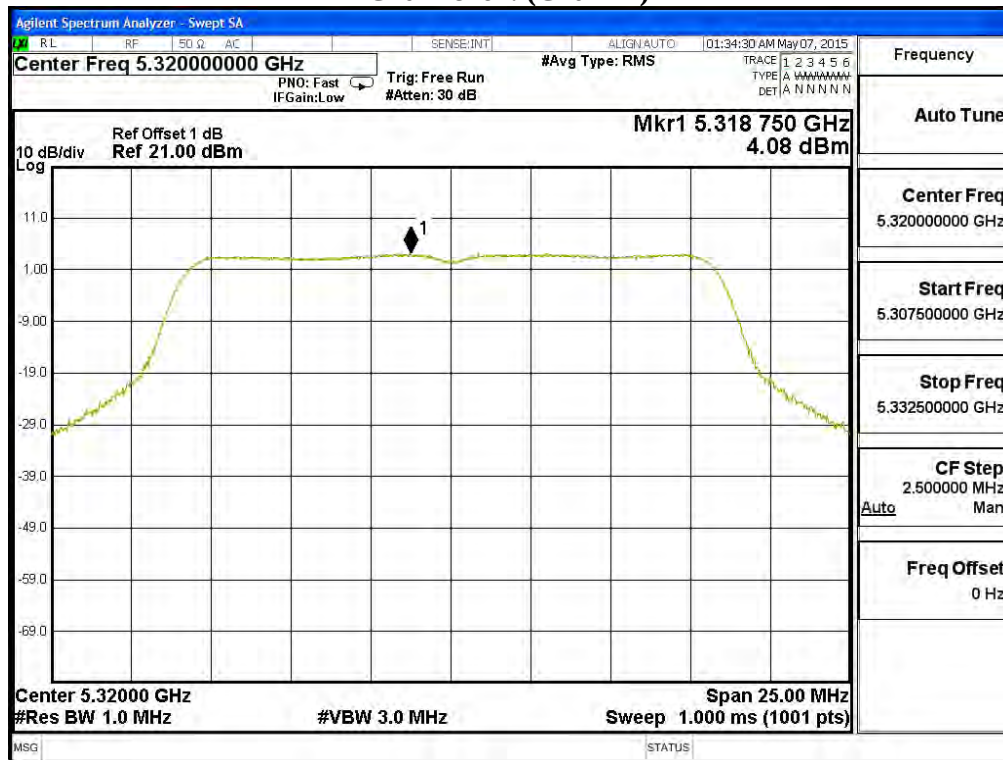
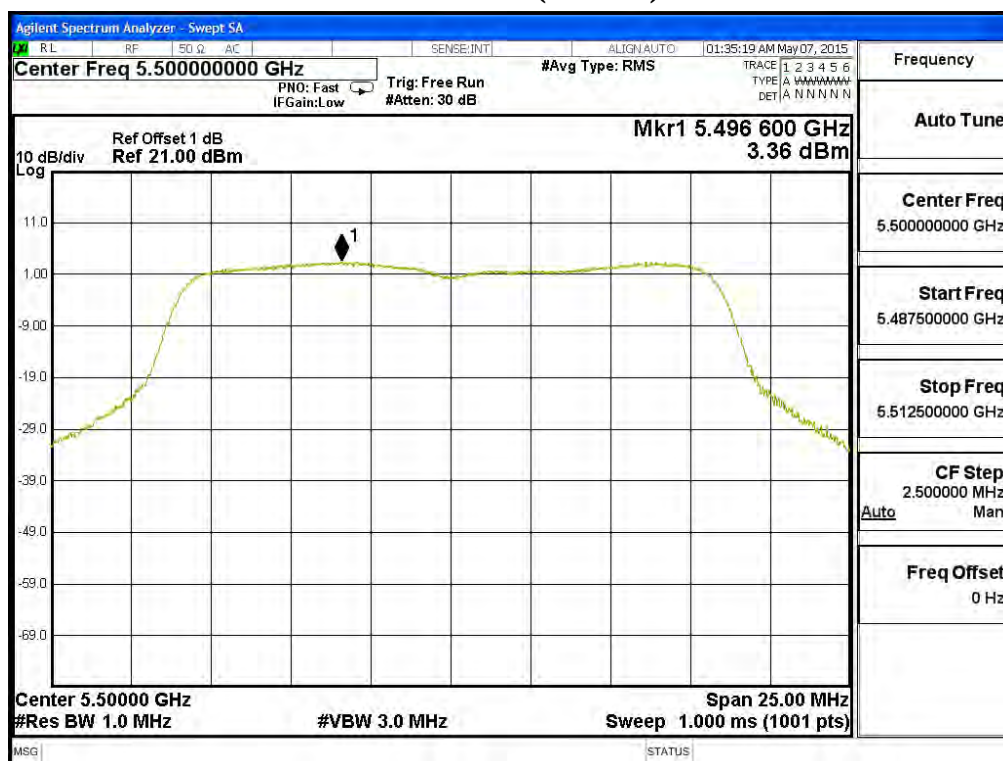


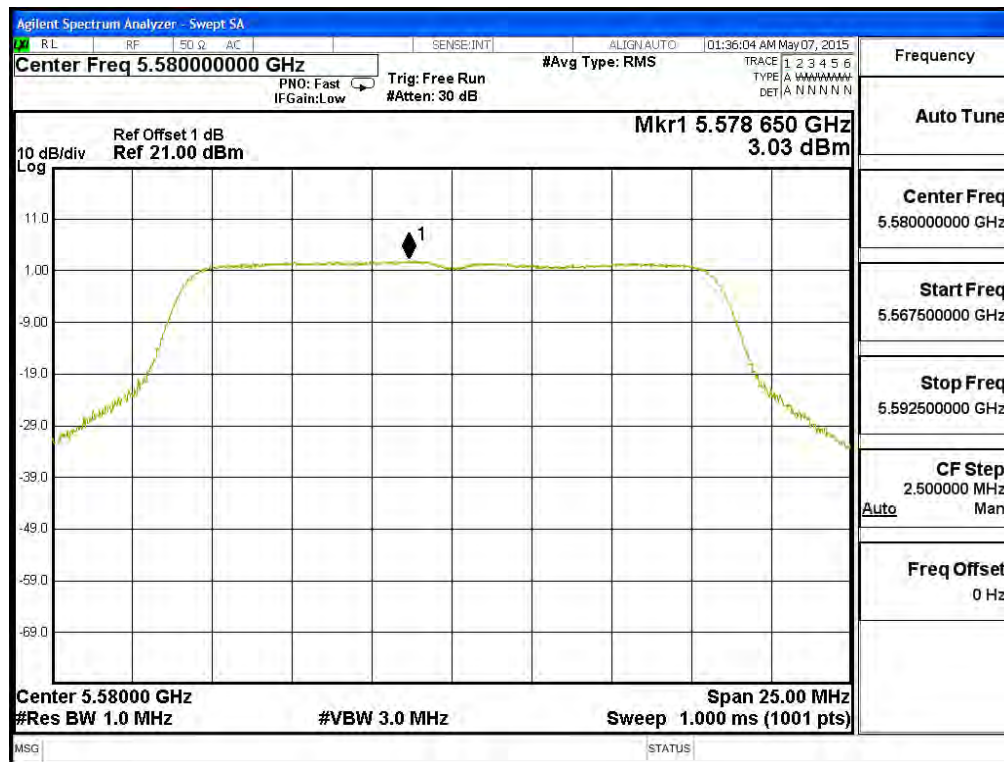
Channel 64: (Chain A)



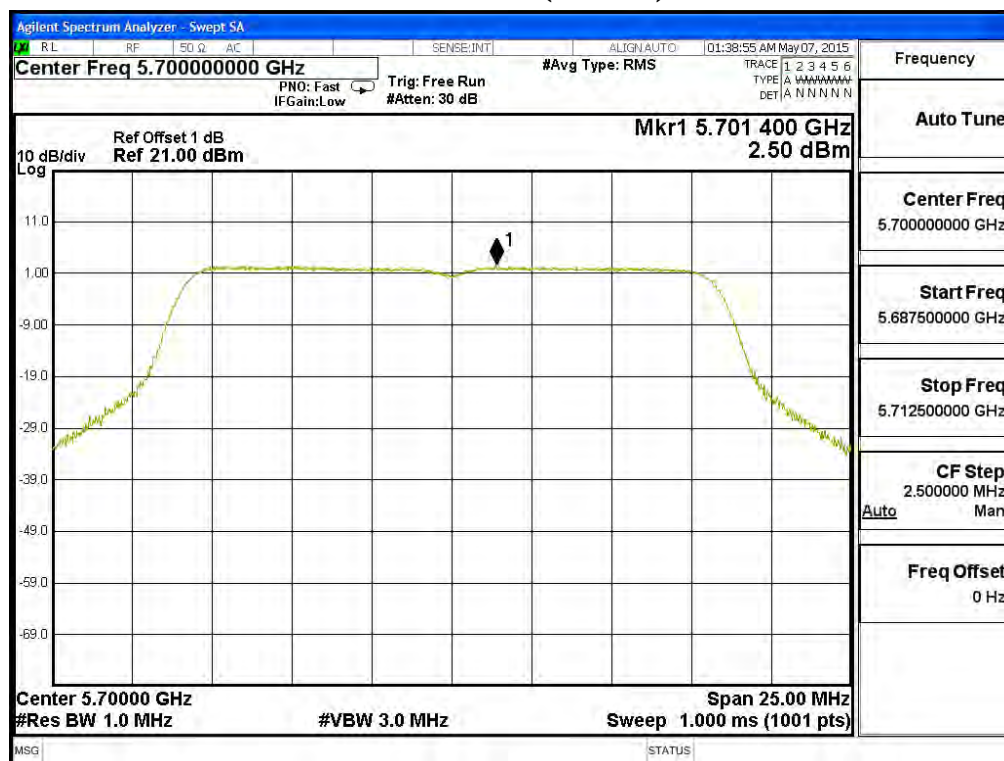
Channel 100: (Chain A)



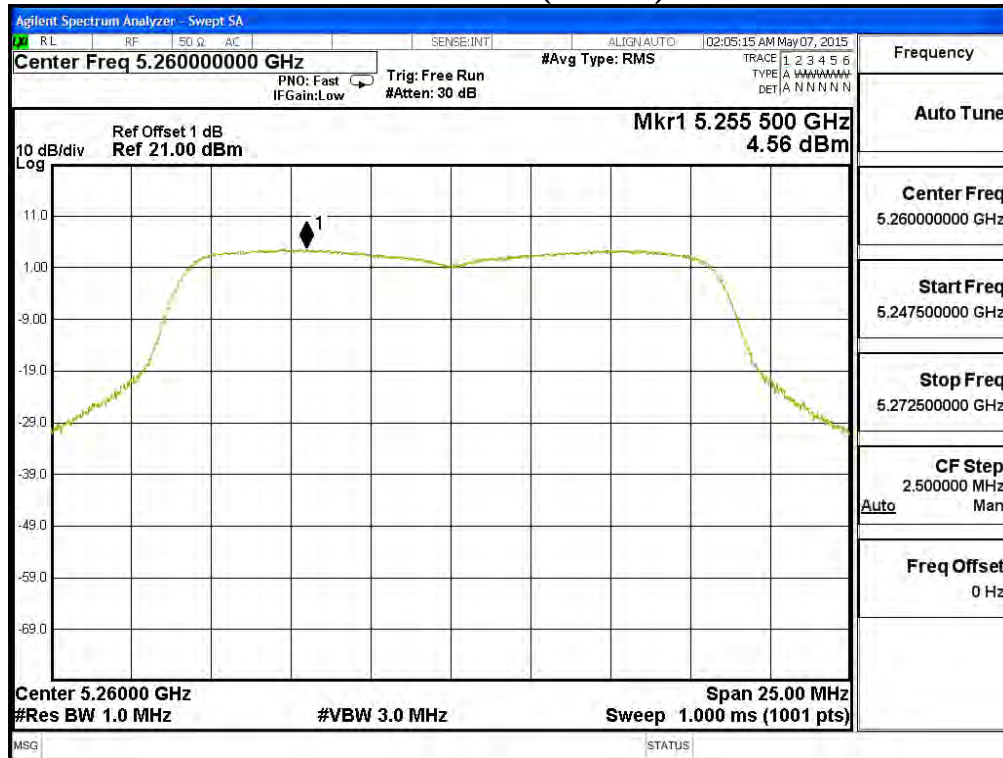
Channel 116: (Chain A)



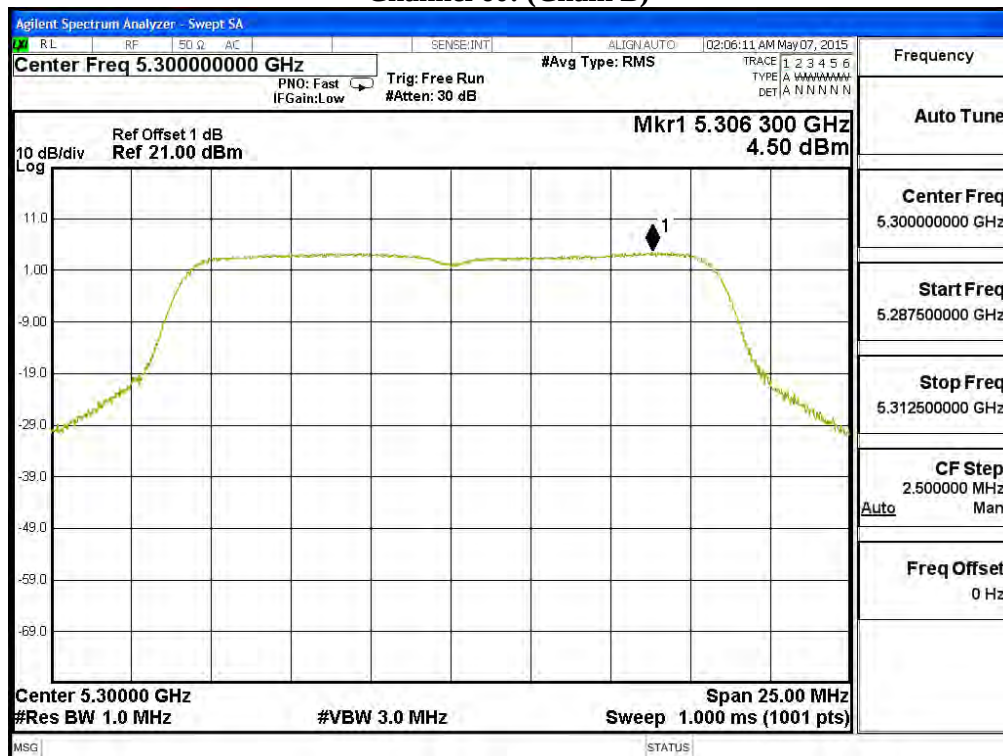
Channel 140: (Chain A)



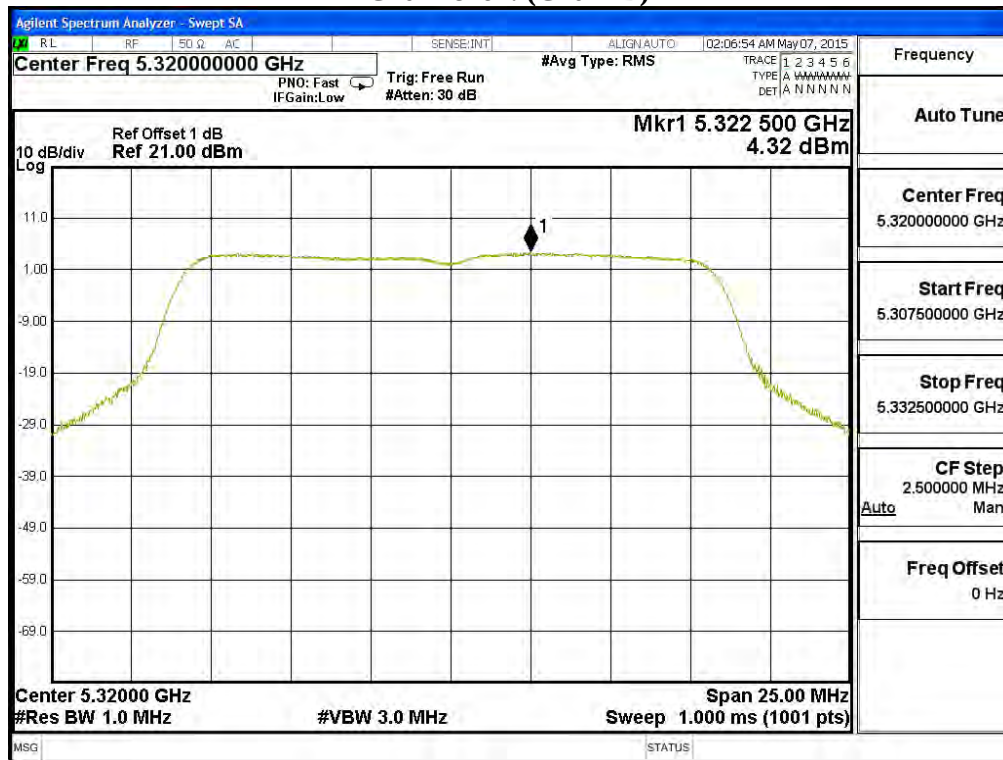
Channel 52: (Chain B)



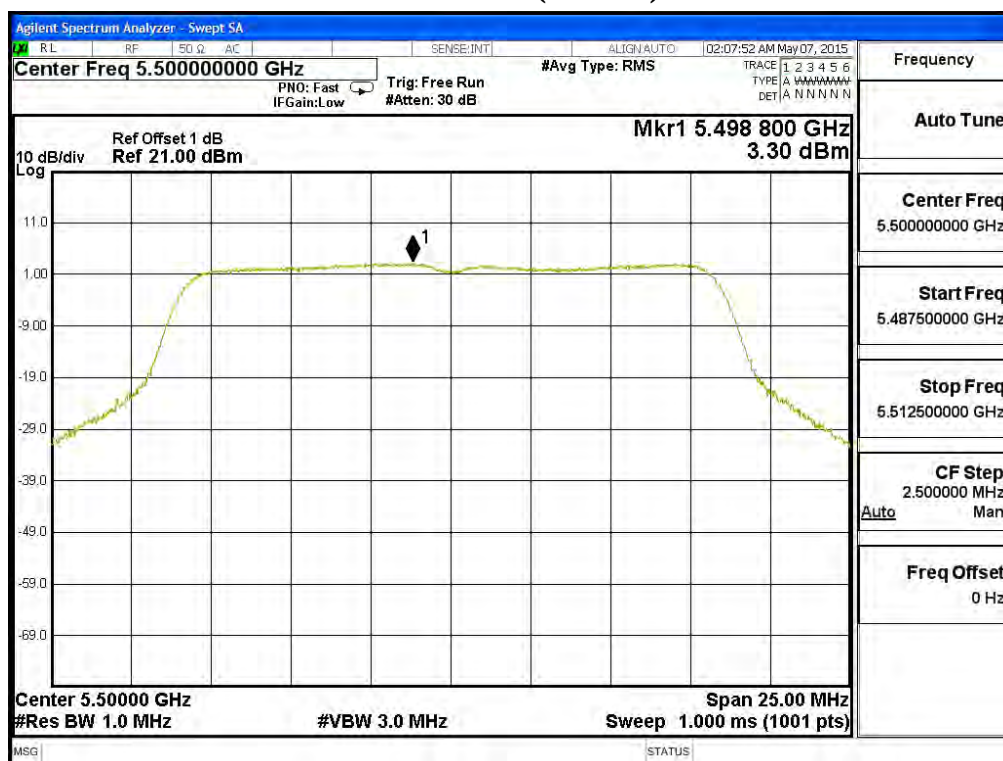
Channel 60: (Chain B)



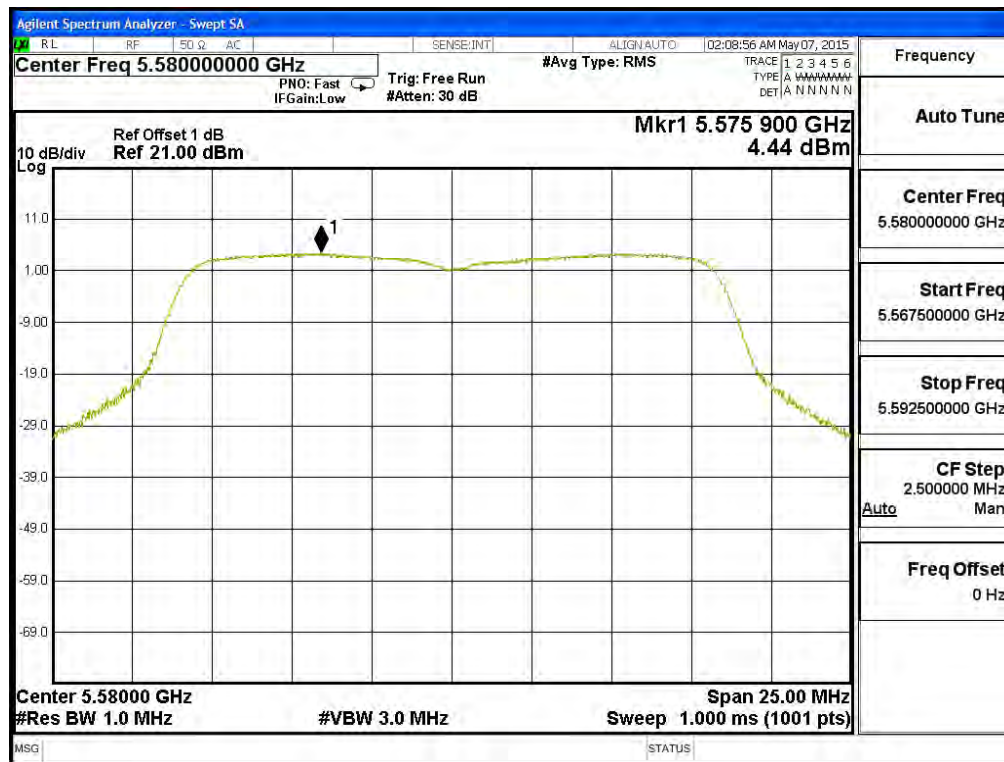
Channel 64: (Chain B)



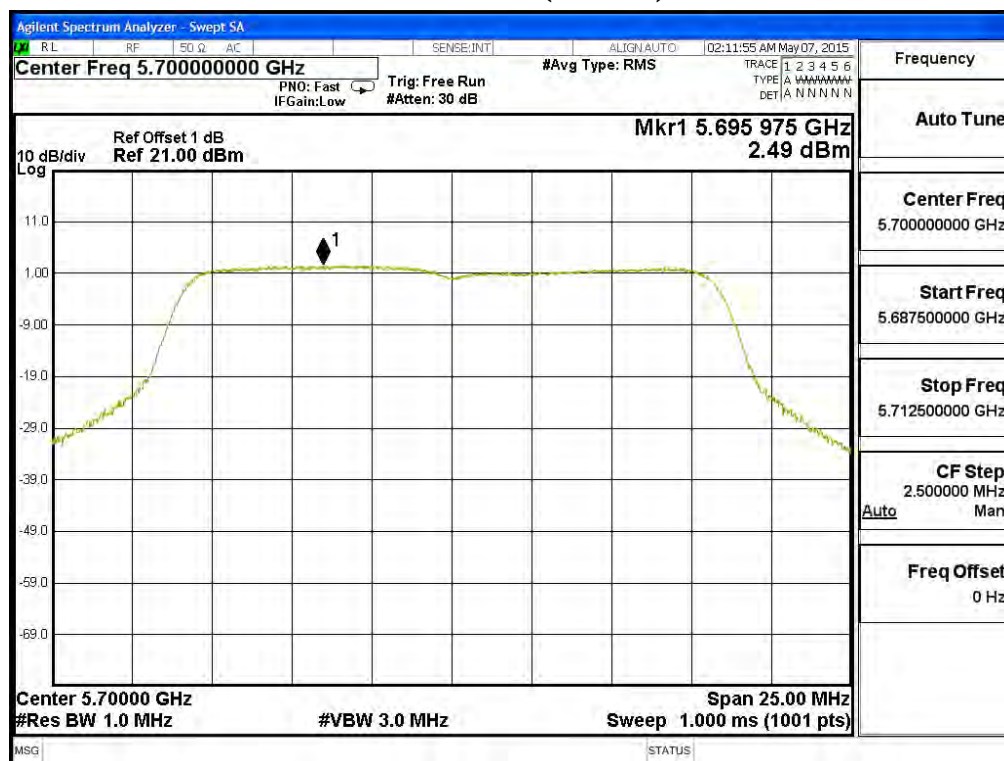
Channel 100: (Chain B)



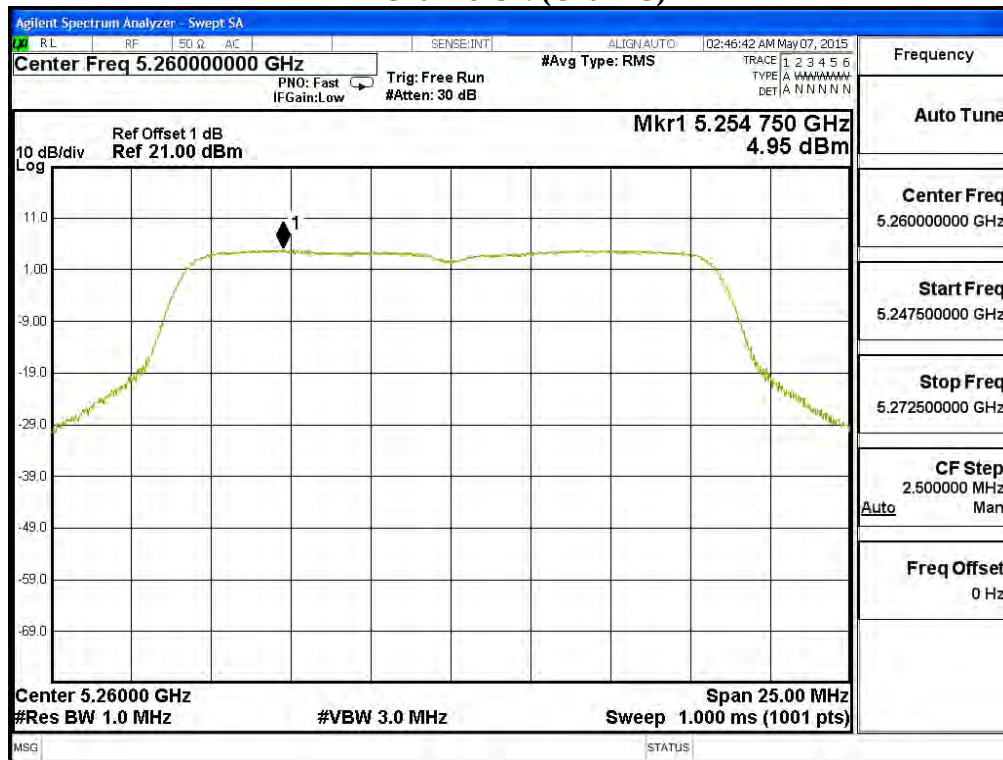
Channel 116: (Chain B)



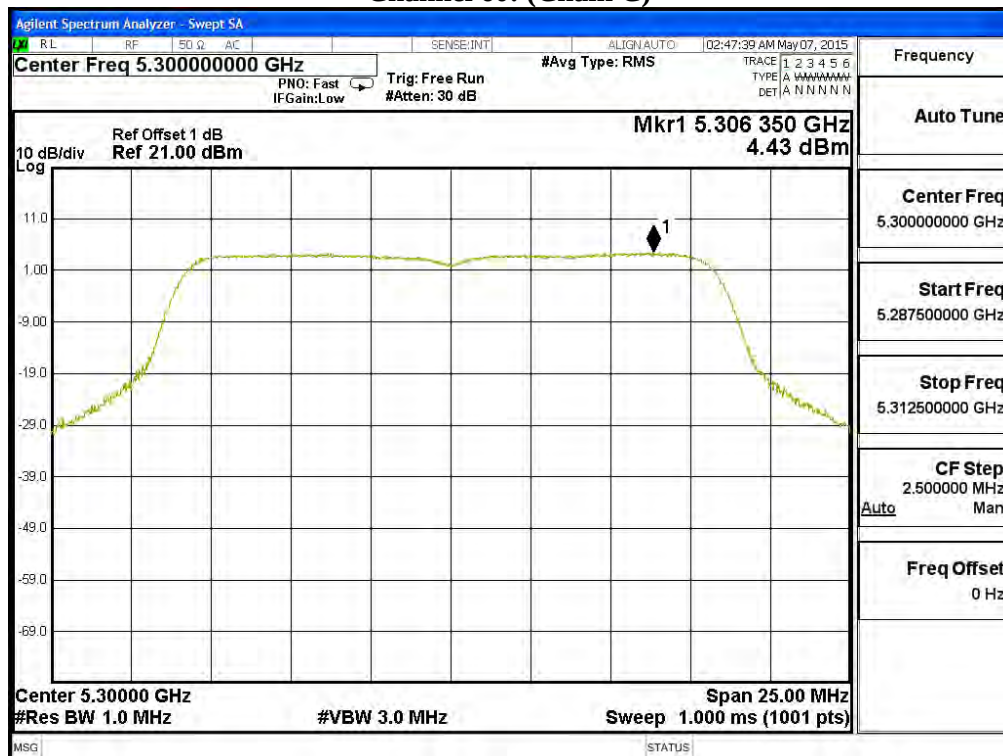
Channel 140: (Chain B)



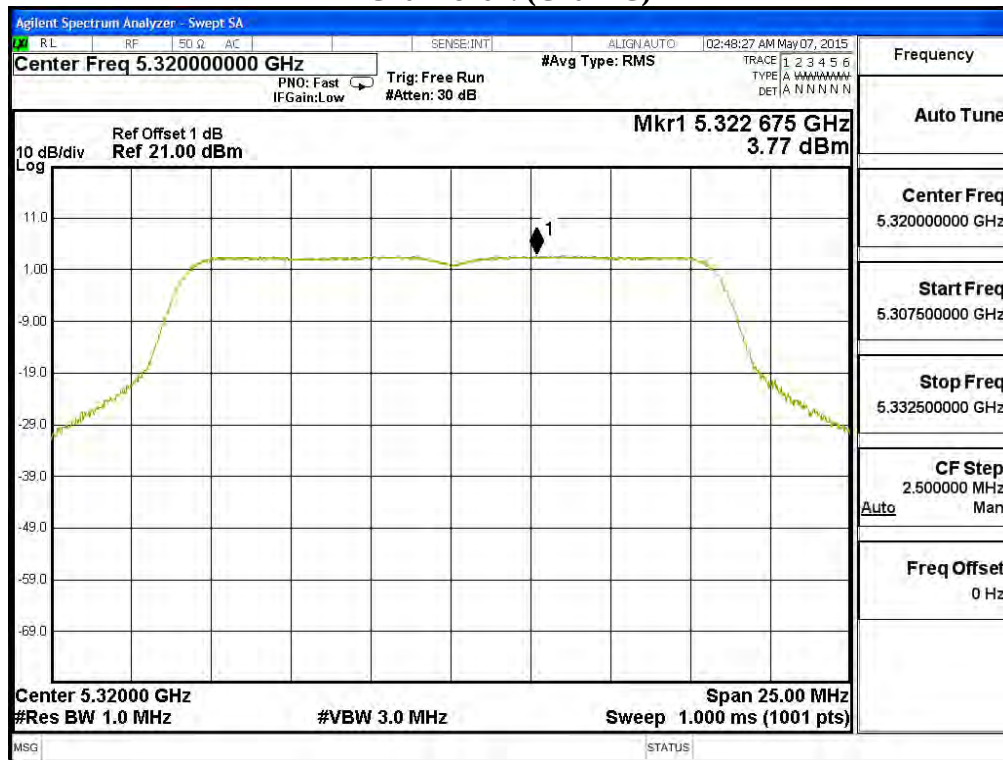
Channel 52: (Chain C)



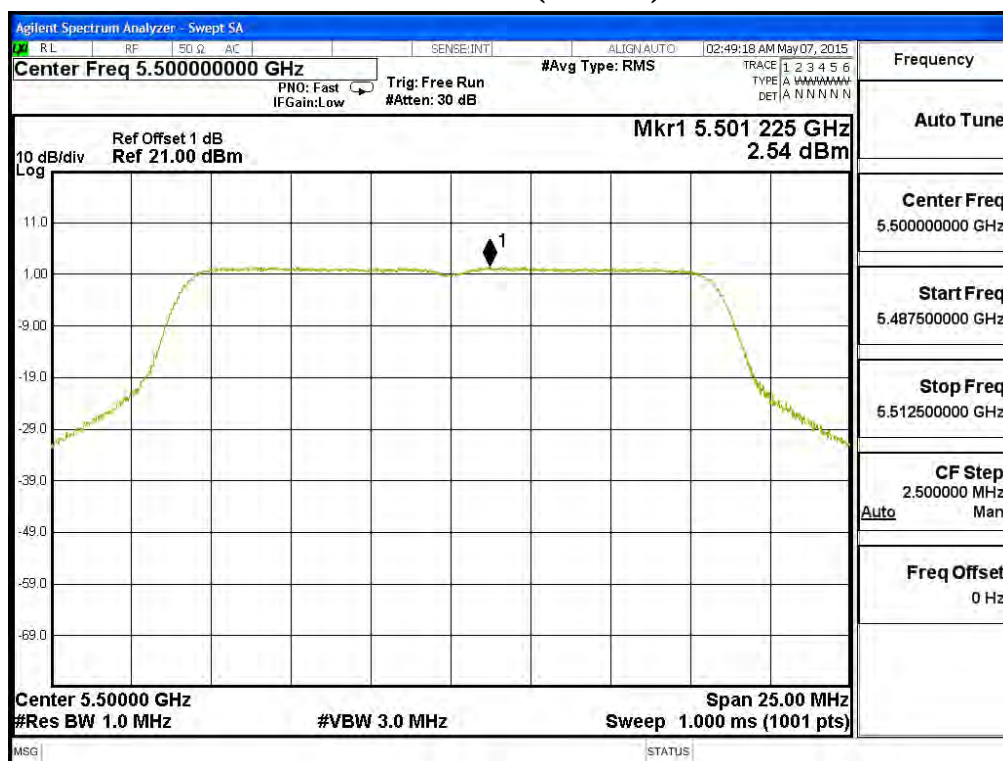
Channel 60: (Chain C)



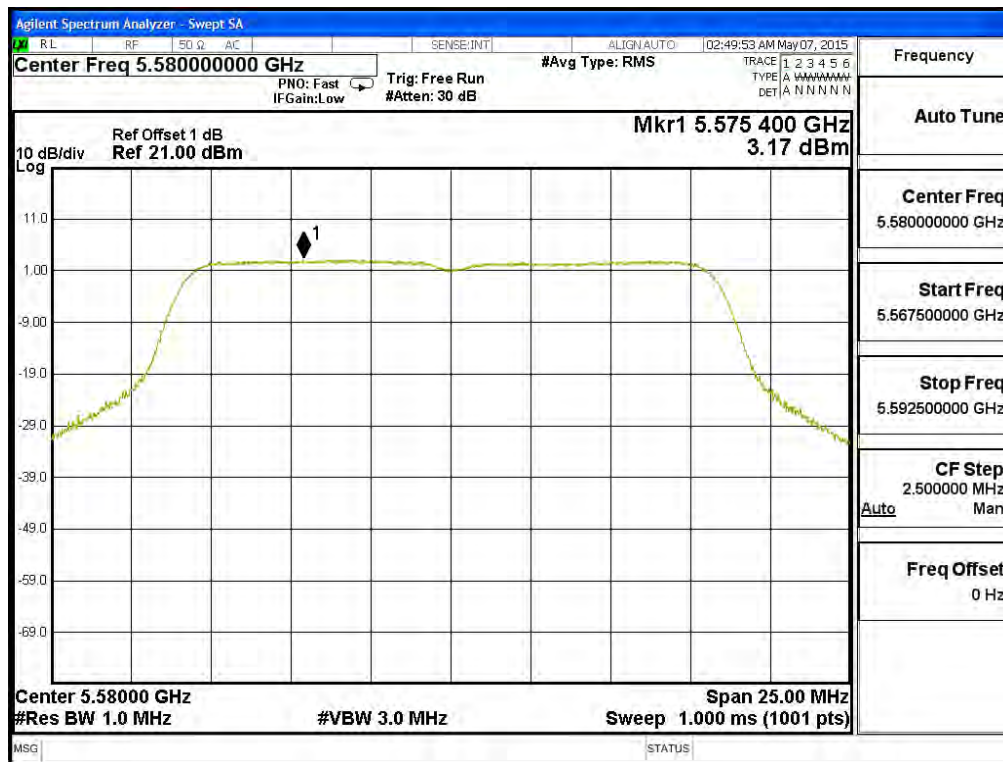
Channel 64: (Chain C)



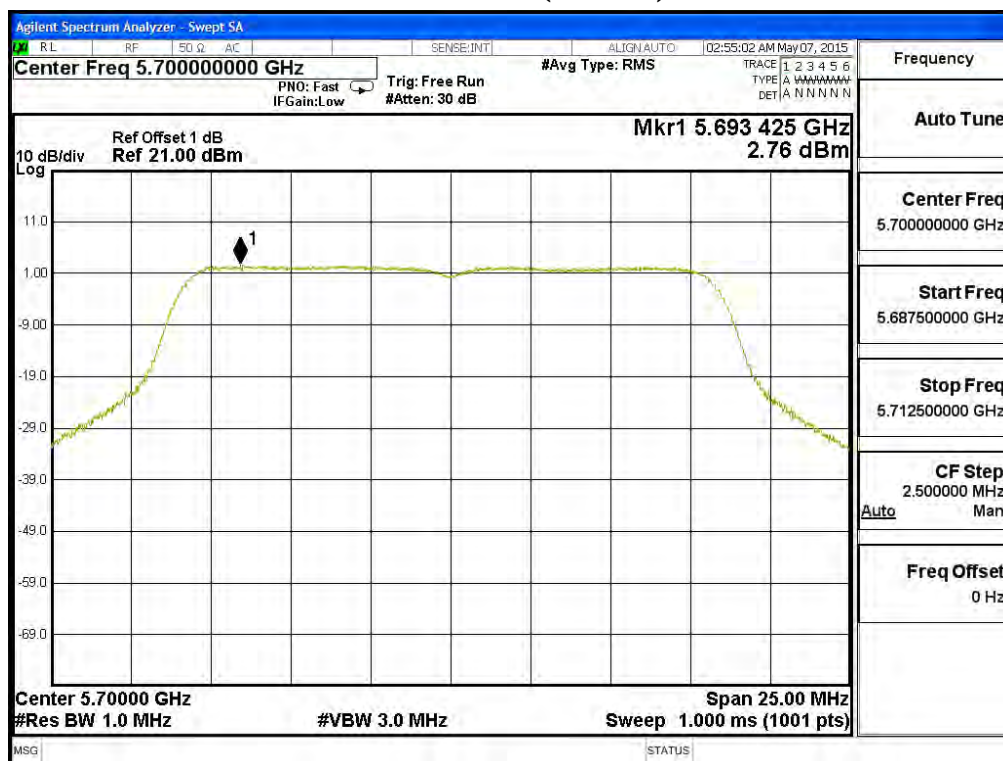
Channel 100: (Chain C)



Channel 116: (Chain C)



Channel 140: (Chain C)



Product : Access Point/Sensor
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna)

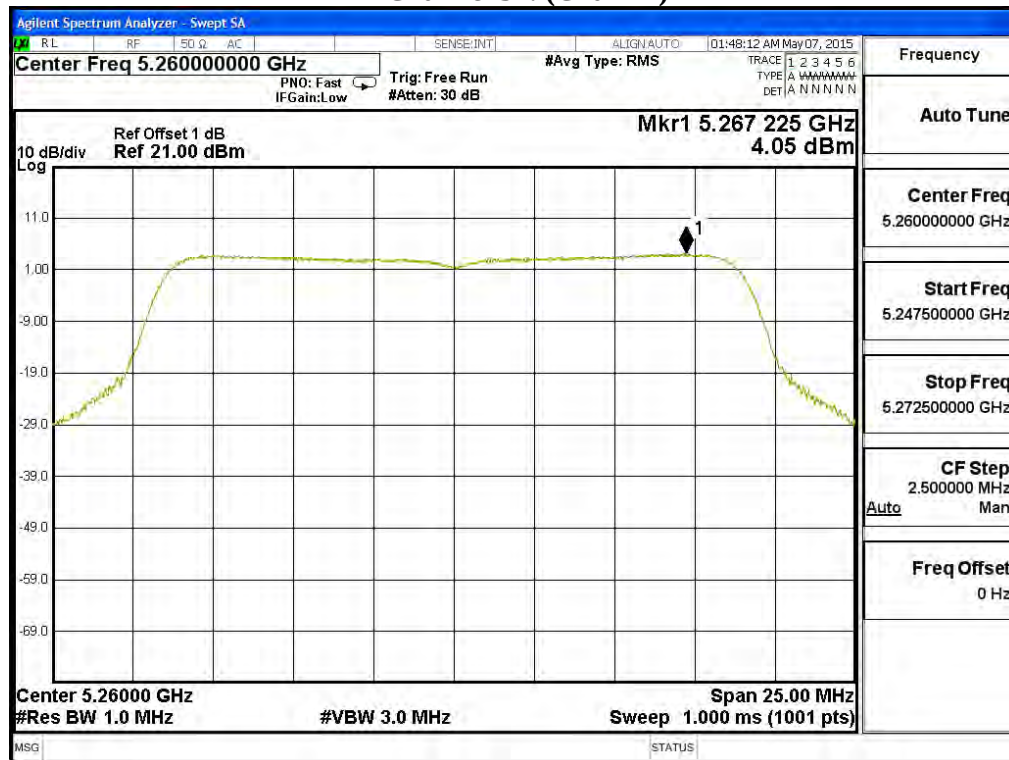
5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz

Channel Number	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSPD/MHz (dBm)	Required Limit (dBm)	Result
52	5260	A	4.050	8.821	11	Pass
		B	4.340	9.111	11	Pass
		C	3.880	8.651	11	Pass
60	5300	A	3.940	8.711	11	Pass
		B	3.940	8.711	11	Pass
		C	3.720	8.491	11	Pass
64	5320	A	4.030	8.801	11	Pass
		B	4.430	9.201	11	Pass
		C	3.840	8.611	11	Pass
100	5500	A	2.950	7.721	10.93	Pass
		B	3.050	7.821	10.93	Pass
		C	2.460	7.231	10.93	Pass
116	5580	A	2.960	7.731	10.93	Pass
		B	3.780	8.551	10.93	Pass
		C	3.100	7.871	10.93	Pass
140	5700	A	4.199	8.970	10.93	Pass
		B	2.890	7.661	10.93	Pass
		C	2.690	7.461	10.93	Pass

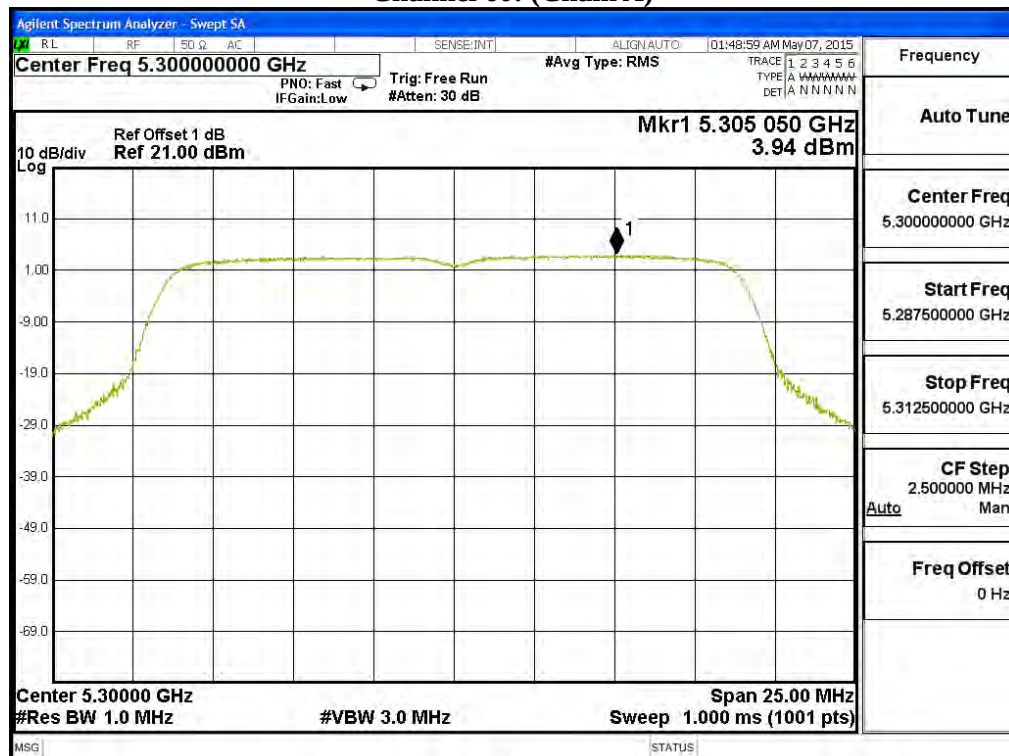
Note :

1. The quantity $10 \cdot \log 3$ (three antennas) is added to the spectrum peak value according to document 662911 D01.
2. The peak power spectral density shall be reduced by the amount in Db that the directional gain of the antenna exceeds 6 dBi.

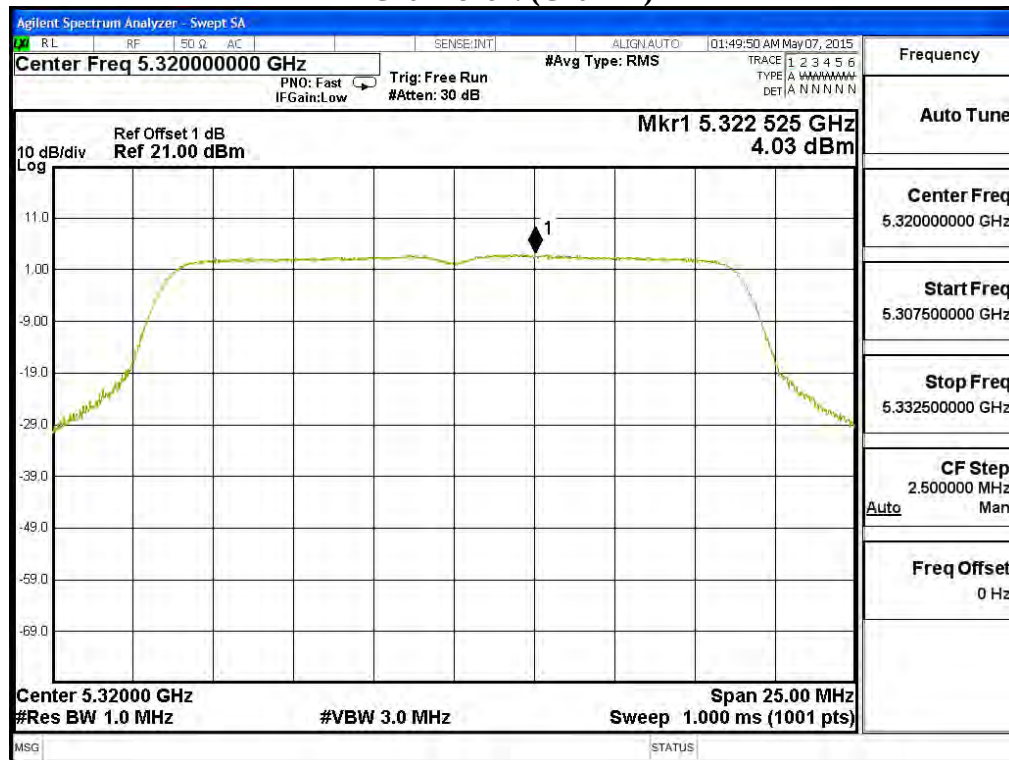
Channel 52: (Chain A)



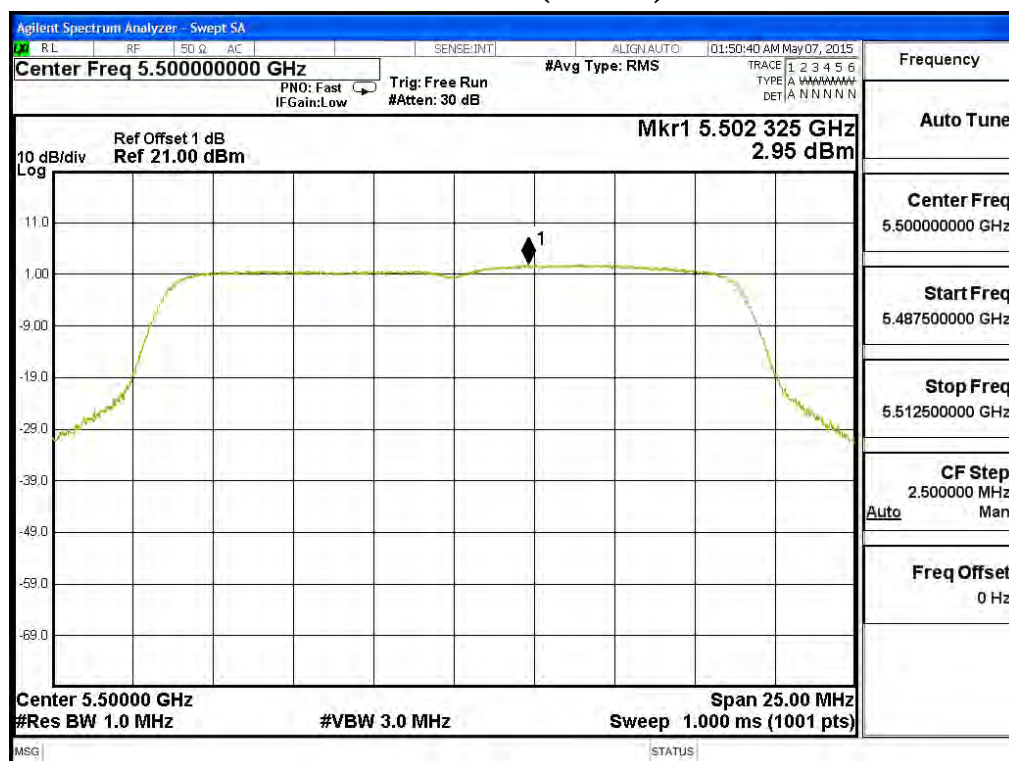
Channel 60: (Chain A)



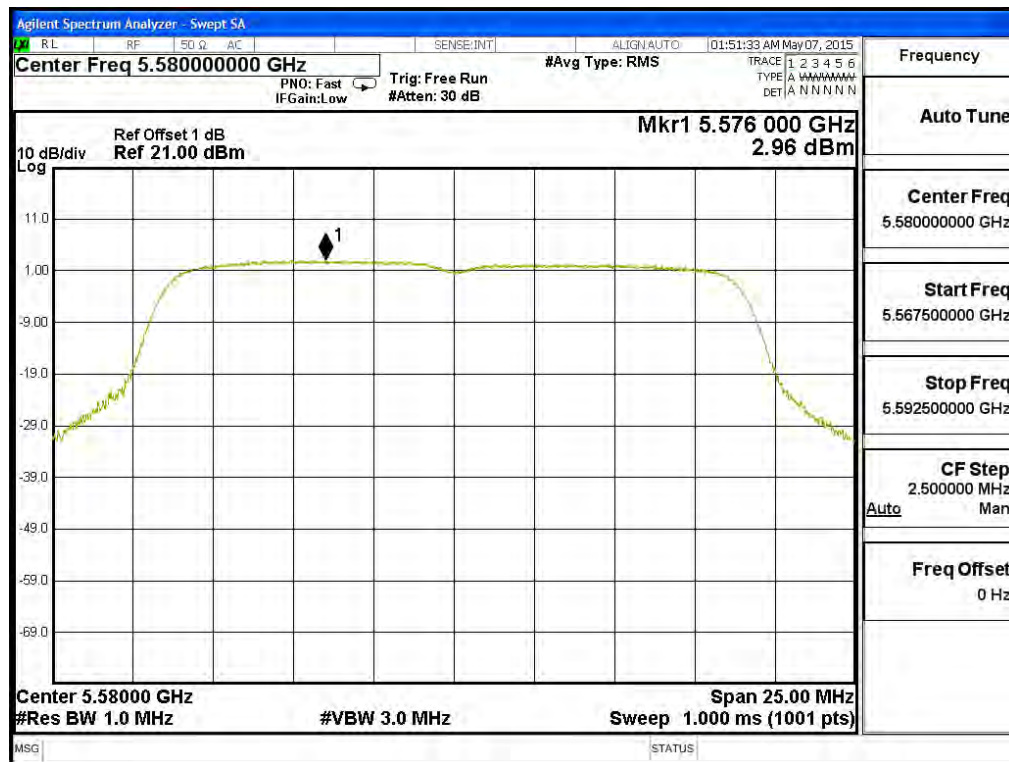
Channel 64: (Chain A)



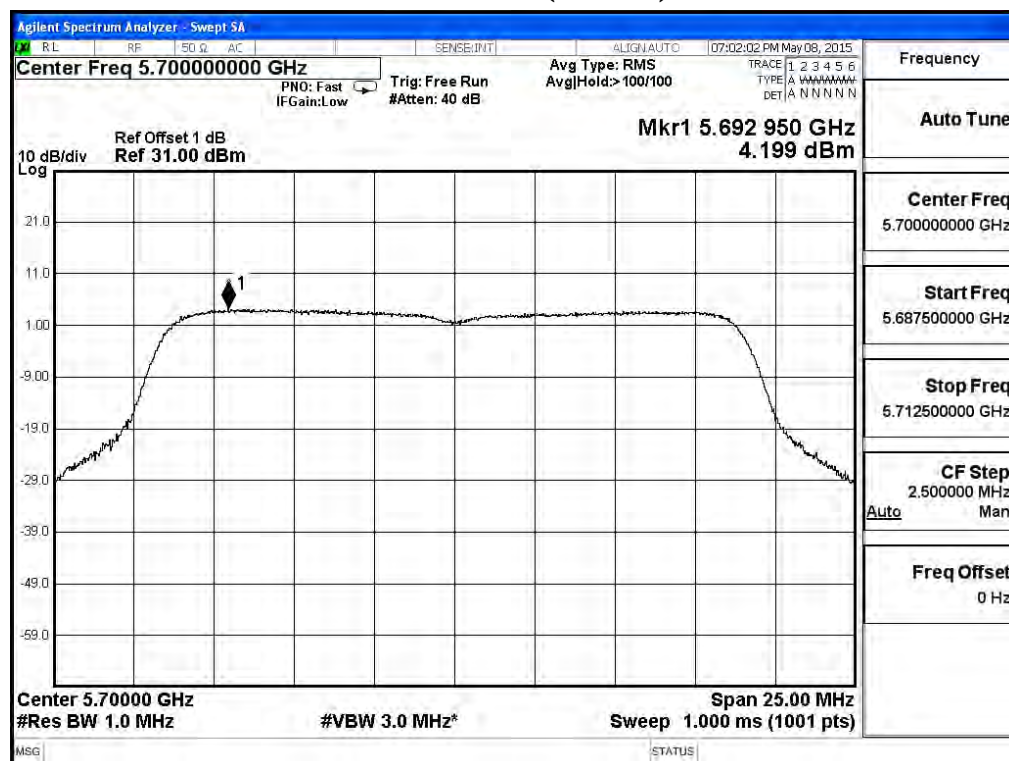
Channel 100: (Chain A)



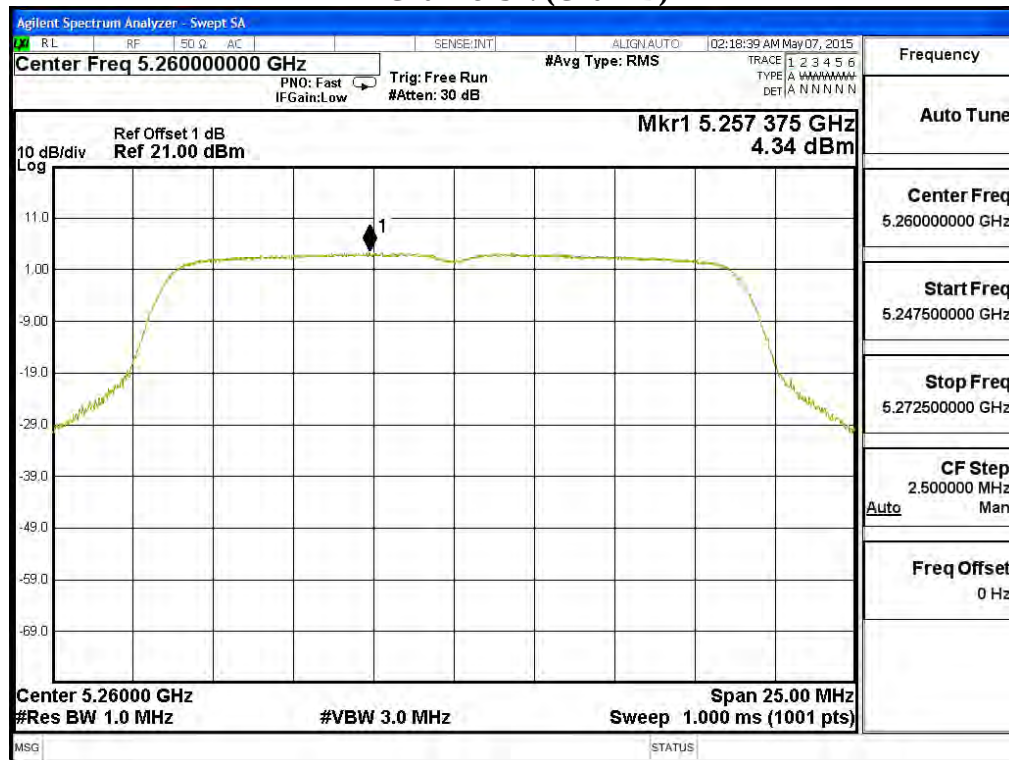
Channel 116: (Chain A)



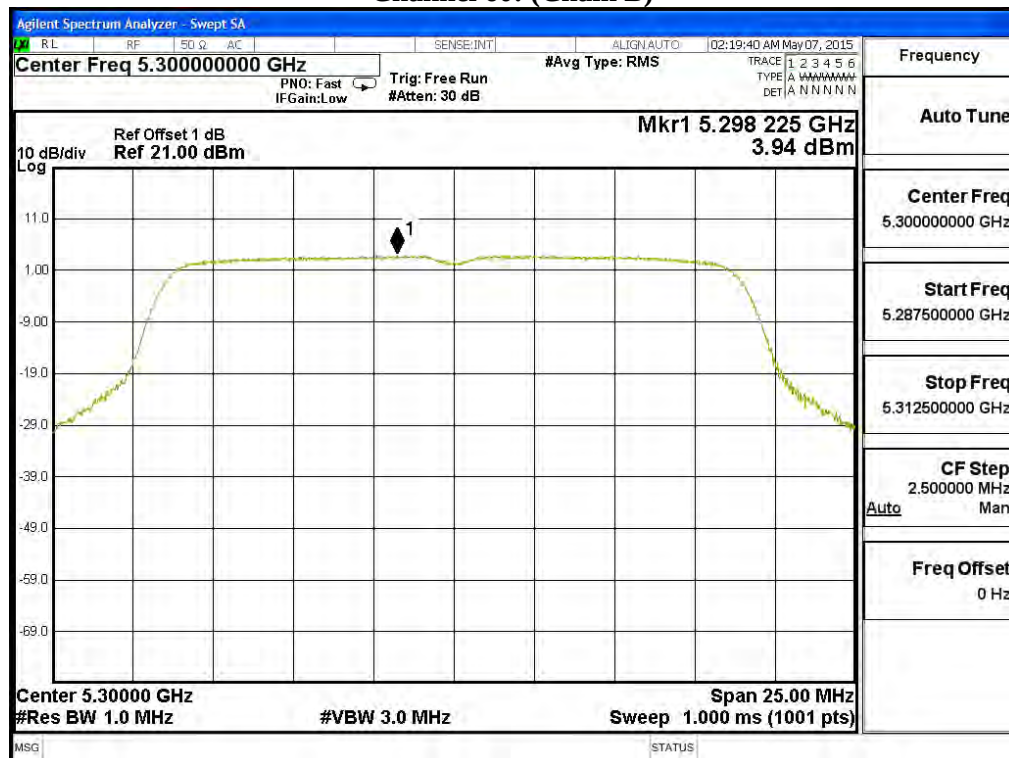
Channel 140: (Chain A)



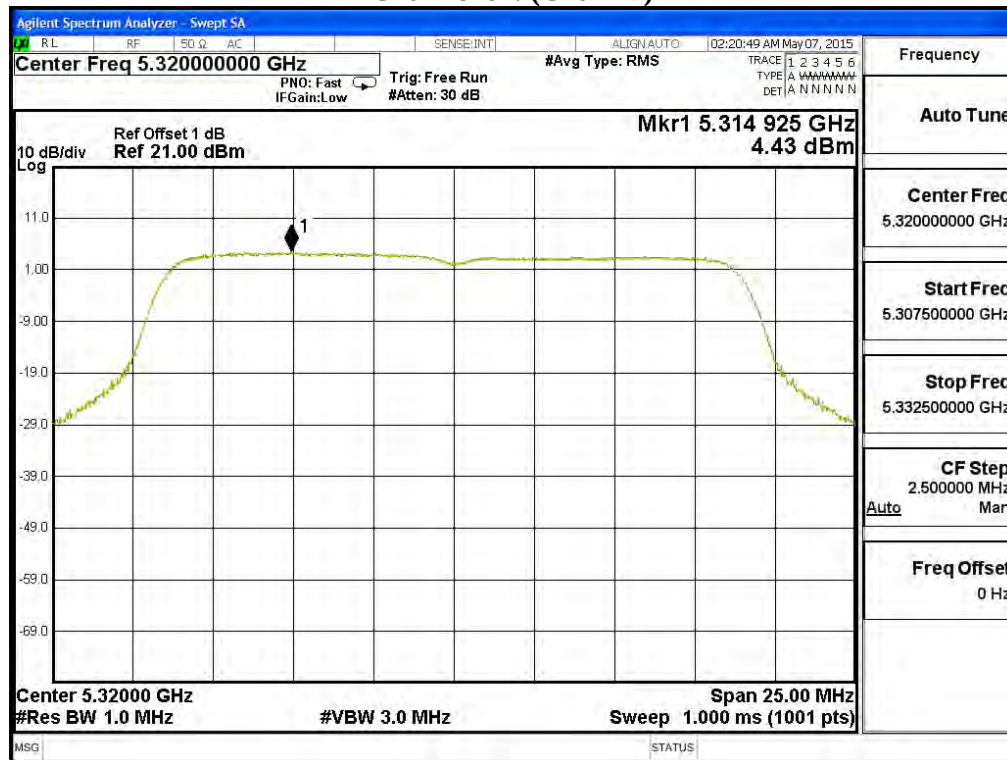
Channel 52: (Chain B)



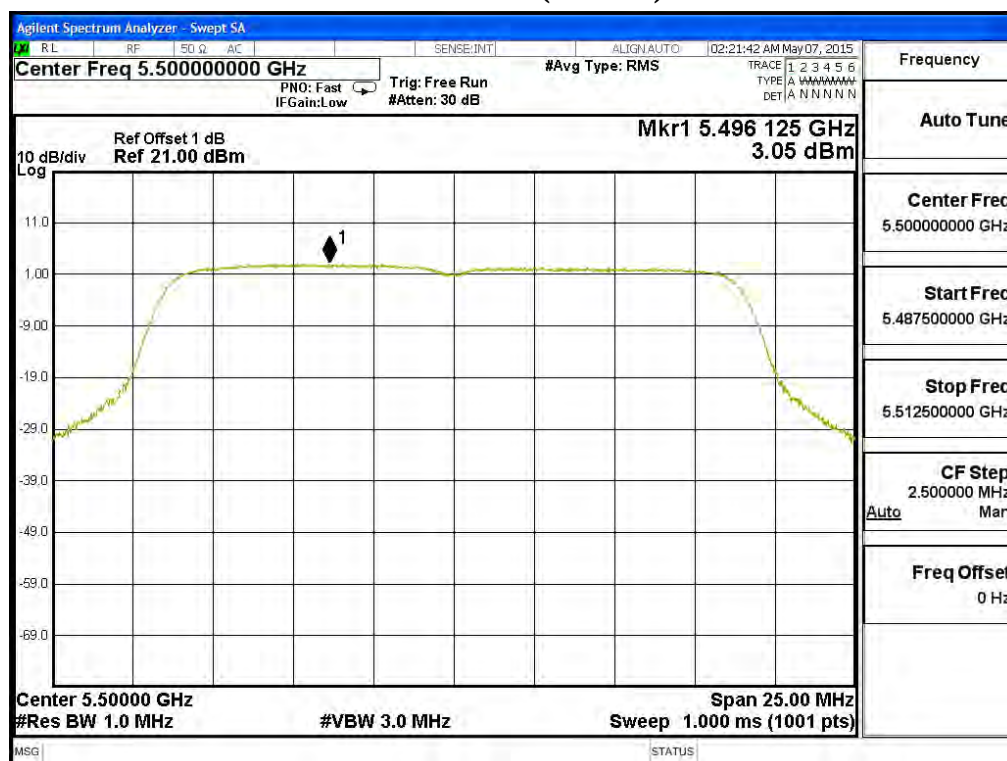
Channel 60: (Chain B)



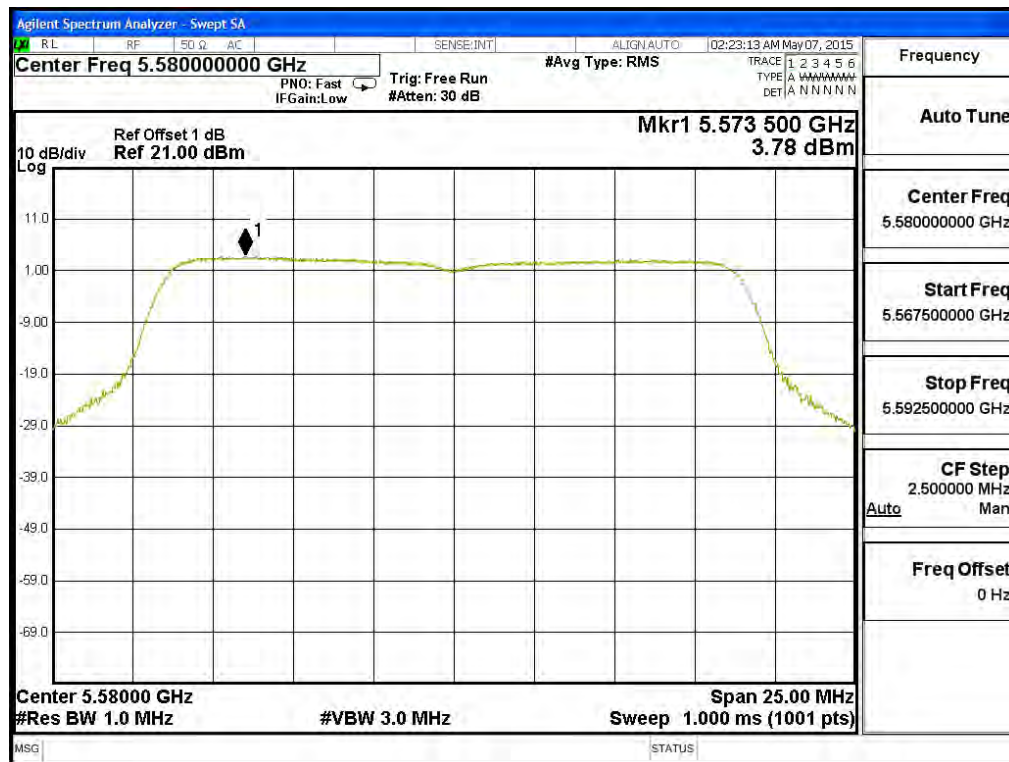
Channel 64: (Chain B)



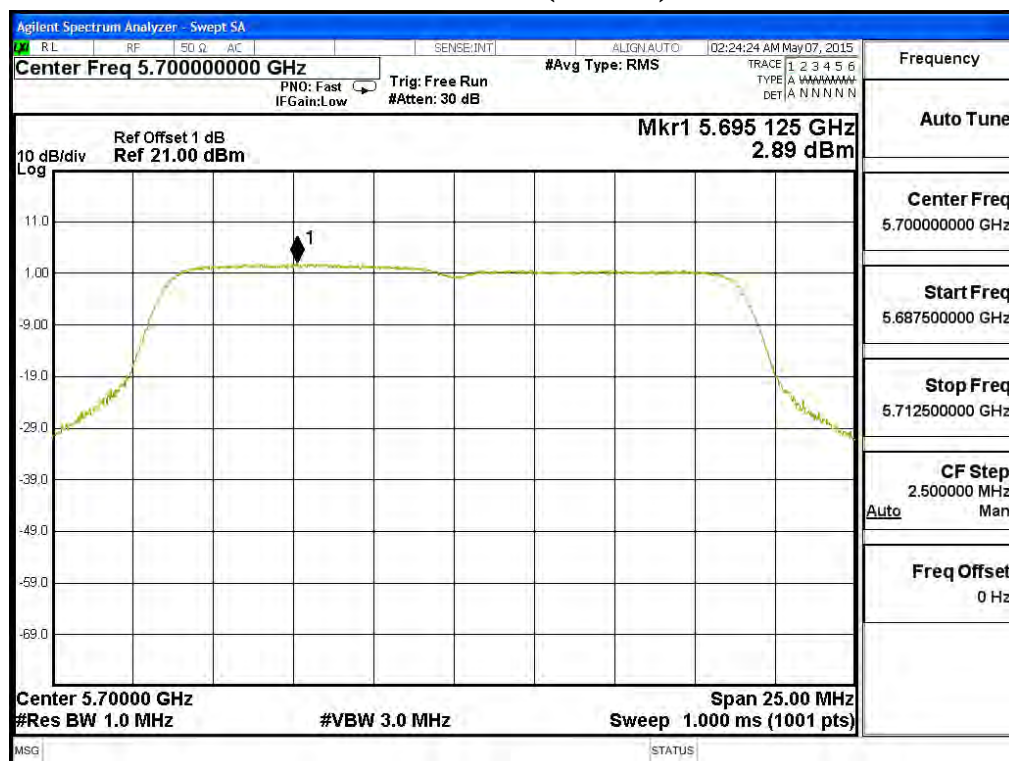
Channel 100: (Chain B)



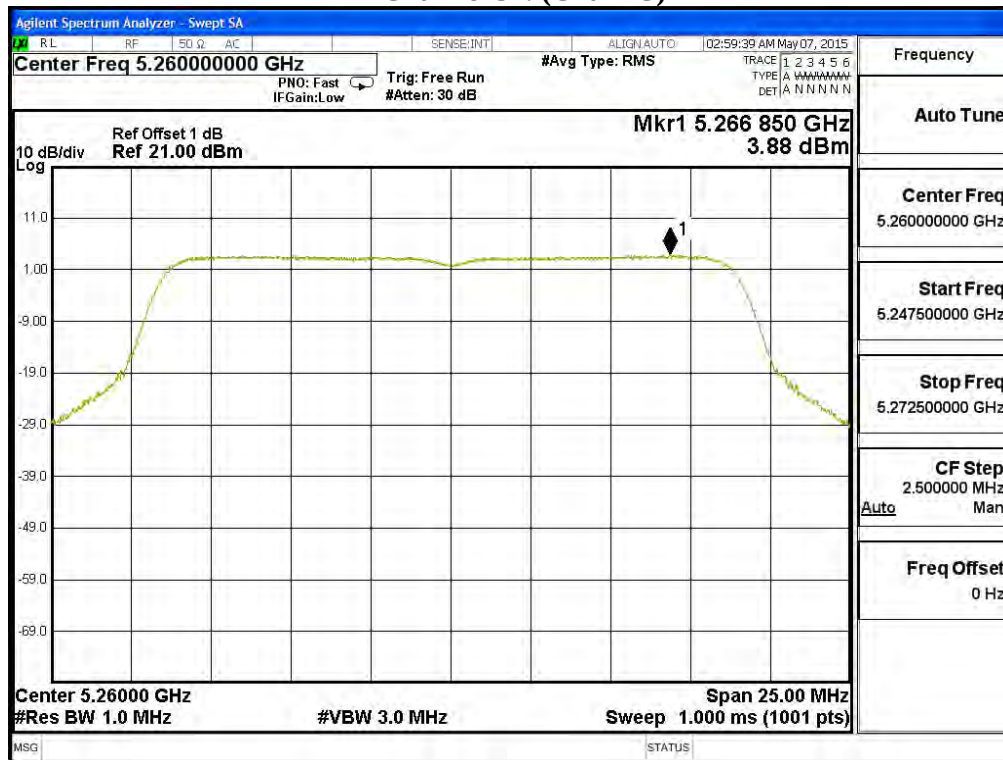
Channel 116: (Chain B)



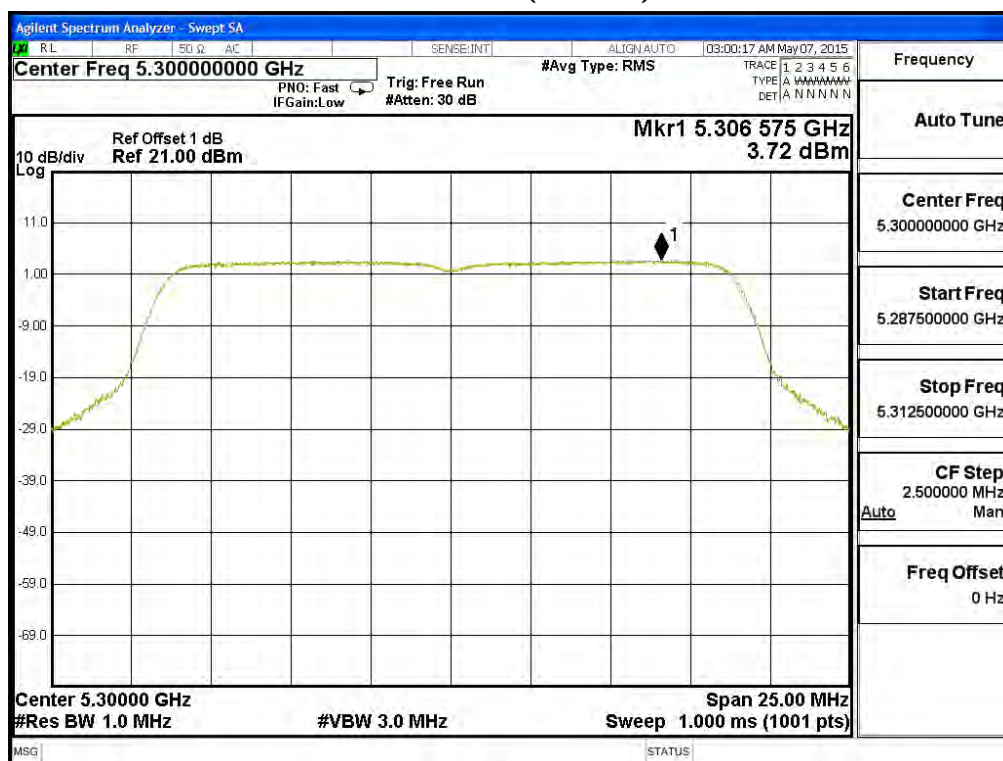
Channel 140: (Chain B)



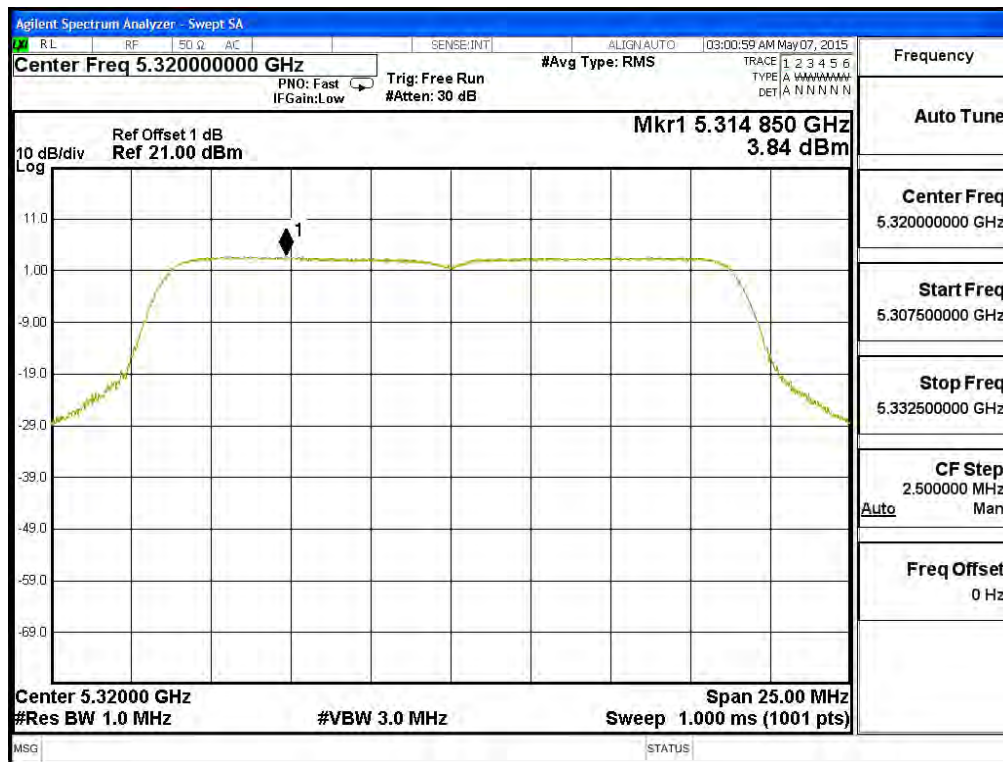
Channel 52: (Chain C)



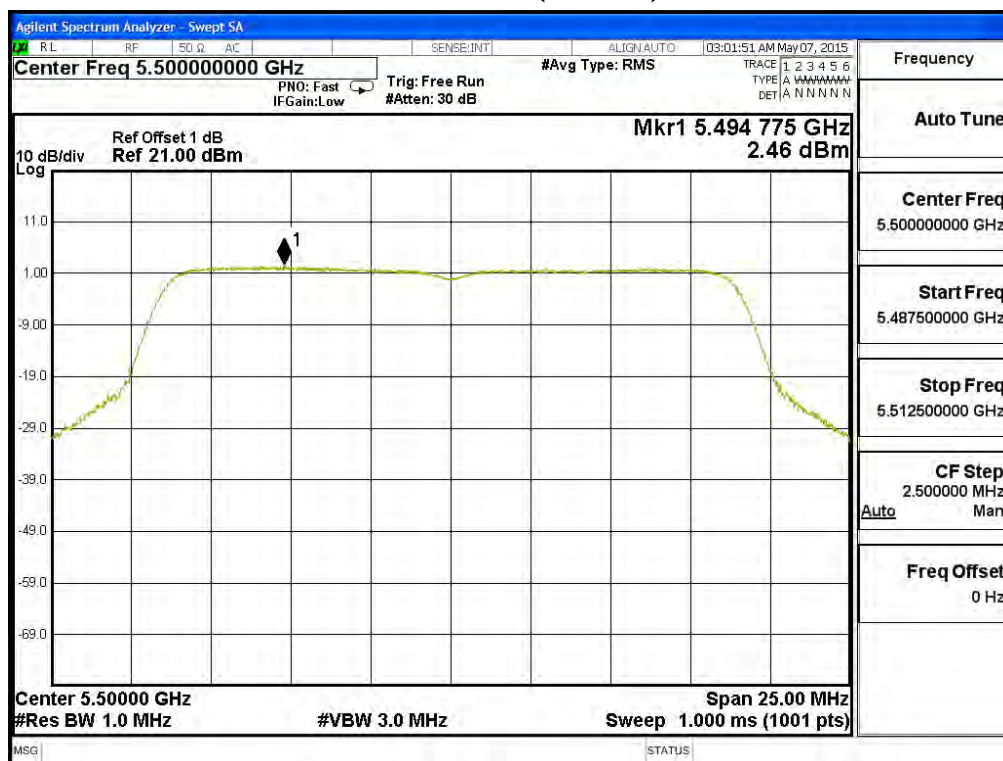
Channel 60: (Chain C)



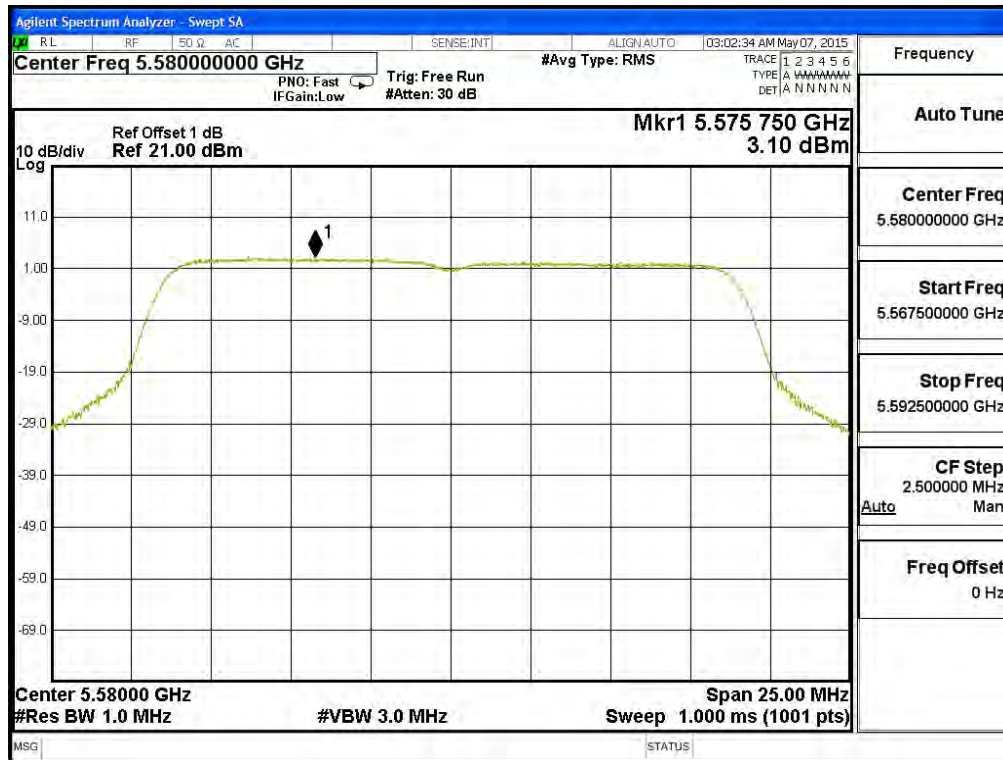
Channel 64: (Chain C)



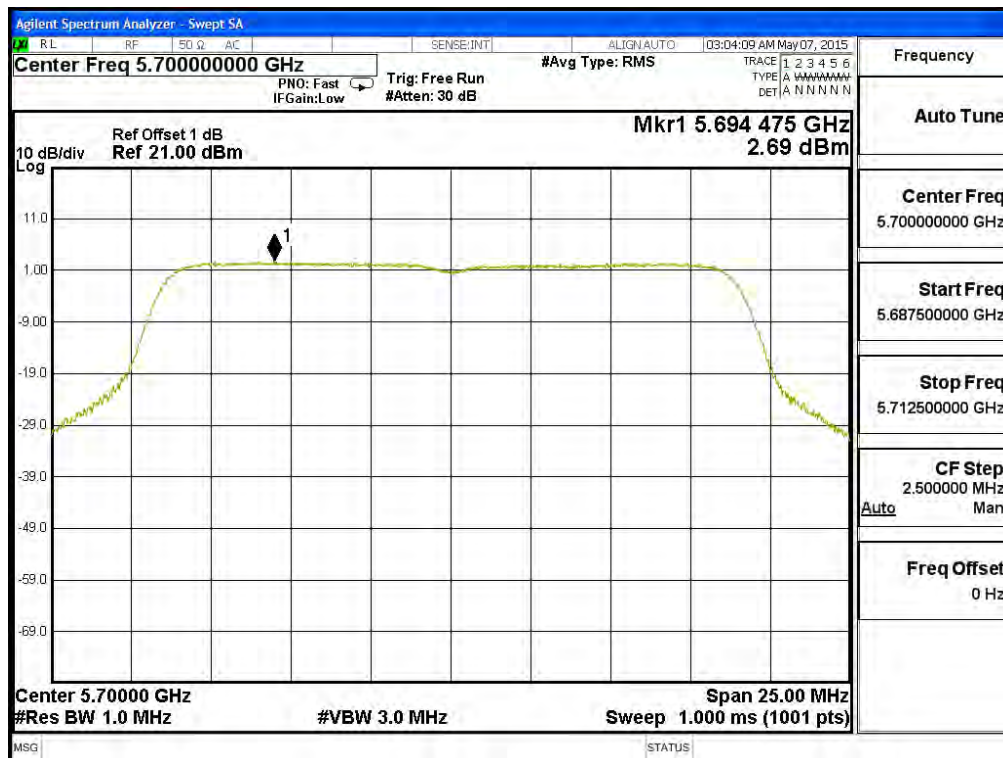
Channel 100: (Chain C)



Channel 116: (Chain C)



Channel 140: (Chain C)



Product : Access Point/Sensor
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna)

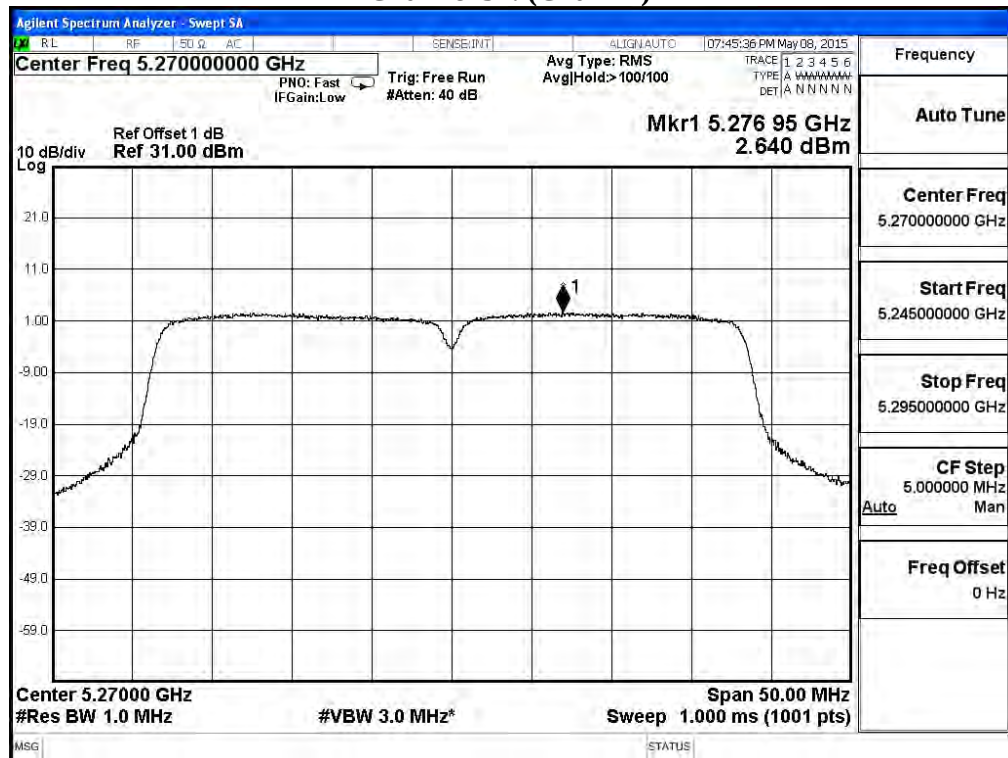
5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz

Channel Number	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PSD/MHz (dBm)	Required Limit (dBm)	Result
54	5270	A	2.640	7.411	11	Pass
		B	2.406	7.177	11	Pass
		C	2.179	6.950	11	Pass
62	5310	A	-0.598	4.173	11	Pass
		B	-0.272	4.499	11	Pass
		C	-0.469	4.302	11	Pass
102	5510	A	0.012	4.783	10.93	Pass
		B	-0.239	4.532	10.93	Pass
		C	-0.509	4.262	10.93	Pass
110	5550	A	-0.190	4.581	10.93	Pass
		B	0.610	5.381	10.93	Pass
		C	-0.360	4.411	10.93	Pass
134	5670	A	-0.130	4.641	10.93	Pass
		B	0.210	4.981	10.93	Pass
		C	-0.250	4.521	10.93	Pass

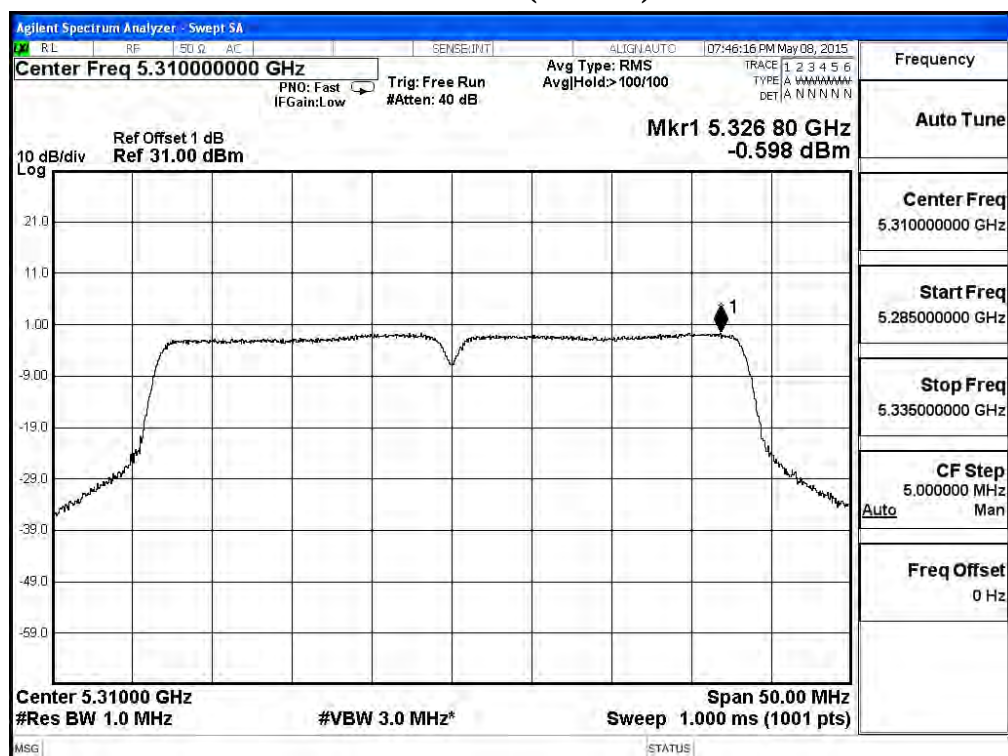
Note :

1. The quantity $10 \cdot \log 3$ (three antennas) is added to the spectrum peak value according to document 662911 D01.
2. The peak power spectral density shall be reduced by the amount in Db that the directional gain of the antenna exceeds 6 dBi.

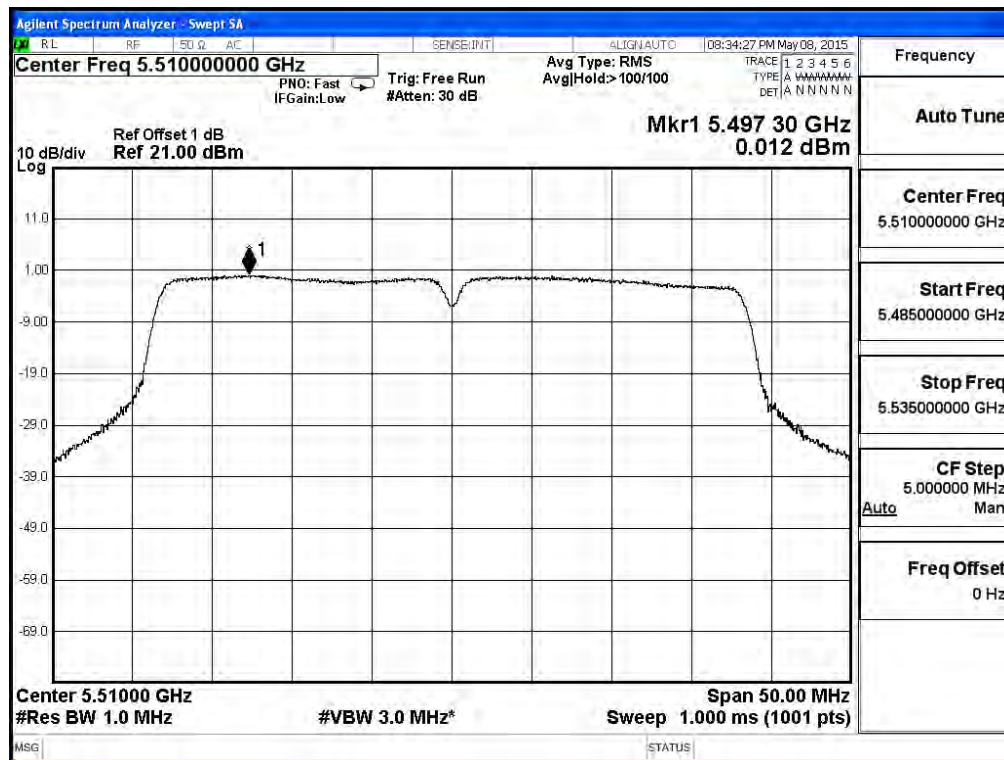
Channel 54: (Chain A)



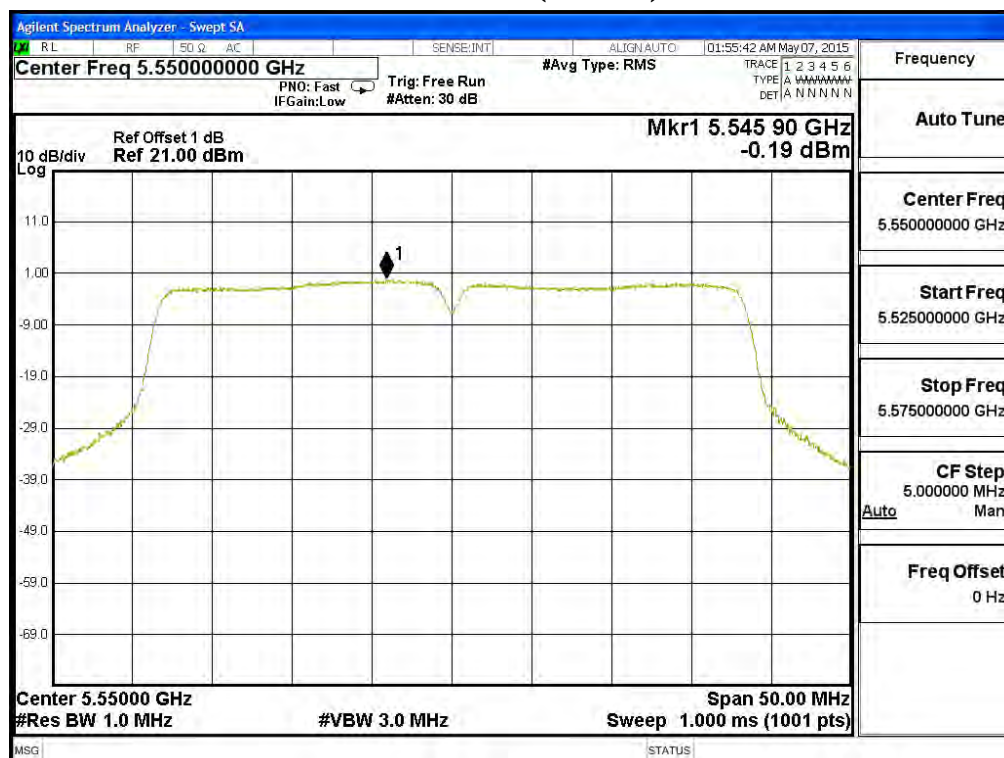
Channel 62: (Chain A)



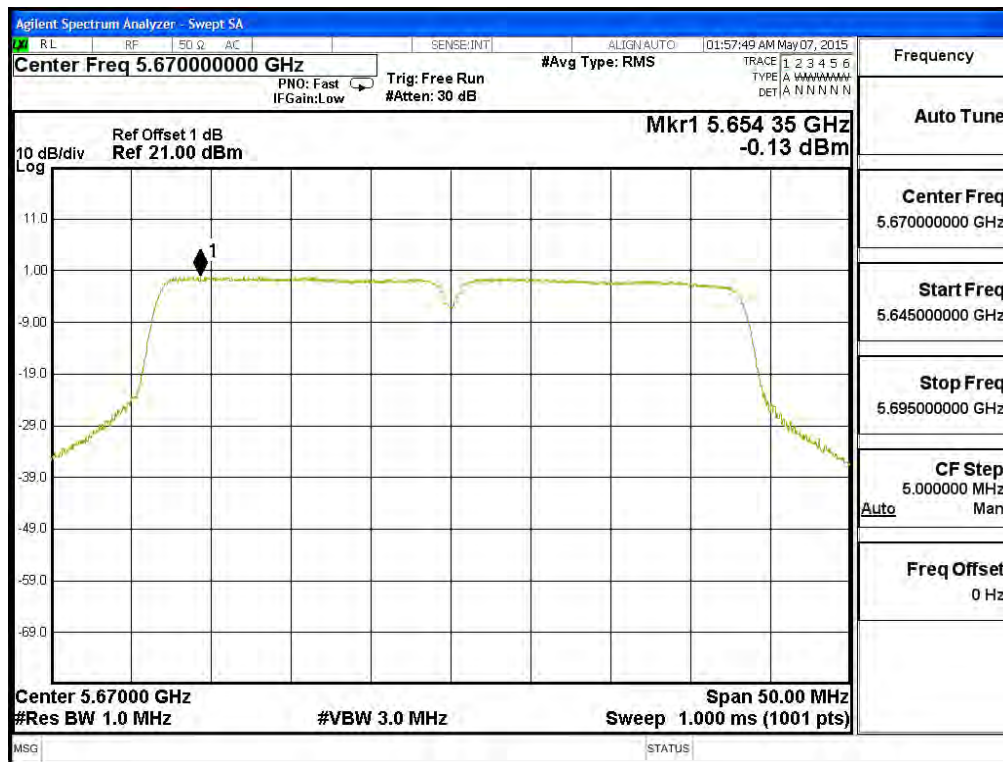
Channel 102: (Chain A)



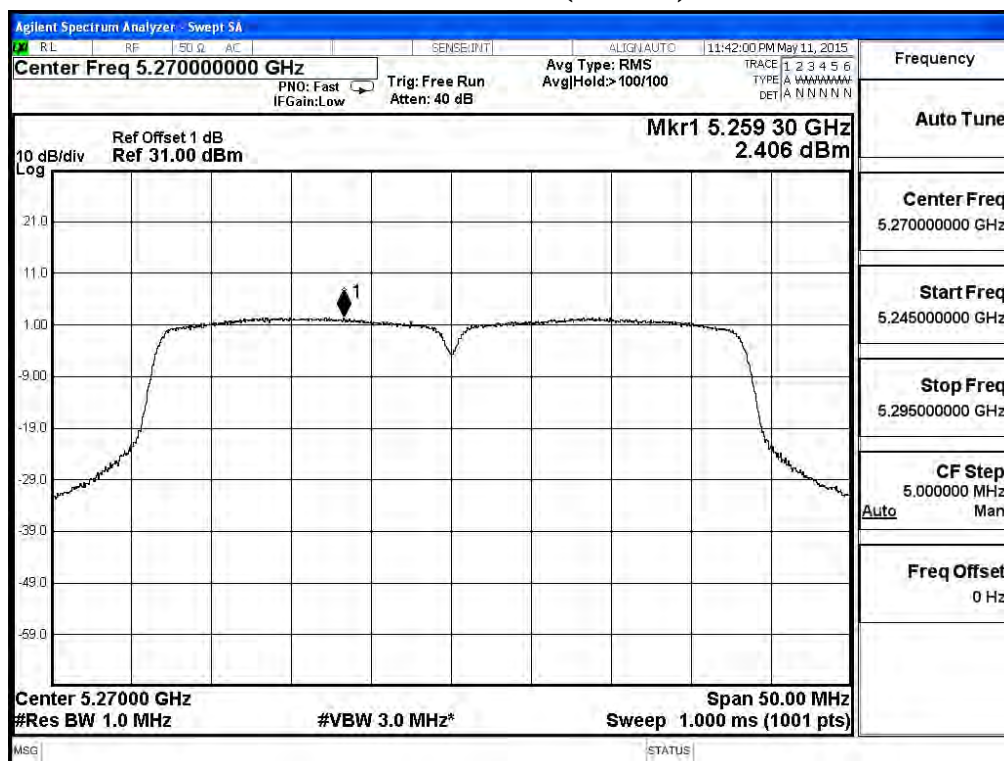
Channel 110: (Chain A)



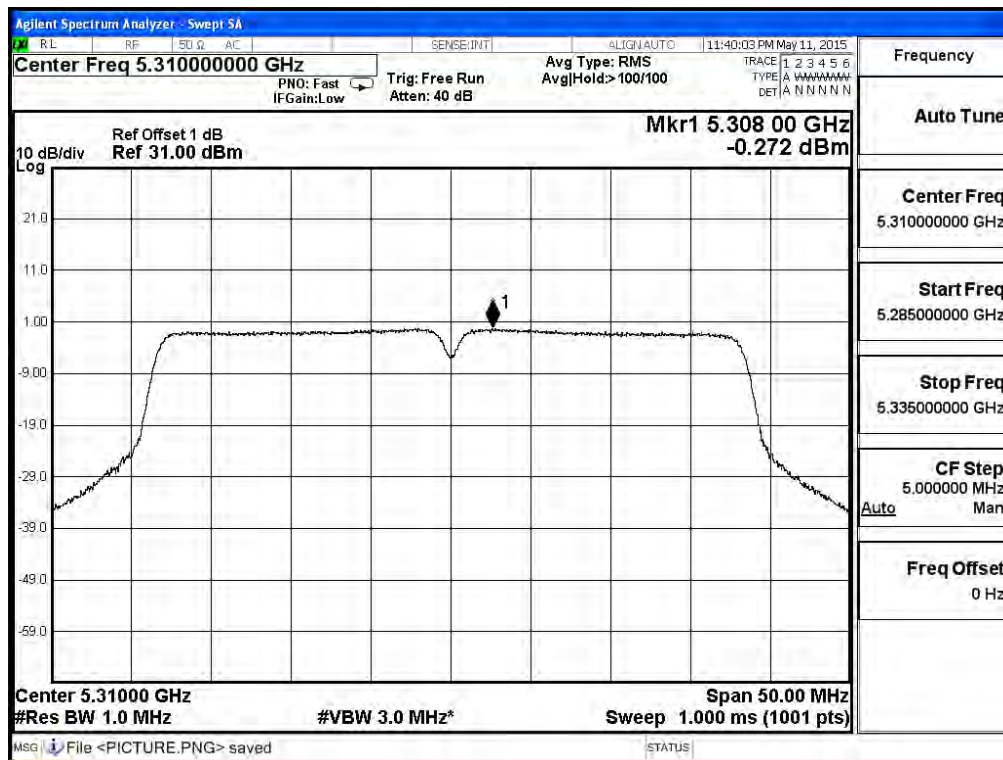
Channel 134: (Chain A)



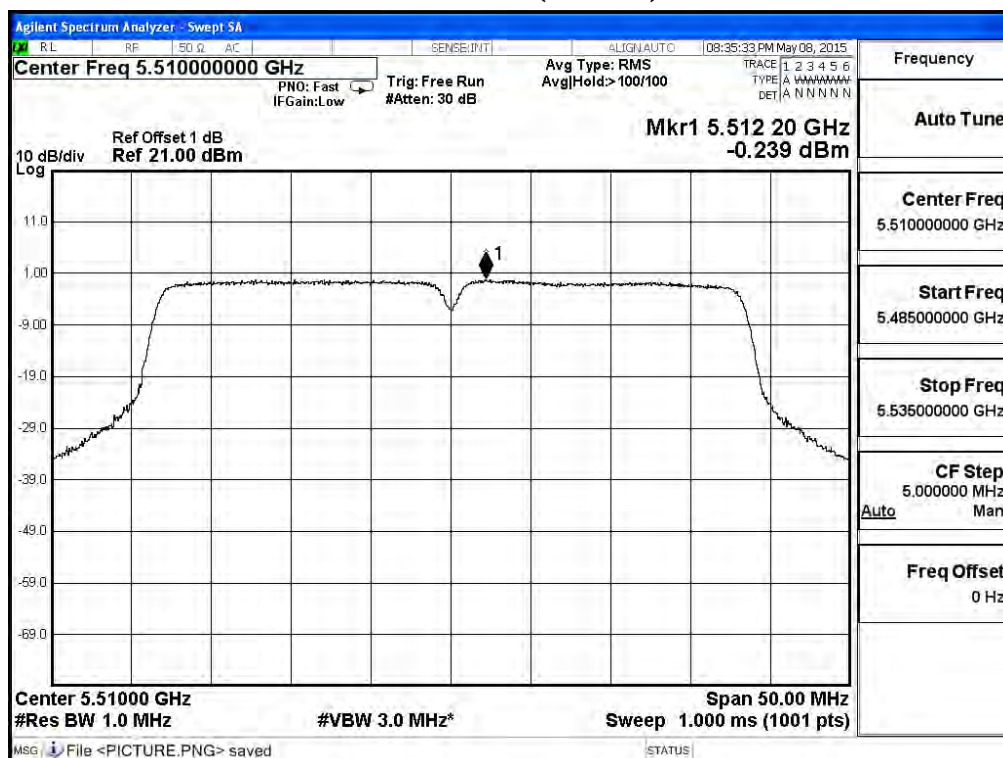
Channel 54: (Chain B)



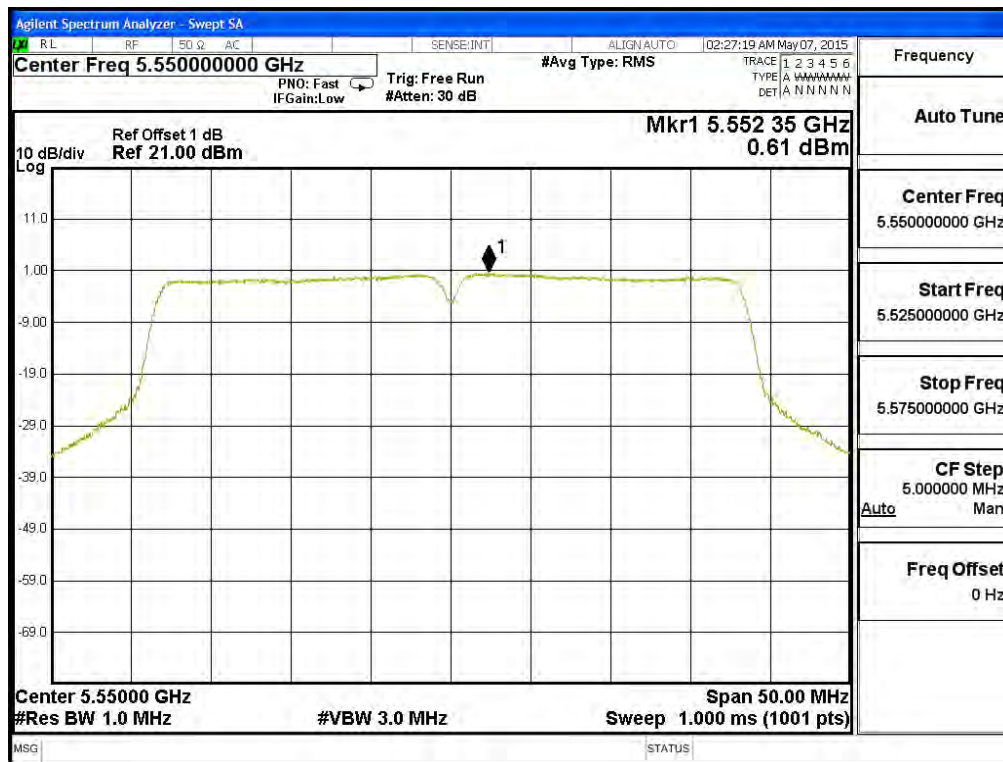
Channel 62: (Chain B)



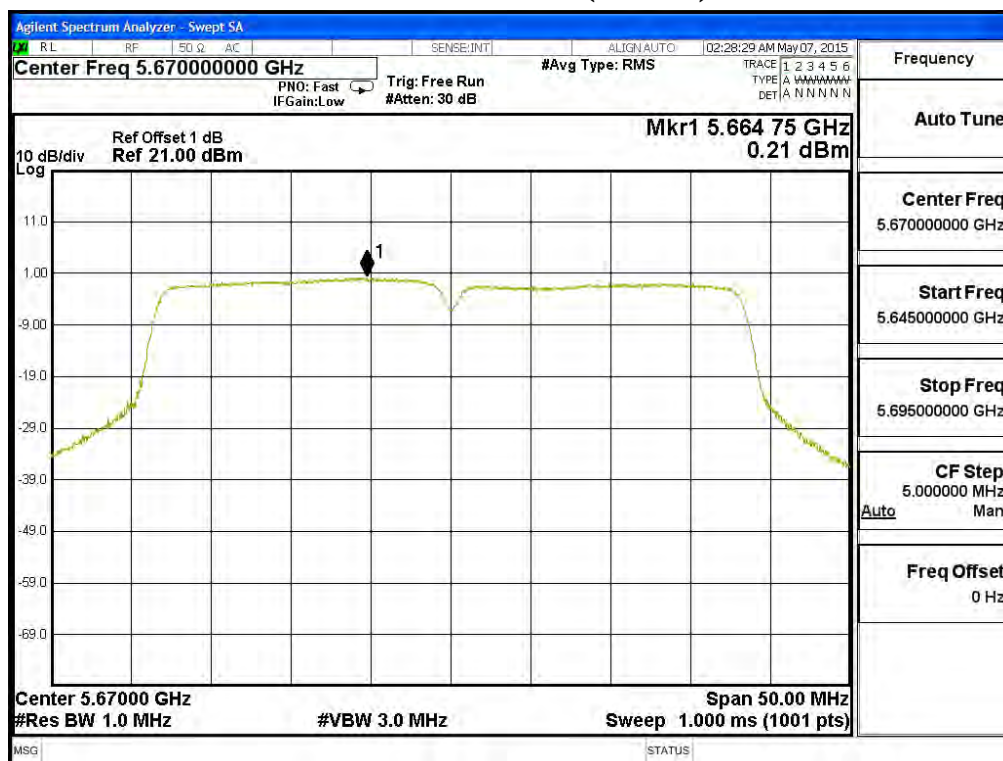
Channel 102: (Chain B)



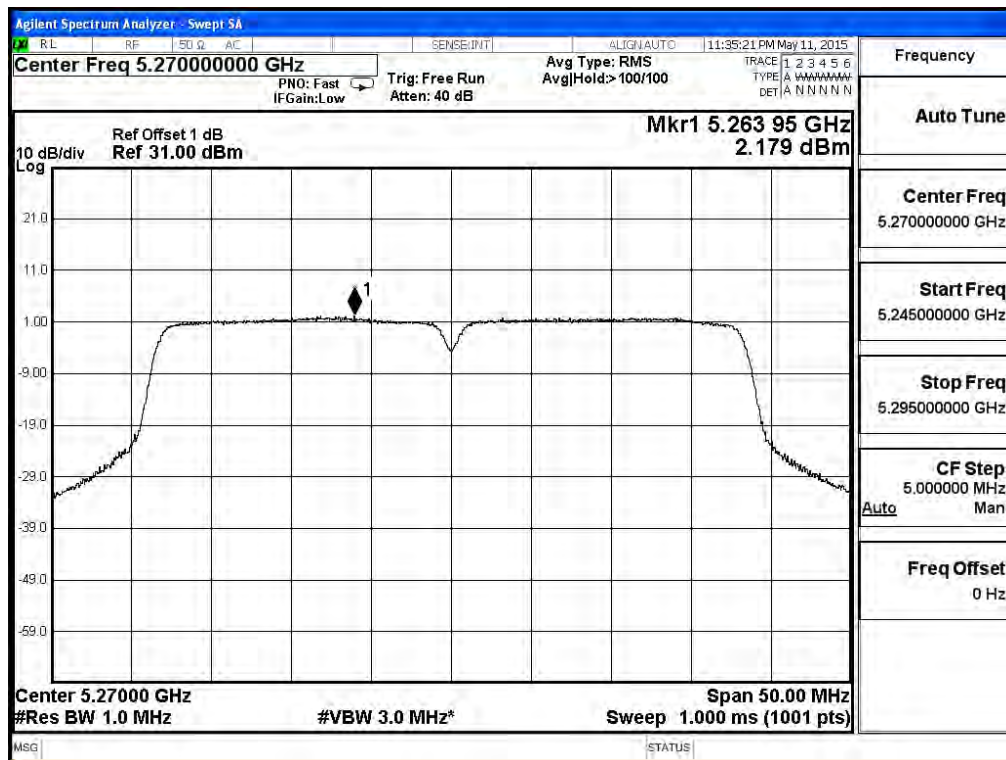
Channel 110: (Chain B)



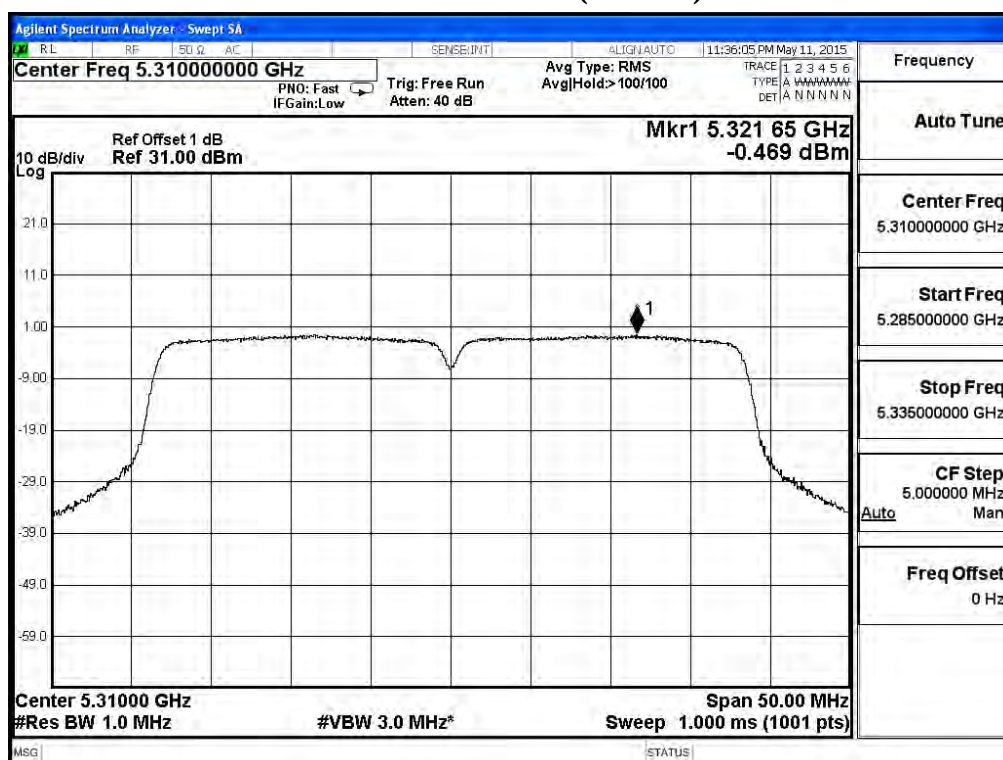
Channel 134: (Chain B)



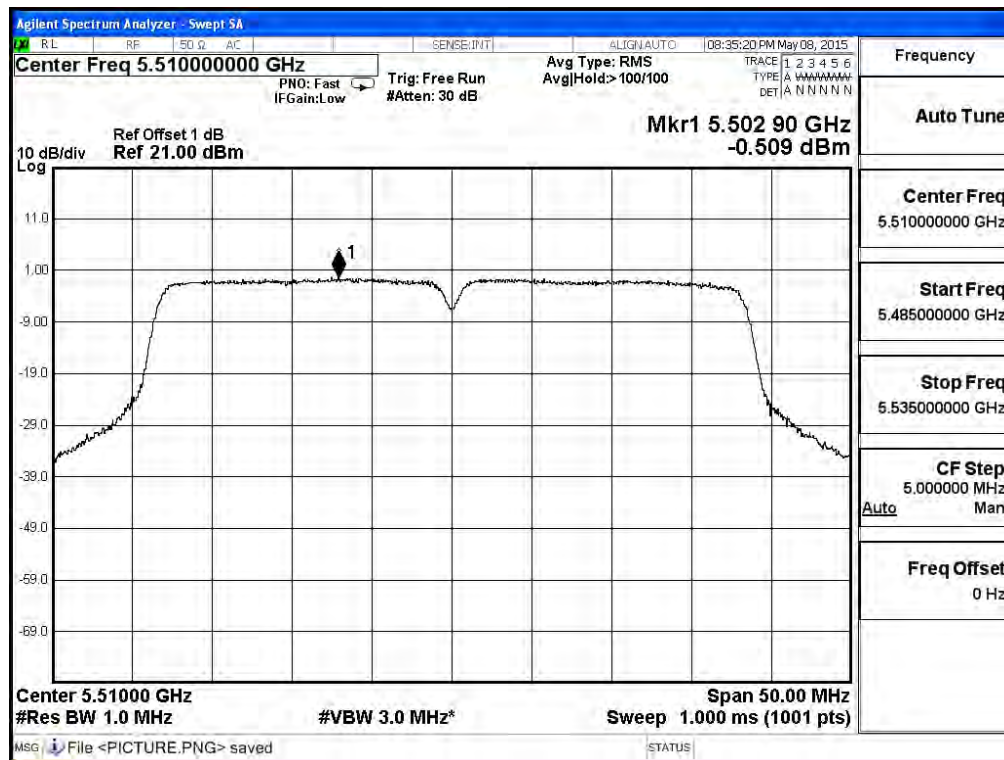
Channel 54 : (Chain C)



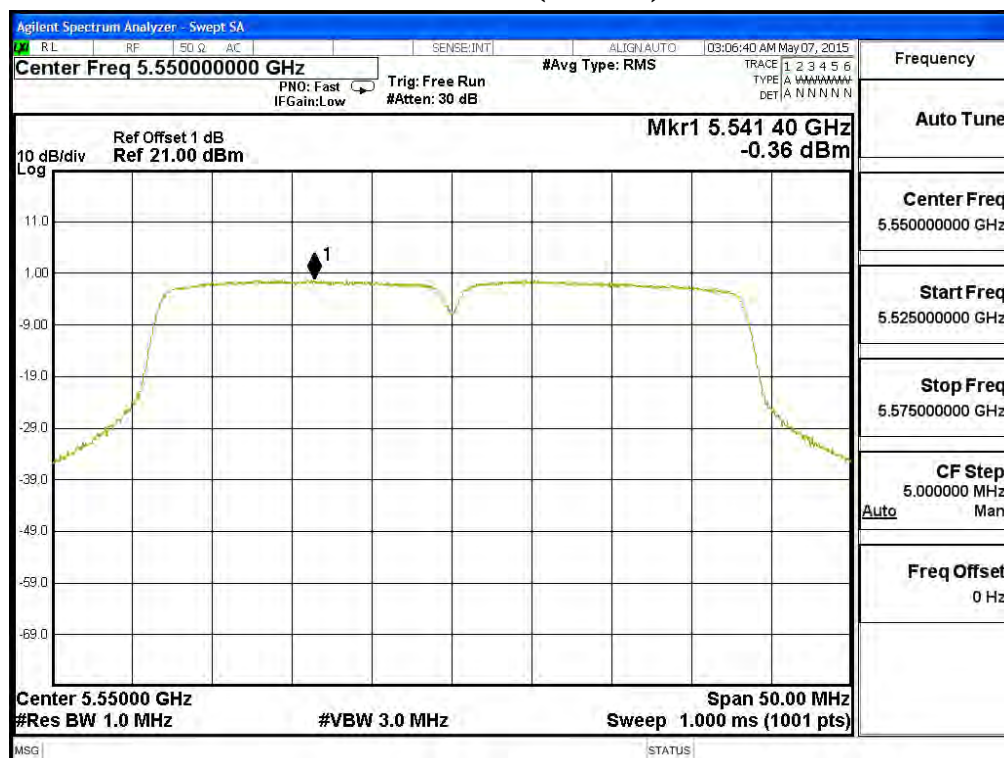
Channel 62 : (Chain C)



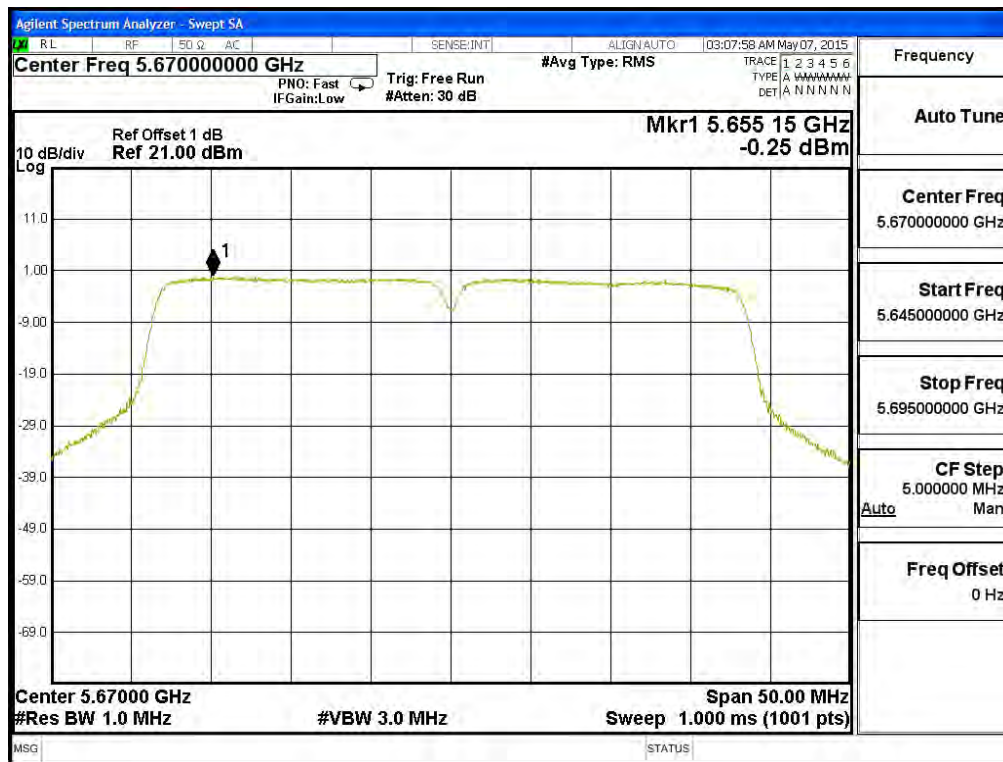
Channel 102: (Chain C)



Channel 110: (Chain C)



Channel 134: (Chain C)



Product : Access Point/Sensor
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11ac-20BW-21.7Mbps) (External Antenna)

Channel Number	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PSD/MHz	Required Limit (dBm)	Result
144	5720(Band3)	A	3.910	8.681	10.93	Pass
	5720(Band3)	B	4.142	8.913	10.93	Pass
	5720(Band3)	C	3.970	8.741	10.93	Pass

Note :

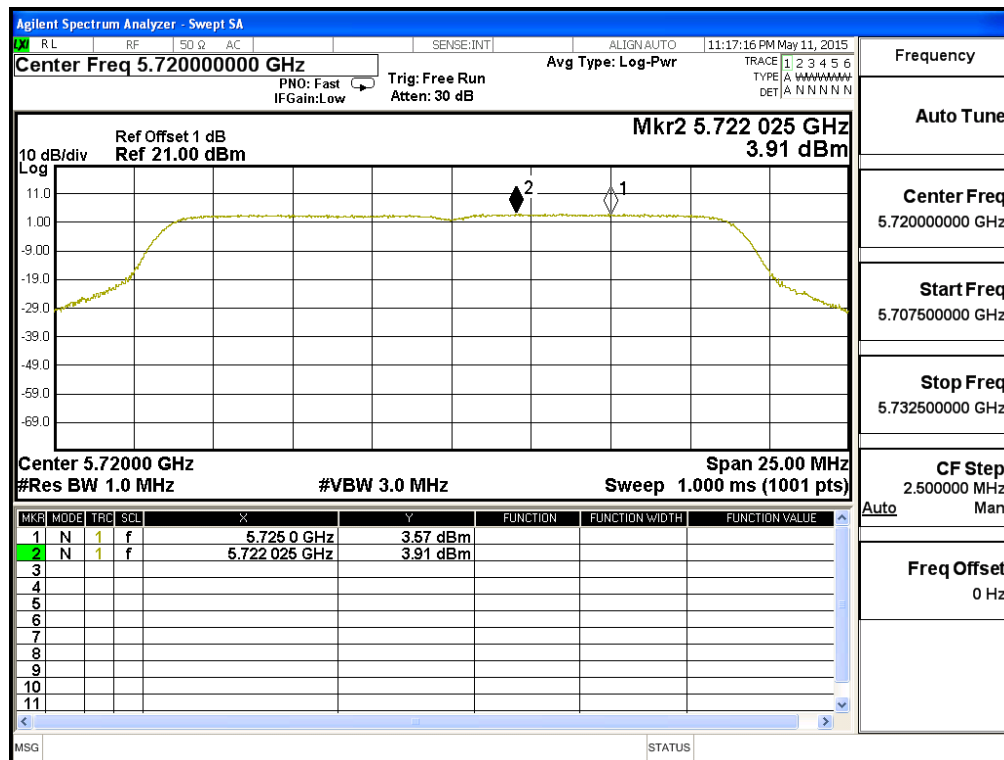
1. The quantity $10 \cdot \log 3$ (three antennas) is added to the spectrum peak value according to document 662911 D01.
2. The peak power spectral density shall be reduced by the amount in Db that the directional gain of the antenna exceeds 6 dBi.

Channel Number	Frequency (MHz)	Chain (dBm)	PPSD (dBm)	BWCF (Db)	Total PSD (dBm)	Required Limit (dBm)	Result
155	5720(Band4)	A	-5.350	6.980	6.401	30	Pass
		B	-5.410	6.980	6.341	30	Pass
		C	-5.240	6.980	6.511	30	Pass

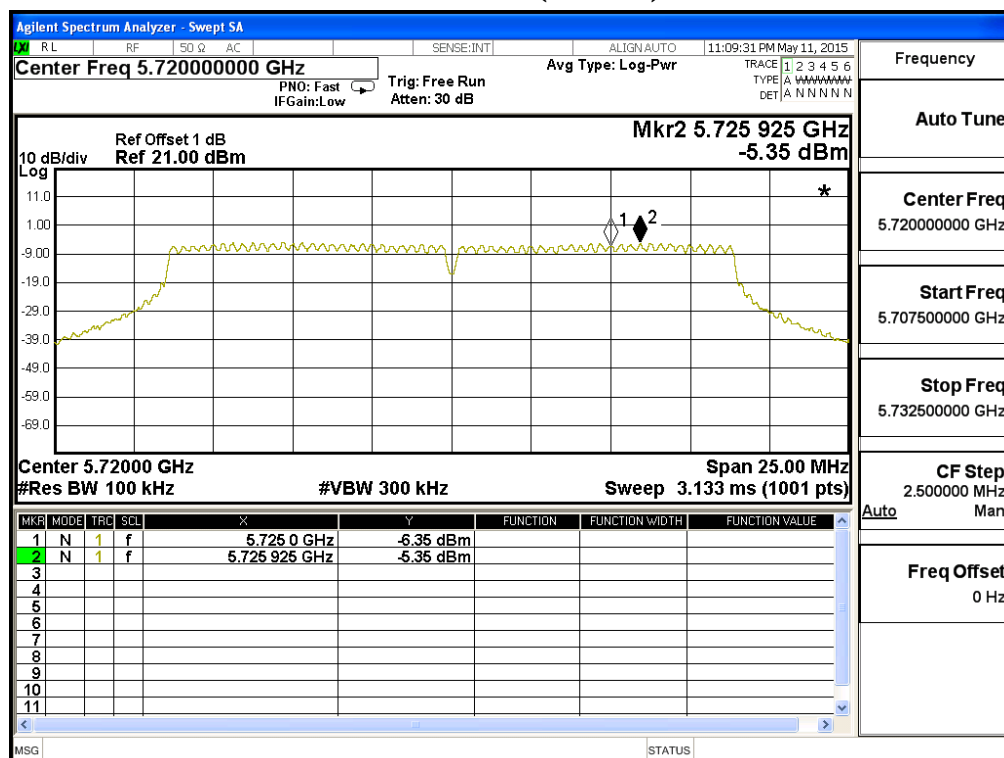
Note :

1. The quantity $10 \cdot \log 3$ (three antennas) is added to the spectrum peak value according to document 662911 D01.
2. The peak power spectral density shall be reduced by the amount in Db that the directional gain of the antenna exceeds 6 dBi.

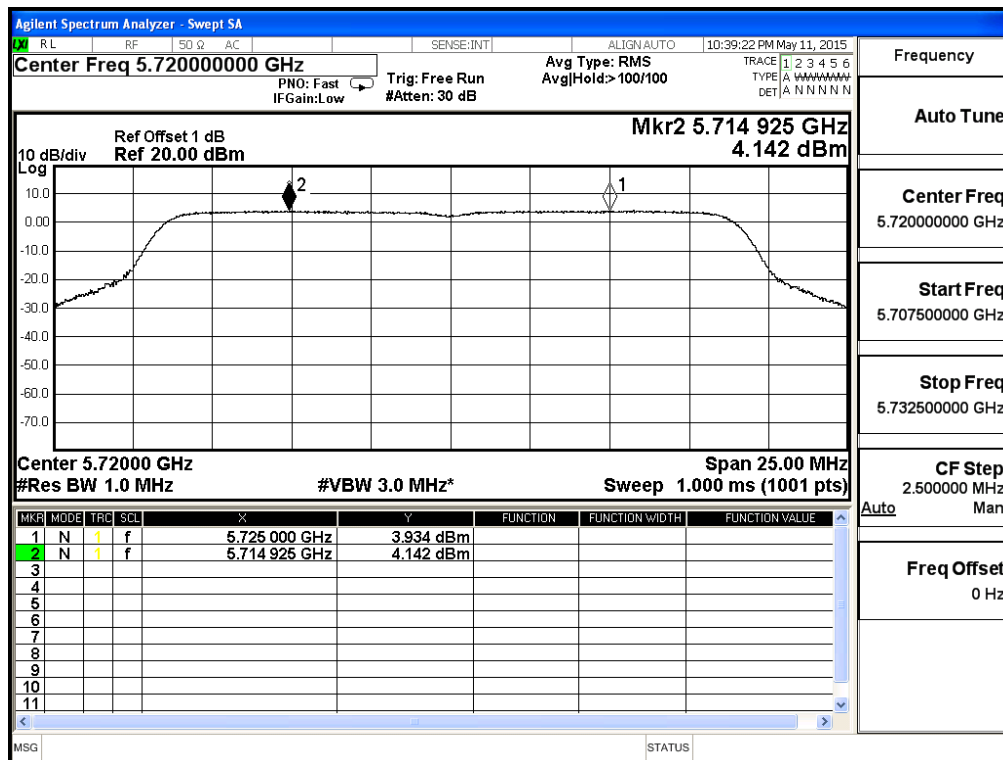
Channel 144: (Chain A)



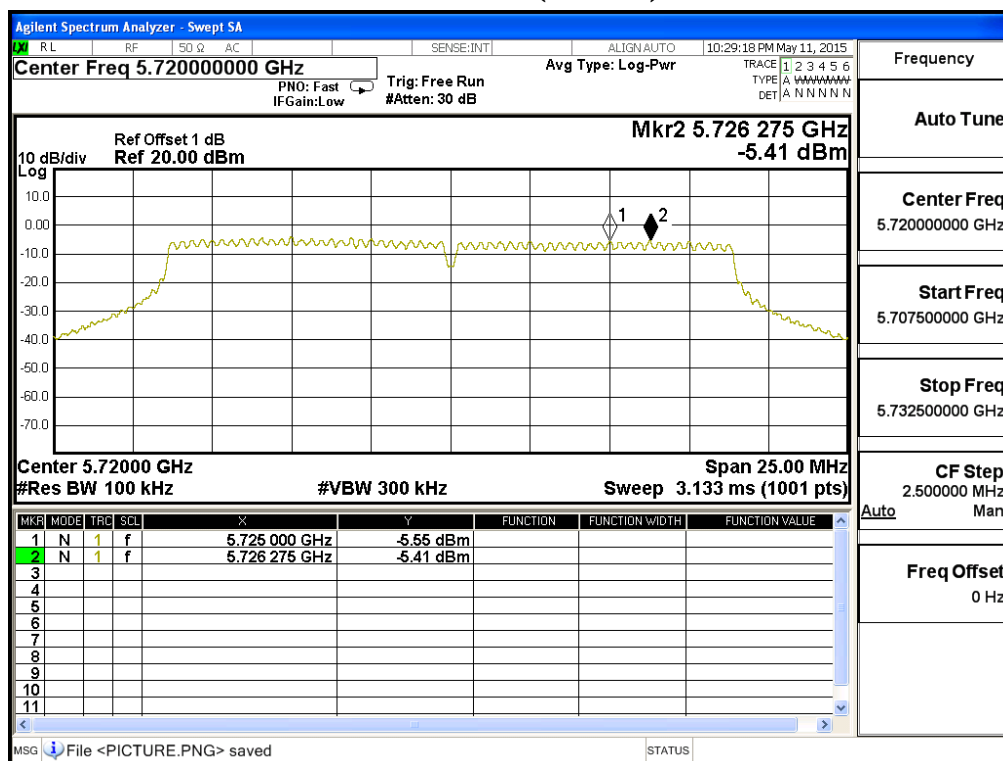
Channel 144: (Chain A)



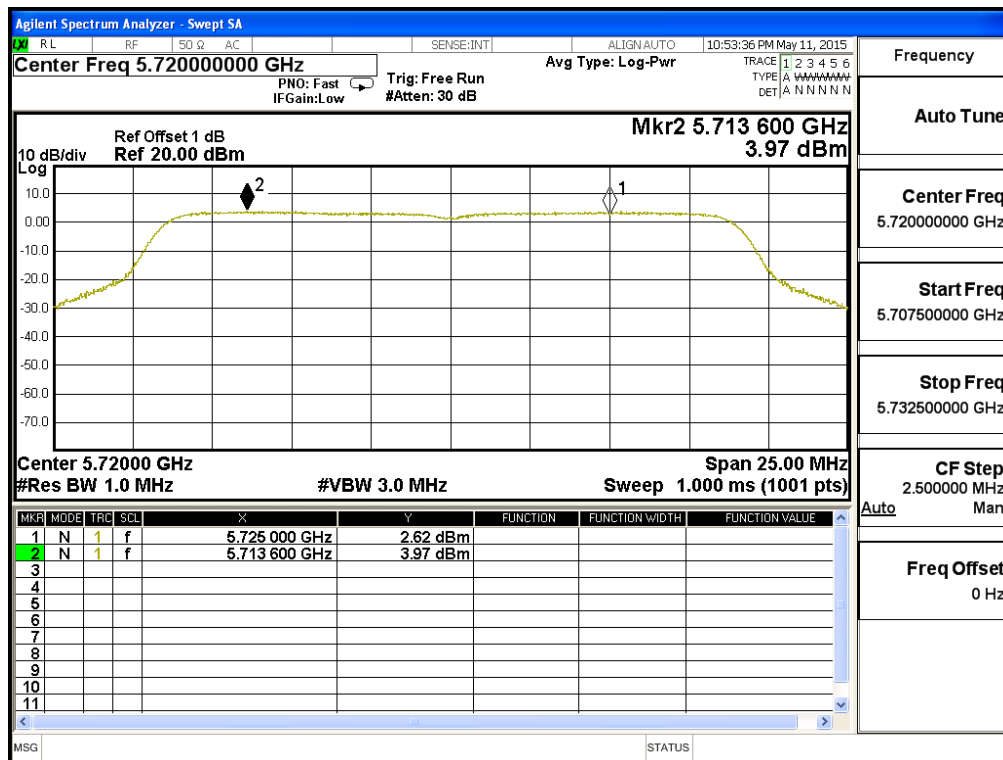
Channel 144: (Chain B)



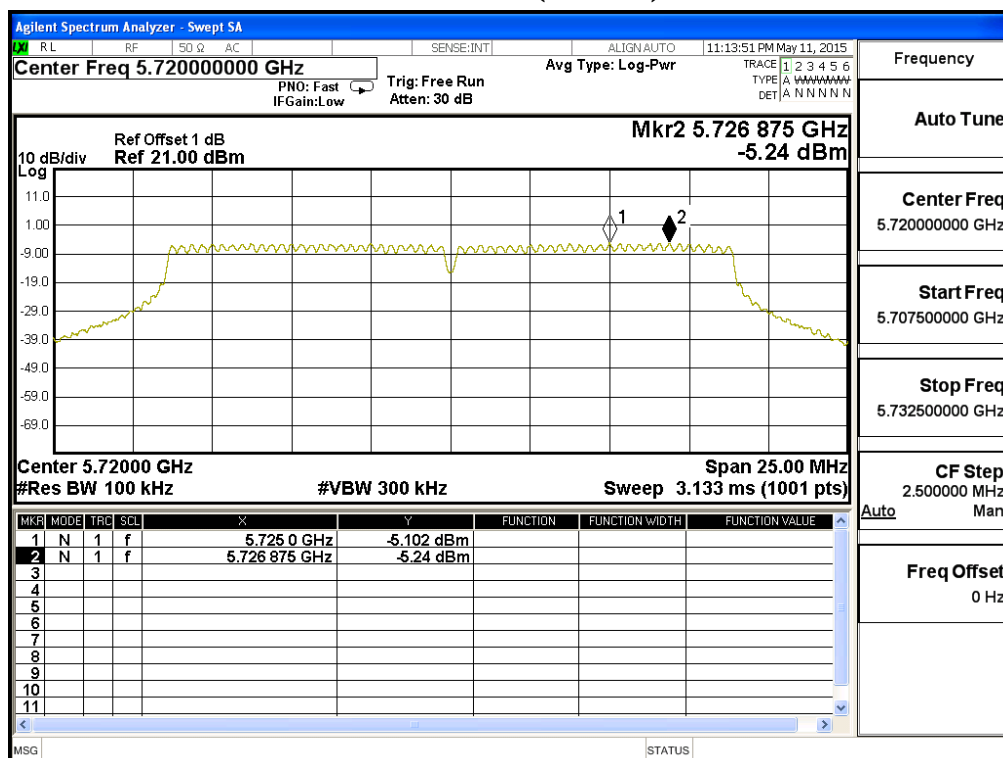
Channel 144: (Chain B)



Channel 144: (Chain C)



Channel 144: (Chain C)



Product : Access Point/Sensor
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11ac-40BW-45Mbps) (External Antenna)

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	Total PPSD (dBm) ¹	Required Limit (dBm)	Result
142	5710(Band3)	A	0.560	5.331	10.93	Pass
		B	1.269	6.040		Pass
		C	0.470	5.241		Pass

Note :

1. The quantity $10 \cdot \log 3$ (three antennas) is added to the spectrum peak value according to document 662911 D01.
2. The peak power spectral density shall be reduced by the amount in Db that the directional gain of the antenna exceeds 6 dBi.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (Db)	Total PPSD (dBm) ¹	Required Limit (dBm)	Result
155	5710(Band4)	A	-9.450	6.980	2.301	30	Pass
		B	-9.610	6.980	2.141	30	Pass
		C	-9.530	6.980	2.221	30	Pass

Note :

1. The quantity $10 \cdot \log 3$ (three antennas) is added to the spectrum peak value according to document 662911 D01.
2. The peak power spectral density shall be reduced by the amount in Db that the directional gain of the antenna exceeds 6 dBi.

Agilent Spectrum Analyzer - Swept SA

R L F 50 Ω AC SENSE:INT ALIGN:AUTO 11:16:25 PM May 11, 2015

Marker 2 5.71320000000 GHz

PNO: Fast IF Gain: Low Trig: Free Run Atten: 30 dB

Avg Type: Log-Pwr TRACE 1 2 3 4 5 6 TYPE A WWWWWW DET A NNNNN N

Ref Offset 1 dB Ref 21.00 dBm Mkr2 5.713 20 GHz 0.56 dBm

10 dB/div Log

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f	f	5.725 0 GHz	-0.706 dBm			
2	N	f	f	5.713 20 GHz	0.56 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

Center 5.71000 GHz Span 50.00 MHz
#Res BW 1.0 MHz #VBW 3.0 MHz Sweep 1.000 ms (1001 pts)

MSG STATUS

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN:AUTO 11:07:42 PM May 11, 2015

Center Freq 5.71000000 GHz Avg Type: Log-Pwr PNO: Fast IF Gain: Low Trig: Free Run Atten: 30 dB TRACE 1 2 3 4 5 6 TYPE A W W W W W W W W DET A N N N N N N

Ref Offset 1 dB Ref 21.00 dBm Mkr2 5.725 28 GHz -9.45 dBm

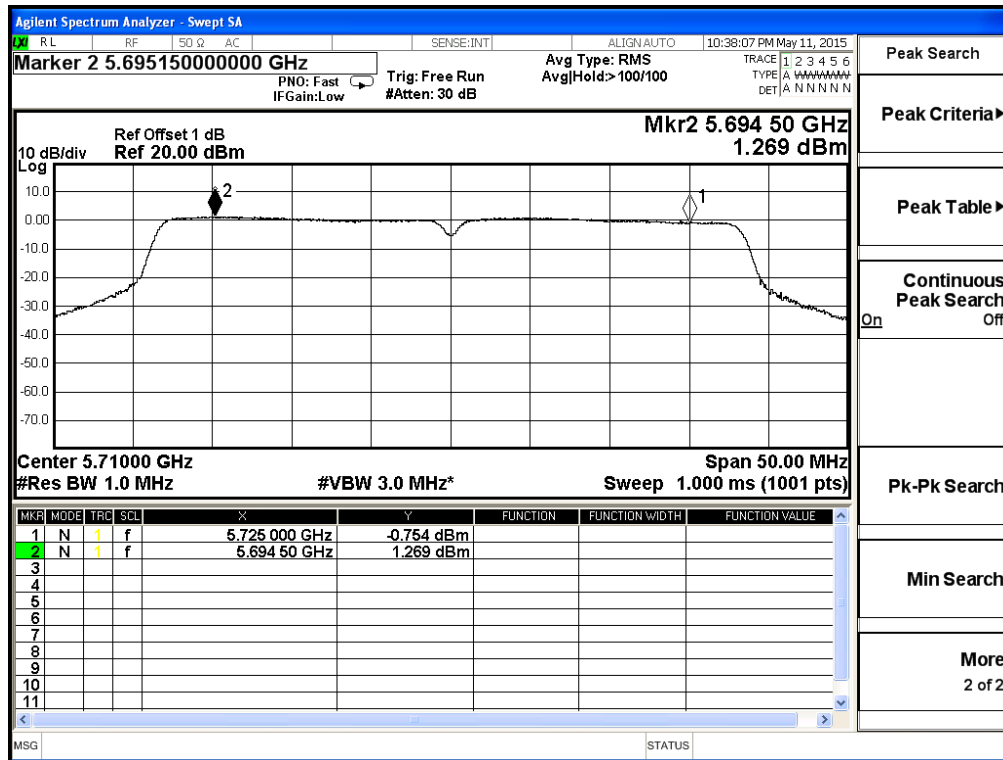
10 dB/div Log

Center 5.71000 GHz Span 50.00 MHz
#Res BW 100 kHz #VBW 300 kHz Sweep 6.200 ms (1001 pts)

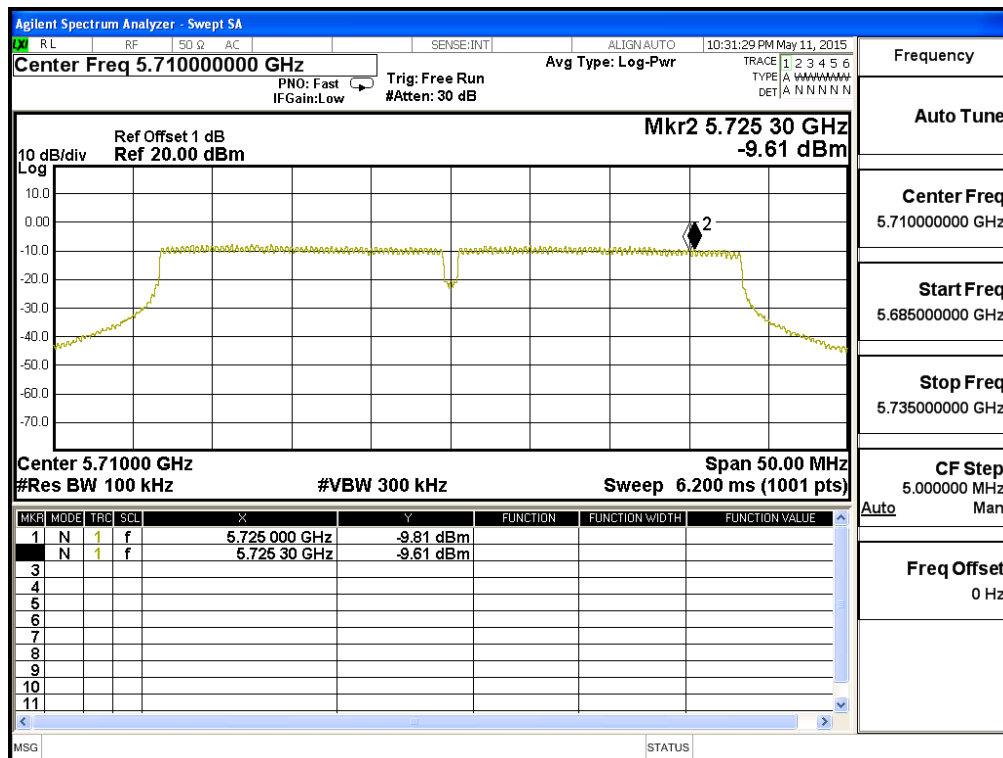
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.725 0 GHz	-9.06 dBm			
2	N	1	f	5.725 28 GHz	-9.45 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

Frequency Auto Tune Center Freq 5.71000000 GHz Start Freq 5.685000000 GHz Stop Freq 5.735000000 GHz CF Step 5.000000 MHz Man Freq Offset 0 Hz

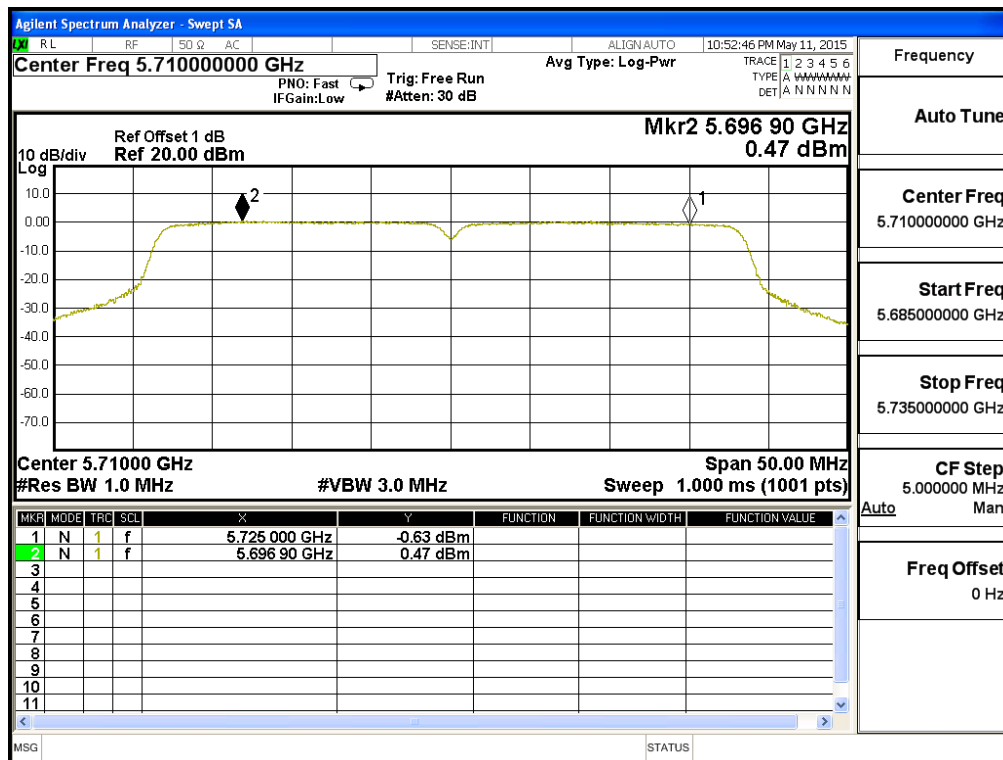
Channel 142: (Chain B)



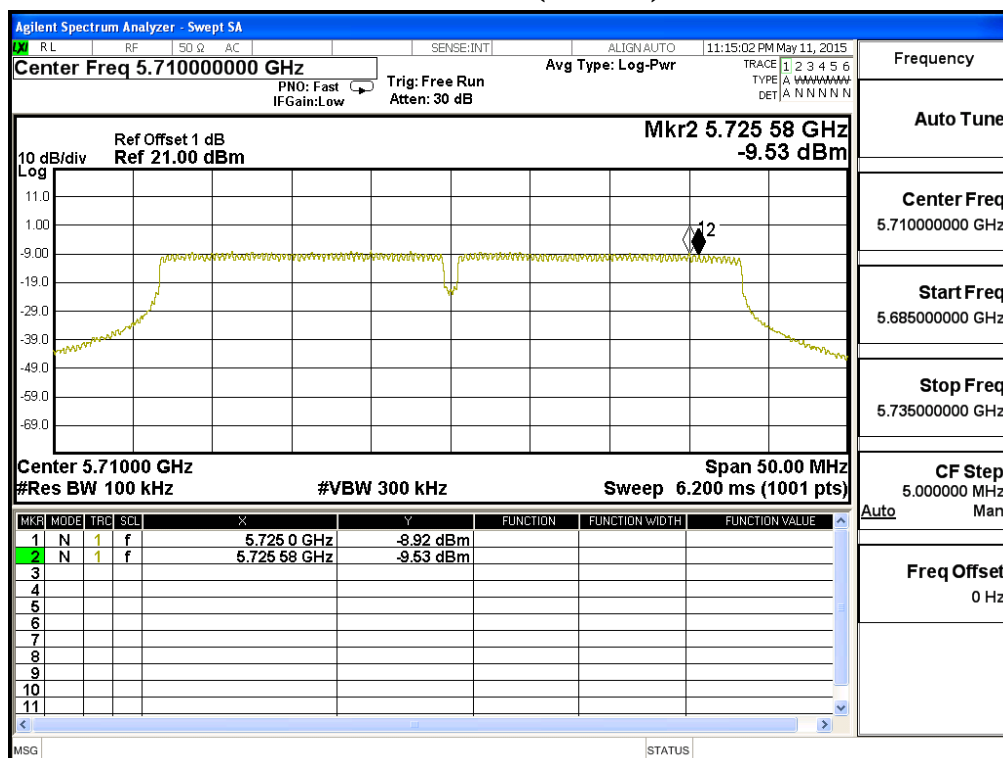
Channel 142: (Chain B)



Channel 142: (Chain C)



Channel 142: (Chain C)



Product : Access Point/Sensor
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (External Antenna)

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	Total PSD (dBm) ¹	Required Limit (dBm)	Result
58	5290	A	-7.270	-2.499	11	Pass
		B	-5.200	-0.429		Pass
		C	-5.990	-1.219		Pass
106	5530	A	-5.670	-0.899	10.93	Pass
		B	-3.800	0.971		Pass
		C	-5.330	-0.559		Pass
122	5610	A	-3.080	1.691	10.93	Pass
		B	-2.640	2.131		Pass
		C	-2.970	1.801		Pass
138	5690(Band3)	A	-2.760	2.011	10.93	Pass
		B	-1.730	3.041		Pass
		C	-2.700	2.071		Pass

Note :

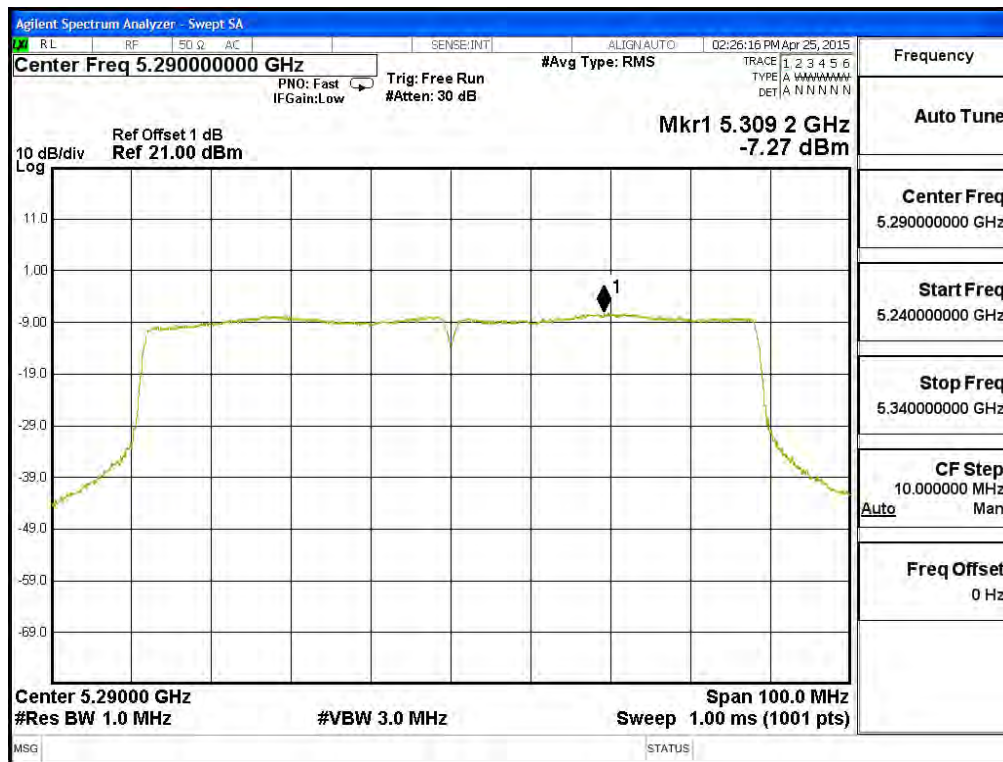
1. The quantity $10 \cdot \log 3$ (three antennas) is added to the spectrum peak value according to document 662911 D01.
2. The peak power spectral density shall be reduced by the amount in Db that the directional gain of the antenna exceeds 6 dBi.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (Db)	Total PSD (dBm) ¹	Required Limit (dBm)	Result
138	5690(Band4)	A	-13.570	6.980	-1.819	30	Pass
		B	-13.180	6.980	-1.429	30	Pass
		C	-13.610	6.980	-1.859	30	Pass

Note :

1. The quantity $10 \cdot \log 3$ (three antennas) is added to the spectrum peak value according to document 662911 D01.
2. The peak power spectral density shall be reduced by the amount in Db that the directional gain of the antenna exceeds 6 dBi.

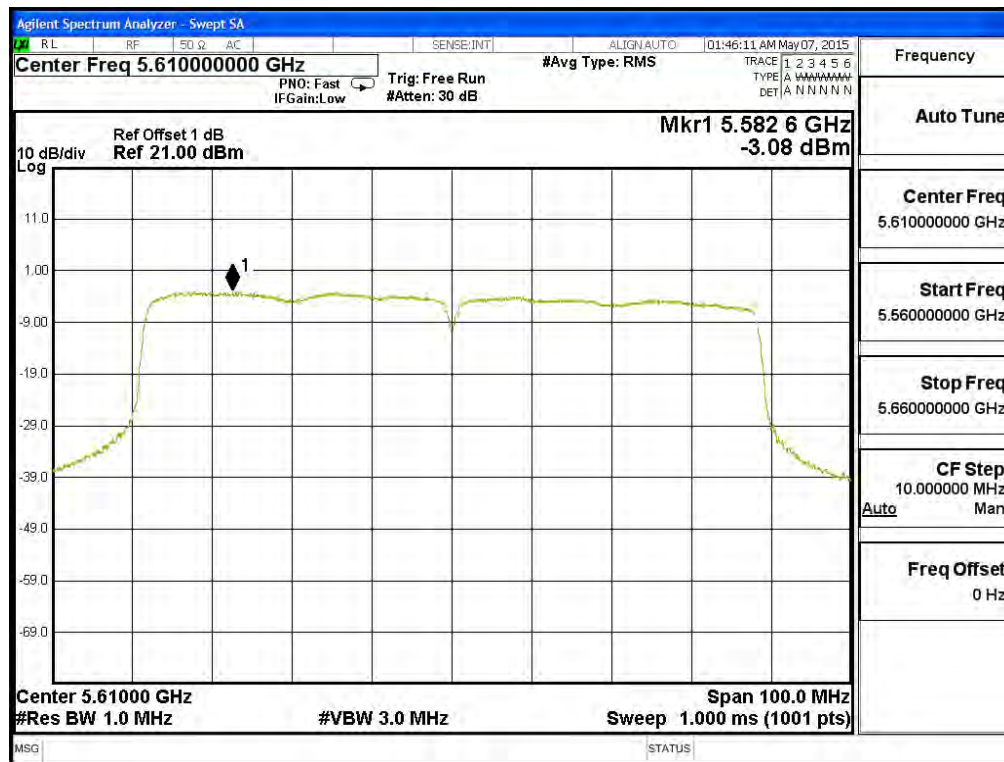
Channel 58 : (Chain A)



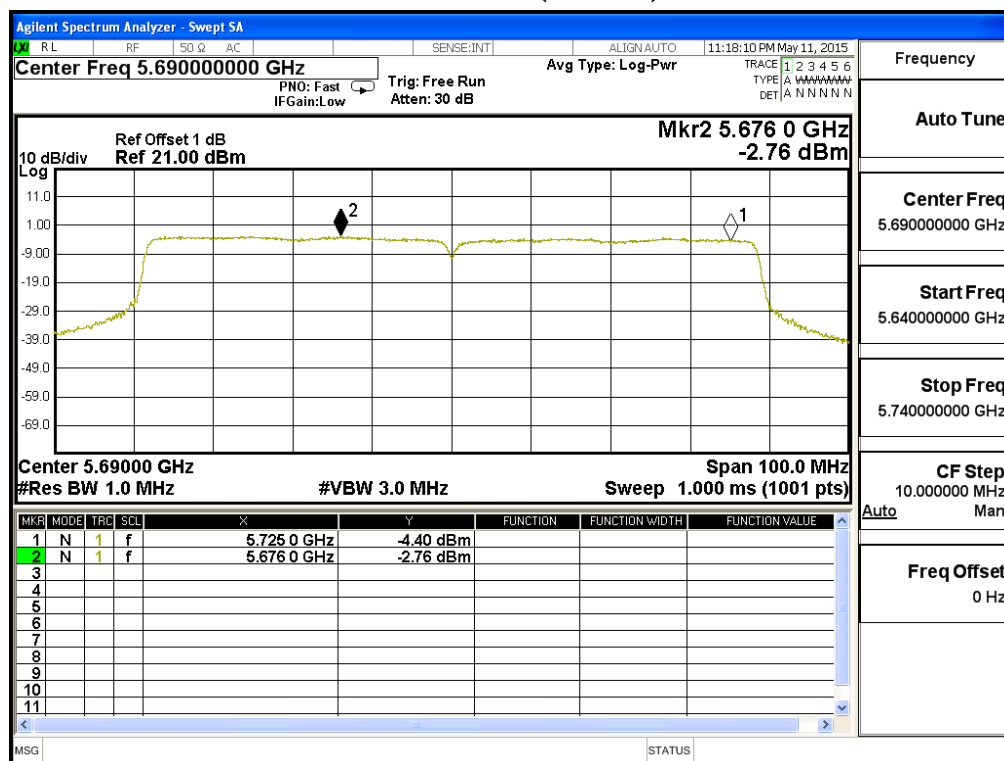
Channel 106: (Chain A)



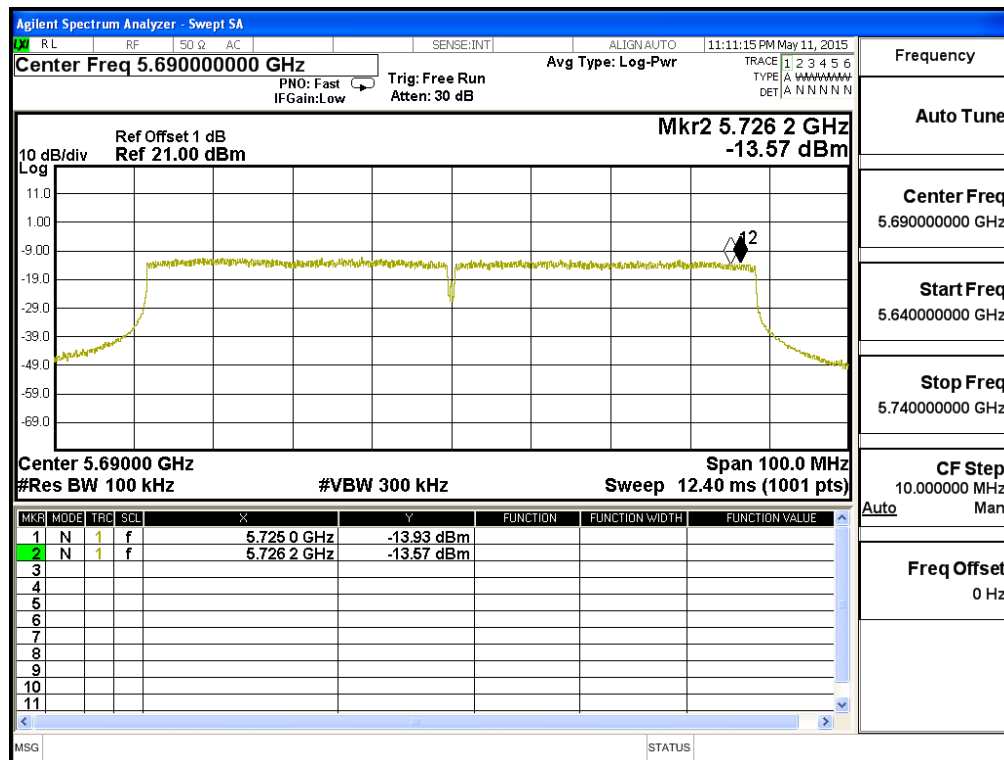
Channel 122: (Chain A)



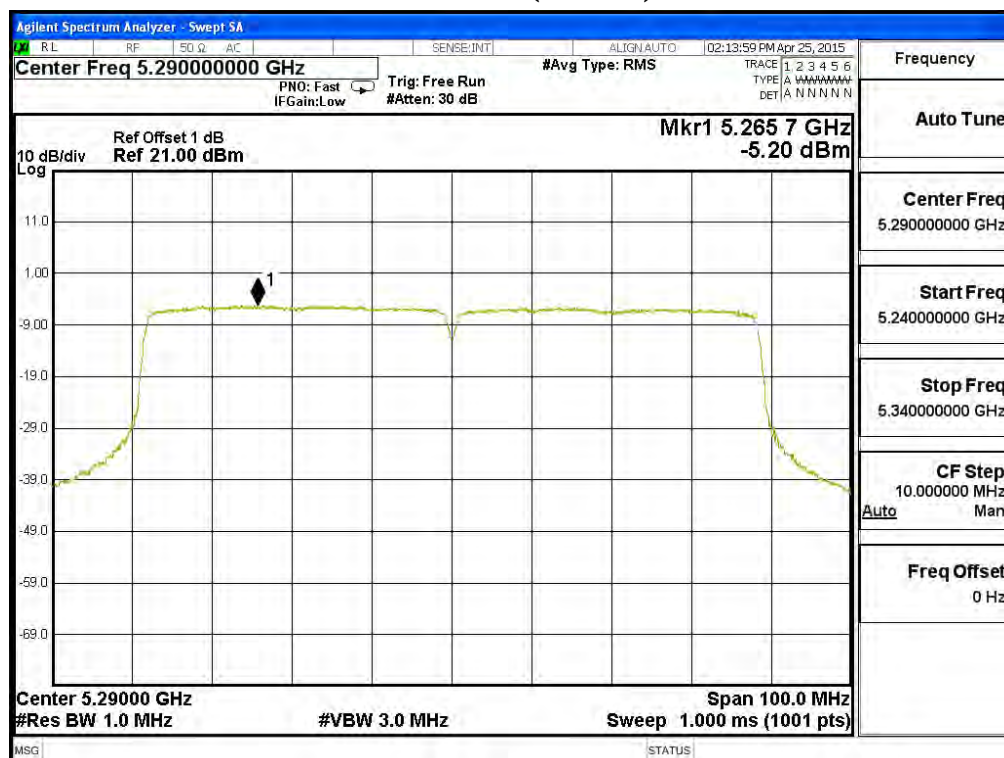
Channel 138: (Chain A)



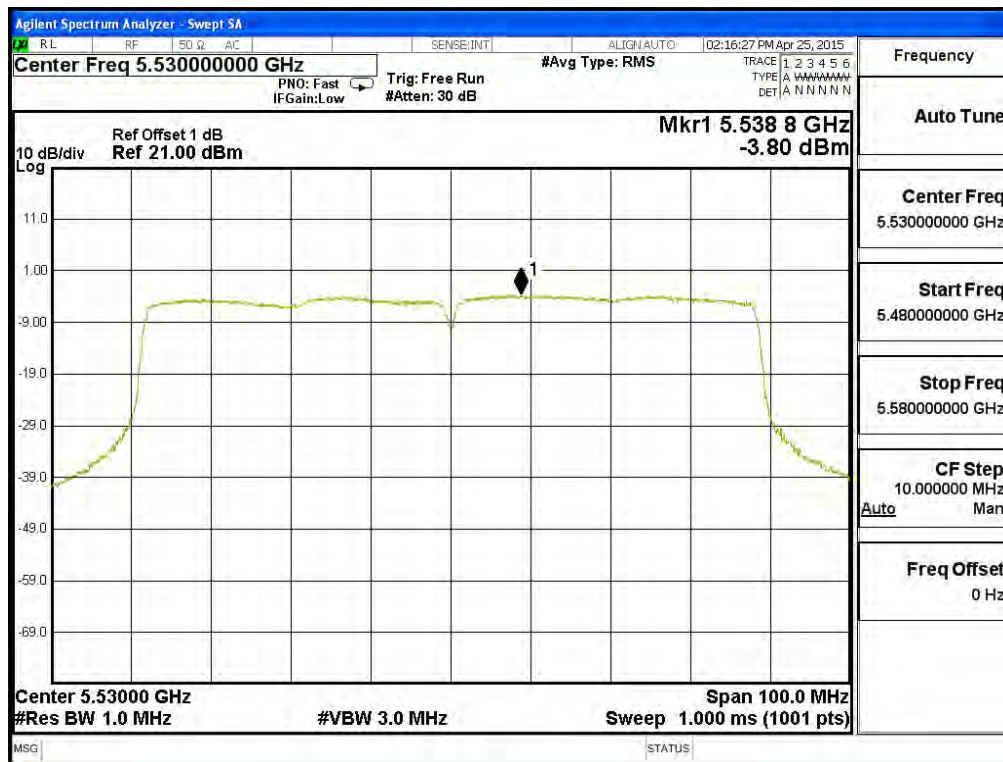
Channel 138: (Chain A)



Channel 58: (Chain B)



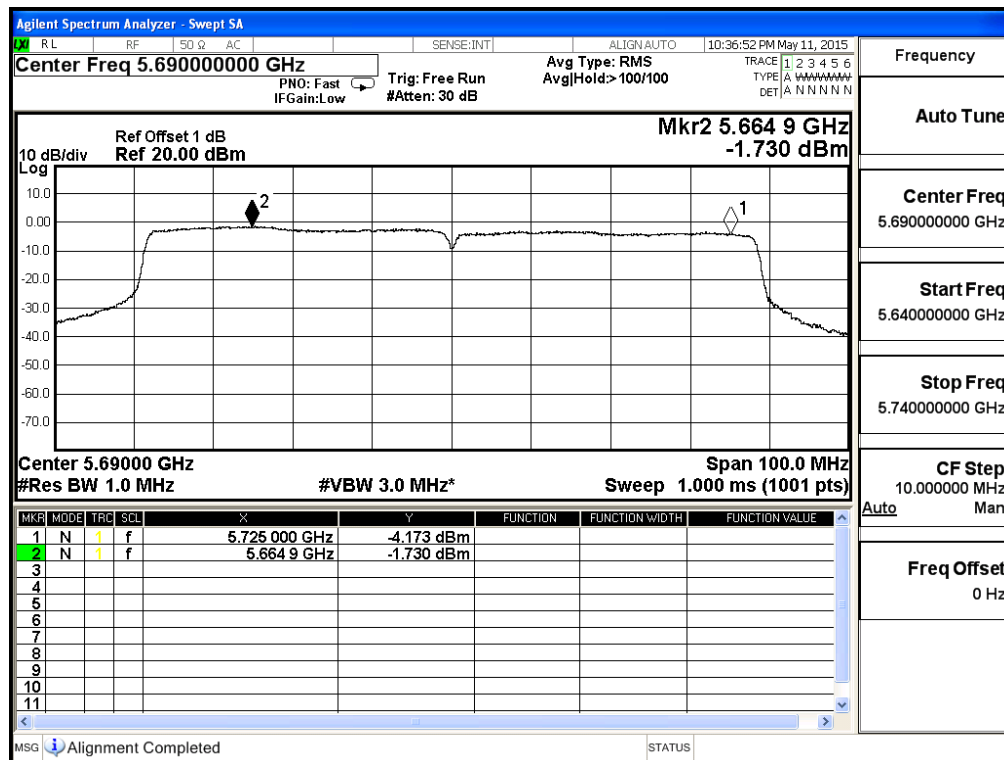
Channel 106: (Chain B)



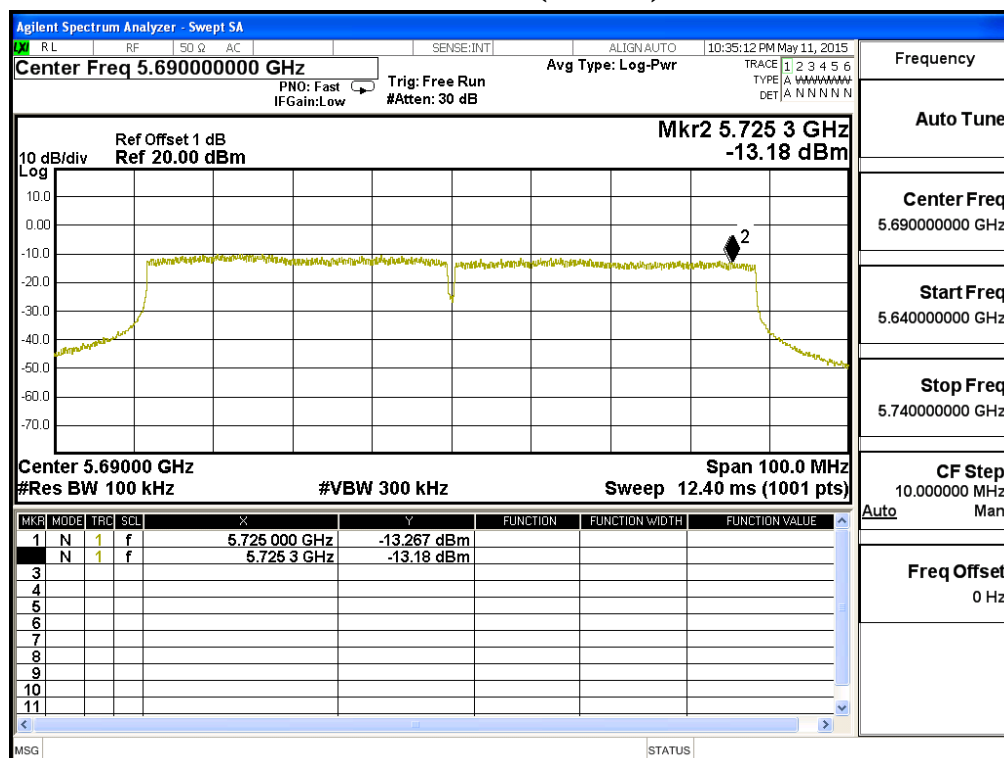
Channel 122: (Chain B)



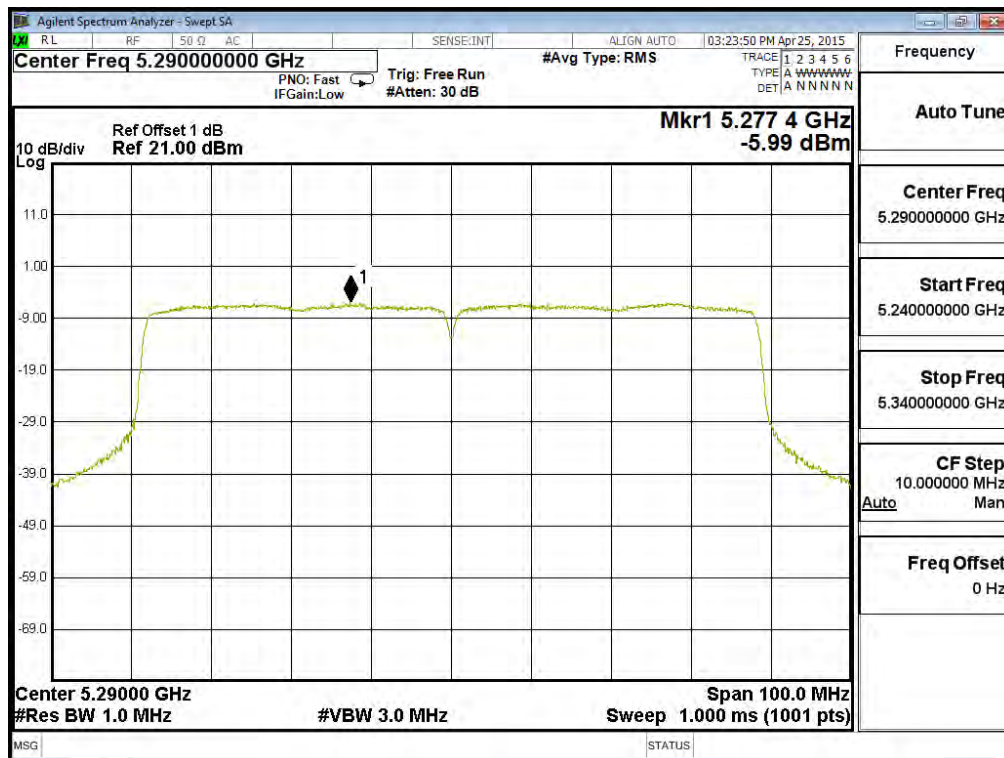
Channel 138: (Chain B)



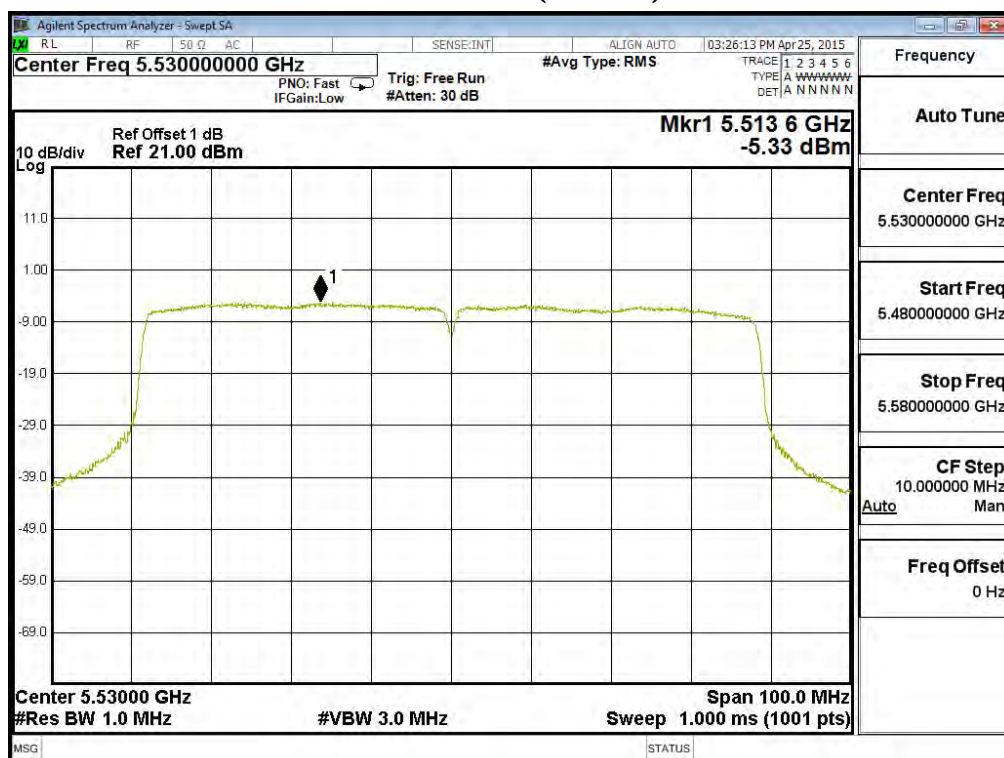
Channel 138: (Chain B)



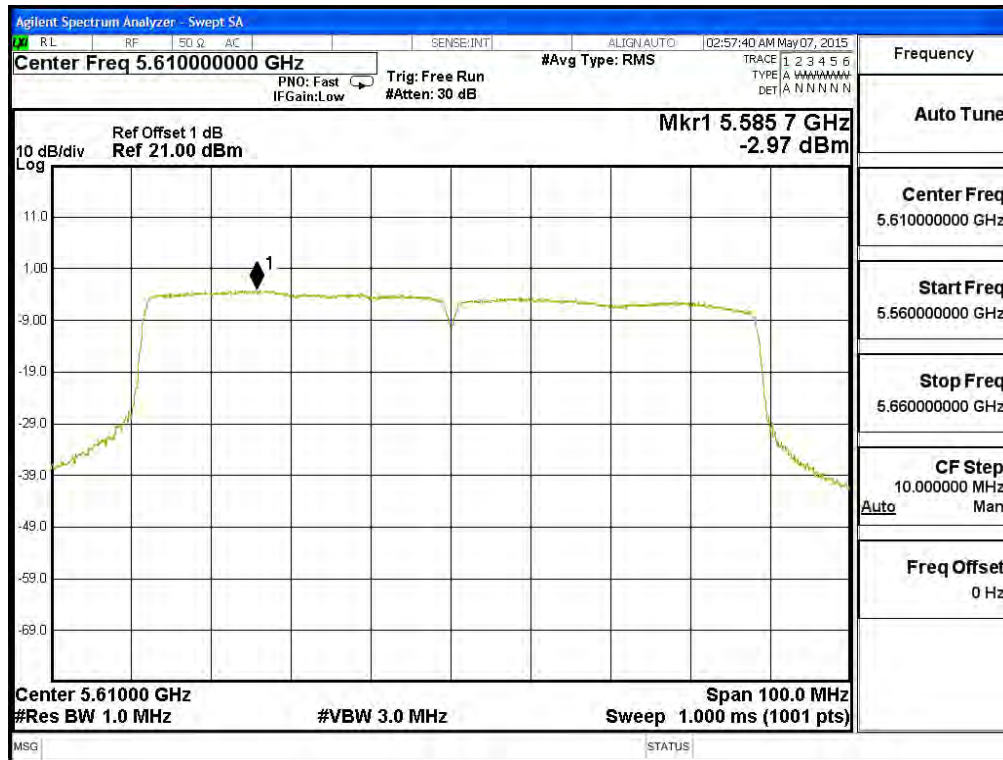
Channel 58: (Chain C)



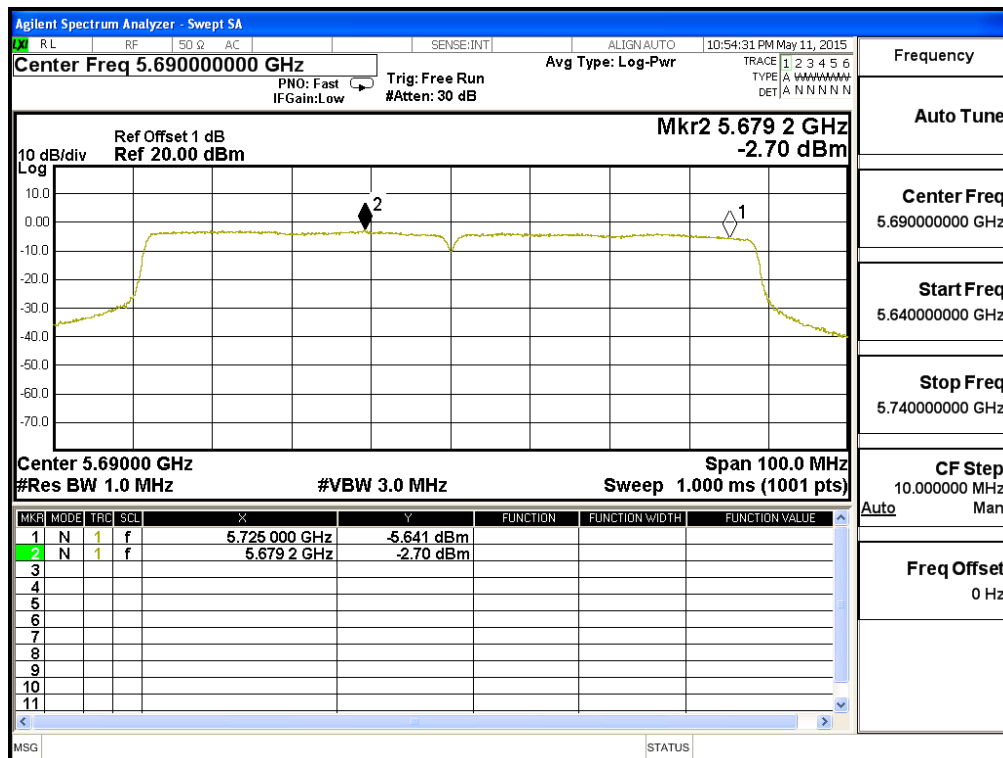
Channel 106: (Chain C)



Channel 122: (Chain C)



Channel 138: (Chain C)



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 11:12:46 PM May 11, 2015

Center Freq 5.690000000 GHz Avg Type: Log-Pwr

PNO: Fast IF Gain: Low Trig: Free Run Atten: 30 dB

TRACE 1 2 3 4 5 6
TYPE A WAAAAA
DET A NNNNN

Ref Offset 1 dB
Ref 21.00 dBm

Mkr2 5.726 2 GHz
-13.61 dBm

10 dB/div
Log

Center 5.69000 GHz Span 100.0 MHz
#Res BW 100 kHz #VBW 300 kHz Sweep 12.40 ms (1001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.726 0 GHz	-14.29 dBm			
2	N	1	f	5.726 2 GHz	-13.61 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 5.690000000 GHz

Start Freq 5.640000000 GHz

Stop Freq 5.740000000 GHz

CF Step 10.000000 MHz

Auto Man

Freq Offset 0 Hz

5. Radiated Emission

5.1. Test Equipment

The following test equipments are used during the radiated emission test:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒ Site # 3	X	Loop Antenna	Teseq	HLA6121 / 37133	Sep., 2015
	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2015
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2015
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2015
	X	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2015
	X	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2015
	X	Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar., 2015
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2015
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2015
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2015
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

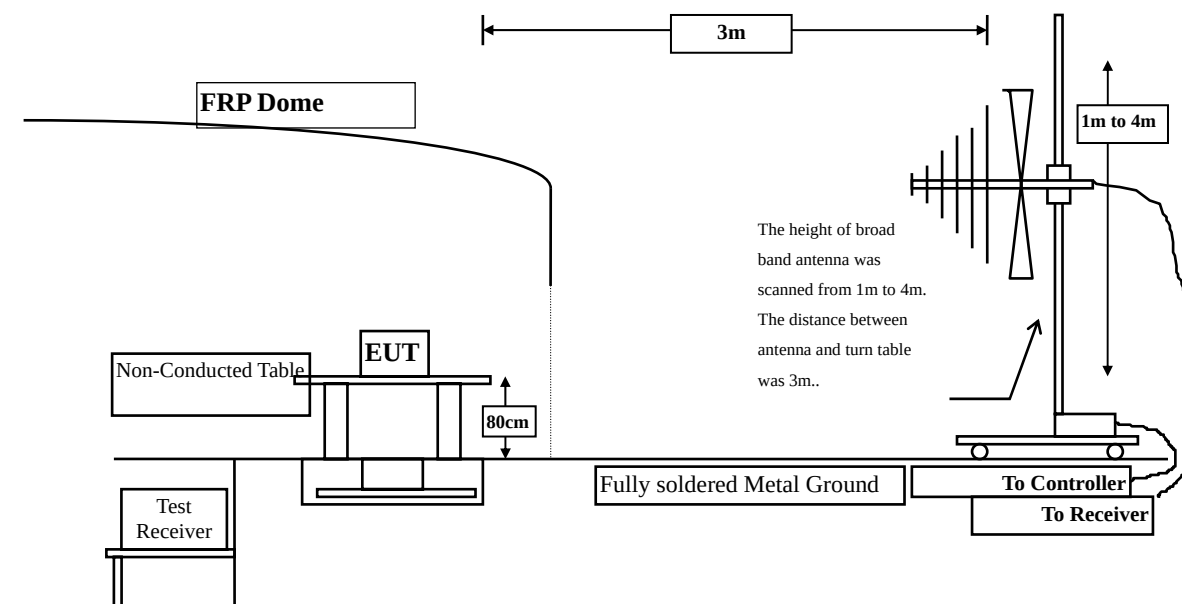
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒ CB # 8	X	Spectrum Analyzer	R&S	FSP40/ 100339	Oct., 2015
	X	Horn Antenna	ETS-Lindgren	3117/ 35205	Mar., 2015
	X	Horn Antenna	Schwarzbeck	BBHA9170/209	Jan., 2015
	X	Horn Antenna	TRC	AH-0801/95051	Aug., 2015
	X	Pre-Amplifier	EMCI	EMC012630SE/980210	Jan., 2015
	X	Pre-Amplifier	MITEQ	JS41-001040000-58-5P/153945	Jul., 2015
	X	Pre-Amplifier	NARDA	DBL-1840N506/013	Jul., 2015

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

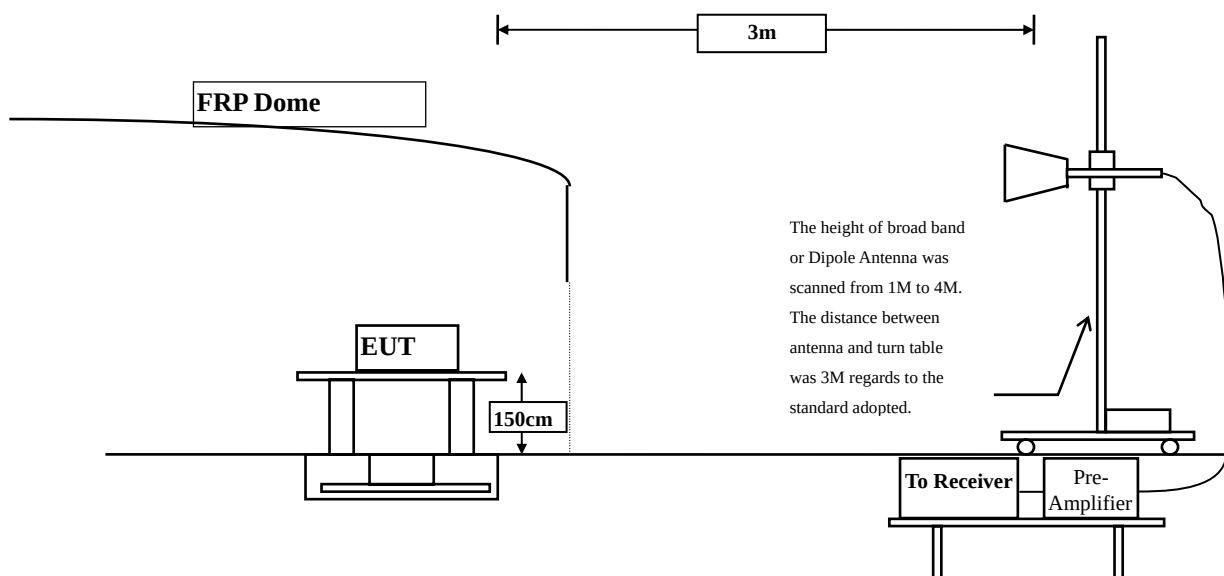
△ The test instruments marked with “X” are used to measure the final test results.

5.2. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



5.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20Db below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits		
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remarks: E field strength (dBμV/m) = 20 log E field strength (Uv/m)

5.4. Test Procedure

The EUT was setup according to ANSI C63.10:2013 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 Db bandwidth of the antenna.

The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

The measurement frequency range from 9KHz – 10th Harmonic of fundamental was investigated.

5.5. Uncertainty

± 3.8 Db below 1GHz

± 3.9 Db above 1GHz

5.6. Test Result of Radiated Emission

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) (5260MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
10520.000	14.150	35.410	49.560	-24.440	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
10520.000	14.150	37.000	51.150	-22.850	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) (5300MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
10600.000	14.176	35.710	49.886	-24.114	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
10600.000	14.176	36.390	50.566	-23.434	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) (5320MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
10640.000	14.152	35.600	49.752	-24.248	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
10640.000	14.152	35.850	50.002	-23.998	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) (5500MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	Db	dBμV	dBμV/m	Db	dBμV/m

Horizontal

Peak Detector:

11000.000	14.527	35.700	50.228	-23.772	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000

**Average
Detector:**

--

Vertical

Peak Detector:

11000.000	14.527	36.610	51.138	-22.862	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000

**Average
Detector:**

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) (5580MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11160.000	14.734	35.060	49.794	-24.206	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11160.000	14.734	35.990	50.724	-23.276	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) (5700MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11400.000	14.869	34.880	49.749	-24.251	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11400.000	14.869	36.900	51.769	-22.231	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) (5260MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	Db	dBμV/m
	Db	dBμV	dBμV/m		

Horizontal

Peak Detector:

10520.000	14.150	31.595	45.745	-28.255	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000

**Average
Detector:**

--

Vertical

Peak Detector:

10520.000	14.150	31.577	45.727	-28.273	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000

**Average
Detector:**

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) (5300MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	Db	dBμV	dBμV/m	Db	dBμV/m

Horizontal

Peak Detector:

10600.000	14.176	30.876	45.052	-28.948	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000

**Average
Detector:**

--

Vertical

Peak Detector:

10600.000	14.176	31.055	45.231	-28.769	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000

**Average
Detector:**

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) (5320MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
10640.000	14.152	30.454	44.606	-29.394	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
10640.000	14.152	30.906	45.058	-28.942	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) (5500MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	Db	dBμV	dBμV/m	Db	dBμV/m

Horizontal

Peak Detector:

11000.000	14.527	31.167	45.695	-28.305	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000

**Average
Detector:**

--

Vertical

Peak Detector:

11000.000	14.527	30.942	45.470	-28.530	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000

**Average
Detector:**

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) (5580MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11160.000	14.734	30.473	45.207	-28.793	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11160.000	14.734	30.683	45.417	-28.583	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) (5700MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11400.000	14.869	31.876	46.745	-27.255	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11400.000	14.869	31.156	46.025	-27.975	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (Internal Antenna) (5270MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
10540.000	14.177	31.393	45.570	-28.430	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
10540.000	14.177	31.677	45.854	-28.146	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (Internal Antenna) (5310MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	Db	dBμV	dBμV/m	Db	dBμV/m

Horizontal

Peak Detector:

10620.000	14.179	30.735	44.914	-29.086	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000

**Average
Detector:**

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Vertical

Peak Detector:

10620.000	13.879	31.000	44.879	-29.121	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000

**Average
Detector:**

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Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (Internal Antenna) (5510MHz)

Frequency MHz	Correct Factor Db	Reading Level dB μ V	Measurement Level dB μ V/m	Margin Db	Limit dB μ V/m
Horizontal					
Peak Detector:					
11020.000	14.573	31.354	45.927	-28.073	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11020.000	14.573	30.704	45.277	-28.723	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (Internal Antenna) (5550MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	Db	dB μ V/m
	Db	dB μ V	dB μ V/m		

Horizontal

Peak Detector:

11100.000	14.516	30.842	45.358	-28.642	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000

Average Detector:

--

Vertical

Peak Detector:

11100.000	14.516	30.567	45.083	-28.917	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000

Average Detector:

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Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (Internal Antenna) (5670MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	Db	dB μ V/m
	Db	dB μ V	dB μ V/m		

Horizontal

Peak Detector:

11340.000	14.900	30.566	45.466	-28.534	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000

Average Detector:

--

Vertical

Peak Detector:

11340.000	14.900	30.693	45.593	-28.407	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000

Average Detector:

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11ac-20BW-21.7Mbps) (Internal Antenna) (5720MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11440.000	14.777	31.230	46.214	-27.786	74.000
17160.000	*	*	*	*	74.000
22880.000	*	*	*	*	74.000
28600.000	*	*	*	*	74.000
34320.000	*	*	*	*	74.000
40040.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11440.000	15.026	31.325	46.351	-27.649	74.000
17160.000	*	*	*	*	74.000
22880.000	*	*	*	*	74.000
28600.000	*	*	*	*	74.000
34320.000	*	*	*	*	74.000
40040.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11ac-40BW-45Mbps) (Internal Antenna) (5710MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11420.000	14.777	31.230	46.008	-27.992	74.000
17130.000	*	*	*	*	74.000
22840.000	*	*	*	*	74.000
28550.000	*	*	*	*	74.000
34260.000	*	*	*	*	74.000
39970.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11420.000	14.777	31.612	46.390	-27.610	74.000
17130.000	*	*	*	*	74.000
22840.000	*	*	*	*	74.000
28550.000	*	*	*	*	74.000
34260.000	*	*	*	*	74.000
39970.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (Internal Antenna) (5290MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
10580.000	14.176	36.950	51.126	-22.874	74.000
15870.000	*	*	*	*	74.000
21160.000	*	*	*	*	74.000
26450.000	*	*	*	*	74.000
31740.000	*	*	*	*	74.000
37030.000	*	*	*	*	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
10580.000	14.176	35.950	50.126	-23.874	74.000
15870.000	*	*	*	*	74.000
21160.000	*	*	*	*	74.000
26450.000	*	*	*	*	74.000
31740.000	*	*	*	*	74.000
37030.000	*	*	*	*	74.000
Average					
Detector:					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (Internal Antenna) (5530MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11060.000	14.232	35.820	50.051	-23.949	74.000
16590.000	*	*	*	*	74.000
22120.000	*	*	*	*	74.000
27650.000	*	*	*	*	74.000
33180.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11060.000	14.232	35.820	50.051	-23.949	74.000
16590.000	*	*	*	*	74.000
22120.000	*	*	*	*	74.000
27650.000	*	*	*	*	74.000
33180.000	*	*	*	*	74.000
38710.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (Internal Antenna) (5690MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11380.000	14.868	37.920	52.787	-21.213	74.000
17070.000	*	*	*	*	74.000
22760.000	*	*	*	*	74.000
28450.000	*	*	*	*	74.000
34140.000	*	*	*	*	74.000
39830.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11380.000	14.868	35.970	50.837	-23.163	74.000
17070.000	*	*	*	*	74.000
22760.000	*	*	*	*	74.000
28450.000	*	*	*	*	74.000
34140.000	*	*	*	*	74.000
39830.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) (5300MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector					
54.250	-8.832	37.841	29.009	-10.991	40.000
192.960	-6.954	38.614	31.660	-11.840	43.500
407.330	-7.761	39.892	32.131	-13.869	46.000
515.970	-1.754	38.037	36.283	-9.717	46.000
664.380	-2.628	37.584	34.956	-11.044	46.000
768.170	0.662	37.262	37.924	-8.076	46.000
Vertical					
Peak Detector					
167.740	-4.397	38.612	34.215	-9.285	43.500
246.310	-7.457	38.628	31.171	-14.829	46.000
281.230	-7.266	42.818	35.552	-10.448	46.000
431.580	-7.349	43.777	36.428	-9.572	46.000
522.760	-1.489	38.511	37.022	-8.978	46.000
772.050	0.647	36.951	37.598	-8.402	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) (5580MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	Db	dBμV/m
	Db	dBμV	dBμV/m		

Horizontal

Peak Detector

162.890	-3.994	38.798	34.804	-8.696	43.500
264.740	-6.601	39.102	32.501	-13.499	46.000
480.080	-4.574	38.559	33.985	-12.015	46.000
662.440	-2.358	38.293	35.935	-10.065	46.000
772.050	0.647	37.127	37.774	-8.226	46.000
977.690	8.098	37.510	45.608	-8.392	54.000

Vertical

Peak Detector

158.040	-3.870	38.349	34.479	-9.021	43.500
520.820	-1.393	39.165	37.772	-8.228	46.000
546.040	-1.513	36.731	35.218	-10.782	46.000
649.830	-0.343	36.503	36.160	-9.840	46.000
798.240	1.052	35.524	36.576	-9.424	46.000
968.960	6.632	37.514	44.146	-9.854	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) (5300MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector					
53.280	-8.287	38.231	29.944	-10.056	40.000
177.440	-5.210	38.515	33.305	-10.195	43.500
550.890	-0.970	38.301	37.331	-8.669	46.000
648.860	-0.171	37.860	37.689	-8.311	46.000
861.290	1.432	36.522	37.954	-8.046	46.000
996.120	8.117	39.243	47.360	-6.640	54.000

Vertical					
Peak Detector					
142.520	-4.455	38.758	34.303	-9.197	43.500
521.790	-1.441	38.313	36.872	-9.128	46.000
570.290	1.010	37.395	38.405	-7.595	46.000
752.650	0.669	38.905	39.574	-6.426	46.000
858.380	1.296	37.357	38.653	-7.347	46.000
988.360	8.276	37.764	46.040	-7.960	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) (5580MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector					
384.050	-7.425	38.602	31.177	-14.823	46.000
555.740	-0.464	35.821	35.357	-10.643	46.000
639.160	1.479	37.426	38.905	-7.095	46.000
732.280	-0.145	37.364	37.219	-8.781	46.000
809.880	1.378	35.887	37.265	-8.735	46.000
989.330	8.264	38.411	46.675	-7.325	54.000
Vertical					
Peak Detector					
52.310	-7.723	37.158	29.435	-10.565	40.000
190.050	-6.645	38.104	31.459	-12.041	43.500
511.120	-2.373	37.879	35.506	-10.494	46.000
640.130	1.424	37.216	38.640	-7.360	46.000
796.300	1.032	38.115	39.147	-6.853	46.000
978.660	8.255	39.236	47.491	-6.509	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (Internal Antenna) (5270MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	Db	dBμV/m
	Db	dBμV	dBμV/m		
Horizontal					
Peak Detector					
169.680	-4.563	40.891	36.328	-7.172	43.500
314.210	-8.827	46.739	37.912	-8.088	46.000
521.790	-1.441	39.040	37.599	-8.401	46.000
634.310	1.593	38.222	39.815	-6.185	46.000
780.780	0.655	36.552	37.207	-8.793	46.000
901.060	4.405	34.775	39.180	-6.820	46.000
984.480	8.366	38.557	46.923	-7.077	54.000
Vertical					
Peak Detector					
181.320	-5.611	38.050	32.439	-11.061	43.500
397.630	-7.635	42.624	34.989	-11.011	46.000
580.960	1.622	37.738	39.360	-6.640	46.000
642.070	1.076	36.471	37.547	-8.453	46.000
851.590	1.444	38.446	39.890	-6.110	46.000
996.120	8.117	38.640	46.757	-7.243	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (Internal Antenna) (5550MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector					
174.530	-4.932	38.200	33.268	-10.232	43.500
376.290	-7.509	46.069	38.560	-7.440	46.000
537.310	-2.148	38.399	36.251	-9.749	46.000
625.580	1.817	35.756	37.573	-8.427	46.000
839.950	1.525	37.443	38.968	-7.032	46.000
1000.000	8.037	37.346	45.383	-8.617	54.000
Vertical					
Peak Detector					
517.910	-1.560	38.260	36.700	-9.300	46.000
645.950	0.366	37.330	37.696	-8.304	46.000
755.560	0.667	37.400	38.067	-7.933	46.000
836.070	1.620	35.850	37.470	-8.530	46.000
923.370	4.609	33.971	38.580	-7.420	46.000
967.990	6.476	36.906	43.382	-10.618	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11ac-20BW-21.7Mbps) (Internal Antenna) (5720MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector					
166.770	-4.324	38.485	34.161	-9.339	43.500
546.040	-1.513	37.667	36.154	-9.846	46.000
643.040	0.904	37.691	38.595	-7.405	46.000
746.830	0.501	37.313	37.814	-8.186	46.000
845.770	1.510	37.555	39.065	-6.935	46.000
992.240	8.207	38.496	46.703	-7.297	54.000
Vertical					
Peak Detector					
45.520	-3.529	36.318	32.789	-7.211	40.000
157.070	-3.927	37.714	33.787	-9.713	43.500
515.970	-1.754	38.956	37.202	-8.798	46.000
721.610	-0.766	39.338	38.572	-7.428	46.000
802.120	1.092	37.312	38.404	-7.596	46.000
985.450	8.344	38.539	46.883	-7.117	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11ac-40BW-45Mbps) (Internal Antenna) (5710MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector					
152.220	-4.128	38.629	34.501	-8.999	43.500
519.850	-1.376	38.666	37.290	-8.710	46.000
566.410	0.657	37.004	37.661	-8.339	46.000
778.840	0.627	35.715	36.342	-9.658	46.000
874.870	2.836	36.657	39.493	-6.507	46.000
996.120	8.117	37.688	45.805	-8.195	54.000
Vertical					
Peak Detector					
167.740	-4.397	36.692	32.295	-11.205	43.500
534.400	-2.049	37.963	35.914	-10.086	46.000
660.500	-2.097	38.025	35.928	-10.072	46.000
720.640	-0.831	37.833	37.002	-8.998	46.000
846.740	1.504	35.968	37.472	-8.528	46.000
986.420	8.321	38.070	46.391	-7.609	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (Internal Antenna) (5290MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	Db	dBμV/m
	Db	dBμV	dBμV/m		
Horizontal					
Peak Detector					
184.230	-5.949	38.795	32.846	-10.654	43.500
549.920	-1.061	38.261	37.200	-8.800	46.000
648.860	-0.171	36.085	35.914	-10.086	46.000
762.350	0.673	35.763	36.436	-9.564	46.000
857.410	1.287	36.873	38.160	-7.840	46.000
987.390	8.299	38.212	46.511	-7.489	54.000
Vertical					
Peak Detector					
157.070	-3.927	39.395	35.468	-8.032	43.500
580.960	1.622	36.699	38.321	-7.679	46.000
637.220	1.519	36.598	38.117	-7.883	46.000
802.120	1.092	35.848	36.940	-9.060	46.000
873.900	2.734	35.523	38.257	-7.743	46.000
981.570	8.433	38.540	46.973	-7.027	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (Internal Antenna) (5690MHz)

Frequency MHz	Correct Factor Db	Reading Level dB μ V	Measurement Level dB μ V/m	Margin Db	Limit dB μ V/m
Horizontal					
Peak Detector					
174.530	-4.932	37.853	32.921	-10.579	43.500
515.000	-1.863	38.954	37.091	-8.909	46.000
737.130	0.073	38.319	38.392	-7.608	46.000
806.000	1.229	37.123	38.352	-7.648	46.000
843.830	1.512	35.810	37.322	-8.678	46.000
993.210	8.184	37.788	45.972	-8.028	54.000
Vertical					
Peak Detector					
158.040	-3.870	38.694	34.824	-8.676	43.500
546.040	-1.513	37.647	36.134	-9.866	46.000
649.830	-0.343	36.600	36.257	-9.743	46.000
761.380	0.671	36.002	36.673	-9.327	46.000
854.500	1.347	37.144	38.491	-7.509	46.000
975.750	7.776	39.033	46.809	-7.191	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna) (5260MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
10520.000	10.660	41.790	52.450	-21.550	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
10520.000	10.660	42.190	52.850	-21.150	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna) (5300MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	Db	dBμV	dBμV/m	Db	dBμV/m
Horizontal					
Peak Detector:					
10600.000	10.760	41.540	52.300	-21.700	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
10600.000	10.760	42.300	53.060	-20.940	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna) (5320MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
10640.000	10.763	41.560	52.323	-21.677	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
10640.000	10.763	41.600	52.363	-21.637	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna) (5500MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11000.000	11.425	41.480	52.905	-21.095	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11000.000	11.425	41.520	52.945	-21.055	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna) (5580MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11160.000	11.538	41.700	53.238	-20.762	74.000
16740.000	*	*	*	*	74.000
22320.000	*	*	*	*	74.000
27900.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11160.000	11.538	42.100	53.638	-20.362	74.000
16740.000	*	*	*	*	74.000
22320.000	*	*	*	*	74.000
27900.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna) (5700MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11400.000	11.531	41.690	53.221	-20.779	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11400.000	11.531	42.330	53.861	-20.139	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna) (5260MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	Db	dB μ V	dB μ V/m	Db	dB μ V/m

Horizontal

Peak Detector:

10520.000	10.660	41.880	52.540	-21.460	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000

**Average
Detector:**

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Vertical

Peak Detector:

10520.000	10.660	42.060	52.720	-21.280	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000

**Average
Detector:**

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Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna) (5300MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
10600.000	10.760	41.420	52.180	-21.820	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
10600.000	10.760	42.430	53.190	-20.810	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna) (5320MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
10640.000	10.763	41.730	52.493	-21.507	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
10640.000	10.763	42.180	52.943	-21.057	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna) (5500MHz)

Frequency MHz	Correct Factor Db	Reading Level dB μ V	Measurement Level dB μ V/m	Margin Db	Limit dB μ V/m
Horizontal					
Peak Detector:					
11000.000	11.425	41.890	53.315	-20.685	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11000.000	11.425	41.180	52.605	-21.395	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna) (5580MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	Db	dBμV	dBμV/m	Db	dBμV/m

Horizontal

Peak Detector:

11160.000	11.538	41.360	52.898	-21.102	74.000
16740.000	*	*	*	*	74.000
22320.000	*	*	*	*	74.000
27900.000	*	*	*	*	74.000

**Average
Detector:**

--

Vertical

Peak Detector:

11160.000	11.538	42.330	53.868	-20.132	74.000
16740.000	*	*	*	*	74.000
22320.000	*	*	*	*	74.000
27900.000	*	*	*	*	74.000

**Average
Detector:**

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna) (5700MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11400.000	11.531	41.500	53.031	-20.969	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11400.000	11.531	41.040	52.571	-21.429	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna) (5270MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
10540.000	10.709	41.790	52.498	-21.502	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
10540.000	10.709	44.250	54.958	-19.042	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average Detector:					
10540.000	10.709	30.500	41.208	-12.792	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna) (5310MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
10620.000	10.778	41.390	52.167	-21.833	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
10620.000	10.778	41.430	52.207	-21.793	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna) (5510MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11020.000	11.459	41.610	53.069	-20.931	74.000
16530.000	*	*	*	*	74.000
22040.000	*	*	*	*	74.000
27550.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11020.000	11.459	41.870	53.329	-20.671	74.000
16530.000	*	*	*	*	74.000
22040.000	*	*	*	*	74.000
27550.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna) (5550MHz)

Frequency MHz	Correct Factor Db	Reading Level dB μ V	Measurement Level dB μ V/m	Margin Db	Limit dB μ V/m
Horizontal					
Peak Detector:					
11100.000	11.355	41.810	53.164	-20.836	74.000
16650.000	*	*	*	*	74.000
22200.000	*	*	*	*	74.000
27750.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11100.000	11.355	41.700	53.054	-20.946	74.000
16650.000	*	*	*	*	74.000
22200.000	*	*	*	*	74.000
27750.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna) (5670MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	Db	dBμV/m
	Db	dBμV	dBμV/m		

Horizontal

Peak Detector:

11340.000	11.598	41.770	53.368	-20.632	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000

Average Detector:

--

Vertical

Peak Detector:

11340.000	11.598	41.600	53.198	-20.802	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000

Average Detector:

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11ac-20BW-21.7Mbps) (External Antenna) (5720MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11440.000	11.665	44.600	56.265	-17.735	74.000
17160.000	*	*	*	*	74.000
22880.000	*	*	*	*	74.000
28600.000	*	*	*	*	74.000
34320.000	*	*	*	*	74.000
40040.000	*	*	*	*	74.000
Average Detector:					
11440.000	11.665	30.300	41.965	-12.035	54.000
Vertical					
Peak Detector:					
11440.000	11.665	43.430	55.095	-18.905	74.000
17160.000	*	*	*	*	74.000
22880.000	*	*	*	*	74.000
28600.000	*	*	*	*	74.000
34320.000	*	*	*	*	74.000
40040.000	*	*	*	*	74.000
Average Detector:					
11440.000	11.665	30.200	41.865	-12.135	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11ac-40BW-45Mbps) (External Antenna) (5710MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11420.000	11.428	42.000	53.428	-20.572	74.000
17130.000	*	*	*	*	74.000
22840.000	*	*	*	*	74.000
28550.000	*	*	*	*	74.000
34260.000	*	*	*	*	74.000
39970.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11420.000	11.428	41.540	52.968	-21.032	74.000
17130.000	*	*	*	*	74.000
22840.000	*	*	*	*	74.000
28550.000	*	*	*	*	74.000
34260.000	*	*	*	*	74.000
39970.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (External Antenna) (5290MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
10580.000	10.742	41.510	52.252	-21.748	74.000
15870.000	*	*	*	*	74.000
21160.000	*	*	*	*	74.000
26450.000	*	*	*	*	74.000
31740.000	*	*	*	*	74.000
37030.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
10580.000	10.742	41.500	52.242	-21.758	74.000
15870.000	*	*	*	*	74.000
21160.000	*	*	*	*	74.000
26450.000	*	*	*	*	74.000
31740.000	*	*	*	*	74.000
37030.000	*	*	*	*	74.000
Average Detector:					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (External Antenna) (5530MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11060.000	11.094	41.390	52.483	-21.517	74.000
16590.000	*	*	*	*	74.000
22120.000	*	*	*	*	74.000
27650.000	*	*	*	*	74.000
33180.000	*	*	*	*	74.000
38710.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11060.000	11.094	41.250	52.343	-21.657	74.000
16590.000	*	*	*	*	74.000
22120.000	*	*	*	*	74.000
27650.000	*	*	*	*	74.000
33180.000	*	*	*	*	74.000
38710.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (External Antenna) (5690MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector:					
11380.000	11.542	41.430	52.972	-21.028	74.000
17070.000	*	*	*	*	74.000
22760.000	*	*	*	*	74.000
28450.000	*	*	*	*	74.000
34140.000	*	*	*	*	74.000
39830.000	*	*	*	*	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11380.000	11.542	41.200	52.742	-21.258	74.000
17070.000	*	*	*	*	74.000
22760.000	*	*	*	*	74.000
28450.000	*	*	*	*	74.000
34140.000	*	*	*	*	74.000
39830.000	*	*	*	*	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna) (5300MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	Db	dB μ V/m
	Db	dB μ V	dB μ V/m		
Horizontal					
Peak Detector					
163.860	-9.989	47.170	37.181	-6.319	43.500
307.420	-4.120	43.612	39.492	-6.508	46.000
431.580	0.757	40.626	41.383	-4.617	46.000
546.040	4.386	36.993	41.379	-4.621	46.000
734.220	3.155	36.389	39.545	-6.455	46.000
883.600	6.601	33.709	40.310	-5.690	46.000
Vertical					
Peak Detector					
181.320	-1.910	40.934	39.024	-4.476	43.500
361.740	-0.646	40.955	40.308	-5.692	46.000
540.220	2.169	39.266	41.435	-4.565	46.000
674.080	0.003	40.686	40.689	-5.311	46.000
817.640	2.966	37.532	40.498	-5.502	46.000
968.960	3.936	40.386	44.322	-9.678	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna) (5580MHz)

Frequency MHz	Correct Factor Db	Reading Level dB μ V	Measurement Level dB μ V/m	Margin Db	Limit dB μ V/m
Horizontal					
Peak Detector					
165.800	-9.915	46.888	36.973	-6.527	43.500
402.480	0.915	39.740	40.655	-5.345	46.000
524.700	3.140	35.951	39.091	-6.909	46.000
666.320	1.879	38.090	39.969	-6.031	46.000
798.240	6.409	32.215	38.623	-7.377	46.000
941.800	6.790	32.307	39.097	-6.903	46.000
Vertical					
Peak Detector					
179.380	-0.824	39.005	38.181	-5.319	43.500
319.060	-4.135	43.777	39.642	-6.358	46.000
456.800	-3.328	43.887	40.559	-5.441	46.000
615.880	1.473	37.925	39.398	-6.602	46.000
780.780	2.769	38.550	41.319	-4.681	46.000
922.400	3.200	37.216	40.416	-5.584	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna) (5300MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	Db	dBμV/m
	Db	dBμV	dBμV/m		
Horizontal					
Peak Detector					
167.740	-9.816	47.885	38.069	-5.431	43.500
359.800	-0.226	40.159	39.933	-6.067	46.000
513.060	3.186	37.397	40.583	-5.417	46.000
662.440	1.882	37.581	39.463	-6.537	46.000
798.240	6.409	33.809	40.217	-5.783	46.000
947.620	6.971	34.627	41.598	-4.402	46.000

Vertical					
Peak Detector					
175.500	-1.842	41.272	39.430	-4.070	43.500
385.020	-0.441	39.331	38.890	-7.110	46.000
544.100	1.503	39.323	40.826	-5.174	46.000
683.780	2.011	37.485	39.496	-6.504	46.000
802.120	2.966	36.724	39.690	-6.310	46.000
935.980	2.820	36.558	39.378	-6.622	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna) (5580MHz)

Frequency MHz	Correct Factor Db	Reading Level dB μ V	Measurement Level dB μ V/m	Margin Db	Limit dB μ V/m
Horizontal					
Peak Detector					
132.820	-7.442	44.019	36.577	-6.923	43.500
266.680	-5.510	45.702	40.192	-5.808	46.000
394.720	0.683	39.128	39.811	-6.189	46.000
540.220	3.499	37.749	41.248	-4.752	46.000
712.880	3.792	36.000	39.792	-6.208	46.000
903.000	5.938	33.793	39.731	-6.269	46.000
Vertical					
Peak Detector					
173.560	-2.713	40.798	38.085	-5.415	43.500
346.220	-0.527	40.394	39.867	-6.133	46.000
538.280	1.996	38.151	40.147	-5.853	46.000
681.840	1.622	38.521	40.143	-5.857	46.000
844.800	2.462	38.212	40.674	-5.326	46.000
968.960	3.936	37.773	41.709	-12.291	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna) (5270MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector					
148.340	-7.806	46.226	38.420	-5.080	43.500
392.780	0.810	38.696	39.506	-6.494	46.000
557.680	2.511	36.718	39.228	-6.772	46.000
707.060	3.066	38.482	41.548	-4.452	46.000
854.500	7.380	31.051	38.431	-7.569	46.000
984.480	8.098	32.740	40.838	-13.162	54.000
984.480	8.366	38.557	46.923	-7.077	54.000
Vertical					
Peak Detector					
196.840	-5.691	45.223	39.532	-3.968	43.500
328.760	-2.407	42.942	40.535	-5.465	46.000
462.620	-2.571	42.855	40.284	-5.716	46.000
625.580	0.299	40.004	40.304	-5.696	46.000
804.060	3.371	37.820	41.191	-4.809	46.000
941.800	3.460	35.864	39.324	-6.676	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna) (5550MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector					
175.500	-9.792	47.381	37.589	-5.911	43.500
317.120	-4.599	44.914	40.314	-5.686	46.000
460.680	4.030	36.353	40.383	-5.617	46.000
610.060	3.657	38.025	41.682	-4.318	46.000
755.560	5.039	34.393	39.432	-6.568	46.000
924.340	6.589	33.657	40.246	-5.754	46.000
Vertical					
Peak Detector					
177.440	-1.248	38.704	37.456	-6.044	43.500
342.340	-0.936	40.649	39.713	-6.287	46.000
470.380	-3.540	44.598	41.058	-4.942	46.000
612.000	1.943	38.657	40.599	-5.401	46.000
817.640	2.966	35.356	38.322	-7.678	46.000
945.680	3.300	37.679	40.979	-5.021	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11ac-20BW-21.7Mbps) (External Antenna) (5720MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	Db	dBμV/m
	Db	dBμV	dBμV/m		
Horizontal					
Peak Detector					
175.500	-9.792	46.948	37.156	-6.344	43.500
313.240	-4.640	44.768	40.128	-5.872	46.000
456.800	2.432	36.822	39.254	-6.746	46.000
664.380	1.882	39.130	41.012	-4.988	46.000
804.060	6.271	32.958	39.229	-6.771	46.000
947.620	6.971	33.867	40.838	-5.162	46.000
Vertical					
Peak Detector					
177.440	-1.248	39.280	38.032	-5.468	43.500
255.040	-5.089	43.260	38.171	-7.829	46.000
385.020	-0.441	40.017	39.576	-6.424	46.000
612.000	1.943	38.631	40.573	-5.427	46.000
796.300	2.639	36.278	38.917	-7.083	46.000
930.160	3.830	37.634	41.464	-4.536	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11ac-40BW-45Mbps) (External Antenna) (5710MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector					
191.020	-9.679	47.428	37.749	-5.751	43.500
390.840	0.962	38.834	39.796	-6.204	46.000
524.700	3.140	38.197	41.337	-4.663	46.000
660.500	1.889	37.834	39.723	-6.277	46.000
778.840	5.180	34.686	39.866	-6.134	46.000
916.580	6.470	33.520	39.990	-6.010	46.000
Vertical					
Peak Detector					
179.380	-0.824	38.917	38.093	-5.407	43.500
328.760	-2.407	39.506	37.099	-8.901	46.000
458.740	-2.562	42.242	39.680	-6.320	46.000
639.160	-1.374	40.587	39.213	-6.787	46.000
782.720	2.757	37.867	40.624	-5.376	46.000
937.920	3.110	36.478	39.588	-6.412	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (External Antenna) (5290MHz)

Frequency MHz	Correct Factor Db	Reading Level dBμV	Measurement Level dBμV/m	Margin Db	Limit dBμV/m
Horizontal					
Peak Detector					
198.780	-9.958	46.874	36.916	-6.584	43.500
377.260	1.107	39.158	40.265	-5.735	46.000
501.420	2.019	36.152	38.171	-7.829	46.000
650.800	1.891	38.061	39.952	-6.048	46.000
773.020	5.145	35.476	40.621	-5.379	46.000
937.920	6.750	33.510	40.260	-5.740	46.000
Vertical					
Peak Detector					
179.380	-0.824	38.501	37.677	-5.823	43.500
340.400	-1.287	42.095	40.808	-5.192	46.000
460.680	-1.930	39.935	38.005	-7.995	46.000
602.300	1.704	36.906	38.610	-7.390	46.000
759.440	2.110	38.781	40.891	-5.109	46.000
957.320	3.015	36.183	39.198	-6.802	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Access Point/Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (External Antenna) (5690MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	Db	dBμV/m
	Db	dBμV	dBμV/m	Db	dBμV/m
Horizontal					
Peak Detector					
200.720	-9.846	47.265	37.419	-6.081	43.500
332.640	-3.895	44.027	40.132	-5.868	46.000
511.120	3.173	38.445	41.618	-4.382	46.000
658.560	1.892	38.011	39.903	-6.097	46.000
794.360	6.387	34.972	41.359	-4.641	46.000
949.560	7.036	33.884	40.920	-5.080	46.000
Vertical					
Peak Detector					
177.440	-1.248	40.151	38.903	-4.597	43.500
299.660	-4.061	43.435	39.374	-6.626	46.000
509.180	0.804	39.423	40.227	-5.773	46.000
660.500	-1.111	40.403	39.292	-6.708	46.000
809.880	3.026	38.275	41.301	-4.699	46.000
943.740	3.383	35.989	39.372	-6.628	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

6. Band Edge

6.1. Test Equipment

RF Conducted Measurement

The following test equipments are used during the band edge tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2015
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2015
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2015

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.

RF Radiated Measurement:

The following test equipments are used during the band edge tests:

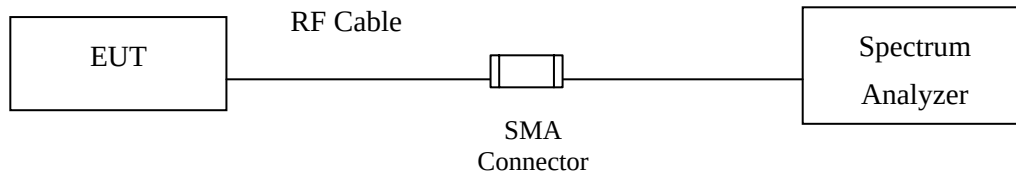
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒ CB # 8	X	Spectrum Analyzer	R&S	FSP40/ 100339	Oct., 2015
	X	Horn Antenna	ETS-Lindgren	3117/ 35205	Mar., 2015
	X	Horn Antenna	Schwarzbeck	BBHA9170/209	Jan., 2015
	X	Horn Antenna	TRC	AH-0801/95051	Aug., 2015
	X	Pre-Amplifier	EMCI	EMC012630SE/980210	Jan., 2015
	X	Pre-Amplifier	MITEQ	JS41-001040000-58-5P/153945	Jul., 2015
	X	Pre-Amplifier	NARDA	DBL-1840N506/013	Jul., 2015

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

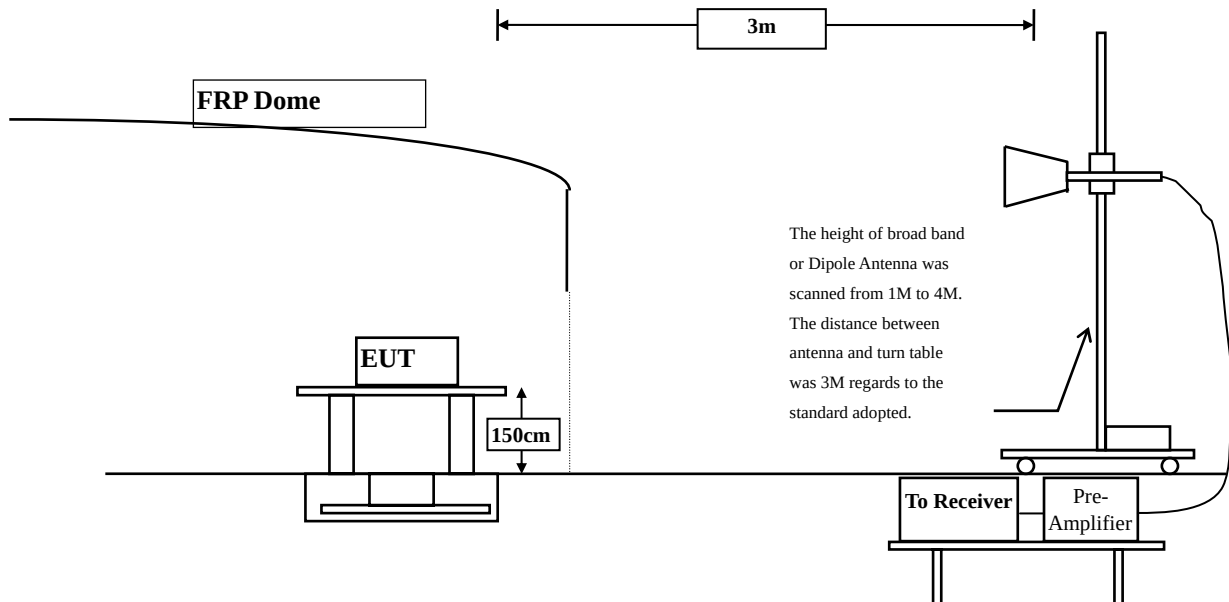
△ The test instruments marked with “X” are used to measure the final test results.

6.2. Test Setup

RF Conducted Measurement:



RF Radiated Measurement:



6.3. Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.

Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	Uv/m @3m	dBµV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks :

1. RF Voltage (dBµV) = 20 log RF Voltage (Uv)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

6.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz.

The EUT was setup to ANSI C63.10: 2013; tested to NII test procedure of FCC KDB-789033 section H.)5.) and section H.)6.) for compliance to FCC 47CFR Subpart E requirements.

6.5. Uncertainty

± 3.8 Db below 1GHz
± 3.9 Db above 1GHz

6.6. Test Result of Band Edge

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) –Channel 64 (5320MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
64 (Peak)	5324.200	3.799	103.087	106.886	--	--	Pass
64 (Peak)	5350.000	3.716	50.892	54.609	74.00	54.00	Pass
64 (Average)	5325.400	3.795	91.074	94.869	--	--	Pass
64 (Average)	5350.000	3.716	39.235	42.952	74.00	54.00	Pass

Figure Channel 64: Horizontal (Peak)

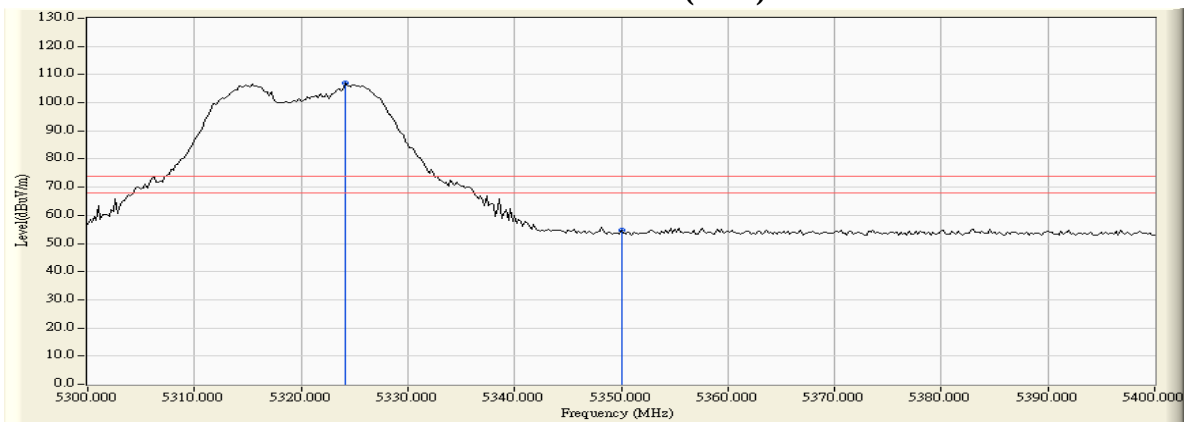
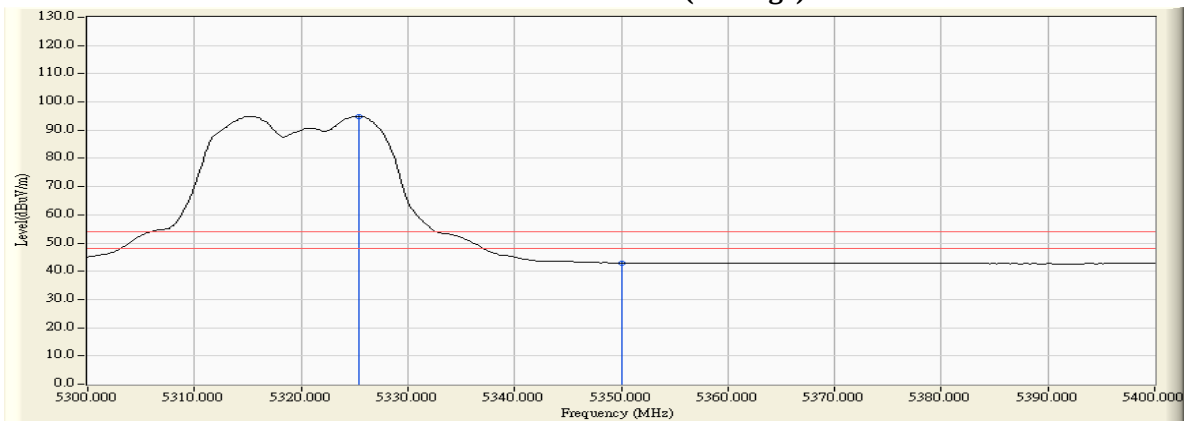


Figure Channel 64: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) –Channel 64 (5320MHz)

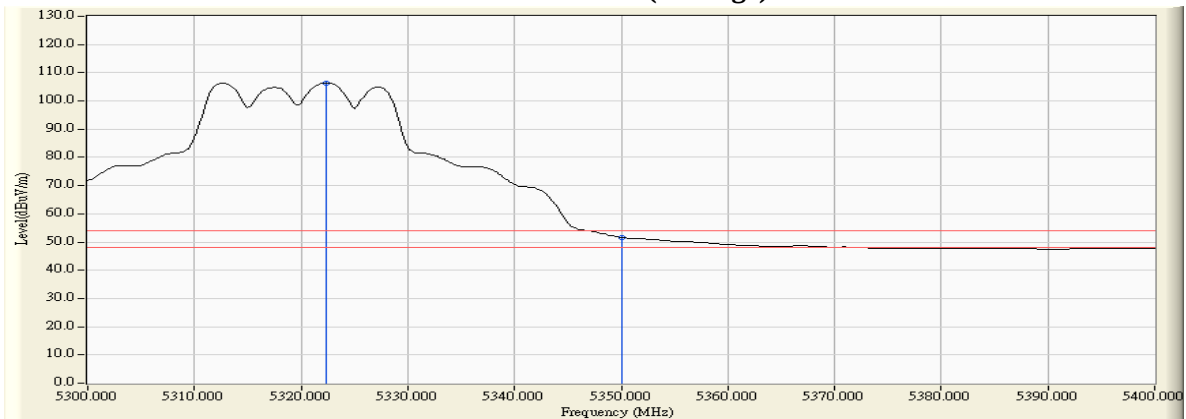
RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
64 (Peak)	5312.600	5.738	112.018	117.757	--	--	Pass
64 (Peak)	5350.000	5.691	64.613	70.305	74.00	54.00	Pass
64 (Peak)	5350.200	5.691	68.071	73.762	74.00	54.00	Pass
64 (Average)	5322.400	5.726	100.737	106.463	--	--	Pass
64 (Average)	5350.000	5.691	45.939	51.631	74.00	54.00	Pass

Figure Channel 64: Vertical (Peak)



Figure Channel 64: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) –Channel 100 (5500MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
100 (Peak)	5458.000	4.327	53.725	58.052	74.00	54.00	Pass
100 (Peak)	5460.000	4.354	53.263	57.617	74.00	54.00	Pass
100 (Peak)	5502.400	4.831	108.042	112.873	--	--	Pass
100 (Average)	5460.000	4.354	40.623	44.977	74.00	54.00	Pass
100 (Average)	5501.400	4.825	95.403	100.227	--	--	Pass

Figure Channel 100: Horizontal (Peak)

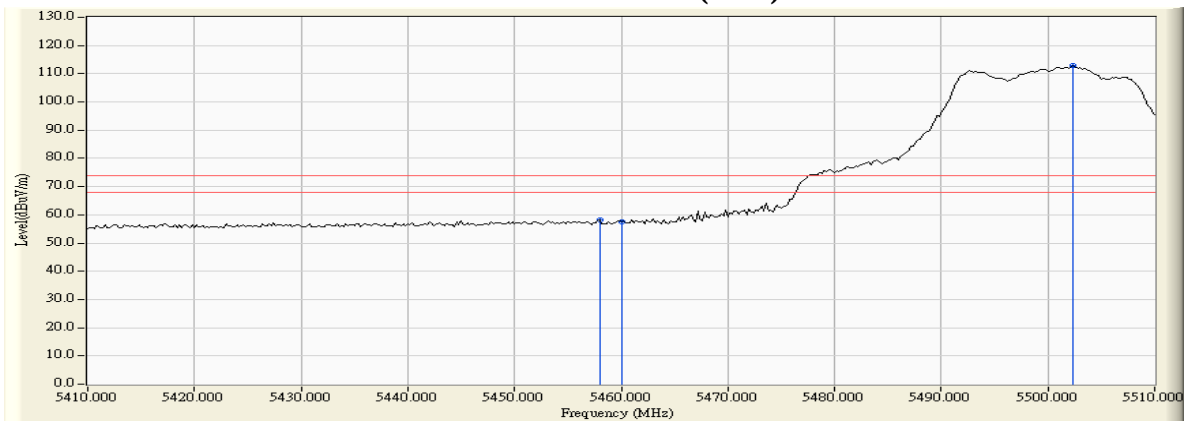
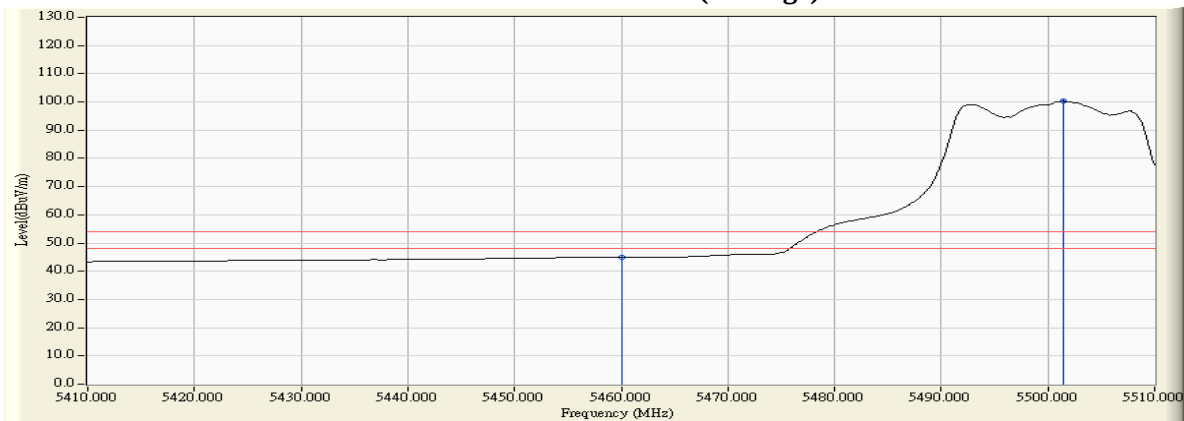


Figure Channel 100: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) –Channel 100 (5500MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
100 (Peak)	5460.000	6.041	66.966	73.007	74.00	54.00	Pass
100 (Peak)	5494.400	6.258	113.794	120.052	--	--	Pass
100 (Average)	5460.000	6.041	47.749	53.790	74.00	54.00	Pass
100 (Average)	5494.200	6.258	102.216	108.473	--	--	Pass

Figure Channel 100: Vertical (Peak)

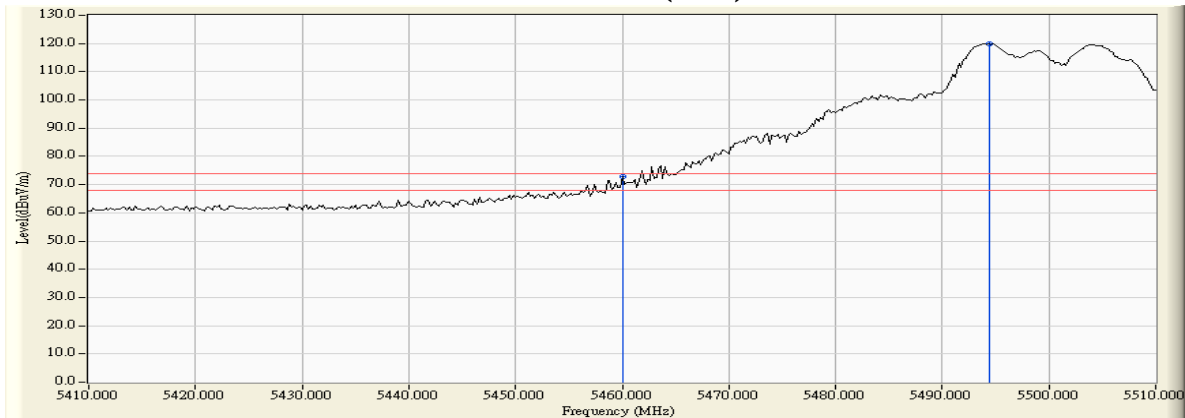
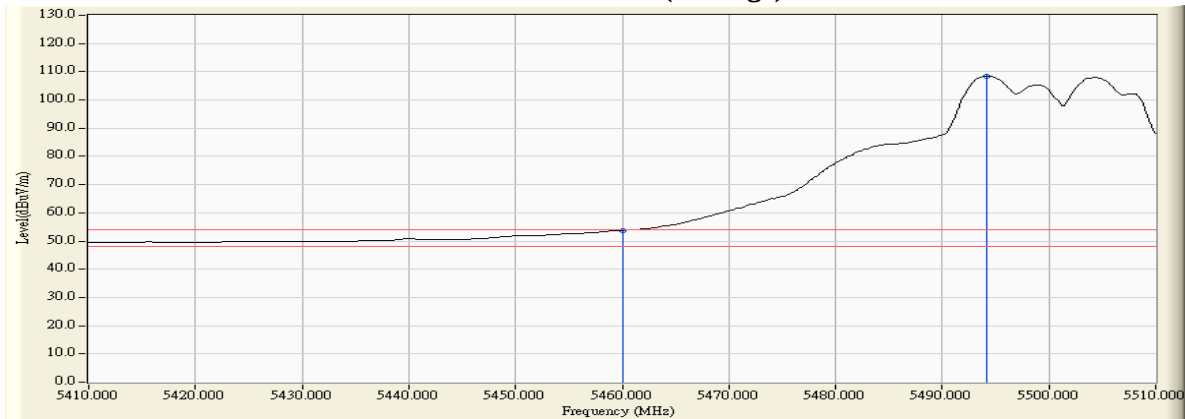


Figure Channel 100: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) –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	-76.242	-57.908	-30.908	-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	-57.390	-38.055	-11.055	-27.000	Pass

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (Internal Antenna) –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	-77.257	-58.608	-31.608	-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	-70.516	-51.144	-24.144	-27.000	Pass

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) –Channel 64 (5320MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dB μ V)	Emission Level (dB μ V/m)	Peak Limit (dB μ V/m)	Average Limit (dB μ V/m)	Result
64 (Peak)	5315.600	3.826	103.904	107.730	--	--	Pass
64 (Peak)	5350.000	3.716	50.670	54.387	74.00	54.00	Pass
64 (Peak)	5355.600	3.699	51.983	55.681	74.00	54.00	Pass
64 (Average)	5314.400	3.831	91.052	94.882	--	--	Pass
64 (Average)	5350.000	3.716	39.116	42.833	74.00	54.00	Pass

Figure Channel 64: Horizontal (Peak)

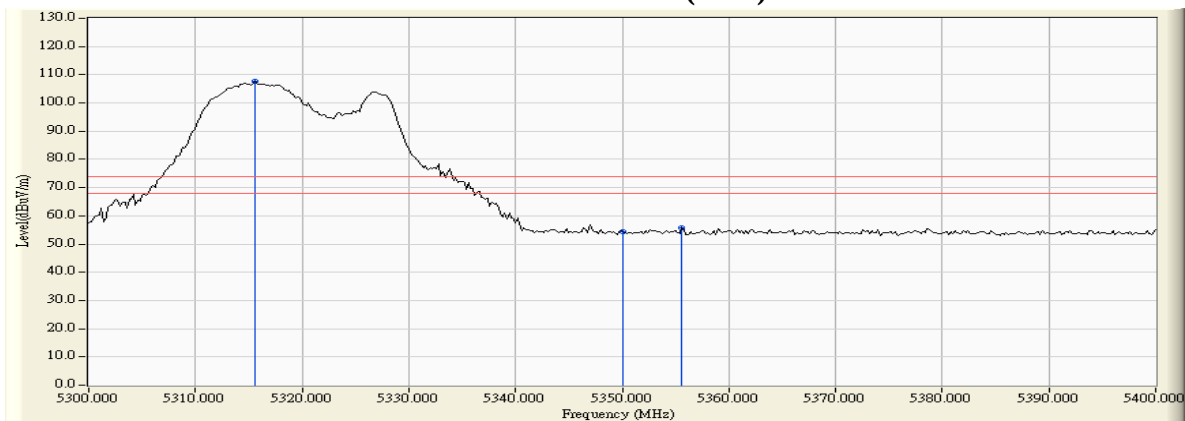
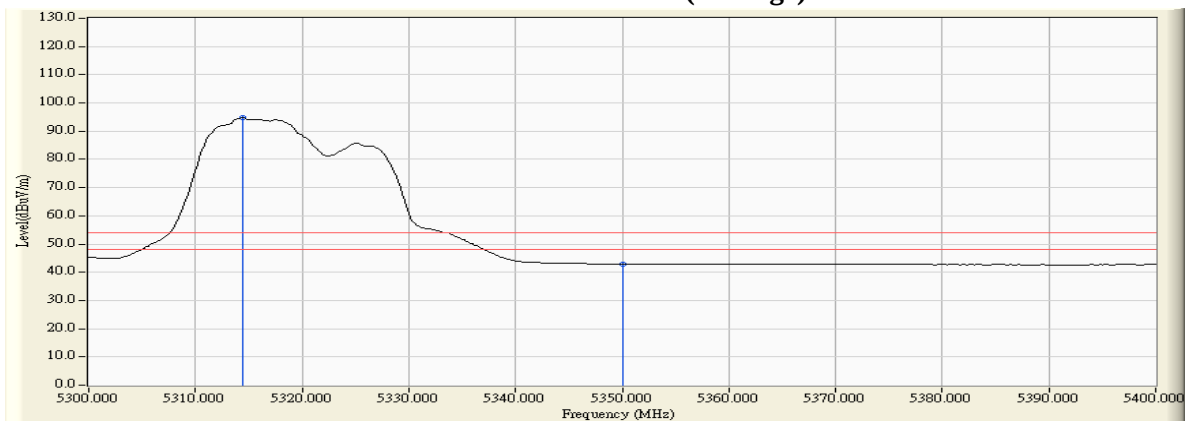


Figure Channel 64: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) –Channel 64 (5320MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
64 (Peak)	5318.800	5.731	112.780	118.511	--	--	Pass
64 (Peak)	5350.000	5.691	62.987	68.679	74.00	54.00	Pass
64 (Average)	5318.800	5.731	101.295	107.026	--	--	Pass
64 (Average)	5350.000	5.691	44.303	49.995	74.00	54.00	Pass

Figure Channel 64: Vertical (Peak)

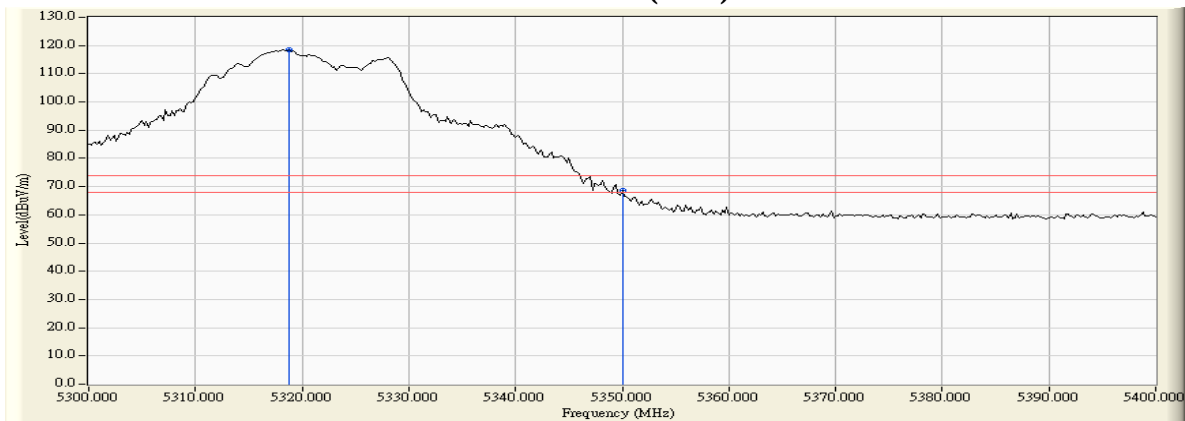
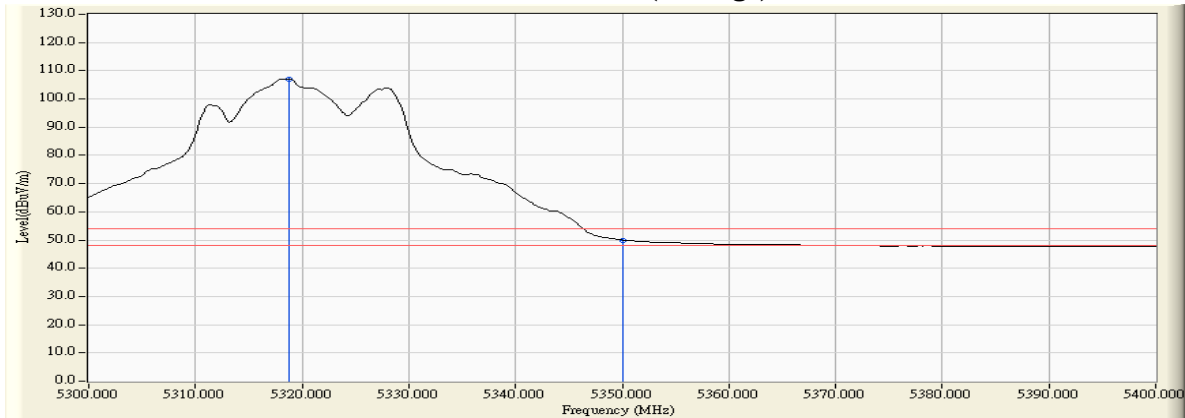


Figure Channel 64: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) –Channel 100 (5500MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
100 (Peak)	5433.800	4.006	53.286	57.292	74.00	54.00	Pass
100 (Peak)	5460.000	4.354	51.965	56.319	74.00	54.00	Pass
100 (Peak)	5501.400	4.825	107.296	112.120	--	--	Pass
100 (Average)	5460.000	4.354	40.632	44.986	74.00	54.00	Pass
100 (Average)	5500.800	4.819	94.745	99.565	--	--	Pass

Figure Channel 100: Horizontal (Peak)

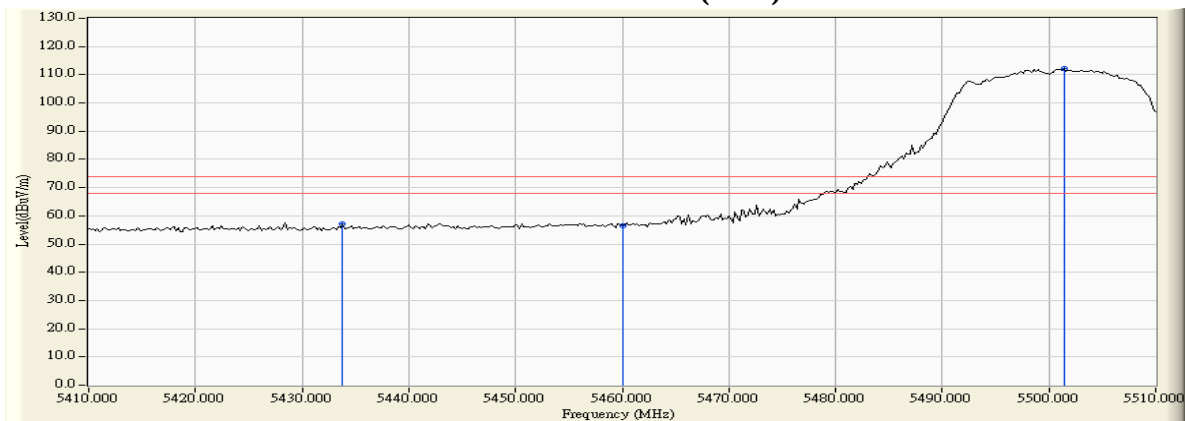
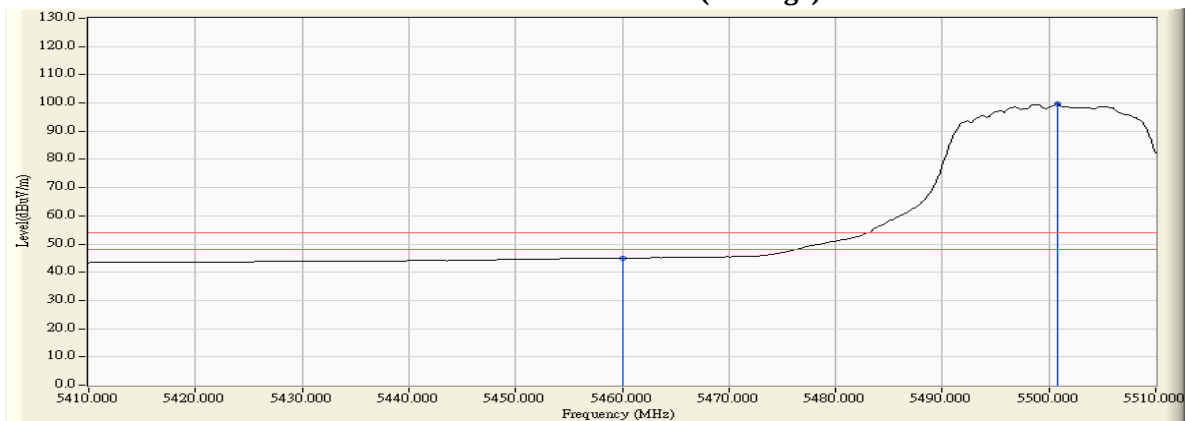


Figure Channel 100: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) –Channel 100 (5500MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
100 (Peak)	5459.800	6.040	66.434	72.473	74.00	54.00	Pass
100 (Peak)	5460.000	6.041	62.922	68.963	74.00	54.00	Pass
100 (Peak)	5493.000	6.253	113.619	119.873	--	--	Pass
100 (Average)	5460.000	6.041	47.084	53.125	74.00	54.00	Pass
100 (Average)	5493.200	6.255	100.732	106.986	--	--	Pass

Figure Channel 100: Vertical (Peak)

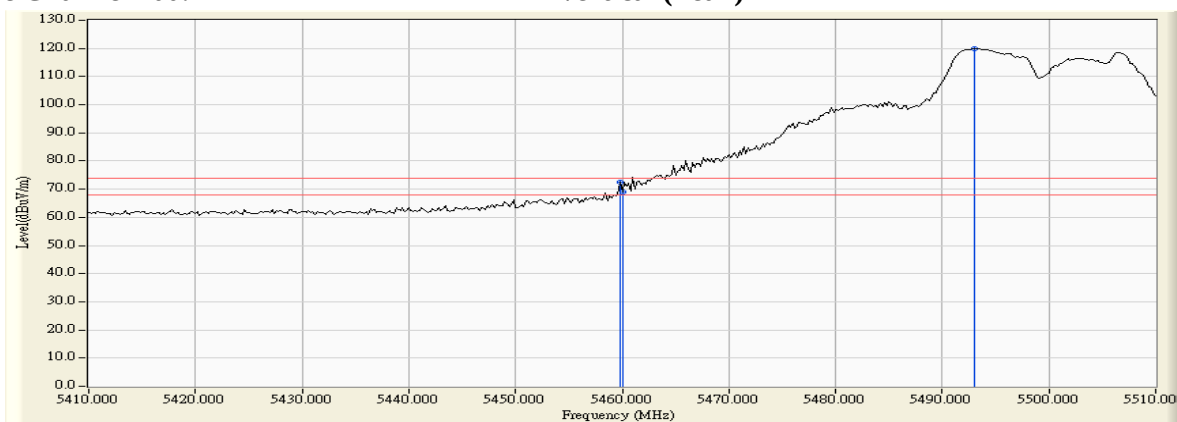
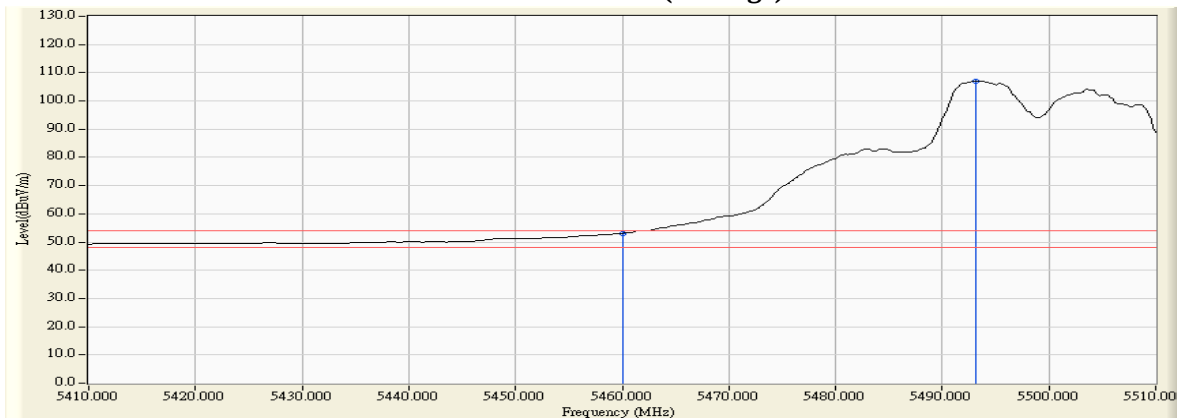


Figure Channel 100: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) –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	-77.600	-59.266	-32.266	-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	-68.640	-49.305	-22.305	-27.000	Pass

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (Internal Antenna) –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	-77.832	-59.183	-32.183	-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	-72.304	-52.932	-25.932	-27.000	Pass

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (Internal Antenna) –Channel 62 (5310MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
62 (Peak)	5305.800	3.859	94.294	98.152	--	--	Pass
62 (Peak)	5350.000	3.716	50.651	54.368	74.00	54.00	Pass
62 (Peak)	5362.800	3.674	55.063	58.737	74.00	54.00	Pass
62 (Average)	5305.400	3.859	81.218	85.078	--	--	Pass
62 (Average)	5350.000	3.716	38.975	42.692	74.00	54.00	Pass

Figure Channel 62: Horizontal (Peak)

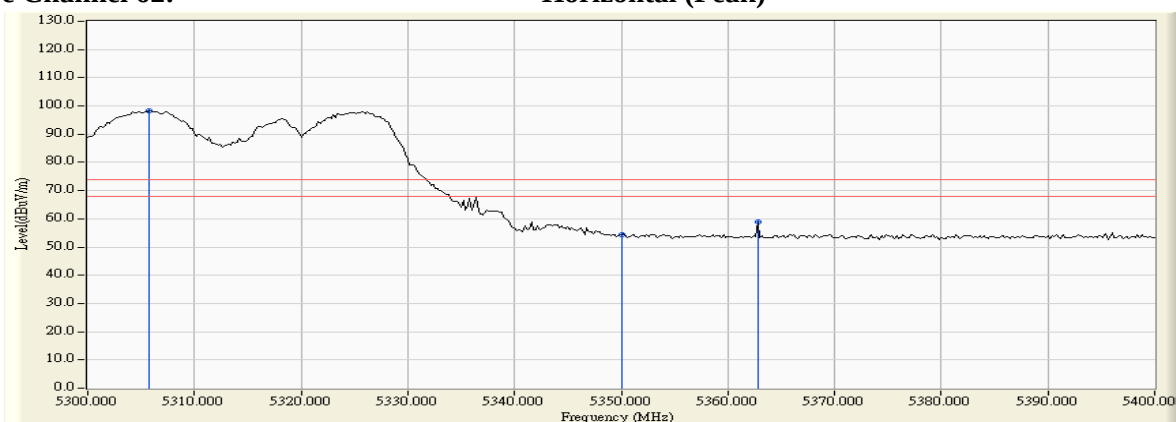
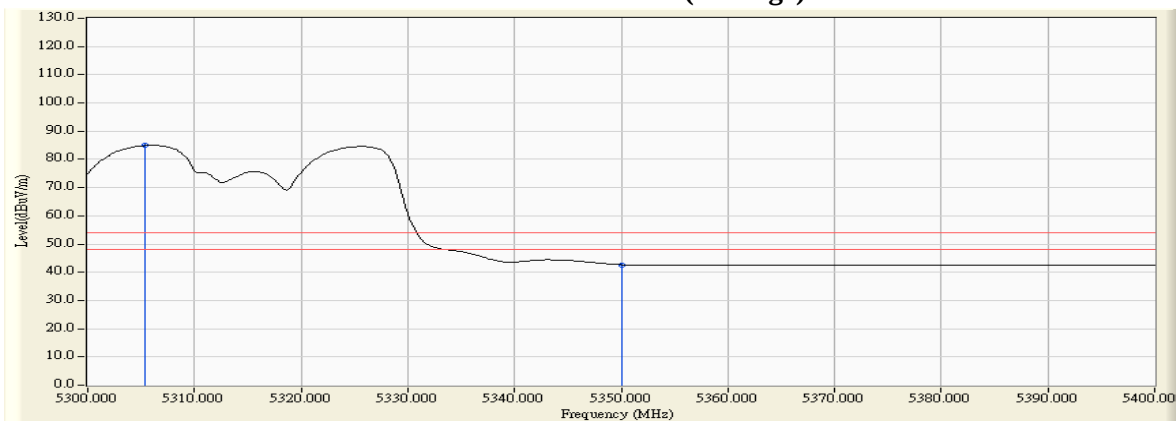


Figure Channel 62: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (Internal Antenna) –Channel 62 (5310MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
62 (Peak)	5308.000	5.745	104.836	110.581	--	--	Pass
62 (Peak)	5350.000	5.691	62.172	67.864	74.00	54.00	Pass
62 (Peak)	5355.000	5.685	64.491	70.176	74.00	54.00	Pass
62 (Average)	5308.000	5.745	90.807	96.552	--	--	Pass
62 (Average)	5350.000	5.691	46.029	51.721	74.00	54.00	Pass

Figure Channel 62: Vertical (Peak)

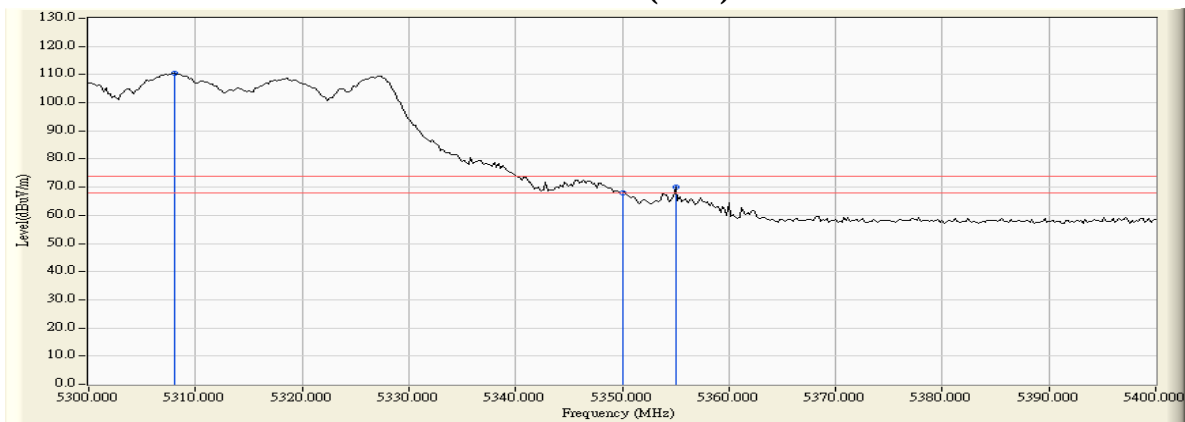
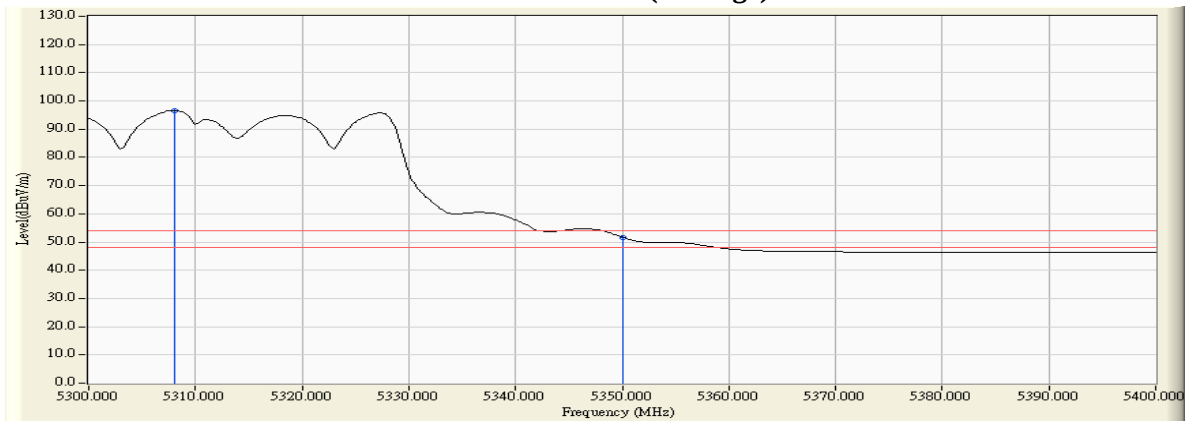


Figure Channel 62: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (Internal Antenna) –Channel 102 (5510MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
102 (Peak)	5411.800	3.711	51.838	55.550	74.00	54.00	Pass
102 (Peak)	5460.000	4.354	50.082	54.436	74.00	54.00	Pass
102 (Peak)	5501.600	4.826	98.994	103.820	--	--	Pass
102 (Average)	5460.000	4.354	39.282	43.636	74.00	54.00	Pass
102 (Average)	5501.200	4.823	85.119	89.942	--	--	Pass

Figure Channel 102: Horizontal (Peak)

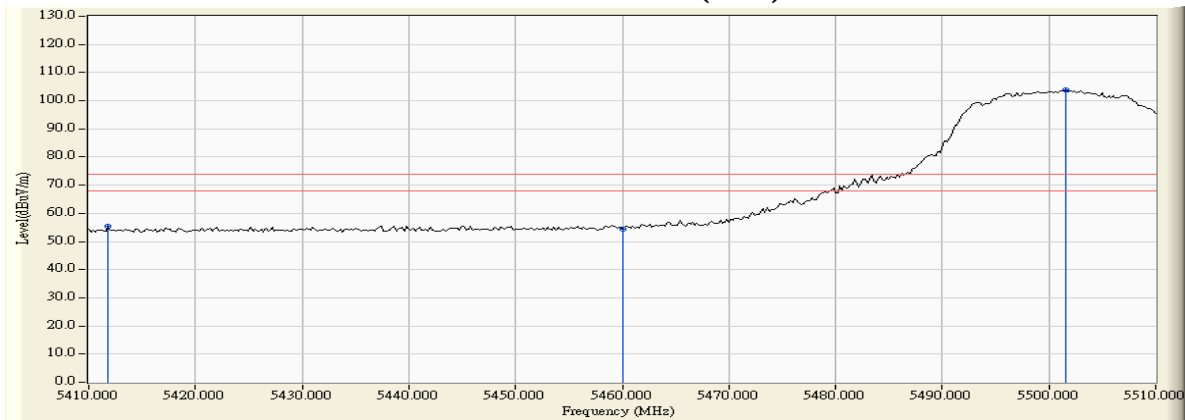
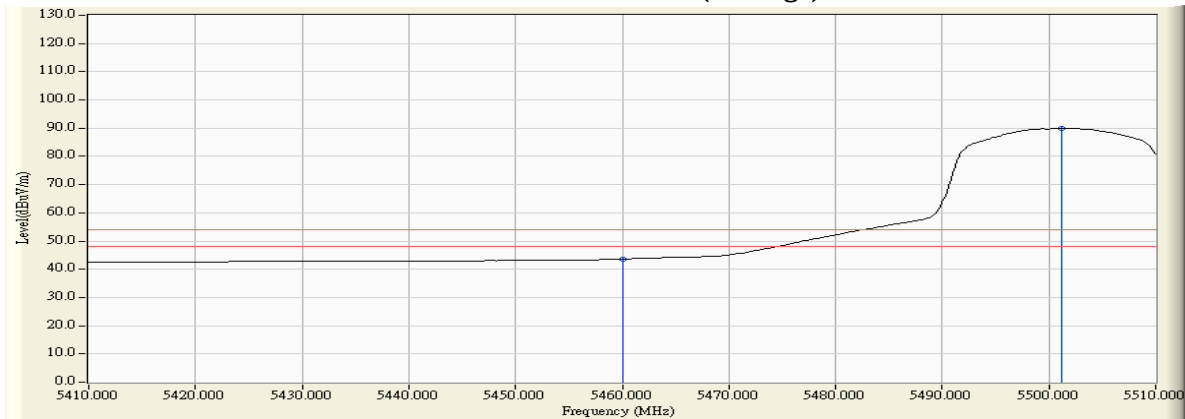


Figure Channel 102: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (Internal Antenna) –Channel 102 (5510MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
102 (Peak)	5459.000	6.033	67.000	73.034	74.00	54.00	Pass
102 (Peak)	5460.000	6.041	65.951	71.992	74.00	54.00	Pass
102 (Peak)	5494.000	6.256	106.442	112.699	--	--	Pass
102 (Average)	5460.000	6.041	46.531	52.572	74.00	54.00	Pass
102 (Average)	5492.800	6.253	92.521	98.774	--	--	Pass

Figure Channel 102: Vertical (Peak)

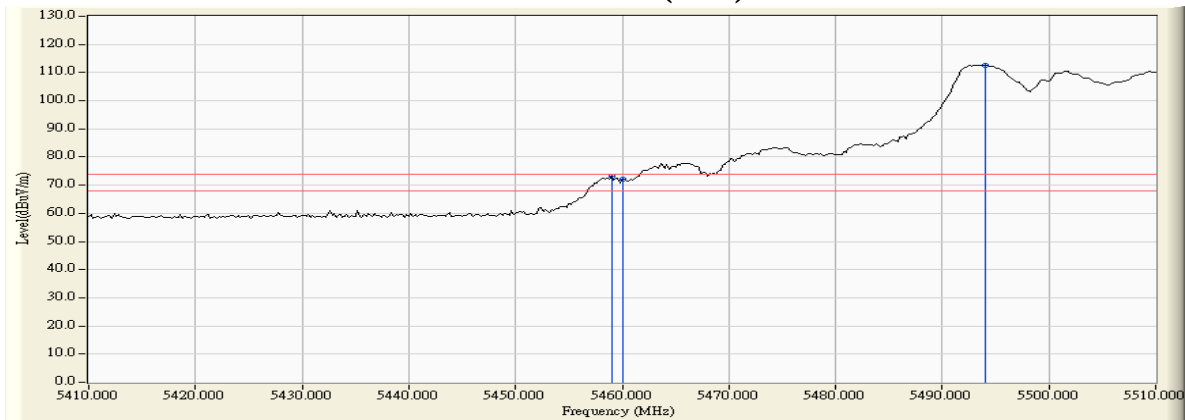
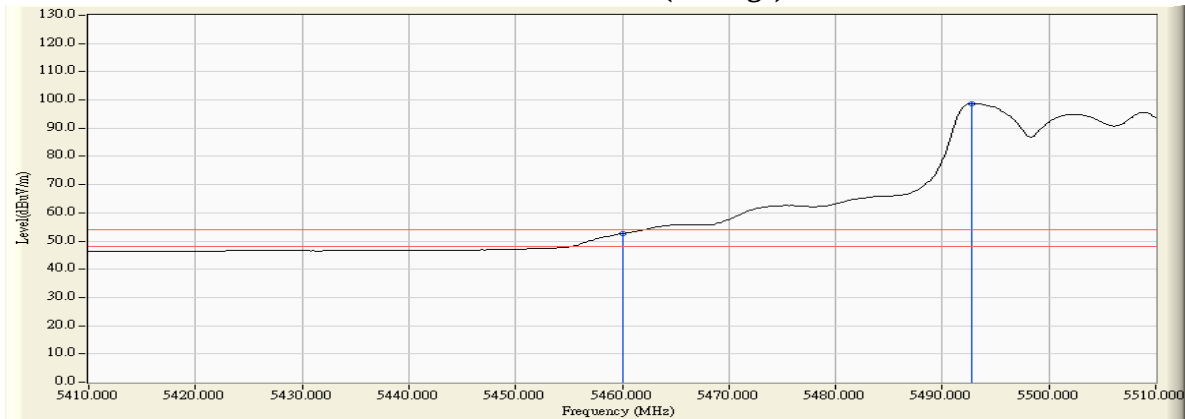


Figure Channel 102: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (Internal Antenna) –Channel 102

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (Db)	Limit (dBm/m)	Result
Horizontal	5470.000	18.275	-79.757	-61.482	-34.482	-27.000	Pass

	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (Db)	Limit (dBm/m)	Result
Vertical	5470.000	19.288	-57.554	-38.266	-11.266	-27.000	Pass

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (Internal Antenna) –Channel 134

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	-78.033	-59.384	-32.384	-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	-74.177	-54.805	-27.805	-27.000	Pass

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (Internal Antenna) –Channel 58 (5290MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dB μ V)	Emission Level (dB μ V/m)	Peak Limit (dB μ V/m)	Average Limit (dB μ V/m)	Result
58 (Peak)	5310.200	3.844	88.569	92.413	--	--	Pass
58 (Peak)	5350.000	3.716	52.892	56.609	74.00	54.00	Pass
58 (Average)	5311.600	3.839	72.860	76.699	--	--	Pass
58 (Average)	5350.000	3.716	39.960	43.677	74.00	54.00	Pass

Figure Channel 58: Horizontal (Peak)

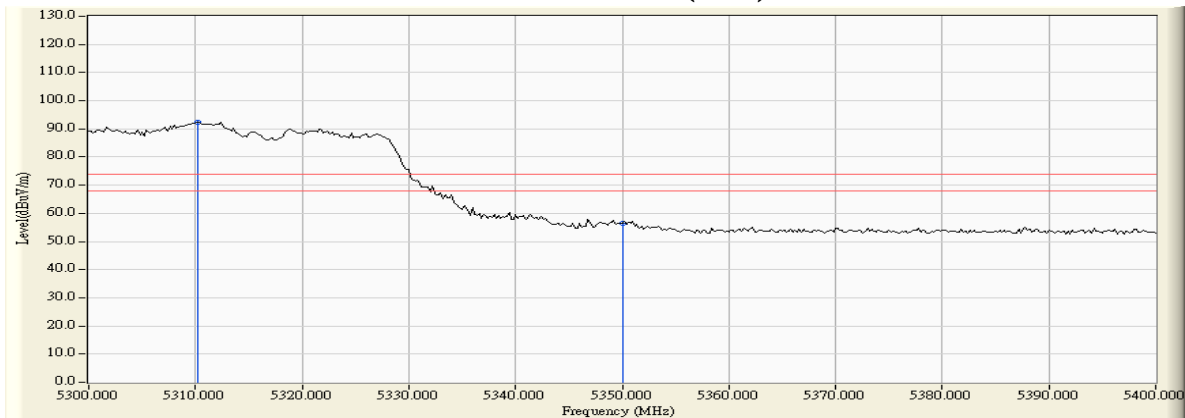
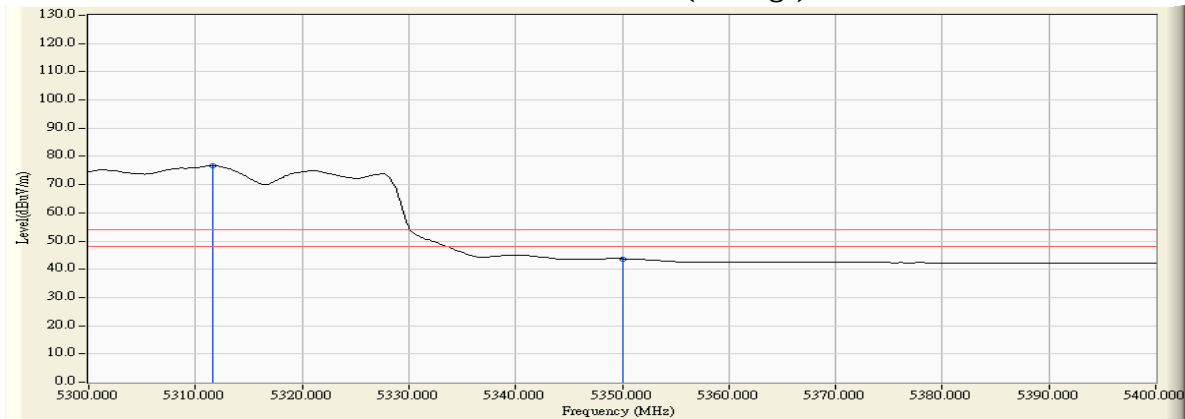


Figure Channel 58: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (Internal Antenna) –Channel 58 (5290MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
58 (Peak)	5315.400	5.735	100.869	106.604	--	--	Pass
58 (Peak)	5350.000	5.691	58.943	64.635	74.00	54.00	Pass
58 (Peak)	5353.600	5.687	65.680	71.367	74.00	54.00	Pass
58 (Average)	5304.400	5.749	83.778	89.527	--	--	Pass
58 (Average)	5350.000	5.691	45.569	51.261	74.00	54.00	Pass
58 (Average)	5354.800	5.685	47.598	53.283	74.00	54.00	Pass

Figure Channel 58: Vertical (Peak)

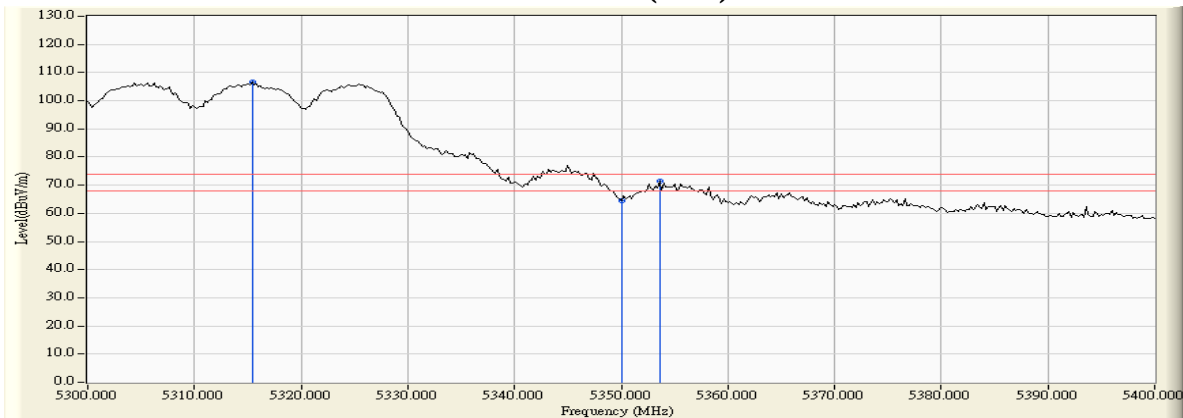
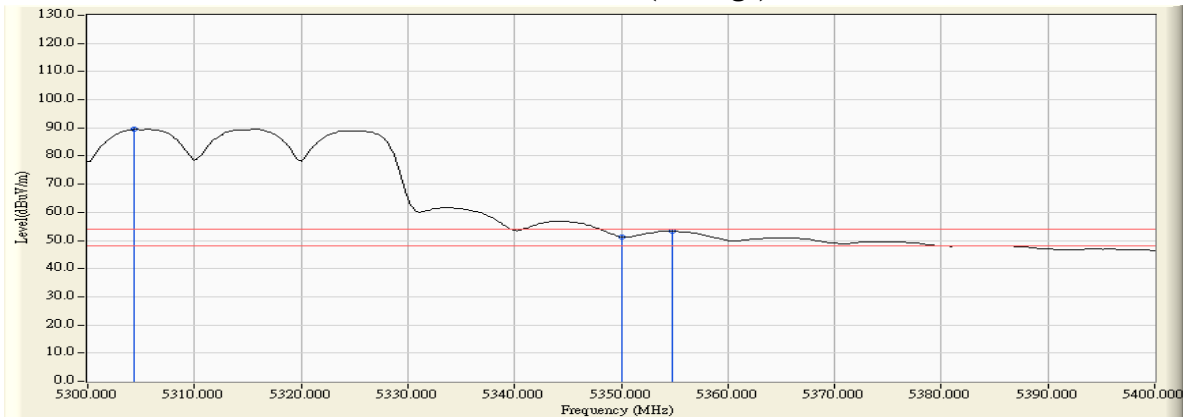


Figure Channel 58: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (Internal Antenna) –Channel 106 (5530MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
106 (Peak)	5459.600	4.349	52.468	56.817	74.00	54.00	Pass
106 (Peak)	5460.000	4.354	50.955	55.309	74.00	54.00	Pass
106 (Peak)	5502.000	4.829	91.769	96.597	--	--	Pass
106 (Average)	5460.000	4.354	39.894	44.248	74.00	54.00	Pass
106 (Average)	5501.800	4.827	75.723	80.550	--	--	Pass

Figure Channel 106: Horizontal (Peak)

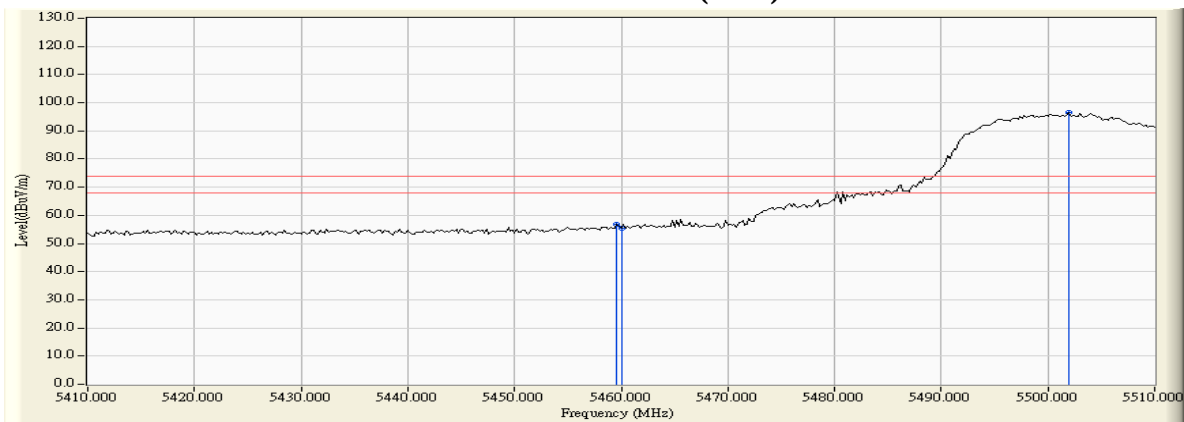
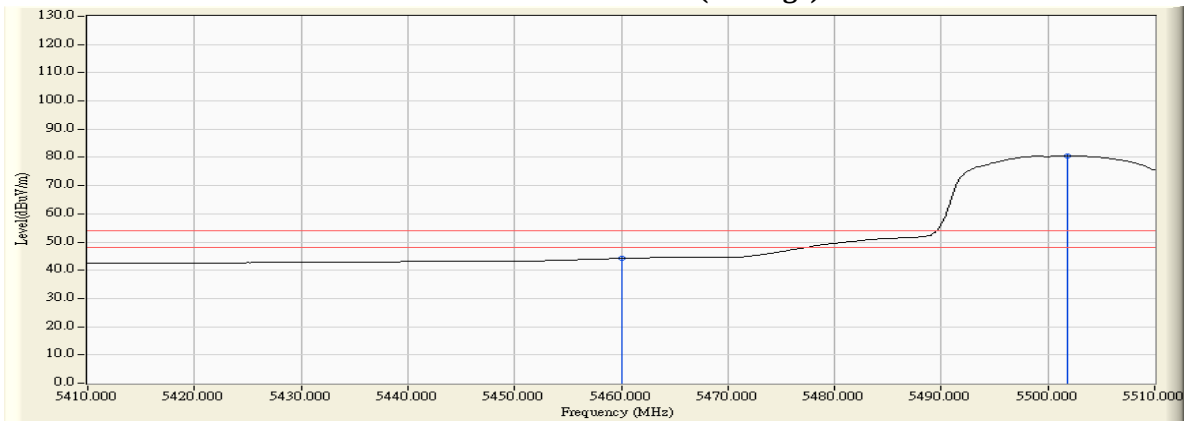


Figure Channel 106: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (Internal Antenna) –Channel 106 (5530MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
106 (Peak)	5458.400	6.029	64.083	70.113	74.00	54.00	Pass
106 (Peak)	5460.000	6.041	60.564	66.605	74.00	54.00	Pass
106 (Peak)	5508.000	6.270	100.131	106.402	--	--	Pass
106 (Average)	5458.800	6.032	45.977	52.009	74.00	54.00	Pass
106 (Average)	5460.000	6.041	45.563	51.604	74.00	54.00	Pass
106 (Average)	5508.000	6.270	83.738	90.009	--	--	Pass

Figure Channel 106: Vertical (Peak)

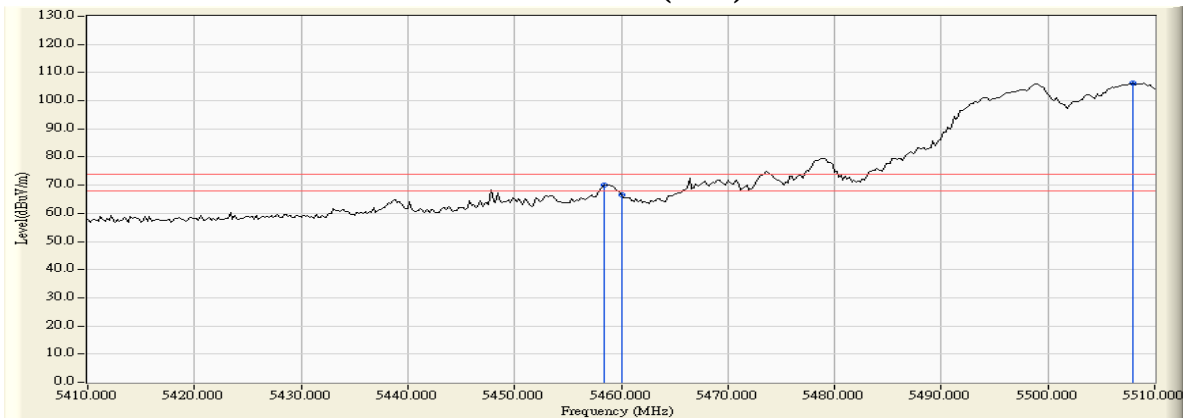
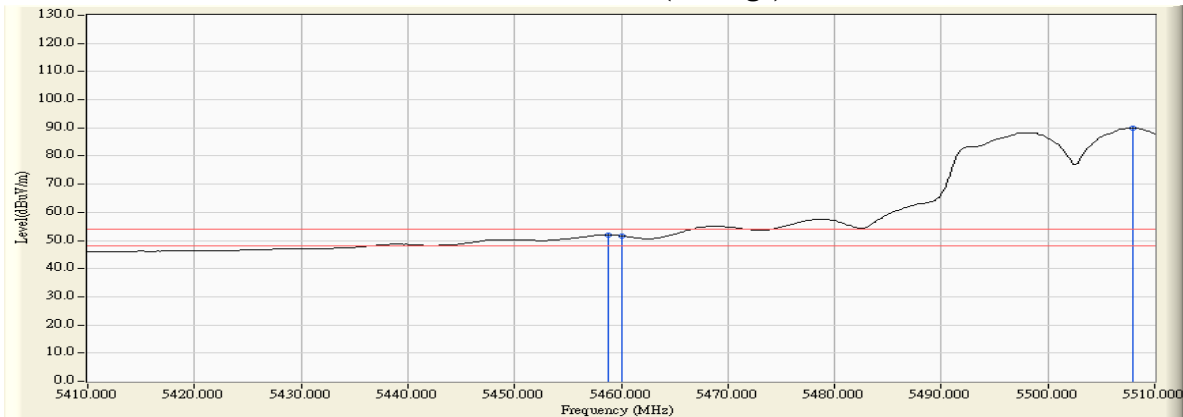


Figure Channel 106: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (Internal Antenna) –Channel
 106

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	-68.640	-50.306	-23.306	-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	-67.650	-48.315	-21.315	-27.000	Pass

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna)-Channel 64 (5320MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
64 (Peak)	5316.200	3.824	106.393	110.217	--	--	Pass
64 (Peak)	5350.000	3.716	51.583	55.300	74.00	54.00	Pass
64 (Peak)	5356.200	3.696	54.361	58.057	74.00	54.00	Pass
64 (Average)	5316.400	3.823	94.445	98.269	--	--	Pass
64 (Average)	5350.000	3.716	39.734	43.451	74.00	54.00	Pass

Figure Channel 64: Horizontal (Peak)

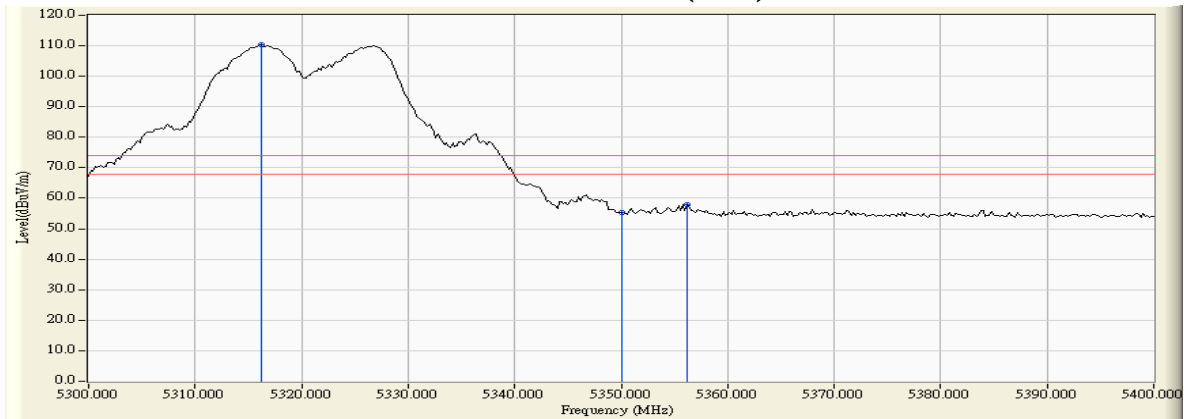
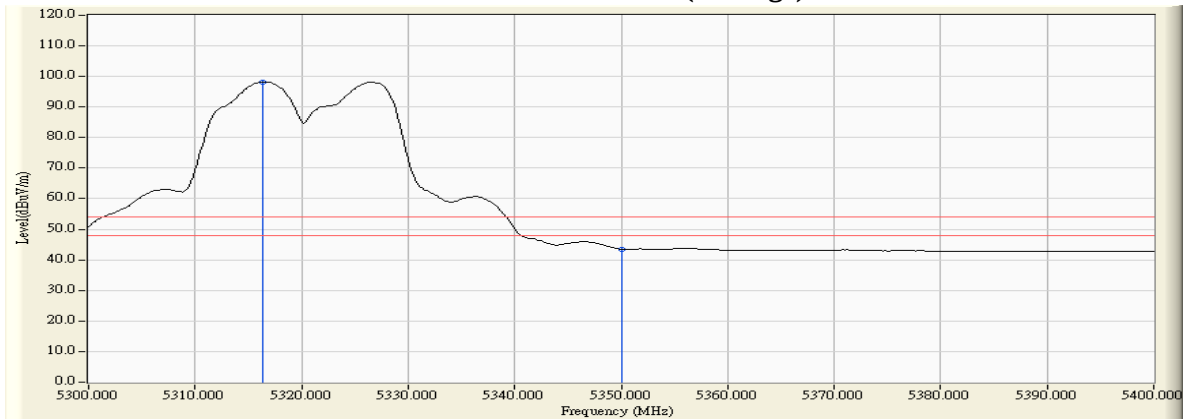


Figure Channel 64: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna)-Channel 64 (5320MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
64 (Peak)	5322.600	5.725	112.801	118.527	--	--	Pass
64 (Peak)	5350.000	5.691	62.362	68.054	74.00	54.00	Pass
64 (Peak)	5352.800	5.688	63.307	68.995	74.00	54.00	Pass
64 (Average)	5313.400	5.738	100.983	106.721	--	--	Pass
64 (Average)	5350.000	5.691	45.611	51.303	74.00	54.00	Pass

Figure Channel 64: Vertical (Peak)

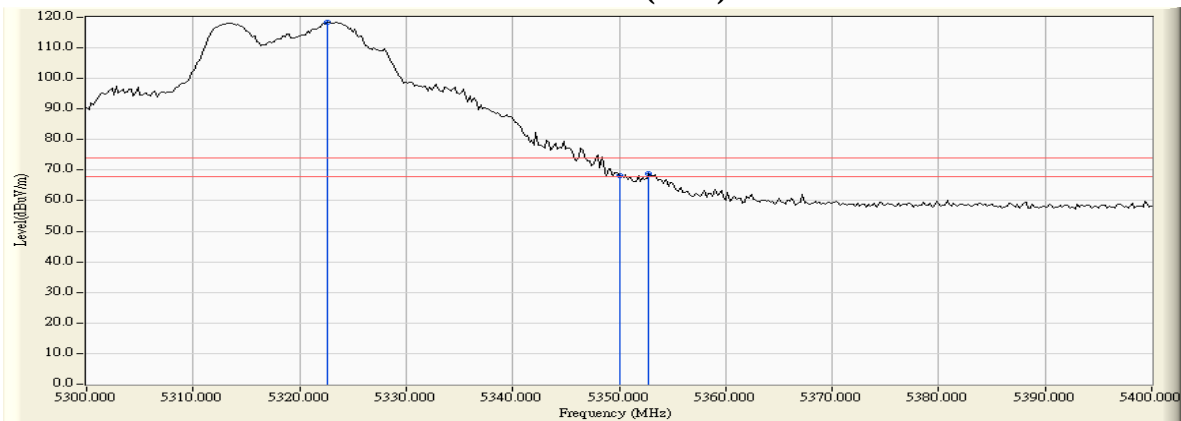
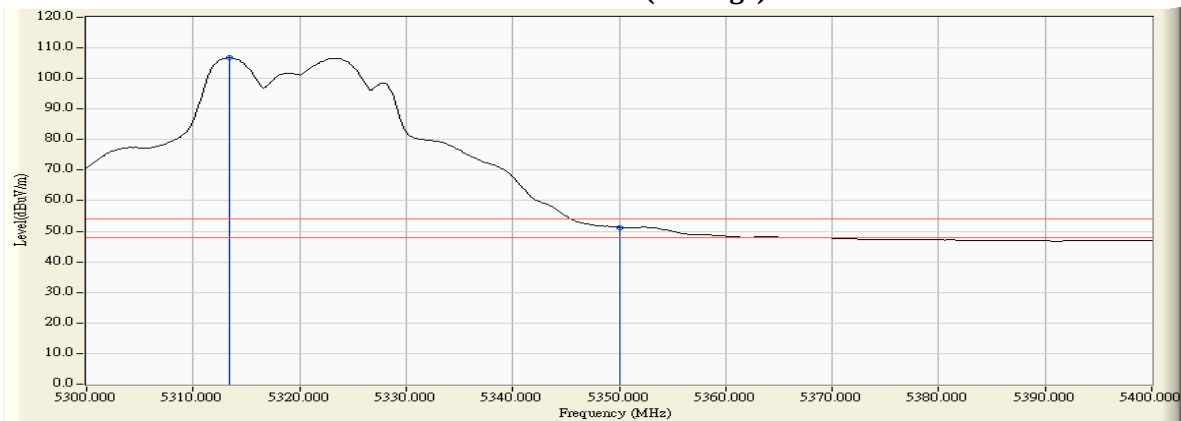


Figure Channel 64: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna)-Channel 100 (5500MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
100 (Peak)	5458.400	4.332	53.246	57.578	74.00	54.00	Pass
100 (Peak)	5460.000	4.354	50.658	55.012	74.00	54.00	Pass
100 (Peak)	5497.200	4.795	104.807	109.602	--	--	Pass
100 (Average)	5460.000	4.354	39.626	43.980	74.00	54.00	Pass
100 (Average)	5497.000	4.794	93.427	98.221	--	--	Pass

Figure Channel 100: Horizontal (Peak)

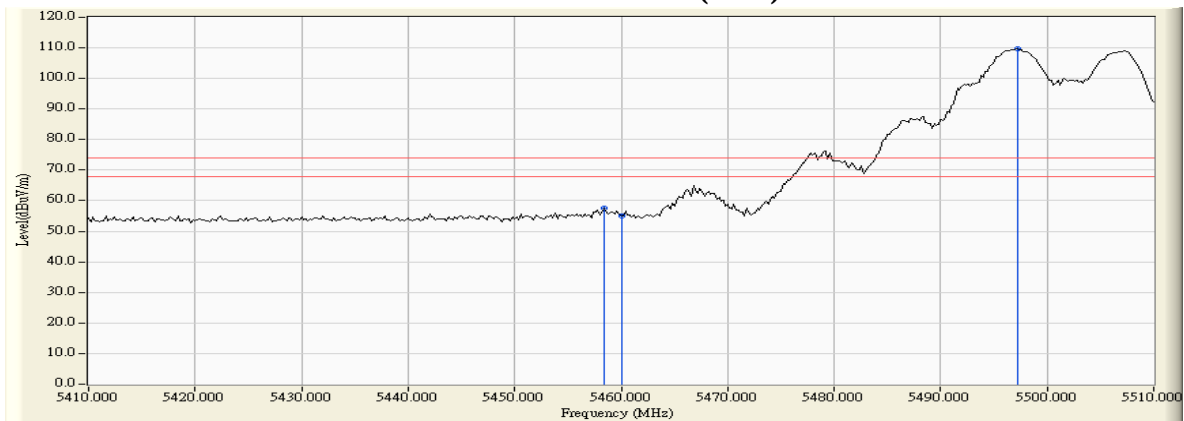
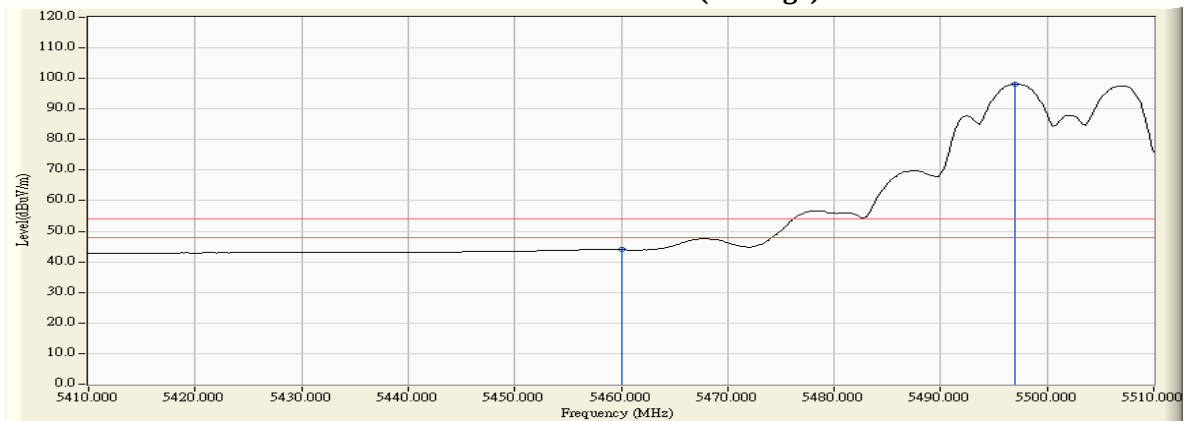


Figure Channel 100: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna)-Channel 100 (5500MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
100 (Peak)	5460.000	6.041	61.565	67.606	74.00	54.00	Pass
100 (Peak)	5499.400	6.273	114.078	120.351	--	--	Pass
100 (Average)	5460.000	6.041	45.230	51.271	74.00	54.00	Pass
100 (Average)	5499.400	6.273	102.634	108.907	--	--	Pass

Figure Channel 100: Vertical (Peak)

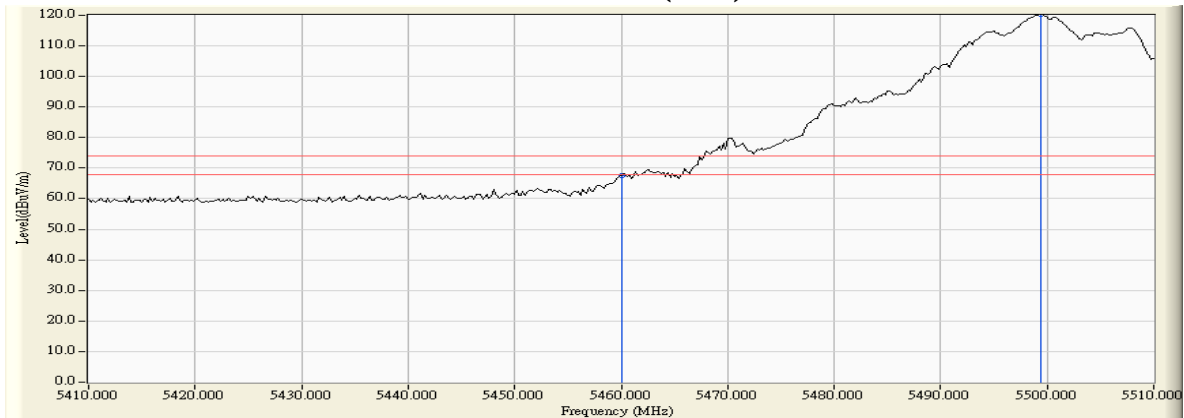
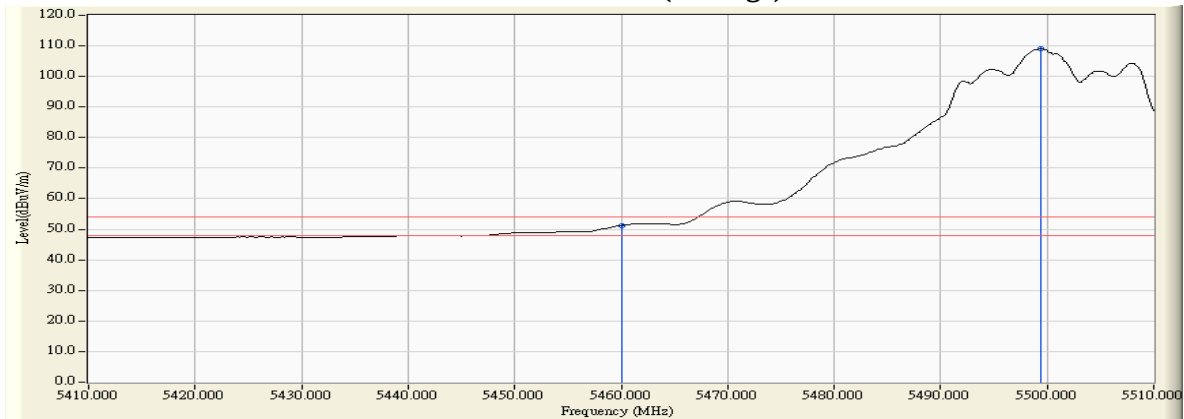


Figure Channel 100: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna)-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	14.189	-78.970	-64.781	-37.781	-27.000	Pass

	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (Db)	Limit (dBm/m)	Result
Vertical	5470.000	13.630	-76.750	-63.120	-36.120	-27.000	Pass

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11a-6Mbps) (External Antenna)-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	14.557	-78.520	-63.963	-36.963	-27.000	Pass

	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (Db)	Limit (dBm/m)	Result
Vertical	5725.000	14.292	-77.070	-62.778	-35.778	-27.000	Pass

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna)-Channel 64 (5320MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dB μ V)	Emission Level (dB μ V/m)	Peak Limit (dB μ V/m)	Average Limit (dB μ V/m)	Result
64 (Peak)	5313.000	3.835	104.016	107.851	--	--	Pass
64 (Peak)	5350.000	3.716	53.405	57.122	74.00	54.00	Pass
64 (Peak)	5353.200	3.706	55.115	58.821	74.00	54.00	Pass
64 (Average)	5314.200	3.831	92.146	95.977	--	--	Pass
64 (Average)	5350.000	3.716	40.400	44.117	74.00	54.00	Pass

Figure Channel 64: Horizontal (Peak)

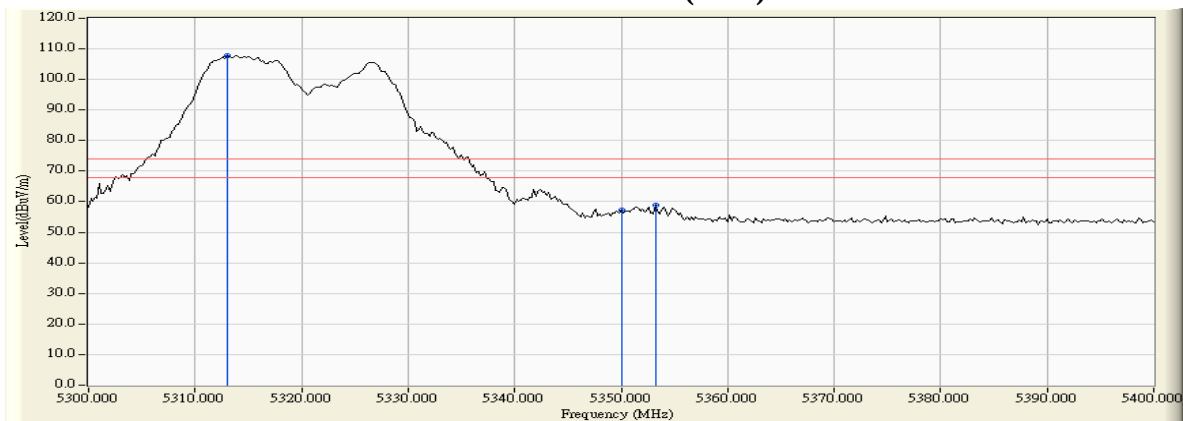
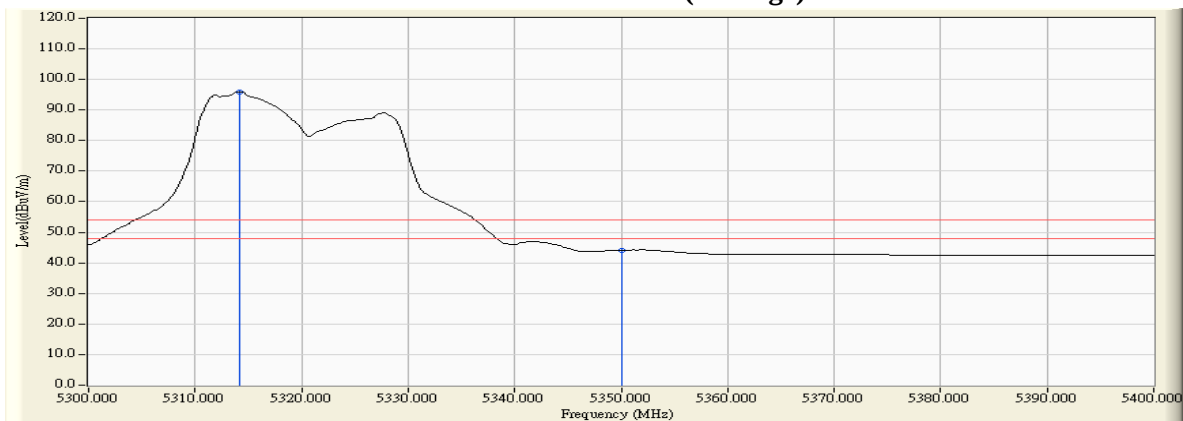


Figure Channel 64: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna)-Channel 64 (5320MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
64 (Peak)	5312.400	5.739	110.948	116.687	--	--	Pass
64 (Peak)	5350.000	5.691	63.256	68.948	74.00	54.00	Pass
64 (Average)	5312.000	5.739	98.622	104.361	--	--	Pass
64 (Average)	5350.000	5.691	45.500	51.192	74.00	54.00	Pass

Figure Channel 64: Vertical (Peak)

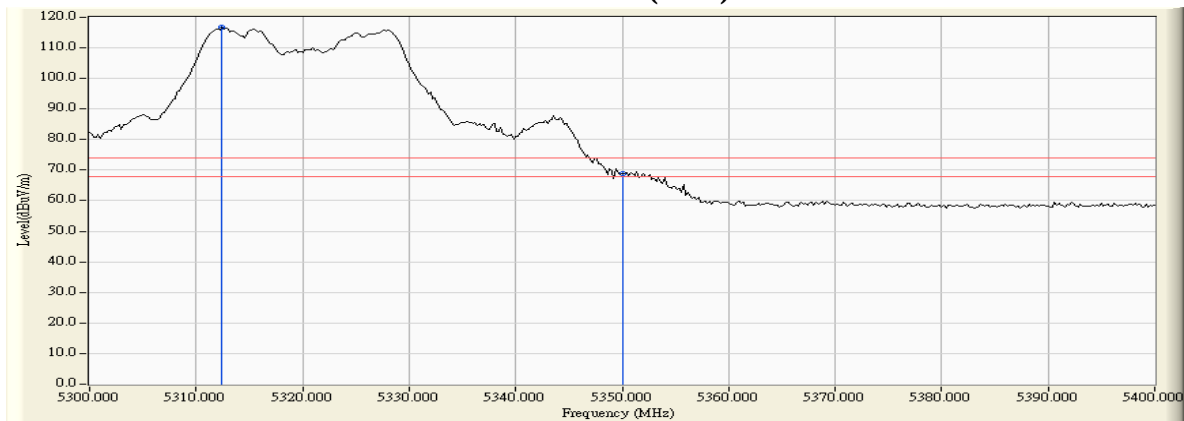
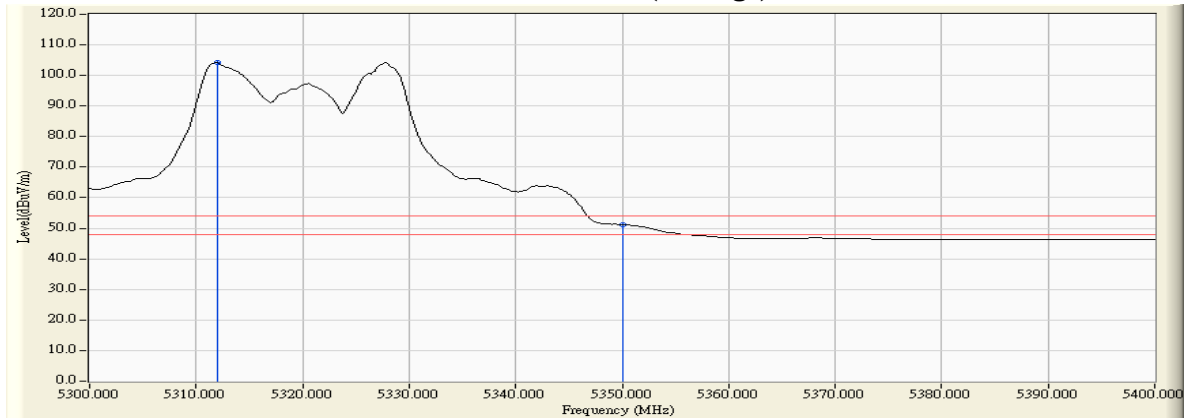


Figure Channel 64: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna)-Channel 100 (5500MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dB μ V)	Emission Level (dB μ V/m)	Peak Limit (dB μ V/m)	Average Limit (dB μ V/m)	Result
100 (Peak)	5460.000	4.354	51.883	56.237	74.00	54.00	Pass
100 (Peak)	5504.800	4.848	102.510	107.358	--	--	Pass
100 (Average)	5460.000	4.354	39.016	43.370	74.00	54.00	Pass
100 (Average)	5505.000	4.849	90.484	95.333	--	--	Pass

Figure Channel 100: Horizontal (Peak)

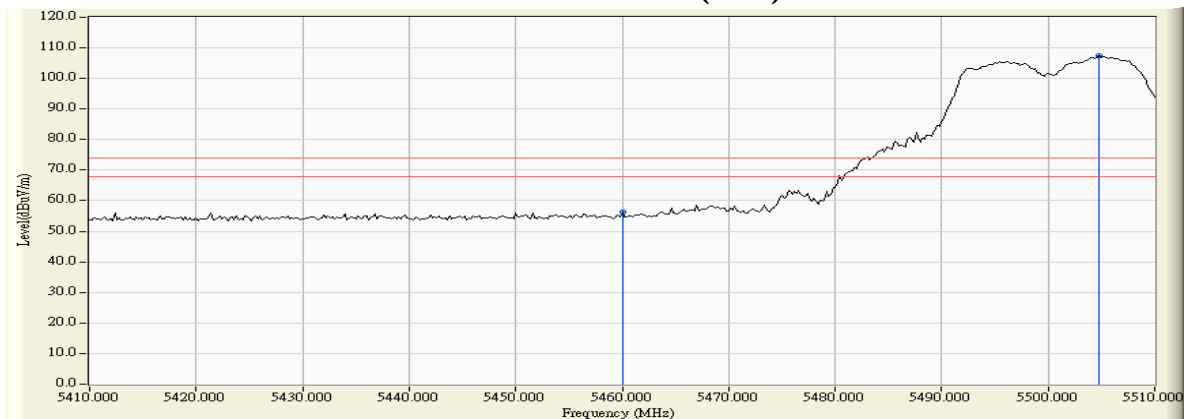
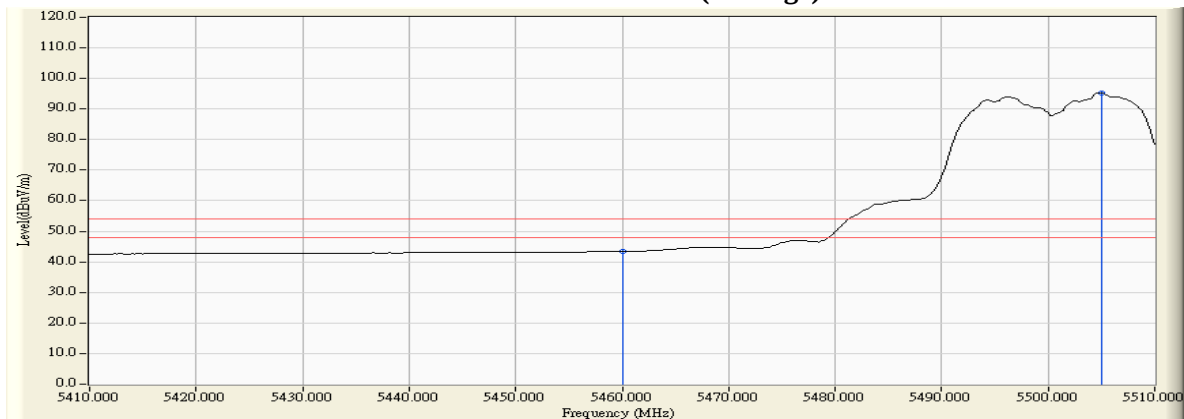


Figure Channel 100: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna)-Channel 100 (5500MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
100 (Peak)	5460.000	6.041	57.376	63.417	74.00	54.00	Pass
100 (Peak)	5505.600	6.286	113.398	119.684	--	--	Pass
100 (Average)	5460.000	6.041	45.464	51.505	74.00	54.00	Pass
100 (Average)	5506.400	6.282	100.638	106.919	--	--	Pass

Figure Channel 100: Vertical (Peak)

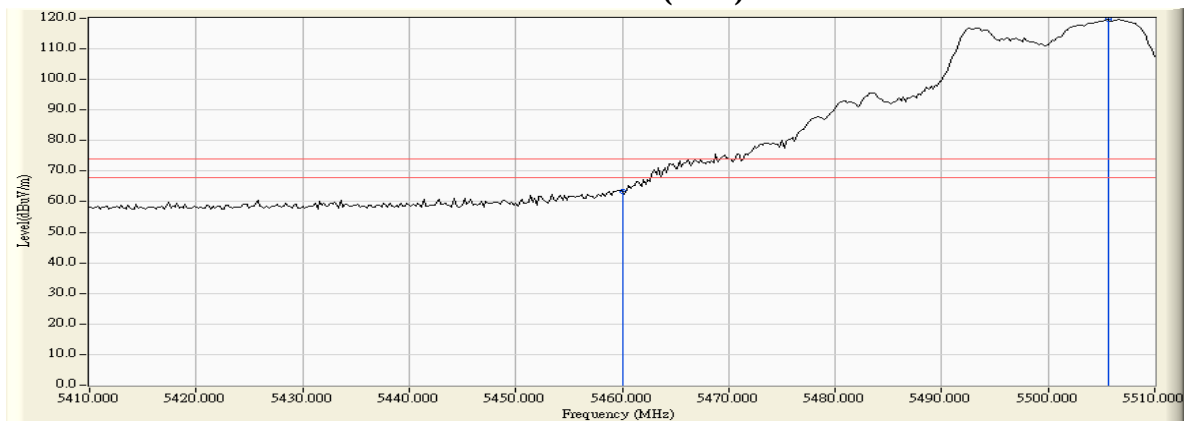
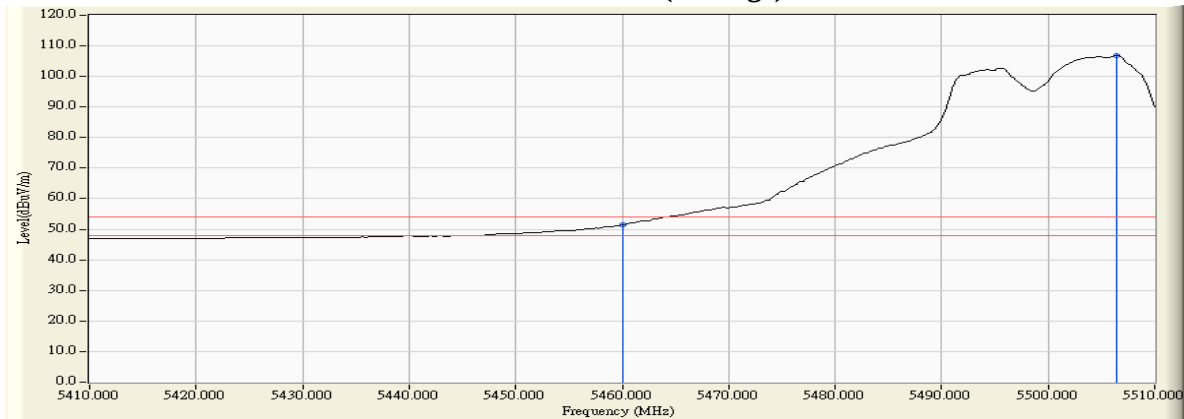


Figure Channel 100: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna)-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	14.189	-78.790	-64.601	-37.601	-27.000	Pass

	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (Db)	Limit (dBm/m)	Result
Vertical	5470.000	13.630	-76.570	-62.940	-35.940	-27.000	Pass

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11n-20BW 21.7Mbps) (External Antenna)-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	14.557	-78.200	-63.643	-36.643	-27.000	Pass

	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (Db)	Limit (dBm/m)	Result
Vertical	5725.000	14.292	-77.520	-63.228	-36.228	-27.000	Pass

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna)-Channel 62 (5310MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
62 (Peak)	5318.800	3.816	94.624	98.440	--	--	Pass
62 (Peak)	5350.000	3.716	52.070	55.787	74.00	54.00	Pass
62 (Average)	5316.200	3.824	80.694	84.518	--	--	Pass
62 (Average)	5350.000	3.716	39.280	42.997	74.00	54.00	Pass

Figure Channel 62: Horizontal (Peak)

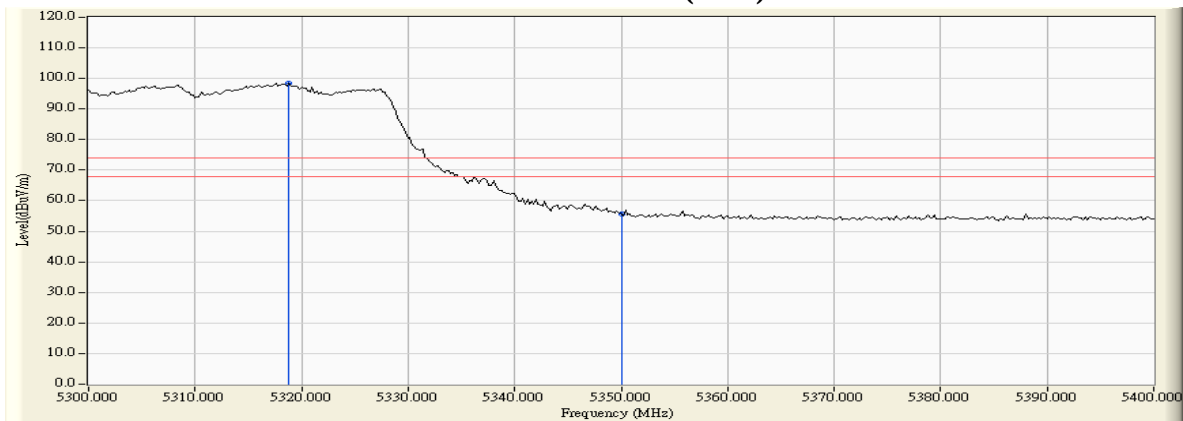
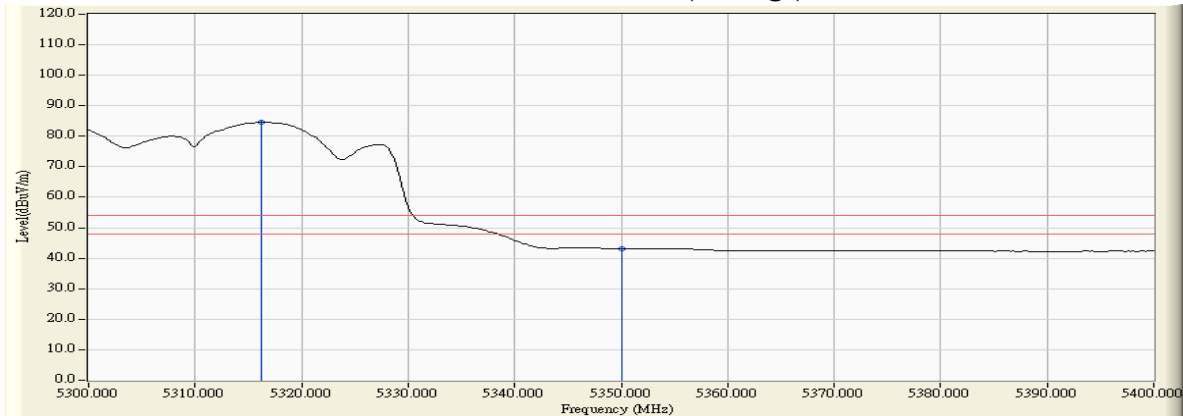


Figure Channel 62: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna)-Channel 62 (5310MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
62 (Peak)	5315.800	5.735	103.947	109.681	--	--	Pass
62 (Peak)	5350.000	5.691	58.918	64.610	74.00	54.00	Pass
62 (Peak)	5356.200	5.683	64.545	70.228	74.00	54.00	Pass
62 (Average)	5315.400	5.735	89.722	95.457	--	--	Pass
62 (Average)	5350.000	5.691	44.184	49.876	74.00	54.00	Pass
62 (Average)	5354.600	5.686	46.668	52.353	74.00	54.00	Pass

Figure Channel 62: Vertical (Peak)

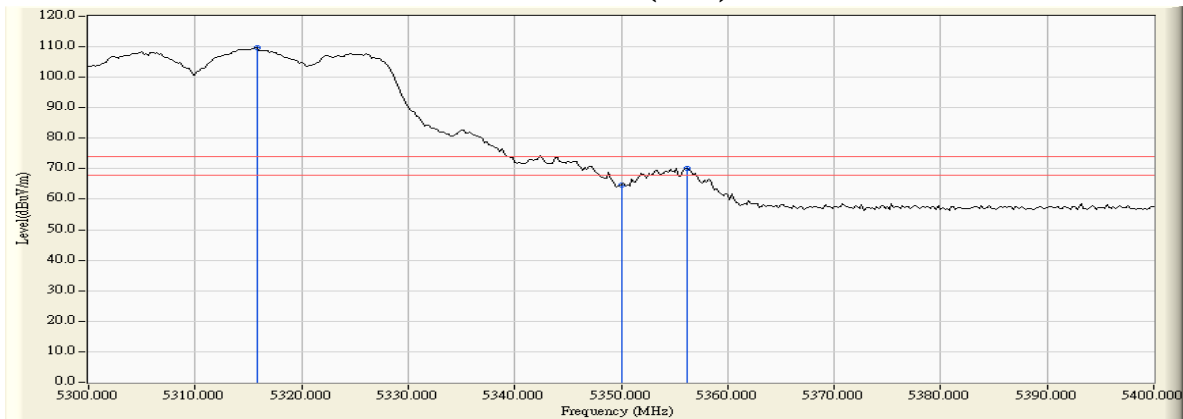
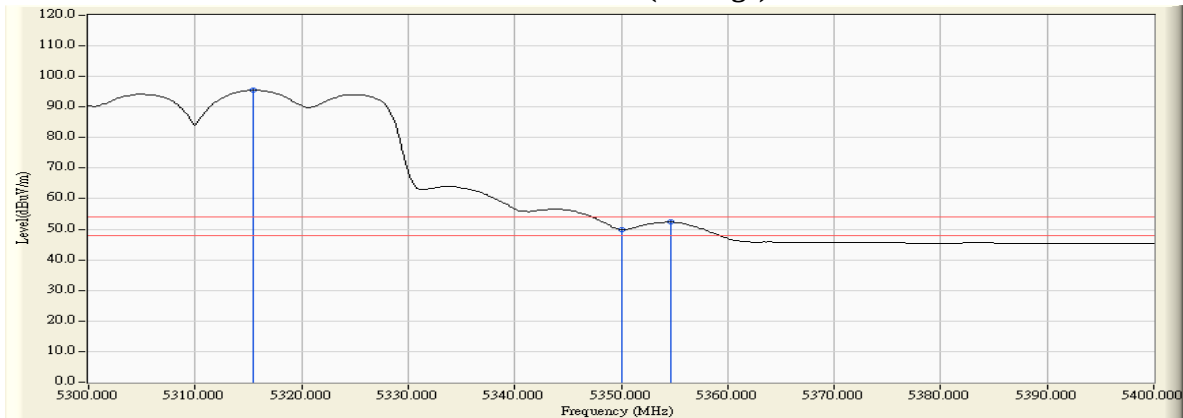


Figure Channel 62: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna)-Channel 102 (5510MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
102 (Peak)	5456.800	4.311	52.029	56.340	74.00	54.00	Pass
102 (Peak)	5460.000	4.354	50.750	55.104	74.00	54.00	Pass
102 (Peak)	5501.600	4.826	94.812	99.638	--	--	Pass
102 (Average)	5460.000	4.354	39.002	43.356	74.00	54.00	Pass
102 (Average)	5501.200	4.823	80.887	85.710	--	--	Pass

Figure Channel 102: Horizontal (Peak)

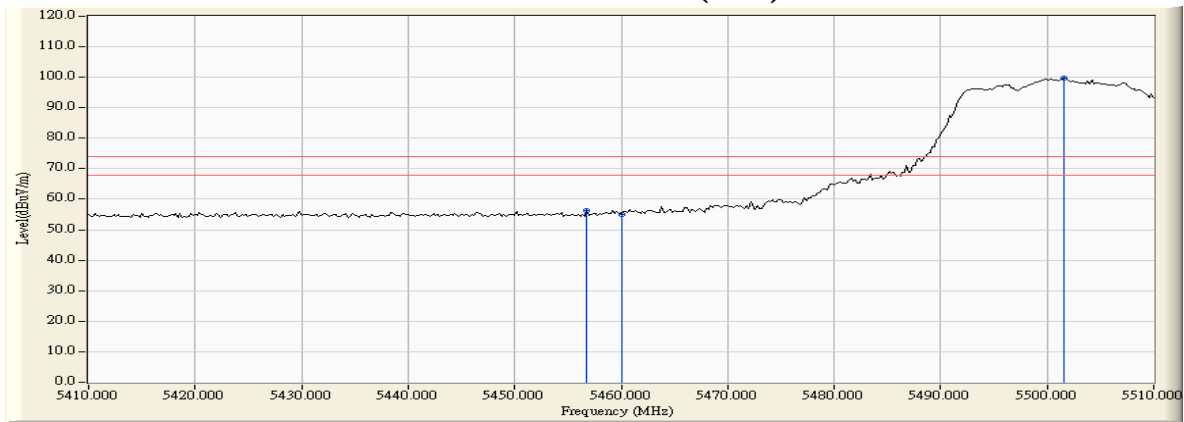
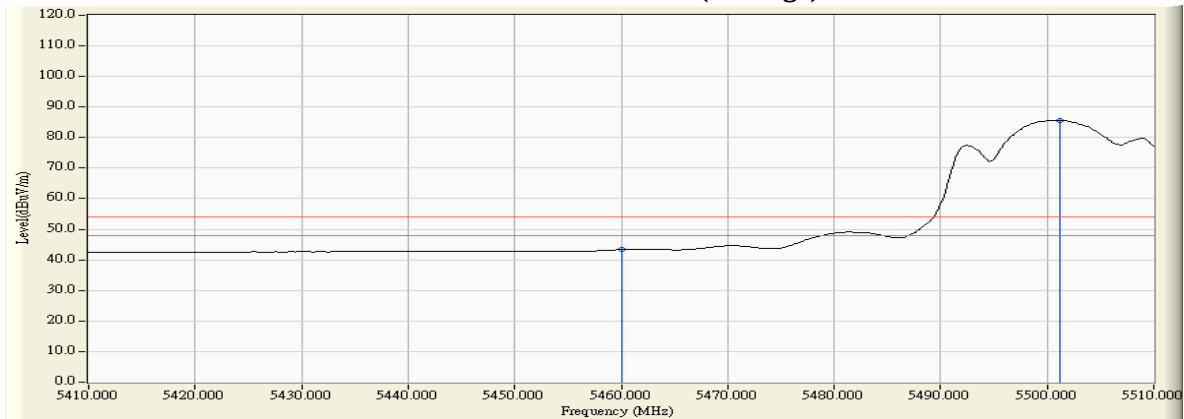


Figure Channel 102: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna)-Channel 102 (5510MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
102 (Peak)	5460.000	6.041	64.129	70.170	74.00	54.00	Pass
102 (Peak)	5494.600	6.259	106.303	112.562	--	--	Pass
102 (Average)	5460.000	6.041	45.021	51.062	74.00	54.00	Pass
102 (Average)	5494.800	6.259	91.623	97.882	--	--	Pass

Figure Channel 102: Vertical (Peak)

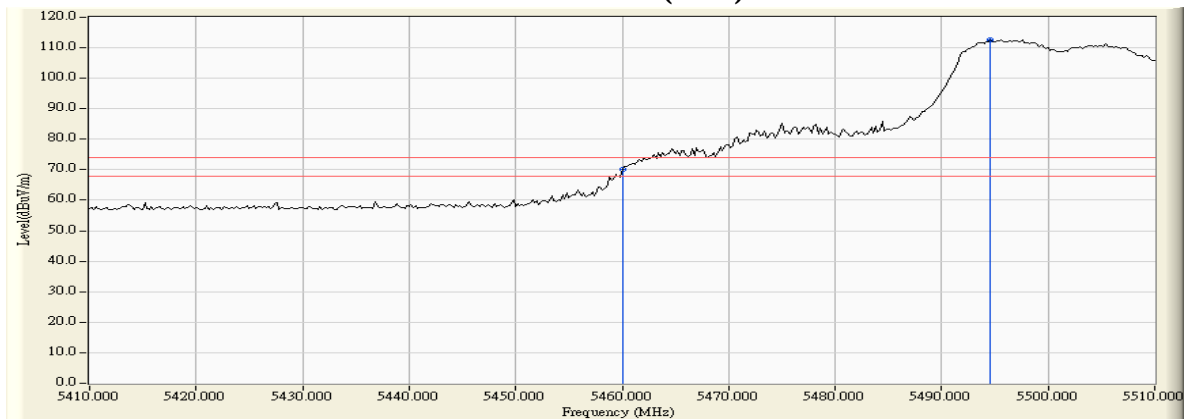
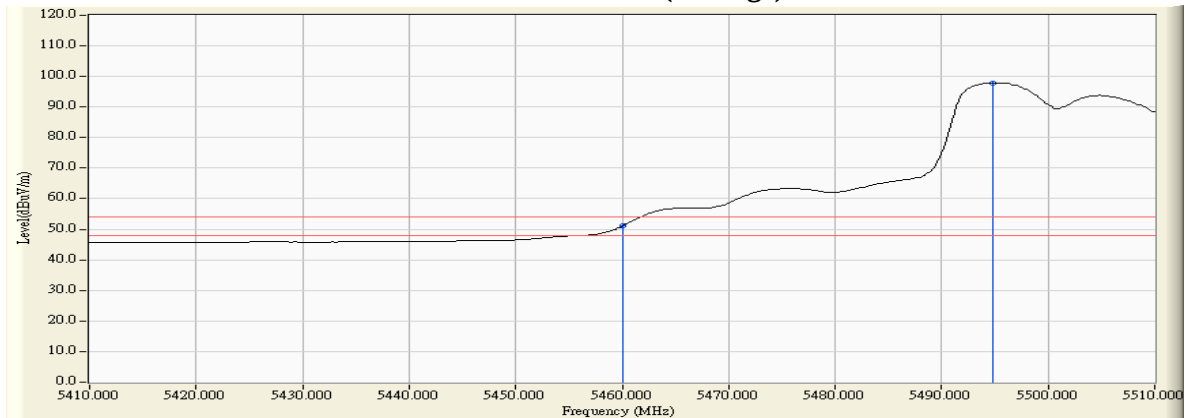


Figure Channel 102: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna)-Channel 102

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (Db)	Limit (dBm/m)	Result
Horizontal	5470.000	14.189	-77.690	-63.501	-36.501	-27.000	Pass

	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (Db)	Limit (dBm/m)	Result
Vertical	5470.000	13.630	-72.810	-59.180	-32.180	-27.000	Pass

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n-40BW 45Mbps) (External Antenna)-Channel 134

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (Db)	Limit (dBm/m)	Result
Horizontal	5725.000	14.557	-78.900	-64.343	-37.343	-27.000	Pass

	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (Db)	Limit (dBm/m)	Result
Vertical	5725.000	14.292	-78.340	-64.048	-37.048	-27.000	Pass

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (External Antenna)-Channel 58 (5290MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
58 (Peak)	5303.600	3.866	89.300	93.165	--	--	Pass
58 (Peak)	5350.000	3.716	50.923	54.640	74.00	54.00	Pass
58 (Peak)	5353.400	3.706	53.431	57.136	74.00	54.00	Pass
58 (Average)	5303.000	3.868	73.654	77.521	--	--	Pass
58 (Average)	5350.000	3.716	39.128	42.845	74.00	54.00	Pass

Figure Channel 58: Horizontal (Peak)

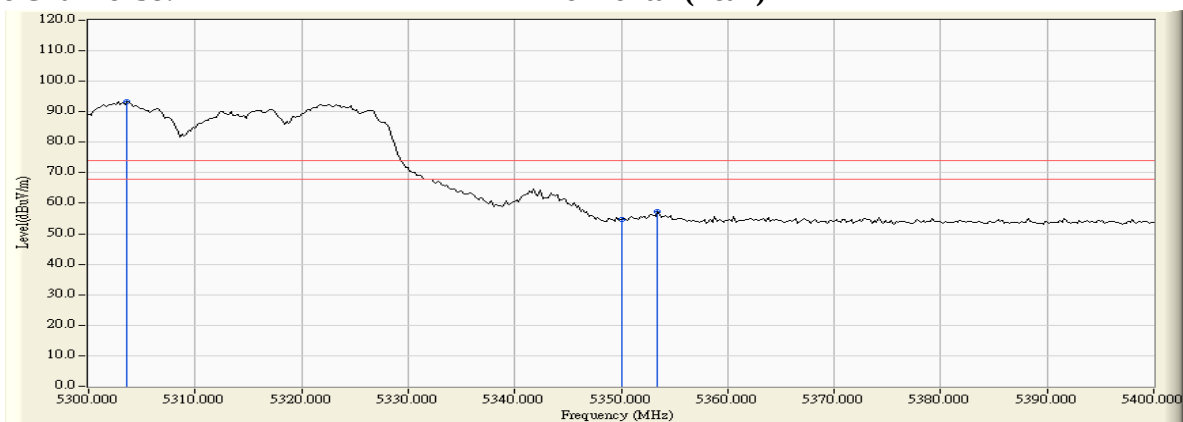
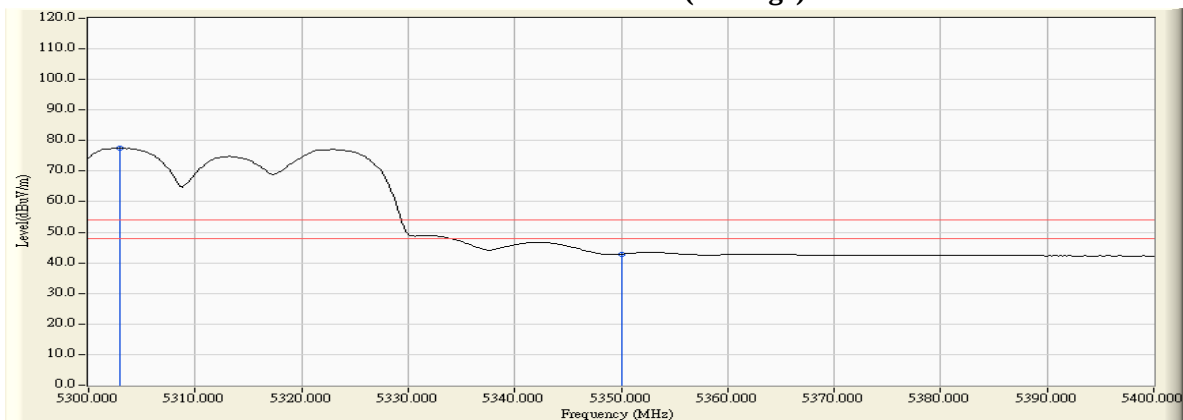


Figure Channel 58: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (External Antenna)-Channel 58 (5290MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
58 (Peak)	5310.400	5.741	97.993	103.735	--	--	Pass
58 (Peak)	5350.000	5.691	62.927	68.619	74.00	54.00	Pass
58 (Average)	5308.800	5.744	80.990	86.734	--	--	Pass
58 (Average)	5350.000	5.691	46.347	52.039	74.00	54.00	Pass

Figure Channel 58: Vertical (Peak)

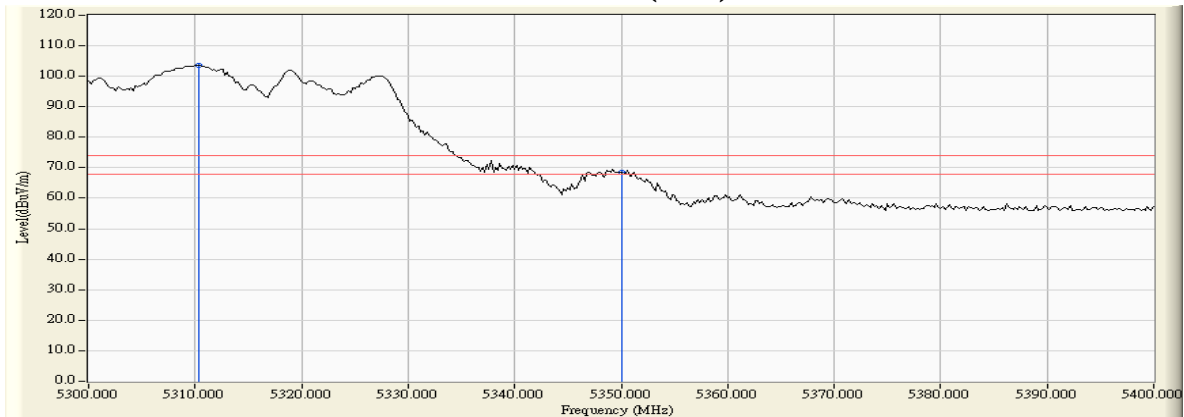
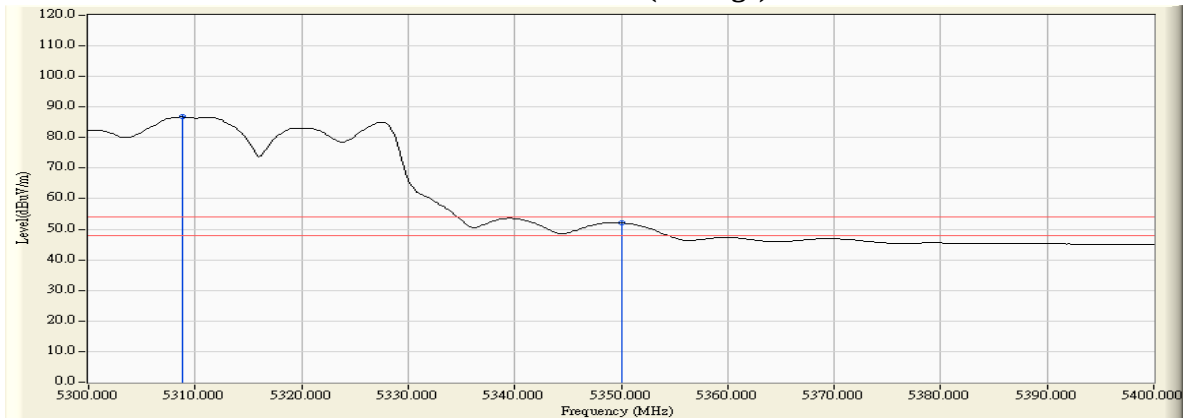


Figure Channel 58: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (External Antenna)-Channel 106 (5530MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
106 (Peak)	5460.000	4.354	50.619	54.973	74.00	54.00	Pass
106 (Peak)	5509.000	4.817	87.696	92.513	--	--	Pass
106 (Average)	5460.000	4.354	38.956	43.310	74.00	54.00	Pass
106 (Average)	5510.000	4.809	71.604	76.413	--	--	Pass

Figure Channel 106: Horizontal (Peak)

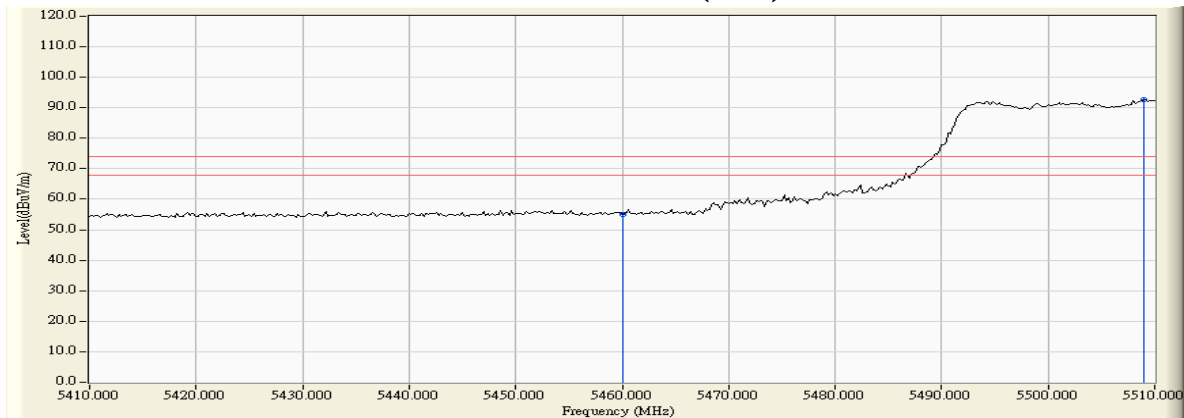
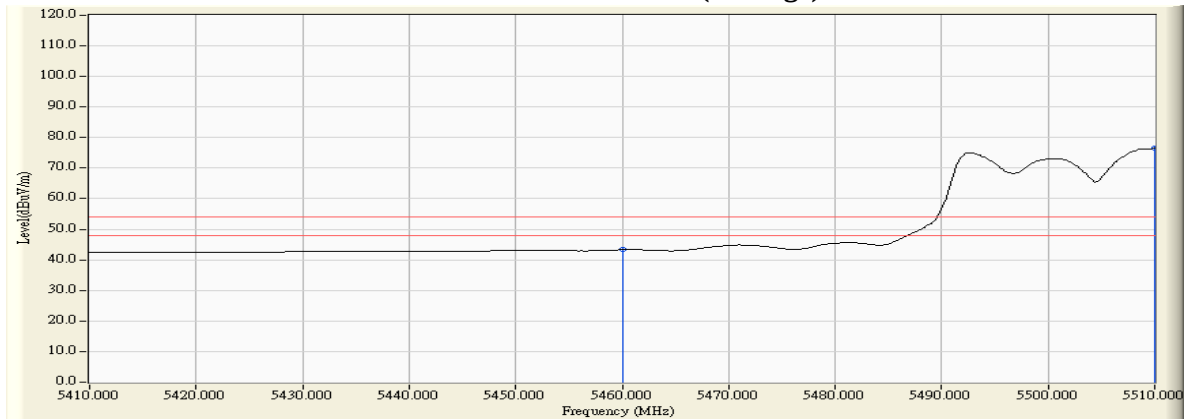


Figure Channel 106: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (External Antenna)-Channel 106 (5530MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (Db)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
106 (Peak)	5460.000	6.041	62.363	68.404	74.00	54.00	Pass
106 (Peak)	5501.400	6.280	99.327	105.606	--	--	Pass
106 (Average)	5460.000	6.041	47.234	53.275	74.00	54.00	Pass
106 (Average)	5500.800	6.277	83.326	89.603	--	--	Pass

Figure Channel 106: Vertical (Peak)

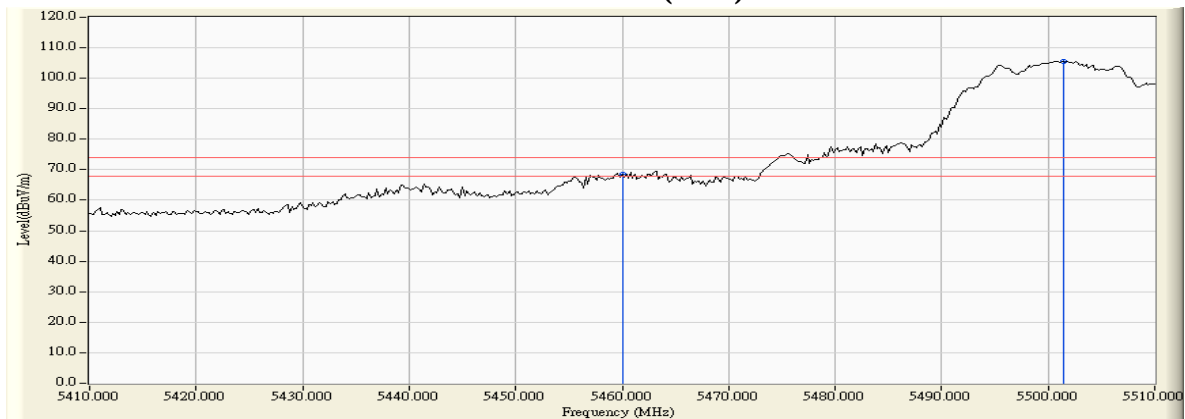
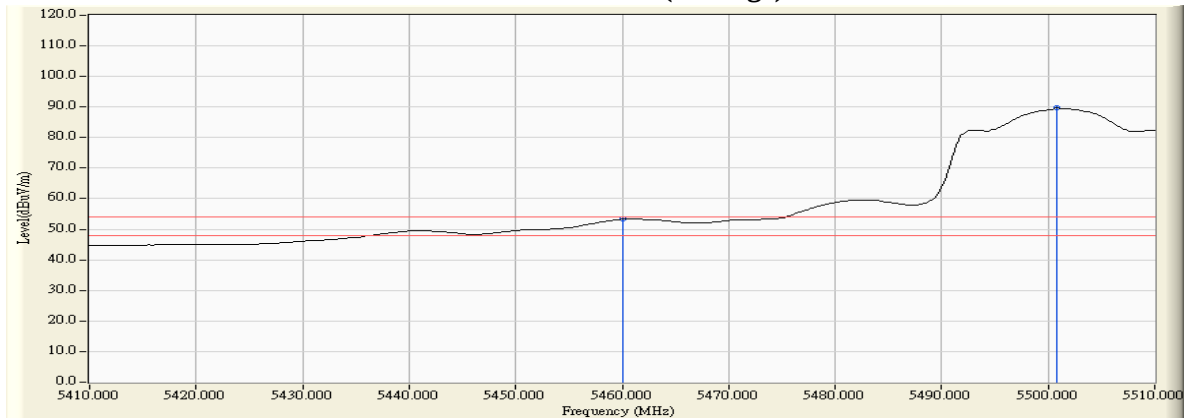


Figure Channel 106: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correction Factor.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.

Product : Access Point/Sensor
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit (802.11ac-80BW-97.5Mbps) (External Antenna) –Channel 106

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	-68.920	-50.586	-23.586	-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	-67.760	-48.425	-21.425	-27.000	Pass

7. Frequency Stability

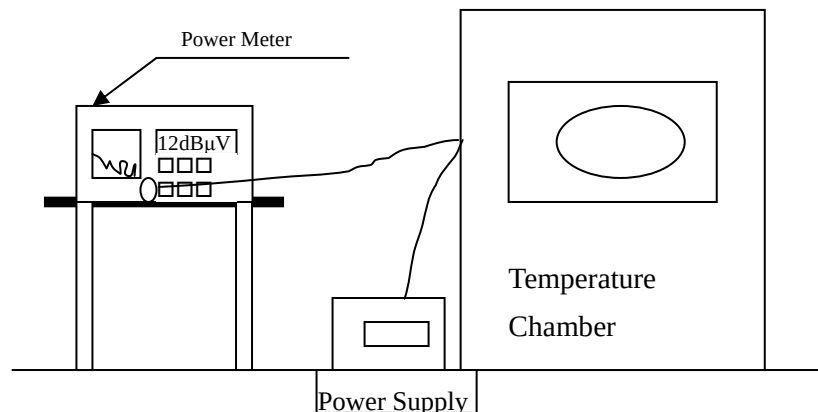
7.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2015
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2015
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2015

Note:

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

7.2. Test Setup



7.3. 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

7.4. Test Procedure

The EUT was tested to procedure of ANSI C63.10: 2013 Section 6.8 for compliance to FCC 47 CFR Subpart E requirements.

7.5. Uncertainty

± 150 Hz

7.6. Test Result of Frequency Stability

Product : Access Point/Sensor
Test Item : Frequency Stability
Test Site : Temperature Chamber
Test Mode : Carrier Wave (Internal Antenna)

Chain A

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle$ F (MHz)
Tnom (20) °C	Vnom (110)V	52	5260.0000	5259.9920	0.0080
		54	5270.0000	5269.9940	0.0060
		60	5300.0000	5299.9950	0.0050
		62	5310.0000	5309.9940	0.0060
		64	5320.0000	5319.9920	0.0080
		100	5500.0000	5499.9980	0.0020
		102	5510.0000	5509.9970	0.0030
		110	5550.0000	5549.9970	0.0030
		116	5580.0000	5579.9980	0.0020
		134	5670.0000	5669.9970	0.0030
		140	5700.0000	5699.9980	0.0020
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle$ F (MHz)
Tmax (55) °C	Vmax (126.5)V	52	5260.0000	5260.0060	-0.0060
		54	5270.0000	5270.0110	-0.0110
		60	5300.0000	5300.0080	-0.0080
		62	5310.0000	5310.0080	-0.0080
		64	5320.0000	5320.0110	-0.0110
		100	5500.0000	5500.0060	-0.0060
		102	5510.0000	5510.0090	-0.0090
		110	5550.0000	5550.0010	-0.0010
		116	5580.0000	5580.0020	-0.0020
		134	5670.0000	5670.0070	-0.0070
		140	5700.0000	5700.0050	-0.0050

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (55) °C	Vmin (93.5)V	52	5260.0000	5260.0150	-0.0150
		54	5270.0000	5270.0120	-0.0120
		60	5300.0000	5300.0080	-0.0080
		62	5310.0000	5310.0120	-0.0120
		64	5320.0000	5320.0080	-0.0080
		100	5500.0000	5500.0060	-0.0060
		102	5510.0000	5510.0090	-0.0090
		110	5550.0000	5550.0040	-0.0040
		116	5580.0000	5580.0060	-0.0060
		134	5670.0000	5670.0090	-0.0090
		140	5700.0000	5700.0010	-0.0010
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmax (126.5)V	52	5260.0000	5260.0740	-0.0740
		54	5270.0000	5270.0860	-0.0860
		60	5300.0000	5300.0740	-0.0740
		62	5310.0000	5310.0640	-0.0640
		64	5320.0000	5320.0750	-0.0750
		100	5500.0000	5500.0790	-0.0790
		102	5510.0000	5510.0680	-0.0680
		110	5550.0000	5550.0040	-0.0040
		116	5580.0000	5580.0020	-0.0020
		134	5670.0000	5670.0720	-0.0720
		140	5700.0000	5700.0680	-0.0680
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmin (93.5)V	52	5260.0000	5260.0680	-0.0680
		54	5270.0000	5270.0710	-0.0710
		60	5300.0000	5300.0680	-0.0680
		62	5310.0000	5310.0680	-0.0680
		64	5320.0000	5320.0720	-0.0720
		100	5500.0000	5500.0690	-0.0690
		102	5510.0000	5510.0720	-0.0720
		110	5550.0000	5550.0040	-0.0040
		116	5580.0000	5580.0060	-0.0060
		134	5670.0000	5670.0820	-0.0820
		140	5700.0000	5700.0680	-0.0680

Chain B

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle$ F (MHz)
Tnom (20) °C	Vnom (110)V	52	5260.0000	5259.9990	0.0010
		54	5270.0000	5269.9970	0.0030
		60	5300.0000	5299.9950	0.0050
		62	5310.0000	5309.9980	0.0020
		64	5320.0000	5319.9960	0.0040
		100	5500.0000	5499.9970	0.0030
		102	5510.0000	5509.9980	0.0020
		110	5550.0000	5549.9950	0.0050
		116	5580.0000	5579.9940	0.0060
		134	5670.0000	5669.9960	0.0040
		140	5700.0000	5699.9980	0.0020
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle$ F (MHz)
Tmax (55) °C	Vmax (126.5)V	52	5260.0000	5260.0100	-0.0100
		54	5270.0000	5270.0080	-0.0080
		60	5300.0000	5300.0120	-0.0120
		62	5310.0000	5310.0060	-0.0060
		64	5320.0000	5320.0100	-0.0100
		100	5500.0000	5500.0070	-0.0070
		102	5510.0000	5510.0060	-0.0060
		110	5550.0000	5550.0030	-0.0030
		116	5580.0000	5580.0060	-0.0060
		134	5670.0000	5670.0080	-0.0080
		140	5700.0000	5700.0150	-0.0150

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (55) °C	Vmin (93.5)V	52	5260.0000	5260.0080	-0.0080
		54	5270.0000	5270.0100	-0.0100
		60	5300.0000	5300.0060	-0.0060
		62	5310.0000	5310.0070	-0.0070
		64	5320.0000	5320.0030	-0.0030
		100	5500.0000	5500.0110	-0.0110
		102	5510.0000	5510.0120	-0.0120
		110	5550.0000	5550.0020	-0.0020
		116	5580.0000	5580.0010	-0.0010
		134	5670.0000	5670.0120	-0.0120
		140	5700.0000	5700.0110	-0.0110
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmax (126.5)V	52	5260.0000	5260.0620	-0.0620
		54	5270.0000	5270.0740	-0.0740
		60	5300.0000	5300.0680	-0.0680
		62	5310.0000	5310.0720	-0.0720
		64	5320.0000	5320.0840	-0.0840
		100	5500.0000	5500.0720	-0.0720
		102	5510.0000	5510.0660	-0.0660
		110	5550.0000	5550.0020	-0.0020
		116	5580.0000	5580.0050	-0.0050
		134	5670.0000	5670.0580	-0.0580
		140	5700.0000	5700.0620	-0.0620
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmin (93.5)V	52	5260.0000	5260.0610	-0.0610
		54	5270.0000	5270.0580	-0.0580
		60	5300.0000	5300.0720	-0.0720
		62	5310.0000	5310.0740	-0.0740
		64	5320.0000	5320.0680	-0.0680
		100	5500.0000	5500.0730	-0.0730
		102	5510.0000	5510.0820	-0.0820
		110	5550.0000	5550.0050	-0.0050
		116	5580.0000	5580.0060	-0.0060
		134	5670.0000	5670.0680	-0.0680
		140	5700.0000	5700.0720	-0.0720

Chain C

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
Tnom (20) °C	Vnom (110)V	52	5260.0000	5259.9980	0.0020
		54	5270.0000	5269.9970	0.0030
		60	5300.0000	5299.9980	0.0020
		62	5310.0000	5309.9980	0.0020
		64	5320.0000	5319.9990	0.0010
		100	5500.0000	5499.9970	0.0030
		102	5510.0000	5509.9960	0.0040
		110	5550.0000	5549.9960	0.0040
		116	5580.0000	5579.9930	0.0070
		134	5670.0000	5669.9980	0.0020
		140	5700.0000	5699.9980	0.0020
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
Tmax (55) °C	Vmax (126.5)V	52	5260.0000	5260.0100	-0.0100
		54	5270.0000	5270.0060	-0.0060
		60	5300.0000	5300.0130	-0.0130
		62	5310.0000	5310.0080	-0.0080
		64	5320.0000	5320.0120	-0.0120
		100	5500.0000	5500.0070	-0.0070
		102	5510.0000	5510.0080	-0.0080
		110	5550.0000	5550.0050	-0.0050
		116	5580.0000	5580.0040	-0.0040
		134	5670.0000	5670.0160	-0.0160
		140	5700.0000	5700.0140	-0.0140

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (55) °C	Vmin (93.5)V	52	5260.0000	5260.0080	-0.0080
		54	5270.0000	5270.0120	-0.0120
		60	5300.0000	5300.0080	-0.0080
		62	5310.0000	5310.0060	-0.0060
		64	5320.0000	5320.0070	-0.0070
		100	5500.0000	5500.0140	-0.0140
		102	5510.0000	5510.0090	-0.0090
		110	5550.0000	5550.0050	-0.0050
		116	5580.0000	5580.0020	-0.0020
		134	5670.0000	5670.0080	-0.0080
		140	5700.0000	5700.0130	-0.0130
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmax (126.5)V	52	5260.0000	5260.0880	-0.0880
		54	5270.0000	5270.0560	-0.0560
		60	5300.0000	5300.0620	-0.0620
		62	5310.0000	5310.0740	-0.0740
		64	5320.0000	5320.0590	-0.0590
		100	5500.0000	5500.0710	-0.0710
		102	5510.0000	5510.0680	-0.0680
		110	5550.0000	5550.0060	-0.0060
		116	5580.0000	5580.0030	-0.0030
		134	5670.0000	5670.0820	-0.0820
		140	5700.0000	5700.0640	-0.0640
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmin (93.5)V	52	5260.0000	5260.0670	-0.0670
		54	5270.0000	5270.0810	-0.0810
		60	5300.0000	5300.0680	-0.0680
		62	5310.0000	5310.0740	-0.0740
		64	5320.0000	5320.0650	-0.0650
		100	5500.0000	5500.0650	-0.0650
		102	5510.0000	5510.0680	-0.0680
		110	5550.0000	5550.0040	-0.0040
		116	5580.0000	5580.0070	-0.0070
		134	5670.0000	5670.0740	-0.0740
		140	5700.0000	5700.0680	-0.0680

Product : Access Point/Sensor
Test Item : Frequency Stability
Test Site : Temperature Chamber
Test Mode : Carrier Wave (ac) (Internal Antenna)

Chain A

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	Δ F (MHz)
Tnom (20) °C	Vnom (110)V	58	5290.0000	5289.9970	0.0030
		106	5530.0000	5529.9980	0.0020
		122	5610.0000	5609.9960	0.0040
		138	5690.0000	5689.9970	0.0030
		142	5710.0000	5709.9980	0.0020
		144	5720.0000	5719.9980	0.0020
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	Δ F (MHz)
Tmax (55) °C	Vmax (126.5)V	58	5290.0000	5290.0080	-0.0080
		106	5530.0000	5530.0070	-0.0070
		122	5610.0000	5610.0120	-0.0120
		138	5690.0000	5690.0160	-0.0160
		142	5710.0000	5710.0060	-0.0060
		144	5720.0000	5720.0120	-0.0120
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	Δ F (MHz)
Tmax (55) °C	Vmin (93.5)V	58	5290.0000	5290.0080	-0.0080
		106	5530.0000	5530.0060	-0.0060
		122	5610.0000	5610.0120	-0.0120
		138	5690.0000	5690.0130	-0.0130
		142	5710.0000	5710.0060	-0.0060
		144	5720.0000	5720.0130	-0.0130
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	Δ F (MHz)
Tmin (-20) °C	Vmax (126.5)V	58	5290.0000	5290.0580	-0.0580
		106	5530.0000	5530.0650	-0.0650
		122	5610.0000	5610.0680	-0.0680
		138	5690.0000	5690.0740	-0.0740
		142	5710.0000	5710.0720	-0.0720
		144	5720.0000	5720.0680	-0.0680
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	Δ F (MHz)
Tmin (-20) °C	Vmin (93.5)V	58	5290.0000	5290.0710	-0.0710
		106	5530.0000	5530.0820	-0.0820
		122	5610.0000	5610.0810	-0.0810
		138	5690.0000	5690.0680	-0.0680
		142	5710.0000	5710.0740	-0.0740
		144	5720.0000	5720.0850	-0.0850

Chain B

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (110)V	58	5290.0000	5289.9980	0.0020
		106	5530.0000	5529.9980	0.0020
		122	5610.0000	5609.9970	0.0030
		138	5690.0000	5689.9960	0.0040
		142	5710.0000	5709.9980	0.0020
		144	5720.0000	5719.9970	0.0030
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (55) °C	Vmax (126.5)V	58	5290.0000	5290.0080	-0.0080
		106	5530.0000	5530.0120	-0.0120
		122	5610.0000	5610.0080	-0.0080
		138	5690.0000	5690.0060	-0.0060
		142	5710.0000	5710.0110	-0.0110
		144	5720.0000	5720.0130	-0.0130
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (55) °C	Vmin (93.5)V	58	5290.0000	5290.0080	-0.0080
		106	5530.0000	5530.0120	-0.0120
		122	5610.0000	5610.0080	-0.0080
		138	5690.0000	5690.0140	-0.0140
		142	5710.0000	5710.0080	-0.0080
		144	5720.0000	5720.0150	-0.0150
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmax (126.5)V	58	5290.0000	5290.0740	-0.0740
		106	5530.0000	5530.0820	-0.0820
		122	5610.0000	5610.0680	-0.0680
		138	5690.0000	5690.0720	-0.0720
		142	5710.0000	5710.0820	-0.0820
		144	5720.0000	5720.0680	-0.0680
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmin (93.5)V	58	5290.0000	5290.0580	-0.0580
		106	5530.0000	5530.0740	-0.0740
		122	5610.0000	5610.0820	-0.0820
		138	5690.0000	5690.0680	-0.0680
		142	5710.0000	5710.0580	-0.0580
		144	5720.0000	5720.0660	-0.0660

Chain C

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	Δ F (MHz)
Tnom (20) °C	Vnom (110)V	58	5290.0000	5289.9990	0.0010
		106	5530.0000	5529.9980	0.0020
		122	5610.0000	5609.9970	0.0030
		138	5690.0000	5689.9980	0.0020
		142	5710.0000	5709.9980	0.0020
		144	5720.0000	5719.9990	0.0010
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	Δ F (MHz)
Tmax (55) °C	Vmax (126.5)V	58	5290.0000	5290.0120	-0.0120
		106	5530.0000	5530.0180	-0.0180
		122	5610.0000	5610.0120	-0.0120
		138	5690.0000	5690.0160	-0.0160
		142	5710.0000	5710.0070	-0.0070
		144	5720.0000	5720.0060	-0.0060
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	Δ F (MHz)
Tmax (55) °C	Vmin (93.5)V	58	5290.0000	5290.0120	-0.0120
		106	5530.0000	5530.0180	-0.0180
		122	5610.0000	5610.0080	-0.0080
		138	5690.0000	5690.0120	-0.0120
		142	5710.0000	5710.0070	-0.0070
		144	5720.0000	5720.0120	-0.0120
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	Δ F (MHz)
Tmin (-20) °C	Vmax (126.5)V	58	5290.0000	5290.0660	-0.0660
		106	5530.0000	5530.0820	-0.0820
		122	5610.0000	5610.0620	-0.0620
		138	5690.0000	5690.0740	-0.0740
		142	5710.0000	5710.0680	-0.0680
		144	5720.0000	5720.0660	-0.0660
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	Δ F (MHz)
Tmin (-20) °C	Vmin (93.5)V	58	5290.0000	5290.0620	-0.0620
		106	5530.0000	5530.0770	-0.0770
		122	5610.0000	5610.0820	-0.0820
		138	5690.0000	5690.0650	-0.0650
		142	5710.0000	5710.0740	-0.0740
		144	5720.0000	5720.0820	-0.0820

Product : Access Point/Sensor
Test Item : Frequency Stability
Test Site : Temperature Chamber
Test Mode : Carrier Wave (External Antenna)

Chain A

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
Tnom (20) °C	Vnom (110)V	52	5260.0000	5259.9920	0.0080
		54	5270.0000	5269.9940	0.0060
		60	5300.0000	5299.9950	0.0050
		62	5310.0000	5309.9940	0.0060
		64	5320.0000	5319.9920	0.0080
		100	5500.0000	5499.9980	0.0020
		102	5510.0000	5509.9970	0.0030
		110	5550.0000	5549.9980	0.0020
		116	5580.0000	5579.9990	0.0010
		134	5670.0000	5669.9970	0.0030
		140	5700.0000	5699.9980	0.0020
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
Tmax (55) °C	Vmax (126.5)V	52	5260.0000	5260.0060	-0.0060
		54	5270.0000	5270.0110	-0.0110
		60	5300.0000	5300.0080	-0.0080
		62	5310.0000	5310.0080	-0.0080
		64	5320.0000	5320.0110	-0.0110
		100	5500.0000	5500.0060	-0.0060
		102	5510.0000	5510.0090	-0.0090
		110	5550.0000	5550.0060	-0.0060
		116	5580.0000	5580.0050	-0.0050
		134	5670.0000	5670.0070	-0.0070
		140	5700.0000	5700.0050	-0.0050

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle$ F (MHz)
Tmax (55) °C	Vmin (93.5)V	52	5260.0000	5260.0150	-0.0150
		54	5270.0000	5270.0120	-0.0120
		60	5300.0000	5300.0080	-0.0080
		62	5310.0000	5310.0120	-0.0120
		64	5320.0000	5320.0080	-0.0080
		100	5500.0000	5500.0060	-0.0060
		102	5510.0000	5510.0090	-0.0090
		110	5550.0000	5550.0020	-0.0020
		116	5580.0000	5580.0030	-0.0030
		134	5670.0000	5670.0090	-0.0090
		140	5700.0000	5700.0010	-0.0010
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle$ F (MHz)
Tmin (-20) °C	Vmax (126.5)V	52	5260.0000	5260.0740	-0.0740
		54	5270.0000	5270.0860	-0.0860
		60	5300.0000	5300.0740	-0.0740
		62	5310.0000	5310.0640	-0.0640
		64	5320.0000	5320.0750	-0.0750
		100	5500.0000	5500.0790	-0.0790
		102	5510.0000	5510.0680	-0.0680
		110	5550.0000	5550.0030	-0.0030
		116	5580.0000	5580.0020	-0.0020
		134	5670.0000	5670.0720	-0.0720
		140	5700.0000	5700.0680	-0.0680
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle$ F (MHz)
Tmin (-20) °C	Vmin (93.5)V	52	5260.0000	5260.0680	-0.0680
		54	5270.0000	5270.0710	-0.0710
		60	5300.0000	5300.0680	-0.0680
		62	5310.0000	5310.0680	-0.0680
		64	5320.0000	5320.0720	-0.0720
		100	5500.0000	5500.0690	-0.0690
		102	5510.0000	5510.0720	-0.0720
		110	5550.0000	5550.0020	-0.0020
		116	5580.0000	5580.0010	-0.0010
		134	5670.0000	5670.0820	-0.0820
		140	5700.0000	5700.0680	-0.0680

Chain B

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
Tnom (20) °C	Vnom (110)V	52	5260.0000	5259.9990	0.0010
		54	5270.0000	5269.9970	0.0030
		60	5300.0000	5299.9950	0.0050
		62	5310.0000	5309.9980	0.0020
		64	5320.0000	5319.9960	0.0040
		100	5500.0000	5499.9970	0.0030
		102	5510.0000	5509.9980	0.0020
		110	5550.0000	5549.9970	0.0030
		116	5580.0000	5579.9980	0.0020
		134	5670.0000	5669.9960	0.0040
		140	5700.0000	5699.9980	0.0020
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
Tmax (55) °C	Vmax (126.5)V	52	5260.0000	5260.0100	-0.0100
		54	5270.0000	5270.0080	-0.0080
		60	5300.0000	5300.0120	-0.0120
		62	5310.0000	5310.0060	-0.0060
		64	5320.0000	5320.0100	-0.0100
		100	5500.0000	5500.0070	-0.0070
		102	5510.0000	5510.0060	-0.0060
		110	5550.0000	5550.0030	-0.0030
		116	5580.0000	5580.0050	-0.0050
		134	5670.0000	5670.0080	-0.0080
		140	5700.0000	5700.0150	-0.0150

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (55) °C	Vmin (93.5)V	52	5260.0000	5260.0080	-0.0080
		54	5270.0000	5270.0100	-0.0100
		60	5300.0000	5300.0060	-0.0060
		62	5310.0000	5310.0070	-0.0070
		64	5320.0000	5320.0030	-0.0030
		100	5500.0000	5500.0110	-0.0110
		102	5510.0000	5510.0120	-0.0120
		110	5550.0000	5550.0030	-0.0030
		116	5580.0000	5580.0020	-0.0020
		134	5670.0000	5670.0120	-0.0120
		140	5700.0000	5700.0110	-0.0110
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmax (126.5)V	52	5260.0000	5260.0620	-0.0620
		54	5270.0000	5270.0740	-0.0740
		60	5300.0000	5300.0680	-0.0680
		62	5310.0000	5310.0720	-0.0720
		64	5320.0000	5320.0840	-0.0840
		100	5500.0000	5500.0720	-0.0720
		102	5510.0000	5510.0660	-0.0660
		110	5550.0000	5550.0040	-0.0040
		116	5580.0000	5580.0020	-0.0020
		134	5670.0000	5670.0580	-0.0580
		140	5700.0000	5700.0620	-0.0620
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmin (93.5)V	52	5260.0000	5260.0610	-0.0610
		54	5270.0000	5270.0580	-0.0580
		60	5300.0000	5300.0720	-0.0720
		62	5310.0000	5310.0740	-0.0740
		64	5320.0000	5320.0680	-0.0680
		100	5500.0000	5500.0730	-0.0730
		102	5510.0000	5510.0820	-0.0820
		110	5550.0000	5550.0030	-0.0030
		116	5580.0000	5580.0020	-0.0020
		134	5670.0000	5670.0680	-0.0680
		140	5700.0000	5700.0720	-0.0720

Chain C

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
Tnom (20) °C	Vnom (110)V	52	5260.0000	5259.9980	0.0020
		54	5270.0000	5269.9970	0.0030
		60	5300.0000	5299.9980	0.0020
		62	5310.0000	5309.9980	0.0020
		64	5320.0000	5319.9990	0.0010
		100	5500.0000	5499.9970	0.0030
		102	5510.0000	5509.9960	0.0040
		110	5550.0000	5549.9980	0.0020
		116	5580.0000	5579.9970	0.0030
		134	5670.0000	5669.9980	0.0020
		140	5700.0000	5699.9980	0.0020
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
Tmax (55) °C	Vmax (126.5)V	52	5260.0000	5260.0100	-0.0100
		54	5270.0000	5270.0060	-0.0060
		60	5300.0000	5300.0130	-0.0130
		62	5310.0000	5310.0080	-0.0080
		64	5320.0000	5320.0120	-0.0120
		100	5500.0000	5500.0070	-0.0070
		102	5510.0000	5510.0080	-0.0080
		110	5550.0000	5550.0030	-0.0030
		116	5580.0000	5580.0020	-0.0020
		134	5670.0000	5670.0160	-0.0160
		140	5700.0000	5700.0140	-0.0140

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (55) °C	Vmin (93.5)V	52	5260.0000	5260.0080	-0.0080
		54	5270.0000	5270.0120	-0.0120
		60	5300.0000	5300.0080	-0.0080
		62	5310.0000	5310.0060	-0.0060
		64	5320.0000	5320.0070	-0.0070
		100	5500.0000	5500.0140	-0.0140
		102	5510.0000	5510.0090	-0.0090
		110	5550.0000	5550.0030	-0.0030
		116	5580.0000	5580.0040	-0.0040
		134	5670.0000	5670.0080	-0.0080
		140	5700.0000	5700.0130	-0.0130
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmax (126.5)V	52	5260.0000	5260.0880	-0.0880
		54	5270.0000	5270.0560	-0.0560
		60	5300.0000	5300.0620	-0.0620
		62	5310.0000	5310.0740	-0.0740
		64	5320.0000	5320.0590	-0.0590
		100	5500.0000	5500.0710	-0.0710
		102	5510.0000	5510.0680	-0.0680
		110	5550.0000	5550.0020	-0.0020
		116	5580.0000	5580.0020	-0.0020
		134	5670.0000	5670.0820	-0.0820
		140	5700.0000	5700.0640	-0.0640
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmin (93.5)V	52	5260.0000	5260.0670	-0.0670
		54	5270.0000	5270.0810	-0.0810
		60	5300.0000	5300.0680	-0.0680
		62	5310.0000	5310.0740	-0.0740
		64	5320.0000	5320.0650	-0.0650
		100	5500.0000	5500.0650	-0.0650
		102	5510.0000	5510.0680	-0.0680
		110	5550.0000	5550.0020	-0.0020
		116	5580.0000	5580.0030	-0.0030
		134	5670.0000	5670.0740	-0.0740
		140	5700.0000	5700.0680	-0.0680

Product : Access Point/Sensor
Test Item : Frequency Stability
Test Site : Temperature Chamber
Test Mode : Carrier Wave (ac) (External Antenna)

Chain A

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle$ F (MHz)
Tnom (20) °C	Vnom (110)V	58	5290.0000	5289.9970	0.0030
		106	5530.0000	5529.9980	0.0020
		122	5610.0000	5609.9960	0.0040
		138	5690.0000	5689.9970	0.0030
		142	5710.0000	5709.9980	0.0020
		144	5720.0000	5719.9980	0.0020
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle$ F (MHz)
Tmax (55) °C	Vmax (126.5)V	58	5290.0000	5290.0080	-0.0080
		106	5530.0000	5530.0070	-0.0070
		122	5610.0000	5610.0120	-0.0120
		138	5690.0000	5690.0160	-0.0160
		142	5710.0000	5710.0060	-0.0060
		144	5720.0000	5720.0120	-0.0120
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle$ F (MHz)
Tmax (55) °C	Vmin (93.5)V	58	5290.0000	5290.0080	-0.0080
		106	5530.0000	5530.0060	-0.0060
		122	5610.0000	5610.0120	-0.0120
		138	5690.0000	5690.0130	-0.0130
		142	5710.0000	5710.0060	-0.0060
		144	5720.0000	5720.0130	-0.0130
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle$ F (MHz)
Tmin (-20) °C	Vmax (126.5)V	58	5290.0000	5290.0580	-0.0580
		106	5530.0000	5530.0650	-0.0650
		122	5610.0000	5610.0680	-0.0680
		138	5690.0000	5690.0740	-0.0740
		142	5710.0000	5710.0720	-0.0720
		144	5720.0000	5720.0680	-0.0680
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle$ F (MHz)
Tmin (-20) °C	Vmin (93.5)V	58	5290.0000	5290.0710	-0.0710
		106	5530.0000	5530.0820	-0.0820
		122	5610.0000	5610.0810	-0.0810
		138	5690.0000	5690.0680	-0.0680
		142	5710.0000	5710.0740	-0.0740
		144	5720.0000	5720.0850	-0.0850

Chain B

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
Tnom (20) °C	Vnom (110)V	58	5290.0000	5289.9980	0.0020
		106	5530.0000	5529.9980	0.0020
		122	5610.0000	5609.9970	0.0030
		138	5690.0000	5689.9960	0.0040
		142	5710.0000	5709.9980	0.0020
		144	5720.0000	5719.9970	0.0030
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
Tmax (55) °C	Vmax (126.5)V	58	5290.0000	5290.0080	-0.0080
		106	5530.0000	5530.0120	-0.0120
		122	5610.0000	5610.0080	-0.0080
		138	5690.0000	5690.0060	-0.0060
		142	5710.0000	5710.0110	-0.0110
		144	5720.0000	5720.0130	-0.0130
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
Tmax (55) °C	Vmin (93.5)V	58	5290.0000	5290.0080	-0.0080
		106	5530.0000	5530.0120	-0.0120
		122	5610.0000	5610.0080	-0.0080
		138	5690.0000	5690.0140	-0.0140
		142	5710.0000	5710.0080	-0.0080
		144	5720.0000	5720.0150	-0.0150
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
Tmin (-20) °C	Vmax (126.5)V	58	5290.0000	5290.0740	-0.0740
		106	5530.0000	5530.0820	-0.0820
		122	5610.0000	5610.0680	-0.0680
		138	5690.0000	5690.0720	-0.0720
		142	5710.0000	5710.0820	-0.0820
		144	5720.0000	5720.0680	-0.0680
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	$\triangle F$ (MHz)
Tmin (-20) °C	Vmin (93.5)V	58	5290.0000	5290.0580	-0.0580
		106	5530.0000	5530.0740	-0.0740
		122	5610.0000	5610.0820	-0.0820
		138	5690.0000	5690.0680	-0.0680
		142	5710.0000	5710.0580	-0.0580
		144	5720.0000	5720.0660	-0.0660

Chain C

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (110)V	58	5290.0000	5289.9990	0.0010
		106	5530.0000	5529.9980	0.0020
		122	5610.0000	5609.9970	0.0030
		138	5690.0000	5689.9980	0.0020
		142	5710.0000	5709.9980	0.0020
		144	5720.0000	5719.9990	0.0010
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (55) °C	Vmax (126.5)V	58	5290.0000	5290.0120	-0.0120
		106	5530.0000	5530.0180	-0.0180
		122	5610.0000	5610.0120	-0.0120
		138	5690.0000	5690.0160	-0.0160
		142	5710.0000	5710.0070	-0.0070
		144	5720.0000	5720.0060	-0.0060
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (55) °C	Vmin (93.5)V	58	5290.0000	5290.0120	-0.0120
		106	5530.0000	5530.0180	-0.0180
		122	5610.0000	5610.0080	-0.0080
		138	5690.0000	5690.0120	-0.0120
		142	5710.0000	5710.0070	-0.0070
		144	5720.0000	5720.0120	-0.0120
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmax (126.5)V	58	5290.0000	5290.0660	-0.0660
		106	5530.0000	5530.0820	-0.0820
		122	5610.0000	5610.0620	-0.0620
		138	5690.0000	5690.0740	-0.0740
		142	5710.0000	5710.0680	-0.0680
		144	5720.0000	5720.0660	-0.0660
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmin (-20) °C	Vmin (93.5)V	58	5290.0000	5290.0620	-0.0620
		106	5530.0000	5530.0770	-0.0770
		122	5610.0000	5610.0820	-0.0820
		138	5690.0000	5690.0650	-0.0650
		142	5710.0000	5710.0740	-0.0740
		144	5720.0000	5720.0820	-0.0820

8. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs