Exhibit 6 – Test Report

General Dynamics C4 Systems

VHF URC-200 Transceiver

FCC ID: MIJURC-200XCVR-V2

Model No. URC-200 (V2)

Equipment Applicant:	**General Dynamics C4 Systems** **8220 E. Roosevelt St.** **Scottsdale, Arizona 85257**
Tests Conducted By:	**General Dynamics C4 Systems** **EMC Test Facility** **8201 E. McDowell Rd.** **Scottsdale, Arizona 85257**
Test Summary:	**Complies with FCC Parts 22, 74, 87, and 90**

The General Dynamics EMC Laboratory is accredited through the

NVLAP®

NVLAP Lab Code 100405-0

6.0 Introduction

6.0.1 Facility Description

The FCC certification testing on the URC-200 (V2) was performed by General Dynamics C4 Systems (GDC4S), EMC/TEMPEST Test Laboratory which is located in the southeast wing of the Hayden building at 8201 E. McDowell Road, Scottsdale, AZ.

The GDC4S EMC test facility includes a certified three-meter and ten-meter Open Area Test Site (OATS) and several shielded enclosures. The facility has been found to be in compliance with the requirements of Section 2.948 of the FCC rules, per Registration Number 90811, dated July 18, 2007. The facility has also been issued a Certificate of Accreditation through the National Voluntary Laboratory Accreditation Program (NVLAP) by NIST. This is under NVLAP Code: 100405-0 and is effective through September 30, 2009. The facility is in compliance with all CISPR 16 requirements.

6.0.2 Quality System

The GDC4S EMI/TEMPEST Test Laboratory maintains a Group Operations Manual that describes the quality assurance program of the EMC/TEMPEST Facility to set forth procedures covering all quality assurance functions. This manual has been constructed to reflect a quality program in compliance with the requirements of the following:

- National Institute of Standards & Technology (NIST) National Voluntary Laboratory Accreditation Program (NVLAP)
- NIST Handbook 150-11 (2007 Edition)
- ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories
- National Security Agency Technical and Security Requirements Document for the Endorsed TEMPEST Test Services Program NSA TSRD No. 88-9C rev. 2

6.0.3 Standard References

47 CFR 2	Code of Federal Regulations, Title 47, Part 2, "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
47 CFR 87	Code of Federal Regulations, Title 47, Part 87, "Aviation Services"
47 CFR 22	Code of Federal Regulations, Title 47, Part 22, "Public Mobile Services"
47 CFR 90	Code of Federal Regulations, Title 47, Part 90, "Private Land Mobile Services"

47 CFR 74 Code of Federal Regulations, Title 47, Part 74, "Auxiliary Broadcast"

C63.4-2003 American National Standards Institute (ANSI), "Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz"

6.1 Test Requirements

The URC-200 transmitter is capable of operating in multiple frequency bands including several allocations across the 117 MHz to 174 MHz. Operation within this VHF band is subject to the regulations of multiple CFR parts including Parts 2, 22, 74, 87, and 90 for FCC Certification for units deployable in the United States. Table 6.1-1 illustrates the test requirements list, as specified in FCC CFR Part 2.

Table 6.1-1 FCC *Certification Technical Requirement List*

47 CFR Part 2 Requirements	***Requirement Description***	***Compliance***
2.1046	Power and Emissions	Yes
2.1047	Modulation Characteristics	Yes
2.1049	Occupied Bandwidth	Yes
2.1051	Spurious Emissions Antenna Terminal; Spectrum Mask	Yes
2.1053	Radiated Spurious Emissions	Yes
2.1055	Carrier Frequency Stability; Temperature and Voltage	Yes

6.2 Test Results

The test results presented in this report are for the certification testing performed on URC-200 (V2), S/N QUAL0028. The majority of these tests were performed in a semi-anechoic chamber, referred to as USC#2 within the EMC test laboratory, having the following ambient conditions:

Temperature 80°F
Humidity 40%
Barometric Pressure 96.6 kPa

6.2.1 Occupied Bandwidth

The occupied bandwidth measurements for the URC-200 are illustrated in Figures 6.2-1 through 6.2-8. These measurements were performed via antenna terminal conducted scans. These carrier measurements were taken with modulation of 2500 Hz tone at an input level 16dB greater than that necessary to produce 50 percent modulation as defined in 47 CFR 2.1049. The 99% occupied bandwidth measurement is an automated measurement performed by the Rohde & Schwartz spectrum analyzer.

