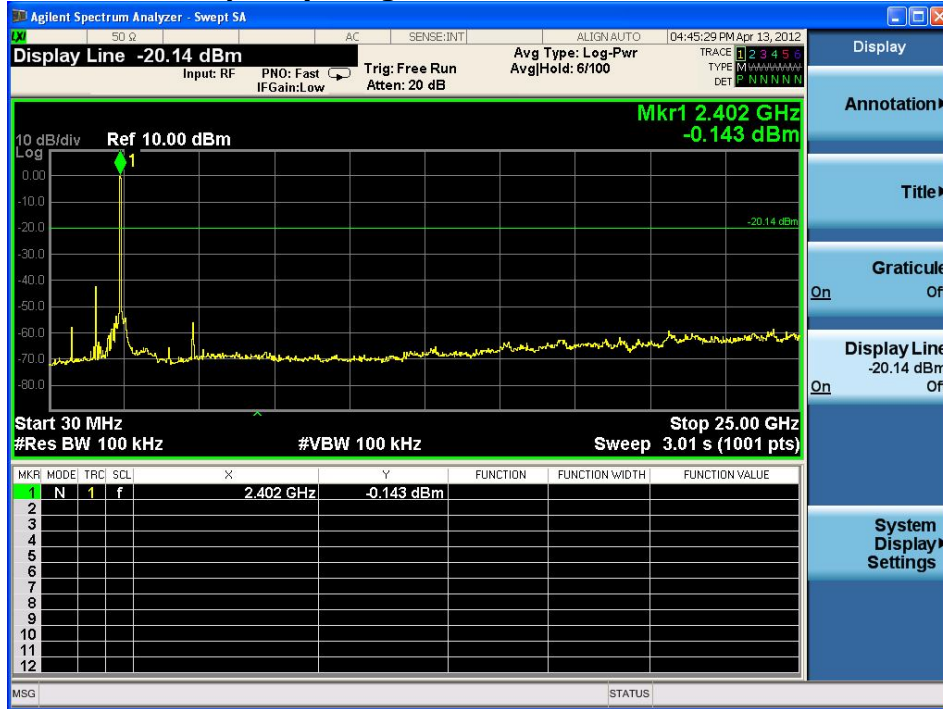
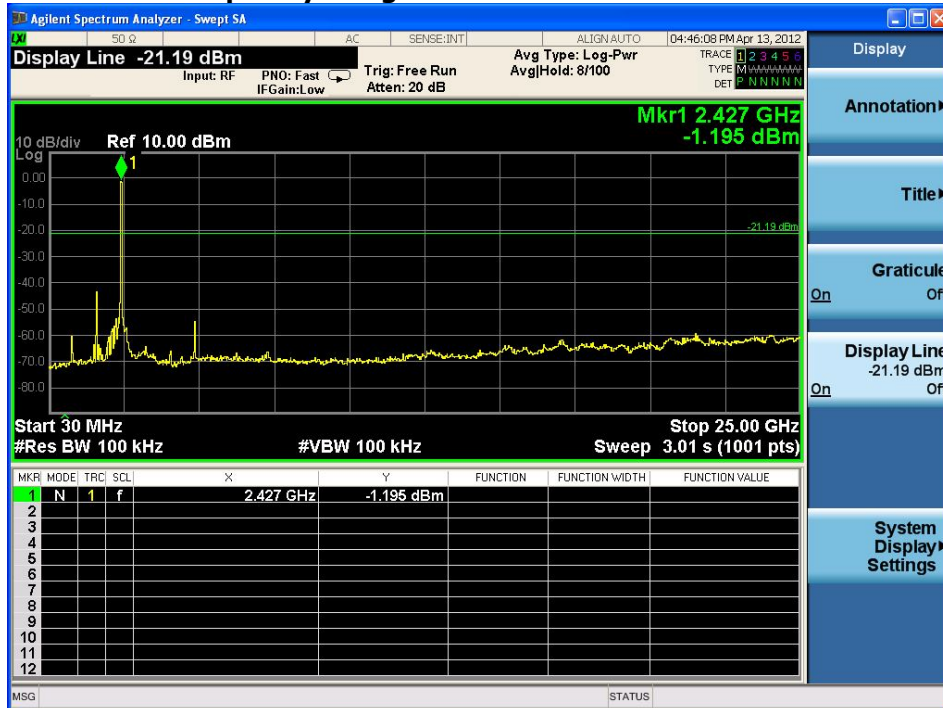


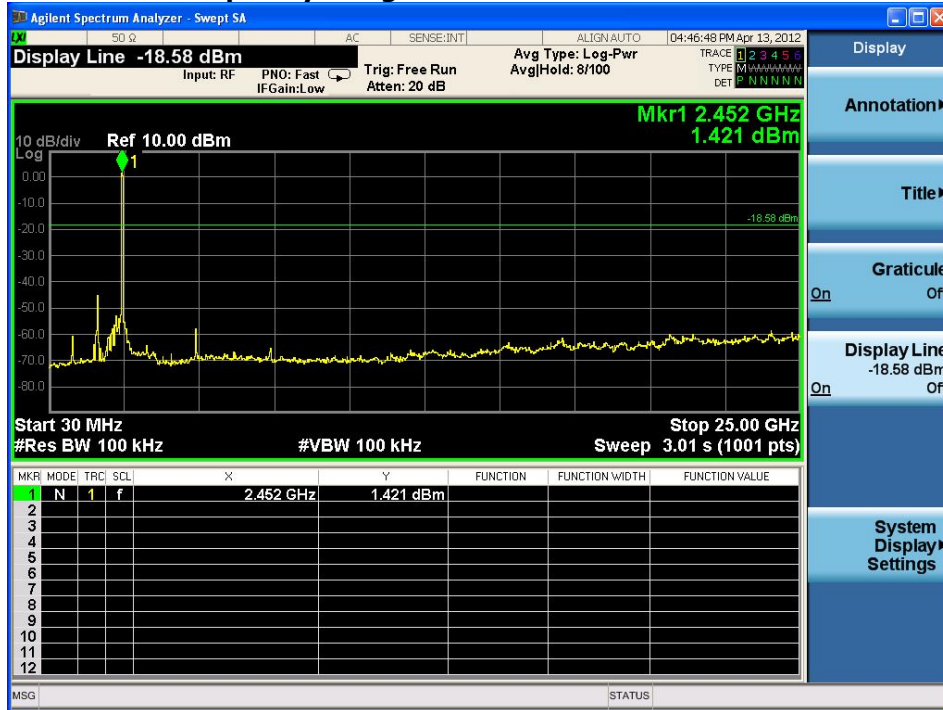
Band – edge (at 20 dB blow) – Low channel(802.11n(20MHz, Ant0))
Frequency Range = 30 MHz ~ 10th harmonic



