



FCC Test Report for

**47CFR15, Subpart B for Unintentional Radiators, per Section 101
Equipment authorization of unintentional radiators,
And
47CFR15, Subpart C for Intentional Radiators, per Section 247
Operation within the bands 902 to 928 MHz**

on

**BridgePad RF by
Quickpad**
[FCC ID: VFV-BPADRF]

Report number

20070524-01-F15

Manufacturer

**Quickpad Technology
465 Fairchild Dr. # 103
Mountain View, CA 94043**

Judgement

Complies as tested

Tests and report by

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Lab Code: 200172-0

ISO17025 Accredited Compliance Laboratory

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PART 1 GENERAL INFORMATION

SECTION 1.1 TEST INFORMATION

Product Type	Bridge RF (Battery Operated)	
Model	BPADRF	
Manufacturer's Name Manufacturer's Address	QuickPad Technology 465 Fairchild Dr. # 103 Mountain View, CA 94043 United States Tel: +1 (650) 961-9114 Henryk Szejnwald	Fax: +1 (650)916-9114 email : Henryk@quickpad.com
Contact		
Test Laboratory	ITC Engineering Services, Inc. 9959 Calaveras Road, PO Box 543 Sunol, CA 94586-0543 Email: docs@itcemc.com Web Site: http://www.itcemc.com	Tel: +1(925) 862-2944 Fax: +1(925) 862-9013
Test Number and Report Numbers	20070524-01	20070524-01-F15
Test Date(s) & Issue Date	June 11 th - June 15 th , 2007	June 28 th , 2007
Test Engineer(s)	Sharmistha Modak	
Chief Engineer	Michael Gbadebo, P.E	
Documentation	Sharmistha Modak	
Test Results	<input checked="" type="checkbox"/> Complies as Tested	<input type="checkbox"/> Fail

The electromagnetic interference tests, which this report describes, were performed by an independent electromagnetic compatibility consultant, ITC Engineering Services, Inc. (ITC), in accordance with the emissions requirements specified in the FCC rules, 47CFR Part 15, Subparts B and C. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical characteristics. Any modifications specified in this report for compliance must be implemented in all production units for compliance to be maintained.

SECTION 1.2 TESTS PERFORMED:

Emissions Requirements:

OPEN FIELD RADIATED EMISSIONS in accordance with the FCC 47 CFR 15.109

RF Requirements:

MAXIMUM PEAK OUTPUT OF FUNDAMENTAL in accordance with the FCC 47 CFR 15.247(b) (1)

OPERATING BAND in accordance with FCC 47 CFR 15.247(a)

6dB BANDWIDTH in accordance with FCC 47 CFR 15.247(a)(2)

SPECTRAL DENSITY in accordance with FCC 47 CFR 15.247(d)

HARMONIC/SPURIOUS EMISSIONS in accordance with the FCC 47 CFR 15.247(c)

RESTRICTED BAND EMISSIONS in accordance with the FCC 47 CFR 15.209(c)

PART 1 General (Cont)

SECTION 1.3 DECLARATION/DISCLAIMER

ITC Engineering Services, Inc. (ITC) reports apply only to the specific samples tested under stated test conditions. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. ITC Engineering Services, Inc. shall have no liability for any deductions, inferences or generalizations drawn by the client or others from ITC Engineering Services, Inc. issued reports.

This report is the confidential property of the client. As a mutual protection to our clients, the public and ourselves, extracts from the test report shall not be reproduced except in full with our written approval. The applicant/manufacturer shall not use this report to claim product endorsement by NVLAP or any US Government agency.

ITC Engineering Services, Inc. (ITC) is:

Accredited by NVLAP (Ref: NVLAP Lab Code 200172-0)

Approved by the Industry Canada.

Certified by the Voluntary Control Council for Interference by Information Technology Equipment (VCCI) for EMC testing, in accordance with the Regulations for Voluntary Control Measures, Article 8, Registration Numbers - Site 1: C-1582 and R-1497.

PART 1 General (Cont)

SECTION 1.4 TEST METHODOLOGY

The electromagnetic interference tests, which this report describes, were performed by an independent electromagnetic compatibility consultant, ITC Engineering Services, Inc., in accordance with the FCC test procedure ANSI C63.4-2003.

SECTION 1.5 TEST FACILITY

The open area test site, the conducted measurement facility, and the test equipment used to collect the emissions data is located in Sunol, California, and is fully described in a site attenuation report. The approved site attenuation description is on file at the Federal Communications Commission.

Table 1 Radio Device Measurement Information

Product Type	Bridge RF (Battery Operated)	
Models	BPADRF	
Applicant / Manufacturer Address	QuickPad Technology 465 Fairchild Dr. # 103 Mountain View, CA 94043 United States Tel: +1 (650) 961-9114 Henryk Szejnwald	
Contact	Henryk Szejnwald Tel: +1 (650) 961-9114	Henryk@quickpad.com Fax: +1(925) 862-9013
Test Results	<input checked="" type="checkbox"/> Complies	<input type="checkbox"/> Not Compliant
Total Number of Pages including Appendices	51	
Test Report File No.	20070524-01-F15	

Table 2 Measurement Uncertainty

RF frequency	$\pm 1 \times 10^{-7}$ HP8565E
RF power, conducted	± 1.5 dB
Adjacent channel power	± 3 dB
Conducted emission of transmitter, valid up to 1 GHz	± 1.5 dB
Conducted emission of transmitter, valid up to 18 GHz	± 1.5 dB
Conducted emission of receivers	± 1.5 dB
Radiated emission of transmitter, valid up to 1 GHz	± 1.5 dB
Radiated emission of transmitter, valid up to 18 GHz	± 1.5 dB
Radiated emission of transmitter, valid up to 26 GHz	± 3 dB
Radiated emission of transmitter, valid up to 40 GHz	± 3 dB
Radiated emission of transmitter, valid up to 75 GHz	± 3 dB

SECTION 1.6 ACCURACY OF TEST DATA

The test results contained in this report accurately represent the emissions generated by the sample equipment under test. ITC Engineering Services, Inc. (ITC) as an independent testing laboratory declares that the equipment as tested complies with the requirements of:

1. FCC standard 47CFR15.247.

for Intentional Radiators Operation within the bands 902MHz to 928MHz

PART 2 RECEIVER MEASUREMENTS

OPEN FIELD RADIATED EMISSIONS

SECTION 2.1 TEST SPECIFICATION: 47 CFR PART 15, SUB-PART B

The BridgePad (or the EUT) was set up at 3 meters in accordance with the suggested configuration given in FCC Measurement Procedure ANSI C63.4-2003. The measurement instrumentation used was a receiver with bandwidth parameters as stipulated in ANSI C63.4-2003. The EUT was set up on a wooden non-conductive tabletop, 80 cm above the ground reference plane, in an open field. The transmit function was de-activated for the tests. For measurements below 1GHz, the BridgePad (or the EUT) was set up at a 3 meters distance from the search antenna with the EUT running in a continuous mode. The EUT was rotated 360 degrees azimuth and the search antenna height varied 1 to 4m in order to maximize the emissions. Significant peaks from the EUT were then recorded to determine margin to the limits. For measurements above 1GHz, the EUT running in continuous mode was set up at a 3 meter distance from the search antenna and was rotated 360 degrees azimuth and also rotated in its x-y-z axis positions to determine the precise amplitude of the emissions

Table 3 Test Equipment Used– Radiated Emissions Tests

Equipment Description	Manufacturer	Model Name	Serial Number	Calibration Due
Spectrum Analyzer	Hewlett-Packard	8568B	2841A04315	11-29-08
Spectrum Analyzer	Hewlett-Packard	E7402A	Us40240204	3/22/2008
Quasi Peak Adapter	Hewlett-Packard	85650	2521A00871	11-29-08
Preselector	Hewlett-Packard	85685A	2620A00265	11-29-08
Spectrum Analyzer	Hewlett-Packard	8565E	2618A02909	03-29-08
Signal Generator	Hewlett-Packard	83650A	3420A00599	09-09-08
Power Supply	BK Precision	1688	2250558	No Cal. Needed
Biconical Antenna	EMCO	3104	3667	02-03-08
L. P. Ant. (200-1000 MHz)	EMCO	3146	9510-4202	02-03-08
Horn Antenna (Below 18GHz)	EMCO	3115	8812-3050	12-19-08

Table 4 Software Used– Radiated Emissions Tests

Software Used	Manufacturer	Model Name	Version Number	Calibration/Validation Date
Test Software	ITC	1.04b1	Rev. 4	02-05-08
Antenna Software	ITC	L.P-V/H 10m	Rev. 4	02-05-08
Antenna Software	ITC	B-V/H 10m	Rev. 4	02-05-08
Cable Software	ITC	OATS 30MHz-1GHz	Rev. 4	02-01-08

Table 5 Support Equipment – Radiated Emissions Tests

No	Description	Manufacturer	Model Name	Serial Number
1	FSU	N/A	N/A	BF00000034
2	NOTEBOOK	SONY	PCG – 974L	283293303418746

OPEN FIELD RADIATED EMISSIONS (cont)

SECTION 2.2 TEST RANGE RADIATED EMISSIONS TESTS

The frequency search range investigated was from 30 MHz to 1 GHz.

SECTION 2.3 SPECTRUM ANALYZER CONFIGURATION (SWEPT FREQUENCY SCANS)-

IF Bandwidth.....120 kHz
Measurements below 1000 MHz (unless stated otherwise)
Analyzer Mode (for Peak Measurements) Peak/Log
Resolution Bandwidth..... 100 kHz
Video Bandwidth..... 100 kHz
Analyzer Mode (for Quasi-Peak Measurements)
Quasi-Peak/Linear Resolution Bandwidth..... 1000 kHz
Video Bandwidth..... 1000 kHz
Measurements above 1000 MHz (unless stated otherwise)
Quasi-Peak Adapter Mode Disabled
Analyzer Mode (for Peak Measurements) Peak
Resolution Bandwidth..... 1000 kHz
Video Bandwidth..... 1000 kHz
Analyzer Mode (for Average Measurements) Video Filter
Resolution Bandwidth..... 1000 kHz
Video Bandwidth..... 10 Hz

Table 6 Data Table Legend and Field Strength Calculation – Radiated Emissions Tests

Detector mode: Peak (P) or Quasi-Peak (QP) or Average (A)

	Polarization	Antenna	Freq Range (MHz)
VB	Vertical	EMCO 3104/sn 3549 Biconical	30 – 200
HB	Horizontal	EMCO 3104/sn 3549 Biconical	30 – 200
VL	Vertical	EMCO 3146/sn. 2075 Log Periodic	200 – 1000
HL	Horizontal	EMCO 3146/sn. 2075 Log Periodic	200 – 1000
VH1	Vertical	EMC 3115/sn. 2362 Horn	Below 18000
HH1	Horizontal	EMC 3115/sn. 2362 Horn	Below 18000
VH2	Vertical	EMC 3116/sn. 2655 Horn	Below 26500
HH2	Horizontal	EMC 3116/sn. 2655 Horn	Below 26500
VH4	Vertical	S&D DBD-520 Horn	Below 75000
HH4	Horizontal	S&D DBD-520 Horn	Below 75000

The margin in the Table 6 is calculated as follows:

Margin = Corrected Amplitude – Limit, where Corrected Amplitude = Spectrum Analyzer Amplitude + Cable Loss + Antenna Factor – Pre-Amp Gain.

SECTION 2.4 OPEN FIELD RADIATED EMISSIONS RESULTS

SECTION 2.5 ADMINISTRATIVE AND ENVIRONMENTAL CONDITIONS DETAILS – RADIATED EMISSIONS

Site Used:	Test Site 1 - 3m Open Field Radiated Site
Test Date:	June 11 th - June 15 th 2007
Test Engineer:	Sharmistha Modak
Temperature	78°F
Humidity	52%

SECTION 2.6 OPEN FIELD RADIATED EMISSIONS TEST RESULTS

Test Plot for Radiated Emissions Measurement Below 200MHz

The plot below shows a summary of the highest amplitudes of the radiated emissions from the equipment under test at various antenna heights, antenna polarization, and EUT orientations. The EUT was tested for radiated emissions at the low, mid and high frequency.

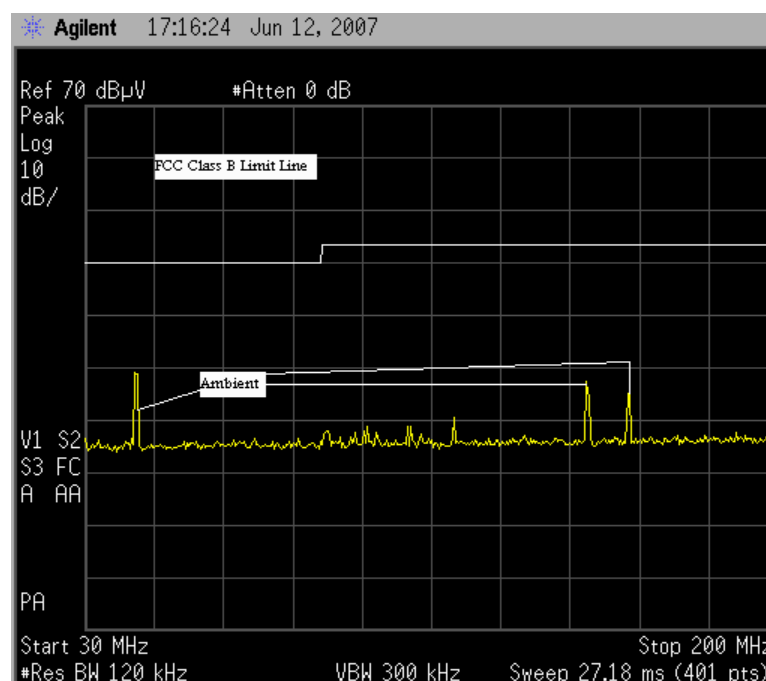


Figure 1 Radiated Emissions (Below 200 MHz)

No emissions of significant level were observed between 30MHz – 200MHz.

Test Plot for Radiated Emissions Measurement (Below 1 GHz)

The plot below shows a summary of the highest amplitudes of the radiated emissions from the equipment under test at various antenna heights, antenna polarization, and EUT orientations. The EUT was tested for radiated emissions at the low, mid and high frequency and the worst case was recorded at mid frequency(915.97MHz)..

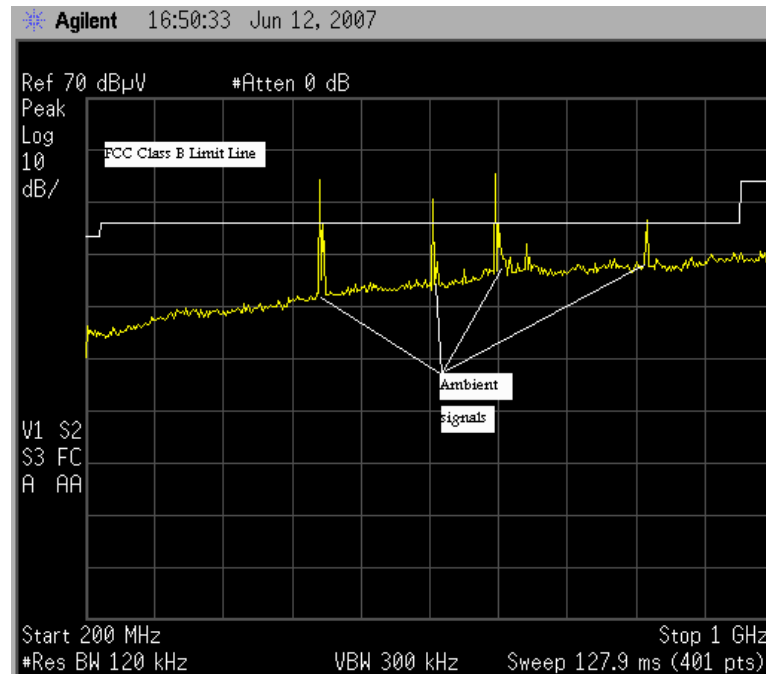


Figure 2 Radiated Emissions (Below 1 GHz)

No emission of significant level was observed between 200MHz -1GHz

SECTION 2.7 TEST DATA SUMMARY

The margin is calculated as follows:

Margin = Corrected Amplitude - Limit; where Corrected Amplitude = Amplitude + Cable Loss + Antenna Factor.

SECTION 2.8 CONCLUSION

The BridgePad meets the requirements of FCC Part 15, Class B for Open Field Radiated Emissions.

OPEN FIELD RADIATED EMISSIONS Results (cont)

SECTION 2.9 RADIATED EMISSIONS TEST SETUP PHOTOGRAPHS



Figure 1: Radiated Emissions Test Setup (Below 200MHz) Front View



Figure 2: Radiated Emissions Test Setup (Below 1 GHz) Rear View



Figure 3: Radiated Emissions Test Setup (Above 1 GHz) RearView

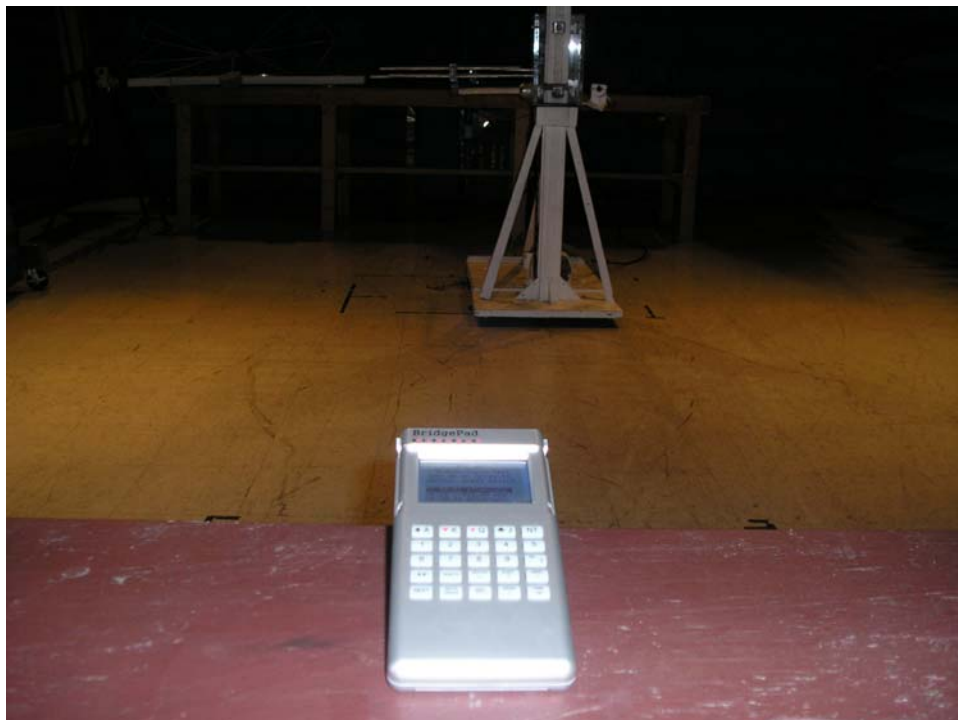


Figure 4: Radiated Emissions Test Setup (Below 1 GHz) Front View

PART 3 RF MEASUREMENTS

SECTION 3.1 LIST OF EQUIPMENT USED DURING RF TESTS

Table 7: Support Equipment – RF Measurements

No	Description	Manufacturer	Model Name	Serial Number
1	FSU	N/A	N/A	BF00000034
2	PLOTTER	HEWLETT PACKARD	7440A	N/A
3	NOTEBOOK	SONY	PCG – 974L	283293303418746

Equipment Description	Manufacturer	Model Name	Serial Number	Calibration Due
Spectrum Analyzer	Hewlett-Packard	8568B	2841A04315	11-29-08
Spectrum Analyzer	Hewlett-Packard	E7402A	Us40240204	3-22-08
Quasi Peak Adapter	Hewlett-Packard	85650	2521A00871	11-29-08
Preselector	Hewlett-Packard	85685A	2620A00265	11-29-08
Spectrum Analyzer	Hewlett-Packard	8565E	2618A02909	03-29-08
Signal Generator	Hewlett-Packard	83650A	3420A00599	09-09-08
Power Supply	BK Precision	1688	2250558	No Cal. Needed
Biconical Antenna	EMCO	3104	3667	02-03-08
L. P. Ant. (200-1000 MHz)	EMCO	3146	9510-4202	02-03-08
Horn Antenna (Below 18GHz)	EMCO	3115	8812-3050	12-19-08

Table 8: Test Equipment – RF Measurements

Software Used	Manufacturer	Model Name	Version Number	Calibration/Validation Date
Test Software	ITC	1.04b1	Rev. 4	02-05-08
Antenna Software	ITC	L.P-V/H 10m	Rev. 4	02-05-08
Antenna Software	ITC	B-V/H 10m	Rev. 4	02-05-08
Cable Software	ITC	OATS 30MHz-1GHz	Rev. 4	02-01-08

Table 9: Data Table Legend and Field Strength Calculation

Detector mode: Peak (P) or Quasi-Peak (QP) or Average (A)

	Polarization	Antenna	Freq Range (MHz)
VB	Vertical	EMCO 3104/sn 3549 Biconical	30 – 200
HB	Horizontal	EMCO 3104/sn 3549 Biconical	30 – 200
VL	Vertical	EMCO 3146/sn. 2075 Log Periodic	200 – 1000
HL	Horizontal	EMCO 3146/sn. 2075 Log Periodic	200 – 1000
VH1	Vertical	EMC 3115/sn. 2362 Horn	Below 18000
HH1	Horizontal	EMC 3115/sn. 2362 Horn	Below 18000
VH2	Vertical	EMC 3116/sn. 2655 Horn	Below 26500
HH2	Horizontal	EMC 3116/sn. 2655 Horn	Below 26500
VH4	Vertical	S&D DBD-520 Horn	Below 75000
HH4	Horizontal	S&D DBD-520 Horn	Below 75000

RF Conducted Measurements

SECTION 3.2 SETUP PHOTOGRAPHS

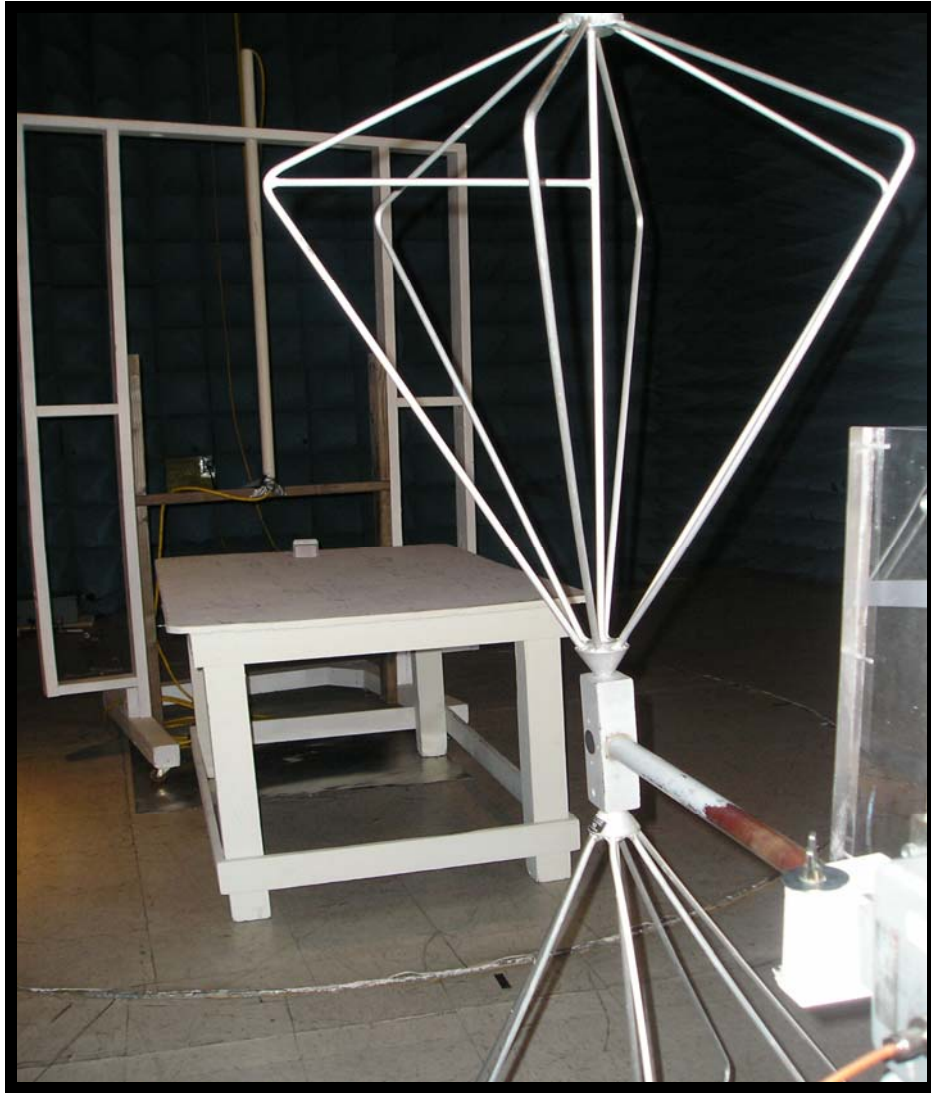


Figure 5 Test Set Up Photos (Rear View)

PART 4 MAXIMUM IN-BAND PEAK

SECTION 4.1 MAXIMUM PEAK MEASUREMENT

The EUT was set up on a wooden non-conductive tabletop, attached at the antenna connector to the measuring device. The measurement instrumentation used was a receiver with bandwidth parameters as stipulated in ANSI C63.4-2003. The EUT was configured to run in continuous mode during the tests. The measurement data below represents the maximum worst-case result from the measurement performed in accordance to the requirements of this section.

SECTION 4.2 SITE USED – MAXIMUM IN-BAND PEAK MEASUREMENT

- ☐ Test Site 1 - 10m Open Field Radiated Site
- ☐ Test Site 2 - Environmental Lab
- ☐ EMC Lab 1 - Test Laboratory
- ☒ Semi-Anechoic Absorber Lined Shielded Room

SECTION 4.3 ADMINISTRATIVE AND ENVIRONMENTAL DETAILS –MAXIMUM IN-BAND PEAK DATA

Test Date(s):	June 11 th - June 15 th , 2007
Test Engineer(s):	Sharmistha Modak
Temperature	65°F
Humidity	50%

SECTION 4.4 TEST DATA – MAXIMUM IN-BAND PEAK MEASUREMENT

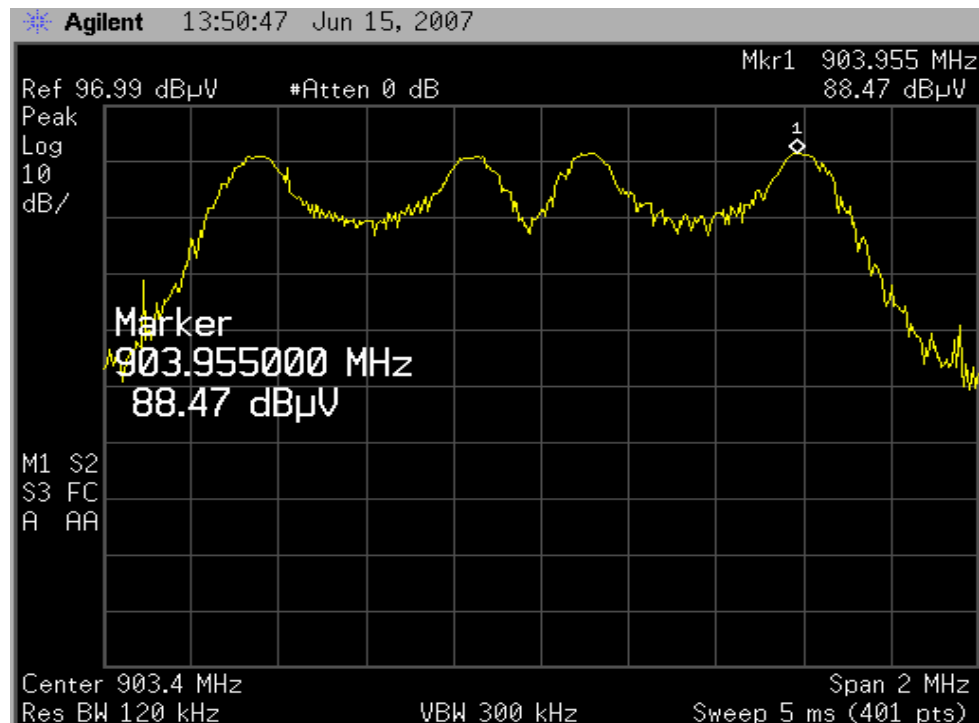


Figure 6: Plot of In-Band Peak Measurement (Lower Bands)

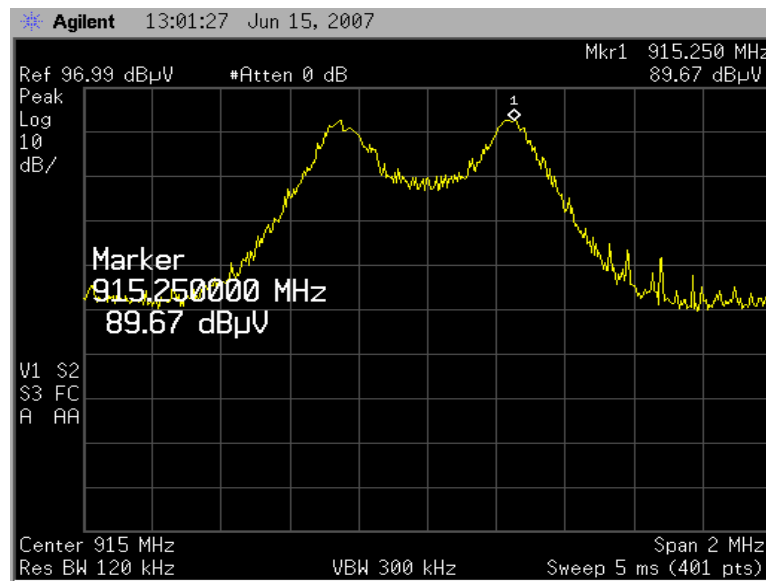


Figure 7: Plot of In-Band Peak Measurement (Middle band)

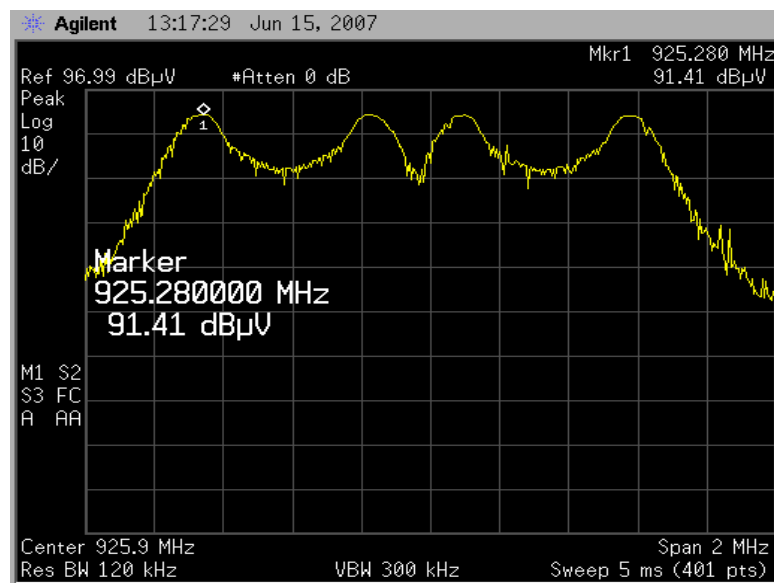


Figure 8: Plot of In-Band Peak Measurement (higher bands)

Test-Data Summary – Peak Measurement:

Maximum Peak Level: = 91.41dBμV

PART 5 CHANNEL SEPARATION MEASUREMENT

SECTION 5.1 CHANNEL SEPARATION MEASUREMENT

The EUT was set up on a wooden non-conductive tabletop, attached at the antenna connector to the measuring device. The measurement instrumentation used was a receiver with bandwidth parameters as stipulated in ANSI C63.4-2003. The EUT was configured to run in continuous mode during the tests. The measurement data below represents the maximum worst-case result from the measurement performed in accordance to the requirements of this section.

SECTION 5.2 SITE USED – CHANNEL SEPARATION MEASUREMENT

- ☐ Test Site 1 - Shielded Room: 16' x 12' x 9'
- ☐ EMC Lab 1 - Test Laboratory
- ☒ Semi-Anechoic Absorber Lined Shielded Room

SECTION 5.3 ADMINISTRATIVE AND ENVIRONMENTAL DETAILS – CHANNEL SEPARATION MEASUREMENT

Test Date(s):	June 11 th - June 15 th , 2007
Test Engineer(s):	Sharmistha Modak
Temperature	65°F
Humidity	50%

SECTION 5.4 TEST DATA – CHANNEL SEPARATION MEASUREMENT

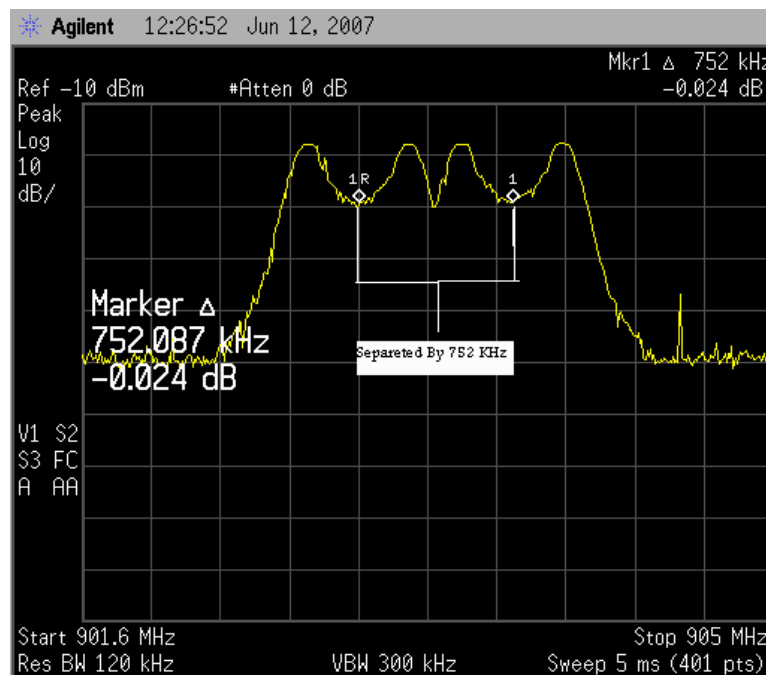


Figure 9: Plot of Channel Separation Measurement

Test-Data Summary – Channel Separation Measurement:

Channel Separation (measured) = 752.087 kHz

PART 6 MAXIMUM POWER OUTPUT PER 47 CFR 15.247(B) (1)

SECTION 6.1 MAXIMUM POWER MEASUREMENT

The EUT was set up on a wooden non-conductive tabletop, attached at the antenna connector to the measuring device. The EUT was configured to run in continuous mode during the tests. The measurement data below represents the maximum worst-case result from the measurement performed in accordance to the requirements of this section.

SECTION 6.2 SITE USED – MAXIMUM POWER MEASUREMENT

- ☐ Test Site 1 - Shielded Room: 16' x 12' x 9'
- ☐ Test Site 1 - 3m Open Field Radiated Site
- ☐ Test Site 1 - 10m Open Field Radiated Site
- ☐ Test Site 2 - Environmental Lab
- ☐ EMC Lab 1 - Test Laboratory
- ☒ Semi-Anechoic Absorber Lined Shielded Room

SECTION 6.3 ADMINISTRATIVE DETAILS – MAXIMUM POWER MEASUREMENT

Test Date(s):	June 11 th - June 15 th , 2007
Test Engineer(s):	Sharmistha Modak
Temperature	65°F
Humidity	50%

SECTION 6.4 TEST DATA – MAXIMUM POWER MEASUREMENT (CH 0)



Figure 10: Plot of Maximum Power Measurement at Channel 0

Test-Data Summary – Peak Measurement (CH 0)

Peak Level: = 18.4 μ W
Limit per 15.247(b)(1) = 1 W

SECTION 6.5 TEST DATA – MAXIMUM POWER MEASUREMENT (CH 16)

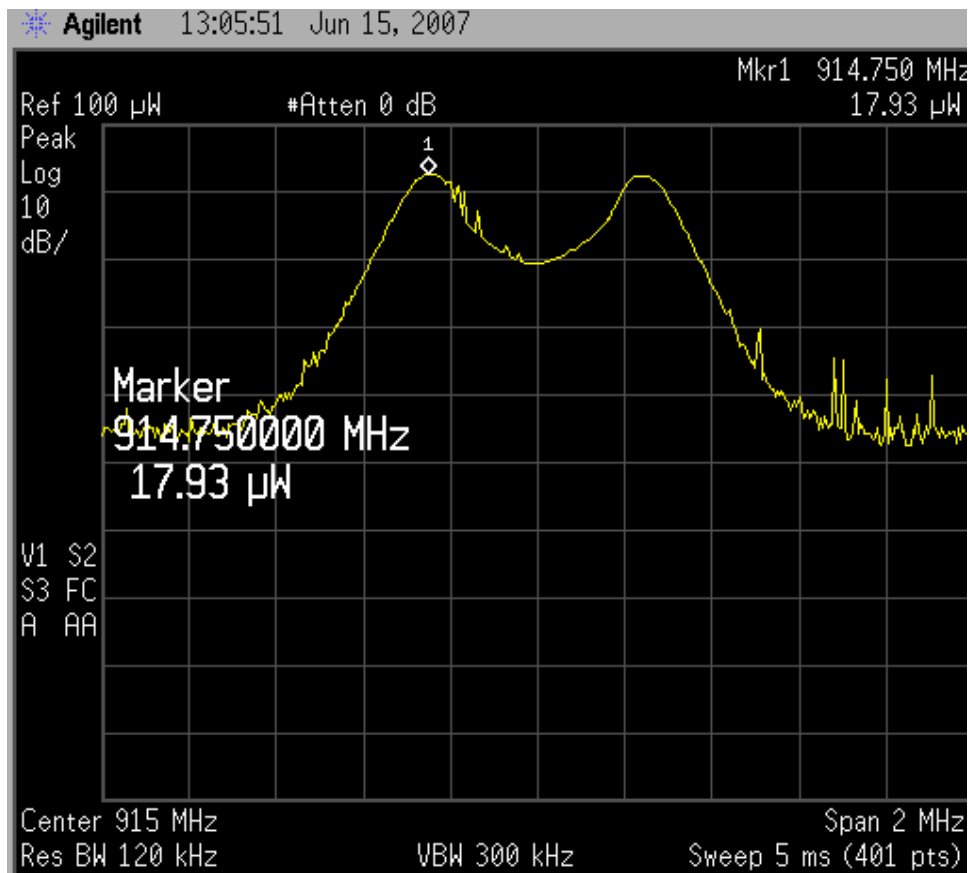


Figure 11: Plot of Maximum Power Measurement at Channel 16

Test-Data Summary – Maximum Power Measurement (CH 16)

Peak Level: = 17.93uW
Limit per 15.247(b)(1) = 1 W

SECTION 6.6 TEST DATA – MAXIMUM POWER MEASUREMENT (CH 30)

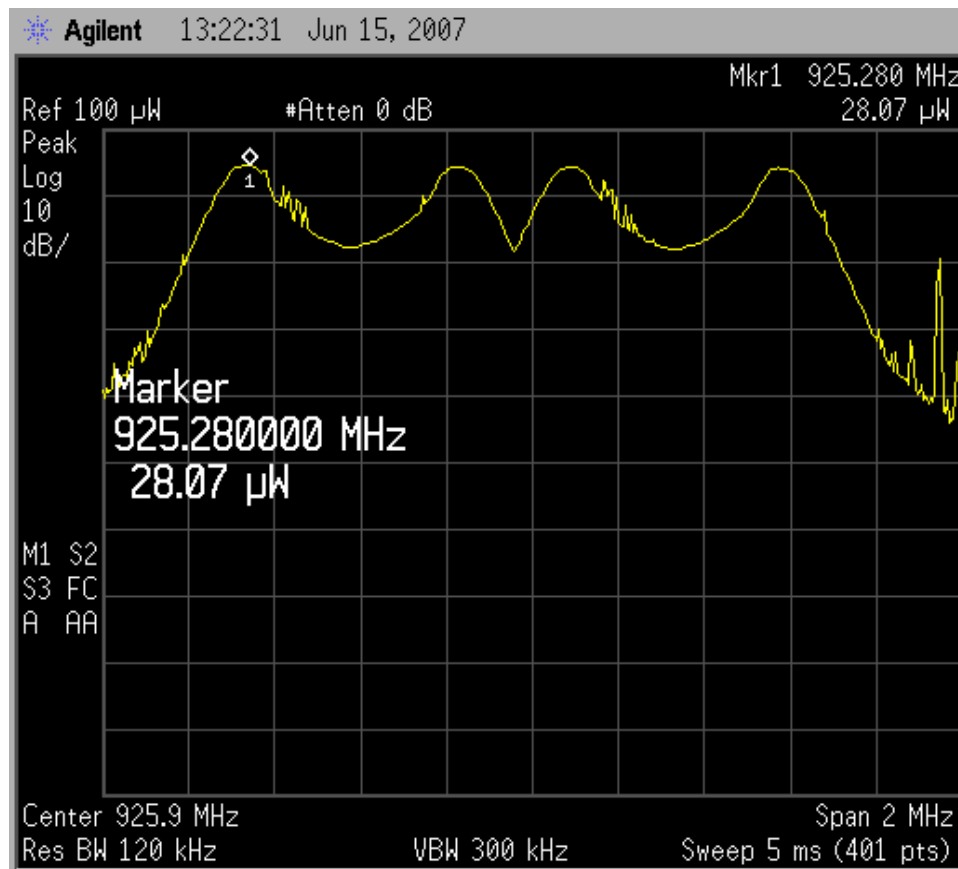


Figure 12: Plot of Maximum Power Measurement at Channel 30

Test-Data Summary – Maximum Power Measurement (CH 30)

Peak Level: = 28.07uW
Limit per 15.247(b)(1) = 1 W

PART 7 SPECTRAL DENSITY per 47 CFR 15.247(c)

SECTION 7.1 SPECTRAL DENSITY MEASUREMENT

The EUT was set up on a wooden non-conductive tabletop, attached at the antenna connector to the measuring device. The EUT was configured to run in continuous mode during the tests. The measurement data below represents the maximum worst-case result from the measurement performed in accordance to the requirements of this section.

SECTION 7.2 SITE USED – SPECTRAL DENSITY MEASUREMENT

- ☐ Test Site 1 - Shielded Room: 16' x 12' x 9'
- ☐ Test Site 1 - 3m Open Field Radiated Site
- ☐ Test Site 1 - 10m Open Field Radiated Site
- ☐ Test Site 2 - Environmental Lab
- ☐ EMC Lab 1 - Test Laboratory
- ☒ Semi-Anechoic Absorber Lined Shielded Room

SECTION 7.3 ADMINISTRATIVE AND ENVIRONMENTAL DETAILS-

Test Date(s):	June 11 th - June 15 th ,2007
Test Engineer(s):	Sharmistha Modak
Temperature	65°F
Humidity	50%

SECTION 7.4 TEST DATA – SPECTRAL DENSITY MEASUREMENT (CHANNEL 0)

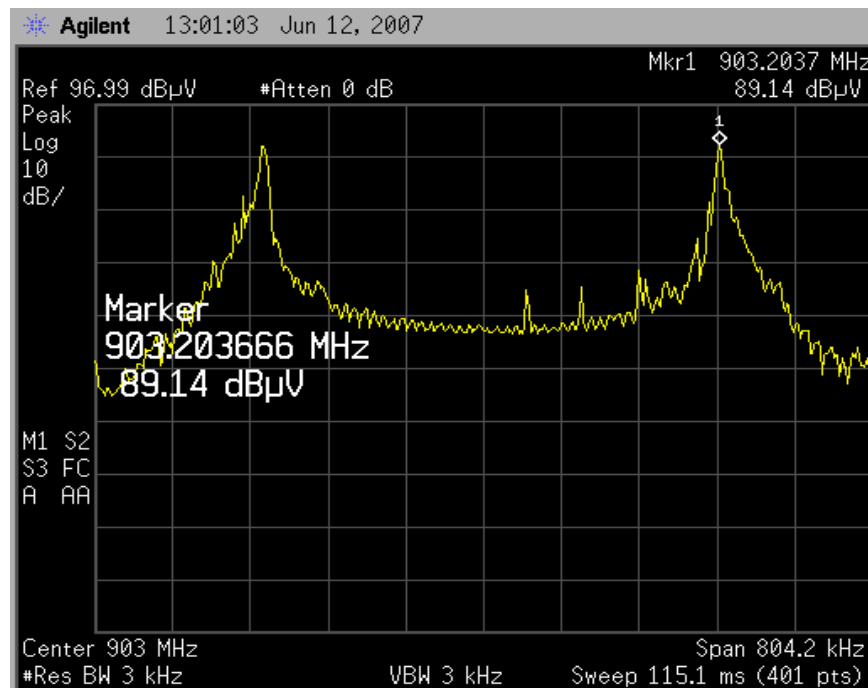


Figure 13: Plot of Spectral Density Measurement at Channel 0

Test-Data Summary – Spectral Density Measurement (Channel 0):

Maximum Field Strength = 89.14dBμV at 903.20MHz = 0.02864V at 903.20MHz

Power Spectral Density (alternate method) per FCC Appendix C

$$P = (Ed)^2 / (30G)$$

$$P = (0.02864 \times 3)^2 / (30 \times 7) = 0.0000351W = -14.54dBm$$

P = Power Spectral Density

E = Field strength = 89.14 dBμV

d = Distance (m) = 3m

G = Gain of the transmitting antenna = 7.00

Limit per 15.247(c) = 8dBm

SECTION 7.5 TEST DATA – SPECTRAL DENSITY MEASUREMENT (CHANNEL 16)

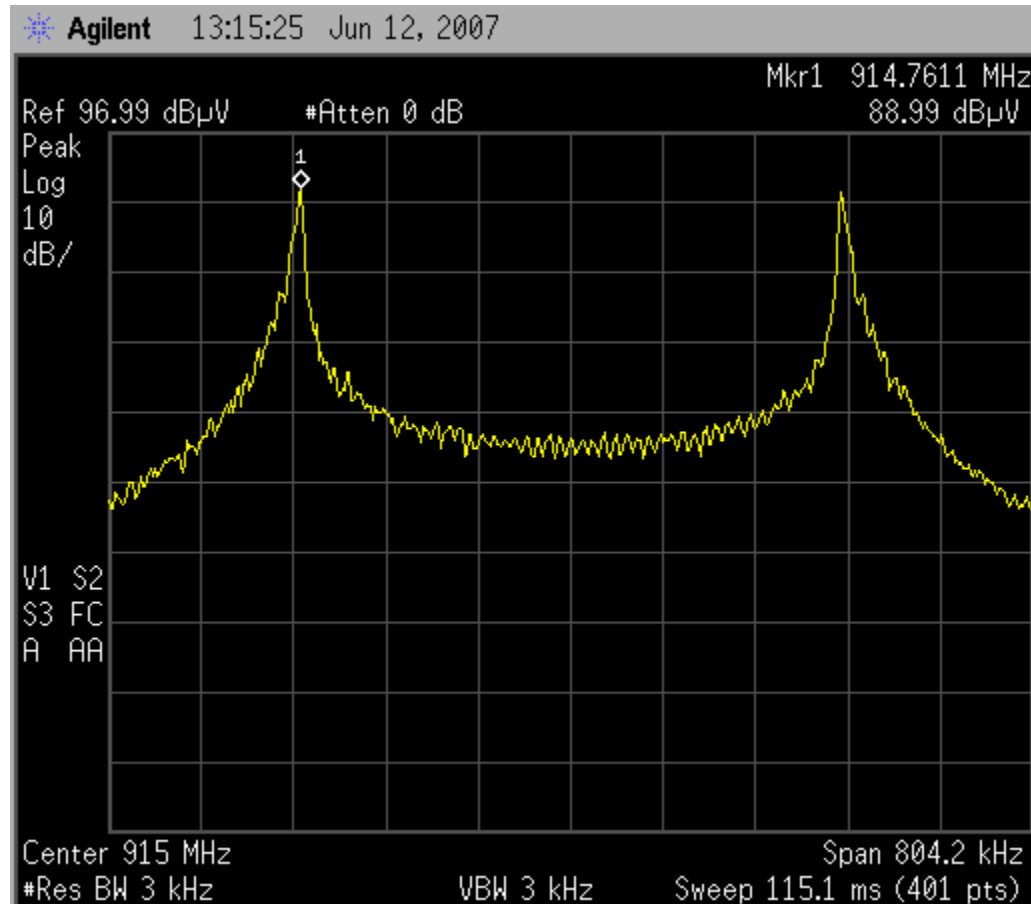


Figure 14: Plot of Spectral Density Measurement at Channel 16

Test-Data Summary – Spectral Density Measurement (channel 16):

Maximum Field Strength = 88.99dBμV = 0.02815V at 914.76MHz

Power Spectral Density (alternate method) per FCC Appendix C

$$P = (Ed)^2 / (30G)$$

$$P = (0.02815 \times 3)^2 / (30 \times 7) = 0.0000113W = -19.46dBm$$

P = Power Spectral Density

E = Field strength = 88.99 dBμV

d = Distance (m) = 3m

G = Gain of the transmitting antenna = 7.00

Limit per 15.247(c) = 8dBm

SECTION 7.6 TEST DATA – SPECTRAL DENSITY MEASUREMENT (CHANNEL 31)

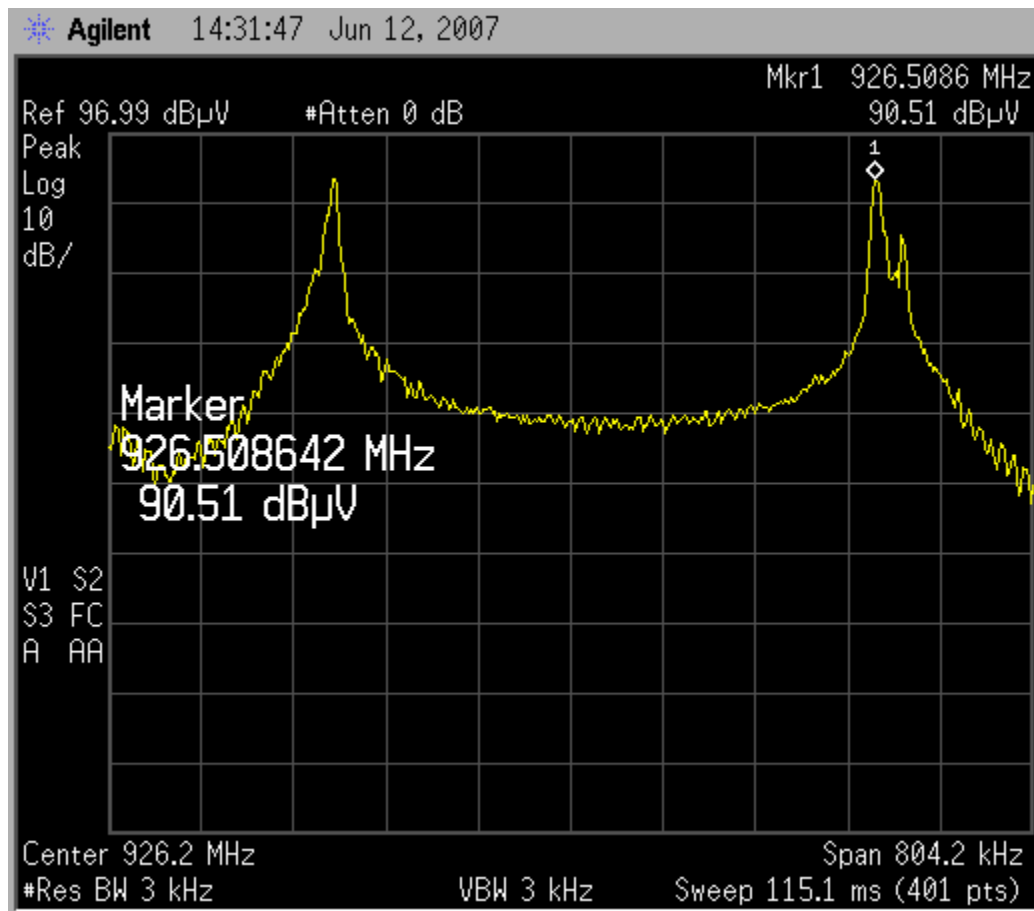


Figure 15: Plot of Spectral Density Measurement at Channel 31

Test-Data Summary – Spectral Density Measurement (Channel 31):

Maximum Field Strength = 90.51 dBμV at 926.50MHz = 0.0335V at 926.50MHz

Power Spectral Density (alternate method) per FCC Appendix C

$$P = (Ed)^2 / (30G)$$

$$P = (0.0335 \times 3)^2 / (30 \times 7) = 0.000048W = -13.18dBm$$

P = Power Spectral Density

E = Field strength = 90.51 dBμV

d = Distance (m) = 3m

G = Gain of the transmitting antenna = 7.00

Limit per 15.247(c) = 8dBm

PART 8 6dB BANDWIDTH per 47 CFR 15.247(a) (2)

SECTION 8.1 6DB BANDWIDTH MEASUREMENT

The EUT was set up on a wooden non-conductive tabletop, attached at the antenna connector to the measuring device. The EUT was configured to run in continuous mode during the tests. The measurement data below represents the maximum worst-case result from the measurement performed in accordance to the requirements of this section.

SECTION 8.2 SITE USED – 6DB BANDWIDTH MEASUREMENT

- ☐ Test Site 1 - Shielded Room: 16' x 12' x 9'
- ☐ Test Site 1 - 3m Open Field Radiated Site
- ☐ Test Site 1 - 10m Open Field Radiated Site
- ☐ Test Site 2 - Environmental Lab
- ☐ EMC Lab 1 - Test Laboratory
- ☒ Semi-Anechoic Absorber Lined Shielded Room

SECTION 8.3 ADMINISTRATIVE & ENVIRONMENTAL - 6DB BANDWIDTH DETAILS

Test Date(s):	June 11 th - June 15 th , 2007
Test Engineer(s):	Sharmistha Modak
Temperature	65°F
Humidity	50%

SECTION 8.4 TEST DATA – 6DB BANDWIDTH MEASUREMENT (CH 0)

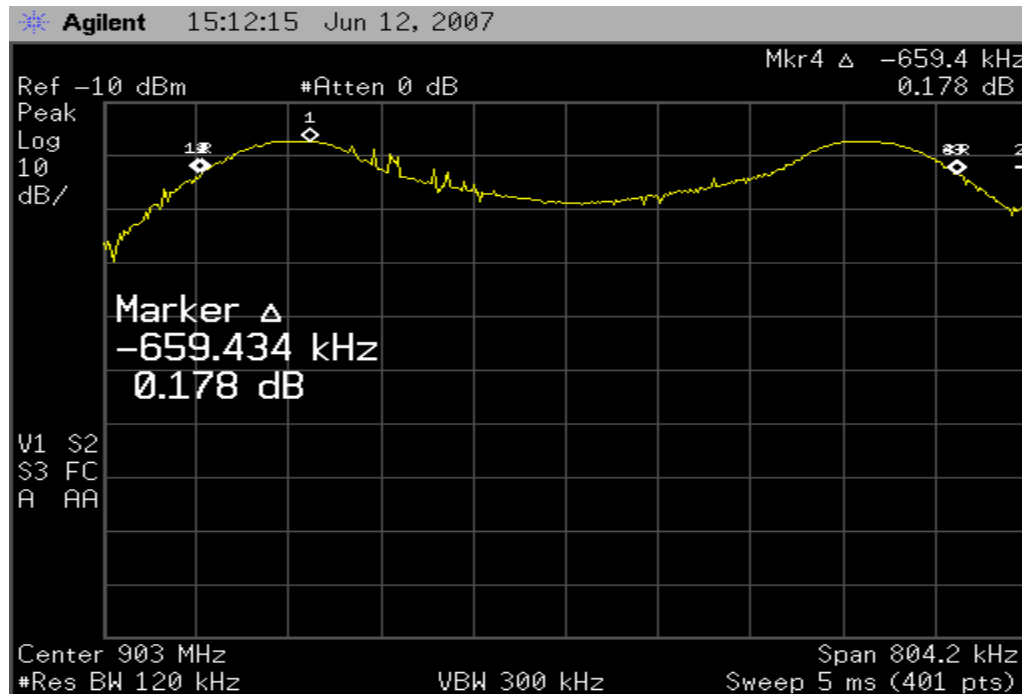


Figure 16: Plot of 6dB Bandwidth Measurement at Channel 0

Test-Data Summary – 6dB Bandwidth Measurement (Channel 0)

6dB Bandwidth = 659.4kHz
 Limit per 15.247(a)(2) = 500kHz minimum

SECTION 8.5 TEST DATA – 6DB BANDWIDTH MEASUREMENT (CH 16)

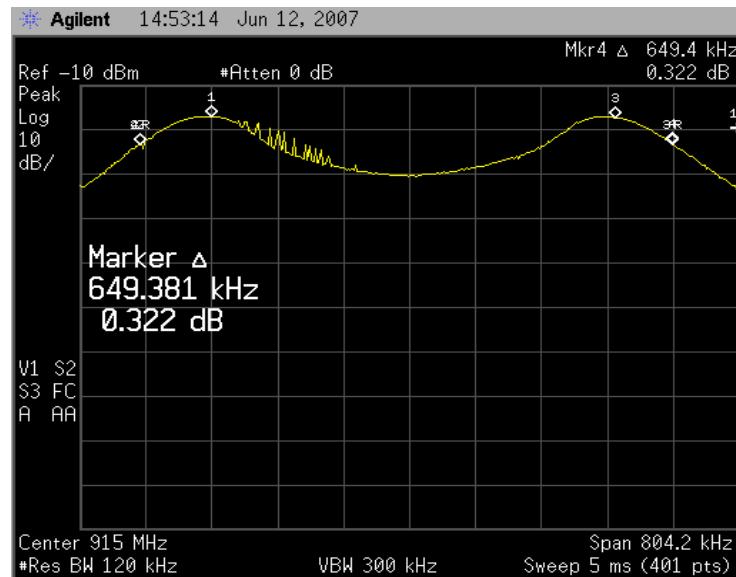


Figure 17: Plot of 6dB Bandwidth Measurement at Channel1 16

Test-Data Summary – 6dB Bandwidth Measurement (Channel16)

6dB Bandwidth = 649.38 kHz
Limit per 15.247(a)(2) = 500kHz minimum

SECTION 8.6 TEST DATA – 6DB BANDWIDTH MEASUREMENT (CH 31)

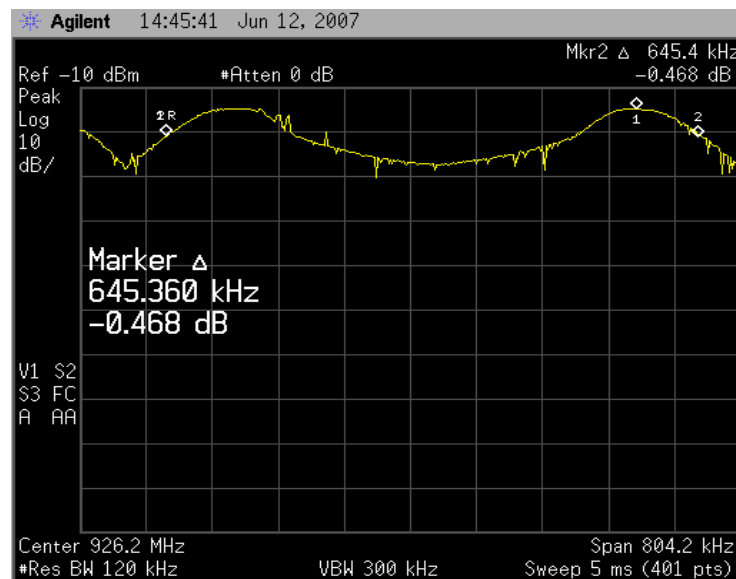


Figure 18: Plot of 6dB Bandwidth Measurement at Channel 31

Test-Data Summary – 6dB Bandwidth Measurement (Channel 31)

6dB Bandwidth = 645.36 kHz
Limit per 15.247(a)(2) = 500kHz minimum

PART 9 100kHz Bandwidth Out-of-Band Emissions per 47 CFR 15.247(a) (2)

SECTION 9.1 100KHZ BANDWIDTH OUT-OF-BAND EMISSIONS MEASUREMENT

The EUT was set up on a wooden non-conductive tabletop, attached at the antenna connector to the measuring device. The EUT was configured to run in continuous mode during the tests. The measurement data below represents the maximum worst-case result from the measurement performed in accordance to the requirements of this section.

SECTION 9.2 SITE USED – 100 KHZ BANDWIDTH OUT-OF-BAND MEASUREMENT

- ☐ Test Site 1 - Shielded Room: 16' x 12' x 9'
- ☐ Test Site 1 - 3m Open Field Radiated Site
- ☐ Test Site 1 - 10m Open Field Radiated Site
- ☐ Test Site 2 - Environmental Lab
- ☐ EMC Lab 1 - Test Laboratory
- ☒ Semi-Anechoic Absorber Lined Shielded Room

SECTION 9.3 ADMINISTRATIVE & ENVIRONMENTAL - (OUT OF BAND DETAILS)

Test Date(s):	June 11 th - June 15 th , 2007
Test Engineer(s):	Sharmistha Modak
Temperature	65°F
Humidity	50%

SECTION 9.4 TEST DATA – 100KHZ (OUT-OF-BAND) MEASUREMENT (CHANNEL 16) 30MHZ – 200MHZ

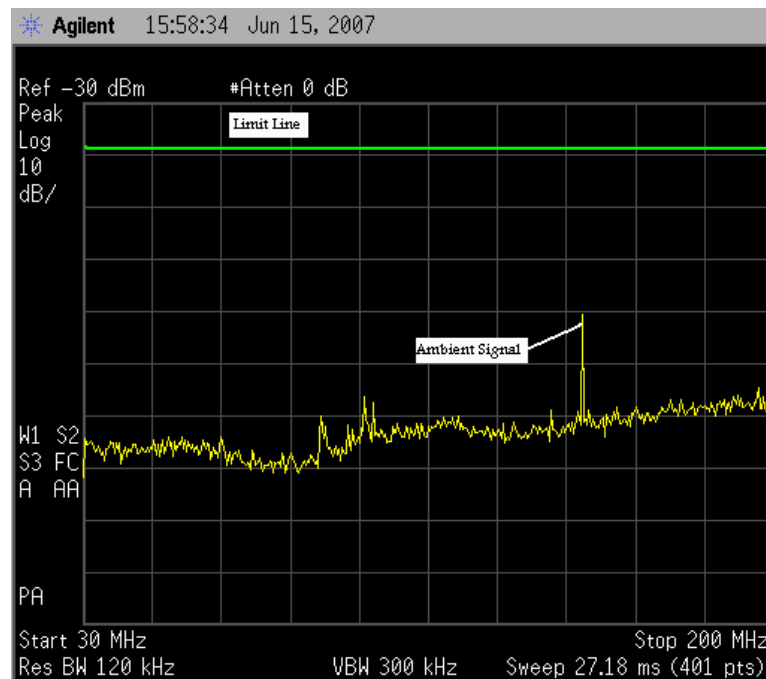


Figure 19: Plot of 100 kHz Bandwidth Out-of-Band Measurement Channel 16

Test-Data Summary – 100 kHz Bandwidth Out-of-Band Measurement :

Maximum Peak (30MHz – 200MHz) = Noise floor
20dB Limit (measured) per 15.247(c)= -39.40dBm

SECTION 9.5 TEST DATA – 100 KHZ BANDWIDTH (OUT-OF-BAND) (CHANNEL 0) 200MHZ-1 GHZ

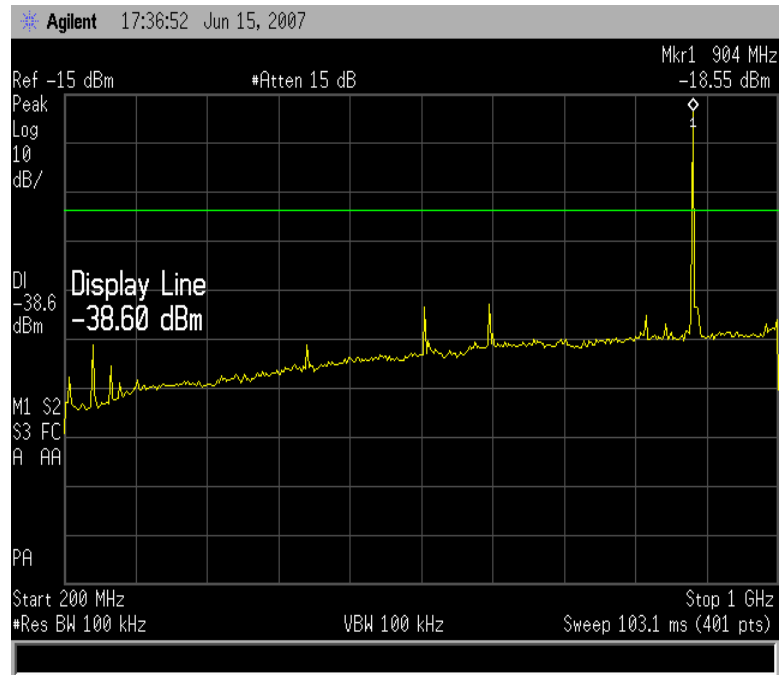


Figure 20: Plot of 100 kHz Bandwidth Out-of-Band Measurement at CH 0

Test-Data Summary – 100 kHz Bandwidth Out-of-Band Measurement (Channel 0) 200MHz – 1GHz

Maximum Peak (200MHz – 1GHz) = -18.55 dBm
 20dB Limit (measured) per 15.247(c) = 38.55 dBm

SECTION 9.6 TEST DATA – 100 KHZ BANDWIDTH (OUT-OF-BAND) (CHANNEL 16) 200MHZ-1GHZ

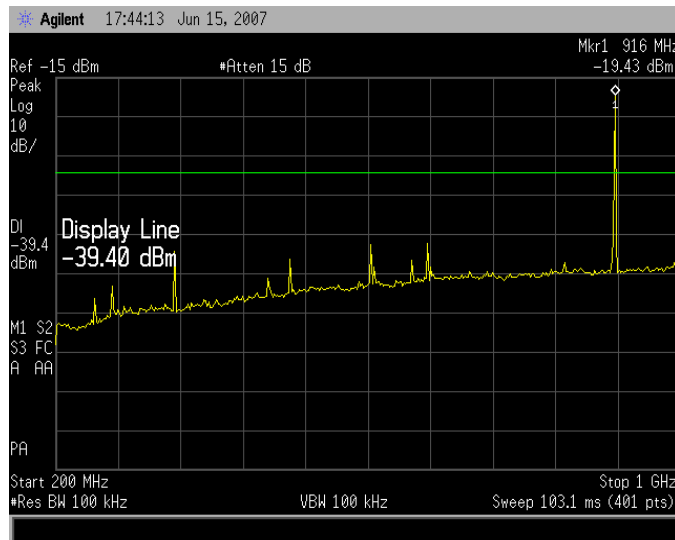


Figure 21 Plot of 100 kHz Bandwidth Out-of-Band Measurement at Channel 16

Test-Data Summary – 100 kHz Bandwidth Out-of-Band Measurement (Channel 16)

Maximum Peak (200MHz –1GHz) = -19.43dBm
 20dB Limit (measured) per 15.247(c) = -39.43dBm (Below 20dB limit)

SECTION 9.7 TEST DATA – 100 KHZ BANDWIDTH (OUT-OF-BAND) (CHANNEL 31) 200MHZ – 1GHZ.

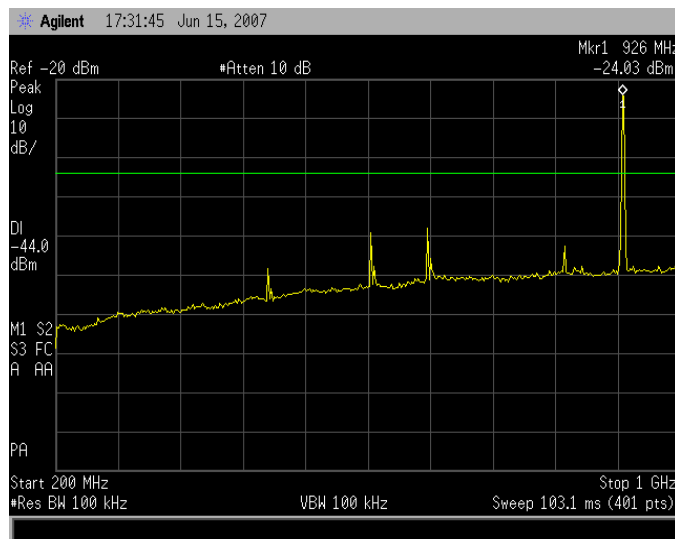


Figure 22 Plot of 100 kHz Bandwidth Out-of-Band Measurement at Channel 31

Test-Data Summary – 100 kHz Bandwidth Out-of-Band Measurement (Channel 31)

Maximum Peak (200MHz – 1GHz) = -24.03dBm
 20dB Limit (measured) per 15.247(c) = -44.03dBm

SECTION 9.8 TEST DATA – 100 KHZ BANDWIDTH (OUT-OF-BAND) (CHANNEL 0) 1GHZ – 2.5GHZ

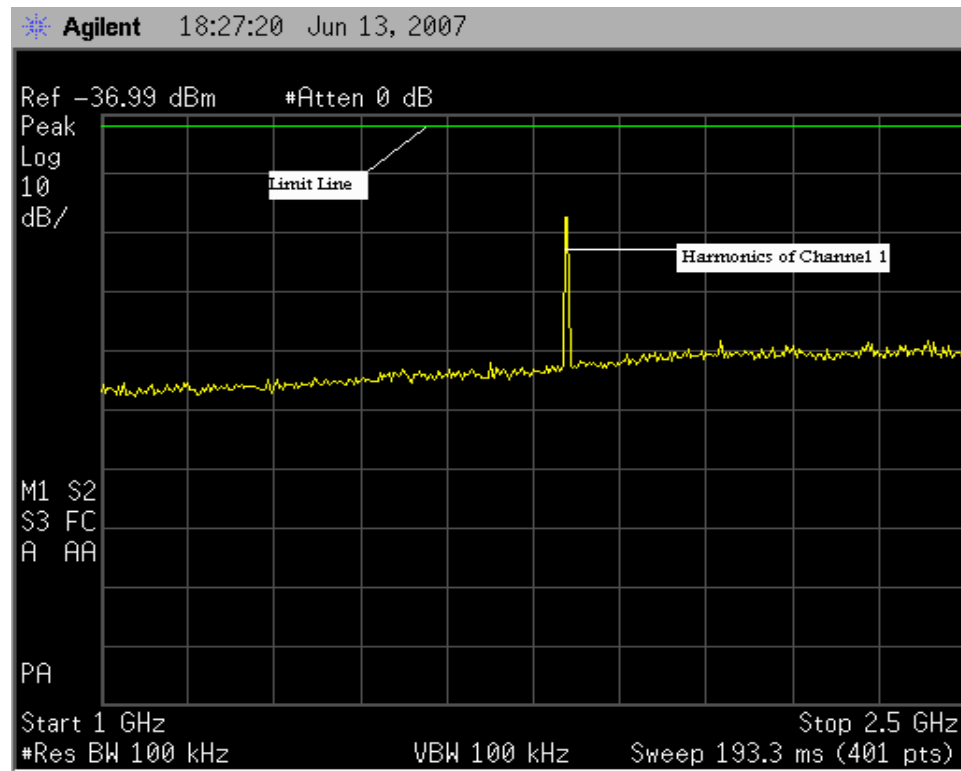


Figure 24: Plot of 100 kHz Bandwidth Out-of-Band Measurement at Channel 0

Test-Data Summary – 100 kHz Bandwidth Out-of-Band Measurement (Channel 0)

Maximum Peak (1GHz – 2.5GHz) = Below 20dB limit
20dB Limit (measured) per 15.247(c) = 38.55 dBm

SECTION 9.9 TEST DATA – 100 KHZ BANDWIDTH (OUT-OF-BAND) (CHANNEL 16) 1GHZ – 2.5GHZ

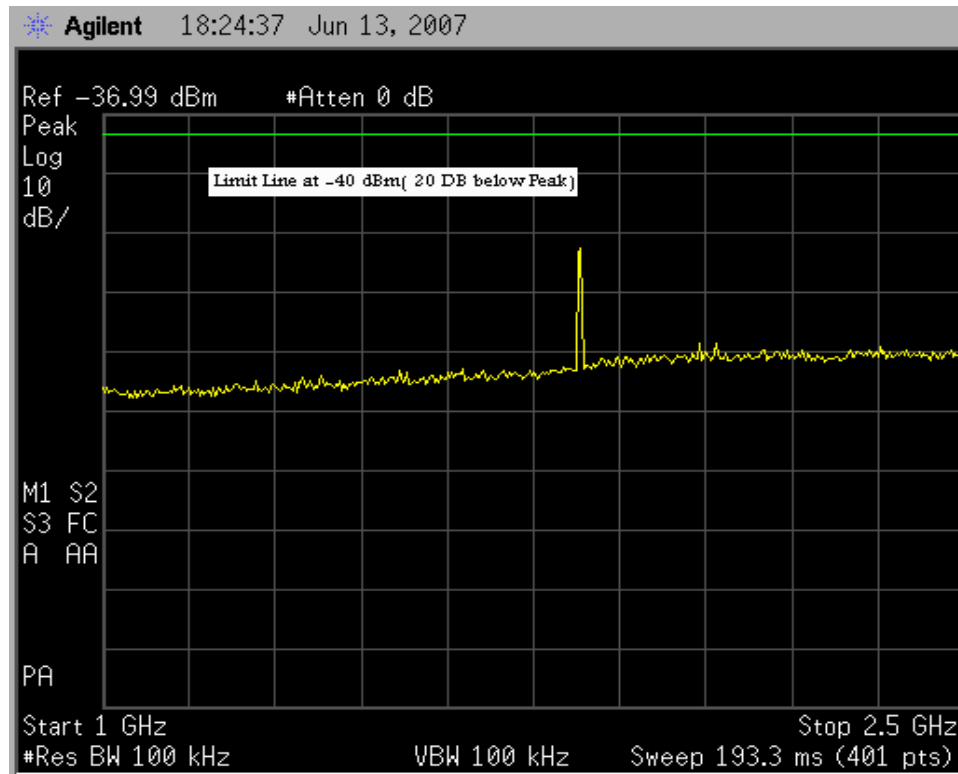


Figure 25: Plot of 100 kHz Bandwidth Out-of-Band Measurement at Channel 16

Test-Data Summary – 100 kHz Bandwidth Out-of-Band Measurement (Channel 16)

Maximum Peak (1GHz – 2.5GHz) = Below 20dB limit
 20dB Limit (measured) per 15.247(c) = -39.43dBm

SECTION 9.10 TEST DATA – 100 KHZ BANDWIDTH (OUT-OF-BAND) OF CHANNEL 31 (1GHZ –2.5GHZ)

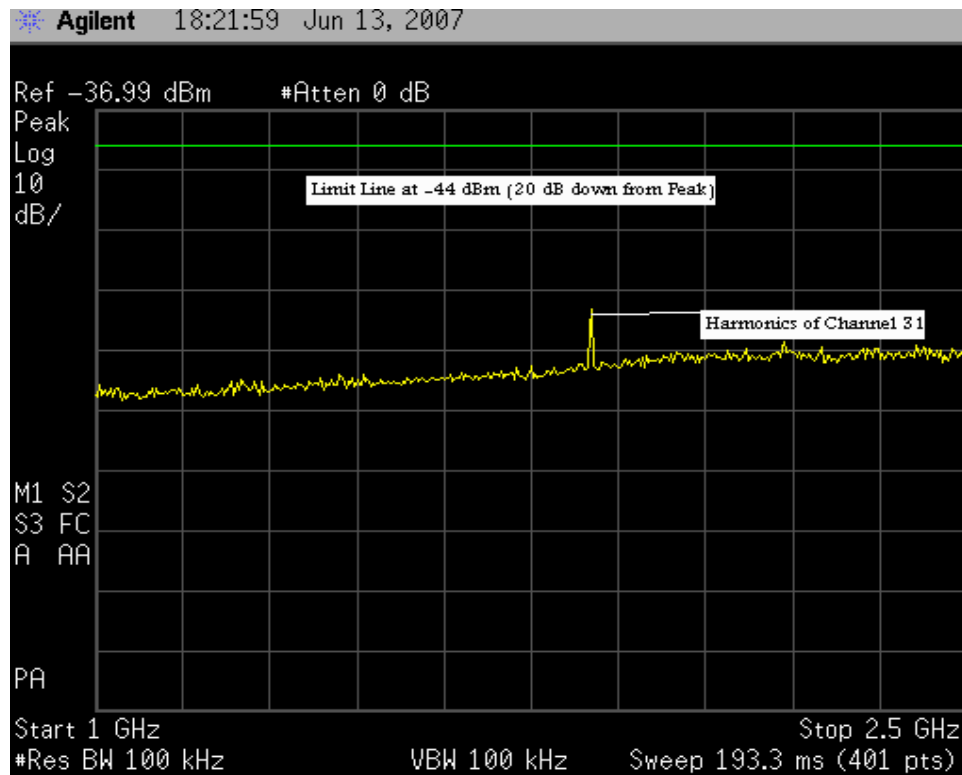


Figure 26: Plot of 100 kHz Bandwidth Out-of-Band Measurement at Channel 31

Test-Data Summary – 100 kHz Bandwidth Out-of-Band Measurement (Channel 31)

Maximum Peak (1GHz – 2.5GHz) = Below 20dB limit

20dB Limit (measured) per 15.247(c) = -44.03dBm

SECTION 9.11 TEST DATA – 100 KHZ BANDWIDTH (OUT-OF-BAND) OF CHANNEL 16 (5GHZ – 10GHZ)

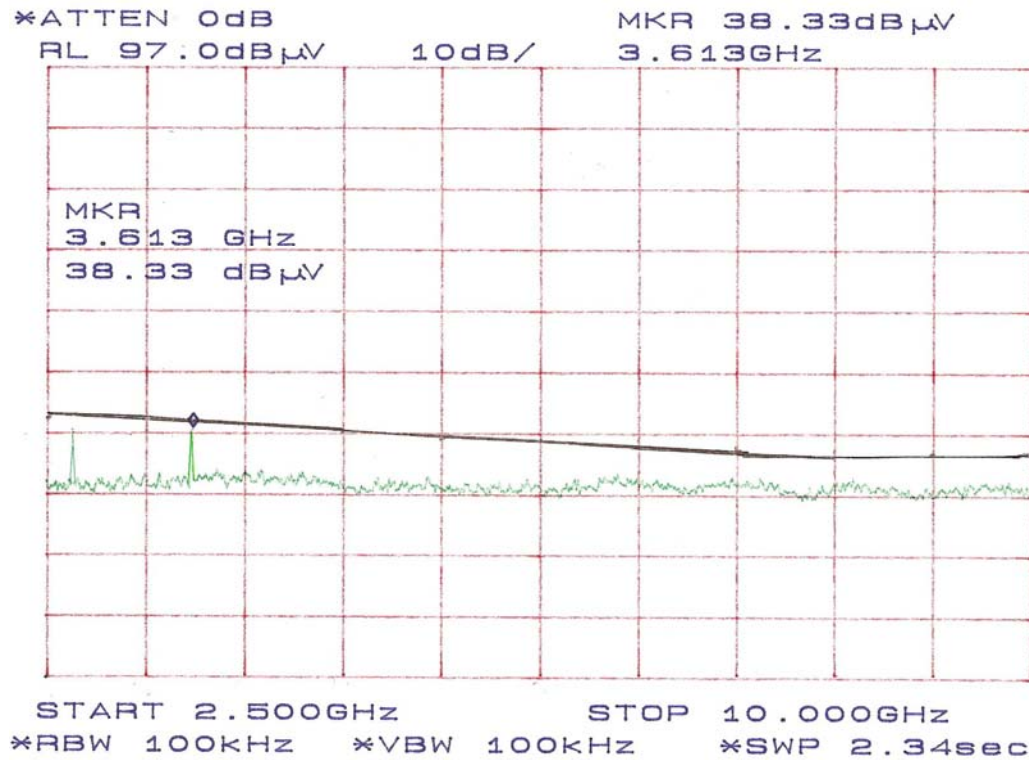


Figure 27: Plot of 100 kHz Bandwidth Out-of-Band Measurement at Channel 16

Test-Data Summary – 100 kHz Bandwidth Out-of-Band Measurement of Channel 16

Maximum Peak (2.5GHz – 5GHz) = 38.33 dBμV
20dB Limit (measured) per 15.247(c) = 39 dBμV (Corrected with Antenna Factor+ cable loss)

PART 10 SPURIOUS/HARMONIC EMISSIONS IN THE RESTRICTED BANDS

SECTION 10.1 TEST SPECIFICATION:

FCC PART 15 SECTION 47 CFR 15.209
FCC PART 15 SECTION 47 CFR 15.247(c)

SECTION 10.2 TEST RANGE – SPURIOUS/HARMONICS EMISSIONS:

The measurement range investigated was from 30 MHz to 10GHz.

SECTION 10.3 SITE USED – SPURIOUS/HARMONICS EMISSIONS MEASUREMENTS

- ☐ Test Site 1 - Shielded Room: 16' x 12' x 9'
- ☐ Test Site 1 - 3m Open Field Radiated Site
- ☐ Test Site 2 - Environmental Lab
- ☐ EMC Lab 1 - Test Laboratory
- ☒ Semi-Anechoic Absorber Lined Shielded Room

SECTION 10.4 ADMINISTRATIVE AND ENVIRONMENTAL DETAILS

Test Date:	June 11 th - June 15 th ,2007
Test Engineer:	Sharmistha Modak
Temperature	65°F
Humidity	50%

SECTION 10.5 TEST DATA – SPURIOUS EMISSIONS (BELOW 1 GHZ)

The plots below shows the highest amplitudes of the spurious RF radiated emissions from the equipment under test.

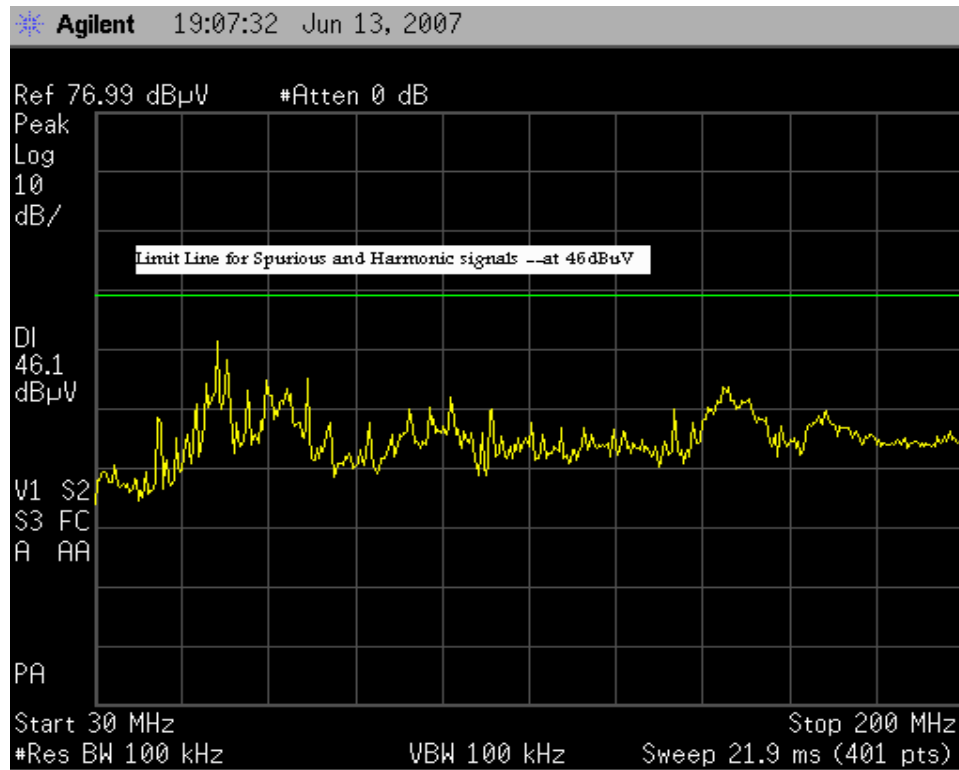


Figure 28: Plot of Spurious and Harmonics Measurement at Channel 0

No emissions of significant level were observed between 30MHz – 200MHz

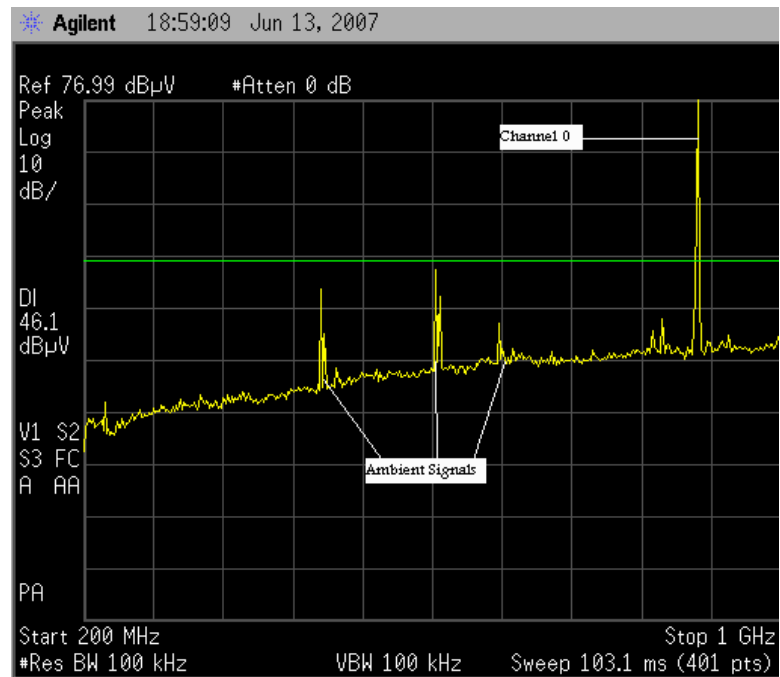


Figure 29: Plot of Spurious and Harmonics Measurement at Channel 0

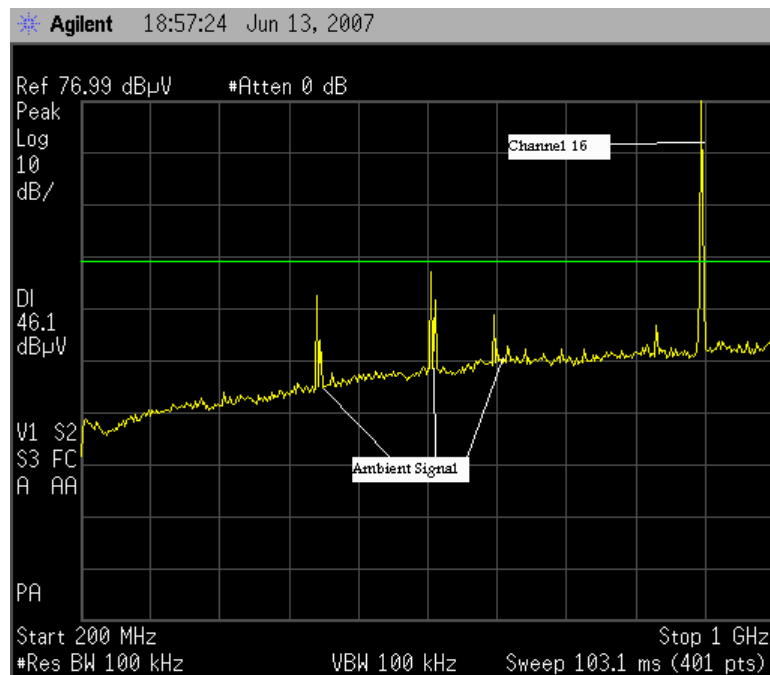


Figure 30: Plot of Spurious and Harmonics Measurement at Channel 16

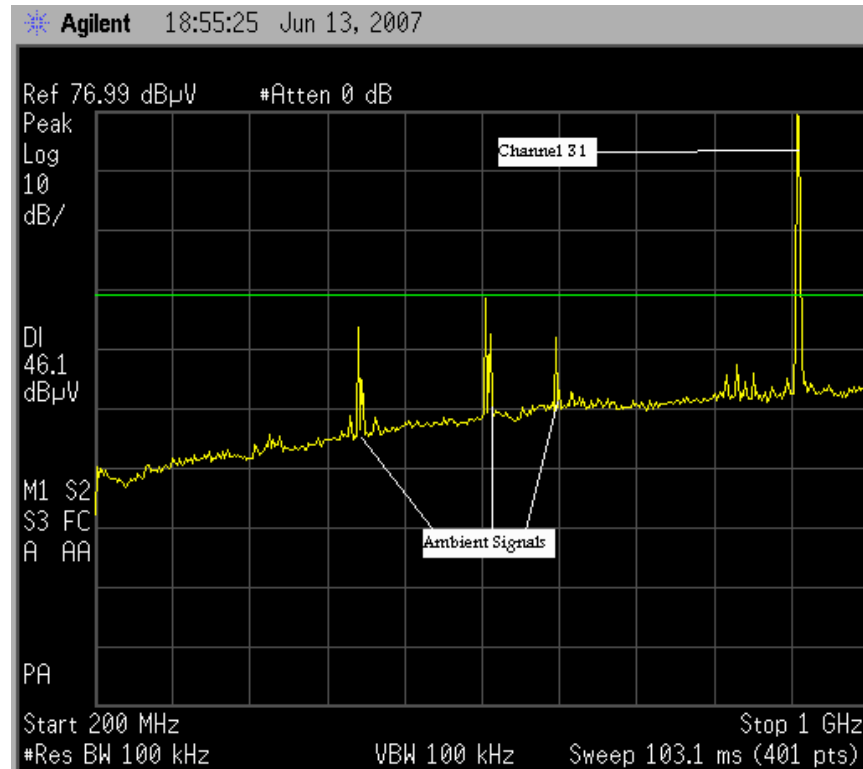


Figure 31: Plot of Spurious and Harmonics Measurement at Channel 31

Remarks:

Green Line represents the Limit Line

No emissions of significant level were observed between 200MHz – 1GHz

SECTION 10.6 TEST DATA – SPURIOUS EMISSIONS (ABOVE 1 GHZ)

Test Plot – Spurious and Harmonics Emissions (Above 1 GHz)

The plot below shows the highest amplitudes of the spurious RF radiated emissions from the equipment under test at various antenna heights, antenna polarization, and EUT orientations.

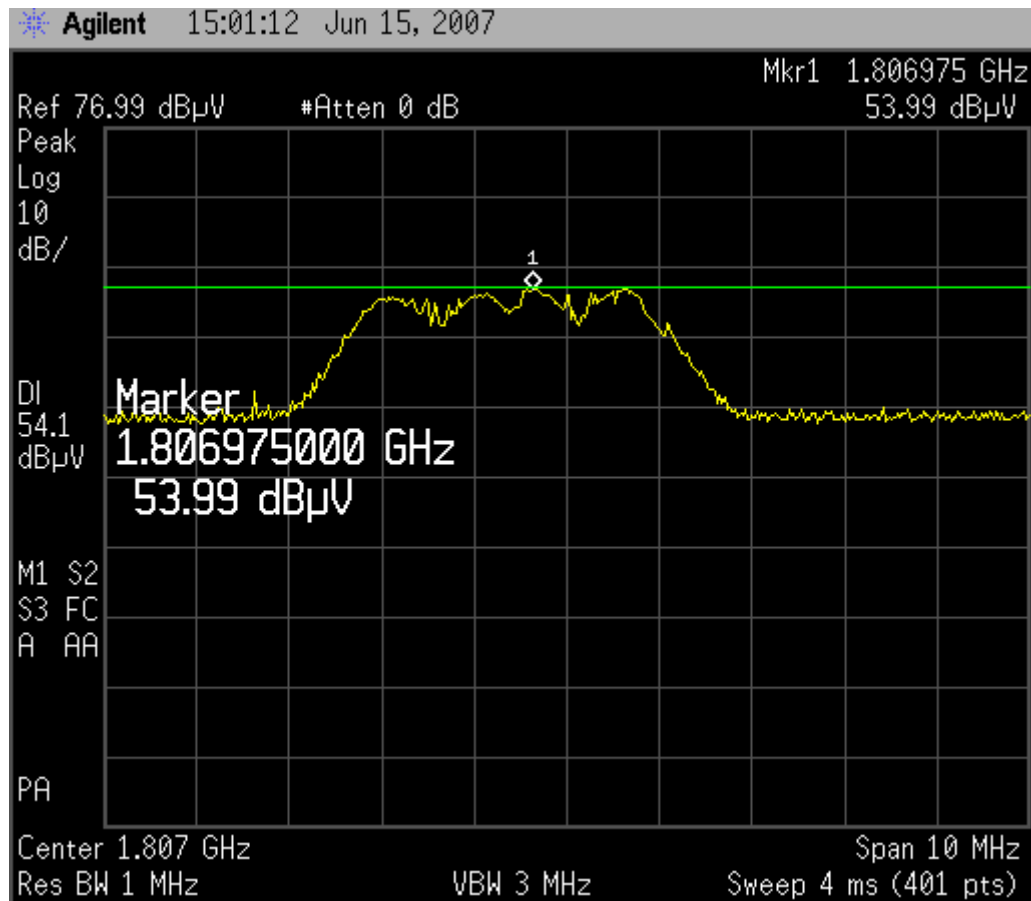


Figure 23: Plot of 1st Harmonics Measurement of Channel 0 (Green line represents Limit)



Figure 24: Plot of 1st Harmonics Measurement of Channel 31

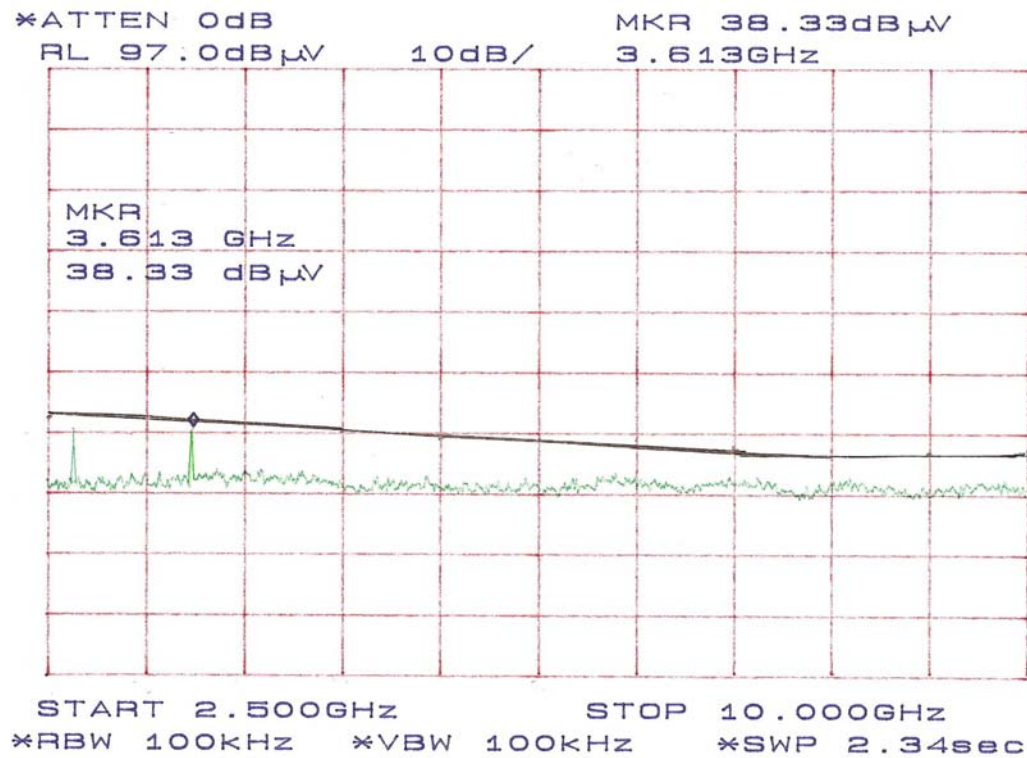


Figure 25: 2nd Harmonics of Channel 16 (Black Line represents Limit)

Remark:

No emission of significant level was observed between 1GHz -10 GHz

SECTION 10.7 TEST DATA SUMMARY

The margin is calculated as follows:

Margin = Corrected Amplitude - Limit; where Corrected Amplitude = Amplitude + Cable Loss + Antenna Factor.

SECTION 10.8 SPURIOUS PHOTOGRAPHS

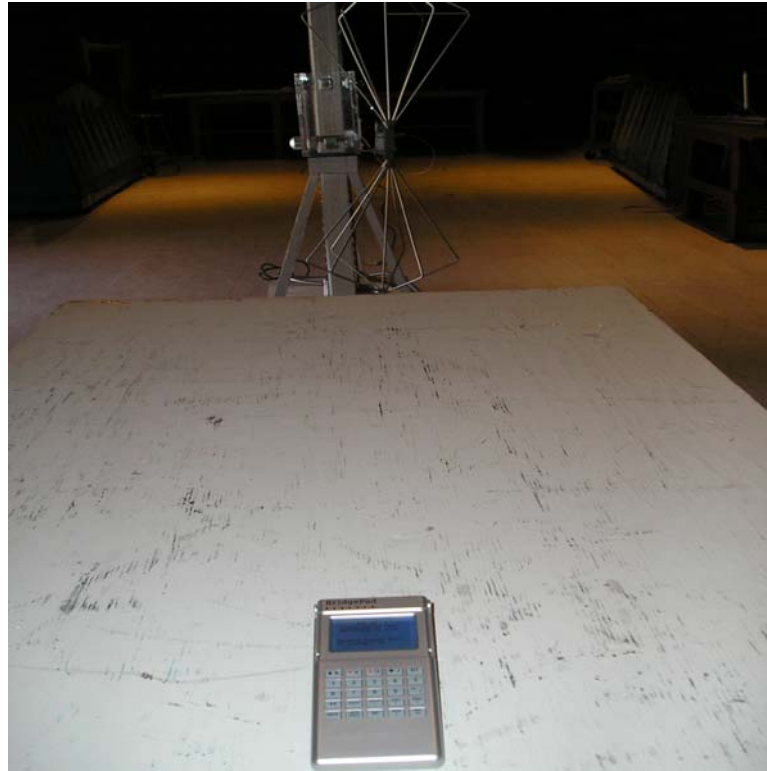


Figure 26: Spurious Emissions Front View (Below 1 GHz)

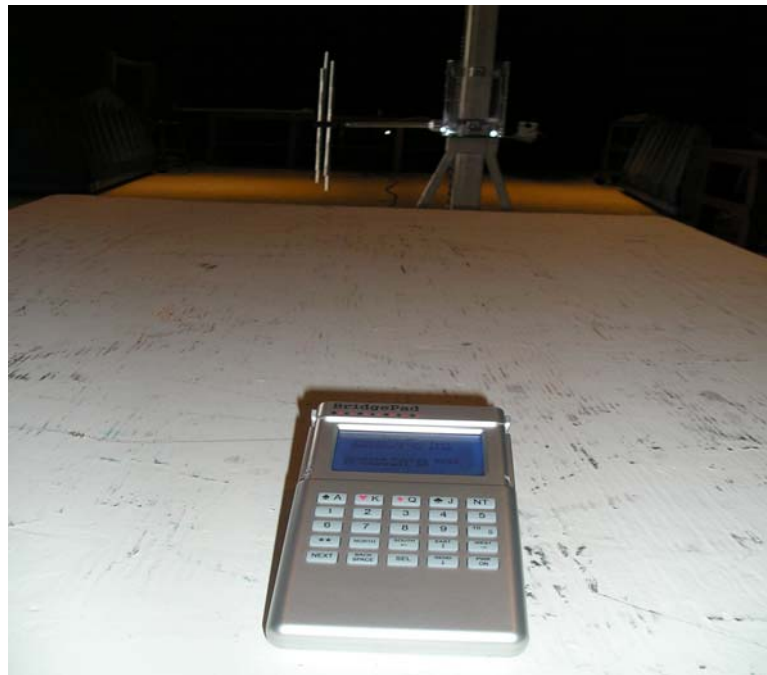


Figure 27: Spurious Emissions Front View (Below 1 GHz)

Spurious Emissions (cont)



Figure 28: Spurious Emissions Rear View (Above 1 GHz)

SECTION 10.9 CONCLUSION

The BridgePad meets the requirements of the test reference for Spurious and Restricted Bands emissions levels specified in the 47CFR15.209

PART 11 Antenna Requirements

An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the applicant can be used with this device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with this requirement.

Remarks:

The unit does not have unique connector for Antenna. The antenna is inside the unit and it is permanently attached.

PART 12 APPENDICES

A EUT TECHNICAL SPECIFICATION

Applicant	QuickPad Technology
General Description	BridgePad RF
Model	BpadRF
Dimension	H=3/4 " ,L=6 " ,W= 3 " , Weight=6.3 Oz
Power Input	3Vdc

B. EUT PHOTOGRAPHS.



Figure 29: EUT Front View



Figure 30: EUT Rear View



Figure 31: Component (View Back of LCD)



Figure 32: Component View (Back of Keypad)

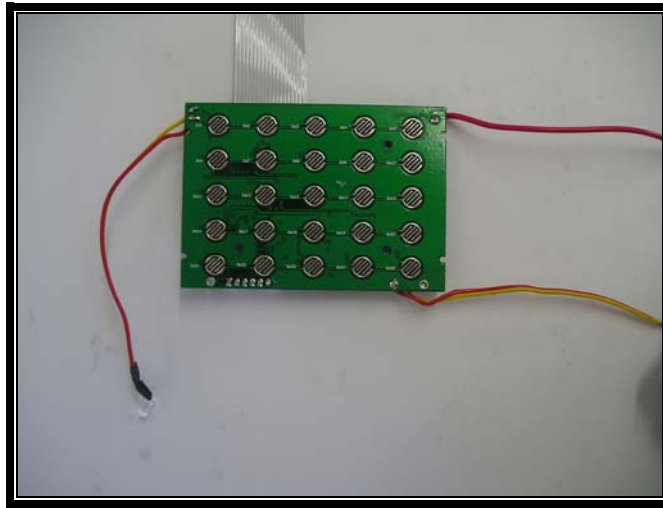


Figure 33: Component View (Front of Keypad)

C. MODIFICATION LETTER

To Whom It May Concern:

This is to certify that no modifications were necessary for BridgePad to comply with the requirements of the standard listed below.

FCC Rules and Regulations per 47 CFR 15.247

It is the manufacturer's responsibility to ensure that additional production units of the BridgePad are manufactured with identical electrical and mechanical characteristics.

For further information, please contact the manufacturer at:

ATTN:

Henryk Szejnwald

QuickPad Technology
465 Fairchild Dr. # 103
Mountain View, CA 94043
United States
Tel: +1 (650) 961-9114

email : Henryk@quickpad.com