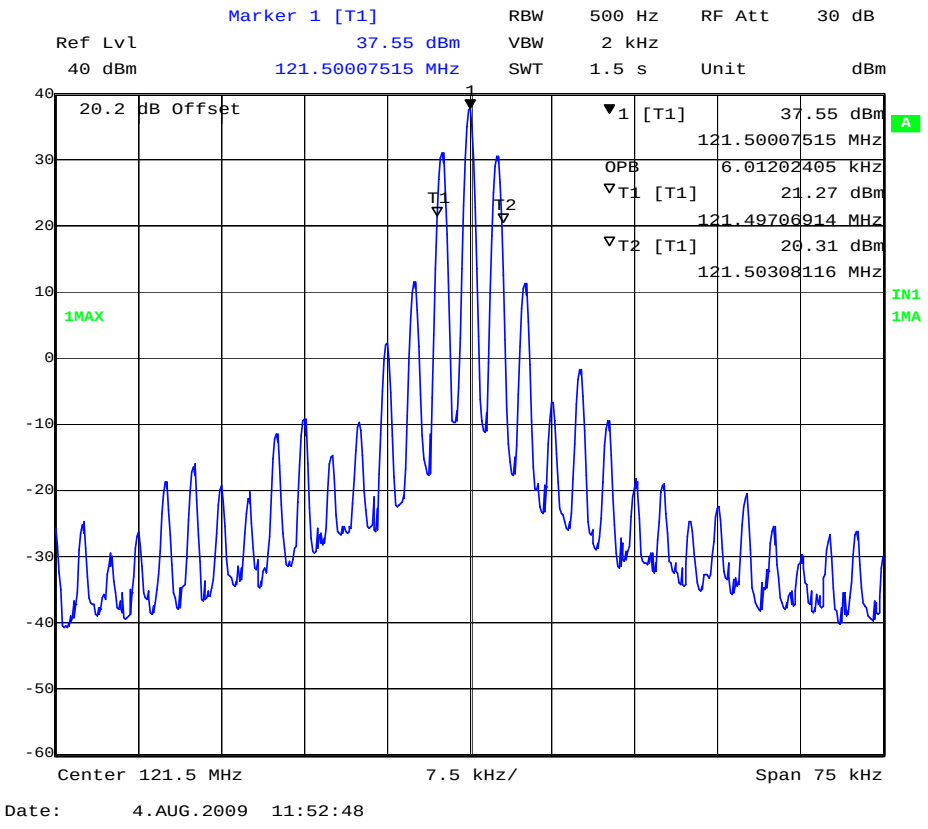


Figure 6.2-1 Occupied Bandwidth @ 121.5 MHz, AM, High Power

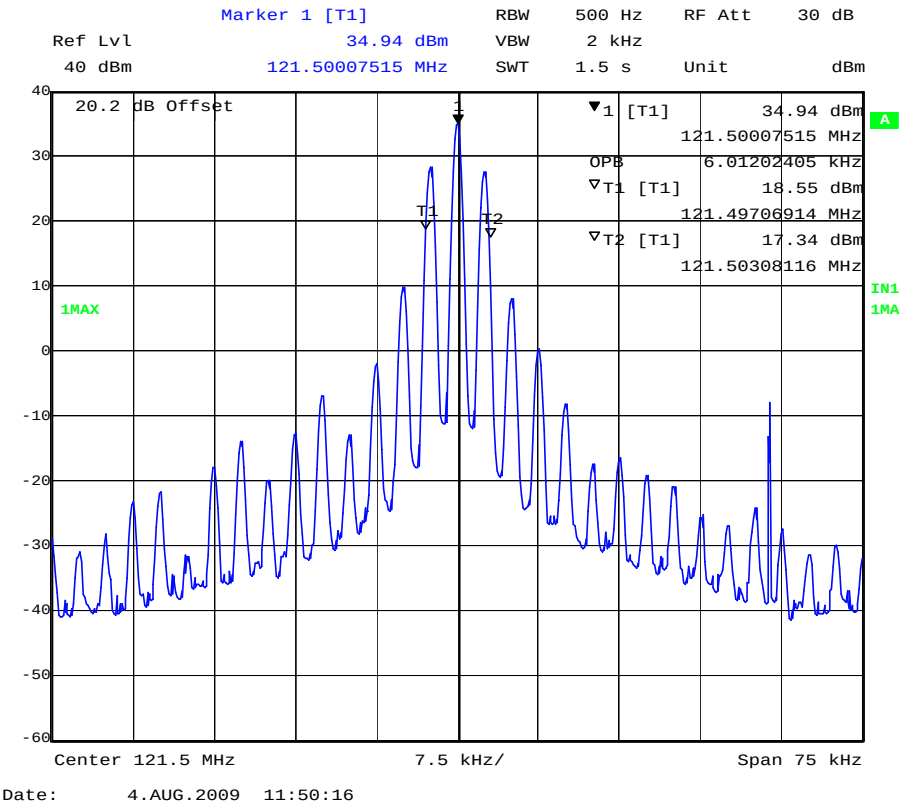


Figure 6.2-2 Occupied Bandwidth @ 121.5 MHz, AM, Low Power

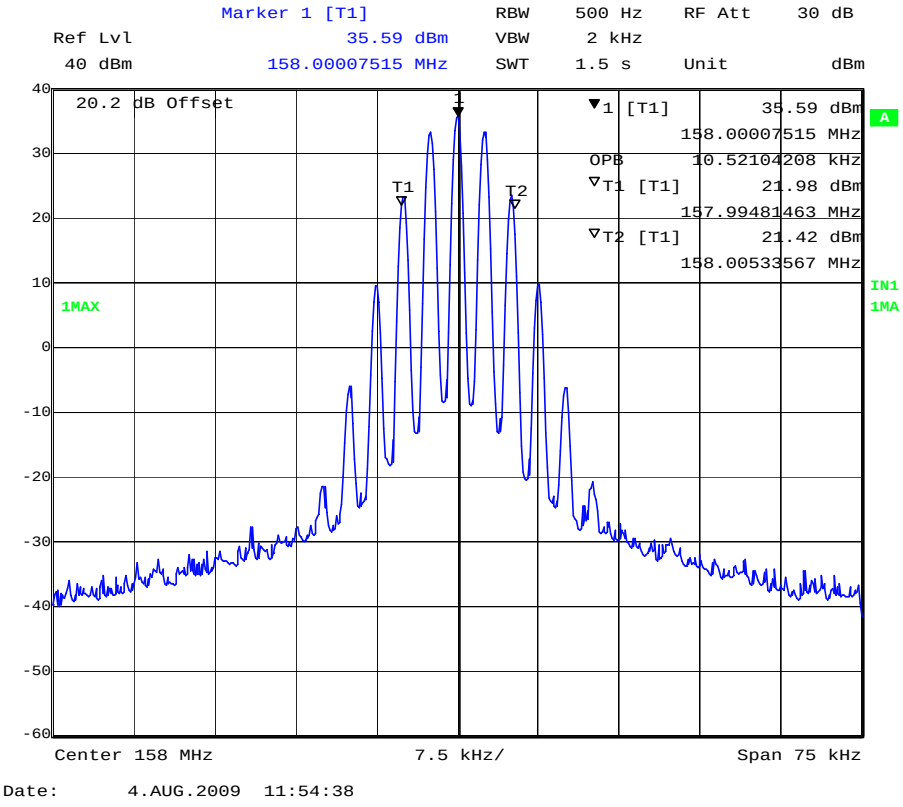


Figure 6.2-3 Occupied Bandwidth @ 158 MHz, FM, High Power

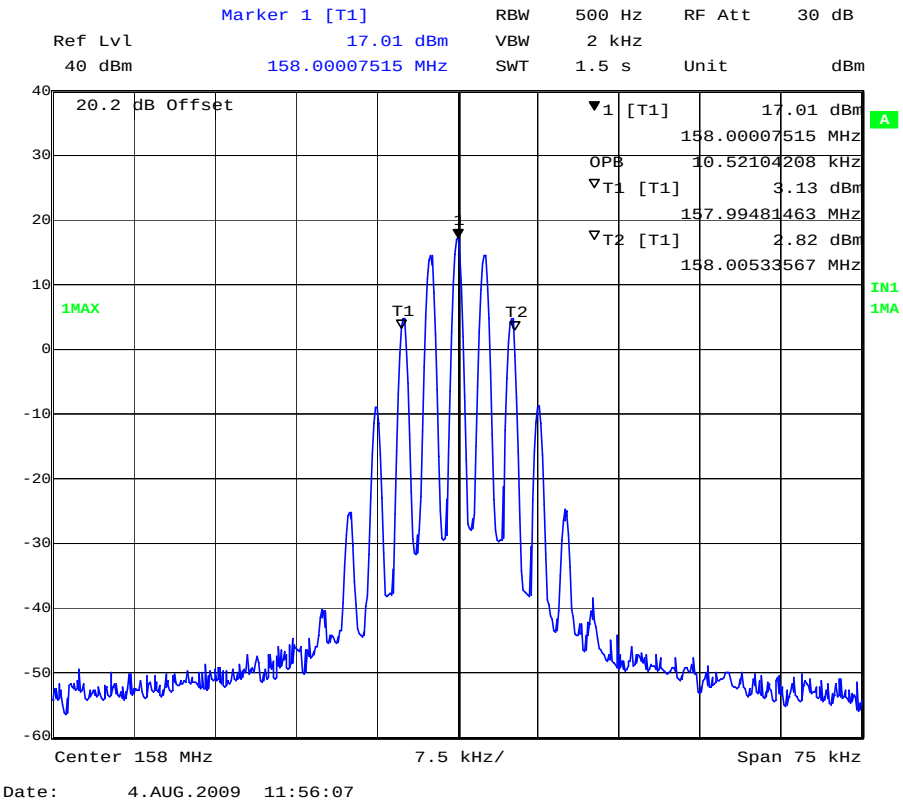


Figure 6.2-4 Occupied Bandwidth @ 158 MHz, FM, Low Power

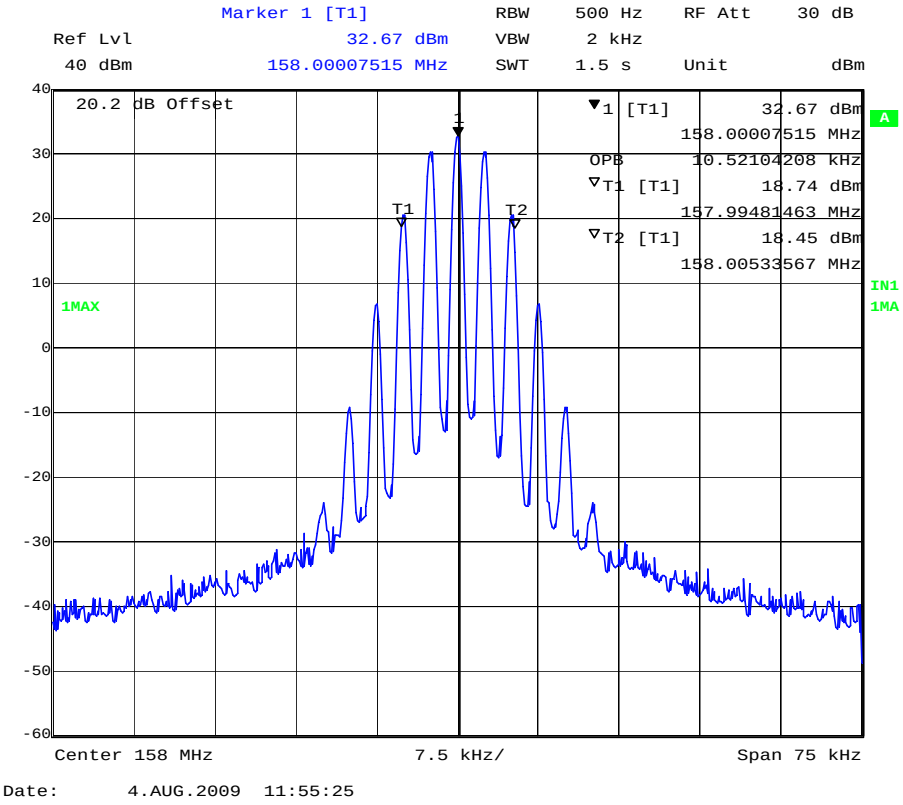


Figure 6.2-5 Occupied Bandwidth @ 158 MHz, FM, Med Power

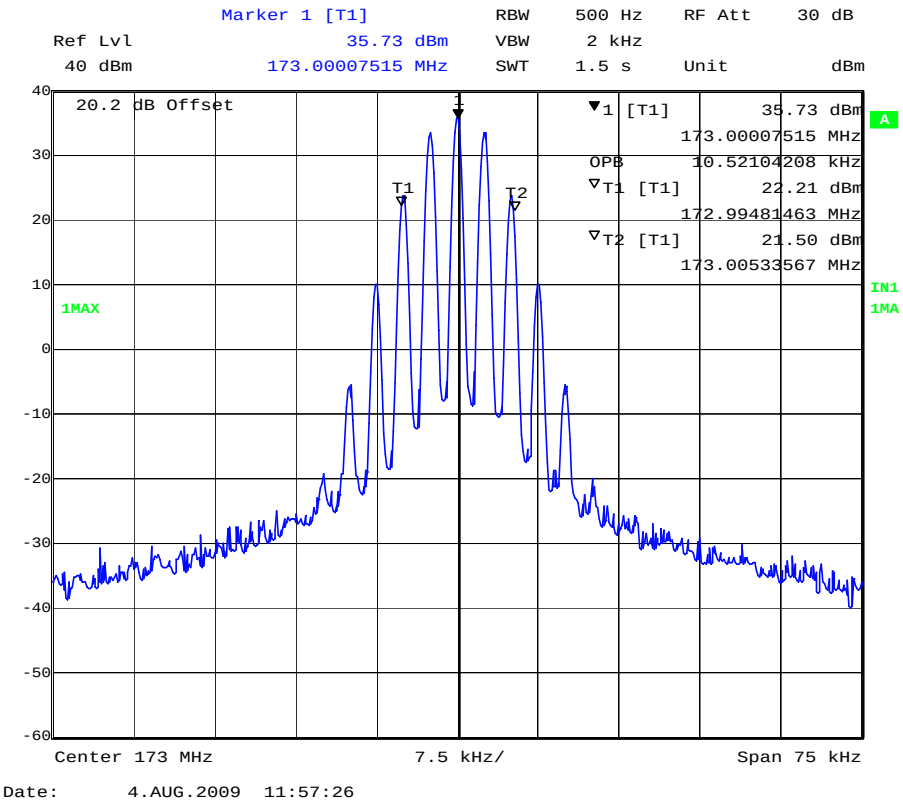


Figure 6.2-6 Occupied Bandwidth @ 173 MHz, FM, High Power

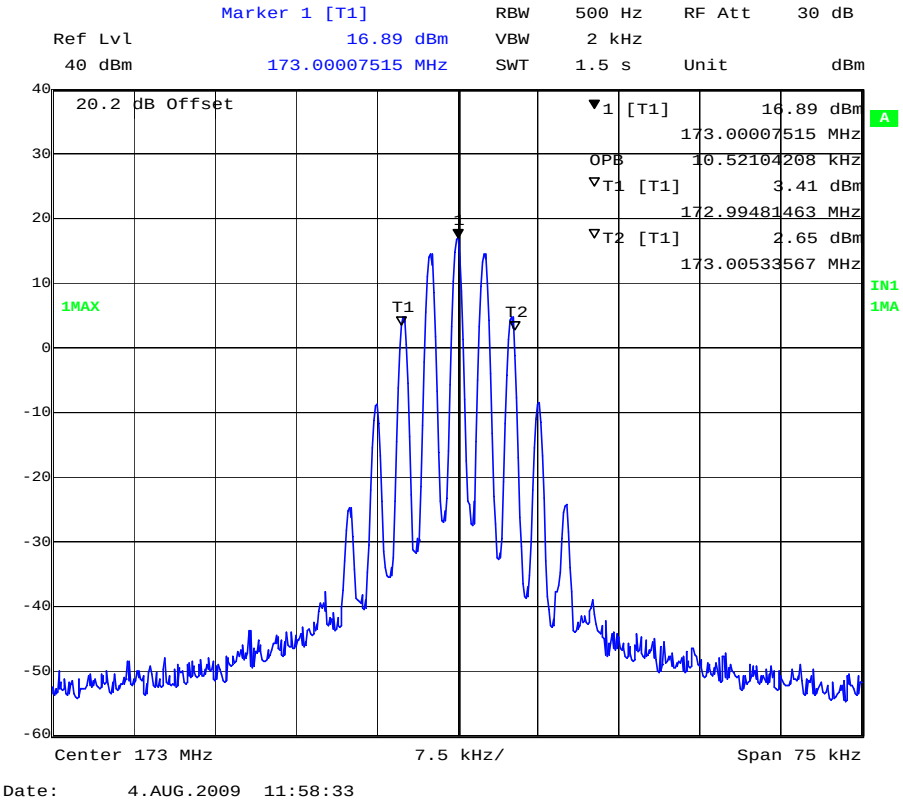


Figure 6.2-7 Occupied Bandwidth @ 173 MHz, FM, Low Power

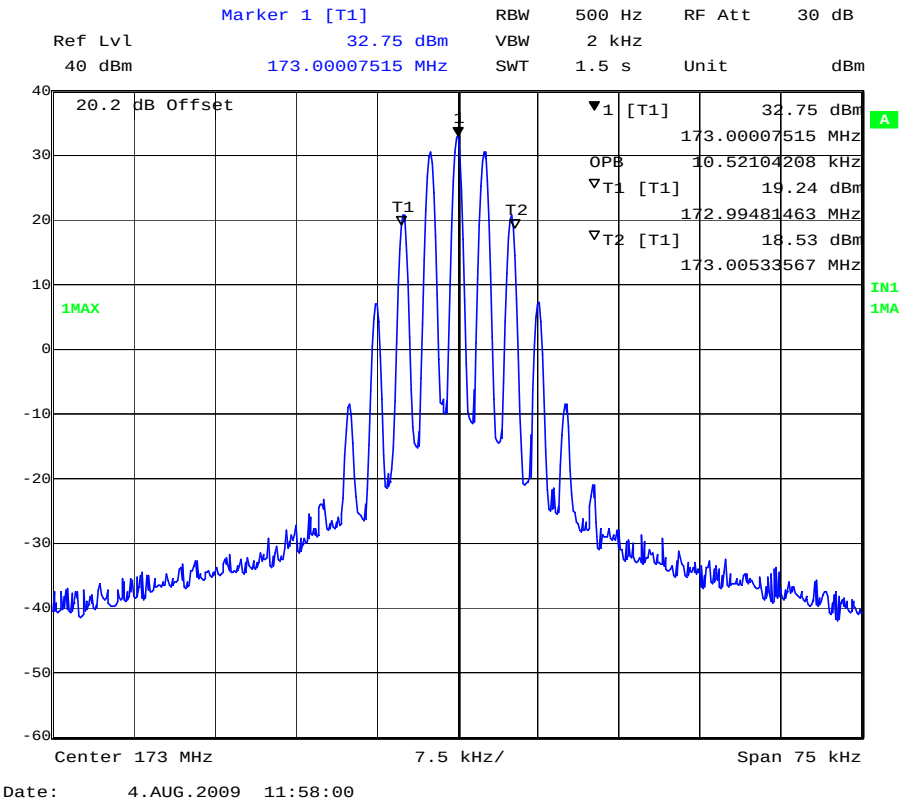


Figure 6.2-8 Occupied Bandwidth @ 173 MHz, FM, Med Power

6.2.2 Spurious Emissions, Antenna Terminal

Conducted spurious emissions at the antenna port were measured over the frequency range of 30 MHz to 2 GHz. The first set of test data provided in Section 6.2.2.1 is for the spectral mask within ± 250% frequency offset of the carrier fundamental frequency. The second set of test data, Section 6.2.2.2, is for all conducted spurious emissions at >250% frequency offset from the carrier frequency.

6.2.2.1 Spectral Mask

The spectral mask was measured at frequencies ± 250% of the allocated bandwidth centered at the low, mid, and high operating frequencies of 121.5 MHz, 158 MHz, and 173 MHz. The requirement limits are specified as -25 dBc @ 50-100% offset, -35 dBc @ 100-250% offset, and -53 dBc (43+10LogP) @ >250% offset. The same modulation schemes used for the Occupied Bandwidth were used for these measurements. All modulated carriers were within their spectral mask requirements. Also provided in this section are the unmodulated (CW) peak power levels measured at each carrier frequency which ranged from +37.6 dBm to +39.2 dBm for the 10W power output setting.