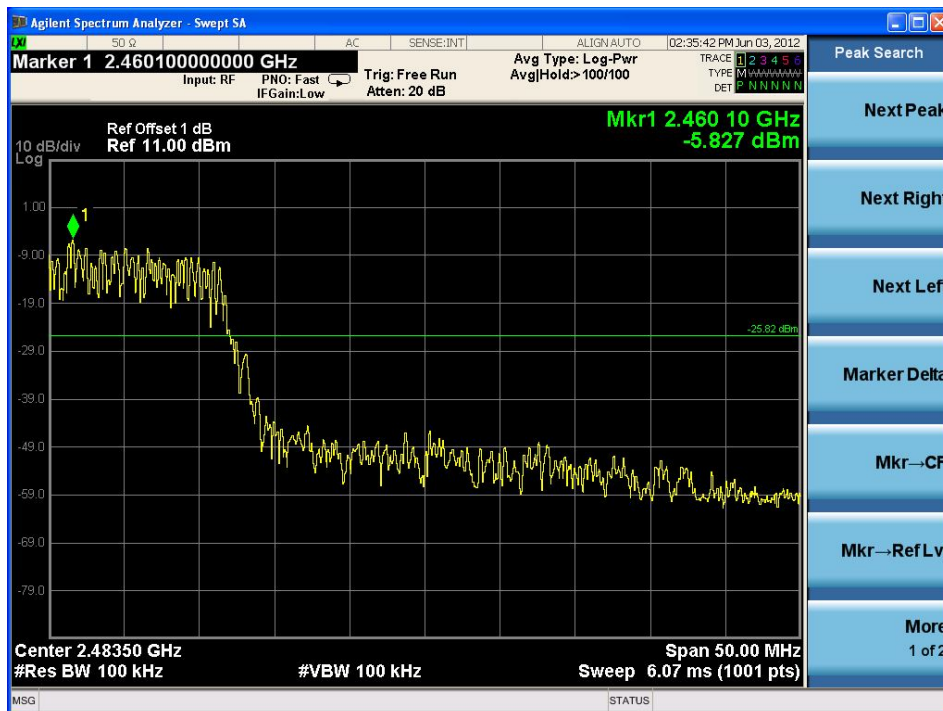
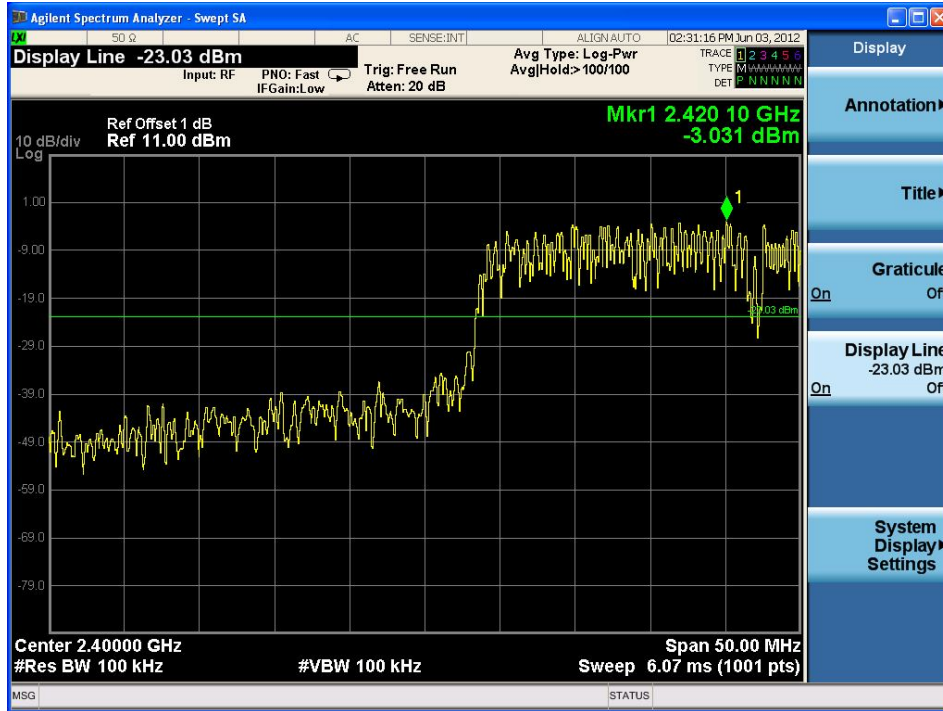
Band – edge (at 20 dB blow) – Mid channel(802.11n(20MHz, Ant0))
Frequency Range = 30 MHz ~ 10th harmonic



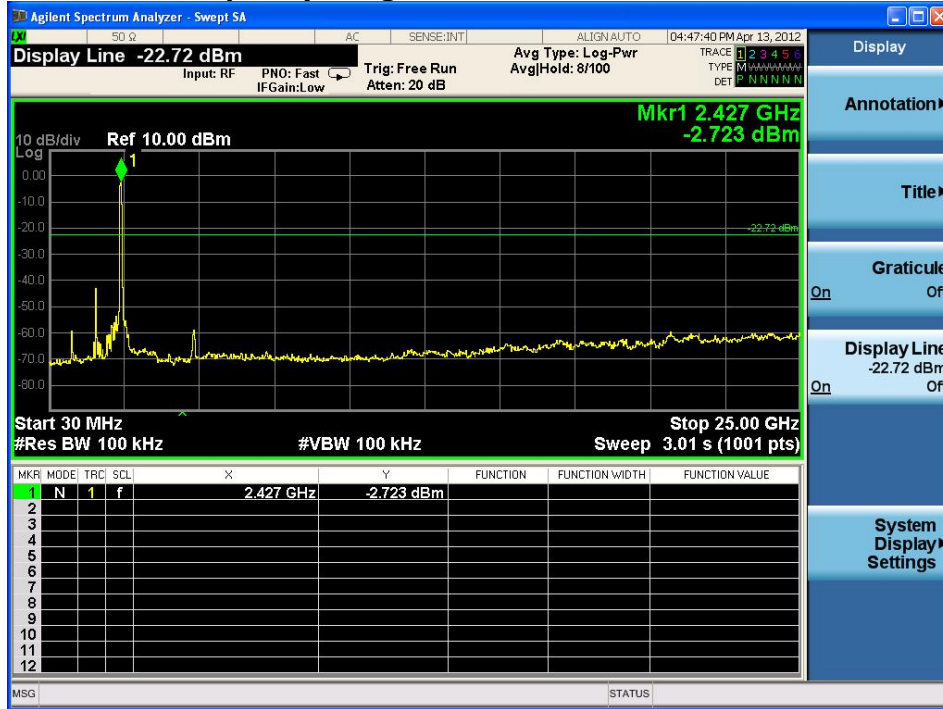
Band – edge (at 20 dB blow) – High channel(802.11n(20MHz, Ant0))
Frequency Range = 30 MHz ~ 10th harmonic



