FCC PROOF OF PERFORMANCE TEST

Rome

TIME WARNER CABLE SYRACUSE DIVISION

JULY / AUGUST 2013

Rome

JULY / AUGUST 2013

HOME | LOGOUT | HELP DESK

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TIME WARNER CABLE - SYRACUSE DIVISION

FCC Proof - of - Performance Tests

System Name	:	Rome			
Plant Mileage	:	1495.3200	***As of***	:	07/17/2013
Basic Subscribers	:	41622	***As of***	:	07/17/2013
System Bandwidth	:	550.0000			
Number of Channels Tested	:	9			
Number of Test Points	:	9			
Test Start Date	:	07/17/2013			
Test Completion Date	:	08/06/2013			

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TIME WARNER CABLE - SYRACUSE DIVISION

Statement of Qualifications

System Name : Rome

Date : 07/18/2013

FCC Testing Summary

Changes Since Last Proof of Performance Test :

Channel 99 was removed from the analog line up on 7/23/2013

Test Results :

All tests met or exceeded FCC test requirements

Miscellaneous :

Oneida, Madison and Hamilton are IP hubs
Rome Headend feeds Boonville, Dixon Rd and North Shore Hubs with Analog,Digital video services.

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TIME WARNER CABLE - SYRACUSE DIVISION

System Name : Rome ***Date*** : 07/18/2013

Sub System Name : Rome

ACTUAL CHANNEL	CARRIER FREQ	CONV CH.	TYPE	SC ("Y")	VITS ("Y")	CALL LTR	PROG SOURCE	ACTUAL CHANNEL	CARRIER FREQ	CONV CH.	TYPE	SC ("Y")	VITS ("Y")	CALL LTR	PROG SOURCE
2	55.2500	2	TV			WKTV-2	Fiber	DD (40)	319.2625	40	TV			MSG+	Sat
3	61.2500	3	TV			WSTM-3	Fiber	EE (41)	325.2625	41					
4	67.2500	4	TV		Y	WCNY24	Fiber	FF (42)	331.2750	42	TV			MSNBC	Sat
5	77.2500	5	TV			WTVH-5	Fiber	GG (43)	337.2625	43	TV			CNNHL	Sat
6	83.2500	6	TV			HBO	Sat	HH (44)	343.2625	44	TV		Y	FX	Sat
A-5 (95)	91.2500	95						II (45)	349.2625	45	TV			SNY	Sat
A-4 (96)	97.2500	96	TV			HSN	Sat	JJ (46)	355.2625	46	TV			HGTV	Sat
A-3 (97)	103.2500	97	TV			TVG	Sat	KK (47)	361.2625	47	TV			SCIFI	Sat
A-2 (98)	109.2750	98						LL (48)	367.2625	48	TV			LIFE	Sat
A-1 (99)	115.2750	99	TV			PACSS	LOCAL	MM (49)	373.2625	49	TV			CMDY	Sat
A (14)	121.2625	14	TV			CKWS	Sat	NN (50)	379.2625	50	TV			NBCSP	Sat
B (15)	127.2625	15	TV			TBS	Sat	OO (51)	385.2625	51	TV			BRAVO	Sat
C (16)	133.2625	16	TV			WGN	Sat	PP (52)	391.2625	52	TV		Y	HLMK	Sat
D (17)	139.2500	17						QQ (53)	397.2625	53	TV			TRAVL	Sat
E (18)	145.2500	18	TV			ION	Sat	RR (54)	403.2500	54	TV			TVLD	Sat
F (19)	151.3210	19	TV			QVC	Sat	SS (55)	409.2500	55	TV			TWCS	STUDIO
G (20)	157.2500	20						TT (56)	415.2500	56	TV			FOXNW	Sat
H (21)	163.2500	21	TV		Y	USA	Sat	UU (57)	421.2500	57	TV			HIST	Sat
I (22)	169.2500	22	TV			ABCF	Sat	VV (58)	427.2500	58	TV			BET	Sat
7	175.2500	7	TV			WNYS	Sat	WW (59)	433.2500	59	TV			TOON	Sat
8	181.2500	8	TV			WSYT	Fiber	XX (60)	439.2500	60	TV			AMC	Sat
9	187.2500	9	TV			WSYR	Fiber	YY (61)	445.2500	61	TV			MTV	Sat
10	193.2500	10	TV			YNN	Studio	ZZ (62)	451.2500	62	TV		Y	CNBC	Sat
11	199.2500	11	TV			WUTR	Fiber	63	457.2500	63	TV			DISCFH	Sat
12	205.2500	12	TV			WFXV	Fiber	64	463.2500	64					
13	211.2500	13	TV		Y	WSTQ	Sat	65	469.2500	65	TV			MSG	Sat
J (23)	217.2500	23	TV			SPIKE	Sat	66	475.2500	66	TV			TCM	Sat
K (24)	223.2500	24	TV			ESPN	Sat	67	481.2500	67					
L (25)	229.2625	25	TV			ESPN2	Sat	68	487.2500	68	TV			WE	Sat
M (26)	235.2625	26	TV			UNIVI	Sat	69	493.2500	69	TV			DISN	Sat
N (27)	241.2625	27	TV		Y	TNT	Sat	70	499.2500	70	TV		Y		
O (28)	247.2625	28	TV			CNN	Sat	71	505.2500	71	TV				
P (29)	253.2625	29	TV			VH1	Sat	72	511.2500	72	TV				
Q (30)	259.2625	30	TV			TWC	Sat	73	517.2500	73	TV				
R (31)	265.2625	31	TV			A/P	Sat	74	523.2500	74	TV				
S (32)	271.2625	32	TV			A&E	Sat	75	529.2500	75	TV				
T (33)	277.2625	33	TV			NICK	Sat	76	535.2500	76	TV				
U (34)	283.2625	34	TV			E!	Sat	77	541.2500	77	TV				
V (35)	289.2625	35	TV		Y	TDC	Sat	78	547.2500	78					
W (36)	295.2625	36	TV			YES	Sat	79	553.2500						
AA (37)	301.2625	37						80	559.2500						
BB (38)	307.2625	38	TV			TLC	Sat	81	565.2500						
CC (39)	313.2625	39	TV			TVFN	Sat								

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TIME WARNER CABLE - SYRACUSE DIVISION

System Name : Rome ***Date*** : 07/18/2013

Sub System Name : Oneida

ACTUAL CHANNEL	CARRIER FREQ	CONV CH.	TYPE	SC ("Y")	VITS ("Y")	CALL LTR	PROG SOURCE	ACTUAL CHANNEL	CARRIER FREQ	CONV CH.	TYPE	SC ("Y")	VITS ("Y")	CALL LTR	PROG SOURCE
2	55.2500	2	TV			WKTV	FIBER	DD (40)	319.2625	40	TV			MSG+	SAT
3	61.2500	3	TV			WWNY	FIBER	EE (41)	325.2625						
4	67.2500	4	TV		Y	WCNY	FIBER	FF (42)	331.2750	42	TV			MSNBC	SAT
5	77.2500	5	TV			WTVH	FIBER	GG (43)	337.2625	43	TV			CNNHL	SAT
6	83.2500	6	TV			HBO	SAT	HH (44)	343.2625	44	TV		Y	FX	SAT
A-5 (95)	91.2500							II (45)	349.2625	45	TV			SNY	SAT
A-4 (96)	97.2500	96	TV			HSN	SAT	JJ (46)	355.2625	46	TV			HGTV	SAT
A-3 (97)	103.2500	97	TV			TVG	SAT	KK (47)	361.2625	47	TV			SCIFI	SAT
A-2 (98)	109.2750							LL (48)	367.2625	48	TV			LIFE	SAT
A-1 (99)	115.2750	99	TV			LOCAL	LOCAL	MM (49)	373.2625	49	TV			CMDY	SAT
A (14)	121.2625	14	TV			CKWS	SAT	NN (50)	379.2625	50	TV			NBCSP	SAT
B (15)	127.2625	15	TV			TBS	SAT	OO (51)	385.2625	51	TV			BRAVO	SAT
C (16)	133.2625	16	TV			WGN	SAT	PP (52)	391.2625	52	TV		Y	HLMK	SAT
D (17)	139.2500							QQ (53)	397.2625	53	TV			TRAVL	SAT
E (18)	145.2500	18	TV			ION	SAT	RR (54)	403.2500	54	TV			TVLD	SAT
F (19)	151.3210	19	TV			QVC	SAT	SS (55)	409.2500	55	TV			TWCS	STUDIO
G (20)	157.2500							TT (56)	415.2500	56	TV			FOXNW	SAT
H (21)	163.2500	21	TV		Y	USA	SAT	UU (57)	421.2500	57	TV			HIST	SAT
I (22)	169.2500	22	TV			ABCF	SAT	VV (58)	427.2500	58	TV			BET	SAT
7	175.2500	7	TV			WNYS	SAT	WW (59)	433.2500	59	TV			TOON	SAT
8	181.2500	8	TV			WSYT	FIBER	XX (60)	439.2500	60	TV			AMC	SAT
9	187.2500	9	TV			WSYR	FIBER	YY (61)	445.2500	61	TV			MTV	SAT
10	193.2500	10	TV			YNN	STUDIO	ZZ (62)	451.2500	62	TV		Y	CNBC	SAT
11	199.2500	11	TV			WUTR	FIBER	63	457.2500	63	TV			DISCH	SAT
12	205.2500	12	TV			WFXV	FIBER	64	463.2500						
13	211.2500	13	TV		Y	WSTQ	SAT	65	469.2500	65	TV			MSG	SAT
J (23)	217.2500	23	TV			SPIKE	SAT	66	475.2500	66	TV			TCM	SAT
K (24)	223.2500	24	TV			ESPN	SAT	67	481.2500						
L (25)	229.2625	25	TV			ESPN 2	SAT	68	487.2500	68	TV			WE	SAT
M (26)	235.2625	26	TV			UNIVI	SAT	69	493.2500	69	TV			DISN	SAT
N (27)	241.2625	27	TV		Y	TNT	SAT	70	499.2500	70	TV		Y	TEST	RF
O (28)	247.2625	28	TV			CNN	SAT	71	505.2500						
P (29)	253.2625	29	TV			VH 1	SAT	72	511.2500						
Q (30)	259.2625	30	TV			TWC	SAT	73	517.2500						
R (31)	265.2625	31	TV			A/P	SAT	74	523.2500						
S (32)	271.2625	32	TV			A&E	SAT	75	529.2500						
T (33)	277.2625	33	TV			NICK	SAT	76	535.2500						
U (34)	283.2625	34	TV			E	SAT	77	541.2500						
V (35)	289.2625	35	TV		Y	TDC	SAT	78	547.2500						
W (36)	295.2625	36	TV			YES	SAT	79	553.2500						
AA (37)	301.2625							80	559.2500						
BB (38)	307.2625	38	TV			TLC	SAT	81	565.2500						
CC (39)	313.2625	39	TV			FOOD	SAT								

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TIME WARNER CABLE - SYRACUSE DIVISION

System Name : Rome ***Date*** : 07/19/2013

Sub System Name : Madison

ACTUAL CHANNEL	CARRIER FREQ	CONV CH.	TYPE	SC ("Y")	VITS ("Y")	CALL LTR	PROG SOURCE	ACTUAL CHANNEL	CARRIER FREQ	CONV CH.	TYPE	SC ("Y")	VITS ("Y")	CALL LTR	PROG SOURCE
2	55.2500	2	TV			WKTV	FIBER	DD (40)	319.2625	40	TV			MSG +	SAT
3	61.2500	3	TV			WSTM	FIBER	EE (41)	325.2625						
4	67.2500	4	TV		Y	WVNY	FIBER	FF (42)	331.2750	42	TV			MSNBC	SAT
5	77.2500	5	TV			WTVH	FIBER	GG (43)	337.2625	43	TV			CNNHL	SAT
6	83.2500	6	TN			HBO	SAT	HH (44)	343.2625	44	TV		Y	FX	SAT
A-5 (95)	91.2500							II (45)	349.2625	45	TV			SNY	SAT
A-4 (96)	97.2500	96	TV			HSN	SAT	JJ (46)	355.2625	46	TV			HGTV	SAT
A-3 (97)	103.2500	97	TV			TVG	SAT	KK (47)	361.2625	47	TV			SCIFI	SAT
A-2 (98)	109.2750							LL (48)	367.2625	48	TV			LIFE	SAT
A-1 (99)	115.2750	99	TV			LOCAL	LOCAL	MM (49)	373.2625	49	TV			CMDY	SAT
A (14)	121.2625	14	TV			CKWS	SAT	NN (50)	379.2625	50	TV			NBCSP	SAT
B (15)	127.2625	15	TV			TBS	SAT	OO (51)	385.2625	51	TV			BRAVO	SAT
C (16)	133.2625	16	TV			WGN	SAT	PP (52)	391.2625	52	TV		Y	HLMK	SAT
D (17)	139.2500							QQ (53)	397.2625	53	TV			TRAVL	SAT
E (18)	145.2500	18	TV			ION	SAT	RR (54)	403.2500	54	TV			TVLD	SAT
F (19)	151.3210	19	TV			QVC	SAT	SS (55)	409.2500	55	TV			TWCS	STUDIO
G (20)	157.2500							TT (56)	415.2500	56	TV			FOXNW	SAT
H (21)	163.2500	21	TV		Y	USA	SAT	UU (57)	421.2500	57	TV			HIST	SAT
I (22)	169.2500	22	TV			ABCF	SAT	VV (58)	427.2500	58	TV			BET	SAT
7	175.2500	7	TV			WNYS	SAT	WW (59)	433.2500	59	TV			TOON	SAT
8	181.2500	8	TV			WSYT	FIBER	XX (60)	439.2500	60	TV			AMC	SAT
9	187.2500	9	TV			WSRY	FIBER	YY (61)	445.2500	61	TV			MTV	SAT
10	193.2500	10	TV			YNN	STUDIO	ZZ (62)	451.2500	62	TV		Y	CNBC	SAT
11	199.2500	11	TV			WUTR	FIBER	63	457.2500	63	TV			DISCFH	SAT
12	205.2500	12	TV			WFXV	FIBER	64	463.2500						
13	211.2500	13	TV		Y	WSTQ	SAT	65	469.2500	65	TV			MSG	SAT
J (23)	217.2500	23	TV			SPIKE	SAT	66	475.2500	66	TV			TCM	SAT
K (24)	223.2500	24	TV			ESPN	SAT	67	481.2500						
L (25)	229.2625	25	TV			ESPN 2	SAT	68	487.2500	68	TV			WE	SAT
M (26)	235.2625	26	TV			UNIVI	SAT	69	493.2500	69	TV			DISN	SAT
N (27)	241.2625	27	TV		Y	TNT	SAT	70	499.2500	70	TV		Y	TEST	RF
O (28)	247.2625	28	TV			CNN	SAT	71	505.2500						
P (29)	253.2625	29	TV			VH 1	SAT	72	511.2500						
Q (30)	259.2625	30	TV			TWC	SAT	73	517.2500						
R (31)	265.2625	31	TV			A/P	SAT	74	523.2500						
S (32)	271.2625	32	TV			A&E	SAT	75	529.2500						
T (33)	277.2625	33	TV			NICK	SAT	76	535.2500						
U (34)	283.2625	34	TV			E	SAT	77	541.2500						
V (35)	289.2625	35	TV		Y	TDC	SAT	78	547.2500						
W (36)	295.2625	36	TV			YES	SAT	79	553.2500						
AA (37)	301.2625							80	559.2500						
BB (38)	307.2625	38	TV			TLC	SAT	81	565.2500						
CC (39)	313.2625	39	TV			FOOD	SAT								

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TIME WARNER CABLE - SYRACUSE DIVISION

System Name : Rome ***Date*** : 07/19/2013

Sub System Name : Hamilton

ACTUAL CHANNEL	CARRIER FREQ	CONV CH.	TYPE	SC ("Y")	VITS ("Y")	CALL LTR	PROG SOURCE	ACTUAL CHANNEL	CARRIER FREQ	CONV CH.	TYPE	SC ("Y")	VITS ("Y")	CALL LTR	PROG SOURCE
2	55.2500	2	TV			WKTV	FIBER	DD (40)	319.2625	40	TV			MSG +	SAT
3	61.2500	3	TV			WSTM	FIBER	EE (41)	325.2625						
4	67.2500	4	TV		Y	WCNY	FIBER	FF (42)	331.2750	42	TV			MSNBC	SAT
5	77.2500	5	TV			WTVH	FIBER	GG (43)	337.2625	43	TV			CNNHL	SAT
6	83.2500	6	TV			HBO	SAT	HH (44)	343.2625	44	TV		Y	FX	SAT
A-5 (95)	91.2500							II (45)	349.2625	45	TV			SNY	SAT
A-4 (96)	97.2500	96	TV			HSN	SAT	JJ (46)	355.2625	46	TV			HGTV	SAT
A-3 (97)	103.2500	97	TV			TVG	SAT	KK (47)	361.2625	47	TV			SCIFI	SAT
A-2 (98)	109.2750							LL (48)	367.2625	48	TV			LIFE	SAT
A-1 (99)	115.2750	99	TV			LOCAL	LOCAL	MM (49)	373.2625	49	TV			CMDY	SAT
A (14)	121.2625	14	TV			CKWS	SAT	NN (50)	379.2625	50	TV			NBCSP	SAT
B (15)	127.2625	15	TV			TBS	SAT	OO (51)	385.2625	51	TV			BRAVO	SAT
C (16)	133.2625	16	TV			WGN	SAT	PP (52)	391.2625	52	TV		Y	HLMK	SAT
D (17)	139.2500							QQ (53)	397.2625	53	TV			TRAVL	SAT
E (18)	145.2500	18	TV			ION	SAT	RR (54)	403.2500	54	TV			TVLD	SAT
F (19)	151.3210	19	TV			QVC	SAT	SS (55)	409.2500	55	TV			TWCS	STUDIO
G (20)	157.2500							TT (56)	415.2500	56	TV			FOXNW	SAT
H (21)	163.2500	21	TV		Y	USA	SAT	UU (57)	421.2500	57	TV			HIST	SAT
I (22)	169.2500	22	TV			ABCF	SAT	VV (58)	427.2500	58	TV			BET	SAT
7	175.2500	7	TV			WNYS	SAT	WW (59)	433.2500	59	TV			TOON	SAT
8	181.2500	8	TV			WSYT	FIBER	XX (60)	439.2500	60	TV			AMC	SAT
9	187.2500	9	TV			WSYR	FIBER	YY (61)	445.2500	61	TV			MTV	SAT
10	193.2500	10	TV			YNN	FIBER	ZZ (62)	451.2500	62	TV		Y	CNBC	SAT
11	199.2500	11	TV			WSKG	FIBER	63	457.2500	63	TV			DISCFH	SAT
12	205.2500	12	TV			WFXV	FIBER	64	463.2500						
13	211.2500	13	TV		Y	WSTQ	SAT	65	469.2500	65	TV			MSG	SAT
J (23)	217.2500	23	TV			SPIKE	SAT	66	475.2500	66	TV			TCM	SAT
K (24)	223.2500	24	TV			ESPN	SAT	67	481.2500						
L (25)	229.2625	25	TV			ESPN 2	SAT	68	487.2500	68	TV			WE	SAT
M (26)	235.2625	26	TV			UNIVI	SAT	69	493.2500	69	TV			DISN	SAT
N (27)	241.2625	27	TV		Y	TNT	SAT	70	499.2500	70	TV		Y	TEST	RF
O (28)	247.2625	28	TV			CNN	SAT	71	505.2500						
P (29)	253.2625	29	TV			VH 1	SAT	72	511.2500						
Q (30)	259.2625	30	TV			TWC	SAT	73	517.2500						
R (31)	265.2625	31	TV			A/P	SAT	74	523.2500						
S (32)	271.2625	32	TV			A&E	SAT	75	529.2500						
T (33)	277.2625	33	TV			NICK	SAT	76	535.2500						
U (34)	283.2625	35	TV			E	SAT	77	541.2500						
V (35)	289.2625	35	TV		Y	TDC	SAT	78	547.2500						
W (36)	295.2625	36	TV			YES	SAT	79	553.2500						
AA (37)	301.2625							80	559.2500						
BB (38)	307.2625	38	TV			TLC	SAT	81	565.2500						
CC (39)	313.2625	39	TV			FOOD	SAT								

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TIME WARNER CABLE - SYRACUSE DIVISION

System Name : Rome ***Date*** : 07/17/2013

Sub System Name : North Shore

ACTUAL CHANNEL	CARRIER FREQ	CONV CH.	TYPE	SC ("Y")	VITS ("Y")	CALL LTR	PROG SOURCE
2	55.2500						
3	61.2500						
4	67.2500						
5	77.2500						
6	83.2500						
A-5 (95)	91.2500						
A-4 (96)	97.2500						
A-3 (97)	103.2500						
A-2 (98)	109.2750						
A-1 (99)	115.2750	99	TV			LOCAL	LOCAL
A (14)	121.2625						
B (15)	127.2625						
C (16)	133.2625						
D (17)	139.2500						
E (18)	145.2500						
F (19)	151.3210						
G (20)	157.2500						
H (21)	163.2500						
I (22)	169.2500						
7	175.2500						
8	181.2500						
9	187.2500						
10	193.2500						
11	199.2500						
12	205.2500						
13	211.2500						
J (23)	217.2500						
K (24)	223.2500						
L (25)	229.2625						
M (26)	235.2625						
N (27)	241.2625						
O (28)	247.2625						
P (29)	253.2625						
Q (30)	259.2625						
R (31)	265.2625						
S (32)	271.2625						
T (33)	277.2625						
U (34)	283.2625						
V (35)	289.2625						
W (36)	295.2625						
AA (37)	301.2625						
BB (38)	307.2625						
CC (39)	313.2625						
DD (40)	319.2625						
EE (41)	325.2625						
FF (42)	331.2750						
GG (43)	337.2625						
HH (44)	343.2625						
II (45)	349.2625						
JJ (46)	355.2625						
KK (47)	361.2625						
LL (48)	367.2625						
MM (49)	373.2625						
NN (50)	379.2625						
OO (51)	385.2625						
PP (52)	391.2625						
QQ (53)	397.2625						
RR (54)	403.2500						
SS (55)	409.2500						
TT (56)	415.2500						
UU (57)	421.2500						
VV (58)	427.2500						
WW (59)	433.2500						
XX (60)	439.2500						
YY (61)	445.2500						
ZZ (62)	451.2500						
63	457.2500						
64	463.2500						
65	469.2500						
66	475.2500						
67	481.2500						
68	487.2500						
69	493.2500						
70	499.2500						
71	505.2500						
72	511.2500						
73	517.2500						
74	523.2500						
75	529.2500						
76	535.2500						
77	541.2500						
78	547.2500						
79	553.2500						
80	559.2500						
81	565.2500						

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TIME WARNER CABLE - SYRACUSE DIVISION

System Name : Rome ***Date*** : 07/17/2013

Sub System Name : Dixon Rd

ACTUAL CHANNEL	CARRIER FREQ	CONV CH.	TYPE	SC ("Y")	VITS ("Y")	CALL LTR	PROG SOURCE	ACTUAL CHANNEL	CARRIER FREQ	CONV CH.	TYPE	SC ("Y")	VITS ("Y")	CALL LTR	PROG SOURCE
2	55.2500							DD (40)	319.2625						
3	61.2500							EE (41)	325.2625						
4	67.2500							FF (42)	331.2750						
5	77.2500							GG (43)	337.2625						
6	83.2500							HH (44)	343.2625						
A-5 (95)	91.2500							II (45)	349.2625						
A-4 (96)	97.2500							JJ (46)	355.2625						
A-3 (97)	103.2500							KK (47)	361.2625						
A-2 (98)	109.2750							LL (48)	367.2625						
A-1 (99)	115.2750	99	TV			LOCAL	LOCAL	MM (49)	373.2625						
A (14)	121.2625							NN (50)	379.2625						
B (15)	127.2625							OO (51)	385.2625						
C (16)	133.2625							PP (52)	391.2625						
D (17)	139.2500							QQ (53)	397.2625						
E (18)	145.2500							RR (54)	403.2500						
F (19)	151.3210							SS (55)	409.2500						
G (20)	157.2500							TT (56)	415.2500						
H (21)	163.2500							UU (57)	421.2500						
I (22)	169.2500							VV (58)	427.2500						
7	175.2500							WW (59)	433.2500						
8	181.2500							XX (60)	439.2500						
9	187.2500							YY (61)	445.2500						
10	193.2500							ZZ (62)	451.2500						
11	199.2500							63	457.2500						
12	205.2500							64	463.2500						
13	211.2500							65	469.2500						
J (23)	217.2500							66	475.2500						
K (24)	223.2500							67	481.2500						
L (25)	229.2625							68	487.2500						
M (26)	235.2625							69	493.2500						
N (27)	241.2625							70	499.2500						
O (28)	247.2625							71	505.2500						
P (29)	253.2625							72	511.2500						
Q (30)	259.2625							73	517.2500						
R (31)	265.2625							74	523.2500						
S (32)	271.2625							75	529.2500						
T (33)	277.2625							76	535.2500						
U (34)	283.2625							77	541.2500						
V (35)	289.2625							78	547.2500						
W (36)	295.2625							79	553.2500						
AA (37)	301.2625							80	559.2500						
BB (38)	307.2625							81	565.2500						
CC (39)	313.2625														

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TIME WARNER CABLE - SYRACUSE DIVISION

System Name : Rome ***Date*** : 07/17/2013

Sub System Name : Boonville

ACTUAL CHANNEL	CARRIER FREQ	CONV CH.	TYPE	SC ("Y")	VITS ("Y")	CALL LTR	PROG SOURCE	ACTUAL CHANNEL	CARRIER FREQ	CONV CH.	TYPE	SC ("Y")	VITS ("Y")	CALL LTR	PROG SOURCE
2	55.2500							DD (40)	319.2625						
3	61.2500	3	TV			WWNY	FIBER	EE (41)	325.2625						
4	67.2500							FF (42)	331.2750						
5	77.2500							GG (43)	337.2625						
6	83.2500							HH (44)	343.2625						
A-5 (95)	91.2500							II (45)	349.2625						
A-4 (96)	97.2500							JJ (46)	355.2625						
A-3 (97)	103.2500							KK (47)	361.2625						
A-2 (98)	109.2750							LL (48)	367.2625						
A-1 (99)	115.2750	99	TV			Local	Local	MM (49)	373.2625						
A (14)	121.2625							NN (50)	379.2625						
B (15)	127.2625							OO (51)	385.2625						
C (16)	133.2625							PP (52)	391.2625						
D (17)	139.2500							QQ (53)	397.2625						
E (18)	145.2500							RR (54)	403.2500						
F (19)	151.3210							SS (55)	409.2500						
G (20)	157.2500							TT (56)	415.2500						
H (21)	163.2500							UU (57)	421.2500						
I (22)	169.2500							VV (58)	427.2500						
7	175.2500							WW (59)	433.2500						
8	181.2500	8	TV			WPBS	FIBER	XX (60)	439.2500						
9	187.2500							YY (61)	445.2500						
10	193.2500							ZZ (62)	451.2500						
11	199.2500							63	457.2500						
12	205.2500							64	463.2500						
13	211.2500							65	469.2500						
J (23)	217.2500							66	475.2500						
K (24)	223.2500							67	481.2500						
L (25)	229.2625							68	487.2500						
M (26)	235.2625							69	493.2500						
N (27)	241.2625							70	499.2500						
O (28)	247.2625							71	505.2500						
P (29)	253.2625							72	511.2500						
Q (30)	259.2625							73	517.2500						
R (31)	265.2625							74	523.2500						
S (32)	271.2625							75	529.2500						
T (33)	277.2625							76	535.2500						
U (34)	283.2625							77	541.2500						
V (35)	289.2625							78	547.2500						
W (36)	295.2625							79	553.2500						
AA (37)	301.2625							80	559.2500						
BB (38)	307.2625							81	565.2500						
CC (39)	313.2625														

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TIME WARNER CABLE - SYRACUSE DIVISION

System Name : Rome
Sub System : Rome

Date : 07/17/2013

Non Video Services

CARRIER FREQ	DESCRIPTION	BANDWIDTH	PROG SOURCE
53	SST	1 MHZ	Data
73	QPSKMOD	1.6 MHZ	Data
567	BIG QAM	6 MHZ	NSG
579	BFS	6 MHZ	NSG
543	HSD	6 MHZ	Docsis
549	HSD	6 MHZ	Docsis
555	HSD	6 Mhz	Docsis
561	HSD	6 MHZ	Docsis
597	QDN	6 MHZ	NSG

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TIME WARNER CABLE - SYRACUSE DIVISION

Statement of Qualifications

System Name : Rome

Employee Name : Frank Servedio ***Title*** : Head End Tech
System : Rome

Qualifications :

24 years CATV

NCTI courses

Employee Name : Peter Grocholski ***Title*** : Head End Tech
System : Rome

Qualifications :

9 Years CATV

NCTI courses

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TIME WARNER CABLE - SYRACUSE DIVISION

Test Equipment Listings

System Name : Rome ***Date*** : 07/18/2013

	Test Equipment			
EQUIPMENT DESCRIPTION	**MODEL NUMBER**	**MANUFACTURER**	**SERIAL NUMBER**	**LAST CALIB**
ANALYZER	8591C	H/P	3829A02865	12/2009
ANALYZER	ATQ2500RQV3	ATQ2500RQV3	TW1040-1010	4/15/2011
METER	860DSP	TRILITHIC	232191	N/A
METER	860DSP	TRILITHIC	232634	1/2013
ANALYZER	ATQ2500RQV3	ATQ2500RQV3	7840-0308	12-10

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TIME WARNER CABLE - SYRACUSE DIVISION

Terminal Isolation Test

System Name : Rome ***Date*** : 07/17/2013

The terminal isolation provided to each subscriber terminal shall not be less than 18 decibels. In lieu of periodic testing, the cable operator may use specifications provided by the manufacturer for the terminal isolation equipment to meet this standard.

Instructions:

Attach a copy of the manufacturer's specifications covering all directional taps used in the system. The specification sheet must show the minimum tap-to-tap isolation. In lieu of a specification sheet, attach a letter from the manufacturer(s) certifying that the directional taps used in the system do exhibit a minimum tap-to-tap isolation of 18dB

Cisco Flexible Solutions Taps, Two-Way, Four-Way, & Eight-Way

The Cisco Flexible Solutions Tap (FST) offers the benefits of our existing Surge-Gap taps plus the additional benefit of increased flexibility in system design via two types of optional plug-ins.

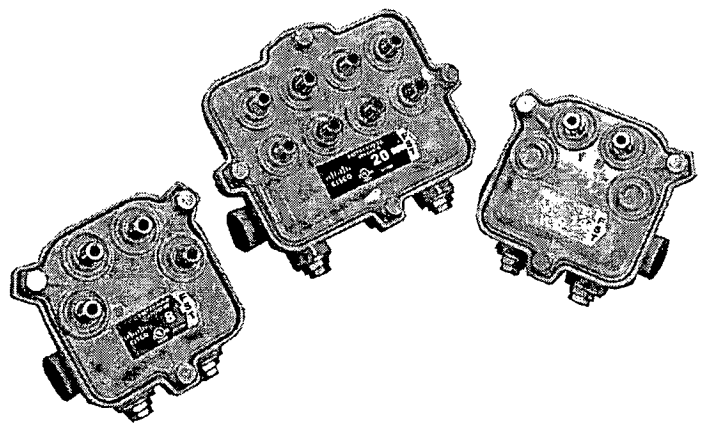
The optional plug-in Reverse Attenuators used in the FST are available in 0, 3, 6, 9, and 12 dB values. The attenuators increase the reverse path tap loss with only a minimal effect on forward tap loss. By selectively adding reverse attenuation to lower value taps, reverse path tap losses can be made more similar across the various values of taps used in an HFC network. This allows the range of RF levels transmitted from closed loop customer premise equipment (CPEs) to be narrowed – thus improving the reliability of upstream transmissions.

The optional plug-in Forward EQs used in the FST are available in 6, 9, and 12 dB values. The Forward EQs increase the forward path tap loss in a standard cable-tilted fashion, with greater loss at lower frequencies than higher frequencies. The plug-in Forward EQ allows optimization of tap output levels at tap locations near the end of the feeder line.

The optional plug-in Forward Inverse EQs used in the FST are available in 3, 6, 9, and 12 dB values. The Inverse EQs increase the forward path tap loss in a down-tilted fashion, with greater loss at higher frequencies than lower frequencies, and with only a minimal effect on reverse tap loss. The plug-in Forward Inverse EQ allows optimization of tap output levels at tap locations with high-level forward RF signals and significant up-tilt (typically tap locations closest to nodes and amplifiers).

The Flexible Solutions Taps all have IEEE compliant 6 kV surge protection, providing significantly improved protection against voltage transients in lightning strike areas and locations with unreliable power networks. In addition, the new tap products offer the same make-before-break capabilities of previous Cisco tap products, enabling the tap faceplate to be removed without interrupting service to downstream customers. The taps pass up to 12 amps of current, enabling operators to access power at locations within the HFC plant where additional power is needed.

Figure 1. Cisco Flexible Solutions Taps

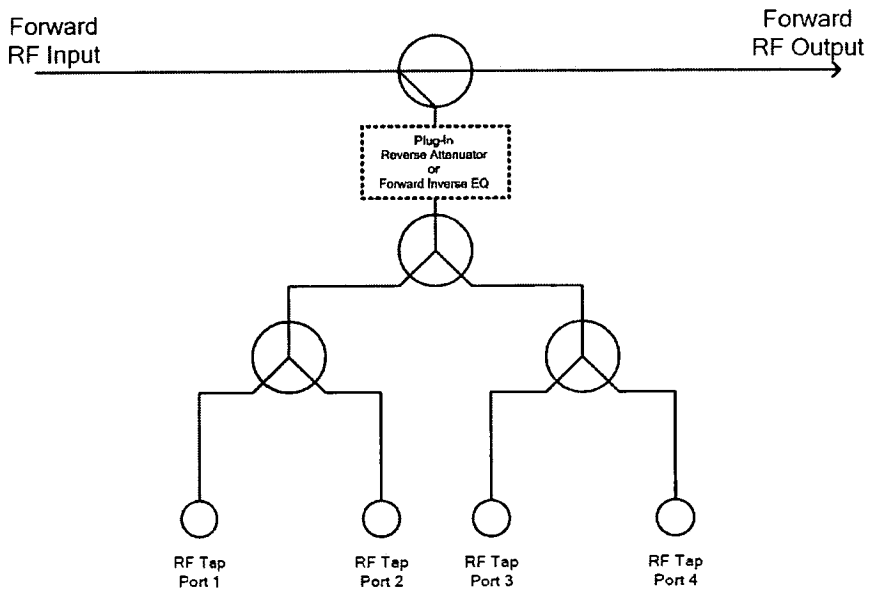


Features

- Optional plug-in Reverse Attenuators, Forward EQs, and Forward Inverse EQs offer design flexibility
- Available in 2-, 4- and 8-way versions
- Increased Surge Tolerance - Rugged design helps enable the products to continue to operate after surges that would typically damage ordinary products and interrupt service
- 12 amp through current rating
- Improved Return Loss - improved return loss performance to lessen reflected signals for a "cleaner" signal
- AC/RF bypass switch provides interruption free service to rest of network during faceplate removal
- Backwards compatible housing supports economical faceplate upgrades
- AL360T housing with powder coating for superior environmental protection
- Sealed and swaged extended F-ports for resistance to moisture ingress
- Nickel plated brass F-ports to provide a corrosion-resistant drop interface
- Component covers for additional protection of faceplate circuitry during maintenance
- Versatile housing design permits aerial, pedestal, or MDU mounting schemes

Block Diagram

Figure 2. Block Diagram



Product Specifications

See the tables below for product specifications.

Table 1. General Specifications

Items	Frequency	Value
Power Passing	-	12 amps
Tap-Tap Isolation (minimum)	5-50 MHz	20 dB
	51-750 MHz	22 dB
	751-1000 MHz	20 dB
In-Out Return Loss (minimum)	5-1000 MHz	18 dB
Tap Port Return Loss (minimum)	5-1000 MHz	18 dB
Hum Modulation @ 10 amps (typical)	5-450 MHz	70 dBc
	451-750 MHz	65 dBc
	751-1000 MHz	55 dBc
EMI Shielding (minimum)	5-15 MHz	85 dB
	16-1000 MHZ	100 dB*

Note: Tested per ANSI / SCTE 48-2 2003.

Table 2. AC/RF Bypass Switch Performance

Items	Value
System Open Circuit Time	0 ms
Contact Resistance	10 mOhms (max)
Through current capacity	12 amps
Voltage capacity	90 VAC
RF Frequency Range	5 to 1000 MHz
Insertion Loss & Return Loss	See Loss Table
Operating Temperature	-40 °C to +60 °C

Table 3. AC/RF Bypass Switch Insertion Loss & Return Loss

AC/RF Bypass	Items	5 MHz	500 MHz	750 MHz	870 MHz	1 GHz
Short Circuited Insertion Loss (dB)	Max	0.02 dB	0.6 dB	0.8 dB	0.7 dB	0.7 dB
	Mean	<0.01 dB	0.4 dB	0.5 dB	0.4 dB	0.5 dB
Short Circuited Return Loss (dB)	Min	45 dB	16 dB	16 dB	18 dB	21 dB
	Mean	50 dB	16.5 dB	16.5 dB	18.5 dB	22 dB

Mechanical Specifications

Table 4. Mechanical Specifications

Mechanical Specifications	
Standard Tap (2-Way/4-Way)	
Height	3.6 in. 91.44 mm
Width	3.6 in. 91.44 mm
Depth	3.0 in. 76.2 mm
Full Profile Tap (2-Way/4-Way/8-Way)	
Height	4.25 in. 107.95 mm
Width	5.25 in. 133.35 mm
Depth	3.0 in. 76.2 mm
Surge Resistance Input / Output ports - (combination wave) Tap ports (ring wave)	 6 kV 6 kV
Compliance Standards	
Mechanical	ANSI / SCTE 01 1996 - F-port interface specification, SCTE IPS-SP-500 - entry port interface specification
Emissions	FCC - Part 76, Subpart K, EN 50083-2/A1: 1998
Environmental	ASTM G 53 - weathering specification, ASTM B 117 - salt spray specification, ASTM D 31 - chip resistance specification, EN 60529: 1992 (IP test), Bellcore GR-63-CORE - vibration/transportation, ANSI/EEEE C62.41 - lightning
Electrical Safety	UL Subject 1697, EN 50083-1/A2: 1997, EN 60065: 1998, IEC 60065: 1998

Note: Unless otherwise noted, specifications reflect typical performance and are referenced to 68 F (20 °C). Specifications are based upon measurements made in accordance with SCTE/ANSI standards (where applicable), using standard frequency assignments.

2-Way FST – Standard and Full Profile Housing

Table 5. Insertion Loss (In-Out) for 2-Way FST

Insertion Loss (dB)																
Frequency	4 dB		8 dB		11 dB		14 dB		17 dB		20 dB		23 dB		26 dB	
	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
5 MHz	-	-	3.2	2.5	2.0	1.8	1.2	1.0	1.1	0.8	0.8	0.8	0.7	0.4	0.6	0.4
55 MHz	-	-	2.5	2.0	1.6	1.2	1.1	0.7	0.9	0.5	0.6	0.5	0.6	0.3	0.6	0.4
550 MHz	-	-	3.6	3.3	2.5	2.1	1.7	1.4	1.6	1.1	1.3	1.1	1.1	1.0	1.2	1.0
650 MHz	-	-	3.9	3.6	2.6	2.3	1.8	1.6	1.5	1.2	1.3	1.2	1.2	1.0	1.3	1.1
750 MHz	-	-	4.1	3.8	2.7	2.5	1.9	1.7	1.6	1.3	1.4	1.3	1.4	1.1	1.4	1.2
870 MHz	-	-	4.3	4.0	3.0	2.8	2.3	2.0	1.8	1.5	1.7	1.5	1.5	1.3	1.6	1.3
1000 MHz	-	-	4.6	4.3	3.6	3.3	2.7	2.4	2.2	1.8	1.9	1.8	1.8	1.6	1.8	1.6

Table 6. Tap Loss Tolerance and Out-Trap Isolation for 2-Way FST

Tap Loss Tolerance (dB)								
Frequency	4 dB	8 dB	11 dB	14 dB	17 dB	20 dB	23 dB	26 dB
5 MHz	1.0	1.0	1.2	1.0	1.0	1.0	1.0	1.0
55 MHz	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0
550 MHz	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
650 MHz	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
750 MHz	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
870 MHz	1.0	1.3	1.0	1.0	1.0	1.0	1.0	1.0
1000 MHz	1.1	1.8	1.0	1.0	1.4	1.0	1.0	1.0
Out-Trap Isolation (Minimum) (dB)								
Frequency	4 dB	8 dB	11 dB	14 dB	17 dB	20 dB	23 dB	26 dB
5-50 MHz	-	20	18	22	24	32	33	39
51-550 MHz	-	26	28	30	32	35	35	41
551-650 MHz	-	24	28	28	33	32	34	38
651-750 MHz	-	23	26	27	33	29	32	36
751-870 MHz	-	22	24	27	33	28	29	34
871-1000 MHz	-	22	23	26	28	26	26	32

Note: Tap Loss Tolerances above are with 0 dB Reverse Attenuator installed. For changes to listed Tap losses with other values of Reverse Attenuators or with Forward EQ / Forward Inverse EQ installed, refer to "Reverse Attenuator Loss Table" or "Forward EQ / Forward Inverse EQ Loss Table."

4-Way FST – Standard and Full Profile Housing

Table 7. Insertion Loss (In-Out) for 4-Way FST

Insertion Loss (dB)														
Frequency	8 dB		11 dB		14 dB		17 dB		20 dB		23 dB		26 dB	
	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
5 MHz	-	-	3.2	2.7	2.1	1.7	1.4	1.0	0.8	0.6	0.8	0.4	0.7	0.3
55 MHz	-	-	2.5	2.2	1.5	1.2	1.2	0.7	0.9	0.5	0.7	0.4	0.6	0.3
550 MHz	-	-	3.8	3.4	2.5	2.2	1.9	1.4	1.6	1.1	1.3	1.0	1.2	0.9
650 MHz	-	-	4.2	3.8	2.7	2.4	1.9	1.6	1.5	1.2	1.3	1.0	1.3	0.9
750 MHz	-	-	4.5	4.0	2.9	2.6	2.1	1.8	1.6	1.3	1.4	1.1	1.3	1.0
870 MHz	-	-	4.8	4.2	3.2	3.0	2.3	2.0	1.8	1.5	1.6	1.2	1.5	1.1
1000 MHz	-	-	5.1	4.5	3.6	3.4	2.7	2.4	2.1	1.9	1.9	1.5	1.9	1.4

Table 8. Tap Loss Tolerance and Out-Trap Isolation for 4-Way FST

Tap Loss Tolerance (dB)							
Frequency	8 dB	11 dB	14 dB	17 dB	20 dB	23 dB	26 dB
5 MHz	1.0	1.0	1.0	1.0	1.0	1.7	1.5
55 MHz	1.1	1.2	1.0	1.0	1.0	1.0	1.0
550 MHz	1.0	1.6	1.0	1.0	1.0	1.0	1.0
650 MHz	1.0	1.7	1.0	1.0	1.0	1.0	1.0
750 MHz	1.0	1.8	1.0	1.0	1.0	1.0	1.0
870 MHz	1.0	2.1	1.0	1.0	1.0	1.2	1.5
1000 MHz	1.5	2.8	1.6	1.3	1.0	1.3	1.5
Out-Trap Isolation (Minimum) (dB)							
Frequency	8 dB	11 dB	14 dB	17 dB	20 dB	23 dB	26 dB
5-50 MHz	-	22	21	26	34	32	35
51-550 MHz	-	27	30	36	35	36	37
551-650 MHz	-	25	29	33	33	36	36
651-750 MHz	-	24	27	33	33	34	35
751-870 MHz	-	23	24	28	28	32	32
871-1000 MHz	-	23	22	25	28	29	29

Note: Tap Loss Tolerances above are with 0 dB Reverse Attenuator installed. For changes to listed Tap losses with other values of Reverse Attenuators or with Forward EQ / Forward Inverse EQ installed, refer to "Reverse Attenuator Loss Table" or "Forward EQ / Forward Inverse EQ Loss Table."

8-Way FST – Standard and Full Profile Housing

Table 9. Insertion Loss (In-Out) for 8-Way FST

Insertion Loss (dB)												
Frequency	11 dB		14 dB		17 dB		20 dB		23 dB		26 dB	
	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
5 MHz	-	-	3.5	3	2.4	1.4	1.1	0.9	0.9	0.7	0.6	0.4
55 MHz	-	-	3.1	2.7	1.9	1.2	1	0.7	0.8	0.5	0.6	0.3
550 MHz	-	-	4.6	4	2.6	2.2	1.9	1.5	1.6	1.2	1.3	1
650 MHz	-	-	4.7	4.3	2.7	2.4	2	1.6	1.6	1.2	1.4	1
750 MHz	-	-	5	4.6	2.9	2.7	2.1	1.8	1.8	1.3	1.5	1.1
870 MHz	-	-	5.2	4.9	3.2	3	2.4	2.2	2	1.5	1.8	1.3
1000 MHz	-	-	5.5	5.1	3.6	3.4	2.8	2.5	2.3	1.7	2.1	1.5

Table 10. Tap Loss Tolerance and Out-Trap Isolation for 8-Way FST

Tap Loss Tolerance (dB)						
Frequency	11 dB	14 dB	17 dB	20 dB	23 dB	26 dB
5 MHz	1.0	1.0	1.0	1.0	1.0	1.0
55 MHz	1.0	1.0	1.2	1.0	1.0	1.0
550 MHz	1.0	1.7	1.6	1.5	1.0	1.1
650 MHz	1.0	1.9	1.4	1.3	1.0	1.2
750 MHz	1.0	2.1	1.5	1.4	1.1	1.2
870 MHz	1.4	2.4	1.8	1.4	1.2	1.2
1000 MHz	1.8	2.9	2.0	1.8	1.6	1.6
Out-Trap Isolation (Minimum) (dB)						
Frequency	11 dB	14 dB	17 dB	20 dB	23 dB	26 dB
5-50 MHz	-	24	25	31	29	37
51-550 MHz	-	29	29	30	33	39
551-650 MHz	-	27	28	32	34	36
651-750 MHz	-	25	27	30	34	33
751-870 MHz	-	24	26	29	34	30
871-1000 MHz	-	24	26	28	33	29

Note 1: Tap Loss Tolerances above are with 0 dB Reverse Attenuator installed. For changes to listed Tap losses with other values of Reverse Attenuators or with Forward EQ / Forward Inverse EQ installed, refer to "Reverse Attenuator Loss Table" or "Forward EQ / Forward Inverse EQ Loss Table."

Note 2: Unless otherwise noted, specifications reflect typical performance and are referenced to 68 F (20 °C). Specifications are based upon measurements made in accordance with SCTE/ANSI standards (where applicable), using standard frequency assignments.

Reverse Attenuator Loss

Table 11. Reverse Attenuator Loss 42/54

Tap Loss Tolerance (dB)	Reverse Attenuator Used					
	Frequency	0 dB	3 dB	6 dB	9 dB	12 dB
Tap Loss Increase* (dB)	5-42 MHz	-	3.0	6.0	9.0	12.0
	54 MHz	-	0.8	0.8	0.8	0.8
	550 MHz	-	0.3	0.3	0.3	0.3
	650 MHz	-	0.4	0.4	0.4	0.4
	750 MHz	-	0.5	0.5	0.5	0.5
	870 MHz	-	0.6	0.6	0.6	0.6
	1000 MHz	-	0.8	0.8	0.8	0.8

Table 12. Reverse Attenuator Loss 55/70

Tap Loss Tolerance (dB)	Reverse Attenuator Used					
	Frequency	0 dB	3 dB	6 dB	9 dB	12 dB
Tap Loss Increase* (dB)	5-55 MHz	-	3.0	6.0	9.0	12.0
	70 MHz	-	0.6	0.6	0.6	0.6
	550 MHz	-	0.3	0.3	0.3	0.3
	650 MHz	-	0.4	0.4	0.4	0.4
	750 MHz	-	0.5	0.5	0.5	0.5
	870 MHz	-	0.6	0.6	0.6	0.6
	1000 MHz	-	0.8	0.8	0.8	0.8

Table 13. Reverse Attenuator Loss 65/86

Tap Loss Tolerance (dB)	Reverse Attenuator Used					
	Frequency	0 dB	3 dB	6 dB	9 dB	12 dB
Tap Loss Increase* (dB)	5-65 MHz	-	3.0	6.0	9.0	12.0
	86 MHz	-	0.6	0.6	0.6	0.6
	550 MHz	-	0.3	0.3	0.3	0.3
	650 MHz	-	0.4	0.4	0.4	0.4
	750 MHz	-	0.5	0.5	0.5	0.5
	870 MHz	-	0.6	0.6	0.6	0.6
	1000 MHz	-	0.8	0.8	0.8	0.8

Table 14. Reverse Attenuator Loss 85/105

Tap Loss Tolerance (dB)	Reverse Attenuator Used					
	Frequency	0 dB	3 dB	6 dB	9 dB	12 dB
Tap Loss Increase* (dB)	5-85 MHz	-	3.0	6.0	9.0	12.0
	105 MHz	-	0.8	0.8	0.8	0.8
	550 MHz	-	0.3	0.3	0.3	0.3
	650 MHz	-	0.4	0.4	0.4	0.4
	750 MHz	-	0.5	0.5	0.5	0.5
	870 MHz	-	0.6	0.6	0.6	0.6
	1000 MHz	-	0.8	0.8	0.8	0.8

Note 1: Tap Loss Tolerances shown on previous pages are with 0 dB Reverse Attenuator installed. The "Reverse Attenuator Loss Table" above shows the additional Tap Loss incurred when utilizing the plug-in Reverse Attenuators.

Note 2: Unless otherwise noted, specifications reflect typical performance and are referenced to 68 F (20 °C). Specifications are based upon measurements made in accordance with SCTE/ANSI standards (where applicable), using standard frequency assignments.

Other Specifications

Table 15. Forward EQ Loss Table

Tap Loss Tolerance (dB)	Forward EQ Used			
	Frequency	6 dB	9 dB	12 dB
Tap Loss Increase* (dB)	5 MHz	6.2	9.1	12.0
	42 MHz	5.7	8.1	10.6
	55 MHz	5.6	7.9	10.2
	70 MHz	5.4	7.5	9.8
	86 MHz	5.2	7.3	9.5
	550 MHz	2.5	3.4	4.2
	650 MHz	2.0	2.8	3.3
	750 MHz	1.6	2.1	2.5
	870 MHz	1.1	1.3	1.5
	1000 MHz	0.8	0.8	0.8

Table 16. Forward Inverse EQ Loss Table

Tap Loss Tolerance (dB)	Forward Inverse EQ Used			
	Frequency	3 dB	6 dB	9 dB	12 dB
Tap Loss Increase* (dB)	5 MHz	0.1	0.1	0.1	0.1
	42 MHz	0.1	0.1	0.1	0.1
	55 MHz	0.1	0.1	0.1	0.2
	70 MHz	0.1	0.2	0.2	0.3
	86 MHz	0.2	0.2	0.2	0.4
	550 MHz	1.9	3.5	4.8	7.1
	650 MHz	2.1	4.1	5.8	8.4
	750 MHz	2.2	4.4	6.5	9.4
	870 MHz	2.4	5.0	7.4	10.5
	1000 MHz	2.6	5.6	8.2	11.4

Note 1: Tap Loss Tolerances shown on previous pages are with 0 dB Reverse Attenuator installed. The "Forward EQ Loss Table" and "Forward Inverse EQ Loss Table" above shows the additional Tap Loss incurred when utilizing the plug-in Forward EQs and Forward Inverse EQs.

Note 2: Unless otherwise noted, specifications reflect typical performance and are referenced to 68 F (20 °C). Specifications are based upon measurements made in accordance with SCTE/ANSI standards (where applicable), using standard frequency assignments.

Ordering Information

The following tables list the part numbers (P/N) for the FST.

Table 17. Standard Profile FST

2-Way Taps	Part Number
FST Tap, 2-way, 4 dB	4013433
FST Tap, 2-way, 8 dB	4013434
FST Tap, 2-way, 11 dB	4013435
FST Tap, 2-way, 14 dB	4013436
FST Tap, 2-way, 17 dB	4013437
FST Tap, 2-way, 20 dB	4013438
FST Tap, 2-way, 23 dB	4018364
FST Tap, 2-way, 26 dB	4018365
4-Way Taps	**Part Number**
FST Tap, 4-way, 8 dB	4013439
FST Tap, 4-way, 11 dB	4013440
FST Tap, 4-way, 14 dB	4013441
FST Tap, 4-way, 17 dB	4013442
FST Tap, 4-way, 20 dB	4013443
FST Tap, 4-way, 23 dB	4018366
FST Tap, 4-way, 26 dB	4018367
2-Way Tap Face Plates	**Part Number**
FST Face Plate, 2-way, 4 dB	4013459
FST Face Plate, 2-way, 8 dB	4013460
FST Face Plate, 2-way, 11 dB	4013461
FST Face Plate, 2-way, 14 dB	4013462
FST Face Plate, 2-way, 17 dB	4013463
FST Face Plate, 2-way, 20 dB	4013464
FST Face Plate, 2-way, 23 dB	4018374
FST Face Plate, 2-way, 26 dB	4018375
4-Way Tap Face Plates	**Part Number**
FST Face Plate, 4-way, 8 dB	4013465
FST Face Plate, 4-way, 11 dB	4013466
FST Face Plate, 4-way, 14 dB	4013467
FST Face Plate, 4-way, 17 dB	4013468
FST Face Plate, 4-way, 20 dB	4013469
FST Face Plate, 4-way, 23 dB	4018376
FST Face Plate, 4-way, 26 dB	4018377

Table 18. Full Profile FST

2-Way Full Profile Taps	Part Number
FST Tap, 2-way, 4 dB	4013448
FST Tap, 2-way, 8 dB	4013449
FST Tap, 2-way, 11 dB	4013450
FST Tap, 2-way, 14 dB	4013451
FST Tap, 2-way, 17 dB	4013452
FST Tap, 2-way, 20 dB	4013453
FST Tap, 2-way, 23 dB	4018370
FST Tap, 2-way, 26 dB	4018371
4-Way Full Profile Taps	**Part Number**
FST Tap, 4-way, 8 dB	4013454
FST Tap, 4-way, 11 dB	4013455
FST Tap, 4-way, 14 dB	4013456
FST Tap, 4-way, 17 dB	4013457
FST Tap, 4-way, 20 dB	4013458
FST Tap, 4-way, 23 dB	4018372
FST Tap, 4-way, 26 dB	4018373
8-Way Full Profile Taps	**Part Number**
FST Tap, 8-way, 11 dB	4013444
FST Tap, 8-way, 14 dB	4013445
FST Tap, 8-way, 17 dB	4013446
FST Tap, 8-way, 20 dB	4013447
FST Tap, 8-way, 23 dB	4018368
FST Tap, 8-way, 26 dB	4018369
2-Way Full Profile Tap Face Plates	**Part Number**
FST Full Profile Face Plate, 2-way, 4 dB	4013474
FST Full Profile Face Plate, 2-way, 8 dB	4013475
FST Full Profile Face Plate, 2-way, 11 dB	4013476
FST Full Profile Face Plate, 2-way, 14 dB	4013477
FST Full Profile Face Plate, 2-way, 17 dB	4013478
FST Full Profile Face Plate, 2-way, 20 dB	4013479
FST Full Profile Face Plate, 2-way, 23 dB	4018380
FST Full Profile Face Plate, 2-way, 26 dB	4018381
4-Way Full Profile Tap Face Plates	**Part Number**
FST Full Profile Face Plate, 4-way, 8 dB	4013480
FST Full Profile Face Plate, 4-way, 11 dB	4013481
FST Full Profile Face Plate, 4-way, 14 dB	4013482
FST Full Profile Face Plate, 4-way, 17 dB	4013483
FST Full Profile Face Plate, 4-way, 20 dB	4013484
FST Full Profile Face Plate, 4-way, 23 dB	4018382
FST Full Profile Face Plate, 4-way, 26 dB	4018383
8-Way Full Profile Tap Face Plates	**Part Number**
FST Full Profile Face Plate, 8-way, 11 dB	4013470
FST Full Profile Face Plate, 8-way, 14 dB	4013471
FST Full Profile Face Plate, 8-way, 17 dB	4013472
FST Full Profile Face Plate, 8-way, 20 dB	4013473
FST Full Profile Face Plate, 8-way, 23 dB	4018378
FST Full Profile Face Plate, 8-way, 26 dB	4018379

Table 19. Plug-In Reverse Attenuators for 42/54 MHz Split

Description	Part Number
0 dB FST Reverse Attenuator (factory installed in each unit)	-
3 dB FST Reverse Attenuator	4013485
6 dB FST Reverse Attenuator	4013486
9 dB FST Reverse Attenuator	4013487
12 dB FST Reverse Attenuator	4013488

Table 20. Plug-In Reverse Attenuators for 55/70 MHz Split

Description	Part Number
0 dB FST Reverse Attenuator (factory installed in each unit)	-
3 dB FST Reverse Attenuator	4018384
6 dB FST Reverse Attenuator	4018385
9 dB FST Reverse Attenuator	4018386
12 dB FST Reverse Attenuator	4018387

Table 21. Plug-In Reverse Attenuators for 65/86 MHz Split

Description	Part Number
0 dB FST Reverse Attenuator (factory installed in each unit)	-
3 dB FST Reverse Attenuator	4018388
6 dB FST Reverse Attenuator	4018389
9 dB FST Reverse Attenuator	4018390
12 dB FST Reverse Attenuator	4018391

Table 22. Plug-In Reverse Attenuators for 85/105 MHz Split

Description	Part Number
0 dB FST Reverse Attenuator (factory installed in each unit)	-
3 dB FST Reverse Attenuator	4038258
6 dB FST Reverse Attenuator	4038259
9 dB FST Reverse Attenuator	4038260
12 dB FST Reverse Attenuator	4038261

Table 23. Plug-In Forward EQs

Description	Part Number
6 dB FST Forward EQ	4022293
9 dB FST Forward EQ	4022294
12 dB FST Forward EQ	4022295

Table 24. Plug-In Forward Inverse EQs

Description	Part Number
3 dB FST Inverse EQ	4018392
6 dB FST Inverse EQ	4018393
9 dB FST Inverse EQ	4018394
12 dB FST Inverse EQ	4018395

Cisco Systems, Inc.
800 722-2009 or 678 277-1120
www.cisco.com

Part Number 7009943 Rev H
July 2012

PAGE 8

TIME WARNER CABLE - SYRACUSE DIVISION

Converter and Trap Specifications

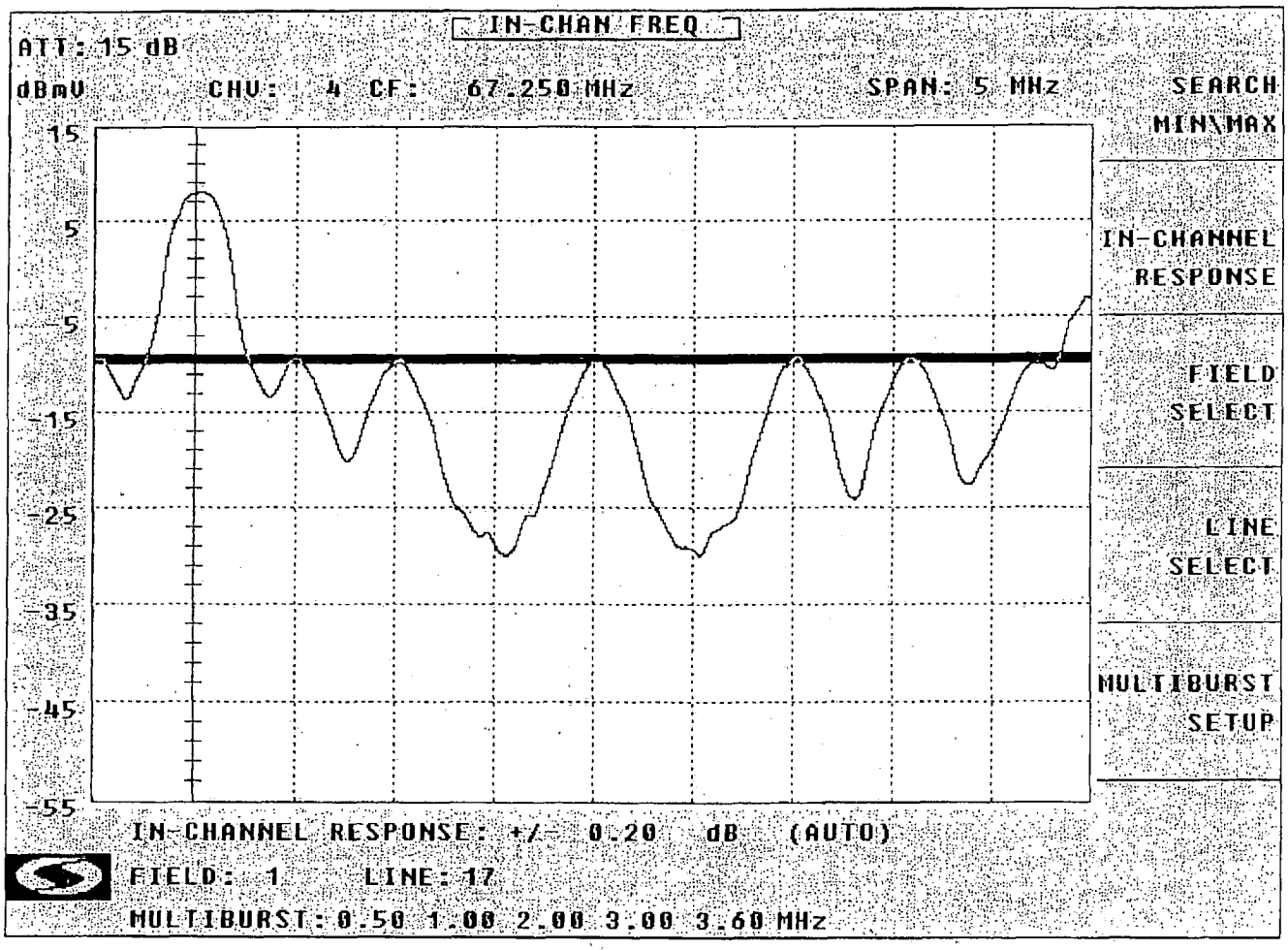
System Name : Rome ***Date*** : 07/17/2013

All testing is done at the end of a 100ft drop cable (RG-6) without a converter. Converter specification sheets are attached for "After Converter" numbers, if so desired.

Instructions:

Attach a copy of the manufacturer's specifications covering all converters used in the system. The specification sheet must show the converters carrier- to- noise (C/N) and distortion figures. Attach a copy of the manufacturer's specifications covering all traps that are in use in the cable plant. This should include basic traps, individual channel traps, high pass filters, etc.

SUNRISE TELECOM BROADBAND 07.18.13 15:37:48



Scientific Atlanta Explorer

8300HD

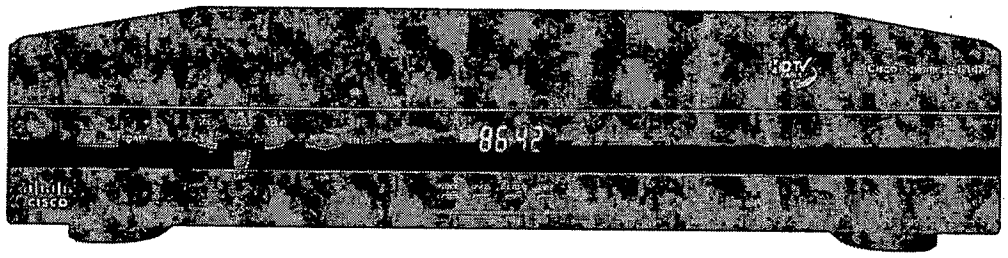
Serial # SABNMLWHK

Cisco Explorer 8642HDC DVR with M-Card Interface

The Cisco® Explorer™ 8642HDC DVR with Multi-Stream CableCARD™ (M-Card™) interface provides high quality video, audio, DVR, and two-way capabilities that cable operators have come to expect. The platform provides faster processing of applications while also supporting bandwidth management objectives.

The 8642HDC becomes the multimedia service gateway for the home – sharing and managing video and audio experiences between the television and other home network devices. Multimedia over Coax Alliance (MoCA™) technology enables an IP LAN connection over coaxial cable, minimizing the need for new wiring in the home.

Figure 1. Cisco Explorer 8642HDC DVR (image may vary from actual product and specification)



Features

Network Utilization Enhancements

- *1 GHz Tuning* allows service providers to expand network bandwidth to provide additional services such as HD and VOD, VoIP video, and high-speed data
- *MPEG-4 (H.264) Decoding* supports compression technology that provides better video quality at about half the data rate of MPEG-2
- *DOCSIS® 2.0* provides increased upstream throughput for future advanced services and provides a path for future IP video services (optional software)
- *Digital-Only Tuning* enables service providers to improve bandwidth efficiency and accelerate the transition to an all-digital network by migrating analog subscribers to digital services

tru2way™ and Conventional Network Support

- *M-Card Interface* uses a Multi-Stream CableCARD for separable security
- *Axiom™ DVR Middleware* supports tru2way (formerly OCAP™) applications such as Service Navigators, Games, and many other future applications (optional software)
- *DOCSIS Set-top Gateway (DSG)* provides a powerful standard transport mechanism for command and control signaling between the set-top and service provider network (optional software)
- *SARA DVR Software* on a set-top provides native navigator and user interface in a non-tru2way environment (optional software)

- *DAVIC Receiver/Transmitter* allows IP-based, real-time, two-way communication between the set-top and the service provider network for services such as on-demand (optional software)

DVR and Home Networking Features

- *Dual-tuner DVR* allows one program to be recorded while viewing or recording another
- *160 GB Internal Hard Drive* stores up to 90 hours of SD or 20 hours of HD programs
- *320 GB Internal Hard Drive (optional)* stores up to 180 hours of SD or 40 hours of HD programs
- *500 GB Internal Hard Drive (optional)* stores up to 280 hours of SD or 62 hours of HD programs
- *Personal media player* enables display of photos and playback of video and audio from standards based home network connected devices (optional software)
- *Ethernet Connection* enables a connection to the home IP LAN for advanced services such as content sharing to the set-top from retail-purchased electronic devices
- *Whole Home DVR* enables sharing and managing of video services throughout the home to other connected DVRs, set-tops, and consumer electronic devices using standards based connection and security technologies (optional software)
- *MoCA Connection* enables an IP LAN connection over coaxial cable, which minimizes the need for new wiring in the home
- *Digital Transmission Content Protection over IP (DTCP-IP)* provides encrypted content protection, such as "copy-one-generation" or "copy-never" based upon content's copy control information (CCI), when output through an IP connection to an authenticated device

Figure 2. Cisco Explorer 8642HDC Front Panel (image may vary from actual product and specification)

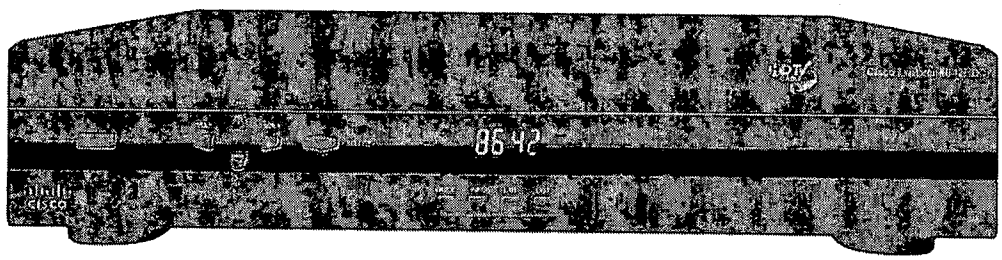


Table 1. Front Panel Features

Feature	Description
Connections	USB 2.0 Host, software controlled
Controls	IR Receiver, 10 Buttons: Power, List, Exit, Info, Guide, Vol+, Vol-, Ch+, Ch-, Select
Indicators	Four 7-segment digits, Power (icon), Message (icon), Record (icon), Home Networking (icon), HDTV, 5.1, Auto, 1080i p, 720i p, 480i p, software controlled
Color	Black finish, black lens, black buttons, grey text
Branding	Cisco, model number, provision for service provider branding, HDTV Cable

Figure 3. Cisco Explorer 8642HDC Back Panel (image may vary from actual product and specification)

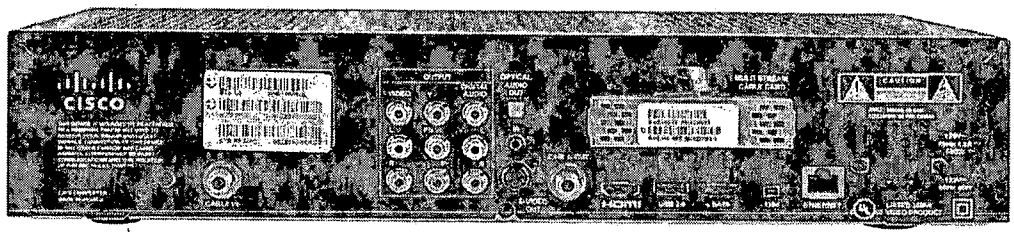


Table 2. Back Panel Features

Feature	Description
Connections In	Cable In
Connections Out	HDMI™ (1.3) with CEC, YPbPr, Optical Digital Audio, Coax Digital Audio, Video, L/R Audio 1, S-Video, L/R Audio 2, IR, TV Cable Out, IEEE-1394 4-Pin, software controlled, see Note 1
Output Resolutions	1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz, software controlled, see Note 1
Output Control	Scaled video in graphics, scaled HD video in graphics, graphics on HD and SD outputs, aspect ratio control, native resolution pass-thru, HD down convertible to SD, software controlled
Connections-Interactive	eSATA, Cable In with MoCA, DTCP-IP on MoCA, USB 2.0 Host, Support for generic serial interface via USB, RJ-45 Ethernet, DTCP-IP on Ethernet, software controlled
Power Input	Polarized 2-prong modular cord plug, 115 VAC, 60 Hz
Power Output	Polarized 2-prong outlet, 500W max, at input line voltage, software controlled
Labels	Serial Number, RF MAC Address, eCM MAC Address, M-Card Serial Number (if optional M-Card module is included), M-Card MAC Address (if optional M-Card module is included), Removal evident M-Card label (if optional M-Card module is included), Cisco, FCC, UL, Shock Warning, CATV Converter, Made In
Labels-Bottom	Scientific Atlanta, Inc., STB Model, Assembly P/N, Rev, Date, FCC, Patents, RSA

Specifications

Table 3. Product Specifications

Specification	Value
Tuning and Decoding	
DVR	Dual tuning, Dual Record, Pause, Rewind, Fast-Forward, Record one program while viewing or recording another, software controlled
Picture in Picture	Digital, HD, software controlled
Tuning	Dual QAM 64 or 256, In-Band 54 MHz - 1 GHz, QPSK out-of-band (OOB) 70-130 MHz, DOCSIS 91-867 MHz, MoCA 1.0-1.5 GHz
Video Decoders	Dedicated Dual 400 MHz VLIW CPU Processors, Dual MPEG-4 (H.264) up to HP@L4.0 (HD), Dual VC1 AP@L2&3, Dual MPEG-2 up to MP@HL, 1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz, video scaling, software controlled
Audio Decoders	Dedicated 250 MHz DSP CPU Processor, Dolby™ Digital to 5.1, MPEG-1 and MPEG-2, BTSC/SAP, Dolby Digital+, AAC, AAC+, software controlled
Conditional Access	Separable security with Multi-Stream CableCARD interface
Encoders	Audio BTSC for TV Cable (RF) Output, software controlled
Graphics Engine	2.5 Dimension graphics, up to 960 x 540 resolution, 32 bit (16 million) color
DAVIC	DAVIC 1.2, QPSK FDC at 1.5 Mbps, QPSK RDC at 1.5 Mbps, software controlled
DOCSIS	OOB and Interaction via DOCSIS 2.0, DOCSIS Set-top Gateway, Baseline Privacy Interface, software controlled

Specification	Value
Memory/Storage	
Unified RAM	384 MB, 512MB (optional), see Note 2
Flash	2 MB
CPU NVM	16 KB
Hard Drive	160 GB, 320 GB (optional), 500 GB (optional), Internal SATA, 1.5 Gbs
Boot Partition on HDD	256 MB, see Note 3
Hard Drive Expansion	External SATA (eSATA), 1.5 Gbs, on rear panel, software controlled
Processors	
Application/CPU	700 MHz (1000 MIPS)
Video/Graphics	Dual 400 MHz VLIW CPUs
Audio	250 MHz DSP CPU
DOCSIS CPU	333 MHz CPU
Network CPU	400 MHz CPU
Dimensions	
Product (HxWxD)	3.25 in. 15.6 in. x 11.2 in. (8.3 cm x 39.7 cm x 28.5 cm)
Product Weight	8.3 lbs (3.8 kg)
Carton (HxWxD)	6.12 in. x 18.0 in. x 14.0 in. (15.6 cm x 45.8 cm x 35.6 cm)
Total Weight	11.6 lbs (5.3 kg)
Operating Conditions	
Placement	Locate with at least 2 inches of open space above and on each side
Room Temperature	32 to 105°F (0 to 40°C) during operation
Power Dissipation	50W maximum

Table 4. Accessories

Specification	Value	
In Carton		
	Power Cord, Quick Reference Guide, HDMI-to-HDMI Cable	
Sold Separately		**Part Number**
	Axiom DVR Middleware License, see Note 2	4014594
	SARA DVR Software License 3-year	752351
	SARA DVR Software License 2-year	4020470
	SARA DVR Software License 1-year	4020469
	PowerKEY® Multi-Stream CableCARD PKM802	4014733
	AllTouch® AT8550 Remote Control	4006369
	AllTouch AT8560 Remote Control	4016237
	HDMI-to-HDMI Cable (additional or replacement)	1002048
	HDMI-to-DVI Cable	1002056
	YPbPr and L/R Cable Set	1000944
	RGB adapter and cables	749790
	IR Extender (USB) —12 ft	1001807
	IR Extender (USB)—25 ft	4006725
	IR Extender (3.5mm) —12 ft	1004648

With respect to each AVC/H.264 product, we are obligated to provide the following notice:

AVC VIDEO LICENSE

THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE http://www.mpegla.com.

Accordingly, please be advised that service providers, content providers, and broadcasters are required to obtain a separate use license from MPEG LA prior to any use of AVC/H.264 encoders and/or decoders.

Cisco Systems, Inc.
1-800-722-2009 or 678-277-1120
www.cisco.com

Part Number 7015625 Rev B
November 2009

Ordering Information

Table 5. Ordering Information

Model	Description	Part Number Set-Top Only	Part Number Set-Top with PowerKEY M-Card Module
Explorer 8642HDC	8642HDC, HD Digital Only MPEG-4/-2 DVR with 160 GB HDD, 384 MB RAM, DOCSIS, Ethernet, MoCA, DTCP-IP, and M-Card Interface	4026538	4026531
Explorer 8642HDC	8642HDC, HD Digital Only MPEG-4/-2 DVR with 320 GB HDD, 384 MB RAM, DOCSIS, Ethernet, MoCA, DTCP-IP, and M-Card Interface	TBD	4028948
Explorer 8642HDC	8642HDC, HD Digital-Only MPEG4/2 DVR with 500GB HDD, 512MB RAM, DOCSIS, Ethernet, MoCA, DTCP-IP, and PK M-Card	TBD	4033772

Notes:

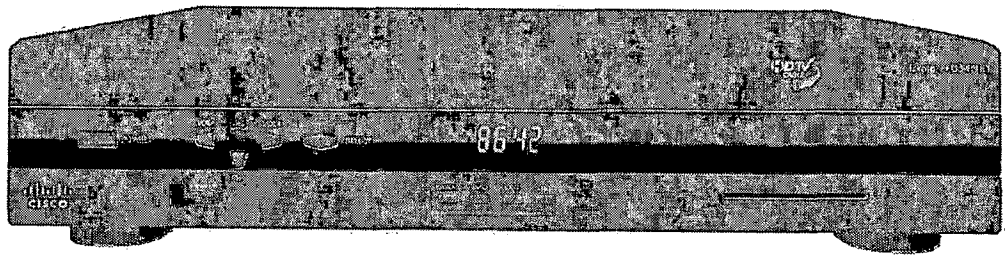
1. 1080p/24 or 1080p/30 output formats are available on HDMI, if those formats are presented to the set-top box at its input. Incoming video formats will not be converted to either of these for output. Output of these formats is under software control.
2. Axiom DVR Middleware for tru2way (formerly OCAP) support is recommended only for the 8600 models that have a minimum of 384 MB RAM.
3. Boot Partition provides space on the hard drive for storing the set-top's core software. Additional non-core application storage space may be made available on the hard drive. The Boot Partition is analogous to a portion of the role traditional flash memory serves on non-hard drive set-tops.

Cisco Explorer 8642HD DVR

The Cisco® Explorer® 8642HD DVR provides high quality video, audio, DVR, and two-way capabilities that cable operators have come to expect. The platform provides faster processing of applications while also supporting bandwidth management objectives.

The 8642HD becomes the multimedia service gateway for the home – sharing and managing video and audio experiences between the television and other home network devices. Multimedia over Coax Alliance (MoCA™) technology enables an IP LAN connection over coaxial cable, minimizing the need for new wiring in the home.

Figure 1. Cisco Explorer 8642HD DVR (image may vary from actual product and specification)



Features

Network Utilization Enhancements

- *1 GHz Tuning* allows service providers to expand network bandwidth to provide additional services such as HD and VOD, VoIP video, and high-speed data
- *MPEG-4 (H.264) Decoding* supports compression technology that provides better video quality at about half the data rate of MPEG-2
- *DOCSIS® 2.0* provides increased upstream throughput for future advanced services and provides a path for future IP video services (optional software)
- *Digital-Only Tuning* enables service providers to improve bandwidth efficiency and accelerate the transition to an all-digital network by migrating analog subscribers to digital services

tru2way™ and Conventional Network Support

- *Embedded PowerKEY® Conditional Access* provides digital security using an RSA encryption algorithm
- *Axiom™ DVR Middleware* supports tru2way (formerly OCAP™) applications such as Service Navigators, Games, and many other applications (optional software)
- *DOCSIS Set-top Gateway (DSG)* provides a powerful standard transport mechanism for command and control signaling between the set-top and service provider network (optional software)
- *SARA DVR Software* on a set-top provides native navigator and user interface in a non-tru2way environment (optional software)

- *DAVIC Receiver/Transmitter* allows IP-based, real-time, two-way communication between the set-top and the service provider network for services such as on-demand (optional software)

DVR and Home Networking Features

- *Dual-tuner DVR* allows one program to be recorded while viewing or recording another
- *160 GB Internal Hard Drive* stores up to 90 hours of SD or 20 hours of HD programs
- *320 GB Internal Hard Drive (optional)* stores up to 180 hours of SD or 40 hours of HD programs
- *500 GB Internal Hard Drive (optional)* stores up to 280 hours of SD or 62 hours of HD programs
- *Personal media player* enables display of photos and playback of video and audio from standards-based home network connected devices (optional software)
- *Ethernet Connection* enables a connection to the home IP LAN for advanced services such as content sharing to the set-top from retail-purchased electronic devices
- *Whole Home DVR* enables sharing and managing of video services throughout the home to other connected DVRs, set-tops and consumer electronic devices using standards-based connection and security technologies (optional software)
- *MoCA Connection (Multi-media over coax)* enables an IP LAN connection over coaxial cable, which minimizes the need for new wiring in the home
- *Digital Transmission Content Protection over IP (DTCP-IP)* provides encrypted content protection, such as "copy-one-generation" or "copy-never" based upon content copy control information (CCI), when output through an IP connection to an authenticated device

Figure 2. Cisco Explorer 8642HD Front Panel (image may vary from actual product and specification)

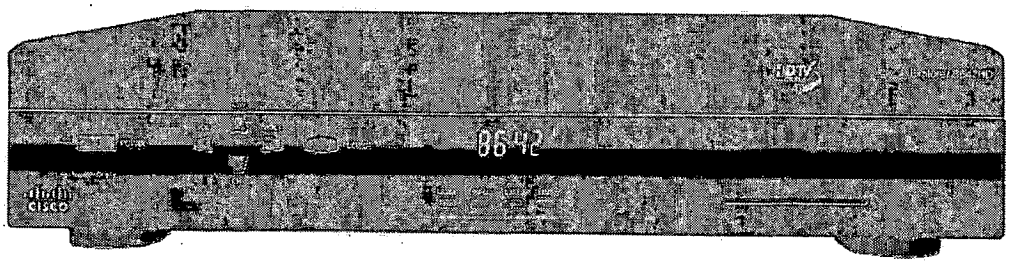


Table 1. Front Panel Features

Feature	Description
Connections	USB 2.0 Host, software controlled
Controls	IR Receiver, 10 Buttons: Power, List, Exit, Info, Guide, Vol+, Vol-, Ch+, Ch-, Select
Indicators	Four 7-segment digits, Power (icon), Message (icon), Record (icon), Home Networking (icon), HDTV, 5.1, Auto, 1080i p, 720i p, 480i p, software controlled
Color	Black finish, black lens, black buttons, grey text
Branding	Cisco, model number, provision for service provider branding, HDTV Cable

Figure 3. Cisco Explorer 8642HD Back Panel (image may vary from actual product and specification)

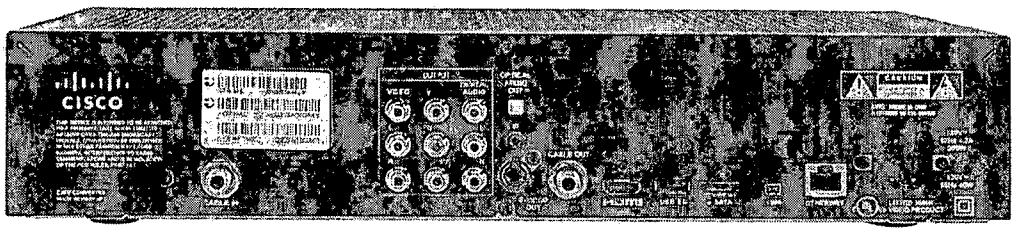


Table 2. Back Panel Features

Feature	Description
Connections In	Cable In
Connections Out	HDMI™ (1.3) with CEC, YPbPr, Optical Digital Audio, Coax Digital Audio, Video, L/R Audio 1, S-Video, L/R Audio 2, IR, TV Cable Out, IEEE-1394 4-Pin, software controlled, see Note 1
Output Resolutions	1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz, software controlled, see Note 1
Output Control	Scaled video in graphics, scaled HD video in graphics, graphics on HD and SD outputs, aspect ratio control, native resolution pass-thru, HD down convertible to SD, software controlled
Connections-Interactive	eSATA, MoCA on Cable Input, DTCP-IP on MoCA, USB 2.0 Host, Support for generic serial interface via USB, RJ-45 Ethernet, DTCP-IP on Ethernet, software controlled
Power Input	Polarized 2-prong modular cord plug, 115 VAC, 60 Hz
Power Output	Polarized 2-prong outlet, 500 W max, at input line voltage, software controlled
Labels	Serial Number, RF MAC Address, eCM MAC Address, Cisco, FCC, UL, Shock Warning, CATV Converter, Made In
Labels-Bottom	Scientific Atlanta, Inc., STB Model, Assembly P/N, Rev, Date, FCC, Patents, RSA

Specifications

Table 3. Product Specifications

Specification	Value
Tuning and Decoding	
DVR	Dual tuning, Dual Record, Pause, Rewind, Fast-Forward, Record one program while viewing or recording another, software controlled
Picture in Picture	Digital, HD, software controlled
Tuning	Dual QAM 64 or 256, In-Band 54 MHz - 1 GHz, QPSK out-of-band (OOB) 70-130 MHz, DOCSIS 91-867 MHz, MoCA 1.0GHz to 1.5GHz
Video Decoders	Dedicated Dual 400 MHz VLIW CPU Processors, Dual MPEG-4 (H.264) up to HP@L4.0 (HD), Dual VC1 AP@L2&3, Dual MPEG-2 up to MP@HL, 1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz, video scaling, software controlled
Audio Decoders	Dedicated 250 MHz DSP CPU Processor, Dolby™ Digital to 5.1, MPEG-1 and MPEG-2, BTSC/SAP, Dolby Digital+, AAC, AAC+, software controlled
Conditional Access	PowerKEY, software controlled
Encoders	Audio BTSC for TV Cable (RF) Output, software controlled
Graphics Engine	2.5 Dimension graphics, up to 960 x 540 resolution, 32 bit (16 million) color
DAVIC	DAVIC 1.2, QPSK FDC at 1.5 Mbps, QPSK RDC at 1.5 Mbps, software controlled
DOCSIS	OOB and Interaction via DOCSIS 2.0, DOCSIS Set-top Gateway, Baseline Privacy Interface, software controlled

Specification	Value
Memory/Storage	
RAM	384 MB, 512MB (optional), unified, see Note 2
Flash	2 MB
NVM	16 KB
Hard Drive	160 GB, 320 GB (optional), 500GB (optional), Internal SATA, 1.5 Gbs
Boot Partition on HDD	256 MB, see Note 3
Hard Drive Expansion	External SATA (eSATA), 1.5 Gbs, on rear panel, software controlled
Processors	
Application/CPU	700 MHz (1000 MIPS)
Video/Graphics	Dual 400 MHz VLIW CPUs
Audio	250 MHz DSP CPU
DOCSIS CPU	333 MHz CPU
Network CPU	400 MHz CPU
Dimensions	
Product (HxWxD)	3.25 in. x 15.6 in. x 11.2 in. (8.3 cm x 39.7 cm x 28.5 cm)
Product Weight	8.3 lbs (3.8 kg)
Carton (HxWxD)	6.12 in. x 18.0 in. x 14.0 in. (15.6 cm x 45.8 cm x 35.6 cm)
Total Weight	11.6 lbs (5.3 kg)
Operating Conditions	
Placement	Locate with at least 2 inches of open space above and on each side
Room Temperature	32° to 105°F (0° to 40°C) during operation
Power Dissipation	50 W maximum

Table 4. Accessories

Specification	Value	
In Carton		
	Power Cord, Quick Reference Guide, HDMI-to-HDMI Cable	
Sold Separately		**Part Number**
	Axiom DVR Middleware License, see Note 2	4014594
	SARA DVR Software License 3-year	752351
	SARA DVR Software License 2-year	4020470
	SARA DVR Software License 1-year	4020469
	AllTouch® AT8550 Remote Control	4006369
	AllTouch AT8560 Remote Control	4016237
	HDMI-to-HDMI Cable (additional or replacement)	1002048
	HDMI-to-DVI Cable	1002056
	YPbPr and L/R Cable Set	1000944
	RGB adapter and cables	749790
	IR Extender (USB)—12 ft	1001807
	IR Extender (USB)—25 ft	4006725
	IR Extender (3.5 mm)—12 ft	1004648

Ordering Information

Table 5. Ordering Information

Model	Description	Part Number
Explorer 8642HD	8642HD, HD Digital Only MPEG-4/-2 DVR with 160 GB HDD, 512 MB RAM, DOCSIS, Ethernet, and DTCP-IP	TBD
Explorer 8642HD	8642HD, HD Digital Only MPEG-4/-2 DVR with 320 GB HDD, 512 MB RAM, DOCSIS, Ethernet, and DTCP-IP	4028600
Explorer 8642HD	8642HD, HD Digital Only MPEG-4/-2 DVR with 500 GB HDD, 512 MB RAM, DOCSIS, Ethernet, and DTCP-IP	4034541

Notes:

1. 1080p/24 or 1080p/30 output formats are available on HDMI, if those formats are presented to the set-top box at its input. Incoming video formats will not be converted to either of these for output. Output of these formats is under software control.
2. Axiom DVR Middleware for tru2way (formerly OCAP) support is recommended only for the 8600 models that have a minimum of 384 MB RAM.
3. Boot Partition provides space on the hard drive for storing the core set-top software. Additional non-core application storage space may be made available on the hard drive. The Boot Partition is analogous to a portion of the role traditional flash memory serves on non-hard drive set-tops.

With respect to each AVC/H.264 product, we are obligated to provide the following notice:

AVC VIDEO LICENSE

THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE http://www.mpegla.com.

Accordingly, please be advised that service providers, content providers, and broadcasters are required to obtain a separate use license from MPEG LA prior to any use of AVC/H.264 encoders and/or decoders.

Cisco Systems, Inc.
1-800-722-2009 or 678-277-1120
www.cisco.com

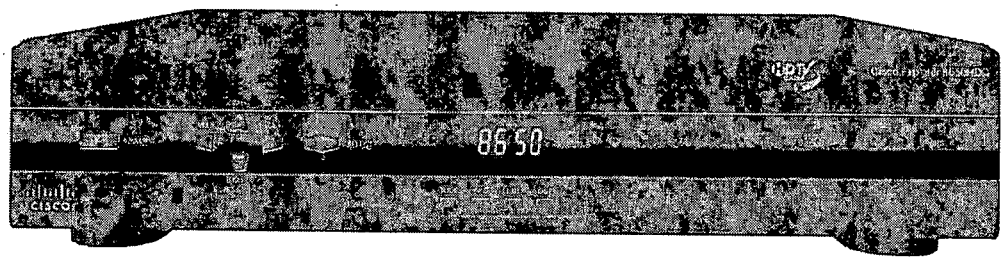
Part Number 7017062 Rev B
November 2009

Cisco Explorer 8650HDC DVR with M-Card Interface

The Cisco® Explorer™ 8650HDC DVR with Multi-Stream CableCARD™ (M-Card™) interface provides high quality video, audio, DVR, and two-way capabilities that cable operators have come to expect. The platform provides faster processing of applications while also supporting bandwidth management objectives.

The 8650HDC becomes the multimedia service gateway for the home – sharing and managing video and audio experiences between the television and other home network devices.

Figure 1. Cisco Explorer 8650HDC DVR (image may vary from actual product and specification)



Features

Network Utilization Enhancements

- *1 GHz Tuning* allows service providers to expand network bandwidth to provide additional services such as HD and VOD, VoIP video, and high-speed data
- *MPEG-4 (H.264) Decoding* supports compression technology that provides better video quality at about half the data rate of MPEG-2
- *DOCSIS® 2.0* provides increased upstream throughput for future advanced services and provides a path for future IP video services (optional software)
- *Digital-Analog tuning* allows cable operators to continue offering some analog-only cable channels, in addition to their digital tier, as they manage the transition to an all-digital lineup

tru2way™ and Conventional Network Support

- *M-Card Interface* uses a Multi-Stream CableCARD for separable security
- *Axiom™ DVR Middleware* supports tru2way (formerly OCAP™) applications such as Service Navigators, Games, and many other future applications (optional software)
- *DOCSIS Set-top Gateway (DSG)* provides a powerful standard transport mechanism for command and control signaling between the set-top and service provider network (optional software)
- *SARA DVR Software* on a set-top provides native navigator and user interface in a non-tru2way environment (optional software)
- *DAVIC Receiver/Transmitter* allows IP-based, real-time, two-way communication between the set-top and the service provider network for services such as on-demand (optional software)

DVR and Home Networking Features

- *Dual-tuner DVR* allows one program to be recorded while viewing or recording another
- *160 GB Internal Hard Drive* stores up to 90 hours of SD or 20 hours of HD programs
- *320 GB Internal Hard Drive (optional)* stores up to 180 hours of SD or 40 hours of HD programs
- *Personal media player* enables display of photos and playback of video and audio from standards based home network connected devices (optional software)
- *Ethernet Connection* enables a connection to the home IP LAN for advanced services such as content sharing to the set-top from retail-purchased electronic devices
- *Digital Transmission Content Protection over IP (DTCP-IP)* provides encrypted content protection, such as "copy-one-generation" or "copy-never" based upon content's copy control information (CCI), when output through an IP connection to an authenticated device

Figure 2. Cisco Explorer 8650HDC Front Panel (image may vary from actual product and specification)

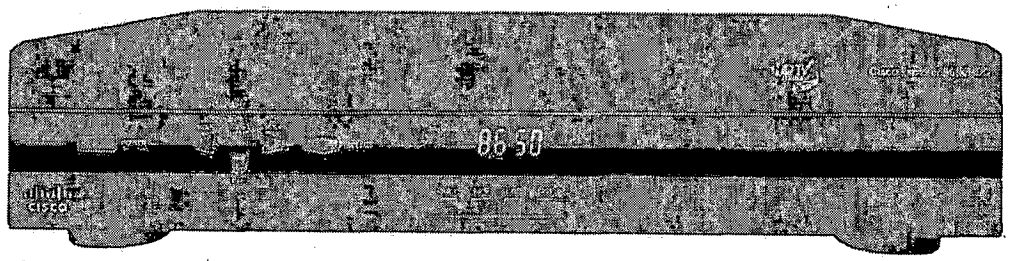


Table 1. Front Panel Features

Feature	Description
Connections	USB 2.0 Host, software controlled
Controls	IR Receiver, 10 Buttons: Power, List, Exit, Info, Guide, Vol+, Vol-, Ch+, Ch-, Select
Indicators	Four 7-segment digits, Power (icon), Message (icon), Record (icon), Home Networking (icon), HDTV, 5.1, Auto, 1080i p, 720i p, 480i p, software controlled
Color	Black finish, black lens, black buttons, grey text
Branding	Cisco, model number, provision for service provider branding, HDTV Cable

Figure 3. Cisco Explorer 8650HDC Back Panel (image may vary from actual product and specification)

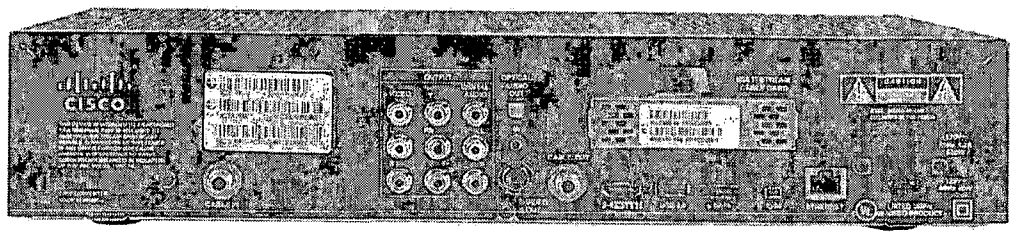


Table 2. Back Panel Features

Feature	Description
Connections In	Cable In
Connections Out	HDMI™ (1.3) with CEC, YPbPr, Optical Digital Audio, Coax Digital Audio, Video, L/R Audio 1, S-Video, L/R Audio 2, IR, TV Cable Out, IEEE-1394 4-Pin, software controlled, see Note 1
Output Resolutions	1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz, software controlled, see Note 1
Output Control	Scaled video in graphics, scaled HD video in graphics, graphics on HD and SD outputs, aspect ratio control, native resolution pass-thru, HD down convertible to SD, software controlled
Connections-Interactive	eSATA, USB 2.0 Host, support for generic serial interface via USB, RJ-45 Ethernet, DTCP-IP on Ethernet, software controlled
Power Input	Polarized 2-prong modular cord plug, 115 VAC, 60 Hz
Power Output	Polarized 2-prong outlet, 500W max, at input line voltage, software controlled
Labels	Serial Number, RF MAC Address, eCM MAC Address, M-Card Serial Number (if optional M-Card module is included), M-Card MAC Address (if optional M-Card module is included), Removal evident M-Card label (if optional M-Card module is included), Cisco, FCC, UL, Shock Warning, CATV Converter, Made In
Labels-Bottom	Scientific Atlanta, Inc., STB Model, Assembly P/N, Rev, Date, FCC, Patents, RSA

Specifications

Table 3. Product Specifications

Specification	Value
Tuning and Decoding	
DVR	Dual tuning, Dual Record, Pause, Rewind, Fast-Forward, Record one program while viewing or recording another, software controlled
Picture in Picture	Digital, HD, Analog, software controlled
Tuning	Dual QAM 64 or 256, Dual Analog, In-Band 54 MHz - 1 GHz, QPSK out-of-band (OOB) 70-130 MHz, DOCSIS 91-867 MHz
Video Decoders	Dedicated Dual 400 MHz VLIW CPU Processors, Dual MPEG-4 (H.264) up to HP@L4.0 (HD), Dual VC1 AP@L2&3, Dual MPEG-2 up to MP@HL, 1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz, video scaling, software controlled
Audio Decoders	Dedicated 250 MHz DSP CPU Processor, Dolby™ Digital to 5.1, MPEG-1 and MPEG-2, BTSC/SAP, Dolby Digital+, AAC, AAC+, software controlled
Conditional Access	Separable security with Multi-Stream CableCARD interface
Encoders	Audio BTSC for TV Cable (RF) Output, Dual Video and Audio (from analog) for recording, software controlled
Graphics Engine	2.5 Dimension graphics, up to 960 x 540 resolution, 32 bit (16 million) color
DAVIC	DAVIC 1.2, QPSK FDC at 1.5 Mbps, QPSK RDC at 1.5 Mbps, software controlled
DOCSIS	OOB and Interaction via DOCSIS 2.0, DOCSIS Set-top Gateway, Baseline Privacy Interface, software controlled

Memory/Storage	
Unified RAM	384 MB, see Note 2
Video Encoder	16 MB
Flash	2 MB
CPU NVM	16 KB
Hard Drive	160 GB, 320 GB (optional), Internal SATA, 1.5 Gbs
Boot Partition on HDD	256 MB, see Note.3
Hard Drive Expansion	External SATA (eSATA), 1.5 Gbs, on rear panel, software controlled
Processors	
Application/CPU	700 MHz (1000 MIPS)
Video/Graphics	Dual 400 MHz VLIW CPUs
Audio	250 MHz DSP CPU
DOCSIS CPU	333 MHz CPU
Network CPU	400 MHz CPU
Dimensions	
Product (HxWxD)	3.25 in. x 15.6 in. x 11.2 in. (8.3 cm x 39.7 cm x 28.5 cm)
Product Weight	8.3 lbs (3.8 kg)
Carton (HxWxD)	6.12 in. x 18.0 in. x 14.0 in. (15.6 cm x 45.8 cm x 35.6 cm)
Total Weight	11.6 lbs (5.3 kg)
Operating Conditions	
Placement	Locate with at least 2 inches of open space above and on each side
Room Temperature	32 to 105°F (0 to 40°C) during operation
Power Dissipation	50W maximum

Table 4. Accessories

Specification	Value	
In Carton		
	Power Cord, Quick Reference Guide, HDMI-to-HDMI Cable	
Sold Separately		**Part Number**
	Axiom DVR Middleware License, see Note 2	4014594
	SARA DVR Software License 3-year	752351
	SARA DVR Software License 2-year	4020470
	SARA DVR Software License 1-year	4020469
	PowerKEY Multi-Stream CableCARD PKM802	4014733
	AllTouch® AT8550 Remote Control	4006369
	AllTouch AT8560 Remote Control	4016237
	HDMI-to-HDMI Cable (additional or replacement)	1002048
	HDMI-to-DVI Cable	1002056
	YPbPr and L/R Cable Set	1000944
	RGB adapter and cables	749790
	IR Extender (USB)—12 ft	1001807
	IR Extender (USB)—25 ft	4006725
	IR Extender (3.5mm)—12 ft	1004648

Ordering Information

Table 5. Ordering Information

Model	Description	Part Number Set-Top Only	Part Number Set-Top with PowerKEY M-Card Module
Explorer 8650HDC	8650HDC, HD MPEG-4/-2 DVR with 160 GB HDD, 384 MB RAM, DOCSIS, Ethernet, DTCP-IP, and M-Card interface	TBD	4026529
Explorer 8650HDC	8650HDC, HD MPEG-4/-2 DVR with 320 GB HDB, 384 MB RAM, DOCSIS, Ethernet, DTCP-IP, and M-Card interface	TBD	TBD

Note: 1. 1080p/24 or 1080p/30 output formats are available on HDMI, if those formats are presented to the set-top box at its input. Incoming video formats will not be converted to either of these for output. Output of these formats is under software control.

Note: 2. Axiom DVR Middleware for tru2way (formerly OCAP) support is recommended only for the 8600 models that have 384 MB RAM.

Note: 3. Boot Partition provides space on the hard drive for storing the set-top's core software. Additional non-core application storage space may be made available on the hard drive. The Boot Partition is analogous to a portion of the role traditional flash memory serves on non-hard drive set-tops.

With respect to each AVC/H.264 product, we are obligated to provide the following notice:

AVC VIDEO LICENSE

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Accordingly, please be advised that service providers, content providers, and broadcasters are required to obtain a separate use license from MPEG LA prior to any use of AVC/H.264 encoders and/or decoders.

Service Provider Video Technology Group
1-800-722-2009 or 678-277-1120
www.scientificatlanta.com

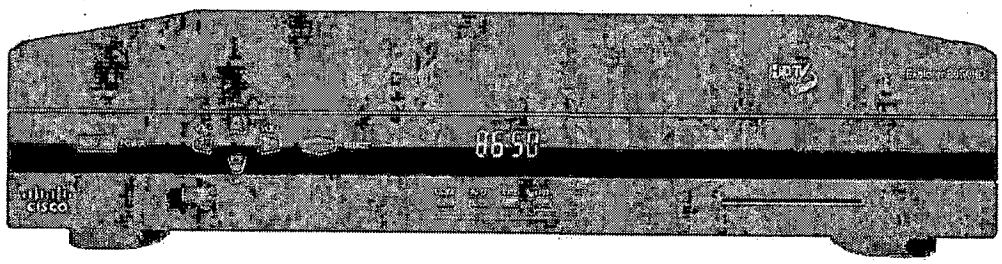
Part Number 7015624 Rev A
November 2008

Cisco Explorer 8650HD DVR

The Cisco® Explorer® 8650HD DVR provides high quality video, audio, DVR, and two-way capabilities that cable operators have come to expect. The platform provides faster processing of applications while also supporting bandwidth management objectives.

The 8650HD becomes the multimedia service gateway for the home – sharing and managing video and audio experiences between the television and other home network devices.

Figure 1. Cisco Explorer 8650HD DVR (image may vary from actual product and specification)



Features

Network Utilization Enhancements

- *1 GHz Tuning* allows service providers to expand network bandwidth to provide additional services such as HD and VOD, VoIP video, and high-speed data
- *MPEG-4 (H.264) Decoding* supports compression technology that provides better video quality at about half the data rate of MPEG-2
- *DOCSIS® 2.0* provides increased upstream throughput for future advanced services and provides a path for future IP video services (optional software)
- *Digital-Analog Tuning* allows cable operators to continue offering some analog-only cable channels, in addition to their digital tier, as they manage the transition to an all-digital lineup

tru2way™ and Conventional Network Support

- *Embedded PowerKEY® Conditional Access* provides digital security using an RSA encryption algorithm
- *Axiom™ DVR Middleware* supports tru2way (formerly OCAP™) applications such as Service Navigators, Games, and many other applications (optional software)
- *DOCSIS Set-top Gateway (DSG)* provides a powerful standard transport mechanism for command and control signaling between the set-top and service provider network (optional software)
- *SARA DVR Software* on a set-top provides native navigator and user interface in a non-tru2way environment (optional software)
- *DAVIC Receiver/Transmitter* allows IP-based, real-time, two-way communication between the set-top and the service provider network for services such as on-demand (optional software)

DVR and Home Networking Features

- *Dual-tuner DVR* allows one program to be recorded while viewing or recording another
- *160 GB Internal Hard Drive* stores up to 90 hours of SD or 20 hours of HD programs
- *320 GB Internal Hard Drive (optional)* stores up to 180 hours of SD or 40 hours of HD programs
- *Personal media player* enables display of photos and playback of video and audio from standards-based home network connected devices (optional software)
- *Ethernet Connection* enables a connection to the home IP LAN for advanced services such as content sharing to the set-top from retail-purchased electronic devices
- *Digital Transmission Content Protection over IP (DTCP-IP)* provides encrypted content protection, such as "copy-one-generation" or "copy-never" based upon content copy control information (CCI), when output through an IP connection to an authenticated device

Figure 2. Cisco Explorer 8650HD Front Panel (image may vary from actual product and specification)

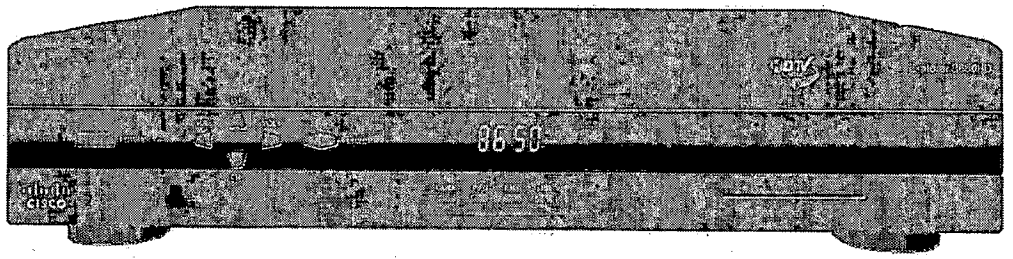


Table 1. Front Panel Features

Feature	Description
Connections	USB 2.0 Host, Smart Card Slot, software controlled
Controls	IR Receiver, 10 Buttons: Power, List, Exit, Info, Guide, Vol+, Vol-, Ch+, Ch-, Select
Indicators	Four 7-segment digits, Power (icon), Message (icon), Record (icon), Home Networking (icon), HDTV, 5.1, Auto, 1080i p, 720i p, 480i p, software controlled
Color	Black finish, black lens, black buttons, grey text
Branding	Cisco, model number, provision for service provider branding, HDTV Cable

Figure 3. Cisco Explorer 8650HD Back Panel (image may vary from actual product and specification)

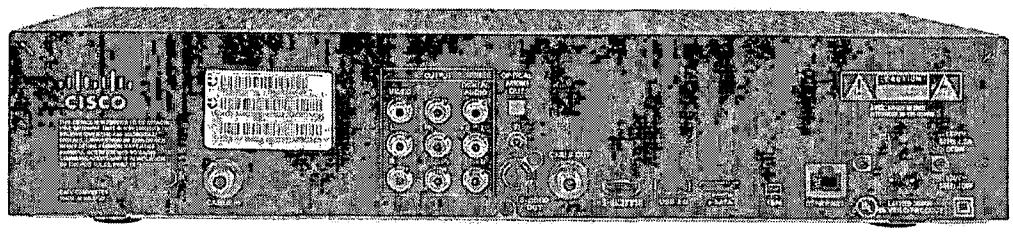


Table 2. Back Panel Features

Feature	Description
Connections In	Cable In
Connections Out	HDMI™.(1.3) with CEC, YPbPr, Optical Digital Audio, Coax Digital Audio, Video, L/R Audio 1, S-Video, L/R Audio 2, IR, TV Cable Out, IEEE-1394 4-Pin, software controlled, see Note 1
Output Resolutions	1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz, software controlled, see Note 1
Output Control	Scaled video in graphics, scaled HD video in graphics, graphics on HD and SD outputs, aspect ratio control, native resolution pass-thru, HD down convertible to SD, software controlled
Connections-Interactive	eSATA, USB 2.0 Host, Support for generic serial interface via USB, RJ-45 Ethernet, DTCP-IP on Ethernet, software controlled
Power Input	Polarized 2-prong modular cord plug, 115 VAC, 60 Hz
Power Output	Polarized 2-prong outlet, 500 W max, at input line voltage, software controlled
Labels	Serial Number, RF MAC Address, eCM MAC Address, Cisco, FCC, UL, Shock Warning, CATV Converter, Made In
Labels-Bottom	Scientific Atlanta, Inc., STB Model, Assembly P/N, Rev, Date, FCC, Patents, RSA

Specifications

Table 3. Product Specifications

Specification	Value
Tuning and Decoding	
DVR	Dual tuning, Dual Record, Pause, Rewind, Fast-Forward, Record one program while viewing or recording another, software controlled
Picture in Picture	Digital, HD, Analog, software controlled
Tuning	Dual QAM 64 or 256, Dual Analog, In-Band 54 MHz - 1 GHz, QPSK out-of-band (OOB) 70-130 MHz, DOCSIS 91-867 MHz
Video Decoders	Dedicated Dual 400 MHz VLIW CPU Processors, Dual MPEG-4 (H.264) up to HP@L4.0 (HD), Dual VC1 AP@L2&3, Dual MPEG-2 up to MP@HL, 1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz, video scaling, software controlled
Audio Decoders	Dedicated 250 MHz DSP CPU Processor, Dolby™ Digital to 5.1, MPEG-1 and MPEG-2, BTSC/SAP, Dolby Digital+, AAC, AAC+, software controlled
Conditional Access	PowerKEY, Smart Card Slot, software controlled
Encoders	Audio BTSC for TV Cable (RF) Output, Dual Video & Audio (from Analog) for recording, software controlled
Graphics Engine	2.5 Dimension graphics, up to 960 x 540 resolution, 32 bit (16 million) color
DAVIC	DAVIC 1.2, QPSK FDC at 1.5 Mbps, QPSK RDC at 1.5 Mbps, software controlled
DOCSIS	OOB and Interaction via DOCSIS 2.0, DOCSIS Set-top Gateway, Baseline Privacy Interface, software controlled

Memory/Storage	
RAM	384 MB, unified, see Note 2
Flash	2 MB
Video Encoder	16 MB
NVM	16 KB
Hard Drive	160 GB, 320 GB (optional), Internal SATA, 1.5 Gbs
Boot Partition on HDD	256 MB, see Note 3
Hard Drive Expansion	External SATA (eSATA), 1.5 Gbs, on rear panel, software controlled
Processors	
Application/CPU	700 MHz (1000 MIPS)
Video/Graphics	Dual 400 MHz VLIW CPUs
Audio	250 MHz DSP CPU
DOCSIS CPU	333 MHz CPU
Network CPU	400 MHz CPU
Dimensions	
Product (HxWxD)	3.25 in. x 15.6 in. x 11.2 in. (8.3 cm x 39.7 cm x 28.5 cm)
Product Weight	8.3 lbs (3.8 kg)
Carton (HxWxD)	6.12 in. x 18.0 in. x 14.0 in. (15.6 cm x 45.8 cm x 35.6 cm)
Total Weight	11.6 lbs (5.3 kg)
Operating Conditions	
Placement	Locate with at least 2 inches of open space above and on each side
Room Temperature	32° to 105°F (0° to 40°C) during operation
Power Dissipation	50 W maximum

Table 4. Accessories

Specification	Value	
In Carton		
	Power Cord, Quick Reference Guide, HDMI-to-HDMI Cable	
Sold Separately		**Part Number**
	Axiom DVR Middleware License, see Note 2	4014594
	SARA DVR Software License 3-year	752351
	SARA DVR Software License 2-year	4020470
	SARA DVR Software License 1-year	4020469
	AllTouch® AT8550 Remote Control	4006369
	AllTouch AT8560 Remote Control	4016237
	HDMI-to-HDMI Cable (additional or replacement)	1002048
	HDMI-to-DVI Cable	1002056
	YPbPr and L/R Cable Set	1000944
	RGB adapter and cables	749790
	IR Extender (USB)—12 ft	1001807
	IR Extender (USB)—25 ft	4006725
	IR Extender (3.5 mm)—12 ft	1004648

Ordering Information

Table 5. Ordering Information

Model	Description	Part Number
Explorer 8650HD	8650HD, HD MPEG4/2 DVR with 160 GB HDD, 384 MB RAM, DOCSIS, Ethernet, and DTCP-IP	4027782
Explorer 8650HD	8650HD, HD MPEG4/2 DVR with 320 GB HDD, 384 MB RAM, DOCSIS, Ethernet, and DTCP-IP	TBD

Note: 1. 1080p/24 or 1080p/30 output formats are available on HDMI, if those formats are presented to the set-top box at its input. Incoming video formats will not be converted to either of these for output. Output of these formats is under software control.

Note: 2. Axiom DVR Middleware for tru2way (formerly OCAP) support is recommended only for the 8600 models that have 384 MB RAM.

Note: 3. Boot Partition provides space on the hard drive for storing the core set-top software. Additional non-core application storage space may be made available on the hard drive. The Boot Partition is analogous to a portion of the role traditional flash memory serves on non-hard drive set-tops.

With respect to each AVC/H.264 product, we are obligated to provide the following notice:

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Accordingly, please be advised that service providers, content providers, and broadcasters are required to obtain a separate use license from MPEG LA prior to any use of AVC/H.264 encoders and/or decoders.

Service Provider Video Technology Group
1-800-722-2009 or 678-277-1120
www.scientificatlanta.com

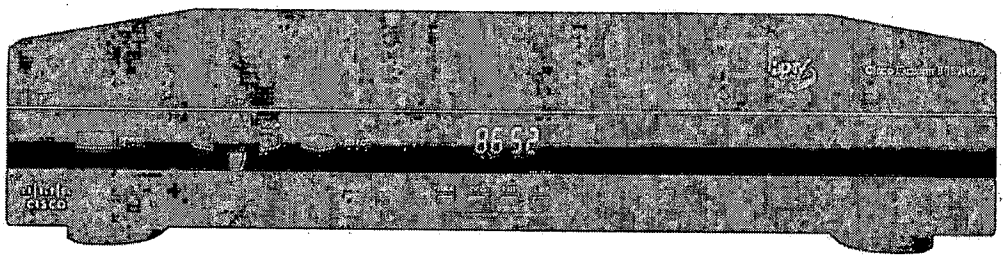
Part Number 7015726 Rev A
January 2009

Cisco Explorer 8652HDC DVR with M-Card Interface

The Cisco® Explorer™ 8652HDC DVR with Multi-Stream CableCARD™ (M-Card™) interface provides high quality video, audio, DVR, and two-way capabilities that cable operators have come to expect. The platform provides faster processing of applications while also supporting bandwidth management objectives.

The 8652HDC becomes the multimedia service gateway for the home – sharing and managing video and audio experiences between the television and other home network devices. Multimedia over Coax Alliance (MoCA™) technology enables an IP LAN connection over coaxial cable, minimizing the need for new wiring in the home.

Figure 1. Cisco Explorer 8652HDC DVR (image may vary from actual product and specification)



Features

Network Utilization Enhancements

- *1 GHz Tuning* allows service providers to expand network bandwidth to provide additional services such as HD and VOD, VoIP video, and high-speed data
- *MPEG-4 (H.264) Decoding* supports compression technology that provides better video quality at about half the data rate of MPEG-2
- *DOCSIS® 2.0* provides increased upstream throughput for future advanced services and provides a path for future IP video services (optional software)
- *Digital-Analog Tuning* allows cable operators to continue offering some analog-only cable channels, in addition to their digital tier, as they manage the transition to an all-digital lineup

tru2way™ and Conventional Network Support

- *M-Card Interface* uses a Multi-Stream CableCARD for separable security
- *Axiom™ DVR Middleware* supports tru2way (formerly OCAP™) applications such as Service Navigators, Games, and many other future applications (optional software)
- *DOCSIS Set-top Gateway (DSG)* provides a powerful standard transport mechanism for command and control signaling between the set-top and service provider network (optional software)
- *SARA DVR Software* on a set-top provides native navigator and user interface in a non-tru2way environment (optional software)

- *DAVIC Receiver/Transmitter* allows IP-based, real-time, two-way communication between the set-top and the service provider network for services such as on-demand (optional software)

DVR and Home Networking Features

- *Dual-tuner DVR* allows one program to be recorded while viewing or recording another
- *160 GB Internal Hard Drive* stores up to 90 hours of SD or 20 hours of HD programs
- *320 GB Internal Hard Drive (optional)* stores up to 180 hours of SD or 40 hours of HD programs
- *Personal media player* enables display of photos and playback of video and audio from standards based home network connected devices (optional software)
- *Ethernet Connection* enables a connection to the home IP LAN for advanced services such as content sharing to the set-top from retail-purchased electronic devices
- *Whole Home DVR* enables sharing and managing of video services throughout the home to other connected DVRs, set-tops, and consumer electronic devices using standards based connection and security technologies (optional software)
- *MoCA Connection* enables an IP LAN connection over coaxial cable, which minimizes the need for new wiring in the home
- *Digital Transmission Content Protection over IP (DTCP-IP)* provides encrypted content protection, such as "copy-one-generation" or "copy-never" based upon content's copy control information (CCI), when output through an IP connection to an authenticated device

Figure 2. Cisco Explorer 8652HDC DVR Front Panel (image may vary from actual product and specification)

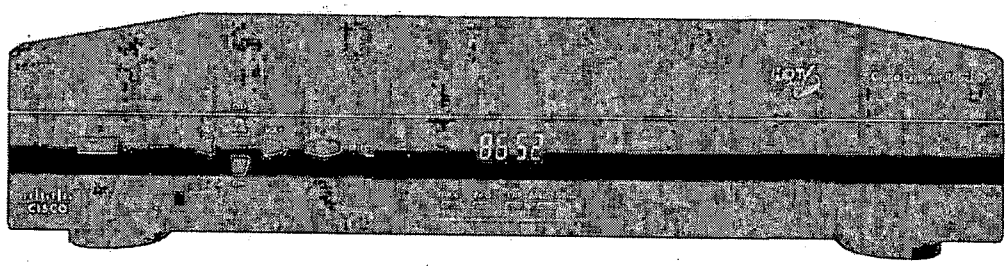


Table 1. Front Panel Features

Feature	Description
Connections	USB 2.0 Host, software controlled
Controls	IR Receiver, 10 Buttons: Power, List, Exit, Info, Guide, Vol+, Vol-, Ch+, Ch-, Select
Indicators	Four 7-segment digits, Power (icon), Message (icon), Record (icon), Home Networking (icon) HDTV, 5.1, Auto, 1080i p, 720i p, 480i p, software controlled
Color	Black finish, black lens, black buttons, grey text
Branding	Cisco, model number, provision for service provider branding, HDTV Cable

Figure 3. Cisco Explorer 8652HDC DVR Back Panel (image may vary from actual product and specification)

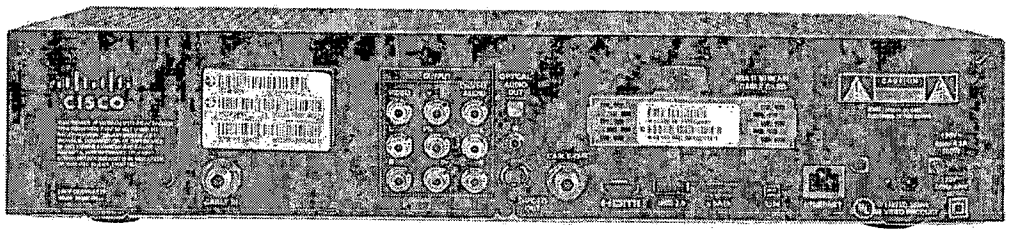


Table 2. Back Panel Features

Feature	Description
Connections In	Cable In
Connections Out	HDMI™ (1.3) with CEC, YPbPr, Optical Digital Audio, Coax Digital Audio, Video, L/R Audio 1, S-Video, L/R Audio 2, IR, TV Cable Out, IEEE-1394 4-Pin, software controlled, see Note 1
Output Resolutions	1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz, software controlled, see Note 1
Output Control	Scaled video in graphics, scaled HD video in graphics, graphics on HD and SD outputs, aspect ratio control, native resolution pass-thru, HD down convertible to SD, software controlled
Connections-Interactive	eSATA, Cable In with MoCA, DTCP-IP on MoCA, USB 2.0 Host, support for generic serial interface via USB, RJ-45 Ethernet, DTCP-IP on Ethernet, software controlled
Power Input	Polarized 2-prong modular cord plug, 115 VAC, 60 Hz
Power Output	Polarized 2-prong outlet, 500W max, at input line voltage, software controlled
Labels	Serial Number, RF MAC Address, eCM MAC Address, M-Card Serial Number (if optional M-Card module is included), M-Card MAC Address (if optional M-Card module is included), Removal evident M-Card label (if optional M-Card module is included), Cisco, FCC, UL, Shock Warning, CATV Converter, Made In
Labels-Bottom	Scientific Atlanta, Inc., STB Model, Assembly P/N, Rev, Date, FCC, Patents, RSA

Specifications

Table 3. Product Specifications

Specification	Value
Tuning and Decoding	
DVR	Dual tuning, Dual Record, Pause, Rewind, Fast-Forward, Record one program while viewing or recording another, software controlled
Picture in Picture	Digital, HD, Analog, software controlled
Tuning	Dual QAM 64 or 256, Dual Analog, In-Band 54 MHz - 1 GHz, QPSK out-of-band (OOB) 70-130 MHz, DOCSIS 91-867 MHz, MoCA 1.0-1.5 GHz
Video Decoders	Dedicated Dual 400 MHz VLIW CPU Processors, Dual MPEG-4 (H.264) up to HP@L4.0 (HD), Dual VC1 AP@L2&3, Dual MPEG-2 up to MP@HL, 1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz, video scaling, software controlled
Audio Decoders	Dedicated 250 MHz DSP CPU Processor, Digital to 5.1, MPEG-1 and MPEG-2, BTSC/SAP, Dolby Digital+, AAC, AAC+, software controlled
Conditional Access	Separable security with Multi-Stream CableCARD interface
Encoders	Audio BTSC for TV Cable (RF) Output, Dual Video and Audio (from analog) for recording, software controlled
Graphics Engine	2.5 Dimension graphics, up to 960 x 540 resolution, 32 bit (16 million) color
DAVIC	DAVIC 1.2, QPSK FDC at 1.5 Mbps, QPSK RDC at 1.5 Mbps, software controlled
DOCSIS	OOB and Interaction via DOCSIS 2.0, DOCSIS Set-top Gateway, Baseline Privacy Interface, software controlled

Memory/Storage	
Unified RAM	384 MB, see Note 2
Video Encoder	16 MB
Flash	2 MB
CPU NVM	16 KB
Hard Drive	160 GB, 320 GB (optional), Internal SATA, 1.5 Gbs
Boot Partition on HDD	256 MB, see Note 3
Hard Drive Expansion	External SATA (eSATA), 1.5 Gbs, on rear panel, software controlled
Processors	
Application/CPU	700 MHz (1000 MIPS)
Video/Graphics	Dual 400 MHz VLIW CPUs
Audio	250 MHz DSP CPU
DOCSIS CPU	333 MHz CPU
Network CPU	400 MHz CPU
Dimensions	
Product (HxWxD)	3.25 in. 15.6 in. x 11.2 in. (8.3 cm x 39.7 cm x 28.5 cm)
Product Weight	8.3 lbs (3.8 kg)
Carton (HxWxD)	6.12 in. x 18.0 in. x 14.0 in. (15.6 cm x 45.8 cm x 35.6 cm)
Total Weight	11.6 lbs (5.3 kg)
Operating Conditions	
Placement	Locate with at least 2 inches of open space above and on each side
Room Temperature	32 to 105°F (0 to 40°C) during operation
Power Dissipation	50W maximum

Table 4. Accessories

Specification	Value	
In Carton		
	Power Cord, Quick Reference Guide, HDMI-to-HDMI Cable	
Sold Separately		**Part Number**
	Axiom DVR Middleware License, see Note 2	4014594
	SARA DVR Software License 3-year	752351
	SARA DVR Software License 2-year	4020470
	SARA DVR Software License 1-year	4020469
	PowerKEY® Multi-Stream CableCARD PKM802	4014733
	AllTouch® AT8550 Remote Control	4006369
	AllTouch AT8560 Remote Control	4016237
	HDMI-to-HDMI Cable (additional or replacement)	1002048
	HDMI-to-DVI Cable	1002056
	YPbPr and L/R Cable Set	1000944
	RGB adapter and cables	749790
	IR Extender (USB)—12 ft	1001807
	IR Extender (USB)—25 ft	4006725
	IR Extender (3.5mm)—12 ft	1004648

Ordering Information

Table 5. Ordering Information

Model	Description	Part Number Set-Top Only	Part Number Set-Top with PowerKEY M-Card Module
Explorer 8652HDC	8652HDC, HD MPEG-4/-2 DVR with 160 GB HDD, 384 MB RAM, DOCSIS, Ethernet, MoCA, DTCP-IP, and M-Card interface	TBD	4026537
Explorer 8652HDC	8652HDC, HD MPEG-4/-2 DVR with 320 GB HDD, 384 MB RAM, DOCSIS, Ethernet, MoCA, DTCP-IP, and M-Card interface	TBD	TBD

Note: 1. 1080p/24 or 1080p/30 output formats are available on HDMI, if those formats are presented to the set-top box at its input. Incoming video formats will not be converted to either of these for output. Output of these formats is under software control.

Note: 2. Axiom DVR Middleware for tru2way (formerly OCAP) support is recommended only for the 8600 models that have 384 MB RAM.

Note: 3. Boot Partition provides space on the hard drive for storing the set-top's core software. Additional non-core application storage space may be made available on the hard drive. The Boot Partition is analogous to a portion of the role traditional flash memory serves on non-hard drive set-tops.

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Accordingly, please be advised that service providers, content providers, and broadcasters are required to obtain a separate use license from MPEG LA prior to any use of AVC/H.264 encoders and/or decoders.

Service Provider Video Technology Group
1-800-722-2009 or 678-277-1120
www.scientificatlanta.com

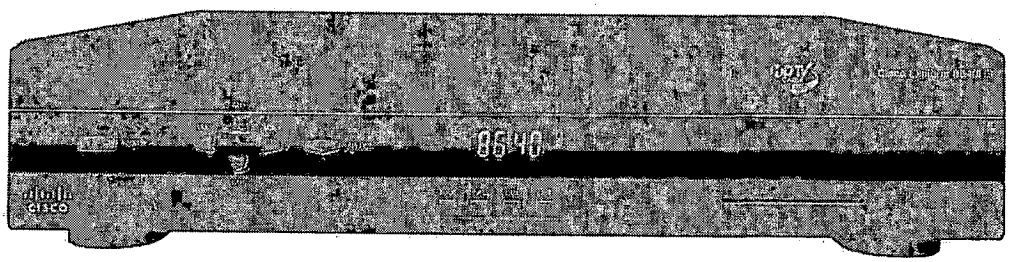
Part Number 7014687 Rev A
November 2008

Cisco Explorer 8640HD DVR

The Cisco® Explorer™ 8640HD DVR provides high quality video, audio, DVR, and two-way capabilities that cable operators have come to expect. The platform provides faster processing of applications while also supporting bandwidth management objectives.

The 8640HD becomes the multimedia service gateway for the home – sharing and managing video and audio experiences between the television and other home network devices.

Figure 1. Cisco Explorer 8640HD DVR (image may vary from actual product and specification)



Features

Network Utilization Enhancements

- *1 GHz Tuning* allows service providers to expand network bandwidth to provide additional services such as HD and VOD, VoIP video, and high-speed data
- *MPEG-4 (H.264) Decoding* supports compression technology that provides better video quality at about half the data rate of MPEG-2
- *DOCSIS® 2.0* provides increased upstream throughput for future advanced services and provides a path for future IP video services (optional software)
- *Digital-Only Tuning* enables service providers to improve bandwidth efficiency and accelerate the transition to an all-digital network by migrating analog subscribers to digital services

tru2way™ and Conventional Network Support

- *Embedded PowerKEY® Conditional Access* provides digital security using an RSA encryption algorithm
- *Axiom™ DVR Middleware* supports tru2way (formerly OCAP™) applications such as Service Navigators, Games, and many other future applications (optional software)
- *DOCSIS Set-top Gateway (DSG)* provides a powerful standard transport mechanism for command and control signaling between the set-top and service provider network (optional software)
- *SARA DVR Software* on a set-top provides native navigator and user interface in a non-tru2way environment (optional software)

- *DAVIC Receiver/Transmitter* allows IP-based, real-time, two-way communication between the set-top and the service provider network for services such as on-demand (optional software)
- *ENERGY STAR® Tier 1* qualified set-top box must meet strict energy-efficiency guidelines set by the US Environmental Protection Agency (EPA) and the US Department of Energy (DOE), see Note 4

DVR and Home Networking Features

- *Dual-tuner DVR* allows one program to be recorded while viewing or recording another
- *160 GB Internal Hard Drive* stores up to 90 hours of SD or 20 hours of HD programs
- *320 GB Internal Hard Drive (optional)* stores up to 180 hours of SD or 40 hours of HD programs
- *500 GB Internal Hard Drive (optional)* stores up to 280 hours of SD or 62 hours of HD programs
- *Personal media player* enables display of photos and playback of video and audio from standards based home network connected devices (optional software)
- *Ethernet Connection* enables a connection to the home IP LAN for advanced services such as content sharing to the set-top from retail-purchased electronic devices
- *Digital Transmission Content Protection over IP (DTCP-IP)* provides encrypted content protection, such as "copy-one-generation" or "copy-never" based upon content's copy control information (CCI), when output through an IP connection to an authenticated device

Figure 2. Cisco Explorer 8640HD Front Panel (image may vary from actual product and specification)

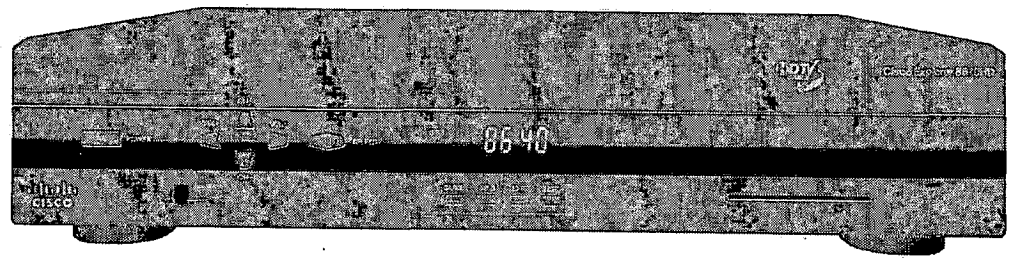


Table 1. Front Panel Features

Feature	Description
Connections	USB 2.0 Host, software controlled
Controls	IR Receiver, 10 Buttons: Power, List, Exit, Info, Guide, Vol+, Vol-, Ch+, Ch-, Select
Indicators	Four 7-segment digits, Power (icon), Message (icon), Record (icon), Home Networking (icon), HDTV, 5.1, Auto, 1080i p, 720i p, 480i p, software controlled
Color	Black finish, black lens, black buttons, grey text
Branding	Cisco, model number, provision for service provider branding, HDTV Cable

Figure 3. Cisco Explorer 8640HD Back Panel (image may vary from actual product and specification)

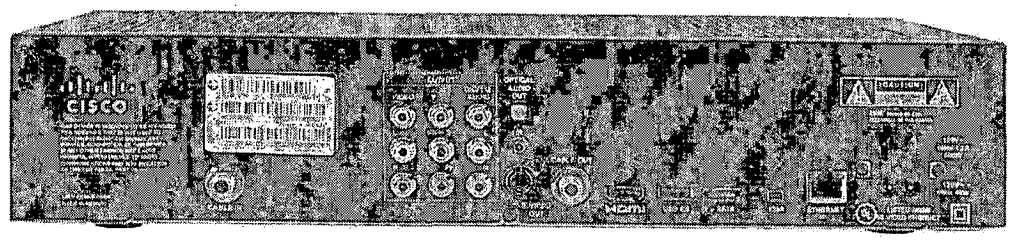


Table 2. Back Panel Features

Feature	Description
Connections In	Cable In
Connections Out	HDMI™ (1.3) with CEC, YPbPr, Optical Digital Audio, Coax Digital Audio, Video, L/R Audio 1, S-Video, L/R Audio 2, IR, TV Cable Out, IEEE-1394 4-Pin, software controlled, see Note 1
Output Resolutions	1920 x 1080i 60 Hz, 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz, software controlled, see Note 1
Output Control	Scaled video in graphics, scaled HD video in graphics, graphics on HD and SD outputs, aspect ratio control, native resolution pass-thru, HD down convertible to SD, software controlled
Connections-Interactive	eSATA, USB 2.0 Host, Support for generic serial interface via USB, RJ-45 Ethernet, DTCP-IP on Ethernet, software controlled
Power Input	Polarized 2-prong modular cord plug, 115 VAC, 60 Hz
Power Output	Polarized 2-prong outlet, 500W max, at input line voltage, software controlled
Labels	Serial Number, RF MAC Address, eCM MAC Address, Cisco, FCC, UL, Shock Warning, CATV Converter, Made In
Labels-Bottom	Scientific Atlanta, Inc., STB Model, Assembly P/N, Rev, Date, FCC, Patents, RSA

Specifications

Table 3. Product Specifications

Specification	Value
Tuning and Decoding	
DVR	Dual tuning, Dual Record, Pause, Rewind, Fast-Forward, Record one program while viewing or recording another, software controlled
Picture in Picture	Digital, HD, software controlled
Tuning	Dual QAM 64 or 256, In-Band 54 MHz - 1 GHz, QPSK out-of-band (OOB) 70-130 MHz, DOCSIS 91-867 MHz
Video Decoders	Dedicated Dual 400 MHz VLIW CPU Processors, Dual MPEG-4 (H.264) up to HP@L4.0 (HD), Dual VC1 AP@L2&3, Dual MPEG-2 up to MP@HL, 1920 x 1080i 60 Hz; 1920 x 1080p 30 Hz, 1920 x 1080p 24 Hz, 1280 x 720p 60 Hz, 720 x 480p 60 Hz, 720 x 480i 60 Hz, video scaling, software controlled
Audio Decoders	Dedicated 250 MHz DSP CPU Processor, Dolby™ Digital to 5.1, MPEG-1 and MPEG-2, BTSC/SAP, Dolby Digital+, AAC, AAC+, software controlled
Conditional Access	PowerKEY, software controlled
Encoders	Audio BTSC for TV Cable (RF) Output, software controlled
Graphics Engine	2.5 Dimension graphics, up to 960 x 540 resolution, 32 bit (16 million) color
DAVIC	DAVIC 1.2, QPSK FDC at 1.5 Mbps, QPSK RDC at 1.5 Mbps, software controlled
DOCSIS	OOB and Interaction via DOCSIS 2.0, DOCSIS Set-top Gateway, Baseline Privacy Interface, software controlled

Specification	Value
Memory/Storage	
Unified RAM	384 MB, 512MB (optional), see Note 2
Flash	2 MB
CPU NVM	16 KB
Hard Drive	160 GB, 320 GB (optional), 500 GB (optional), Internal SATA, 1.5 Gbs
Boot Partition on HDD	256 MB, see Note 3
Hard Drive Expansion	External SATA (eSATA), 1.5 Gbs, on rear panel, software controlled
Processors	
Application/CPU	700 MHz (1000 MIPS)
Video/Graphics	Dual 400 MHz VLIW CPUs
Audio	250 MHz DSP CPU
DOCSIS CPU	333 MHz CPU
Network CPU	400 MHz CPU
Dimensions	
Product (HxWxD)	3.25 in. x 15.6 in. x 11.2 in. (8.3 cm x 39.7 cm x 28.5 cm)
Product Weight	8.3 lbs (3.8 kg)
Carton (HxWxD)	6.12 in. x 18.0 in. x 14.0 in. (15.6 cm x 45.8 cm x 35.6 cm)
Total Weight	11.6 lbs (5.3 kg)
Operating Conditions	
Placement	Locate with at least 2 inches of open space above and on each side
Room Temperature	32 to 105°F (0 to 40°C) during operation
Power Dissipation	50W maximum peak, ENERGY STAR Tier 1

Table 4. Accessories

Specification	Value	
In Carton		
	Power Cord, Quick Reference Guide, HDM-to-HDMI Cable	
Sold Separately		**Part Number**
	Axiom DVR Middleware License, see Note 2	4014594
	SARA DVR Software License 3-year	752351
	SARA DVR Software License 2-year	4020470
	SARA DVR Software License 1-year	4020469
	AllTouch® AT8550 Remote Control	4006369
	AllTouch AT8560 Remote Control	4016237
	HDMI-to-HDMI Cable (additional or replacement)	1002048
	HDMI-to-DVI Cable	1002056
	YPbPr and L/R Cable Set	1000944
	RGB adapter and cables	749790
	IR Extender (USB)—12 ft	1001807
	IR Extender (USB)—25 ft	4006725
	IR Extender (3.5mm)—12 ft	1004648

Ordering Information

Table 5. Ordering Information

Model	Description	Part Number
Explorer 8640HD	8640HD, HD Digital Only MPEG-4/-2 DVR with 160 GB HDD, 512 MB RAM, DOCSIS, Ethernet, and DTCP-IP	4026533
Explorer 8640HD	8640HD, HD Digital Only MPEG-4/-2 DVR with 320 GB HDD, 512 MB RAM, DOCSIS, Ethernet, and DTCP-IP	4026534
Explorer 8640HD	8640HD, HD Digital Only MPEG-4/-2 DVR with 500 GB HDD, 512 MB RAM, DOCSIS, Ethernet, and DTCP-IP	4034563

Notes:

1. 1080p/24 or 1080p/30 output formats are available on HDMI, if those formats are presented to the set-top box at its input. Incoming video formats will not be converted to either of these for output. Output of these formats is under software control.
2. Axiom DVR Middleware for tru2way (formerly OCAP) support is recommended only for the 8600 models that have a minimum of 384 MB RAM.
3. Boot Partition provides space on the hard drive for storing the set-top's core software. Additional non-core application storage space may be made available on the hard drive. The Boot Partition is analogous to a portion of the role traditional flash memory serves on non-hard drive set-tops.
4. In order to use the ENERGY STAR name or marks in association with this product deployed to subscribers, service providers must first sign a Partnership Agreement with EPA and abide by all of the conditions set forth in the ENERGY STAR Program Requirements for Cable, Satellite, and Telecom Service Providers. ENERGY STAR is a registered mark owned by the U.S. government and its use is reserved for partners. Service providers that have not signed an ENERGY STAR Partnership Agreement are not to distribute boxes labeled with the ENERGY STAR.

With respect to each AVC/H.264 product, we are obligated to provide the following notice:

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THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE http://www.mpegla.com.

Accordingly, please be advised that service providers, content providers, and broadcasters are required to obtain a separate use license from MPEG LA prior to any use of AVC/H.264 encoders and/or decoders.

Cisco Systems, Inc.
1-800-722-2009 or 678-277-1120
www.cisco.com

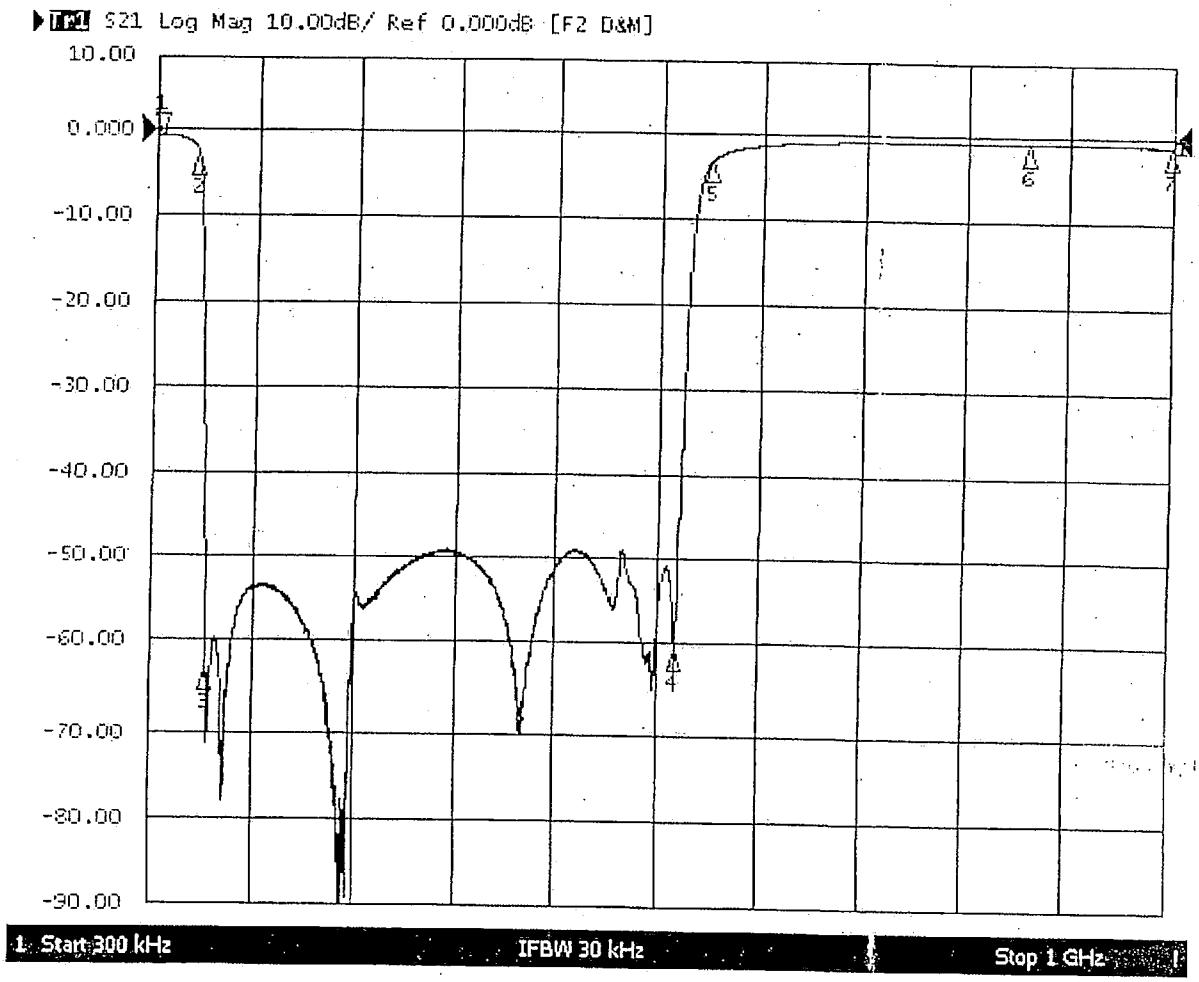
Part Number 7015627 Rev B
November 2009

ESTIMATED SPECIFICATIONS

Model: **SBS-2/71** Prep. By S.S. Date: 8/14/06

Passband insertion loss: 2 dB Minimum operating frequency: 1 GHz

Marker #	Freq. Desc.	Freq. (MHz)	Nominal Loss (dB)	
1		5.0	0.6	
2		42	2.8	
3	2 vid.	55.25	64	
4	67 vid.	481.25	62	
5	72 vid.	511.25	3.0	
6		860	0.6	
7		1000	0.9	
8				



NO TRAP

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	3.7	N/A	N/A	N/A
13	211.25	ANALOG	3	N/A	N/A	N/A
23	217.25	ANALOG	2.9	N/A	N/A	N/A
24	223.25	ANALOG	2.7	N/A	N/A	N/A
69	493.25	ANALOG	2.7	N/A	N/A	N/A
70	499.25	ANALOG	3.2	N/A	N/A	N/A
71	505.25	ANALOG	3.1	N/A	N/A	N/A
72	510-516	OPEN	-4.7/-5.1	N/A	N/A	N/A
73	516-522	SDV	-3.5	36	1.0E-9	1.0E-9
74	522-528	SDV	-3.4	36	1.0E-9	1.0E-9

QBR-23/71

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	3.7	N/A	N/A	N/A
13	211.25	ANALOG	0.5	N/A	N/A	N/A
23	217.25	ANALOG	-3.5	N/A	N/A	N/A
24	223.25	ANALOG	-23	N/A	N/A	N/A
69	493.25	ANALOG	-44	N/A	N/A	N/A
70	499.25	ANALOG	-23.6	N/A	N/A	N/A
71	505.25	ANALOG	-8.1	N/A	N/A	N/A
72	510-516	OPEN	-11.1/-8.4	N/A	N/A	N/A
73	516-522	SDV	-4.6	35.8	1.0E-9	1.0E-9
74	522-528	SDV	-4.4	36.2	1.0E-9	1.0E-9

72	NOISE GENERATOR

QBR-23/71 TRAP

CH #	TV-QUALITY
13	
22	
23	
24	
68	
69	
70	
71	

(+4.0 DB @ TV BEFORE TRAP)

PICTURE NOT VISIBLE	
PICTURE SLIGHTLY VISIBLE	
PICTURE SNOWY/DE-GRADED	
PICTURE GOOD	

NO TRAP

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	3.7	N/A	N/A	N/A
13	211.25	ANALOG	3	N/A	N/A	N/A
23	217.25	ANALOG	2.9	N/A	N/A	N/A
24	223.25	ANALOG	2.7	N/A	N/A	N/A
69	493.25	ANALOG	2.7	N/A	N/A	N/A
70	499.25	ANALOG	3.2	N/A	N/A	N/A
71	505.25	ANALOG	3.1	N/A	N/A	N/A
72	510-516	OPEN	-4.7/-5.1	N/A	N/A	N/A
73	516-522	SDV	-3.5	36.8	1.0E-9	1.0E-9
74	522-528	SDV	-3.4	36.8	1.0E-9	1.0E-9

QBR-23/72

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	3.4	N/A	N/A	N/A
13	211.25	ANALOG	1.4	N/A	N/A	N/A
23	217.25	ANALOG	-2.9	N/A	N/A	N/A
24	223.25	ANALOG	-25.7	N/A	N/A	N/A
69	493.25	ANALOG	-50.6	N/A	N/A	N/A
70	499.25	ANALOG	-46.6	N/A	N/A	N/A
71	505.25	ANALOG	-20.5	N/A	N/A	N/A
72	510-516	OPEN	-13.4/-8.2	N/A	N/A	N/A
73	516-522	SDV	-6.5	35.9	1.0E-9	1.0E-9
74	522-528	SDV	-5.9	36.2	1.0E-9	1.0E-9

72	NOISE GENERATOR

QBR-23/72 TRAP

CH #	TV-QUALITY
13	
22	
23	
24	
68	
69	
70	
71	

(+4.0 DB @ TV BEFORE TRAP)

PICTURE NOT VISIBLE	
PICTURE SLIGHTLY VISIBLE	
PICTURE SNOWY/DE-GRADED	
PICTURE GOOD	

PPC
Innovate. Connect.

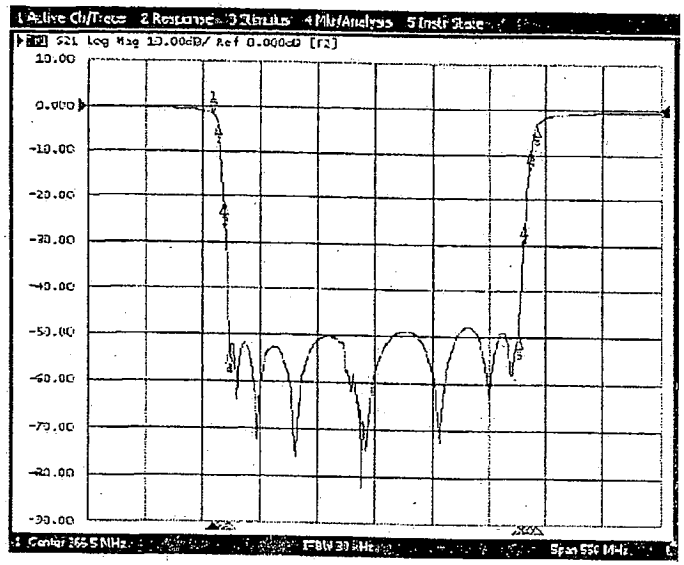
TRAP SPECIFICATIONS

Model: QBR-23/73 Prep. By T.H. Date: 4/17/08

Job # 6712

Passband insertion loss: 0.5 dB Minimum operating frequency: 1 GHz

Marker #	Freq. Desc.	Freq. (MHz)	Typical Loss (dB)	Limits (dB)
1	13 vid.	211.25	1.6	3.0 max.
2	13 aud.	215.75	4.0	6.0 max.
3	23 aud.	221.75	21	21 ref.
4	24 aud.	227.75	53	46 min.
5	71 vid.	505.25	50	46 min.
6	72 vid.	511.25	25	25 ref.
7	73 vid.	517.25	9.0	9.0 ref.
8	74 vid.	523.25	3.5	5.0 max.

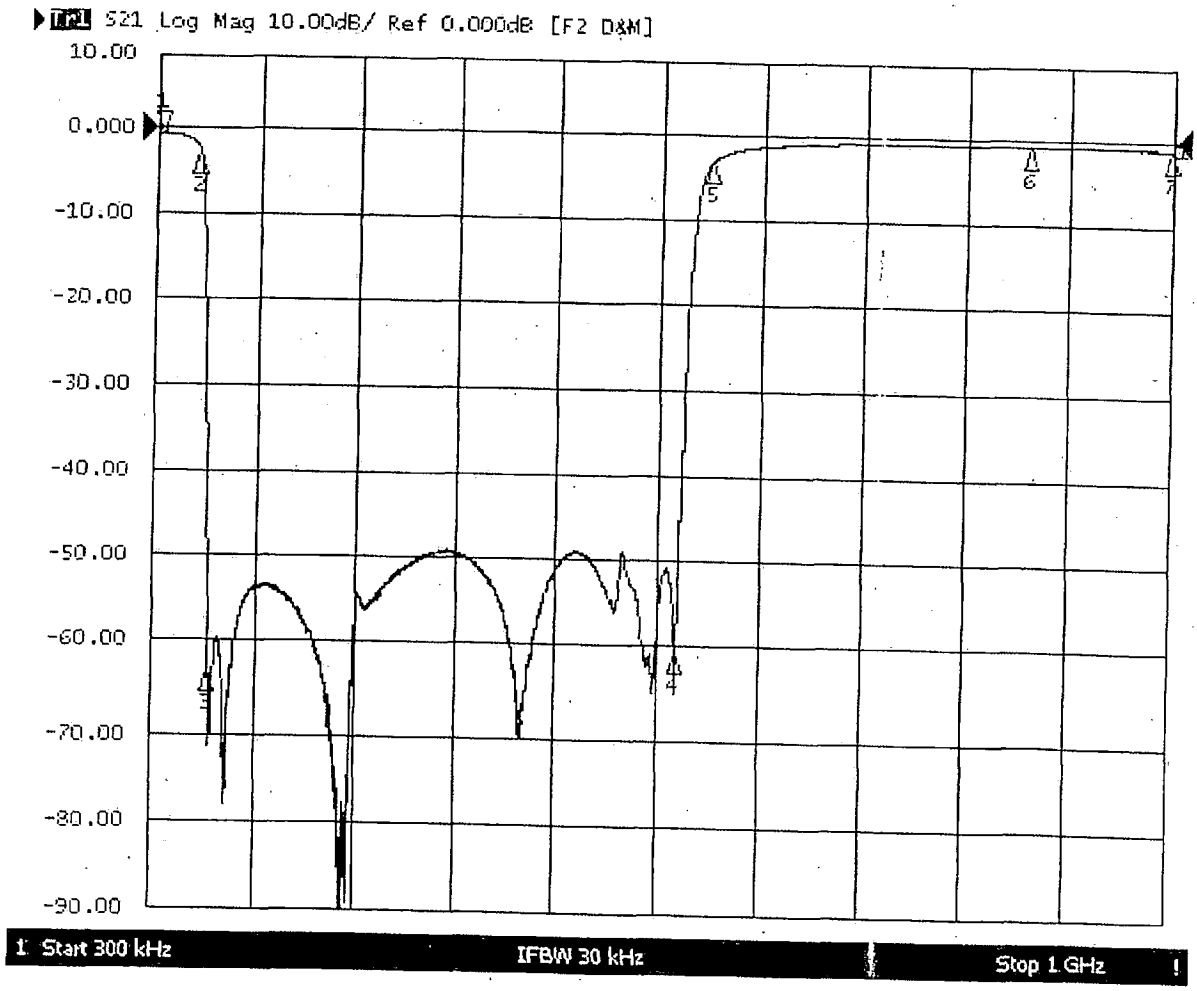


ESTIMATED SPECIFICATIONS

Model: **SBS-2/71** Prep. By S.S. Date: 8/14/06

Passband insertion loss: 2 dB Minimum operating frequency: 1 GHz

Marker #	Freq. Desc.	Freq. (MHz)	Nominal Loss (dB)	
1		5.0	0.6	
2		42	2.8	
3	2 vid.	55.25	64	
4	67 vid.	481.25	62	
5	72 vid.	511.25	3.0	
6		860	0.6	
7		1000	0.9	
8				



NO TRAP

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	3.7	N/A	N/A	N/A
13	211.25	ANALOG	3	N/A	N/A	N/A
23	217.25	ANALOG	2.9	N/A	N/A	N/A
24	223.25	ANALOG	2.7	N/A	N/A	N/A
69	493.25	ANALOG	2.7	N/A	N/A	N/A
70	499.25	ANALOG	3.2	N/A	N/A	N/A
71	505.25	ANALOG	3.1	N/A	N/A	N/A
72	510-516	OPEN	-4.7/-5.1	N/A	N/A	N/A
73	516-522	SDV	-3.5	36	1.0E-9	1.0E-9
74	522-528	SDV	-3.4	36	1.0E-9	1.0E-9

QBR-23/71

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	3.7	N/A	N/A	N/A
13	211.25	ANALOG	0.5	N/A	N/A	N/A
23	217.25	ANALOG	-3.5	N/A	N/A	N/A
24	223.25	ANALOG	-23	N/A	N/A	N/A
69	493.25	ANALOG	-44	N/A	N/A	N/A
70	499.25	ANALOG	-23.6	N/A	N/A	N/A
71	505.25	ANALOG	-8.1	N/A	N/A	N/A
72	510-516	OPEN	-11.1/-8.4	N/A	N/A	N/A
73	516-522	SDV	-4.6	35.8	1.0E-9	1.0E-9
74	522-528	SDV	-4.4	36.2	1.0E-9	1.0E-9

72	NOISE GENERATOR

QBR-23/71 TRAP

CH #	TV QUALITY
13	
22	
23	
24	
68	
69	
70	
71	

(+4.0 DB @ TV BEFORE TRAP)

PICTURE NOT VISIBLE

PICTURE SLIGHTLY VISIBLE

PICTURE SNOWY/DE-GRADED

PICTURE GOOD

NO TRAP

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	3.7	N/A	N/A	N/A
13	211.25	ANALOG	3	N/A	N/A	N/A
23	217.25	ANALOG	2.9	N/A	N/A	N/A
24	223.25	ANALOG	2.7	N/A	N/A	N/A
69	493.25	ANALOG	2.7	N/A	N/A	N/A
70	499.25	ANALOG	3.2	N/A	N/A	N/A
71	505.25	ANALOG	3.1	N/A	N/A	N/A
72	510-516	OPEN	-4.7/-5.1	N/A	N/A	N/A
73	516-522	SDV	-3.5	36.8	1.0E-9	1.0E-9
74	522-528	SDV	-3.4	36.8	1.0E-9	1.0E-9

QBR-23/72

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	3.4	N/A	N/A	N/A
13	211.25	ANALOG	1.4	N/A	N/A	N/A
23	217.25	ANALOG	-2.9	N/A	N/A	N/A
24	223.25	ANALOG	-25.7	N/A	N/A	N/A
69	493.25	ANALOG	-50.6	N/A	N/A	N/A
70	499.25	ANALOG	-46.6	N/A	N/A	N/A
71	505.25	ANALOG	-20.5	N/A	N/A	N/A
72	510-516	OPEN	-13.4/-8.2	N/A	N/A	N/A
73	516-522	SDV	-6.5	35.9	1.0E-9	1.0E-9
74	522-528	SDV	-5.9	36.2	1.0E-9	1.0E-9

72	NOISE GENERATOR

QBR-23/72 TRAP

CH #	TV QUALITY
13	
22	
23	
24	
68	
69	
70	
71	

(+4.0 DB @ TV BEFORE TRAP)

PICTURE NOT VISIBLE

PICTURE SLIGHTLY VISIBLE

PICTURE SNOWY/DE-GRADED

PICTURE GOOD

PPC
Innovate. Connect.

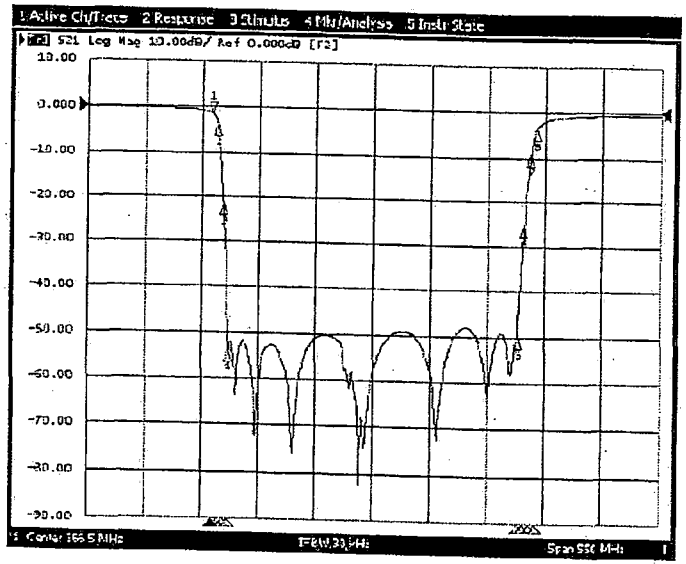
TRAP SPECIFICATIONS

Model: QBR-23/73 Prep. By T.H. Date: 4/17/08

Job # 6712

Passband insertion loss: 0.5 dB Minimum operating frequency: 1 GHz

Marker #	Freq. Desc.	Freq. (MHz)	Typical Loss (dB)	Limits (dB)
1	13 vid.	211.25	1.6	3.0 max.
2	13 aud.	215.75	4.0	6.0 max.
3	23 aud.	221.75	21	21 ref
4	24 aud.	227.75	53	46 min.
5	71 vid.	505.25	50	46 min.
6	72 vid.	511.25	25	25 ref.
7	73 vid.	517.25	9.0	9.0 ref.
8	74 vid.	523.25	3.5	5.0 max.



NO TRAP

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	3.6	N/A	N/A	N/A
13	211.25	ANALOG	2.9	N/A	N/A	N/A
23	217.25	ANALOG	2.6	N/A	N/A	N/A
24	223.25	ANALOG	2.5	N/A	N/A	N/A
69	493.25	ANALOG	2.8	N/A	N/A	N/A
70	499.25	ANALOG	3.6	N/A	N/A	N/A
71	505.25	ANALOG	3.8	N/A	N/A	N/A
72	510-516	OPEN	-6.3/-5.8	N/A	N/A	N/A
73	516-522	SDV	-3.4	36.6	1.0E-9	1.0E-9
74	522-528	SDV	-3.3	36.7	1.0E-9	1.0E-9

8MNF-L-GGG

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	2.9	N/A	N/A	N/A
13	211.25	ANALOG	0.4	N/A	N/A	N/A
23	217.25	ANALOG	-1.3	N/A	N/A	N/A
24	223.25	ANALOG	-15.6	N/A	N/A	N/A
69	493.25	ANALOG	-49.3	N/A	N/A	N/A
70	499.25	ANALOG	-38	N/A	N/A	N/A
71	505.25	ANALOG	-18	N/A	N/A	N/A
72	510-516	OPEN	-16.1/-10.1	N/A	N/A	N/A
73	516-522	SDV	-7.7	35.4	1.0E-9	1.0E-9
74	522-528	SDV	-7	35.6	1.0E-9	1.0E-9

72	NOISE GENERATOR

8MNF-L-GGG

CH #	TV-QUALITY
13	
22	
23	
24	
68	
69	
70	
71	

(+4.0 DB @ TV BEFORE TRAP)

PICTURE NOT VISIBLE

PICTURE SLIGHTLY VISIBLE

PICTURE SNOWY/DE-GRADED

PICTURE GOOD

NO TRAP

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	3.6	N/A	N/A	N/A
13	211.25	ANALOG	2.9	N/A	N/A	N/A
23	217.25	ANALOG	2.6	N/A	N/A	N/A
24	223.25	ANALOG	2.5	N/A	N/A	N/A
69	493.25	ANALOG	2.8	N/A	N/A	N/A
70	499.25	ANALOG	3.6	N/A	N/A	N/A
71	505.25	ANALOG	3.8	N/A	N/A	N/A
72	510-516	OPEN	-6.3/-5.8	N/A	N/A	N/A
73	516-522	SDV	-3.4	36.6	1.0E-9	1.0E-9
74	522-528	SDV	-3.3	36.7	1.0E-9	1.0E-9

8MNF-L-HHH

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	2.5	N/A	N/A	N/A
13	211.25	ANALOG	0.8	N/A	N/A	N/A
23	217.25	ANALOG	-0.5	N/A	N/A	N/A
24	223.25	ANALOG	-9.8	N/A	N/A	N/A
69	493.25	ANALOG	-48.8	N/A	N/A	N/A
70	499.25	ANALOG	-50.1	N/A	N/A	N/A
71	505.25	ANALOG	-38.4	N/A	N/A	N/A
72	510-516	OPEN	-32.1/-14.6	N/A	N/A	N/A
73	516-522	SDV	-9.9	33.9	1.0E-9	1.0E-9
74	522-528	SDV	-7.7	35.4	1.0E-9	1.0E-9

72	NOISE GENERATOR

8MNF-L-HHH

CH #	TV-QUALITY
13	
22	
23	
24	
68	
69	
70	
71	

(+4.0 DB @ TV BEFORE TRAP)

PICTURE NOT VISIBLE

PICTURE SLIGHTLY VISIBLE

PICTURE SNOWY/DE-GRADED

PICTURE GOOD

NO TRAP

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	3.6	N/A	N/A	N/A
13	211.25	ANALOG	2.9	N/A	N/A	N/A
23	217.25	ANALOG	2.6	N/A	N/A	N/A
24	223.25	ANALOG	2.5	N/A	N/A	N/A
69	493.25	ANALOG	2.8	N/A	N/A	N/A
70	499.25	ANALOG	3.6	N/A	N/A	N/A
71	505.25	ANALOG	3.8	N/A	N/A	N/A
72	510-516	OPEN	-6.3/-5.8	N/A	N/A	N/A
73	516-522	SDV	-3.4	36.6	1.0E-9	1.0E-9
74	522-528	SDV	-3.3	36.7	1.0E-9	1.0E-9

8MNF-L-III

CH #	FREQ	USAGE	REF LEVEL	MER	BER-PRE	BER-POST
9	187.25	ANALOG	2.6	N/A	N/A	N/A
13	211.25	ANALOG	-0.2	N/A	N/A	N/A
23	217.25	ANALOG	-4.6	N/A	N/A	N/A
24	223.25	ANALOG	-24.1	N/A	N/A	N/A
69	493.25	ANALOG	-46.5	N/A	N/A	N/A
70	499.25	ANALOG	-45.3	N/A	N/A	N/A
71	505.25	ANALOG	-49.1	N/A	N/A	N/A
72	510-516	OPEN	-48.9/-33.6	N/A	N/A	N/A
73	516-522	SDV	-20	WILL NOT LOCK		
74	522-528	SDV	-10.4	33.3	1.0E-9	1.0E-9

72	NOISE GENERATOR

8MNF-L-III

CH #	TV QUALITY
13	
22	
23	
24	
68	
69	
70	
71	

(+4.0 DB @ TV BEFORE TRAP)

PICTURE NOT VISIBLE	
PICTURE SLIGHTLY VISIBLE	
PICTURE SNOWY/DE-GRADED	
PICTURE GOOD	

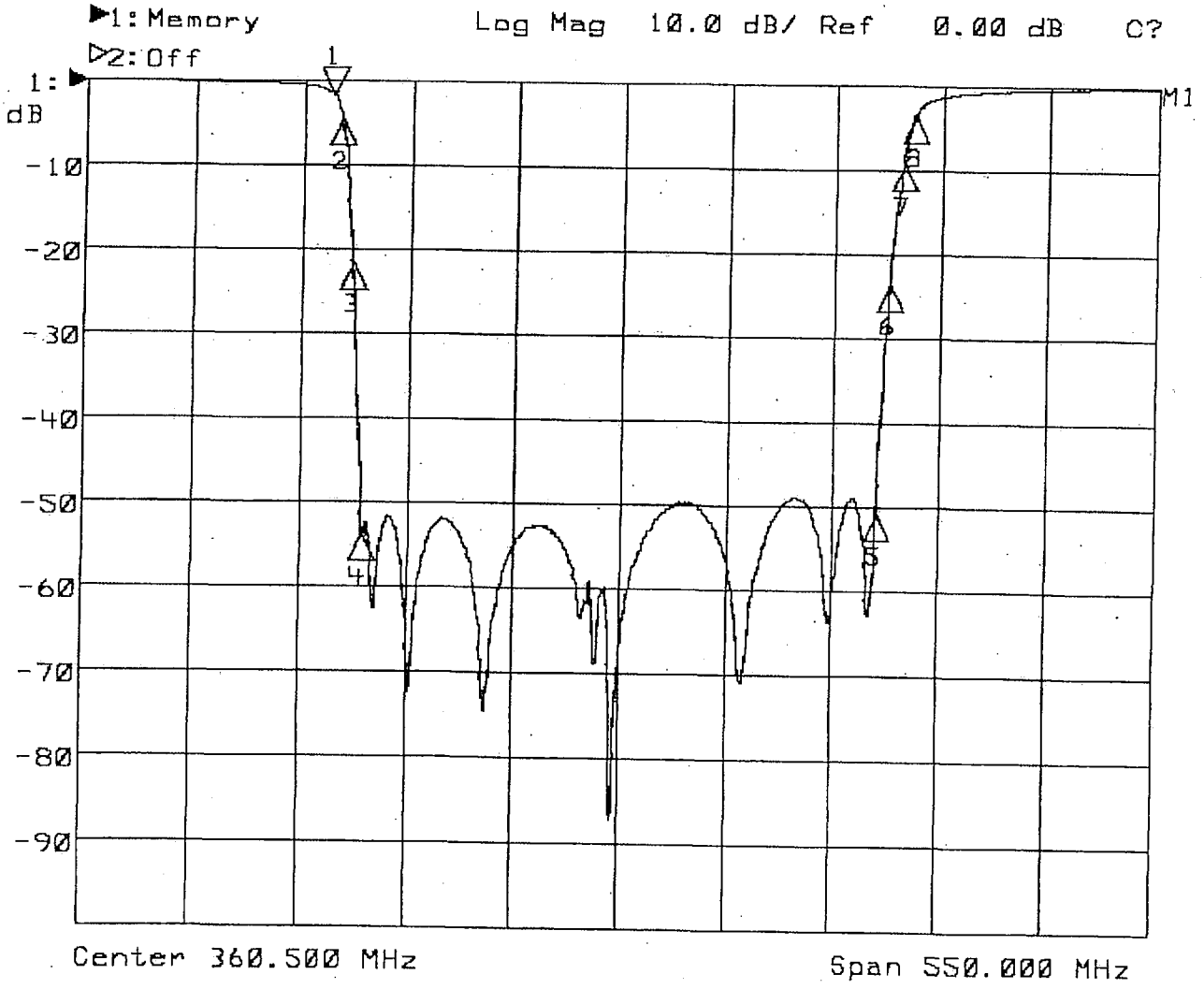
TRAP SPECIFICATIONS

Model: **QBR-23/71** Prep. By T.H. Date: 10/25/07

Job # 6902

Passband insertion loss: 0.5 dB Minimum operating frequency: 1 GHz

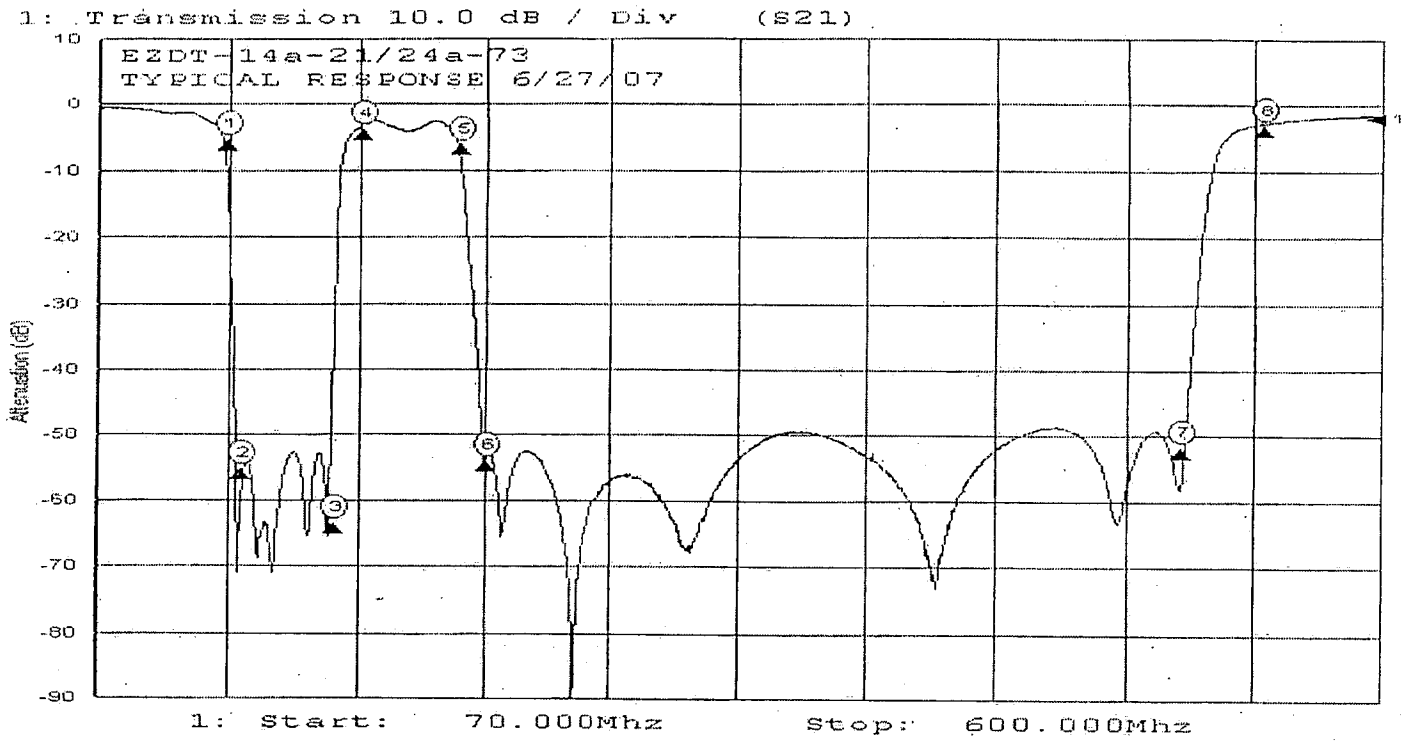
Marker #	Freq. Desc.	Freq. (MHz)	Typical Loss (dB)	Limits (dB)
1	13 vid.	211.25	1.7	3.0 max.
2	13 aud.	215.75	4.5	6.0 max.
3	23 aud.	221.75	22	22 ref.
4	24 aud.	227.75	53	46 min.
5	69 vid.	493.25	51	46 min.
6	70 vid.	499.25	23	23 ref.
7	71 vid.	505.25	9.0	9.0 ref.
8	72 vid.	511.25	3.5	5.0 max.



 Customer Approval_____ Date_____

EAGLE COMTRONICS INC.

Model: EZDT-14a-21/24a-73



Channel 1 Markers				
Mk #	Channel #		Frequency	Loss
1	A-1 = 99	Audio	119.750	-5.06
2	A = 14	Audio	125.750	-55.41
3	H = 21	Video	163.250	-63.90
4	7 = 7	Video	175.250	-3.39
5	13 = 13	Audio	215.750	-5.59
6	K = 24	Audio	227.750	-53.85
7	KKK = 73	Video	517.250	-51.88
8	QQQ = 79	Video	553.250	-2.64

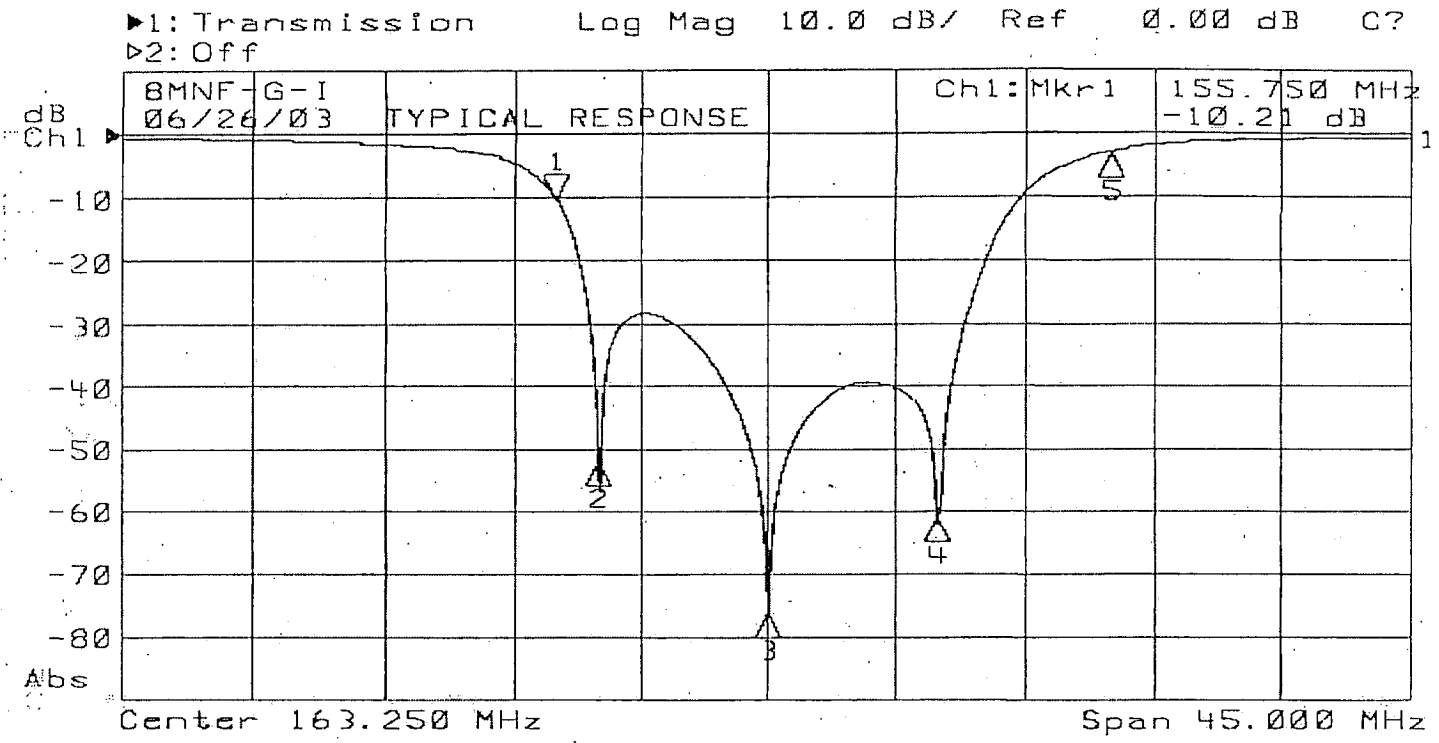
Channel 2 Markers				
Mk #	Channel #		Frequency	Loss
1				
2				
3				
4				
5				
6				
7				
8				

Eagle Comtronics, Inc Confidential Production Variances May Occur

Customer Approval _____ Date _____

EAGLE COMTRONICS INC.

Model: 8MNF-G,H,I (2.6)



Channel 1 Markers				
Mk #	Channel #		Frequency	Loss
1	F = 19	Audio	155.750	-10.21
2	G = 20	Video	157.250	-51.91
3	H = 21	Video	163.250	-76.01
4	I = 22	Video	169.250	-60.95
5	7 = 7	Video	175.250	-2.75

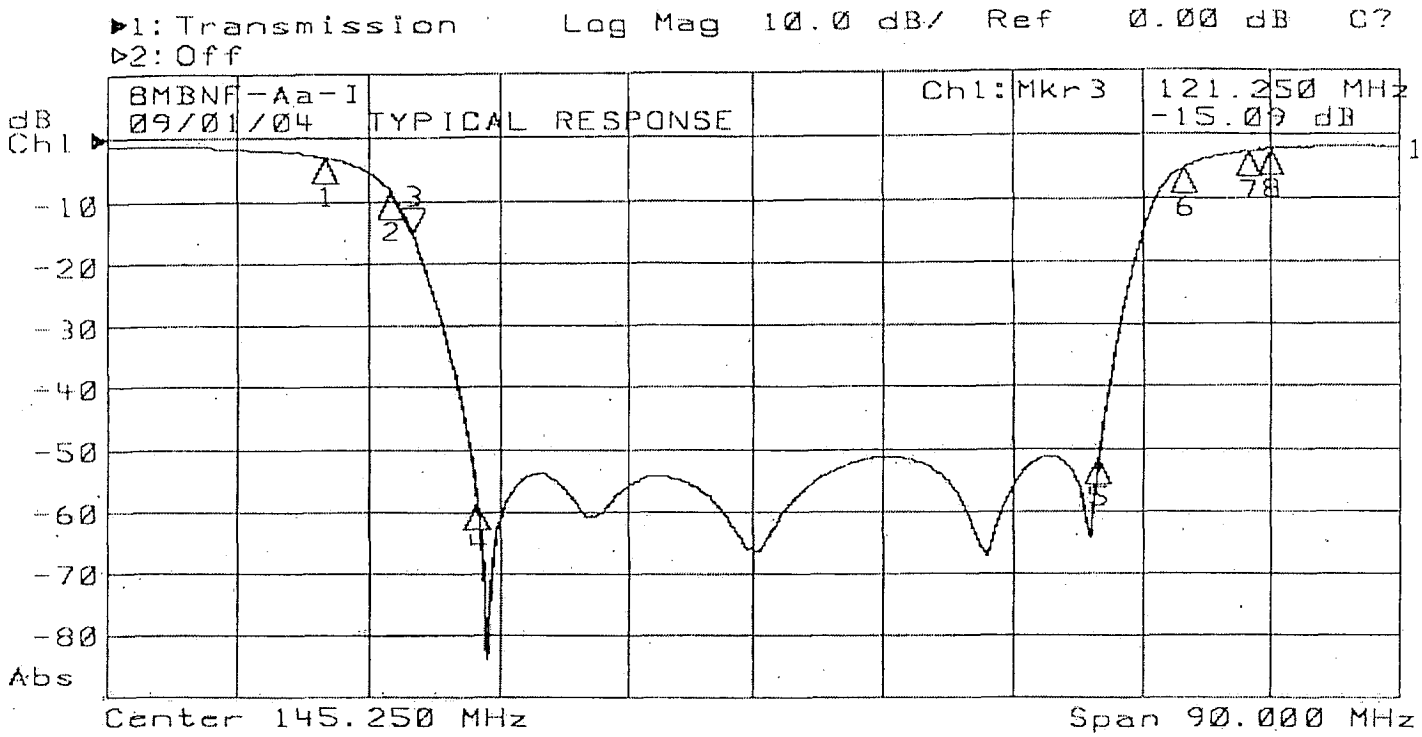
Channel 2 Markers				
Mk #	Channel #		Frequency	Loss
1				
2				
3				
4				
5				

Eagle Comtronics, Inc Confidential Production Variances May Occur

Customer Approval _____ Date _____

EAGLE COMTRONICS INC.

Model: 8MBNF-Aa-I (2.6)



Channel 1 Markers				
Mk #	Channel #		Frequency	Loss
1	A-1 = 99	Video	115.250	-2.90
2	A-1 = 99	Audio	119.750	-8.33
3	A = 14	Video	121.250	-15.09
4	A = 14	Audio	125.750	-58.73
5	I = 22	Video	169.250	-51.62
6	7 = 7	Video	175.250	-4.99
7	7 = 7	Audio	179.750	-2.54
8	8 = 8	Video	181.250	-2.22

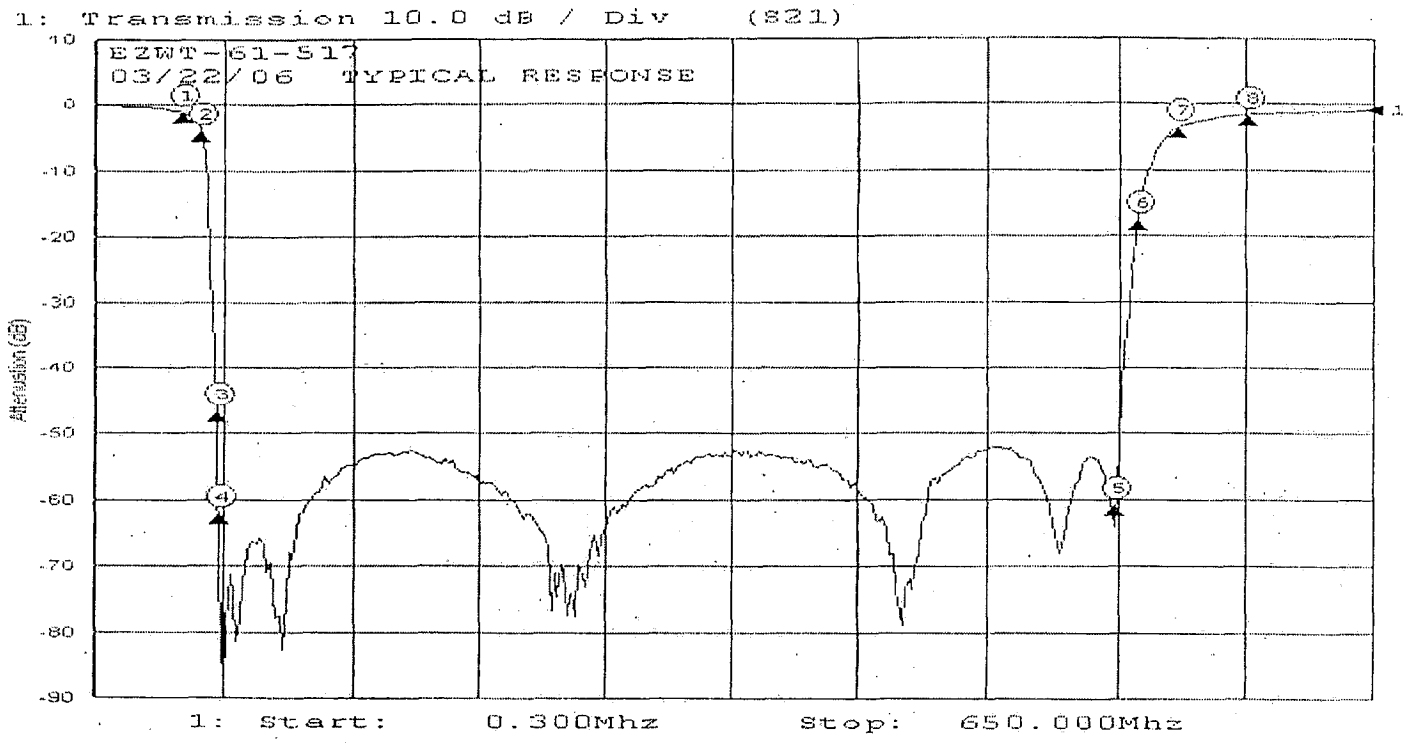
Channel 2 Markers				
Mk #	Channel #		Frequency	Loss
1				
2				
3				
4				
5				
6				
7				
8				

Eagle Comtronics, Inc Confidential Production Variances May Occur

Customer Approval _____ Date _____

EAGLE COMTRONICS INC.

Model: EZWT-61-517



Channel 1 Markers				
Mk #	Channel #		Frequency	Loss
1			42.000	-1.11
2			53.000	-3.63
3	2 = 2	Audio	59.750	-47.30
4	3 = 3	Video	61.250	-61.90
5	KKK = 73	Video	517.250	-57.43
6	LLL = 74	Audio	527.750	-17.09
7			550.000	-3.40
8			585.000	-1.70

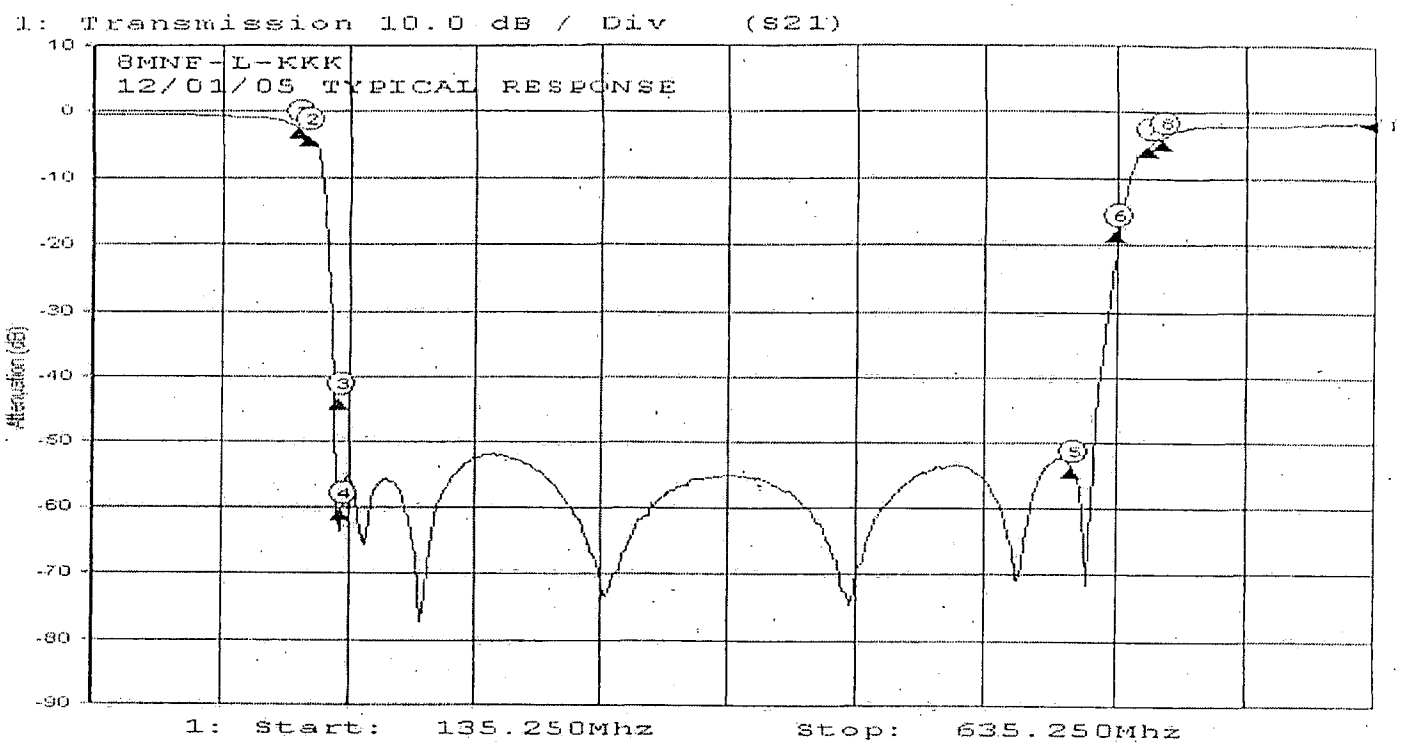
Channel 2 Markers				
Mk #	Channel #		Frequency	Loss
1				
2				
3				
4				
5				
6				
7				
8				

Eagle Comtronics, Inc Confidential Production Variances May Occur

Customer Approval _____ Date _____

EAGLE COMTRONICS INC.

