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# EMISSIONS TEST REPORT

ACCORDING TO: FCC §15.247

FOR:

**Motorola Israel Ltd.**  
**R765 iDEN, MOTotalk**  
**Transceiver with Bluetooth**  
**Model:H06XCN6JS9AN**

This report is in conformity with ISO/ IEC 17025. The "A2LA Accredited" symbol endorsement applies only to the tests and calibrations that are listed in the scope of Hermon Laboratories accreditation. The test results relate only to the items tested. This test report shall not be reproduced in any form except in full with the written approval of Hermon Laboratories Ltd.



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## 1 Applicant information

**Client name:** Motorola Israel Ltd.  
**Address:** 3 Kremenetski street, P.O.B. 25016, 67899 Tel Aviv, Israel  
**Telephone:** +972 3565 8888  
**Fax:** +972 3565 9968  
**E-mail:** Teddy.Neeman@motorola.com  
**Contact name:** Mr. Teddy Neeman

## 2 Equipment under test attributes

**Product name:** R765 iDEN, MOTotalk Transceiver with Bluetooth  
**Product type:** Transceiver  
**Model(s):** H06XCN6JS9AN  
**Receipt date:** 9/4/2008

## 3 Manufacturer information

**Manufacturer name:** Motorola Israel Ltd.  
**Address:** 3 Kremenetski street, P.O.B. 25016, 67899 Tel Aviv, Israel  
**Telephone:** +972 3565 8888  
**Fax:** +972 3565 9968  
**E-Mail:** Teddy.Neeman@motorola.com  
**Contact name:** Mr. Teddy Neeman

## 4 Test details

**Project ID:** 19051  
**Location:** Hermon Laboratories Ltd. Harakevet Industrial Zone, Binyamina 30500, Israel  
**Test started:** 9/4/2008  
**Test completed:** 9/25/2008  
**Test specification(s):** FCC part 15 §15.247 (FHSS)

## 5 Tests summary

Test	Status
<b>FCC part 15 section 15.247 (FHSS)</b>	
<b>Transmitter characteristics</b>	
Section 15.247(c), Emissions at band edges	Pass
Section 15.247(c), Radiated spurious emissions	Pass
Section 15.247(c), Radiated spurious emissions, simultaneous BT&Mototalk transmission	Pass
Section 15.207(a), Conducted emissions	Pass*

\* Refer to the test report MOTRAD\_FCC.19051\_part15.

The test results relate only to the items tested. Pass/ fail decision was based on nominal values.

	Name and Title	Date	Signature
<b>Tested by:</b>	Mr. L. Markel, test engineer	September 25, 2008	
<b>Reviewed by:</b>	Mrs. M. Cherniavsky, certification engineer	September 25, 2008	
<b>Approved by:</b>	Mr. M. Nikishin, EMC and radio group leader	September 26, 2008	



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## 6 EUT description

### 6.1 General information

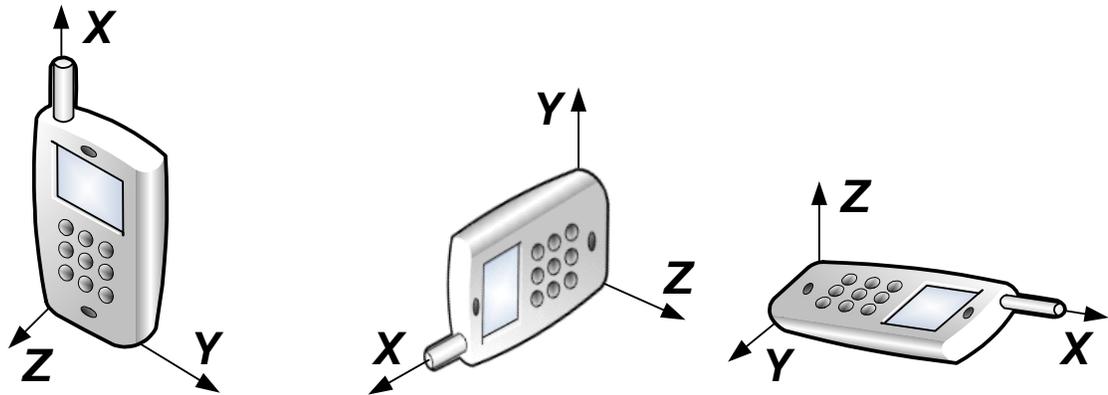
The EUT is a battery-powered hand-held radio transceiver for iDEN digital cellular networks. It also includes MOTotalk digital walkie-talkie option and Bluetooth (R).

The devices are rugged and durable monolith handsets targeted towards industrial, petrochemical and utility companies. Industries that use these handsets are manufacturing, construction, transportation and distribution. The handsets shall be certified for military specification requirements including humidity, shock and vibration and blowing rain.

The EUT is powered by 7.4 V rechargeable battery.

### 6.2 EUT positions

The EUT was tested in 3 orthogonal positions and maximum power was found at Z-axis orientation.



<b>Test specification:</b> Section 15.247(c), Emissions at band edges			
<b>Test procedure:</b> Public notice DA 00-705			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/23/2008 11:46:22 AM			
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

## 7 Transmitter tests according to 47CFR part 15 subpart C requirements

### 7.1 Band edge emissions at RF antenna connector

#### 7.1.1 General

This test was performed to measure band edge emissions at RF antenna connector. Specification test limits are given in Table 7.1.1.

Table 7.1.1 Band edge emission limits

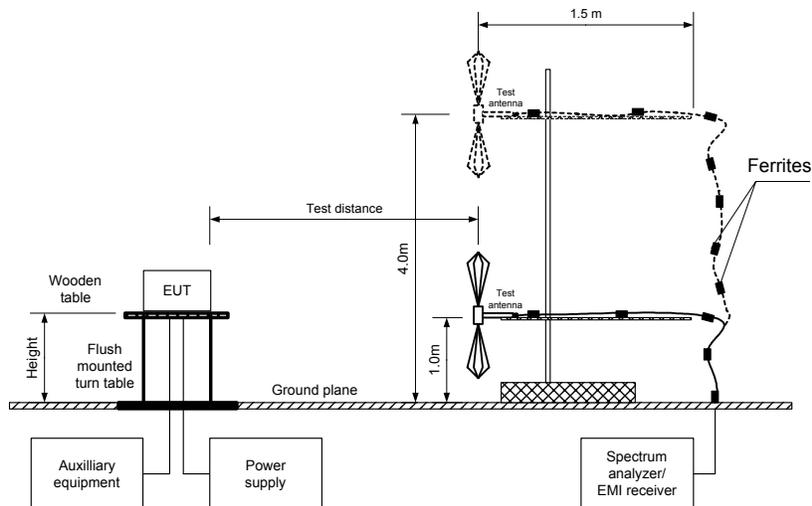
Assigned frequency, MHz	Attenuation below carrier*, dBc
902.0 – 928.0	20.0

\* - Band edge emission limit is provided in terms of attenuation below the peak of modulated carrier measured with the same resolution bandwidth.

#### 7.1.2 Test procedure

- 7.1.2.1 The EUT was set up as shown in Figure 7.1.1, energized normally modulated at the maximum data rate with its hopping function disabled and its proper operation was checked.
- 7.1.2.2 The EUT was adjusted to produce maximum available to end user RF output power at the lowest carrier frequency.
- 7.1.2.3 The spectrum analyzer span was set to capture the carrier frequency and associated modulation products. The resolution bandwidth was set wider than 1 % of the frequency span.
- 7.1.2.4 The spectrum analyzer was set in max hold mode and allowed trace to stabilize. The highest emission level within the authorized band was measured.
- 7.1.2.5 The maximum band edge emission and modulation product outside of the band were measured as provided in Table 7.1.2 and associated plots and referenced to the highest emission level measured within the authorized band.
- 7.1.2.6 The above procedure was repeated with the EUT adjusted to produce maximum RF output power at the highest carrier frequency.
- 7.1.2.7 The above procedure was repeated with the frequency hopping function enabled.

Figure 7.1.1 Band edge emission test setup





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<b>Test specification:</b>	<b>Section 15.247(c), Emissions at band edges</b>		
<b>Test procedure:</b>	Public notice DA 00-705		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 11:46:22 AM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b>	Mototalk		

Photograph 7.1.1 Band edge emission test setup





<b>Test specification:</b>	<b>Section 15.247(c), Emissions at band edges</b>		
<b>Test procedure:</b>	Public notice DA 00-705		
<b>Test mode:</b>	Compliance	<b>Verdict: PASS</b>	
<b>Date &amp; Time:</b>	9/23/2008 11:46:22 AM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

**Table 7.1.2 Band edge emission test results**

ASSIGNED FREQUENCY RANGE: 902 - 928MHz  
DETECTOR USED: Peak  
MODULATION: 8FSK  
TRANSMITTER OUTPUT POWER: Maximum  
RESOLUTION BANDWIDTH: 100 kHz  
VIDEO BANDWIDTH: ≥ RBW

Frequency, MHz	Band edge emission, dBm	Emission at carrier, dBm	Attenuation below carrier, dBc	Limit, dBc	Margin, dB*	Verdict
<b>Frequency hopping disabled</b>						
All band edge emissions are at least 40 dB below the carrier				20.0	NA	Pass
<b>Frequency hopping enabled</b>						
All band edge emissions are at least 40 dB below the carrier				20.0	NA	Pass

\*- Margin = Attenuation below carrier – specification limit.

**Reference numbers of test equipment used**

HL 0521	HL 0604	HL 1947	HL 3123				
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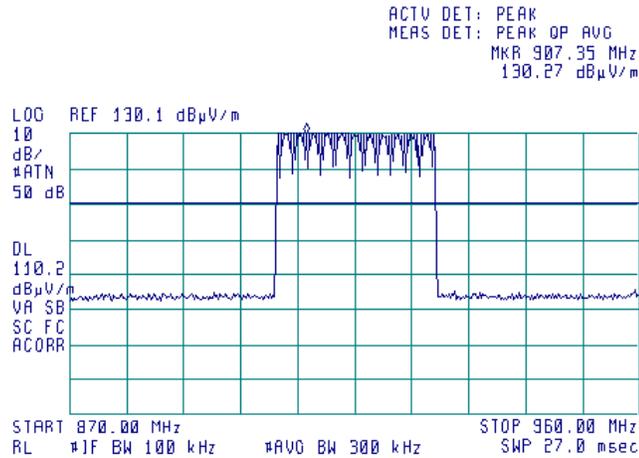
Full description is given in Appendix A.



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<b>Test specification:</b>	<b>Section 15.247(c), Emissions at band edges</b>		
<b>Test procedure:</b>	Public notice DA 00-705		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 11:46:22 AM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.1.1 The highest band edge emission at low carrier frequency with hopping function enabled

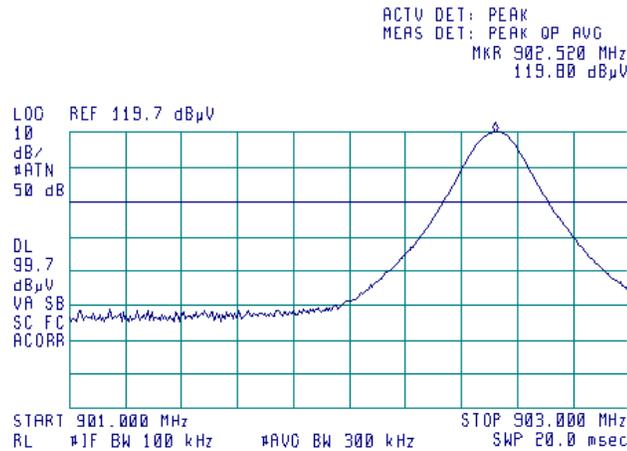




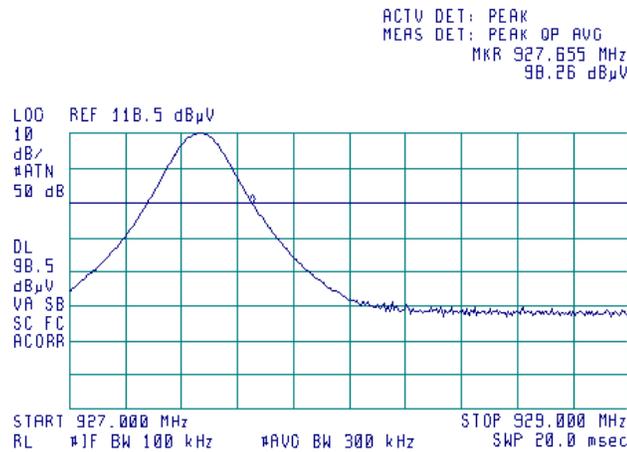
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<b>Test specification:</b>	<b>Section 15.247(c), Emissions at band edges</b>		
<b>Test procedure:</b>	Public notice DA 00-705		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 11:46:22 AM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.1.2 The highest band edge emission at low carrier frequency with hopping function disabled



Plot 7.1.3 The highest band edge emission at high carrier frequency with hopping function disabled

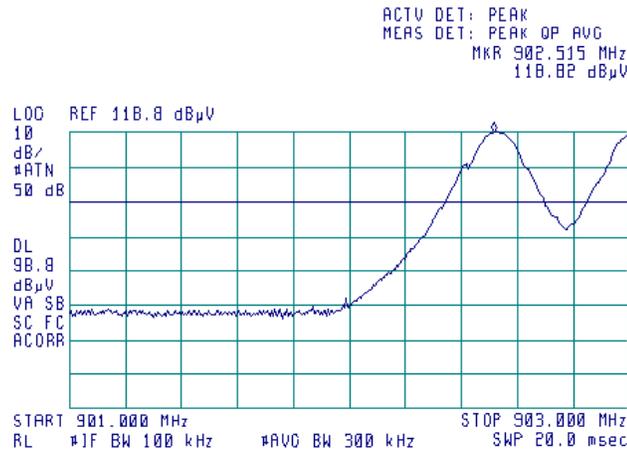




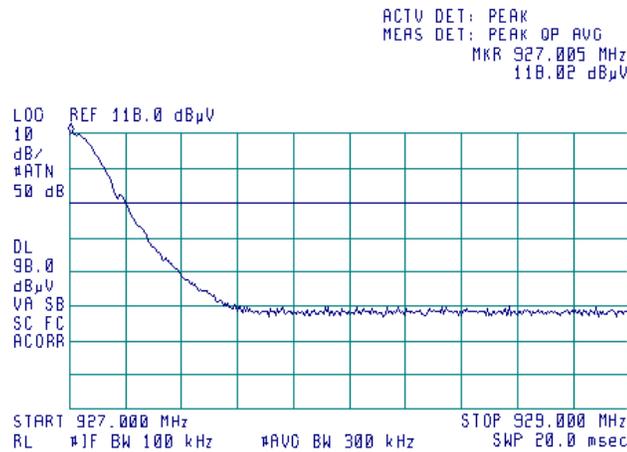
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<b>Test specification:</b> Section 15.247(c), Emissions at band edges			
<b>Test procedure:</b> Public notice DA 00-705			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/23/2008 11:46:22 AM			
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.1.4 The highest band edge emission at low carrier frequency with hopping function enabled



Plot 7.1.5 The highest band edge emission at high carrier frequency with hopping function enabled



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

## 7.2 Field strength of spurious emissions

### 7.2.1 General

This test was performed to measure field strength of spurious emissions from the EUT. Specification test limits are given in Table 7.2.1

Table 7.2.1 Radiated spurious emissions limits

Frequency, MHz	Field strength at 3 m within restricted bands, dB(μV/m)***			Attenuation of field strength of spurious versus carrier outside restricted bands, dBc***
	Peak	Quasi Peak	Average	
0.009 – 0.090	148.5 – 128.5	NA	128.5 – 108.5**	20.0
0.090 – 0.110	NA	108.5 – 106.8**	NA	
0.110 – 0.490	126.8 – 113.8	NA	106.8 – 93.8**	
0.490 – 1.705	NA	73.8 – 63.0**	NA	
1.705 – 30.0*		69.5		
30 – 88		40.0		
88 – 216		43.5		
216 – 960		46.0		
960 – 1000		54.0		
1000 – 10 <sup>th</sup> harmonic	74.0	NA	54.0	

\*- The limit for 3 m test distance was calculated using the inverse square distance extrapolation factor as follows:

$$\text{Lim}_{S_2} = \text{Lim}_{S_1} + 40 \log (S_1/S_2),$$

where  $S_1$  and  $S_2$  – standard defined and test distance respectively in meters.

\*\* - The limit decreases linearly with the logarithm of frequency.

\*\*\* - The field strength limits applied from the lowest radio frequency generated in the device, without going below 9 kHz up to the tenth harmonic of the highest fundamental frequency.

### 7.2.2 Test procedure for spurious emission field strength measurements in 9 kHz to 30 MHz band

7.2.2.1 The EUT was set up as shown in Figure 7.2.1, energized and the performance check was conducted.

7.2.2.2 The specified frequency range was investigated with antenna connected to spectrum analyzer/ EMI receiver. To find maximum radiation the turntable was rotated 360° and the measuring antenna was rotated around its vertical axis.

7.2.2.3 The worst test results (the lowest margins) were recorded and shown in the associated plots.

### 7.2.3 Test procedure for spurious emission field strength measurements above 30 MHz

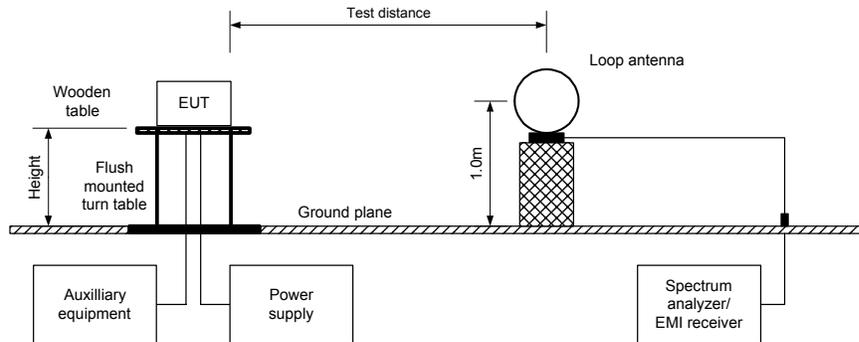
7.2.3.1 The EUT was set up as shown in Figure 7.2.2, energized and the performance check was conducted.

7.2.3.2 The specified frequency range was investigated with antenna connected to spectrum analyzer/ EMI receiver. To find maximum radiation the turntable was rotated 360°, the measuring antenna height was changed from 1 to 4 m, its polarization was switched from vertical to horizontal.

7.2.3.3 The worst test results (the lowest margins) were recorded and shown in the associated plots.

<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance		<b>Verdict:</b>	PASS
<b>Date &amp; Time:</b> 9/23/2008 1:11:03 PM			
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Figure 7.2.1 Setup for spurious emission field strength measurements below 30 MHz

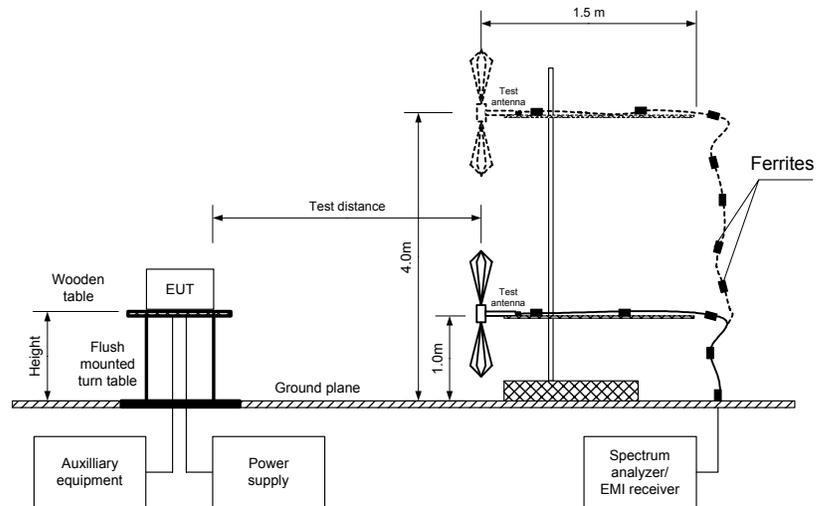


Photograph 7.2.1 Setup for spurious emission field strength measurements below 30 MHz



<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/23/2008 1:11:03 PM			
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Figure 7.2.2 Setup for spurious emission field strength measurements above 30 MHz



Photograph 7.2.2 Setup for spurious emission field strength measurements from 30 to 1000 MHz



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Photograph 7.2.3 Setup for spurious emission field strength measurements above 1000 MHz in the anechoic chamber



Photograph 7.2.4 Setup for spurious emission field strength measurements above 1000 MHz in the anechoic chamber





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<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b>	Mototalk		

Photograph 7.2.5 Setup for spurious emission field strength measurements above 1000 MHz at the OATS





<b>Test specification:</b>		<b>Section 15.247(c), Radiated spurious emissions</b>	
<b>Test procedure:</b>		Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

**Table 7.2.2 Field strength of emissions outside restricted bands**

ASSIGNED FREQUENCY: 902-928 MHz  
 INVESTIGATED FREQUENCY RANGE: 0.009 - 10000 MHz  
 TEST DISTANCE: 3 m  
 MODULATION: 8-FSK  
 DUTY CYCLE: 97.2 %  
 TRANSMITTER OUTPUT POWER: Maximum  
 DETECTOR USED: Peak  
 RESOLUTION BANDWIDTH: 100 kHz  
 VIDEO BANDWIDTH: 300 kHz  
 TEST ANTENNA TYPE: Active loop (9 kHz – 30 MHz)  
 Biconilog (30 MHz – 1000 MHz)  
 Double ridged guide (above 1000 MHz)  
 FREQUENCY HOPPING: Disabled

Frequency, MHz	Field strength of spurious, dB(µV/m)	Antenna polarization	Antenna height, m	Azimuth, degrees*	Field strength of carrier, dB(µV/m)	Attenuation below carrier, dB†	Limit, dBc	Margin, dB**	Verdict
<b>Low carrier frequency 902.525 MHz</b>									
560.9813	35.12	H (Whip)	1.5	120	129.34	94.22	20.0	-74.22	Pass
1805.046	70.38	H (Whip)	1.5	040		58.96		-38.96	
<b>Mid carrier frequency 915.525 MHz</b>									
574.8765	36.15	H (Whip)	1.6	090	128.25	92.10	20.0	-72.10	Pass
1831.050	75.87	H (Whip)	1.0	160		52.38		-32.38	
<b>High carrier frequency 927.475 MHz</b>									
579.4384	33.48	H (Whip)	1.4	110	126.41	92.93	20.0	-72.93	Pass
1854.960	77.97	H (Whip)	1.2	130		48.44		-28.44	

\*- EUT front panel refers to 0 degrees position of turntable.  
 \*\*- Margin = Attenuation below carrier – specification limit.

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict: PASS</b>	
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

**Table 7.2.3 Field strength of spurious emissions above 1 GHz within restricted bands**

ASSIGNED FREQUENCY: 902 – 928 MHz  
 INVESTIGATED FREQUENCY RANGE: 1000 – 10000 MHz  
 TEST DISTANCE: 3 m  
 MODULATION: 8-FSK  
 DUTY CYCLE: 97.2 %  
 TRANSMITTER OUTPUT POWER: Maximum  
 DETECTOR USED: Peak  
 RESOLUTION BANDWIDTH: 1000 kHz  
 TEST ANTENNA TYPE: Double ridged guide  
 FREQUENCY HOPPING: Disabled

Frequency MHz	Antenna		Azimuth, degrees*	Peak field strength (VBW=3 MHz)			Average field strength (VBW=30 Hz)				Verdict
	Polarization	Height, m		Measured, dB(μV/m)	Limit, dB(μV/m)	Margin, dB**	Measured, dB(μV/m)	Calculated dB(μV/m)	Limit, dB(μV/m)	Margin, dB***	
<b>Low carrier frequency 902.525 MHz</b>											
1031.458	H (Whip)	1.0	120	55.60	74.00	-18.40	46.67	46.43	54.00	-7.57	Pass
2707.588	H (Whip)	1.2	270	49.87	74.00	-24.13	44.51	44.27	54.00	-9.73	
3610.111	V (Stubby)	1.2	090	53.20	74.00	-20.80	40.85	40.61	54.00	-13.39	
4512.775	V (Stubby)	1.4	220	54.17	74.00	-19.83	47.72	47.48	54.00	-6.52	
<b>Mid carrier frequency 915.525 MHz</b>											
1021.991	H (Whip)	1.1	150	57.07	74.00	-16.93	48.07	47.83	54.00	-6.17	Pass
2746.663	H (Whip)	1.2	260	52.26	74.00	-21.74	45.31	45.07	54.00	-8.93	
3662.088	V (Stubby)	1.3	120	51.76	74.00	-22.24	39.09	38.85	54.00	-15.15	
4577.638	V (Stubby)	1.5	240	53.09	74.00	-20.91	44.44	44.20	54.00	-9.80	
7324.550	V (Stubby)	1.5	220	56.08	74.00	-17.92	42.62	42.38	54.00	-11.62	
<b>High carrier frequency 927.475 MHz</b>											
1035.355	H (Whip)	1.0	110	53.89	74.00	-20.11	45.14	44.90	54.00	-9.10	Pass
2782.450	H (Whip)	1.3	250	54.44	74.00	-19.56	48.68	48.44	54.00	-5.56	
3709.975	V (Stubby)	1.2	110	52.07	74.00	-21.93	39.36	39.12	54.00	-14.88	
4637.338	V (Stubby)	1.3	130	51.41	74.00	-22.59	41.08	40.84	54.00	-13.16	
7419.813	V (Stubby)	1.4	220	56.12	74.00	-17.88	42.38	42.14	54.00	-11.86	
8347.325	V (Stubby)	1.5	200	56.10	74.00	-17.90	42.29	42.05	54.00	-11.95	

\*- EUT front panel refers to 0 degrees position of turntable.  
 \*\*- Margin = Measured field strength – specification limit.  
 \*\*\*- Margin = Calculated field strength – specification limit,  
 where Calculated field strength = Measured field strength + average factor.

**Table 7.2.4 Average factor calculation**

Transmission pulse		Transmission burst		Transmission train duration, ms	Average factor, dB
Duration, ms	Period, ms	Duration, ms	Period, ms		
87.50	90.00	—	—	longer than 100 ms	-0.24

Average factor=20log(87.5/90)=-0.24

1/Tx on = 30 Hz



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<b>Test specification:</b>		<b>Section 15.247(c), Radiated spurious emissions</b>			
<b>Test procedure:</b>		Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b>	Compliance	<b>Verdict:</b>		<b>PASS</b>	
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM				
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery		
<b>Remarks:</b> Mototalk					

**Table 7.2.5 Field strength of spurious emissions below 1 GHz within restricted bands**

ASSIGNED FREQUENCY: 902-928 MHz  
 INVESTIGATED FREQUENCY RANGE: 0.009 – 1000 MHz  
 TEST DISTANCE: 3 m  
 MODULATION: 8-FSK  
 DUTY CYCLE: 97.2 %  
 TRANSMITTER OUTPUT POWER: Maximum  
 RESOLUTION BANDWIDTH: 1 kHz (9 kHz – 150 kHz)  
 9.0 kHz (150 kHz – 30 MHz)  
 120 kHz (30 MHz – 1000 MHz)  
 VIDEO BANDWIDTH: > Resolution bandwidth  
 TEST ANTENNA TYPE: Active loop (9 kHz – 30 MHz)  
 Biconilog (30 MHz – 1000 MHz)  
 FREQUENCY HOPPING: Disabled

Frequency, MHz	Peak emission, dB(µV/m)	Quasi-peak			Antenna polarization	Antenna height, m	Turn-table position**, degrees	Verdict
		Measured emission, dB(µV/m)	Limit, dB(µV/n)	Margin, dB*				
<b>Low carrier frequency 902.525 MHz</b>								
All emissions are at least 20 dB below the limit								Pass
<b>Mid carrier frequency 915.525 MHz</b>								
961.796	38.54	36.21	54.0	-17.79	H (Whip)	1.4	090	Pass
<b>High carrier frequency 927.475 MHz</b>								
965.285	43.50	40.70	54.0	-13.30	H (Whip)	1.6	040	Pass

\*- Margin = Measured emission - specification limit.  
 \*\*- EUT front panel refer to 0 degrees position of turntable.  
 EUT was tested with both antennas and maximum results are reported.

**Table 7.2.6 Restricted bands**

MHz	MHz	MHz	MHz	MHz	GHz
0.09 - 0.11	8.37625 - 8.38675	73 - 74.6	399.9 - 410	2690 - 2900	10.6 - 12.7
0.495 - 0.505	8.41425 - 8.41475	74.8 - 75.2	608 - 614	3260 - 3267	13.25 - 13.4
2.1735 - 2.1905	12.29 - 12.293	108 - 121.94	960 - 1240	3332 - 3339	14.47 - 14.5
4.125 - 4.128	12.51975 - 12.52025	123 - 138	1300 - 1427	3345.8 - 3358	15.35 - 16.2
4.17725 - 4.17775	12.57675 - 12.57725	149.9 - 150.05	1435 - 1626.5	3600 - 4400	17.7 - 21.4
4.20725 - 4.20775	13.36 - 13.41	156.52475 - 156.52525	1645.5 - 1646.5	4500 - 5150	22.01 - 23.12
6.215 - 6.218	16.42 - 16.423	156.7 - 156.9	1660 - 1710	5350 - 5460	23.6 - 24
6.26775 - 6.26825	16.69475 - 16.69525	162.0125 - 167.17	1718.8 - 1722.2	7250 - 7750	31.2 - 31.8
6.31175 - 6.31225	16.80425 - 16.80475	167.72 - 173.2	2200 - 2300	8025 - 8500	36.43 - 36.5
8.291 - 8.294	25.5 - 25.67	240 - 285	2310 - 2390	9000 - 9200	Above 38.6
8.362 - 8.366	37.5 - 38.25	322 - 335.4	2483.5 - 2500	9300 - 9500	

**Reference numbers of test equipment used**

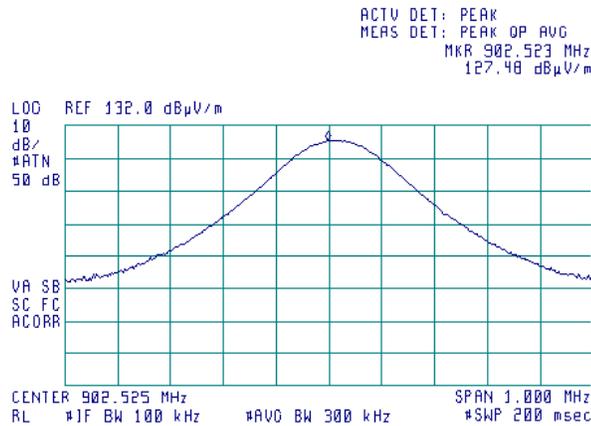
HL 0446	HL 0521	HL 0604	HL 1200	HL 1947	HL 1984	HL 2432	HL 2909
HL 2910	HL 3123	HL 3386	HL 3342	HL 3345			

Full description is given in Appendix A.