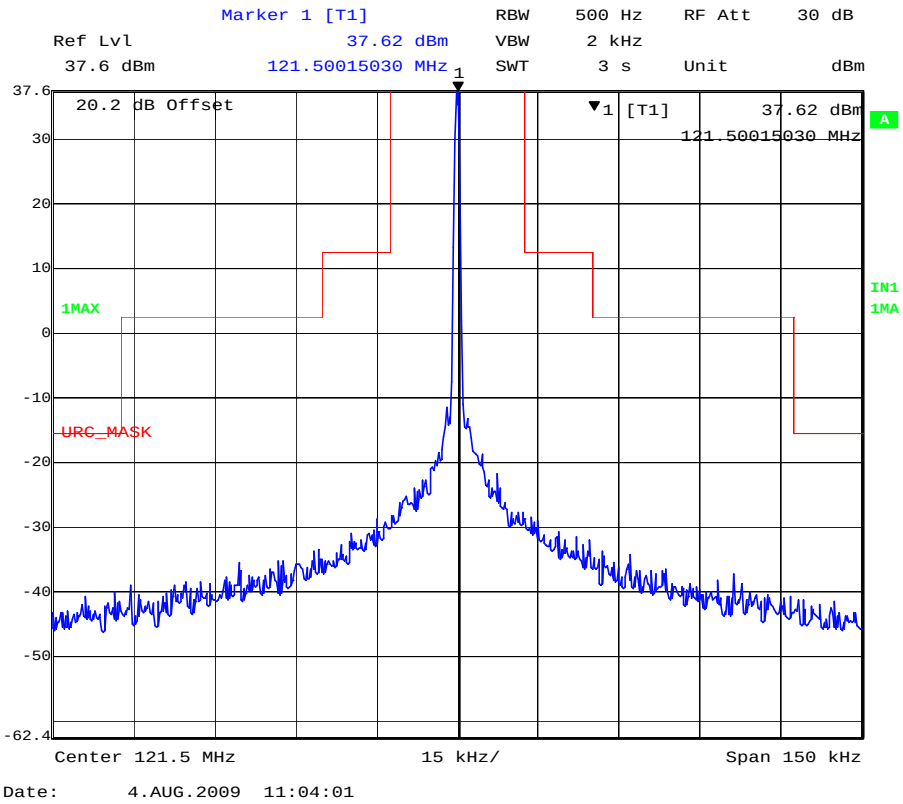


Figure 6.2-9 Spectrum Mask @ 121.5 MHz, CW, High Power

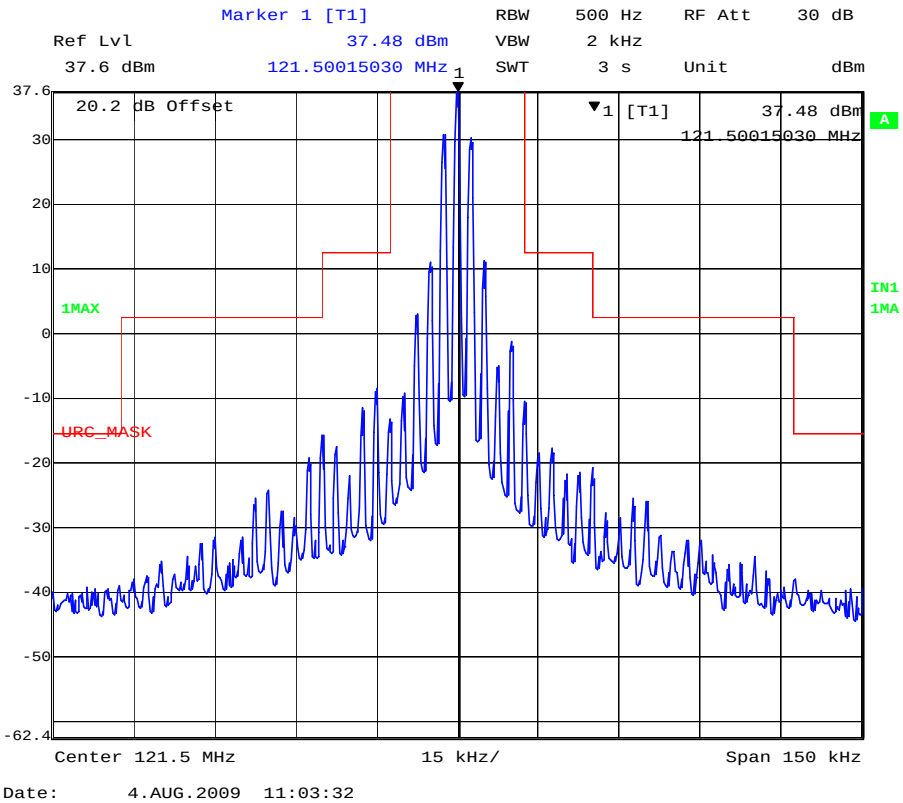


Figure 6.2-10 Spectrum Mask @ 121.5 MHz, AM, High Power

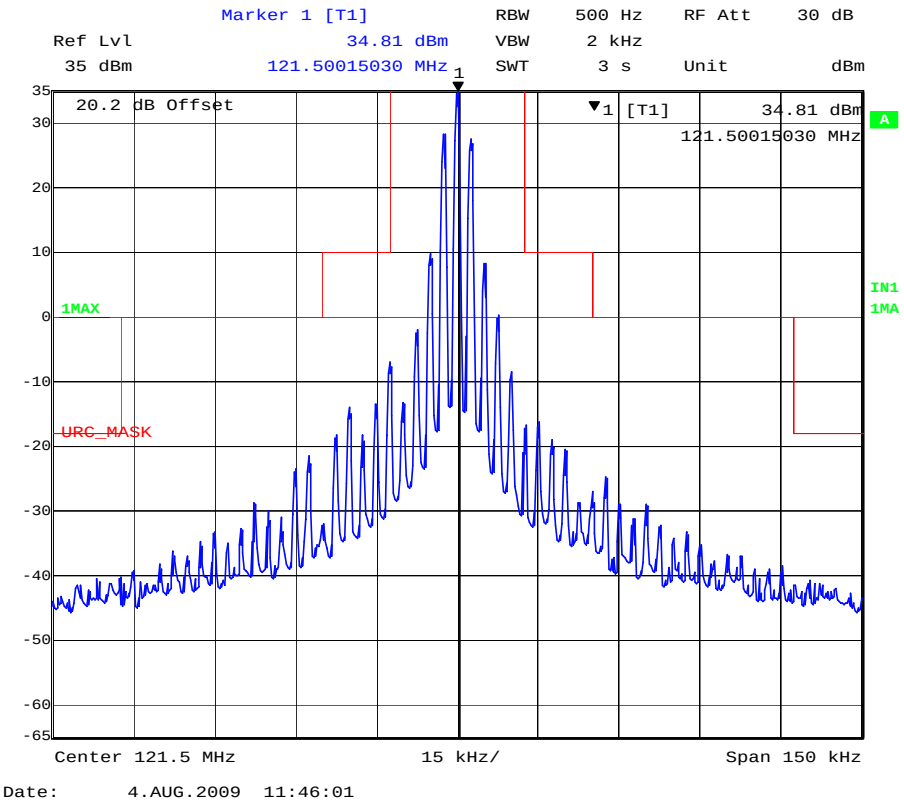


Figure 6.2-11 Spectrum Mask @ 121.5 MHz, AM, Low Power

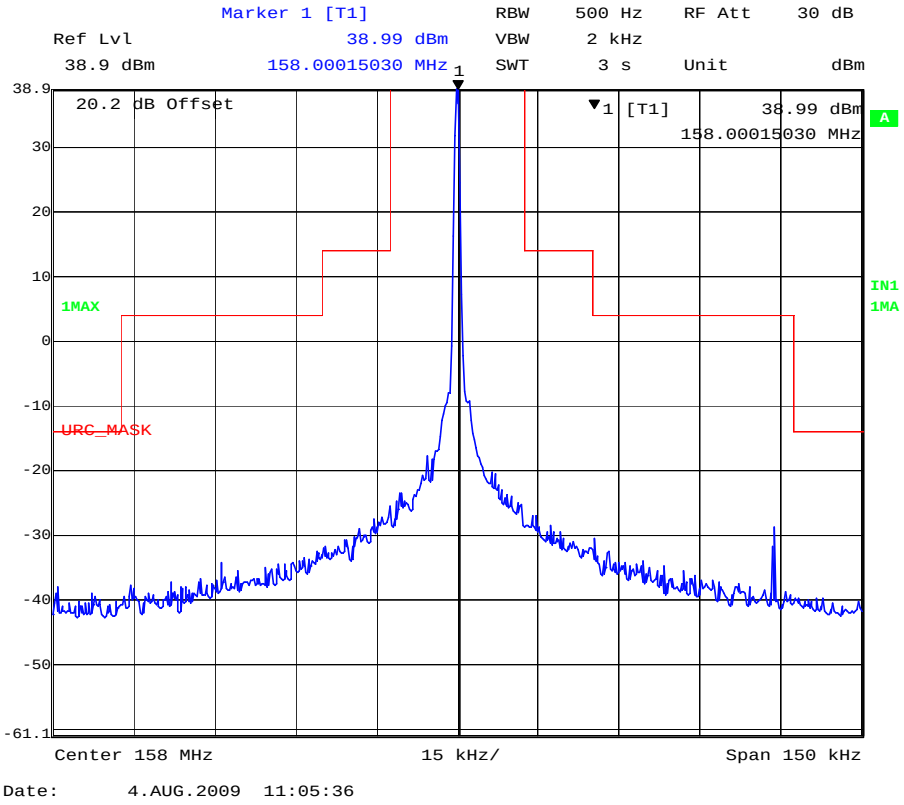


Figure 6.2-12 Spectrum Mask @ 158 MHz, CW, High Power

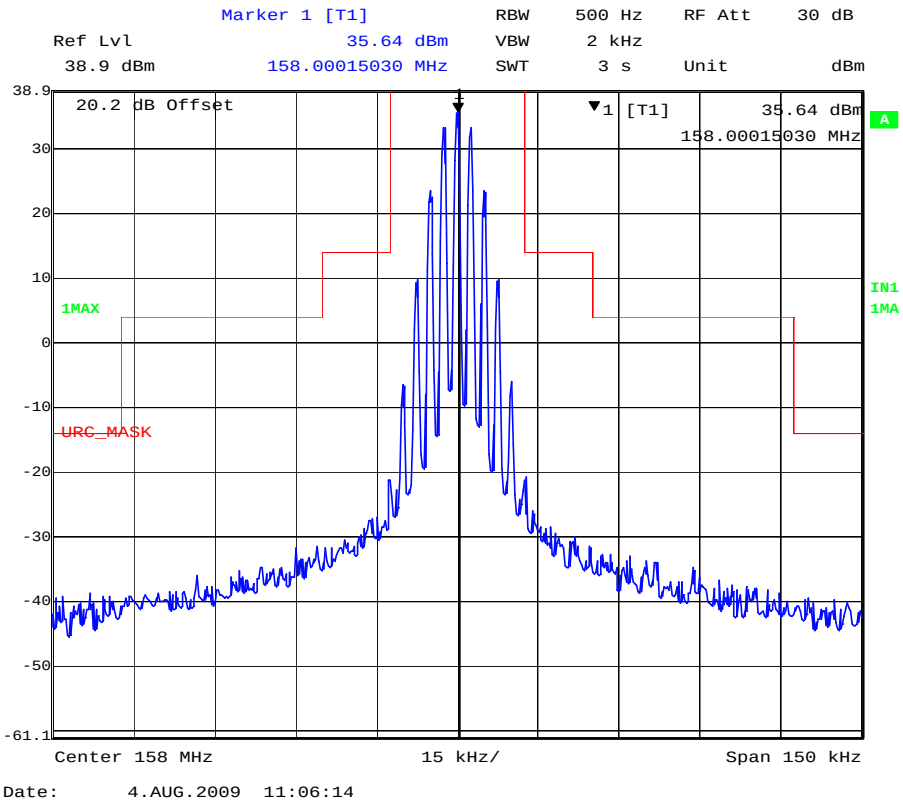


Figure 6.2-13 Spectrum Mask @ 158 MHz, FM, High Power

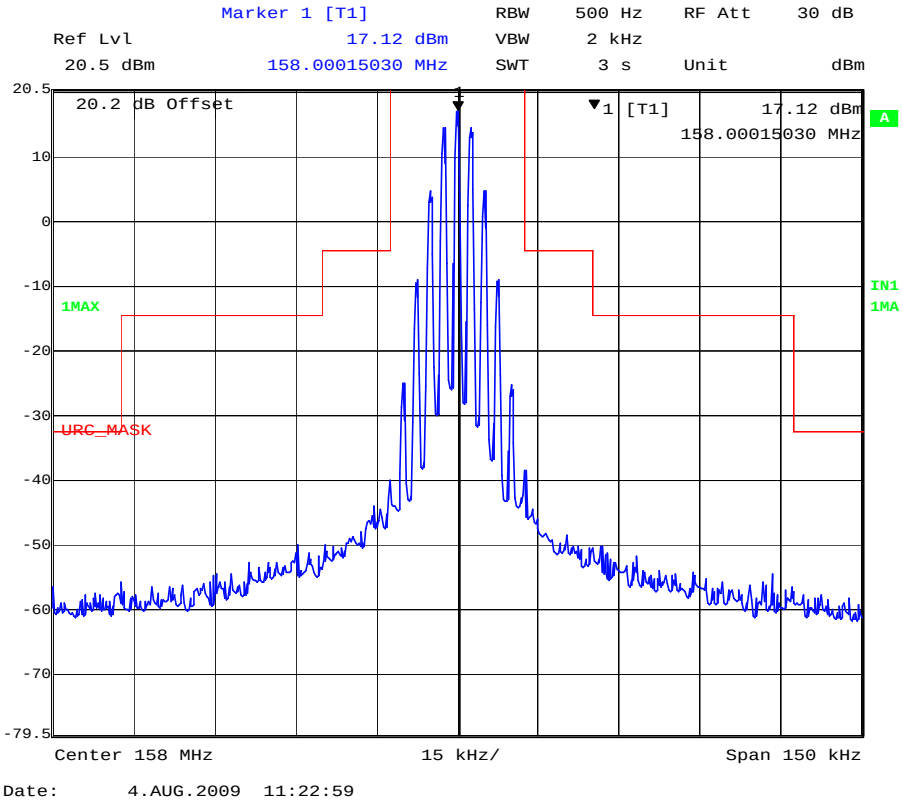


Figure 6.2-14 Spectrum Mask @ 158 MHz, FM, Low Power

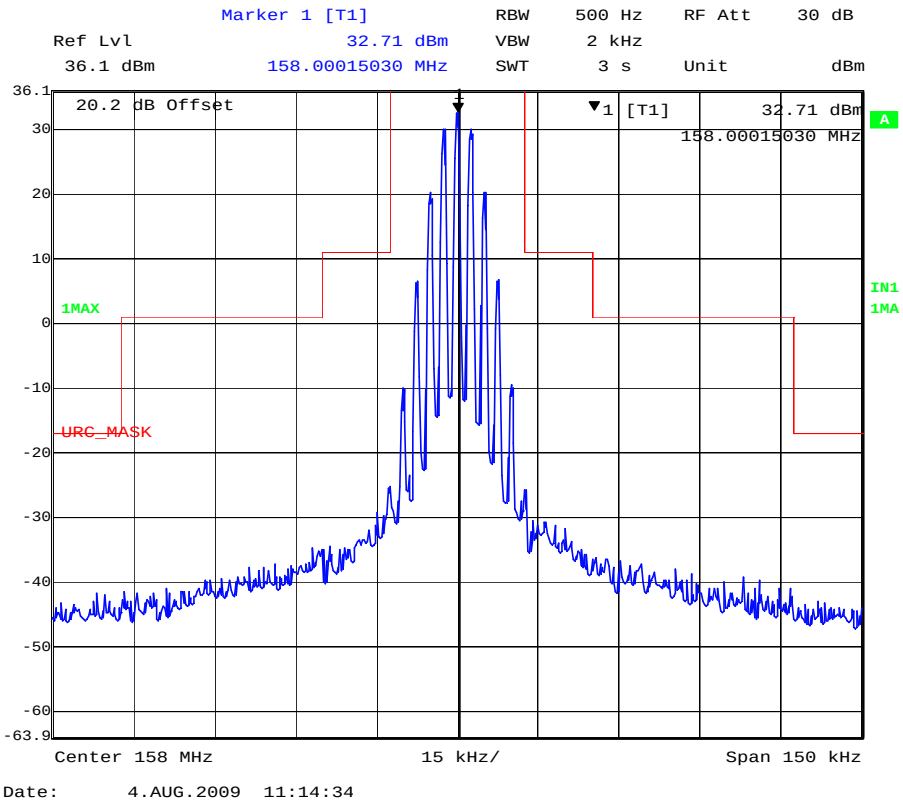


Figure 6.2-15 Spectrum Mask @ 158 MHz, FM, Med Power

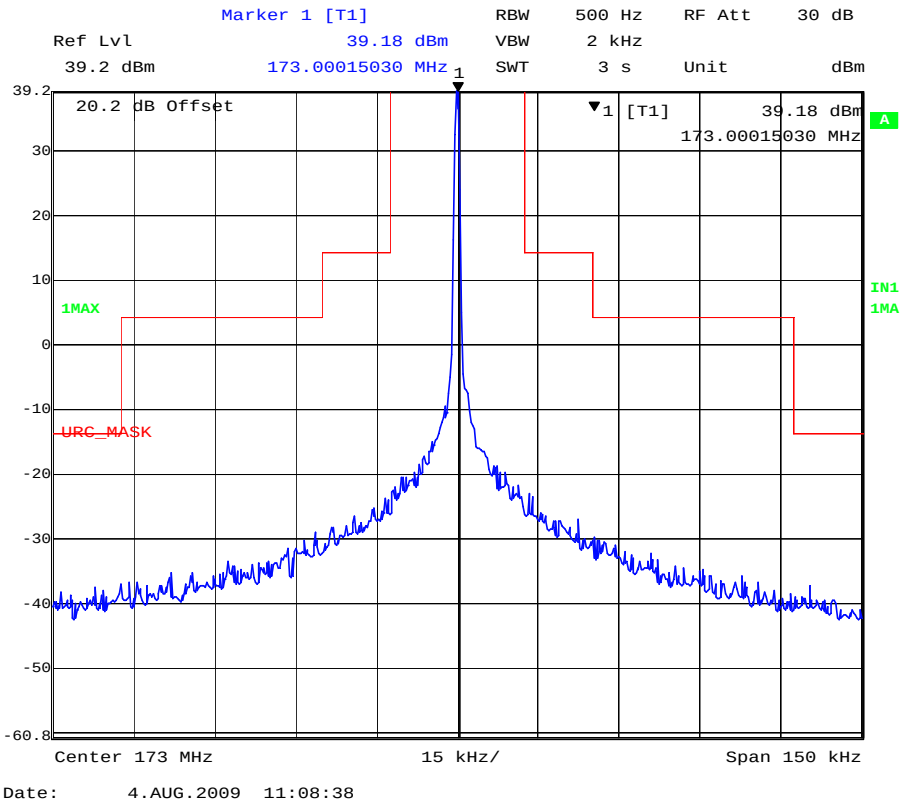


Figure 6.2-16 Spectrum Mask @ 173 MHz, CW, High Power

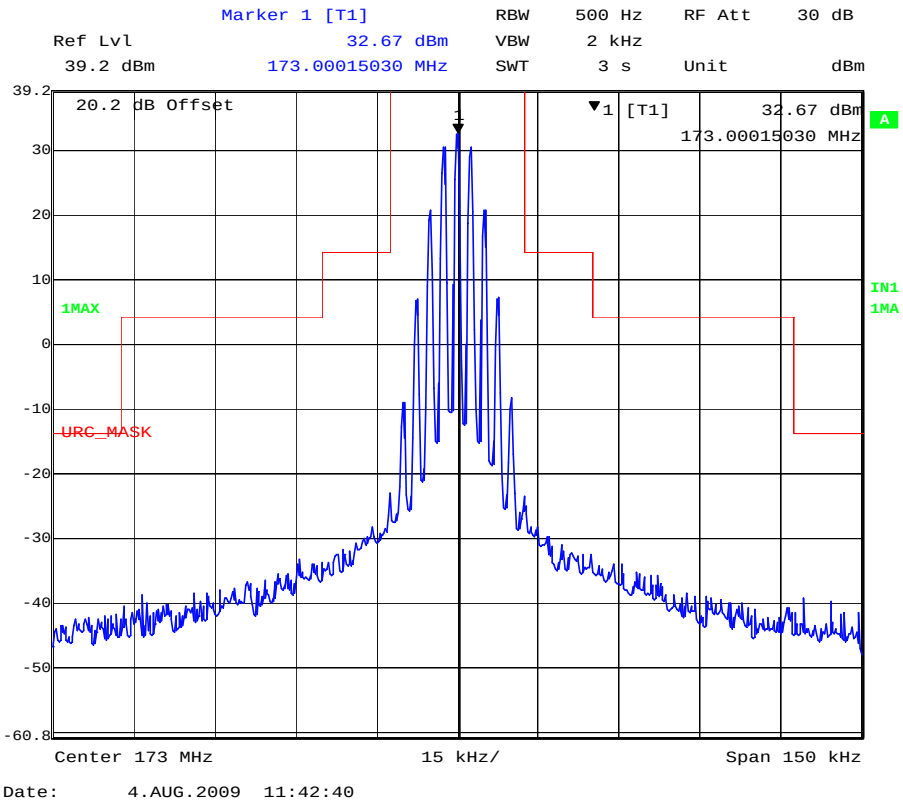


Figure 6.2-17 Spectrum Mask @ 173 MHz, FM, High Power

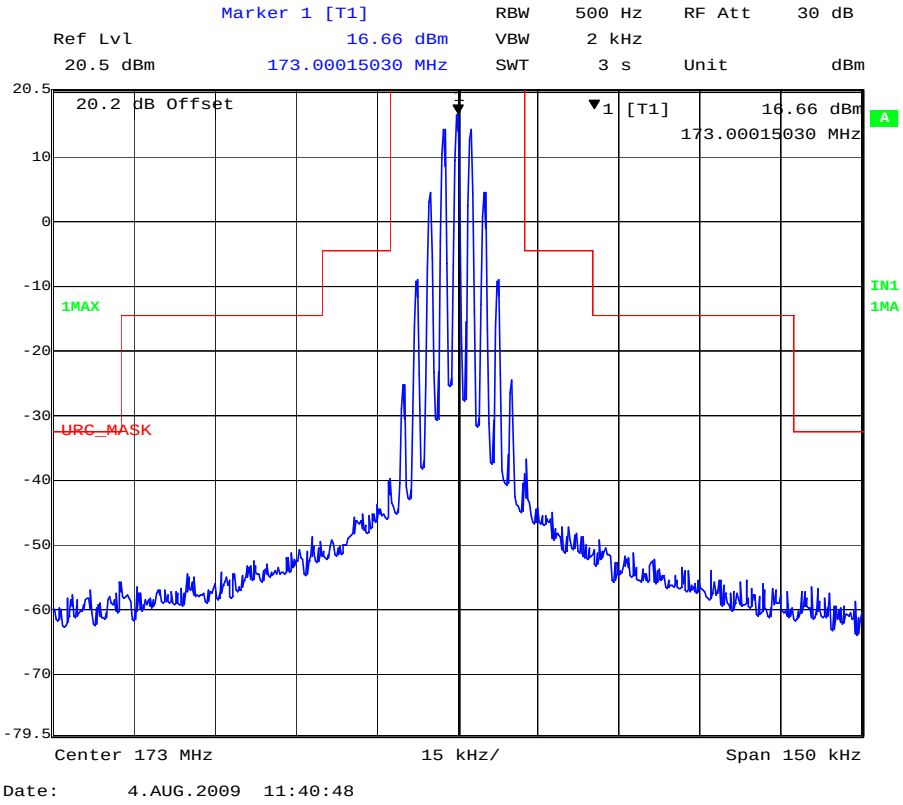


Figure 6.2-18 Spectrum Mask @ 173 MHz, FM, Low Power

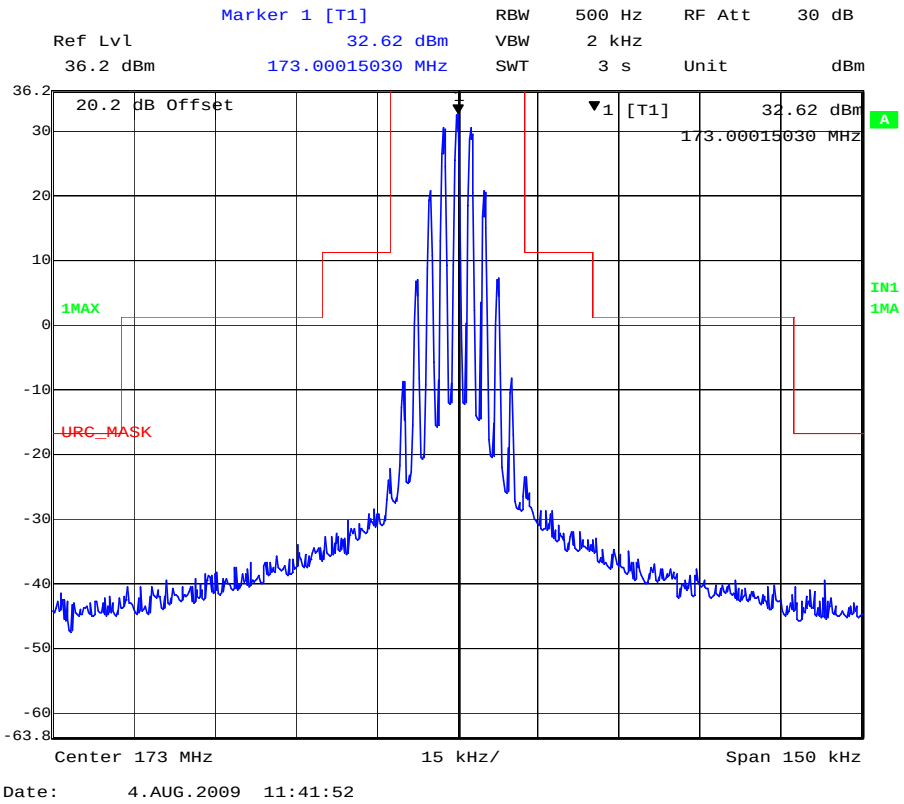


Figure 6.2-19 Spectrum Mask @ 173 MHz, FM, Med Power

6.2.2.2 Conducted Spurious Emissions

This data illustrates the out-of-band conducted spurious emissions measured between 30 MHz and 2 GHz. The test requirement limit specified at >250% frequency offset from the carrier frequency is -53 dBc (43+10Log P) or, for 10 W maximum power output, approximately -13 dBm.

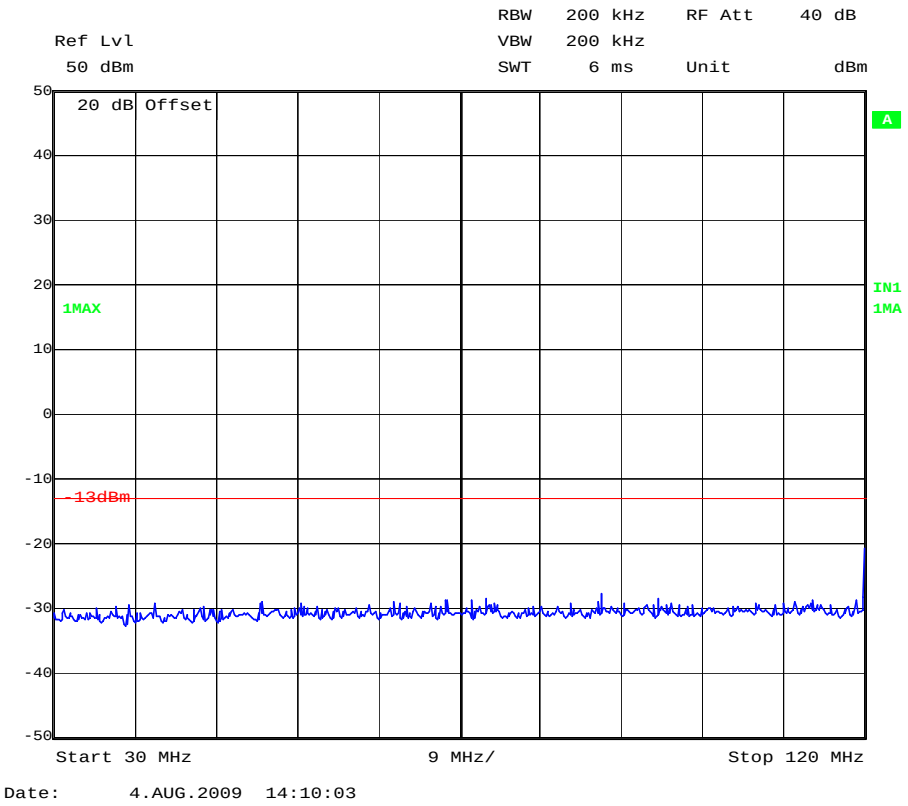


Figure 6.2-20 Conducted spurious emissions, 121.5 MHz (30 MHz – 120 MHz)

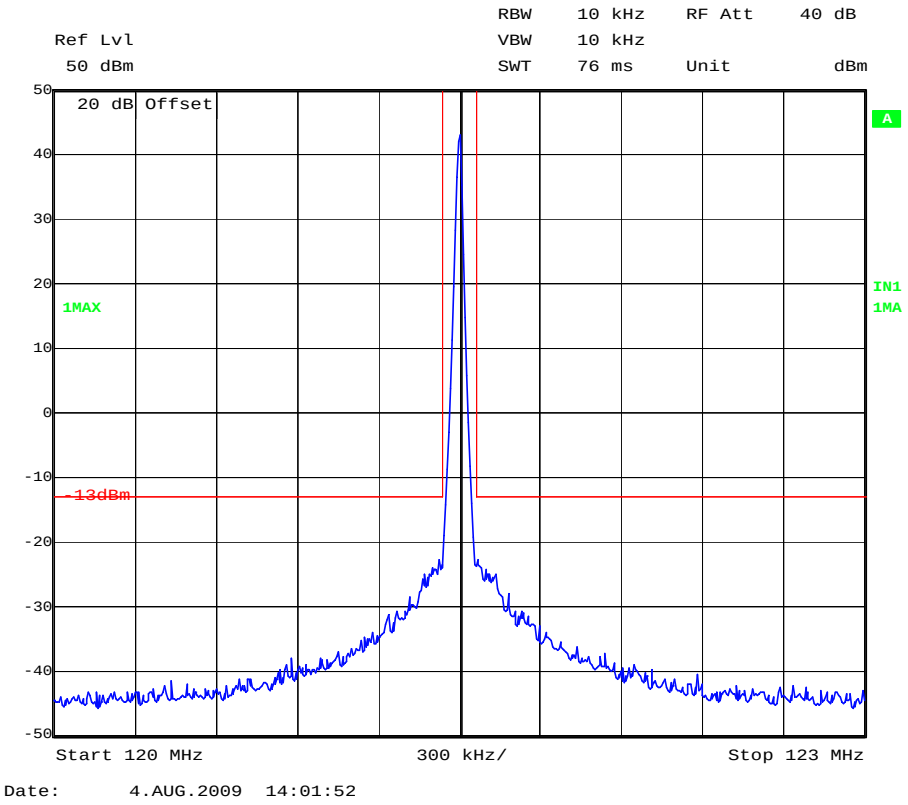


Figure 6.2-21 Conducted spurious emissions, 121.5 MHz (120 MHz – 123 MHz)

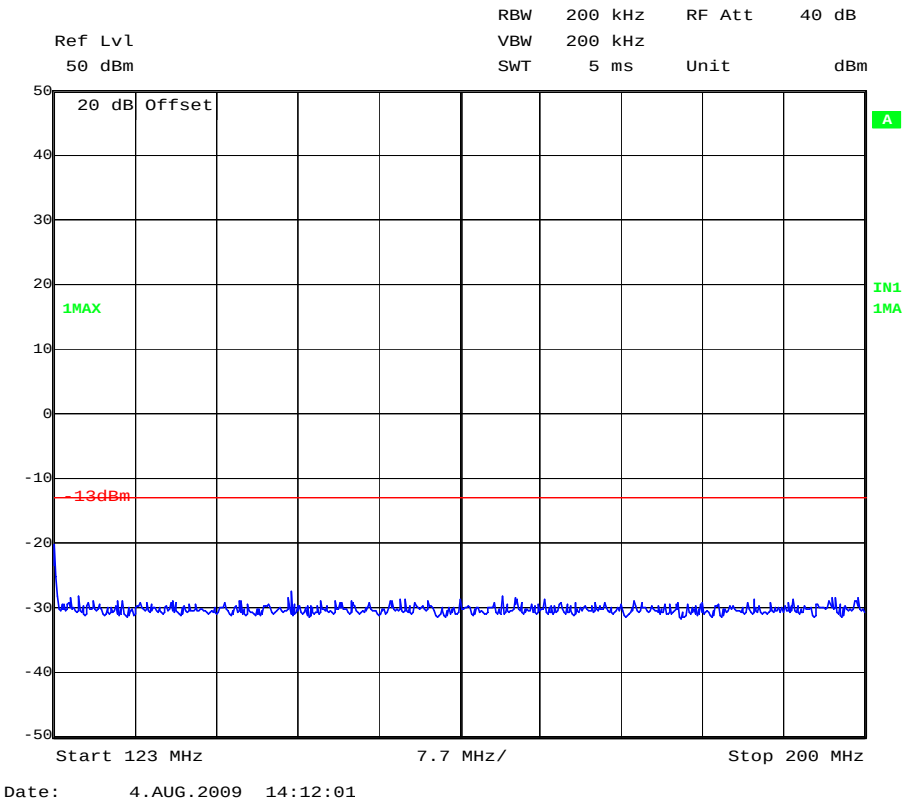


Figure 6.2-22 Conducted spurious emissions, 121.5 MHz (123 MHz – 200 MHz)

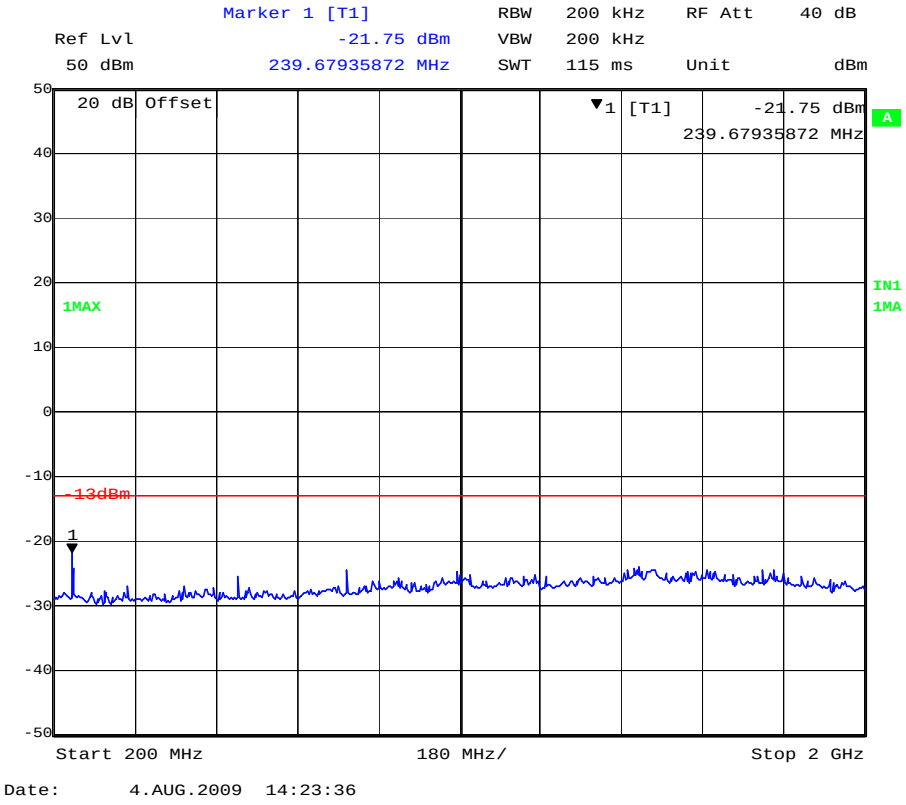


Figure 6.2-23 Conducted spurious emissions, 121.5 MHz (200 MHz – 2 GHz)

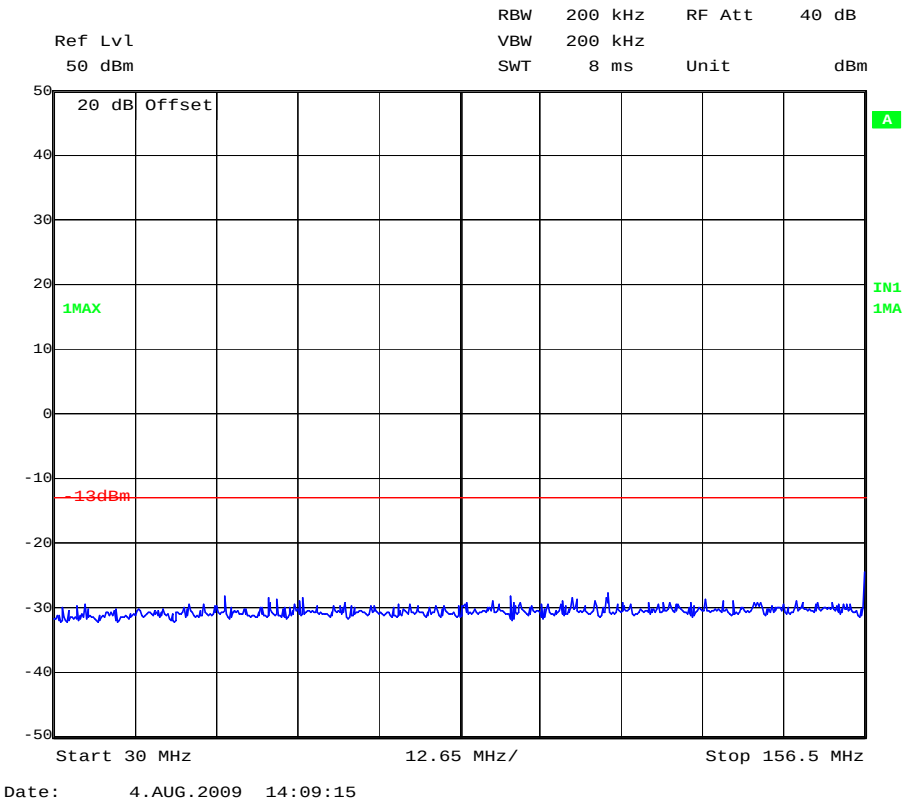


Figure 6.2-24 Conducted spurious emissions, 158 MHz (30 MHz – 156.5 MHz)

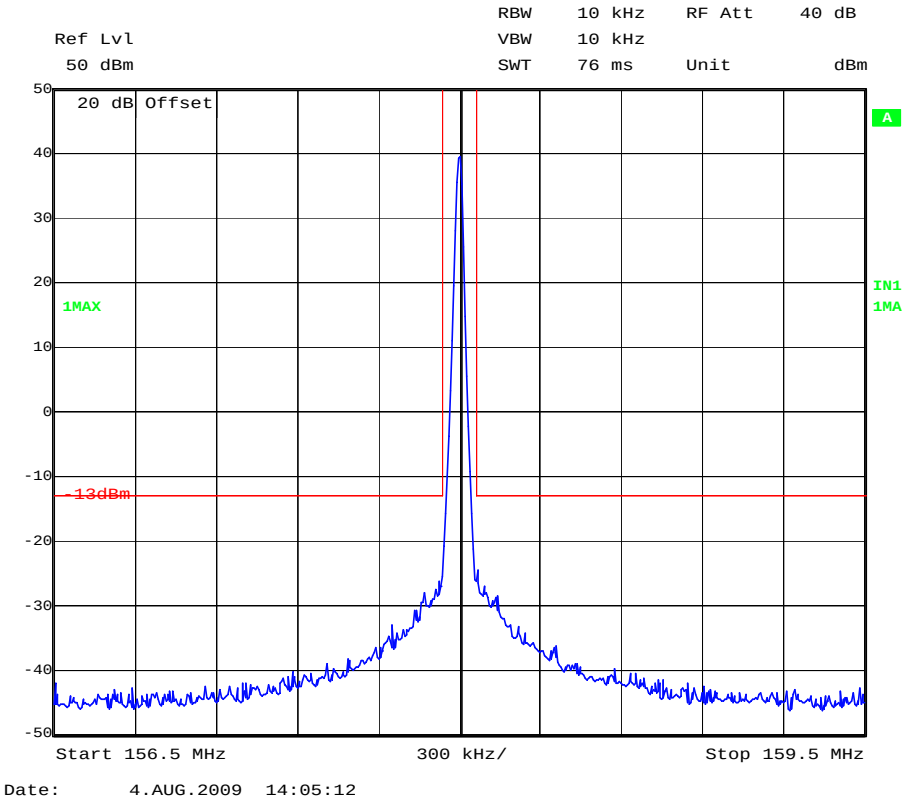


Figure 6.2-25 Conducted spurious emissions, 158 MHz (156.5 MHz – 159.5 MHz)

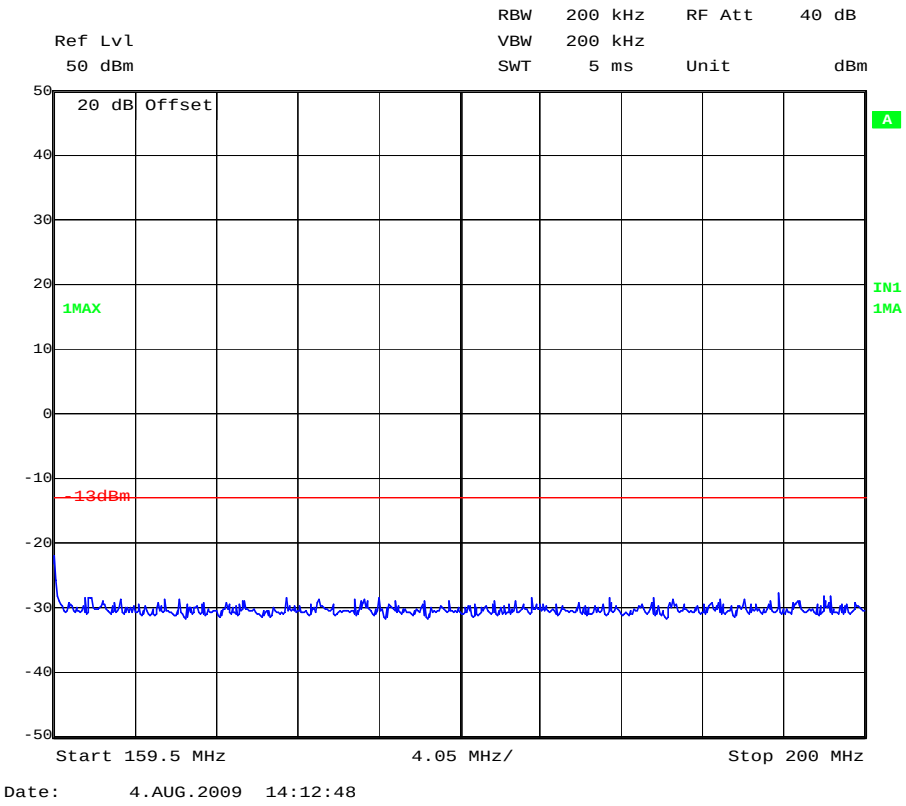


Figure 6.2-26 Conducted spurious emissions, 158 MHz (159.5 MHz – 200 MHz)

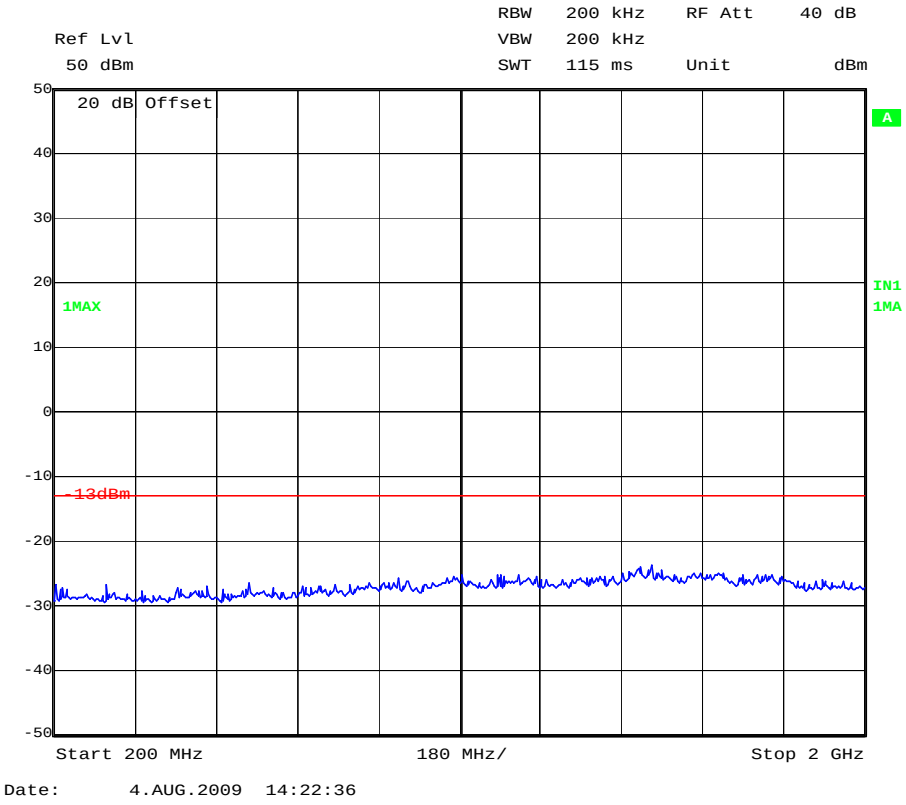


Figure 6.2-27 Conducted spurious emissions, 158 MHz (200 MHz – 2 GHz)

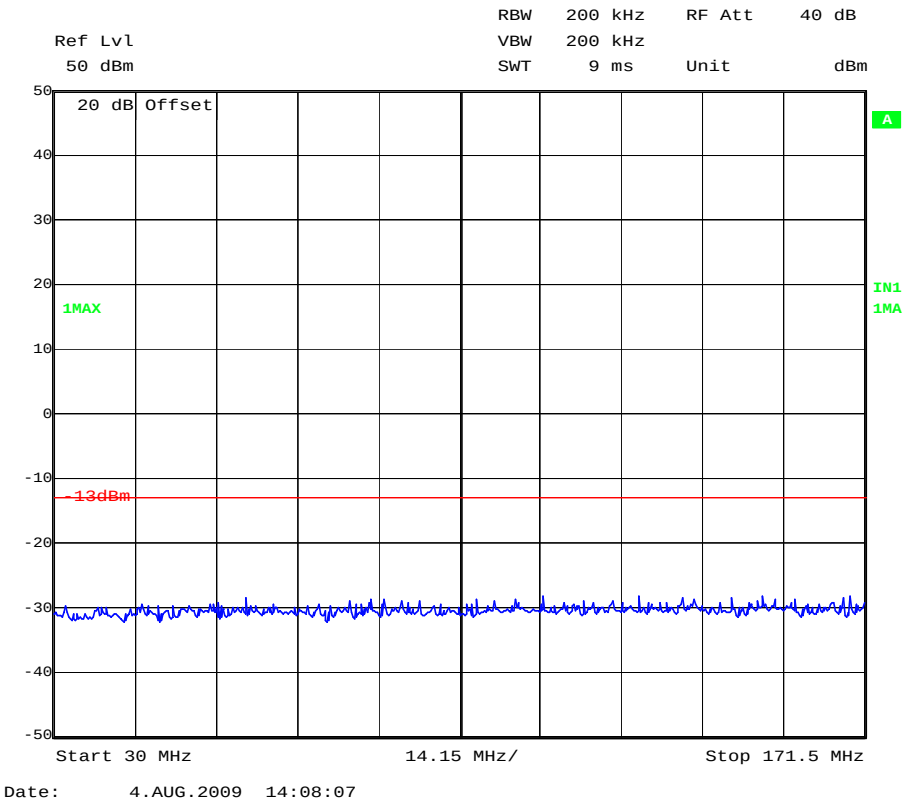


Figure 6.2-28 Conducted spurious emissions, 173 MHz (30 MHz – 171.5 MHz)

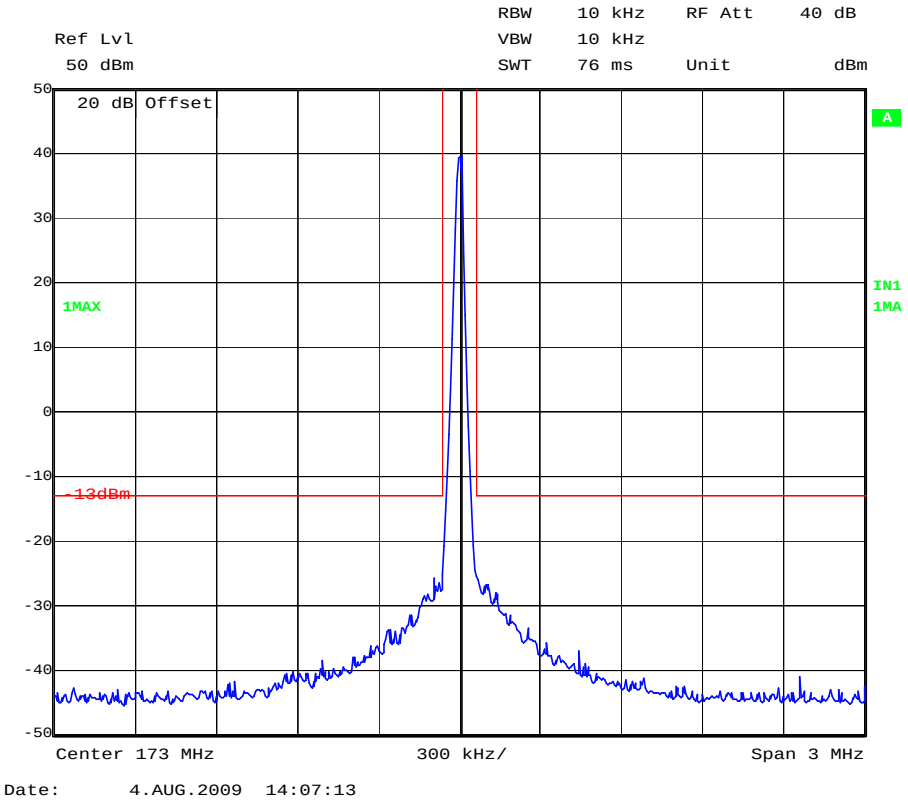


Figure 6.2-29 Conducted spurious emissions, 173 MHz (171.5 MHz – 174.5 MHz)

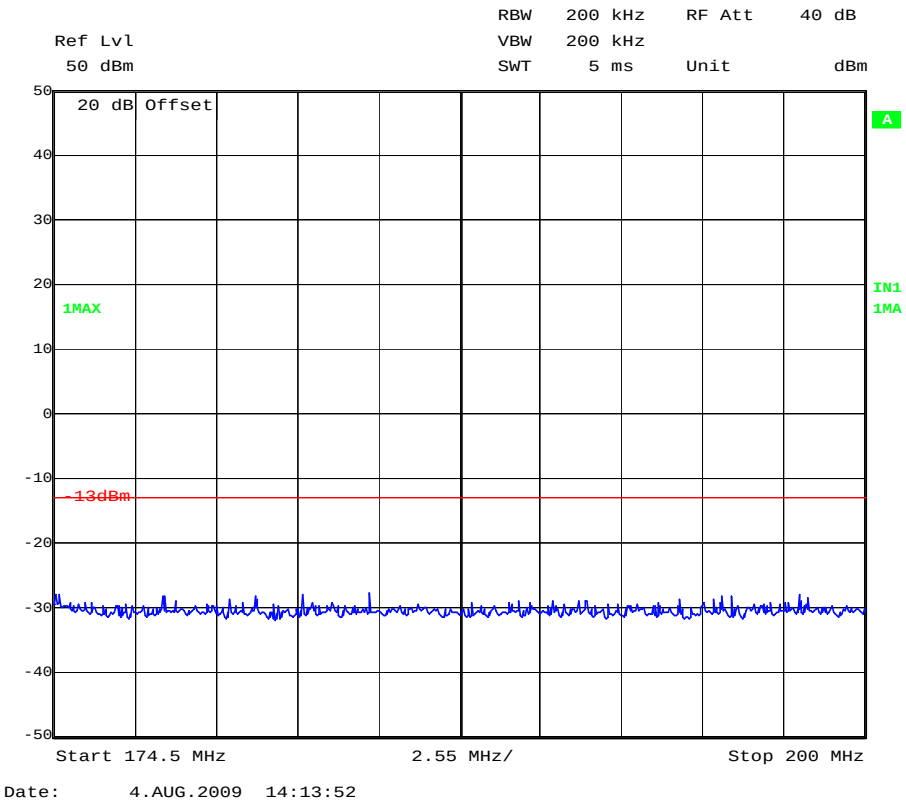


Figure 6.2-30 Conducted spurious emissions, 173 MHz (174.5 MHz – 200 MHz)

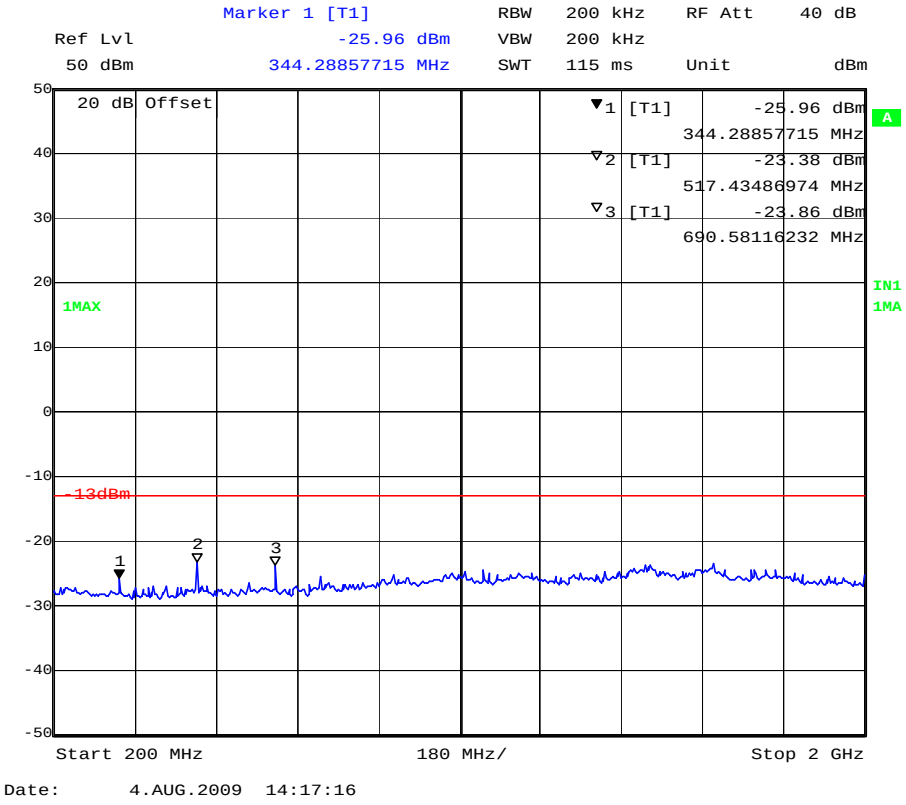


Figure 6.2-31 Conducted spurious emissions, 173 MHz (200 MHz – 2 GHz)

6.2.3 Radiated Spurious Emissions, Chassis/Cables

Radiated spurious emissions were measured over the frequency range of 30 MHz to 2 GHz with a 50 Ohm termination on the antenna port. The carrier signal field strength at maximum power (10W) was calculated to be approximately 137.4 dBuV/m at a 3 meter distance using the following formula.

$$E\ (V/m) = \sqrt{(30*P_tG_n)/d} = \sqrt{(30*10*1.64)/3} = 7.4\ V/m$$
$$E\ (dBuV/m) = 20*Log\ (7.4e06) = 137.4\ dBuV/m$$

This reference level was calculated with the assumption that all emissions are radiated from half wave dipole antennas ($G_n = 1.64$). Therefore, the radiated emissions requirement limit was calculated to be approximately -53 dBc (i.e. 43 +10*Log (10)) or 84 dBuV/m.

As illustrated, all radiated emissions from the cabinet and/or associated cables are well below (>30dB) the requirement limit. Therefore, there was no need to re-measure any of these spurious emissions again on the OATS.

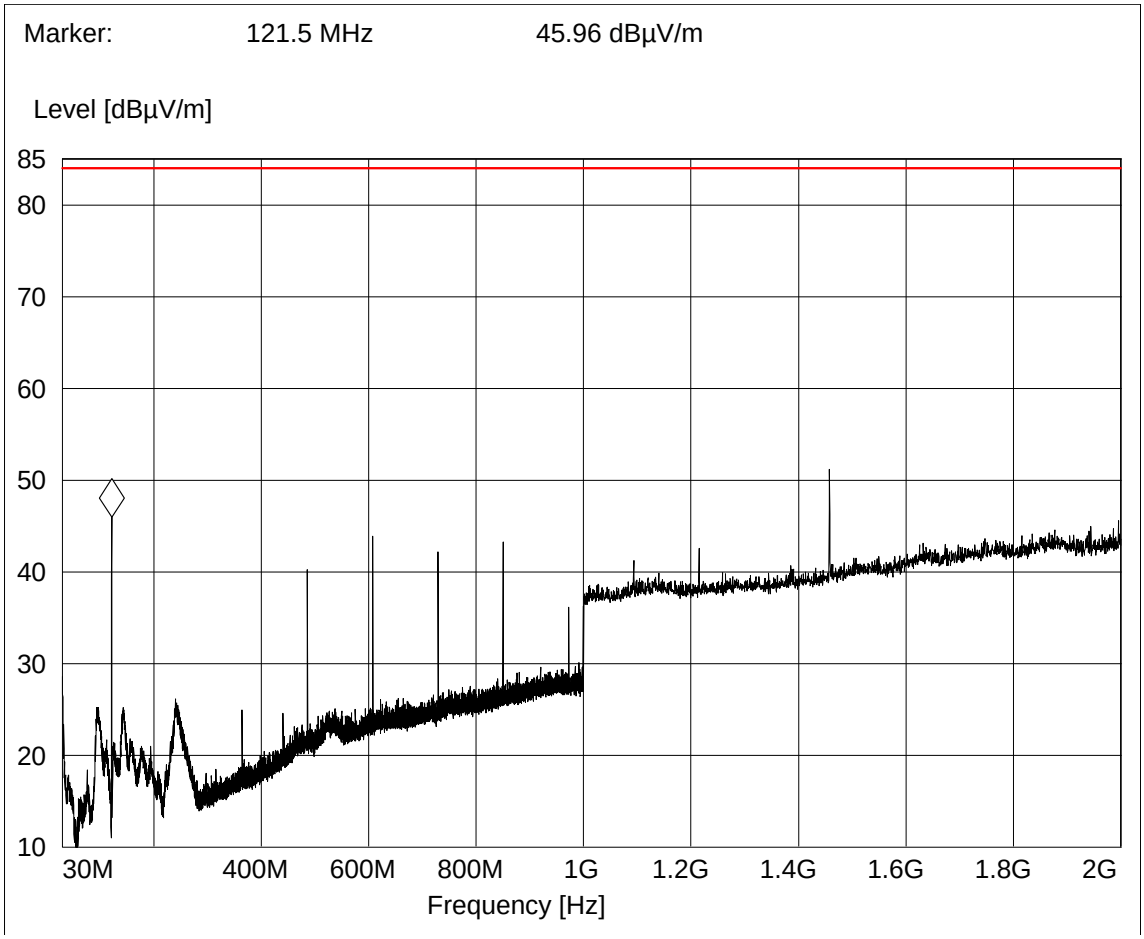


Figure 6.2-32 Radiated spurious emissions, 121.5 MHz (30 MHz – 2 GHz)

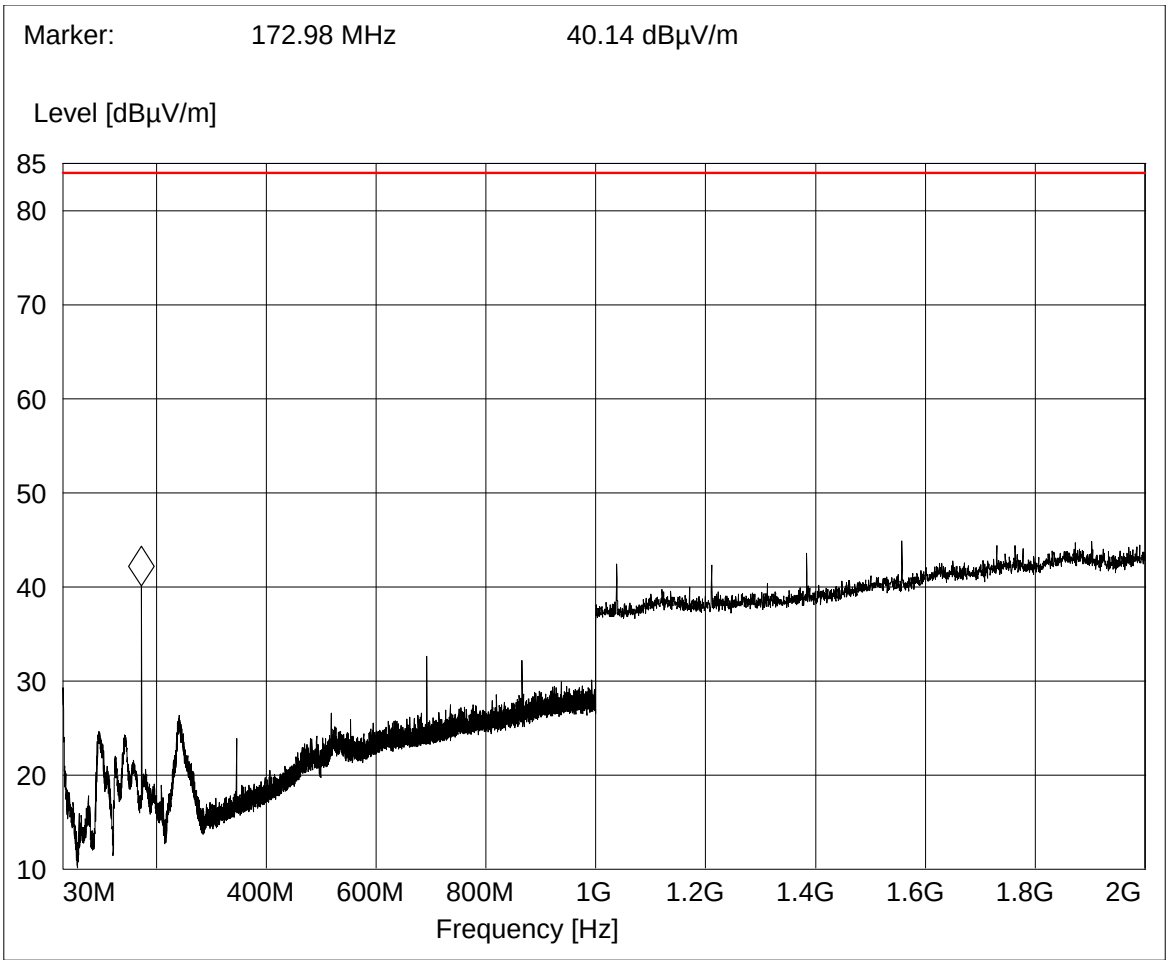


Figure 6.2-33 Radiated spurious emissions, 173 MHz (30 MHz – 2 GHz)

6.2.4 Modulation Characteristics

Figure 6.2-34 illustrates the test setup used for measuring the audio response of the modulator and filter circuitry. Data was taken and recorded with the HP 3561A Dynamic Signal Analyzer. The HP3561A noise source output was adjusted such that the AC voltage on the audio analyzer read 100 millivolts. This signal was then routed to the Mic-In port on the X-mode box. The frequency response data is presented in Figure 6.2-35.

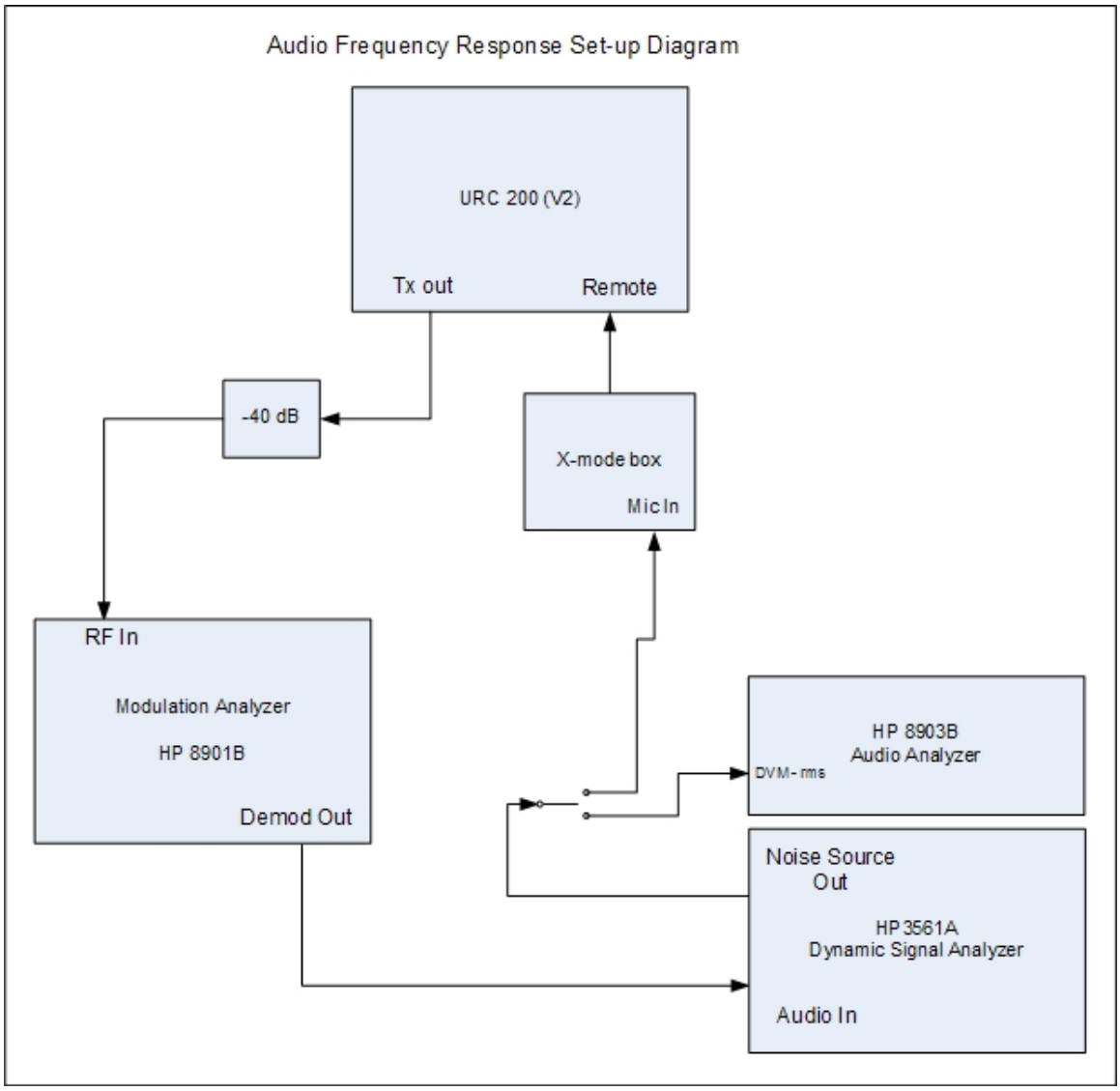


Figure 6.2-34 Audio Frequency Response Test Setup Diagram

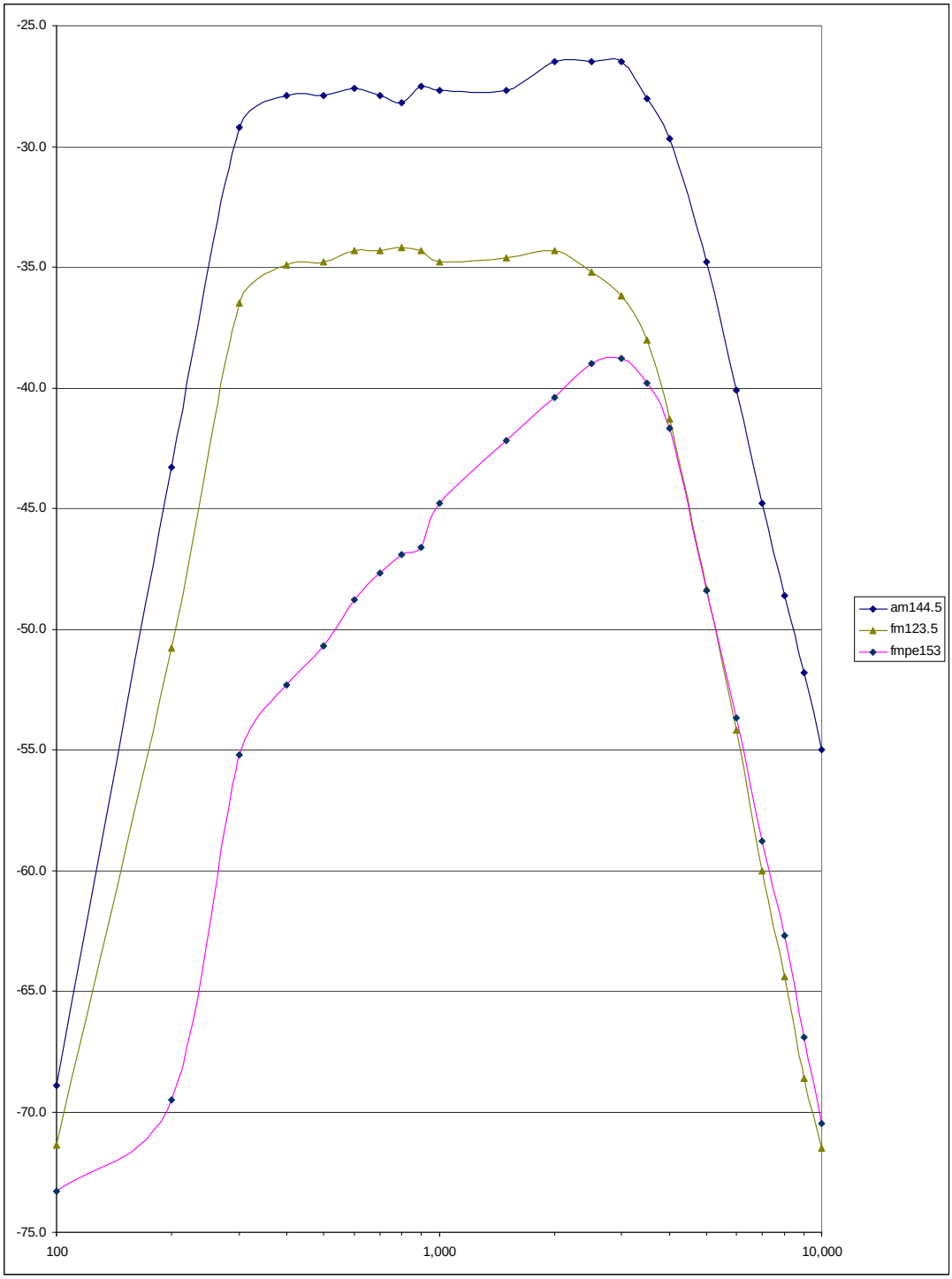


Figure 6.2-35 Audio Frequency Response Curve

Data was also taken to illustrate the percentage of modulation versus the modulation input voltage. This data was taken while holding the audio frequency at 300 Hz, 1 kHz and 3 kHz and a peak frequency taken from the audio frequency response results, into the URC-200. The audio frequency analyzer was first set to 1 kHz and the signal injected into the audio input port of the URC-200. The amplitude was adjusted to obtain 50% modulation at 1000 Hz. This level was then taken as the 0-dB reference. The 0 dB reference was about 0.4 mV RMS. The amplitude of the generator was then varied and the output level recorded while holding each of the frequency tones constant. The URC-200 was set for 25 kHz channel spacing. The test setup diagram is shown as Figure 6.2-36.

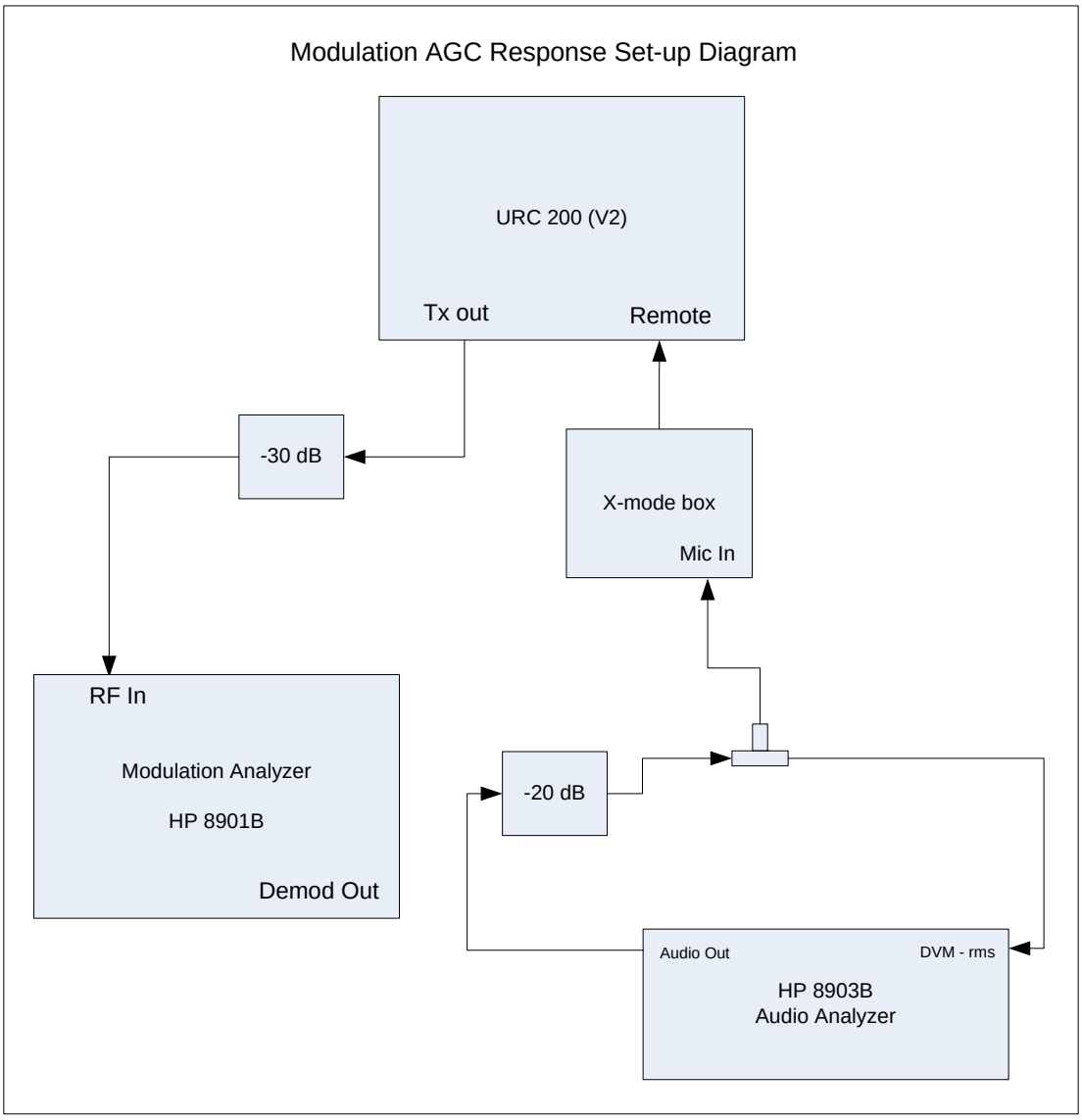


Figure 6.2-36 Modulation AGC Response Setup Diagram

Table 6.2-1 Modulation AGC Characteristics at 300 Hz, 1 kHz, 2 kHz, and 3 kHz Tones
123.5 MHz, FM

123.5 MHz	FM				"peak freq"	
mV (@1kHz)	mV (@1kHz)	(@1kHz)	kHz FM	kHz FM	kHz FM	kHz FM
8903 Output	Mic Input	dB	300Hz	1kHz	2kHz	3kHz
0.6	0.196	-6	0.4	0.4	0.4	0.4
9.3	0.259	-4	1.2	1.2	0.8	0.6
14.5	0.320	-2	1.8	1.7	1.1	0.7
20.0	**0.396**	**0**	2.3	**2.2**	1.3	0.9
27.0	0.496	2	2.6	2.7	1.6	1.1
35.0	0.201	4	2.7	2.9	1.9	1.3
45.0	0.783	6	2.7	3.1	2.2	1.5
57.0	0.976	8	2.7	3.2	2.5	1.7
72.0	1.230	10	2.7	3.3	2.7	1.9
146.0	2.470	16	2.8	3.4	3.2	2.6
231.0	3.900	20	2.8	3.5	3.3	2.8
411.0	6.930	25	2.8	3.5	3.4	2.9
731.0	12.320	30	2.8	3.5	3.4	2.9
1301.0	21.920	35	2.9	3.5	3.4	2.9
2311.0	39.000	40	2.9	3.6	3.4	2.9
4111.0	69.300	45	2.9	3.6	3.4	2.9
		50				

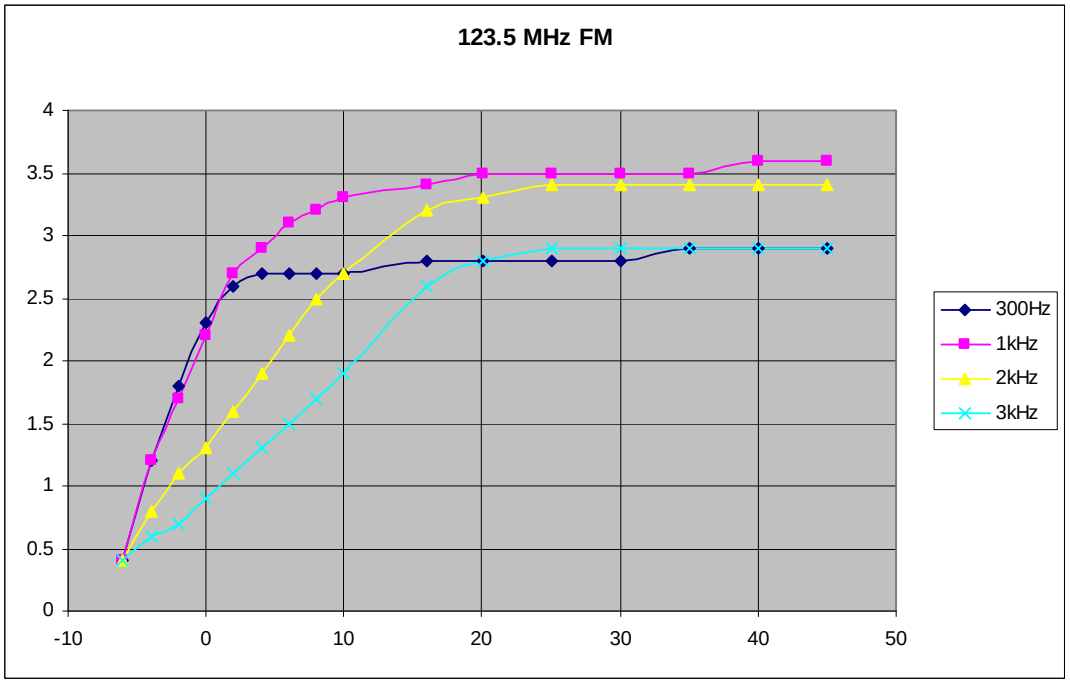


Table 6.2-2 Modulation AGC Characteristics at 300 Hz, 1 kHz, 2.5 kHz, and 3 kHz Tones
144.5 MHz, AM

144.5 MHz	AM				"peak freq"	
mV (@1kHz)	mV (@1kHz)	(@1kHz)	%AM	%AM	%AM	%AM
8903 Output	Mic Input	dB	300Hz	1kHz	2.5kHz	3kHz
0.6	0.196	-6	5	6	5	5
9.3	0.259	-4	28	26	15	13
14.5	0.320	-2	40	37	21	19
20.0	**0.396**	**0**	50	**50**	27	24
27.0	0.496	2	61	60	34	29
35.0	0.201	4	64	65	41	35
45.0	0.783	6	65	69	48	42
57.0	0.976	8	66	72	56	50
72.0	1.230	10	65	74	64	57
146.0	2.470	16	66	77	81	77
231.0	3.900	20	67	78	87	85
411.0	6.930	25	67	78	89	88
731.0	12.320	30	67	78	89	89
1301.0	21.920	35	68	78	89	89
2311.0	39.000	40	69	79	89	89
4111.0	69.300	45	69	80	90	89
		50				

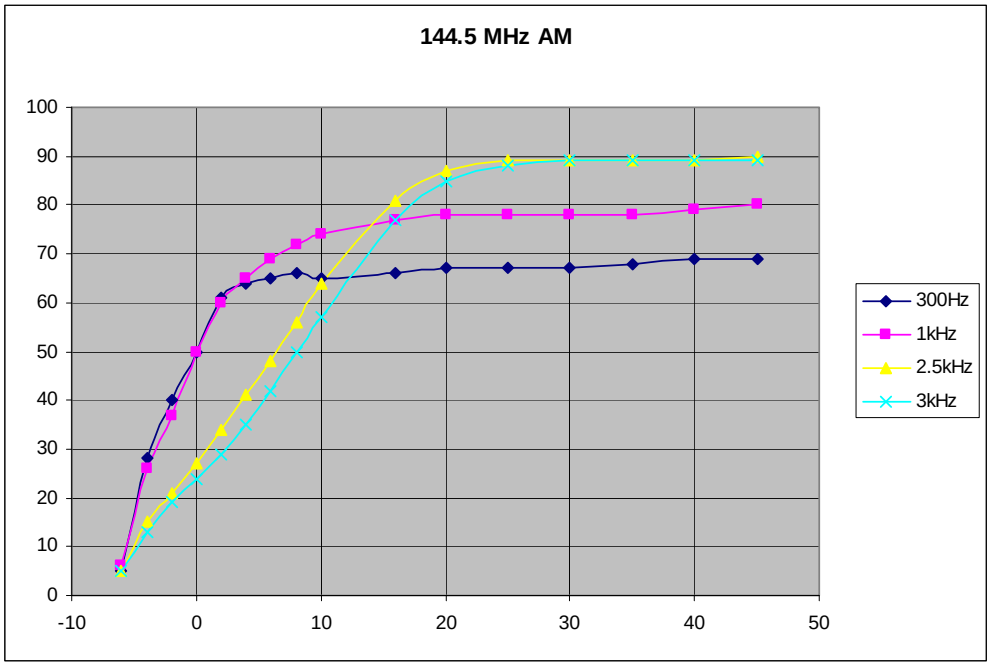
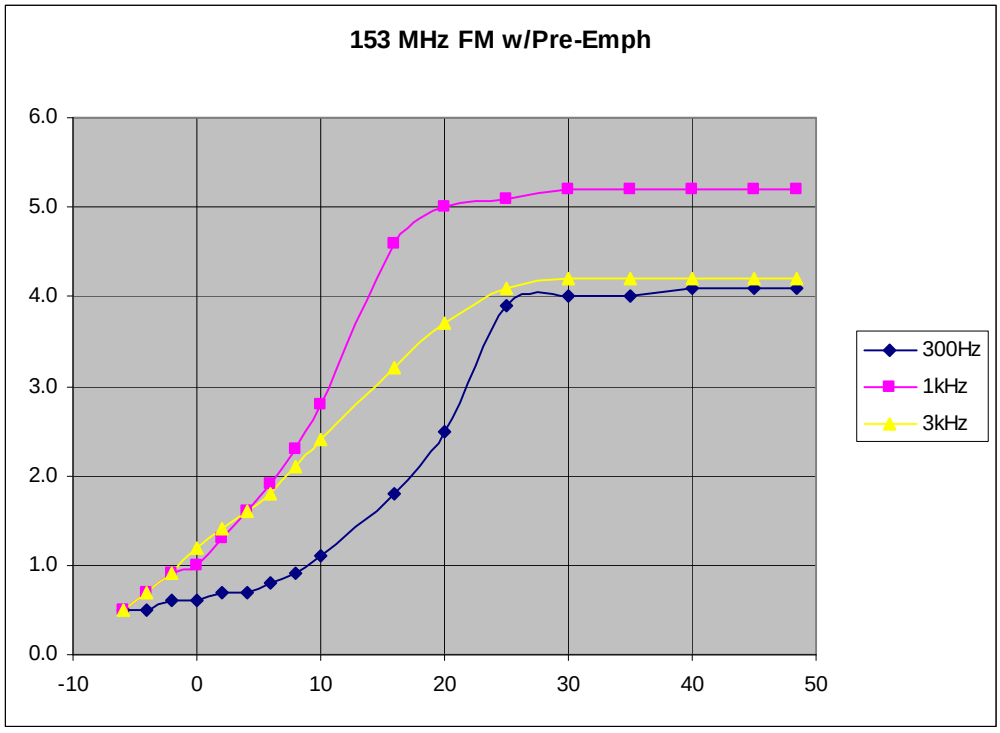


Table 6.2-3 Modulation AGC Characteristics at 300 Hz, 1 kHz, and 3 kHz Tones
153 MHz, FM

153 MHz	FM w/ Pre-Emphasis				"peak freq"
mV (@1kHz)	mV (@1kHz)	(@1kHz)	kHz FM	kHz FM	kHz FM
8903 Output	Mic Input	dB	300Hz	1kHz	3kHz
0.6	0.196	-6	0.5	0.5	0.5
9.3	0.259	-4	0.5	0.7	0.7
14.5	0.320	-2	0.6	0.9	0.9
20.0	**0.396**	**0**	0.6	**1.0**	1.2
27.0	0.496	2	0.7	1.3	1.4
35.0	0.201	4	0.7	1.6	1.6
45.0	0.783	6	0.8	1.9	1.8
57.0	0.976	8	0.9	2.3	2.1
72.0	1.230	10	1.1	2.8	2.4
146.0	2.470	16	1.8	4.6	3.2
231.0	3.900	20	2.5	5.0	3.7
411.0	6.930	25	3.9	5.1	4.1
731.0	12.320	30	4.0	5.2	4.2
1301.0	21.920	35	4.0	5.2	4.2
2311.0	39.000	40	4.1	5.2	4.2
4111.0	69.300	45	4.1	5.2	4.2
6000	103	48.5	4.1	5.2	4.2



6.2.5 *Frequency Stability*

The URC-200 was tested for frequency stability when operated in a CW mode at maximum rated power over the temperature range of -30°C to +55°C. This included testing at three (3) operating frequencies (121.5 MHz, 158 MHz, and 173 MHz). Frequency stability was also measured over an input power voltage range of 85% to 115% for AC power operation and at DC voltage extremes for battery operation. The data is presented below in Tables 6.2-4 through 6.2-12.

Table 6.2-4 Frequency Stability over Temperature – 121.5 MHz

URC# QUAL0025
S/W 1.00.00
CPLD 5.5.09
Passed final qual test on 8-1-2009

Temp C	soak (mins)						
-30	60	Set Frq. (MHz)	121.5	121.5	121.5	121.5	
	A2D	time	14:49	14:51	14:54	14:59	A2D
	255	t delta (min)	0.0	2.0	5.0	10.0	251
		Freq (MHz)	121.500078	121.500077	121.500080	121.500084	
		offset (Hz)	78	77	80	84	
		PPM	0.64	0.63	0.66	0.69	

Temp C	soak						
-20	60	Set Frq. (MHz)	121.5	121.5	121.5	121.5	
	A2D	time	13:15	13:17	13:20	13:25	A2D
	255	t delta (min)	0.0	2.0	5.0	10.0	250
		Freq (MHz)	121.500069	121.500070	121.500072	121.500072	
		offset (Hz)	69	70	72	72	
		PPM	0.57	0.58	0.59	0.59	

Temp C	soak						
-10	60	Set Frq. (MHz)	121.5	121.5	121.5	121.5	
	A2D	time	11:15	11:17	11:20	11:25	A2D
	255	t delta (min)	0.0	2.0	5.0	10.0	239
		Freq (MHz)	121.500048	121.500047	121.500040	121.500033	
		offset (Hz)	48	47	40	33	
		PPM	0.40	0.39	0.33	0.27	

Temp C	soak						
0	60	Set Frq. (MHz)	121.5	121.5	121.5	121.5	
	A2D	time	9:26	9:28	9:31	9:36	A2D
	250	t delta (min)	0.0	2.0	5.0	10.0	233
		Freq (MHz)	121.500033	121.500032	121.500035	121.500038	
		offset (Hz)	33	32	35	38	
		PPM	0.27	0.26	0.29	0.31	

Temp C	soak						
10	60	Set Frq. (MHz)	121.5	121.5	121.5	121.5	
	A2D	time	12:05	12:07	12:10	12:15	A2D
	243	t delta (min)	0.0	2.0	5.0	10.0	226
		Freq (MHz)	121.500064	121.500064	121.500066	121.500069	
		offset (Hz)	64	64	66	69	
		PPM	0.53	0.53	0.54	0.57	

Temp C	soak						
20	1 hr	Set Frq. (MHz)	121.5	121.5	121.5	121.5	
	A2D	time	9:58	10:00	10:03	10:08	A2D
	233	t delta (min)	0.0	2.0	5.0	10.0	209
		Freq (MHz)	121.500050	121.500052	121.500053	121.500051	
		offset (Hz)	50	52	53	51	
		PPM	0.41	0.43	0.44	0.42	

Temp C	soak						
30	60	Set Frq. (MHz)	121.5	121.5	121.5	121.5	
	A2D	time	16:25	16:27	16:30	16:35	A2D
	217	t delta (min)	0.0	2.0	5.0	10.0	179
		Freq (MHz)	121.500079	121.500075	121.500069	121.500064	
		offset (Hz)	79	75	69	64	
		PPM	0.65	0.62	0.57	0.53	

Temp C	soak						
40	56	Set Frq. (MHz)	121.5	121.5	121.5	121.5	
	A2D	time	18:00	18:02	18:05	18:10	A2D
	206	t delta (min)	0.0	2.0	5.0	10.0	158
		Freq (MHz)	121.500055	121.500054	121.500050	121.500045	
		offset (Hz)	55	54	50	45	
		PPM	0.45	0.44	0.41	0.37	

Temp C	soak						
50	60	Set Frq. (MHz)	121.5	121.5	121.5	121.5	
	A2D	time	19:50	19:52	19:55	20:00	A2D
	188	t delta (min)	0.0	2.0	5.0	10.0	153
		Freq (MHz)	121.500050	121.500049	121.500044	121.500038	
		offset (Hz)	50	49	44	38	
		PPM	0.41	0.40	0.36	0.31	

Temp C	soak						
55	30	Set Frq. (MHz)	121.5	121.5	121.5	121.5	
	A2D	time	21:05	21:07	21:10	21:15	A2D
	188	t delta (min)	0.0	2.0	5.0	10.0	126
		Freq (MHz)	121.500032	121.500031	121.500025	121.500018	
		offset (Hz)	32	31	25	18	
		PPM	0.26	0.26	0.21	0.15	

Table 6.2-5 Frequency Stability over Temperature – 158 MHz

Temp C	soak (mins)						
-30	1	Set Frq. (MHz)	158.0	158.0	158.0	158.0	
	A2D	time	15:00	15:02	15:05	15:10	A2D
	255	t delta (min)	0.0	2.0	5.0	10.0	252
		Freq (MHz)	158.000107	158.000108	158.000108	158.000109	
		offset (Hz)	107	108	108	109	
		PPM	0.68	0.68	0.68	0.69	
-20	5	Set Frq. (MHz)	158.0	158.0	158.0	158.0	
	A2D	time	13:30	13:32	13:35	13:40	A2D
	255	t delta (min)	0.0	2.0	5.0	10.0	247
		Freq (MHz)	158.000096	158.000098	158.000098	158.000099	
		offset (Hz)	96	98	98	99	
		PPM	0.61	0.62	0.62	0.63	
-10	11	Set Frq. (MHz)	158.0	158.0	158.0	158.0	
	A2D	time	11:36	11:38	11:41	11:46	A2D
	255	t delta (min)	0.0	2.0	5.0	10.0	244
		Freq (MHz)	158.000051	158.000050	158.000045	158.000041	
		offset (Hz)	51	50	45	41	
		PPM	0.32	0.32	0.28	0.26	
0	7	Set Frq. (MHz)	158.0	158.0	158.0	158.0	
	A2D	time	9:43	9:45	9:48	9:53	A2D
	250	t delta (min)	0.0	2.0	5.0	10.0	239
		Freq (MHz)	158.000041	158.000041	158.000043	158.000046	
		offset (Hz)	41	41	43	46	
		PPM	0.26	0.26	0.27	0.29	
10	8	Set Frq. (MHz)	158.0	158.0	158.0	158.0	
	A2D	time	12:23	12:25	12:28	12:33	A2D
	243	t delta (min)	0.0	2.0	5.0	10.0	228
		Freq (MHz)	158.000085	158.000086	158.000088	158.000091	
		offset (Hz)	85	86	88	91	
		PPM	0.54	0.54	0.56	0.58	
20	15 min	Set Frq. (MHz)	158.0	158.0	158.0	158.0	
	A2D	time	10:23	10:25	10:28	10:33	A2D
	233	t delta (min)	0.0	2.0	5.0	10.0	217
		Freq (MHz)	158.000081	158.000081	158.000078	158.000077	
		offset (Hz)	81	81	78	77	
		PPM	0.51	0.51	0.49	0.49	
30	5	Set Frq. (MHz)	158.0	158.0	158.0	158.0	
	A2D	time	16:40	16:42	16:45	16:50	A2D
	217	t delta (min)	0.0	2.0	5.0	10.0	186
		Freq (MHz)	158.000086	158.000088	158.000086	158.000083	
		offset (Hz)	86	88	86	83	
		PPM	0.54	0.56	0.54	0.53	
40	13	Set Frq. (MHz)	158.0	158.0	158.0	158.0	
	A2D	time	18:23	18:25	18:28	18:33	A2D
	206	t delta (min)	0.0	2.0	5.0	10.0	166
		Freq (MHz)	158.000066	158.000065	158.000062	158.000058	
		offset (Hz)	66	65	62	58	
		PPM	0.42	0.41	0.39	0.37	
50	10	Set Frq. (MHz)	158.0	158.0	158.0	158.0	
	A2D	time	20:10	20:12	20:15	20:20	A2D
	188	t delta (min)	0.0	2.0	5.0	10.0	142
		Freq (MHz)	158.000045	158.000044	158.000043	158.000038	
		offset (Hz)	45	44	43	38	
		PPM	0.28	0.28	0.27	0.24	
55	6	Set Frq. (MHz)	158.0	158.0	158.0	158.0	
	A2D	time	21:21	21:23	21:26	21:31	A2D
	188	t delta (min)	0.0	2.0	5.0	10.0	135
		Freq (MHz)	158.000041	158.000040	158.000035	158.000027	
		offset (Hz)	41	40	35	27	
		PPM	0.26	0.25	0.22	0.17	

Table 6.2-6 Frequency Stability over Temperature – 173 MHz

Temp C	soak (mins)						
-30	1	Set Frq. (MHz)	173.0	173.0	173.0	173.0	
	A2D	time	15:11	15:13	15:16	15:21	A2D
	255	t delta (min)	0.0	2.0	5.0	10.0	248
		Freq (MHz)	173.000119	173.000118	173.000121	173.000125	
		offset (Hz)	119	118	121	125	
		PPM	0.69	0.68	0.70	0.72	
-20	3	Set Frq. (MHz)	173.0	173.0	173.0	173.0	
	A2D	time	13:43	13:45	13:48	13:53	A2D
	255	t delta (min)	0.0	2.0	5.0	10.0	242
		Freq (MHz)	173.000110	173.000113	173.000111	173.000107	
		offset (Hz)	110	113	111	107	
		PPM	0.64	0.65	0.64	0.62	
-10	14	Set Frq. (MHz)	173.0	173.0	173.0	173.0	
	A2D	time	12:00	12:02	12:05	12:10	A2D
	255	t delta (min)	0.0	2.0	5.0	10.0	236
		Freq (MHz)	173.000056	173.000057	173.000050	173.000042	
		offset (Hz)	56	57	50	42	
		PPM	0.32	0.33	0.29	0.24	
0	10	Set Frq. (MHz)	173.0	173.0	173.0	173.0	
	A2D	time	10:03	10:05	10:08	10:13	A2D
	250	t delta (min)	0.0	2.0	5.0	10.0	227
		Freq (MHz)	173.000044	173.000045	173.000048	173.000054	
		offset (Hz)	44	45	48	54	
		PPM	0.25	0.26	0.28	0.31	
10	17	Set Frq. (MHz)	173.0	173.0	173.0	173.0	
	A2D	time	12:50	12:52	12:55	13:00	A2D
	243	t delta (min)	0.0	2.0	5.0	10.0	226
		Freq (MHz)	173.000096	173.000098	173.000100	173.000103	
		offset (Hz)	96	98	100	103	
		PPM	0.55	0.57	0.58	0.60	
20	12	Set Frq. (MHz)	173.0	173.0	173.0	173.0	
	A2D	time	10:45	10:47	10:50	10:55	A2D
	233	t delta (min)	0.0	2.0	5.0	10.0	211
		Freq (MHz)	173.000093	173.000092	173.000089	173.000084	
		offset (Hz)	93	92	89	84	
		PPM	0.54	0.53	0.51	0.49	
30	4	Set Frq. (MHz)	173.0	173.0	173.0	173.0	
	A2D	time	16:54	16:56	16:59	17:04	A2D
	217	t delta (min)	0.0	2.0	5.0	10.0	191
		Freq (MHz)	173.000094	173.000096	173.000091	173.000087	
		offset (Hz)	94	96	91	87	
		PPM	0.54	0.55	0.53	0.50	
40	8	Set Frq. (MHz)	173.0	173.0	173.0	173.0	
	A2D	time	18:41	18:43	18:46	18:51	A2D
	206	t delta (min)	0.0	2.0	5.0	10.0	159
		Freq (MHz)	173.000073	173.000073	173.000066	173.000062	
		offset (Hz)	73	73	66	62	
		PPM	0.42	0.42	0.38	0.36	
50	5	Set Frq. (MHz)	173.0	173.0	173.0	173.0	
	A2D	time	20:35	20:27	20:30	20:35	A2D
	188	t delta (min)	0.0	2.0	5.0	10.0	139
		Freq (MHz)	173.000052	173.000052	173.000049	173.000042	
		offset (Hz)	52	52	49	42	
		PPM	0.30	0.30	0.28	0.24	
55	5	Set Frq. (MHz)	173.0	173.0	173.0	173.0	
	A2D	time	21:36	21:38	21:41	21:46	A2D
	188	t delta (min)	0.0	2.0	5.0	10.0	131
		Freq (MHz)	173.000038	173.000037	173.000033	173.000023	
		offset (Hz)	38	37	33	23	
		PPM	0.22	0.21	0.19	0.13	

Table 6.2-7 Frequency Stability over AC Voltage – 121.5 MHz

VAC	nom %					
110	100	Set Frq. (MHz)	121.5	121.5	121.5	121.5
		time	10:36	10:38	10:41	10:46
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	121.500015	121.500009	121.499996	121.499997
		offset (Hz)	15	9	-4	-3
		PPM	0.12	0.07	0.03	0.02
VAC	nom %					
93	85	Set Frq. (MHz)	121.5	121.5	121.5	121.5
		time	11:40	11:42	11:45	11:50
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	121.499975	121.499975	121.499969	121.499961
		offset (Hz)	-25	-25	-31	-39
		PPM	0.21	0.21	0.26	0.32
VAC	nom %					
127	115	Set Frq. (MHz)	121.5	121.5	121.5	121.5
		time	12:20	12:22	12:25	12:30
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	121.499963	121.499965	121.499963	121.499957
		offset (Hz)	-37	-35	-37	-43
		PPM	0.30	0.29	0.30	0.35

Table 6.2-8 Frequency Stability at DC Voltage extremes – 121.5 MHz

VDC	low					
22		Set Frq. (MHz)	121.5	121.5	121.5	121.5
		time	13:40	13:42	13:45	13:50
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	121.499958	121.499961	121.499962	121.499961
		offset (Hz)	-42	-39	-38	-39
		PPM	0.35	0.32	0.31	0.32
VDC	high					
34		Set Frq. (MHz)	121.5	121.5	121.5	121.5
		time	13:00	13:02	13:05	13:10
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	121.499974	121.499973	121.499967	121.499953
		offset (Hz)	-26	-27	-33	-47
		PPM	0.21	0.22	0.27	0.39

Table 6.2-9 Frequency Stability over AC Voltage – 158 MHz

VAC	nom %					
110	100	Set Frq. (MHz)	158.0	158.0	158.0	158.0
		time	10:49	10:51	10:54	10:59
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	157.999961	157.999946	157.999958	157.999950
		offset (Hz)	-39	-54	-42	-50
		PPM	0.25	0.34	0.27	0.32
VAC	nom %					
93	85	Set Frq. (MHz)	158.0	158.0	158.0	158.0
		time	11:55	11:57	12:00	12:05
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	157.999950	157.999953	157.999947	157.999938
		offset (Hz)	-50	-47	-53	-62
		PPM	0.32	0.30	0.34	0.39
VAC	nom %					
127	115	Set Frq. (MHz)	158.0	158.0	158.0	158.0
		time	12:32	12:34	12:37	12:42
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	157.999950	157.999955	157.999952	157.999947
		offset (Hz)	-50	-45	-48	-53
		PPM	0.32	0.28	0.30	0.34

Table 6.2-10 Frequency Stability at DC Voltage extremes – 158 MHz

VDC	low					
22		Set Frq. (MHz)	158.0	158.0	158.0	158.0
		time	13:53	13:55	13:58	14:03
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	157.999952	157.999956	157.999957	157.999961
		offset (Hz)	-48	-44	-43	-39
		PPM	0.30	0.28	0.27	0.25
VDC	high					
34		Set Frq. (MHz)	158.0	158.0	158.0	158.0
		time	13:13	13:15	13:18	13:23
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	157.999944	157.999947	157.999944	157.999939
		offset (Hz)	-56	-53	-56	-61

Table 6.2-11 Frequency Stability over AC Voltage – 173 MHz

VAC	nom %					
110	100	Set Frq. (MHz)	173.0	173.0	173.0	173.0
		time	11:00	11:02	11:05	11:10
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	172.999943	172.999946	172.999942	172.999935
		offset (Hz)	-57	-54	-58	-65
		PPM	0.33	0.31	0.34	0.38
VAC	nom %					
93	85	Set Frq. (MHz)	173.0	173.0	173.0	173.0
		time	12:06	12:08	12:11	12:16
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	172.999937	172.999941	172.999940	172.999935
		offset (Hz)	-63	-59	-60	-65
		PPM	0.36	0.34	0.35	0.38
VAC	nom %					
127	115	Set Frq. (MHz)	173.0	173.0	173.0	173.0
		time	12:44	12:46	12:49	12:54
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	172.999948	172.999952	172.999949	172.999942
		offset (Hz)	-52	-48	-51	-58
		PPM	0.30	0.28	0.29	0.34

Table 6.2-12 Frequency Stability at DC Voltage extremes – 173 MHz

VDC	low					
22		Set Frq. (MHz)	173.0	173.0	173.0	173.0
		time	14:05	14:07	14:10	14:15
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	172.999962	172.999966	172.999965	172.999965
		offset (Hz)	-38	-34	-35	-35
		PPM	0.22	0.20	0.20	0.20
VDC	high					
34		Set Frq. (MHz)	173.0	173.0	173.0	173.0
		time	13:24	13:26	13:29	13:34
		t delta (min)	0.0	2.0	5.0	10.0
		Freq (MHz)	172.999934	172.999938	172.999933	172.999925
		offset (Hz)	-66	-62	-67	-75
		PPM	0.38	0.36	0.39	0.43