Model: 8MNF-L-KKK



Channel 1 Markers				
Mk #	Channel #		Frequency	Loss
1	13 = 13	Video	211.250	-2.10
2	13 = 13	Audio	215.750	-3.30
3	K = 24	Audio	227.750	-43.51
4	L = 25	Video	229.250	-71.04
5	KKK = 73	Video	517.250	-53.82
6	NNN = 76	Video	535.250	-17.74
7	PPP = 78	Video	547.250	-4.83
8	QQQ = 79	Video	553.250	-3.53

Channel 2 Markers				
Mk #	Channel #		Frequency	Loss
1				
2				
3				
4				
5				
6				
7				
8				

Eagle Comtronics, Inc Confidential Production Variances May Occur

Customer Approval _____ Date _____

TIME WARNER CABLE - SYRACUSE DIVISION

Headend Tests

System Name	:	Rome
HE Location	:	Rome

PAGE 10 MAIN

TIME WARNER CABLE - SYRACUSE DIVISION

Visual Carrier and Aural Carrier Difference Frequency Tests (at Headend)

System Name : Rome
HE Location : Rome ***Date*** : 07/17/2013
Performed By : Frank Servedio

ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)		ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)	
2	55.2500	55.2500		4.5000		DD (40)	319.2625	319.2625		4.5001	
3	61.2500	61.2625		4.5002		EE (41)	325.2625				
4	67.2500	67.2500		4.5001		FF (42)	331.2750	331.2751		4.4998	
5	77.2500	77.2501		4.5000		GG (43)	337.2625	337.2625		4.4999	
6	83.2500	83.2501		4.5001		HH (44)	343.2625	343.2625		4.5003	
A-5 (95)	91.2500					II (45)	349.2625	349.2625		4.4998	
A-4 (96)	97.2500	97.2500		4.5000		JJ (46)	355.2625	355.2625		4.5000	
A-3 (97)	103.2500	103.2500		4.5000		KK (47)	361.2625	361.2625		4.4998	
A-2 (98)	109.2750					LL (48)	367.2625	367.2625		4.4998	
A-1 (99)	115.2750	115.2749		4.5000		MM (49)	373.2625	373.2625		4.4999	
A (14)	121.2625	121.2626		4.4999		NN (50)	379.2625	379.2625		4.5001	
B (15)	127.2625	127.2626		4.5000		OO (51)	385.2625	385.2626		4.5000	
C (16)	133.2625	133.2626		4.5001		PP (52)	391.2625	391.2625		4.5002	
D (17)	139.2500					QQ (53)	397.2625	397.2625		4.5000	
E (18)	145.2500	145.2501		4.4998		RR (54)	403.2500	403.2626		4.5000	
F (19)	151.3210	151.3201		4.4998		SS (55)	409.2500	409.2501		4.4999	
G (20)	157.2500					TT (56)	415.2500	415.2500		4.5000	
H (21)	163.2500	163.2501		4.5002		UU (57)	421.2500	421.2499		4.5000	
I (22)	169.2500	169.2501		4.5000		VV (58)	427.2500	427.2500		4.5000	
7	175.2500	175.2501		4.5001		WW (59)	433.2500	433.2500		4.5000	
8	181.2500	181.2625		4.5002		XX (60)	439.2500	439.2500		4.5001	
9	187.2500	187.2502		4.4999		YY (61)	445.2500	445.2500		4.4998	
10	193.2500	193.2501		4.5002		ZZ (62)	451.2500	451.2499		4.5000	
11	199.2500	199.2496		4.4999		63	457.2500	457.2500		4.5001	
12	205.2500	205.2501		4.4998		64	463.2500				
13	211.2500	211.2627		4.5000		65	469.2500	469.2501		4.5001	
J (23)	217.2500	217.2626		4.5001		66	475.2500	475.2500		4.5000	
K (24)	223.2500	223.2626		4.5000		67	481.2500				
L (25)	229.2625	229.2627		4.4999		68	487.2500	487.2501		4.4999	
M (26)	235.2625	235.2627		4.5000		69	493.2500	493.2500		4.5000	
N (27)	241.2625	241.2627		4.4999		70	499.2500	499.2501		4.5000	
O (28)	247.2625	247.2627		4.4999		71	505.2500				
P (29)	253.2625	253.2627		4.5003		72	511.2500				
Q (30)	259.2625	259.2626		4.5000		73	517.2500				
R (31)	265.2625	265.2627		4.5000		74	523.2500				
S (32)	271.2625	271.2626		4.4999		75	529.2500				
T (33)	277.2625	277.2627		4.5001		76	535.2500				
U (34)	283.2625	283.2627		4.5000		77	541.2500				
V (35)	289.2625	289.2625		4.5003		78	547.2500				
W (36)	295.2625	295.2625		4.4998		79	553.2500				
AA (37)	301.2625					80	559.2500				
BB (38)	307.2625	307.2625		4.5000		81	565.2500				
CC (39)	313.2625	313.2625		4.5001							

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TIME WARNER CABLE - SYRACUSE DIVISION

Visual Carrier and Aural Carrier Difference Frequency Tests (at Headend)

System Name : Rome
HE Location : Oneida ***Date*** : 07/18/2013
Performed By : Frank Servedio

ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)		ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)	
2	55.2500	55.2499		4.5000		DD (40)	319.2625	319.2627		4.4999	
3	61.2500	61.2499		4.4998		EE (41)	325.2625				
4	67.2500	67.2499		4.4996		FF (42)	331.2750	331.2752		4.4998	
5	77.2500	77.2499		4.4999		GG (43)	337.2625	337.2628		4.4998	
6	83.2500	83.2499		4.4998		HH (44)	343.2625	343.2627		4.5000	
A-5 (95)	91.2500					II (45)	349.2625	349.2626		4.5001	
A-4 (96)	97.2500	97.2499		4.5000		JJ (46)	355.2625	355.2627		4.4999	
A-3 (97)	103.2500	103.2499		4.5000		KK (47)	361.2625	361.2627		4.4999	
A-2 (98)	109.2750					LL (48)	367.2625	367.2627		4.4999	
A-1 (99)	115.2750	115.2749		4.5001		MM (49)	373.2625	373.2627		4.5001	
A (14)	121.2625	121.2624		4.4999		NN (50)	379.2625	379.2626		4.5000	
B (15)	127.2625	127.2624		4.4999		OO (51)	385.2625	385.2628		4.4997	
C (16)	133.2625	133.2624		4.4998		PP (52)	391.2625	391.2627		4.4999	
D (17)	139.2500					QQ (53)	397.2625	397.2627		4.5001	
E (18)	145.2500	145.2498		4.4999		RR (54)	403.2500	403.2627		4.5000	
F (19)	151.3210	151.3248		4.5000		SS (55)	409.2500	409.2627		4.4997	
G (20)	157.2500					TT (56)	415.2500	415.2502		4.4998	
H (21)	163.2500	163.2498		4.5000		UU (57)	421.2500	421.2502		4.4998	
I (22)	169.2500	169.2498		4.4999		VV (58)	427.2500	427.2503		4.4999	
7	175.2500	175.2498		4.4999		WW (59)	433.2500	433.2502		4.5000	
8	181.2500	181.2499		4.5009		XX (60)	439.2500	439.2503		4.4998	
9	187.2500	187.2498		4.5000		YY (61)	445.2500	445.2502		4.5000	
10	193.2500	193.2499		4.4999		ZZ (62)	451.2500	451.2503		4.5001	
11	199.2500	199.2499		4.4995		63	457.2500	457.2502		4.5001	
12	205.2500	205.2497		4.5000		64	463.2500				
13	211.2500	211.2499		4.5000		65	469.2500	469.2503		4.4998	
J (23)	217.2500	217.2499		4.5003		66	475.2500	475.2502		4.5001	
K (24)	223.2500	223.2499		4.4999		67	481.2500				
L (25)	229.2625	229.2623		4.4999		68	487.2500	487.2503		4.4999	
M (26)	235.2625	235.2623		4.5000		69	493.2500	493.2502		4.5000	
N (27)	241.2625	241.2624		4.5000		70	499.2500	499.2503		4.4999	
O (28)	247.2625	247.2622		4.5002		71	505.2500				
P (29)	253.2625	253.2623		4.5001		72	511.2500				
Q (30)	259.2625	259.2623		4.5000		73	517.2500				
R (31)	265.2625	265.2623		4.4993		74	523.2500				
S (32)	271.2625	271.2624		4.4998		75	529.2500				
T (33)	277.2625	277.2627		4.5000		76	535.2500				
U (34)	283.2625	283.2627		4.4999		77	541.2500				
V (35)	289.2625	289.2627		4.4999		78	547.2500				
W (36)	295.2625	295.2627		4.5000		79	553.2500				
AA (37)	301.2625					80	559.2500				
BB (38)	307.2625	307.2627		4.4997		81	565.2500				
CC (39)	313.2625	313.2627		4.4999							

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TIME WARNER CABLE - SYRACUSE DIVISION

Visual Carrier and Aural Carrier Difference Frequency Tests (at Headend)

System Name : Rome
HE Location : Madison ***Date*** : 07/19/2013
Performed By : Frank Servedio

ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)		ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)	
2	55.2500	55.2498		4.5001		DD (40)	319.2625	319.2628		4.4999	
3	61.2500	61.2498		4.5000		EE (41)	325.2625				
4	67.2500	67.2499		4.5001		FF (42)	331.2750	331.2752		4.5000	
5	77.2500	77.2498		4.5000		GG (43)	337.2625	337.2627		4.5000	
6	83.2500	83.2499		4.5000		HH (44)	343.2625	343.2627		4.5000	
A-5 (95)	91.2500					II (45)	349.2625	349.2628		4.5002	
A-4 (96)	97.2500	97.2498		4.5000		JJ (46)	355.2625	355.2627		4.5000	
A-3 (97)	103.2500	103.2498		4.5000		KK (47)	361.2625	361.2627		4.4992	
A-2 (98)	109.2750					LL (48)	367.2625	367.2628		4.4999	
A-1 (99)	115.2750	115.2751		4.4998		MM (49)	373.2625	373.2628		4.4999	
A (14)	121.2625	121.2622		4.5001		NN (50)	379.2625	379.2627		4.5000	
B (15)	127.2625	127.2622		4.5001		OO (51)	385.2625	385.2627		4.5001	
C (16)	133.2625	133.2622		4.5000		PP (52)	391.2625	391.2629		4.4999	
D (17)	139.2500					QQ (53)	397.2625	397.2628		4.4998	
E (18)	145.2500	145.2497		4.5000		RR (54)	403.2500	403.2628		4.5000	
F (19)	151.3210	151.3246		4.5001		SS (55)	409.2500	409.2628		4.5003	
G (20)	157.2500					TT (56)	415.2500	415.2502		4.5001	
H (21)	163.2500	163.2497		4.4999		UU (57)	421.2500	421.2503		4.4997	
I (22)	169.2500	169.2497		4.4999		VV (58)	427.2500	427.2503		4.5001	
7	175.2500	175.2496		4.5002		WW (59)	433.2500	433.2504		4.5000	
8	181.2500	181.2496		4.5001		XX (60)	439.2500	439.2503		4.4997	
9	187.2500	187.2497		4.5000		YY (61)	445.2500	445.2503		4.5002	
10	193.2500	193.2497		4.4999		ZZ (62)	451.2500	451.2503		4.4999	
11	199.2500	199.2496		4.4998		63	457.2500	457.2503		4.5001	
12	205.2500	205.2496		4.4999		64	463.2500				
13	211.2500	211.2496		4.4999		65	469.2500	469.2503		4.4999	
J (23)	217.2500	217.2497		4.4999		66	475.2500	475.2503		4.5001	
K (24)	223.2500	223.2496		4.4992		67	481.2500				
L (25)	229.2625	229.2621		4.5000		68	487.2500	487.2504		4.4998	
M (26)	235.2625	235.2621		4.5001		69	493.2500	493.2504		4.4999	
N (27)	241.2625	241.2620		4.4999		70	499.2500	499.2504		4.5000	
O (28)	247.2625	247.2619		4.4998		71	505.2500				
P (29)	253.2625	253.2620		4.4999		72	511.2500				
Q (30)	259.2625	259.2620		4.5000		73	517.2500				
R (31)	265.2625	265.2620		4.5000		74	523.2500				
S (32)	271.2625	271.2620		4.5002		75	529.2500				
T (33)	277.2625	277.2627		4.5008		76	535.2500				
U (34)	283.2625	283.2628		4.4999		77	541.2500				
V (35)	289.2625	289.2627		4.5000		78	547.2500				
W (36)	295.2625	295.2627		4.5000		79	553.2500				
AA (37)	301.2625					80	559.2500				
BB (38)	307.2625	307.2628		4.5002		81	565.2500				
CC (39)	313.2625	313.2628		4.5001							

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TIME WARNER CABLE - SYRACUSE DIVISION

Visual Carrier and Aural Carrier Difference Frequency Tests (at Headend)

System Name : Rome
HE Location : Hamilton ***Date*** : 07/19/2013
Performed By : Frank Servedio

ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)		ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)	
2	55.2500	55.2499		4.5001		DD (40)	319.2625	319.2620		4.4998	
3	61.2500	61.2499		4.5003		EE (41)	325.2625				
4	67.2500	67.2499		4.5001		FF (42)	331.2750	331.2744		4.5002	
5	77.2500	77.2499		4.4999		GG (43)	337.2625	337.2620		4.4998	
6	83.2500	83.2498		4.5000		HH (44)	343.2625	343.2619		4.5000	
A-5 (95)	91.2500					II (45)	349.2625	349.2619		4.5000	
A-4 (96)	97.2500	97.2498		4.5000		JJ (46)	355.2625	355.2619		4.4999	
A-3 (97)	103.2500	103.2498		4.5000		KK (47)	361.2625	361.2619		4.4999	
A-2 (98)	109.2750					LL (48)	367.2625	367.2618		4.5001	
A-1 (99)	115.2750	115.2748		4.5000		MM (49)	373.2625	373.2618		4.5002	
A (14)	121.2625	121.2623		4.5001		NN (50)	379.2625	379.2618		4.5000	
B (15)	127.2625	127.2623		4.4995		OO (51)	385.2625	385.2618		4.5001	
C (16)	133.2625	133.2622		4.5000		PP (52)	391.2625	391.2618		4.4999	
D (17)	139.2500					QQ (53)	397.2625	397.2618		4.5001	
E (18)	145.2500	145.2498		4.5000		RR (54)	403.2500	403.2618		4.5000	
F (19)	151.3210	151.3248		4.4998		SS (55)	409.2500	409.2618		4.5002	
G (20)	157.2500					TT (56)	415.2500	415.2494		4.4999	
H (21)	163.2500	163.2498		4.5000		UU (57)	421.2500	421.2493		4.5000	
I (22)	169.2500	169.2498		4.4999		VV (58)	427.2500	427.2493		4.5000	
7	175.2500	175.2498		4.5008		WW (59)	433.2500	433.2492		4.4999	
8	181.2500	181.2498		4.4997		XX (60)	439.2500	439.2492		4.5002	
9	187.2500	187.2498		4.4998		YY (61)	445.2500	445.2492		4.5003	
10	193.2500	193.2497		4.5001		ZZ (62)	451.2500	451.2492		4.5001	
11	199.2500	199.2497		4.5002		63	457.2500	457.2493		4.5000	
12	205.2500	205.2498		4.4999		64	463.2500				
13	211.2500	211.2497		4.4999		65	469.2500	469.2492		4.5001	
J (23)	217.2500	217.2493		4.5002		66	475.2500	475.2492		4.5002	
K (24)	223.2500	223.2497		4.5000		67	481.2500				
L (25)	229.2625	229.2622		4.4999		68	487.2500	487.2493		4.4997	
M (26)	235.2625	235.2622		4.5002		69	493.2500	493.2492		4.5001	
N (27)	241.2625	241.2622		4.4998		70	499.2500	499.2492		4.5001	
O (28)	247.2625	247.2622		4.5000		71	505.2500				
P (29)	253.2625	253.2622		4.5000		72	511.2500				
Q (30)	259.2625	259.2622		4.4999		73	517.2500				
R (31)	265.2625	265.2622		4.5000		74	523.2500				
S (32)	271.2625	271.2621		4.5000		75	529.2500				
T (33)	277.2625	277.2621		4.4999		76	535.2500				
U (34)	283.2625	283.2620		4.4999		77	541.2500				
V (35)	289.2625	289.2621		4.4999		78	547.2500				
W (36)	295.2625	295.2620		4.5000		79	553.2500				
AA (37)	301.2625					80	559.2500				
BB (38)	307.2625	307.2620		4.5001		81	565.2500				
CC (39)	313.2625	313.2620		4.4999							

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TIME WARNER CABLE - SYRACUSE DIVISION

Visual Carrier and Aural Carrier Difference Frequency Tests (at Headend)

System Name : Rome
HE Location : North Shore ***Date*** : 07/17/2013
Performed By : Frank Servedio

ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)		ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)	
2	55.2500	55.2500		4.4995		DD (40)	319.2625	319.2625		4.4998	
3	61.2500	61.2624		4.5004		EE (41)	325.2625				
4	67.2500	67.2501		4.4998		FF (42)	331.2750	331.2751		4.4999	
5	77.2500	77.2500		4.5000		GG (43)	337.2625	337.2626		4.5000	
6	83.2500	83.2500		4.4999		HH (44)	343.2625	343.2625		4.5000	
A-5 (95)	91.2500					II (45)	349.2625	349.2625		4.5000	
A-4 (96)	97.2500	97.2500		4.5001		JJ (46)	355.2625	355.2625		4.4999	
A-3 (97)	103.2500	103.2500		4.5000		KK (47)	361.2625	361.2625		4.4997	
A-2 (98)	109.2750					LL (48)	367.2625	367.2626		4.4998	
A-1 (99)	115.2750	115.2748		4.4999		MM (49)	373.2625	373.2625		4.4999	
A (14)	121.2625	121.2625		4.5000		NN (50)	379.2625	379.2625		4.5000	
B (15)	127.2625	127.2625		4.5001		OO (51)	385.2625	385.2625		4.4999	
C (16)	133.2625	133.2625		4.4998		PP (52)	391.2625	391.2625		4.4997	
D (17)	139.2500					QQ (53)	397.2625	397.2626		4.4998	
E (18)	145.2500	145.2501		4.4999		RR (54)	403.2500	403.2625		4.5003	
F (19)	151.3210	151.3200		4.5000		SS (55)	409.2500	409.2501		4.5002	
G (20)	157.2500					TT (56)	415.2500	415.2499		4.5001	
H (21)	163.2500	163.2500		4.5001		UU (57)	421.2500	421.2500		4.5001	
I (22)	169.2500	169.2501		4.5000		VV (58)	427.2500	427.2500		4.5000	
7	175.2500	175.2501		4.5000		WW (59)	433.2500	433.2499		4.4998	
8	181.2500	181.2625		4.5002		XX (60)	439.2500	439.2500		4.5000	
9	187.2500	187.2501		4.4999		YY (61)	445.2500	445.2500		4.4999	
10	193.2500	193.2501		4.5001		ZZ (62)	451.2500	451.2500		4.5000	
11	199.2500					63	457.2500	457.2500		4.5000	
12	205.2500	205.2502		4.4998		64	463.2500				
13	211.2500	211.2627		4.5001		65	469.2500	469.2500		4.5003	
J (23)	217.2500	217.2626		4.4997		66	475.2500	475.2500		4.5000	
K (24)	223.2500	223.2627		4.4998		67	481.2500				
L (25)	229.2625	229.2627		4.5000		68	487.2500	487.2500		4.5001	
M (26)	235.2625	235.2627		4.5000		69	493.2500	493.2501		4.4999	
N (27)	241.2625	241.2626		4.5003		70	499.2500	499.2500		4.5000	
O (28)	247.2625	247.2627		4.5000		71	505.2500				
P (29)	253.2625	253.2627		4.5002		72	511.2500				
Q (30)	259.2625	259.2626		4.4998		73	517.2500				
R (31)	265.2625	265.2628		4.4999		74	523.2500				
S (32)	271.2625	271.2627		4.4995		75	529.2500				
T (33)	277.2625	277.2627		4.5004		76	535.2500				
U (34)	283.2625	283.2627		4.5001		77	541.2500				
V (35)	289.2625	289.2625		4.4997		78	547.2500				
W (36)	295.2625	295.2625		4.5001		79	553.2500				
AA (37)	301.2625					80	559.2500				
BB (38)	307.2625	307.2625		4.4998		81	565.2500				
CC (39)	313.2625	313.2625		4.5000							

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TIME WARNER CABLE - SYRACUSE DIVISION

Visual Carrier and Aural Carrier Difference Frequency Tests (at Headend)

System Name : Rome
HE Location : Dixon Rd ***Date*** : 07/17/2013
Performed By : Frank Servedio

ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)		ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)	
2	55.2500	55.2500		4.4998		DD (40)	319.2625	319.2625		4.5000	
3	61.2500	61.2624		4.5006		EE (41)	325.2625				
4	67.2500	67.2501		4.5000		FF (42)	331.2750	331.2751		4.5001	
5	77.2500	77.2499		4.5001		GG (43)	337.2625	337.2625		4.5000	
6	83.2500	83.2500		4.4999		HH (44)	343.2625	343.2625		4.4991	
A-5 (95)	91.2500					II (45)	349.2625	349.2625		4.5001	
A-4 (96)	97.2500	97.2500		4.5001		JJ (46)	355.2625	355.2625		4.4999	
A-3 (97)	103.2500	103.2500		4.5000		KK (47)	361.2625	361.2625		4.5000	
A-2 (98)	109.2750					LL (48)	367.2625	367.2625		4.5003	
A-1 (99)	115.2750	115.2749		4.5009		MM (49)	373.2625	373.2625		4.5003	
A (14)	121.2625	121.2625		4.5002		NN (50)	379.2625	379.2625		4.5000	
B (15)	127.2625	127.2625		4.5002		OO (51)	385.2625	385.2625		4.5001	
C (16)	133.2625	133.2626		4.4999		PP (52)	391.2625	391.2625		4.5001	
D (17)	139.2500					QQ (53)	397.2625	397.2625		4.4997	
E (18)	145.2500	145.2500		4.4999		RR (54)	403.2500	403.2625		4.5000	
F (19)	151.3210	151.3200		4.4998		SS (55)	409.2500	409.2500		4.5000	
G (20)	157.2500					TT (56)	415.2500	415.2500		4.4999	
H (21)	163.2500	163.2501		4.4998		UU (57)	421.2500	421.2500		4.4999	
I (22)	169.2500	169.2500		4.5000		VV (58)	427.2500	427.2500		4.4998	
7	175.2500	175.2500		4.5001		WW (59)	433.2500	433.2499		4.5000	
8	181.2500	181.2625		4.5003		XX (60)	439.2500	439.2499		4.5003	
9	187.2500	187.2502		4.4999		YY (61)	445.2500	445.2500		4.5000	
10	193.2500	193.2502		4.4997		ZZ (62)	451.2500	451.2500		4.5000	
11	199.2500	199.2497		4.5001		63	457.2500	457.2502		4.5000	
12	205.2500	205.2502		4.4999		64	463.2500				
13	211.2500	211.2626		4.5001		65	469.2500	469.2500		4.5000	
J (23)	217.2500	217.2626		4.5003		66	475.2500	475.2499		4.5000	
K (24)	223.2500	223.2626		4.4998		67	481.2500				
L (25)	229.2625	229.2627		4.5000		68	487.2500	487.2501		4.5000	
M (26)	235.2625	235.2626		4.5000		69	493.2500	493.2500		4.5001	
N (27)	241.2625	241.2627		4.5000		70	499.2500	499.2502		4.4998	
O (28)	247.2625	247.2627		4.5000		71	505.2500				
P (29)	253.2625	253.2626		4.5001		72	511.2500				
Q (30)	259.2625	259.2627		4.4996		73	517.2500				
R (31)	265.2625	265.2626		4.5000		74	523.2500				
S (32)	271.2625	271.2627		4.5000		75	529.2500				
T (33)	277.2625	277.2627		4.5000		76	535.2500				
U (34)	283.2625	283.2626		4.5002		77	541.2500				
V (35)	289.2625	289.2626		4.4999		78	547.2500				
W (36)	295.2625	295.2626		4.5001		79	553.2500				
AA (37)	301.2625					80	559.2500				
BB (38)	307.2625	307.2625		4.5004		81	565.2500				
CC (39)	313.2625	313.2625		4.5003							

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TIME WARNER CABLE - SYRACUSE DIVISION

Visual Carrier and Aural Carrier Difference Frequency Tests (at Headend)

System Name : Rome
HE Location : Boonville ***Date*** : 07/17/2013
Performed By : Frank Servedio

ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)		ACTUAL CHANNEL	CARRIER FREQ	VISUAL FREQUENCY (MHZ)		AURAL FREQUENCY DIFF (MHZ)	
2	55.2500	55.2500		4.4998		DD (40)	319.2625	319.2626		4.4999	
3	61.2500	61.2500		4.4999		EE (41)	325.2625				
4	67.2500	67.2500		4.5000		FF (42)	331.2750	331.2751		4.5000	
5	77.2500	77.2500		4.5000		GG (43)	337.2625	337.2625		4.5000	
6	83.2500	83.2500		4.5000		HH (44)	343.2625	343.2626		4.4999	
A-5 (95)	91.2500					II (45)	349.2625	349.2625		4.4999	
A-4 (96)	97.2500	97.2501		4.4999		JJ (46)	355.2625	355.2624		4.5001	
A-3 (97)	103.2500	103.2500		4.5000		KK (47)	361.2625	361.2626		4.5006	
A-2 (98)	109.2750					LL (48)	367.2625	367.2625		4.4999	
A-1 (99)	115.2750	115.2749		4.5009		MM (49)	373.2625	373.2625		4.5000	
A (14)	121.2625	121.2625		4.5001		NN (50)	379.2625	379.2625		4.5000	
B (15)	127.2625	127.2625		4.4999		OO (51)	385.2625	385.2625		4.4998	
C (16)	133.2625	133.2626		4.5003		PP (52)	391.2625	391.2625		4.4999	
D (17)	139.2500					QQ (53)	397.2625	397.2625		4.5001	
E (18)	145.2500	145.2501		4.5002		RR (54)	403.2500	403.2625		4.5002	
F (19)	151.3210	151.3201		4.5000		SS (55)	409.2500	409.2501		4.5002	
G (20)	157.2500					TT (56)	415.2500	415.2500		4.4999	
H (21)	163.2500	163.2501		4.5001		UU (57)	421.2500	421.2499		4.4997	
I (22)	169.2500	169.2501		4.5001		VV (58)	427.2500	427.2500		4.5000	
7	175.2500	175.2501		4.5000		WW (59)	433.2500	433.2500		4.5000	
8	181.2500	181.2626		4.5000		XX (60)	439.2500	439.2500		4.4998	
9	187.2500	187.2501		4.5002		YY (61)	445.2500	445.2499		4.5000	
10	193.2500	193.2501		4.4999		ZZ (62)	451.2500	451.2499		4.5000	
11	199.2500	199.2496		4.4999		63	457.2500	457.2501		4.5001	
12	205.2500	205.2502		4.4999		64	463.2500				
13	211.2500	211.2627		4.5000		65	469.2500	469.2501		4.5000	
J (23)	217.2500	217.2627		4.5001		66	475.2500	475.2499		4.5000	
K (24)	223.2500	223.2627		4.5001		67	481.2500				
L (25)	229.2625	229.2627		4.5000		68	487.2500	487.2501		4.5000	
M (26)	235.2625	235.2626		4.4999		69	493.2500	493.2500		4.4998	
N (27)	241.2625	241.2627		4.5000		70	499.2500	499.2500		4.5000	
O (28)	247.2625	247.2627		4.4994		71	505.2500				
P (29)	253.2625	253.2627		4.5002		72	511.2500				
Q (30)	259.2625	259.2627		4.4995		73	517.2500				
R (31)	265.2625	265.2625		4.5001		74	523.2500				
S (32)	271.2625	271.2627		4.5001		75	529.2500				
T (33)	277.2625	277.2627		4.4999		76	535.2500				
U (34)	283.2625	283.2627		4.5001		77	541.2500				
V (35)	289.2625	289.2626		4.4997		78	547.2500				
W (36)	295.2625	295.2626		4.5000		79	553.2500				
AA (37)	301.2625					80	559.2500				
BB (38)	307.2625	307.2626		4.5002		81	565.2500				
CC (39)	313.2625	313.2626		4.4999							

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TIME WARNER CABLE - SYRACUSE DIVISION

Visual / Aural Level Difference Test (at Headend)

System Name	: Rome	***Meter / Serial Number***	: 232634
HE Location	: Rome	***Performed By***	: Frank Servedio
Date	: 07/17/2013	***Time***	: 07:52:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	25.3	9.3		16	DD (40)	319.2625	25.2	10.4		14.8
3	61.2500	25.5	8.8		16.7	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	25.5	9.7		15.8	FF (42)	331.2750	25.5	10.3		15.2
5	77.2500	25.4	9.8		15.6	GG (43)	337.2625	25.2	10.3		14.9
6	83.2500	25.3	10.0		15.3	HH (44)	343.2625	25.3	10.6		14.7
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	25.5	10.5		15
A-4 (96)	97.2500	25.5	10.1		15.4	JJ (46)	355.2625	25.4	10.1		15.3
A-3 (97)	103.2500	25.5	9.9		15.6	KK (47)	361.2625	25.1	10.1		15
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	25.5	10.6		14.9
A-1 (99)	115.2750	25.4	10.7		14.7	MM (49)	373.2625	25.5	10.4		15.1
A (14)	121.2625	25.4	10.1		15.3	NN (50)	379.2625	25.4	10.1		15.3
B (15)	127.2625	25.2	10.0		15.2	OO (51)	385.2625	25.1	10.5		14.6
C (16)	133.2625	25.3	10.0		15.3	PP (52)	391.2625	25.3	11.0		14.3
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	25.4	10.8		14.6
E (18)	145.2500	25.1	10.1		15	RR (54)	403.2500	25.4	10.2		15.2
F (19)	151.3210	25.5	9.5		16	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	25.5	11.0		14.5
H (21)	163.2500	25.3	10.6		14.7	UU (57)	421.2500	25.5	10.4		15.1
I (22)	169.2500	25.5	10.3		15.2	VV (58)	427.2500	25.1	10.0		15.1
7	175.2500	25.2	9.8		15.4	WW (59)	433.2500	25.2	10.5		14.7
8	181.2500	25.1	9.2		15.9	XX (60)	439.2500	25.4	10.9		14.5
9	187.2500	25.5	10.8		14.7	YY (61)	445.2500	25.5	10.5		15
10	193.2500	25.5	10.6		14.9	ZZ (62)	451.2500	25.1	10.1		15
11	199.2500	25.2	9.3		15.9	63	457.2500	25.4	10.8		14.6
12	205.2500	25.2	10.3		14.9	64	463.2500	N/A	N/A		N/A
13	211.2500	25.4	10.2		15.2	65	469.2500	25.2	10.4		14.8
J (23)	217.2500	25.3	10.2		15.1	66	475.2500	25.2	10.2		15
K (24)	223.2500	25.1	10.3		14.8	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	25.3	10.1		15.2	68	487.2500	25.0	11.1		13.9
M (26)	235.2625	25.5	10.1		15.4	69	493.2500	25.5	10.6		14.9
N (27)	241.2625	25.5	10.4		15.1	70	499.2500	25.5	10.6		14.9
O (28)	247.2625	25.2	10.5		14.7	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	25.4	10.5		14.9	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	25.3	9.3		16	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	25.4	10.3		15.1	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	25.4	10.5		14.9	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	25.5	10.7		14.8	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	25.4	10.3		15.1	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	25.1	9.8		15.3	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	25.0	10.3		14.7	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	25.5	10.5		15	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	25.0	10.0		15						

Min Channel	:	W(36)	25.0
Max Channel	:	3	25.5
Peak to Valley	:	0.5	

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TIME WARNER CABLE - SYRACUSE DIVISION

Visual / Aural Level Difference Test (at Headend)

System Name	: Rome	***Meter / Serial Number***	: 232634
HE Location	: Oneida	***Performed By***	: Frank Servedio
Date	: 08/06/2013	***Time***	: 03:48:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	25.7	12.5		13.2	DD (40)	319.2625	25.2	11.5		13.7
3	61.2500	25.9	12.4		13.5	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	25.6	11.8		13.8	FF (42)	331.2750	25.8	11.3		14.5
5	77.2500	25.7	11.8		13.9	GG (43)	337.2625	25.9	11.4		14.5
6	83.2500	25.2	11.3		13.9	HH (44)	343.2625	25.4	11.1		14.3
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	25.4	11.7		13.7
A-4 (96)	97.2500	25.6	12.3		13.3	JJ (46)	355.2625	25.9	11.5		14.4
A-3 (97)	103.2500	25.5	12.1		13.4	KK (47)	361.2625	25.7	11.0		14.7
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	25.4	10.5		14.9
A-1 (99)	115.2750	N/A	N/A		N/A	MM (49)	373.2625	25.9	11.7		14.2
A (14)	121.2625	25.4	11.9		13.5	NN (50)	379.2625	25.6	11.7		13.9
B (15)	127.2625	25.3	11.7		13.6	OO (51)	385.2625	25.3	11.6		13.7
C (16)	133.2625	25.7	11.1		14.6	PP (52)	391.2625	25.9	11.3		14.6
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	25.3	12.4		12.9
E (18)	145.2500	25.4	11.3		14.1	RR (54)	403.2500	25.6	12.5		13.1
F (19)	151.3210	25.3	11.8		13.5	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	25.4	12.3		13.1
H (21)	163.2500	25.9	12.3		13.6	UU (57)	421.2500	25.5	12.3		13.2
I (22)	169.2500	25.7	12.1		13.6	VV (58)	427.2500	25.5	12.1		13.4
7	175.2500	25.6	11.5		14.1	WW (59)	433.2500	25.3	11.7		13.6
8	181.2500	25.2	11.9		13.3	XX (60)	439.2500	25.7	12.5		13.2
9	187.2500	25.5	11.7		13.8	YY (61)	445.2500	25.6	12.3		13.3
10	193.2500	25.8	11.3		14.5	ZZ (62)	451.2500	25.3	11.9		13.4
11	199.2500	25.2	10.8		14.4	63	457.2500	25.6	11.4		14.2
12	205.2500	25.4	11.1		14.3	64	463.2500	N/A	N/A		N/A
13	211.2500	25.6	11.0		14.6	65	469.2500	25.2	11.8		13.4
J (23)	217.2500	25.7	10.8		14.9	66	475.2500	25.9	11.7		14.2
K (24)	223.2500	25.3	10.5		14.8	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	25.4	12.1		13.3	68	487.2500	25.2	11.8		13.4
M (26)	235.2625	25.3	11.9		13.4	69	493.2500	25.4	11.8		13.6
N (27)	241.2625	25.2	11.6		13.6	70	499.2500	25.9	11.5		14.4
O (28)	247.2625	25.2	11.1		14.1	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	25.3	11.6		13.7	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	25.7	11.3		14.4	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	25.9	10.9		15	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	25.7	10.5		15.2	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	25.9	11.8		14.1	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	25.9	11.8		14.1	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	25.5	11.5		14	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	25.8	11.3		14.5	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	25.6	12.0		13.6	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	25.4	12.0		13.4						

Min Channel	: 6	25.2
Max Channel	: 3	25.9
Peak to Valley	:	0.7

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TIME WARNER CABLE - SYRACUSE DIVISION

Visual / Aural Level Difference Test (at Headend)

System Name	: Rome	***Meter / Serial Number***	: 232634
HE Location	: Madison	***Performed By***	: Frank Servedio
Date	: 08/06/2013	***Time***	: 04:24:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	23.7	9.9		13.8	DD (40)	319.2625	23.4	9.5		13.9
3	61.2500	23.8	9.4		14.4	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	23.3	9.6		13.7	FF (42)	331.2750	23.3	10.1		13.2
5	77.2500	23.4	10.0		13.4	GG (43)	337.2625	23.3	11.0		12.3
6	83.2500	23.9	9.2		14.7	HH (44)	343.2625	23.4	10.7		12.7
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	23.7	10.2		13.5
A-4 (96)	97.2500	23.5	10.2		13.3	JJ (46)	355.2625	23.5	10.1		13.4
A-3 (97)	103.2500	23.4	10.1		13.3	KK (47)	361.2625	23.4	10.0		13.4
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	23.6	9.5		14.1
A-1 (99)	115.2750	N/A	N/A		N/A	MM (49)	373.2625	23.7	8.3		15.4
A (14)	121.2625	23.4	11.2		12.2	NN (50)	379.2625	23.6	8.7		14.9
B (15)	127.2625	23.9	11.0		12.9	OO (51)	385.2625	23.9	8.8		15.1
C (16)	133.2625	23.8	10.9		12.9	PP (52)	391.2625	23.4	8.8		14.6
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	23.4	9.5		13.9
E (18)	145.2500	23.8	9.0		14.8	RR (54)	403.2500	23.9	9.2		14.7
F (19)	151.3210	23.8	8.2		15.6	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	23.8	9.5		14.3
H (21)	163.2500	23.9	8.2		15.7	UU (57)	421.2500	23.7	9.5		14.2
I (22)	169.2500	23.8	8.1		15.7	VV (58)	427.2500	23.8	9.6		14.2
7	175.2500	23.9	7.6		16.3	WW (59)	433.2500	23.8	9.4		14.4
8	181.2500	23.7	10.2		13.5	XX (60)	439.2500	23.9	8.9		15
9	187.2500	23.9	9.9		14	YY (61)	445.2500	23.8	9.0		14.8
10	193.2500	23.7	9.4		14.3	ZZ (62)	451.2500	23.4	9.1		14.3
11	199.2500	23.8	8.7		15.1	63	457.2500	23.5	8.9		14.6
12	205.2500	24.0	9.0		15	64	463.2500	N/A	N/A		N/A
13	211.2500	23.9	9.1		14.8	65	469.2500	23.9	9.1		14.8
J (23)	217.2500	23.9	9.0		14.9	66	475.2500	23.9	9.1		14.8
K (24)	223.2500	24.0	8.9		15.1	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	23.9	10.1		13.8	68	487.2500	23.1	10.2		12.9
M (26)	235.2625	23.1	10.1		13	69	493.2500	23.1	10.1		13
N (27)	241.2625	23.6	10.0		13.6	70	499.2500	23.2	9.8		13.4
O (28)	247.2625	23.4	9.8		13.6	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	23.8	9.1		14.7	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	23.9	9.0		14.9	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	24.0	8.7		15.3	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	23.9	8.3		15.6	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	23.7	8.9		14.8	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	23.9	8.9		15	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	23.7	8.9		14.8	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	24.0	8.7		15.3	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	23.7	9.7		14	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	23.9	9.6		14.3						

Min Channel	:	M(26)	23.1
Max Channel	:	12	24.0
Peak to Valley	:	0.9	

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TIME WARNER CABLE - SYRACUSE DIVISION

Visual / Aural Level Difference Test (at Headend)

System Name	: Rome	***Meter / Serial Number***	: 232634
HE Location	: Hamilton	***Performed By***	: Frank Servedio
Date	: 08/06/2013	***Time***	: 04:49:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	18.8	4.3		14.5	DD (40)	319.2625	18.3	3.6		14.7
3	61.2500	19.0	4.2		14.8	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	18.6	3.8		14.8	FF (42)	331.2750	18.4	4.0		14.4
5	77.2500	18.3	4.0		14.3	GG (43)	337.2625	18.6	4.3		14.3
6	83.2500	18.2	3.7		14.5	HH (44)	343.2625	18.4	4.0		14.4
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	18.5	3.3		15.2
A-4 (96)	97.2500	18.9	4.7		14.2	JJ (46)	355.2625	18.8	3.2		15.6
A-3 (97)	103.2500	18.8	4.5		14.3	KK (47)	361.2625	18.2	3.0		15.2
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	18.9	2.5		16.4
A-1 (99)	115.2750	N/A	N/A		N/A	MM (49)	373.2625	18.7	3.5		15.2
A (14)	121.2625	18.7	4.4		14.3	NN (50)	379.2625	18.7	3.5		15.2
B (15)	127.2625	18.5	4.1		14.4	OO (51)	385.2625	18.3	3.2		15.1
C (16)	133.2625	18.7	3.8		14.9	PP (52)	391.2625	18.7	2.8		15.9
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	18.2	2.0		16.2
E (18)	145.2500	18.8	4.6		14.2	RR (54)	403.2500	18.9	2.5		16.4
F (19)	151.3210	18.4	3.8		14.6	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	18.2	3.8		14.4
H (21)	163.2500	18.3	4.1		14.2	UU (57)	421.2500	19.0	3.5		15.5
I (22)	169.2500	18.3	4.0		14.3	VV (58)	427.2500	18.3	3.5		14.8
7	175.2500	19.0	3.3		15.7	WW (59)	433.2500	18.4	3.1		15.3
8	181.2500	18.9	4.7		14.2	XX (60)	439.2500	18.3	4.3		14
9	187.2500	18.7	4.5		14.2	YY (61)	445.2500	18.4	4.1		14.3
10	193.2500	18.8	4.1		14.7	ZZ (62)	451.2500	18.7	4.0		14.7
11	199.2500	18.7	3.7		15	63	457.2500	18.5	3.5		15
12	205.2500	18.5	4.3		14.2	64	463.2500	N/A	N/A		N/A
13	211.2500	18.4	4.2		14.2	65	469.2500	18.6	5.2		13.4
J (23)	217.2500	18.5	3.8		14.7	66	475.2500	18.4	5.1		13.3
K (24)	223.2500	18.7	3.7		15	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	18.7	5.0		13.7	68	487.2500	18.2	4.9		13.3
M (26)	235.2625	18.2	5.0		13.2	69	493.2500	19.0	4.6		14.4
N (27)	241.2625	18.6	4.9		13.7	70	499.2500	18.9	4.1		14.8
O (28)	247.2625	18.5	4.7		13.8	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	18.6	4.8		13.8	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	18.6	4.6		14	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	18.7	4.4		14.3	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	18.5	3.9		14.6	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	18.2	3.6		14.6	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	18.3	3.4		14.9	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	18.3	3.2		15.1	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	18.3	2.9		15.4	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	19.0	3.8		15.2	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	18.2	3.8		14.4						

Min Channel	: 6	18.2
Max Channel	: 3	19.0
Peak to Valley	:	0.8

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TIME WARNER CABLE - SYRACUSE DIVISION

Visual / Aural Level Difference Test (at Headend)

System Name	: Rome	***Meter / Serial Number***	: 232634
HE Location	: North Shore	***Performed By***	: Frank Servedio
Date	: 07/17/2013	***Time***	: 07:53:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	18.5	2.7		15.8	DD (40)	319.2625	18.3	3.6		14.7
3	61.2500	18.8	2.2		16.6	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	18.8	3.1		15.7	FF (42)	331.2750	18.6	3.5		15.1
5	77.2500	18.1	3.2		14.9	GG (43)	337.2625	18.3	3.5		14.8
6	83.2500	18.2	3.3		14.9	HH (44)	343.2625	18.5	3.9		14.6
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	18.8	3.9		14.9
A-4 (96)	97.2500	18.2	3.5		14.7	JJ (46)	355.2625	18.7	3.3		15.4
A-3 (97)	103.2500	18.2	3.3		14.9	KK (47)	361.2625	18.2	3.2		15
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	18.6	3.7		14.9
A-1 (99)	115.2750	18.5	2.1		16.4	MM (49)	373.2625	18.8	3.6		15.2
A (14)	121.2625	18.0	3.3		14.7	NN (50)	379.2625	18.6	3.3		15.3
B (15)	127.2625	18.9	3.3		15.6	OO (51)	385.2625	18.3	3.7		14.6
C (16)	133.2625	18.1	3.2		14.9	PP (52)	391.2625	18.8	4.3		14.5
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	18.1	4.0		14.1
E (18)	145.2500	18.2	3.3		14.9	RR (54)	403.2500	18.7	3.6		15.1
F (19)	151.3210	18.7	2.8		15.9	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	18.9	4.3		14.6
H (21)	163.2500	18.4	3.8		14.6	UU (57)	421.2500	18.7	3.8		14.9
I (22)	169.2500	18.7	3.5		15.2	VV (58)	427.2500	18.5	3.5		15
7	175.2500	18.3	3.0		15.3	WW (59)	433.2500	18.5	3.9		14.6
8	181.2500	18.2	2.4		15.8	XX (60)	439.2500	18.1	4.4		13.7
9	187.2500	18.5	4.1		14.4	YY (61)	445.2500	18.0	4.0		14
10	193.2500	18.6	3.7		14.9	ZZ (62)	451.2500	18.6	3.7		14.9
11	199.2500	N/A	N/A		N/A	63	457.2500	18.9	4.3		14.6
12	205.2500	18.4	3.5		14.9	64	463.2500	N/A	N/A		N/A
13	211.2500	18.6	3.5		15.1	65	469.2500	18.7	3.7		15
J (23)	217.2500	18.5	3.5		15	66	475.2500	18.5	3.7		14.8
K (24)	223.2500	18.4	3.5		14.9	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	18.4	3.3		15.1	68	487.2500	18.6	4.5		14.1
M (26)	235.2625	18.6	3.3		15.3	69	493.2500	18.1	3.8		14.3
N (27)	241.2625	18.5	3.5		15	70	499.2500	18.7	3.8		14.9
O (28)	247.2625	18.4	3.6		14.8	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	18.4	3.5		14.9	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	18.8	2.9		15.9	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	18.6	3.4		15.2	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	18.4	3.6		14.8	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	18.6	3.8		14.8	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	18.6	3.4		15.2	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	18.2	3.0		15.2	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	18.1	3.3		14.8	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	18.5	3.5		15	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	18.1	3.2		14.9						

Min Channel	:	A(14)	18.0
Max Channel	:	B(15)>	18.9
Peak to Valley	:	0.9	

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TIME WARNER CABLE - SYRACUSE DIVISION

Visual / Aural Level Difference Test (at Headend)

System Name	: Rome	***Meter / Serial Number***	: 232634
HE Location	: Dixon Rd	***Performed By***	: Frank Servedio
Date	: 07/17/2013	***Time***	: 07:55:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	17.6	1.7		15.9	DD (40)	319.2625	17.8	2.7		15.1
3	61.2500	17.8	2.2		15.6	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	17.8	2.1		15.7	FF (42)	331.2750	17.5	2.4		15.1
5	77.2500	17.5	2.2		15.3	GG (43)	337.2625	17.7	2.5		15.2
6	83.2500	17.2	2.3		14.9	HH (44)	343.2625	17.8	2.9		14.9
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	17.8	2.8		15
A-4 (96)	97.2500	17.6	2.4		15.2	JJ (46)	355.2625	17.6	2.2		15.4
A-3 (97)	103.2500	17.6	2.3		15.3	KK (47)	361.2625	17.6	2.2		15.4
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	17.5	2.7		14.8
A-1 (99)	115.2750	17.8	3.4		14.4	MM (49)	373.2625	17.7	2.5		15.2
A (14)	121.2625	17.9	2.4		15.5	NN (50)	379.2625	17.5	2.2		15.3
B (15)	127.2625	17.9	2.3		15.6	OO (51)	385.2625	17.6	2.6		15
C (16)	133.2625	17.5	2.3		15.2	PP (52)	391.2625	17.7	3.1		14.6
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	17.8	2.8		15
E (18)	145.2500	17.3	2.4		14.9	RR (54)	403.2500	17.7	2.4		15.3
F (19)	151.3210	17.8	1.9		15.9	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	17.6	3.1		14.5
H (21)	163.2500	17.5	2.8		14.7	UU (57)	421.2500	17.7	2.5		15.2
I (22)	169.2500	17.7	2.5		15.2	VV (58)	427.2500	17.9	2.1		15.8
7	175.2500	17.3	2.1		15.2	WW (59)	433.2500	17.7	2.6		15.1
8	181.2500	17.6	2.5		15.1	XX (60)	439.2500	17.7	3.0		14.7
9	187.2500	17.6	3.0		14.6	YY (61)	445.2500	17.7	2.6		15.1
10	193.2500	17.6	2.7		14.9	ZZ (62)	451.2500	17.7	2.3		15.4
11	199.2500	17.9	2.5		15.4	63	457.2500	17.6	3.0		14.6
12	205.2500	17.7	2.5		15.2	64	463.2500	N/A	N/A		N/A
13	211.2500	17.6	2.5		15.1	65	469.2500	17.8	2.6		15.2
J (23)	217.2500	17.6	2.5		15.1	66	475.2500	17.7	2.5		15.2
K (24)	223.2500	17.7	2.6		15.1	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	17.5	2.5		15	68	487.2500	17.9	3.4		14.5
M (26)	235.2625	17.8	2.4		15.4	69	493.2500	17.9	2.8		15.1
N (27)	241.2625	17.6	2.6		15	70	499.2500	17.7	2.8		14.9
O (28)	247.2625	17.5	2.9		14.6	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	17.7	2.8		14.9	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	17.7	2.3		15.4	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	17.7	2.5		15.2	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	17.6	2.9		14.7	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	17.8	3.0		14.8	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	17.8	2.5		15.3	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	17.6	2.1		15.5	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	17.7	2.5		15.2	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	17.5	2.5		15	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	17.7	2.2		15.5						

Min Channel	:	6	17.2
Max Channel	:	A(14)>	17.9
Peak to Valley	:	0.7	

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TIME WARNER CABLE - SYRACUSE DIVISION

Visual / Aural Level Difference Test (at Headend)

System Name	: Rome	***Meter / Serial Number***	: 232634
HE Location	: Boonville	***Performed By***	: Frank Servedio
Date	: 07/17/2013	***Time***	: 07:54:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	17.5	1.8		15.7	DD (40)	319.2625	17.5	2.7		14.8
3	61.2500	17.4	1.3		16.1	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	17.4	2.1		15.3	FF (42)	331.2750	17.6	2.5		15.1
5	77.2500	17.4	2.2		15.2	GG (43)	337.2625	17.4	2.7		14.7
6	83.2500	17.6	2.3		15.3	HH (44)	343.2625	17.5	3.0		14.5
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	17.6	2.9		14.7
A-4 (96)	97.2500	17.4	2.4		15	JJ (46)	355.2625	17.7	2.3		15.4
A-3 (97)	103.2500	17.5	2.4		15.1	KK (47)	361.2625	17.5	2.3		15.2
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	17.6	2.7		14.9
A-1 (99)	115.2750	17.4	3.3		14.1	MM (49)	373.2625	17.7	2.6		15.1
A (14)	121.2625	17.5	2.3		15.2	NN (50)	379.2625	17.6	2.4		15.2
B (15)	127.2625	17.8	2.3		15.5	OO (51)	385.2625	17.4	2.8		14.6
C (16)	133.2625	17.5	2.3		15.2	PP (52)	391.2625	17.4	3.3		14.1
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	17.4	2.9		14.5
E (18)	145.2500	17.4	2.5		14.9	RR (54)	403.2500	17.6	2.5		15.1
F (19)	151.3210	17.7	1.9		15.8	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	17.7	3.2		14.5
H (21)	163.2500	17.5	2.8		14.7	UU (57)	421.2500	17.8	2.6		15.2
I (22)	169.2500	17.7	2.6		15.1	VV (58)	427.2500	17.4	2.3		15.1
7	175.2500	17.4	2.1		15.3	WW (59)	433.2500	17.5	2.8		14.7
8	181.2500	17.6	3.8		13.8	XX (60)	439.2500	17.5	3.1		14.4
9	187.2500	17.7	3.0		14.7	YY (61)	445.2500	17.7	2.7		15
10	193.2500	17.7	2.7		15	ZZ (62)	451.2500	17.4	2.3		15.1
11	199.2500	17.4	2.4		15	63	457.2500	17.6	3.1		14.5
12	205.2500	17.4	2.5		14.9	64	463.2500	N/A	N/A		N/A
13	211.2500	17.6	2.5		15.1	65	469.2500	18.0	2.7		15.3
J (23)	217.2500	17.4	2.5		14.9	66	475.2500	17.5	2.6		14.9
K (24)	223.2500	17.4	2.6		14.8	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	17.6	2.5		15.1	68	487.2500	17.3	3.3		14
M (26)	235.2625	17.7	2.4		15.3	69	493.2500	17.7	2.7		15
N (27)	241.2625	17.6	2.5		15.1	70	499.2500	17.6	2.8		14.8
O (28)	247.2625	17.4	2.7		14.7	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	17.7	2.7		15	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	17.6	3.2		14.4	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	17.7	2.5		15.2	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	17.6	2.9		14.7	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	17.8	3.0		14.8	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	17.7	2.4		15.3	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	17.5	2.0		15.5	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	17.7	2.5		15.2	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	17.7	2.7		15	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	17.5	2.3		15.2						

Min Channel	:	68	17.3
Max Channel	:	65	18.0
Peak to Valley	:		0.7

TESTPOINT 1, PAGE 1

TIME WARNER CABLE - SYRACUSE DIVISION

System Name	:	Rome
System Test Point #	:	1
Hub Name	:	Rome
Location	:	7138 Brennon Ave
Map Number	:	527-5694
Pole Number	:	10/11
D.T. Value	:	17/4
OR Number	:	RM019
GNA Cascade	:	6
LE Cscade	:	1

TESTPOINT 1, PAGE 2

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL
VISUAL / AURAL LEVEL DIFFERENCE
(at Test Point, at the end of a 100' Drop)

System Name	: Rome	***Test Location***	: 7138 Brennon Ave
Date	: 07/18/2013	***Time***	: 13:03:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	18.55	5.44		13.11	DD (40)	319.2625	18.31	2.45		15.86
3	61.2500	19.32	5.01		14.31	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	19.37	5.09		14.28	FF (42)	331.2750	18.75	2.12		16.63
5	77.2500	19.57	5.24		14.33	GG (43)	337.2625	18.41	2.15		16.26
6	83.2500	19.43	5.64		13.79	HH (44)	343.2625	18.02	2.19		15.83
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	18.34	2.27		16.07
A-4 (96)	97.2500	18.06	4.58		13.48	JJ (46)	355.2625	18.19	2.07		16.12
A-3 (97)	103.2500	17.18	4.14		13.04	KK (47)	361.2625	18.39	2.04		16.35
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	18.31	2.14		16.17
A-1 (99)	115.2750	19.13	5.95		13.18	MM (49)	373.2625	18.96	2.20		16.76
A (14)	121.2625	19.66	4.72		14.94	NN (50)	379.2625	19.04	2.75		16.29
B (15)	127.2625	19.45	5.17		14.28	OO (51)	385.2625	17.13	2.51		14.62
C (16)	133.2625	19.86	4.98		14.88	PP (52)	391.2625	19.16	2.52		16.64
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	18.76	2.71		16.05
E (18)	145.2500	18.25	4.66		13.59	RR (54)	403.2500	18.77	3.16		15.61
F (19)	151.3210	18.17	4.81		13.36	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	18.56	2.67		15.89
H (21)	163.2500	17.68	2.47		15.21	UU (57)	421.2500	18.89	2.72		16.17
I (22)	169.2500	18.92	2.13		16.79	VV (58)	427.2500	18.30	2.61		15.69
7	175.2500	17.78	2.63		15.15	WW (59)	433.2500	18.75	2.13		16.62
8	181.2500	17.10	3.06		14.04	XX (60)	439.2500	18.56	1.67		16.89
9	187.2500	18.95	2.29		16.66	YY (61)	445.2500	18.78	2.38		16.4
10	193.2500	17.07	2.63		14.44	ZZ (62)	451.2500	18.71	2.66		16.05
11	199.2500	19.32	3.12		16.2	63	457.2500	18.04	2.37		15.67
12	205.2500	19.55	3.09		16.46	64	463.2500	N/A	N/A		N/A
13	211.2500	19.32	3.34		15.98	65	469.2500	18.72	3.22		15.5
J (23)	217.2500	19.32	3.27		16.05	66	475.2500	17.03	3.39		13.64
K (24)	223.2500	19.18	3.35		15.83	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	19.04	3.98		15.06	68	487.2500	17.29	3.15		14.14
M (26)	235.2625	19.55	4.10		15.45	69	493.2500	17.08	3.11		13.97
N (27)	241.2625	19.48	3.14		16.34	70	499.2500	17.74	2.68		15.06
O (28)	247.2625	19.59	2.91		16.68	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	18.65	3.45		15.2	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	18.96	3.93		15.03	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	17.68	2.90		14.78	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	18.54	2.89		15.65	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	18.57	2.45		16.12	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	18.71	2.59		16.12	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	18.43	2.97		15.46	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	18.38	2.81		15.57	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	18.19	2.12		16.07	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	18.09	2.09		16						

Min Channel	:	66	17.030
Max Channel	:	C(16)	19.860
Peak to Valley	:	2.83	

TESTPOINT 1, PAGE 3

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL RESPONSE TEST
CARRIER - TO - NOISE TEST
COHERENT DISTURBANCES TEST
LOW FREQUENCY DISTURBANCES TEST

System Name : Rome ***Date*** : 07/18/2013

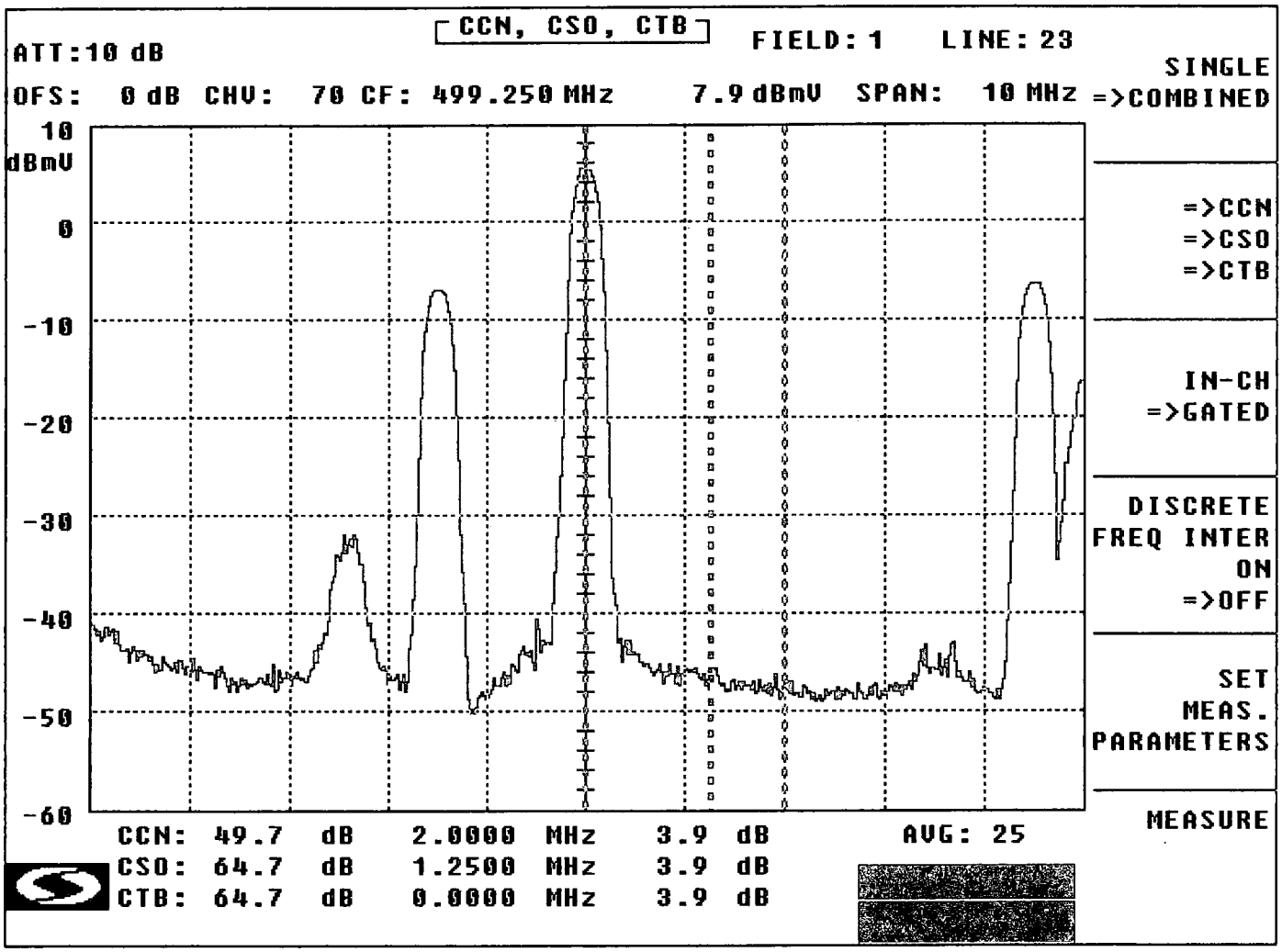
Performed By : Frank Servedio

Location : 7138 Brennon Ave

Note: Make Measurements through a 100 ft. test drop cable without converter.

CHANNEL NUMBER	IN CHANNEL RESPONSE	CARRIER TO NOISE RATIO	DISTORTIONS	CSO	HUM
	(+/- DB)	(DB)	(-DBC) CTB		(%)
4	085	47.5	61.0	62.1	.4
13	0.75	47.6	61.0	62.1	
21	0.5	48.3	61.2	62.3	
27	0.65	47.1	60.1	61.1	
35	0.45	47.5	61.2	60.1	
44	0.5	47.8	62.3	62.3	
52	0.9	48.1	60.9	62.1	
63	0.95	49.5	63.2	62.1	
70	0.65	49.7	64.7	64.7	

SUNRISE TELECOM BROADBAND 07.18.13 12:58:06



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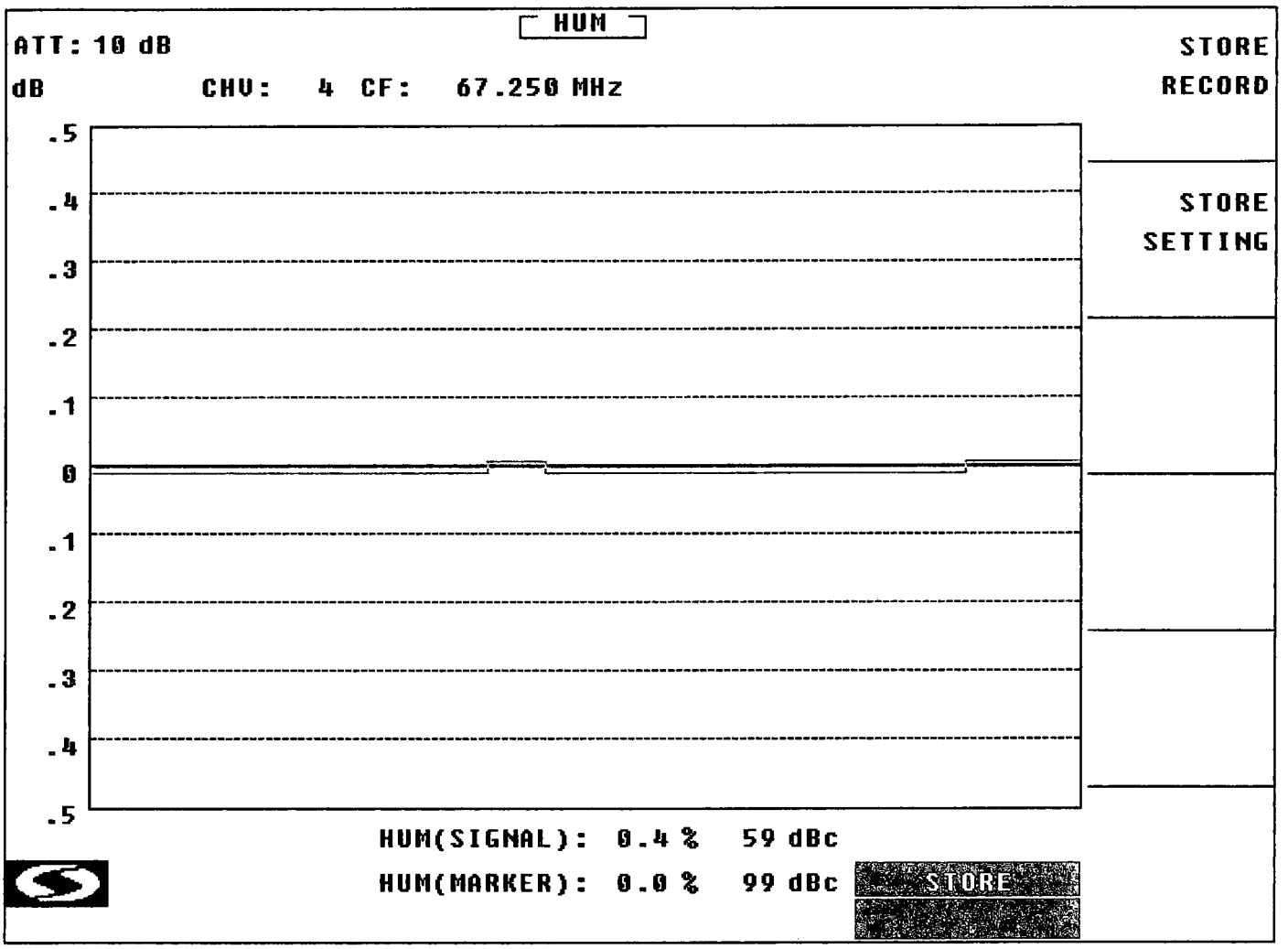

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL FREQUENCY RESPONSE TEST (76.605) (a) (6)

System Name : Rome ***Date*** : 07/18/2013

Performed By : Frank Servedio

Location : 7138 Brennon Ave

(SEE THE ATTACHED SWEEP TRACES)

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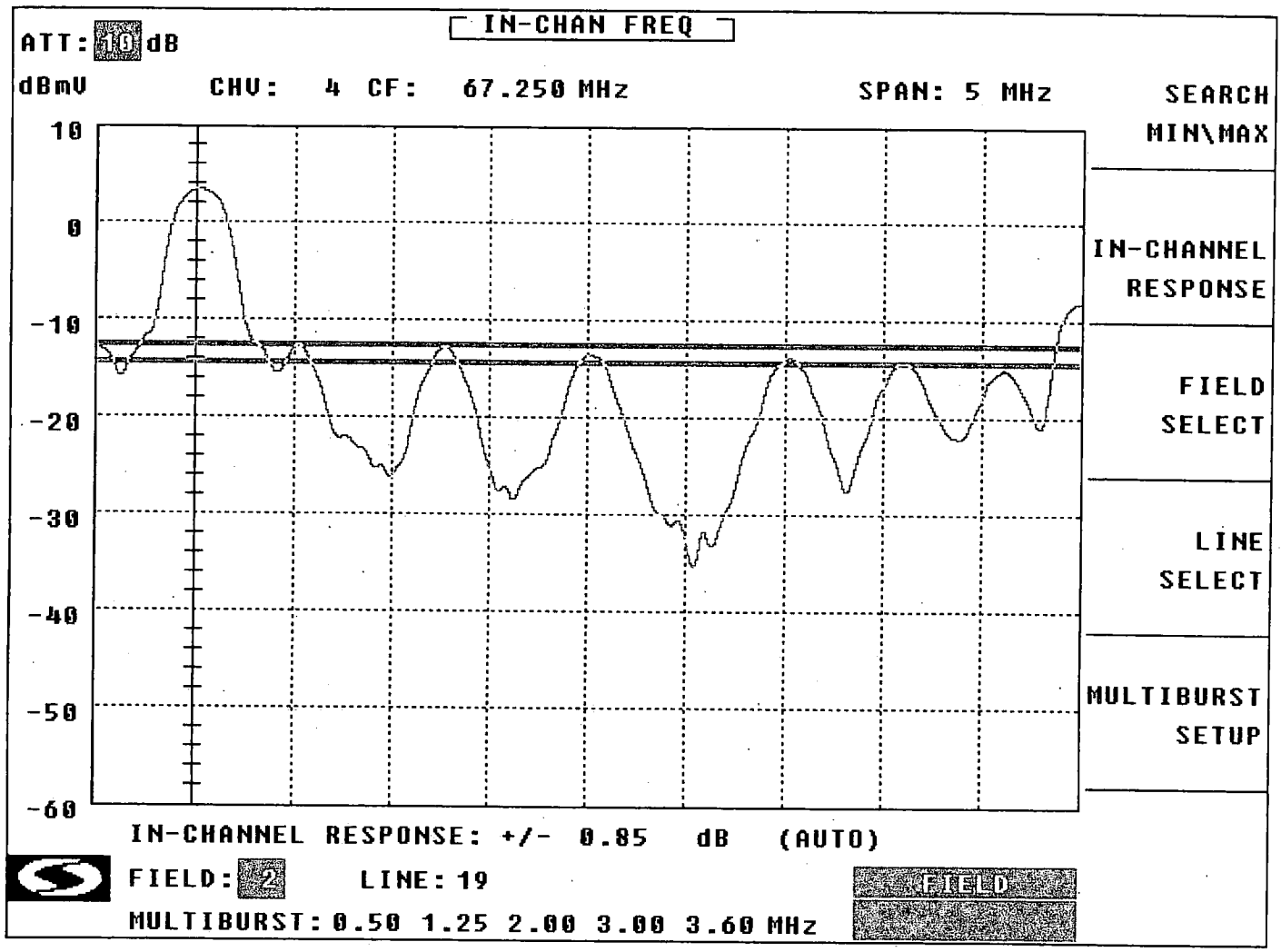

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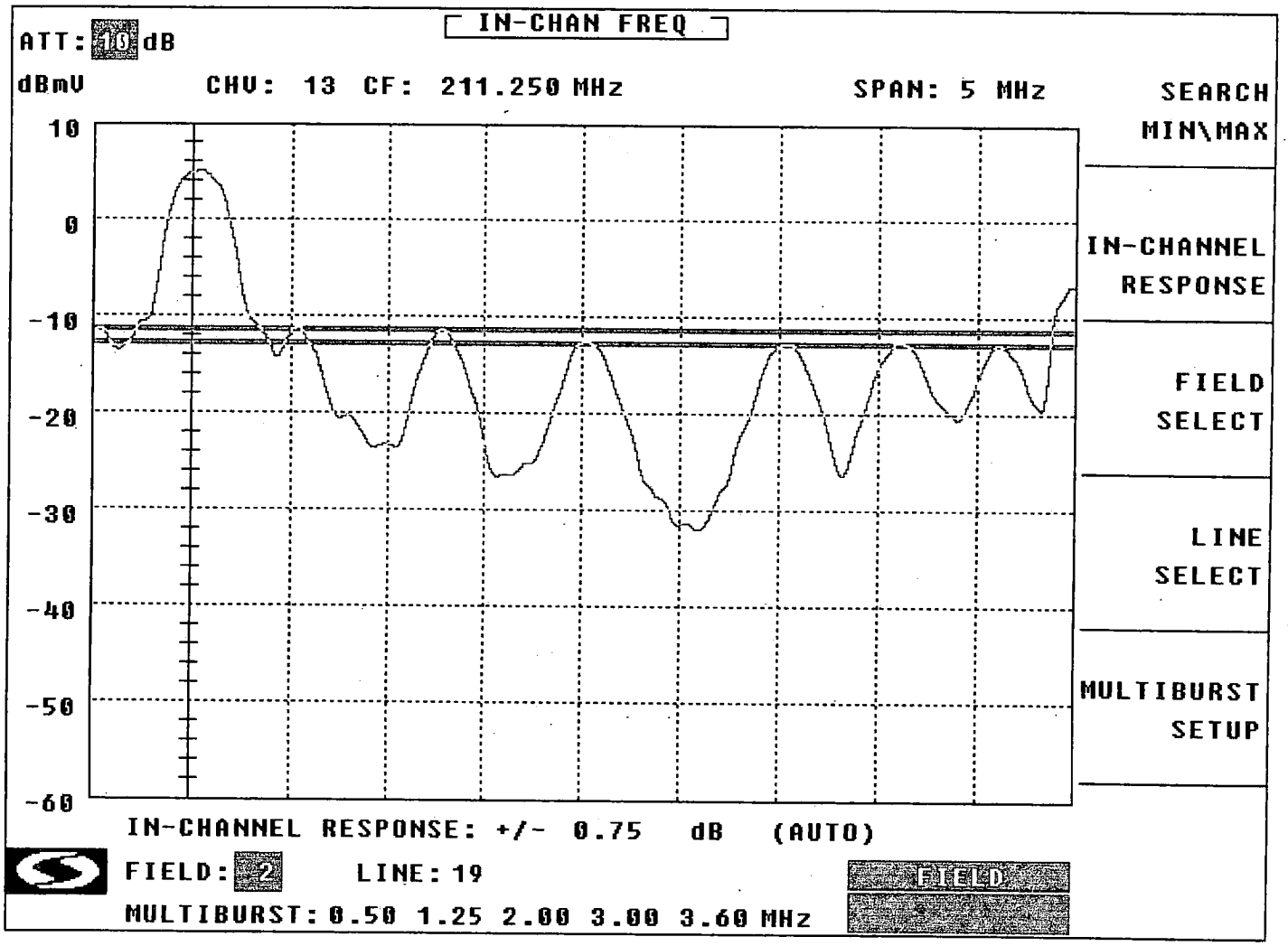

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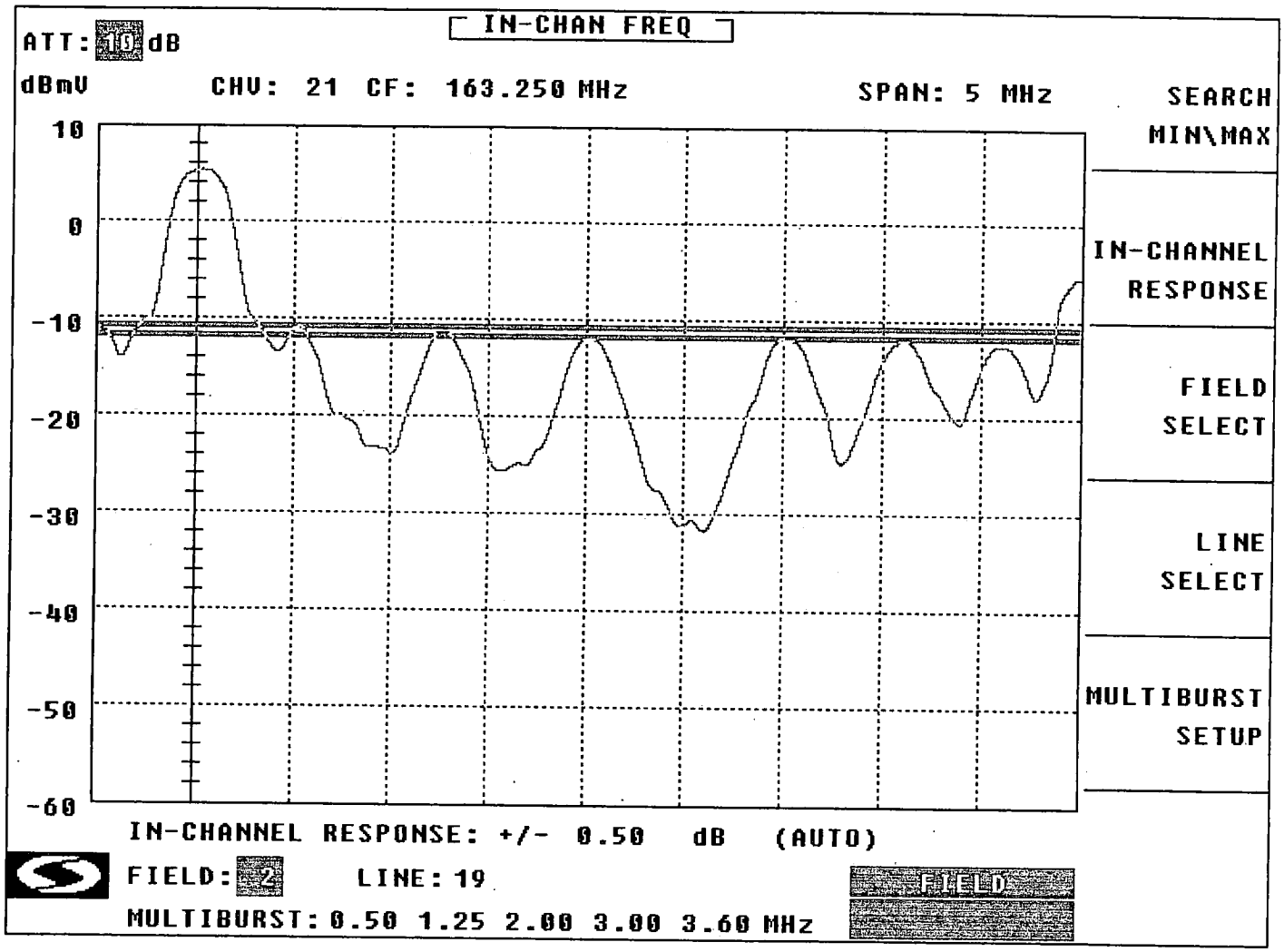

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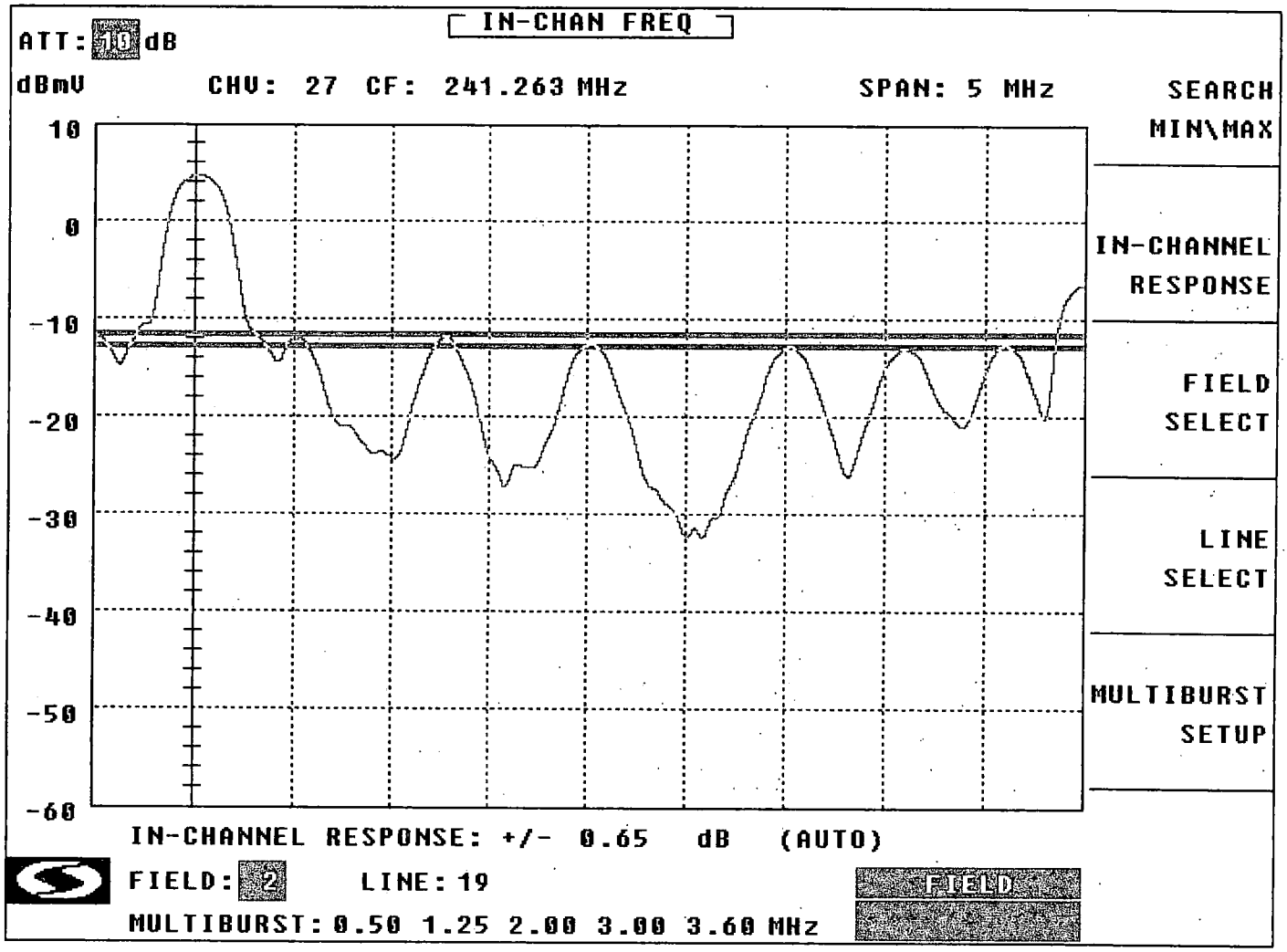

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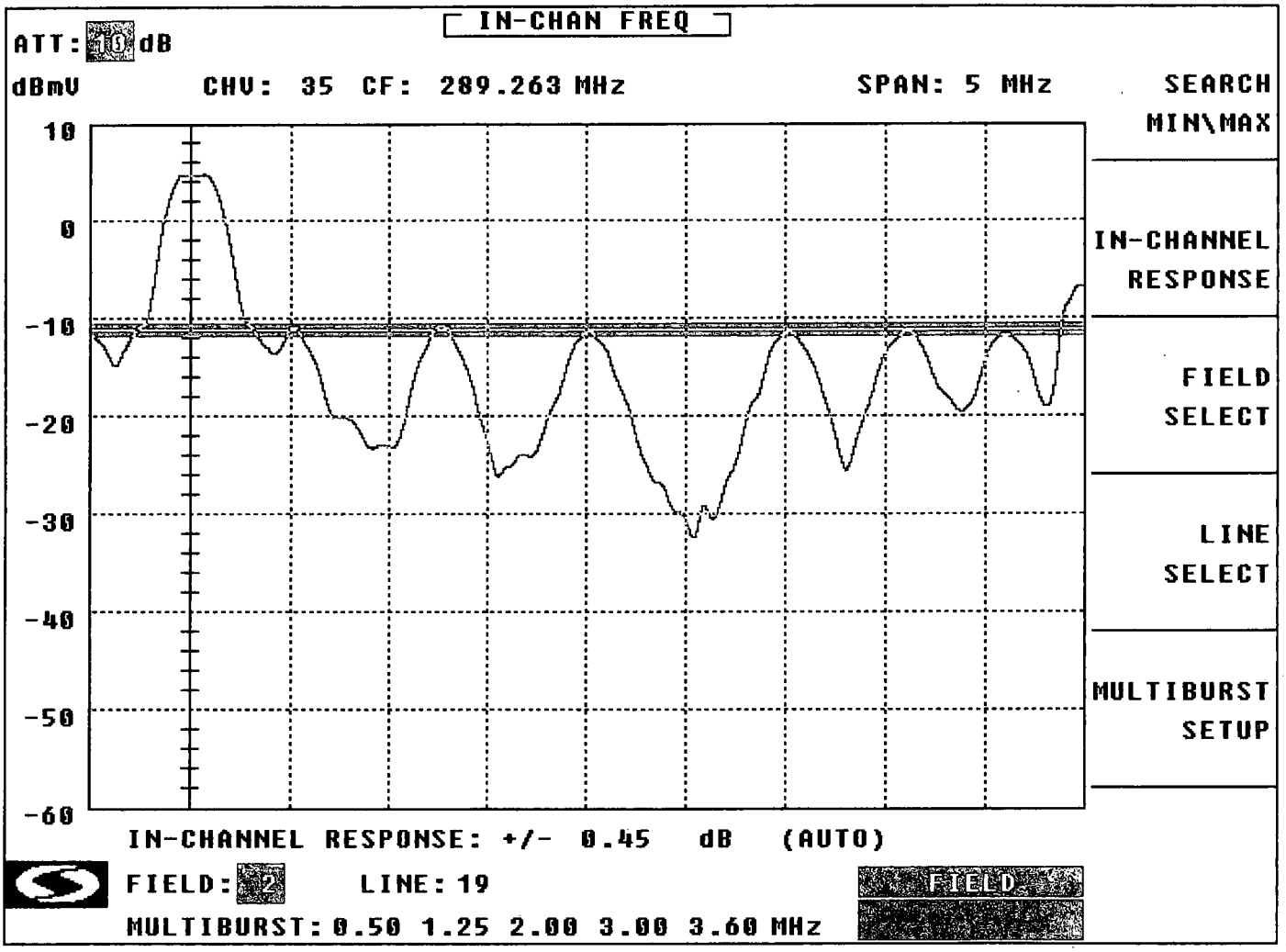

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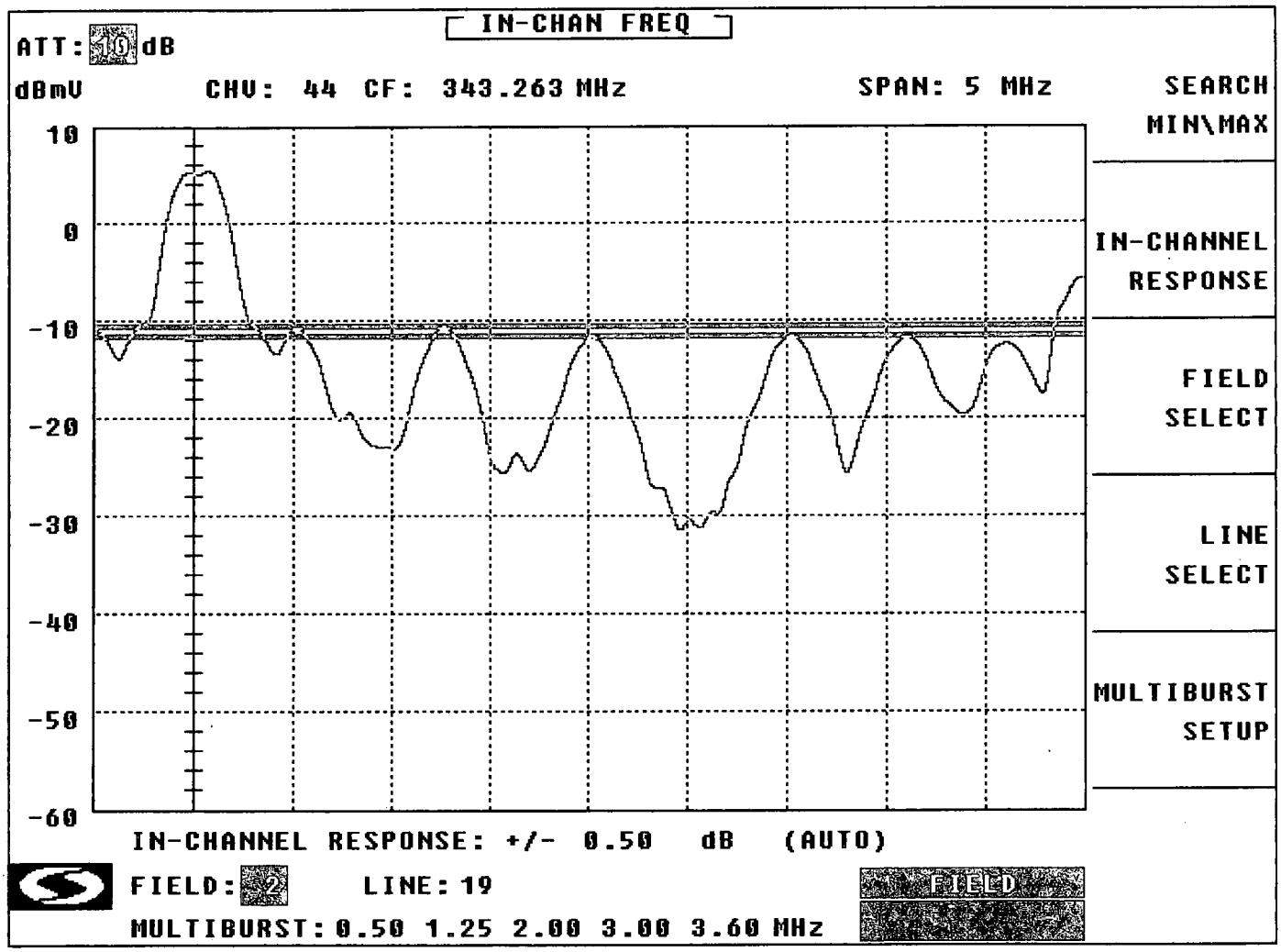

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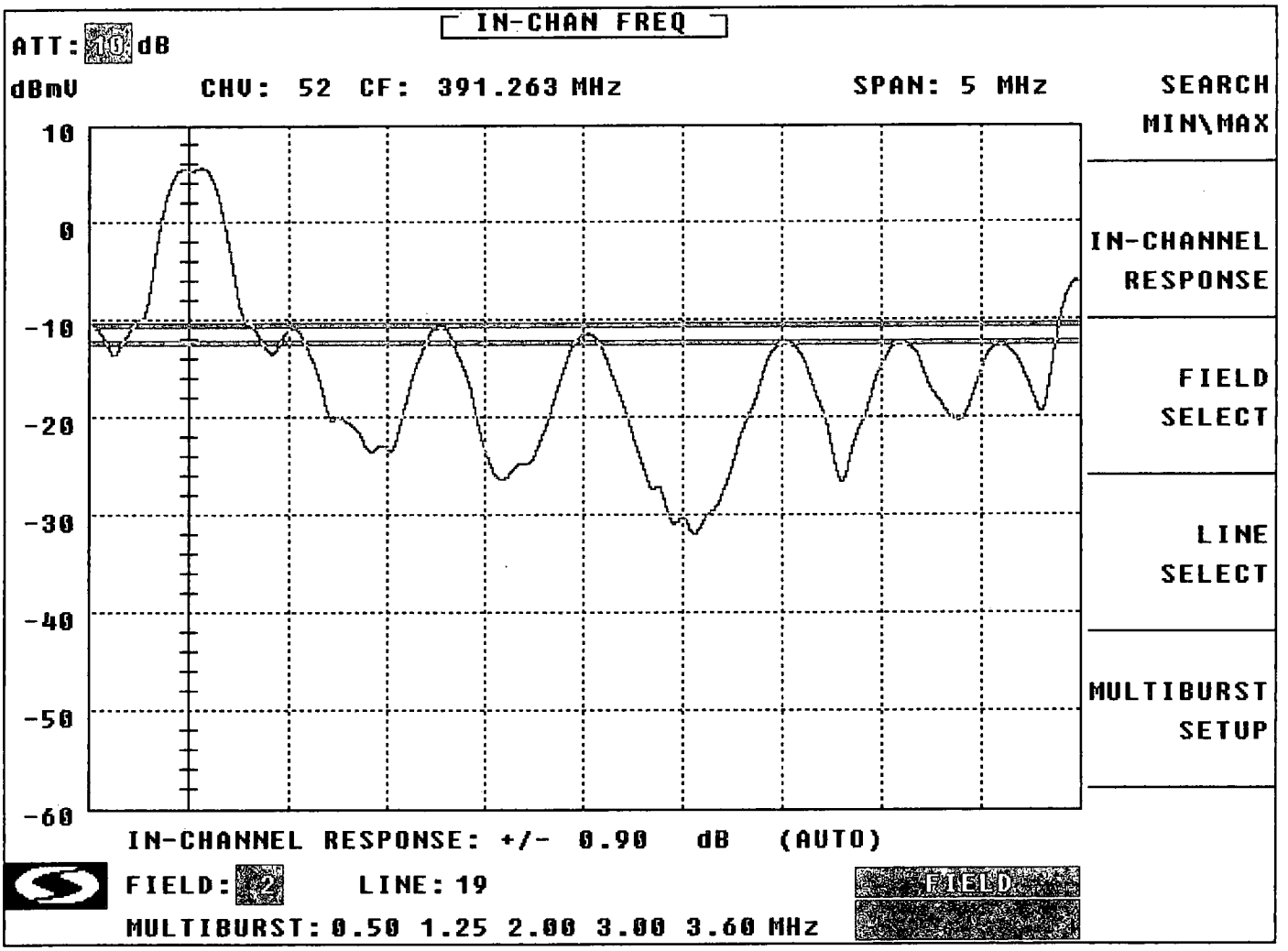

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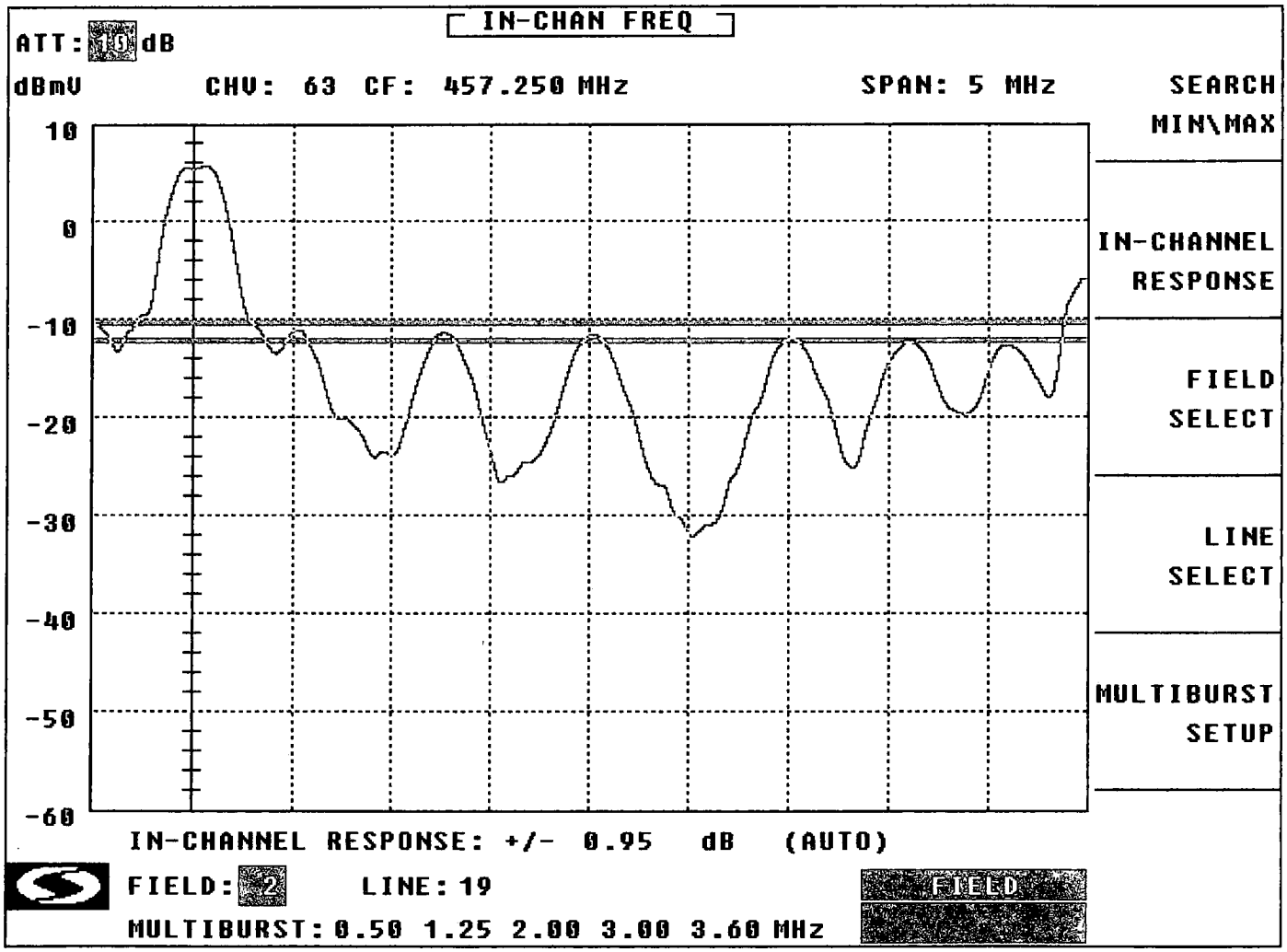

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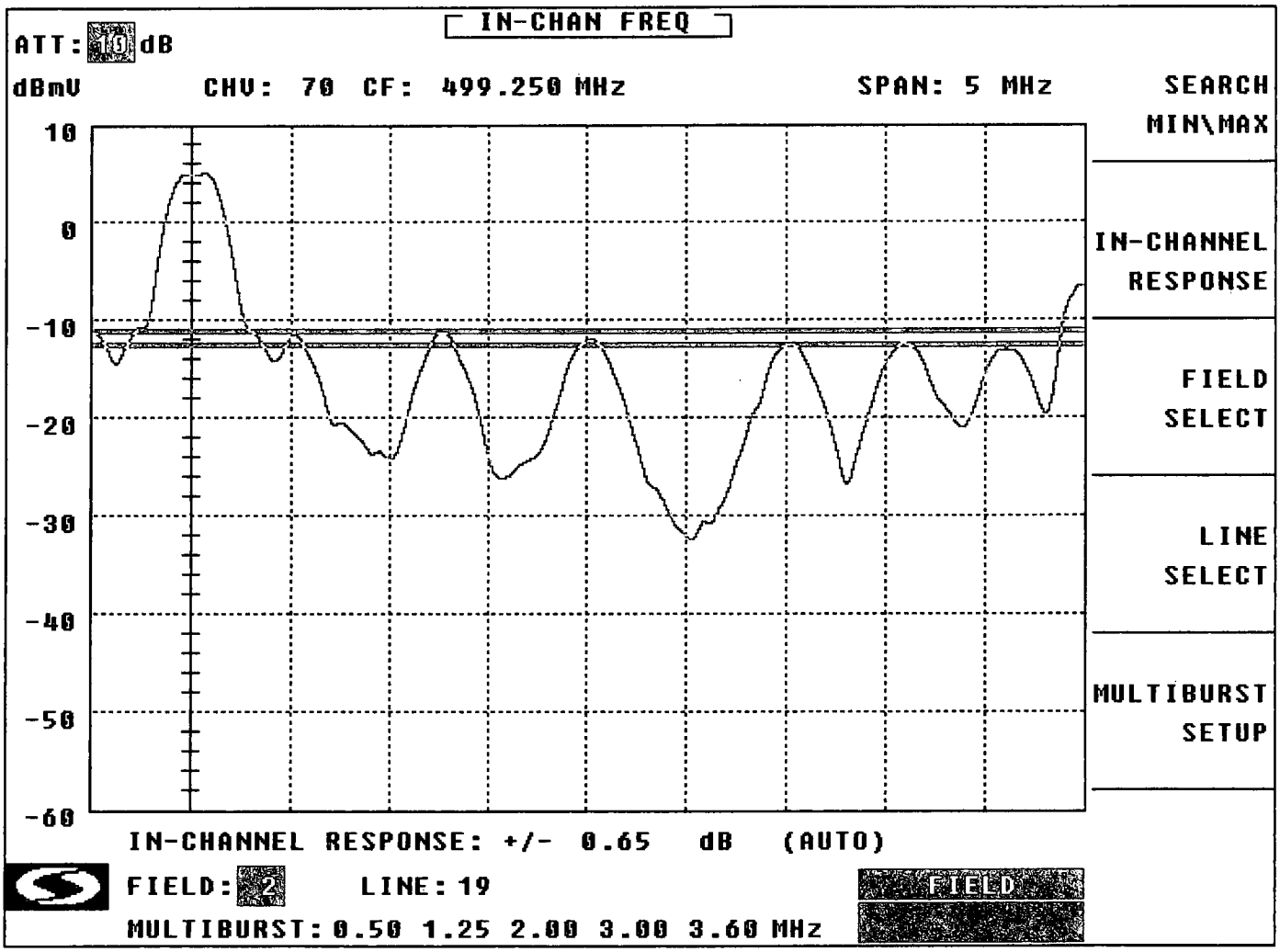