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

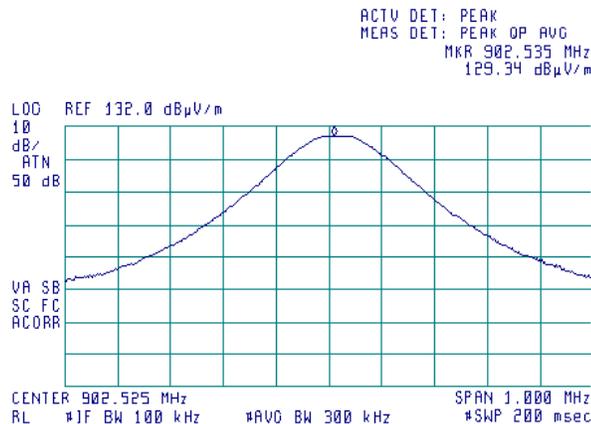
**Plot 7.2.1 Radiated emission measurements at the low carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Whip (110mm)



**Plot 7.2.2 Radiated emission measurements at the low carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Horizontal  
 Ant Whip (110mm)



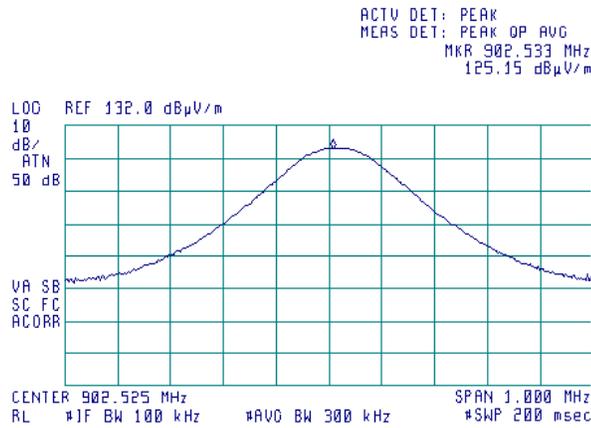


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<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict: PASS</b>	
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

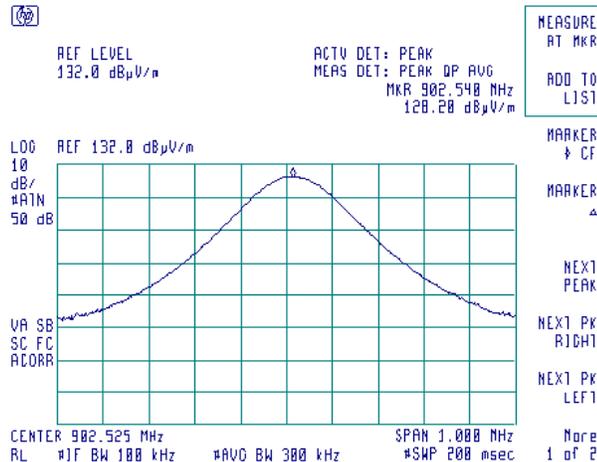
**Plot 7.2.3 Radiated emission measurements at the low carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Stubby (35mm)



**Plot 7.2.4 Radiated emission measurements at the low carrier frequency**

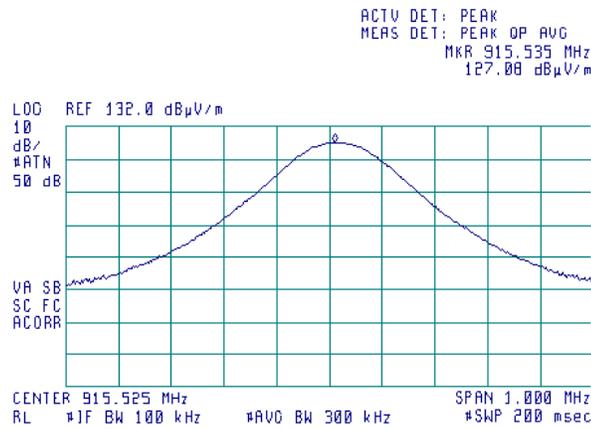
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Horizontal  
 Ant Stubby (35mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

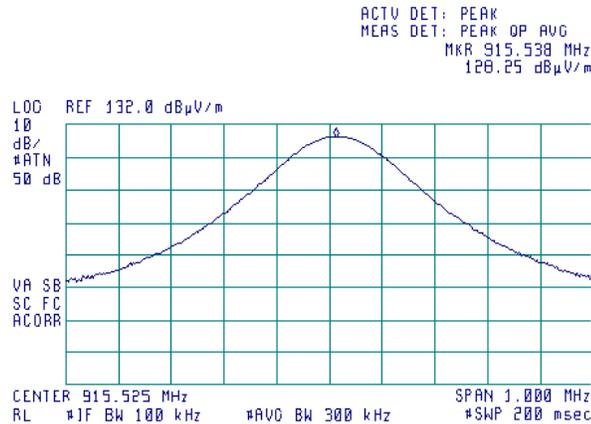
**Plot 7.2.5 Radiated emission measurements at the mid carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Whip (110mm)



**Plot 7.2.6 Radiated emission measurements at the mid carrier frequency**

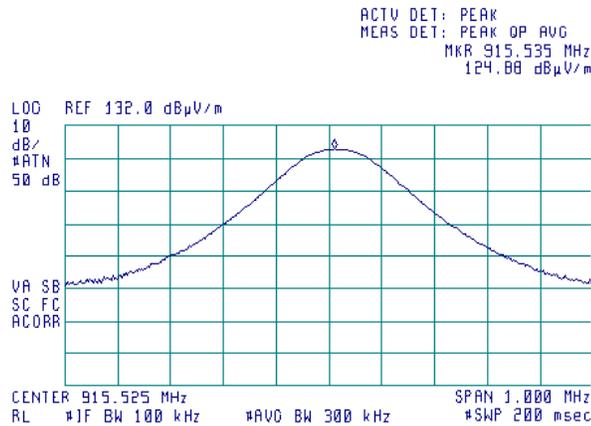
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Horizontal  
 Ant Whip (110mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

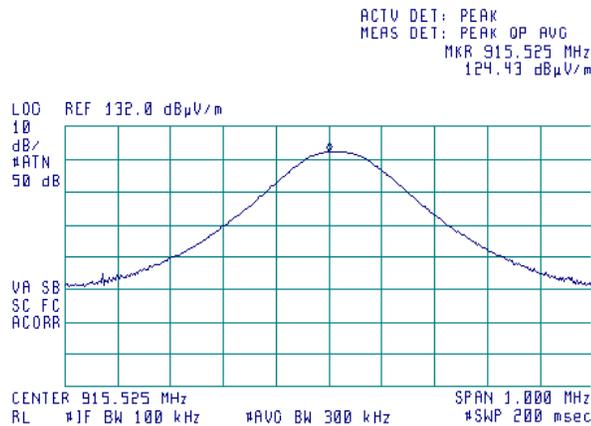
**Plot 7.2.7 Radiated emission measurements at the mid carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Stubby (35mm)



**Plot 7.2.8 Radiated emission measurements at the mid carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Horizontal  
 Ant Stubby (35mm)



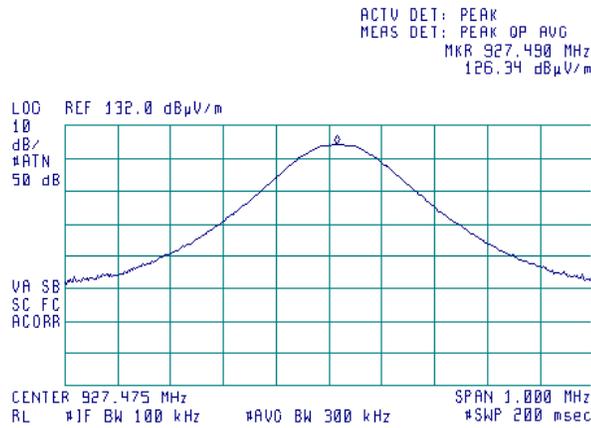


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<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict: PASS</b>	
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

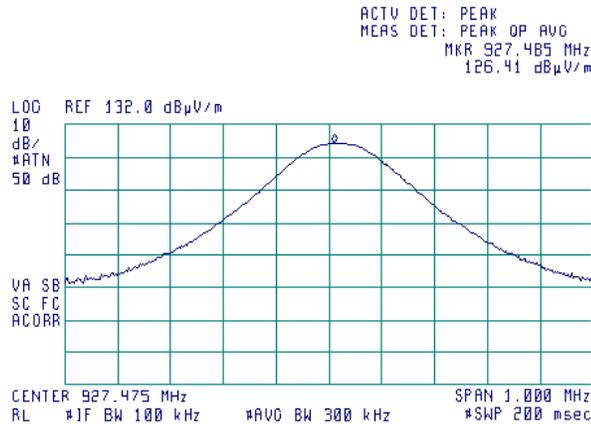
**Plot 7.2.9 Radiated emission measurements at the high carrier frequency**

TEST SITE: Semi anechoic chamber  
TEST DISTANCE: 3 m  
ANTENNA POLARIZATION: Vertical  
Ant Whip (110mm)



**Plot 7.2.10 Radiated emission measurements at the high carrier frequency**

TEST SITE: Semi anechoic chamber  
TEST DISTANCE: 3 m  
ANTENNA POLARIZATION: Horizontal  
Ant Whip (110mm)



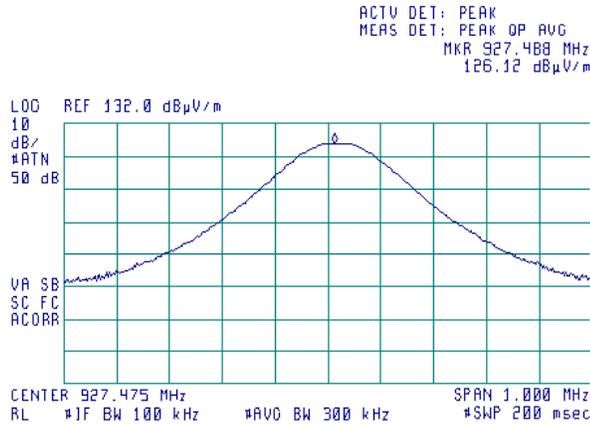


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<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

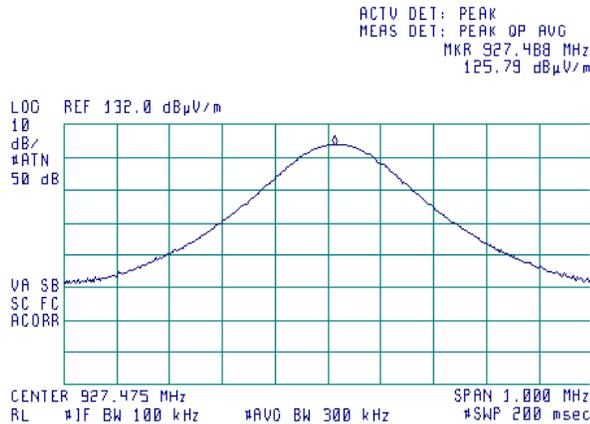
Plot 7.2.11 Radiated emission measurements at the high carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Stubby (35mm)



Plot 7.2.12 Radiated emission measurements at the high carrier frequency

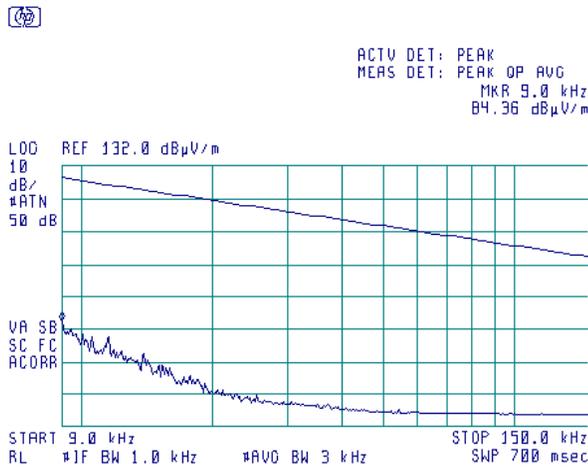
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Horizontal  
 Ant Stubby (35mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

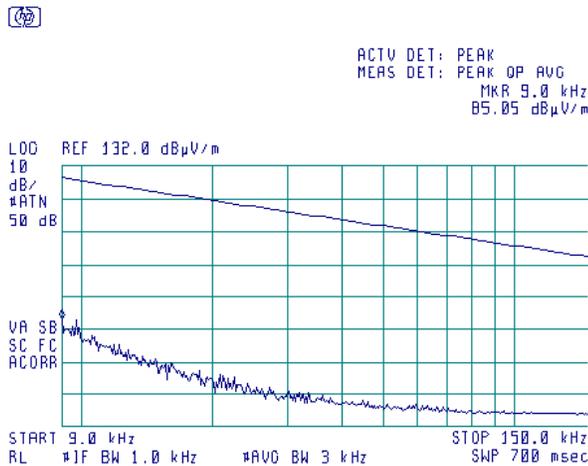
**Plot 7.2.13 Radiated emission measurements from 9 to 150 kHz at the low carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Whip (110mm)



**Plot 7.2.14 Radiated emission measurements from 9 to 150 kHz at the low carrier frequency**

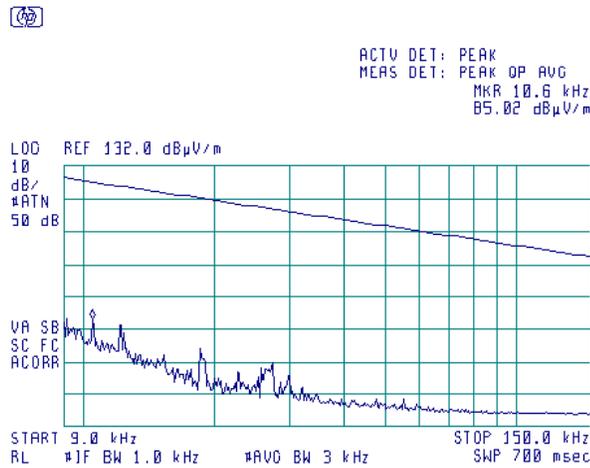
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Stubby (35mm)



<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/23/2008 1:11:03 PM			
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

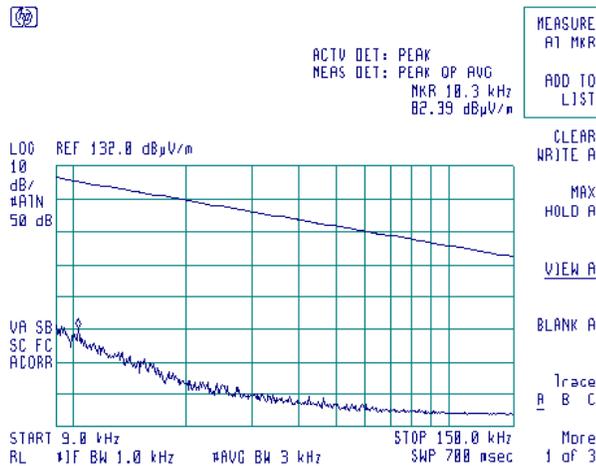
Plot 7.2.15 Radiated emission measurements from 9 to 150 kHz at the mid carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Whip (110mm)



Plot 7.2.16 Radiated emission measurements from 9 to 150 kHz at the mid carrier frequency

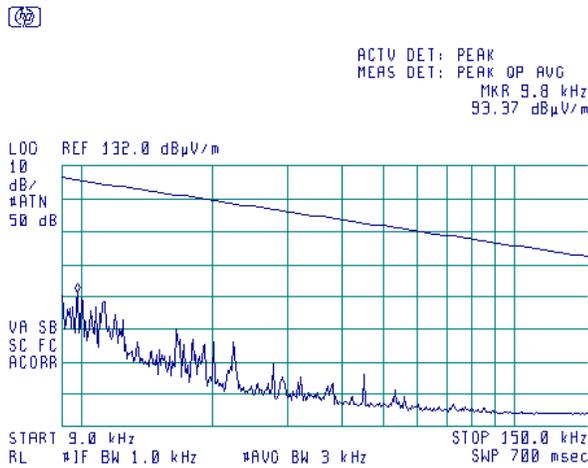
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Stubby (35mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict: PASS</b>	
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

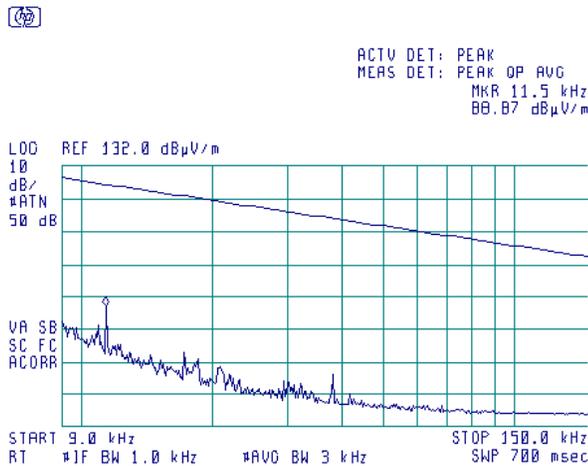
**Plot 7.2.17 Radiated emission measurements from 9 to 150 kHz at the high carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Whip (110mm)



**Plot 7.2.18 Radiated emission measurements from 9 to 150 kHz at the high carrier frequency**

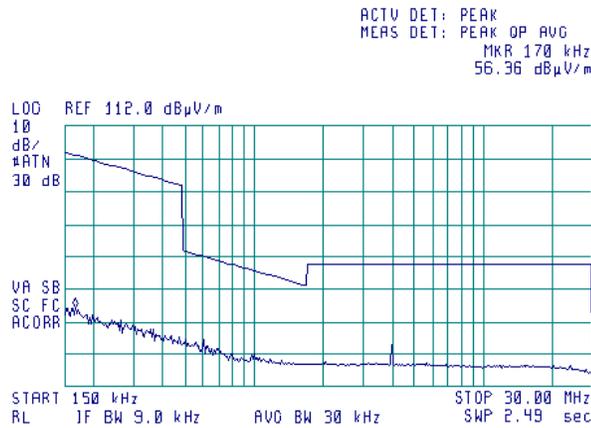
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Stubby (35mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

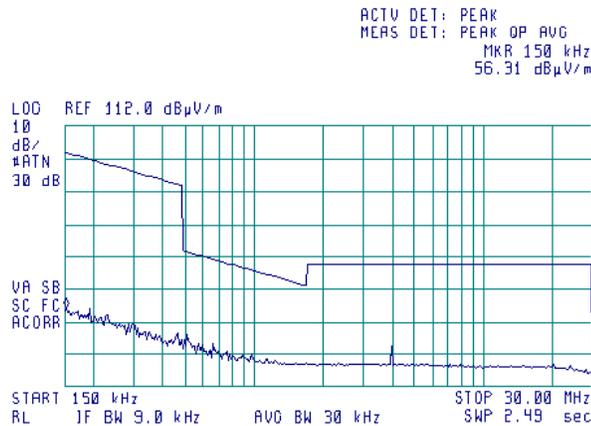
**Plot 7.2.19 Radiated emission measurements from 0.15 to 30 MHz at the low carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Whip (110mm)



**Plot 7.2.20 Radiated emission measurements from 0.15 to 30 MHz at the low carrier frequency**

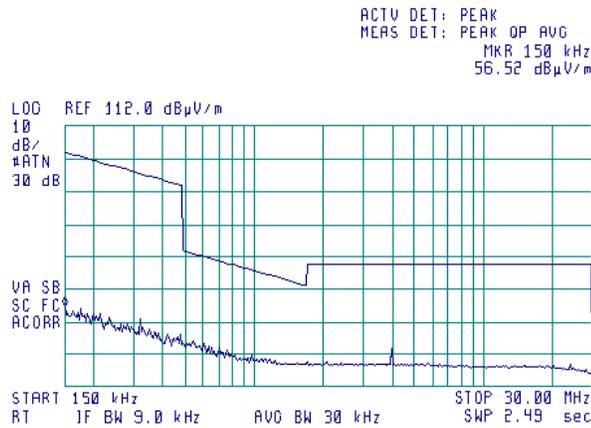
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Stubby (35mm)



<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/23/2008 1:11:03 PM			
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

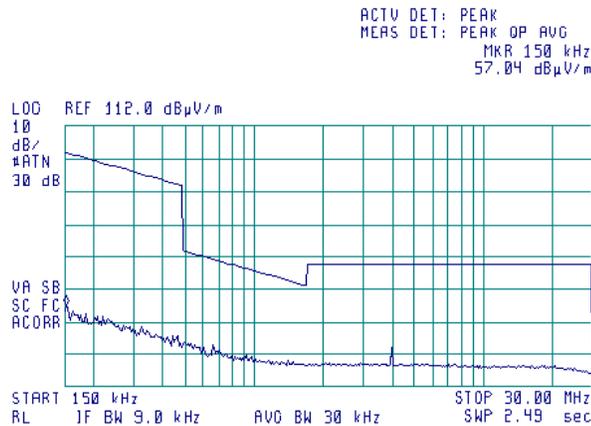
Plot 7.2.21 Radiated emission measurements from 0.15 to 30 MHz at the mid carrier frequency

TEST SITE: Semi anechoic chamber  
TEST DISTANCE: 3 m  
ANTENNA POLARIZATION: Vertical  
Ant Whip (110mm)



Plot 7.2.22 Radiated emission measurements from 0.15 to 30 MHz at the mid carrier frequency

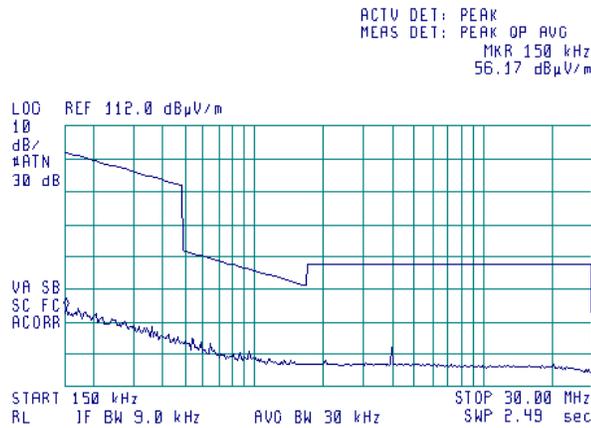
TEST SITE: Semi anechoic chamber  
TEST DISTANCE: 3 m  
ANTENNA POLARIZATION: Vertical  
Ant Stubby (35mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b>	Mototalk		

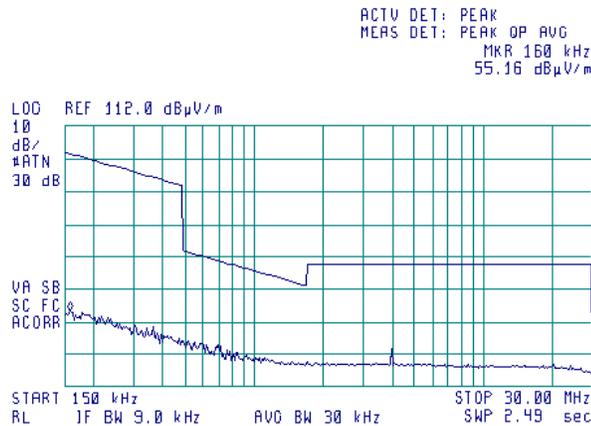
Plot 7.2.23 Radiated emission measurements from 0.15 to 30 MHz at the high carrier frequency

TEST SITE: Semi anechoic chamber  
TEST DISTANCE: 3 m  
ANTENNA POLARIZATION: Vertical  
Ant Whip (110mm)



Plot 7.2.24 Radiated emission measurements from 0.15 to 30 MHz at the high carrier frequency

TEST SITE: Semi anechoic chamber  
TEST DISTANCE: 3 m  
ANTENNA POLARIZATION: Vertical  
Ant Stubby (35mm)



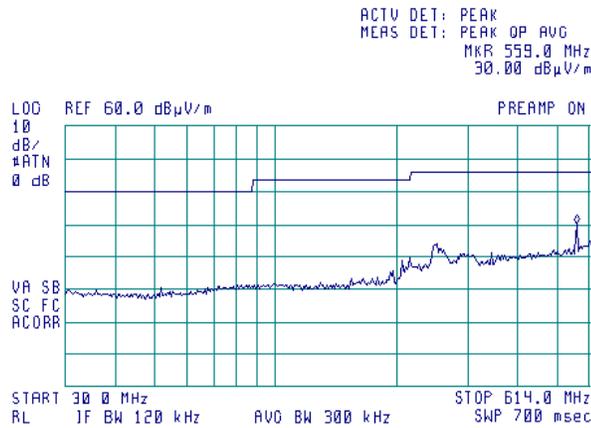


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<b>Test specification:</b>		<b>Section 15.247(c), Radiated spurious emissions</b>	
<b>Test procedure:</b>		Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

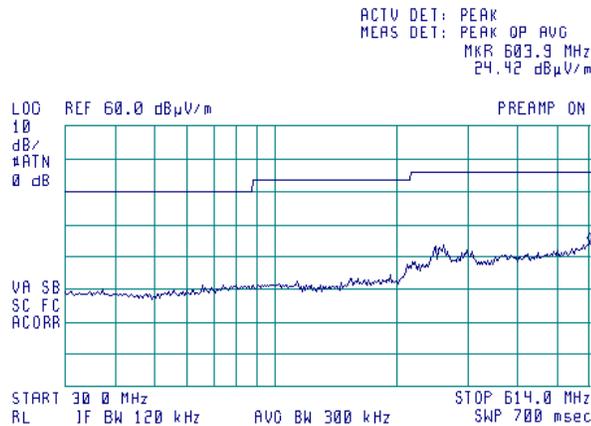
Plot 7.2.25 Radiated emission measurements from 30 to 614 MHz at the low carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Whip (110mm)



Plot 7.2.26 Radiated emission measurements from 30 to 614 MHz at the low carrier frequency

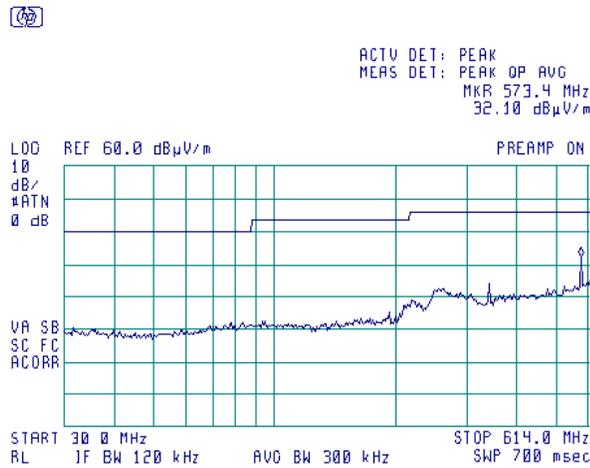
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Stubby (35mm)



<b>Test specification:</b>		<b>Section 15.247(c), Radiated spurious emissions</b>	
<b>Test procedure:</b>		Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

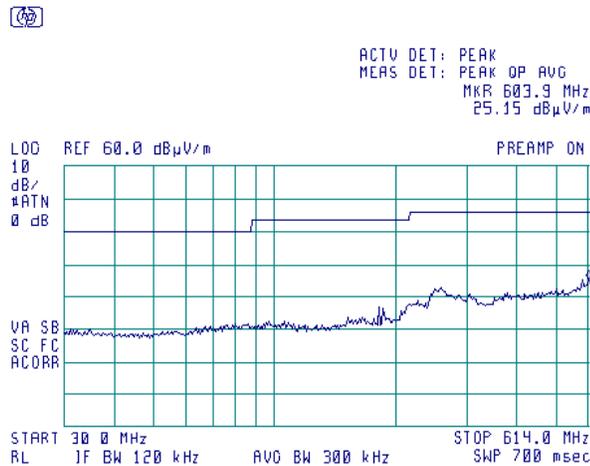
**Plot 7.2.27 Radiated emission measurements from 30 to 614 MHz at the mid carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Whip (110mm)



**Plot 7.2.28 Radiated emission measurements from 30 to 614 MHz at the mid carrier frequency**

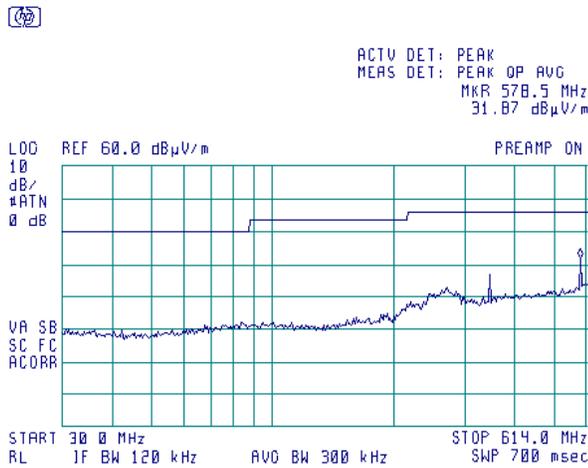
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Stubby (35mm)



<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/23/2008 1:11:03 PM			
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

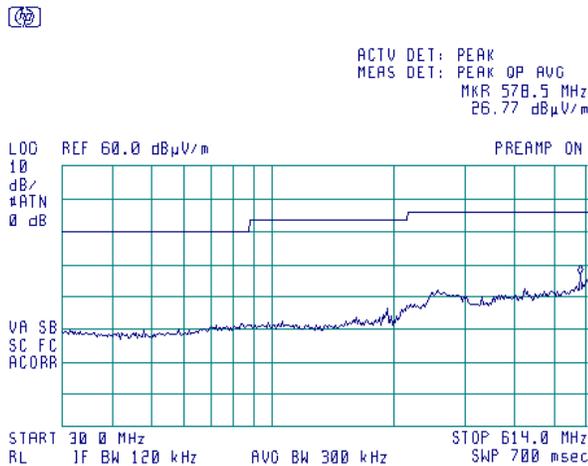
Plot 7.2.29 Radiated emission measurements from 30 to 614 MHz at the high carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Whip (110mm)



Plot 7.2.30 Radiated emission measurements from 30 to 614 MHz at the high carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 Ant Stubby (35mm)



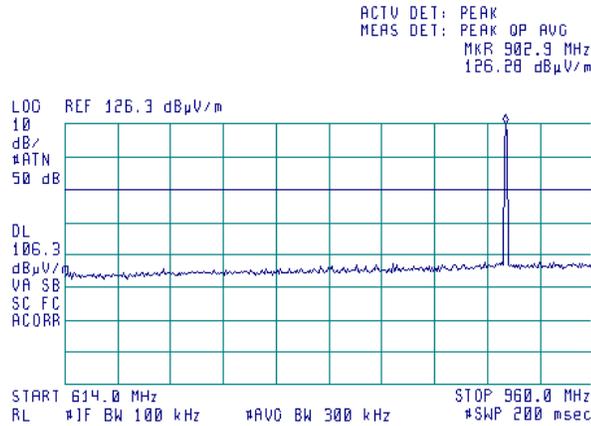


HERMON LABORATORIES

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

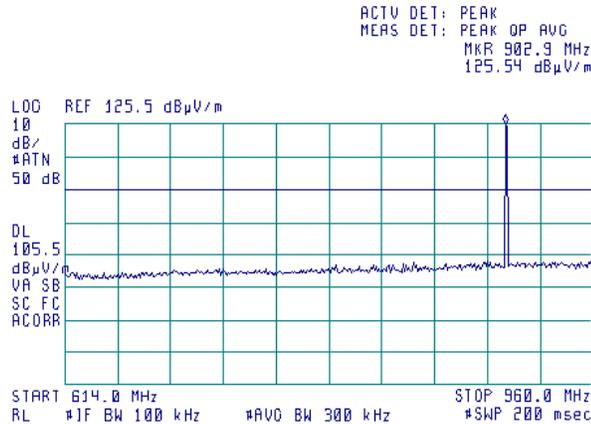
Plot 7.2.31 Radiated emission measurements from 614 to 960 MHz at the low carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Whip (110mm)



Plot 7.2.32 Radiated emission measurements from 614 to 960 MHz at the low carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Stubby (35mm)



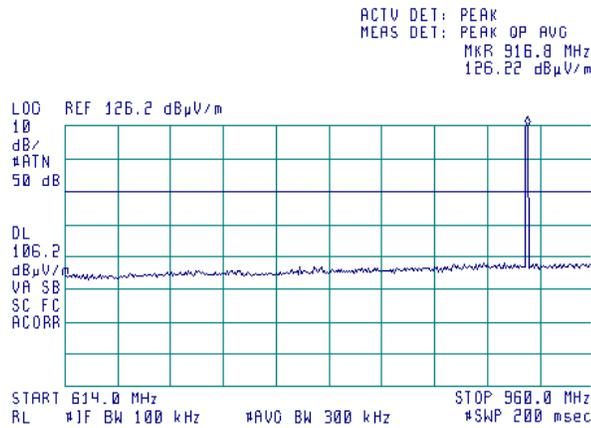


HERMON LABORATORIES

<b>Test specification:</b>		<b>Section 15.247(c), Radiated spurious emissions</b>	
<b>Test procedure:</b>		Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

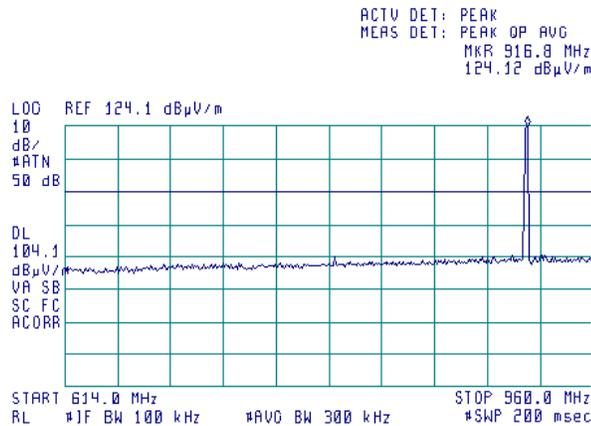
Plot 7.2.33 Radiated emission measurements from 614 to 960 MHz at the mid carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Whip (110mm)



Plot 7.2.34 Radiated emission measurements from 614 to 960 MHz at the mid carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Stubby (35mm)



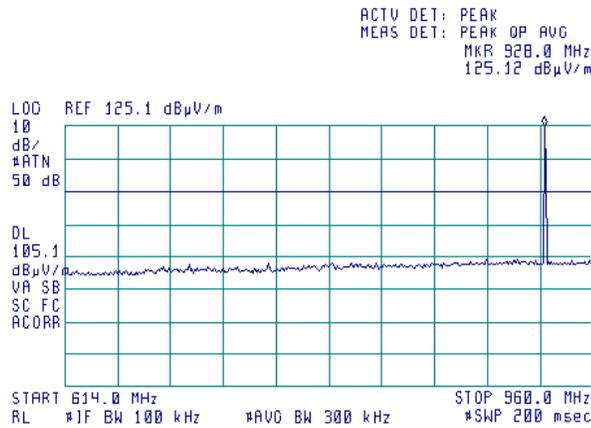


HERMON LABORATORIES

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict: PASS</b>	
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

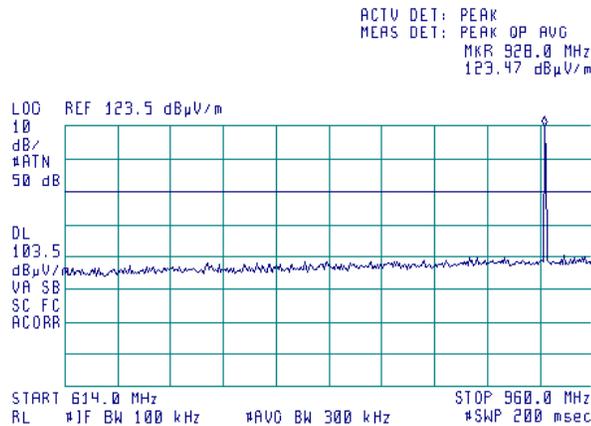
Plot 7.2.35 Radiated emission measurements from 614 to 960 MHz at the high carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Whip (110mm)



Plot 7.2.36 Radiated emission measurements from 614 to 960 MHz at the high carrier frequency

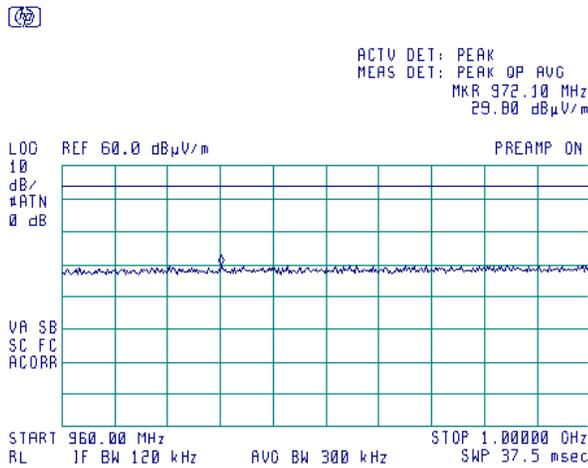
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Stubby (35mm)



<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/23/2008 1:11:03 PM			
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

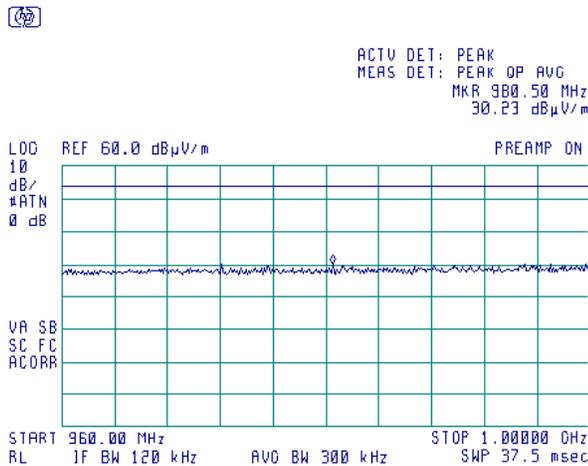
Plot 7.2.37 Radiated emission measurements from 960 to 1000 MHz at the low carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Whip (110mm)



Plot 7.2.38 Radiated emission measurements from 960 to 1000 MHz at the low carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Stubby (35mm)



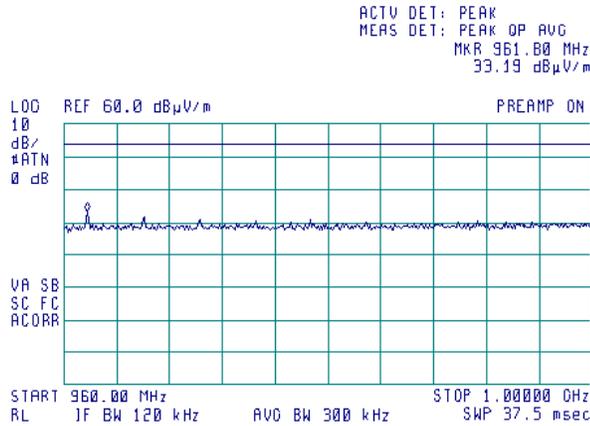


HERMON LABORATORIES

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b>	Mototalk		

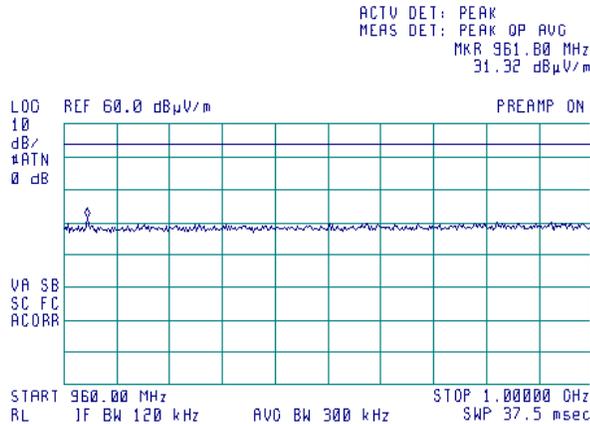
Plot 7.2.39 Radiated emission measurements from 960 to 1000 MHz at the mid carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Whip (110mm)



Plot 7.2.40 Radiated emission measurements from 960 to 1000 MHz at the mid carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Stubby (35mm)



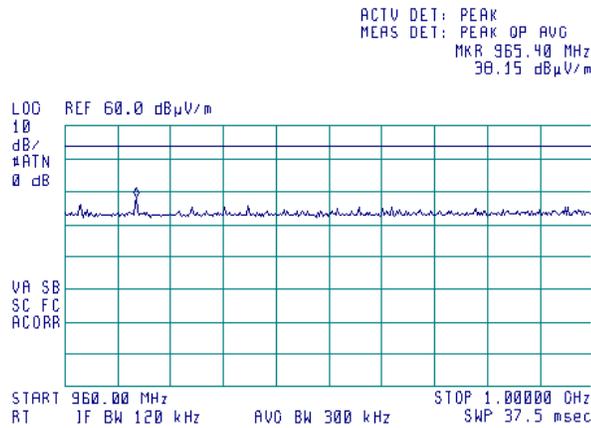


HERMON LABORATORIES

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict: PASS</b>	
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

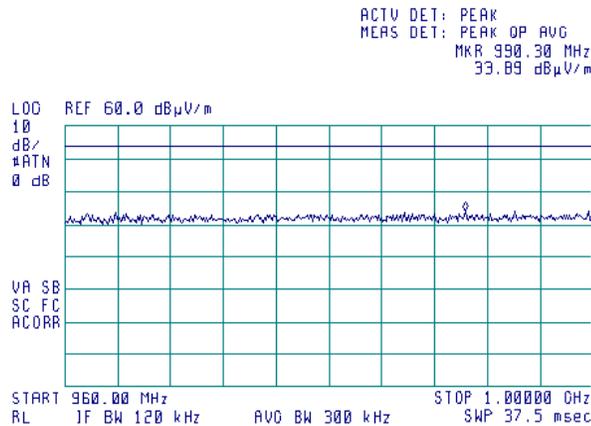
**Plot 7.2.41 Radiated emission measurements from 960 to 1000 MHz at the high carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Whip (110mm)



**Plot 7.2.42 Radiated emission measurements from 960 to 1000 MHz at the high carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Stubby (35mm)



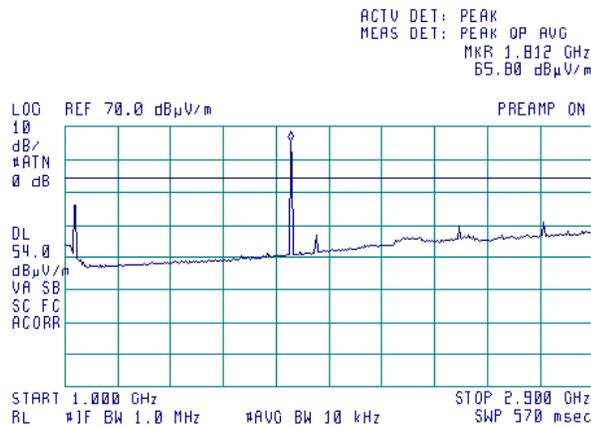
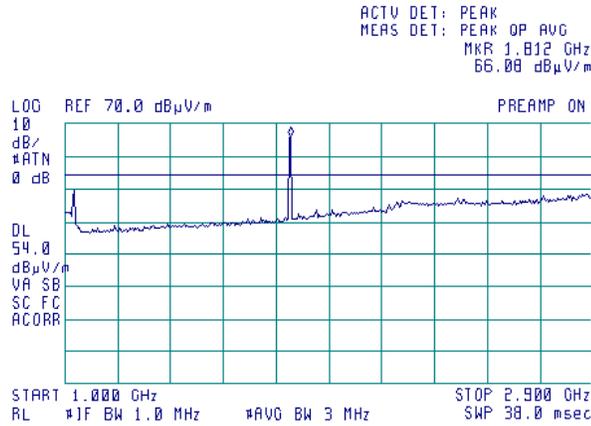


HERMON LABORATORIES

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

**Plot 7.2.43 Radiated emission measurements from 1000 to 2900 MHz at the low carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 ANT: Whip (110mm) and Stubby (35mm)



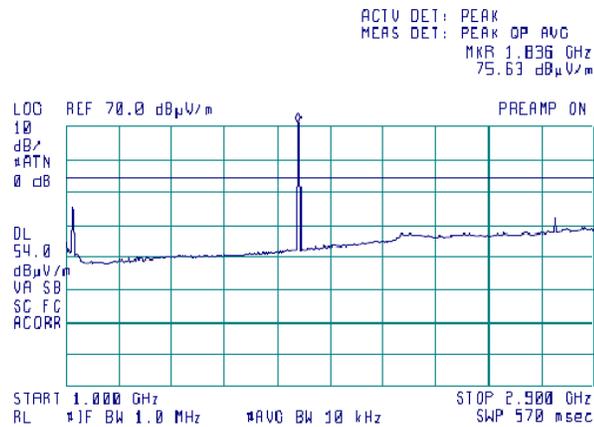
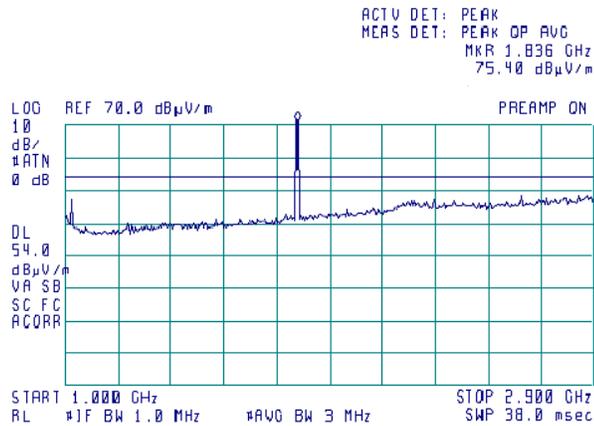


HERMON LABORATORIES

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b>	Mototalk		

Plot 7.2.44 Radiated emission measurements from 1000 to 2900 MHz at the mid carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 ANT: Whip (110mm) and Stubby (35mm)



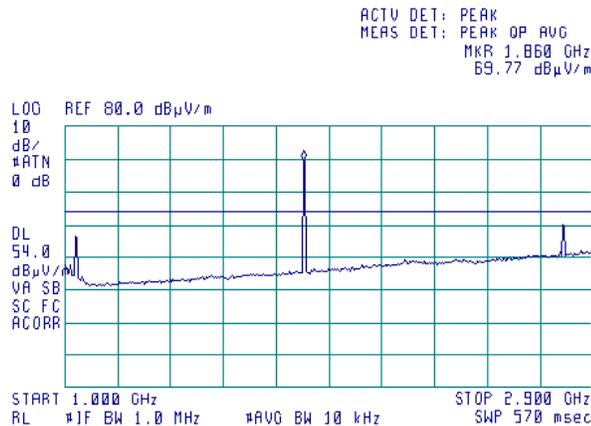
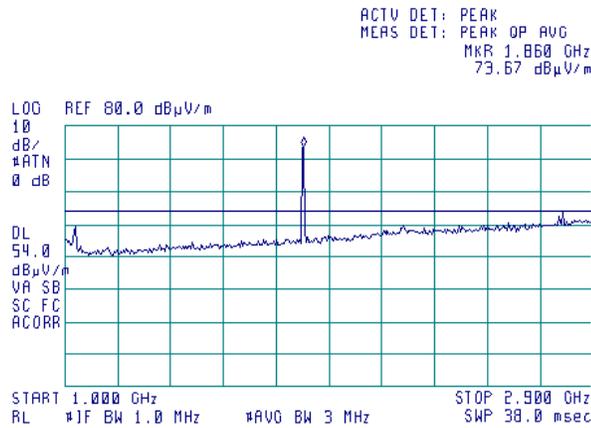


HERMON LABORATORIES

<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/23/2008 1:11:03 PM			
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.45 Radiated emission measurements from 1000 to 2900 MHz at the high carrier frequency

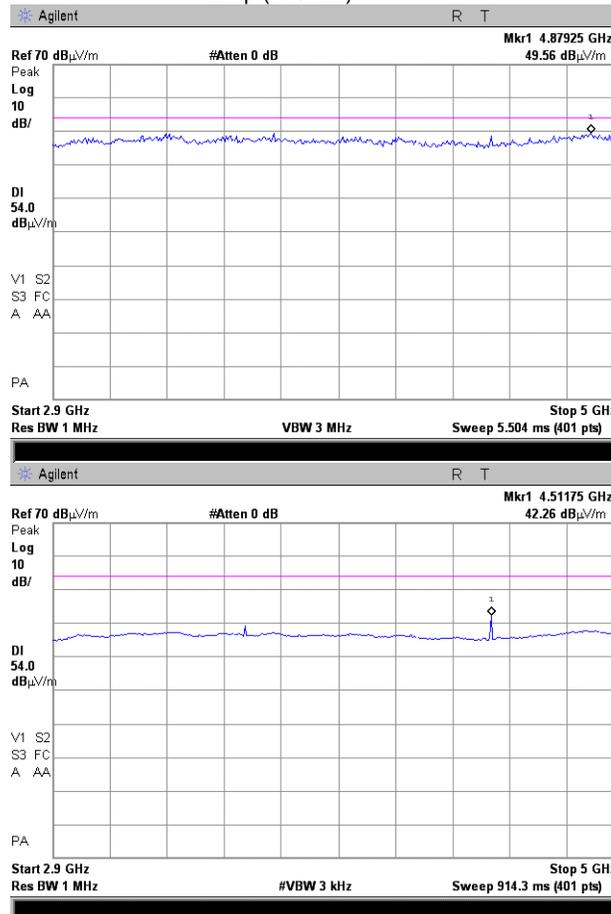
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Whip (110mm) and Stubby (35mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

**Plot 7.2.46 Radiated emission measurements from 2900 to 5000 MHz at the low carrier frequency**

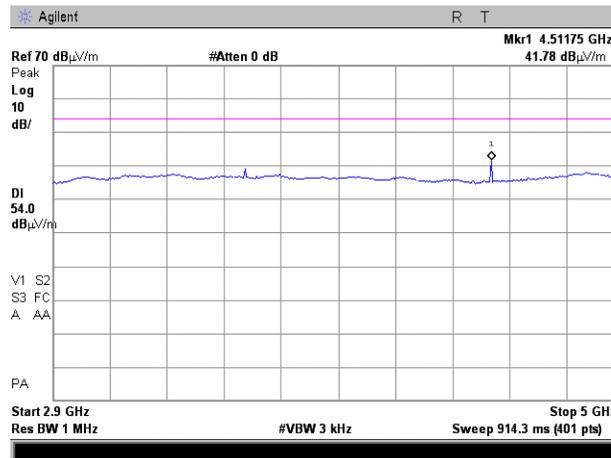
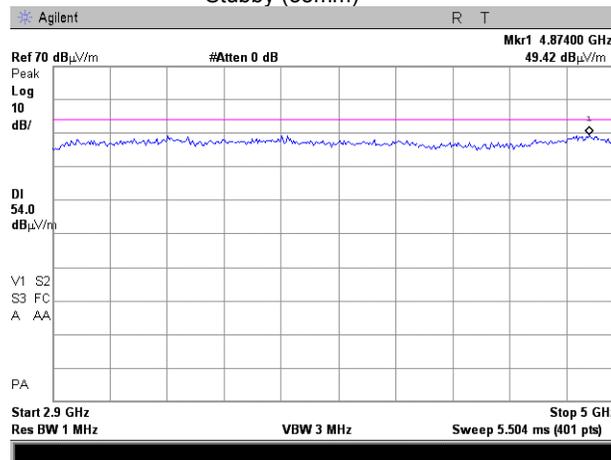
TEST SITE: Anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 ANT: Whip (110mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.47 Radiated emission measurements from 2900 to 5000 MHz at the low carrier frequency

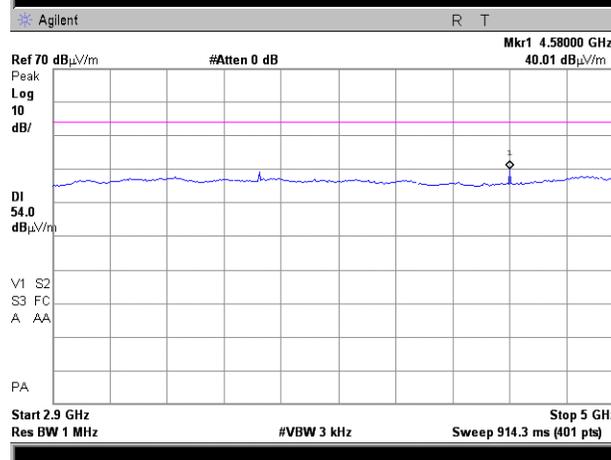
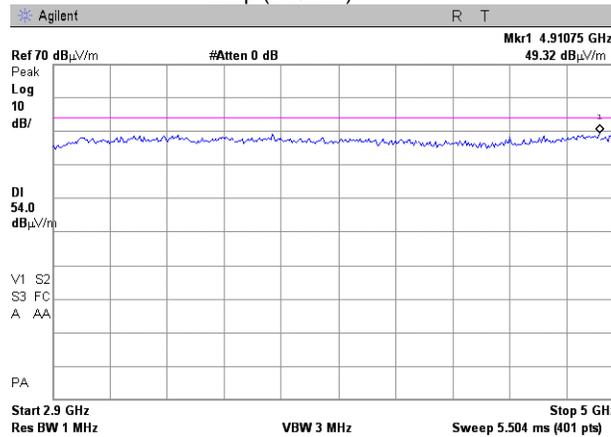
TEST SITE: Anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 ANT: Stubby (35mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

**Plot 7.2.48 Radiated emission measurements from 2900 to 5000 MHz at the mid carrier frequency**

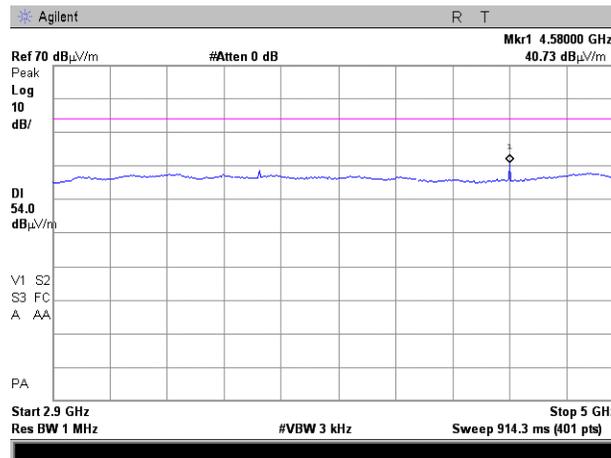
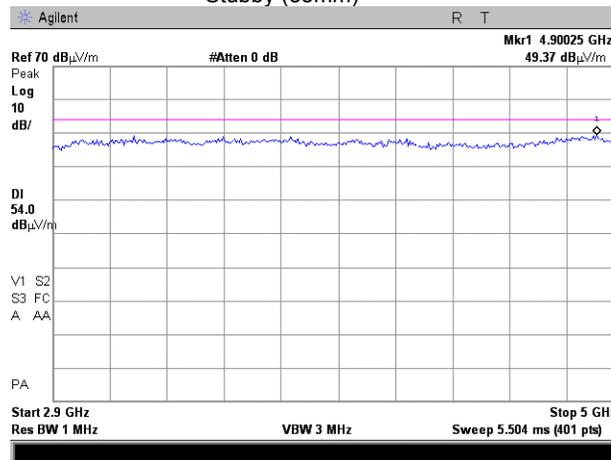
TEST SITE: Anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 ANT: Whip (110mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.49 Radiated emission measurements from 2900 to 5000 MHz at the mid carrier frequency

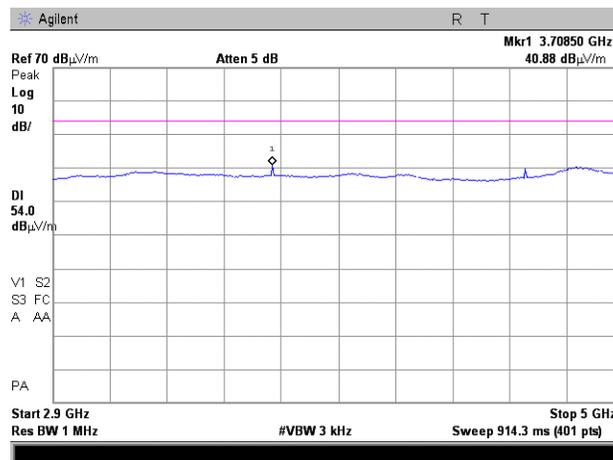
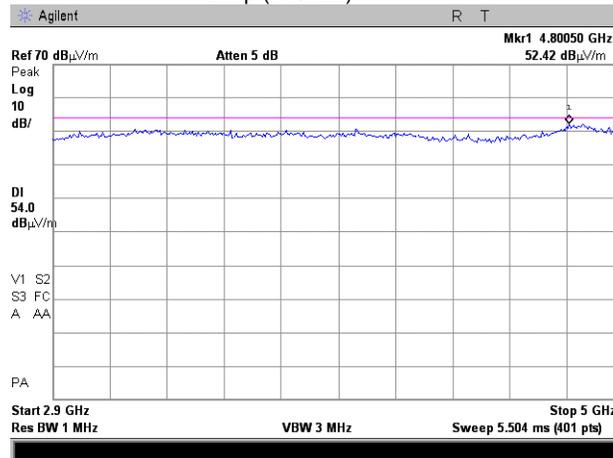
TEST SITE: Anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 ANT: Stubby (35mm)



<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/23/2008 1:11:03 PM			
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.50 Radiated emission measurements from 2900 to 5000 MHz at the high carrier frequency

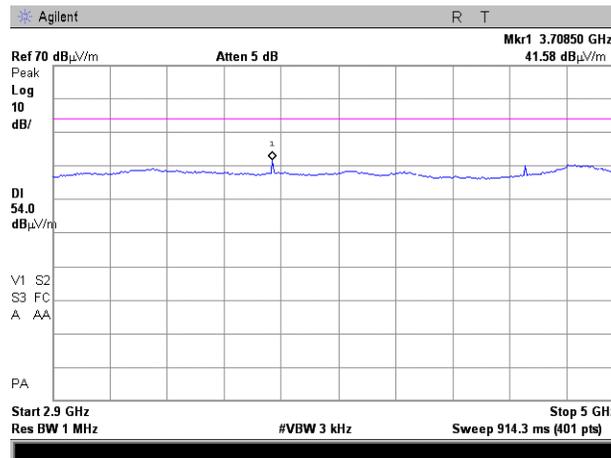
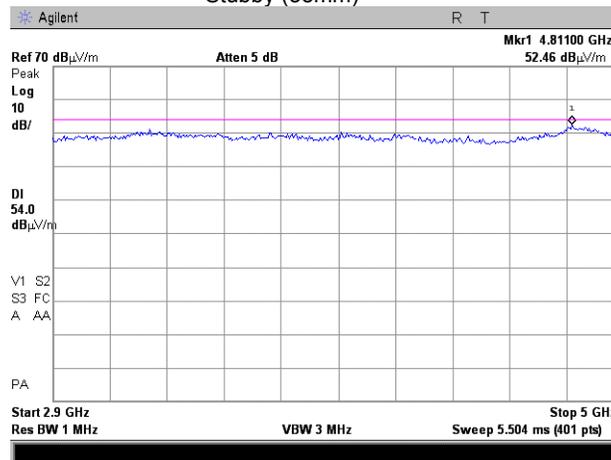
TEST SITE: Anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Whip (110mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict: PASS</b>	
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.51 Radiated emission measurements from 2900 to 5000 MHz at the high carrier frequency

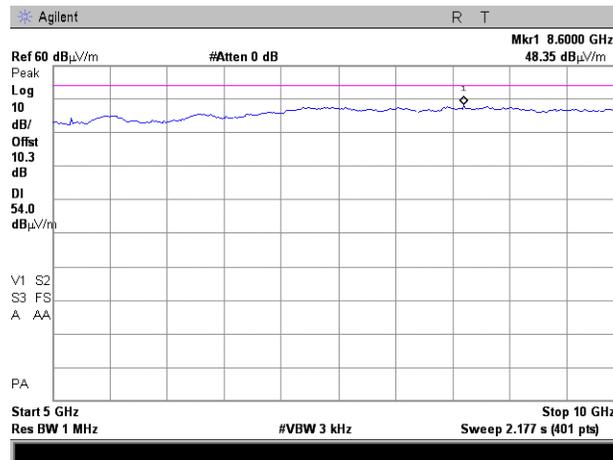
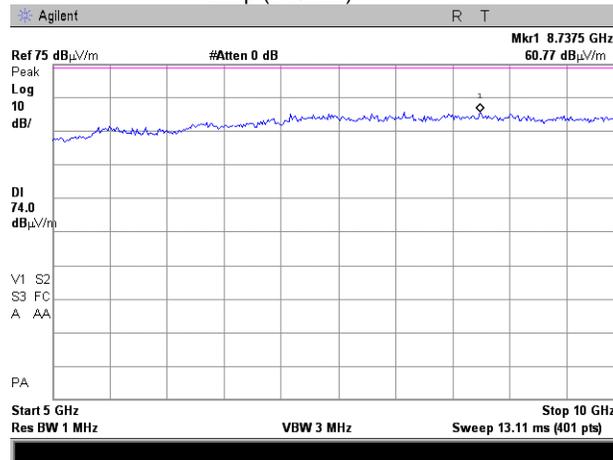
TEST SITE: Anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Stubby (35mm)



<b>Test specification:</b>		<b>Section 15.247(c), Radiated spurious emissions</b>	
<b>Test procedure:</b>		Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

**Plot 7.2.52 Radiated emission measurements from 5000 to 10000 MHz at the low carrier frequency**

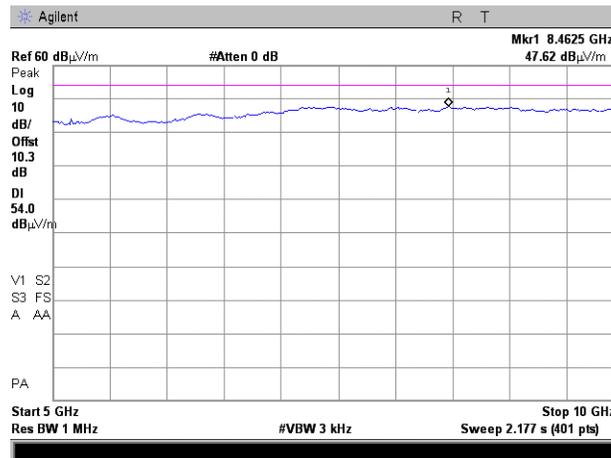
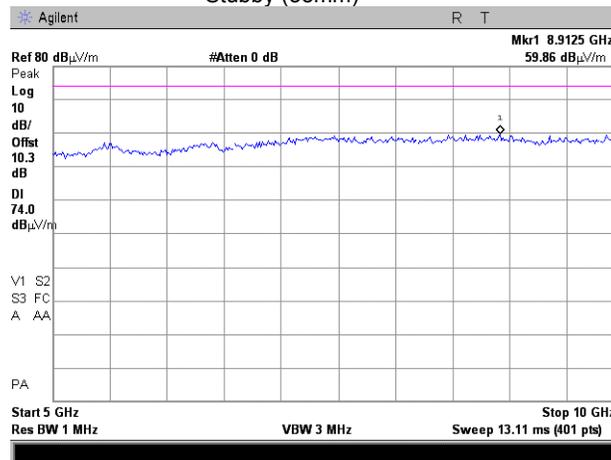
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Whip (110mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.53 Radiated emission measurements from 5000 to 10000 MHz at the low carrier frequency

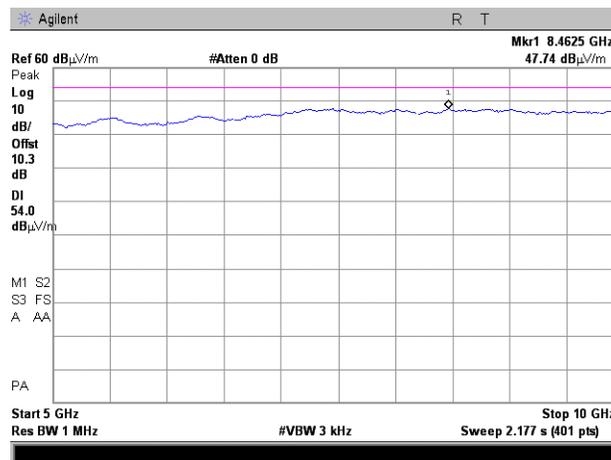
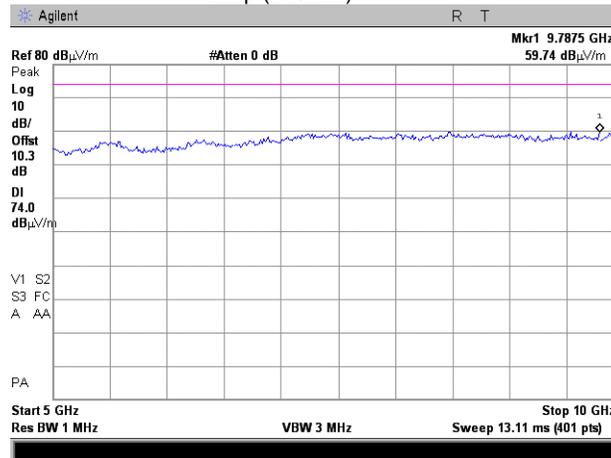
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Stubby (35mm)



<b>Test specification:</b>		<b>Section 15.247(c), Radiated spurious emissions</b>	
<b>Test procedure:</b>		Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	PASS
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.54 Radiated emission measurements from 5000 to 10000 MHz at the mid carrier frequency

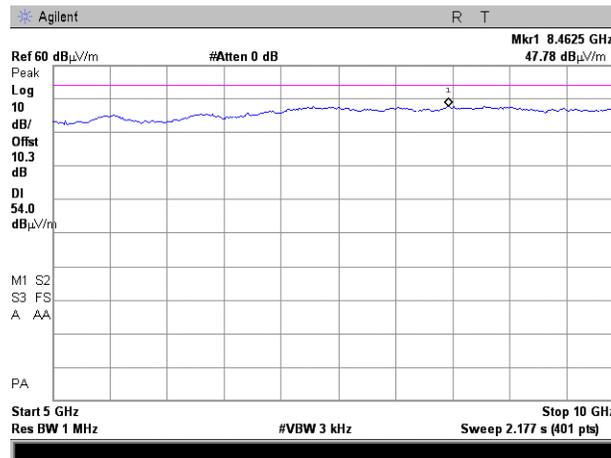
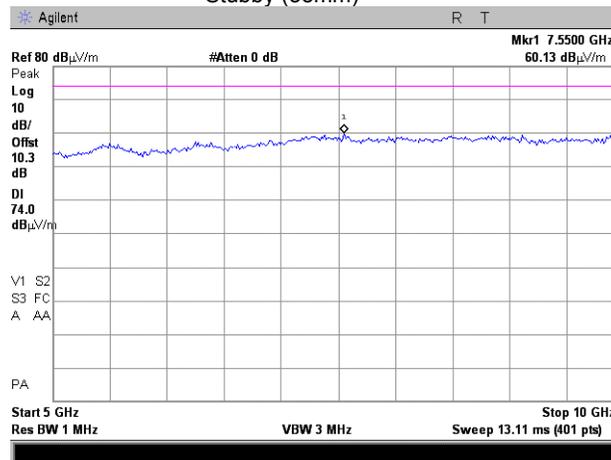
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Whip (110mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

**Plot 7.2.55 Radiated emission measurements from 5000 to 10000 MHz at the mid carrier frequency**

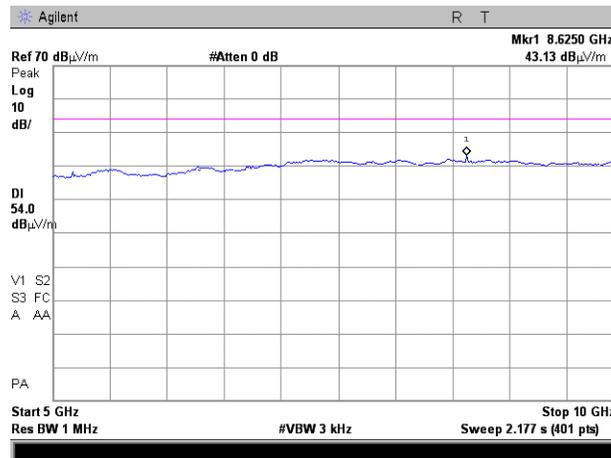
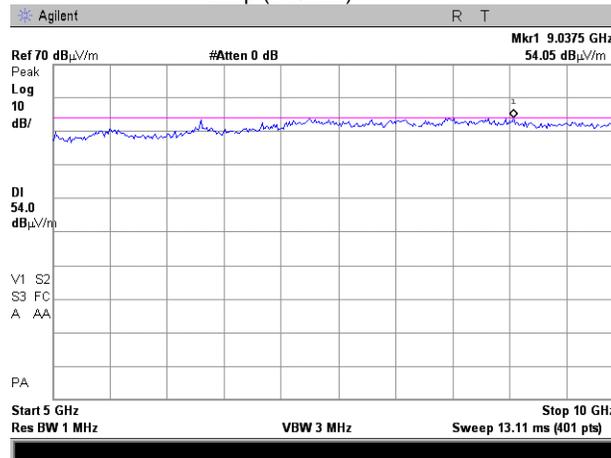
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Stubby (35mm)



<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/23/2008 1:11:03 PM			
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.56 Radiated emission measurements from 5000 to 10000 MHz at the high carrier frequency

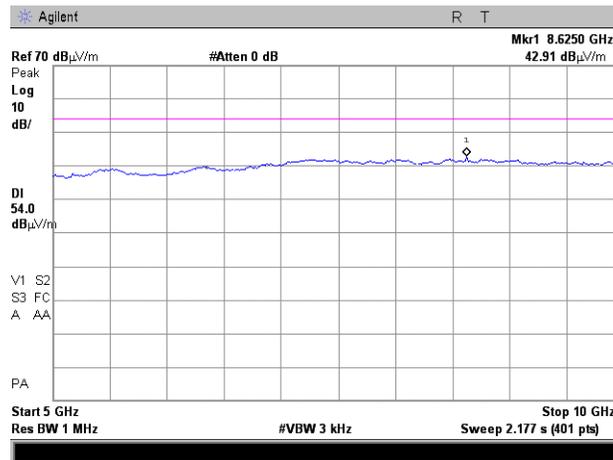
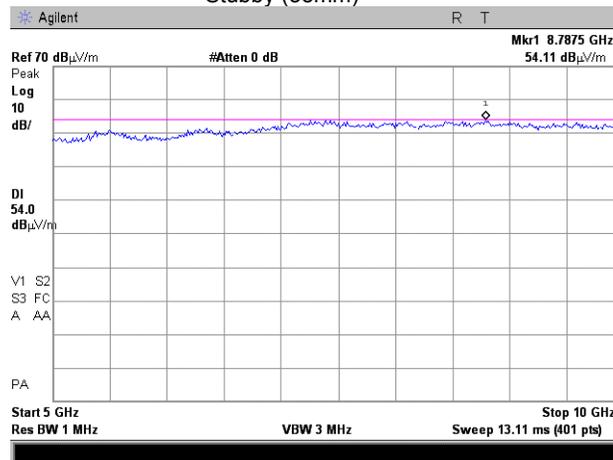
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Whip (110mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.57 Radiated emission measurements from 5000 to 10000 MHz at the high carrier frequency

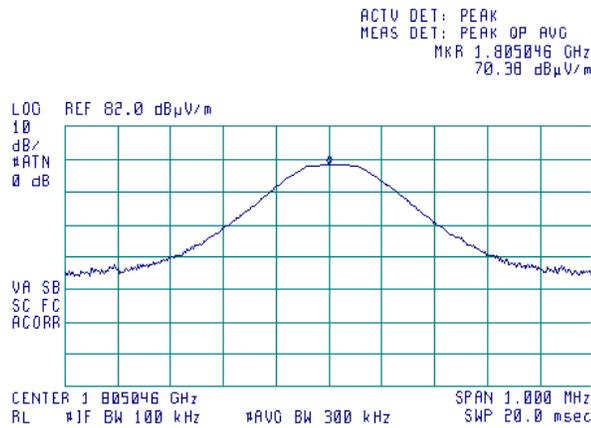
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 Ant Stubby (35mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b>	Mototalk		

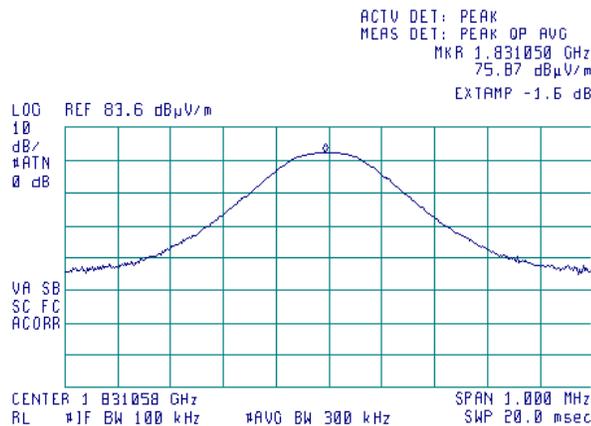
Plot 7.2.58 Radiated emission measurements at the second harmonic of low carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 EUT ORIENTATION: Z-axis  
 EUT ANTENNA: Whip (110mm) and Stubby (35mm) - Whip (110mm) max)



Plot 7.2.59 Radiated emission measurements at the second harmonic of mid carrier frequency

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 EUT ORIENTATION: Z-axis  
 EUT ANTENNA: Whip (110mm) and Stubby (35mm) - Whip (110mm) max)



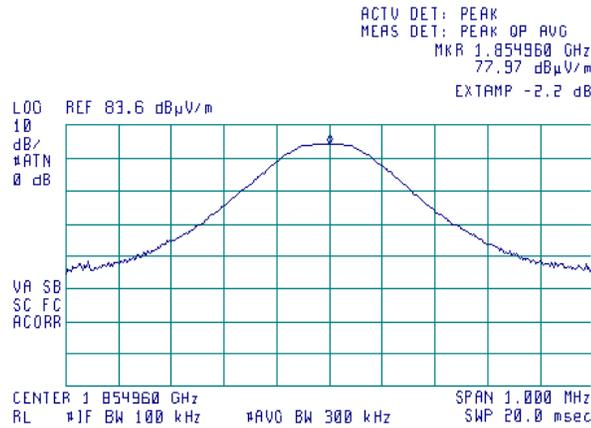


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<b>Test specification:</b>		<b>Section 15.247(c), Radiated spurious emissions</b>	
<b>Test procedure:</b>		Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

**Plot 7.2.60 Radiated emission measurements at the second harmonic of high carrier frequency**

TEST SITE: Semi anechoic chamber  
TEST DISTANCE: 3 m  
EUT ORIENTATION: Z-axis  
EUT ANTENNA: Whip (110mm) and Stubby (35mm) - Whip (110mm) max



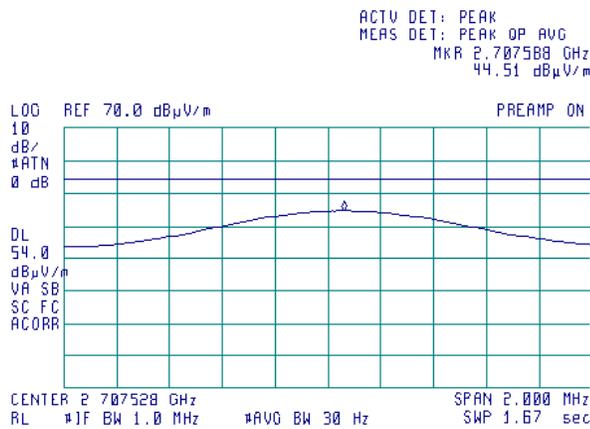
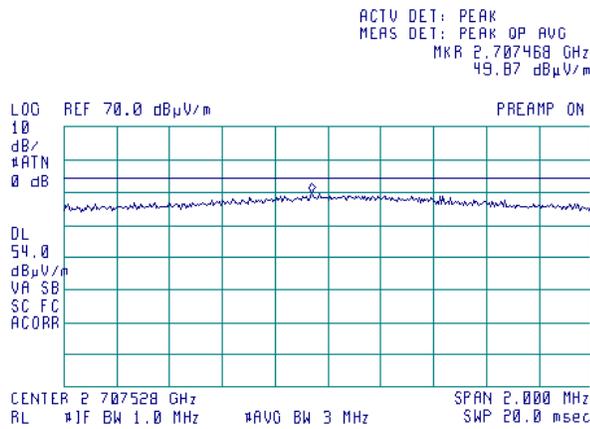


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<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.61 Radiated emission measurements at the third harmonic of low carrier frequency

TEST SITE: Semi anechoic chamber  
TEST DISTANCE: 3 m



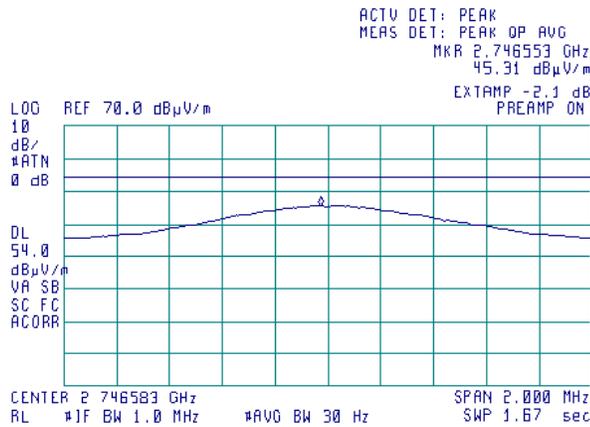
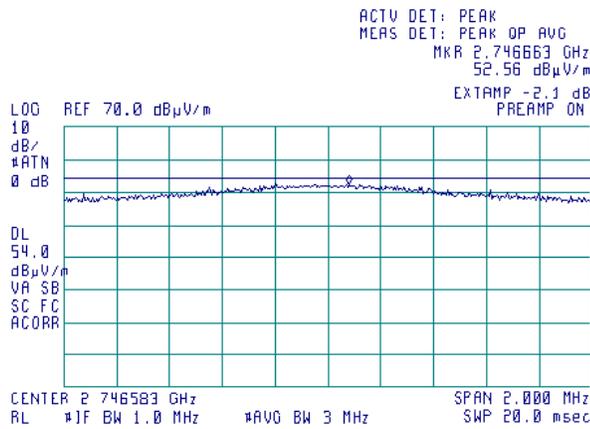


HERMON LABORATORIES

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict: PASS</b>	
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.62 Radiated emission measurements at the third harmonic of mid carrier frequency

TEST SITE: Semi anechoic chamber  
TEST DISTANCE: 3 m



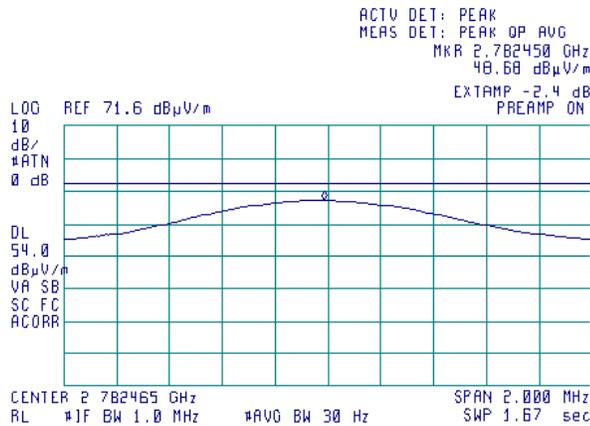
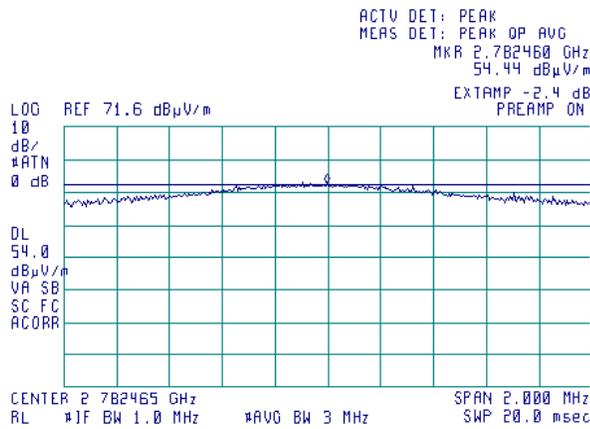


HERMON LABORATORIES

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.63 Radiated emission measurements at the third harmonic of high carrier frequency

TEST SITE: Semi anechoic chamber  
TEST DISTANCE: 3 m



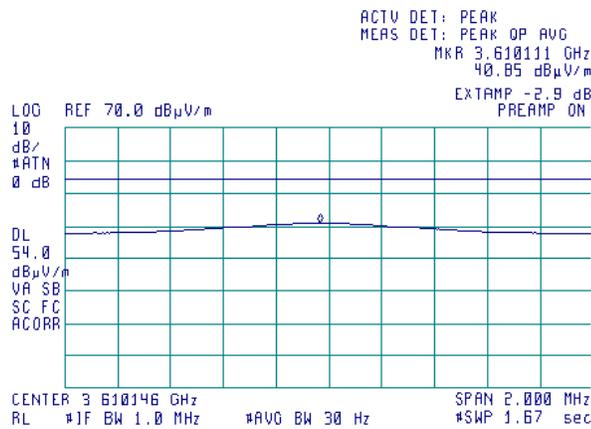
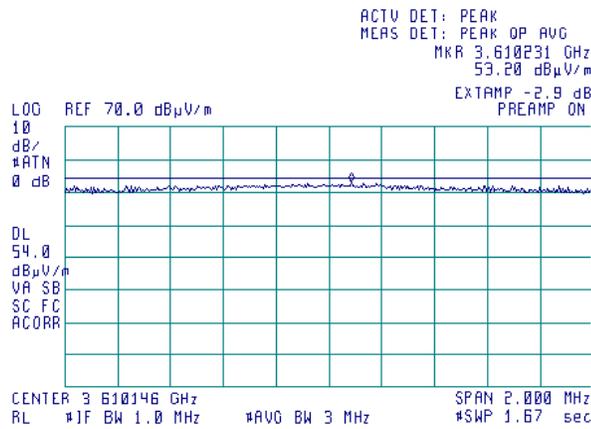


HERMON LABORATORIES

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

**Plot 7.2.64 Radiated emission measurements at the fourth harmonic of low carrier frequency**

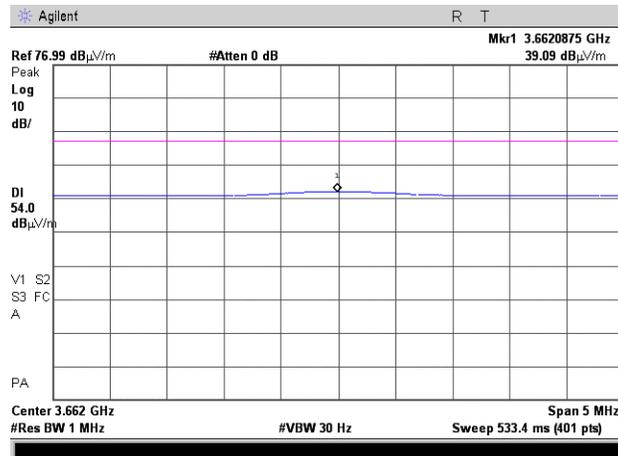
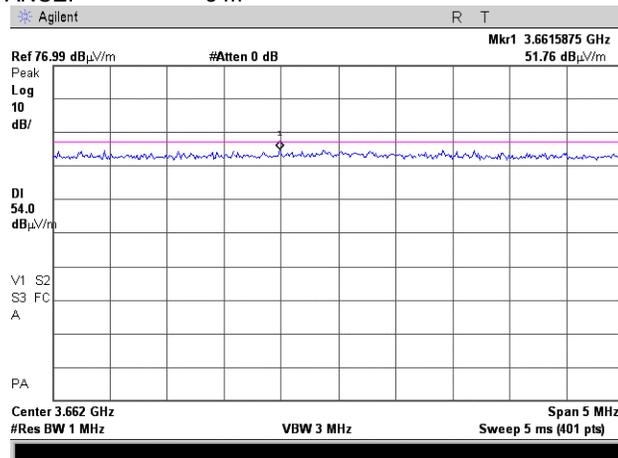
TEST SITE: Semi anechoic chamber  
TEST DISTANCE: 3 m



<b>Test specification:</b>		<b>Section 15.247(c), Radiated spurious emissions</b>	
<b>Test procedure:</b>		Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.65 Radiated emission measurements at the fourth harmonic of mid carrier frequency

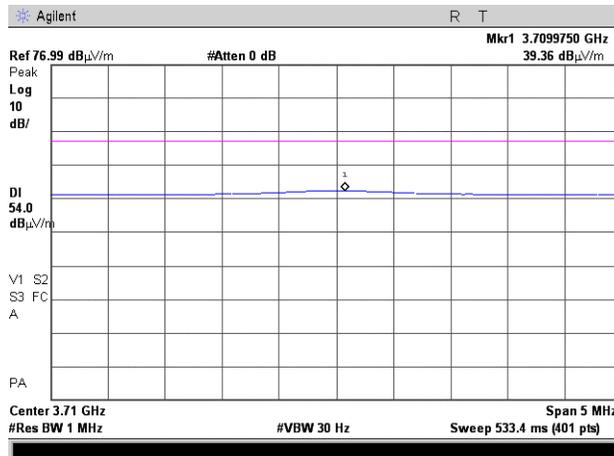
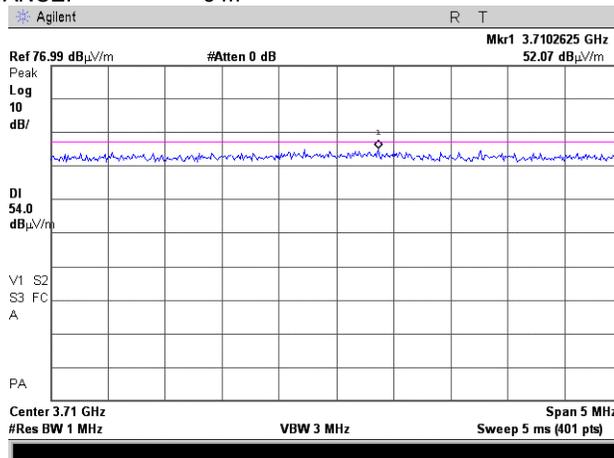
TEST SITE: OATS  
TEST DISTANCE: 3 m



<b>Test specification:</b>		<b>Section 15.247(c), Radiated spurious emissions</b>	
<b>Test procedure:</b>		Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	PASS
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.66 Radiated emission measurements at the fourth harmonic of high carrier frequency

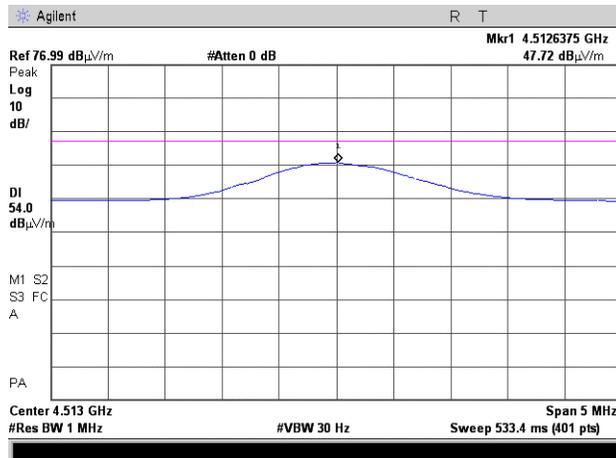
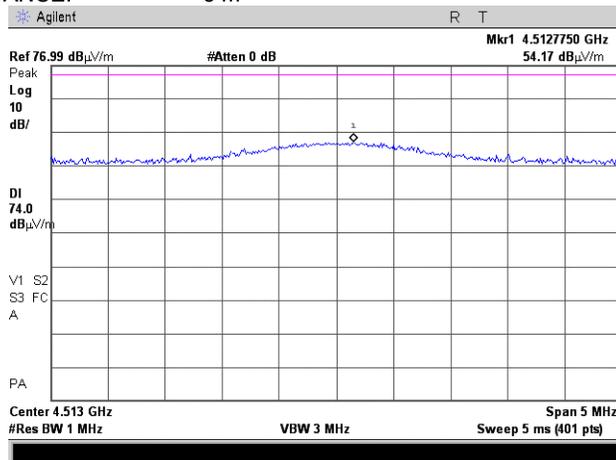
TEST SITE: OATS  
TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.67 Radiated emission measurements at the fifth harmonic of low carrier frequency

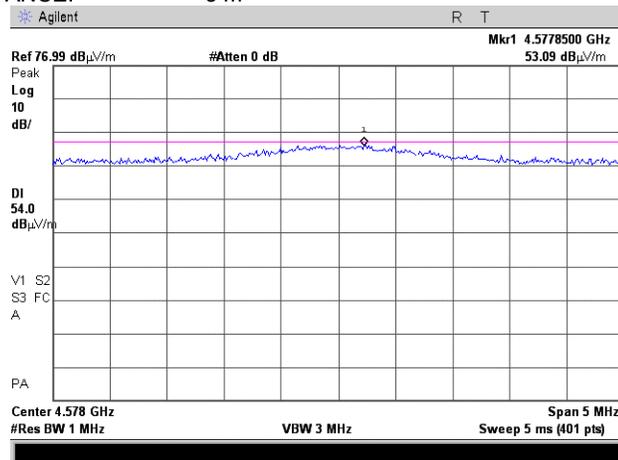
TEST SITE: OATS  
TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.68 Radiated emission measurements at the fifth harmonic of mid carrier frequency

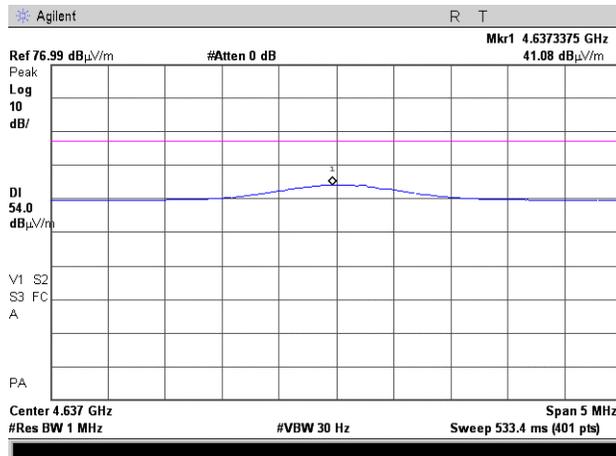
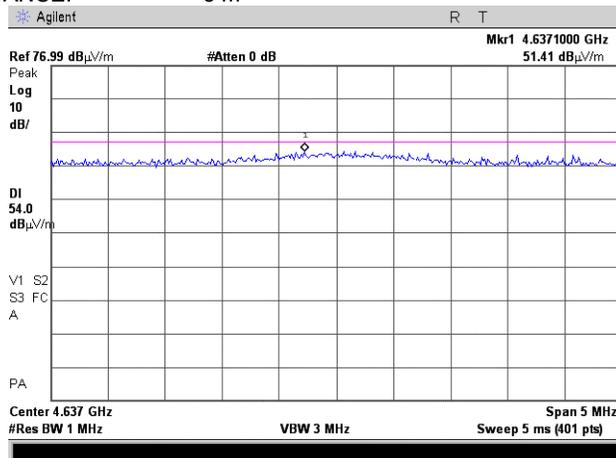
TEST SITE: OATS  
TEST DISTANCE: 3 m



<b>Test specification:</b>		<b>Section 15.247(c), Radiated spurious emissions</b>	
<b>Test procedure:</b>		Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	PASS
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.69 Radiated emission measurements at the fifth harmonic of high carrier frequency

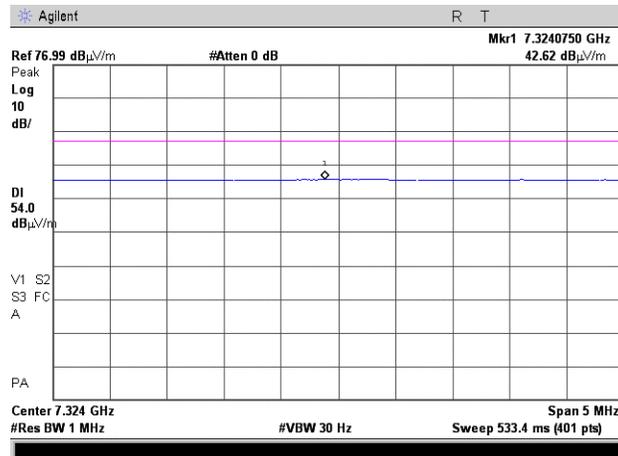
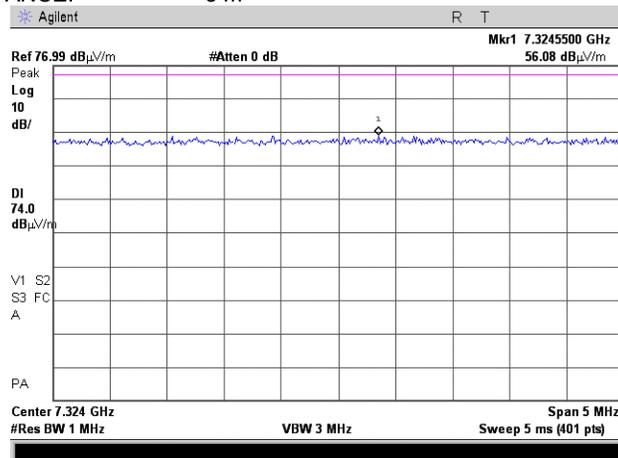
TEST SITE: OATS  
TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.70 Radiated emission measurements at the eighth harmonic of mid carrier frequency

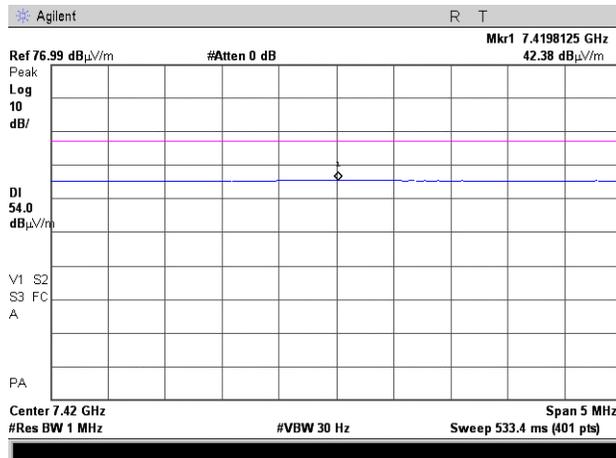
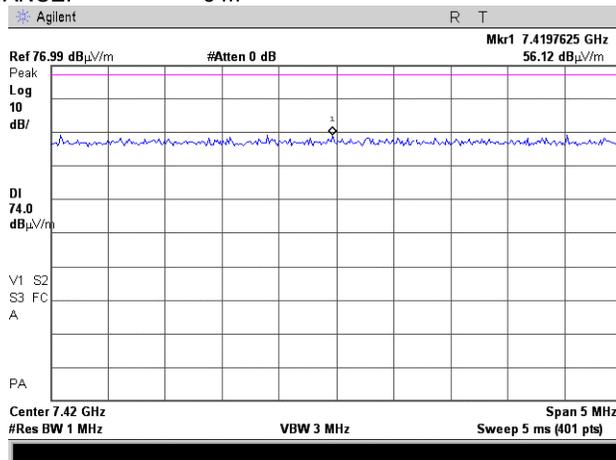
TEST SITE: OATS  
TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.71 Radiated emission measurements at the eighth harmonic of high carrier frequency

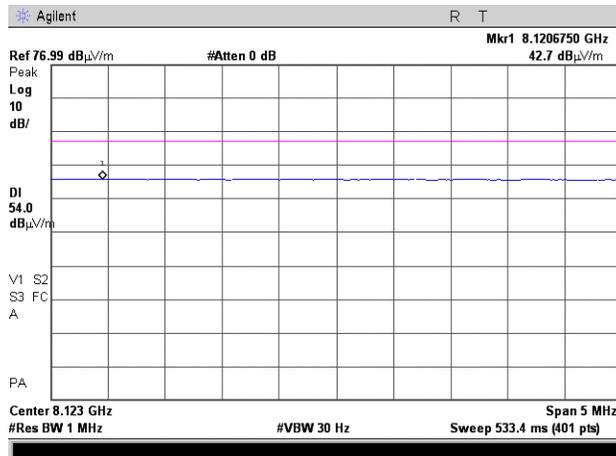
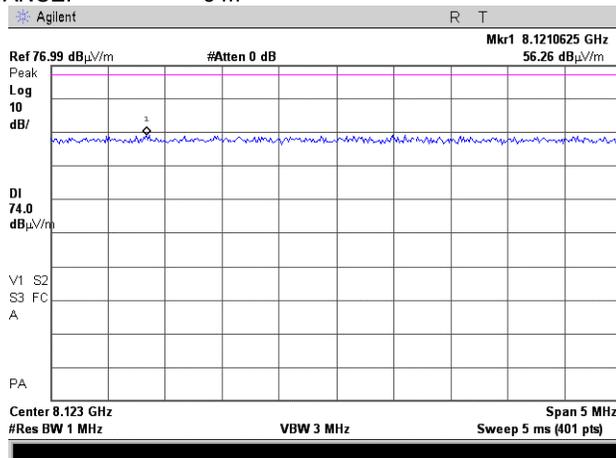
TEST SITE: OATS  
TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.72 Radiated emission measurements at the ninth harmonic of low carrier frequency

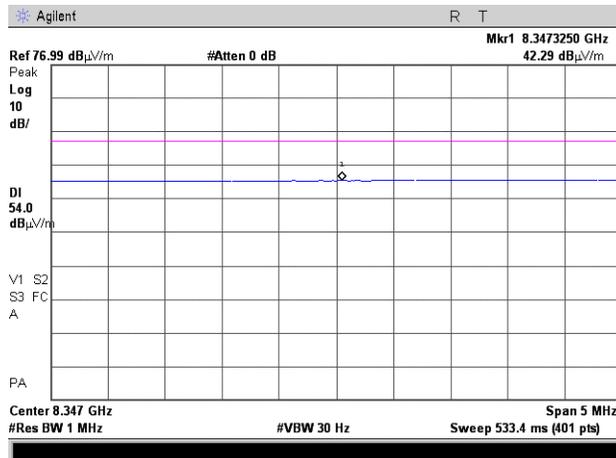
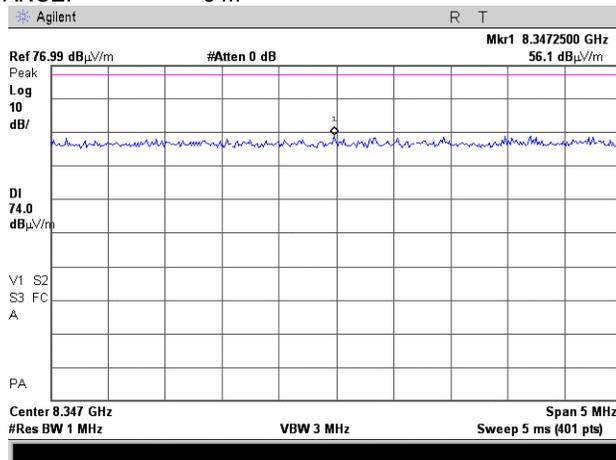
TEST SITE: OATS  
TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.73 Radiated emission measurements at the ninth harmonic of high carrier frequency

TEST SITE: OATS  
TEST DISTANCE: 3 m

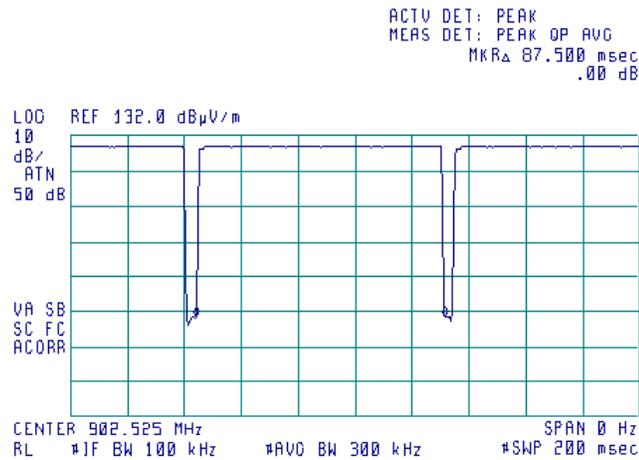




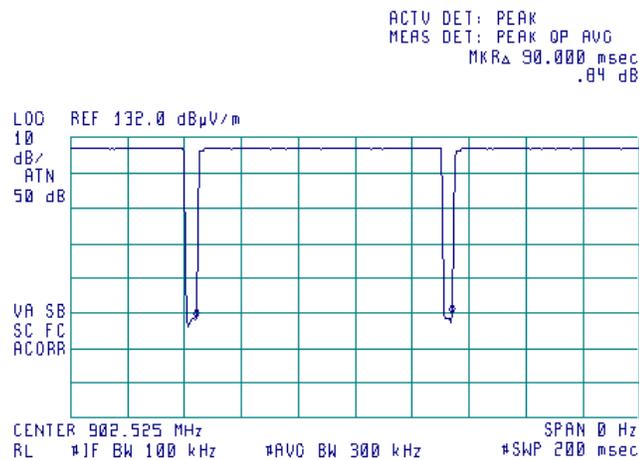
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<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/23/2008 1:11:03 PM		
<b>Temperature:</b> 26°C	<b>Air Pressure:</b> 1014 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Mototalk			

Plot 7.2.74 Transmission pulse duration



Plot 7.2.75 Transmission pulse period



<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions	
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS
<b>Date &amp; Time:</b> 9/24/2008 3:47:31 PM	
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa
<b>Relative Humidity:</b> 47 %	
<b>Power Supply:</b> Battery	
<b>Remarks:</b> Simultaneous mode: BT&Mototalk	

### 7.3 Radiated spurious emission measurements

#### 7.3.1 General

This test was performed to measure radiated spurious emissions from the EUT. Specification test limits are given in Table 7.3.1.

Table 7.3.1 Radiated spurious emission test limits (47CFR Part 15)

Frequency, MHz	Field strength at 3 m within restricted bands, dB(μV/m)***			Attenuation of field strength of spurious versus carrier outside restricted bands, dBc***
	Peak	Quasi Peak	Average	
0.009 – 0.090	148.5 – 128.5	NA	128.5 – 108.5**	20.0
0.090 – 0.110	NA	108.5 – 106.8**	NA	
0.110 – 0.490	126.8 – 113.8	NA	106.8 – 93.8**	
0.490 – 1.705	NA	73.8 – 63.0**	NA	
1.705 – 30.0*		69.5		
30 – 88		40.0		
88 – 216		43.5		
216 – 960		46.0		
960 – 1000		54.0		
1000 – 10 <sup>th</sup> harmonic	74.0	NA	54.0	

\* - Excluding the in band emission within ± 250 % of the authorized bandwidth from the carrier

\*\* - P is transmitter output power in Watts

\*\*\* - Equivalent field strength limit was calculated from maximum allowed ERP of spurious as follows:  $E = \sqrt{30 \times P \times 1.64} / r$ , where P is ERP in Watts, 1.64 is numeric gain of ideal dipole and r is antenna to EUT distance in meters

#### 7.3.2 Test procedure for spurious emission field strength measurements in 9 kHz to 30 MHz band

7.3.2.1 The EUT was set up as shown in Figure 7.3.1, energized and the performance check was conducted.

7.3.2.2 The specified frequency range was investigated with antenna connected to spectrum analyzer. To find maximum radiation the turntable was rotated 360° and the measuring antenna was rotated around its vertical axis.

7.3.2.3 The worst test results (the lowest margins) were recorded in Table 7.3.5 and shown in the associated plots.

#### 7.3.3 Test procedure for spurious emission field strength measurements above 30 MHz

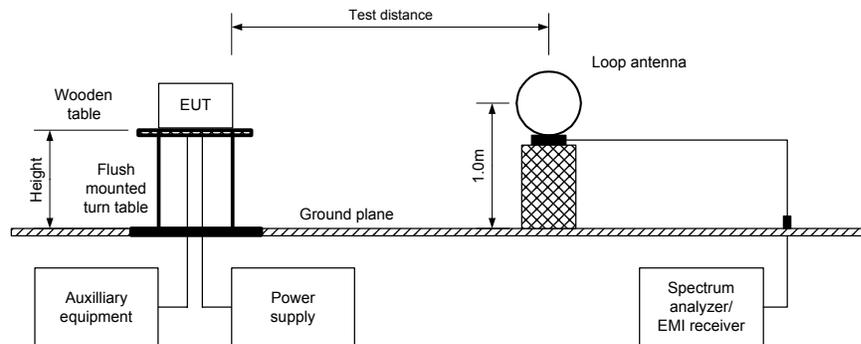
7.3.3.1 The EUT was set up as shown in Figure 7.3.2, energized and the performance check was conducted.

7.3.3.2 The specified frequency range was investigated with antenna connected to spectrum analyzer. To find maximum radiation the turntable was rotated 360° and the measuring antenna height was swept from 1 to 4 m in both, vertical and horizontal, polarizations.

7.3.3.3 The worst test results (the lowest margins) were recorded in Table 7.3.2, Table 7.3.3, Table 7.3.5 and shown in the associated plots.

<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/24/2008 3:47:31 PM			
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

Figure 7.3.1 Setup for spurious emission field strength measurements in 9 kHz to 30 MHz band

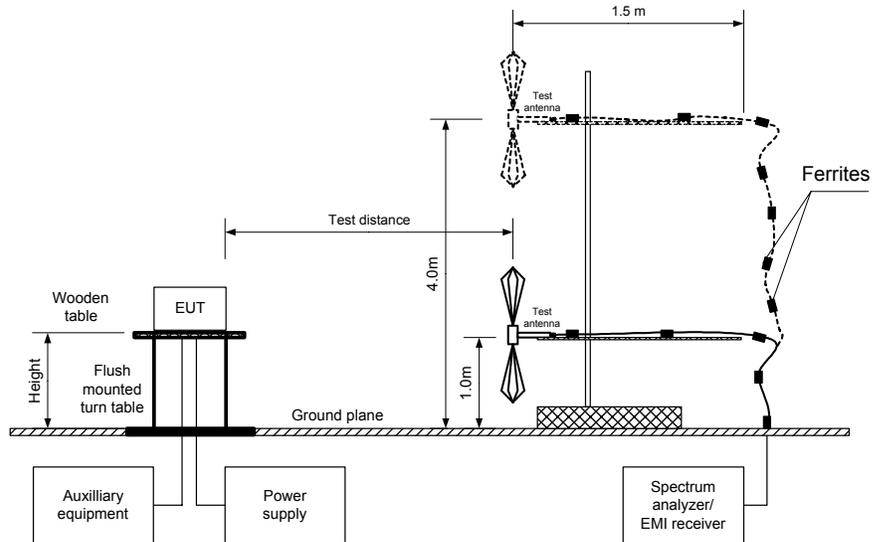


Photograph 7.3.1 Setup for spurious emission field strength measurements in 9 kHz to 30 MHz band



<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/24/2008 3:47:31 PM			
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

Figure 7.3.2 Setup for spurious emission field strength measurements above 30 MHz



Photograph 7.3.2 Setup for spurious emission field strength measurements above 30 MHz



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

Photograph 7.3.3 Setup for spurious emission field strength measurements above 1000 MHz



Photograph 7.3.4 Setup for spurious emission field strength measurements above 1000 MHz





<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions	
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS
<b>Date &amp; Time:</b> 9/24/2008 3:47:31 PM	
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa
<b>Relative Humidity:</b> 47 %	
<b>Power Supply:</b> Battery	
<b>Remarks:</b> Simultaneous mode: BT&Mototalk	

Table 7.3.2 Field strength of emissions outside restricted bands

ASSIGNED FREQUENCY: 902-928 MHz (MOTOTalk)  
/2400 – 2483.5 MHz (Bluetooth)

INVESTIGATED FREQUENCY RANGE: 0.009 - 10000 MHz

TEST DISTANCE: 3 m

MODULATION: 8-FSK for MOTOTalk / GFSK for Bluetooth

DUTY CYCLE: 97.2 % for MOTOTalk / 41.17 for Bluetooth

TRANSMITTER OUTPUT POWER: Maximum

DETECTOR USED: Peak

RESOLUTION BANDWIDTH: 100 kHz

VIDEO BANDWIDTH: 300 kHz

TEST ANTENNA TYPE: Active loop (9 kHz – 30 MHz)  
Biconilog (30 MHz – 1000 MHz)  
Double ridged guide (above 1000 MHz)

FREQUENCY HOPPING: Disabled (MOTOTalk)  
Enabled (Bluetooth)

Frequency, MHz	Field strength of spurious, dB(µV/m)	Antenna polarization	Antenna height, m	Azimuth, degrees*	Field strength of carrier, dB(µV/m)	Attenuation below carrier, dBc	Limit, dBc	Margin, dB**	Verdict
<b>High carrier frequency 927.475 MHz</b>									
1854.950	73.88	H	1.2	350	125.51	51.63	20.0	-31.63	Pass

\*- EUT front panel refers to 0 degrees position of turntable.  
\*\*- Margin = Attenuation below carrier – specification limit.



<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions	
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS
<b>Date &amp; Time:</b> 9/24/2008 3:47:31 PM	
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa
<b>Relative Humidity:</b> 47 %	
<b>Power Supply:</b> Battery	
<b>Remarks:</b> Simultaneous mode: BT&Mototalk	

**Table 7.3.3 Field strength of spurious emissions above 1 GHz within restricted bands**

ASSIGNED FREQUENCY: 902 - 928 MHz (MOTotalk);  
2400 – 2483.5 MHz(Bluetooth)

INVESTIGATED FREQUENCY RANGE: 1000 - 10000 MHz

TEST DISTANCE: 3 m

MODULATION: 8-FSK for MOTOTalk / GFSK for Bluetooth

DUTY CYCLE: 97.2 % for MOTOTalk / 41.17 for Bluetooth

TRANSMITTER OUTPUT POWER: Maximum

DETECTOR USED: Peak

RESOLUTION BANDWIDTH: 1000 kHz

TEST ANTENNA TYPE: Double ridged guide

FREQUENCY HOPPING : Disabled (MOTOTalk)  
Enabled (Bluetooth)

Frequency MHz	Antenna		Azimuth, degrees*	Peak field strength(VBW=3 MHz)			Average field strength(VBW=30 Hz)				Verdict
	Polarization	Height m		Measured, dB(µV/m)	Limit, dB(µV/m)	Margin, dB**	Measured, dB(µV/m)	Calculated dB(µV/m)	Limit, dB(µV/m)	Margin, dB***	
<b>High carrier frequency 927.475 MHz</b>											
2782.485	H	1.5	260	53.52	74.00	-20.48	49.52	49.28	54.00	-4.72	Pass
3709.875	V	1.4	230	52.79	74.00	-21.21	40.72	40.48	54.00	-13.52	
4637.363	H	1.3	260	51.17	74.00	-22.83	41.44	41.20	54.00	-12.8	
7419.863	V	1.4	220	55.85	74.00	-18.15	42.40	42.16	54.00	-11.84	

\*- EUT front panel refers to 0 degrees position of turntable.  
\*\*- Margin = Measured field strength - specification limit.  
\*\*\*- Margin = Calculated field strength - specification limit,  
where Calculated field strength = Measured field strength + average factor.

**Table 7.3.4 Average factor calculation**

Transmission pulse		Transmission burst		Transmission train duration, ms	Average factor, dB
Duration, ms	Period, ms	Duration, ms	Period, ms		
87.50	90.00	—	—	longer than 100 ms	-0.24

\*- Average factor was calculated as follows  
for pulse train Stubby (35mm)er than 100 ms:  

$$\text{Average factor} = 20 \times \log_{10} \left( \frac{\text{Pulse duration}}{\text{Pulse period}} \times \frac{\text{Burst duration}}{\text{Train duration}} \times \text{Number of bursts within pulse train} \right)$$
for pulse train Whip (110mm)er than 100 ms:  

$$\text{Average factor} = 20 \times \log_{10} \left( \frac{\text{Pulse duration}}{\text{Pulse period}} \times \frac{\text{Burst duration}}{100\text{ms}} \times \text{Number of bursts within 100ms} \right)$$

Average factor=20log(87.5/90)=-0.24

1/Tx on = 30 Hz



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<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions	
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4	
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS
<b>Date &amp; Time:</b> 9/24/2008 3:47:31 PM	
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa
<b>Relative Humidity:</b> 47 %	
<b>Power Supply:</b> Battery	
<b>Remarks:</b> Simultaneous mode: BT&Mototalk	

**Table 7.3.5 Field strength of spurious emissions below 1 GHz within restricted bands**

ASSIGNED FREQUENCY: 902-928 MHz  
 INVESTIGATED FREQUENCY RANGE: 0.009 – 1000 MHz  
 TEST DISTANCE: 3 m  
 MODULATION: 8-FSK  
 DUTY CYCLE: 97.2 %  
 TRANSMITTER OUTPUT POWER SETTINGS: Maximum  
 RESOLUTION BANDWIDTH: 1 kHz (9 kHz – 150 kHz)  
 9.0 kHz (150 kHz – 30 MHz)  
 120 kHz (30 MHz – 1000 MHz)  
 VIDEO BANDWIDTH: > Resolution bandwidth  
 TEST ANTENNA TYPE: Active loop (9 kHz – 30 MHz)  
 Biconilog (30 MHz – 1000 MHz)  
 FREQUENCY HOPPING: Disabled (MOTOTalk)  
 Enabled (Bluetooth)

Frequency, MHz	Peak emission, dB(µV/m)	Quasi-peak			Antenna polarization	Antenna height, m	Turn-table position**, degrees	Verdict
		Measured emission, dB(µV/m)	Limit, dB(µV/m)	Margin, dB'				
<b>High carrier frequency 927.475 MHz</b>								
965.285	47.20	43.20	54.0	-10.8	H (Whip)	1.6	040	Pass

\*- Margin = Measured emission - specification limit.

\*\*- EUT front panel refer to 0 degrees position of turntable.

EUT was tested with both antennas and maximum results are reported.

**Table 7.3.6 Restricted bands**

MHz	MHz	MHz	MHz	MHz	GHz
0.09 - 0.11	8.37625 - 8.38675	73 - 74.6	399.9 - 410	2690 - 2900	10.6 - 12.7
0.495 - 0.505	8.41425 - 8.41475	74.8 - 75.2	608 - 614	3260 - 3267	13.25 - 13.4
2.1735 - 2.1905	12.29 - 12.293	108 - 121.94	960 - 1240	3332 - 3339	14.47 - 14.5
4.125 - 4.128	12.51975 - 12.52025	123 - 138	1300 - 1427	3345.8 - 3358	15.35 - 16.2
4.17725 - 4.17775	12.57675 - 12.57725	149.9 - 150.05	1435 - 1626.5	3600 - 4400	17.7 - 21.4
4.20725 - 4.20775	13.36 - 13.41	156.52475 - 156.52525	1645.5 - 1646.5	4500 - 5150	22.01 - 23.12
6.215 - 6.218	16.42 - 16.423	156.7 - 156.9	1660 - 1710	5350 - 5460	23.6 - 24
6.26775 - 6.26825	16.69475 - 16.69525	162.0125 - 167.17	1718.8 - 1722.2	7250 - 7750	31.2 - 31.8
6.31175 - 6.31225	16.80425 - 16.80475	167.72 - 173.2	2200 - 2300	8025 - 8500	36.43 - 36.5
8.291 - 8.294	25.5 - 25.67	240 - 285	2310 - 2390	9000 - 9200	Above 38.6
8.362 - 8.366	37.5 - 38.25	322 - 335.4	2483.5 - 2500	9300 - 9500	

**Reference numbers of test equipment used**

HL 0446	HL 0521	HL 0567	HL 0604	HL 0661	HL 1947	HL 1984	HL 2909
HL 2910	HL 2432	HL 3123	HL 3207	HL 3342	HL 3345		

Full description is given in Appendix A.

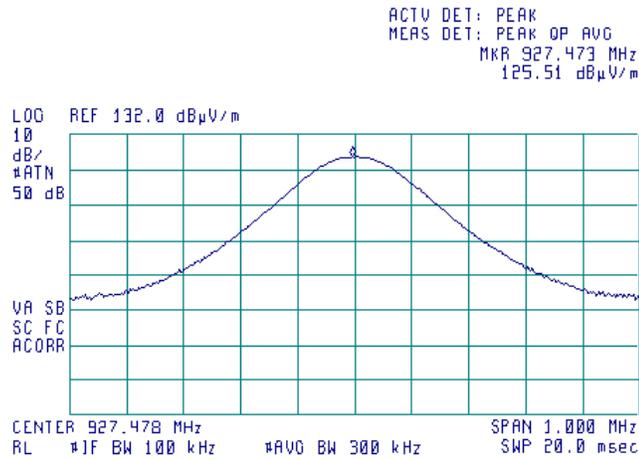


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<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/24/2008 3:47:31 PM			
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

**Plot 7.3.1 Radiated emission measurements at the high carrier frequency (927.475 of MOTOTalk)**

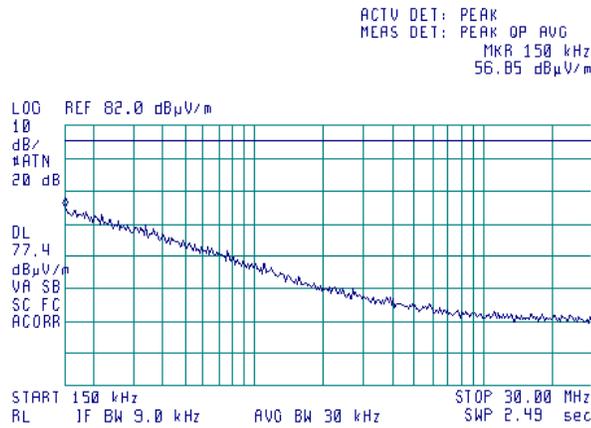
TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Horizontal  
 Ant Whip (110mm)



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

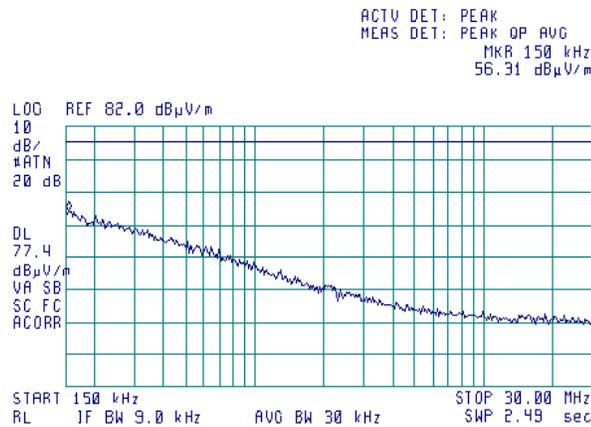
**Plot 7.3.2 Radiated emission measurements in 0.15 - 30 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.3 Radiated emission measurements in 0.15 - 30 MHz range**

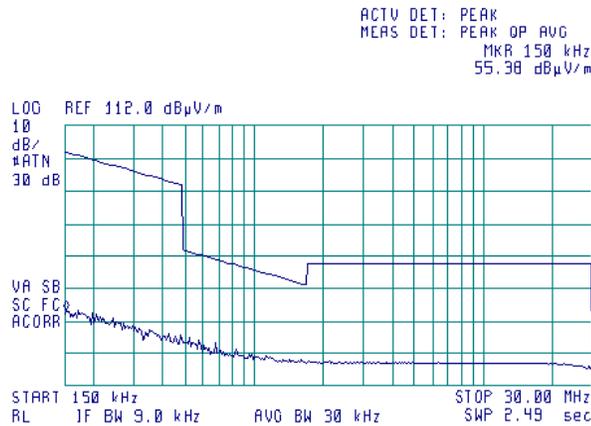
TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

**Plot 7.3.4 Radiated emission measurements in 0.15 - 30 MHz range**

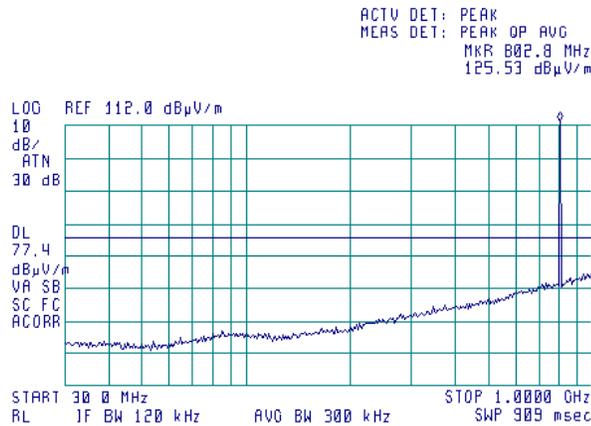
TEST SITE:	Semi anechoic chamber
CARRIER FREQUENCY:	High
ANTENNA POLARIZATION:	Vertical and Horizontal
TEST DISTANCE:	3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

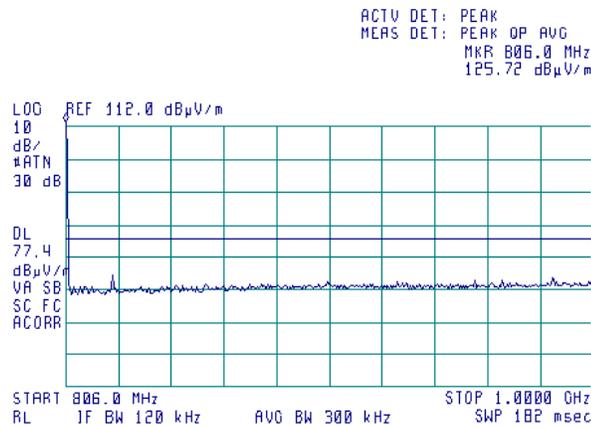
**Plot 7.3.5 Radiated emission measurements in 30 - 1000 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.6 Radiated emission measurements in 806 - 1000 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



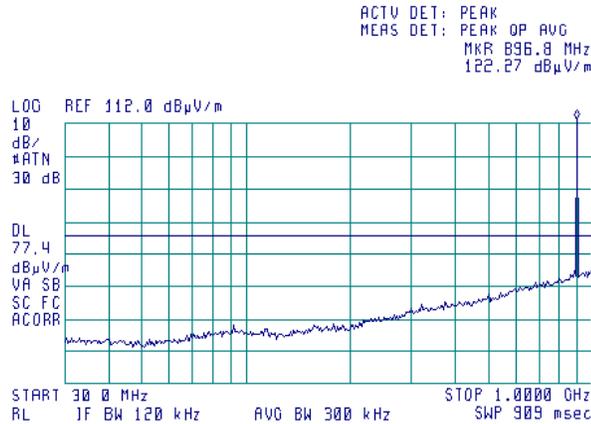


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<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

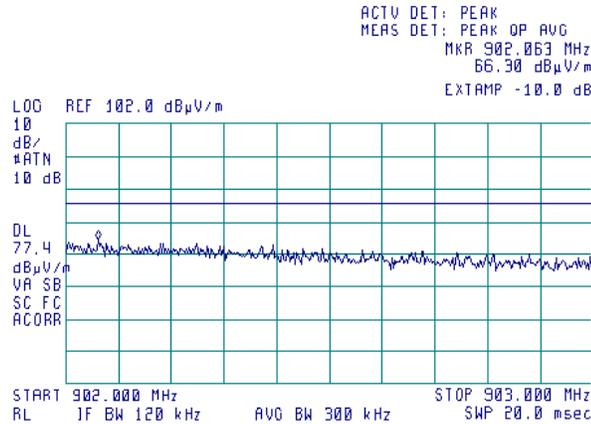
Plot 7.3.7 Radiated emission measurements in 30 - 1000 MHz range

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



Plot 7.3.8 Radiated emission measurements in 902 - 903 MHz range

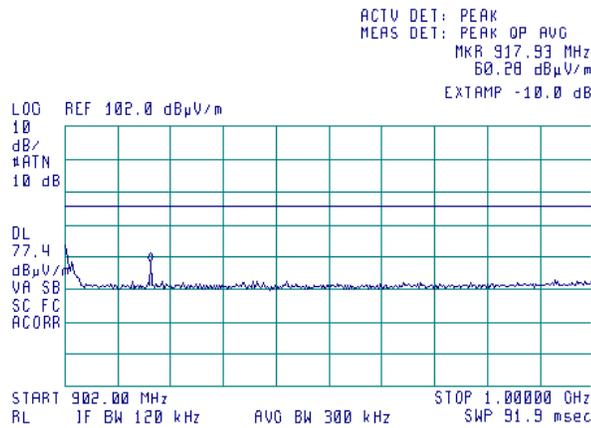
TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/24/2008 3:47:31 PM			
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

**Plot 7.3.9 Radiated emission measurements in 902 - 1000 MHz range**

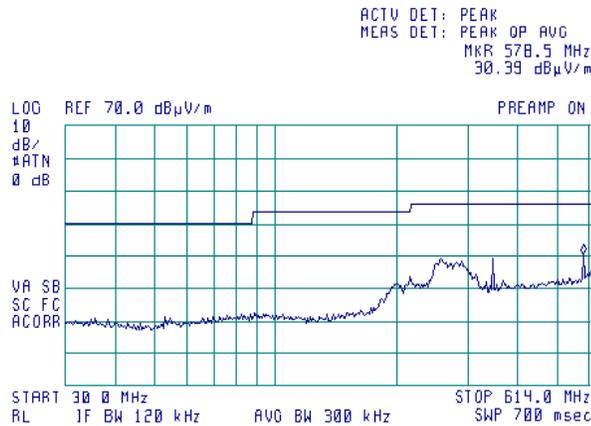
TEST SITE:	Semi anechoic chamber
CARRIER FREQUENCY:	Mid
ANTENNA POLARIZATION:	Vertical and Horizontal
TEST DISTANCE:	3 m



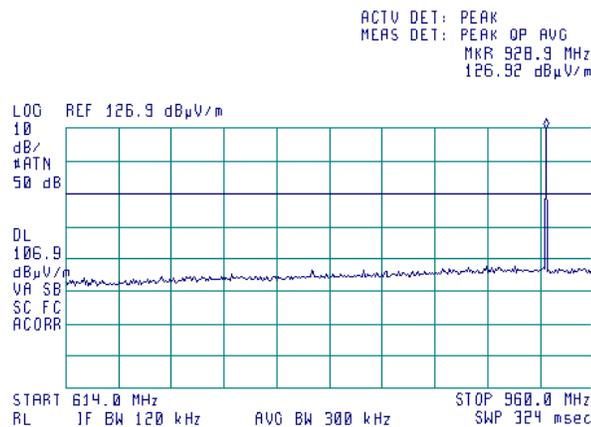
<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/24/2008 3:47:31 PM			
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

Plot 7.3.10 Radiated emission measurements in 30 - 614 MHz range

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



Plot 7.3.11 Radiated emission measurements in 614 - 960 MHz range





HERMON LABORATORIES

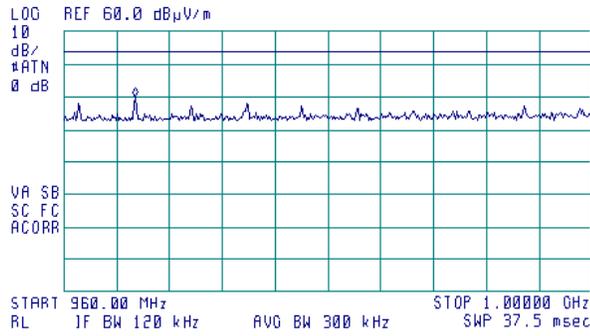
<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/24/2008 3:47:31 PM			
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

**Plot 7.3.12 Radiated emission measurements in 960 - 1000 MHz range**

TEST SITE:	Semi anechoic chamber
CARRIER FREQUENCY:	High
ANTENNA POLARIZATION:	Vertical and Horizontal
TEST DISTANCE:	3 m



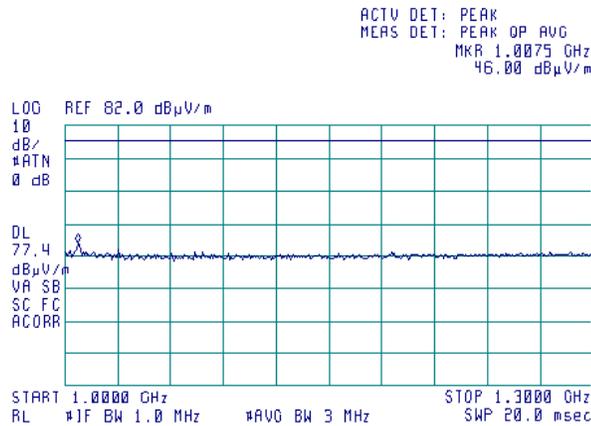
ACTV DET: PEAK  
 MEAS DET: PEAK OP AVG  
 MKR 965.48 MHz  
 39.92 dBµV/m



<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/24/2008 3:47:31 PM			
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

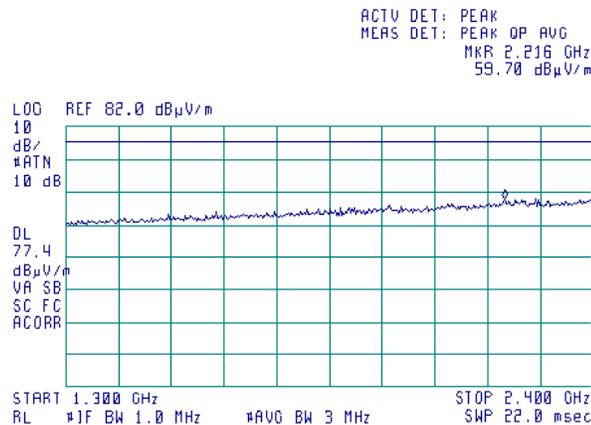
Plot 7.3.13 Radiated emission measurements in 1000 – 1300 MHz range

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



Plot 7.3.14 Radiated emission measurements in 1300 – 2400 MHz range

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



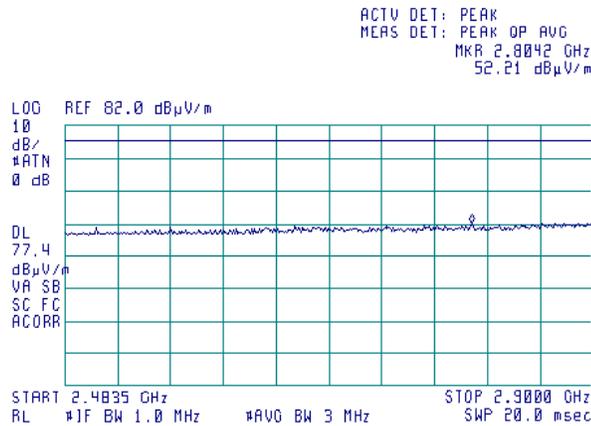


HERMON LABORATORIES

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

**Plot 7.3.15 Radiated emission measurements in 2483.5 – 2900 MHz range**

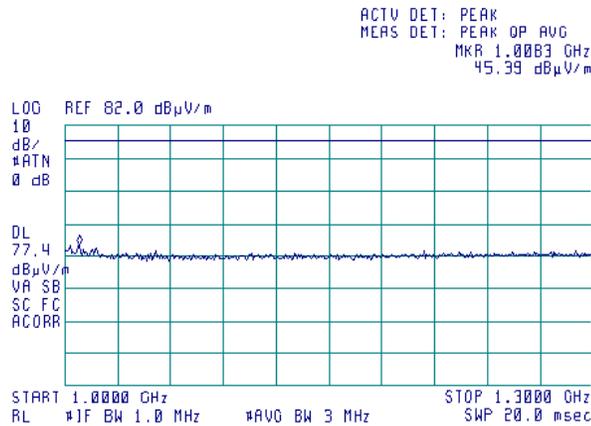
TEST SITE:	Semi anechoic chamber
CARRIER FREQUENCY:	Low
ANTENNA POLARIZATION:	Vertical and Horizontal
TEST DISTANCE:	3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

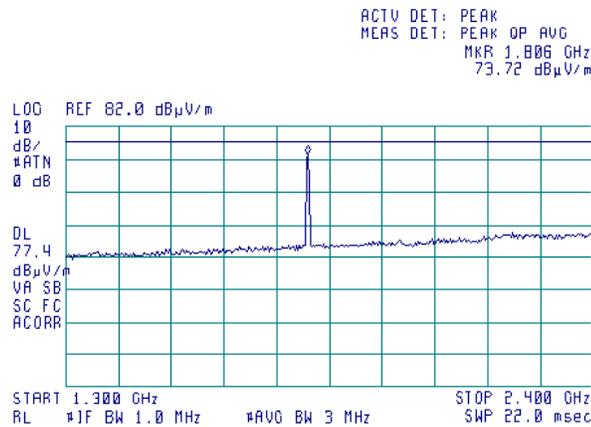
**Plot 7.3.16 Radiated emission measurements in 1000 – 1300 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.17 Radiated emission measurements in 1300 – 2400 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



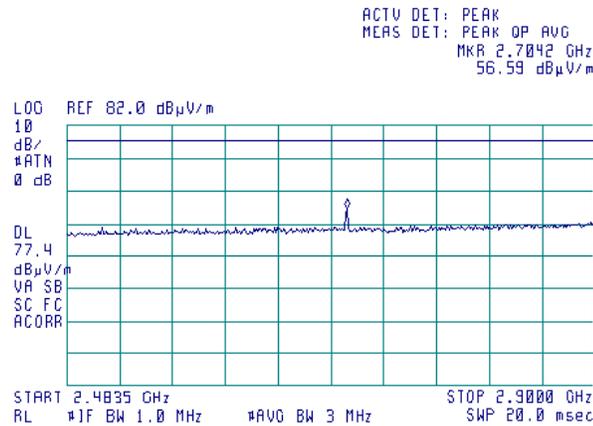


HERMON LABORATORIES

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

**Plot 7.3.18 Radiated emission measurements in 2483.5 – 2900 MHz range**

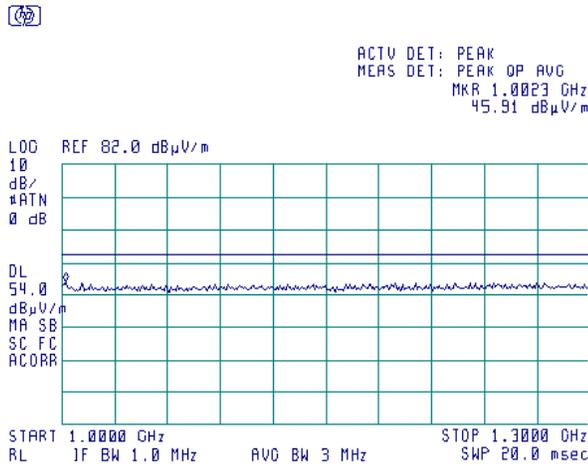
TEST SITE:	Semi anechoic chamber
CARRIER FREQUENCY:	Mid
ANTENNA POLARIZATION:	Vertical and Horizontal
TEST DISTANCE:	3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

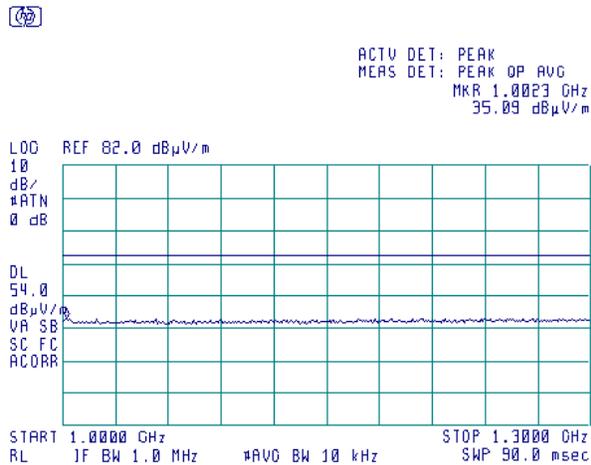
**Plot 7.3.19 Radiated emission measurements in 1000 – 1300 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.20 Radiated emission measurements in 1000 – 1300 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



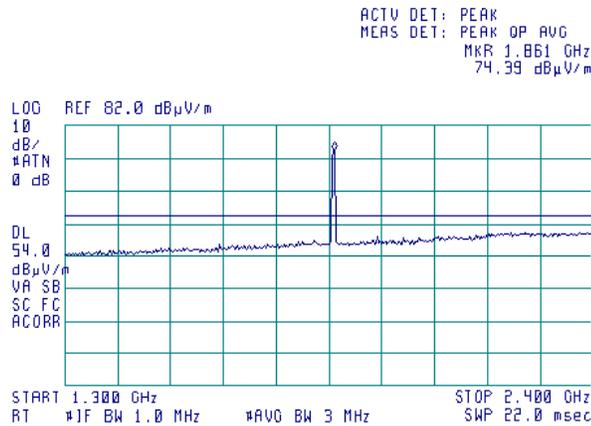


HERMON LABORATORIES

<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

**Plot 7.3.21 Radiated emission measurements in 1300 – 2400 MHz range**

TEST SITE:	Semi anechoic chamber
CARRIER FREQUENCY:	High
ANTENNA POLARIZATION:	Vertical and Horizontal
TEST DISTANCE:	3 m



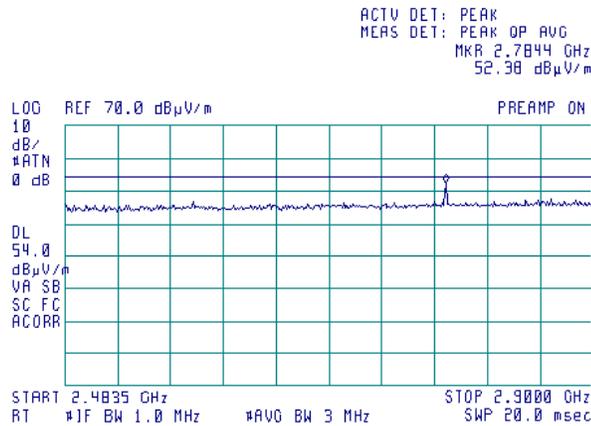


HERMON LABORATORIES

<b>Test specification:</b> Section 15.247(c), Radiated spurious emissions			
<b>Test procedure:</b> Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4			
<b>Test mode:</b> Compliance	<b>Verdict:</b> PASS		
<b>Date &amp; Time:</b> 9/24/2008 3:47:31 PM			
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

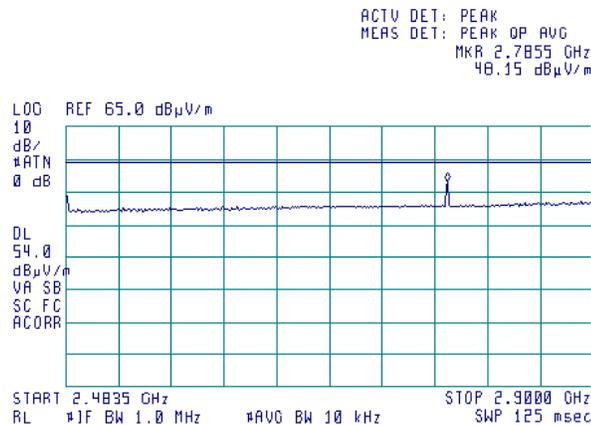
**Plot 7.3.22 Radiated emission measurements in 2483.5 – 2900 MHz range**

TEST SITE:	Semi anechoic chamber
CARRIER FREQUENCY:	High
ANTENNA POLARIZATION:	Vertical and Horizontal
TEST DISTANCE:	3 m



**Plot 7.3.23 Radiated emission measurements in 2483.5 – 2900 MHz range**

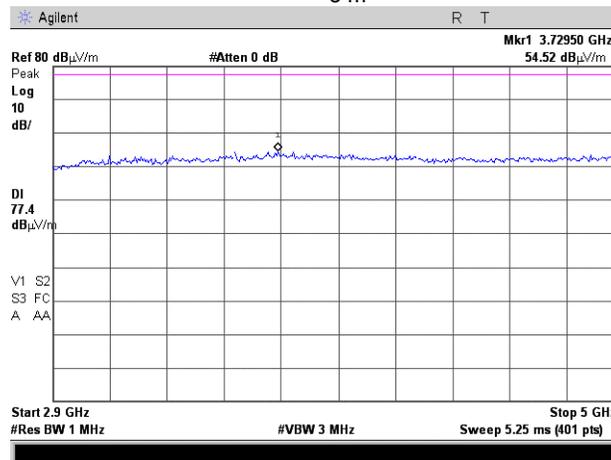
TEST SITE:	Semi anechoic chamber
CARRIER FREQUENCY:	High
ANTENNA POLARIZATION:	Vertical and Horizontal
TEST DISTANCE:	3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

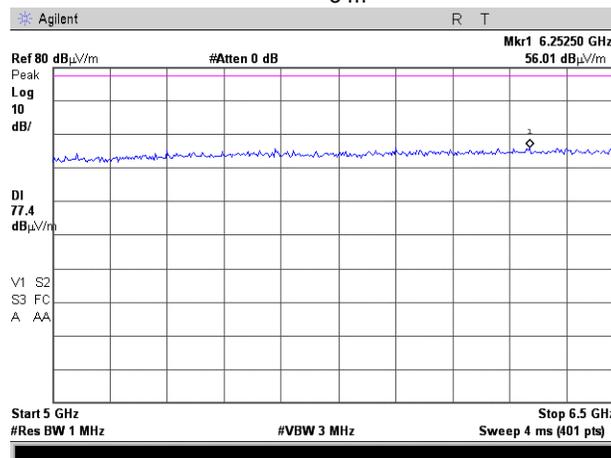
**Plot 7.3.24 Radiated emission measurements in 2900 –5000 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.25 Radiated emission measurements in 5000 – 6500 MHz range**

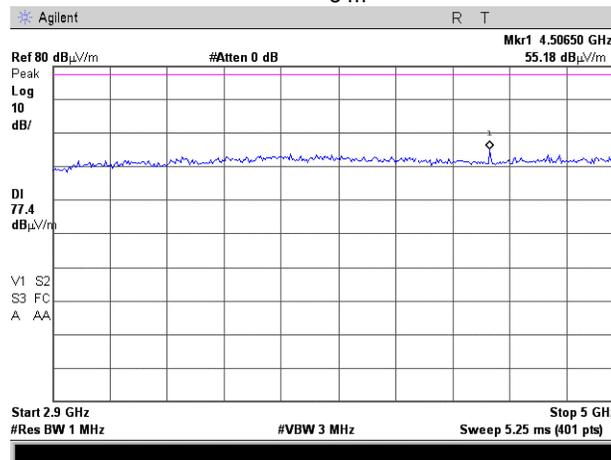
TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

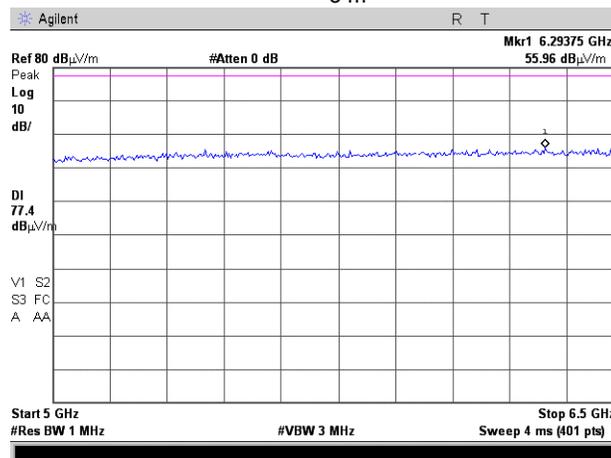
**Plot 7.3.26 Radiated emission measurements in 2900 –5000 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.27 Radiated emission measurements in 5000 – 6500 MHz range**

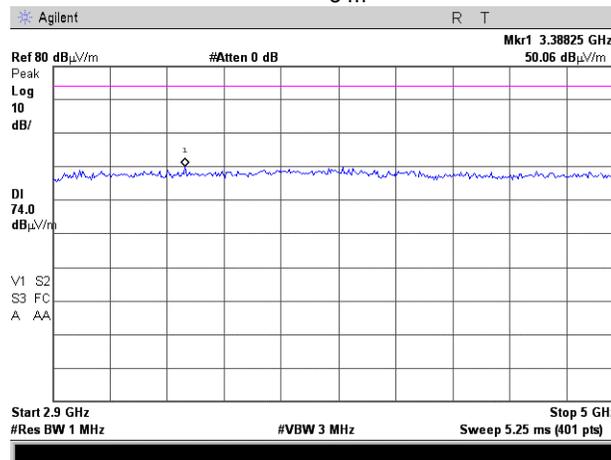
TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

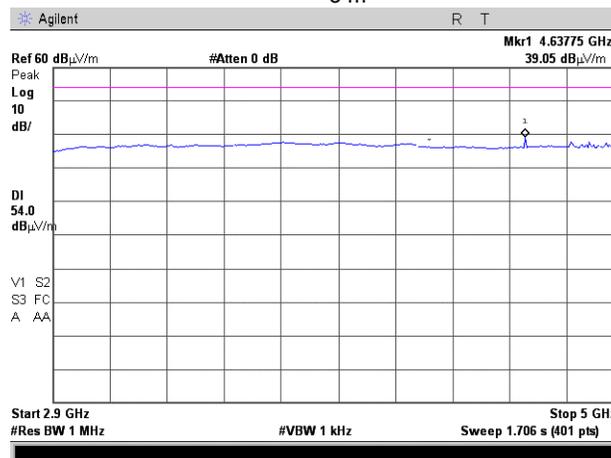
**Plot 7.3.28 Radiated emission measurements in 2900 –5000 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.29 Radiated emission measurements in 2900 – 5000 MHz range**

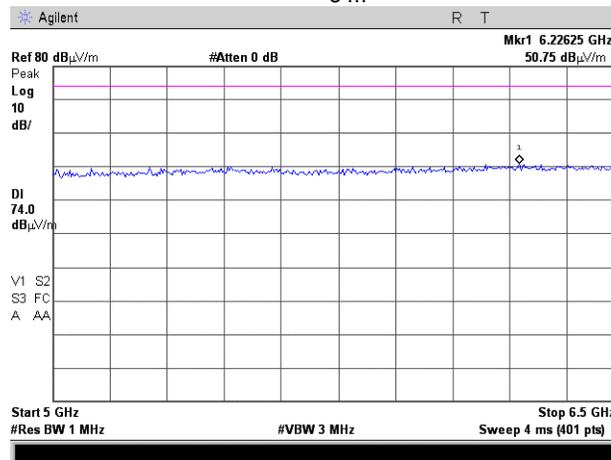
TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

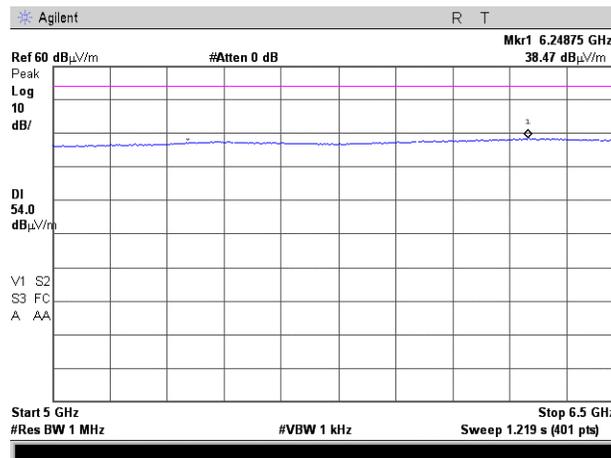
**Plot 7.3.30 Radiated emission measurements in 5000 – 6500 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.31 Radiated emission measurements in 5000 – 6500 MHz range**

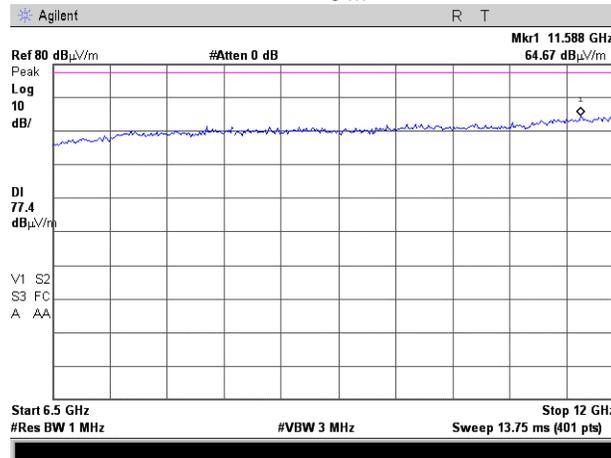
TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

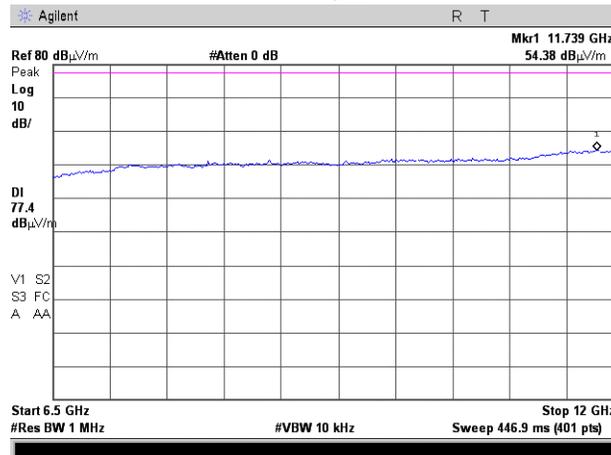
**Plot 7.3.32 Radiated emission measurements in 6500 – 12000 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.33 Radiated emission measurements in 6500 – 12000 MHz range**

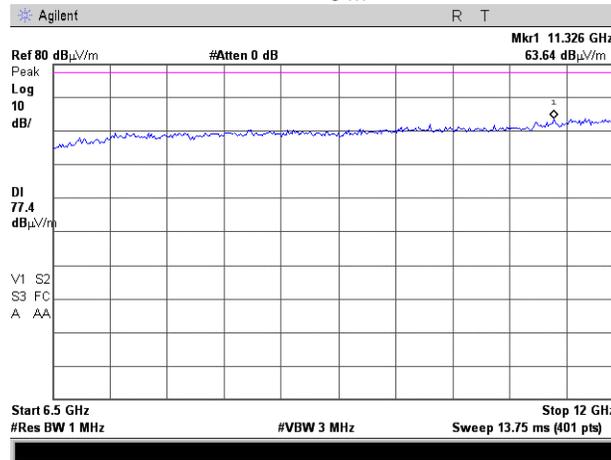
TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict: PASS</b>	
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

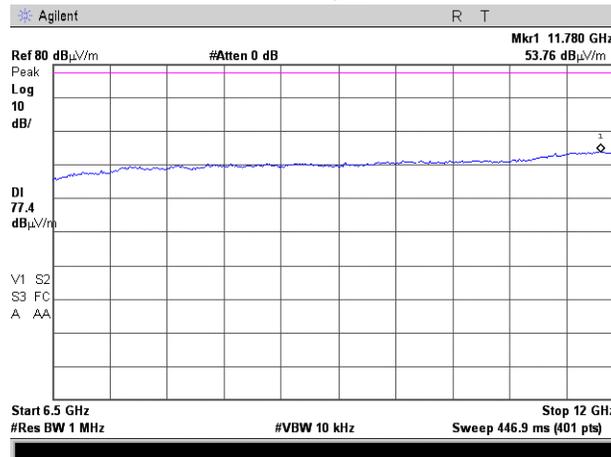
**Plot 7.3.34 Radiated emission measurements in 6500 – 12000 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.35 Radiated emission measurements in 6500 – 12000 MHz range**

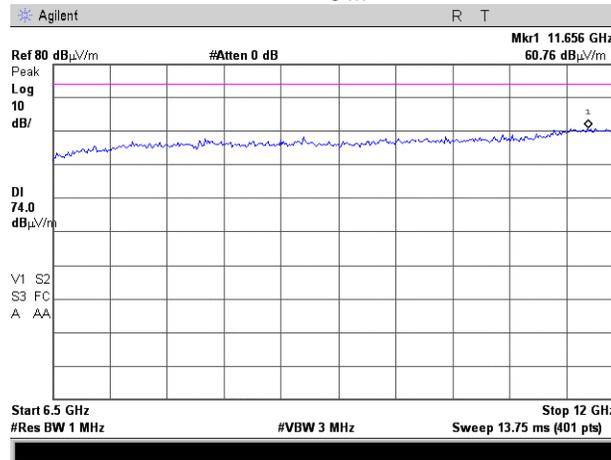
TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

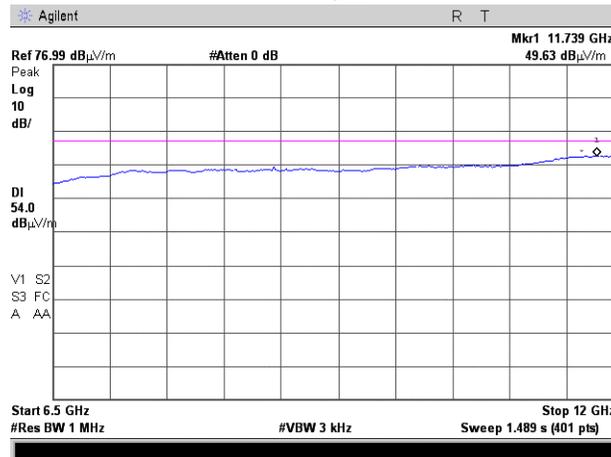
**Plot 7.3.36 Radiated emission measurements in 6500 – 12000 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.37 Radiated emission measurements in 6500 – 12000 MHz range**

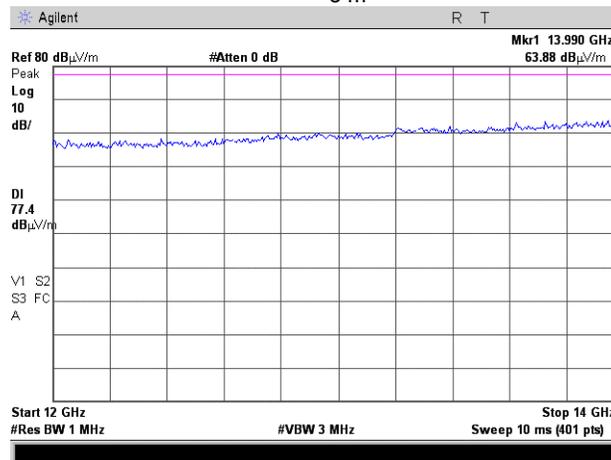
TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

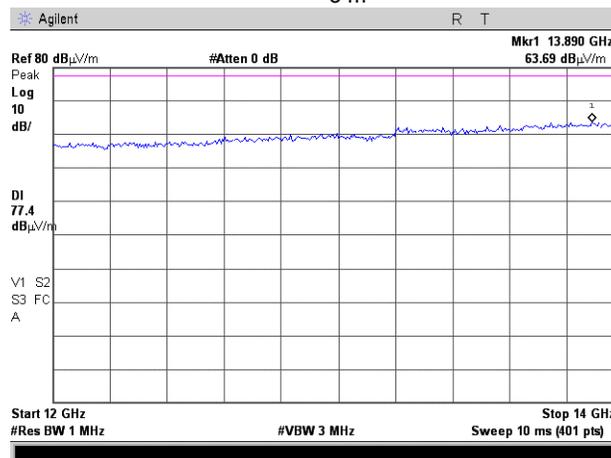
**Plot 7.3.38 Radiated emission measurements in 12000 – 14000 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.39 Radiated emission measurements in 12000 – 14000 MHz range**

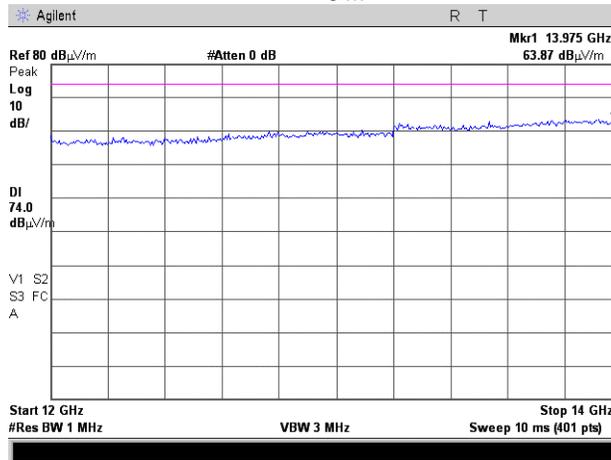
TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

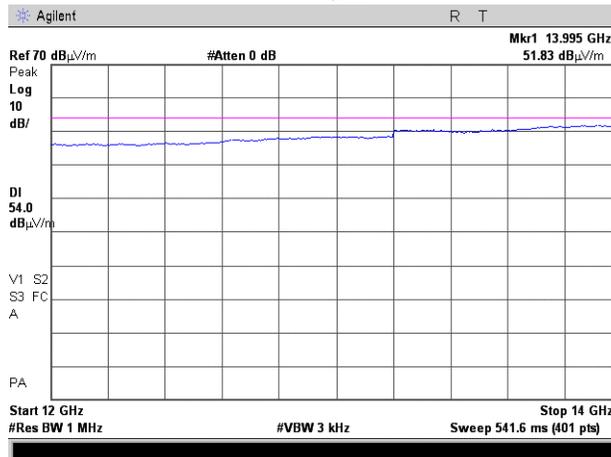
**Plot 7.3.40 Radiated emission measurements in 12000 – 14000 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.41 Radiated emission measurements in 12000 – 14000 MHz range**

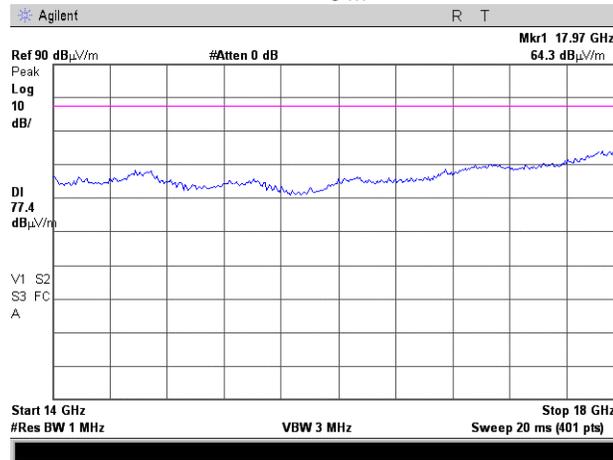
TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

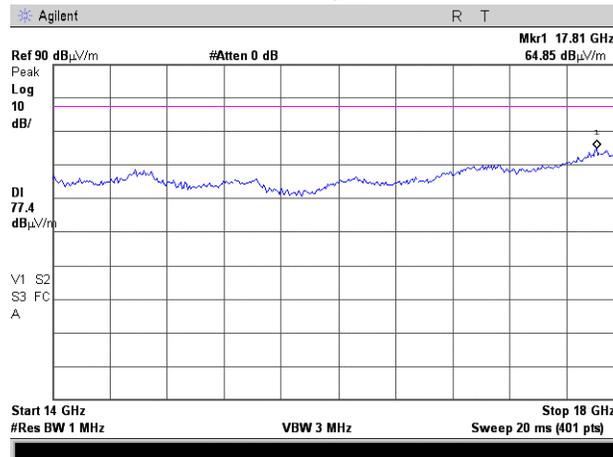
**Plot 7.3.42 Radiated emission measurements in 14000 – 18000 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.43 Radiated emission measurements in 14000 – 18000 MHz range**

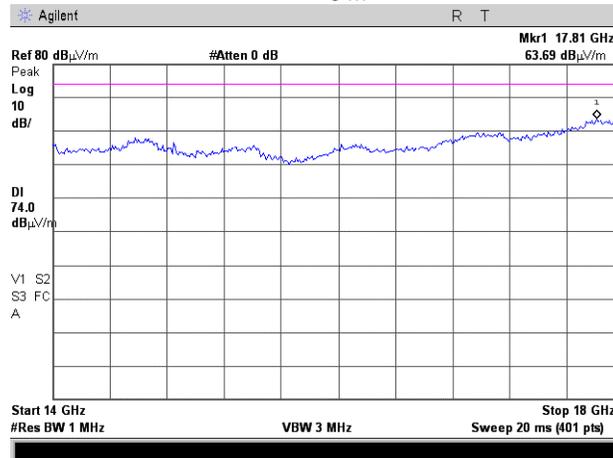
TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

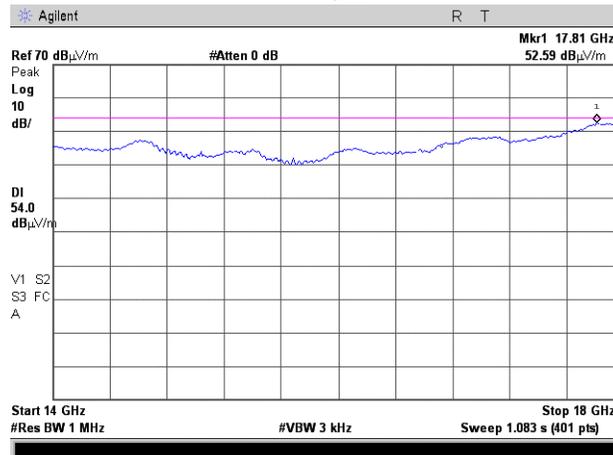
**Plot 7.3.44 Radiated emission measurements in 14000 – 18000 MHz range**

TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.45 Radiated emission measurements in 14000 – 18000 MHz range**

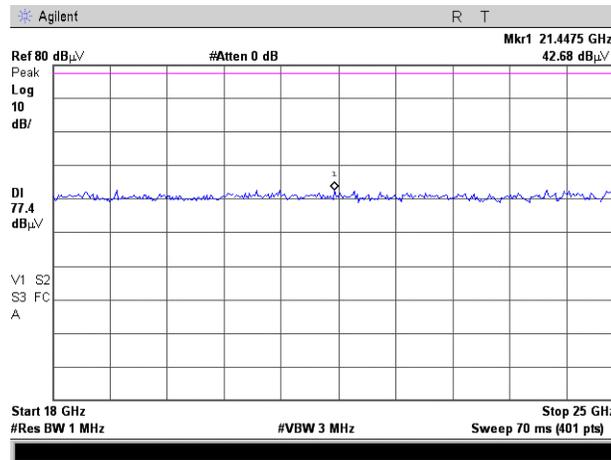
TEST SITE: Semi anechoic chamber  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

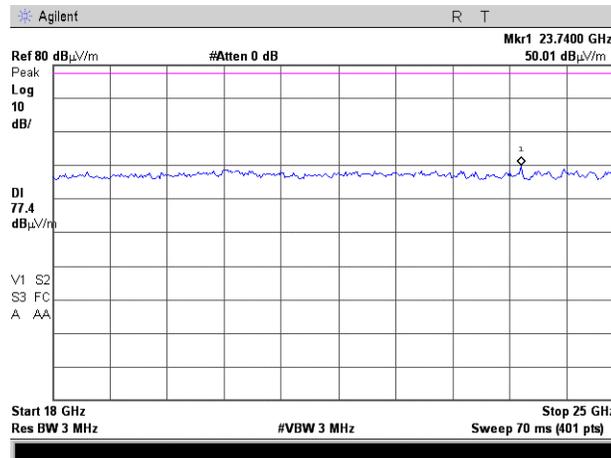
**Plot 7.3.46 Radiated emission measurements in 18000 – 25000 MHz range**

TEST SITE: OATS  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.47 Radiated emission measurements in 18000 – 25000 MHz range**

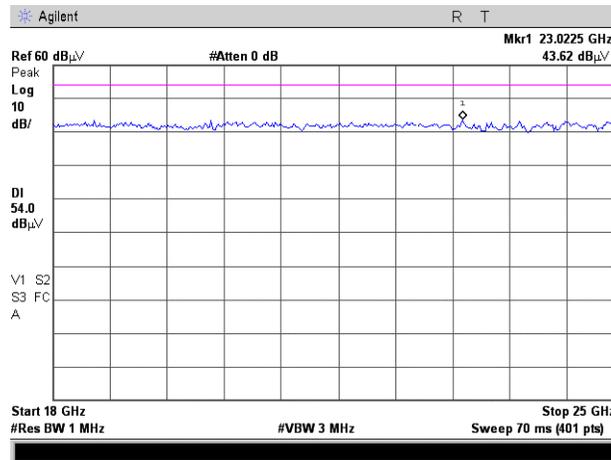
TEST SITE: OATS  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

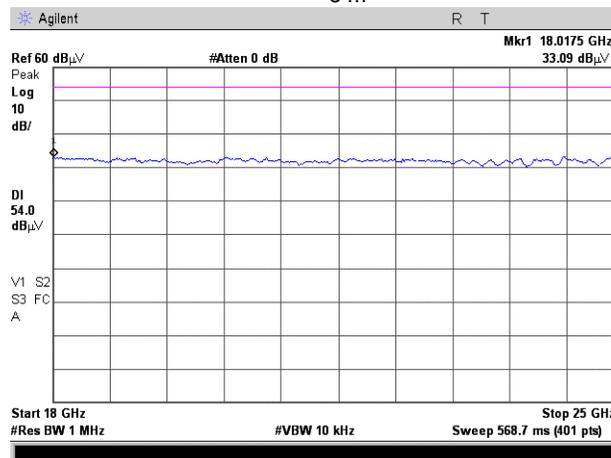
**Plot 7.3.48 Radiated emission measurements in 18000 – 25000 MHz range**

TEST SITE: OATS  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.49 Radiated emission measurements in 18000 – 25000 MHz range**

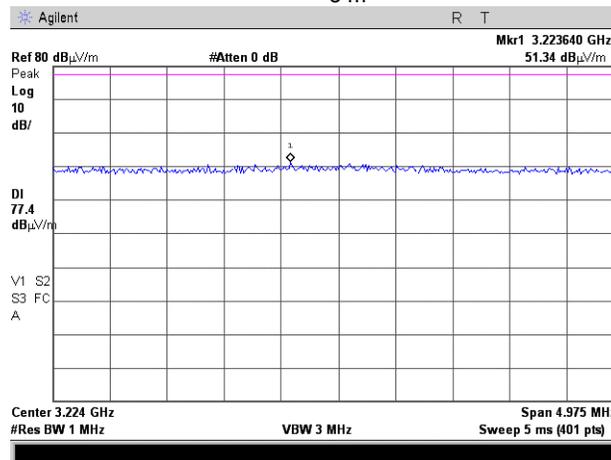
TEST SITE: OATS  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

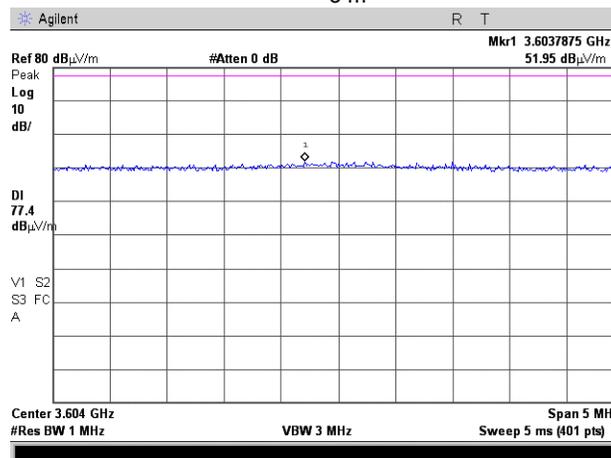
**Plot 7.3.50 Radiated emission measurements at the 4<sup>th</sup> harmonic**

TEST SITE: OATS  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical  
 TEST DISTANCE: 3 m



**Plot 7.3.51 Radiated emission measurements at the 4<sup>th</sup> harmonic**

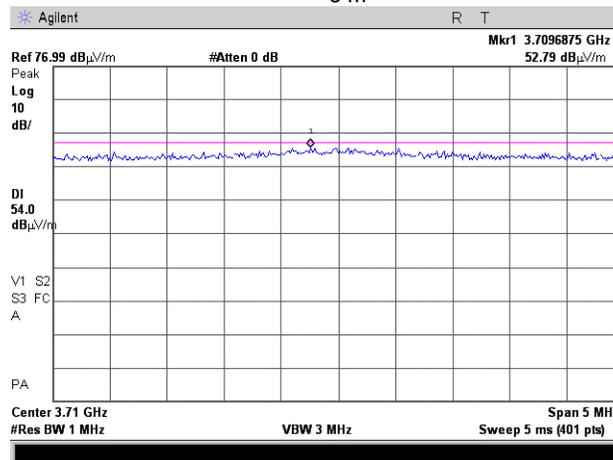
TEST SITE: OATS  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

Plot 7.3.52 Radiated emission measurements at the 4<sup>th</sup> harmonic

TEST SITE: OATS  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical  
 TEST DISTANCE: 3 m



Plot 7.3.53 Radiated emission measurements at the 4<sup>th</sup> harmonic

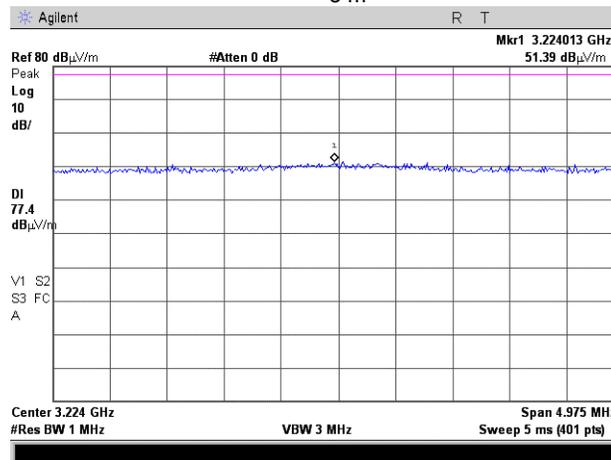
TEST SITE: OATS  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

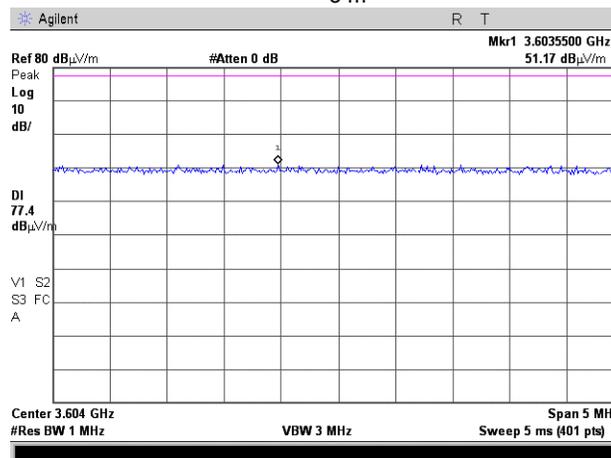
**Plot 7.3.54 Radiated emission measurements at the 4<sup>th</sup> harmonic**

TEST SITE: OATS  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.55 Radiated emission measurements at the 4<sup>th</sup> harmonic**

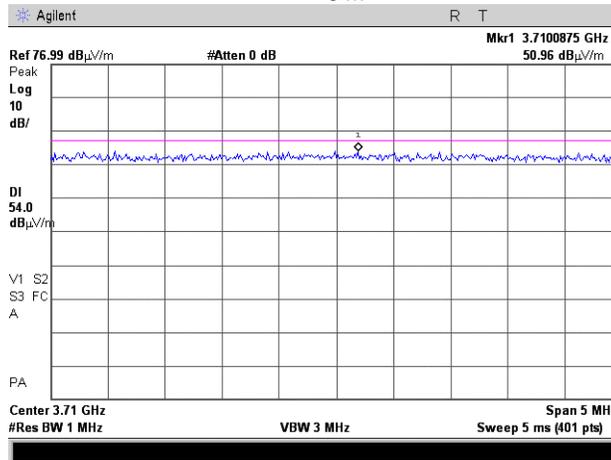
TEST SITE: OATS  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

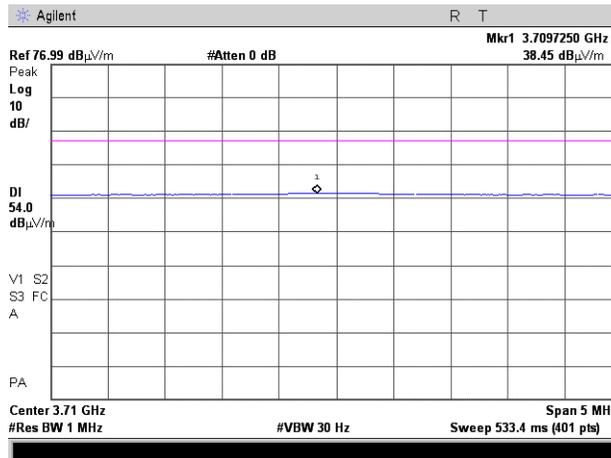
**Plot 7.3.56 Radiated emission measurements at the 4<sup>th</sup> harmonic**

TEST SITE: OATS  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.57 Radiated emission measurements at the 4<sup>th</sup> harmonic**

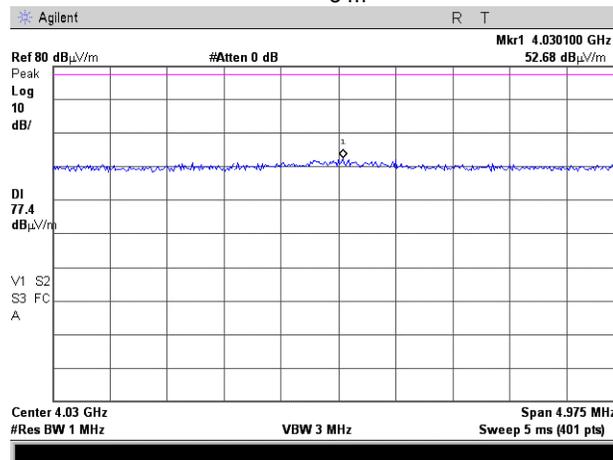
TEST SITE: OATS  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

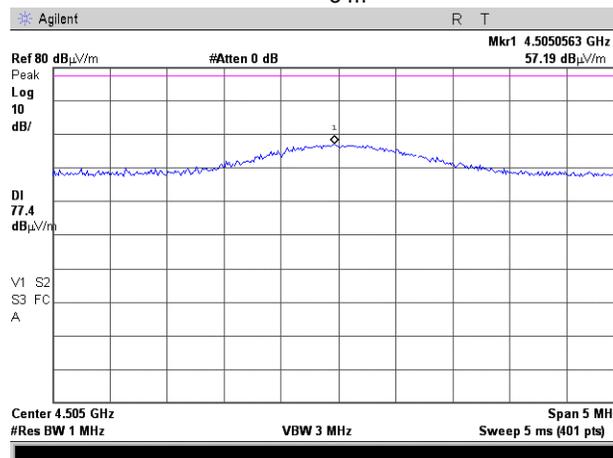
**Plot 7.3.58 Radiated emission measurements at the 5<sup>th</sup> harmonic**

TEST SITE: OATS  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical  
 TEST DISTANCE: 3 m



**Plot 7.3.59 Radiated emission measurements at the 5<sup>th</sup> harmonic**

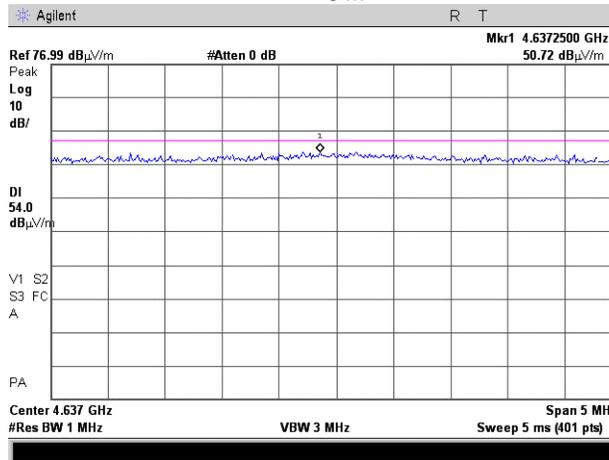
TEST SITE: OATS  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

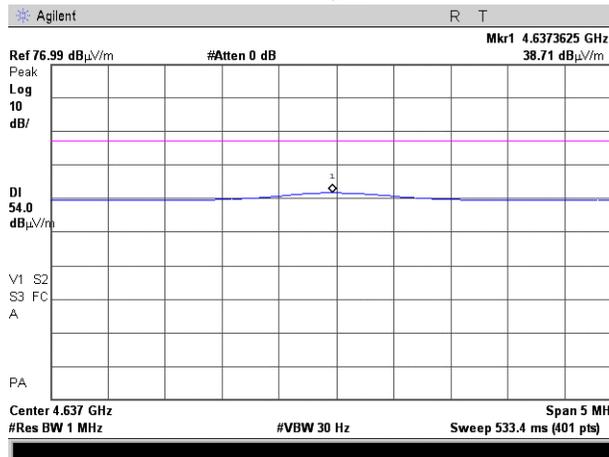
**Plot 7.3.60 Radiated emission measurements at the 5<sup>th</sup> harmonic**

TEST SITE: OATS  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical  
 TEST DISTANCE: 3 m



**Plot 7.3.61 Radiated emission measurements at the 5<sup>th</sup> harmonic**

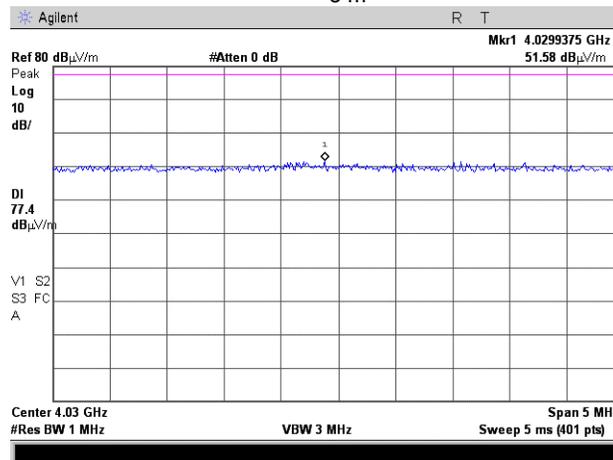
TEST SITE: OATS  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

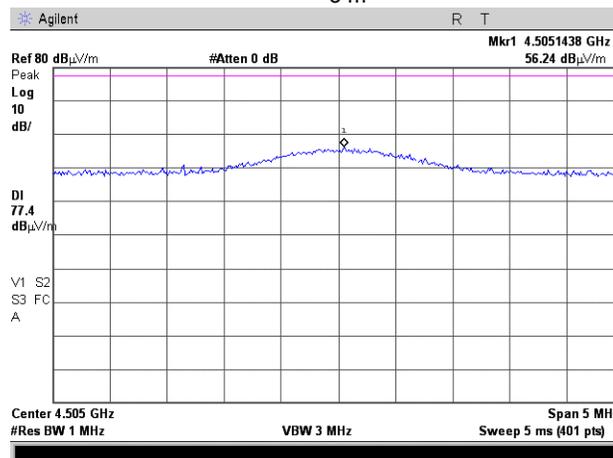
**Plot 7.3.62 Radiated emission measurements at the 5<sup>th</sup> harmonic**

TEST SITE: OATS  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.63 Radiated emission measurements at the 5<sup>th</sup> harmonic**

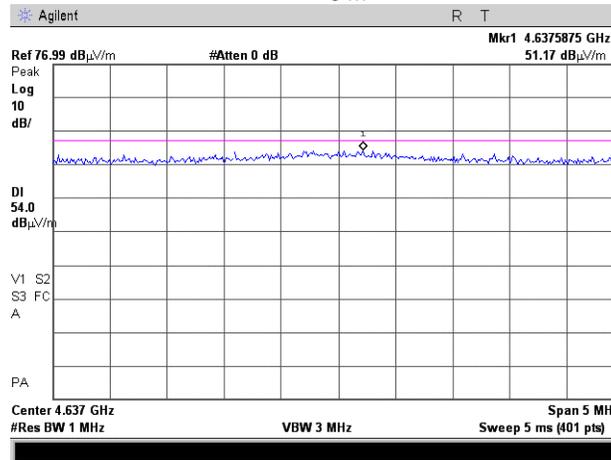
TEST SITE: OATS  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

**Plot 7.3.64 Radiated emission measurements at the 5<sup>th</sup> harmonic**

TEST SITE: OATS  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.65 Radiated emission measurements at the 5<sup>th</sup> harmonic**

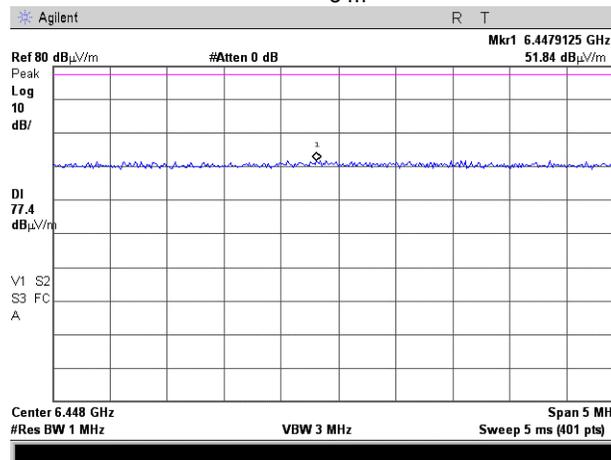
TEST SITE: OATS  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Horizontal  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

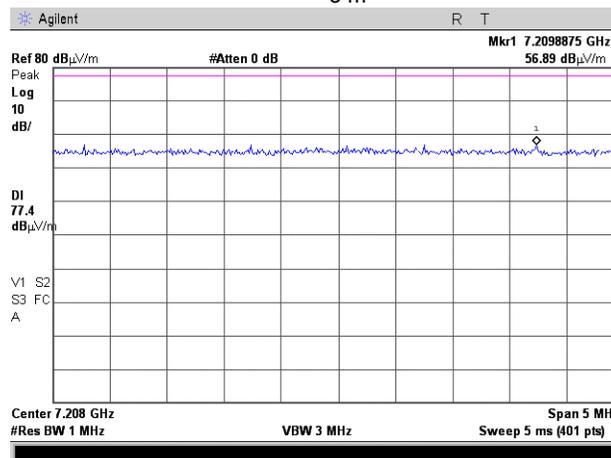
**Plot 7.3.66 Radiated emission measurements at the 8<sup>th</sup> harmonic**

TEST SITE: OATS  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Vertical  
 TEST DISTANCE: 3 m



**Plot 7.3.67 Radiated emission measurements at the 8<sup>th</sup> harmonic**

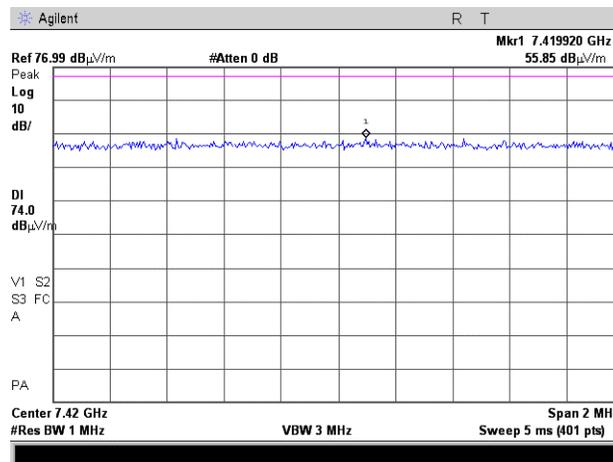
TEST SITE: OATS  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

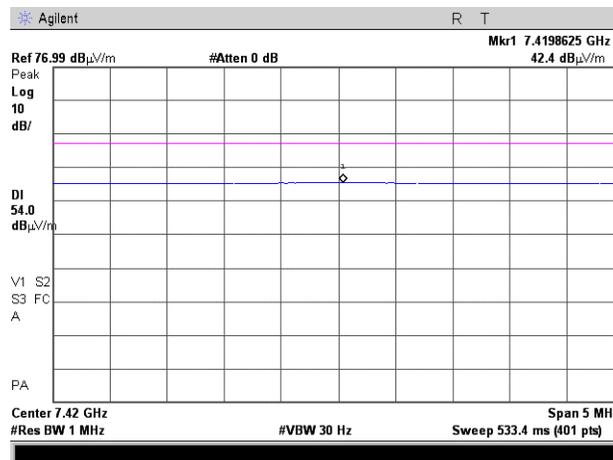
**Plot 7.3.68 Radiated emission measurements at the 8<sup>th</sup> harmonic**

TEST SITE: OATS  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical  
 TEST DISTANCE: 3 m



**Plot 7.3.69 Radiated emission measurements at the 8<sup>th</sup> harmonic**

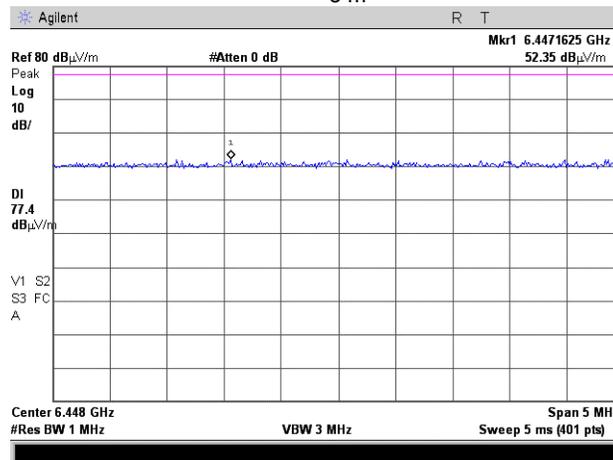
TEST SITE: OATS  
 CARRIER FREQUENCY: High  
 ANTENNA POLARIZATION: Vertical  
 TEST DISTANCE: 3 m



<b>Test specification:</b>	<b>Section 15.247(c), Radiated spurious emissions</b>		
<b>Test procedure:</b>	Public notice DA 00-705/ 47 CFR, Section 15.247(c) / ANSI C63.4, Section 13.1.4		
<b>Test mode:</b>	Compliance	<b>Verdict:</b>	<b>PASS</b>
<b>Date &amp; Time:</b>	9/24/2008 3:47:31 PM		
<b>Temperature:</b> 25°C	<b>Air Pressure:</b> 1012 hPa	<b>Relative Humidity:</b> 47 %	<b>Power Supply:</b> Battery
<b>Remarks:</b> Simultaneous mode: BT&Mototalk			

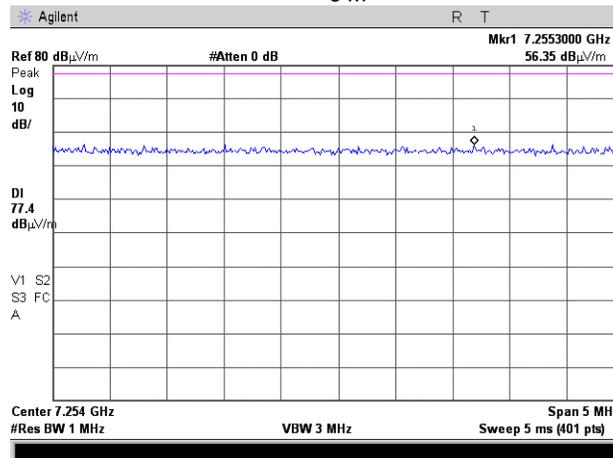
**Plot 7.3.70 Radiated emission measurements at the 8<sup>th</sup> harmonic**

TEST SITE: OATS  
 CARRIER FREQUENCY: Low  
 ANTENNA POLARIZATION: Horizontal  
 TEST DISTANCE: 3 m



**Plot 7.3.71 Radiated emission measurements at the 9<sup>th</sup> harmonic**

TEST SITE: OATS  
 CARRIER FREQUENCY: Mid  
 ANTENNA POLARIZATION: Vertical  
 TEST DISTANCE: 3 m



## 8 APPENDIX A Test equipment and ancillaries used for tests

HL No	Description	Manufacturer	Model	Ser. No.	Last Cal.	Due Cal.
0446	Antenna, Loop, Active, 10 kHz - 30 MHz	EMCO	6502	2857	29-Jun-08	29-Jun-09
0521	EMI Receiver (Spectrum Analyzer) with RF filter section 9 kHz-6.5 GHz	Hewlett Packard Co	8546A	3617A 00319, 3448A002 53	29-Aug-08	29-Aug-09
0567	Antenna, Dipole, Tunable, 500 - 1000 MHz	Electro-Metrics	TDS-25/30-2	298	29-Jan-08	29-Jan-09
0604	Antenna BiconiLog Log-Periodic/T Bow-TIE, 26 - 2000 MHz	EMCO	3141	9611-1011	10-Jan-08	10-Jan-09
0661	Generator Swept Signal, 10 MHz to 40 GHz, + 10 dBm	HP	83640B	3614A002 66	17-Sep-08	17-Sep-09
1200	Quadruplexer 1-12 GHz (1-2 GHz; 2-4GHz;4-8 GHz; 8-12GHz)	Elettronica S.p.A. - Roma	UE 84	D/00240	08-Feb-07	08-Feb-09
1947	Cable 18GHz, 6.5 m, blue	Rhophase Microwave Limited	NPS-1803A-6500-NPS	T4974	05-Oct-07	05-Oct-08
1984	Antenna, Double-Ridged Waveguide Horn, 1-18 GHz, 300 W	EMC Test Systems	3115	9911-5964	03-Mar-08	03-Mar-09
2432	Antenna, Double-Ridged Waveguide Horn 1-18 GHz	EMC Test Systems	3115	00027177	03-Mar-08	03-Mar-09
2909	Spectrum analyzer, ESA-E, 100 Hz to 26.5 GHz	Agilent Technologies	E4407B	MY414447 62	07-May-07	07-May-09
2910	Cable 18 GHz, 3 m, SMA-SMA	Gore	NA	989370	05-Oct-07	05-Oct-08
3123	Microwave Cable Assembly, 18 GHz, 6.4 m, SMA - SMA	Huber-Suhner	198-9155-00	3123	13-Dec-07	13-Dec-08
3207	Cable 40GHz, 1.2 m	Gore	GOR245	05118337	10-Jun-08	10-Jun-09
3342	High Pass Filter, 50 Ohm, 2000 to 5200 MHz.	Mini-Circuits	VHF-1910+	NA	24-Oct-07	24-Oct-08
3345	High Pass Filter, 50 Ohm, 4250 to 10000 MHz.	Mini-Circuits	VHF-3800+	NA	24-Oct-07	24-Oct-08
3386	Microwave Cable Assembly, 26.5 GHz, 1.0 m, N type/N type	Suhner Sucoflex	104EA	3386	12-Feb-08	12-Feb-09

## 9 APPENDIX B Measurement uncertainties

### Expanded uncertainty at 95% confidence in Hermon Labs EMC measurements

Test description	Expanded uncertainty
Conducted carrier power at RF antenna connector	Below 12.4 GHz: $\pm 1.7$ dB 12.4 GHz to 40 GHz: $\pm 2.3$ dB
Conducted emissions at RF antenna connector	9 kHz to 2.9 GHz: $\pm 2.6$ dB 2.9 GHz to 6.46 GHz: $\pm 3.5$ dB 6.46 GHz to 13.2 GHz: $\pm 4.3$ dB 13.2 GHz to 22.0 GHz: $\pm 5.0$ dB 22.0 GHz to 26.8 GHz: $\pm 5.5$ dB 26.8 GHz to 40.0 GHz: $\pm 4.8$ dB
Duty cycle, timing (Tx ON / OFF) and average factor measurements	$\pm 1.0$ %
Conducted emissions with LISN	9 kHz to 150 kHz: $\pm 3.9$ dB 150 kHz to 30 MHz: $\pm 3.8$ dB
Radiated emissions at 3 m measuring distance Horizontal polarization  Vertical polarization	Biconilog antenna: $\pm 5.3$ dB Biconical antenna: $\pm 5.0$ dB Log periodic antenna: $\pm 5.3$ dB Double ridged horn antenna: $\pm 5.3$ dB Biconilog antenna: $\pm 6.0$ dB Biconical antenna: $\pm 5.7$ dB Log periodic antenna: $\pm 6.0$ dB Double ridged horn antenna: $\pm 6.0$ dB

Hermon Laboratories is accredited by A2LA for calibration according to present requirements of ISO/IEC 17025 and NCSL Z540-1. The accreditation is granted to perform calibration of parameters that are listed in the Scope of Hermon Laboratories Accreditation.

Hermon Laboratories calibrates its reference and transfer standards by calibration laboratories accredited to ISO/IEC 17025 by a mutually recognized Accreditation Body or by a recognized national metrology institute. All reference and transfer standards used in the calibration system are traceable to national or international standards.

In-house calibration of all test and measurement equipment is performed on a regular basis according to Hermon Laboratories calibration procedures, manufacturer calibration/verification procedures or procedures defined in the relevant standards. The Hermon Laboratories test and measurement equipment is calibrated within the tolerances specified by the manufacturers and/or by the relevant standards.

## 10 APPENDIX C Test laboratory description

Tests were performed at Hermon Laboratories Ltd., which is a fully independent, private, EMC, safety, environmental and telecommunication testing facility. Hermon Laboratories is listed by the Federal Communications Commission (USA) for all parts of Code of Federal Regulations 47 (CFR 47) and by Industry Canada for electromagnetic emissions (file numbers IC 2186-1 for OATS and IC 2186-2 for anechoic chamber), certified by VCCI, Japan (the registration numbers are R-808 for OATS, R-1082 for anechoic chamber, C-845 for conducted emissions site), assessed by TNO Certification EP&S (Netherlands) for a number of EMC, telecommunications, environmental, safety standards, and by AMTAC (UK) for safety of medical devices. The laboratory is accredited by American Association for Laboratory Accreditation (USA) according to ISO/IEC 17025 for electromagnetic compatibility, product safety, telecommunications testing and environmental simulation (for exact scope please refer to Certificate No. 839.01).

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## 11 APPENDIX D Specification references

FCC 47CFR part 15: 2007	Radio Frequency Devices.
Public notice DA 00- 705: 2000	Filing and measurement guidelines for frequency hopping spread spectrum systems.
ANSI C63.2: 1996	American National Standard for Instrumentation-Electromagnetic Noise and Field Strength, 10 kHz to 40 GHz-Specifications.
ANSI C63.4: 2003	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.
FCC 47CFR part 90: 2007	Private Land Mobile Radio Services
FCC 47CFR part 24: 2007	Personal Communications services
FCC 47CFR part 2: 2007	Frequency allocations and radio treaty matters; general rules and regulations
ANSI/TIA/EIA-603-A:2001	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards

## 12 APPENDIX E Test equipment correction factors

Antenna factor  
Active loop antenna  
Model 6502, S/N 2857, HL 0446

Frequency, MHz	Magnetic antenna factor, dB	Electric antenna factor, dB
0.009	-32.8	18.7
0.010	-33.8	17.7
0.020	-38.3	13.2
0.050	-41.1	10.4
0.075	-41.3	10.2
0.100	-41.6	9.9
0.150	-41.7	9.8
0.250	-41.6	9.9
0.500	-41.8	9.8
0.750	-41.9	9.7
1.000	-41.4	10.1
2.000	-41.5	10.0
3.000	-41.4	10.2
4.000	-41.4	10.1
5.000	-41.5	10.1
10.000	-41.9	9.6
15.000	-41.9	9.6
20.000	-42.2	9.3
25.000	-42.8	8.7
30.000	-44.0	7.5

Antenna factor in dB(1/m) is to be added to receiver meter reading in dB( $\mu$ V) to convert it into field intensity in dB( $\mu$ V/m).

Antenna factor  
Standard gain horn antenna  
Quinstar Technology  
Model QWH  
Ser.No.110, HL 0768

Frequency min, GHz	Frequency max, GHz	Antenna factor, dB(1/m)
18.000	26.500	32.01
26.500	40.000	35.48
40.000	60.000	39.03
60.000	90.000	42.55
90.000	140.000	46.23
140.000	220.000	50.11

Antenna factor in dB(1/m) is to be added to receiver meter reading in dB( $\mu$ V) to convert it into field intensity in dB( $\mu$ V/m).

**Antenna factor**  
**Biconilog antenna EMCO Model 3141**  
**Ser.No.1011, HL 0604**

Frequency, MHz	Antenna Factor, dB(1/m)	Frequency, MHz	Antenna Factor, dB(1/m)
26	7.8	940	24.0
28	7.8	960	24.1
30	7.8	980	24.5
40	7.2	1000	24.9
60	7.1	1020	25.0
70	8.5	1040	25.2
80	9.4	1060	25.4
90	9.8	1080	25.6
100	9.7	1100	25.7
110	9.3	1120	26.0
120	8.8	1140	26.4
130	8.7	1160	27.0
140	9.2	1180	27.0
150	9.8	1200	26.7
160	10.2	1220	26.5
170	10.4	1240	26.5
180	10.4	1260	26.5
190	10.3	1280	26.6
200	10.6	1300	27.0
220	11.6	1320	27.8
240	12.4	1340	28.3
260	12.8	1360	28.2
280	13.7	1380	27.9
300	14.7	1400	27.9
320	15.2	1420	27.9
340	15.4	1440	27.8
360	16.1	1460	27.8
380	16.4	1480	28.0
400	16.6	1500	28.5
420	16.7	1520	28.9
440	17.0	1540	29.6
460	17.7	1560	29.8
480	18.1	1580	29.6
500	18.5	1600	29.5
520	19.1	1620	29.3
540	19.5	1640	29.2
560	19.8	1660	29.4
580	20.6	1680	29.6
600	21.3	1700	29.8
620	21.5	1720	30.3
640	21.2	1740	30.8
660	21.4	1760	31.1
680	21.9	1780	31.0
700	22.2	1800	30.9
720	22.2	1820	30.7
740	22.1	1840	30.6
760	22.3	1860	30.6
780	22.6	1880	30.6
800	22.7	1900	30.6
820	22.9	1920	30.7
840	23.1	1940	30.9
860	23.4	1960	31.2
880	23.8	1980	31.6
900	24.1	2000	32.0
920	24.1		

Antenna factor in dB(1/m) is to be added to receiver meter reading in dB(μV) to convert it into field intensity in dB(μV/m).

**Antenna factor**  
**Double-ridged wave guide horn antenna**  
**Model 3115, S/N 9911-5964, HL1984**

Frequency, MHz	Antenna factor, dB(1/m)
1000.0	24.7
1500.0	25.7
2000.0	27.6
2500.0	28.9
3000.0	31.2
3500.0	32.0
4000.0	32.5
4500.0	32.7
5000.0	33.6
5500.0	35.1
6000.0	35.4
6500.0	34.9
7000.0	36.1
7500.0	37.8
8000.0	38.0
8500.0	38.1
9000.0	39.1
9500.0	38.3
10000.0	38.6
10500.0	38.2
11000.0	38.7
11500.0	39.5
12000.0	40.0
12500.0	40.4
13000.0	40.5
13500.0	41.1
14000.0	41.6
14500.0	41.7
15000.0	38.7
15500.0	38.2
16000.0	38.8
16500.0	40.5
17000.0	42.5
17500.0	45.9
18000.0	49.4

Antenna factor in dB(1/m) is to be added to receiver meter reading in dB( $\mu$ V) to convert it into field intensity in dB( $\mu$ V/m).

**Cable loss**  
**Cable 18 GHz, 6.5 m, blue, model: NPS-1803A-6500-NPS, S/N T4974, HL 1947**

Frequency, GHz	Cable loss, dB
0.03	0.30
0.05	0.38
0.10	0.53
0.20	0.74
0.30	0.91
0.40	1.05
0.50	1.18
0.60	1.29
0.70	1.40
0.80	1.50
0.90	1.59
1.00	1.68
1.10	1.77
1.20	1.86
1.30	1.94
1.40	2.01
1.50	2.08
1.60	2.16
1.70	2.22
1.80	2.29
1.90	2.36
2.00	2.42
2.10	2.48
2.20	2.54
2.30	2.60
2.40	2.66
2.50	2.71
2.60	2.77
2.70	2.83
2.80	2.89
2.90	2.95
3.10	3.06
3.30	3.17
3.50	3.28
3.70	3.39
3.90	3.51
4.10	3.62
4.30	3.76
4.50	3.87
4.70	4.01
4.90	4.10
5.10	4.21
5.30	4.31
5.50	4.43
5.70	4.56
5.90	4.71

Frequency, GHz	Cable loss, dB
6.10	4.87
6.30	4.95
6.50	4.94
6.70	4.88
6.90	4.87
7.10	4.83
7.30	4.85
7.50	4.86
7.70	4.91
7.90	4.96
8.10	5.03
8.30	5.08
8.50	5.13
8.70	5.21
8.90	5.22
9.10	5.34
9.30	5.35
9.50	5.52
9.70	5.51
9.90	5.66
10.10	5.70
10.30	5.78
10.50	5.79
10.70	5.82
10.90	5.86
11.10	5.94
11.30	6.06
11.50	6.21
11.70	6.44
11.90	6.61
12.10	6.76
12.40	6.68
13.00	6.66
13.50	6.81
14.00	6.90
14.50	6.90
15.00	6.97
15.50	7.17
16.00	7.28
16.50	7.27
17.00	7.38
17.50	7.68
18.00	7.92

**Cable loss**  
**Cable 40 GHz, 0.8 m, blue, model: KPS-1503A-800-KPS, S/N W4907, HL 2254**

Frequency, GHz	Cable loss, dB	Frequency, GHz	Cable loss, dB	Frequency, GHz	Cable loss, dB
0.03	0.04	5.10	0.80	15.00	1.49
0.05	0.07	5.30	0.83	15.50	1.49
0.10	0.09	5.50	0.83	16.00	1.46
0.20	0.15	5.70	0.84	16.50	1.47
0.30	0.19	5.90	0.87	17.00	1.50
0.40	0.25	6.10	0.86	17.50	1.57
0.50	0.29	6.30	0.89	18.00	1.63
0.60	0.33	6.50	0.90	18.50	1.57
0.70	0.37	6.70	0.89	19.00	1.63
0.80	0.41	6.90	0.93	19.50	1.65
0.90	0.44	7.10	0.92	20.00	1.64
1.00	0.45	7.30	0.95	20.50	1.75
1.10	0.48	7.50	0.96	21.00	1.72
1.20	0.51	7.70	0.97	21.50	1.78
1.30	0.53	7.90	1.01	22.00	1.76
1.40	0.54	8.10	1.00	22.50	1.72
1.50	0.57	8.30	1.05	23.00	1.83
1.60	0.59	8.50	1.04	23.50	1.80
1.70	0.04	8.70	1.07	24.00	1.90
1.80	0.07	8.90	1.11	24.50	1.81
1.90	0.09	9.10	1.09	25.00	1.98
2.00	0.15	9.30	1.14	25.50	1.91
2.10	0.19	9.50	1.12	26.00	2.02
2.20	0.25	9.70	1.15	26.50	1.92
2.30	0.29	9.90	1.16	27.00	1.97
2.40	0.33	10.10	1.16	28.00	2.02
2.50	0.37	10.30	1.19	29.00	1.95
2.60	0.41	10.50	1.14	30.00	1.94
2.70	0.44	10.70	1.19	31.00	2.11
2.80	0.45	10.90	1.17	32.00	2.17
2.90	0.48	11.10	1.13	33.00	2.27
3.10	0.61	11.30	1.20	34.00	2.27
3.30	0.64	11.50	1.13	35.00	2.29
3.50	0.65	11.70	1.20	36.00	2.35
3.70	0.68	11.90	1.18	37.00	2.37
3.90	0.69	12.10	1.14	38.00	2.40
4.10	0.71	12.40	1.19	39.00	2.57
4.30	0.73	13.00	1.34	40.00	2.36
4.50	0.75	13.50	1.33		
4.70	0.77	14.00	1.48		
4.90	0.79	14.50	1.45		

**Cable loss**  
**Cable coaxial, Gore, 18 GHz, 3m, SMA-SMA, S/N 989370**  
**HL 2910**

Frequency, MHz	Cable loss, dB	Frequency, MHz	Cable loss, dB	Frequency, MHz	Cable loss, dB
10	0.07	5750	2.97	12000	5.05
30	0.19	6000	2.91	12250	4.44
100	0.36	6250	3.23	12500	4.82
250	0.53	6500	3.42	12750	5.22
500	0.77	6750	3.17	13000	5.02
750	0.94	7000	3.56	13250	5.00
1000	1.10	7250	3.77	13500	5.09
1250	1.19	7500	3.48	13750	4.70
1500	1.35	7750	3.81	14000	5.03
1750	1.51	8000	3.82	14250	5.17
2000	1.57	8250	3.62	14500	4.92
2250	1.69	8500	3.95	14750	4.91
2500	1.76	8750	4.00	15000	5.03
2750	1.83	9000	3.80	15250	4.93
3000	2.02	9250	4.09	15500	5.28
3250	2.17	9500	4.12	15750	5.60
3500	2.13	9750	4.11	16000	5.16
3750	2.23	10000	4.36	16250	5.45
4000	2.40	10250	4.75	16500	5.78
4250	2.31	10500	4.61	16750	5.47
4500	2.52	10750	4.26	17000	5.21
4750	2.77	11000	4.62	17250	5.53
5000	2.82	11250	4.55	17500	5.53
5250	2.77	11500	4.59	17750	5.71
5500	3.04	11750	5.20	18000	5.77

**Cable loss**  
**Microwave Cable Assembly, 18 GHz, 6.4 m, SMA – SMA, Huber-Suhner, model 198-9155-00**  
**HL 3123**

Frequency, MHz	Cable loss, dB								
10.0	0.11	3600	1.97	7400	3.12	11200	3.90	15100	4.74
30	0.17	3700	1.97	7500	3.13	11300	3.93	15200	4.70
50	0.25	3800	2.03	7600	3.16	11400	3.88	15300	4.73
100	0.32	3900	2.04	7700	3.18	11500	3.87	15400	4.78
200	0.46	4000	2.10	7800	3.20	11600	3.90	15500	4.75
300	0.58	4100	1.97	7900	3.23	11700	3.86	15600	4.76
400	0.65	4200	1.97	8000	3.25	11800	3.88	15700	4.75
500	0.74	4300	2.03	8100	3.26	11900	3.86	15800	4.78
600	0.82	4400	2.04	8200	3.28	12000	3.89	15900	4.79
700	0.89	4500	2.10	8300	3.31	12100	3.94	16000	4.73
800	0.95	4600	1.97	8400	3.31	12200	3.92	16100	4.78
900	1.01	4700	1.97	8500	3.32	12300	3.96	16200	4.84
1000	1.07	4800	2.03	8600	3.34	12400	4.01	16300	4.90
1100	1.11	4900	2.04	8700	3.35	12500	4.07	16400	4.87
1200	1.17	5000	2.10	8800	3.37	12600	4.08	16500	4.90
1300	1.22	5100	2.53	8900	3.39	12700	4.17	16600	4.98
1400	1.27	5200	2.55	9000	3.42	12800	4.26	16700	5.05
1500	1.29	5300	2.60	9100	3.43	12900	4.16	16800	5.04
1600	1.35	5400	2.61	9200	3.51	13000	4.21	16900	5.02
1700	1.40	5500	2.64	9300	3.52	13100	4.24	17000	5.09
1800	1.44	5600	2.70	9400	3.54	13200	4.27	17100	5.07
1900	1.51	5700	2.67	9500	3.63	13300	4.31	17200	5.10
2000	1.49	5800	2.71	9600	3.61	13400	4.33	17300	5.13
2100	1.55	5900	2.74	9700	3.71	13500	4.25	17400	5.23
2200	1.58	6000	2.80	9800	3.66	13600	4.27	17500	5.21
2300	1.62	6100	2.79	9900	3.77	13700	4.33	17600	5.22
2400	1.72	6200	2.81	10000	3.75	13800	4.33	17700	5.36
2500	1.76	6300	2.83	10100	3.77	13900	4.31	17800	5.35
2600	1.78	6400	2.86	10200	3.80	14000	4.30	17900	5.45
2700	1.80	6500	2.88	10300	3.79	14100	4.30	18000	5.43
2800	1.86	6600	2.90	10400	3.87	14200	4.31		
2900	1.90	6700	2.92	10500	3.83	14300	4.37		
3000	1.90	6800	2.98	10600	3.88	14400	4.35		
3100	1.97	6900	2.98	10700	3.86	14600	4.53		
3200	1.97	7000	3.00	10800	3.87	14700	4.50		
3300	2.03	7100	3.02	10900	3.90	14800	4.62		
3400	2.04	7200	3.04	11000	3.84	14900	4.65		
3500	2.10	7300	3.06	11100	3.88	15000	4.79		

### 13 APPENDIX F Abbreviations and acronyms

A	ampere
AC	alternating current
AM	amplitude modulation
AVRG	average (detector)
BB	broad band
cm	centimeter
dB	decibel
dBm	decibel referred to one milliwatt
dB( $\mu$ V)	decibel referred to one microvolt
dB( $\mu$ V/m)	decibel referred to one microvolt per meter
dB( $\mu$ A)	decibel referred to one microampere
DC	direct current
EIRP	equivalent isotropically radiated power
ERP	effective radiated power
EUT	equipment under test
F	frequency
GHz	gigahertz
GND	ground
H	height
HL	Hermon laboratories
Hz	hertz
k	kilo
kHz	kilohertz
LO	local oscillator
m	meter
MHz	megahertz
mm	millimeter
ms	millisecond
$\mu$ s	microsecond
NA	not applicable
NB	narrow band
OATS	open area test site
$\Omega$	Ohm
ppm	part per million ( $10^{-6}$ )
QP	quasi-peak
RE	radiated emission
RF	radio frequency
rms	root mean square
Rx	receive
s	second
T	temperature
Tx	transmit
V	volt

END OF DOCUMENT