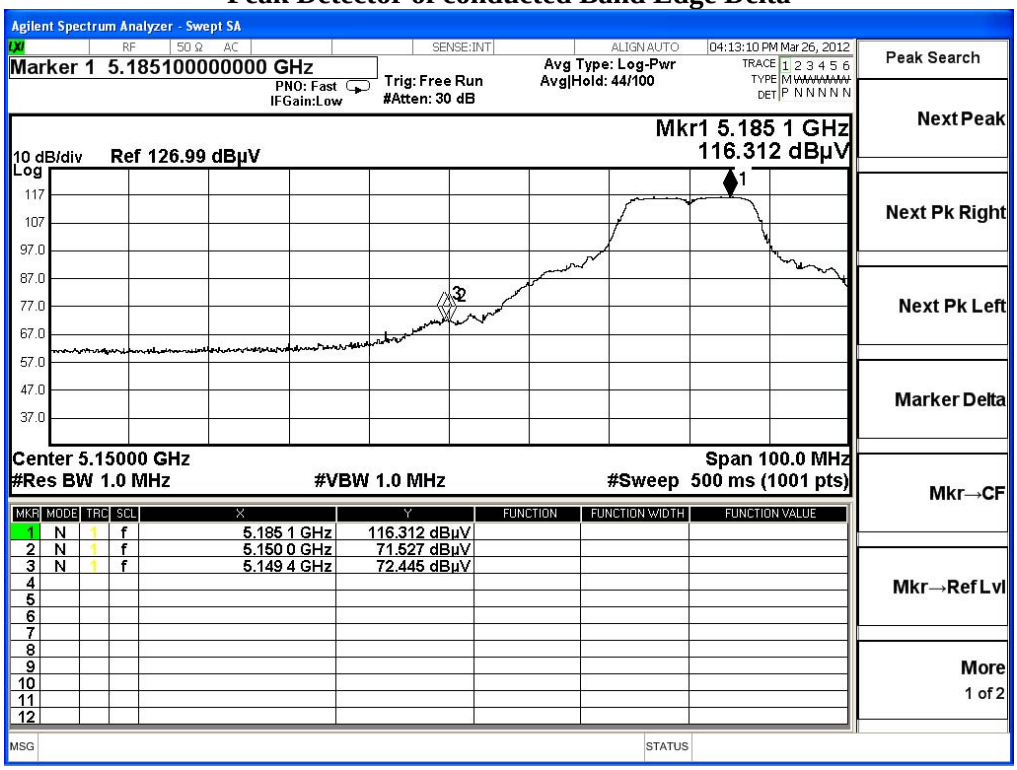
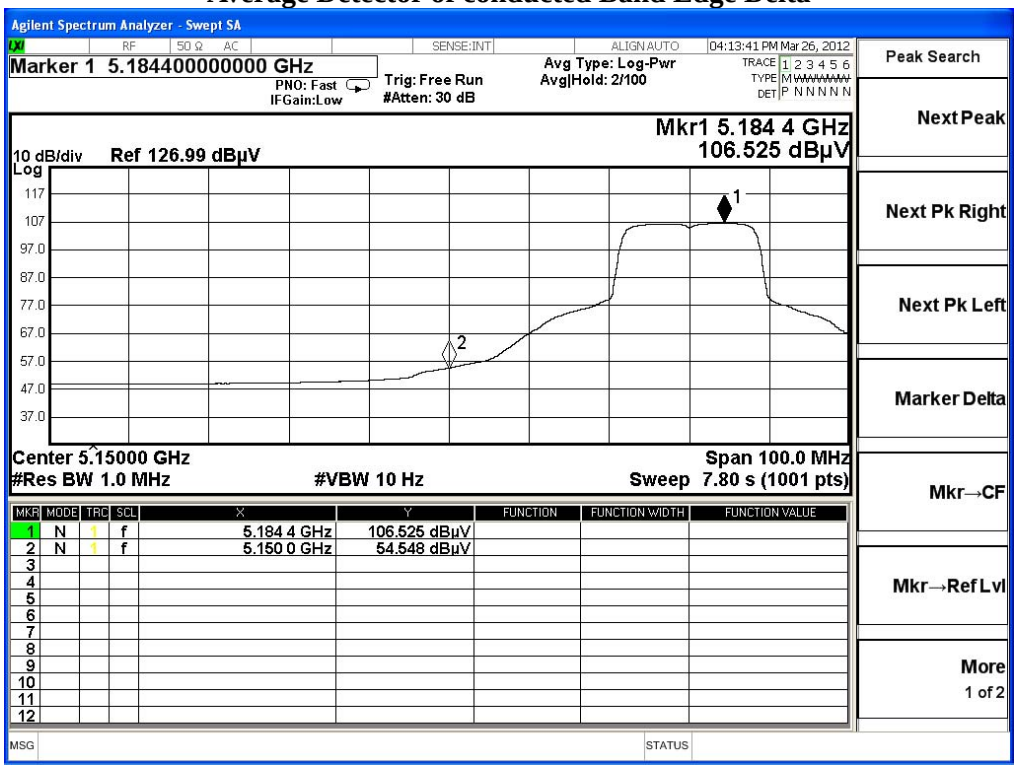
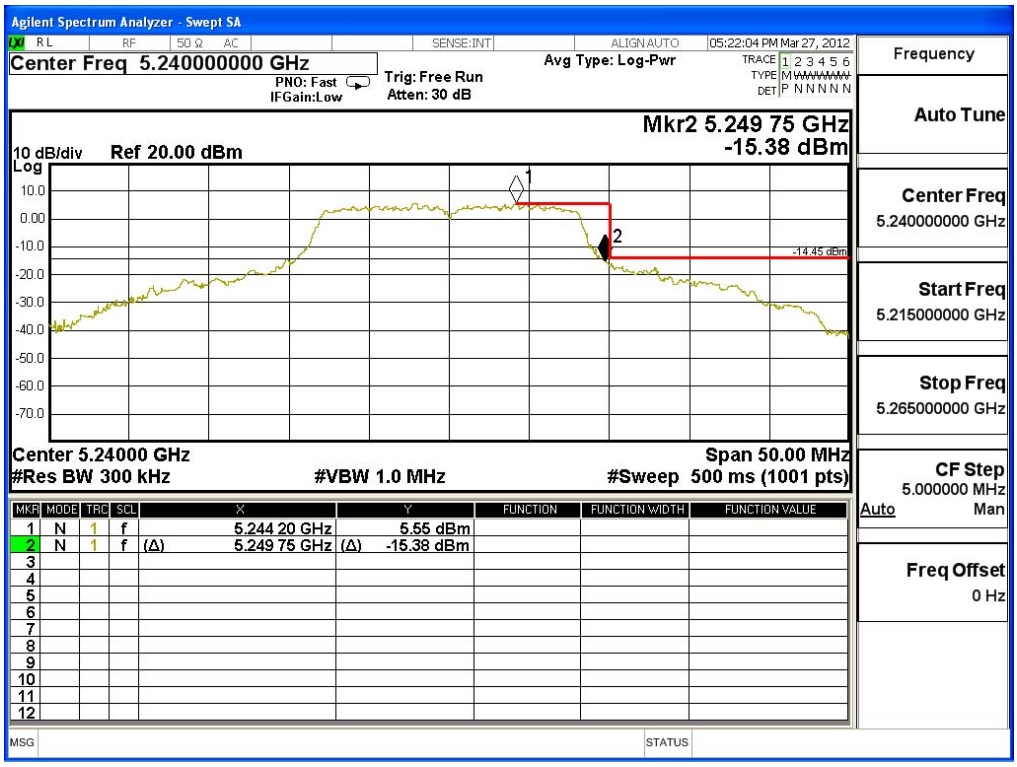
Peak Detector of conducted Band Edge Delta



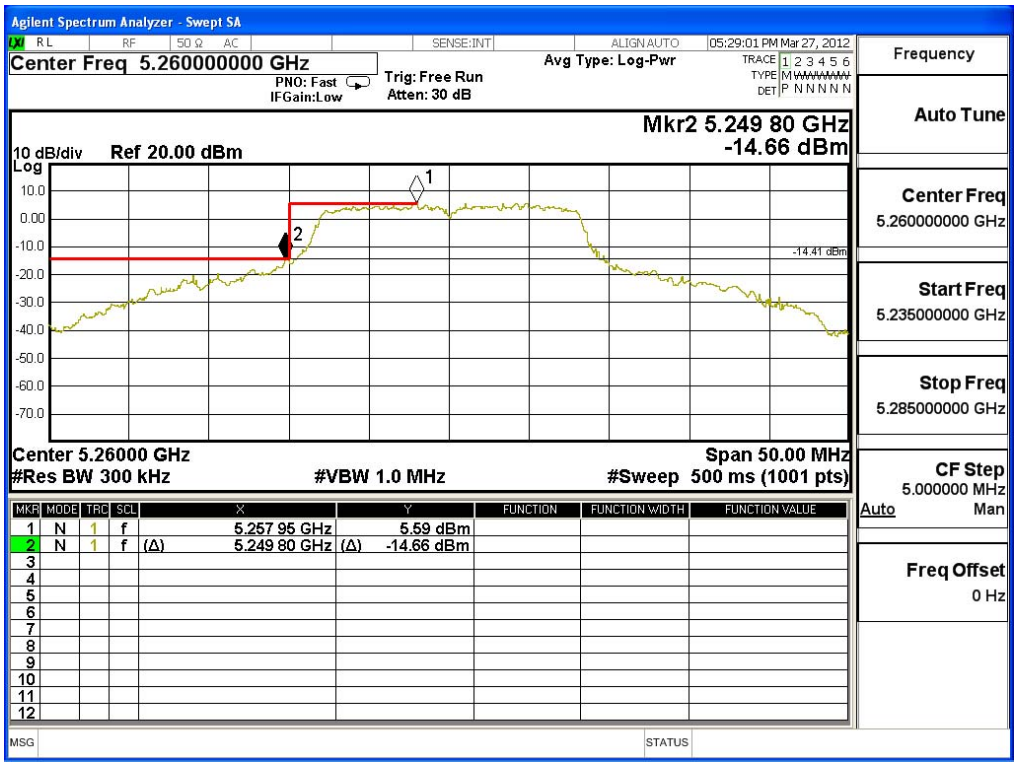
Average Detector of conducted Band Edge Delta



Product : Nport Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps)-Channel 48



Product : Nport Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps)-Channel 52



Product : Nport Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) -Channel 64

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Detector
Horizontal	5320	35.635	56.39	92.024	Peak
Horizontal	5320	35.635	46.25	81.884	Average
Vertical	5320	35.635	68.15	103.784	Peak
Vertical	5320	35.635	57.84	93.474	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Requiqment Limit (dBuV/m)	Detector
Horizontal	5353	92.024	46.332	45.692	74.000	Peak
Horizontal	5350	81.884	52.233	29.651	54.000	Average
Vertical	5353	103.784	46.332	57.452	74.000	Peak
Vertical	5350	93.474	52.233	41.241	54.000	Average

Note:

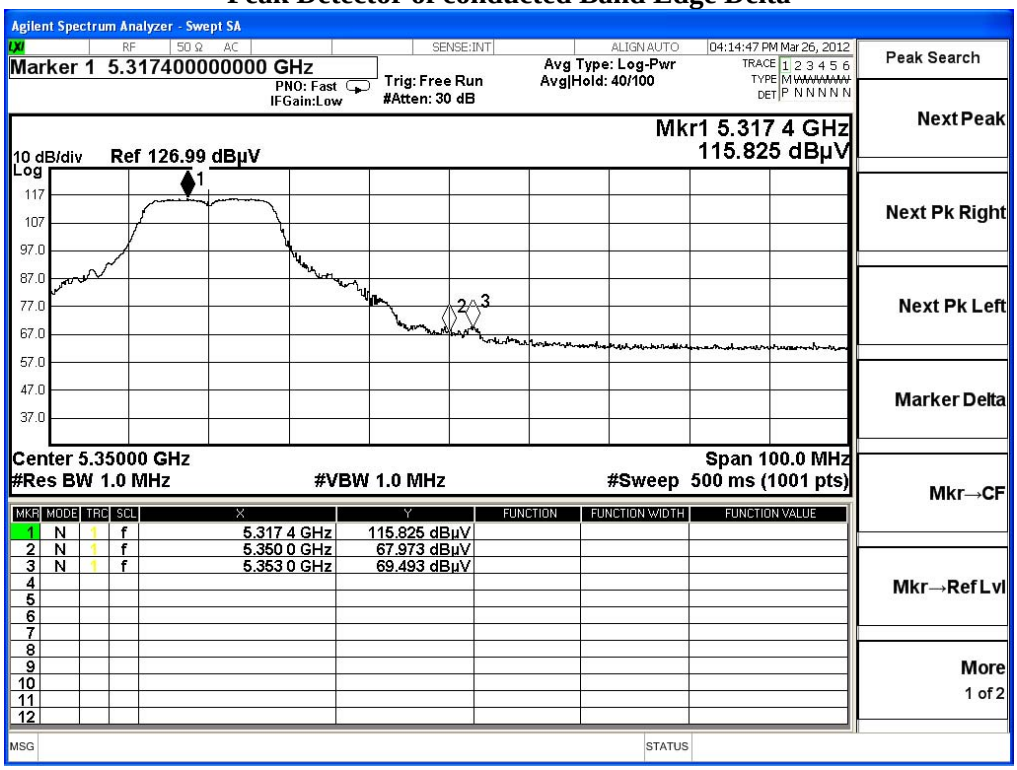
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

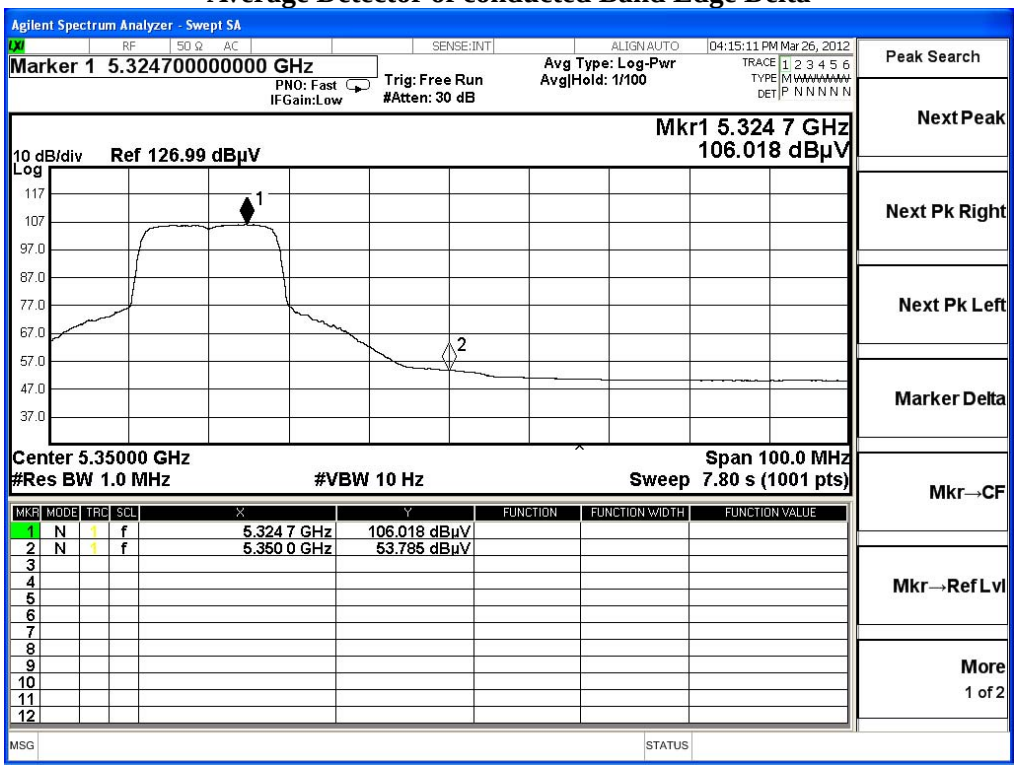
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Nport Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) -Channel 100

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Detector
Horizontal	5500	36.684	57.25	93.934	Peak
Horizontal	5500	36.684	47.07	83.754	Average
Vertical	5500	38.145	65.64	103.785	Peak
Vertical	5500	38.145	55.41	93.555	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Requiqment Limit (dBuV/m)	Detector
Horizontal	5457.7	93.934	50.457	43.477	74.000	Peak
Horizontal	5460	83.754	54.964	28.79	54.000	Average
Vertical	5457.7	103.785	50.457	53.328	74.000	Peak
Vertical	5460	93.555	54.964	38.591	54.000	Average

Note:

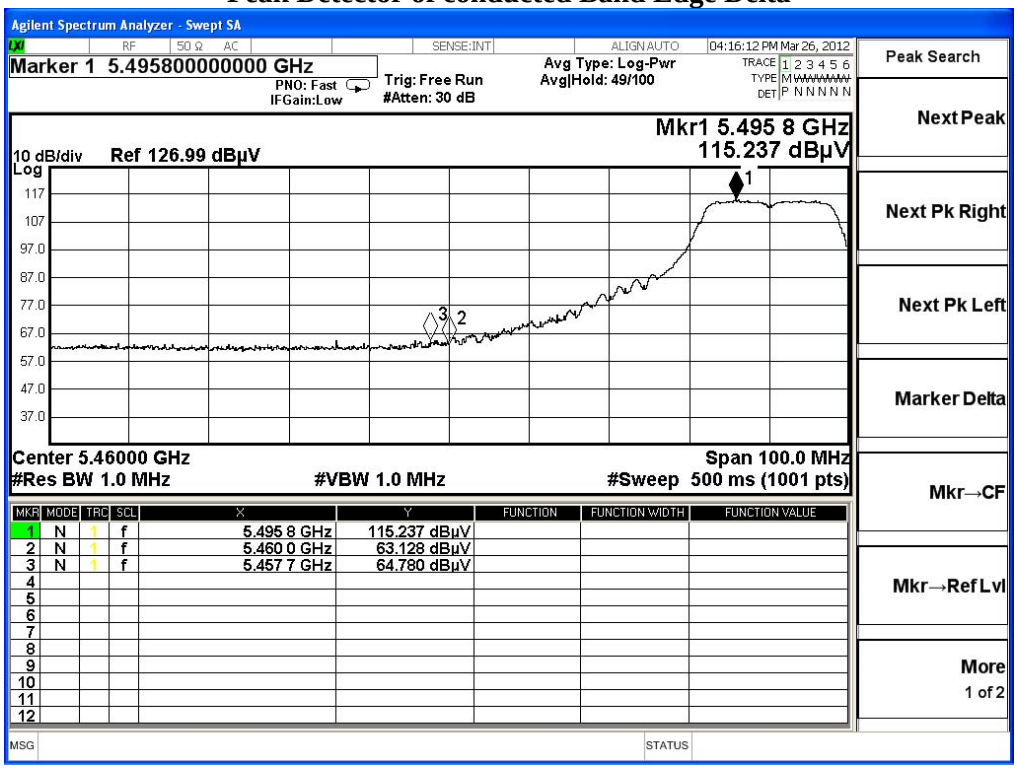
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

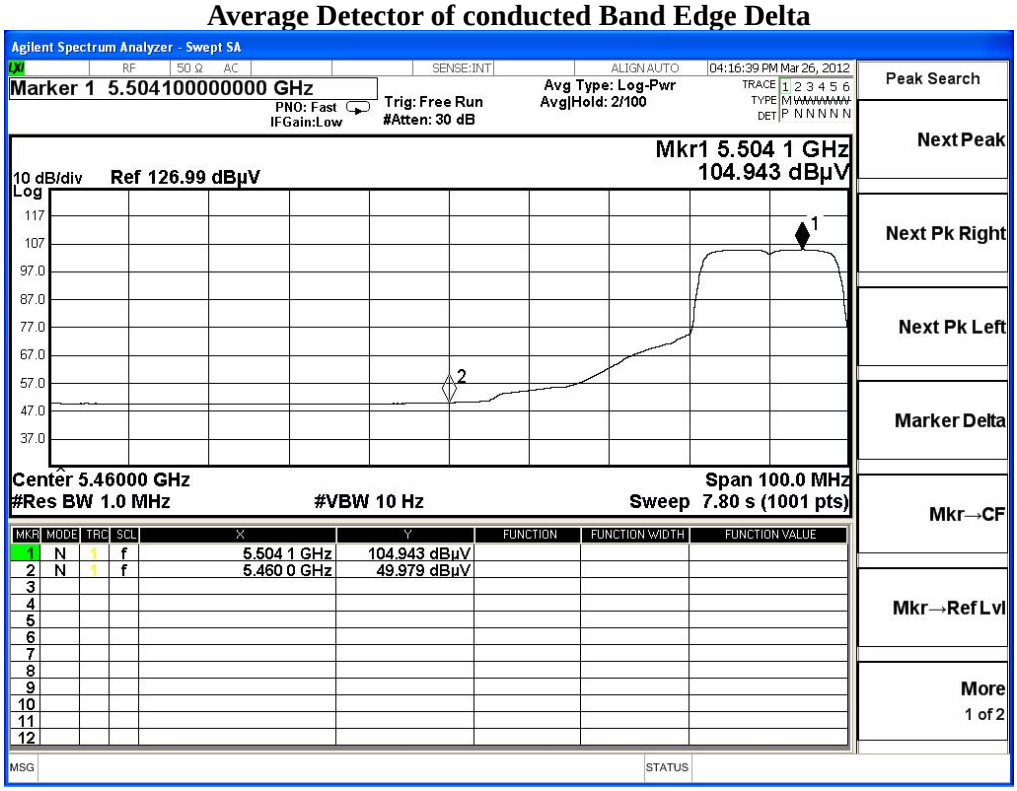
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Nport Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) -Channel 100

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-69.660	-51.326	-24.326	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5470.000	19.335	-67.970	-48.635	-21.635	-27.000	Pass

Product : Nport Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) -Channel 140

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-69.150	-50.501	-23.501	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	19.372	-66.720	-47.348	-20.348	-27.000	Pass

8. Frequency Stability

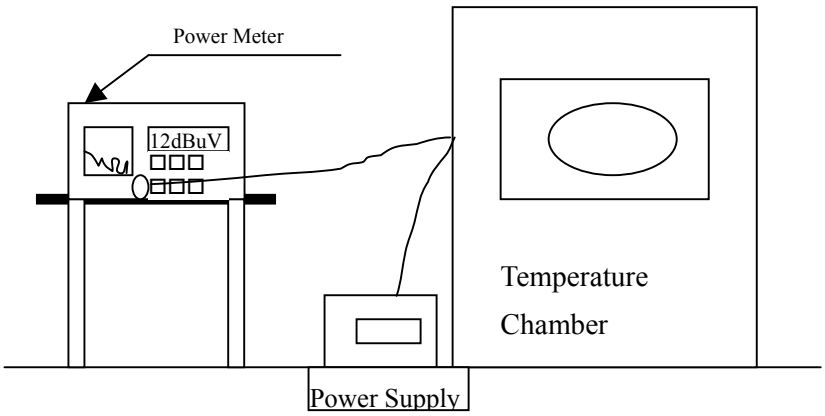
8.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2011
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2011
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2012

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

8.2. Test Setup



8.3. Limits

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified

8.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

8.5. Uncertainty

± 150 Hz

8.6. Test Result of Frequency Stability

Product : Nport Device Server
Test Item : Frequency Stability
Test Site : Temperature Chamber
Test Mode : Carrier Wave

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) oC	Vnom (110)V	36	5180.0000	5180.0064	-0.0064
		44	5220.0000	5220.0095	-0.0095
		48	5240.0000	5240.0099	-0.0099
		52	5260.0000	5260.0085	-0.0085
		60	5300.0000	5300.0089	-0.0089
		64	5320.0000	5320.0100	-0.0100
		100	5500.0000	5500.0096	-0.0096
		120	5600.0000	5600.0099	-0.0099
		140	5700.0000	5700.0095	-0.0095
Tnom (50) oC	Vnom (126.5)V	36	5180.0000	5180.0058	-0.0058
		44	5220.0000	5220.0095	-0.0095
		48	5240.0000	5240.0098	-0.0098
		52	5260.0000	5260.0085	-0.0085
		60	5300.0000	5300.0085	-0.0085
		64	5320.0000	5320.0100	-0.0100
		100	5500.0000	5500.0068	-0.0068
		120	5600.0000	5600.0087	-0.0087
		140	5700.0000	5700.0095	-0.0095
Tnom (50) oC	Vnom (93.5)V	36	5180.0000	5180.0058	-0.0058
		44	5220.0000	5220.0095	-0.0095
		48	5240.0000	5240.0098	-0.0098
		52	5260.0000	5260.0085	-0.0085
		60	5300.0000	5300.0085	-0.0085
		64	5320.0000	5320.0100	-0.0100
		100	5500.0000	5500.0068	-0.0068
		120	5600.0000	5600.0097	-0.0097
		140	5700.0000	5700.0095	-0.0095

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (0) oC	Vnom (126.5)V	36	5180.0000	5180.0100	-0.0100
		44	5220.0000	5220.0095	-0.0095
		48	5240.0000	5240.0094	-0.0094
		52	5260.0000	5260.0085	-0.0085
		60	5300.0000	5300.0089	-0.0089
		64	5320.0000	5320.0100	-0.0100
		100	5500.0000	5500.0093	-0.0093
		120	5600.0000	5600.0098	-0.0098
		140	5700.0000	5700.0095	-0.0095
Tnom (0) oC	Vnom (93.5)V	36	5180.0000	5180.0100	-0.0100
		44	5220.0000	5220.0095	-0.0095
		48	5240.0000	5240.0094	-0.0094
		52	5260.0000	5260.0085	-0.0085
		60	5300.0000	5300.0089	-0.0089
		64	5320.0000	5320.0100	-0.0100
		100	5500.0000	5500.0093	-0.0093
		120	5600.0000	5600.0098	-0.0098
		140	5700.0000	5700.0095	-0.0095

9. EMI Reduction Method During Compliance Testing

No modification was made during testing.