TESTPOINT 1, PAGE 5

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL VARIATION TEST

System Name	: Rome	***Test Location***	: 7138 Brennon Ave
Date	: 07/18/2013	***Performed By***	: Frank Servedio
Meter Serial Number	: 232634		

		TEMP F							TEMP F				
		93.00	88.00	75.00	89.00				93.00	88.00	75.00	89.00	
		TIME							TIME				
		13:03:00	19:03:00	01:03:00	07:03:00				13:03:00	19:03:00	01:03:00	07:03:00	
CHAN	FREQ (MHZ)	VISUAL LEVEL (DBMV)				MAX VAR	CHAN	FREQ (MHZ)	VISUAL LEVEL (DBMV)				MAX VAR
2	55.2500	18.55	19.26	18.48	16.59	2.67	DD(40)	319.2625	18.31	17.14	18.20	19.34	2.2
3	61.2500	19.32	18.14	18.39	17.54	1.78	EE(41)	325.2625					
4	67.2500	19.37	18.10	18.32	17.45	1.92	FF(42)	331.2750	18.75	17.50	18.69	17.81	1.25
5	77.2500	19.57	18.28	17.52	17.57	2.05	GG(43)	337.2625	18.41	17.23	18.35	18.51	1.28
6	83.2500	19.43	18.14	17.32	17.46	2.11	HH(44)	343.2625	18.02	17.81	18.97	17.10	1.87
A-5(95)	91.2500						II(45)	349.2625	18.34	17.19	19.31	17.51	2.12
A-4(96)	97.2500	18.06	17.80	17.92	18.04	0.26	JJ(46)	355.2625	18.19	17.94	18.12	17.25	0.94
A-3(97)	103.2500	17.18	18.93	17.07	18.20	1.86	KK(47)	361.2625	18.39	17.14	18.27	17.47	1.25
A-2(98)	109.2750						LL(48)	367.2625	18.31	18.09	18.17	18.33	0.24
A-1(99)	115.2750	19.13	19.44	18.04	17.12	2.32	MM(49)	373.2625	18.96	18.80	17.98	19.14	1.16
A(14)	121.2625	19.66	18.44	18.64	17.66	2	NN(50)	379.2625	19.04	19.87	17.96	17.12	2.75
B(15)	127.2625	19.45	18.19	18.49	17.59	1.86	OO(51)	385.2625	17.13	18.94	19.03	17.19	1.9
C(16)	133.2625	19.86	18.40	18.00	18.08	1.86	PP(52)	391.2625	19.16	18.91	18.08	17.11	2.05
D(17)	139.2500						QQ(53)	397.2625	18.76	18.58	18.72	16.88	1.88
E(18)	145.2500	18.25	18.10	18.66	18.05	0.61	RR(54)	403.2500	18.77	18.54	18.68	17.80	0.97
F(19)	151.3210	18.17	18.80	18.63	17.75	1.05	SS(55)	409.2500					
G(20)	157.2500						TT(56)	415.2500	18.56	18.34	18.40	17.52	1.04
H(21)	163.2500	17.68	18.59	18.42	19.59	1.91	UU(57)	421.2500	18.89	18.72	18.88	17.02	1.87
I(22)	169.2500	18.92	18.54	18.48	19.67	1.19	VV(58)	427.2500	18.30	18.17	18.26	17.39	0.91
7	175.2500	17.78	18.48	17.50	17.62	0.98	WW(59)	433.2500	18.75	18.57	18.74	17.87	0.88
8	181.2500	17.10	18.79	17.81	17.92	1.69	XX(60)	439.2500	18.56	18.48	18.68	17.80	0.88
9	187.2500	18.95	18.66	17.80	17.84	1.15	YY(61)	445.2500	18.78	18.69	18.95	18.05	0.9
10	193.2500	17.07	18.70	18.76	18.89	1.82	ZZ(62)	451.2500	18.71	18.65	18.91	18.02	0.89
11	199.2500	19.32	19.02	18.08	18.19	1.24	63	457.2500	18.04	19.20	18.59	18.70	1.16
12	205.2500	19.55	18.23	18.20	18.37	1.35	64	463.2500					
13	211.2500	19.32	18.98	18.92	18.04	1.28	65	469.2500	18.72	17.70	18.08	18.21	1.02
J(23)	217.2500	19.32	18.99	18.00	18.16	1.32	66	475.2500	17.03	17.11	18.66	19.71	2.68
K(24)	223.2500	19.18	18.91	18.95	18.10	1.08	67	481.2500					
L(25)	229.2625	19.04	18.72	18.71	18.91	0.33	68	487.2500	17.29	17.32	17.85	19.00	1.71
M(26)	235.2625	19.55	19.23	19.26	18.41	1.14	69	493.2500	17.08	17.18	17.93	17.20	0.85
N(27)	241.2625	19.48	19.12	19.09	19.26	0.39	70	499.2500	17.74	17.89	17.62	16.68	1.21
O(28)	247.2625	19.59	19.32	19.30	19.46	0.29	71	505.2500					
P(29)	253.2625	18.65	19.36	18.21	18.45	1.15	72	511.2500					
Q(30)	259.2625	18.96	19.61	18.55	17.70	1.91	73	517.2500					
R(31)	265.2625	17.68	19.45	18.50	17.68	1.77	74	523.2500					
S(32)	271.2625	18.54	19.30	17.38	17.54	1.92	75	529.2500					
T(33)	277.2625	18.57	18.27	17.33	17.51	1.24	76	535.2500					
U(34)	283.2625	18.71	18.45	17.48	17.66	1.23	77	541.2500					
V(35)	289.2625	18.43	17.16	17.23	17.35	1.27	78	547.2500					
W(36)	295.2625	18.38	17.16	17.23	19.37	2.21	79	553.2500					
AA(37)	301.2625						80	559.2500					
BB(38)	307.2625	18.19	17.89	17.82	19.04	1.22	81	565.2500					
CC(39)	313.2625	18.09	17.79	17.88	19.11	1.32							

Max Non Adjacent Channel Level Diff	:- 3.12
Max Adjacent Channel Level Diff	:- 2.25
Max Variance from last proof of performance test	:- 5.49
Date of last proof of performance test	:- 01/27/2013

Note :- Make measurements through a 100 ft. test drop cable without a converter

TIME WARNER CABLE - SYRACUSE DIVISION

System Name	:	Rome
System Test Point #	:	2
Hub Name	:	Rome
Location	:	Roser Terrace
Map Number	:	518-5704
Pole Number	:	12/11
D.T. Value	:	20/4
OR Number	:	RM093
GNA Cascade	:	2
LE Cscade	:	2

TESTPOINT 2, PAGE 2

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL
VISUAL / AURAL LEVEL DIFFERENCE
(at Test Point, at the end of a 100' Drop)

System Name	: Rome	***Test Location***	: Roser Terrace
Date	: 07/18/2013	***Time***	: 12:03:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	16.83	3.68		13.15	DD (40)	319.2625	19.48	5.68		13.8
3	61.2500	15.95	3.79		12.16	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	16.40	3.03		13.37	FF (42)	331.2750	19.53	5.38		14.15
5	77.2500	17.07	3.94		13.13	GG (43)	337.2625	19.43	5.27		14.16
6	83.2500	16.86	3.89		12.97	HH (44)	343.2625	19.39	5.23		14.16
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	19.66	5.05		14.61
A-4 (96)	97.2500	17.33	3.50		13.83	JJ (46)	355.2625	19.47	5.16		14.31
A-3 (97)	103.2500	17.41	4.38		13.03	KK (47)	361.2625	19.42	5.37		14.05
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	19.54	5.33		14.21
A-1 (99)	115.2750	16.95	3.75		13.2	MM (49)	373.2625	19.53	5.29		14.24
A (14)	121.2625	16.98	3.56		13.42	NN (50)	379.2625	19.66	5.18		14.48
B (15)	127.2625	17.21	3.41		13.8	OO (51)	385.2625	19.23	5.45		13.78
C (16)	133.2625	17.26	3.41		13.85	PP (52)	391.2625	19.54	5.33		14.21
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	19.76	5.14		14.62
E (18)	145.2500	17.96	4.97		12.99	RR (54)	403.2500	19.68	5.13		14.55
F (19)	151.3210	17.82	4.99		12.83	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	19.50	5.19		14.31
H (21)	163.2500	18.99	5.40		13.59	UU (57)	421.2500	19.32	5.05		14.27
I (22)	169.2500	19.15	5.86		13.29	VV (58)	427.2500	19.59	5.18		14.41
7	175.2500	18.79	5.18		13.61	WW (59)	433.2500	19.98	4.82		15.16
8	181.2500	17.01	3.79		13.22	XX (60)	439.2500	19.55	4.91		14.64
9	187.2500	18.57	5.85		12.72	YY (61)	445.2500	19.79	5.14		14.65
10	193.2500	18.55	6.19		12.36	ZZ (62)	451.2500	19.93	5.27		14.66
11	199.2500	17.21	4.94		12.27	63	457.2500	19.82	4.81		15.01
12	205.2500	18.74	5.51		13.23	64	463.2500	N/A	N/A		N/A
13	211.2500	18.41	5.54		12.87	65	469.2500	18.02	4.52		13.5
J (23)	217.2500	18.38	6.28		12.1	66	475.2500	18.45	4.52		13.93
K (24)	223.2500	18.43	6.22		12.21	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	18.31	5.56		12.75	68	487.2500	18.82	4.15		14.67
M (26)	235.2625	18.81	6.23		12.58	69	493.2500	17.54	4.14		13.4
N (27)	241.2625	19.00	5.62		13.38	70	499.2500	17.59	4.54		13.05
O (28)	247.2625	19.16	5.31		13.85	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	19.25	5.90		13.35	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	17.87	7.21		10.66	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	19.22	5.80		13.42	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	18.50	5.52		12.98	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	19.53	4.94		14.59	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	19.55	5.40		14.15	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	19.29	6.04		13.25	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	19.34	5.59		13.75	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	19.32	5.51		13.81	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	19.39	5.50		13.89						

Min Channel	:	3	15.950
Max Channel	:	WW(59)	19.980
Peak to Valley	:	4.03	

TESTPOINT 2, PAGE 3

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL RESPONSE TEST
CARRIER - TO - NOISE TEST
COHERENT DISTURBANCES TEST
LOW FREQUENCY DISTURBANCES TEST

System Name : Rome ***Date*** : 7/18/2013

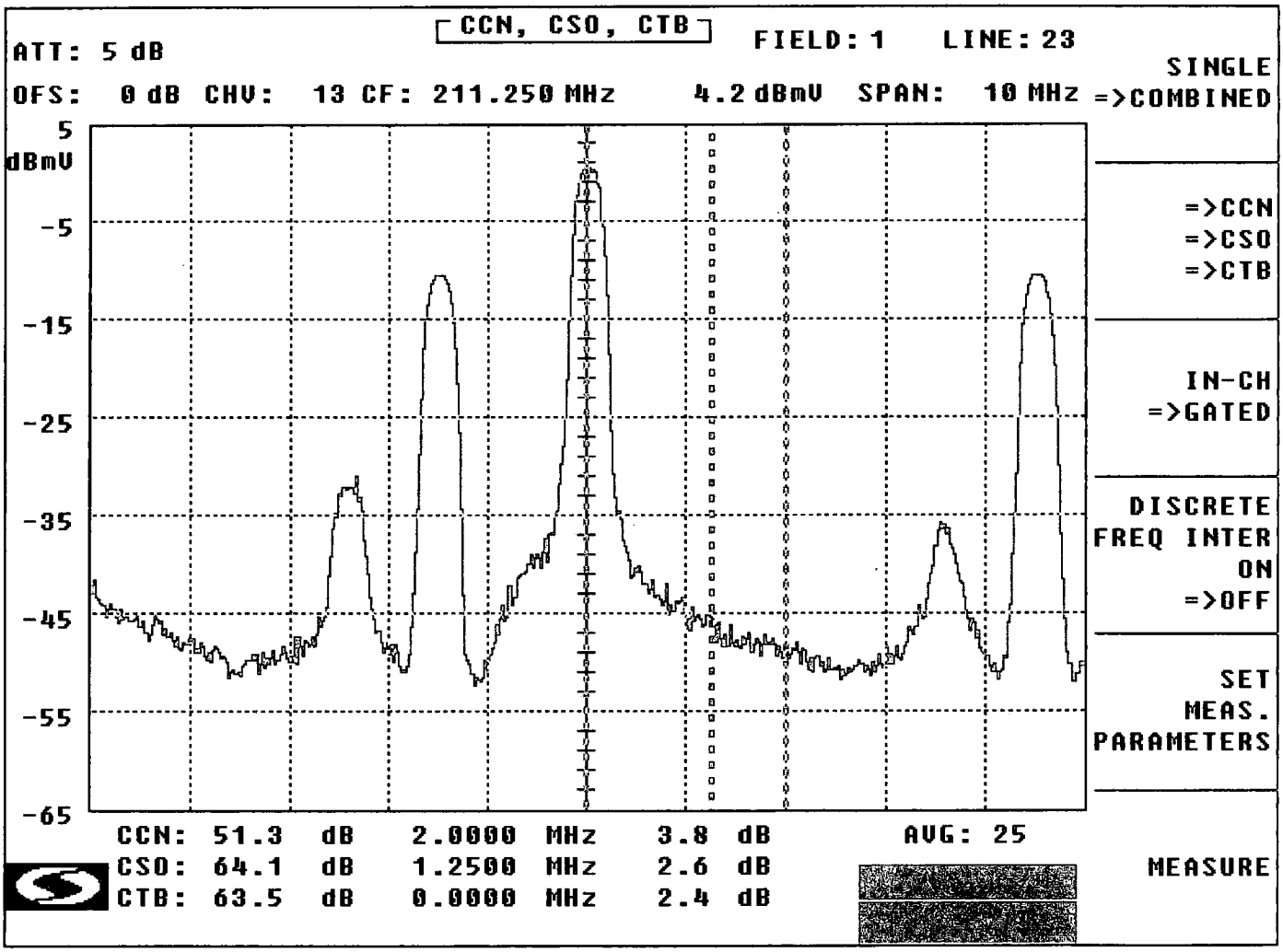
Performed By : Frank Servedio

Location : Roser Terrace

Note: Make Measurements through a 100 ft. test drop cable without converter.

CHANNEL NUMBER	IN CHANNEL RESPONSE	CARRIER TO NOISE RATIO	DISTORTIONS	CSO	HUM
	(+/- DB)	(DB)	(-DBC) CTB		(%)
4	.95	49.2	62.1	63.2	
13	.7	51.3	63.5	64.1	
21	.8	49.7	64.7	64.8	
27	.65	50.5	64.4	64.2	
35	.5	50.6	61.1	63.2	
44	.65	50.9	65.1	64.4	
52	.65	50.8	65.1	63.8	
63	.75	49.5	63.8	63.9	
70	.75	50.3	64.9	63.1	.6

SUNRISE TELECOM BROADBAND 07.18.13 11:31:49



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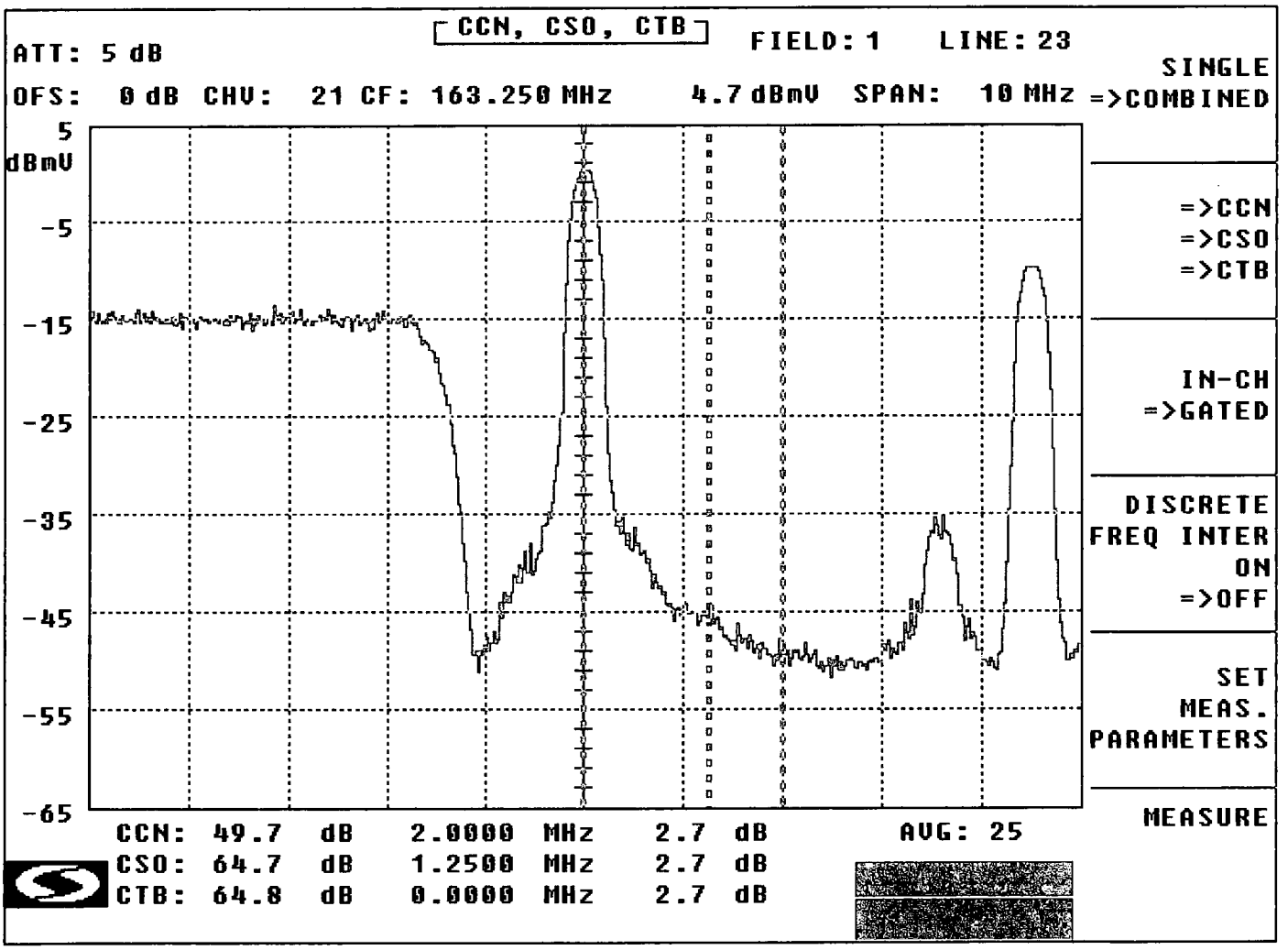

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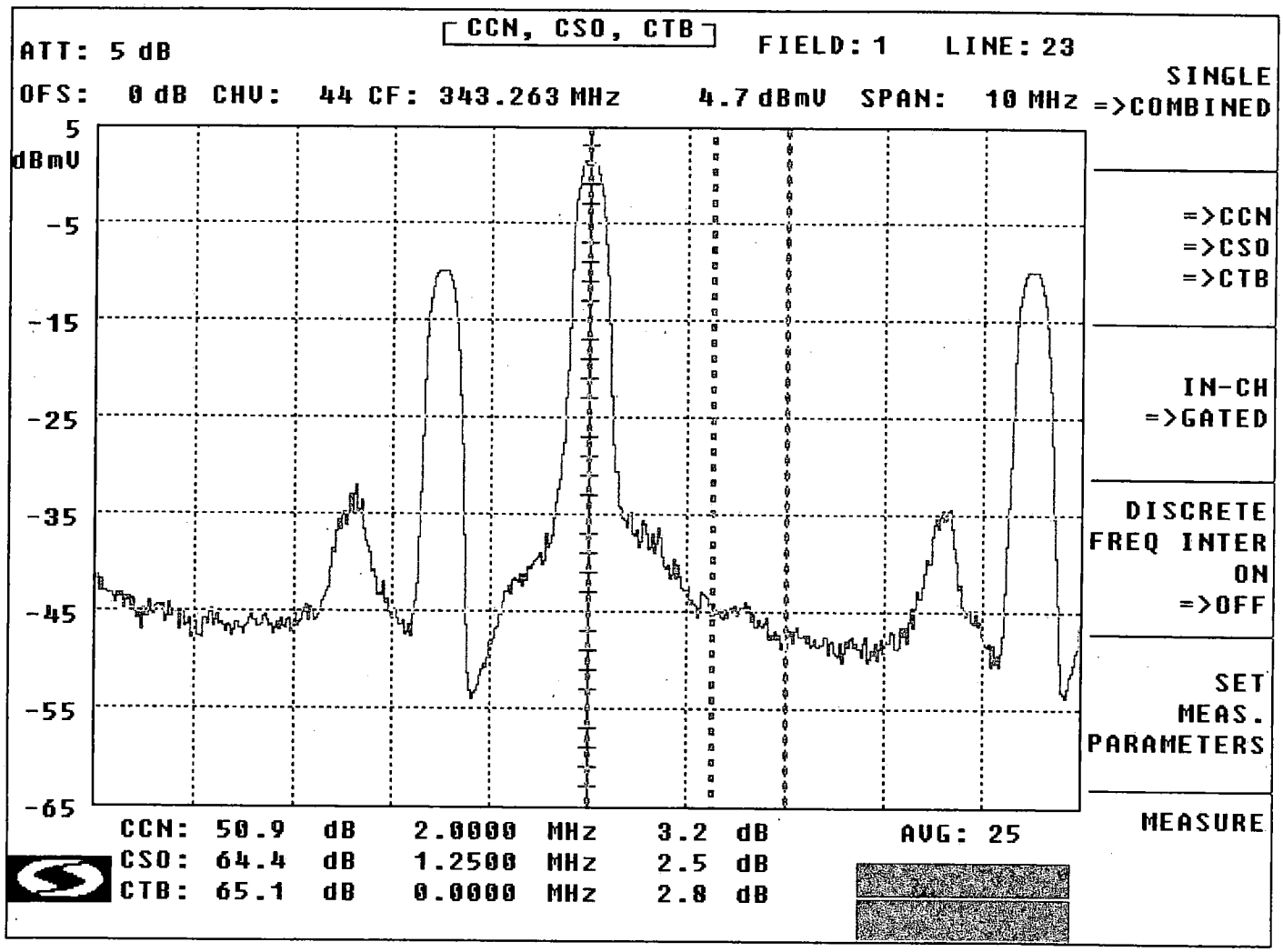
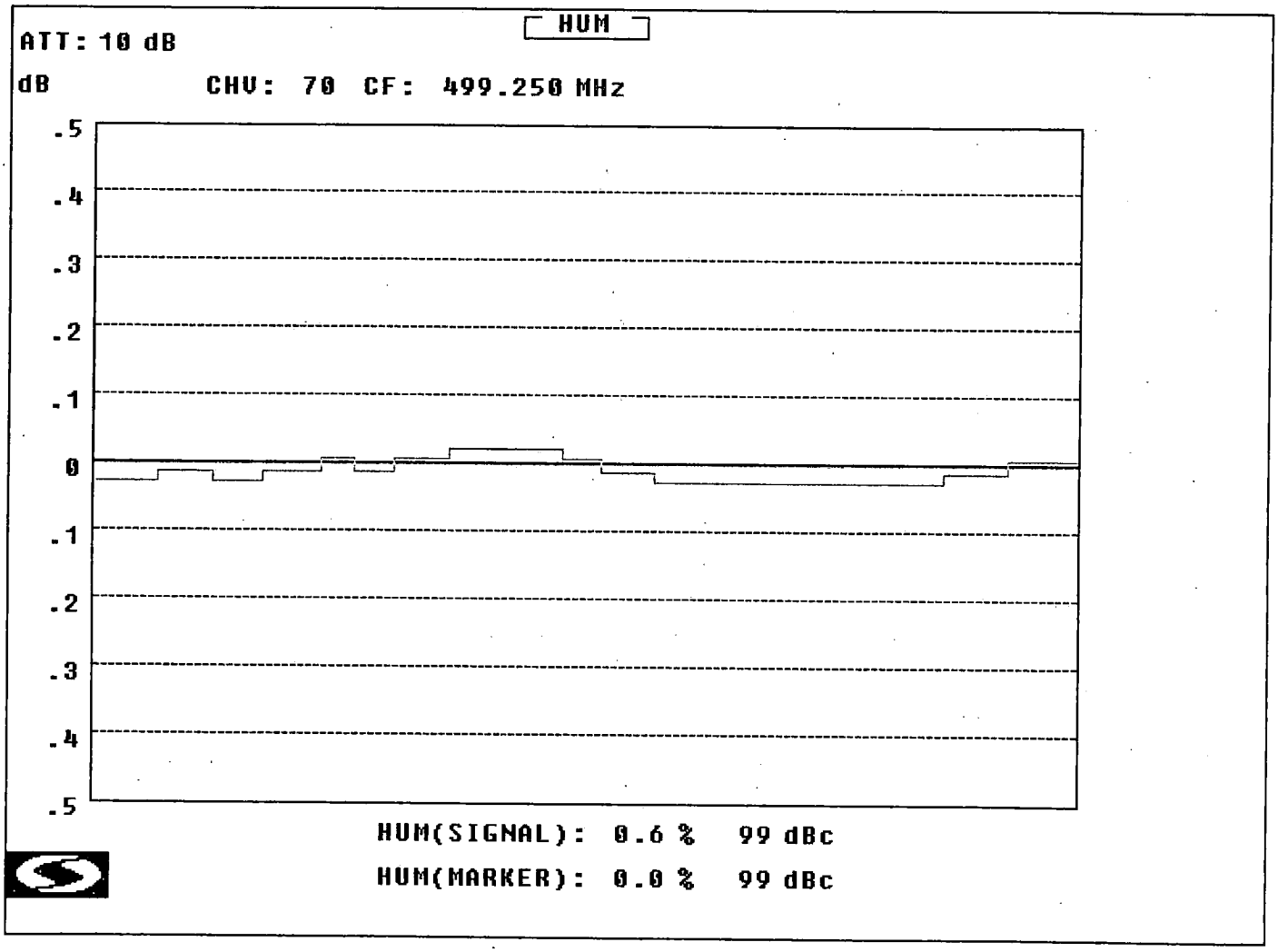


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: 2
Comment :
Mode : HUM Test

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-18 Time: 11:00:34 AM Temp: 84 F



TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL FREQUENCY RESPONSE TEST
(76.605) (a) (6)

System Name : Rome ***Date*** : 7/18/2013

Performed By : Frank Servedio

Location : Roser Terrace

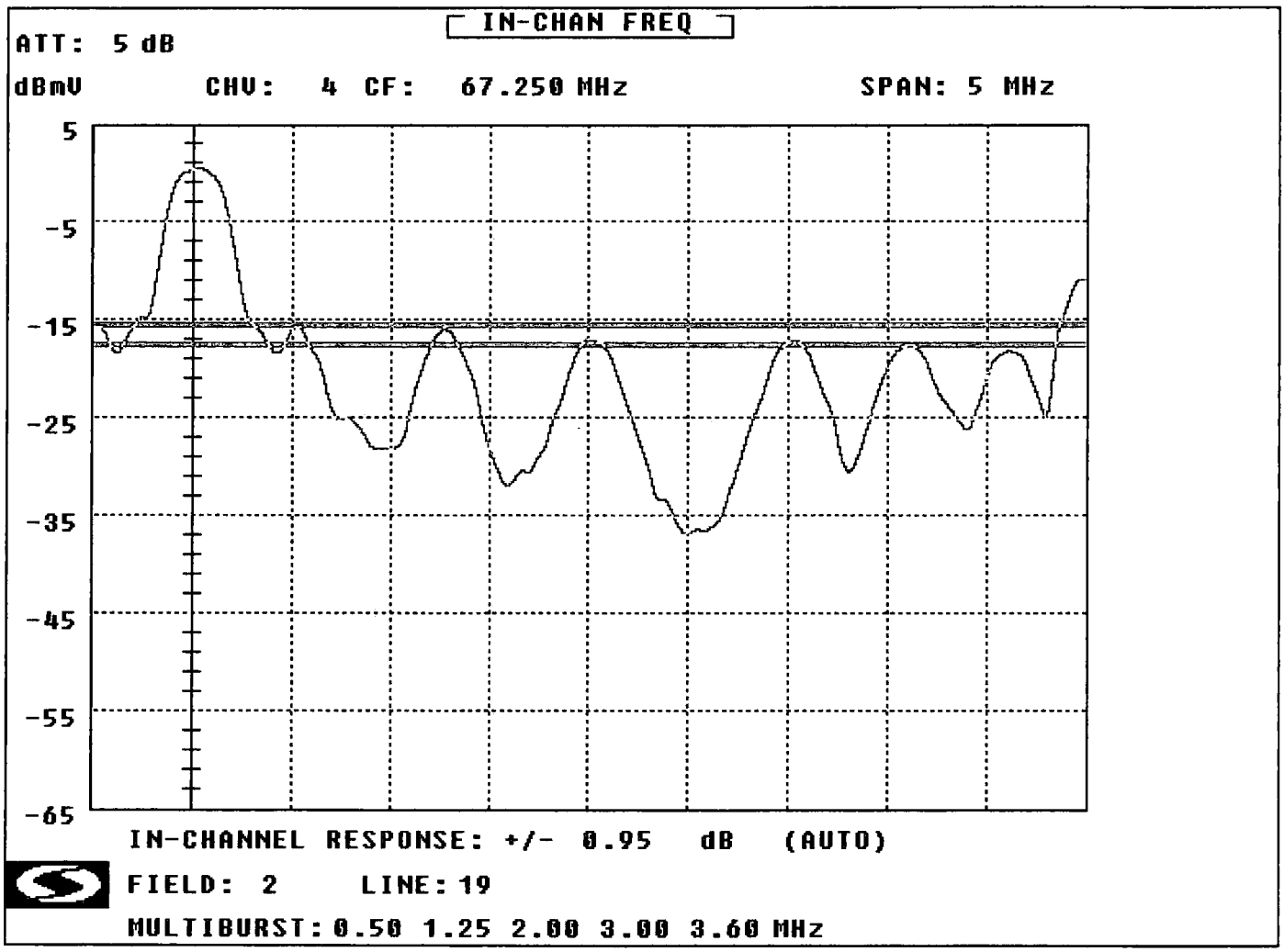
(SEE THE ATTACHED SWEEP TRACES)

SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: 2
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-18 Time: 10:52:53 AM Temp: 82 F

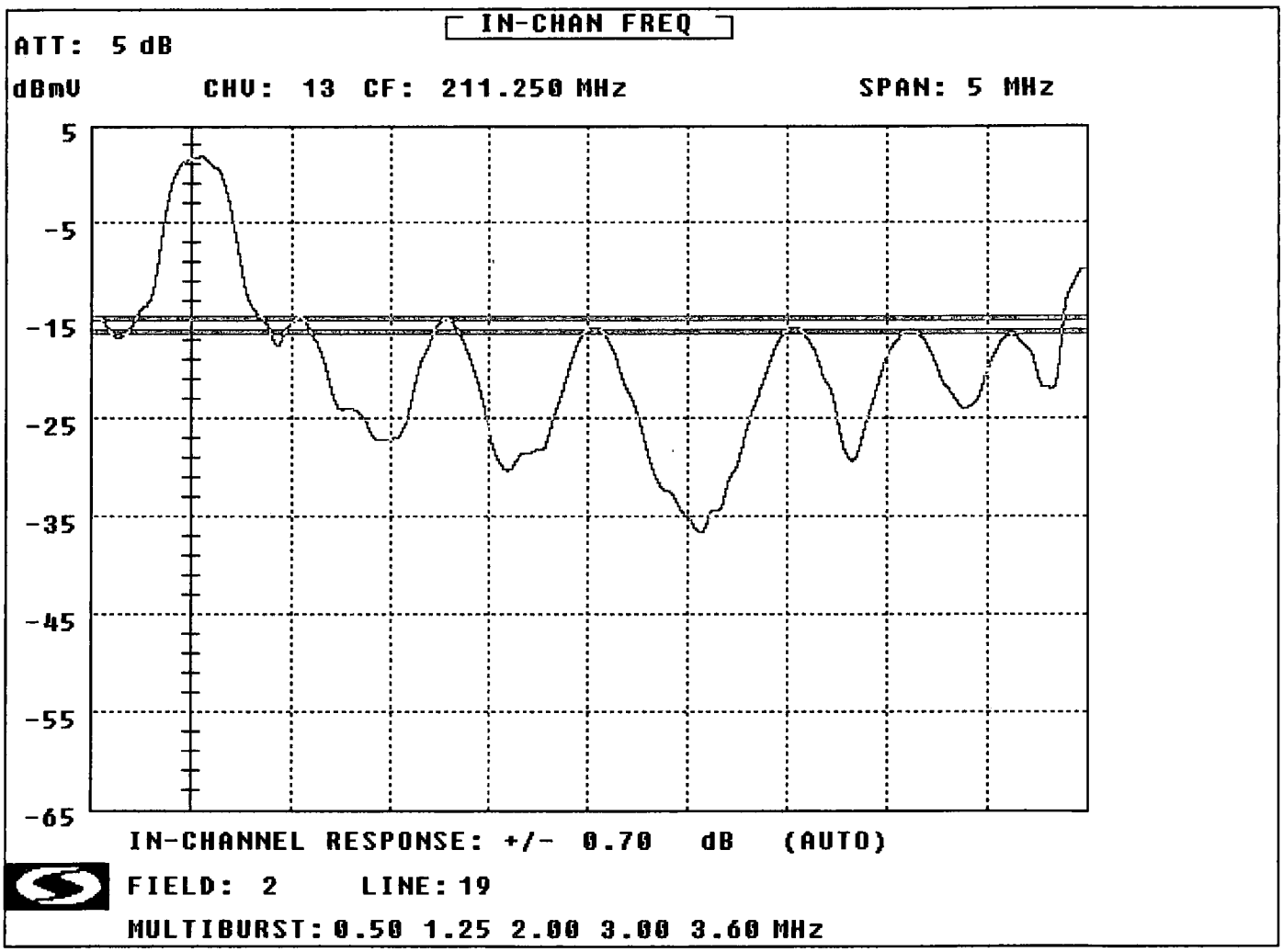


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: 2001
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-18 Time: 10:53:44 AM Temp: 82 F

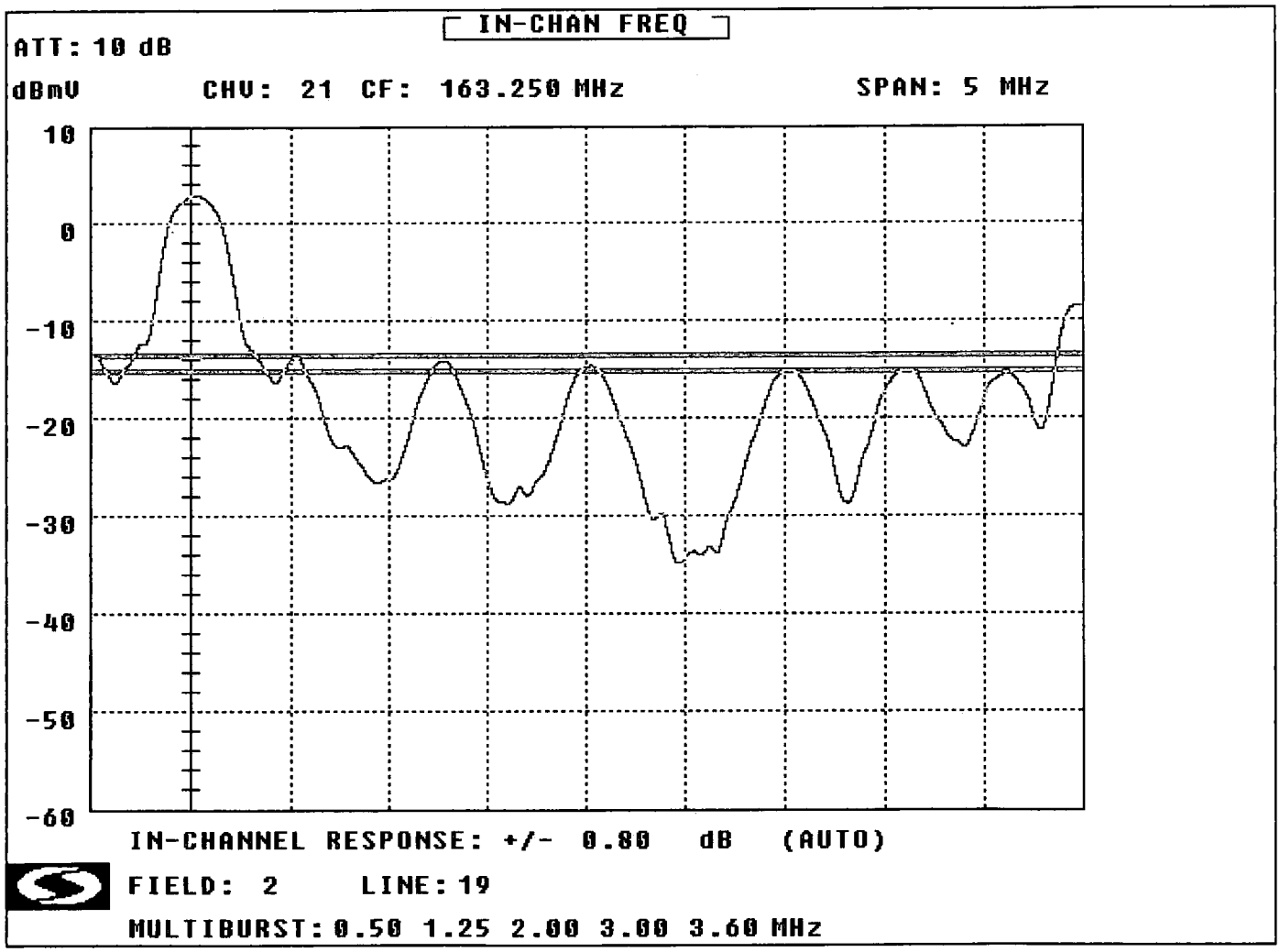


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: 2002
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-18 Time: 10:54:27 AM Temp: 82 F

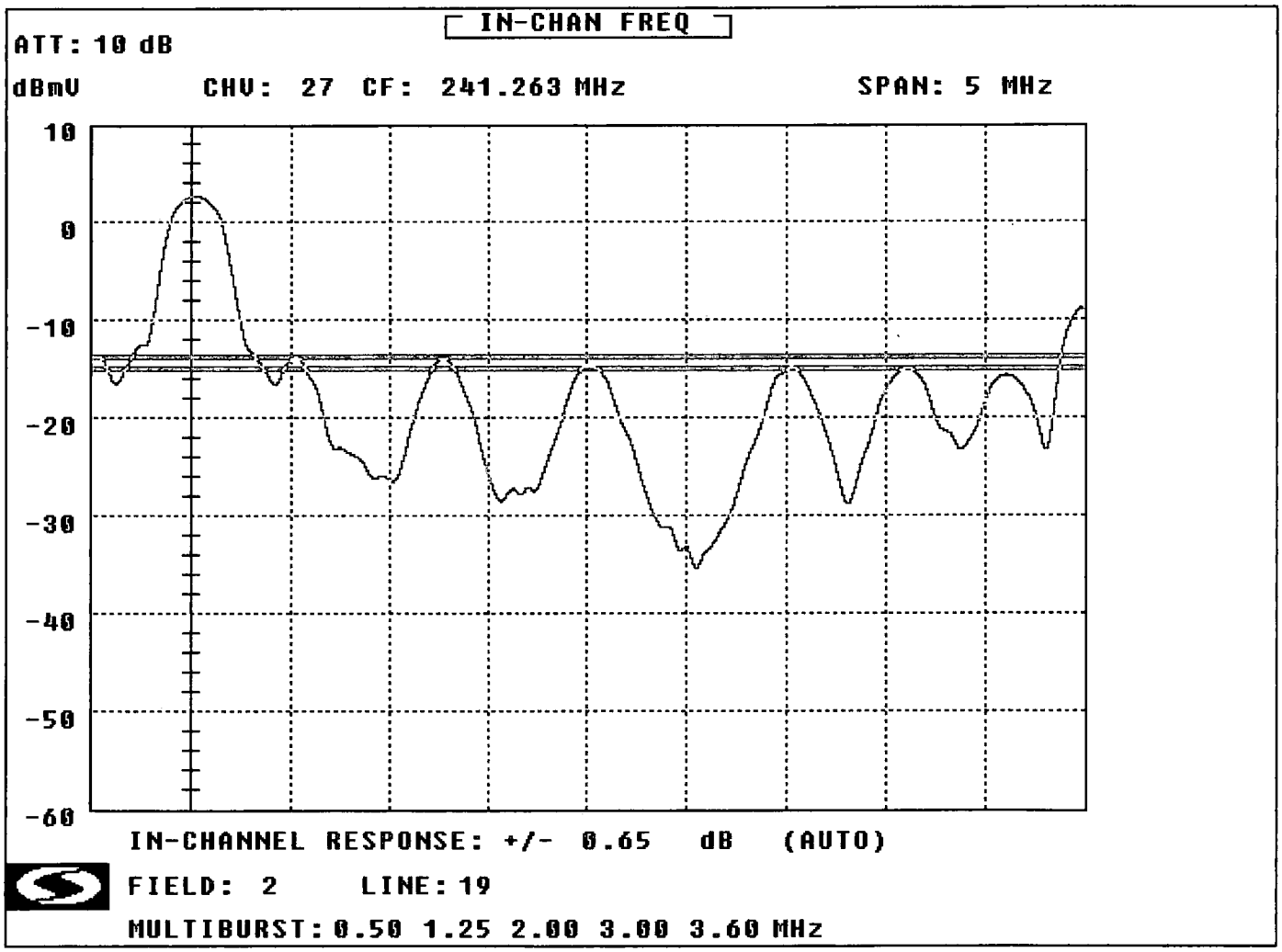


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: 2003
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-18 Time: 10:55:03 AM Temp: 82 F

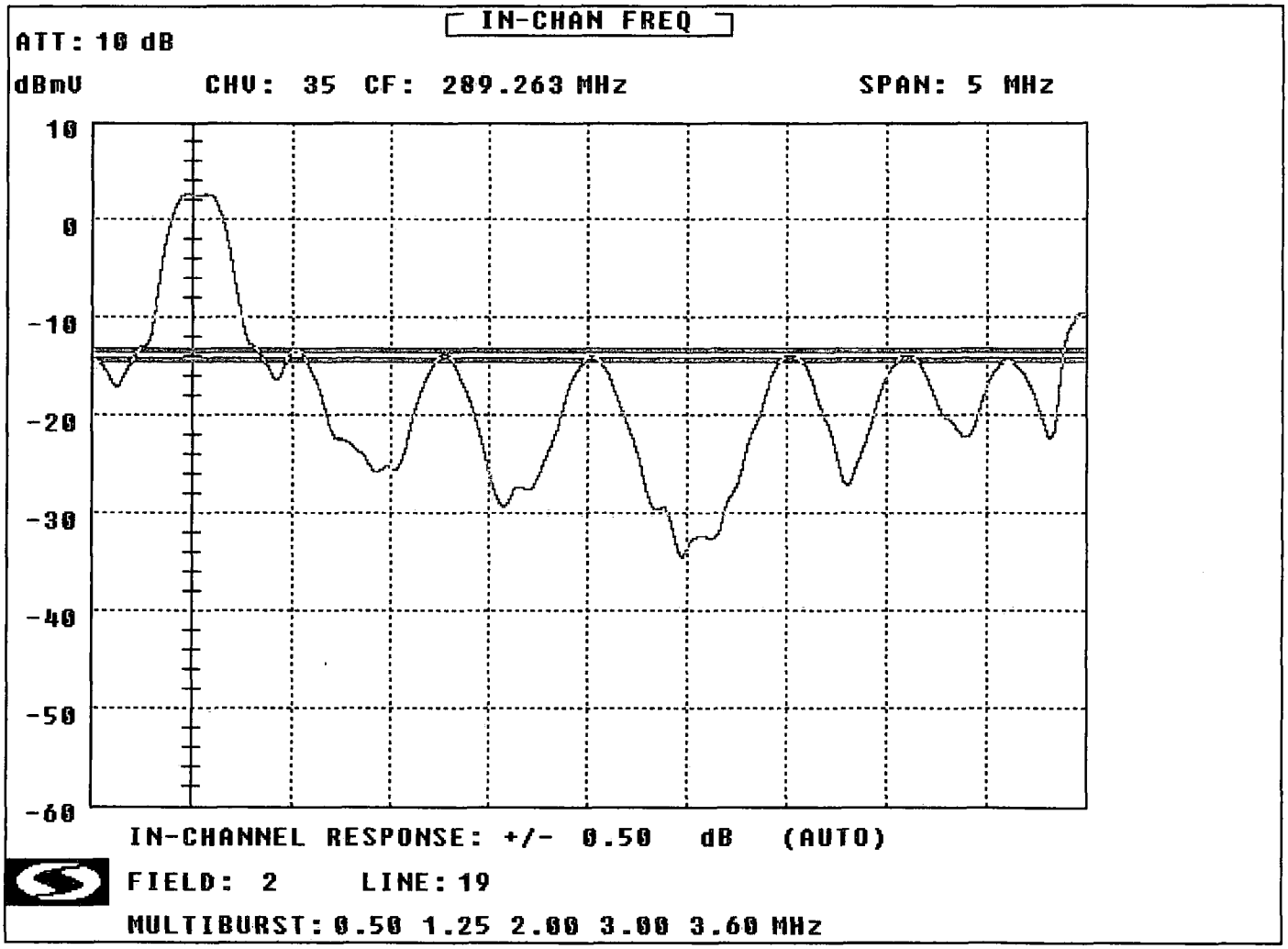


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: 2004
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-18 Time: 10:55:41 AM Temp: 84 F

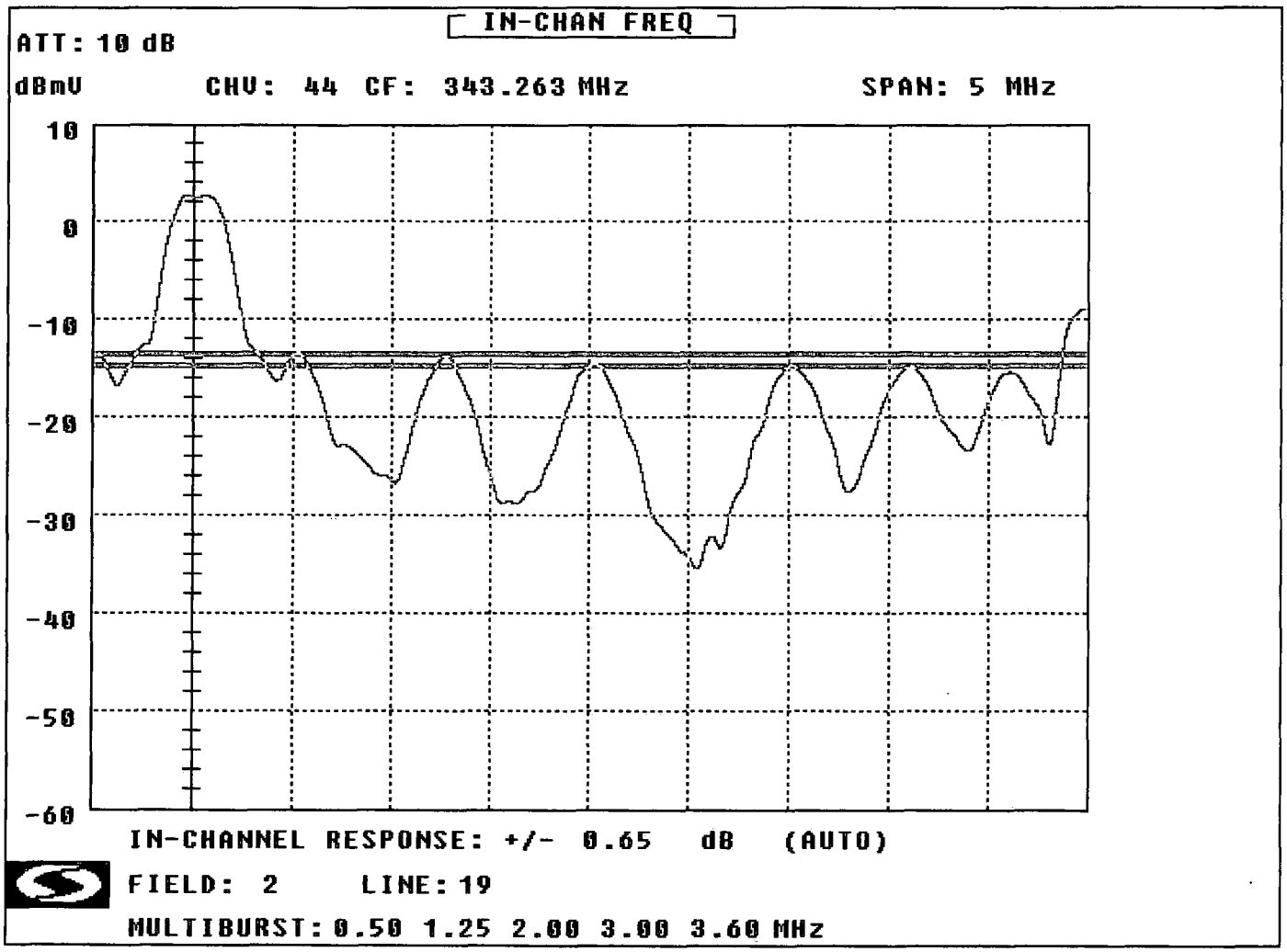


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: 2005
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-18 Time: 10:56:30 AM Temp: 82 F

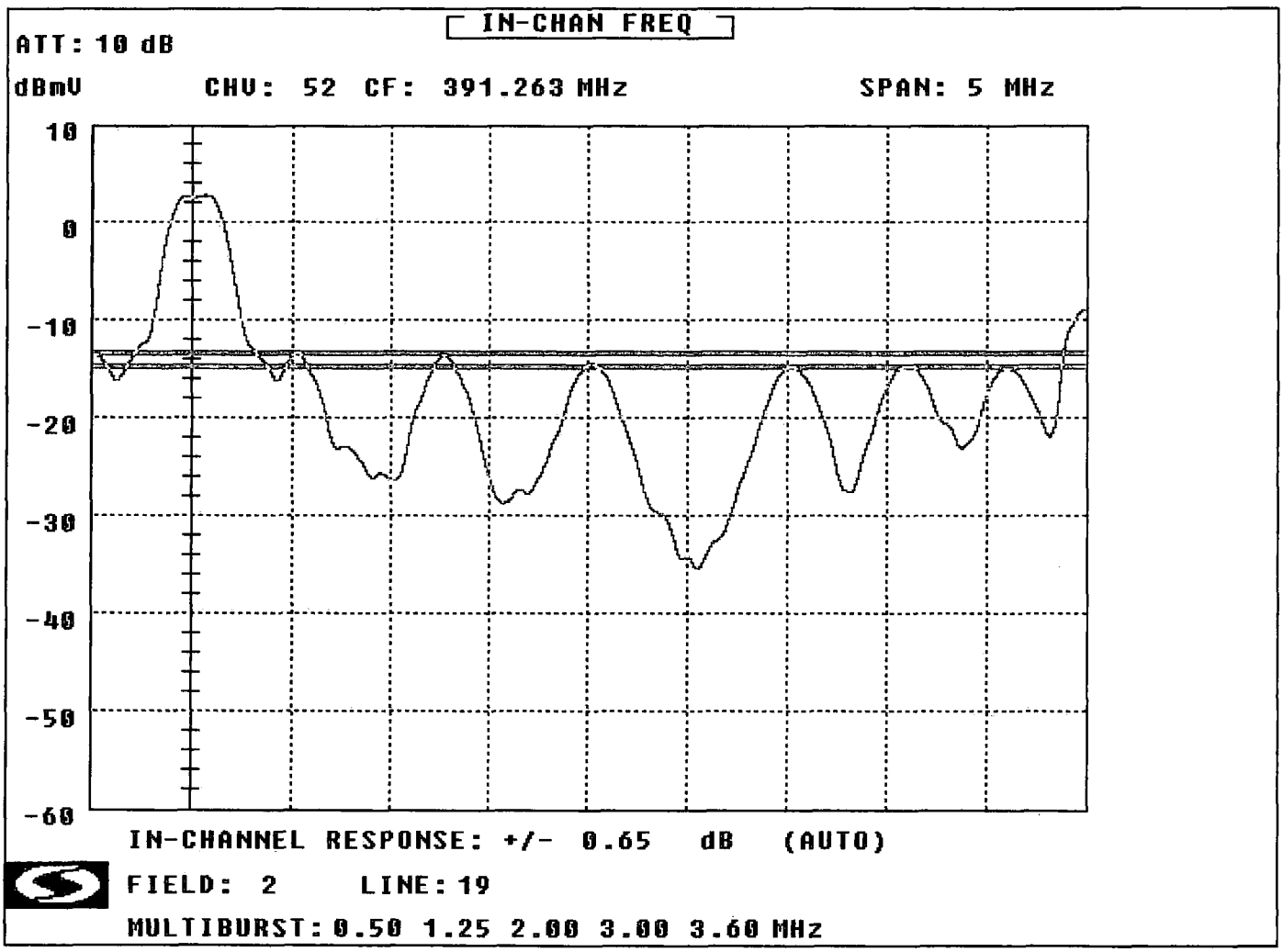


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: 2006
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-18 Time: 10:57:12 AM Temp: 82 F

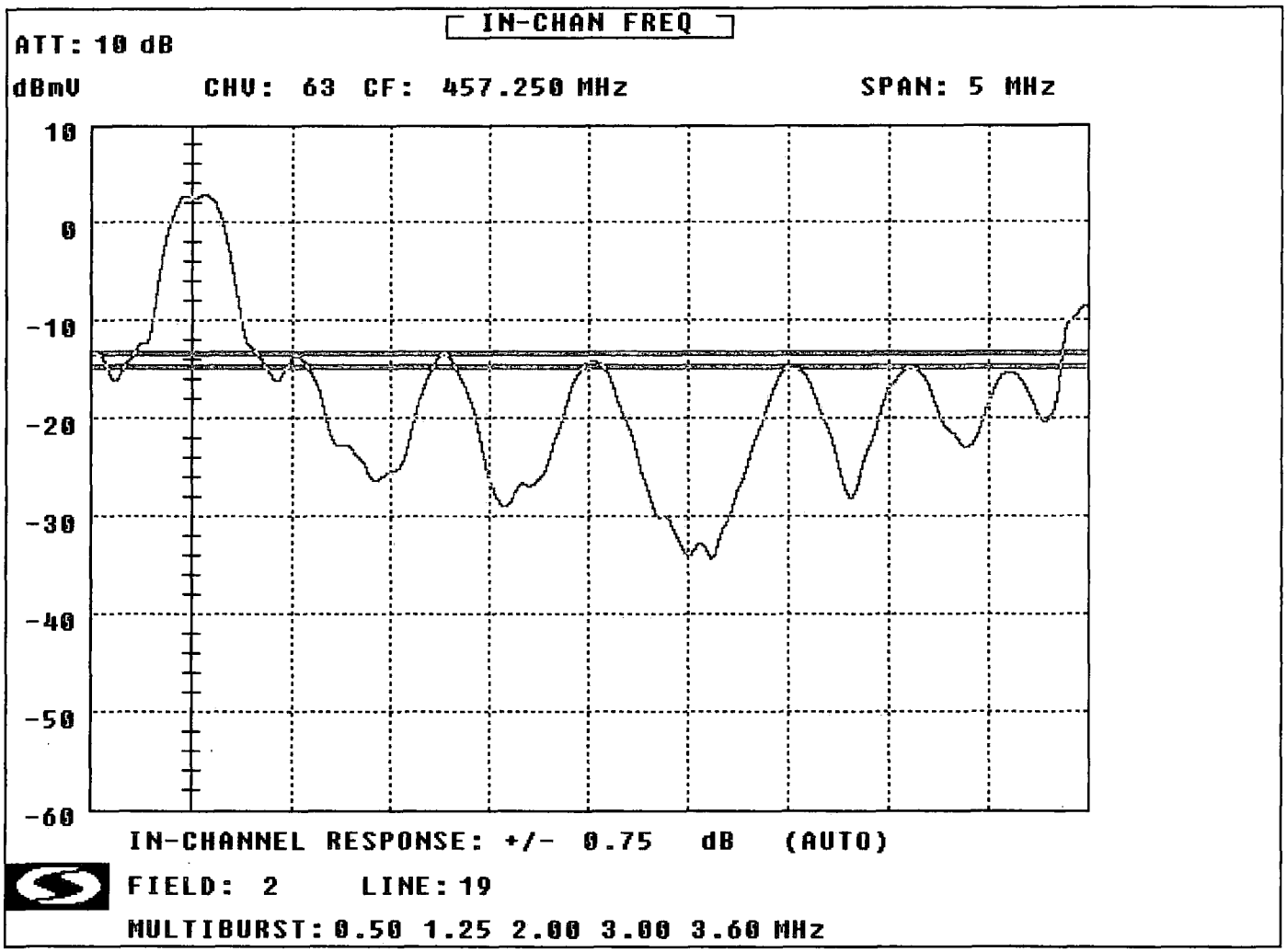


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: 2007
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-18 Time: 10:57:50 AM Temp: 82 F

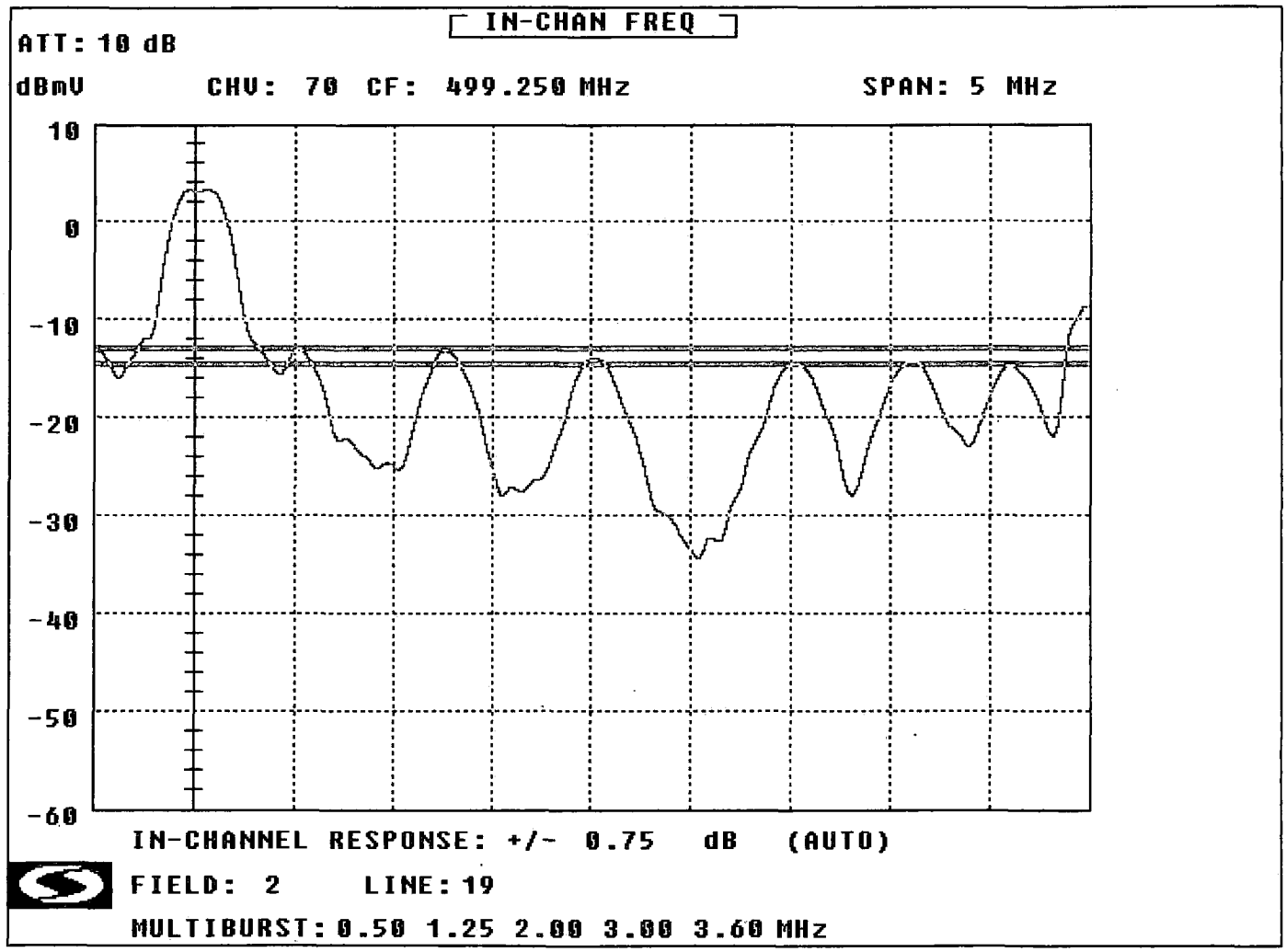


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: 2008
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-18 Time: 10:58:26 AM Temp: 84 F



TESTPOINT 2, PAGE 5

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL VARIATION TEST

System Name	: Rome	***Test Location***	: Roser Terrace
Date	: 07/18/2013	***Performed By***	: Frank Servedio
Meter Serial Number	: 232191		

		TEMP F							*TEMP F*				
		91.00	86.00	73.00	74.00				91.00	86.00	73.00	74.00	
		TIME							*TIME*				
		12:03:00	18:03:00	00:03:00	06:03:00				12:03:00	18:03:00	00:03:00	06:03:00	
CHAN	*FREQ (MHZ)*	*VISUAL LEVEL (DBMV)*				*MAX VAR*	*CHAN*	*FREQ (MHZ)*	*VISUAL LEVEL (DBMV)*				*MAX VAR*
2	55.2500	16.83	17.24	18.54	16.64	1.9	DD(40)	319.2625	19.48	19.68	18.82	18.81	0.87
3	61.2500	15.95	16.56	17.71	15.77	1.94	EE(41)	325.2625					
4	67.2500	16.40	16.89	17.97	15.98	1.99	FF(42)	331.2750	19.53	19.64	18.91	19.01	0.73
5	77.2500	17.07	17.39	18.41	16.41	2	GG(43)	337.2625	19.43	19.63	18.94	19.08	0.69
6	83.2500	16.86	17.08	18.21	16.15	2.06	HH(44)	343.2625	19.39	19.66	18.98	19.09	0.68
A-5(95)	91.2500						II(45)	349.2625	19.66	19.89	18.24	19.21	1.65
A-4(96)	97.2500	17.33	17.65	18.67	16.69	1.98	JJ(46)	355.2625	19.47	19.75	18.11	19.23	1.64
A-3(97)	103.2500	17.41	17.64	18.71	16.73	1.98	KK(47)	361.2625	19.42	19.73	18.13	19.24	1.6
A-2(98)	109.2750						LL(48)	367.2625	19.54	19.74	18.25	19.34	1.49
A-1(99)	115.2750	16.95	16.97	18.46	16.18	2.28	MM(49)	373.2625	19.53	19.85	18.26	19.26	1.59
A(14)	121.2625	16.98	17.22	18.36	16.36	2	NN(50)	379.2625	19.66	19.89	18.24	19.30	1.65
B(15)	127.2625	17.21	17.55	18.63	16.57	2.06	OO(51)	385.2625	19.23	19.46	18.75	18.98	0.71
C(16)	133.2625	17.26	17.56	18.67	16.69	1.98	PP(52)	391.2625	19.54	19.76	18.09	19.25	1.67
D(17)	139.2500						QQ(53)	397.2625	19.76	18.05	19.32	19.34	1.71
E(18)	145.2500	17.96	18.25	19.35	17.40	1.95	RR(54)	403.2500	19.68	19.98	19.32	19.37	0.66
F(19)	151.3210	17.82	18.11	19.30	17.34	1.96	SS(55)	409.2500					
G(20)	157.2500						TT(56)	415.2500	19.50	19.78	19.12	19.30	0.66
H(21)	163.2500	18.99	19.28	18.57	18.59	0.71	UU(57)	421.2500	19.32	19.63	19.96	19.03	0.93
I(22)	169.2500	19.15	19.32	18.51	18.59	0.81	VV(58)	427.2500	19.59	19.80	19.15	19.21	0.65
7	175.2500	18.79	19.14	18.33	18.41	0.81	WW(59)	433.2500	19.98	17.24	19.61	19.71	2.74
8	181.2500	17.01	17.43	18.57	16.59	1.98	XX(60)	439.2500	19.55	19.68	19.01	19.29	0.67
9	187.2500	18.57	18.87	17.18	18.17	1.69	YY(61)	445.2500	19.79	19.93	19.29	19.56	0.64
10	193.2500	18.55	18.81	18.12	18.18	0.69	ZZ(62)	451.2500	19.93	17.07	19.48	19.70	2.86
11	199.2500	17.21	17.57	18.82	16.87	1.95	63	457.2500	19.82	17.00	19.41	19.56	2.82
12	205.2500	18.74	19.00	17.18	18.28	1.82	64	463.2500					
13	211.2500	18.41	18.69	19.88	17.93	1.95	65	469.2500	18.02	17.15	19.55	19.84	2.69
J(23)	217.2500	18.38	18.70	18.00	18.05	0.7	66	475.2500	18.45	18.58	19.93	18.08	1.85
K(24)	223.2500	18.43	18.67	19.96	18.14	1.82	67	481.2500					
L(25)	229.2625	18.31	18.63	19.91	18.05	1.86	68	487.2500	18.82	18.97	19.24	18.46	0.78
M(26)	235.2625	18.81	19.08	18.37	18.43	0.71	69	493.2500	17.54	18.74	19.05	18.36	1.51
N(27)	241.2625	19.00	19.25	18.63	18.68	0.62	70	499.2500	17.59	18.74	19.09	18.37	1.5
O(28)	247.2625	19.16	19.41	18.61	18.75	0.8	71	505.2500					
P(29)	253.2625	19.25	19.53	18.83	18.92	0.7	72	511.2500					
Q(30)	259.2625	17.87	18.08	19.41	17.47	1.94	73	517.2500					
R(31)	265.2625	19.22	19.47	18.73	18.65	0.82	74	523.2500					
S(32)	271.2625	18.50	18.96	18.53	18.80	0.46	75	529.2500					
T(33)	277.2625	19.53	19.71	18.96	19.16	0.75	76	535.2500					
U(34)	283.2625	19.55	19.65	18.85	18.98	0.8	77	541.2500					
V(35)	289.2625	19.29	19.48	18.64	18.68	0.84	78	547.2500					
W(36)	295.2625	19.34	19.43	18.68	18.69	0.75	79	553.2500					
AA(37)	301.2625						80	559.2500					
BB(38)	307.2625	19.32	19.48	18.67	18.81	0.81	81	565.2500					
CC(39)	313.2625	19.39	19.48	18.74	18.78	0.74							

Max Non Adjacent Channel Level Diff :- 4.07
Max Adjacent Channel Level Diff :- 2.86
Max Variance from last proof of performance test :- 5.87
Date of last proof of performance test :- 01/27/2013

Note :- Make measurements through a 100 ft. test drop cable without a converter

TIME WARNER CABLE - SYRACUSE DIVISION

System Name	:	Rome
System Test Point #	:	3
Hub Name	:	Dixon Rd
Location	:	Liberty St
Map Number	:	437-5742
Pole Number	:	28/28
D.T. Value	:	20/2
OR Number	:	DX018
GNA Cascade	:	3
LE Cscade	:	2

TESTPOINT 3, PAGE 2

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL
VISUAL / AURAL LEVEL DIFFERENCE
(at Test Point, at the end of a 100' Drop)

System Name	: Rome	***Test Location***	: Liberty St
Date	: 07/19/2013	***Time***	: 10:00:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	11.66	-2.72		14.38	DD (40)	319.2625	13.34	-1.81		15.15
3	61.2500	12.02	-2.24		14.26	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	12.12	-2.50		14.62	FF (42)	331.2750	13.29	-1.88		15.17
5	77.2500	12.46	-2.49		14.95	GG (43)	337.2625	13.09	-1.70		14.79
6	83.2500	12.18	-2.70		14.88	HH (44)	343.2625	13.27	-1.70		14.97
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	13.38	-1.76		15.14
A-4 (96)	97.2500	12.31	-2.84		15.15	JJ (46)	355.2625	12.83	-2.22		15.05
A-3 (97)	103.2500	12.05	-2.89		14.94	KK (47)	361.2625	12.90	-2.17		15.07
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	12.74	-2.26		15
A-1 (99)	115.2750	11.34	-3.29		14.63	MM (49)	373.2625	12.88	-2.42		15.3
A (14)	121.2625	10.76	-3.40		14.16	NN (50)	379.2625	12.36	-2.41		14.77
B (15)	127.2625	10.70	-4.03		14.73	OO (51)	385.2625	12.40	-2.49		14.89
C (16)	133.2625	10.96	-3.75		14.71	PP (52)	391.2625	12.61	-2.13		14.74
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	12.43	-2.30		14.73
E (18)	145.2500	11.09	-3.19		14.28	RR (54)	403.2500	12.39	-2.52		14.91
F (19)	151.3210	11.66	-3.15		14.81	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	12.05	-2.86		14.91
H (21)	163.2500	12.13	-2.71		14.84	UU (57)	421.2500	12.13	-2.57		14.7
I (22)	169.2500	12.09	-3.13		15.22	VV (58)	427.2500	12.18	-2.87		15.05
7	175.2500	12.35	-3.35		15.7	WW (59)	433.2500	12.37	-2.50		14.87
8	181.2500	11.16	-3.67		14.83	XX (60)	439.2500	12.45	-2.21		14.66
9	187.2500	12.35	-2.57		14.92	YY (61)	445.2500	12.75	-2.31		15.06
10	193.2500	11.85	-2.77		14.62	ZZ (62)	451.2500	12.38	-2.45		14.83
11	199.2500	11.68	-3.39		15.07	63	457.2500	12.39	-2.30		14.69
12	205.2500	11.38	-3.22		14.6	64	463.2500	N/A	N/A		N/A
13	211.2500	11.38	-3.75		15.13	65	469.2500	12.55	-2.47		15.02
J (23)	217.2500	11.29	-3.59		14.88	66	475.2500	12.53	-2.29		14.82
K (24)	223.2500	11.23	-3.76		14.99	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	11.07	-3.54		14.61	68	487.2500	12.82	-2.14		14.96
M (26)	235.2625	12.11	-2.63		14.74	69	493.2500	12.46	-2.11		14.57
N (27)	241.2625	12.10	-2.48		14.58	70	499.2500	12.77	-2.43		15.2
O (28)	247.2625	12.64	-1.96		14.6	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	12.53	-2.22		14.75	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	12.29	-2.73		15.02	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	12.85	-1.61		14.46	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	13.30	-1.45		14.75	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	13.16	-1.06		14.22	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	13.41	-1.27		14.68	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	12.81	-1.71		14.52	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	13.11	-1.89		15	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	12.99	-1.60		14.59	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	12.96	-1.97		14.93						

Min Channel	:	B(15)	10.700
Max Channel	:	U(34)	13.410
Peak to Valley	:	2.71	

TESTPOINT 3, PAGE 3

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL RESPONSE TEST
CARRIER - TO - NOISE TEST
COHERENT DISTURBANCES TEST
LOW FREQUENCY DISTURBANCES TEST

System Name : Rome ***Date*** : 07/18/2013

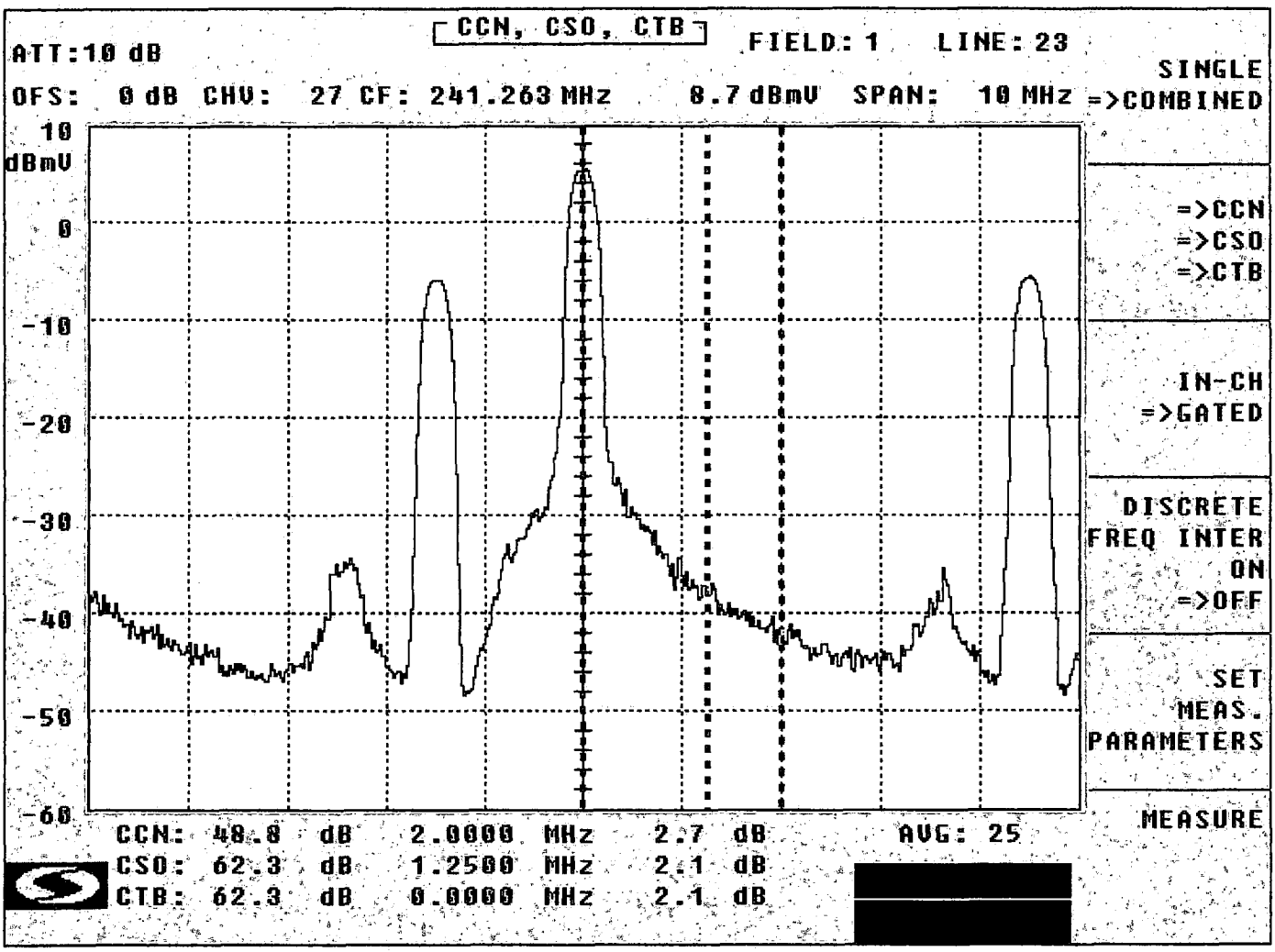
Performed By : Peter Grocholski

Location : Liberty St

Note: Make Measurements through a 100 ft. test drop cable without converter.

CHANNEL NUMBER	IN CHANNEL RESPONSE	CARRIER TO NOISE RATIO	DISTORTIONS	CSO	HUM
	(+/- DB)	(DB)	(-DBC) CTB		(%)
4	.7	46.3	60.8	60.9	
13	07	47.3	60.8	62.1	
21	1.0	48	62.5	61.6	.2
27	.7	48.8	62.3	62.3	
35	.45	47.1	61.5	61.7	
44	.6	48.8	61.4	62.2	
52	.75	47.1	61.7	61.4	
63	.8	47.5	61.7	63.1	
70	.7	48.7	62	62.2	

SUNRISE TELECOM BROADBAND 07.18.13 14:01:15



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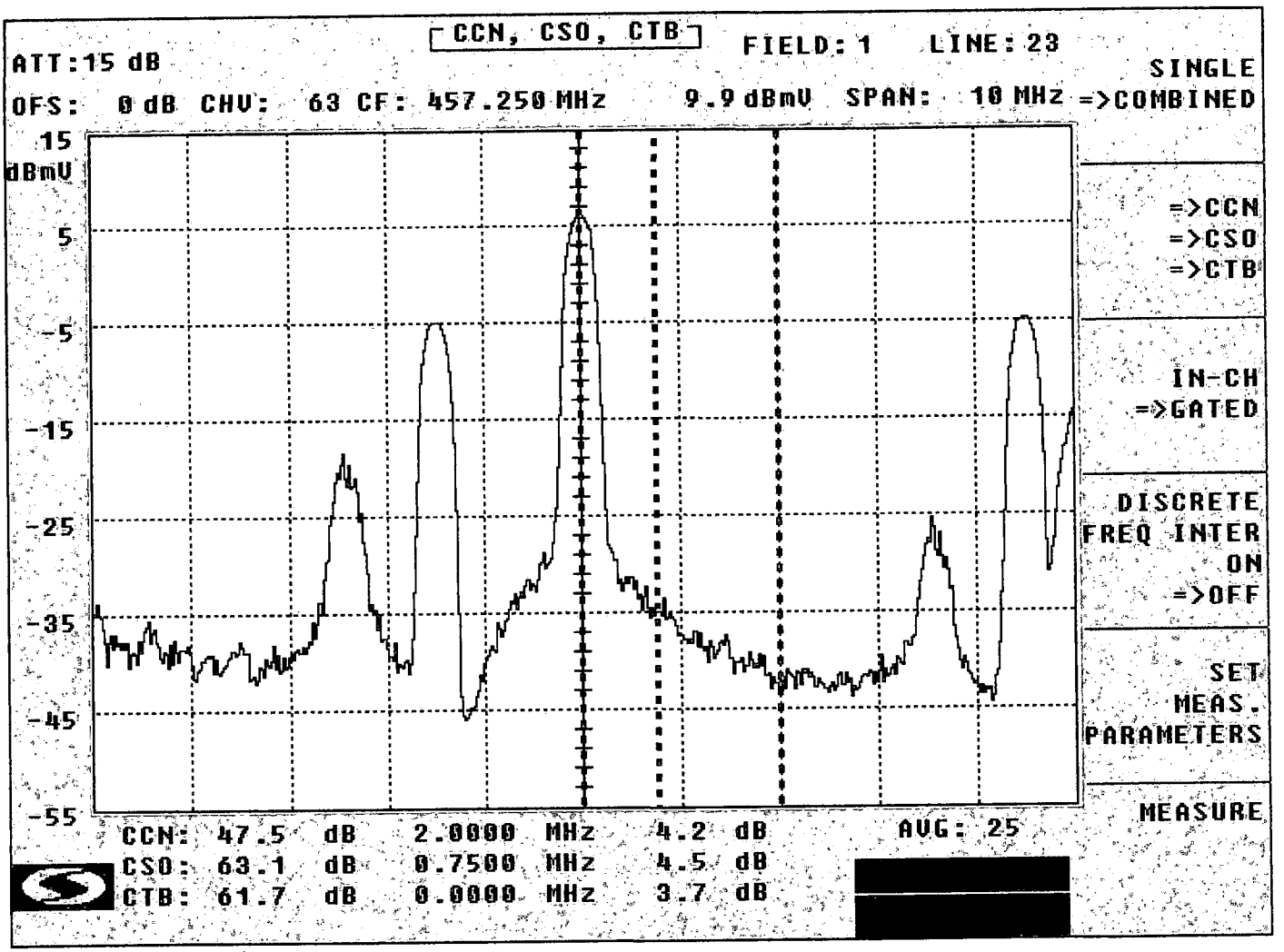

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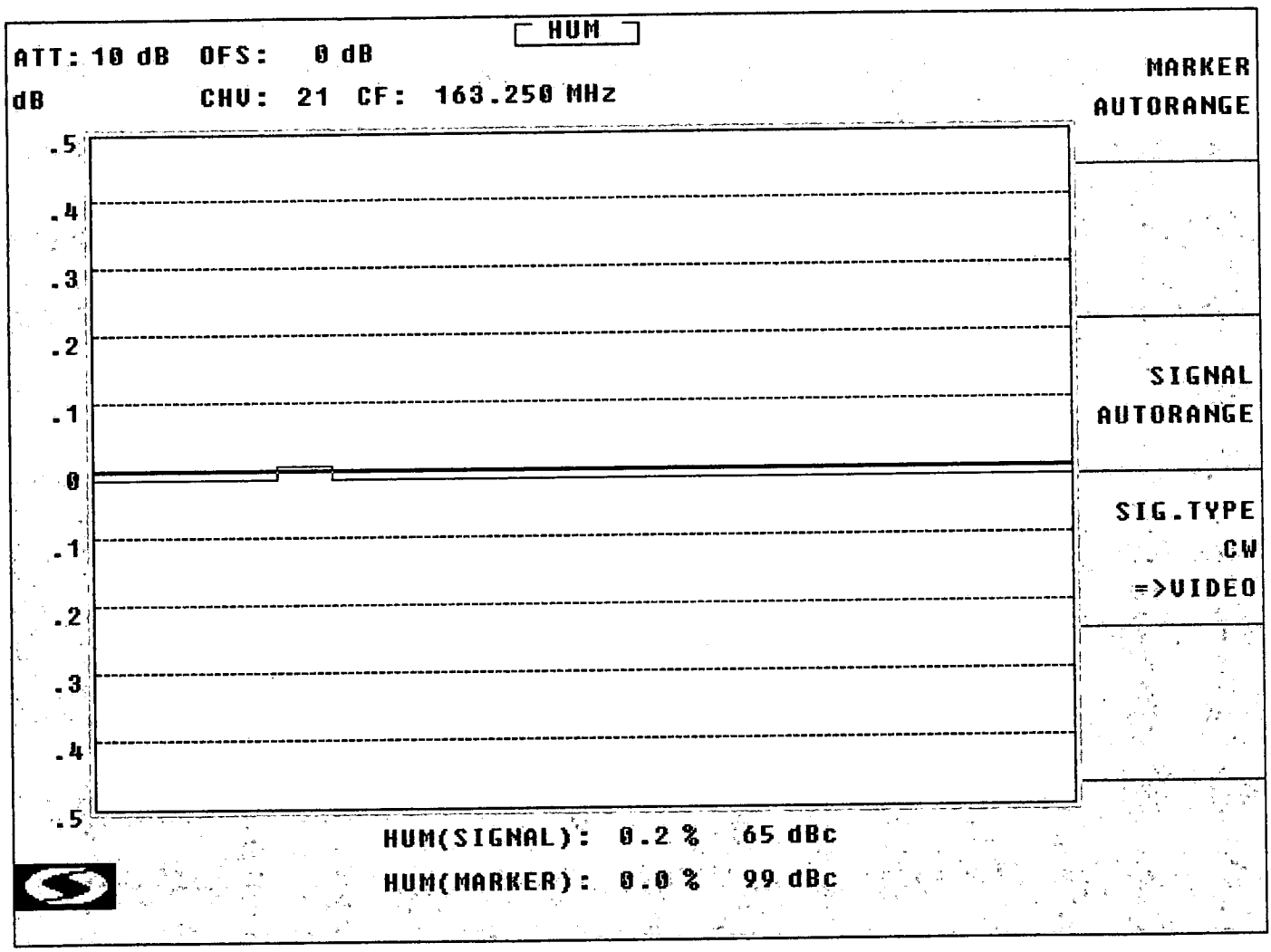

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL FREQUENCY RESPONSE TEST (76.605) (a) (6)

System Name : Rome ***Date*** : 07/18/2013

Performed By : Peter Grocholski

Location : Liberty St

(SEE THE ATTACHED SWEEP TRACES)

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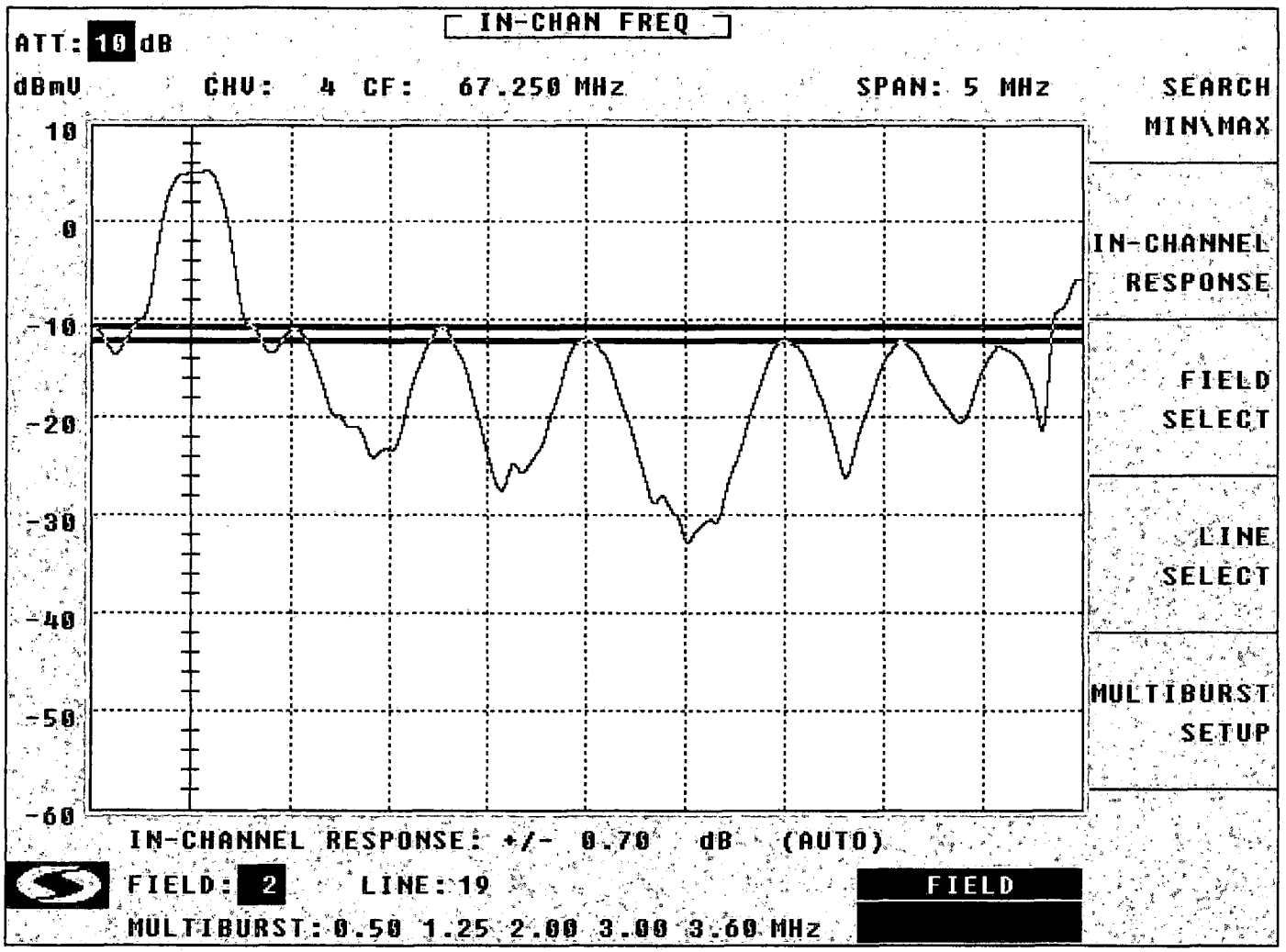

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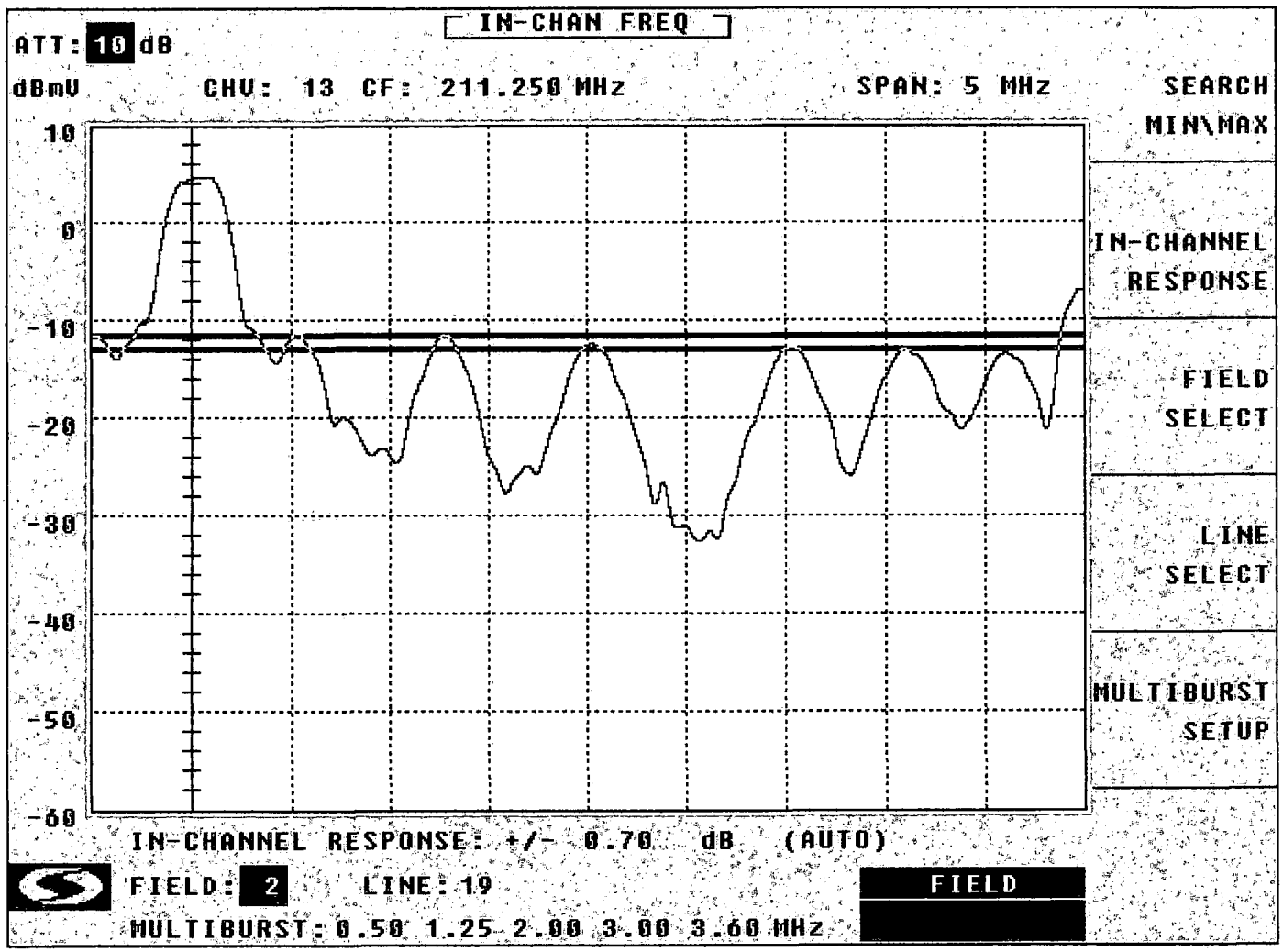

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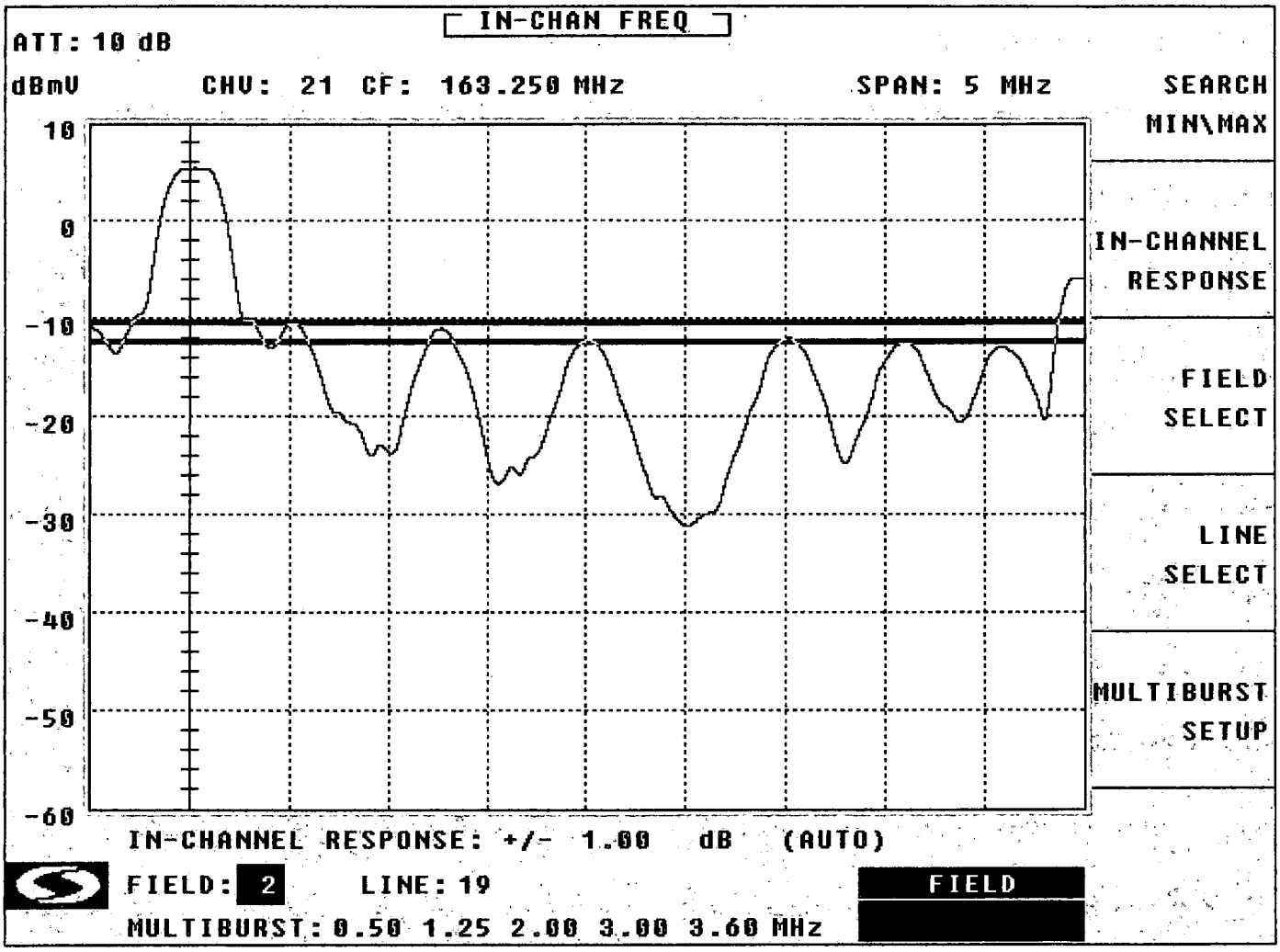

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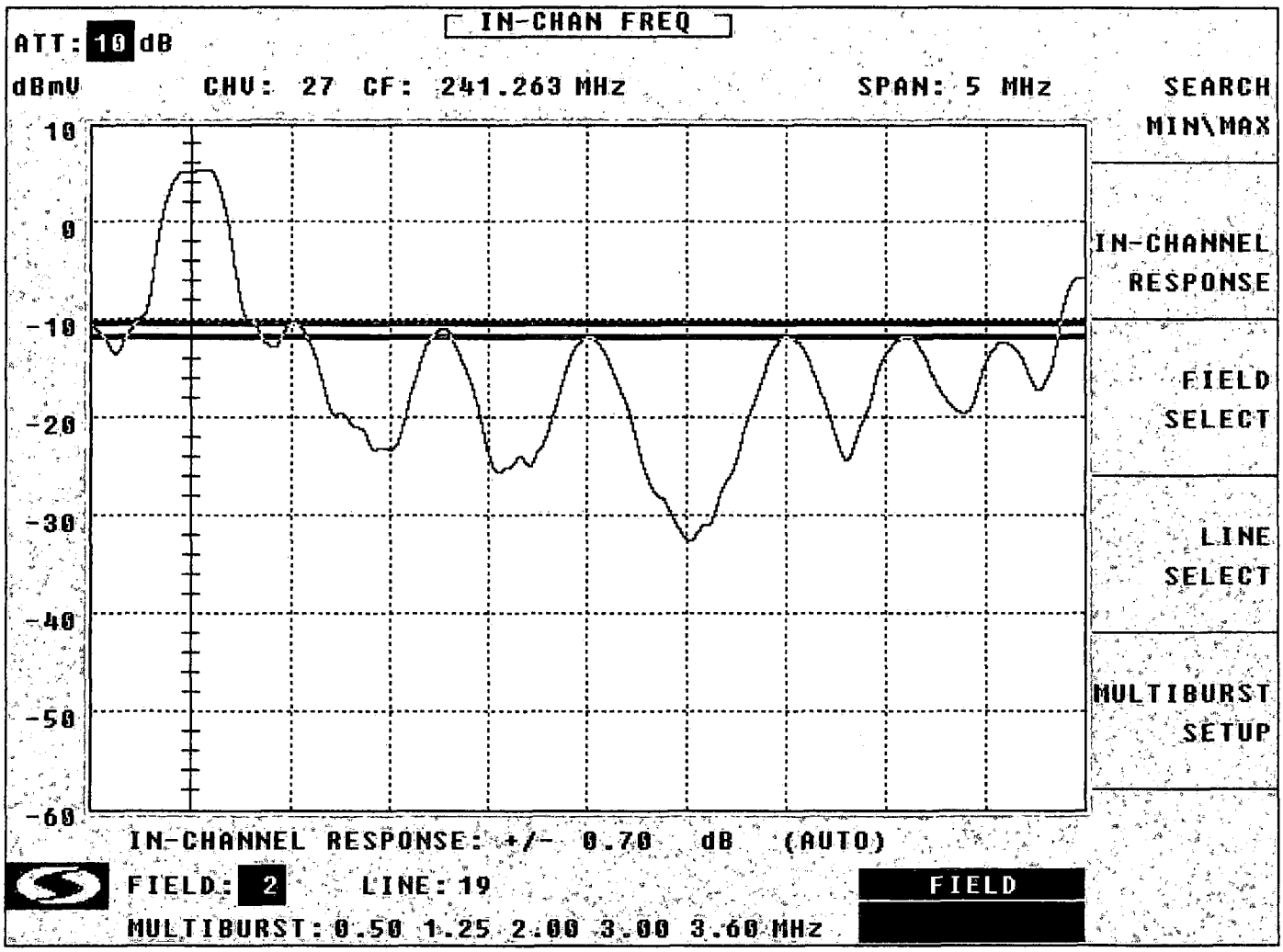

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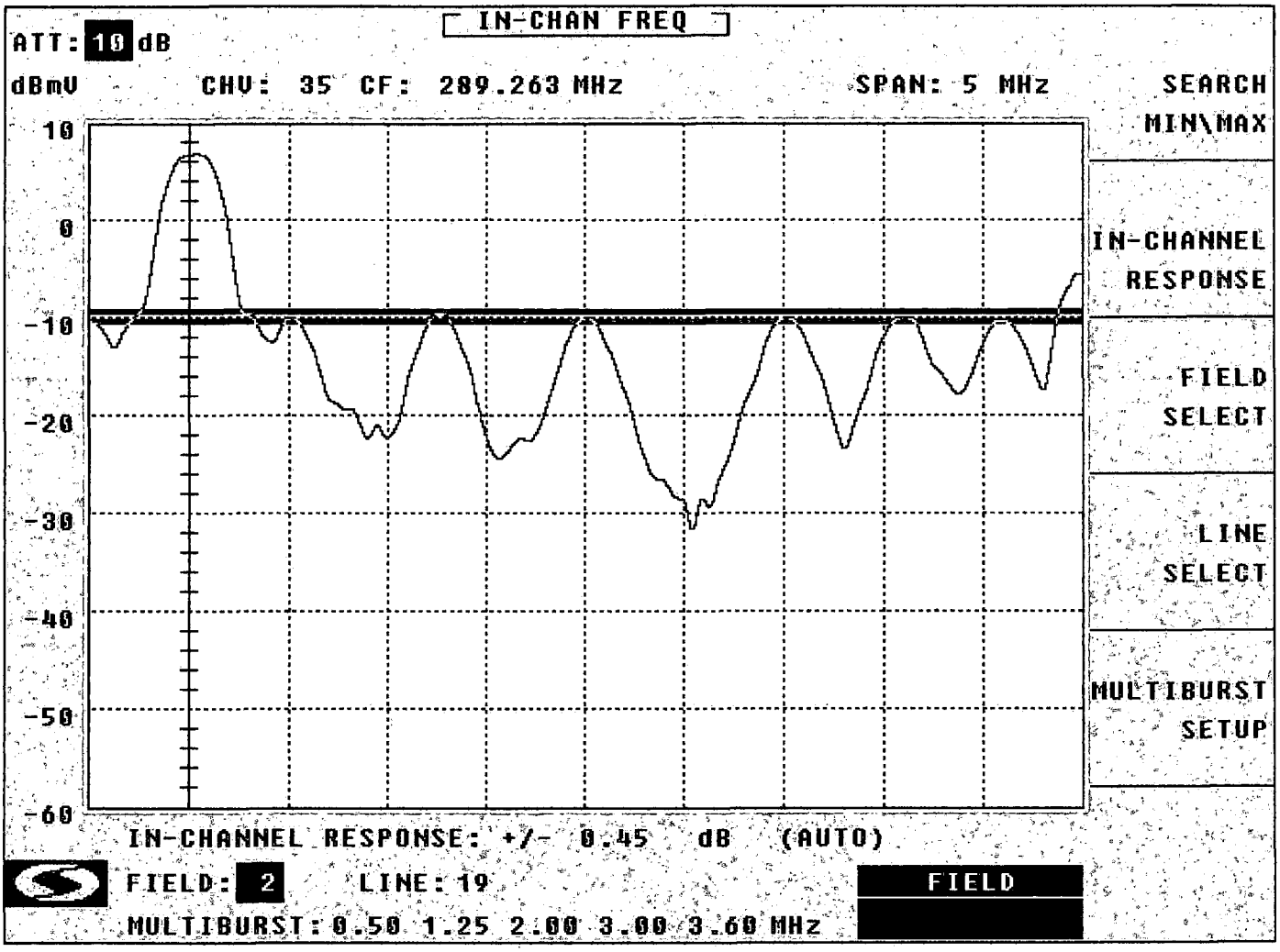

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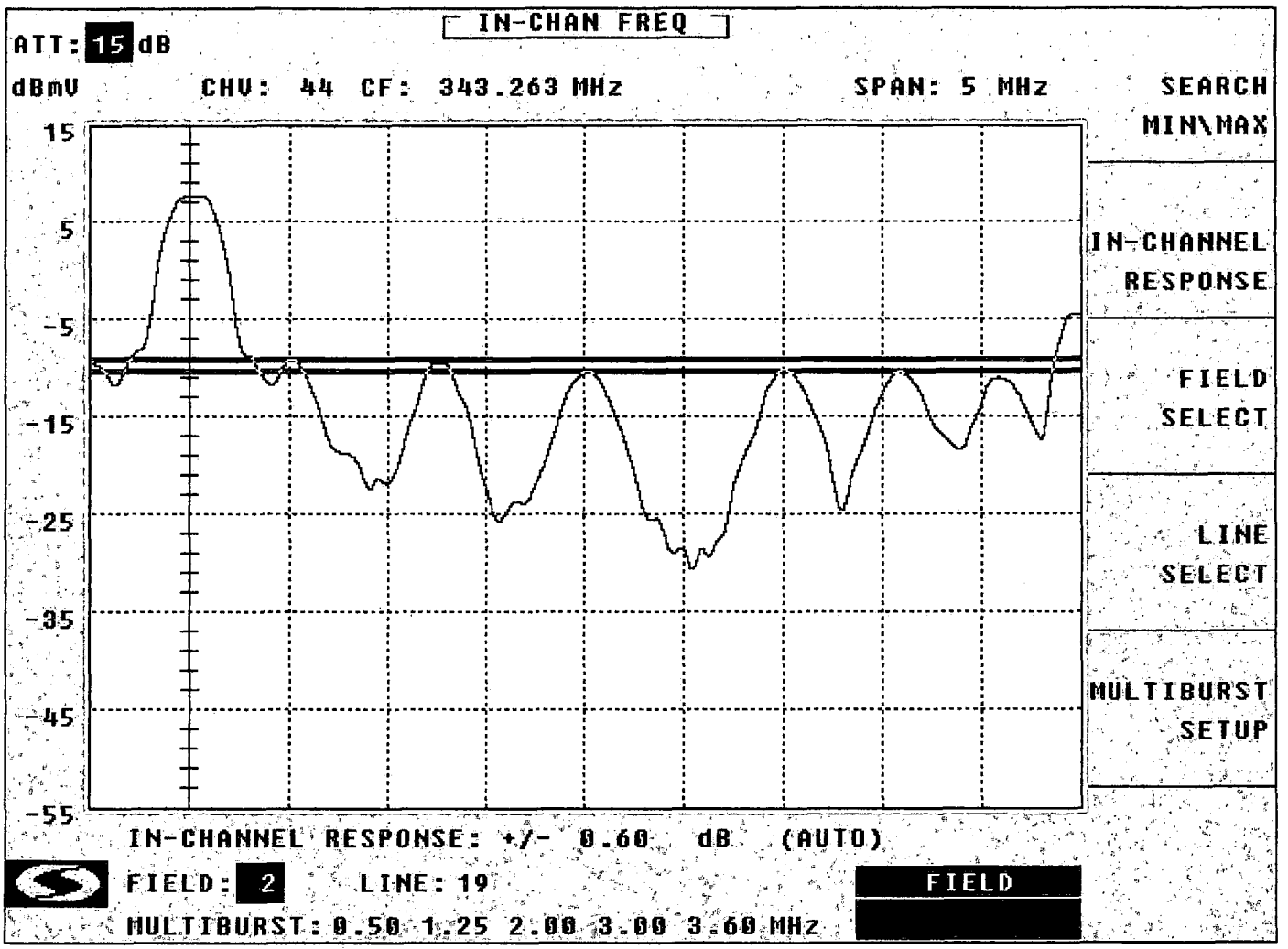

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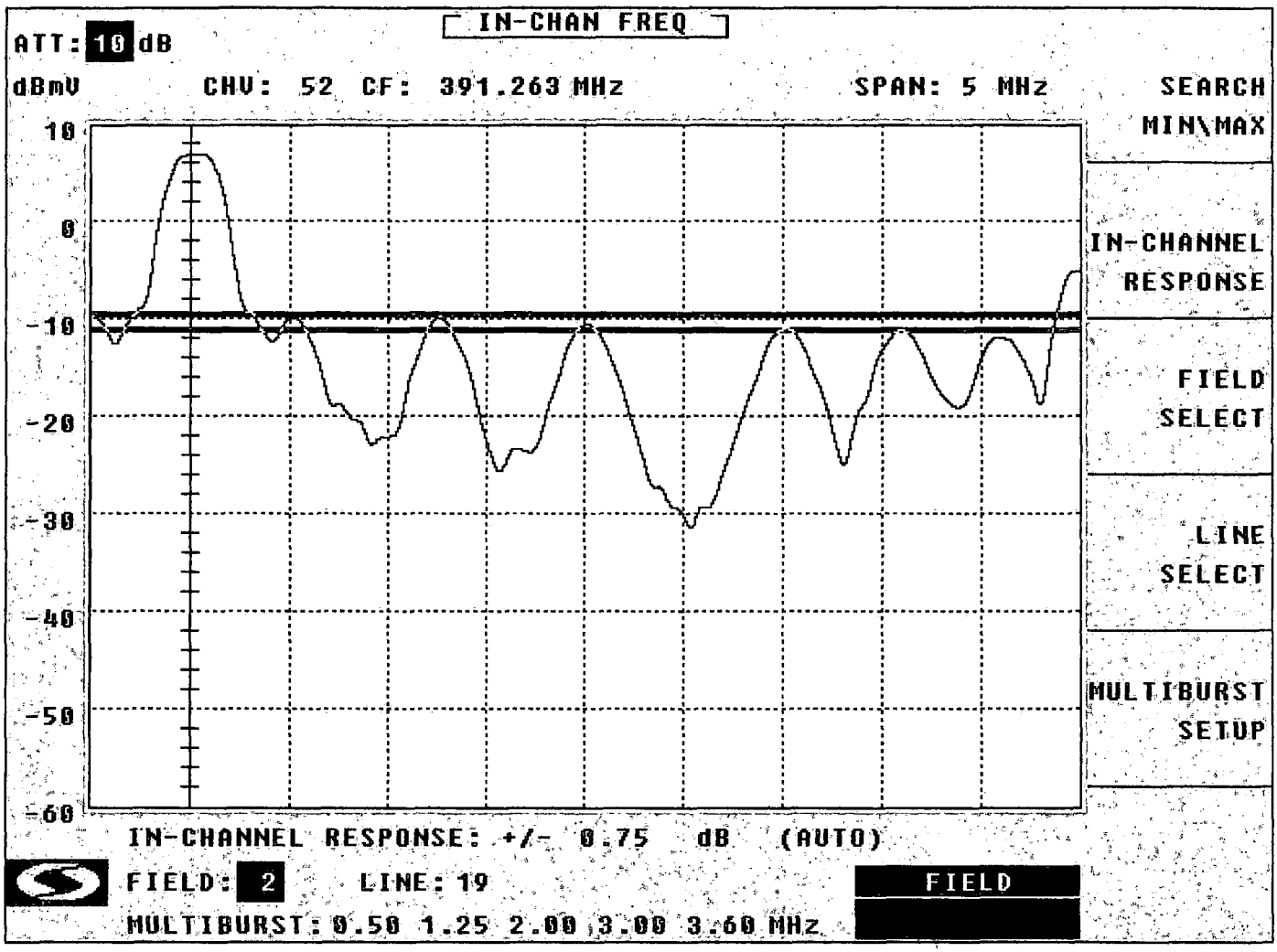

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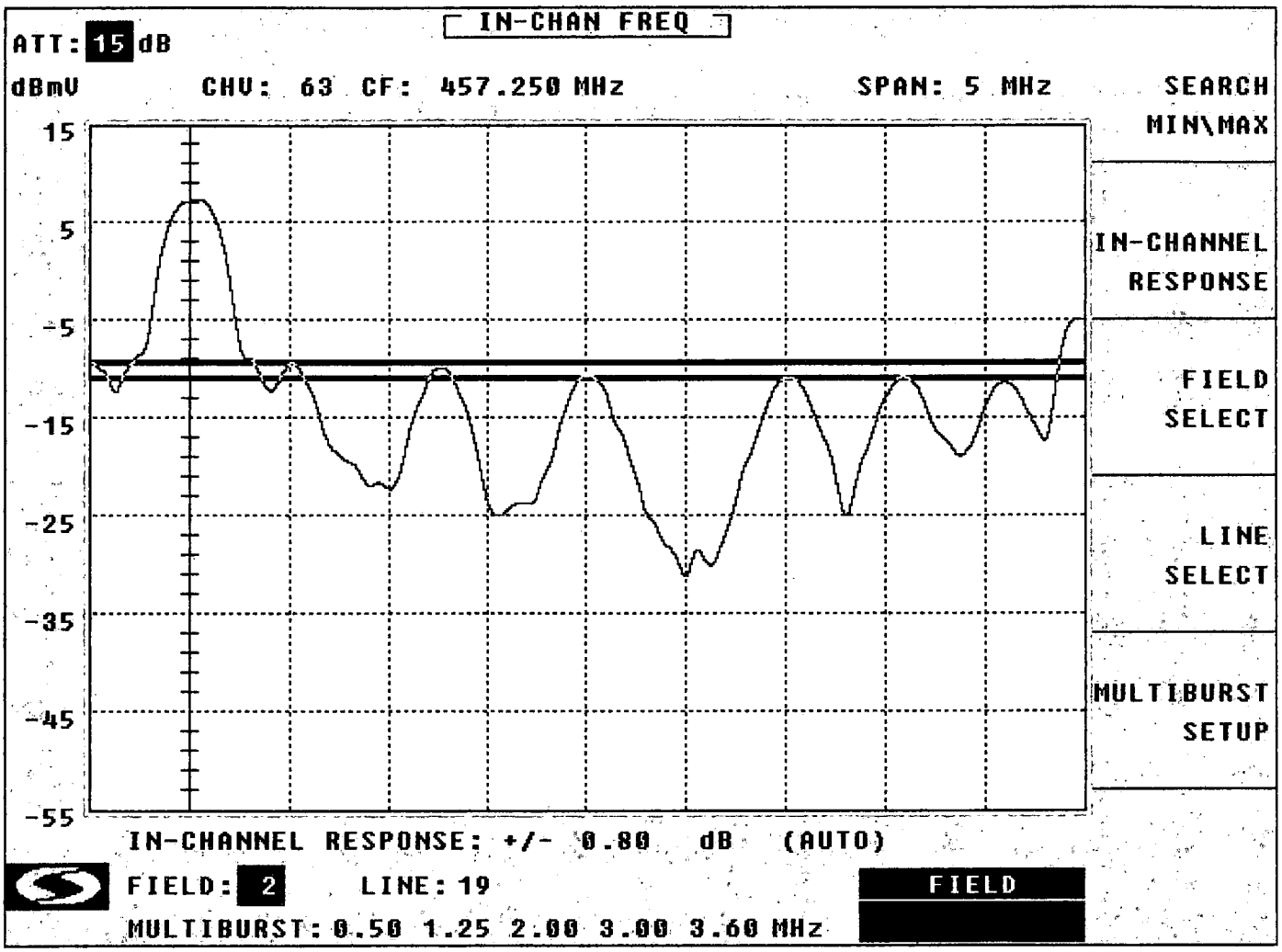

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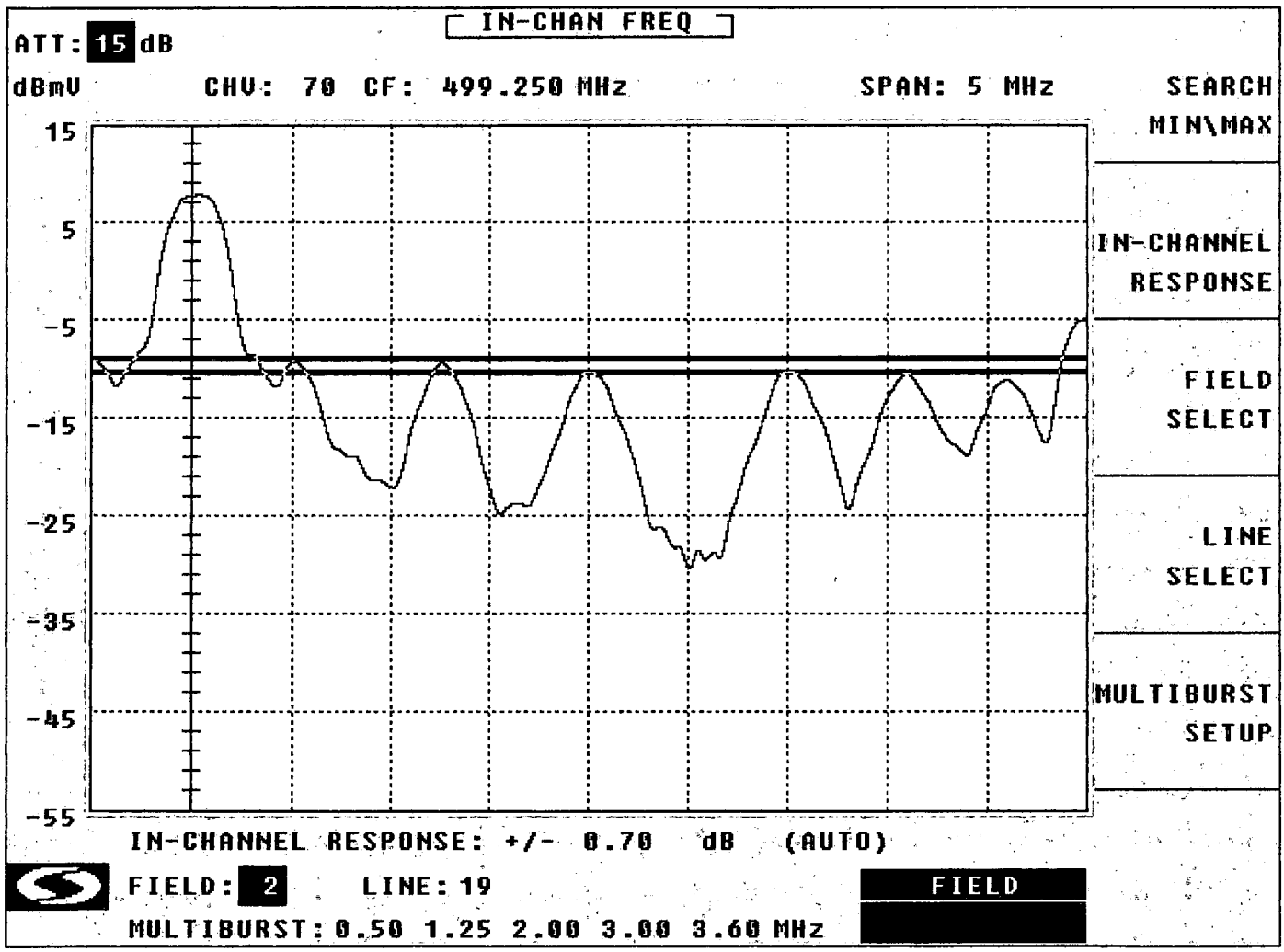


TESTPOINT 3, PAGE 5

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL VARIATION TEST

System Name	: Rome	***Test Location***	: Liberty St
Date	: 07/19/2013	***Performed By***	: Peter Grocholski
Meter Serial Number	: 232634		

		TEMP F										
		85.00	94.00	71.00	68.00			85.00	94.00	71.00	68.00	
		TIME						*TIME*				
		10:00:00	16:00:00	22:00:00	04:00:00			10:00:00	16:00:00	22:00:00	04:00:00	
CHAN	*FREQ (MHZ)*	*VISUAL LEVEL (DBMV)*				*MAX VAR*	*CHAN*	*FREQ (MHZ)*	*VISUAL LEVEL (DBMV)*			*MAX VAR*
2	55.2500	11.66	10.88	12.17	12.46	1.58	DD(40)	319.2625	13.34	12.67	13.85	14.18	1.51
3	61.2500	12.02	11.21	12.51	12.80	1.59	EE(41)	325.2625					
4	67.2500	12.12	11.33	12.68	13.05	1.72	FF(42)	331.2750	13.29	12.52	13.85	14.24	1.72
5	77.2500	12.46	11.66	12.97	13.39	1.73	GG(43)	337.2625	13.09	12.38	13.68	14.07	1.69
6	83.2500	12.18	11.41	12.72	13.06	1.65	HH(44)	343.2625	13.27	12.56	13.89	14.41	1.85
A-5(95)	91.2500						II(45)	349.2625	13.38	12.77	14.07	14.50	1.73
A-4(96)	97.2500	12.31	11.48	12.85	13.15	1.67	JJ(46)	355.2625	12.83	12.16	13.51	13.88	1.72
A-3(97)	103.2500	12.05	11.31	12.69	12.99	1.68	KK(47)	361.2625	12.90	12.21	13.61	14.05	1.84
A-2(98)	109.2750						LL(48)	367.2625	12.74	11.98	13.45	13.96	1.98
A-1(99)	115.2750	11.34	10.50	12.28	12.16	1.78	MM(49)	373.2625	12.88	12.10	13.68	14.15	2.05
A(14)	121.2625	10.76	10.04	11.52	11.82	1.78	NN(50)	379.2625	12.36	11.68	13.20	13.66	1.98
B(15)	127.2625	10.70	9.93	11.31	11.55	1.62	OO(51)	385.2625	12.40	11.63	13.16	13.63	2
C(16)	133.2625	10.96	10.20	11.61	11.93	1.73	PP(52)	391.2625	12.61	11.73	13.33	13.77	2.04
D(17)	139.2500						QQ(53)	397.2625	12.43	11.30	13.21	13.55	2.25
E(18)	145.2500	11.09	10.29	11.55	11.88	1.59	RR(54)	403.2500	12.39	11.43	13.13	13.49	2.06
F(19)	151.3210	11.66	10.96	12.29	12.43	1.47	SS(55)	409.2500					
G(20)	157.2500						TT(56)	415.2500	12.05	11.26	12.66	13.05	1.79
H(21)	163.2500	12.13	11.36	12.80	13.06	1.7	UU(57)	421.2500	12.13	11.35	12.77	13.18	1.83
I(22)	169.2500	12.09	11.38	12.71	12.94	1.56	VV(58)	427.2500	12.18	11.45	12.86	13.25	1.8
7	175.2500	12.35	11.62	12.90	13.12	1.5	WW(59)	433.2500	12.37	11.61	13.14	13.54	1.93
8	181.2500	11.16	10.42	11.79	11.94	1.52	XX(60)	439.2500	12.45	11.69	13.21	13.61	1.92
9	187.2500	12.35	11.54	12.91	13.21	1.67	YY(61)	445.2500	12.75	12.00	13.52	13.82	1.82
10	193.2500	11.85	11.07	12.47	12.73	1.66	ZZ(62)	451.2500	12.38	11.58	13.18	13.57	1.99
11	199.2500	11.68	10.94	12.30	12.63	1.69	63	457.2500	12.39	11.69	13.17	13.54	1.85
12	205.2500	11.38	10.66	11.98	12.31	1.65	64	463.2500					
13	211.2500	11.38	10.57	11.90	12.23	1.66	65	469.2500	12.55	11.90	13.37	13.70	1.8
J(23)	217.2500	11.29	10.46	11.79	12.12	1.66	66	475.2500	12.53	11.89	13.36	13.71	1.82
K(24)	223.2500	11.23	10.36	11.69	11.91	1.55	67	481.2500					
L(25)	229.2625	11.07	10.25	11.56	11.90	1.65	68	487.2500	12.82	12.31	13.74	14.13	1.82
M(26)	235.2625	12.11	11.28	12.53	12.84	1.56	69	493.2500	12.46	11.89	13.57	13.95	2.06
N(27)	241.2625	12.10	11.35	12.61	12.92	1.57	70	499.2500	12.77	12.13	13.92	14.34	2.21
O(28)	247.2625	12.64	11.87	13.16	13.46	1.59	71	505.2500					
P(29)	253.2625	12.53	11.78	13.04	13.38	1.6	72	511.2500					
Q(30)	259.2625	12.29	11.54	12.81	13.13	1.59	73	517.2500					
R(31)	265.2625	12.85	12.00	13.37	13.71	1.71	74	523.2500					
S(32)	271.2625	13.30	12.53	13.77	14.13	1.6	75	529.2500					
T(33)	277.2625	13.16	12.35	13.71	14.07	1.72	76	535.2500					
U(34)	283.2625	13.41	12.70	13.87	14.29	1.59	77	541.2500					
V(35)	289.2625	12.81	12.06	13.37	13.70	1.64	78	547.2500					
W(36)	295.2625	13.11	12.38	13.56	13.89	1.51	79	553.2500					
AA(37)	301.2625						80	559.2500					
BB(38)	307.2625	12.99	12.30	13.54	13.87	1.57	81	565.2500					
CC(39)	313.2625	12.96	12.18	13.50	13.90	1.72							

Max Non Adjacent Channel Level Diff	:- 2.95
Max Adjacent Channel Level Diff	:- 1.27
Max Variance from last proof of performance test	:- 5.1
Date of last proof of performance test	:- 01/30/2013

Note :- Make measurements through a 100 ft. test drop cable without a converter

TIME WARNER CABLE - SYRACUSE DIVISION

System Name	:	Rome
System Test Point #	:	4
Hub Name	:	North Shore
Location	:	Knapp Rd
Map Number	:	377-5716
Pole Number	:	16/11
D.T. Value	:	17/2
OR Number	:	NS005
GNA Cascade	:	7
LE Cscade	:	0

TESTPOINT 4, PAGE 2

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL
VISUAL / AURAL LEVEL DIFFERENCE
(at Test Point, at the end of a 100' Drop)

System Name	: Rome	***Test Location***	: Knapp Rd
Date	: 07/19/2013	***Time***	: 10:45:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	14.32	0.08		14.24	DD (40)	319.2625	11.18	-3.85		15.03
3	61.2500	13.81	-0.58		14.39	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	14.96	0.13		14.83	FF (42)	331.2750	11.02	-3.85		14.87
5	77.2500	14.44	-0.89		15.33	GG (43)	337.2625	11.11	-3.56		14.67
6	83.2500	13.93	-1.48		15.41	HH (44)	343.2625	11.21	-3.86		15.07
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	10.97	-3.58		14.55
A-4 (96)	97.2500	12.86	-1.61		14.47	JJ (46)	355.2625	11.53	-3.23		14.76
A-3 (97)	103.2500	12.87	-2.47		15.34	KK (47)	361.2625	11.39	-3.84		15.23
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	11.10	-4.03		15.13
A-1 (99)	115.2750	11.97	-2.55		14.52	MM (49)	373.2625	10.72	-4.47		15.19
A (14)	121.2625	10.95	-3.86		14.81	NN (50)	379.2625	10.33	-5.01		15.34
B (15)	127.2625	10.71	-3.49		14.2	OO (51)	385.2625	11.27	-4.40		15.67
C (16)	133.2625	11.50	-3.38		14.88	PP (52)	391.2625	12.41	-3.21		15.62
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	12.15	-3.34		15.49
E (18)	145.2500	11.88	-2.96		14.84	RR (54)	403.2500	12.50	-3.42		15.92
F (19)	151.3210	11.85	-2.75		14.6	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	12.54	-3.34		15.88
H (21)	163.2500	13.08	-1.35		14.43	UU (57)	421.2500	12.46	-3.21		15.67
I (22)	169.2500	13.45	-1.41		14.86	VV (58)	427.2500	11.83	-3.74		15.57
7	175.2500	13.37	-1.55		14.92	WW (59)	433.2500	10.54	-4.18		14.72
8	181.2500	11.99	-3.38		15.37	XX (60)	439.2500	10.36	-4.38		14.74
9	187.2500	12.96	-1.64		14.6	YY (61)	445.2500	10.28	-4.12		14.4
10	193.2500	12.76	-2.02		14.78	ZZ (62)	451.2500	10.54	-4.07		14.61
11	199.2500	N/A	N/A		N/A	63	457.2500	10.77	-3.83		14.6
12	205.2500	11.81	-3.02		14.83	64	463.2500	N/A	N/A		N/A
13	211.2500	11.70	-3.19		14.89	65	469.2500	10.76	-3.70		14.46
J (23)	217.2500	11.61	-3.12		14.73	66	475.2500	10.96	-3.88		14.84
K (24)	223.2500	11.61	-2.93		14.54	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	11.70	-3.20		14.9	68	487.2500	11.21	-3.72		14.93
M (26)	235.2625	12.53	-2.25		14.78	69	493.2500	10.67	-3.96		14.63
N (27)	241.2625	12.80	-2.03		14.83	70	499.2500	10.75	-4.13		14.88
O (28)	247.2625	13.12	-1.67		14.79	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	13.09	-2.16		15.25	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	10.49	-2.98		13.47	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	13.27	-1.84		15.11	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	13.04	-1.71		14.75	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	12.92	-1.70		14.62	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	12.63	-2.29		14.92	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	11.94	-2.98		14.92	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	11.99	-2.75		14.74	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	11.45	-3.24		14.69	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	11.26	-3.48		14.74						

Min Channel	:	YY(61)	10.280
Max Channel	:	4	14.960
Peak to Valley	:	4.68	

TESTPOINT 4, PAGE 3

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL RESPONSE TEST
CARRIER - TO - NOISE TEST
COHERENT DISTURBANCES TEST
LOW FREQUENCY DISTURBANCES TEST

System Name : Rome ***Date*** : 07/18/2013

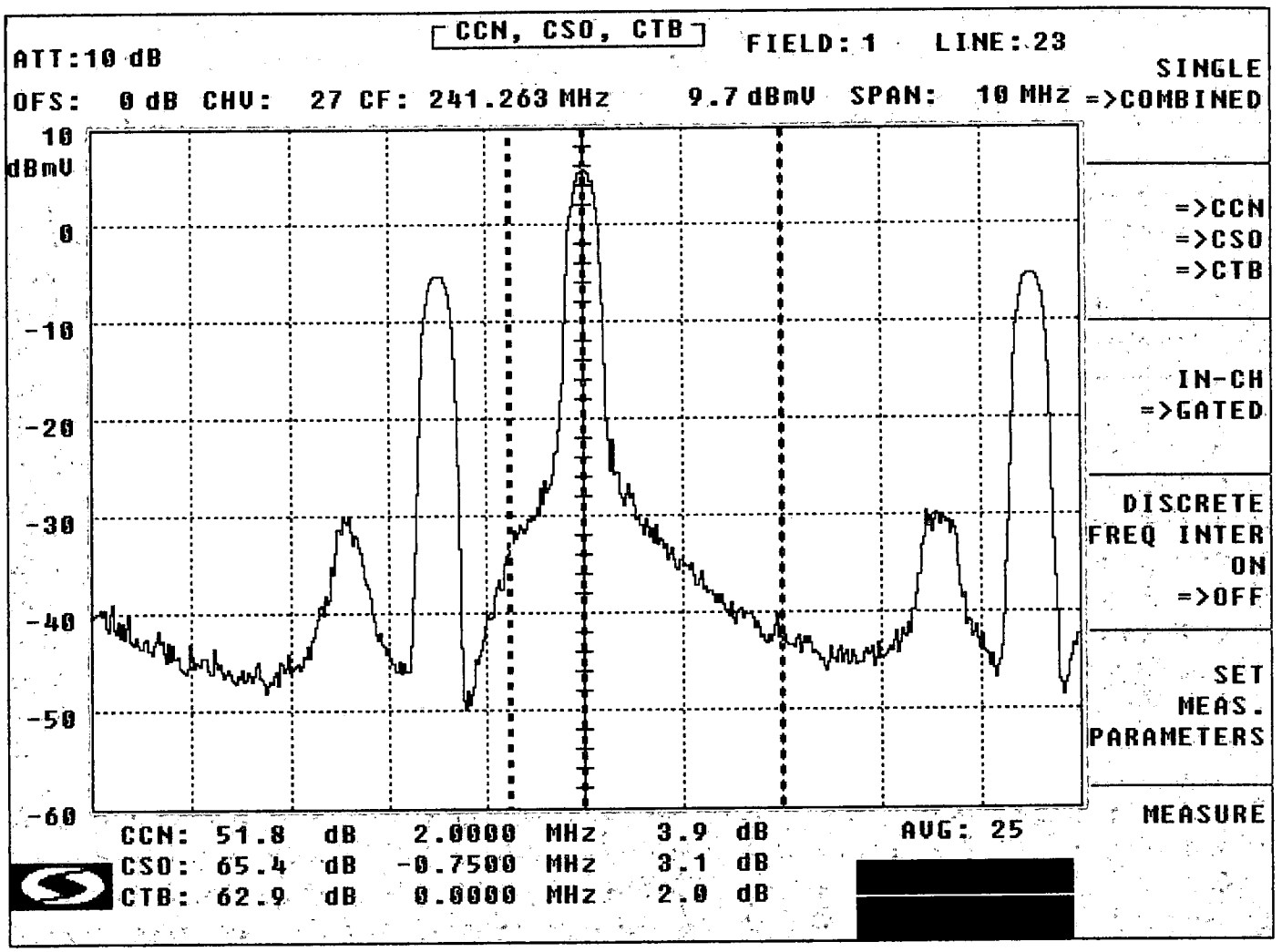
Performed By : Peter Grocholski

Location : Knapp Rd

Note: Make Measurements through a 100 ft. test drop cable without converter.

CHANNEL NUMBER	IN CHANNEL RESPONSE	CARRIER TO NOISE RATIO	DISTORTIONS	CSO	HUM
	(+/- DB)	(DB)	(-DBC) CTB		(%)
4	.8	51.4	63.8	63.9	
13	.9	51.7	62.9	62.8	
21	.75	51.3	63.7	63.7	
27	.6	51.8	62.9	65.4	.2
35	.3	50.5	63.3	63.5	
44	.75	50	62.8	61.7	
52	.8	50	64.2	62.9	
63	.8	51.5	62.7	62.7	
70	.75	50.7	64.4	63.4	

SUNRISE TELECOM BROADBAND 07.18.13 12:08:48



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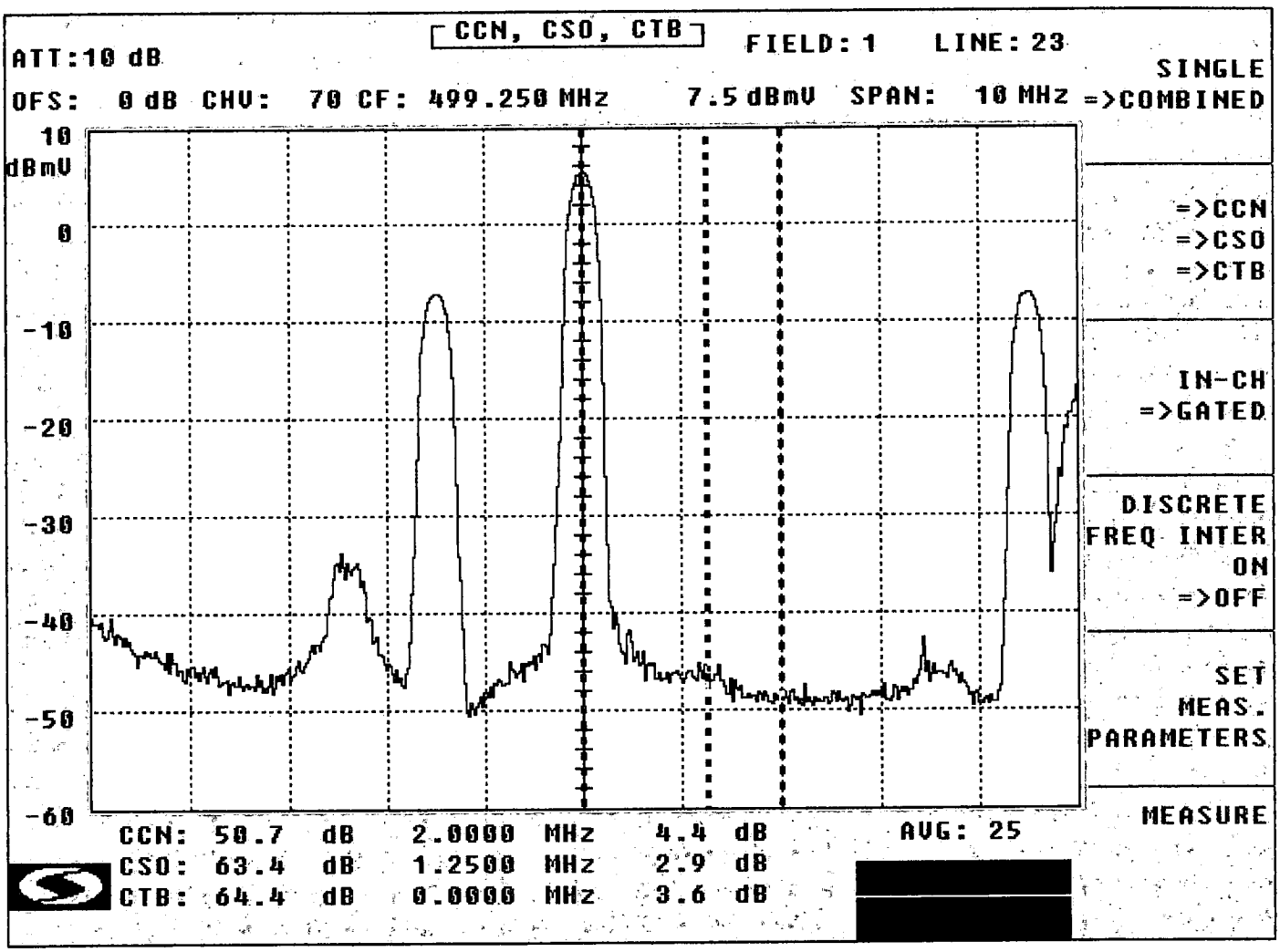

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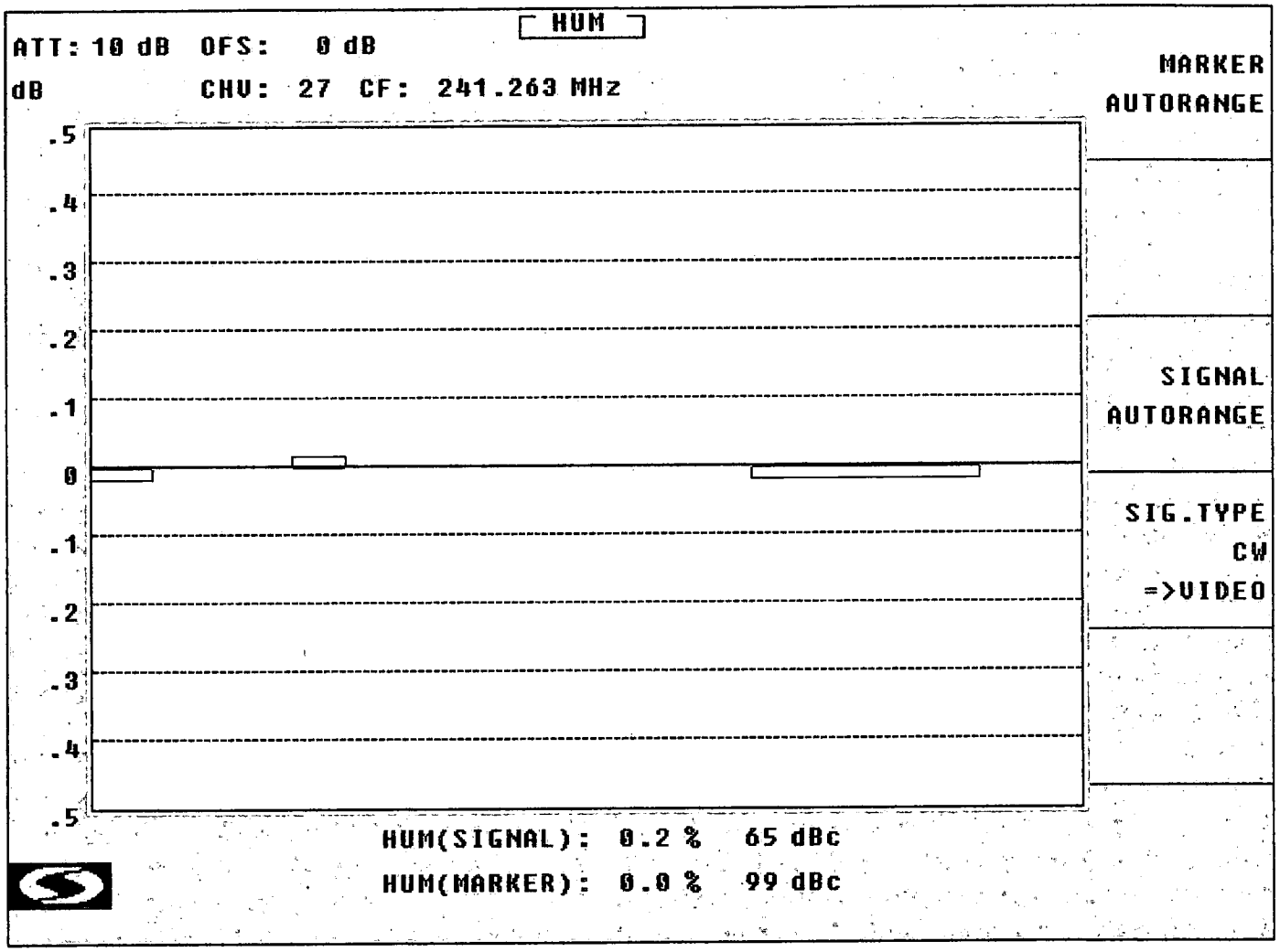


TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL FREQUENCY RESPONSE TEST
(76.605) (a) (6)

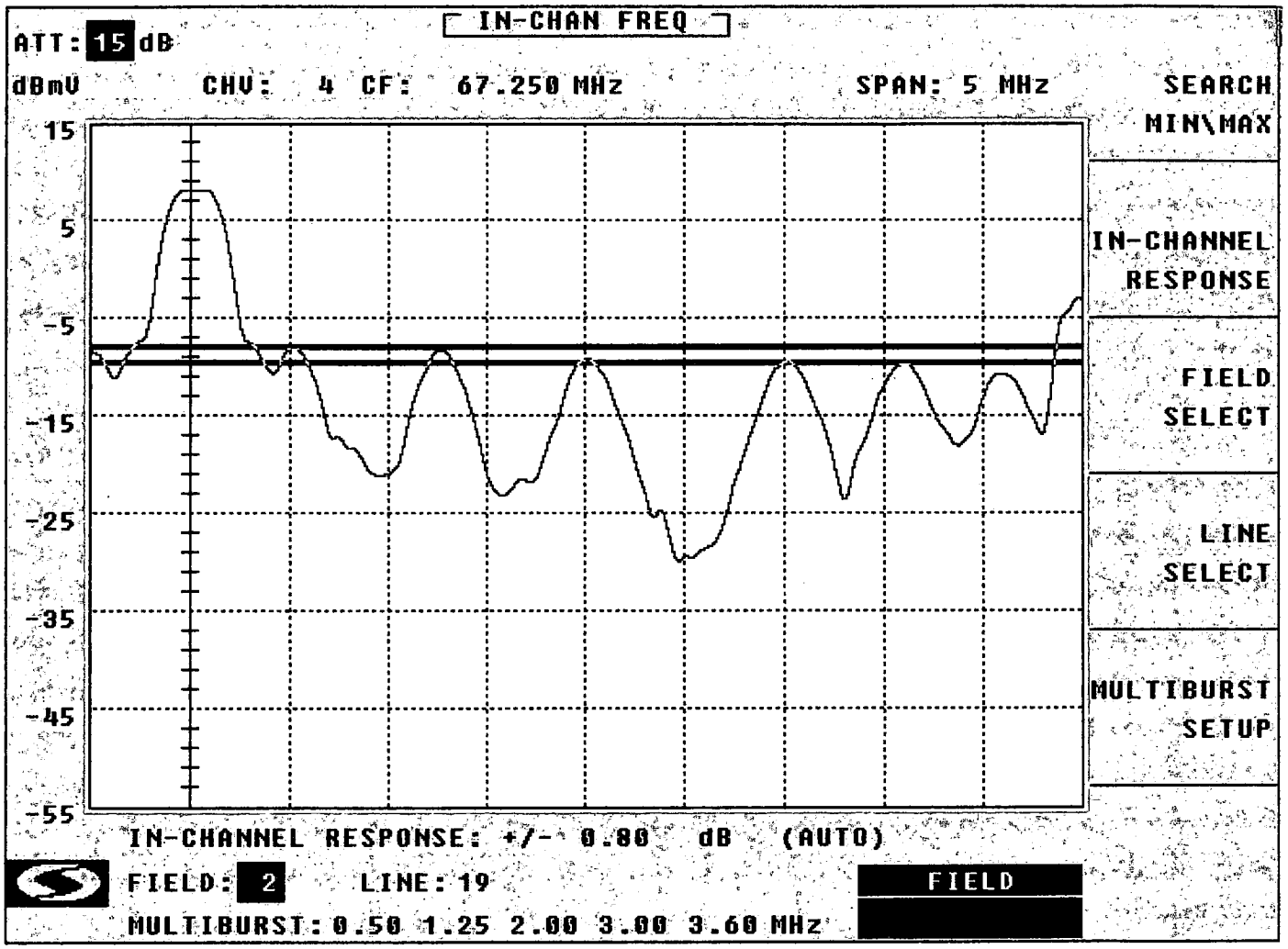
System Name : Rome ***Date*** : 07/18/2013

Performed By : Peter Grocholski

Location : Knapp Rd

(SEE THE ATTACHED SWEEP TRACES)

SUNRISE TELECOM BROADBAND 07.18.13 11:42:01



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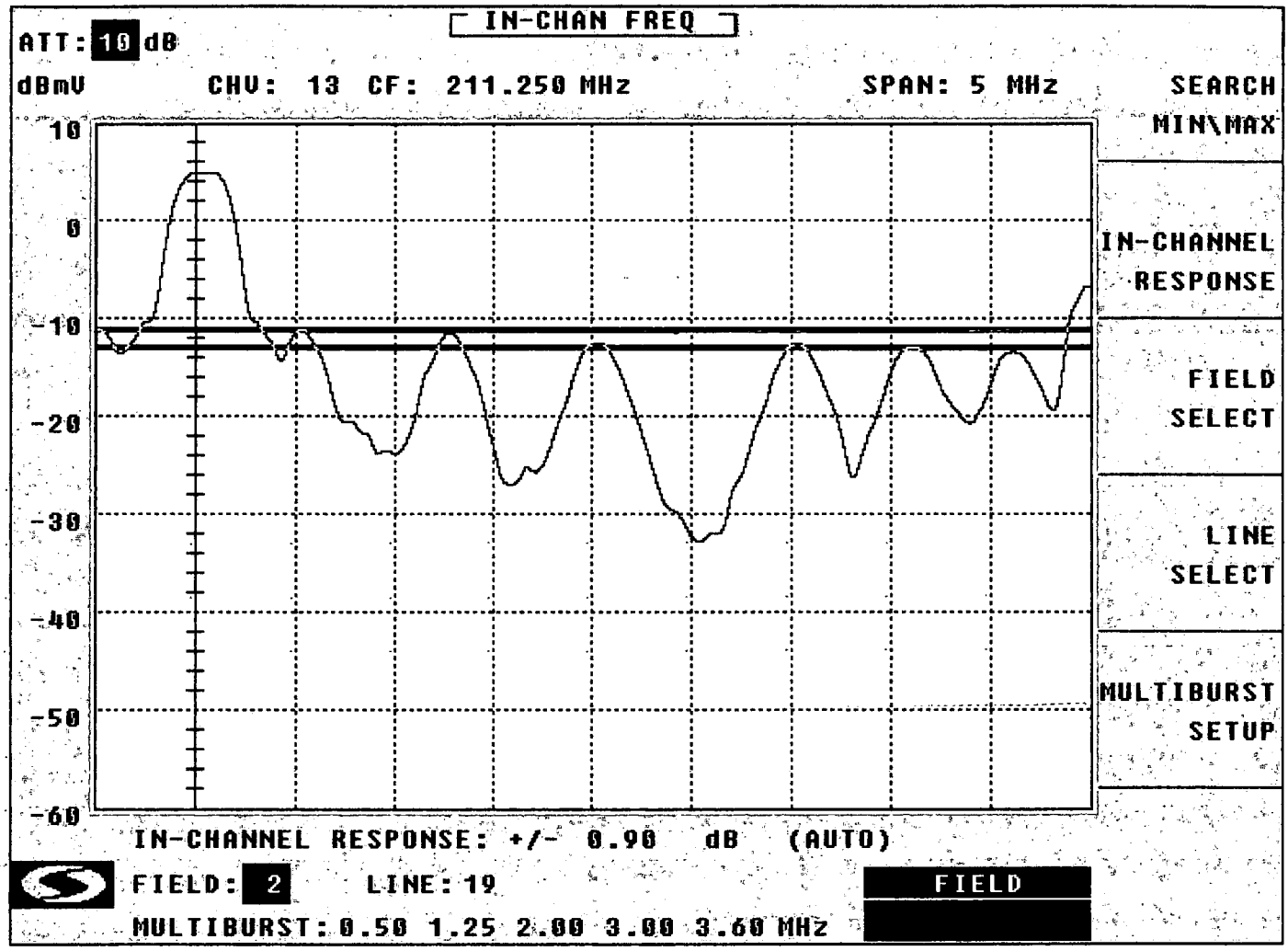

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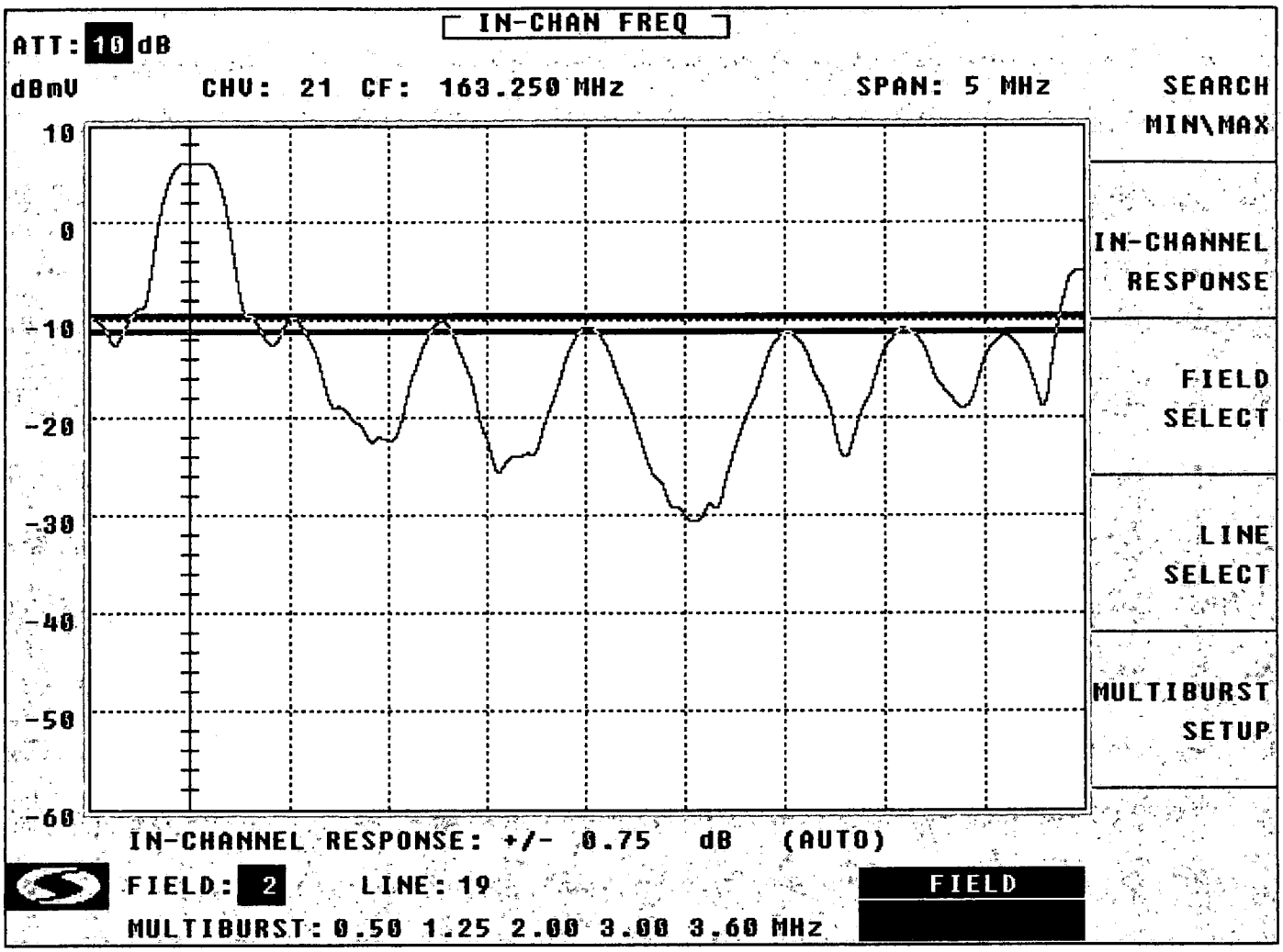

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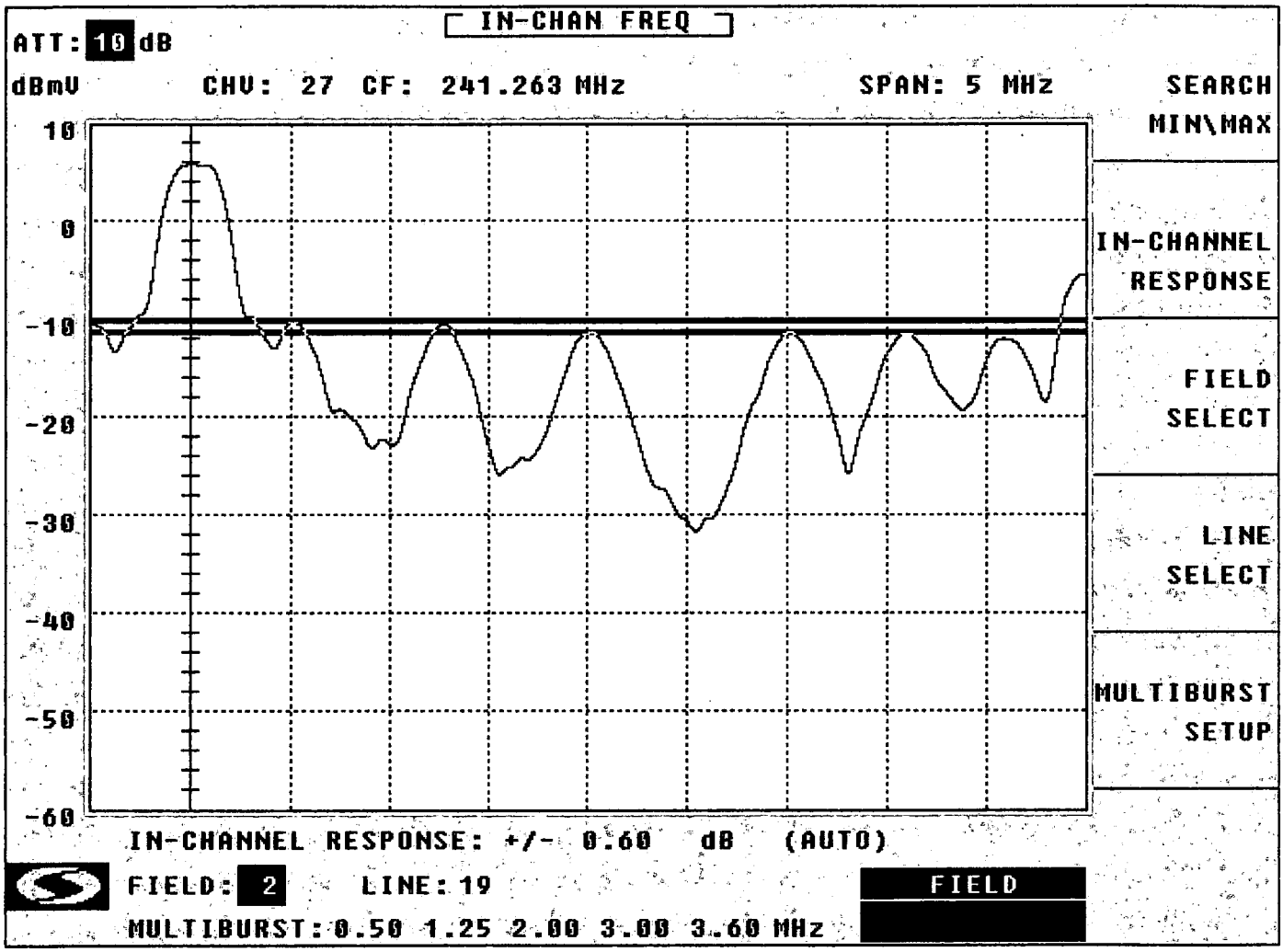

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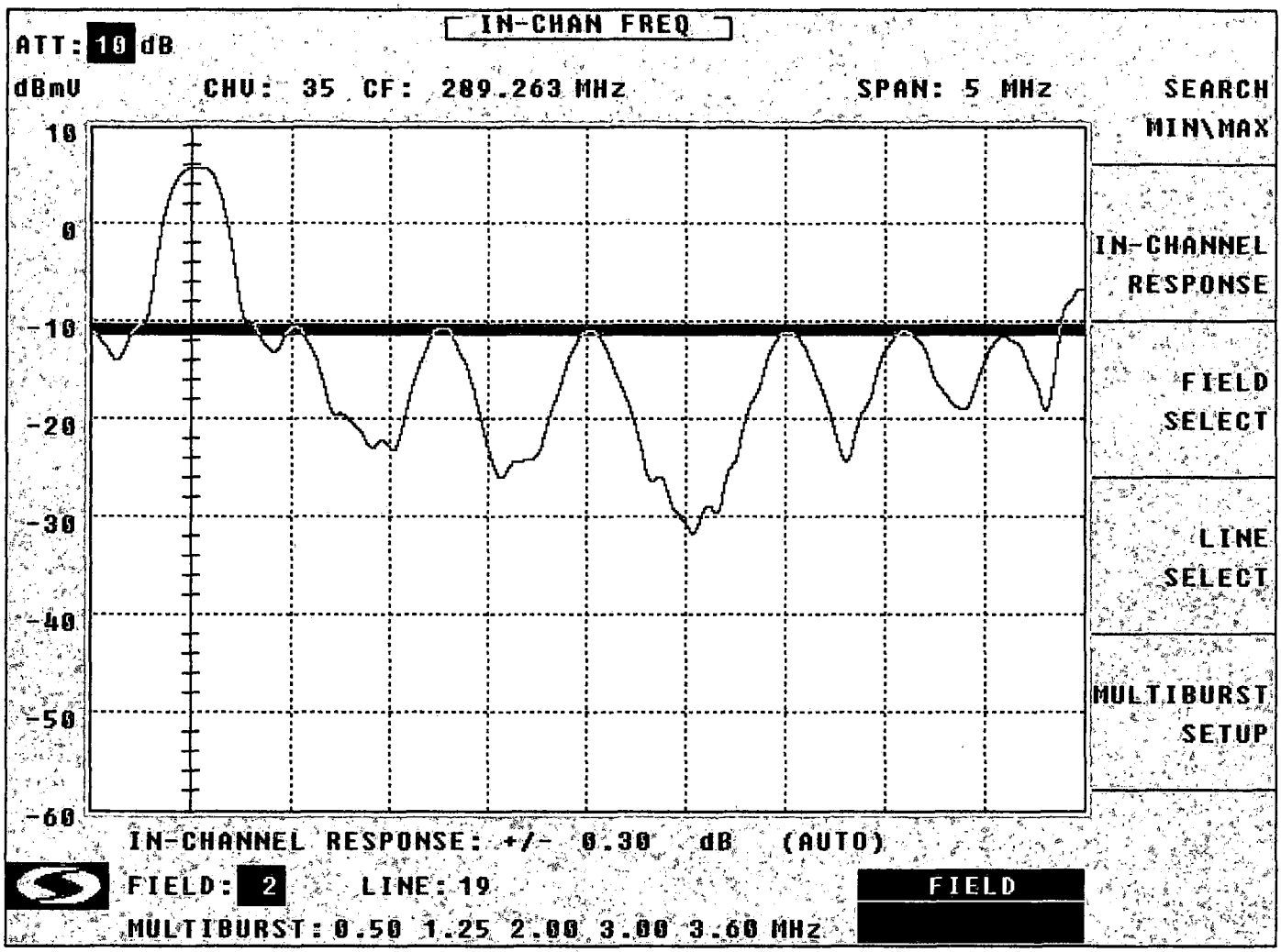

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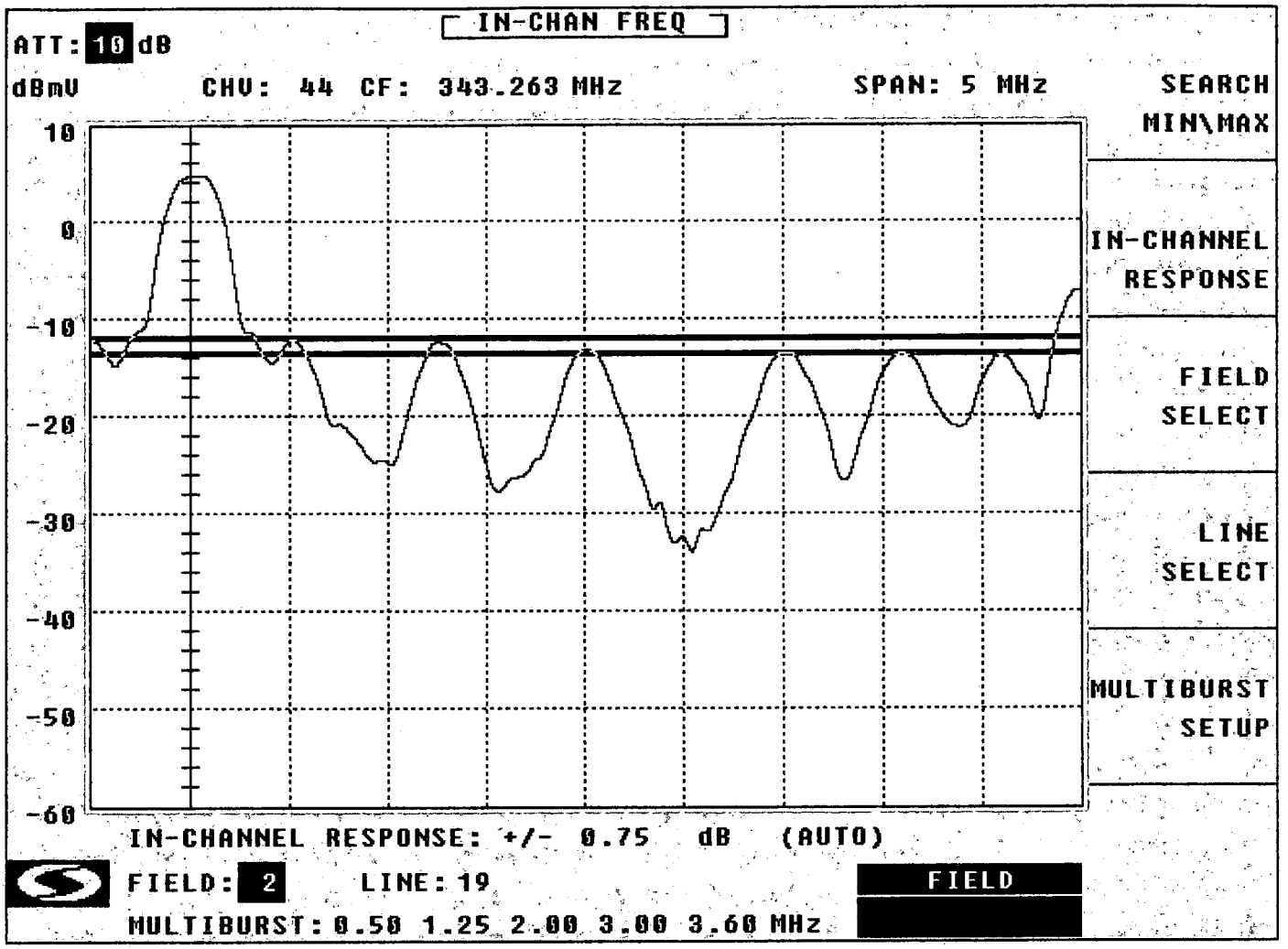

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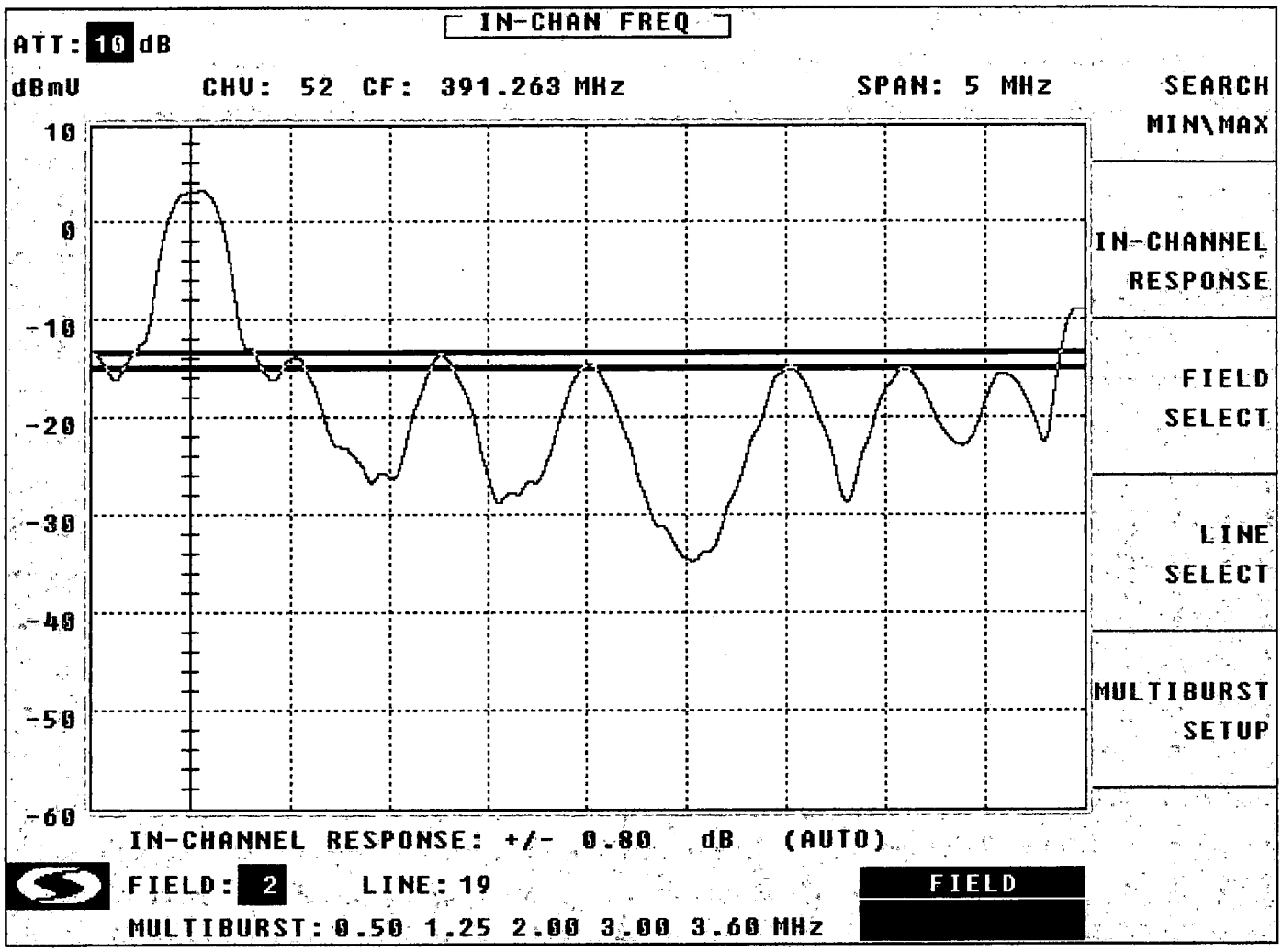

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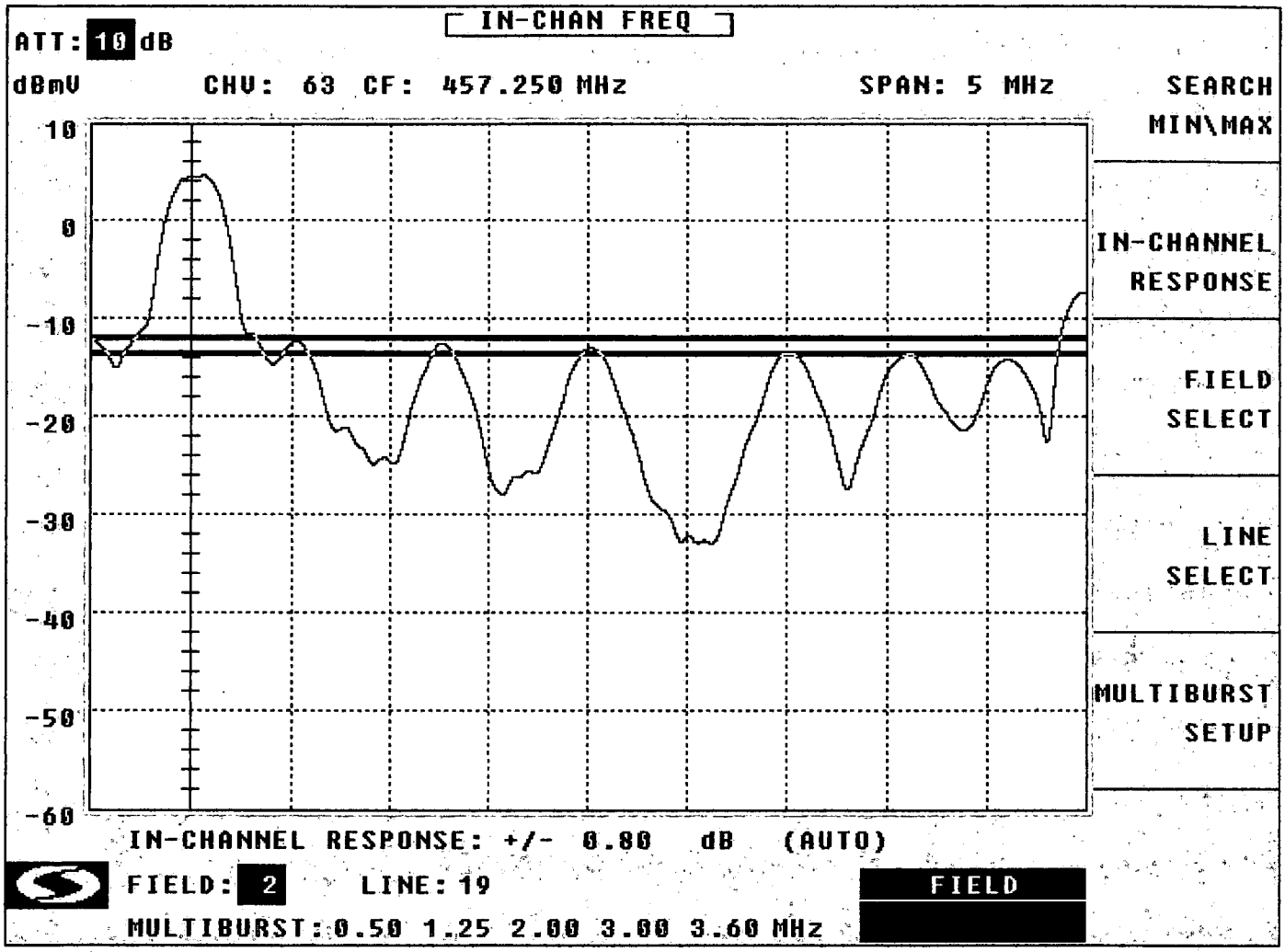

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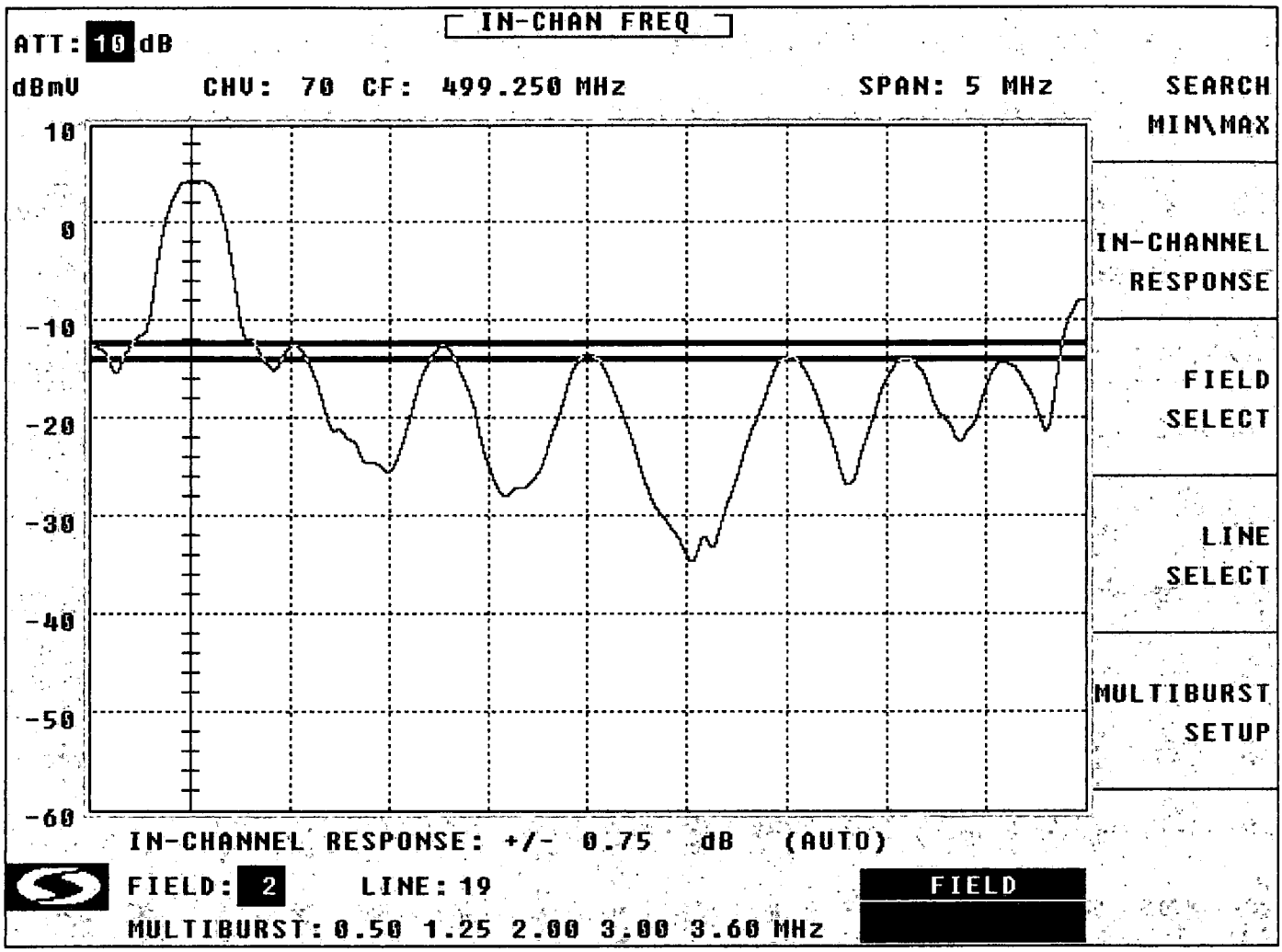


TESTPOINT 4, PAGE 5

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL VARIATION TEST

System Name	: Rome	***Test Location***	: Knapp Rd
Date	: 07/19/2013	***Performed By***	: Peter grocholski
Meter Serial Number	: 232191		

		TEMP F							*TEMP F*				
		90.00	93.00	79.00	71.00				90.00	93.00	79.00	71.00	
		TIME							*TIME*				
		10:45:00	16:45:00	22:45:00	04:45:00				10:45:00	16:45:00	22:45:00	04:45:00	
CHAN	*FREQ (MHZ)*	*VISUAL LEVEL (DBMV)*				*MAX VAR*	*CHAN*	*FREQ (MHZ)*	*VISUAL LEVEL (DBMV)*				*MAX VAR*
2	55.2500	14.32	13.80	15.42	15.71	1.91	DD(40)	319.2625	11.18	11.11	11.77	11.95	0.84
3	61.2500	13.81	13.27	14.89	15.15	1.88	EE(41)	325.2625					
4	67.2500	14.96	14.38	15.98	15.22	1.6	FF(42)	331.2750	11.02	10.95	11.76	12.01	1.06
5	77.2500	14.44	14.09	15.54	15.80	1.71	GG(43)	337.2625	11.11	10.86	11.71	11.91	1.05
6	83.2500	13.93	13.52	15.11	15.30	1.78	HH(44)	343.2625	11.21	11.05	11.73	12.02	0.97
A-5(95)	91.2500						II(45)	349.2625	10.97	10.81	11.48	11.82	1.01
A-4(96)	97.2500	12.86	12.50	13.94	14.16	1.66	JJ(46)	355.2625	11.53	11.34	12.03	11.72	0.69
A-3(97)	103.2500	12.87	12.61	13.77	14.18	1.57	KK(47)	361.2625	11.39	11.20	12.14	11.69	0.94
A-2(98)	109.2750						LL(48)	367.2625	11.10	10.94	11.68	12.03	1.09
A-1(99)	115.2750	11.97	11.64	11.71	11.79	0.33	MM(49)	373.2625	10.72	10.56	11.16	11.39	0.83
A(14)	121.2625	10.95	10.64	12.20	12.28	1.64	NN(50)	379.2625	10.33	10.20	10.72	10.96	0.76
B(15)	127.2625	10.71	10.38	11.58	11.69	1.31	OO(51)	385.2625	11.27	11.29	12.84	11.97	1.57
C(16)	133.2625	11.50	11.18	12.24	12.55	1.37	PP(52)	391.2625	12.41	11.45	10.29	10.48	2.12
D(17)	139.2500						QQ(53)	397.2625	12.15	12.13	10.37	10.50	1.78
E(18)	145.2500	11.88	11.54	12.94	13.15	1.61	RR(54)	403.2500	12.50	12.21	10.68	10.81	1.82
F(19)	151.3210	11.85	11.59	12.94	13.11	1.52	SS(55)	409.2500					
G(20)	157.2500						TT(56)	415.2500	12.54	11.20	10.63	10.73	1.91
H(21)	163.2500	13.08	12.78	14.01	14.21	1.43	UU(57)	421.2500	12.46	11.09	10.47	10.58	1.99
I(22)	169.2500	13.45	13.19	14.11	14.32	1.13	VV(58)	427.2500	11.83	11.54	10.84	10.90	0.99
7	175.2500	13.37	13.03	14.07	14.28	1.25	WW(59)	433.2500	10.54	10.21	11.46	11.59	1.38
8	181.2500	11.99	11.66	12.66	12.82	1.16	XX(60)	439.2500	10.36	10.14	11.18	11.30	1.16
9	187.2500	12.96	12.57	13.54	13.74	1.17	YY(61)	445.2500	10.28	10.07	11.09	11.30	1.23
10	193.2500	12.76	12.45	13.38	13.57	1.12	ZZ(62)	451.2500	10.54	10.42	11.43	11.61	1.19
11	199.2500						63	457.2500	10.77	10.59	11.59	11.76	1.17
12	205.2500	11.81	11.62	12.29	12.48	0.86	64	463.2500					
13	211.2500	11.70	11.51	12.16	12.38	0.87	65	469.2500	10.76	10.55	11.57	11.65	1.1
J(23)	217.2500	11.61	11.30	12.14	12.33	1.03	66	475.2500	10.96	10.83	11.82	11.94	1.11
K(24)	223.2500	11.61	11.31	11.99	12.17	0.86	67	481.2500					
L(25)	229.2625	11.70	11.45	12.38	12.60	1.15	68	487.2500	11.21	11.14	12.09	12.23	1.09
M(26)	235.2625	12.53	12.27	13.26	13.55	1.28	69	493.2500	10.67	10.52	11.54	11.67	1.15
N(27)	241.2625	12.80	12.50	13.55	13.71	1.21	70	499.2500	10.75	10.64	11.66	11.79	1.15
O(28)	247.2625	13.12	12.83	13.82	14.08	1.25	71	505.2500					
P(29)	253.2625	13.09	12.87	13.93	14.13	1.26	72	511.2500					
Q(30)	259.2625	10.49	10.18	11.92	11.52	1.74	73	517.2500					
R(31)	265.2625	13.27	12.88	13.94	14.13	1.25	74	523.2500					
S(32)	271.2625	13.04	12.92	13.65	13.79	0.87	75	529.2500					
T(33)	277.2625	12.92	12.88	13.63	13.80	0.92	76	535.2500					
U(34)	283.2625	12.63	12.49	13.24	13.46	0.97	77	541.2500					
V(35)	289.2625	11.94	11.83	12.50	12.66	0.83	78	547.2500					
W(36)	295.2625	11.99	11.86	12.55	12.75	0.89	79	553.2500					
AA(37)	301.2625						80	559.2500					
BB(38)	307.2625	11.45	11.38	12.03	12.25	0.87	81	565.2500					
CC(39)	313.2625	11.26	11.18	11.85	12.02	0.84							

Max Non Adjacent Channel Level Diff	:- 5.69
Max Adjacent Channel Level Diff	:- 2.78
Max Variance from last proof of performance test	:- 3.4
Date of last proof of performance test	:- 01/28/2013

Note :- Make measurements through a 100 ft. test drop cable without a converter

TIME WARNER CABLE - SYRACUSE DIVISION

System Name	:	Rome
System Test Point #	:	5
Hub Name	:	Oneida
Location	:	Mount hope
Map Number	:	467-5638
Pole Number	:	11
D.T. Value	:	20/2
OR Number	:	ON018
GNA Cascade	:	3
LE Cscade	:	3

TESTPOINT 5, PAGE 2

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL
VISUAL / AURAL LEVEL DIFFERENCE
(at Test Point, at the end of a 100' Drop)

System Name	: Rome	***Test Location***	: Mount hope
Date	: 07/22/2013	***Time***	: 12:45:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	7.22	-5.48		12.7	DD (40)	319.2625	10.43	-4.21		14.64
3	61.2500	8.01	-5.07		13.08	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	8.55	-5.59		14.14	FF (42)	331.2750	10.09	-4.15		14.24
5	77.2500	8.25	-5.54		13.79	GG (43)	337.2625	10.15	-3.80		13.95
6	83.2500	8.54	-6.07		14.61	HH (44)	343.2625	10.54	-4.27		14.81
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	10.67	-3.07		13.74
A-4 (96)	97.2500	8.89	-5.00		13.89	JJ (46)	355.2625	10.89	-3.20		14.09
A-3 (97)	103.2500	9.03	-5.23		14.26	KK (47)	361.2625	11.02	-3.42		14.44
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	10.60	-3.63		14.23
A-1 (99)	115.2750	N/A	N/A		N/A	MM (49)	373.2625	11.68	-3.91		15.59
A (14)	121.2625	9.06	-5.27		14.33	NN (50)	379.2625	10.13	-3.80		13.93
B (15)	127.2625	8.98	-5.38		14.36	OO (51)	385.2625	10.23	-4.34		14.57
C (16)	133.2625	9.61	-5.90		15.51	PP (52)	391.2625	9.86	-4.73		14.59
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	11.09	-4.13		15.22
E (18)	145.2500	8.83	-5.59		14.42	RR (54)	403.2500	11.21	-4.08		15.29
F (19)	151.3210	9.40	-5.14		14.54	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	9.30	-4.90		14.2
H (21)	163.2500	9.52	-3.94		13.46	UU (57)	421.2500	9.21	-5.16		14.37
I (22)	169.2500	9.49	-4.45		13.94	VV (58)	427.2500	9.00	-5.34		14.34
7	175.2500	9.65	-4.88		14.53	WW (59)	433.2500	8.79	-5.85		14.64
8	181.2500	10.01	-4.07		14.08	XX (60)	439.2500	9.09	-4.83		13.92
9	187.2500	9.71	-4.45		14.16	YY (61)	445.2500	9.26	-4.91		14.17
10	193.2500	9.68	-4.66		14.34	ZZ (62)	451.2500	9.05	-5.36		14.41
11	199.2500	10.41	-5.21		15.62	63	457.2500	8.80	-5.28		14.08
12	205.2500	10.01	-5.27		15.28	64	463.2500	N/A	N/A		N/A
13	211.2500	9.60	-5.55		15.15	65	469.2500	9.48	-4.86		14.34
J (23)	217.2500	9.09	-6.15		15.24	66	475.2500	9.13	-4.90		14.03
K (24)	223.2500	9.07	-6.49		15.56	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	9.17	-4.83		14	68	487.2500	9.32	-4.86		14.18
M (26)	235.2625	9.05	-4.79		13.84	69	493.2500	9.00	-5.32		14.32
N (27)	241.2625	9.02	-5.18		14.2	70	499.2500	8.84	-5.82		14.66
O (28)	247.2625	9.37	-5.65		15.02	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	9.23	-4.86		14.09	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	9.07	-5.46		14.53	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	9.56	-5.62		15.18	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	9.26	-6.14		15.4	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	9.46	-4.93		14.39	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	9.30	-4.36		13.66	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	10.21	-4.64		14.85	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	10.16	-4.43		14.59	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	10.67	-3.49		14.16	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	10.71	-3.87		14.58						

Min Channel	:	2	7.220
Max Channel	:	MM(49)	11.680
Peak to Valley	:	4.46	

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL RESPONSE TEST
CARRIER - TO - NOISE TEST
COHERENT DISTURBANCES TEST
LOW FREQUENCY DISTURBANCES TEST

System Name : Rome ***Date*** : 7/18/2013

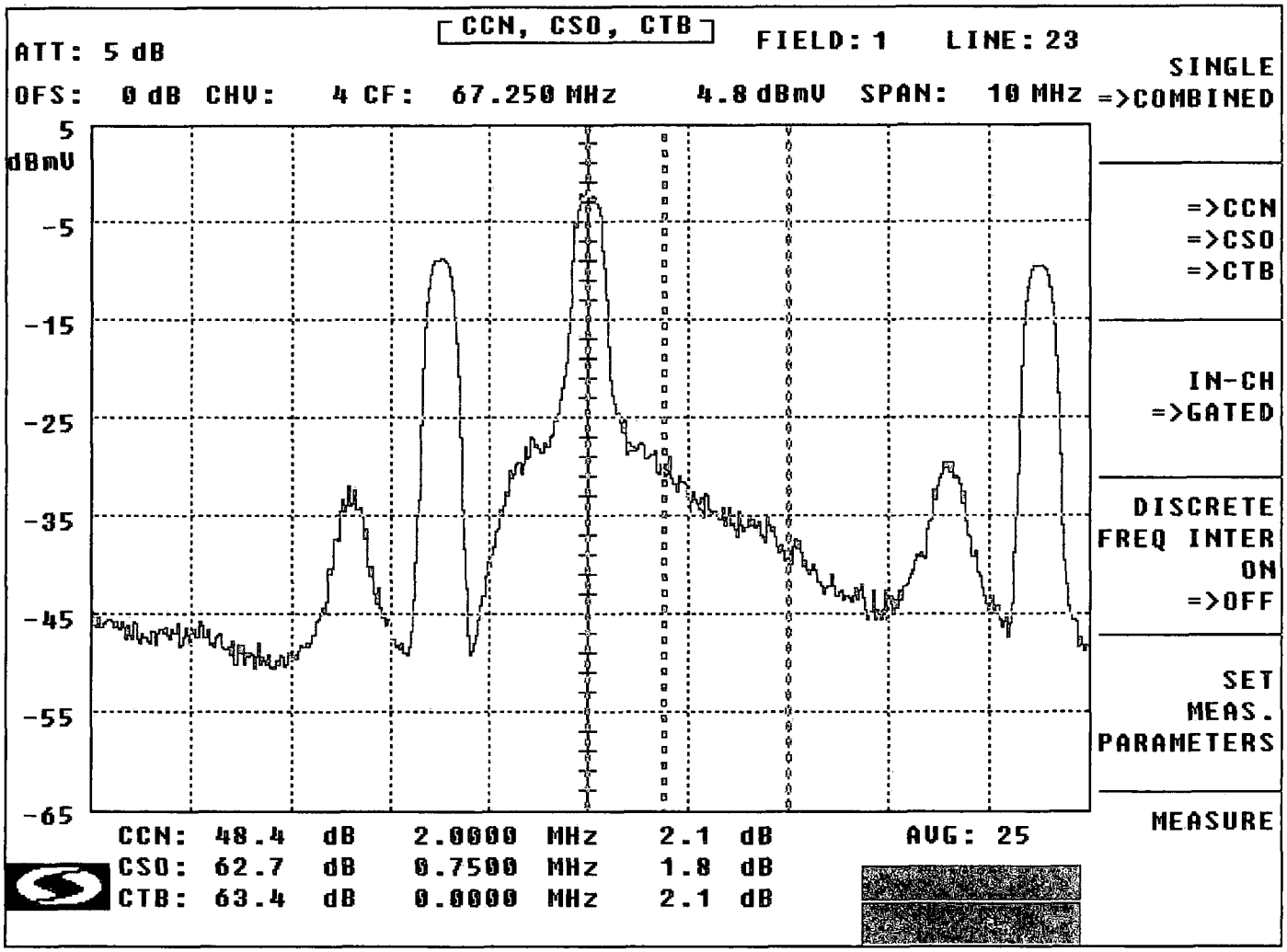
Performed By : Frank Servedio

Location : Mount hope

Note: Make Measurements through a 100 ft. test drop cable without converter.