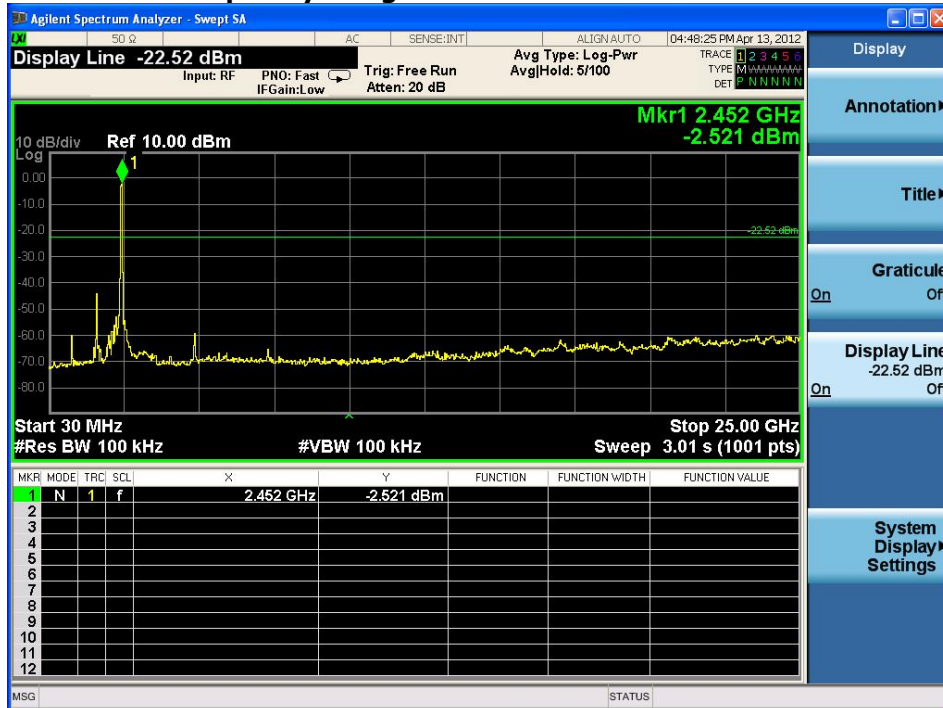
802.11n(40MHz, Ant0) Band-edge Measurements



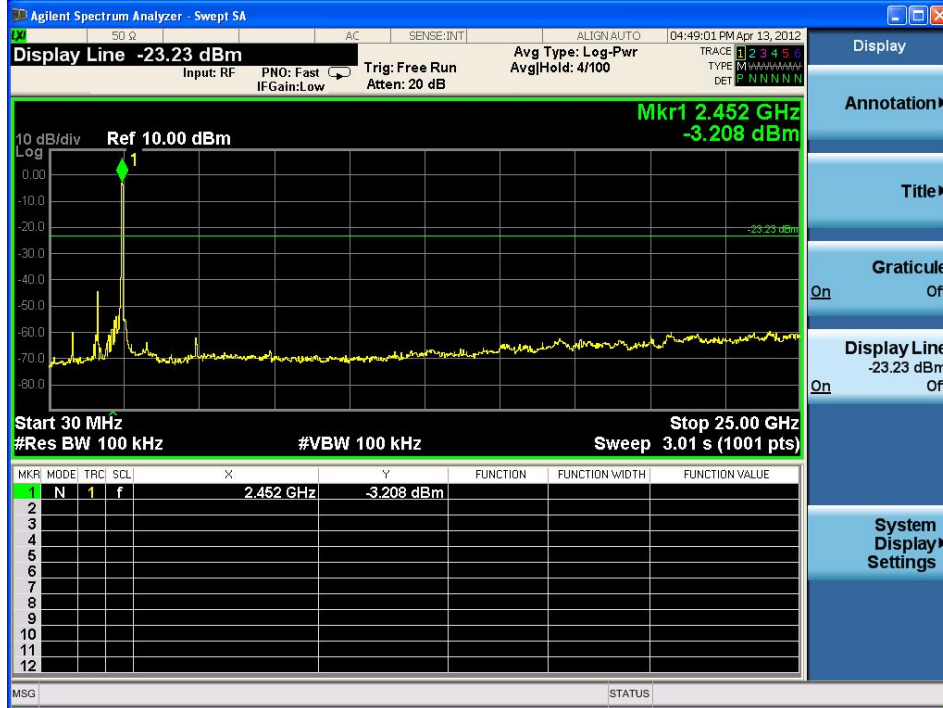
Band – edge (at 20 dB blow) – Low channel(802.11n(40MHz, Ant0))
Frequency Range = 30 MHz ~ 10th harmonic



Band – edge (at 20 dB blow) – Mid channel(802.11n(40MHz, Ant0))
Frequency Range = 30 MHz ~ 10th harmonic



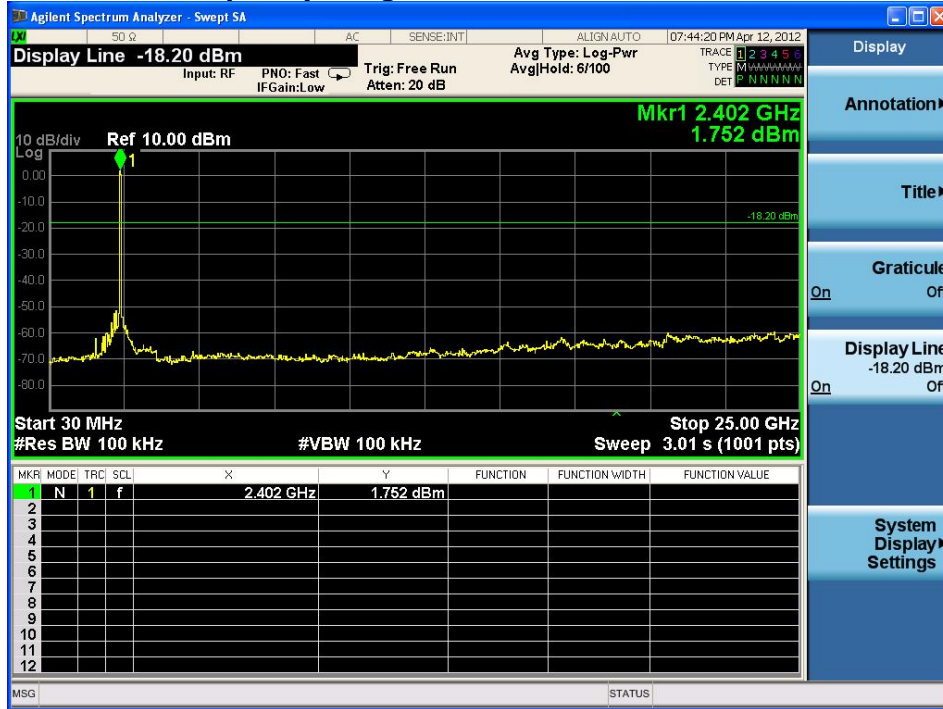
Band – edge (at 20 dB blow) – High channel(802.11n(40MHz, Ant0))
Frequency Range = 30 MHz ~ 10th harmonic



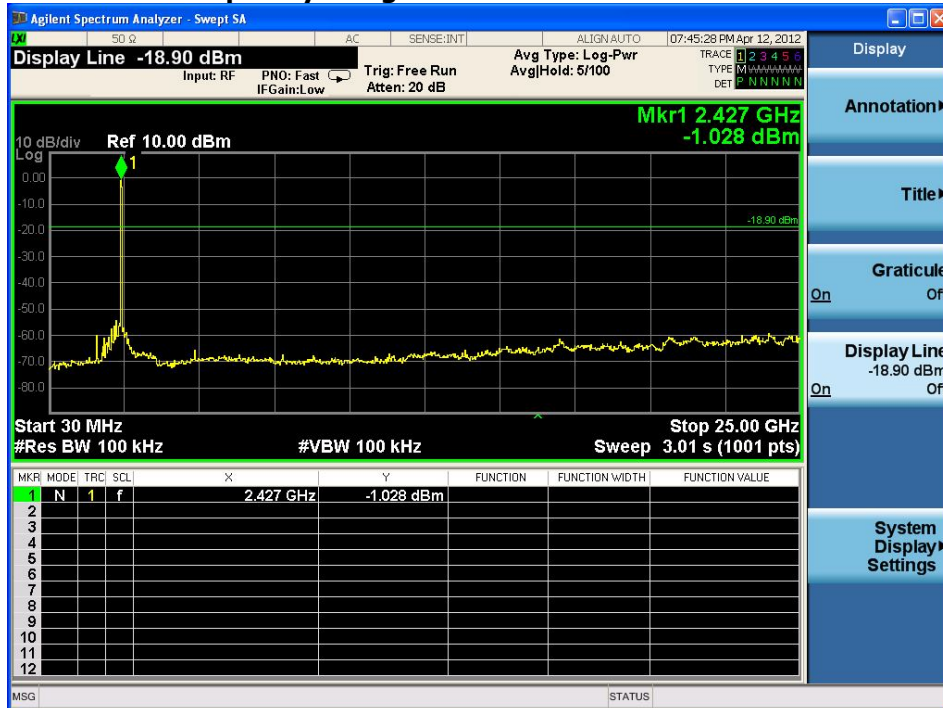
802.11n(20MHz, Ant1) Band-edge Measurements



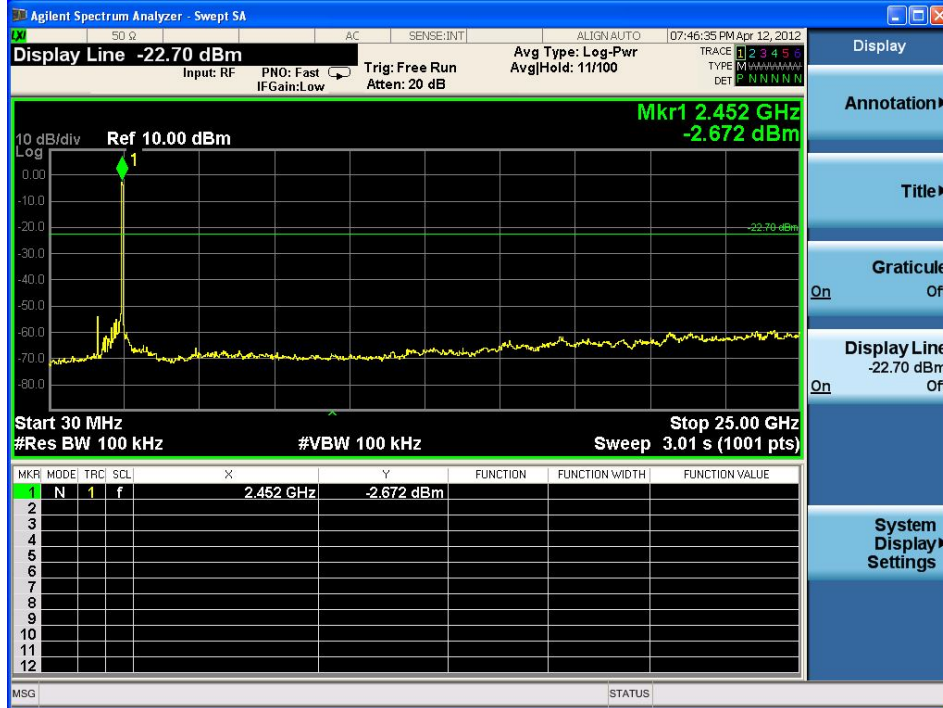
Band – edge (at 20 dB blow) – Low channel(802.11n(20MHz, Ant1))
Frequency Range = 30 MHz ~ 10th harmonic



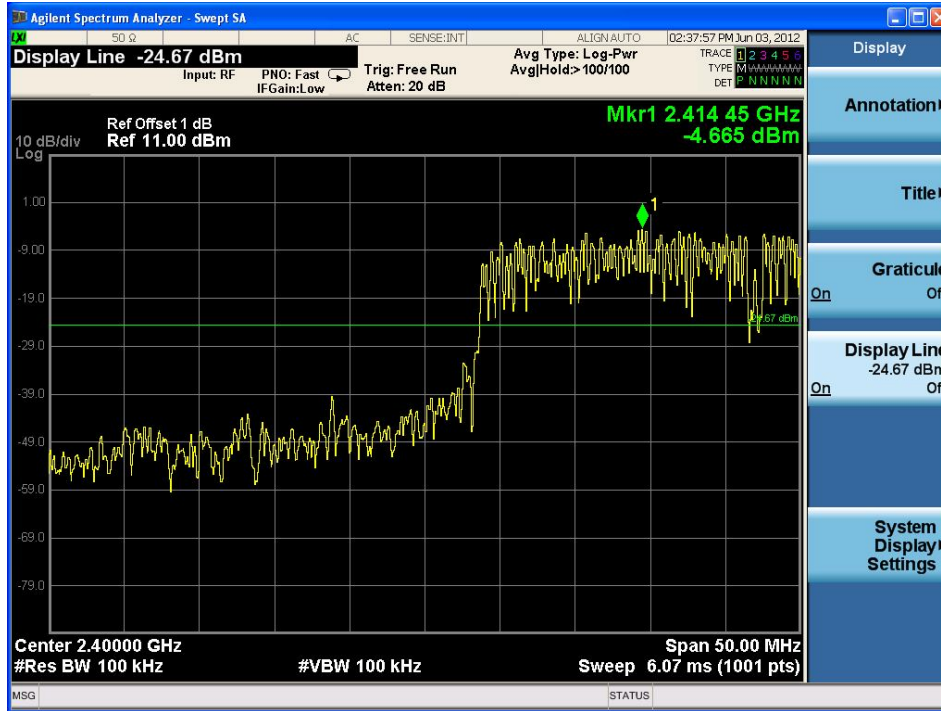
Band – edge (at 20 dB blow) – Mid channel(802.11n(20MHz, Ant1))
Frequency Range = 30 MHz ~ 10th harmonic



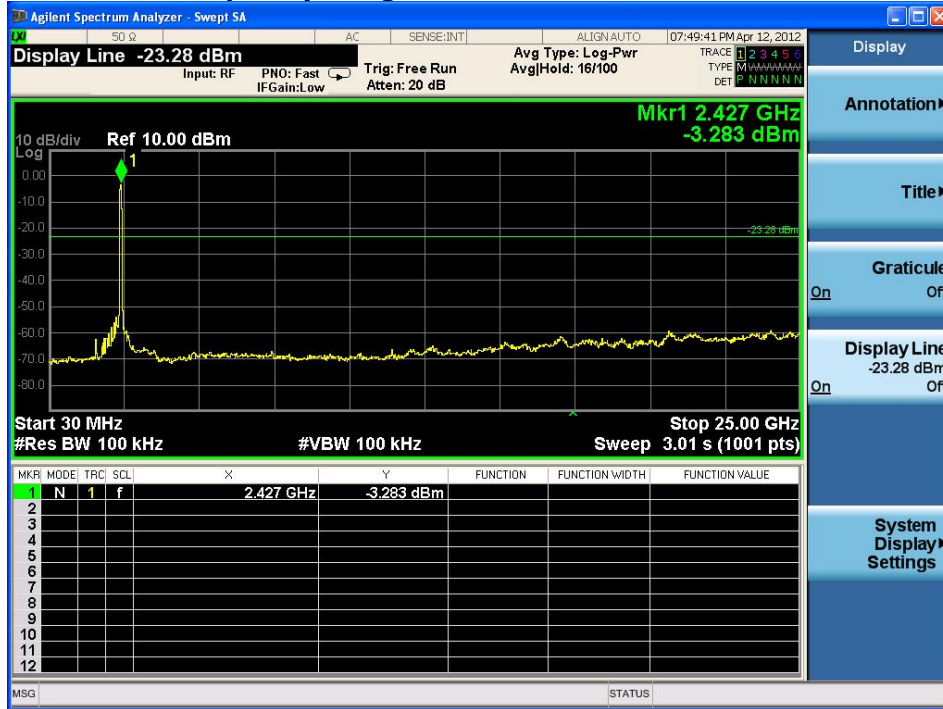
Band – edge (at 20 dB blow) – High channel(802.11n(20MHz, Ant1))
Frequency Range = 30 MHz ~ 10th harmonic



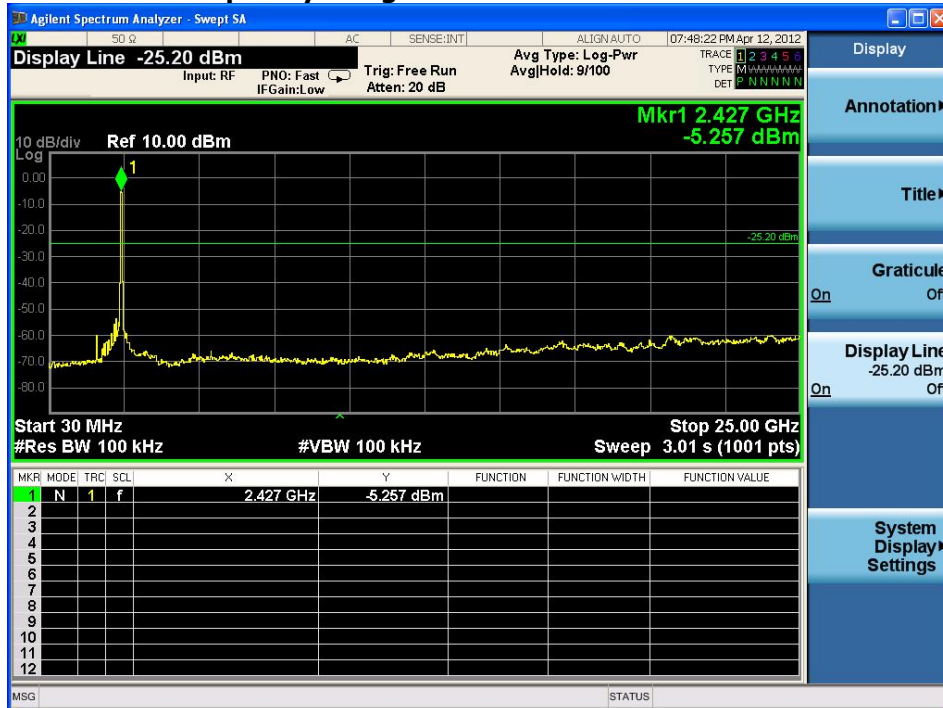
802.11n(40MHz, Ant1) Band-edge Measurements



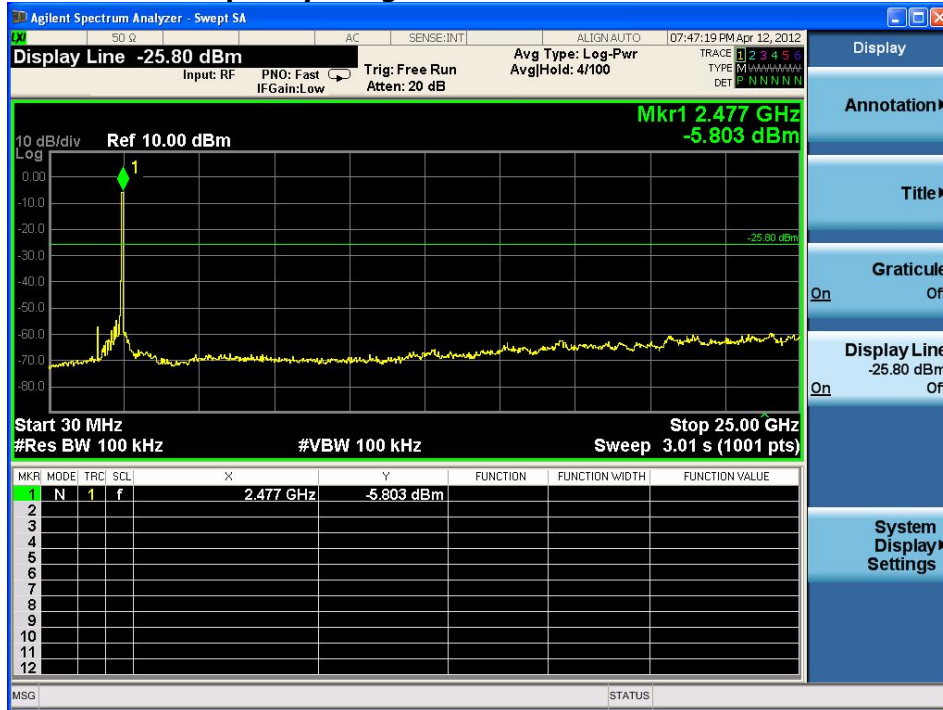
Band – edge (at 20 dB blow) – Low channel(802.11n(40MHz, Ant1))
Frequency Range = 30 MHz ~ 10th harmonic



Band – edge (at 20 dB blow) – Mid channel(802.11n(40MHz, Ant1))
Frequency Range = 30 MHz ~ 10th harmonic



Band – edge (at 20 dB blow) – High channel(802.11n(40MHz, Ant1))
Frequency Range = 30 MHz ~ 10th harmonic



2.1.5 Field Strength of Emissions

Test Location

Testing was performed at a test distance of 3 meter SAC

Test Procedures

The height of the measuring antenna was varied between 1 to 4 m and the table was rotated a full revolution in order to obtain maximum values of the electric field intensity. The measurement was made in both the vertical and horizontal polarization, and the maximum value is presented in the report.

The spectrum analyzer is set to:

Center frequency = the worst channel

Frequency Range = 30 MHz ~ 10th harmonic

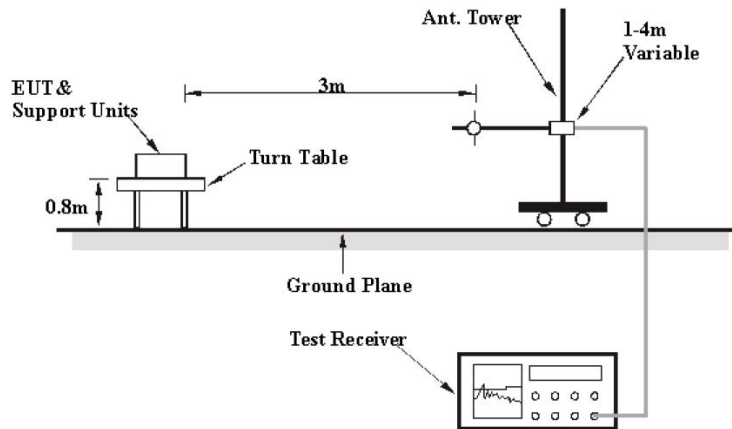
RBW = 120 kHz (30 MHz ~ 1 GHz) VBW ≥ RBW

= 1 MHz (1 GHz ~ 10th harmonic)

Span = 100 MHz

Detector function = Quasi-peak

Trace = max hold



Limit

- 15.209(a)

Frequency(MHz)	Field Strength uV/m@3m	Field Strength dBuV/m@3m
30-88	100**	40
88-216	150**	43.5
216-960	200**	46
Above 960	500	54

** Except as provided in 15.209(g).fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72MHz, 76-88MHz, 174-216MHz, 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g.15.231 and 15.241.



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Test Results

Test mode : 802.11b

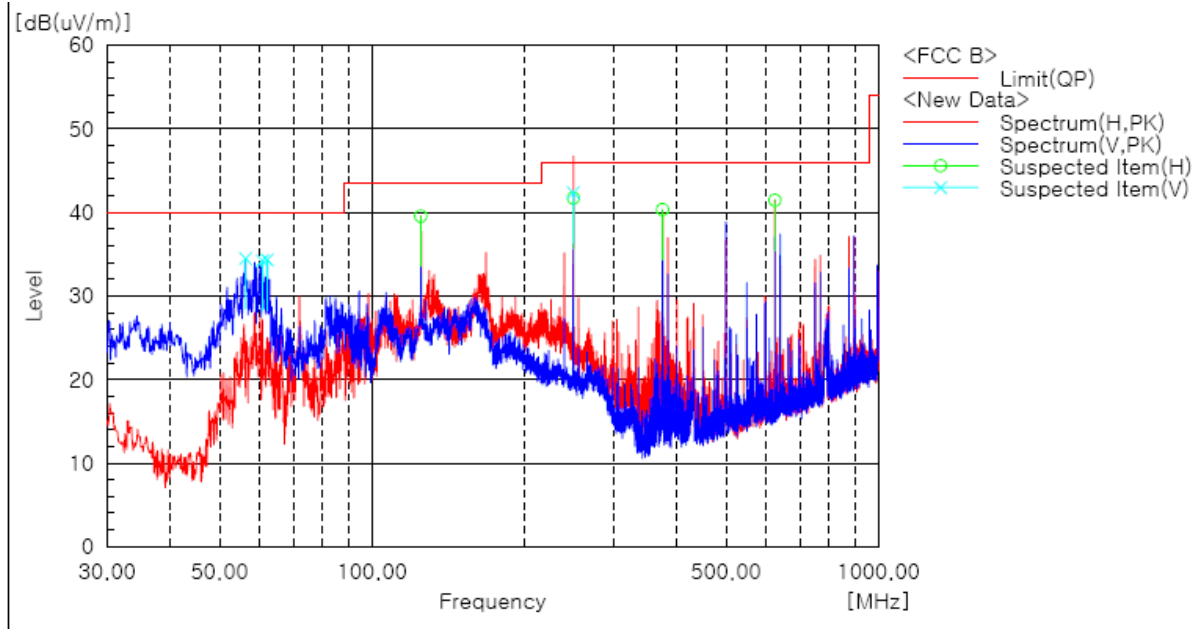
EUT	NetweeN	Measurement Detail	
Model	C340T	Frequency Range	Below 1000MHz
Mode	802.11b(Worst Case)	Detector function	Quasi-Peak

The requirements are:

Complies

Frequency (MHz)	Measured Data (dBuV/m)	Margin (dB)	Remark
249.947	42.3	3.7	Quasi-peak

Test Data



Spectrum Selection

No.	Frequency [MHz]	(P)	Reading [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	56.311	V	60.2	-25.7	34.5	40.0	5.5	100.0	23.0
2	60.798	V	60.4	-26.2	34.2	40.0	5.8	196.0	296.0
3	62.131	V	60.4	-26.1	34.3	40.0	5.7	196.0	333.0
4	124.939	H	59.4	-19.9	39.5	43.5	4.0	208.0	290.0
5	249.947	H	60.0	-18.3	41.7	46.0	4.3	100.0	315.0
6	249.947	V	60.6	-18.3	42.3	46.0	3.7	100.0	214.0
7	374.956	H	54.7	-14.4	40.3	46.0	5.7	100.0	278.0
8	624.974	H	49.8	-8.4	41.4	46.0	4.6	100.0	278.0

Remark :

1. The field strength of spurious emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X,Y axis). The worst emission was found in stand-up position(X axis) and the worst case was recorded.

Test Results

EUT	NetweeN	Measurement Detail	
Model	C340T	Frequency Range	1-25GHz
		Detector function	Peak

Remarks

We have tested three mode (X, Y, Z). The worst mode (X axis) for final test.

The requirements are:

Complies

Frequency (MHz)	Measured Data (dBuV/m)	Margin (dB)	Remark
4830.5	51.9	2.1	Average

Test Data (Mode: 802.11b, Low channel)

Frequency [MHz]	Reading [dBuV/m]		Pol.	Height [m]	Correction Factor			Limits [dBuV/m]		Result [dBuV/m]		Margin [dB]	
	AV	Peak			Antenna	Amp. Gain	Cable	AV	Peak	AV	Peak	AV	Peak
4830.50	41.4	57.5	V	1.1	32.7	34.9	11.4	54.0	74.0	50.6	66.7	3.4	7.3

Test Data (Mode: 802.11g, Low channel)

Frequency [MHz]	Reading [dBuV/m]		Pol.	Height [m]	Correction Factor			Limits [dBuV/m]		Result [dBuV/m]		Margin [dB]	
	AV	Peak			Antenna	Amp. Gain	Cable	AV	Peak	AV	Peak	AV	Peak
4830.50	41.2	52.4	V	1.1	32.7	34.9	11.4	54.0	74.0	50.4	61.6	3.6	12.4

Test Data (Mode: 802.11n_20MHz, Ant0, Low channel)

Frequency [MHz]	Reading [dBuV/m]		Pol.	Height [m]	Correction Factor			Limits [dBuV/m]		Result [dBuV/m]		Margin [dB]	
	AV	Peak			Antenna	Amp. Gain	Cable	AV	Peak	AV	Peak	AV	Peak
4830.50	40.5	54.9	V	1.5	32.7	34.9	11.4	54.0	74.0	49.7	64.1	4.3	9.9
7227.50	32.6	44.4	V	1.5	37.7	34.8	14.3	54.0	74.0	49.8	61.6	4.2	12.4

Test Data (Mode: 802.11n_40MHz, Ant0, Low channel)

Frequency [MHz]	Reading [dBuV/m]		Pol.	Height [m]	Correction Factor			Limits [dBuV/m]		Result [dBuV/m]		Margin [dB]	
	AV	Peak			Antenna	Amp. Gain	Cable	AV	Peak	AV	Peak	AV	Peak
4830.50	42.7	53.3	V	1.1	32.7	34.9	11.4	54.0	74.0	51.9	62.5	2.1	11.5

Test Data (Mode: 802.11n_20MHz, Ant1, High channel)

Frequency [MHz]	Reading [dBuV/m] AV / Peak		Pol.	Height [m]	Correction Factor			Limits [dBuV/m] AV / Peak	Result [dBuV/m] AV / Peak		Margin [dB] AV / Peak		
	Antenna	Amp. Gain			Cable	AV	Peak		AV	Peak	AV	Peak	
4924.50	41.8	53.6	V	1.5	32.7	34.9	11.4	54.0	74.0	51.0	62.8	3.0	11.2

Test Data (Mode: 802.11n_40MHz, Ant1, Mid channel)

Frequency [MHz]	Reading [dBuV/m] AV / Peak		Pol.	Height [m]	Correction Factor			Limits [dBuV/m] AV / Peak	Result [dBuV/m] AV / Peak		Margin [dB] AV / Peak		
	Antenna	Amp. Gain			Cable	AV	Peak		AV	Peak	AV	Peak	
4877.50	39.8	51.8	V	1.1	32.7	34.9	11.4	54.0	74.0	49.0	61.0	5.0	13.0

Restricted band edge test data

Measured frequency range : 2310-2390 MHz, 2483.5-2500 MHz

Test data - 802.11b

Frequency [MHz]	Reading [dBuV/m] AV / Peak	Pol.	Height [m]	Correction Factor			Limits [dBuV/m] AV / Peak	Result [dBuV/m] AV / Peak	Margin [dB] AV / Peak
				Antenna	Amp. Gain	Cable			
No emissions were detected at a level greater than 20dB below limit.									

Test Data - 802.11g

Frequency [MHz]	Reading [dBuV/m] AV / Peak	Pol.	Height [m]	Correction Factor			Limits [dBuV/m] AV / Peak	Result [dBuV/m] AV / Peak	Margin [dB] AV / Peak
				Antenna	Amp. Gain	Cable			
No emissions were detected at a level greater than 20dB below limit.									

Test Data - 802.11n(20 MHz, Ant0)

Frequency [MHz]	Reading [dBuV/m] AV / Peak	Pol.	Height [m]	Correction Factor			Limits [dBuV/m] AV / Peak	Result [dBuV/m] AV / Peak	Margin [dB] AV / Peak
				Antenna	Amp. Gain	Cable			
No emissions were detected at a level greater than 20dB below limit.									

Test Data - 802.11n(40 MHz, Ant0)

Frequency [MHz]	Reading [dBuV/m] AV / Peak	Pol.	Height [m]	Correction Factor			Limits [dBuV/m] AV / Peak	Result [dBuV/m] AV / Peak	Margin [dB] AV / Peak
				Antenna	Amp. Gain	Cable			
No emissions were detected at a level greater than 20dB below limit.									

Test Data - 802.11n(20 MHz, Ant1)

Frequency [MHz]	Reading [dBuV/m] AV / Peak	Pol.	Height [m]	Correction Factor			Limits [dBuV/m] AV / Peak	Result [dBuV/m] AV / Peak	Margin [dB] AV / Peak
				Antenna	Amp. Gain	Cable			
No emissions were detected at a level greater than 20dB below limit.									

Test Data - 802.11n(40 MHz, Ant1)

Frequency [MHz]	Reading [dBuV/m] AV / Peak	Pol.	Height [m]	Correction Factor			Limits [dBuV/m] AV / Peak	Result [dBuV/m] AV / Peak	Margin [dB] AV / Peak
				Antenna	Amp. Gain	Cable			
No emissions were detected at a level greater than 20dB below limit.									

2.1.6 AC Conducted Emissions

Test Location

Shielded Room

Frequency Range of Measurement

150 kHz to 30 MHz

Instrument Settings

IF Band Width: 9 kHz

Test Procedures

The EUT was placed on a non-metallic table 0.8m above the metallic, grounded floor and 0.4m from the reference ground plane wall. The distance to other metallic surfaces was at least 0.8m.

Amplitude measurements were performed with a quasi-peak detector and an average detector.

Limit

- 15.207(a)

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56*	56 to 46*
0.5 ~ 5	56	46
5 ~ 30	60	50

* Decreases with the logarithm of the frequency.

Test Results

The requirements are:

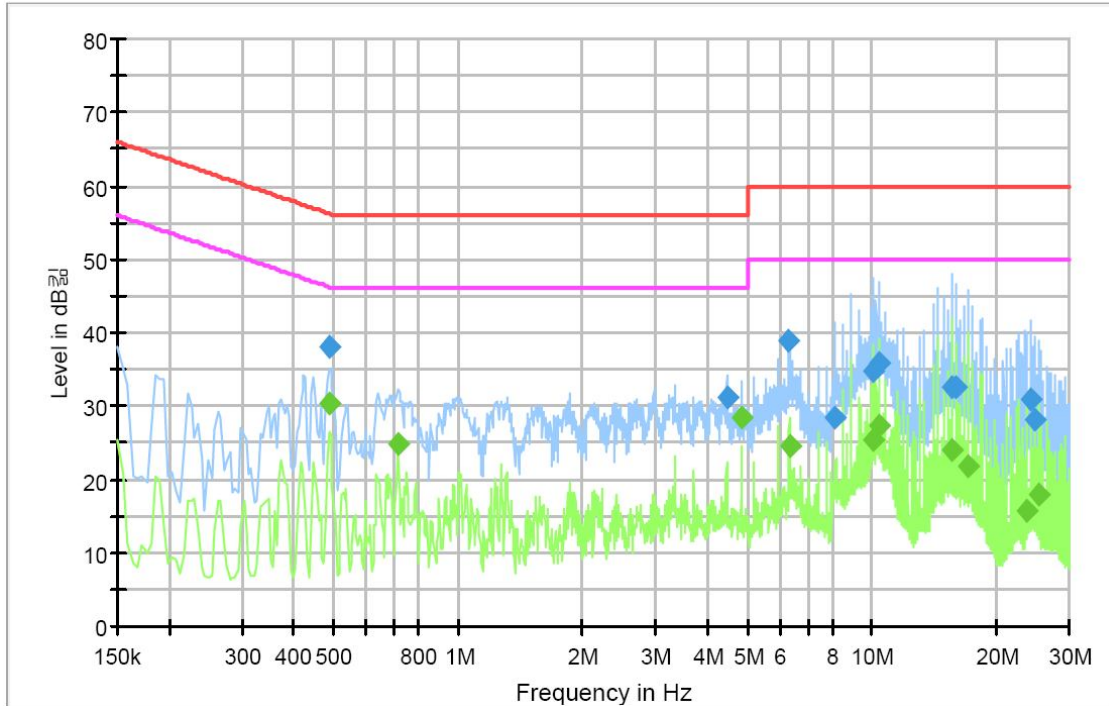
Complies

Test mode : 802.11b

Frequency (MHz)	Measured Data (dBuV/m)	Margin (dB)	Remark
15.5805	36.3	13.7	Average

Test Data

[HOT]



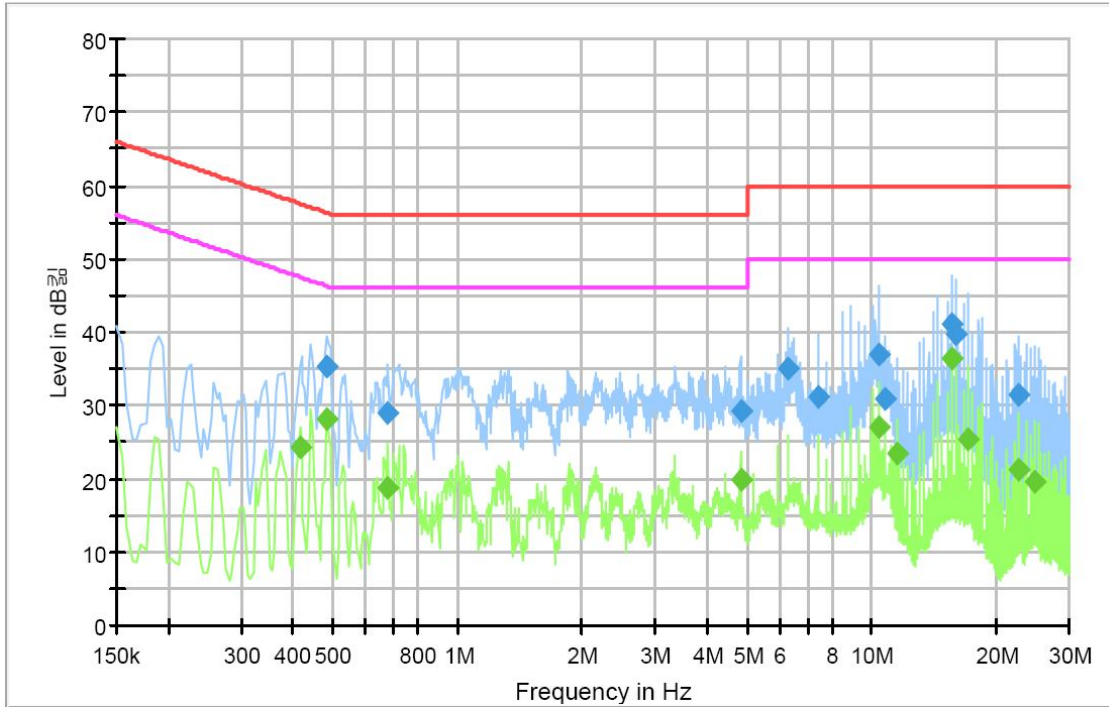
Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.487500	38.1	1000.0	9.000	On	L1	10.0	18.1	56.2
4.461000	31.0	1000.0	9.000	On	L1	9.8	25.0	56.0
6.315000	39.0	1000.0	9.000	On	L1	9.7	21.0	60.0
8.160000	28.3	1000.0	9.000	On	L1	9.7	31.7	60.0
10.036500	34.8	1000.0	9.000	On	L1	9.7	25.2	60.0
10.405500	35.8	1000.0	9.000	On	L1	9.7	24.2	60.0
15.607500	32.7	1000.0	9.000	On	L1	9.8	27.3	60.0
15.981000	32.4	1000.0	9.000	On	L1	9.8	27.6	60.0
24.144000	30.9	1000.0	9.000	On	L1	9.9	29.1	60.0
24.895500	28.1	1000.0	9.000	On	L1	10.0	31.9	60.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.487500	30.4	1000.0	9.000	On	L1	10.0	15.8	46.2
0.712500	24.9	1000.0	9.000	On	L1	10.1	21.1	46.0
4.830000	28.3	1000.0	9.000	On	L1	9.8	17.7	46.0
6.319500	24.6	1000.0	9.000	On	L1	9.7	25.4	50.0
10.036500	25.3	1000.0	9.000	On	L1	9.7	24.7	50.0
10.405500	27.2	1000.0	9.000	On	L1	9.7	22.8	50.0
15.607500	23.9	1000.0	9.000	On	L1	9.8	26.1	50.0
17.092500	21.8	1000.0	9.000	On	L1	9.8	28.2	50.0
23.779500	15.8	1000.0	9.000	On	L1	9.9	34.2	50.0
25.260000	18.0	1000.0	9.000	On	L1	10.0	32.0	50.0

[NEUTRAL]



Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.483000	35.3	1000.0	9.000	On	N	9.9	21.0	56.3
0.681000	28.8	1000.0	9.000	On	N	10.1	27.2	56.0
4.825500	29.3	1000.0	9.000	On	N	9.8	26.7	56.0
6.306000	35.1	1000.0	9.000	On	N	9.7	24.9	60.0
7.422000	31.1	1000.0	9.000	On	N	9.7	28.9	60.0
10.392000	37.1	1000.0	9.000	On	N	9.7	22.9	60.0
10.761000	30.9	1000.0	9.000	On	N	9.7	29.1	60.0
15.585000	41.2	1000.0	9.000	On	N	9.8	18.8	60.0
15.954000	39.7	1000.0	9.000	On	N	9.8	20.3	60.0
22.632000	31.6	1000.0	9.000	On	N	10.0	28.4	60.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.415500	24.4	1000.0	9.000	On	N	10.0	23.2	47.5
0.483000	28.2	1000.0	9.000	On	N	9.9	18.1	46.3
0.681000	18.8	1000.0	9.000	On	N	10.1	27.2	46.0
4.825500	19.8	1000.0	9.000	On	N	9.8	26.2	46.0
10.392000	27.1	1000.0	9.000	On	N	9.7	22.9	50.0
11.503500	23.4	1000.0	9.000	On	N	9.7	26.6	50.0
15.580500	36.3	1000.0	9.000	On	N	9.8	13.7	50.0
17.070000	25.4	1000.0	9.000	On	N	9.8	24.6	50.0
22.632000	21.2	1000.0	9.000	On	N	10.0	28.8	50.0
24.859500	19.5	1000.0	9.000	On	N	10.1	30.5	50.0



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APPENDIX A – Test Equipment Used For Tests

	Name of Equipment	Manufacturer	Model No.	Serial No.	Due Date
1	Signal Analyzer	Agilent	N9020A	MY48011598	2012-11-10
2	Spectrum Analyzer	Rohde & Schwarz	FSP-30	100994	2012-11-10
3	EMI Test Receiver	Rohde & Schwarz	ESVS30	826638/008	2012-07-07
4	ULTRA Broadband Antenna	Rohde & Schwarz	HL562	361324/014	2013-11.03
5	LOOP ANTENNA	EMCO	6502	9107-2652	2012-10-29
6	Attenuator	HP	8498A	1801A06913	2012-11-14
7	EPM Series Power Meter	HP	E4418A	GB38272734	2012-11-10
8	Power Sensor	HP	8487A	3318A03524	2012-07-07
9	Audio Analyzer	HP	8903B	2747A03432	2012-11-10
10	ESG-D Series Signal Generator	Agilent	E4432B	US40054094	2012-11-21
11	SYNTHESIZED SWEEPER	HP	8341B	2819A01563	2012-11-10
12	Modulation Analyzer	HP	8901B	3438A05228	2012-11-18
13	Attenuator	HP	8494A	3308A33351	2012-11-14
14	Temp&Humi Chamber	Kunpoong	JT-TH-556-1	9QE5-002	2013-01-12
15	DC POWER SUPPLY	Agilent	E3632A	MY40011638	2012-11-10
16	EMC Analyzer	Agilent	E7405A	MY45110859	2013-02-13
17	Horn Antenna	ETS-Lindgren	3115	00078894	2013-03-22
18	Horn Antenna	ETS-Lindgren	3115	00078895	2013-03-22
19	Dipole Antenna	SCHWARZBECK	VHA 9103	VHA91032557	2013-11-04
20	Dipole Antenna	SCHWARZBECK	UHA 9105	UHA91052417	2013-11-04
21	OPT H64 AMPLIFIER	HP	8447F	3113A06814	2013-03-27
22	PREAMPLIFIER	Agilent	8449B	3008A02307	2012-11-17
23	Radio Communication Tester	Rohde & Schwarz	CMU200	106765	2013-02-09
24	LISN	Rohde & Schwarz	ENV216	101235	2012-08-18
25	LISN	Rohde & Schwarz	ENV216	101236	2012-08-18
26	DC POWER SUPPLY	Agilent	E3632A	MY40011638	2012-11-10
27	EMI Test Receiver	Rohde & Schwarz	ESCI3	100032	2013-02-09