CHANNEL NUMBER	IN CHANNEL RESPONSE	CARRIER TO NOISE RATIO	DISTORTIONS	CSO	HUM
	(+/- DB)	(DB)	(-DBC) CTB		(%)
4	1.1	48.4	63.4	62.7	
13	.95	50.1	63	62.7	.2
21	.9	48.4	62.1	62.4	
27	.85	49.1	61.3	63.3	
35	.9	47.9	61.5	62.3	
44	.8	47.8	61.5	62.4	
52	.8	48.7	61.8	61.4	
63	.9	49.7	62.7	60.1	
70	1	48.1	61.4	60.5	

SUNRISE TELECOM BROADBAND 07.18.13 15:46:21



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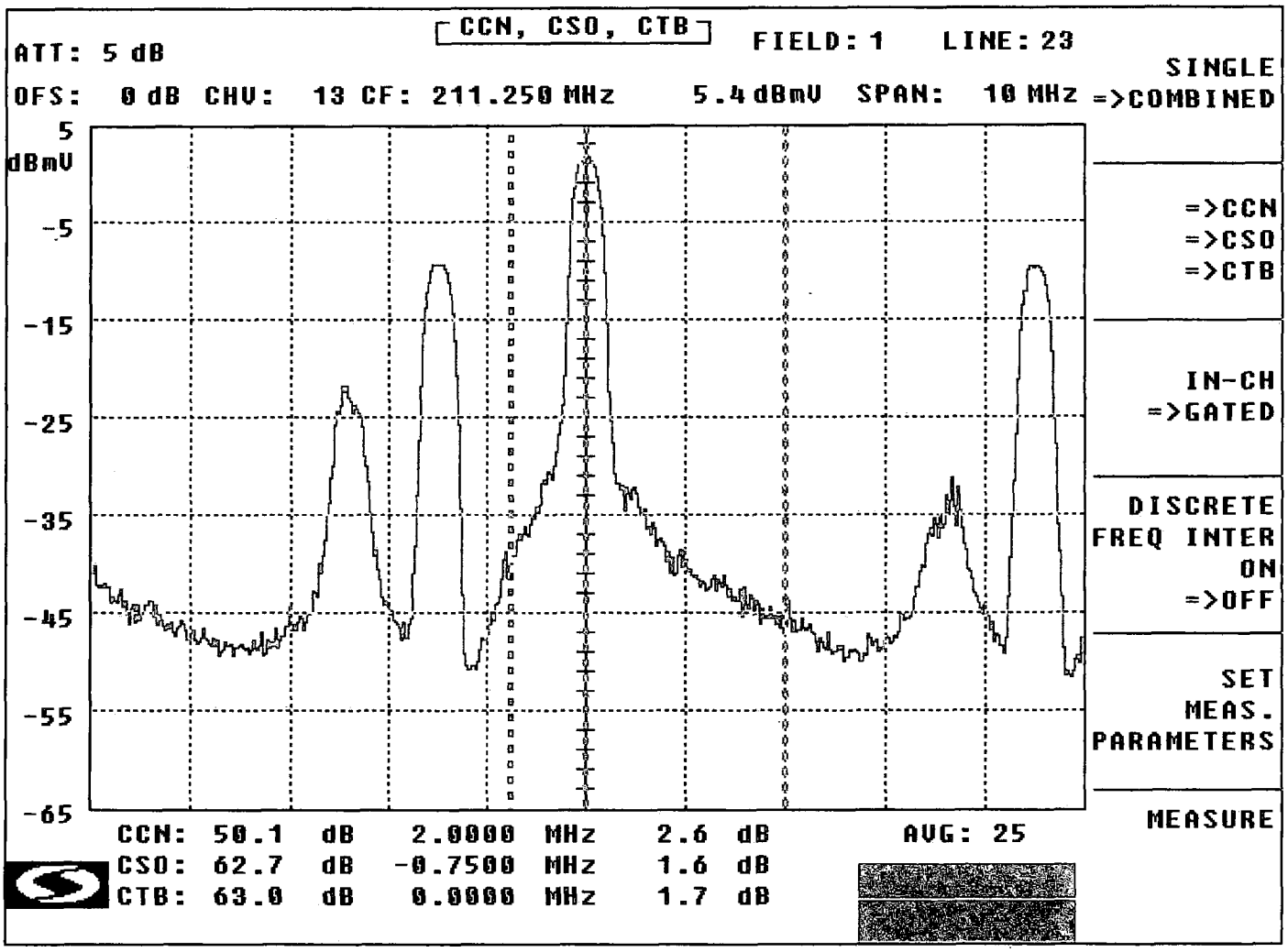

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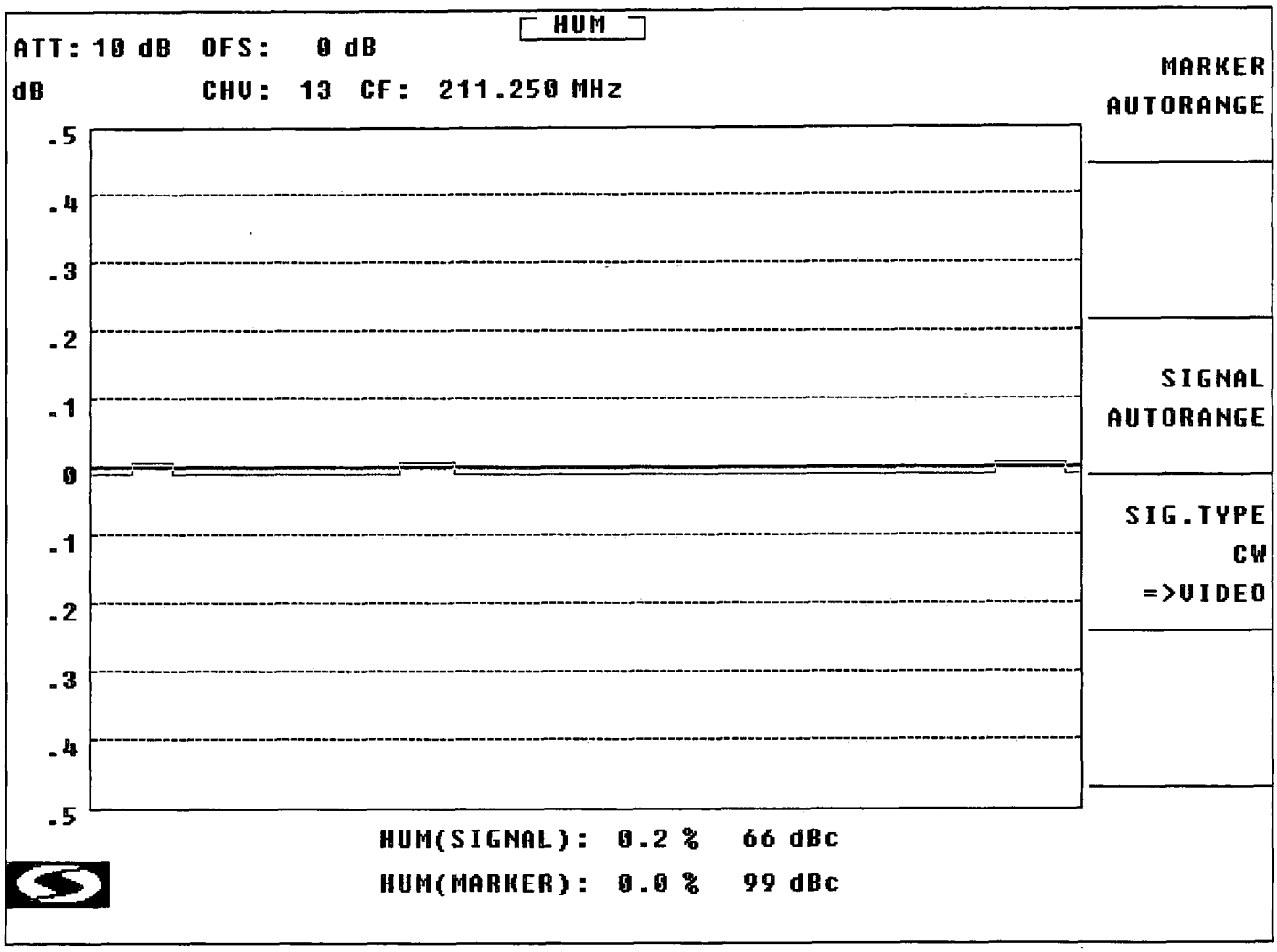

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL FREQUENCY RESPONSE TEST
(76.605) (a) (6)

System Name : Rome ***Date*** : 7/18/2013

Performed By : Frank Servedio

Location : Mount hope

(SEE THE ATTACHED SWEEP TRACES)

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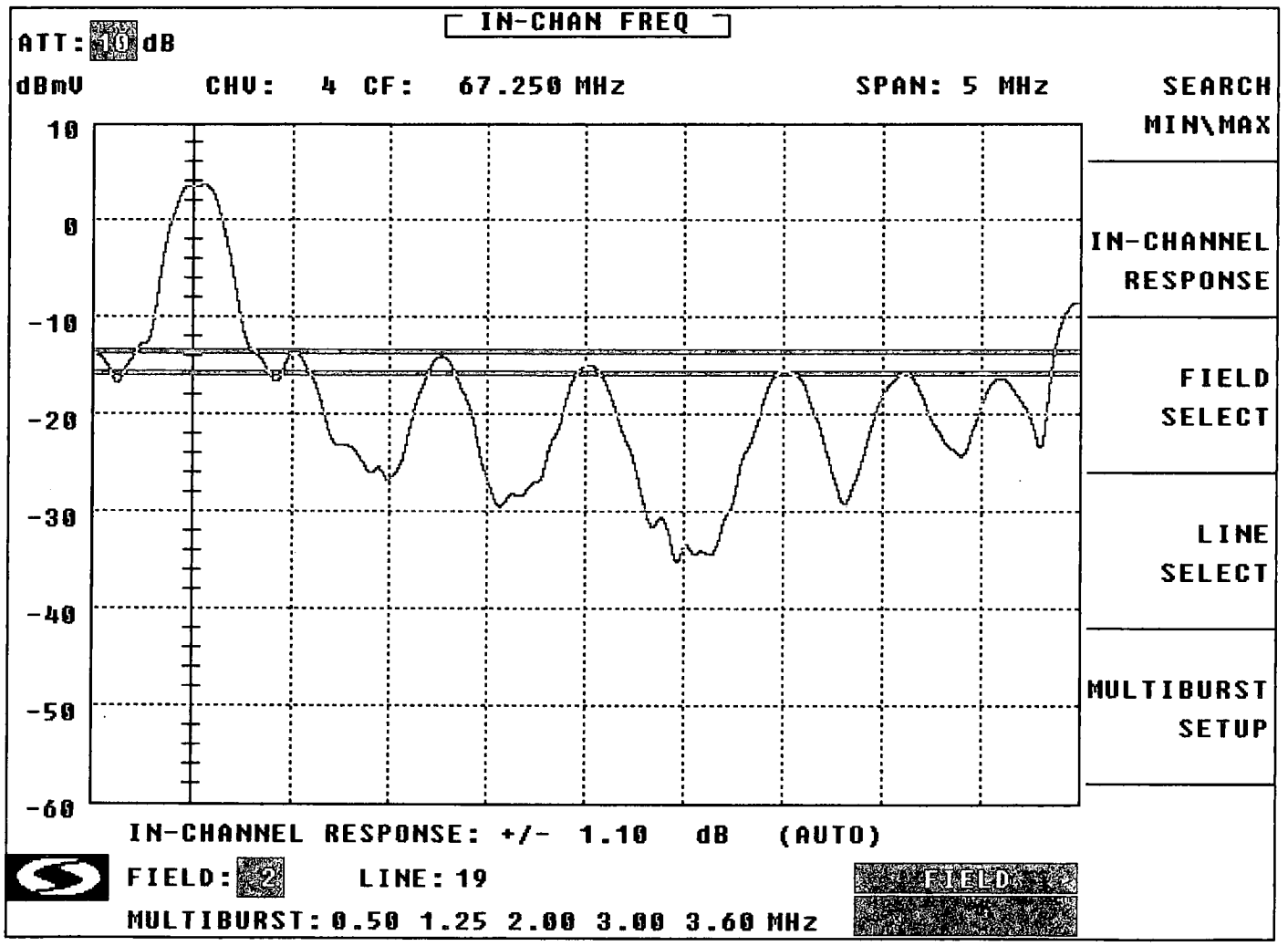

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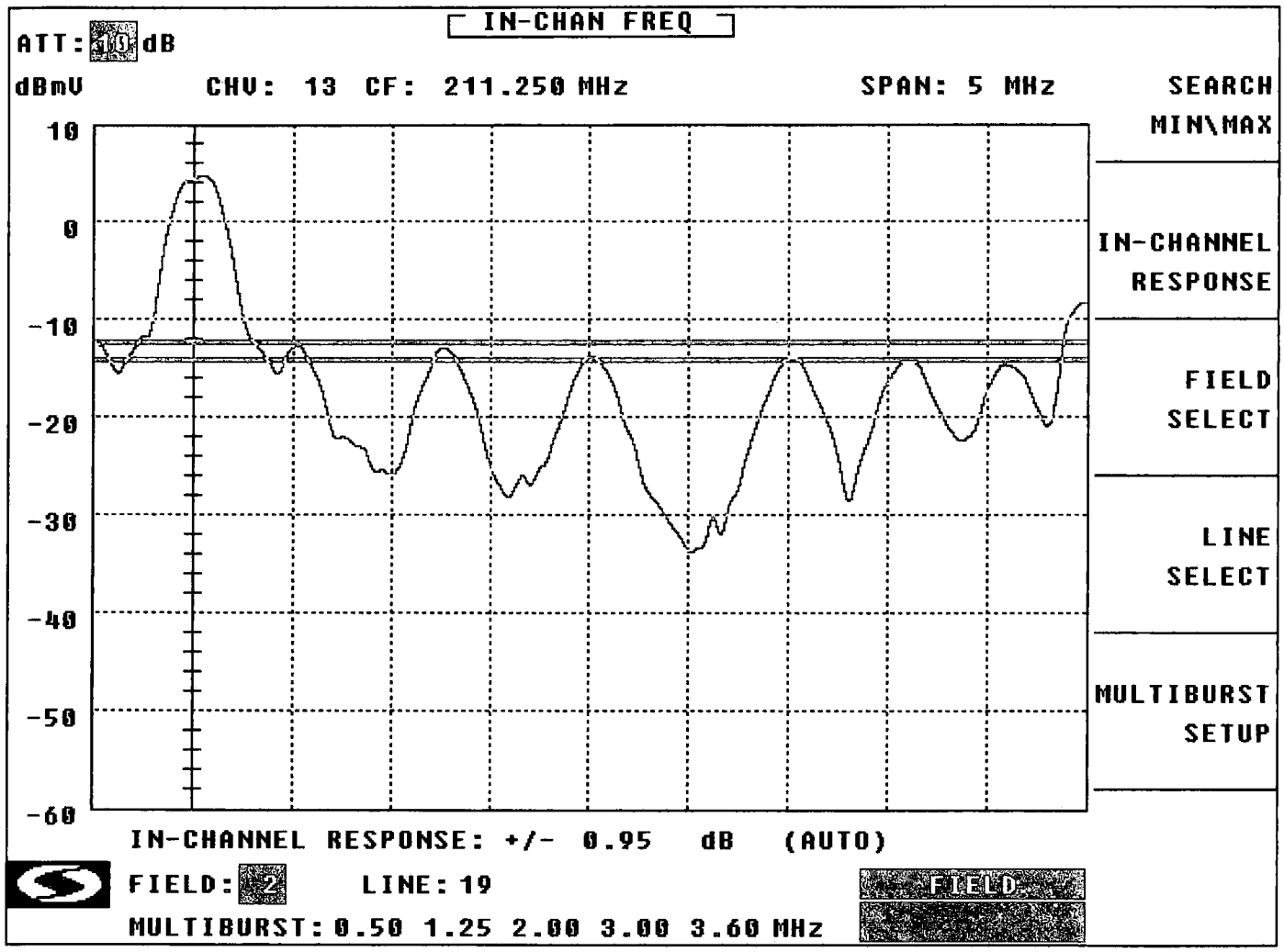

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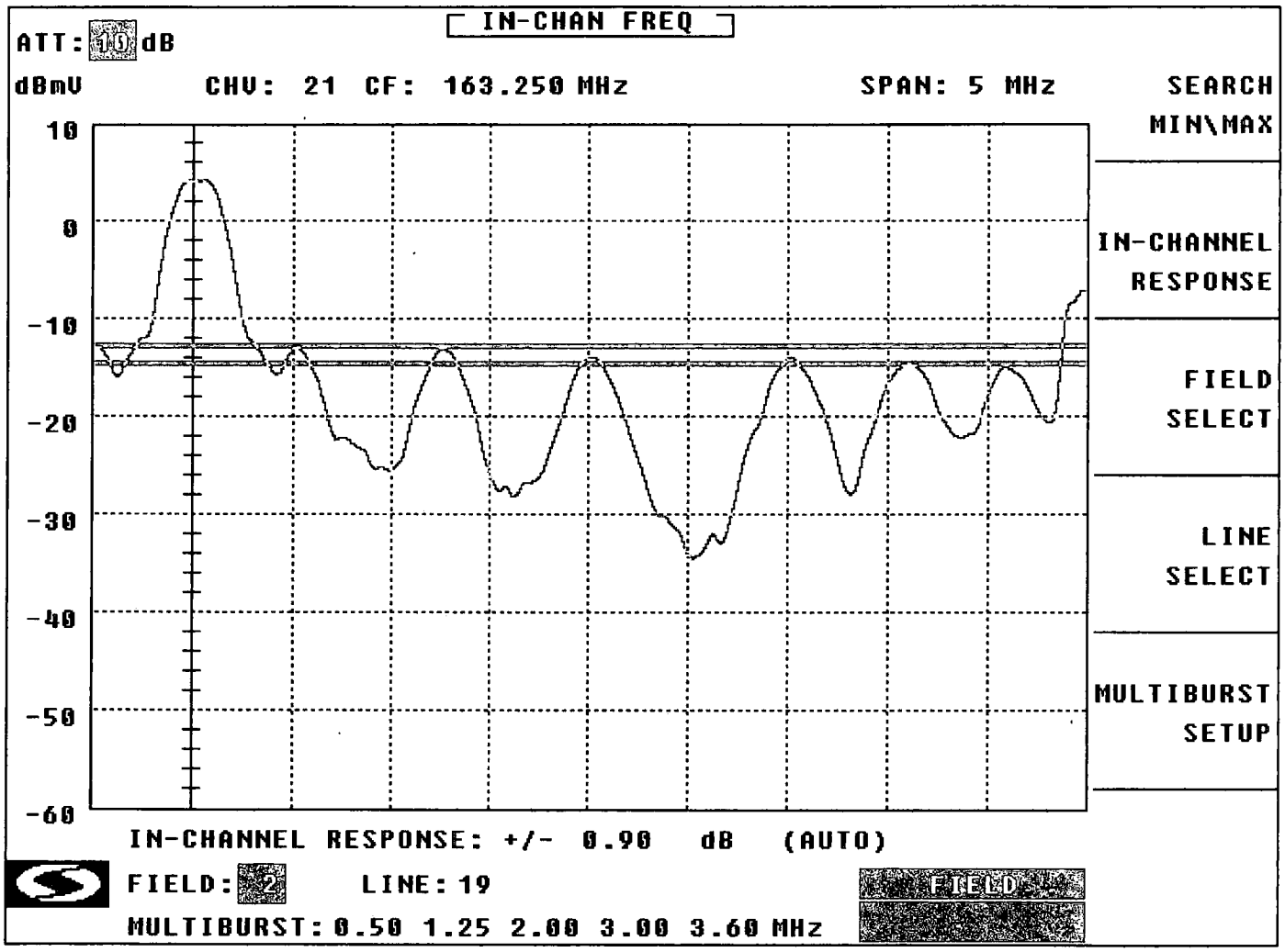

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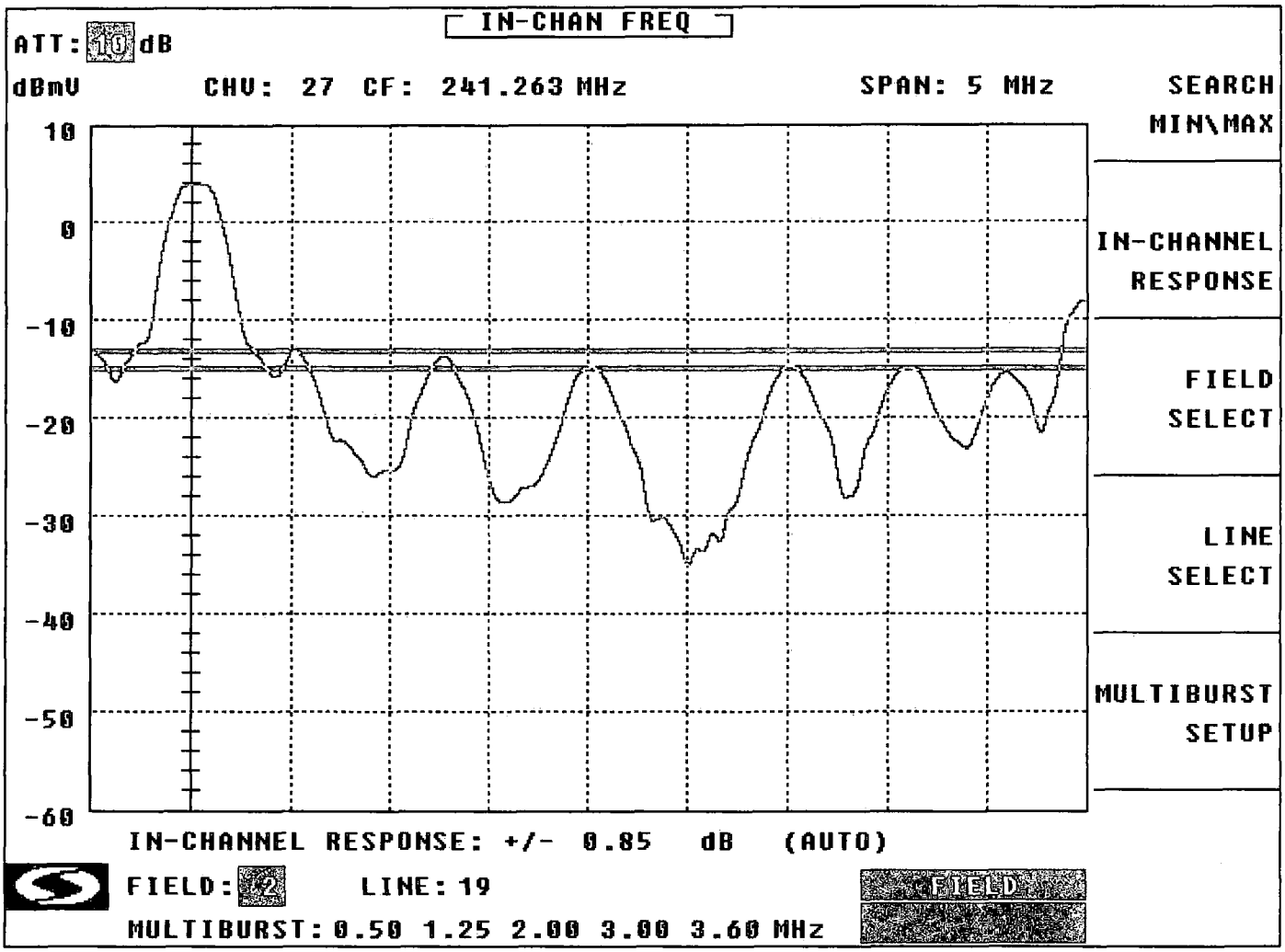

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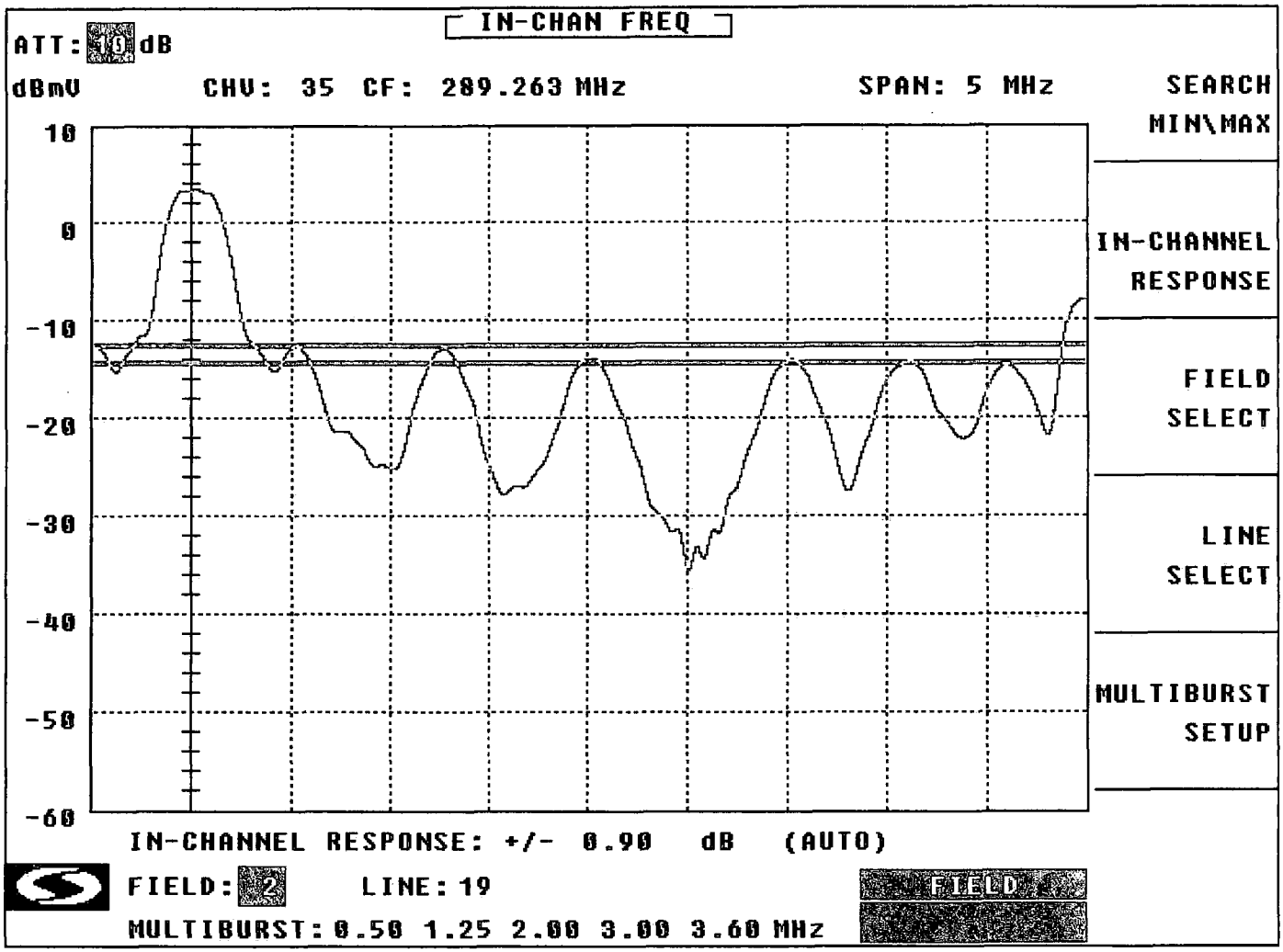

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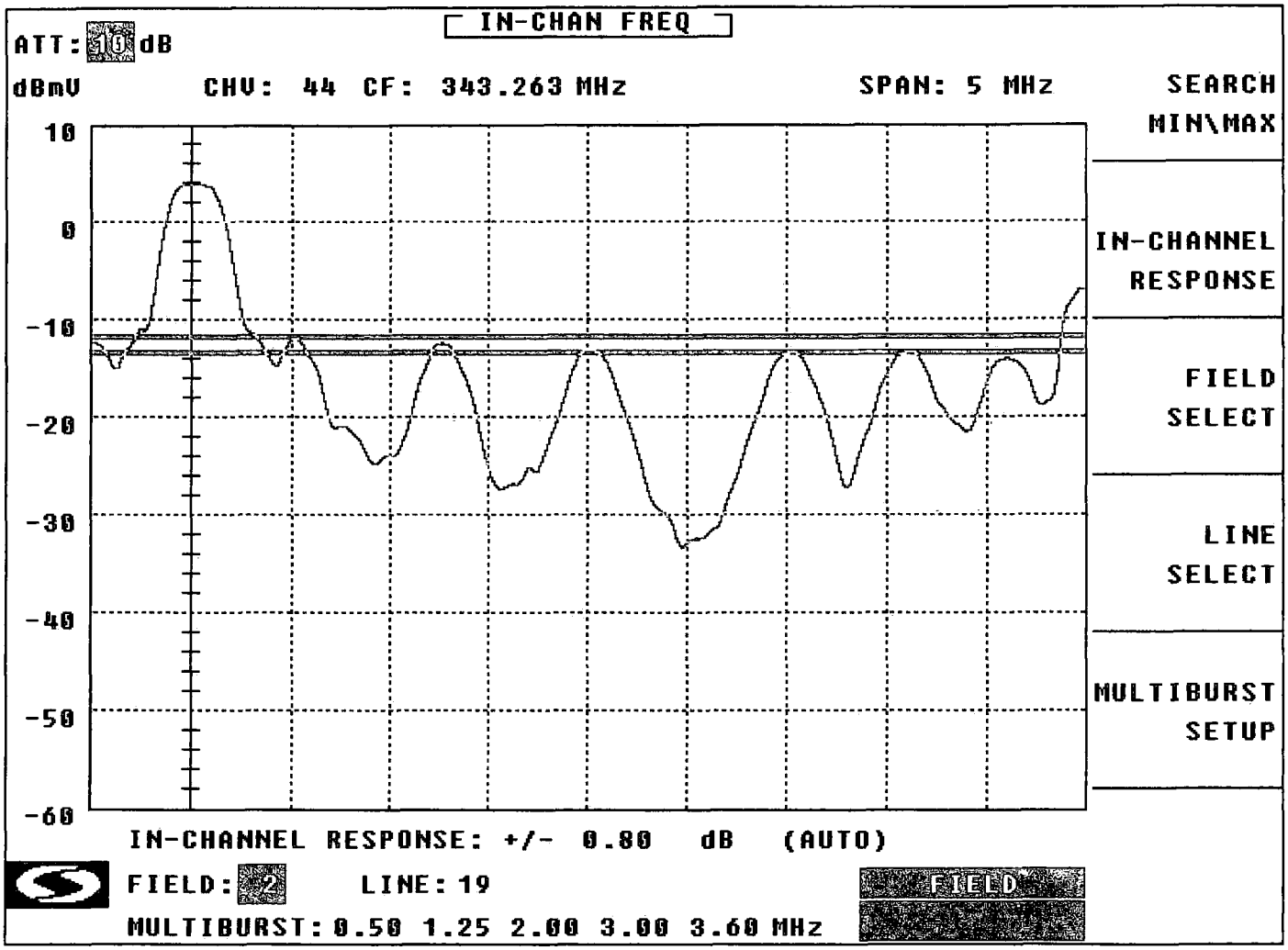

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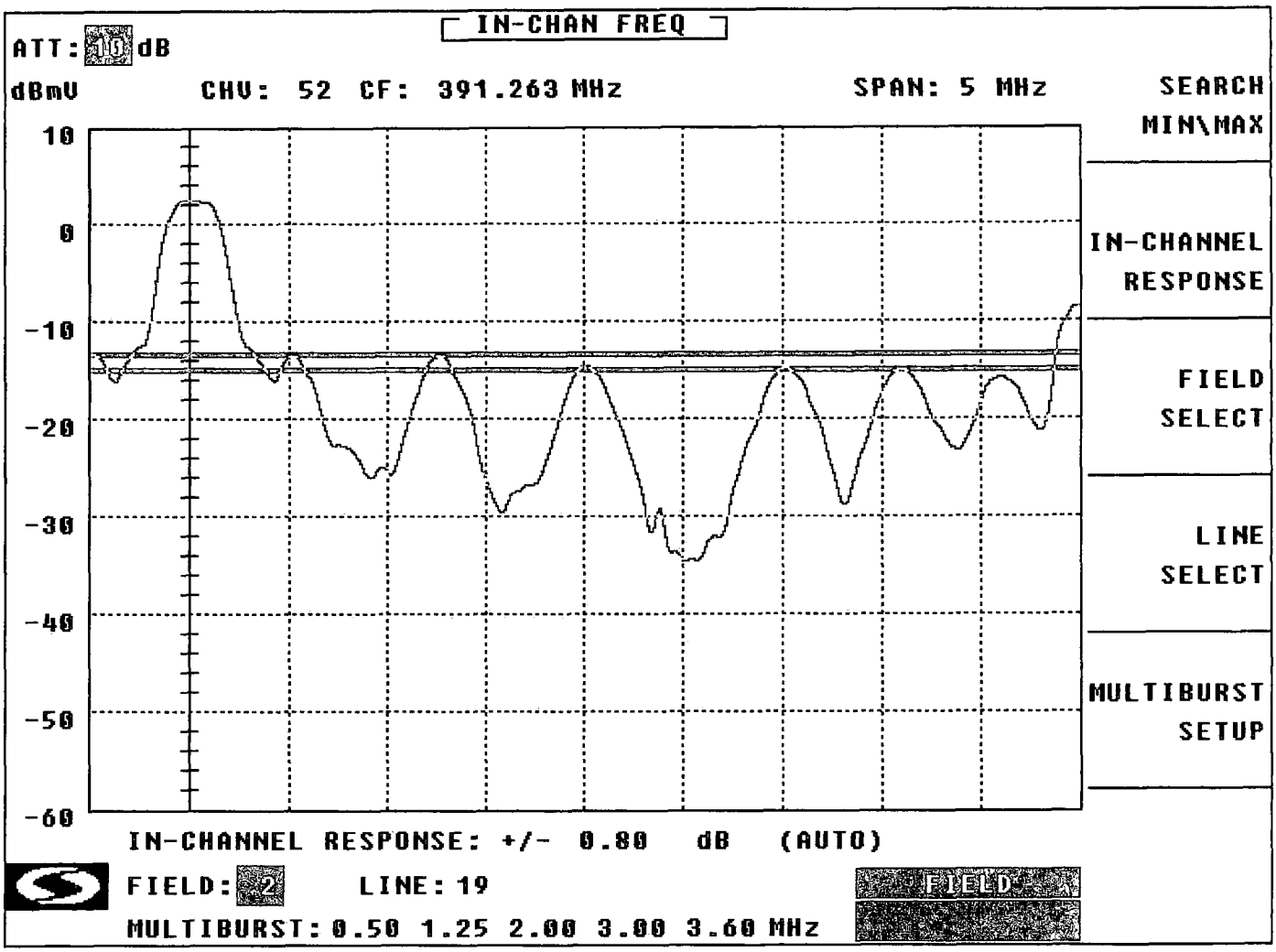

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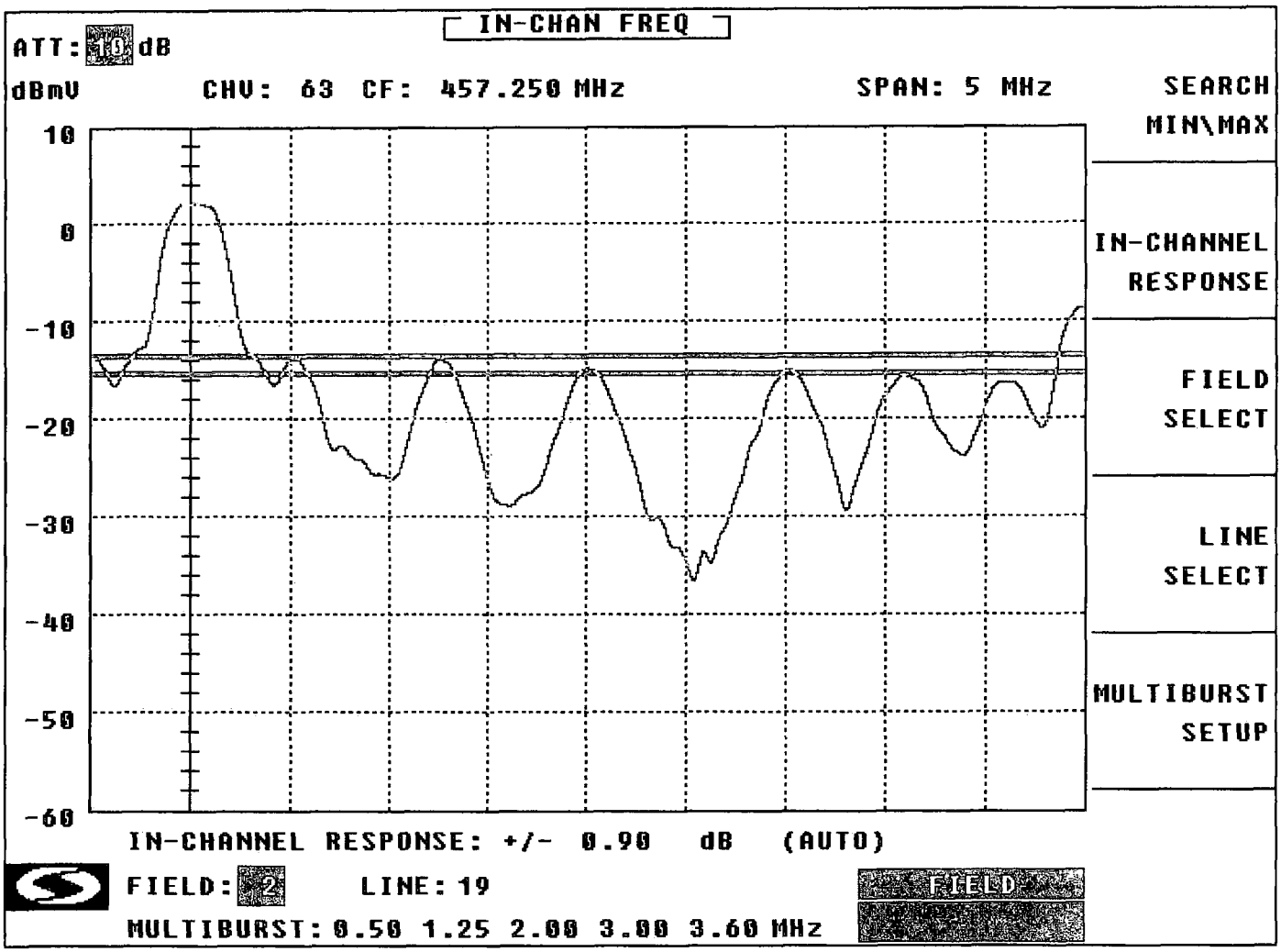

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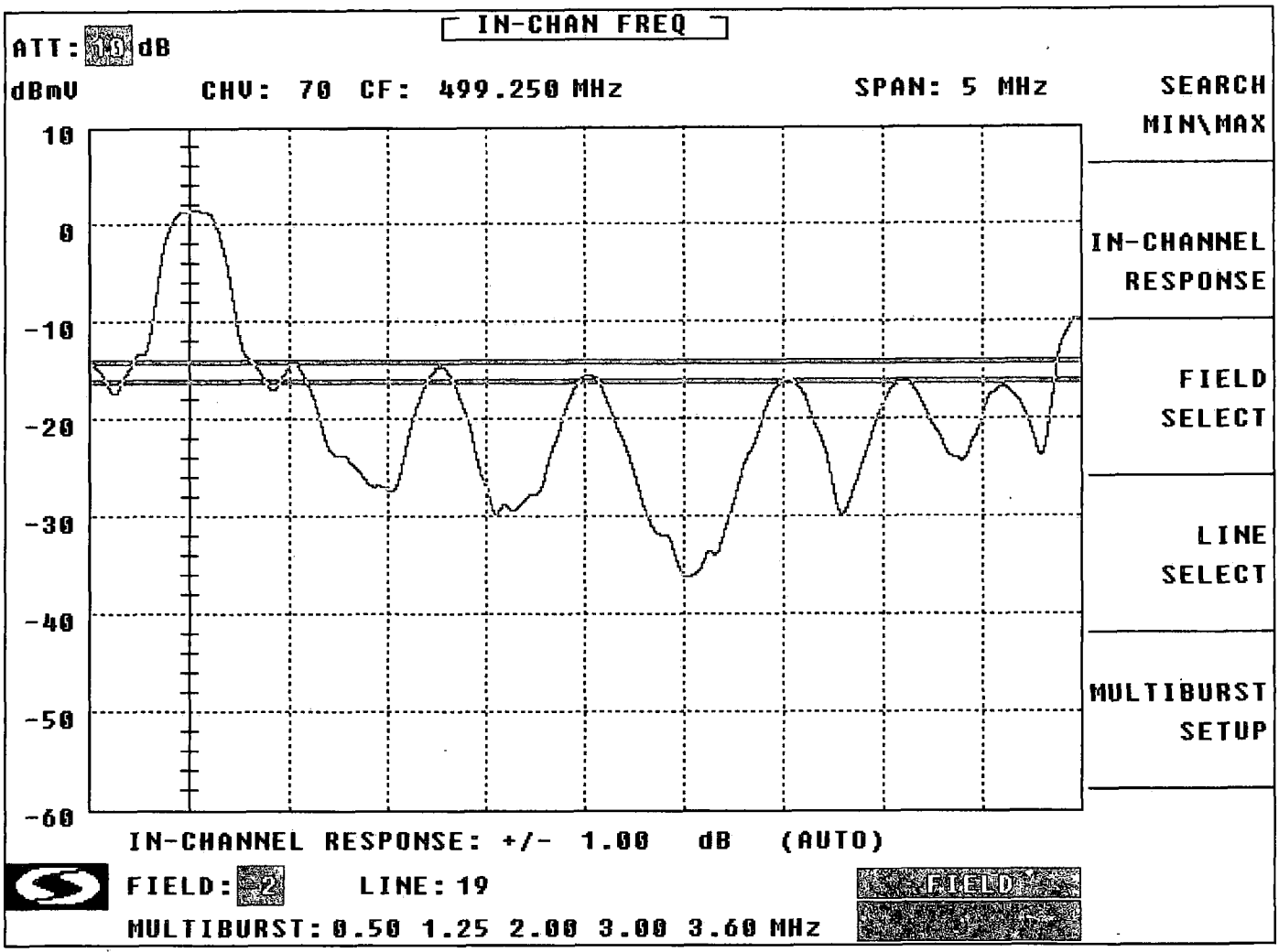


TESTPOINT 5, PAGE 5

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL VARIATION TEST

System Name	: Rome	***Test Location***	: Mount hope
Date	: 07/22/2013	***Performed By***	: Frank Servedio
Meter Serial Number	: 232634		

		TEMP F										
		91.00	88.00	80.00	73.00			91.00	88.00	80.00	73.00	
		TIME						TIME				
		12:45:00	18:45:00	00:45:00	06:45:00			12:45:00	18:45:00	00:45:00	06:45:00	
CHAN	FREQ (MHZ)	VISUAL LEVEL (DBMV)				MAX VAR	CHAN	FREQ (MHZ)	VISUAL LEVEL (DBMV)			MAX VAR
2	55.2500	7.22	8.87	9.40	9.63	2.41	DD(40)	319.2625	10.43	12.21	12.82	12.98	2.55
3	61.2500	8.01	9.51	9.97	10.15	2.14	EE(41)	325.2625					
4	67.2500	8.55	10.13	10.63	10.83	2.28	FF(42)	331.2750	10.09	11.85	12.45	12.65	2.56
5	77.2500	8.25	9.70	9.61	9.86	1.61	GG(43)	337.2625	10.15	12.02	12.62	12.77	2.62
6	83.2500	8.54	10.00	10.52	10.73	2.19	HH(44)	343.2625	10.54	12.37	12.96	13.12	2.58
A-5(95)	91.2500						II(45)	349.2625	10.67	12.56	13.11	13.26	2.59
A-4(96)	97.2500	8.89	10.36	11.03	11.12	2.23	JJ(46)	355.2625	10.89	12.72	13.23	13.42	2.53
A-3(97)	103.2500	9.03	10.55	11.03	11.29	2.26	KK(47)	361.2625	11.02	12.79	13.26	13.39	2.37
A-2(98)	109.2750						LL(48)	367.2625	10.60	12.37	12.69	12.86	2.26
A-1(99)	115.2750						MM(49)	373.2625	11.68	13.60	13.69	13.82	2.14
A(14)	121.2625	9.06	10.57	11.12	11.34	2.28	NN(50)	379.2625	10.13	12.23	13.55	13.74	3.61
B(15)	127.2625	8.98	10.53	11.09	11.24	2.26	OO(51)	385.2625	10.23	11.90	13.38	13.57	3.34
C(16)	133.2625	9.61	11.15	11.70	11.93	2.32	PP(52)	391.2625	9.86	11.64	12.89	13.02	3.16
D(17)	139.2500						QQ(53)	397.2625	11.09	12.87	13.43	12.36	2.34
E(18)	145.2500	8.83	10.38	10.99	11.21	2.38	RR(54)	403.2500	11.21	13.24	12.96	13.55	2.34
F(19)	151.3210	9.40	11.00	11.58	11.80	2.4	SS(55)	409.2500					
G(20)	157.2500						TT(56)	415.2500	9.30	11.25	11.74	11.98	2.68
H(21)	163.2500	9.52	11.21	11.73	11.96	2.44	UU(57)	421.2500	9.21	11.34	11.80	12.01	2.8
I(22)	169.2500	9.49	11.13	11.64	11.88	2.39	VV(58)	427.2500	9.00	11.08	11.66	11.84	2.84
7	175.2500	9.65	11.37	11.85	12.10	2.45	WW(59)	433.2500	8.79	10.89	11.45	11.66	2.87
8	181.2500	10.01	11.74	12.27	12.49	2.48	XX(60)	439.2500	9.09	11.19	11.81	12.03	2.94
9	187.2500	9.71	11.49	11.98	12.24	2.53	YY(61)	445.2500	9.26	11.34	11.97	12.24	2.98
10	193.2500	9.68	11.39	11.93	12.15	2.47	ZZ(62)	451.2500	9.05	11.10	11.88	12.13	3.08
11	199.2500	10.41	12.11	12.61	12.86	2.45	63	457.2500	8.80	11.01	11.62	11.91	3.11
12	205.2500	10.01	11.60	12.10	12.35	2.34	64	463.2500					
13	211.2500	9.60	11.15	11.66	11.93	2.33	65	469.2500	9.48	11.71	12.40	12.60	3.12
J(23)	217.2500	9.09	10.88	11.37	11.61	2.52	66	475.2500	9.13	11.41	12.06	12.32	3.19
K(24)	223.2500	9.07	10.78	11.26	11.52	2.45	67	481.2500					
L(25)	229.2625	9.17	10.77	11.24	11.51	2.34	68	487.2500	9.32	11.69	12.39	12.62	3.3
M(26)	235.2625	9.05	10.75	11.24	11.46	2.41	69	493.2500	9.00	11.35	11.98	12.20	3.2
N(27)	241.2625	9.02	10.73	11.27	11.53	2.51	70	499.2500	8.84	11.21	11.86	12.11	3.27
O(28)	247.2625	9.37	11.15	11.63	11.90	2.53	71	505.2500					
P(29)	253.2625	9.23	11.07	11.57	11.80	2.57	72	511.2500					
Q(30)	259.2625	9.07	10.88	11.32	11.65	2.58	73	517.2500					
R(31)	265.2625	9.56	11.41	11.91	12.21	2.65	74	523.2500					
S(32)	271.2625	9.26	11.03	11.53	11.85	2.59	75	529.2500					
T(33)	277.2625	9.46	11.14	11.67	11.92	2.46	76	535.2500					
U(34)	283.2625	9.30	11.01	11.63	11.87	2.57	77	541.2500					
V(35)	289.2625	10.21	11.96	12.36	12.55	2.34	78	547.2500					
W(36)	295.2625	10.16	12.04	11.90	12.14	1.98	79	553.2500					
AA(37)	301.2625						80	559.2500					
BB(38)	307.2625	10.67	12.40	12.98	13.47	2.8	81	565.2500					
CC(39)	313.2625	10.71	12.51	13.17	13.41	2.7							

Max Non Adjacent Channel Level Diff	:- 4.73
Max Adjacent Channel Level Diff	:- 1.55
Max Variance from last proof of performance test	:- 7.25
Date of last proof of performance test	:- 01/26/2013

Note :- Make measurements through a 100 ft. test drop cable without a converter

TIME WARNER CABLE - SYRACUSE DIVISION

System Name	:	Rome
System Test Point #	:	6
Hub Name	:	Oneida
Location	:	Brownell Rd
Map Number	:	392-5656
Pole Number	:	14&1/2
D.T. Value	:	17/4
OR Number	:	ON065
GNA Cascade	:	5
LE Cscade	:	2

TESTPOINT 6, PAGE 2

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL
VISUAL / AURAL LEVEL DIFFERENCE
(at Test Point, at the end of a 100' Drop)

System Name	: Rome	***Test Location***	: Brownell Rd
Date	: 07/22/2013	***Time***	: 12:03:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	9.11	-2.26		11.37	DD (40)	319.2625	10.73	-3.98		14.71
3	61.2500	10.98	-2.45		13.43	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	10.92	-3.61		14.53	FF (42)	331.2750	9.84	-4.45		14.29
5	77.2500	10.32	-4.68		15	GG (43)	337.2625	9.66	-4.50		14.16
6	83.2500	9.38	-5.28		14.66	HH (44)	343.2625	9.74	-5.01		14.75
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	9.73	-4.76		14.49
A-4 (96)	97.2500	9.67	-4.80		14.47	JJ (46)	355.2625	9.45	-5.16		14.61
A-3 (97)	103.2500	9.30	-4.88		14.18	KK (47)	361.2625	9.04	-5.54		14.58
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	9.11	-4.45		13.56
A-1 (99)	115.2750	N/A	N/A		N/A	MM (49)	373.2625	11.06	-3.50		14.56
A (14)	121.2625	9.66	-4.55		14.21	NN (50)	379.2625	10.65	-4.13		14.78
B (15)	127.2625	9.70	-4.63		14.33	OO (51)	385.2625	10.01	-4.61		14.62
C (16)	133.2625	10.24	-5.24		15.48	PP (52)	391.2625	9.61	-5.25		14.86
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	10.69	-4.66		15.35
E (18)	145.2500	9.47	-5.29		14.76	RR (54)	403.2500	10.36	-4.88		15.24
F (19)	151.3210	9.77	-4.36		14.13	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	9.01	-5.16		14.17
H (21)	163.2500	10.22	-3.20		13.42	UU (57)	421.2500	8.89	-5.39		14.28
I (22)	169.2500	10.44	-3.30		13.74	VV (58)	427.2500	8.75	-5.18		13.93
7	175.2500	10.21	-4.11		14.32	WW (59)	433.2500	9.06	-5.59		14.65
8	181.2500	10.66	-3.80		14.46	XX (60)	439.2500	9.28	-4.44		13.72
9	187.2500	10.26	-3.74		14	YY (61)	445.2500	9.66	-4.28		13.94
10	193.2500	10.37	-2.69		13.06	ZZ (62)	451.2500	9.60	-4.05		13.65
11	199.2500	11.96	-4.38		16.34	63	457.2500	9.55	-4.38		13.93
12	205.2500	10.59	-4.47		15.06	64	463.2500	N/A	N/A		N/A
13	211.2500	9.94	-4.56		14.5	65	469.2500	10.20	-3.50		13.7
J (23)	217.2500	10.00	-3.86		13.86	66	475.2500	10.29	-3.63		13.92
K (24)	223.2500	11.20	-5.73		16.93	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	11.20	-5.26		16.46	68	487.2500	10.55	-3.40		13.95
M (26)	235.2625	9.26	-4.01		13.27	69	493.2500	10.57	-3.61		14.18
N (27)	241.2625	10.25	-3.86		14.11	70	499.2500	10.32	-4.17		14.49
O (28)	247.2625	10.71	-4.31		15.02	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	10.50	-5.93		16.43	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	8.31	-5.59		13.9	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	9.86	-4.65		14.51	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	10.70	-4.50		15.2	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	11.21	-2.75		13.96	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	11.03	-3.14		14.17	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	11.57	-2.91		14.48	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	11.40	-3.09		14.49	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	11.06	-3.47		14.53	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	10.80	-3.41		14.21						

Min Channel	:	Q(30)	8.310
Max Channel	:	11	11.960
Peak to Valley	:	3.65	

TESTPOINT 6, PAGE 3

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL RESPONSE TEST
CARRIER - TO - NOISE TEST
COHERENT DISTURBANCES TEST
LOW FREQUENCY DISTURBANCES TEST

System Name : Rome ***Date*** : 07/19/2013

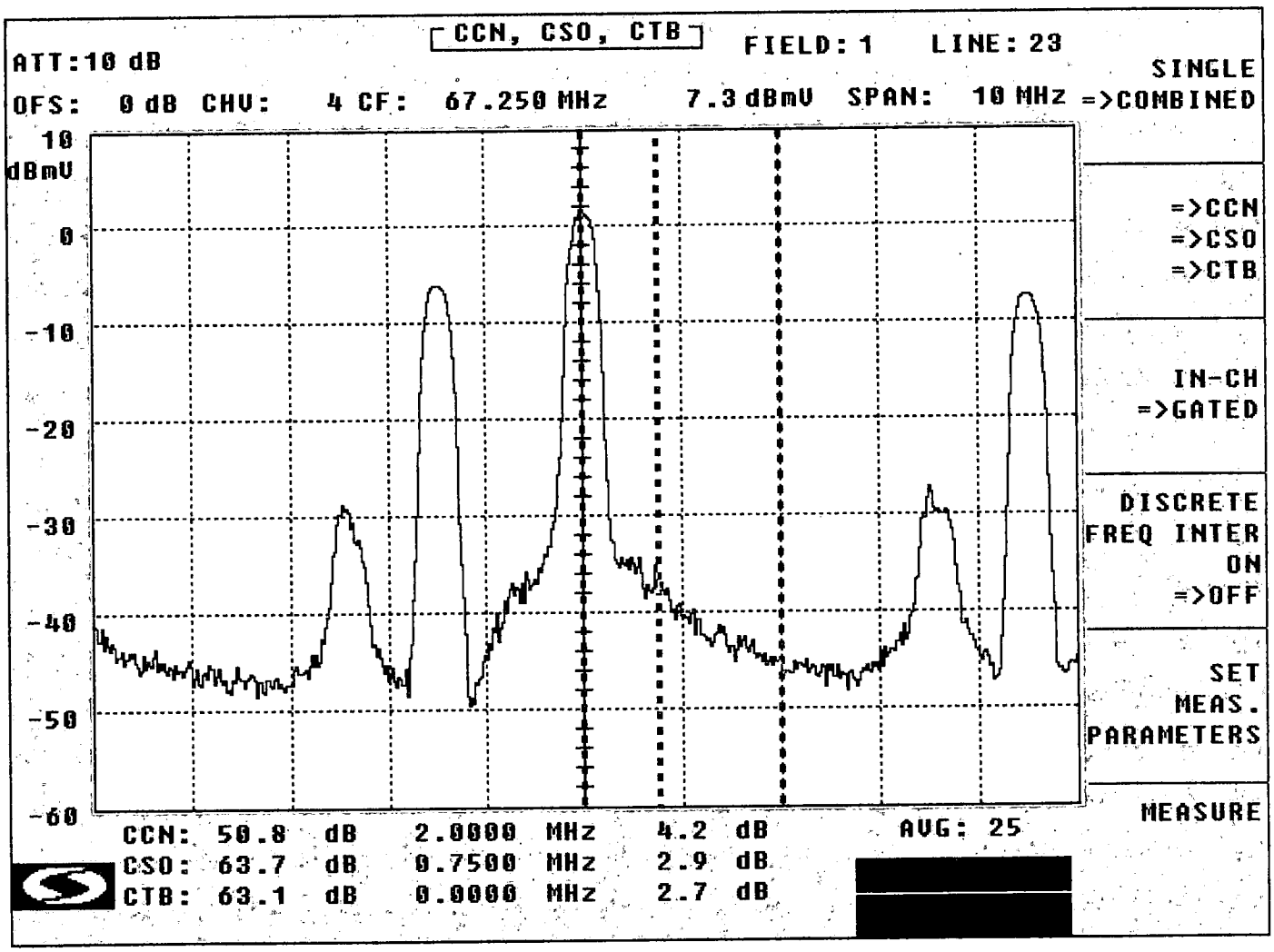
Performed By : Peter Grocholski

Location : Brownell Rd

Note: Make Measurements through a 100 ft. test drop cable without converter.

CHANNEL NUMBER	IN CHANNEL RESPONSE	CARRIER TO NOISE RATIO	DISTORTIONS	CSO	HUM
	(+/- DB)	(DB)	(-DBC) CTB		(%)
4	1	50.8	63.1	63.7	
13	.65	49.2	62.1	62.5	
21	.7	48.2	62.5	62.5	
27	.6	47.6	61.9	62.9	
35	.9	48.3	61.3	63.2	
44	.95	47.1	60.5	60.5	.2
52	1	47.7	60.9	61.7	
63	.7	48.9	61.2	62.2	
70	.95	47.9	60.9	61.5	

SUNRISE TELECOM BROADBAND 07.19.13 11:56:18



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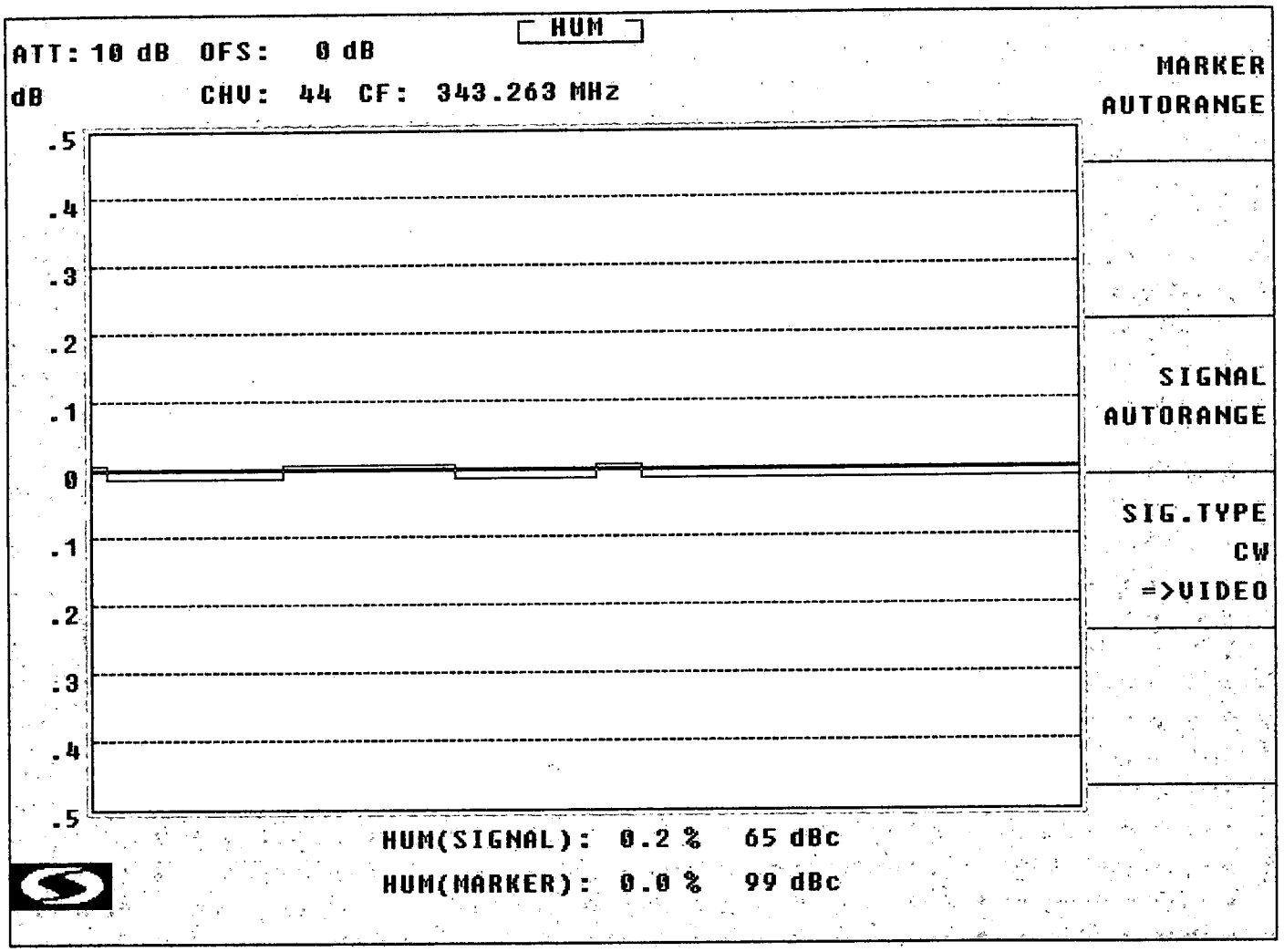

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL FREQUENCY RESPONSE TEST
(76.605) (a) (6)

System Name : Rome ***Date*** : 07/19/2013

Performed By : Peter Grocholski

Location : Brownell Rd

(SEE THE ATTACHED SWEEP TRACES)

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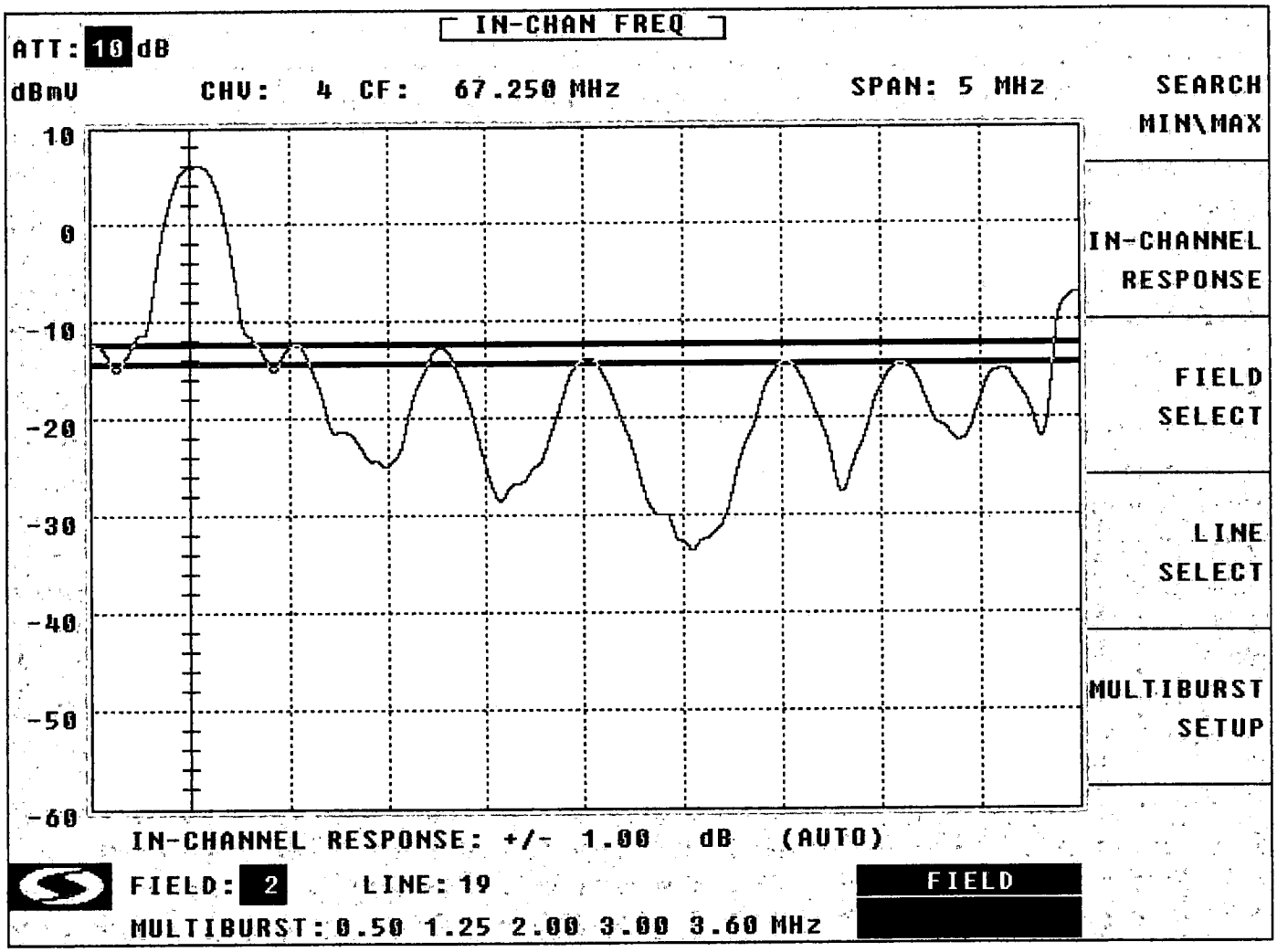

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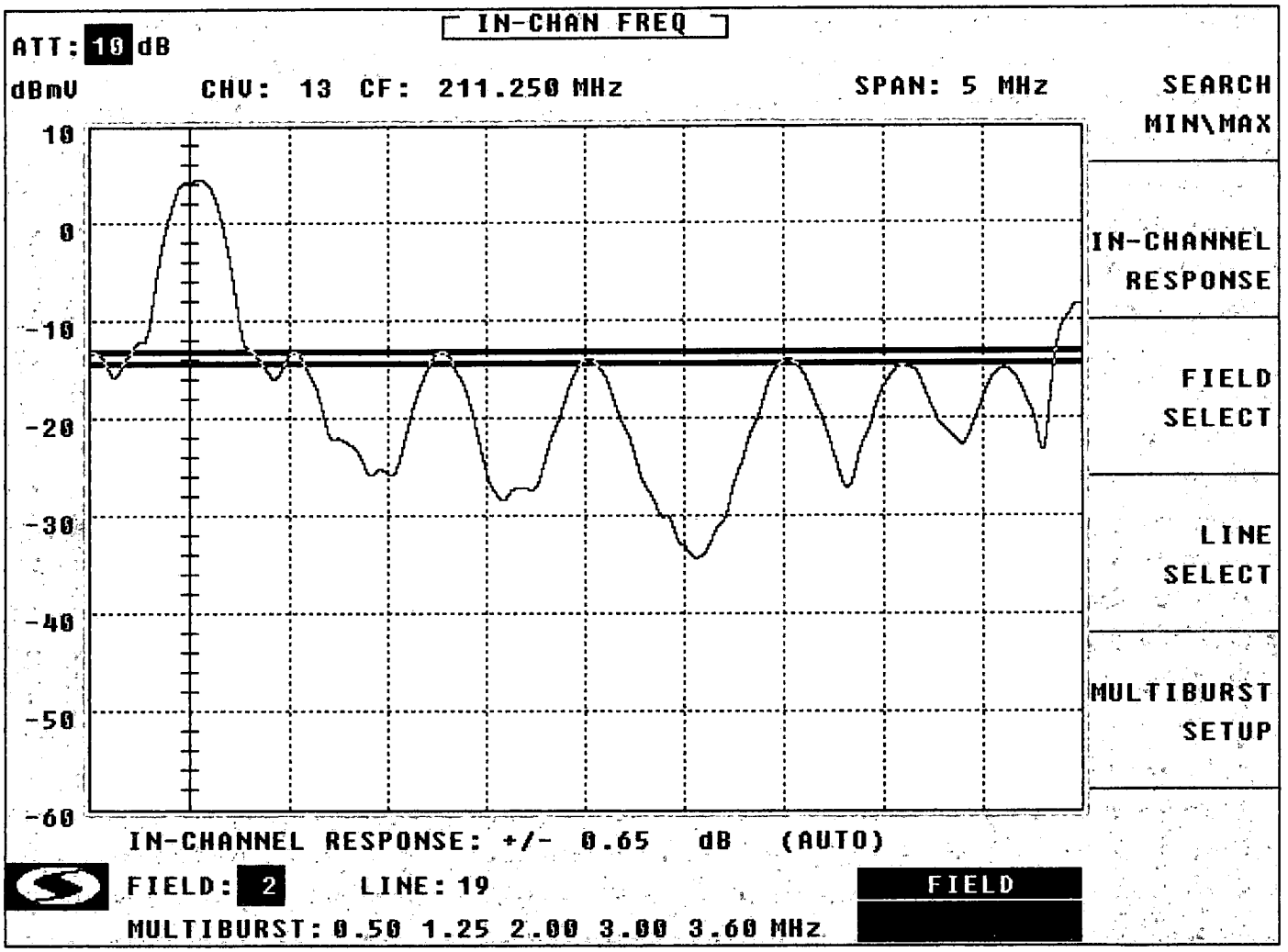

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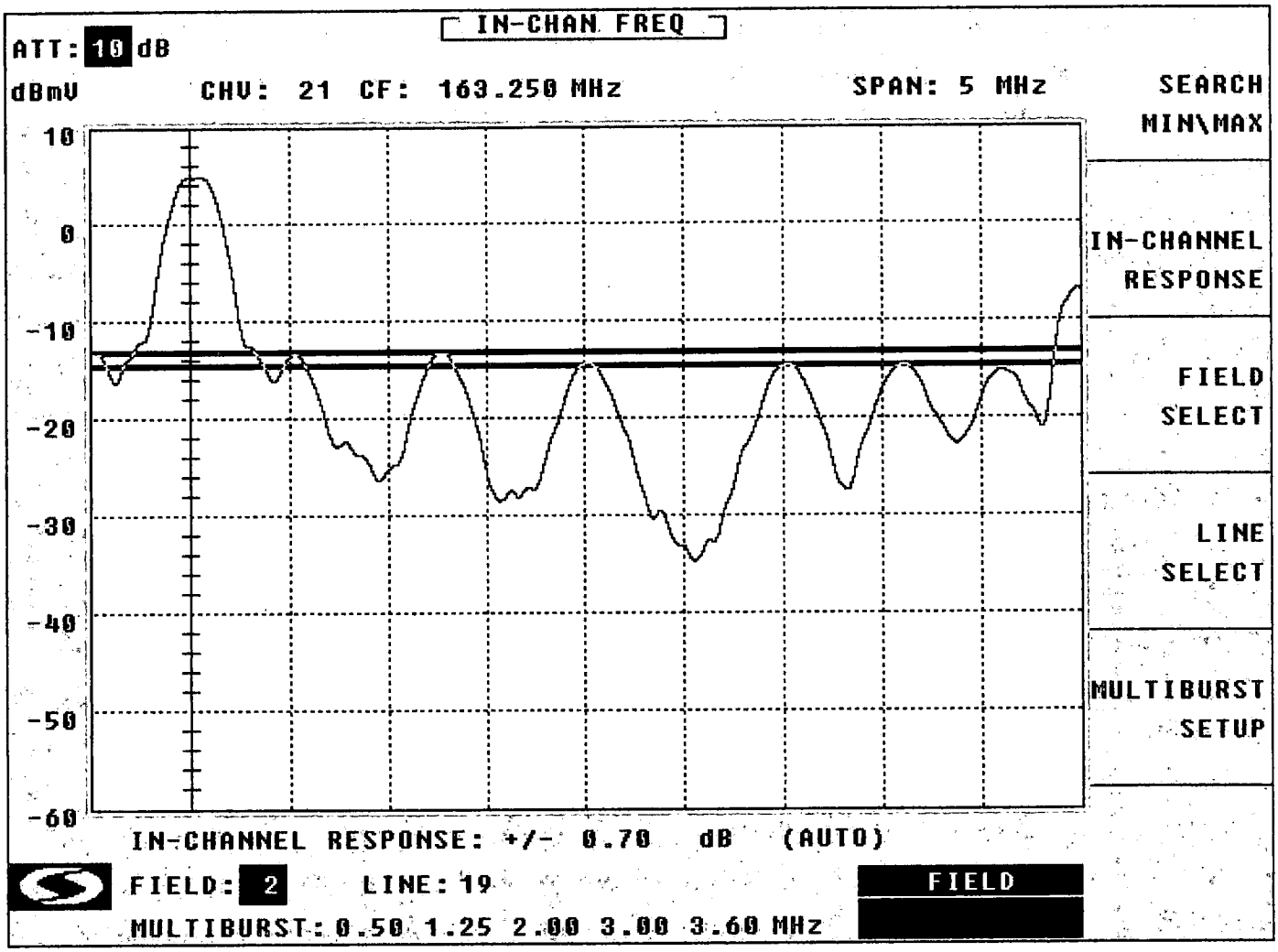

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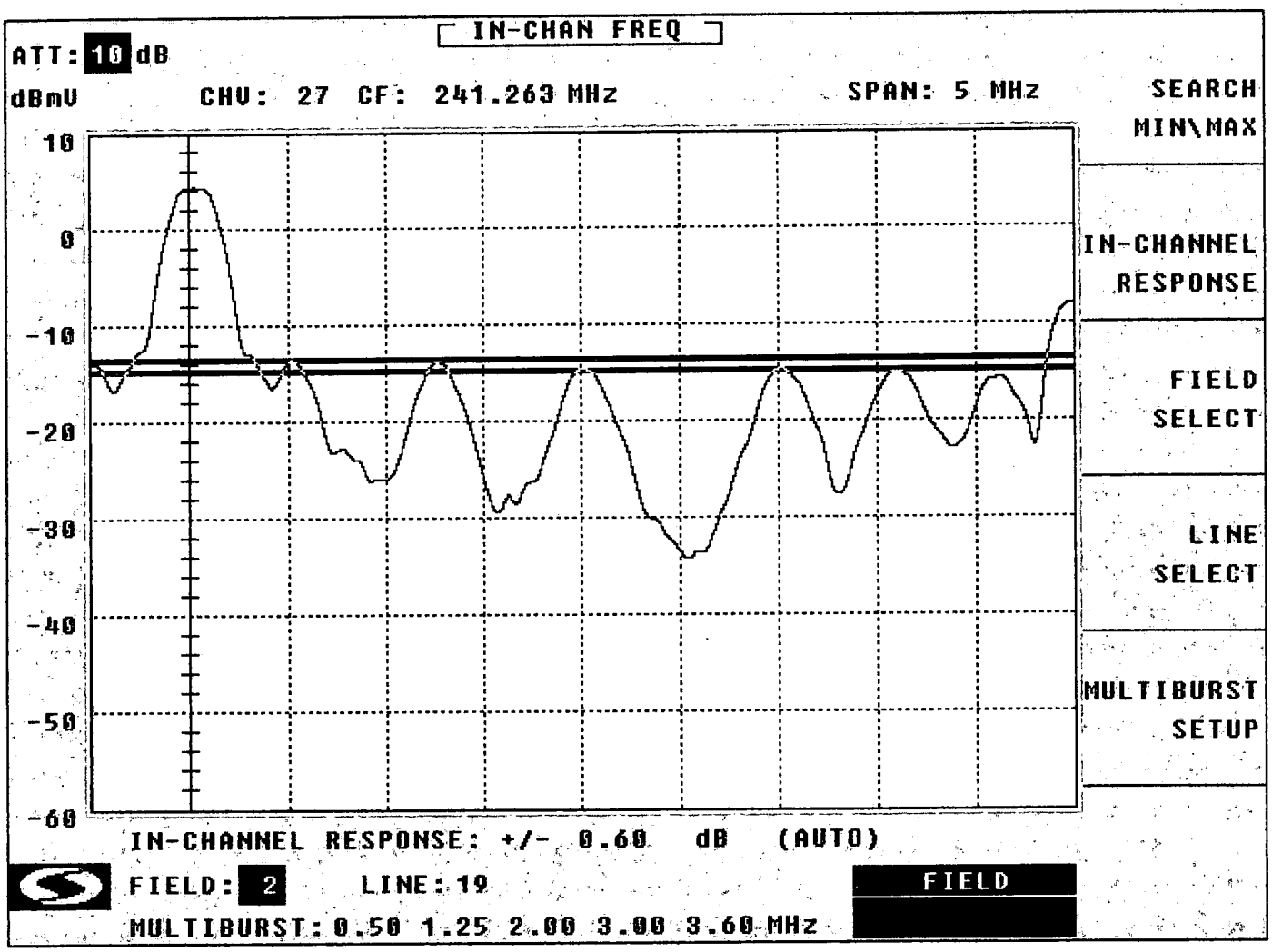

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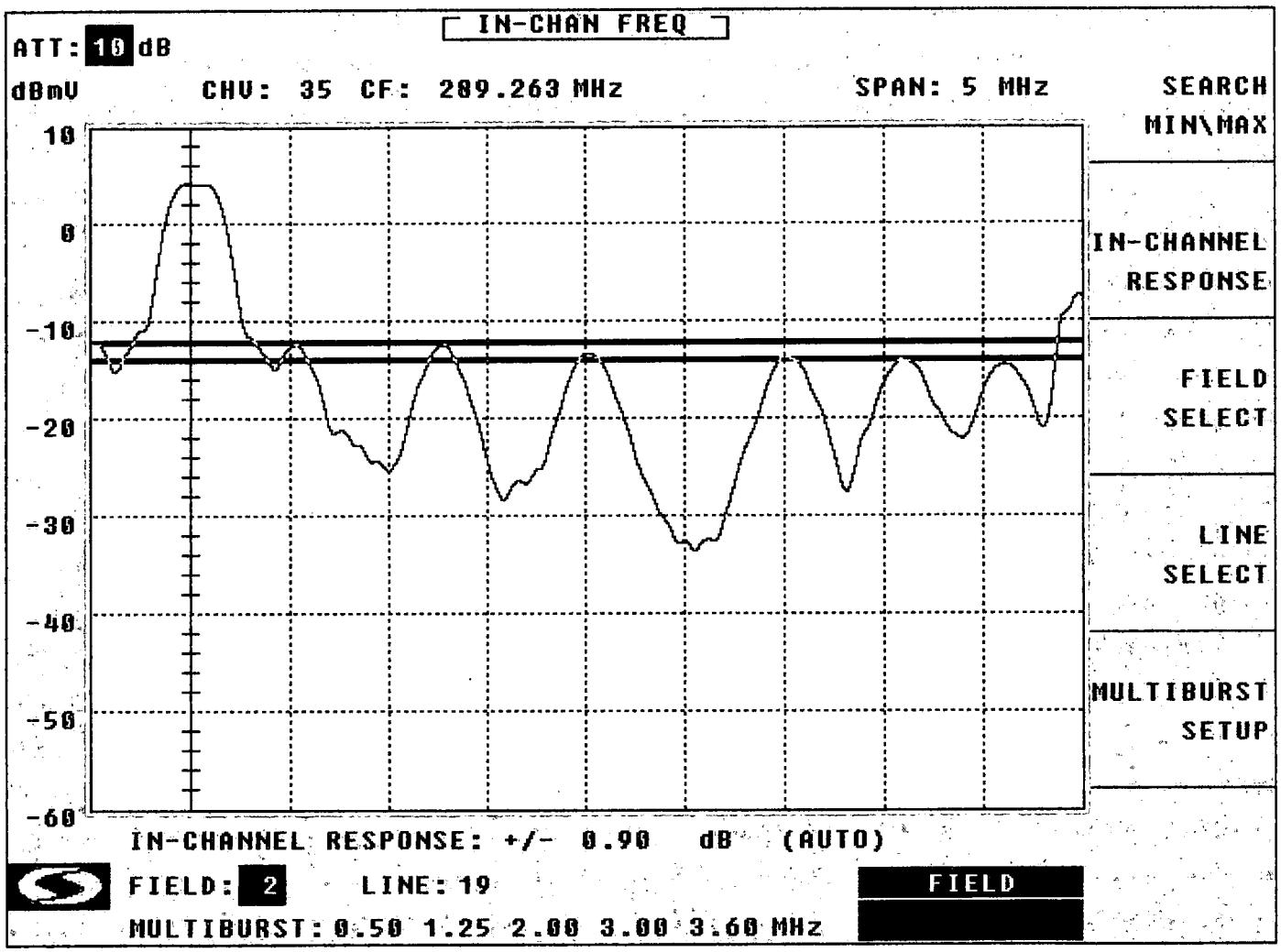

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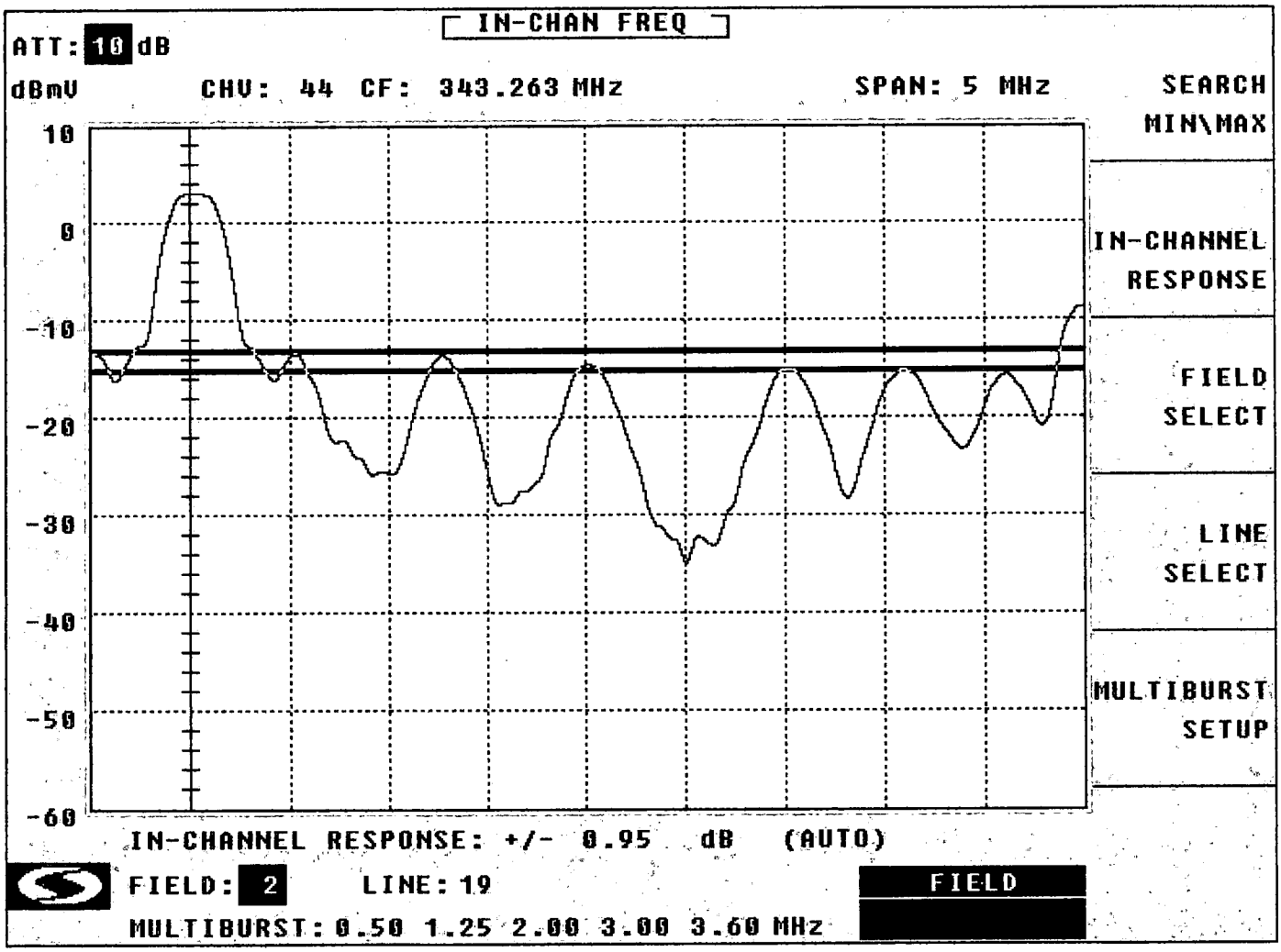

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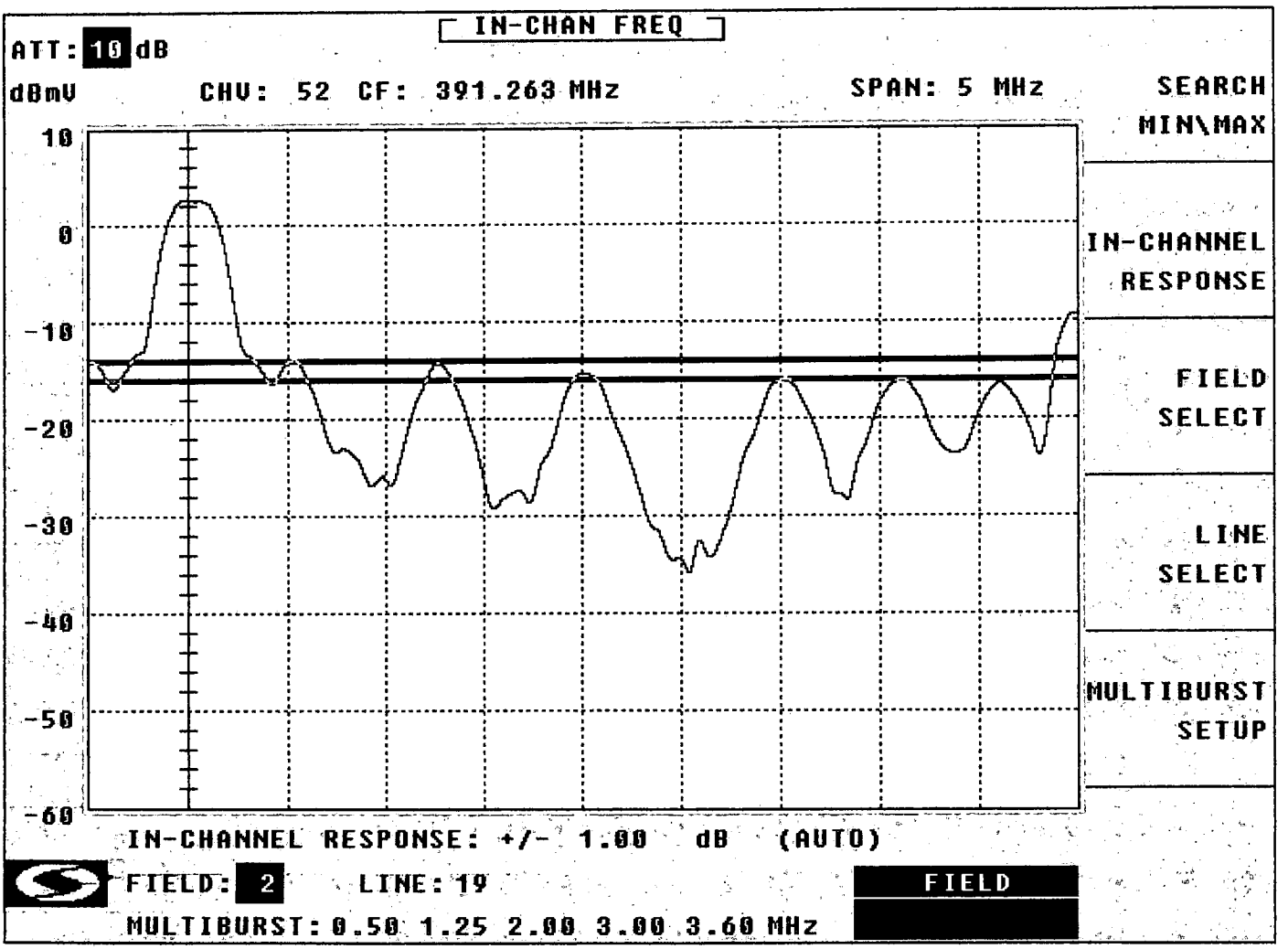

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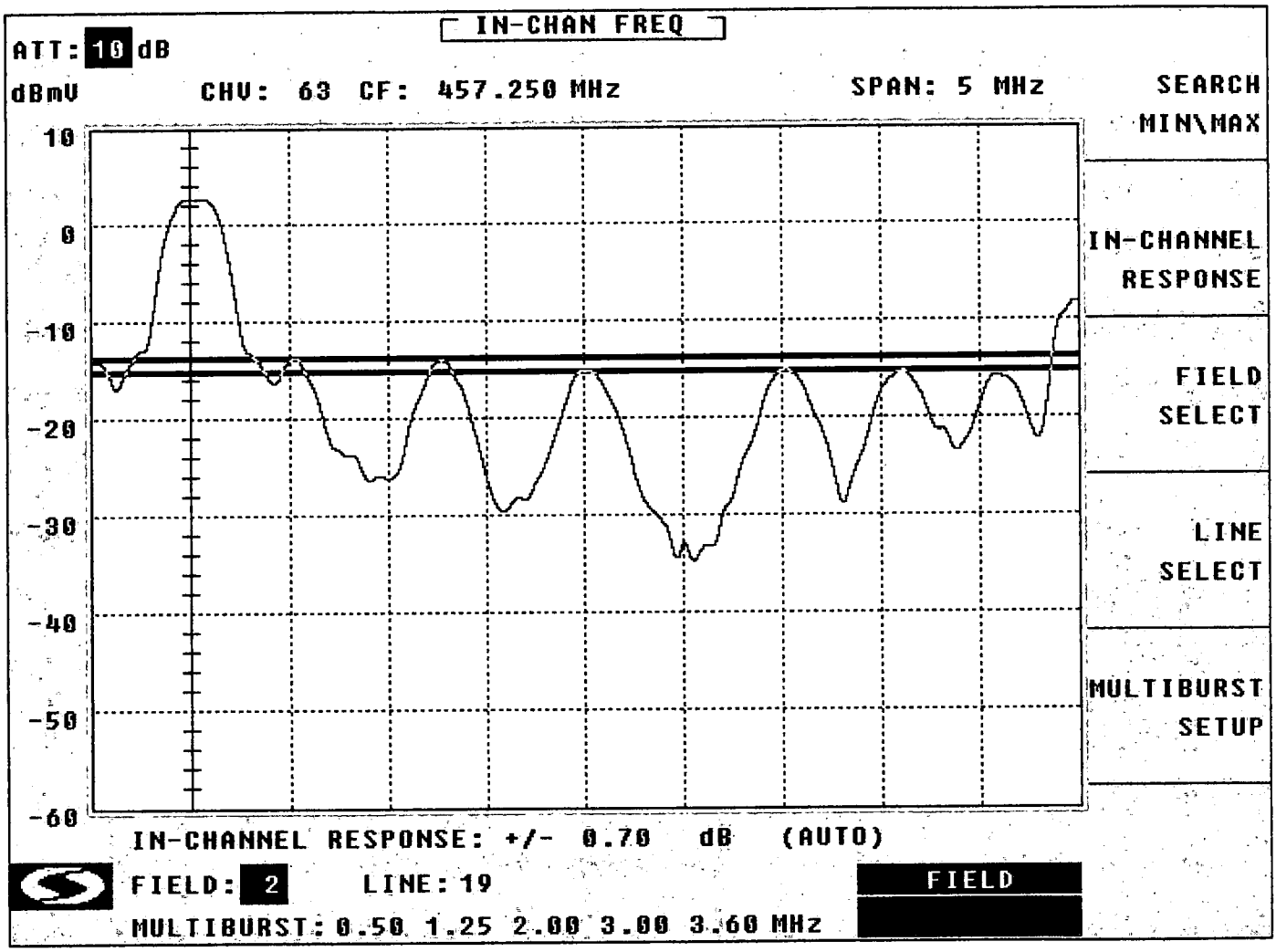

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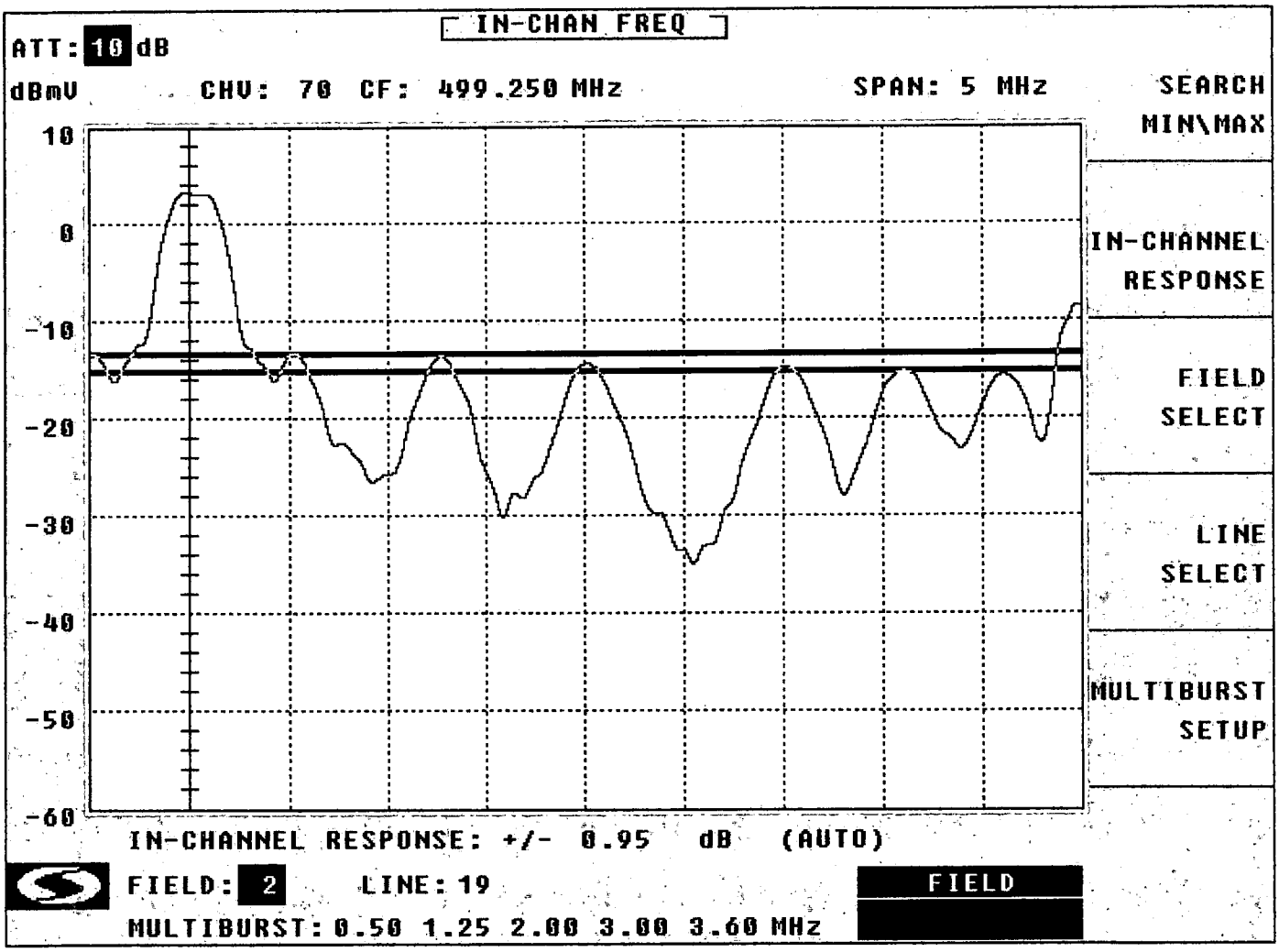


TESTPOINT 6, PAGE 5

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL VARIATION TEST

System Name	: Rome	***Test Location***	: Brownell Rd
Date	: 07/22/2013	***Performed By***	: Frank Servedio
Meter Serial Number	: 232191		

		TEMP F							*TEMP F*				
		82.00	75.00	65.00	60.00				82.00	75.00	65.00	60.00	
		TIME							*TIME*				
		12:03:00	18:03:00	00:03:00	06:03:00				12:03:00	18:03:00	00:03:00	06:03:00	
CHAN	*FREQ (MHZ)*	*VISUAL LEVEL (DBMV)*				*MAX VAR*	*CHAN*	*FREQ (MHZ)*	*VISUAL LEVEL (DBMV)*				*MAX VAR*
2	55.2500	9.11	9.84	10.52	11.05	1.94	DD(40)	319.2625	10.73	11.11	11.67	11.82	1.09
3	61.2500	10.98	11.65	12.36	12.86	1.88	EE(41)	325.2625					
4	67.2500	10.92	11.58	12.17	12.60	1.68	FF(42)	331.2750	9.84	10.16	10.63	10.77	0.93
5	77.2500	10.32	11.01	11.73	12.20	1.88	GG(43)	337.2625	9.66	10.19	10.79	10.92	1.26
6	83.2500	9.38	10.47	11.25	11.71	2.33	HH(44)	343.2625	9.74	10.20	10.79	10.93	1.19
A-5(95)	91.2500						II(45)	349.2625	9.73	10.14	10.73	10.95	1.22
A-4(96)	97.2500	9.67	10.43	10.96	11.58	1.91	JJ(46)	355.2625	9.45	9.99	10.58	10.78	1.33
A-3(97)	103.2500	9.30	9.85	10.94	11.16	1.86	KK(47)	361.2625	9.04	9.59	10.22	10.45	1.41
A-2(98)	109.2750						LL(48)	367.2625	9.11	9.34	9.96	10.09	0.98
A-1(99)	115.2750						MM(49)	373.2625	11.06	11.68	12.37	12.25	1.31
A(14)	121.2625	9.66	9.32	10.30	10.88	1.56	NN(50)	379.2625	10.65	11.21	11.93	12.34	1.69
B(15)	127.2625	9.70	9.81	9.50	10.33	0.83	OO(51)	385.2625	10.01	10.41	11.17	11.41	1.4
C(16)	133.2625	10.24	10.63	9.96	10.04	0.67	PP(52)	391.2625	9.61	9.99	10.70	10.91	1.3
D(17)	139.2500						QQ(53)	397.2625	10.69	11.03	11.71	11.90	1.21
E(18)	145.2500	9.47	9.92	10.20	10.33	0.86	RR(54)	403.2500	10.36	10.71	11.33	11.59	1.23
F(19)	151.3210	9.77	10.32	10.82	11.13	1.36	SS(55)	409.2500					
G(20)	157.2500						TT(56)	415.2500	9.01	9.45	10.06	10.23	1.22
H(21)	163.2500	10.22	10.57	11.05	11.21	0.99	UU(57)	421.2500	8.89	9.30	9.88	10.05	1.16
I(22)	169.2500	10.44	10.87	11.29	11.63	1.19	VV(58)	427.2500	8.75	9.16	9.86	10.04	1.29
7	175.2500	10.21	10.55	11.07	11.38	1.17	WW(59)	433.2500	9.06	9.48	9.92	10.23	1.17
8	181.2500	10.66	11.04	11.48	11.73	1.07	XX(60)	439.2500	9.28	9.68	10.20	10.41	1.13
9	187.2500	10.26	10.65	11.15	11.41	1.15	YY(61)	445.2500	9.66	10.11	10.67	10.99	1.33
10	193.2500	10.37	10.82	11.62	11.71	1.34	ZZ(62)	451.2500	9.60	10.07	10.61	10.92	1.32
11	199.2500	11.96	11.79	12.05	12.56	0.77	63	457.2500	9.55	10.04	10.52	10.83	1.28
12	205.2500	10.59	10.89	11.39	11.68	1.09	64	463.2500					
13	211.2500	9.94	10.34	10.91	11.20	1.26	65	469.2500	10.20	10.72	11.30	11.45	1.25
J(23)	217.2500	10.00	10.46	10.99	11.18	1.18	66	475.2500	10.29	10.82	11.42	11.48	1.19
K(24)	223.2500	11.20	11.73	12.32	12.57	1.37	67	481.2500					
L(25)	229.2625	11.20	11.40	11.74	11.06	0.68	68	487.2500	10.55	11.09	11.76	11.74	1.21
M(26)	235.2625	9.26	9.78	10.29	10.55	1.29	69	493.2500	10.57	11.15	11.83	11.79	1.26
N(27)	241.2625	10.25	10.63	11.14	11.38	1.13	70	499.2500	10.32	11.00	11.60	11.63	1.31
O(28)	247.2625	10.71	11.05	11.66	11.87	1.16	71	505.2500					
P(29)	253.2625	10.50	11.33	11.78	11.86	1.36	72	511.2500					
Q(30)	259.2625	8.31	8.61	8.98	9.15	0.84	73	517.2500					
R(31)	265.2625	9.86	9.82	10.45	10.80	0.98	74	523.2500					
S(32)	271.2625	10.70	10.87	11.30	11.62	0.92	75	529.2500					
T(33)	277.2625	11.21	11.39	11.95	12.04	0.83	76	535.2500					
U(34)	283.2625	11.03	11.33	11.93	12.20	1.17	77	541.2500					
V(35)	289.2625	11.57	11.95	12.62	12.71	1.14	78	547.2500					
W(36)	295.2625	11.40	11.85	12.44	12.59	1.19	79	553.2500					
AA(37)	301.2625						80	559.2500					
BB(38)	307.2625	11.06	11.42	11.99	12.24	1.18	81	565.2500					
CC(39)	313.2625	10.80	11.24	11.77	11.96	1.16							

Max Non Adjacent Channel Level Diff	:- 3.71
Max Adjacent Channel Level Diff	:- 2.8
Max Variance from last proof of performance test	:- 7.43
Date of last proof of performance test	:- 01/26/2013

Note :- Make measurements through a 100 ft. test drop cable without a converter

TIME WARNER CABLE - SYRACUSE DIVISION

System Name	:	Rome
System Test Point #	:	7
Hub Name	:	Madison
Location	:	Augusta Rd
Map Number	:	503-5590
Pole Number	:	41
D.T. Value	:	11/2
OR Number	:	MD001
GNA Cascade	:	6
LE Cscade	:	1

TESTPOINT 7, PAGE 2

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL
VISUAL / AURAL LEVEL DIFFERENCE
(at Test Point, at the end of a 100' Drop)

System Name	: Rome	***Test Location***	: Augusta Rd
Date	: 07/23/2013	***Time***	: 09:20:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	9.57	-3.31		12.88	DD (40)	319.2625	10.70	-4.04		14.74
3	61.2500	10.63	-3.86		14.49	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	9.95	-4.23		14.18	FF (42)	331.2750	11.25	-3.26		14.51
5	77.2500	10.06	-3.71		13.77	GG (43)	337.2625	11.39	-2.50		13.89
6	83.2500	10.19	-4.49		14.68	HH (44)	343.2625	11.12	-3.07		14.19
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	10.78	-2.93		13.71
A-4 (96)	97.2500	10.63	-3.23		13.86	JJ (46)	355.2625	11.32	-2.91		14.23
A-3 (97)	103.2500	10.52	-3.29		13.81	KK (47)	361.2625	10.91	-3.52		14.43
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	10.37	-3.92		14.29
A-1 (99)	115.2750	N/A	N/A		N/A	MM (49)	373.2625	8.51	-5.29		13.8
A (14)	121.2625	10.45	-2.34		12.79	NN (50)	379.2625	8.04	-5.58		13.62
B (15)	127.2625	9.96	-2.55		12.51	OO (51)	385.2625	8.20	-3.80		12
C (16)	133.2625	10.15	-2.97		13.12	PP (52)	391.2625	10.20	-3.56		13.76
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	10.58	-3.50		14.08
E (18)	145.2500	9.73	-4.34		14.07	RR (54)	403.2500	10.44	-3.77		14.21
F (19)	151.3210	9.93	-5.02		14.95	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	10.50	-4.39		14.89
H (21)	163.2500	9.62	-5.29		14.91	UU (57)	421.2500	10.30	-4.03		14.33
I (22)	169.2500	8.75	-5.57		14.32	VV (58)	427.2500	10.77	-3.77		14.54
7	175.2500	8.39	-6.01		14.4	WW (59)	433.2500	11.02	-3.73		14.75
8	181.2500	9.75	-3.27		13.02	XX (60)	439.2500	10.17	-3.98		14.15
9	187.2500	9.45	-3.43		12.88	YY (61)	445.2500	10.70	-3.74		14.44
10	193.2500	9.79	-3.57		13.36	ZZ (62)	451.2500	11.07	-3.12		14.19
11	199.2500	10.05	-4.06		14.11	63	457.2500	11.42	-2.74		14.16
12	205.2500	9.71	-4.17		13.88	64	463.2500	N/A	N/A		N/A
13	211.2500	9.41	-4.35		13.76	65	469.2500	10.20	-2.93		13.13
J (23)	217.2500	9.24	-4.40		13.64	66	475.2500	10.75	-2.51		13.26
K (24)	223.2500	9.71	-4.41		14.12	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	10.62	-3.66		14.28	68	487.2500	11.78	-2.07		13.85
M (26)	235.2625	10.78	-3.76		14.54	69	493.2500	12.06	-1.93		13.99
N (27)	241.2625	10.67	-3.99		14.66	70	499.2500	12.46	-2.63		15.09
O (28)	247.2625	10.67	-4.27		14.94	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	9.74	-4.82		14.56	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	9.84	-4.46		14.3	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	9.80	-4.89		14.69	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	11.38	-5.41		16.79	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	8.98	-3.89		12.87	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	9.73	-3.84		13.57	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	9.70	-3.95		13.65	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	10.14	-3.82		13.96	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	9.96	-3.80		13.76	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	10.47	-3.76		14.23						

Min Channel	:	NN(50)	8.040
Max Channel	:	70	12.460
Peak to Valley	:	4.42	

TESTPOINT 7, PAGE 3

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL RESPONSE TEST
CARRIER - TO - NOISE TEST
COHERENT DISTURBANCES TEST
LOW FREQUENCY DISTURBANCES TEST

System Name : Rome ***Date*** : 7/19/2013

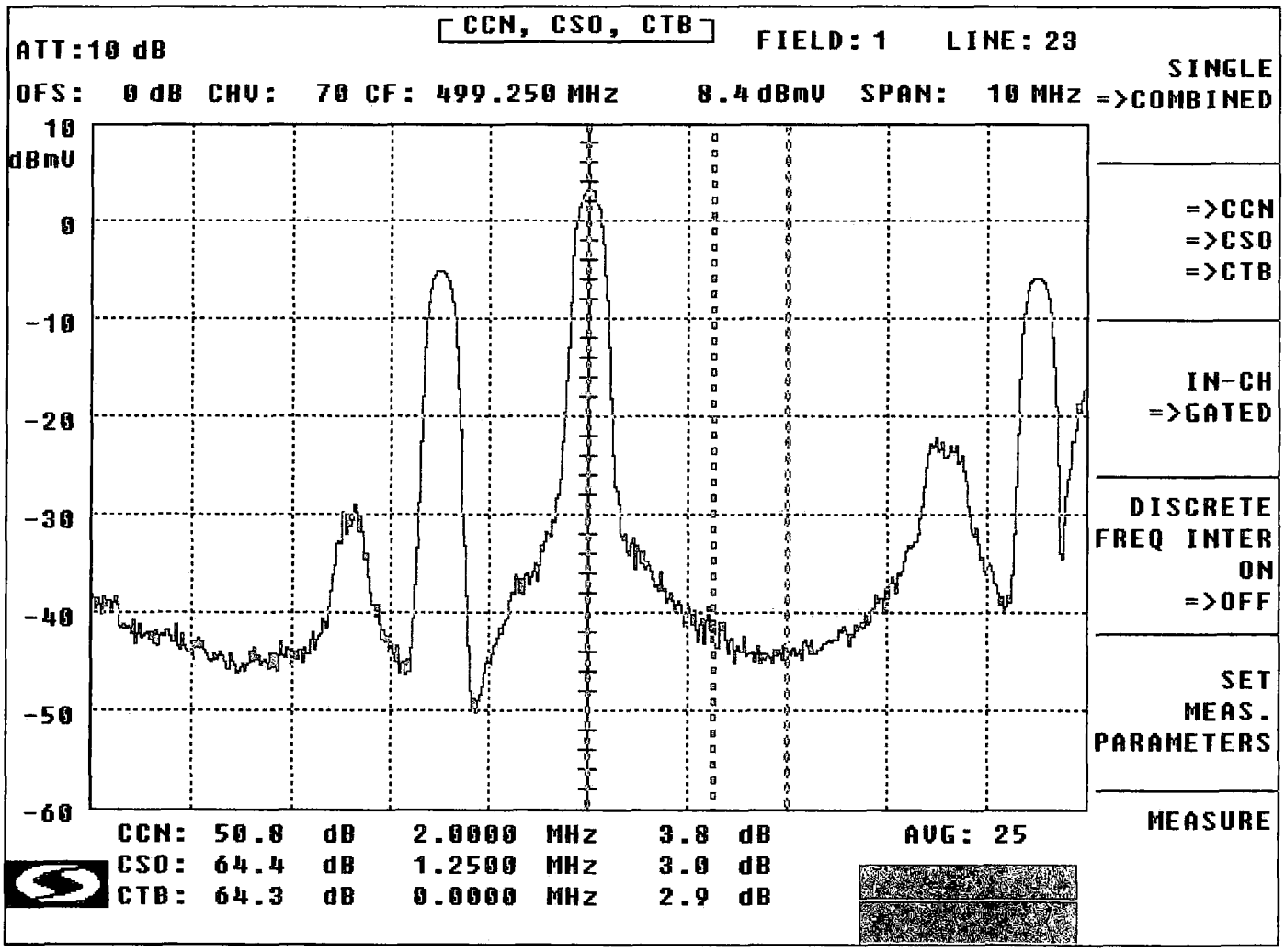
Performed By : Frank Servedio

Location : Augusta Rd

Note: Make Measurements through a 100 ft. test drop cable without converter.

CHANNEL NUMBER	IN CHANNEL RESPONSE	CARRIER TO NOISE RATIO	DISTORTIONS	CSO	HUM
	(+/- DB)	(DB)	(-DBC) CTB		(%)
4	.85	48.8	63.3	64.1	
13	.75	49.2	62.4	62.6	
21	.85	47.8	61.3	61.7	
27	.65	49.2	61	63.1	
35	.7	48.4	61	63.1	
44	.9	50.2	62	64.2	
52	.8	49.4	61	62.9	
63	.75	49.4	63.2	63.9	
70	1	50.8	64.3	64.4	.2

SUNRISE TELECOM BROADBAND 07.19.13 11:21:04



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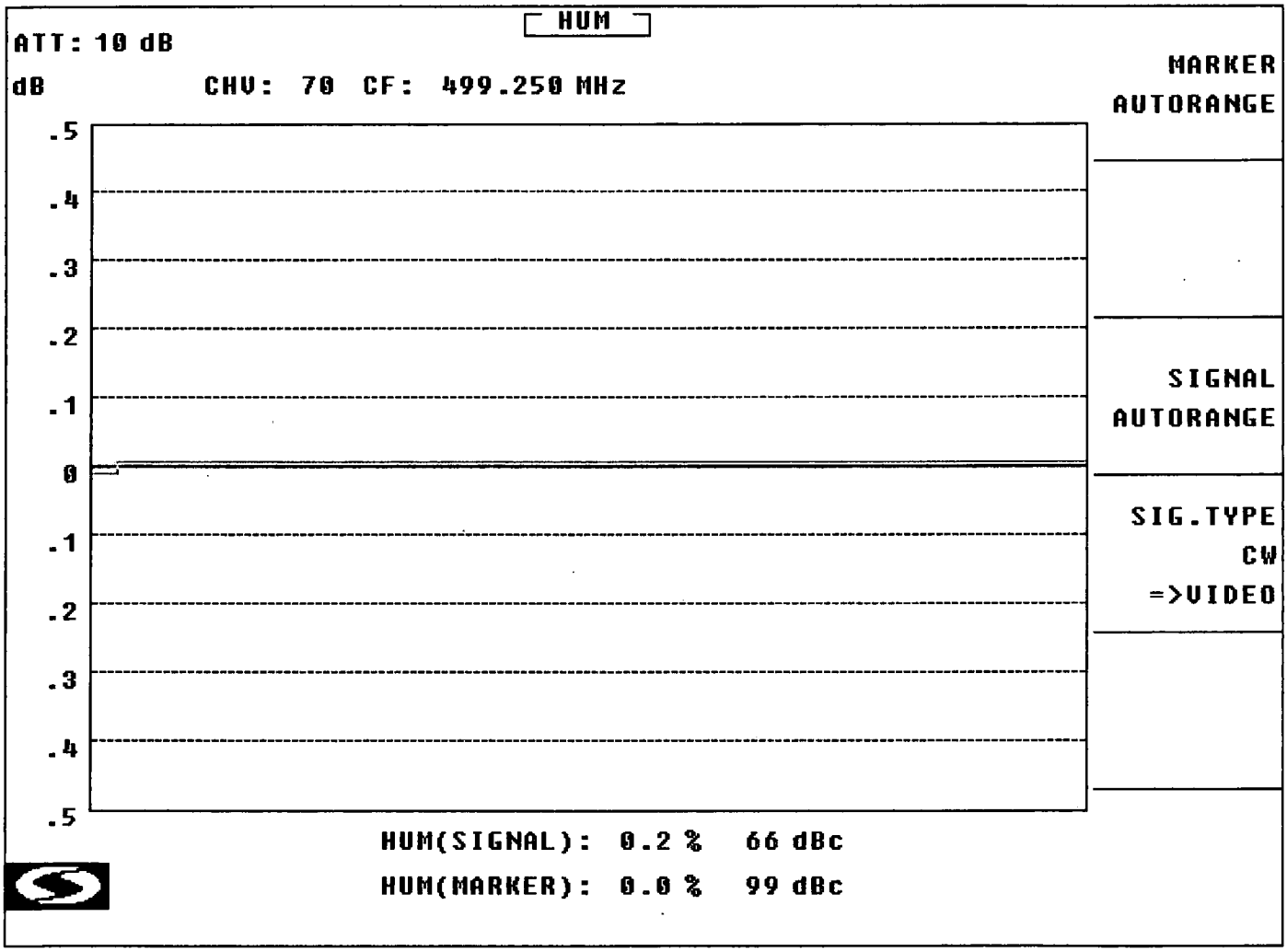


TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL FREQUENCY RESPONSE TEST
(76.605) (a) (6)

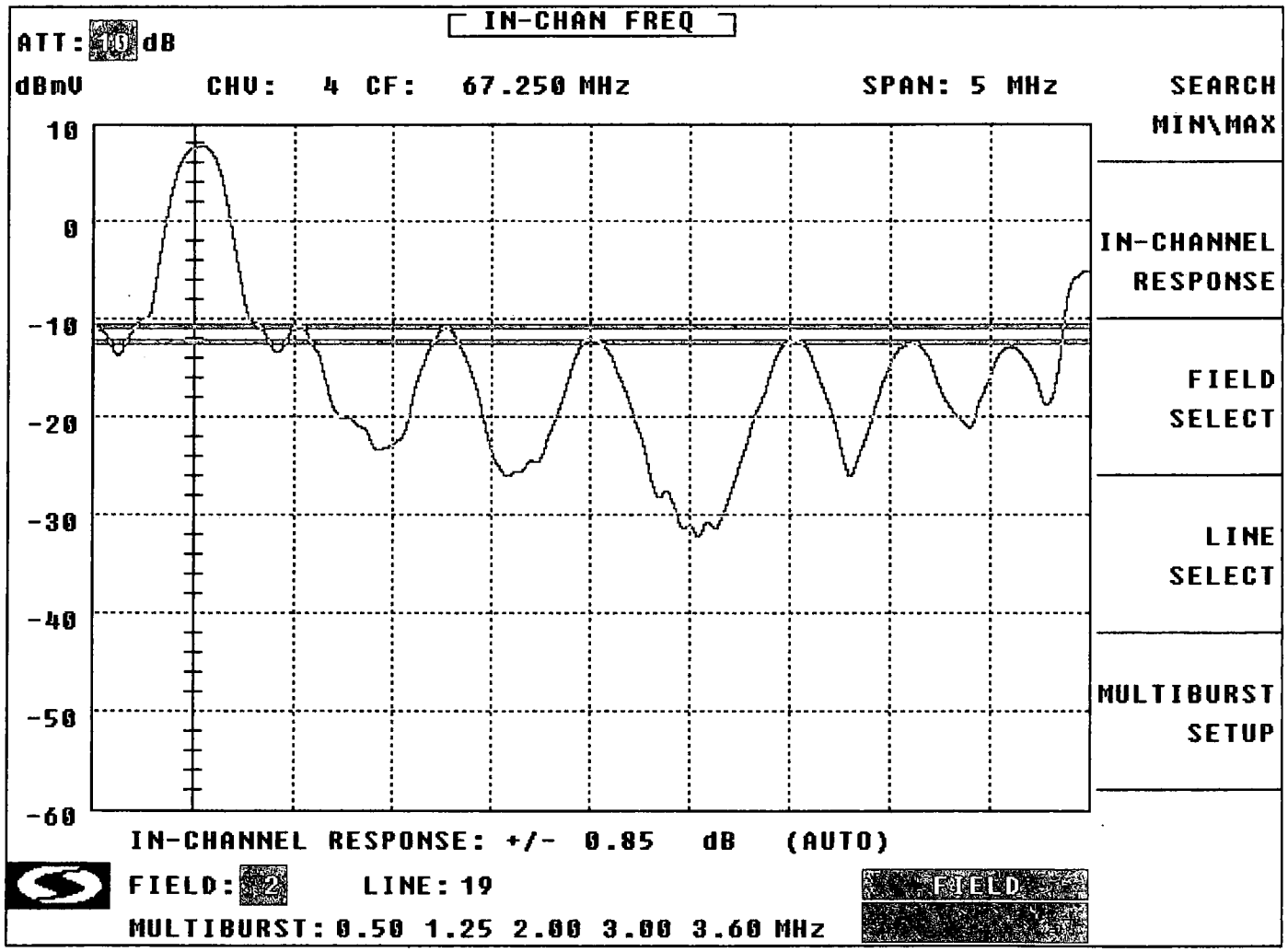
System Name : Rome ***Date*** : 7/19/2013

Performed By : Frank Servedio

Location : Augusta Rd

(SEE THE ATTACHED SWEEP TRACES)

SUNRISE TELECOM BROADBAND 07.19.13 10:55:52



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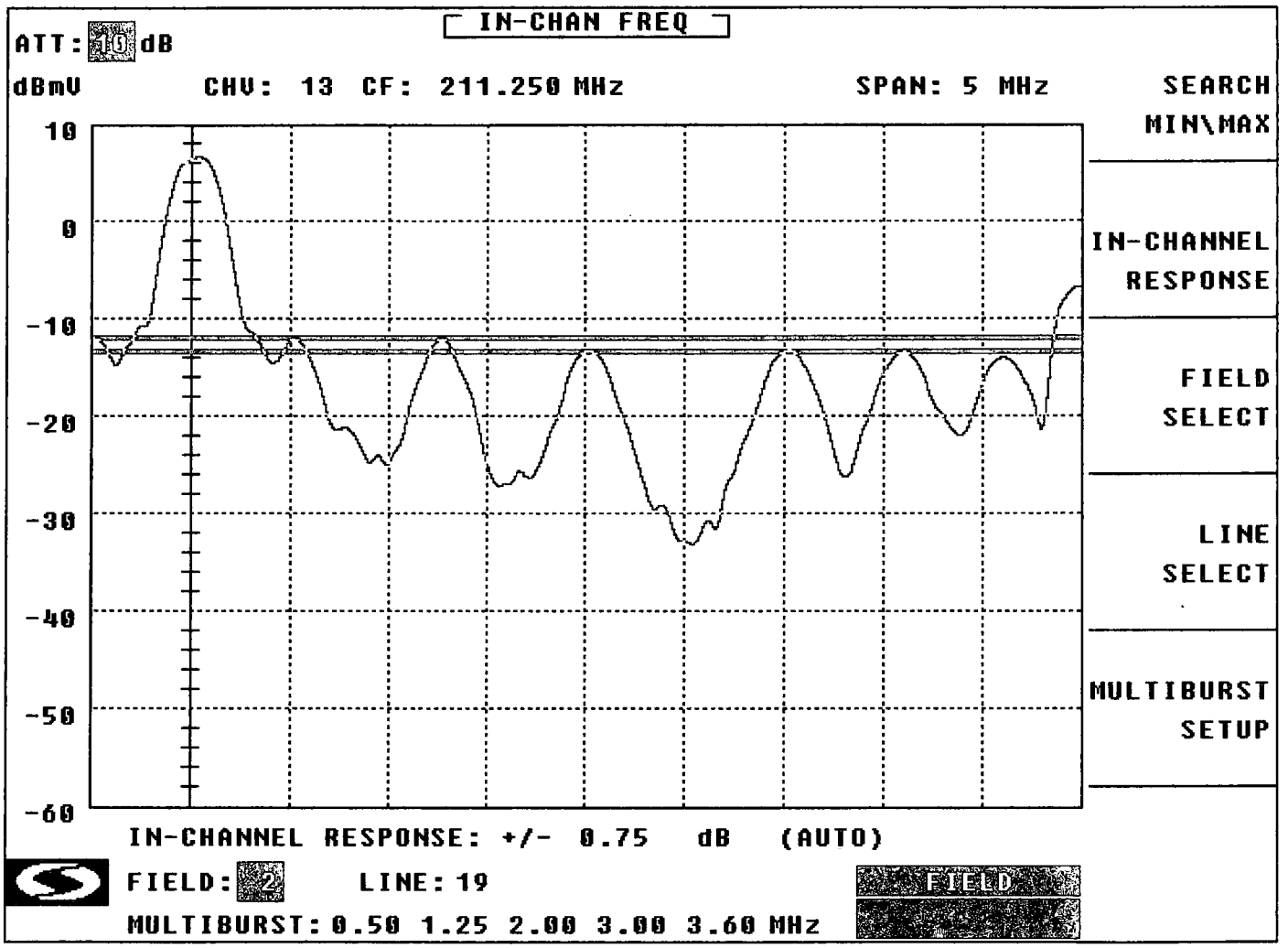

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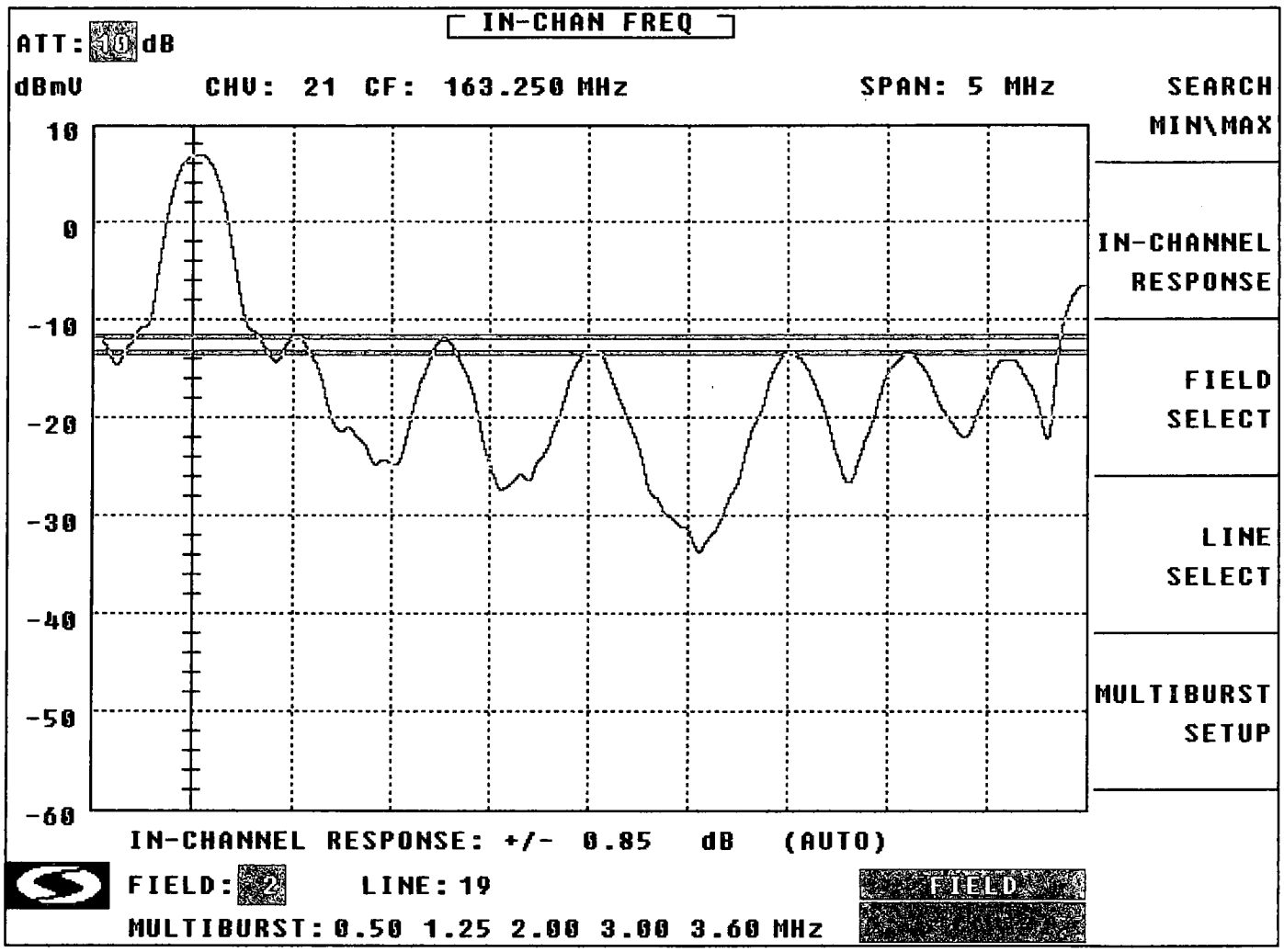

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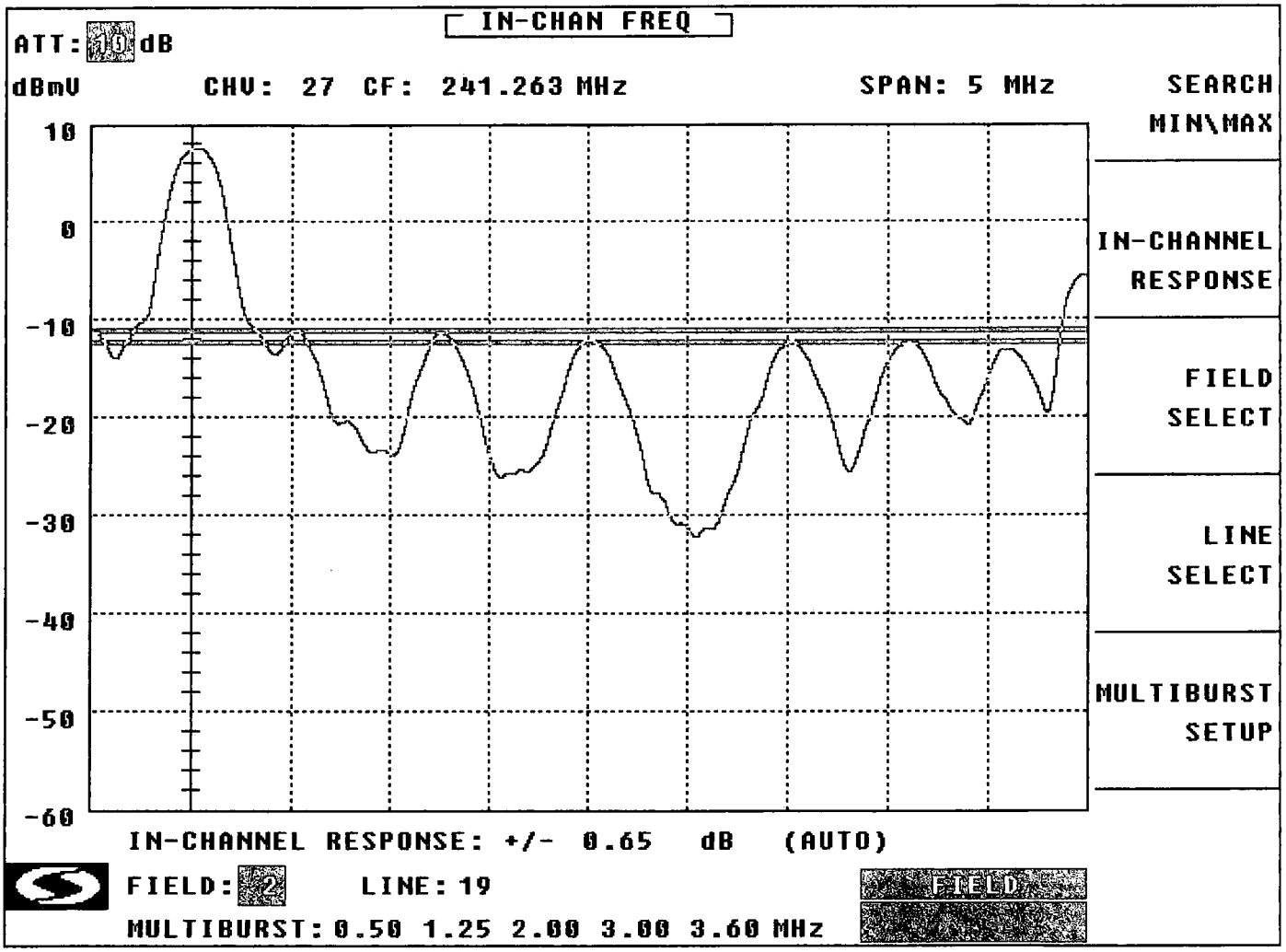

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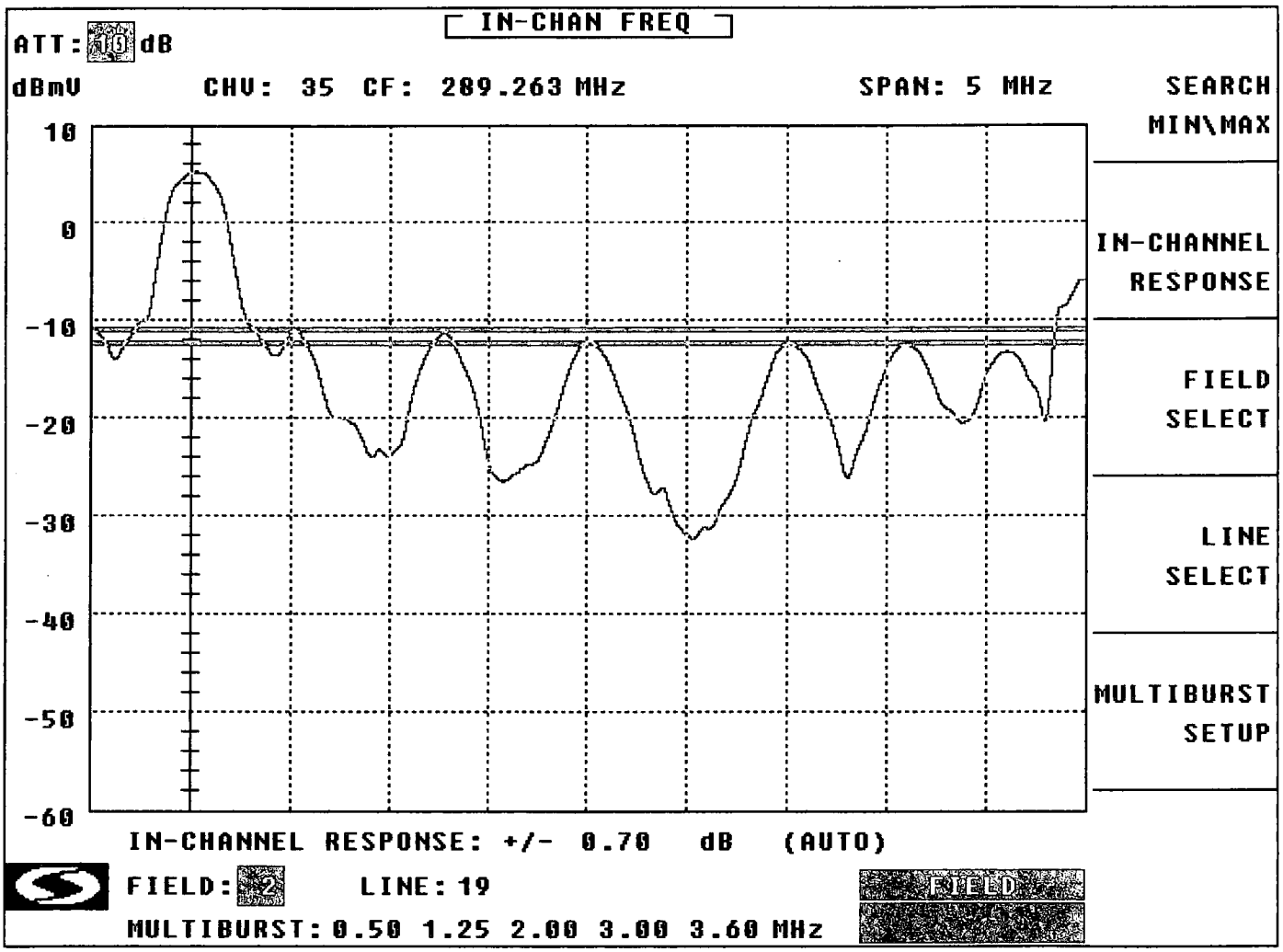

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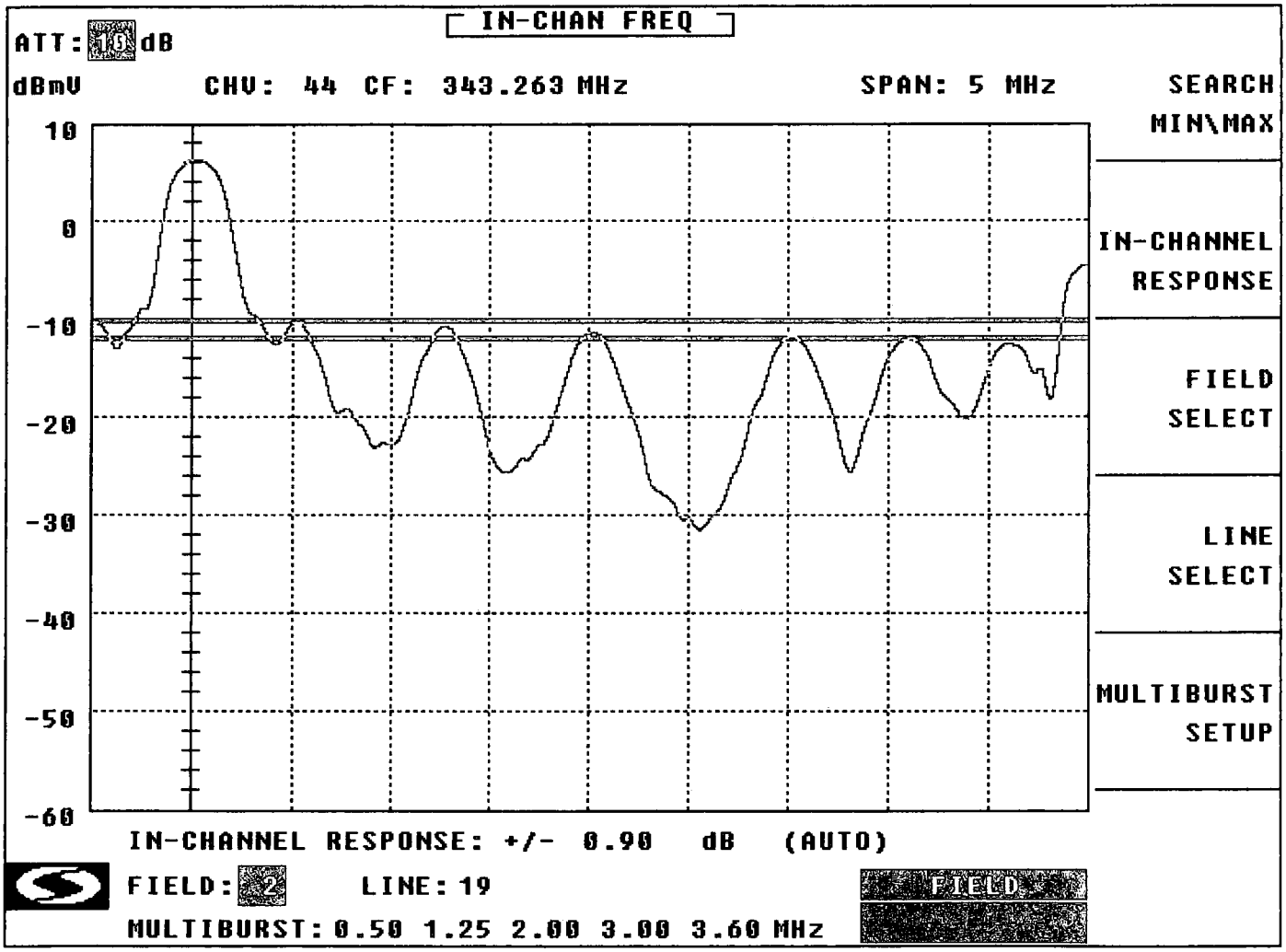

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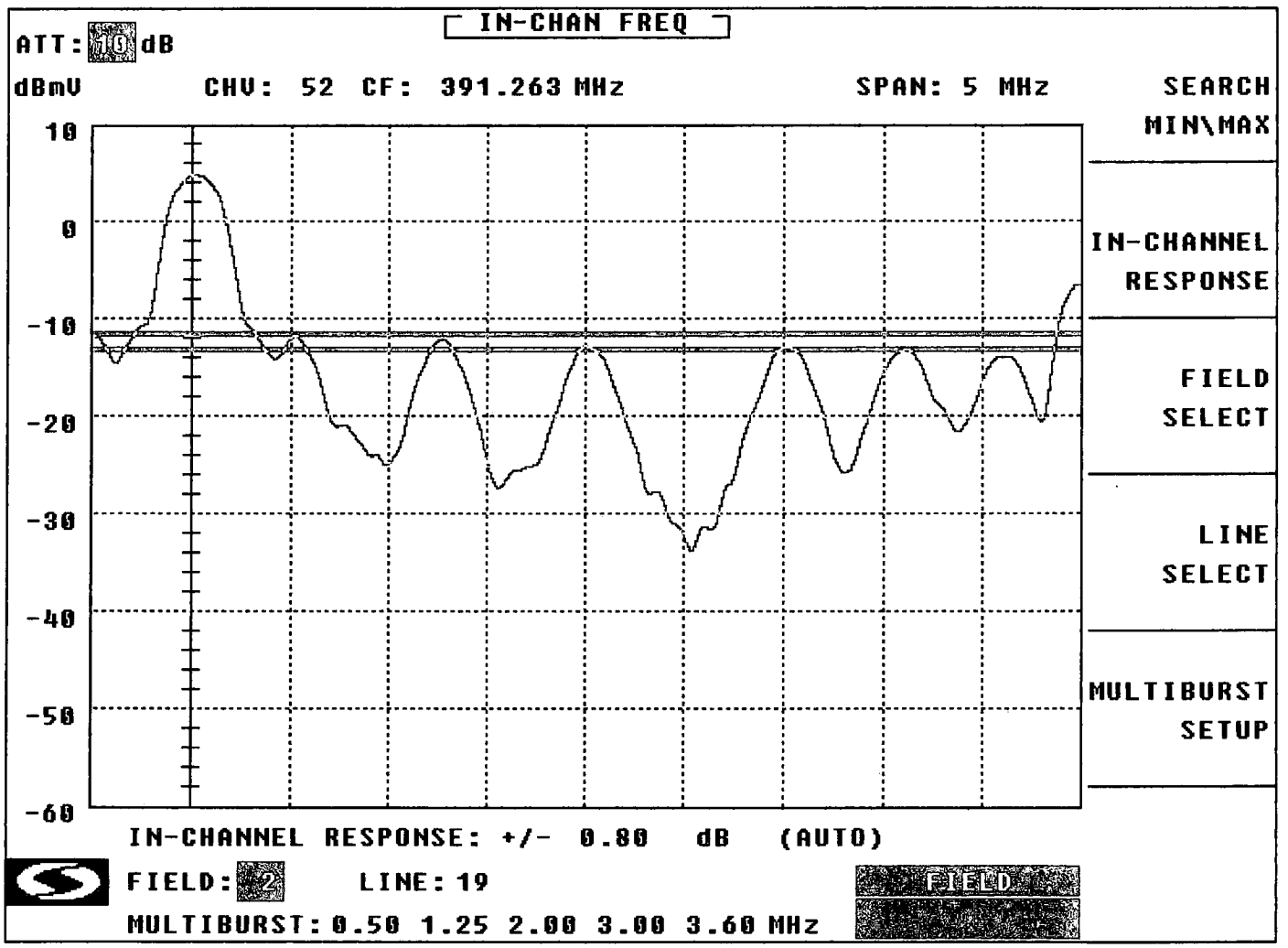

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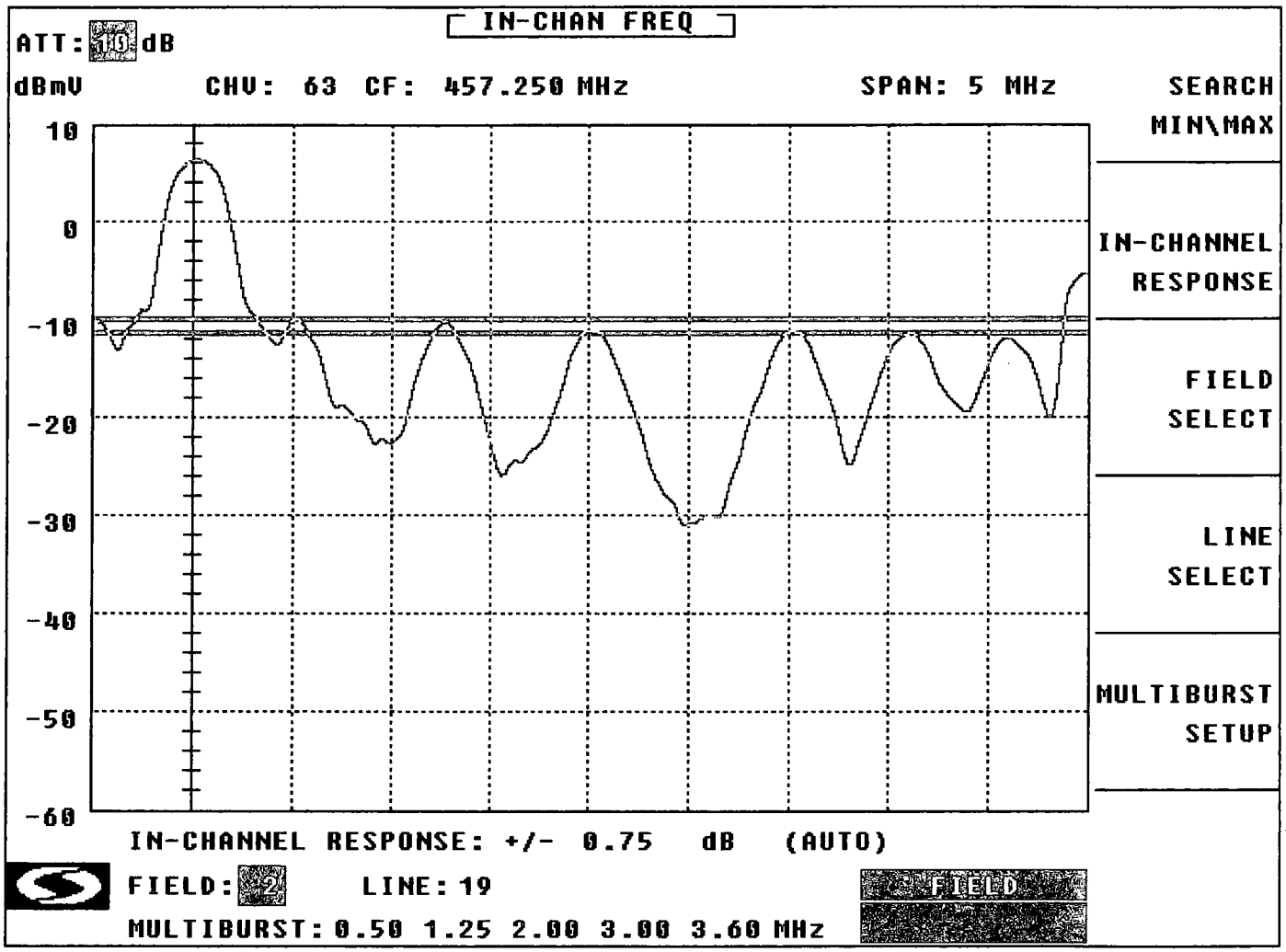
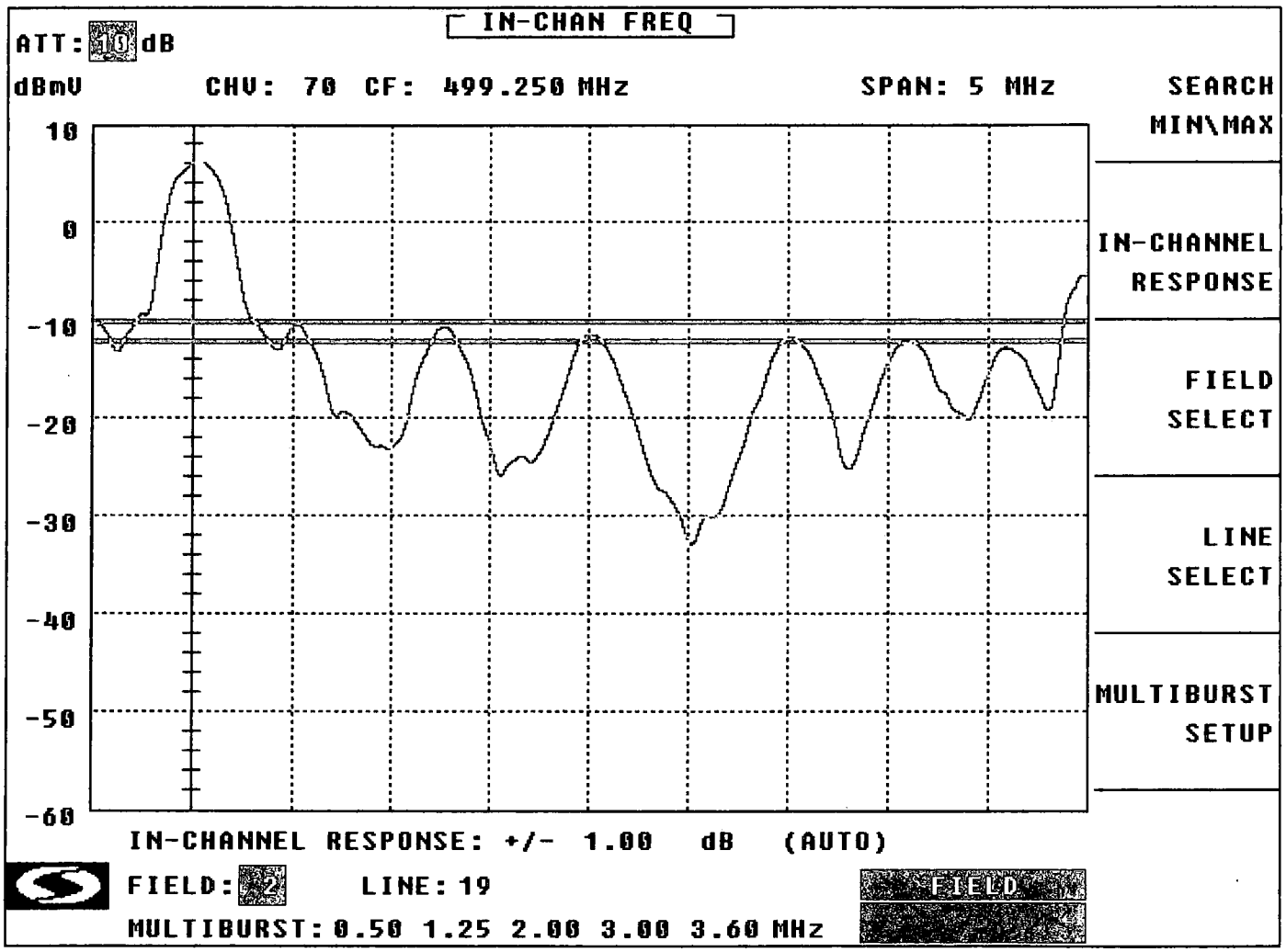


SUNRISE TELECOM BROADBAND 07.19.13 11:05:06



TESTPOINT 7, PAGE 5

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL VARIATION TEST

System Name	: Rome	***Test Location***	: Augusta Rd
Date	: 07/23/2013	***Performed By***	: Frank Servedio
Meter Serial Number	: 232634		

		TEMP F							*TEMP F*				
		85.00	93.00	79.00	71.00				85.00	93.00	79.00	71.00	
		TIME							*TIME*				
		09:20:00	15:20:00	21:20:00	03:20:00				09:20:00	15:20:00	21:20:00	03:20:00	
CHAN	*FREQ (MHZ)*	*VISUAL LEVEL (DBMV)*				*MAX VAR*	*CHAN*	*FREQ (MHZ)*	*VISUAL LEVEL (DBMV)*				*MAX VAR*
2	55.2500	9.57	9.37	11.31	11.95	2.58	DD(40)	319.2625	10.70	11.18	12.46	12.35	1.76
3	61.2500	10.63	10.59	12.40	12.91	2.32	EE(41)	325.2625					
4	67.2500	9.95	9.87	11.79	12.23	2.36	FF(42)	331.2750	11.25	11.86	13.10	12.93	1.85
5	77.2500	10.06	10.27	12.12	12.57	2.51	GG(43)	337.2625	11.39	11.86	13.25	13.08	1.86
6	83.2500	10.19	10.46	12.26	12.67	2.48	HH(44)	343.2625	11.12	11.68	13.17	13.05	2.05
A-5(95)	91.2500						II(45)	349.2625	10.78	11.34	12.84	12.79	2.06
A-4(96)	97.2500	10.63	10.93	12.66	12.93	2.3	JJ(46)	355.2625	11.32	11.85	13.35	13.31	2.03
A-3(97)	103.2500	10.52	10.88	12.59	12.94	2.42	KK(47)	361.2625	10.91	11.45	13.08	13.04	2.17
A-2(98)	109.2750						LL(48)	367.2625	10.37	10.88	12.58	12.58	2.21
A-1(99)	115.2750						MM(49)	373.2625	8.51	8.89	10.61	10.66	2.15
A(14)	121.2625	10.45	10.89	12.43	12.70	2.25	NN(50)	379.2625	8.04	8.34	10.27	10.39	2.35
B(15)	127.2625	9.96	10.25	11.87	12.11	2.15	OO(51)	385.2625	8.20	9.15	10.17	10.31	2.11
C(16)	133.2625	10.15	10.13	11.93	12.18	2.05	PP(52)	391.2625	10.20	10.88	11.88	11.12	1.68
D(17)	139.2500						QQ(53)	397.2625	10.58	10.96	12.23	12.20	1.65
E(18)	145.2500	9.73	10.88	11.66	10.40	1.93	RR(54)	403.2500	10.44	10.93	12.37	12.41	1.97
F(19)	151.3210	9.93	10.44	11.68	11.58	1.75	SS(55)	409.2500					
G(20)	157.2500						TT(56)	415.2500	10.50	10.99	12.21	12.19	1.71
H(21)	163.2500	9.62	10.15	11.60	11.64	2.02	UU(57)	421.2500	10.30	10.71	12.02	11.98	1.72
I(22)	169.2500	8.75	9.37	10.82	10.72	2.07	VV(58)	427.2500	10.77	11.20	12.43	12.41	1.66
7	175.2500	8.39	8.82	10.46	10.48	2.09	WW(59)	433.2500	11.02	11.47	12.84	12.80	1.82
8	181.2500	9.75	10.12	11.76	11.84	2.09	XX(60)	439.2500	10.17	10.64	11.99	11.97	1.82
9	187.2500	9.45	9.90	11.46	11.48	2.03	YY(61)	445.2500	10.70	11.23	12.53	12.56	1.86
10	193.2500	9.79	10.39	11.72	11.88	2.09	ZZ(62)	451.2500	11.07	11.58	13.03	13.14	2.07
11	199.2500	10.05	10.62	11.98	12.13	2.08	63	457.2500	11.42	11.97	13.38	13.52	2.1
12	205.2500	9.71	10.38	11.64	11.59	1.93	64	463.2500					
13	211.2500	9.41	9.88	11.24	10.90	1.83	65	469.2500	10.20	10.85	12.24	12.44	2.24
J(23)	217.2500	9.24	9.67	11.11	11.23	1.99	66	475.2500	10.75	11.26	12.66	12.83	2.08
K(24)	223.2500	9.71	10.09	11.55	11.63	1.92	67	481.2500					
L(25)	229.2625	10.62	10.98	12.29	12.41	1.79	68	487.2500	11.78	12.02	13.47	13.67	1.89
M(26)	235.2625	10.78	11.27	12.59	12.71	1.93	69	493.2500	12.06	12.21	13.69	13.84	1.78
N(27)	241.2625	10.67	11.14	12.50	12.60	1.93	70	499.2500	12.46	12.63	14.09	14.14	1.68
O(28)	247.2625	10.67	11.08	12.52	12.48	1.85	71	505.2500					
P(29)	253.2625	9.74	10.29	11.80	11.85	2.11	72	511.2500					
Q(30)	259.2625	9.84	10.52	12.01	12.01	2.17	73	517.2500					
R(31)	265.2625	9.80	10.52	11.99	12.01	2.21	74	523.2500					
S(32)	271.2625	11.38	10.25	11.70	11.76	1.51	75	529.2500					
T(33)	277.2625	8.98	9.91	11.27	11.41	2.43	76	535.2500					
U(34)	283.2625	9.73	10.55	11.75	11.79	2.06	77	541.2500					
V(35)	289.2625	9.70	10.41	11.67	11.68	1.98	78	547.2500					
W(36)	295.2625	10.14	10.79	12.13	11.95	1.99	79	553.2500					
AA(37)	301.2625						80	559.2500					
BB(38)	307.2625	9.96	10.64	11.93	11.76	1.97	81	565.2500					
CC(39)	313.2625	10.47	11.08	12.30	12.32	1.85							

Max Non Adjacent Channel Level Diff	:- 4.42
Max Adjacent Channel Level Diff	:- 2.4
Max Variance from last proof of performance test	:- 7.49
Date of last proof of performance test	:- 01/26/2013

Note :- Make measurements through a 100 ft. test drop cable without a converter

TIME WARNER CABLE - SYRACUSE DIVISION

System Name	:	Rome
System Test Point #	:	8
Hub Name	:	Hamilton
Location	:	Shawler Brook Rd
Map Number	:	509-5512
Pole Number	:	509-5512
D.T. Value	:	14/2
OR Number	:	HM016
GNA Cascade	:	5
LE Cscade	:	3

TESTPOINT 8, PAGE 2

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL
VISUAL / AURAL LEVEL DIFFERENCE
(at Test Point, at the end of a 100' Drop)

System Name	: Rome	***Test Location***	: Shawler Brook Rd
Date	: 07/23/2013	***Time***	: 10:05:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	13.35	0.87		12.48	DD (40)	319.2625	17.53	2.58		14.95
3	61.2500	15.03	1.34		13.69	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	14.92	0.73		14.19	FF (42)	331.2750	17.05	2.40		14.65
5	77.2500	14.70	0.79		13.91	GG (43)	337.2625	17.18	3.34		13.84
6	83.2500	14.66	-0.28		14.94	HH (44)	343.2625	17.31	2.48		14.83
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	16.09	1.53		14.56
A-4 (96)	97.2500	15.92	1.72		14.2	JJ (46)	355.2625	15.62	1.04		14.58
A-3 (97)	103.2500	15.73	1.57		14.16	KK (47)	361.2625	15.88	0.62		15.26
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	15.54	1.24		14.3
A-1 (99)	115.2750	N/A	N/A		N/A	MM (49)	373.2625	16.96	4.14		12.82
A (14)	121.2625	15.30	2.45		12.85	NN (50)	379.2625	17.85	2.68		15.17
B (15)	127.2625	16.31	1.86		14.45	OO (51)	385.2625	17.14	2.15		14.99
C (16)	133.2625	16.31	1.69		14.62	PP (52)	391.2625	16.67	2.20		14.47
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	16.30	0.81		15.49
E (18)	145.2500	16.66	2.25		14.41	RR (54)	403.2500	16.04	-0.58		16.62
F (19)	151.3210	16.03	1.72		14.31	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	15.14	0.20		14.94
H (21)	163.2500	16.41	2.40		14.01	UU (57)	421.2500	14.55	0.13		14.42
I (22)	169.2500	16.66	2.34		14.32	VV (58)	427.2500	14.90	0.06		14.84
7	175.2500	16.32	1.38		14.94	WW (59)	433.2500	15.04	-0.35		15.39
8	181.2500	17.20	3.32		13.88	XX (60)	439.2500	14.93	0.89		14.04
9	187.2500	17.55	4.19		13.36	YY (61)	445.2500	15.23	0.98		14.25
10	193.2500	18.36	3.36		15	ZZ (62)	451.2500	15.41	0.98		14.43
11	199.2500	17.80	2.87		14.93	63	457.2500	15.44	0.66		14.78
12	205.2500	17.43	3.05		14.38	64	463.2500	N/A	N/A		N/A
13	211.2500	17.28	2.76		14.52	65	469.2500	16.61	2.63		13.98
J (23)	217.2500	16.59	2.16		14.43	66	475.2500	16.83	2.52		14.31
K (24)	223.2500	16.56	2.18		14.38	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	17.67	3.89		13.78	68	487.2500	16.80	2.56		14.24
M (26)	235.2625	17.94	4.04		13.9	69	493.2500	16.45	2.41		14.04
N (27)	241.2625	18.00	3.76		14.24	70	499.2500	16.54	1.88		14.66
O (28)	247.2625	17.79	3.39		14.4	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	17.41	3.49		13.92	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	16.86	2.76		14.1	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	16.73	1.73		15	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	15.74	1.63		14.11	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	16.07	1.62		14.45	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	16.30	2.11		14.19	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	17.11	2.37		14.74	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	17.38	2.24		15.14	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	17.18	3.01		14.17	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	17.05	2.88		14.17						

Min Channel	:	2	13.350
Max Channel	:	10	18.360
Peak to Valley	:		5.01

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL RESPONSE TEST
CARRIER - TO - NOISE TEST
COHERENT DISTURBANCES TEST
LOW FREQUENCY DISTURBANCES TEST

System Name : Rome ***Date*** : 7/19/2013

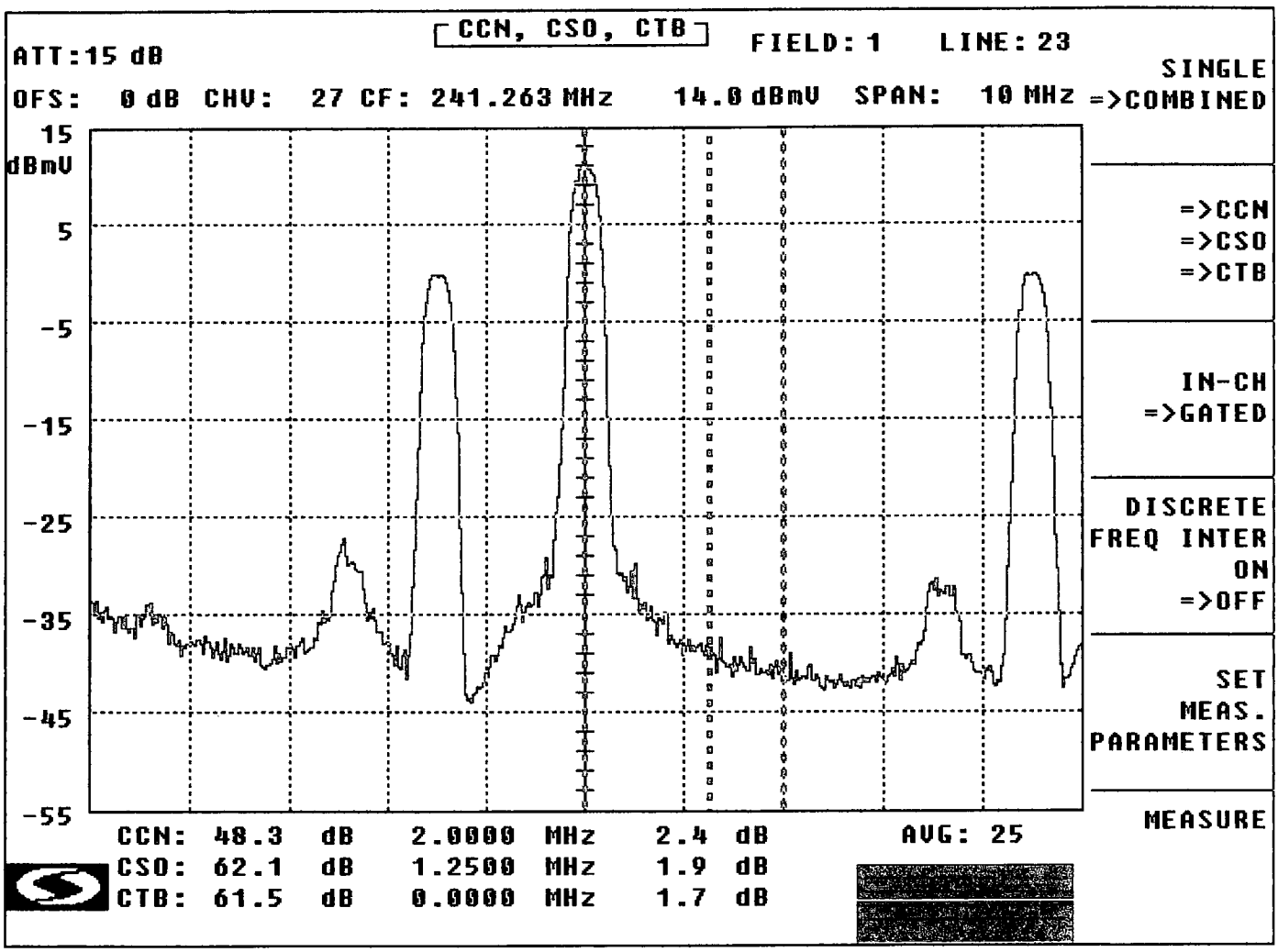
Performed By : Frank Servedio

Location : Shawler Brook Rd

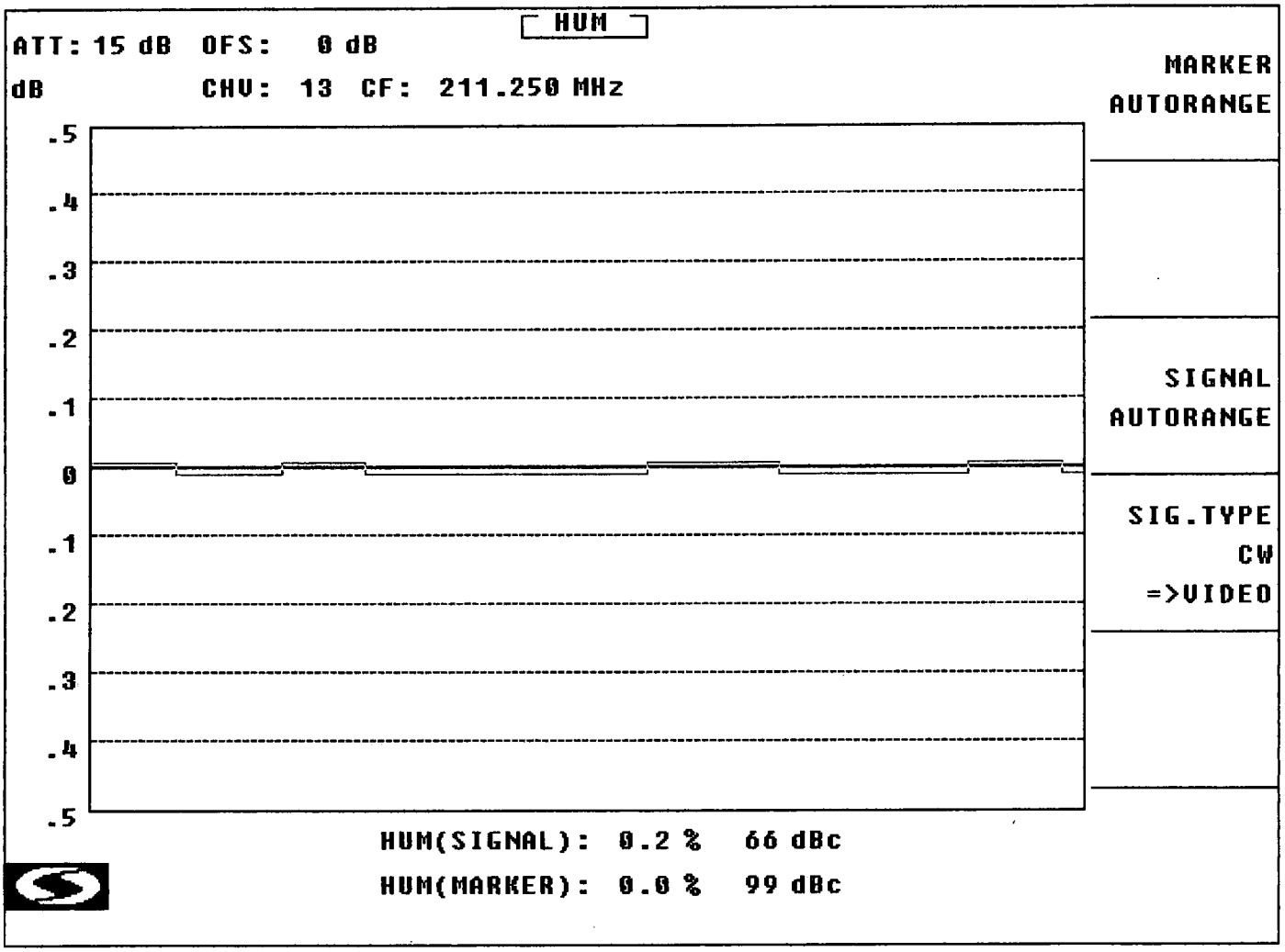
Note: Make Measurements through a 100 ft. test drop cable without converter.

CHANNEL NUMBER	IN CHANNEL RESPONSE	CARRIER TO NOISE RATIO	DISTORTIONS	CSO	HUM
	(+/- DB)	(DB)	(-DBC) CTB		(%)
4	.9	48.2	61.4	62.1	
13	.8	47.6	60.6	61.6	.2
21	.7	47.5	60.7	62.1	
27	.9	48.3	61.5	62.1	
35	.55	47.4	60.8	60.9	
44	1	47.1	60.1	60.7	
52	.9	47	60.2	60.1	
63	.9	46.9	60.1	60.5	
70	.85	46.8	60.5	61.3	

SUNRISE TELECOM BROADBAND 07.19.13 09:16:46



SUNRISE TELECOM BROADBAND 07.19.13 09:09:20



TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL FREQUENCY RESPONSE TEST
(76.605) (a) (6)

System Name : Rome ***Date*** : 7/19/2013

Performed By : Frank Servedio

Location : Shawler Brook Rd

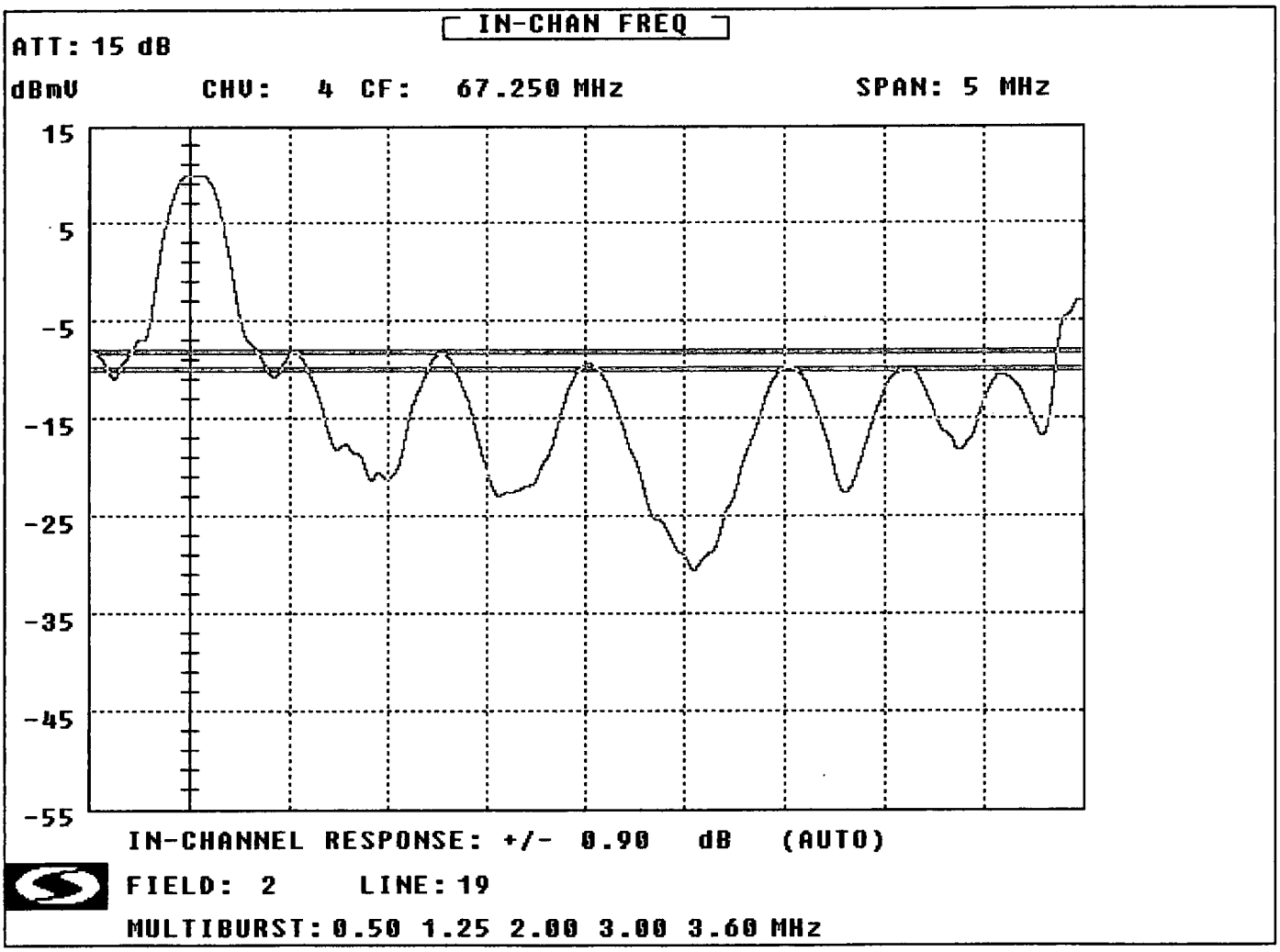
(SEE THE ATTACHED SWEEP TRACES)

SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: h4
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-19 Time: 09:00:49 AM Temp: 80 F

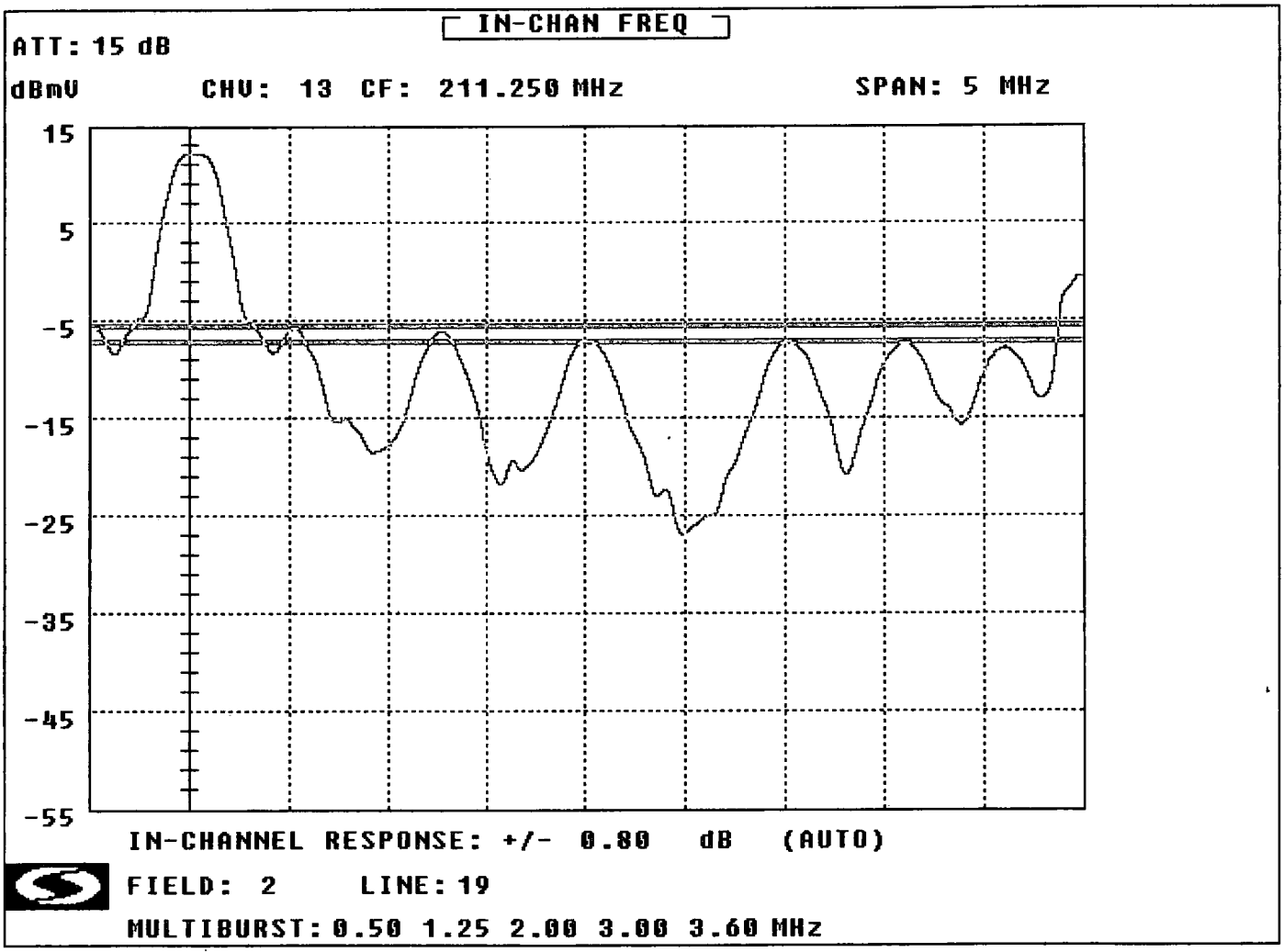


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: h13
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-19 Time: 09:01:45 AM Temp: 80 F

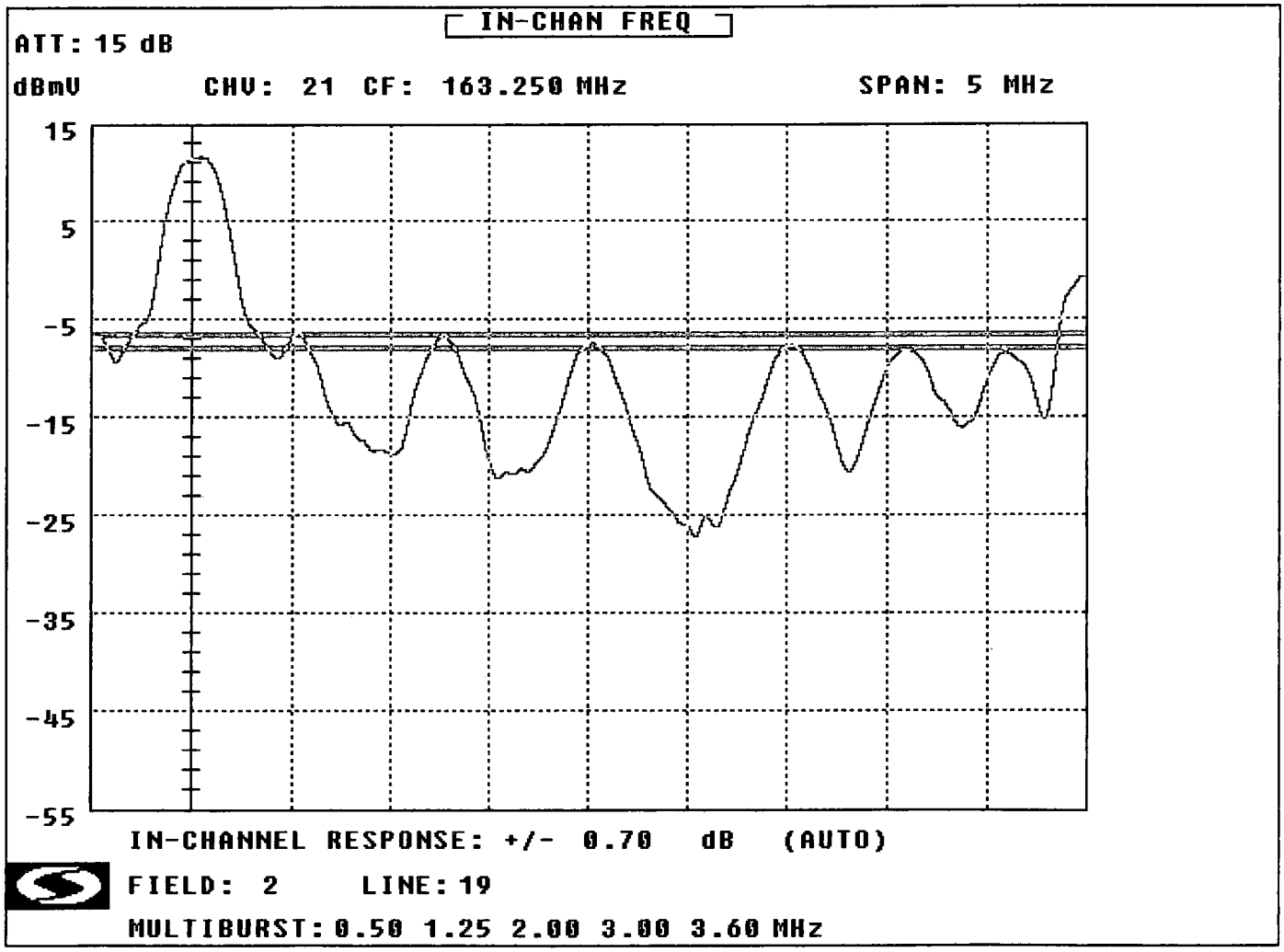


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: h21
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-19 Time: 09:02:42 AM Temp: 80 F

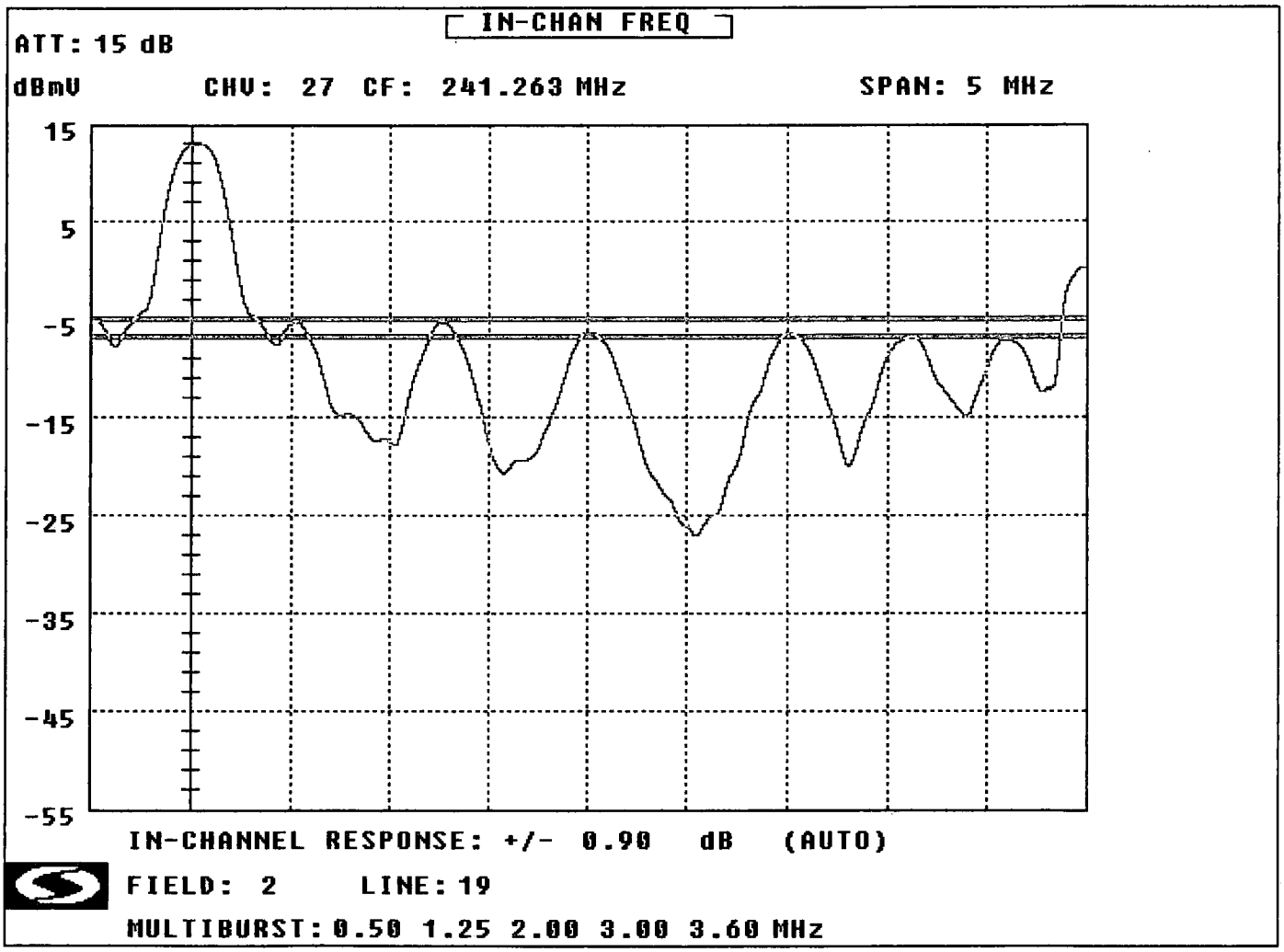


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: h27
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-19 Time: 09:03:20 AM Temp: 80 F

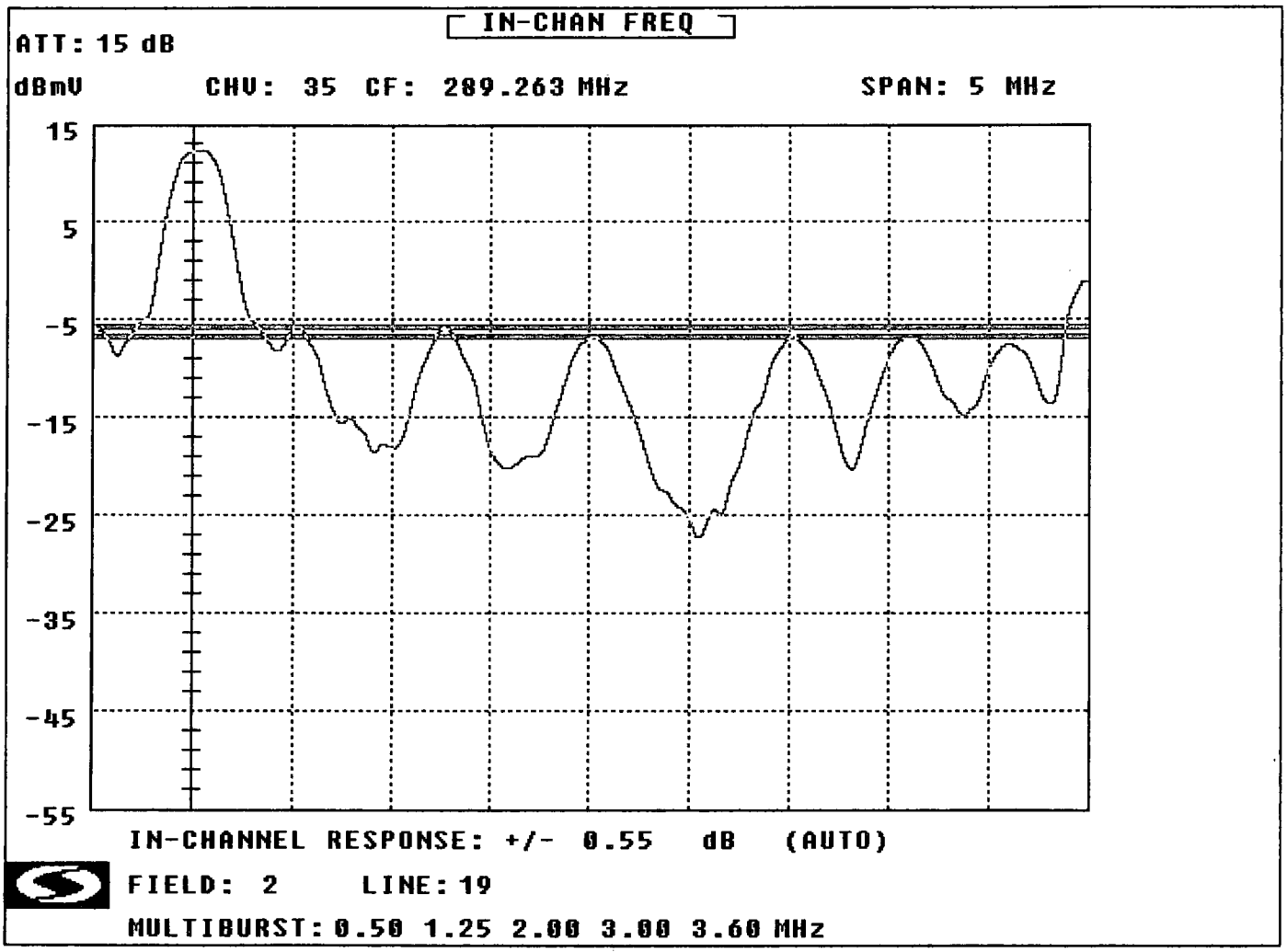


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: h35
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-19 Time: 09:03:57 AM Temp: 80 F

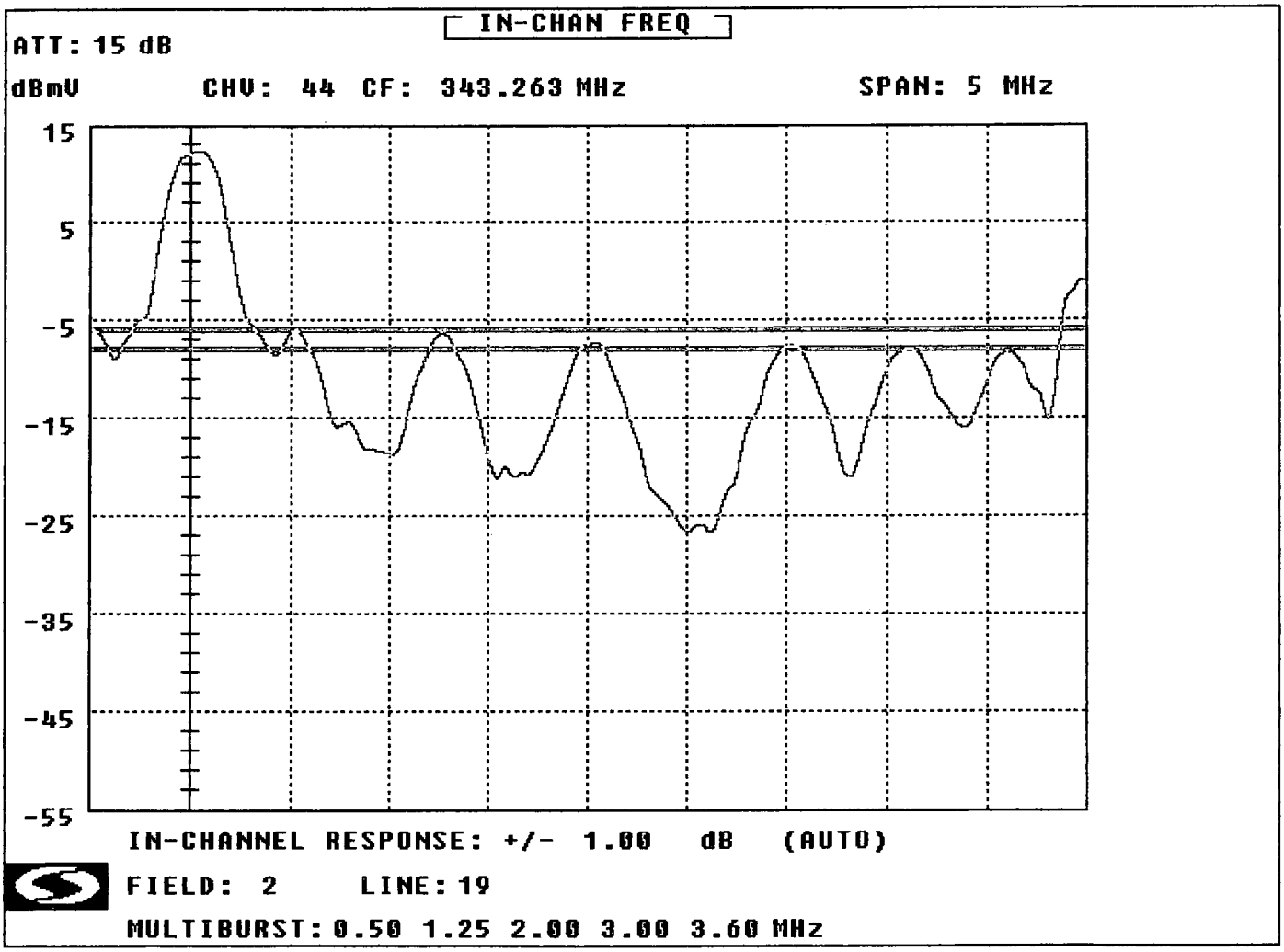


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: h44
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-19 Time: 09:04:36 AM Temp: 80 F

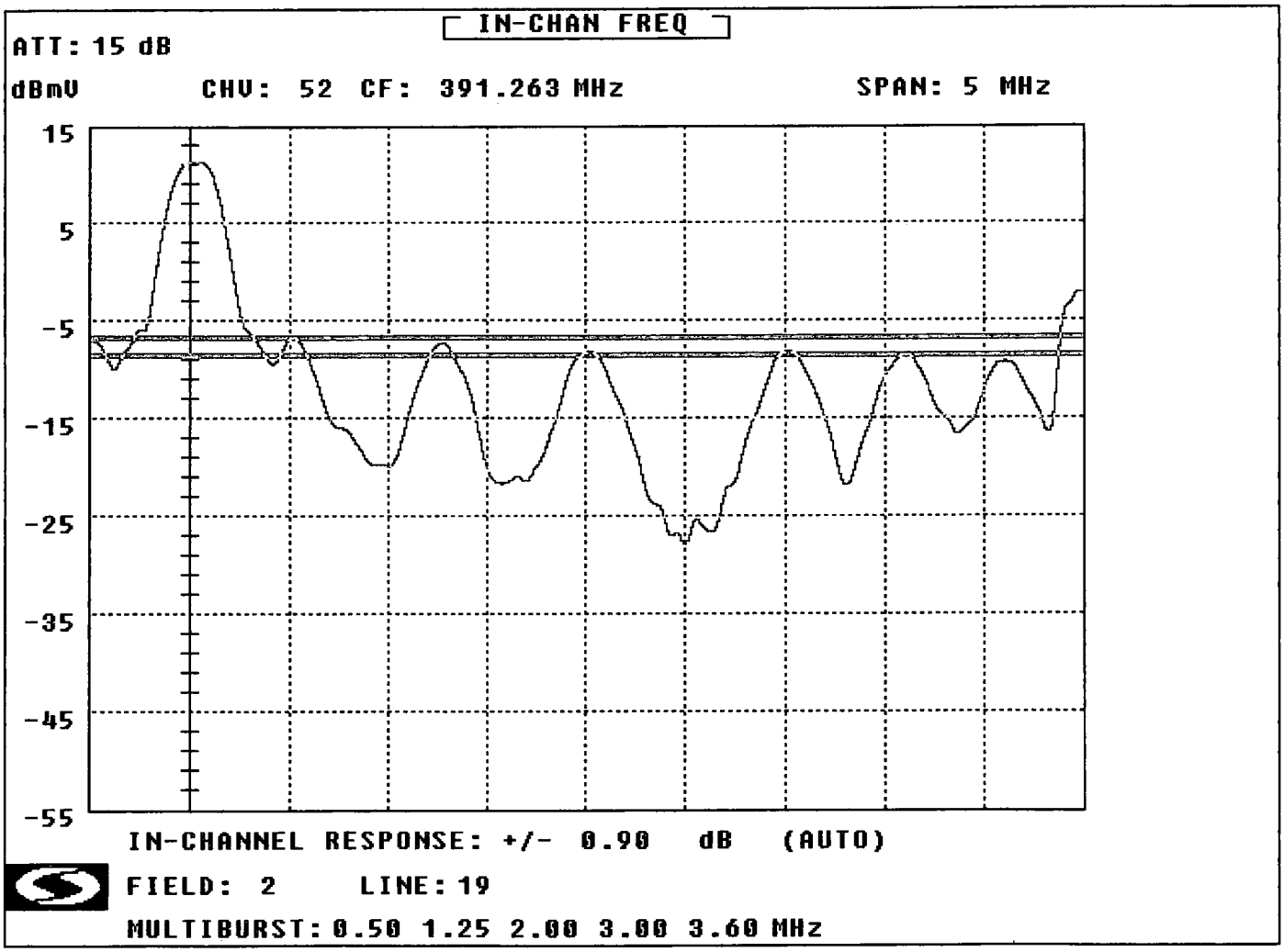


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: h52
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-19 Time: 09:05:15 AM Temp: 80 F

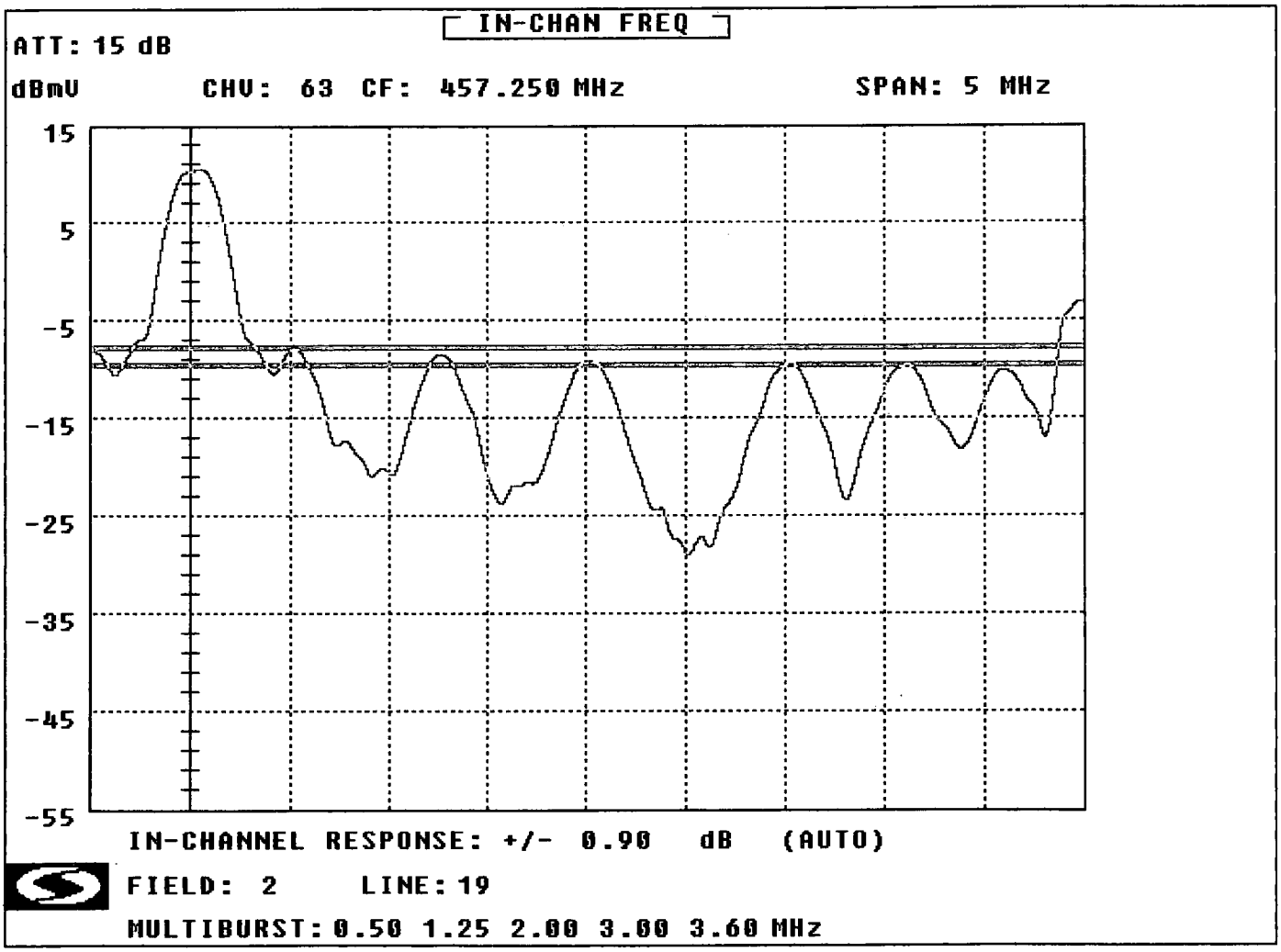


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: h63
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-19 Time: 09:05:57 AM Temp: 82 F

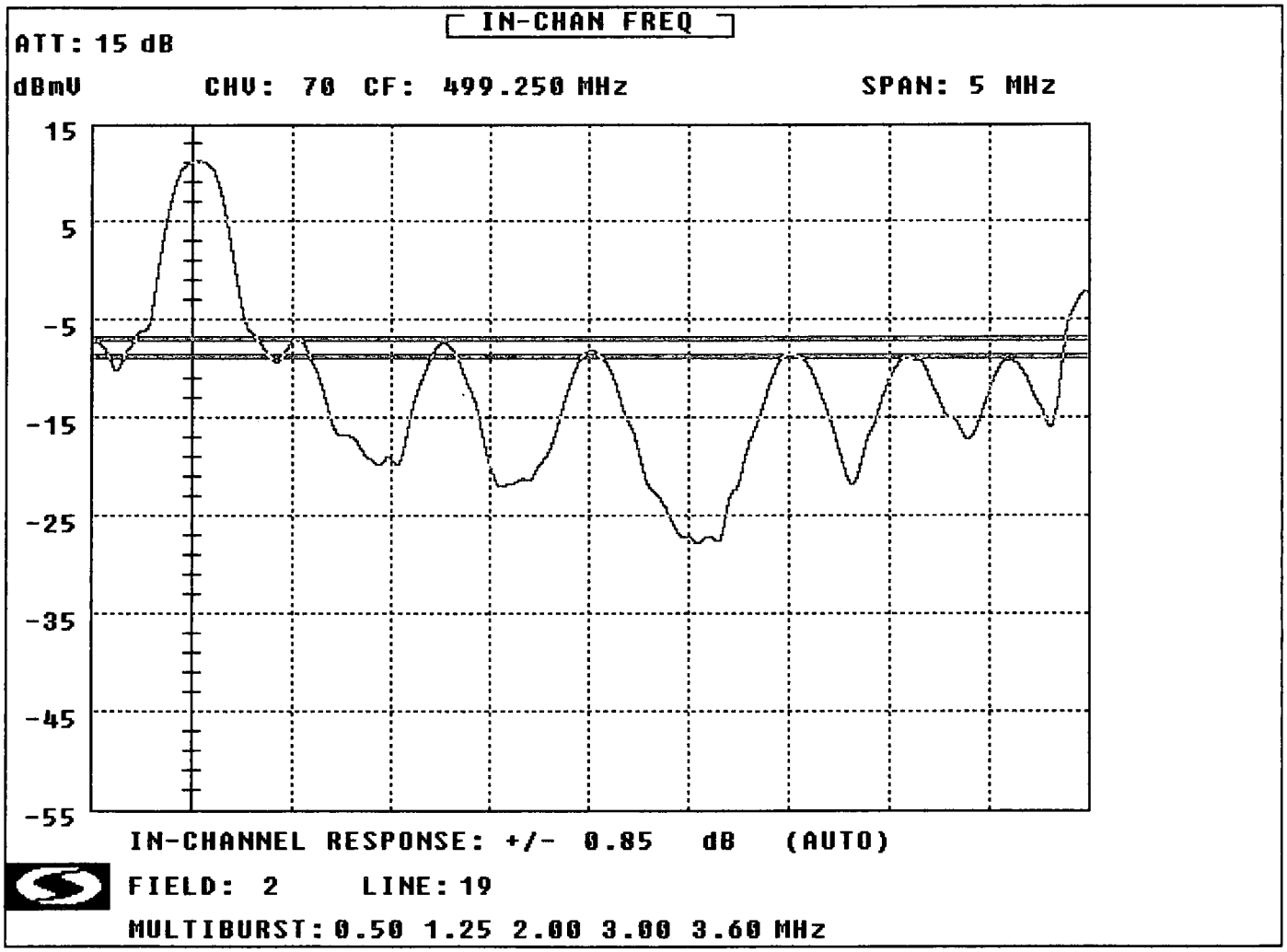


SUNRISE TELECOM BROADBAND

Network : SRTB
User ID : GUEST
File name: h70
Comment :
Mode : FR

Model AT2500R S/N: 7840-0308
Calibration Date : 2010-12-17

Date: 2013-07-19 Time: 09:06:35 AM Temp: 80 F



TESTPOINT 8, PAGE 5

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL VARIATION TEST

System Name	: Rome	**Test Location**	: Shawler Brook Rd
Date	: 07/23/2013	**Performed By**	: Frank Servedio
Meter Serial Number	: 232191		

		TEMP F						TEMP F				
		86.00	93.00	79.00	71.00			86.00	93.00	79.00	71.00	
		TIME						TIME				
		10:05:00	16:05:00	22:05:00	04:05:00			10:05:00	16:05:00	22:05:00	04:05:00	
CHAN	FREQ (MHZ)	VISUAL LEVEL (DBMV)				MAX VAR	CHAN	FREQ (MHZ)	VISUAL LEVEL (DBMV)			MAX VAR
2	55.2500	13.35	13.19	14.07	14.22	1.03	DD(40)	319.2625	17.53	17.57	17.96	17.72	0.43
3	61.2500	15.03	14.92	15.73	15.80	0.88	EE(41)	325.2625					
4	67.2500	14.92	14.71	15.61	15.65	0.94	FF(42)	331.2750	17.05	17.07	17.57	17.40	0.52
5	77.2500	14.70	14.70	15.31	15.39	0.69	GG(43)	337.2625	17.18	17.13	17.48	17.32	0.35
6	83.2500	14.66	14.82	15.27	15.43	0.77	HH(44)	343.2625	17.31	17.28	17.77	17.68	0.49
A-5(95)	91.2500						II(45)	349.2625	16.09	16.11	16.68	16.53	0.59
A-4(96)	97.2500	15.92	15.95	16.31	16.26	0.39	JJ(46)	355.2625	15.62	15.66	16.15	16.04	0.53
A-3(97)	103.2500	15.73	15.73	16.37	16.26	0.64	KK(47)	361.2625	15.88	15.93	16.39	16.28	0.51
A-2(98)	109.2750						LL(48)	367.2625	15.54	15.45	15.91	15.84	0.46
A-1(99)	115.2750						MM(49)	373.2625	16.96	16.80	17.40	17.08	0.6
A(14)	121.2625	15.30	15.28	15.53	15.44	0.25	NN(50)	379.2625	17.85	17.70	18.64	18.91	1.21
B(15)	127.2625	16.31	16.20	16.38	16.00	0.38	OO(51)	385.2625	17.14	17.02	17.72	17.62	0.7
C(16)	133.2625	16.31	16.31	16.70	16.73	0.42	PP(52)	391.2625	16.67	16.36	17.22	17.15	0.86
D(17)	139.2500						QQ(53)	397.2625	16.30	16.10	17.02	17.00	0.92
E(18)	145.2500	16.66	16.66	17.11	17.03	0.45	RR(54)	403.2500	16.04	15.77	16.70	16.63	0.93
F(19)	151.3210	16.03	16.09	16.50	16.38	0.47	SS(55)	409.2500					
G(20)	157.2500						TT(56)	415.2500	15.14	14.96	15.64	15.55	0.68
H(21)	163.2500	16.41	16.54	16.88	16.61	0.47	UU(57)	421.2500	14.55	14.16	15.02	15.01	0.86
I(22)	169.2500	16.66	16.81	17.06	16.86	0.4	VV(58)	427.2500	14.90	14.64	15.49	15.54	0.9
7	175.2500	16.32	16.41	16.66	16.50	0.34	WW(59)	433.2500	15.04	14.66	15.68	15.77	1.11
8	181.2500	17.20	17.32	17.58	17.39	0.38	XX(60)	439.2500	14.93	14.65	15.60	15.65	1
9	187.2500	17.55	17.50	18.02	17.77	0.52	YY(61)	445.2500	15.23	14.95	15.98	16.04	1.09
10	193.2500	18.36	18.63	18.90	18.84	0.54	ZZ(62)	451.2500	15.41	15.31	16.21	16.22	0.91
11	199.2500	17.80	17.97	18.34	18.21	0.54	63	457.2500	15.44	15.37	16.25	16.25	0.88
12	205.2500	17.43	17.58	17.98	17.81	0.55	64	463.2500					
13	211.2500	17.28	17.41	17.79	17.56	0.51	65	469.2500	16.61	16.52	17.32	17.25	0.8
J(23)	217.2500	16.59	16.77	17.00	16.84	0.41	66	475.2500	16.83	16.71	17.60	17.38	0.89
K(24)	223.2500	16.56	16.71	16.96	16.77	0.4	67	481.2500					
L(25)	229.2625	17.67	17.81	18.07	17.79	0.4	68	487.2500	16.80	16.64	17.58	17.27	0.94
M(26)	235.2625	17.94	18.00	18.33	18.13	0.39	69	493.2500	16.45	16.31	17.25	16.91	0.94
N(27)	241.2625	18.00	17.97	18.41	18.20	0.44	70	499.2500	16.54	16.37	17.32	16.96	0.95
O(28)	247.2625	17.79	17.58	18.22	18.04	0.64	71	505.2500					
P(29)	253.2625	17.41	16.68	17.74	17.66	1.06	72	511.2500					
Q(30)	259.2625	16.86	16.06	17.22	17.28	1.22	73	517.2500					
R(31)	265.2625	16.73	17.19	17.10	17.51	0.78	74	523.2500					
S(32)	271.2625	15.74	17.16	16.16	16.48	1.42	75	529.2500					
T(33)	277.2625	16.07	16.88	16.49	15.66	1.22	76	535.2500					
U(34)	283.2625	16.30	16.66	16.73	16.00	0.73	77	541.2500					
V(35)	289.2625	17.11	17.34	17.58	17.20	0.47	78	547.2500					
W(36)	295.2625	17.38	17.36	17.82	17.54	0.46	79	553.2500					
AA(37)	301.2625						80	559.2500					
BB(38)	307.2625	17.18	17.29	17.71	17.52	0.53	81	565.2500					
CC(39)	313.2625	17.05	17.10	17.61	17.43	0.56							

Max Non Adjacent Channel Level Diff	:- 5.44
Max Adjacent Channel Level Diff	:- 1.83
Max Variance from last proof of performance test	:- 7.92
Date of last proof of performance test	:- 01/26/2013

Note :- Make measurements through a 100 ft. test drop cable without a converter

TIME WARNER CABLE - SYRACUSE DIVISION

System Name	:	Rome
System Test Point #	:	9
Hub Name	:	Boonville
Location	:	Aubrey Ave
Map Number	:	551-5782
Pole Number	:	VB502
D.T. Value	:	23-4
OR Number	:	BN006
GNA Cascade	:	2
LE Cscade	:	3

TESTPOINT 9, PAGE 2

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL
VISUAL / AURAL LEVEL DIFFERENCE
(at Test Point, at the end of a 100' Drop)

System Name	: Rome	***Test Location***	: Aubrey Ave
Date	: 07/31/2013	***Time***	: 10:15:00

CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)	CHANNEL	FREQ (MHZ)	VISUAL LEVEL (DBMV)	AURAL LEVEL (DBMV)	SC "S"	DIFF (DBMV)
2	55.2500	14.45	0.73		13.72	DD (40)	319.2625	16.21	1.18		15.03
3	61.2500	14.05	-0.37		14.42	EE (41)	325.2625	N/A	N/A		N/A
4	67.2500	16.17	0.94		15.23	FF (42)	331.2750	15.93	0.73		15.2
5	77.2500	15.93	0.77		15.16	GG (43)	337.2625	15.70	0.51		15.19
6	83.2500	15.18	0.50		14.68	HH (44)	343.2625	15.58	0.53		15.05
A-5 (95)	91.2500	N/A	N/A		N/A	II (45)	349.2625	15.24	-0.16		15.4
A-4 (96)	97.2500	15.59	0.76		14.83	JJ (46)	355.2625	14.57	-0.46		15.03
A-3 (97)	103.2500	15.20	0.69		14.51	KK (47)	361.2625	14.55	-0.38		14.93
A-2 (98)	109.2750	N/A	N/A		N/A	LL (48)	367.2625	14.56	-0.36		14.92
A-1 (99)	115.2750	N/A	N/A		N/A	MM (49)	373.2625	14.20	-0.31		14.51
A (14)	121.2625	14.30	-0.27		14.57	NN (50)	379.2625	14.31	-0.23		14.54
B (15)	127.2625	14.20	0		14.2	OO (51)	385.2625	14.22	-0.11		14.33
C (16)	133.2625	14.55	-0.11		14.66	PP (52)	391.2625	14.29	0.10		14.19
D (17)	139.2500	N/A	N/A		N/A	QQ (53)	397.2625	14.39	0.12		14.27
E (18)	145.2500	15.47	0.44		15.03	RR (54)	403.2500	14.52	-0.34		14.86
F (19)	151.3210	15.14	-0.05		15.19	SS (55)	409.2500	N/A	N/A		N/A
G (20)	157.2500	N/A	N/A		N/A	TT (56)	415.2500	14.57	-0.75		15.32
H (21)	163.2500	16.91	1.78		15.13	UU (57)	421.2500	14.47	-1.13		15.6
I (22)	169.2500	16.78	1.63		15.15	VV (58)	427.2500	14.48	-0.72		15.2
7	175.2500	16.59	1.31		15.28	WW (59)	433.2500	14.89	-0.35		15.24
8	181.2500	15.88	2.56		13.32	XX (60)	439.2500	14.60	-0.52		15.12
9	187.2500	16.48	1.63		14.85	YY (61)	445.2500	14.23	-0.46		14.69
10	193.2500	16.08	1.18		14.9	ZZ (62)	451.2500	14.06	-0.32		14.38
11	199.2500	15.70	0.71		14.99	63	457.2500	14.19	0.09		14.1
12	205.2500	15.16	0.29		14.87	64	463.2500	N/A	N/A		N/A
13	211.2500	15.09	-0.06		15.15	65	469.2500	15.05	1.16		13.89
J (23)	217.2500	14.93	-0.25		15.18	66	475.2500	15.38	1.09		14.29
K (24)	223.2500	14.47	-0.29		14.76	67	481.2500	N/A	N/A		N/A
L (25)	229.2625	14.77	-0.34		15.11	68	487.2500	16.13	1.75		14.38
M (26)	235.2625	15.58	0.41		15.17	69	493.2500	16.17	1.42		14.75
N (27)	241.2625	15.50	0.81		14.69	70	499.2500	16.34	1.50		14.84
O (28)	247.2625	15.43	0.78		14.65	71	505.2500	N/A	N/A		N/A
P (29)	253.2625	15.55	0.48		15.07	72	511.2500	N/A	N/A		N/A
Q (30)	259.2625	16.02	1.18		14.84	73	517.2500	N/A	N/A		N/A
R (31)	265.2625	15.76	0.84		14.92	74	523.2500	N/A	N/A		N/A
S (32)	271.2625	15.67	1.30		14.37	75	529.2500	N/A	N/A		N/A
T (33)	277.2625	16.10	1.49		14.61	76	535.2500	N/A	N/A		N/A
U (34)	283.2625	16.04	1.13		14.91	77	541.2500	N/A	N/A		N/A
V (35)	289.2625	15.20	0.39		14.81	78	547.2500	N/A	N/A		N/A
W (36)	295.2625	15.36	0.61		14.75	79	553.2500	N/A	N/A		N/A
AA (37)	301.2625	N/A	N/A		N/A	80	559.2500	N/A	N/A		N/A
BB (38)	307.2625	15.35	1.04		14.31	81	565.2500	N/A	N/A		N/A
CC (39)	313.2625	15.64	1.16		14.48						

Min Channel	:	3	14.050
Max Channel	:	H(21)	16.910
Peak to Valley	:	2.86	

TESTPOINT 9, PAGE 3

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL RESPONSE TEST
CARRIER - TO - NOISE TEST
COHERENT DISTURBANCES TEST
LOW FREQUENCY DISTURBANCES TEST

System Name : Rome ***Date*** : 07/18/2013

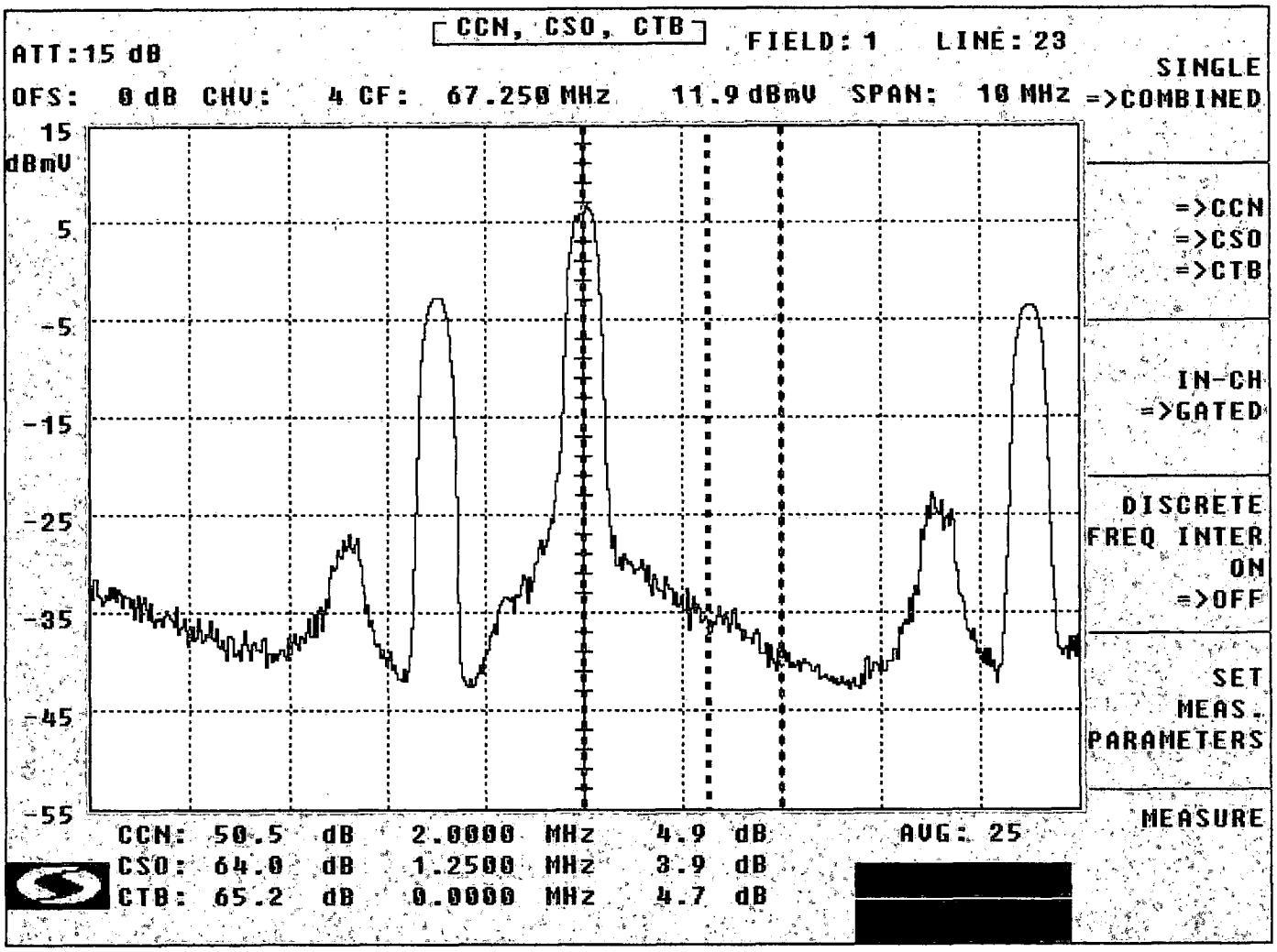
Performed By : Peter Grocholski

Location : Aubrey Ave

Note: Make Measurements through a 100 ft. test drop cable without converter.

CHANNEL NUMBER	IN CHANNEL RESPONSE	CARRIER TO NOISE RATIO	DISTORTIONS	CSO	HUM
	(+/- DB)	(DB)	(-DBC) CTB		(%)
4	.95	50.5	65.2	64	
13	.75	49.7	61.9	63.4	
21	.85	50.2	62.6	64.8	
27	.75	51.5	60.9	64	
35	.45	49.6	61.7	63.1	
44	.75	50.2	61.6	63.3	
52	.75	49.3	61.3	64.2	
63	.8	49.5	63.5	63.1	
70	.7	50.9	62.4	64.8	.2

SUNRISE TELECOM BROADBAND 07.18.13 15:25:34



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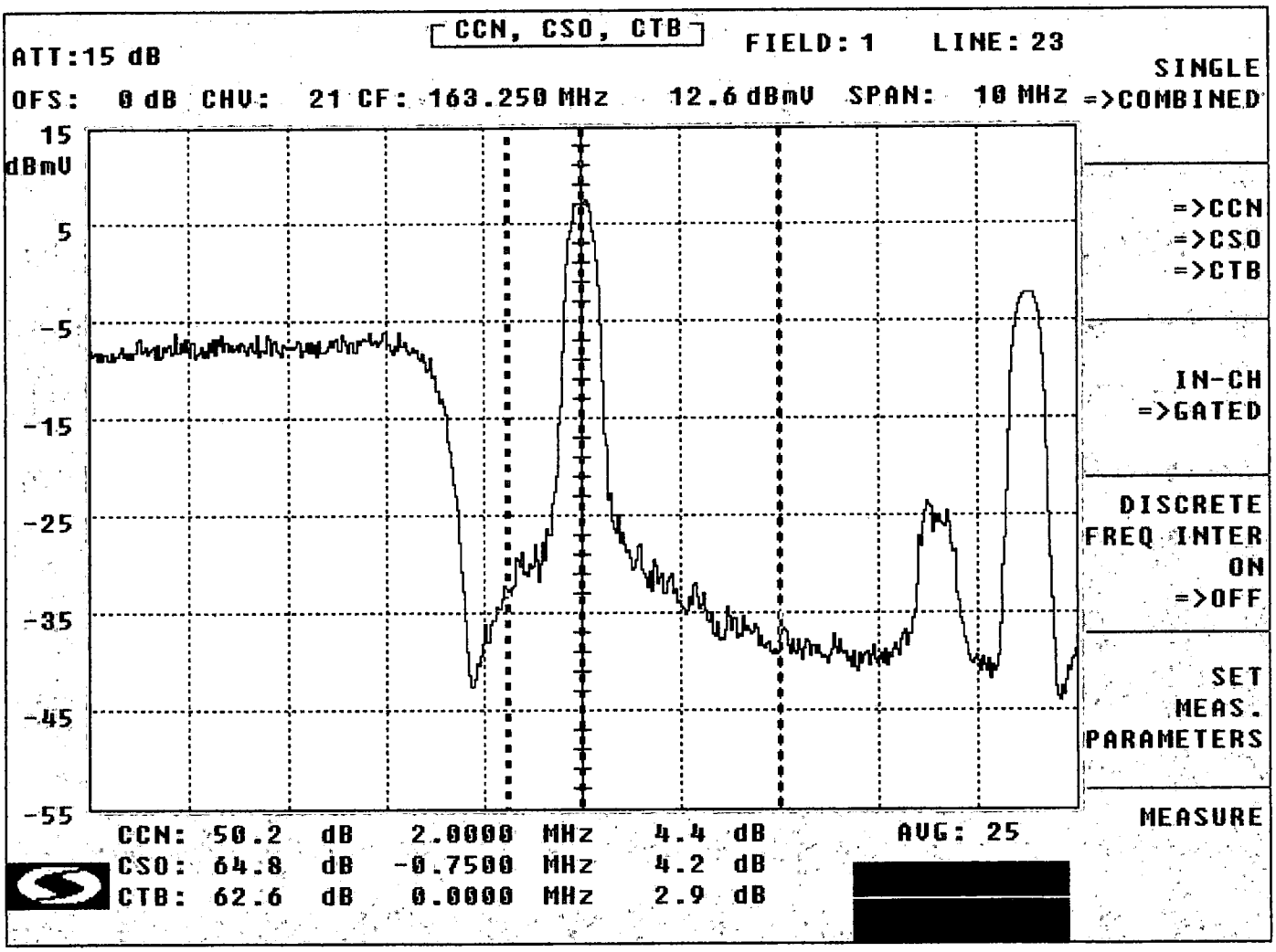

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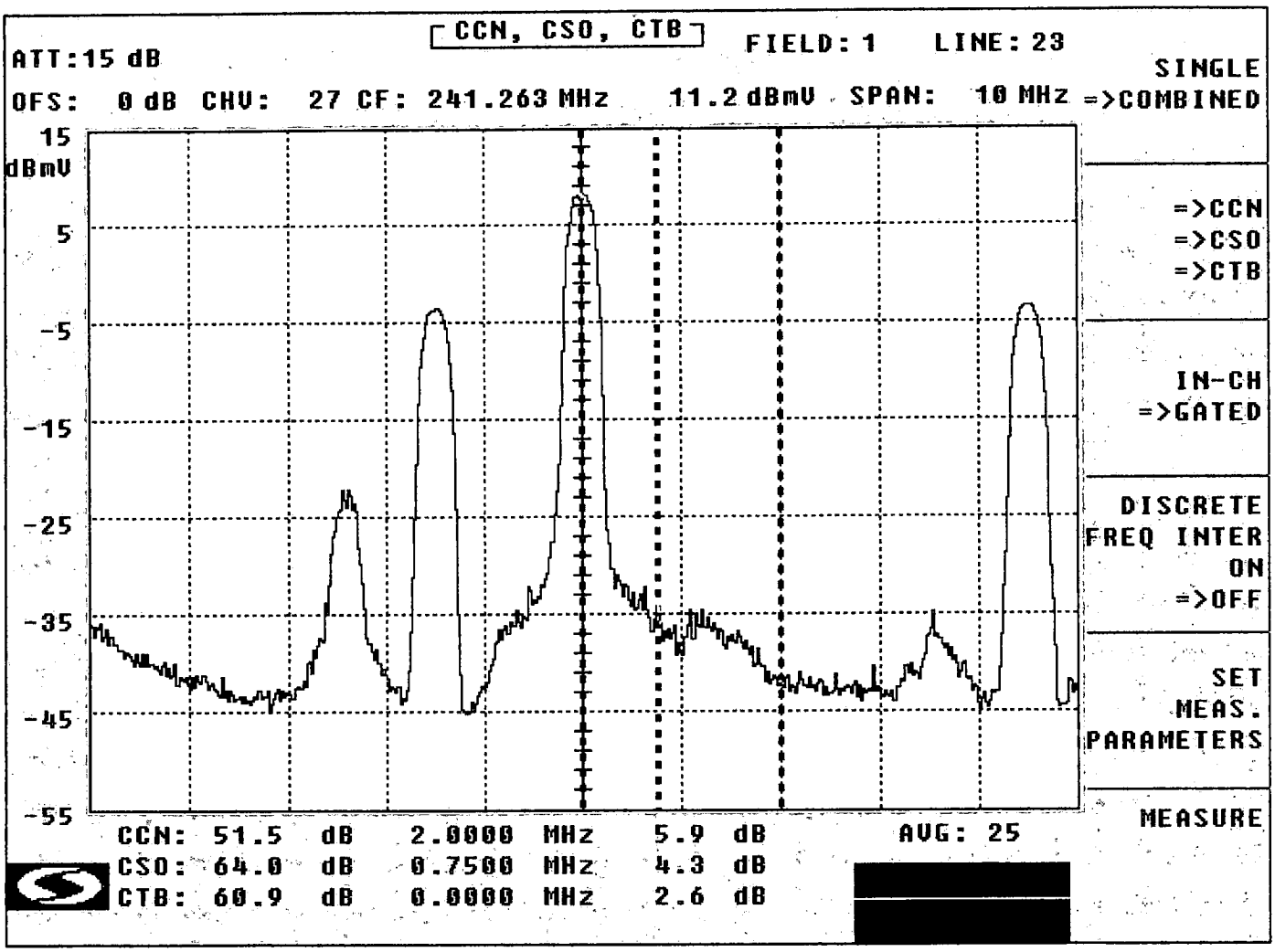

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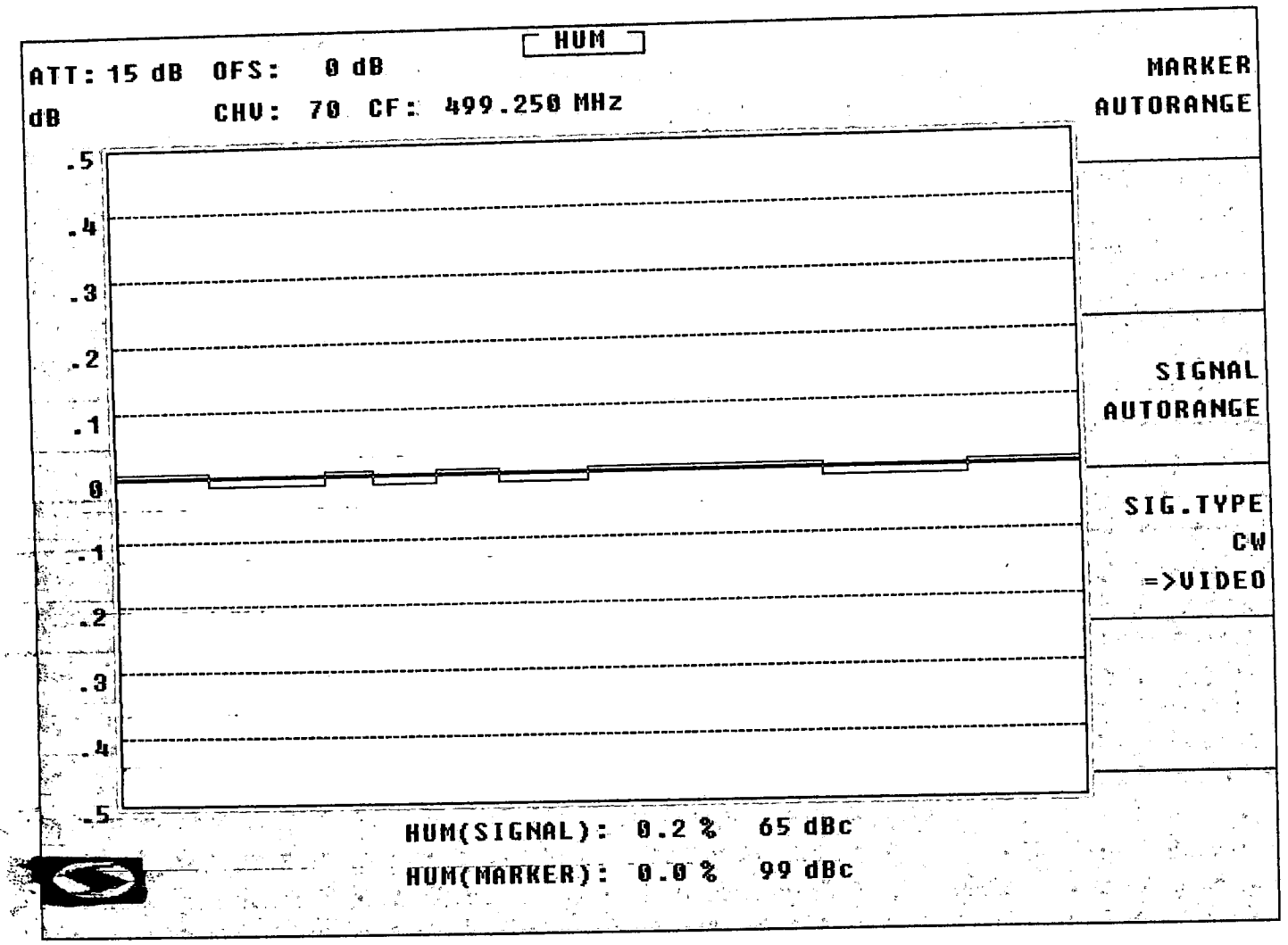

TIME WARNER CABLE - SYRACUSE DIVISION

IN CHANNEL FREQUENCY RESPONSE TEST (76.605) (a) (6)

System Name : Rome ***Date*** : 7/18/2013

Performed By : Frank Servedio

Location : Aubrey Ave

(SEE THE ATTACHED SWEEP TRACES)

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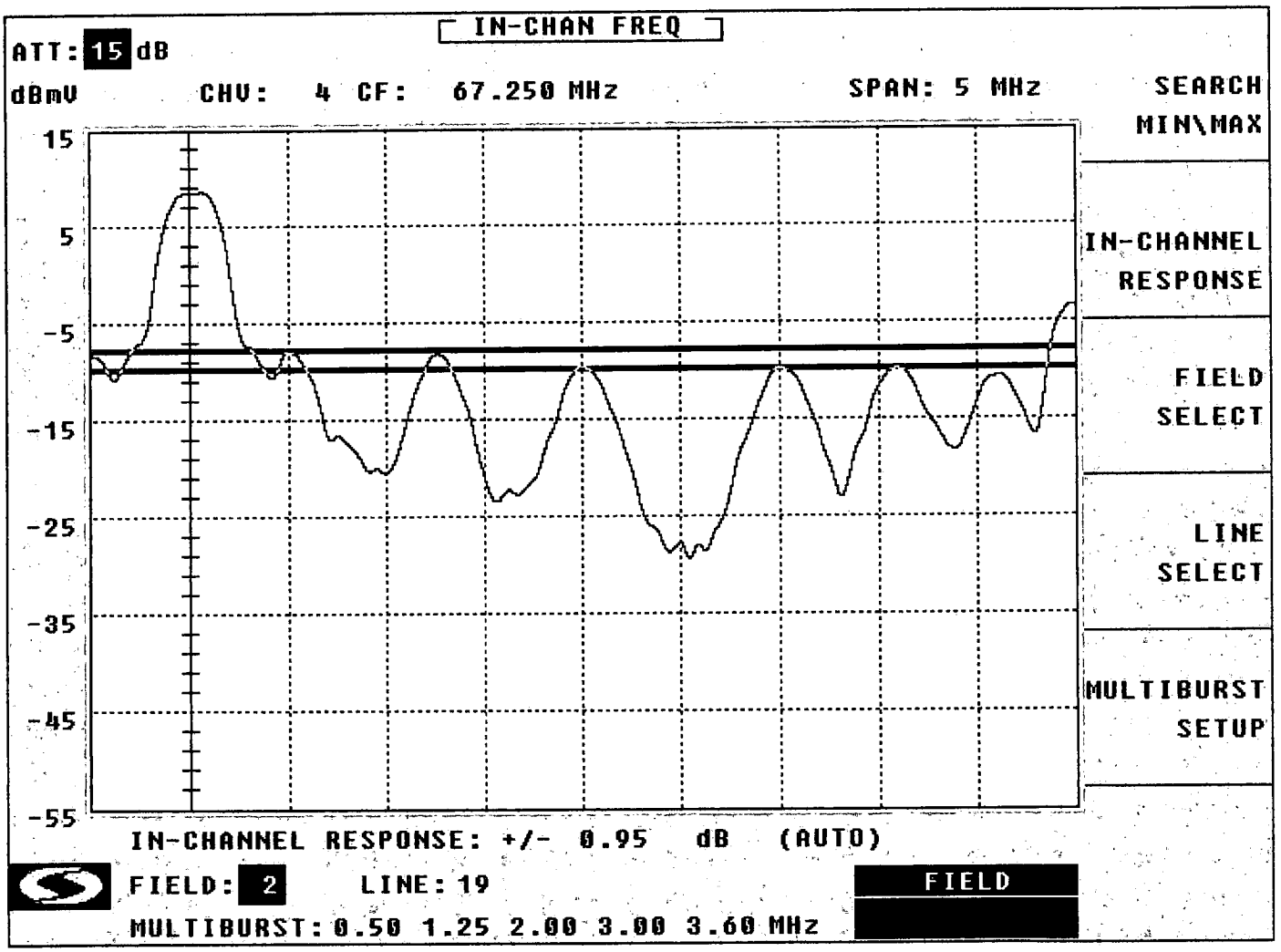

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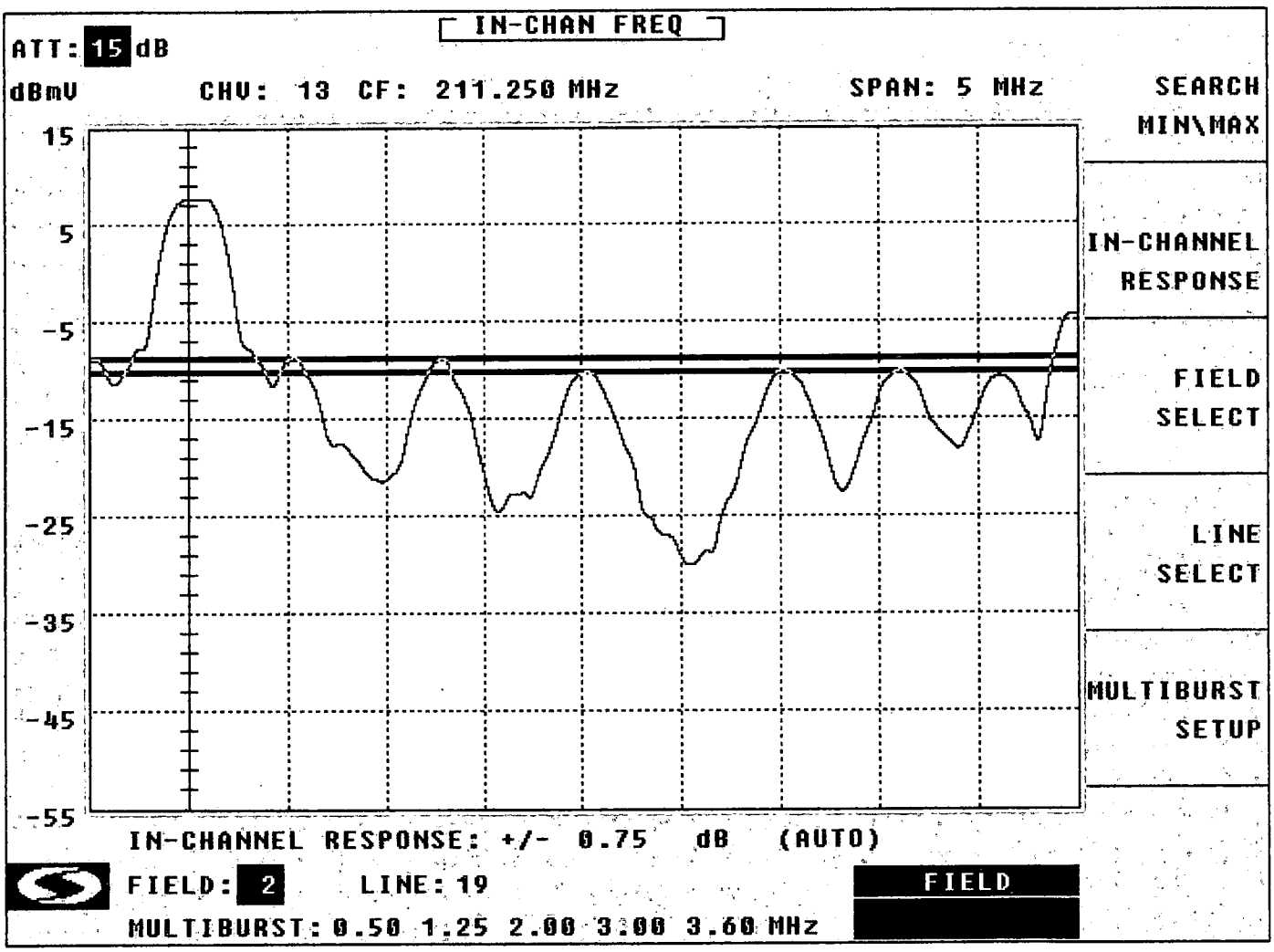

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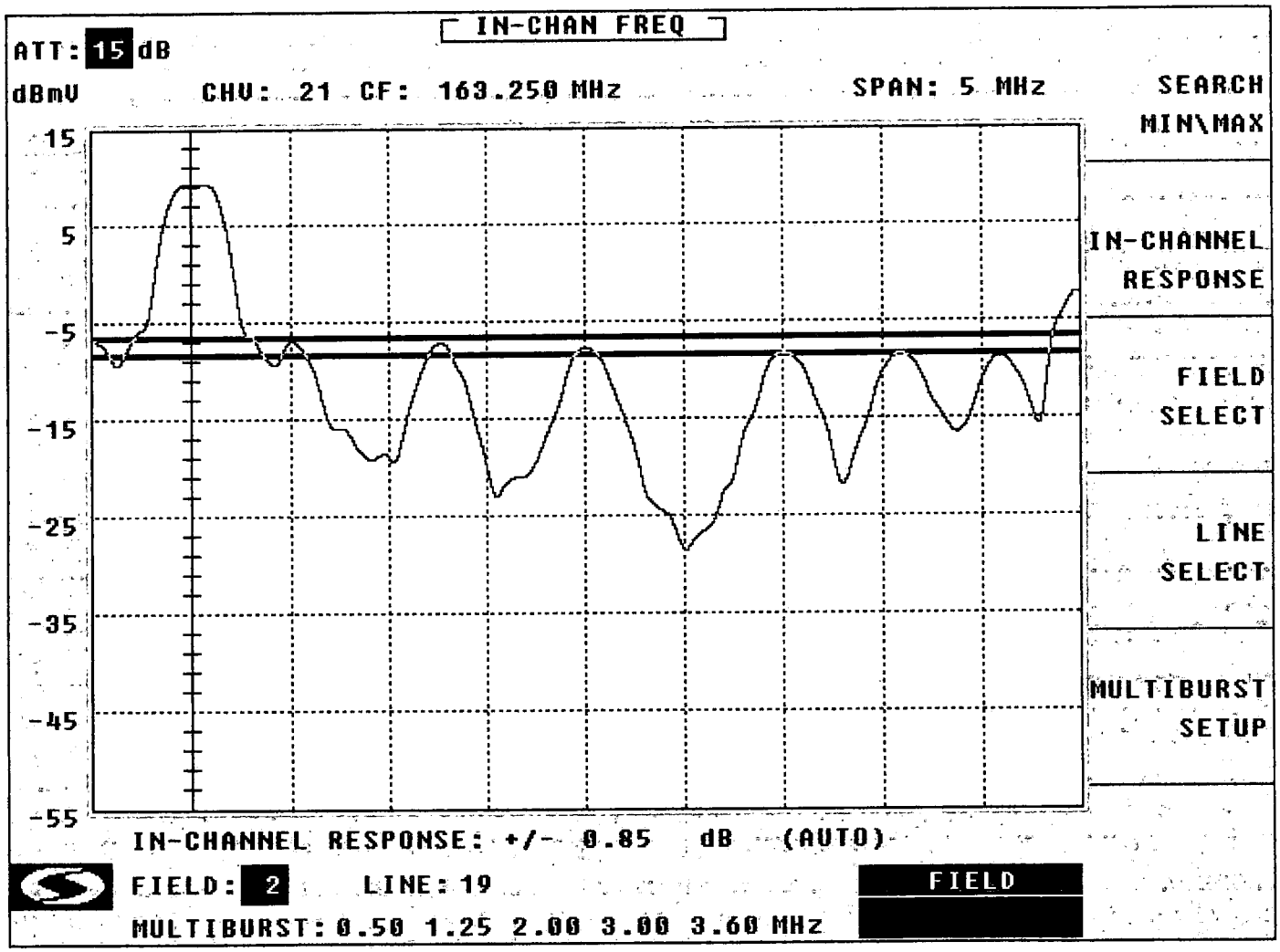

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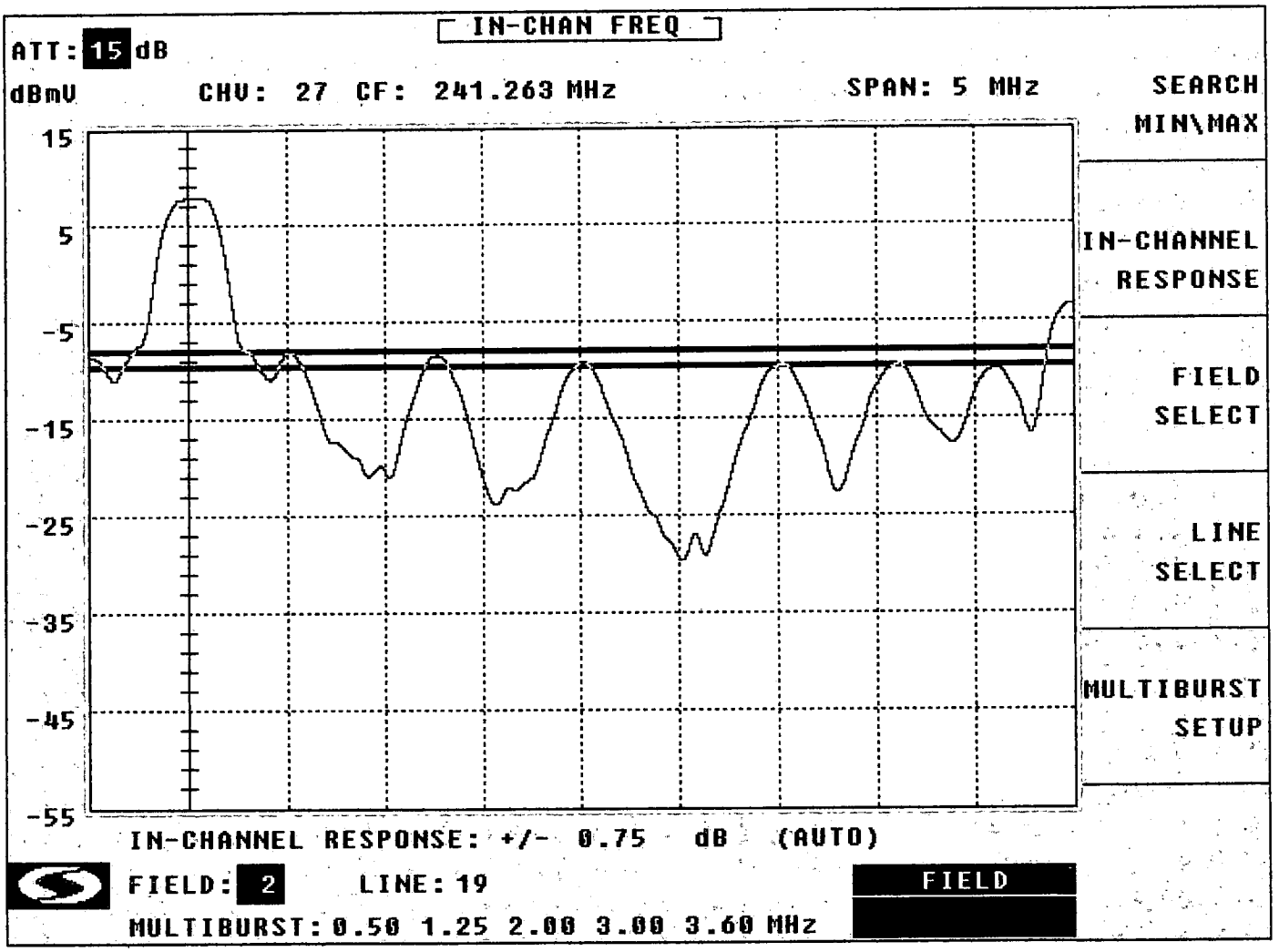

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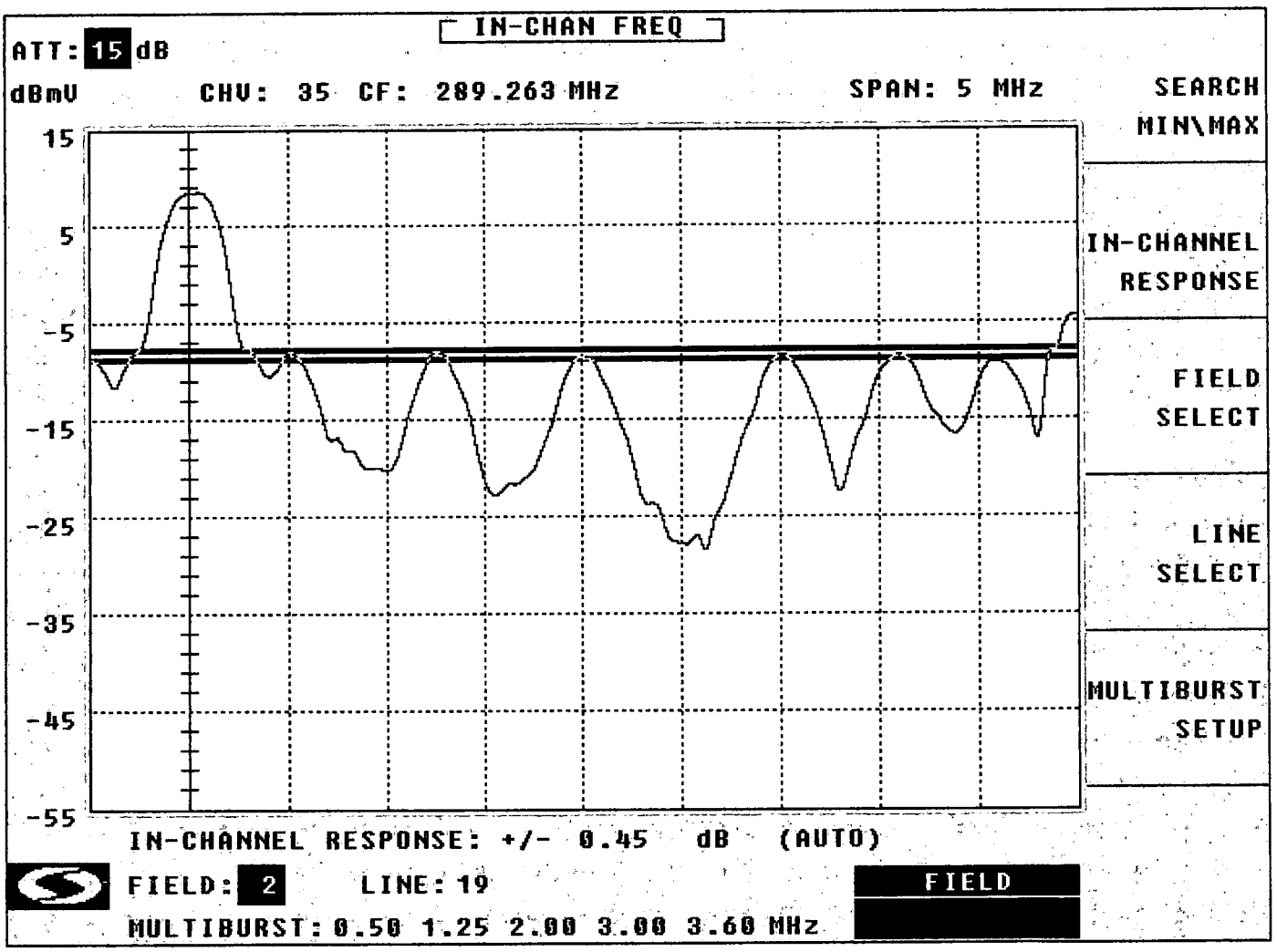

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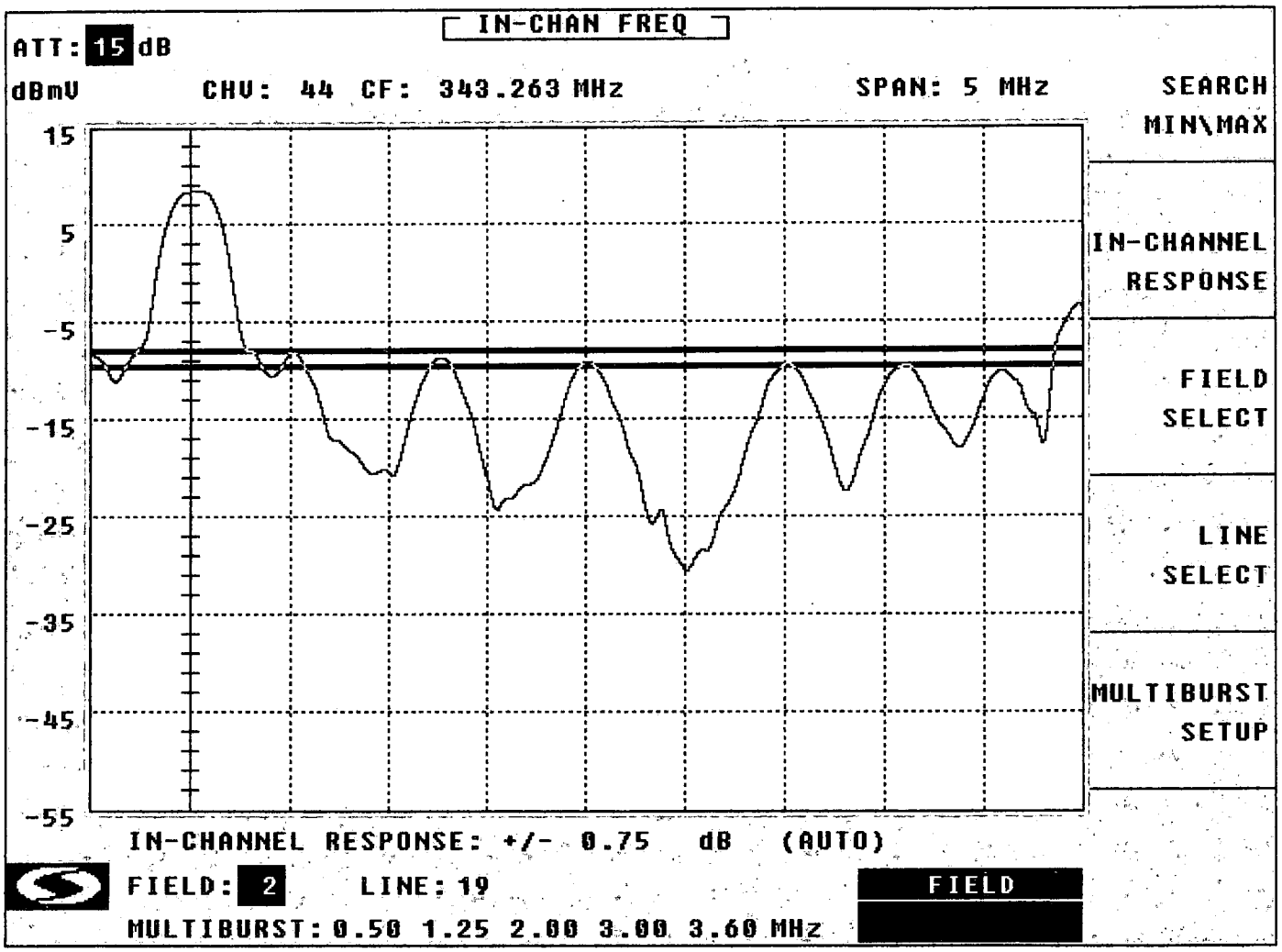

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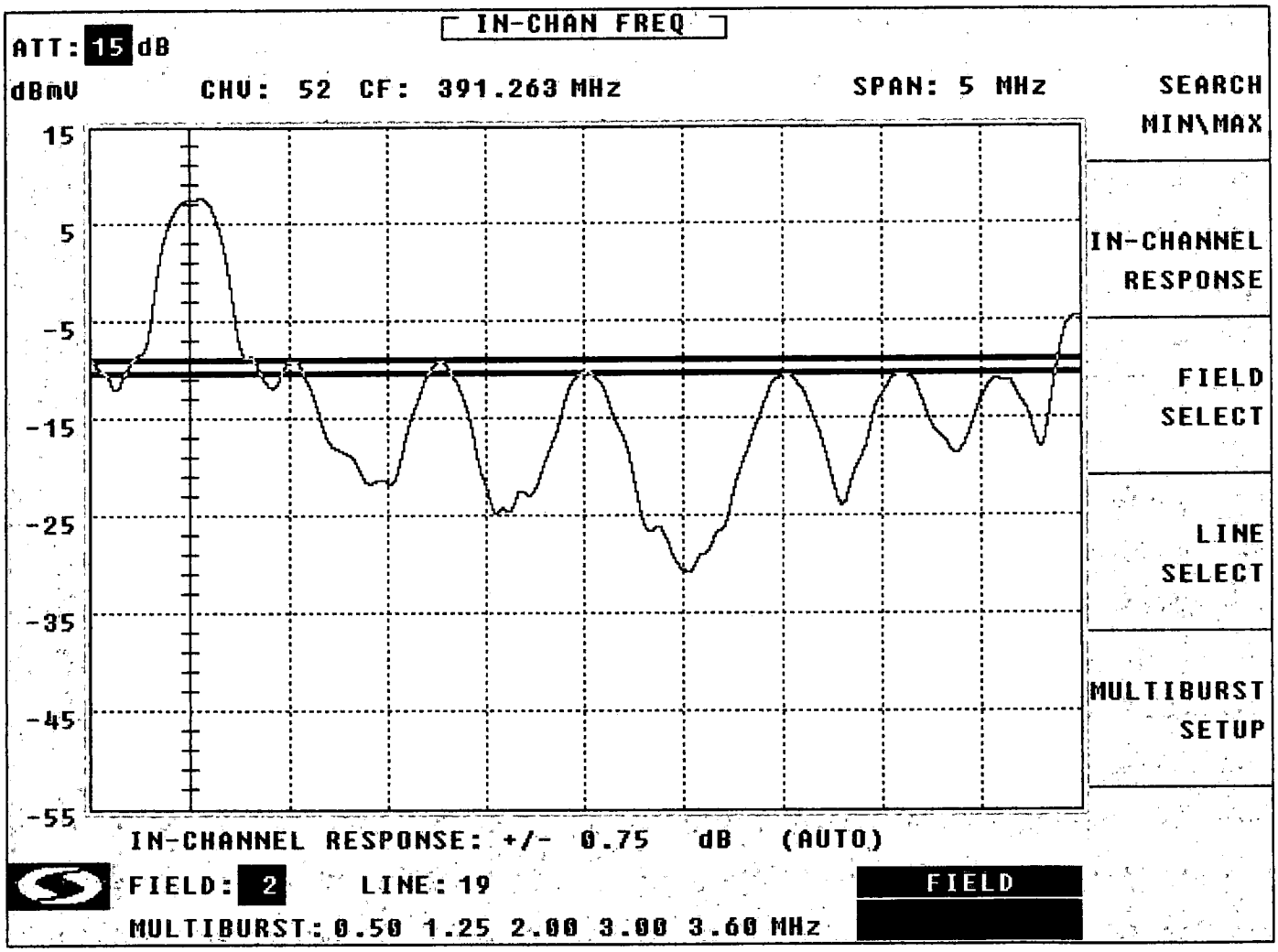

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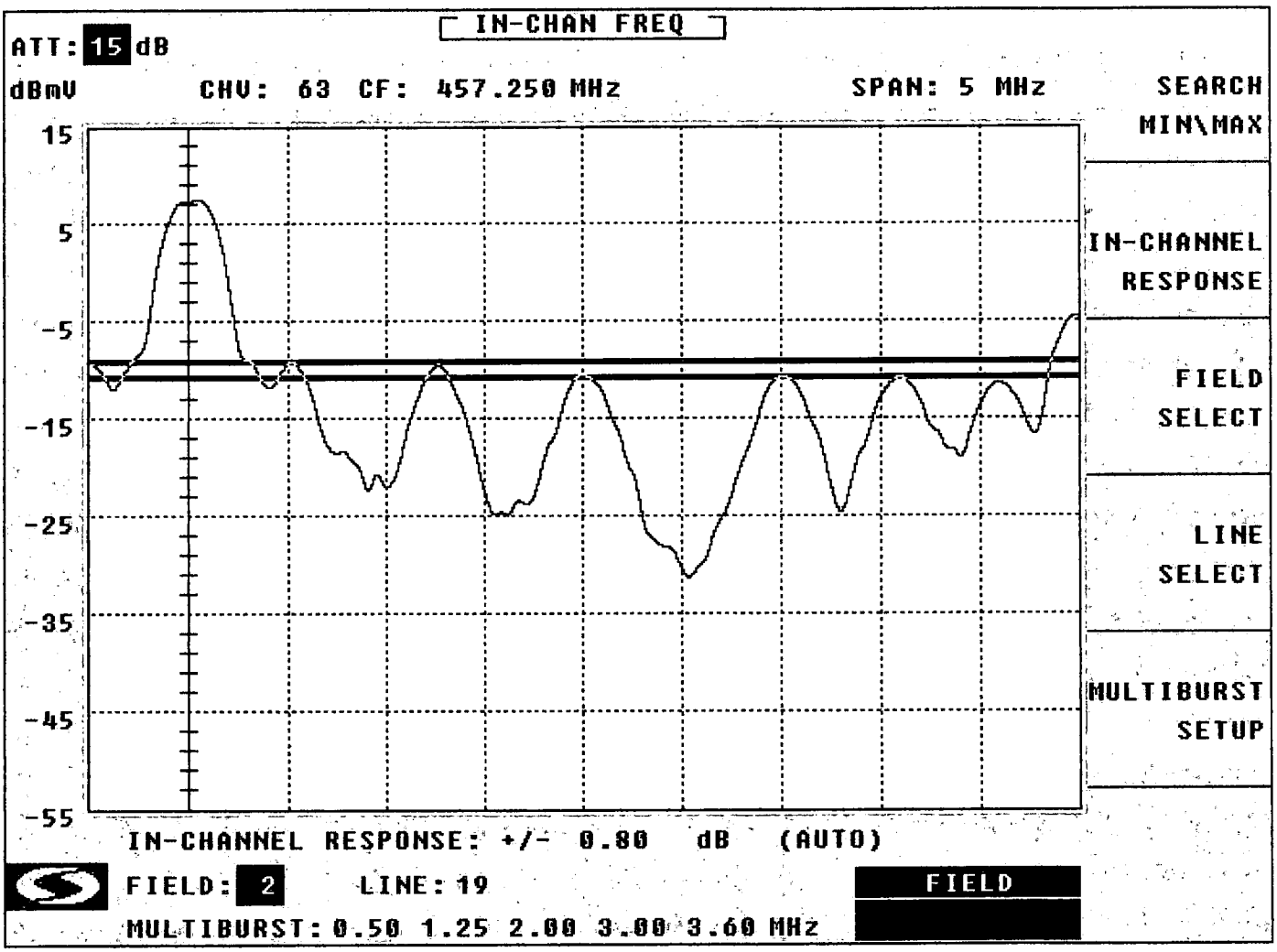

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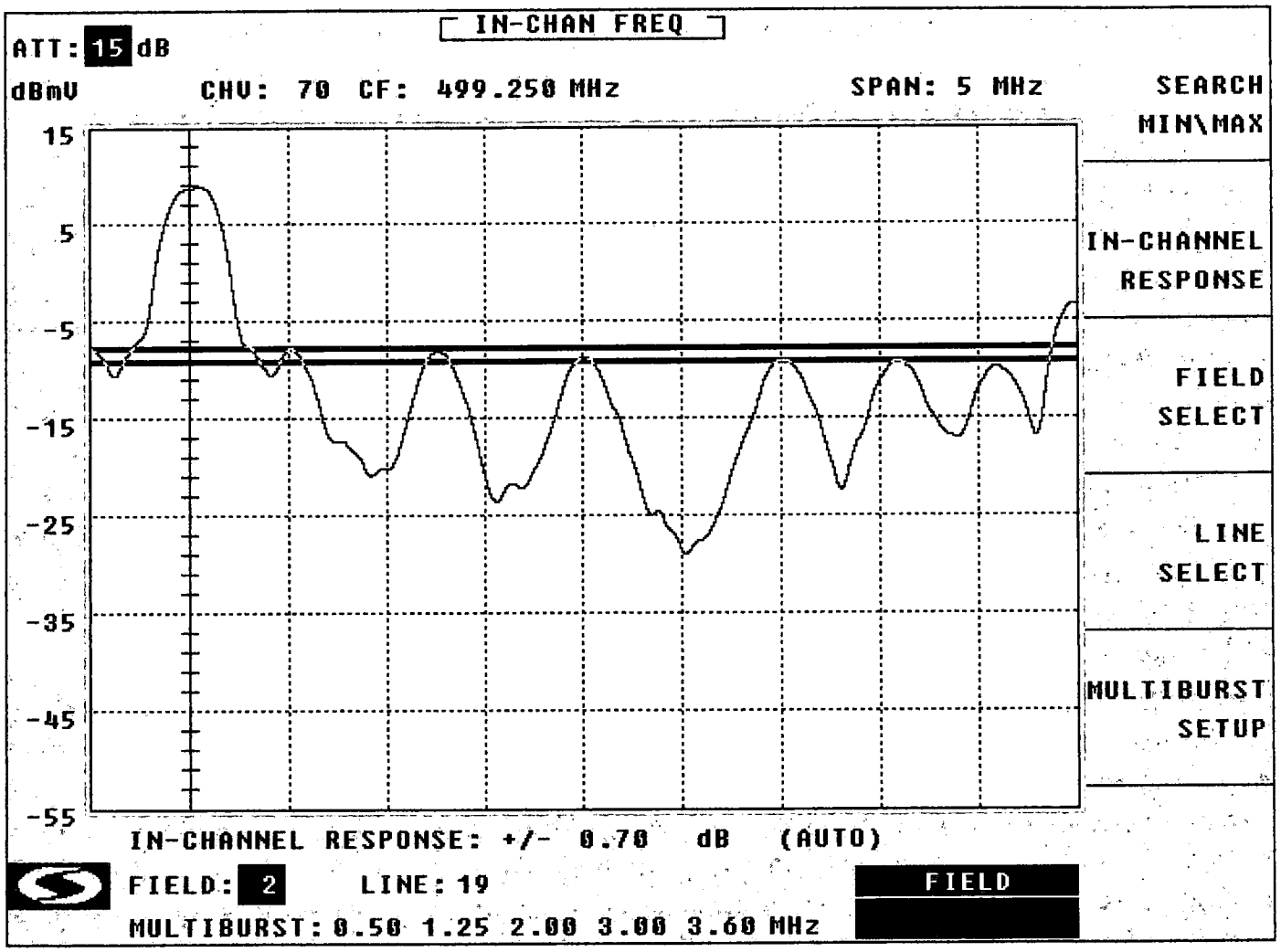


TESTPOINT 9, PAGE 5

TIME WARNER CABLE - SYRACUSE DIVISION

VISUAL CARRIER LEVEL VARIATION TEST

System Name	: Rome	***Test Location***	: Aubrey Ave
Date	: 07/31/2013	***Performed By***	: Peter grocholski
Meter Serial Number	: 232191		

		TEMP F							*TEMP F*				
		70.00	75.00	62.00	61.00				70.00	75.00	62.00	61.00	
		TIME							*TIME*				
		10:15:00	16:15:00	22:15:00	04:15:00				10:15:00	16:15:00	22:15:00	04:15:00	
CHAN	*FREQ (MHZ)*	*VISUAL LEVEL (DBMV)*				*MAX VAR*	*CHAN*	*FREQ (MHZ)*	*VISUAL LEVEL (DBMV)*				*MAX VAR*
2	55.2500	14.45	13.81	15.30	15.73	1.92	DD(40)	319.2625	16.21	16.25	16.88	17.22	1.01
3	61.2500	14.05	14.15	14.66	15.20	1.15	EE(41)	325.2625					
4	67.2500	16.17	16.04	16.73	17.03	0.99	FF(42)	331.2750	15.93	15.98	16.61	16.96	1.03
5	77.2500	15.93	15.71	16.43	16.91	1.2	GG(43)	337.2625	15.70	15.78	16.56	16.84	1.14
6	83.2500	15.18	15.07	15.76	16.07	1	HH(44)	343.2625	15.58	15.63	16.43	16.68	1.1
A-5(95)	91.2500						II(45)	349.2625	15.24	15.23	16.00	16.23	1
A-4(96)	97.2500	15.59	15.43	16.16	16.51	1.08	JJ(46)	355.2625	14.57	14.50	15.22	15.50	1
A-3(97)	103.2500	15.20	15.14	15.86	16.26	1.12	KK(47)	361.2625	14.55	14.60	15.31	15.55	1
A-2(98)	109.2750						LL(48)	367.2625	14.56	14.58	15.33	15.50	0.94
A-1(99)	115.2750						MM(49)	373.2625	14.20	14.12	15.03	15.21	1.09
A(14)	121.2625	14.30	14.29	15.00	15.43	1.14	NN(50)	379.2625	14.31	14.32	15.09	15.31	1
B(15)	127.2625	14.20	14.09	14.80	15.25	1.16	OO(51)	385.2625	14.22	14.25	14.95	15.21	0.99
C(16)	133.2625	14.55	14.46	15.18	15.61	1.15	PP(52)	391.2625	14.29	14.30	15.03	15.31	1.02
D(17)	139.2500						QQ(53)	397.2625	14.39	14.40	15.22	15.47	1.08
E(18)	145.2500	15.47	15.48	16.24	16.63	1.16	RR(54)	403.2500	14.52	14.58	15.26	15.53	1.01
F(19)	151.3210	15.14	15.14	15.79	16.23	1.09	SS(55)	409.2500					
G(20)	157.2500						TT(56)	415.2500	14.57	14.60	15.33	15.52	0.95
H(21)	163.2500	16.91	16.91	17.59	17.67	0.76	UU(57)	421.2500	14.47	14.51	15.29	15.51	1.04
I(22)	169.2500	16.78	16.74	17.43	17.75	1.01	VV(58)	427.2500	14.48	14.52	15.27	15.60	1.12
7	175.2500	16.59	16.70	17.15	17.55	0.96	WW(59)	433.2500	14.89	14.89	15.73	15.98	1.09
8	181.2500	15.88	15.95	16.55	16.84	0.96	XX(60)	439.2500	14.60	14.62	15.53	15.76	1.16
9	187.2500	16.48	16.43	17.04	17.53	1.1	YY(61)	445.2500	14.23	14.45	15.10	15.24	1.01
10	193.2500	16.08	15.89	16.71	17.06	1.17	ZZ(62)	451.2500	14.06	14.16	15.00	15.22	1.16
11	199.2500	15.70	15.75	16.36	16.61	0.91	63	457.2500	14.19	13.92	15.21	15.44	1.52
12	205.2500	15.16	15.12	15.75	16.04	0.92	64	463.2500					
13	211.2500	15.09	15.09	15.71	15.99	0.9	65	469.2500	15.05	15.04	16.21	16.51	1.47
J(23)	217.2500	14.93	15.03	15.52	15.84	0.91	66	475.2500	15.38	15.40	16.50	16.82	1.44
K(24)	223.2500	14.47	14.49	15.01	15.28	0.81	67	481.2500					
L(25)	229.2625	14.77	14.73	15.33	15.56	0.83	68	487.2500	16.13	16.14	17.25	17.62	1.49
M(26)	235.2625	15.58	15.59	16.15	16.38	0.8	69	493.2500	16.17	16.22	17.28	17.64	1.47
N(27)	241.2625	15.50	15.50	16.05	16.31	0.81	70	499.2500	16.34	16.38	17.46	17.80	1.46
O(28)	247.2625	15.43	15.43	15.98	16.27	0.84	71	505.2500					
P(29)	253.2625	15.55	15.59	16.16	16.48	0.93	72	511.2500					
Q(30)	259.2625	16.02	16.17	16.71	17.01	0.99	73	517.2500					
R(31)	265.2625	15.76	15.82	16.50	16.80	1.04	74	523.2500					
S(32)	271.2625	15.67	15.54	16.34	16.59	1.05	75	529.2500					
T(33)	277.2625	16.10	16.06	16.72	17.03	0.97	76	535.2500					
U(34)	283.2625	16.04	16.02	16.61	16.98	0.96	77	541.2500					
V(35)	289.2625	15.20	15.18	15.77	16.13	0.95	78	547.2500					
W(36)	295.2625	15.36	15.35	15.96	16.27	0.92	79	553.2500					
AA(37)	301.2625						80	559.2500					
BB(38)	307.2625	15.35	15.39	15.90	16.21	0.86	81	565.2500					
CC(39)	313.2625	15.64	15.66	16.27	16.57	0.93							

Max Non Adjacent Channel Level Diff	:- 3.1
Max Adjacent Channel Level Diff	:- 2.12
Max Variance from last proof of performance test	:- 6.51
Date of last proof of performance test	:- 01/26/2013

Note :- Make measurements through a 100 ft. test drop cable without a converter

TIME WARNER CABLE

SYRACUSE DIVISION

FCC TECHNICAL TESTING STANDARDS AND PROCEDURES

7 – 15 – 2002
FCC Part 76 (2001)
Rev 2

VISUAL CARRIER FREQUENCY AND AURAL CARRIER CENTER FREQUENCY FCC 76.612 (a) (b) and 76.605 (a) (2)

Specification:

FCC: Visual carrier frequency part 76.612 (a) and (b). The center frequency of the aural carrier part 76.605 (a) (2).

Syracuse Division: +/- 25 Khz on all non air-nav video carriers
+/- 3.5 Khz on air-nav visual carriers.
The center frequency of the aural carrier must be 4.5 MHz, +/- 1 KHz above the frequency of the visual carrier.

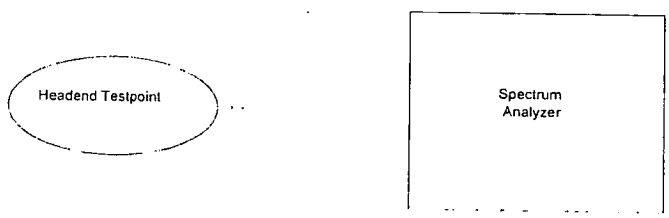
Picture Effect:

Various impairments

Recommended Procedures:

- All measurements to be made at the headend test point.
- Connect equipment as shown in block diagram below.
- Use a spectrum analyzer with a precision frequency option.
- Follow the manufacturers recommended methods for performing this measurement.
- Record the visual carrier frequency and intercarrier frequency difference of all system channels.
- Visual carrier frequencies in the frequency bands 108.0-137.0 Mhz and 225.0-400.00 Mhz need to be properly offset as per FCC Rule 76.612.
- For non-air nav visual frequencies you should observe the +/- 25 Khz tolerance.
- Lastly, follow sound engineering practices as outlined in the NCTA Recommended Practices for Measurements on Cable Television Systems.

Block Diagram:



VISUAL, AURAL CARRIER LEVELS AND 24 HR. VARIATION TESTS (LEVEL REQUIREMENTS) FCC 76.605 (a) (3), (4), (5)

Specification:

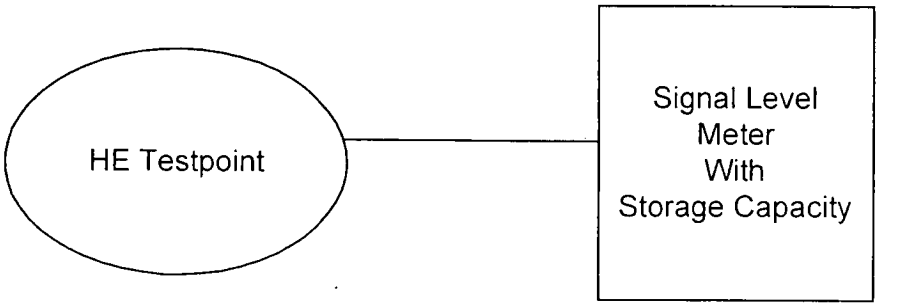
FCC: Levels and Variation Testing

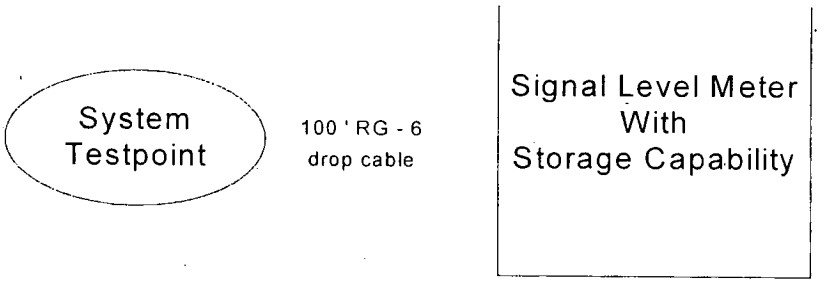
- Visual carrier level shall be no less than 0 dbmv at subscriber terminal and no less than +3 dbmv at the end of a 100' drop. FCC 76.605 (a)(3)
- Variance of adjacent (6 Mhz) visual carriers shall not vary by more than 3 db FCC 76.605(a)(4)
- Variance of non-adjacent channels video carrier levels shall not vary by more than 10 db plus 1 db for every 100 Mhz above 300 Mhz. FCC 76.605(a)(4)
- The aural carrier amplitude shall be between 10 db and 17 db down from the visual carrier FCC 76.605 (a)(5)
- For 24 hr variation testing, the visual signal level of each channel must be measured and recorded, along with the date, time of measurement, and temperature, once every 6 hours (at intervals of not less than 5 hours or no more than 7 hours after the last measurement), which shall include the coldest and warmest months (January or February and in July or August) during a 24 hour period. Visual signal level for each channel shall not vary by more than 8 db within 24 hours or in any 6 month interval. FCC 76.605 (a)(4). The level must also meet the requirements of FCC 76.605 (a)(3)(4)(5).

Recommended Procedures:

- Prior to the start of testing the Headend levels should be checked and adjusted to obtain no more than 1 db max peak to valley with all non-scrambled aural carriers approximately 13 to 14 db down from video.
- Store the Headend levels in the same meter that will be used for your system test point testing, note the time from the meter and the bin number that this was stored in. This will be entered into the Headend test forms at a later time.
- If you use more than one meter for your 24 hour test, then you should verify its response against the response of the meter used for headed and test point testing.
- At each test point you should again store the recorded levels prior to the converter. The Syracuse Division has decided to test prior to the converter and insert an attachment stating the specifications of the converter.
- For the 24 hour testing you should have a watch to note the time (or use automated time function on signal level meter) and should use either a thermometer to record the temperature or obtain this from the weather channel as the temperature reading from the meter will only indicate the temperature of the meter.

Block Diagram:





IN-CHANNEL FREQUENCY RESPONSE
FCC 76.605 (a) (6)

Specification:

FCC and Syracuse Division: +/- 2 db from 750 Khz to 5 Mhz above the lower frequency boundary of the cable television channel.

Picture Effect:

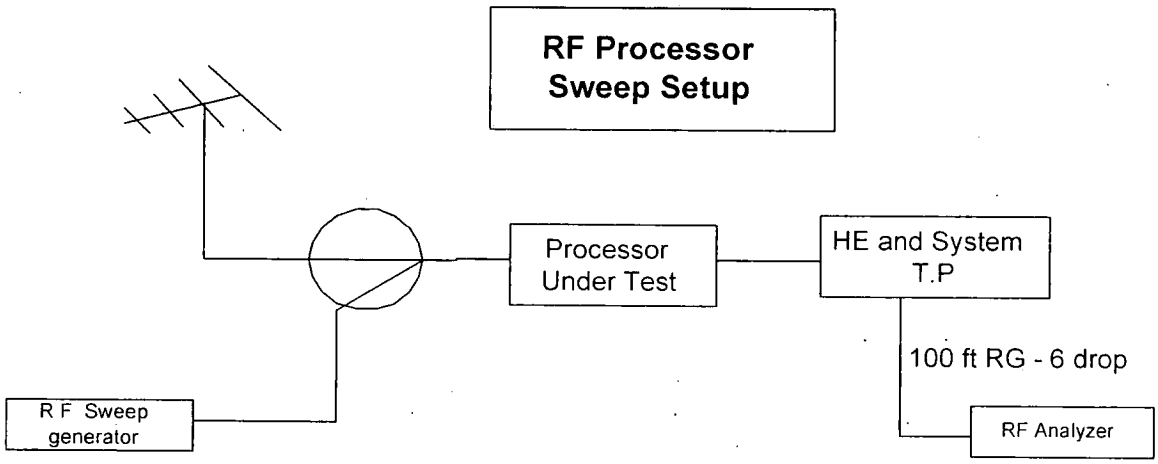
Variations can not only affect the relative amplitude of different frequency components of the visual signal, but relative visual carrier level and chroma delay. This could cause improper colors and poor picture quality.

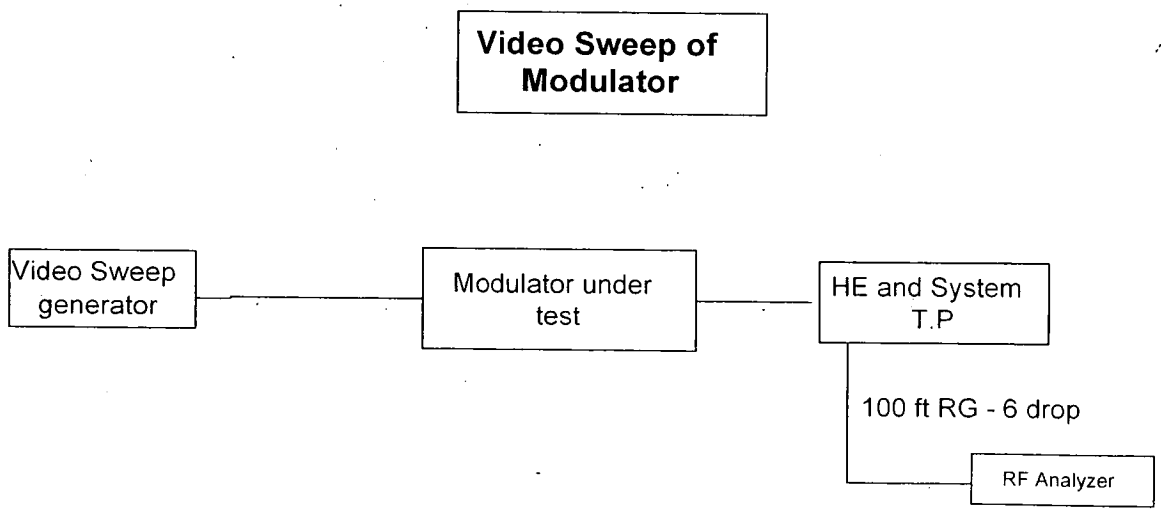
Recommended Procedures:

- Measurements should be made on all FCC designated test channels at each system test point. The frequency response of all other channels should be verified periodically at the headend test point.
- Connect equipment as shown in the block diagrams .
- This procedure varies based on the type of analyzer used and the type of channel, ie; modulator or processor. The block diagrams show the two most common setups for making this measurement.
- Record the +/- db number [(peak to valley) / (2)] on page 3 of 5 for each testpoint.
- Lastly, follow sound engineering practices as outlined in the NCTA Recommended Practices for Measurements on Cable Television Systems.

Note :- The FCC Rules state that this test be done after a converter. The Syracuse Division does the field test without a converter but includes a "typical" frequency response trace of the converter used in the system. The system and converter traces will show system total response.

Block Diagrams





CARRIER TO NOISE RATIO
(C/N)
FCC 76.605 (a) (7)

Specification:

FCC: Minimum of 43 db

Syracuse Division: Minimum of 47 db prior to converter

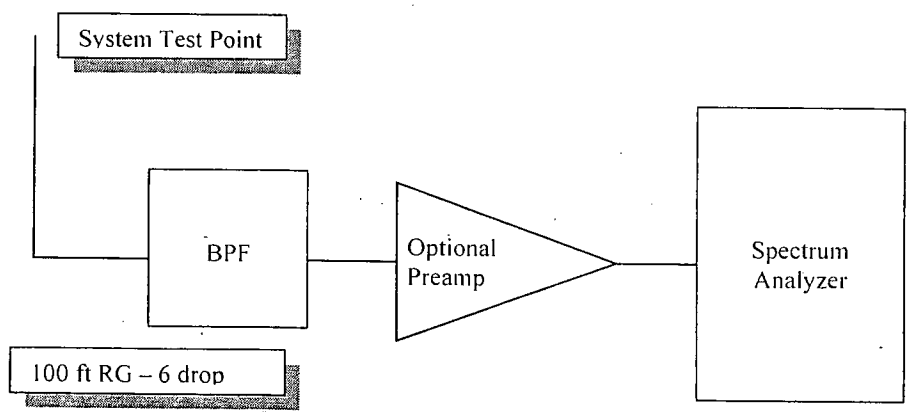
Picture Effect:

Noisy or snowy pictures. This can range from "imperceptible" at ratios above 47 db to "annoying" at levels less than 43 db.

Recommended Procedures:

- Measurements should be made on all of the test channels at each test point
- Connect equipment as shown in block diagram .
- Since most systems now have analyzers or signal level meters that automate this measurement, you should follow the manufacturers recommended method for this measurement. This would include such items as the proper RF input level required for measurement, the system noise floor higher than the analyzer noise floor, etc.
- Lastly, follow sound engineering practices as outlined in the NCTA Recommended Practices for Measurements on Cable Television Systems.

Block Diagrams



COHERENT DISTURBANCES (CTB, CSO, INTERMOD) FCC 76.605 (a) (8)

Specification:

FCC: Ratio of visual signal level to coherent disturbances shall not be less than 51db. Syracuse Division: Minimum intermod, CSO and CTB is 55db

Picture Effect:

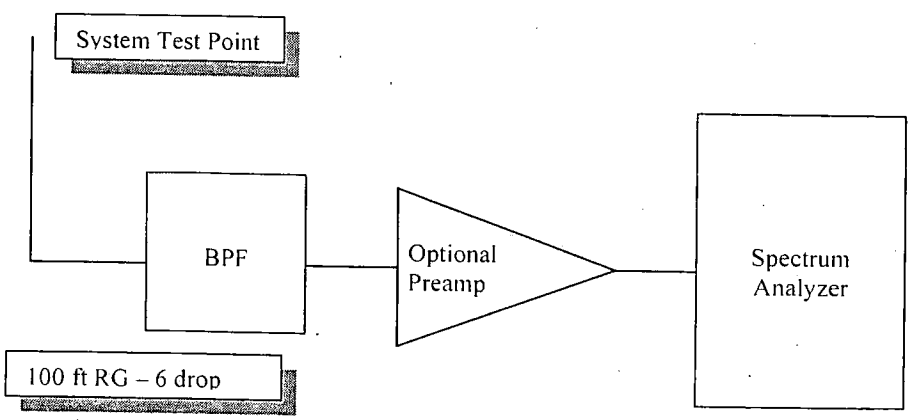
Interfering line patterns, horizontal line streaks, beats in the picture, etc.

Recommended Procedures:

- Measurements should be made on all test channels at each test point
- Connect equipment as shown in block diagram.
- Since most systems now have analyzers that automate these measurements, you should follow the manufacturers recommended method for performing these measurements. This would include such items as the proper RF input level that is required for the measurement, insuring that you are not overloading the front end of the analyzer, etc.
- Lastly, follow sound engineering practices as outlined in the NCTA Recommended Practices for Measurements on Cable Television Systems.

Note:

1) Intermod products can fall anywhere within a 6 Mhz bandwidth
2) CSO falls at +/- .75 Mhz and +/- 1.25 Mhz, we only need to record the positive offset numbers. If this measurement is automated, then it will give you the worst case number. This is fine as long as it meets or exceeds spec.
3) CTB will fall at the visual carrier frequency. When picking test channels for the FCC proof, you should pick one channel that yields worst case CTB for your specific channel loading. Because you have to turn the video carrier off at the headend to make the CTB measurement, make sure you are not testing any AGC pilot frequencies.
4) If testing a channel that falls in an off-air spectrum insure that CTB measurement is not measuring direct pick-up.



LOW FREQUENCY DISTURBANCES (HUM MODULATION) FCC 76.605 (a) (10)

Specification:

FCC: Less than 3%

Syracuse Division: Less than 1%

Picture Effect:

Horizontal bars or stripes slowly moving from the bottom of the screen to the top.

Recommended Procedures:

- Measurement must be made on at least one of the FCC designated test channels.
- Connect equipment as shown in block diagram below.
- Since all systems now have analyzers that automate this measurement, you should follow the manufacturers recommended method for this measurement. This would include such items as the proper RF input level required for measurement, and measurements made on a cw carrier etc.
- Lastly, follow sound engineering practices as outlined in the NCTA Recommended Practices for Measurements on Cable Television Systems.

Block Diagram: