Product : SpectraGuard® Access Point / Sensor
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna)

| Channel Number | Frequency (MHz) | Chain | PPSD/MHz (dBm) | Total PPSD/MHz (dBm)[1] | Required Limit (dBm) | Result |
|---|---|---|---|---|---|---|
| 54 | 5270 | A | -0.290 | 2.720 | <11 | Pass |
| | | B | -0.590 | 2.420 | <11 | Pass |
| 62 | 5310 | A | -7.850 | -4.840 | <11 | Pass |
| | | B | -7.850 | -4.840 | <11 | Pass |
| 102 | 5510 | A | -6.470 | -3.460 | <11 | Pass |
| | | B | -6.080 | -3.070 | <11 | Pass |
| 110 | 5550 | A | -4.220 | -1.210 | <11 | Pass |
| | | B | -2.970 | 0.040 | <11 | Pass |
| 134 | 5670 | A | -0.140 | 2.870 | <11 | Pass |
| | | B | 0.430 | 3.440 | <11 | Pass |

Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01

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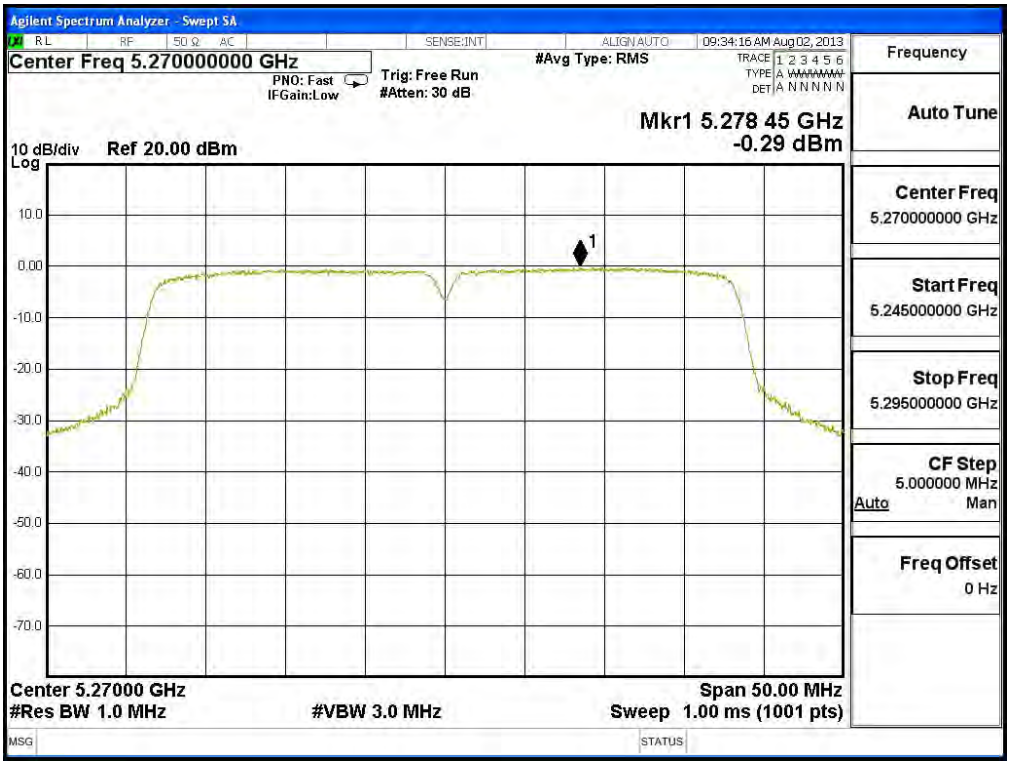
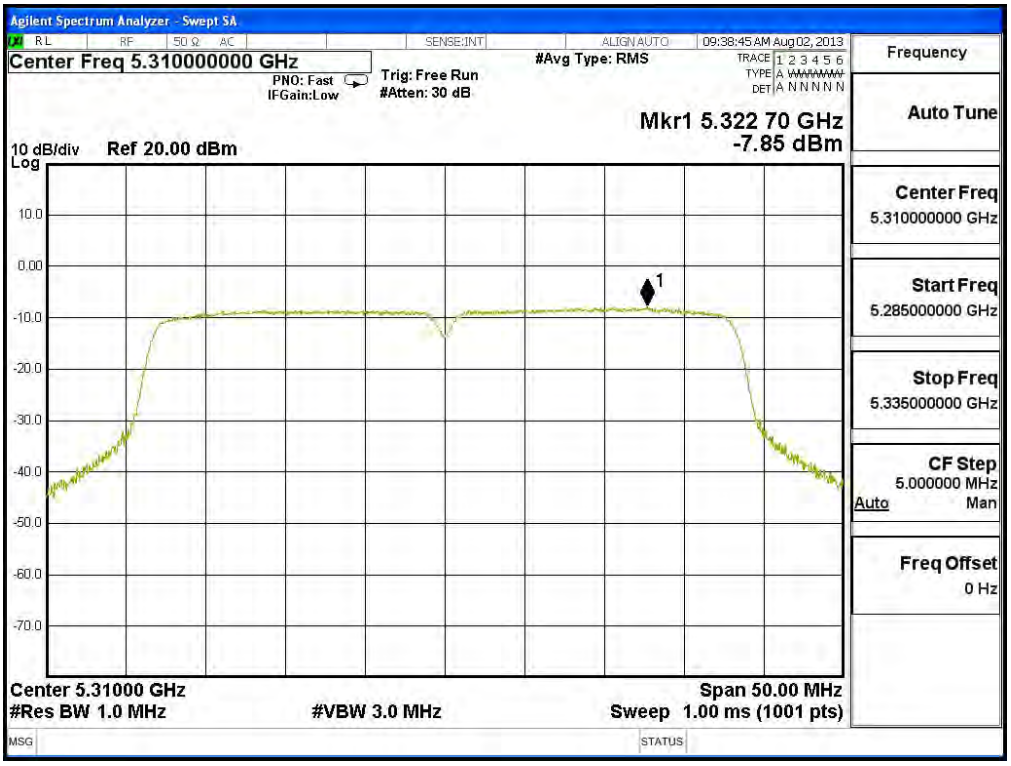
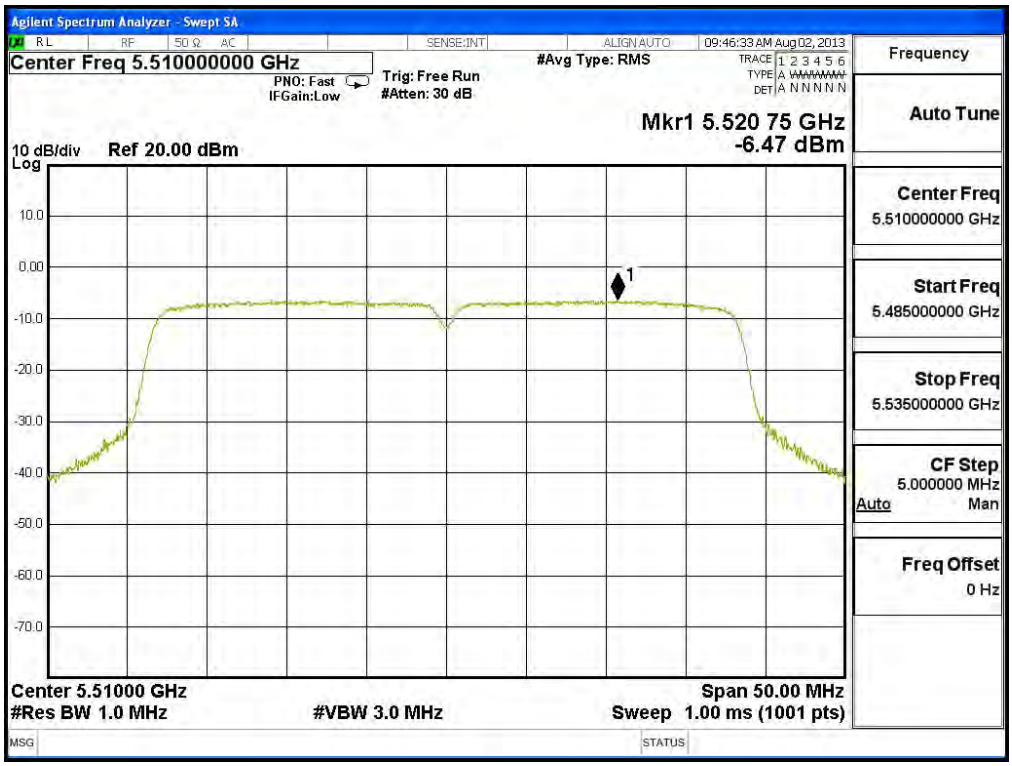
**Channel 54 – Chain A**



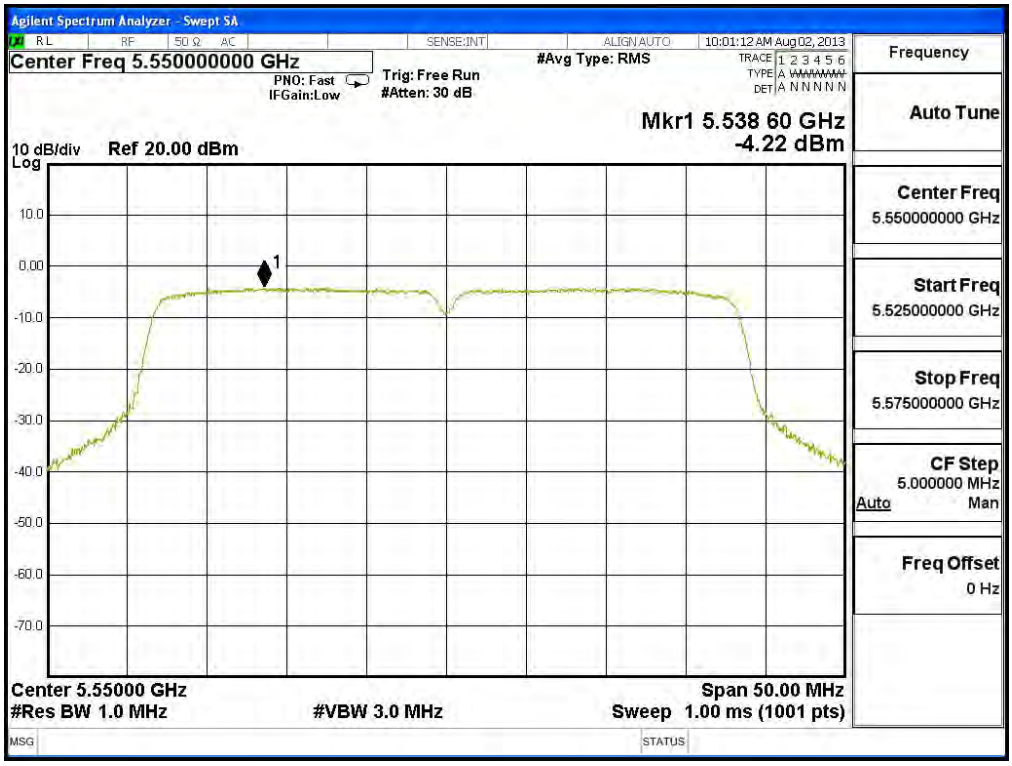

**Channel 62 – Chain A**



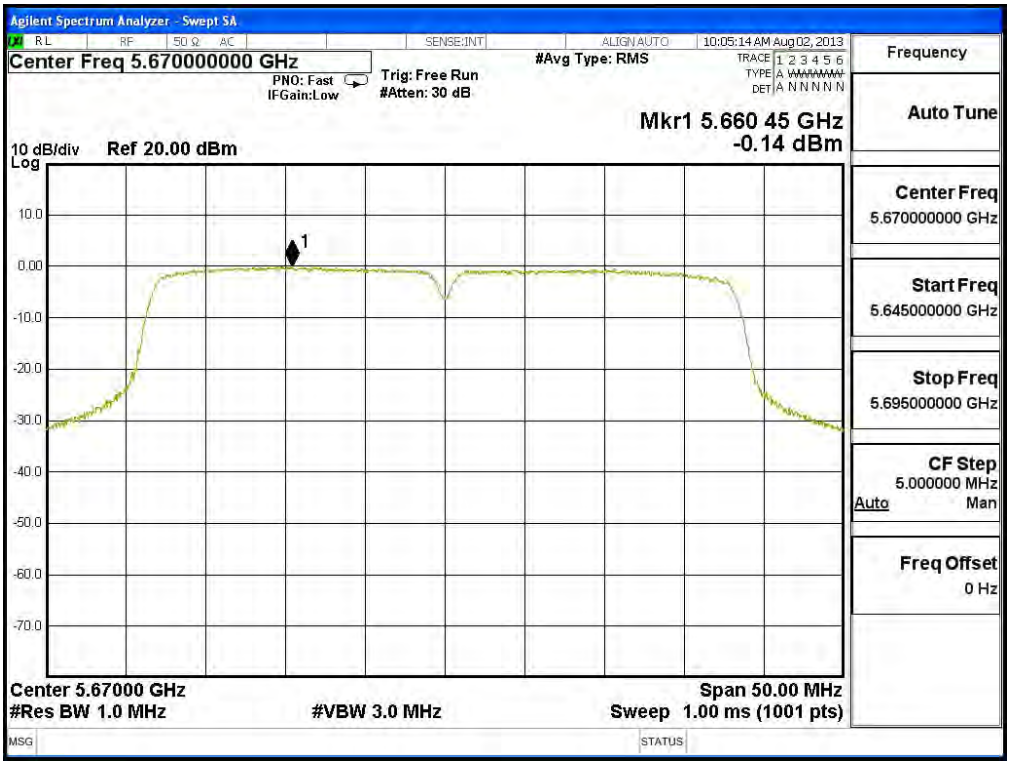
**Channel 102 – Chain A**



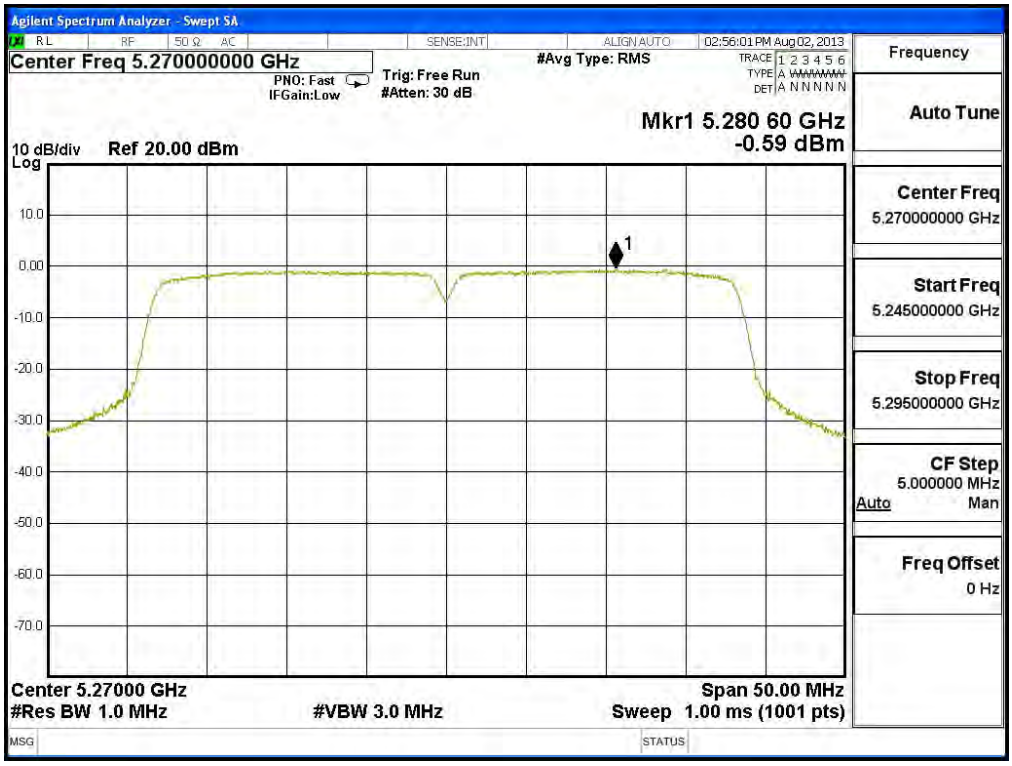

**Channel 110 – Chain A**



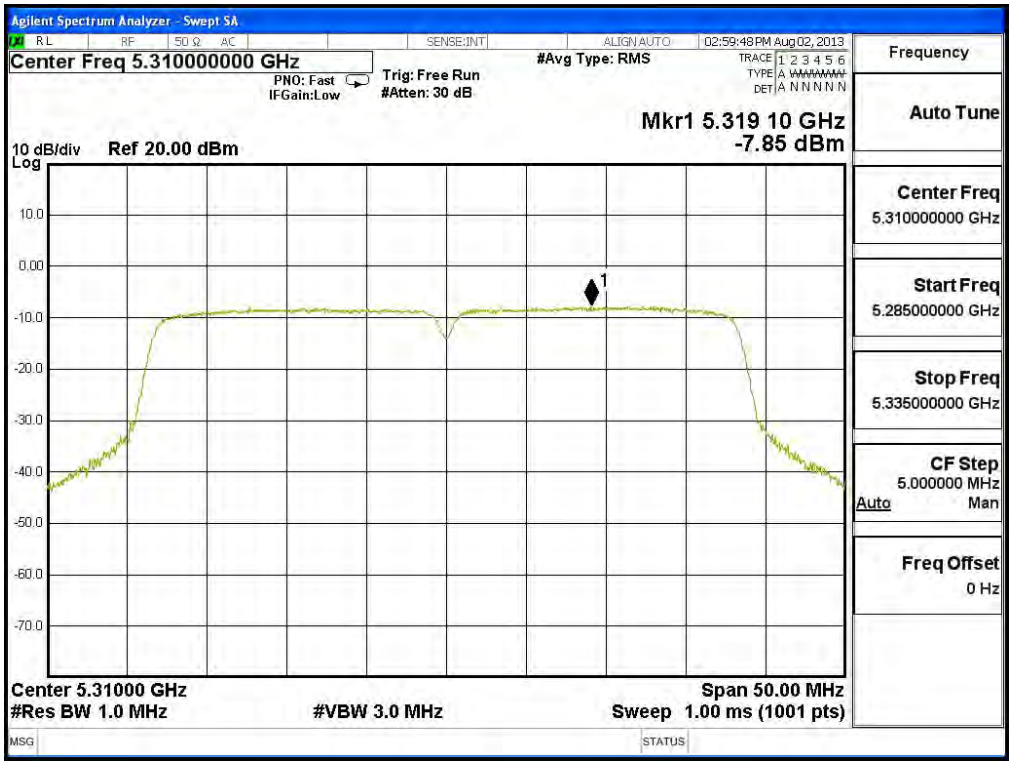
**Channel 134 – Chain A**



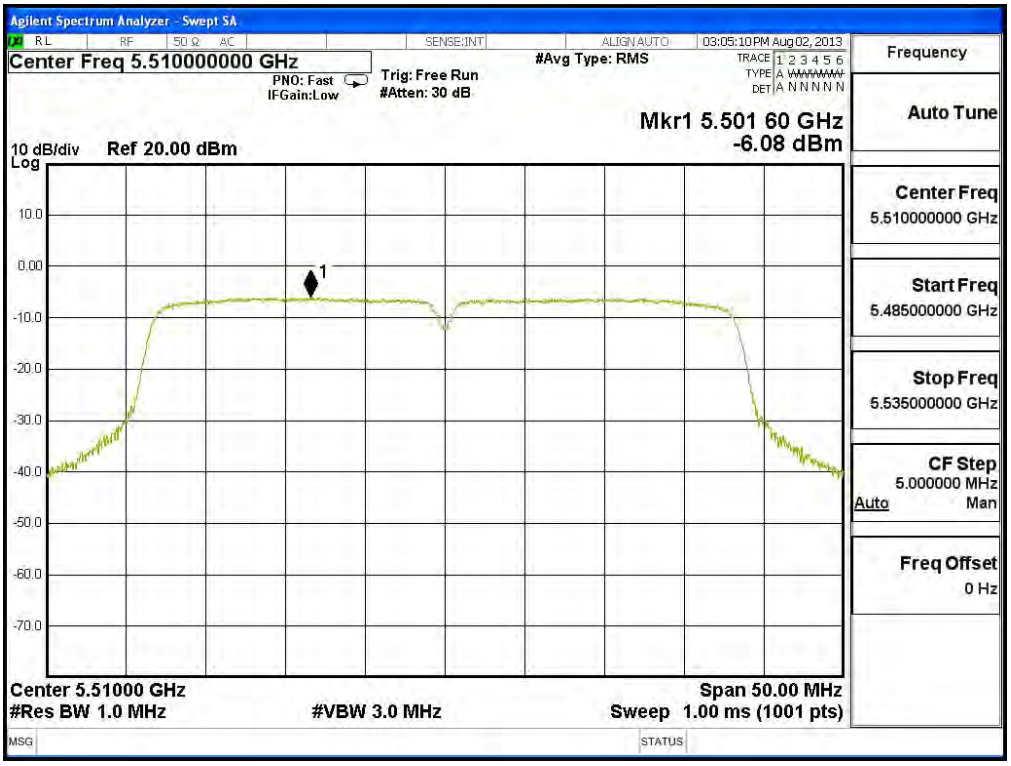
**Channel 54 – Chain B**



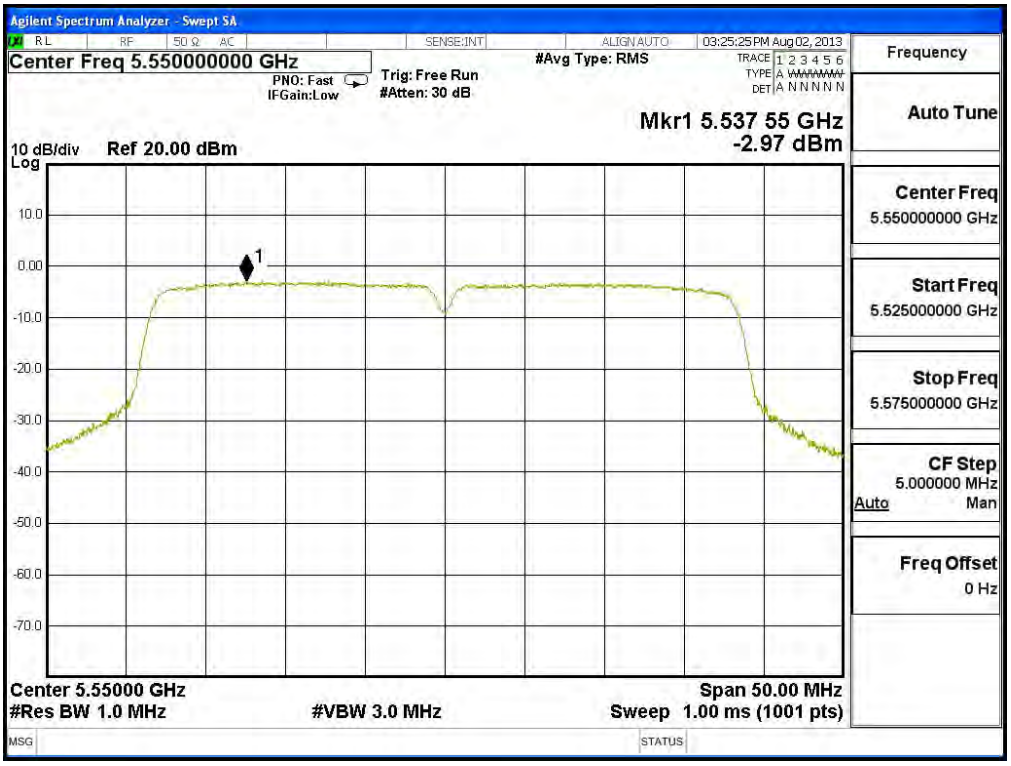

**Channel 62 – Chain B**



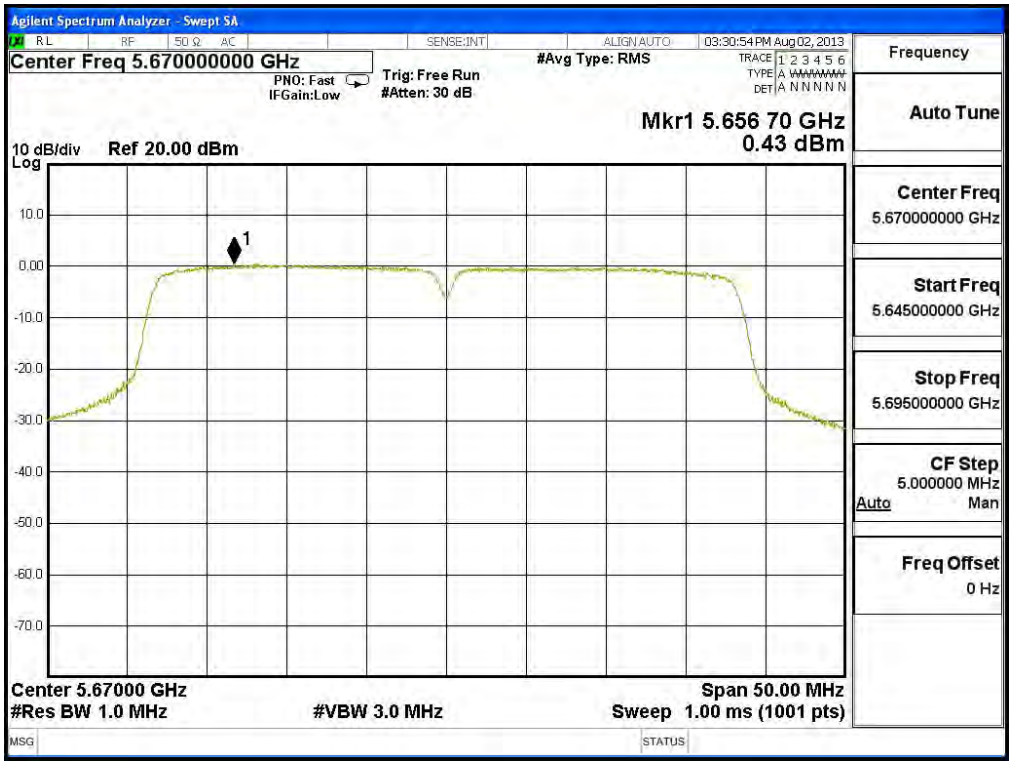
**Channel 102 – Chain B**




**Channel 110 – Chain B**



**Channel 134 – Chain B**



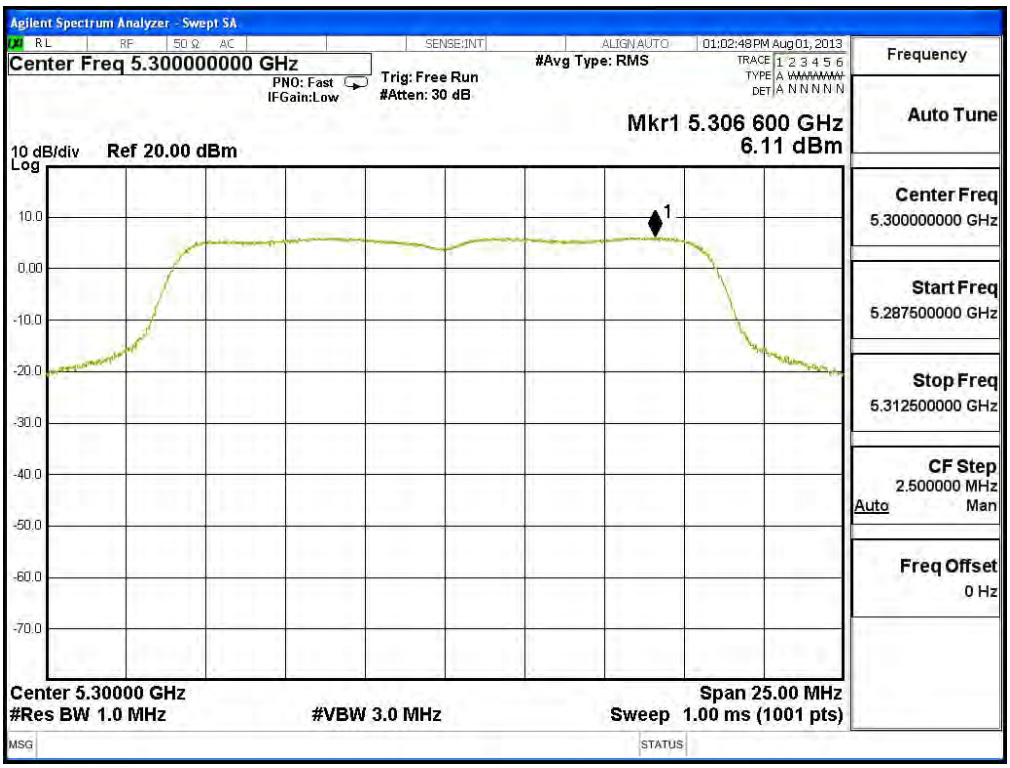
Product : SpectraGuard® Access Point / Sensor
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna)

| Channel Number | Frequency (MHz) | Chain | PPSD/MHz (dBm) | Total PPSD/MHz (dBm)[1] | Required Limit (dBm) | Result |
|---|---|---|---|---|---|---|
| 52 | 5260 | A | 7.060 | 10.070 | <11 | Pass |
| | | B | 6.530 | 9.540 | <11 | Pass |
| 60 | 5300 | A | 6.110 | 9.120 | <11 | Pass |
| | | B | 6.010 | 9.020 | <11 | Pass |
| 64 | 5320 | A | 4.940 | 7.950 | <11 | Pass |
| | | B | 4.630 | 7.640 | <11 | Pass |
| 100 | 5500 | A | 4.170 | 7.180 | <11 | Pass |
| | | B | 3.850 | 6.860 | <11 | Pass |
| 116 | 5580 | A | 4.890 | 7.900 | <11 | Pass |
| | | B | 4.790 | 7.800 | <11 | Pass |
| 140 | 5700 | A | 7.420 | 10.430 | <11 | Pass |
| | | B | 6.760 | 9.770 | <11 | Pass |

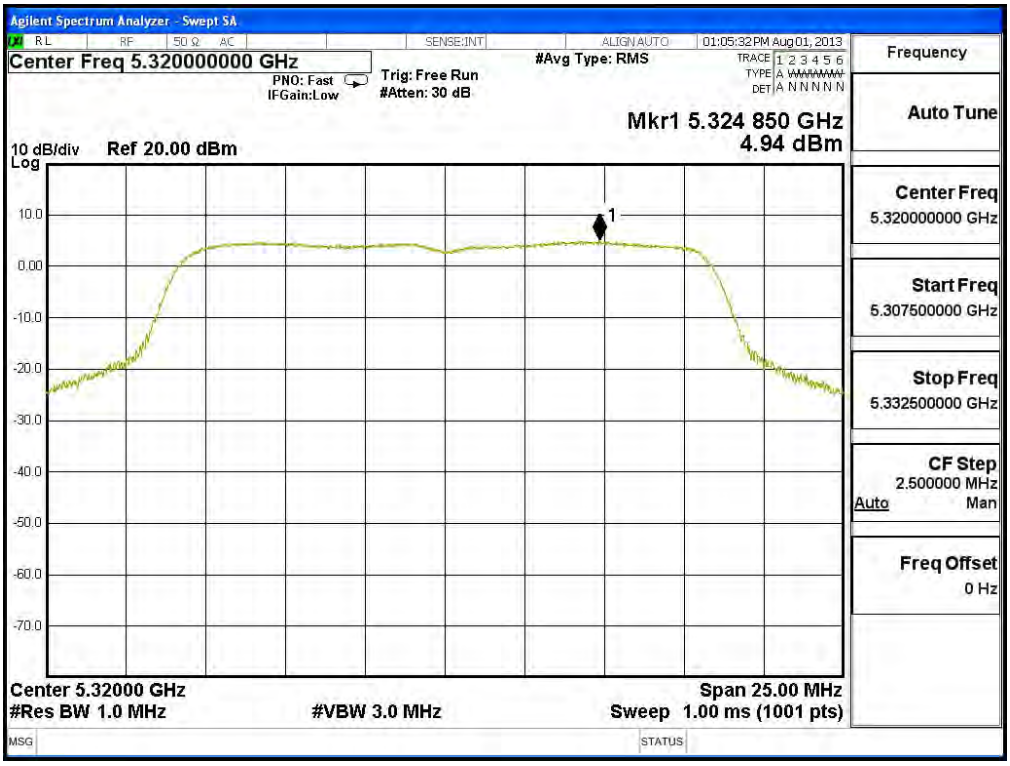
Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

**Channel 52: CHAIN A**

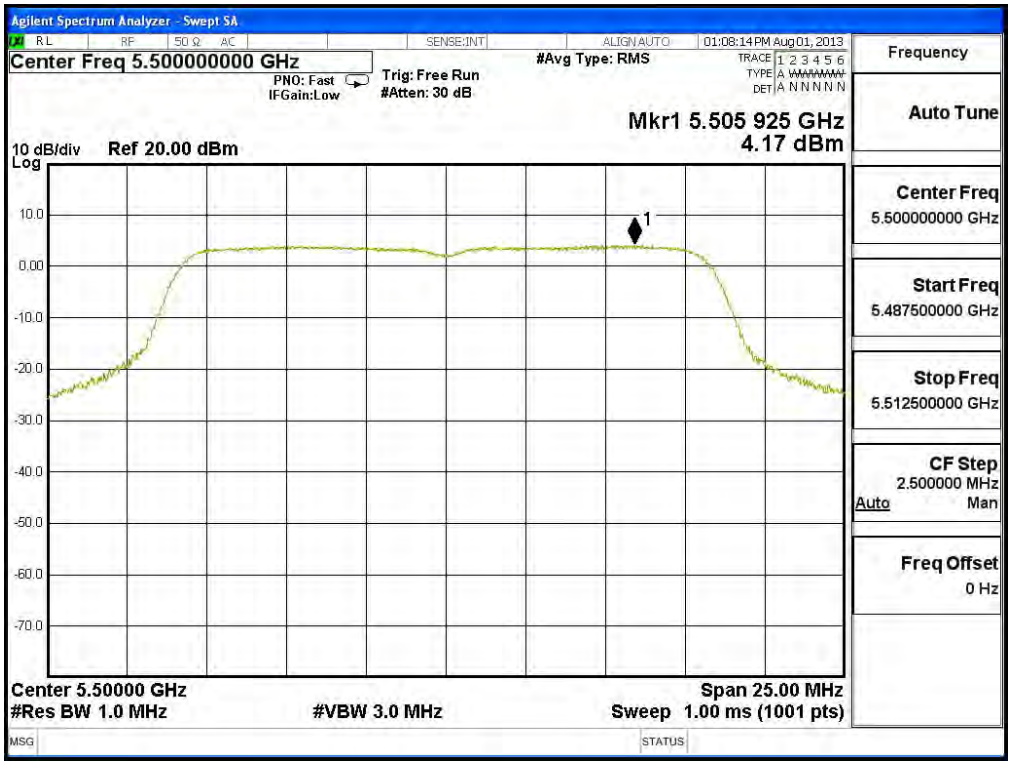

**Channel 60: CHAIN A**



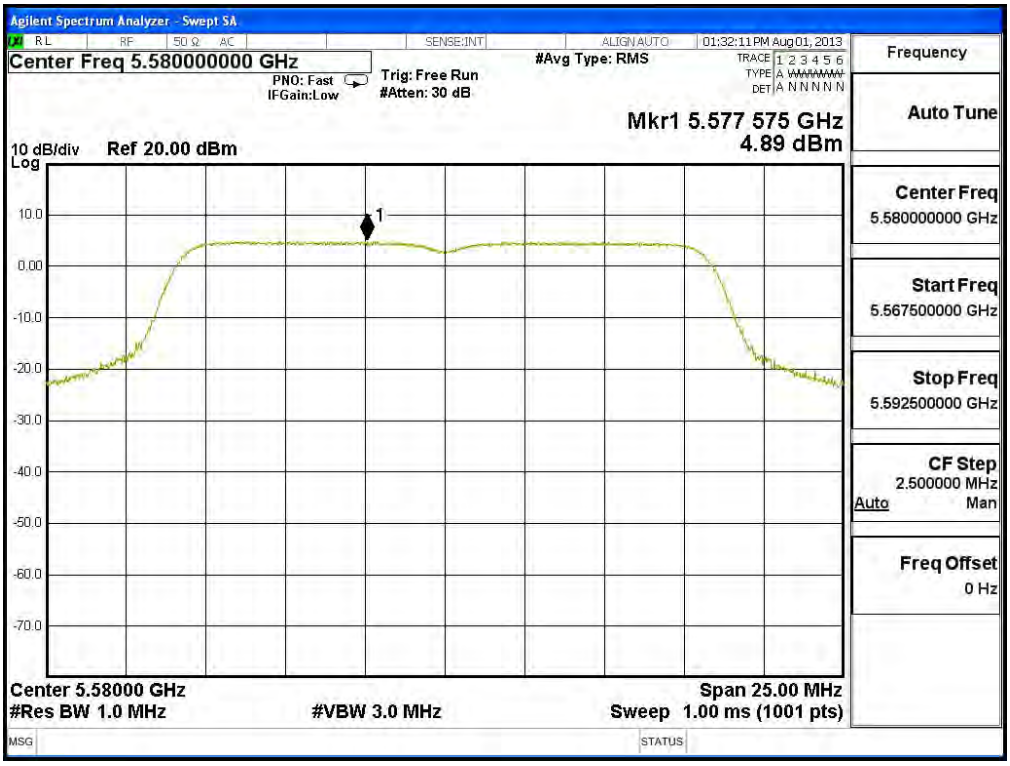
**Channel 64: CHAIN A**



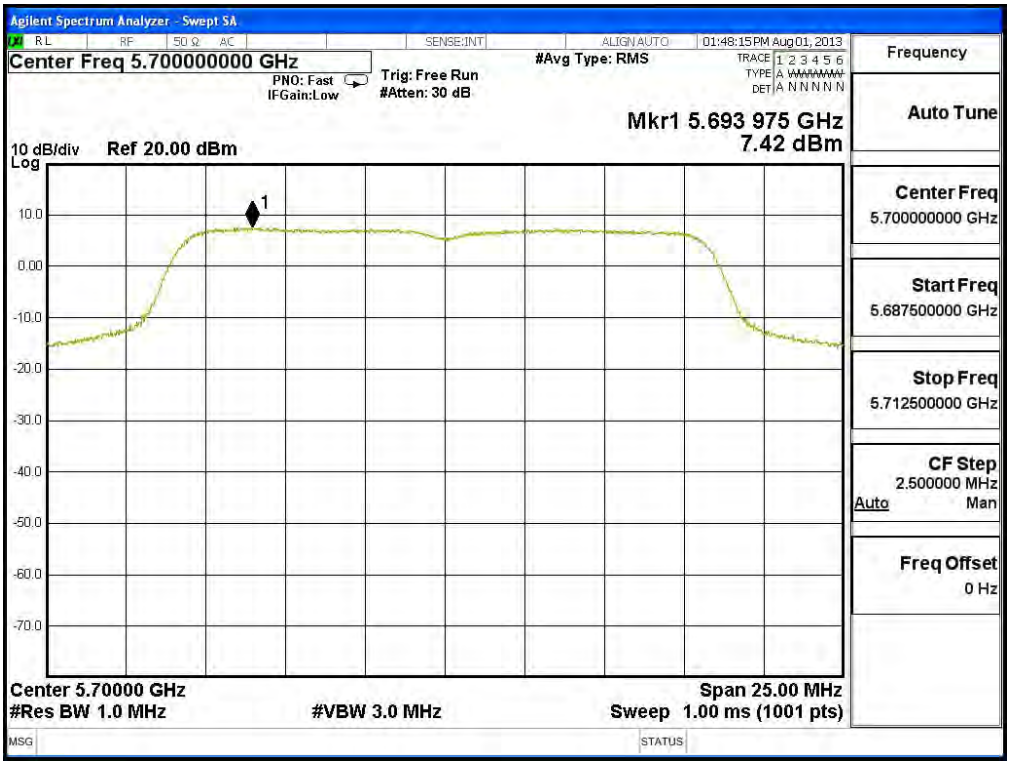

**Channel 100: CHAIN A**



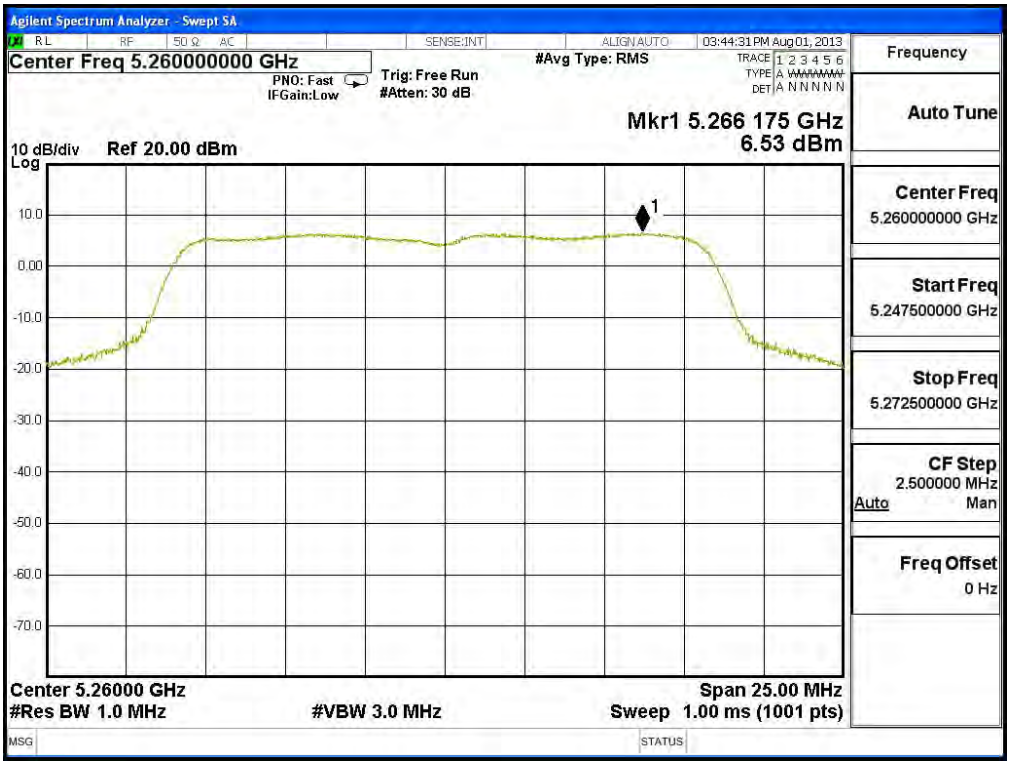
**Channel 120: CHAIN A**



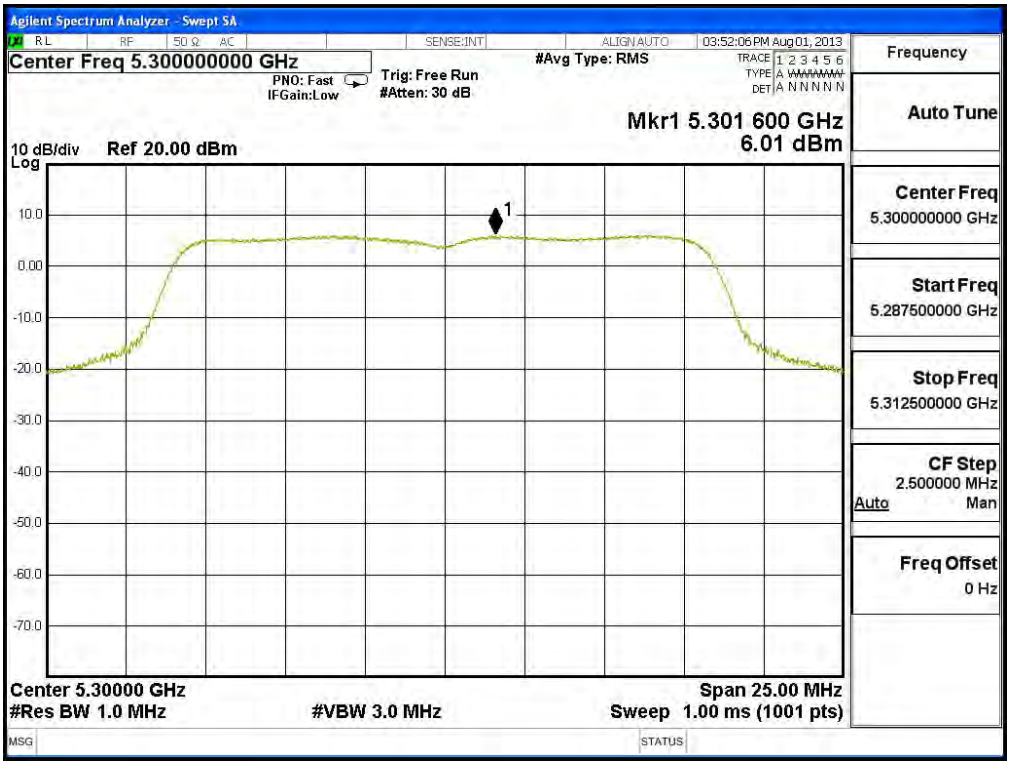

**Channel 140: CHAIN A**



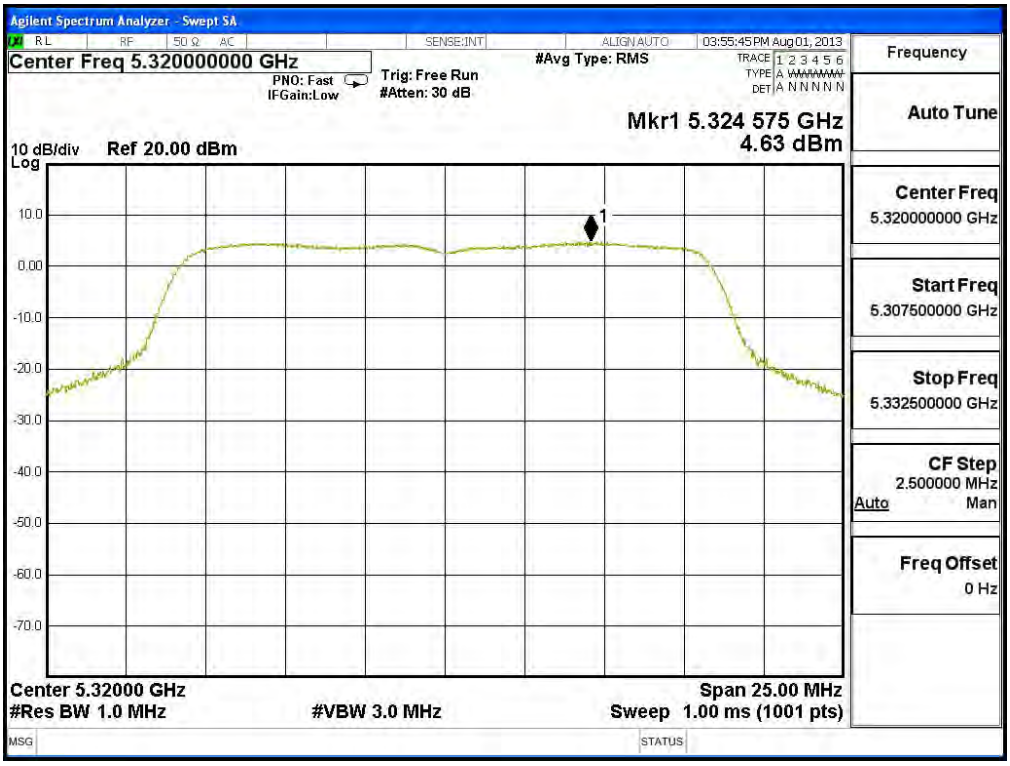
**Channel 52: CHAIN B**



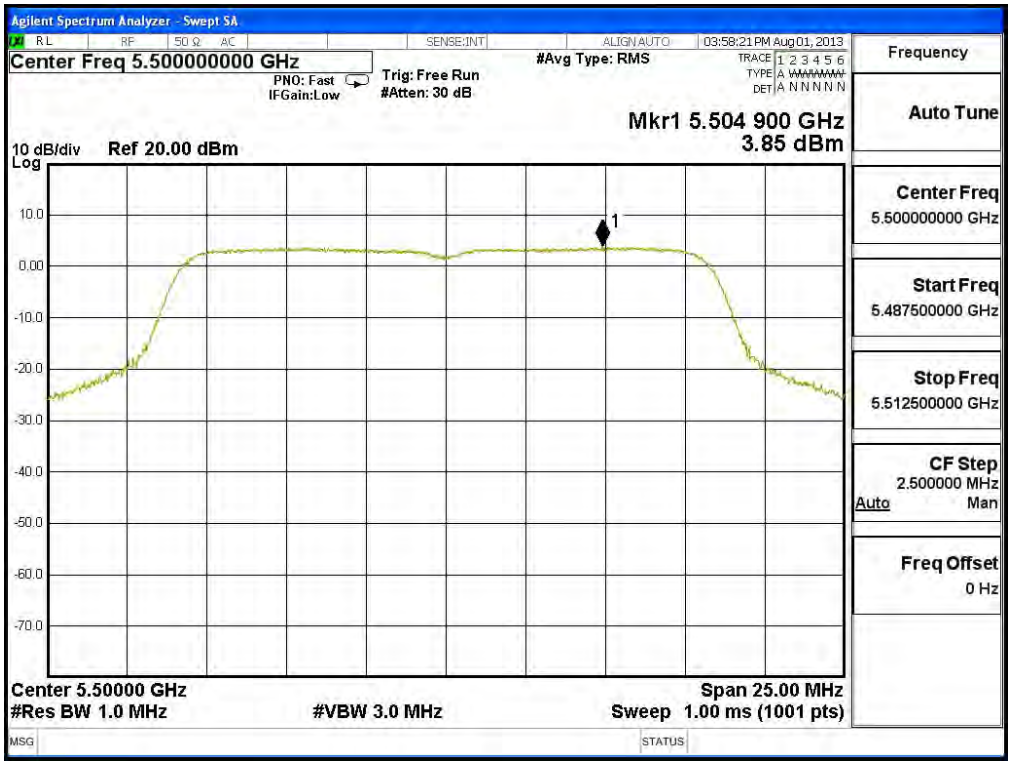

**Channel 60: CHAIN B**



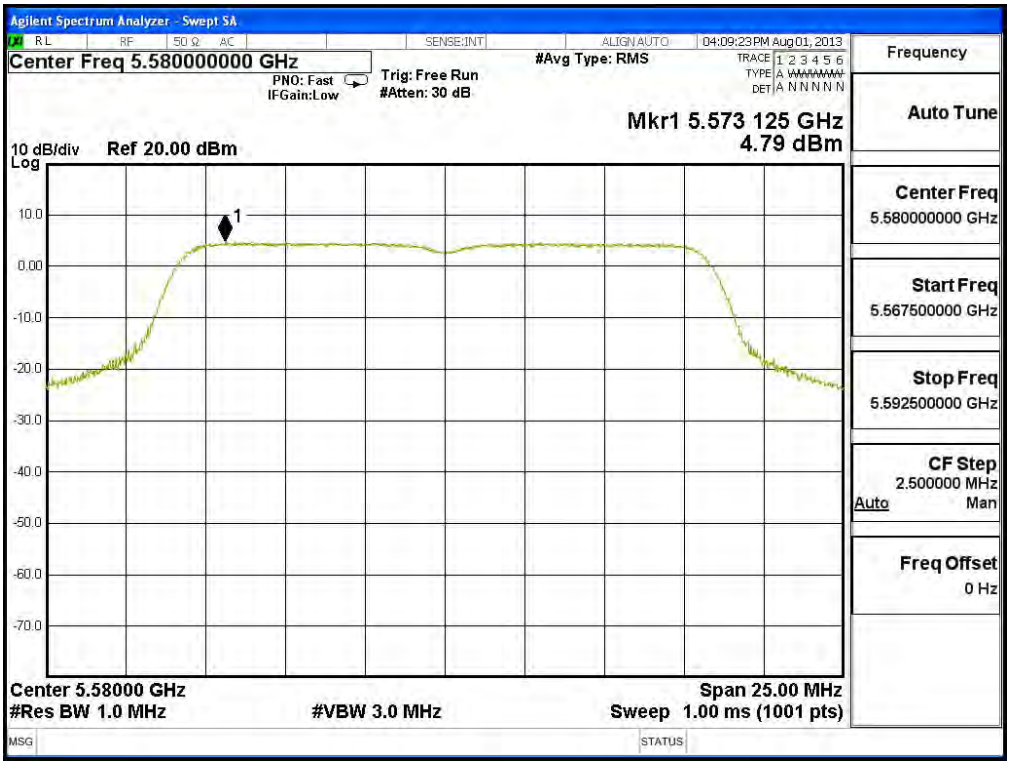
**Channel 64: CHAIN B**



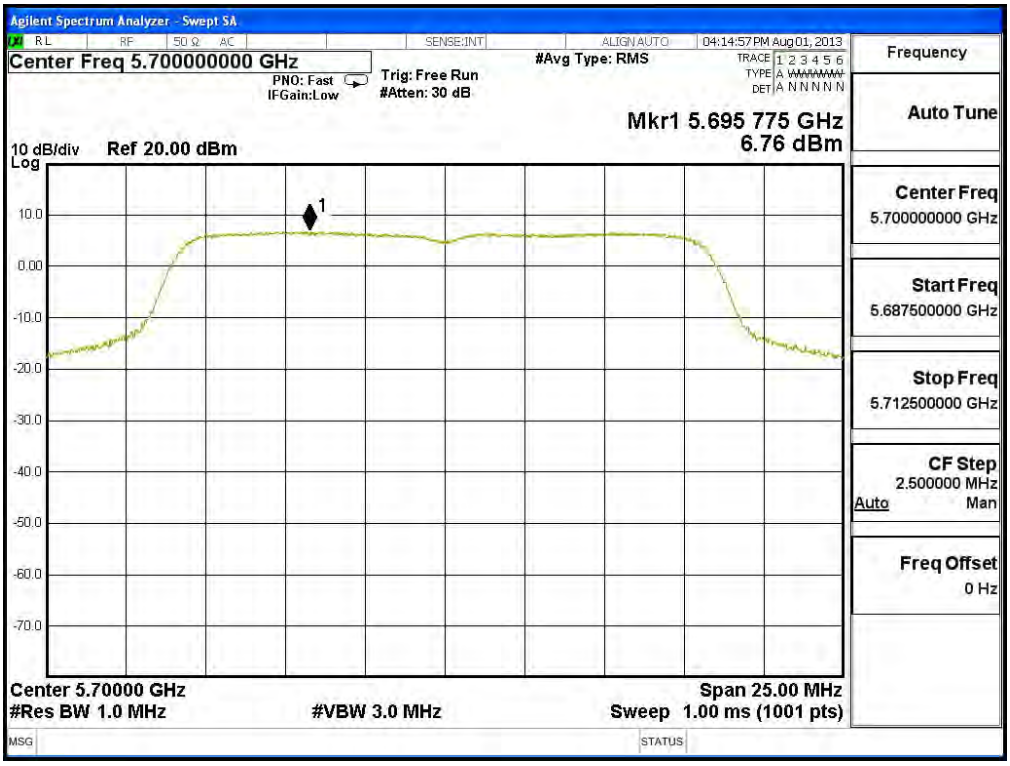

**Channel 100: CHAIN B**



**Channel 120: CHAIN B**




**Channel 140: CHAIN B**

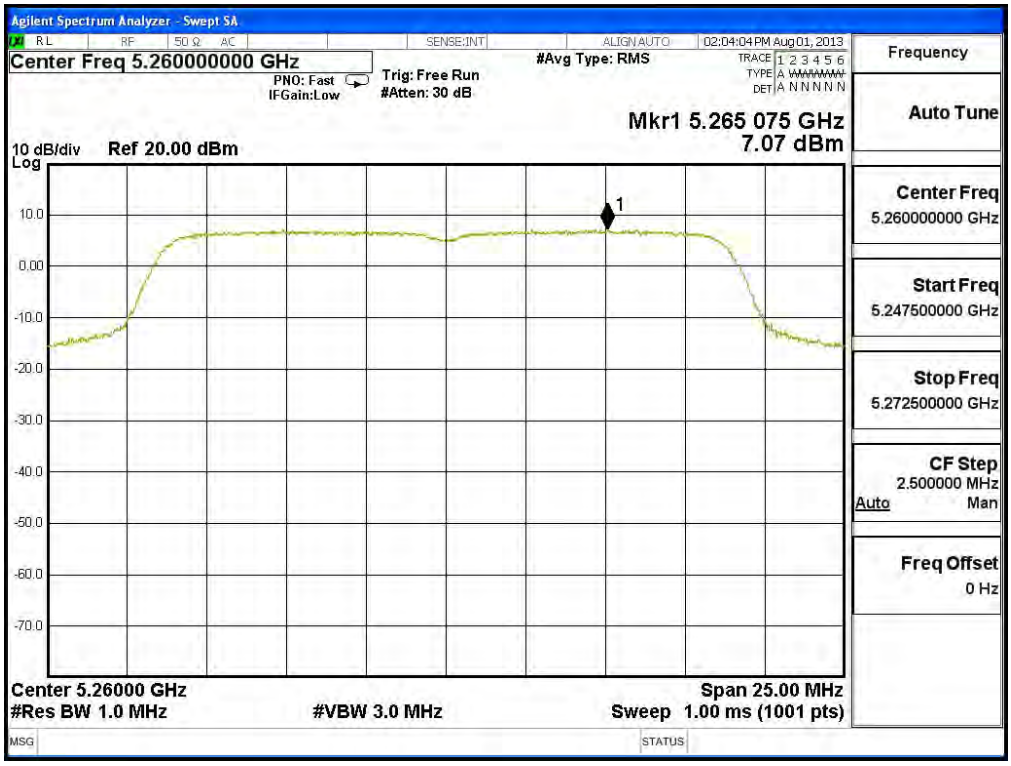


Product : SpectraGuard® Access Point / Sensor
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna)

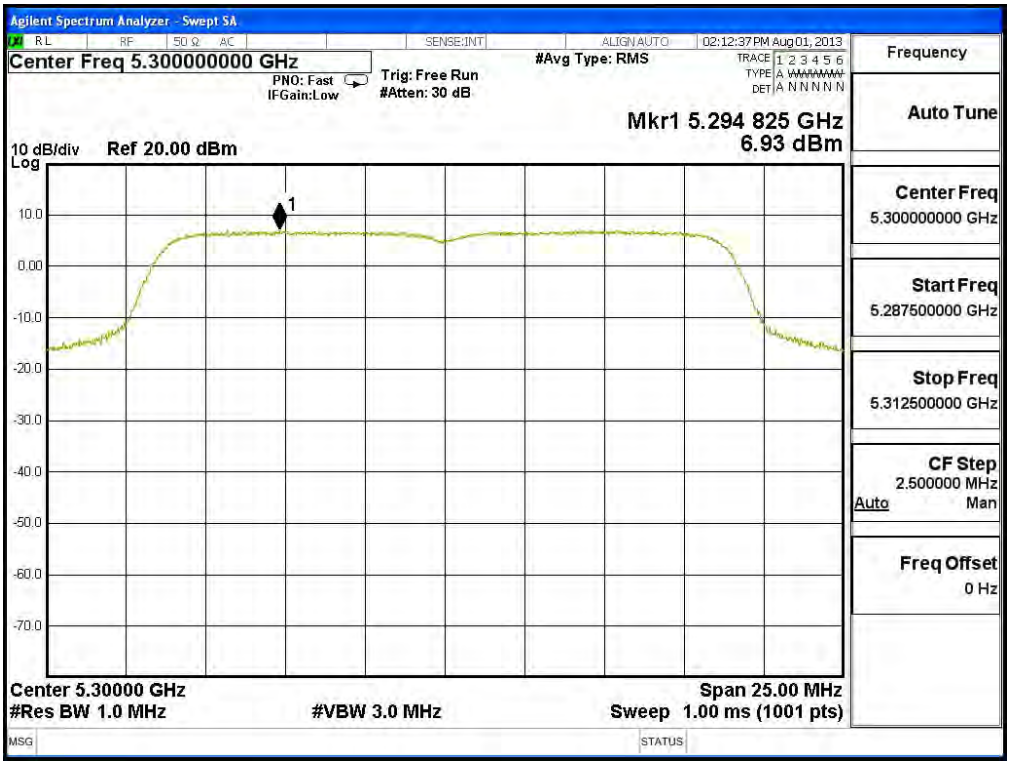
| Channel Number | Frequency (MHz) | Chain | PPSD/MHz (dBm) | Total PPSD/MHz (dBm)[1] | Required Limit (dBm) | Result |
|---|---|---|---|---|---|---|
| 52 | 5260 | A | 7.070 | 10.080 | <11 | Pass |
| | | B | 6.900 | 9.910 | <11 | Pass |
| 60 | 5300 | A | 6.930 | 9.940 | <11 | Pass |
| | | B | 6.980 | 9.990 | <11 | Pass |
| 64 | 5320 | A | 4.070 | 7.080 | <11 | Pass |
| | | B | 5.180 | 8.190 | <11 | Pass |
| 100 | 5500 | A | 4.900 | 7.910 | <11 | Pass |
| | | B | 4.750 | 7.760 | <11 | Pass |
| 116 | 5580 | A | 2.990 | 6.000 | <11 | Pass |
| | | B | 3.080 | 6.090 | <11 | Pass |
| 140 | 5700 | A | 5.910 | 8.920 | <11 | Pass |
| | | B | 5.810 | 8.820 | <11 | Pass |

Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

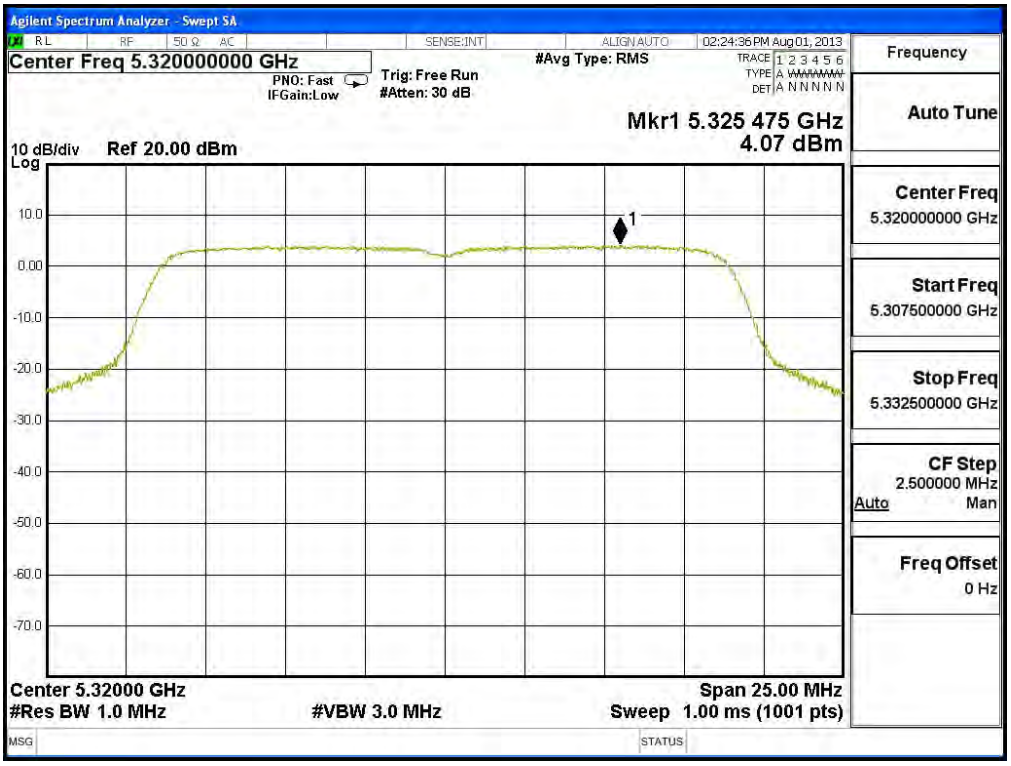
**Channel 52 – Chain A**



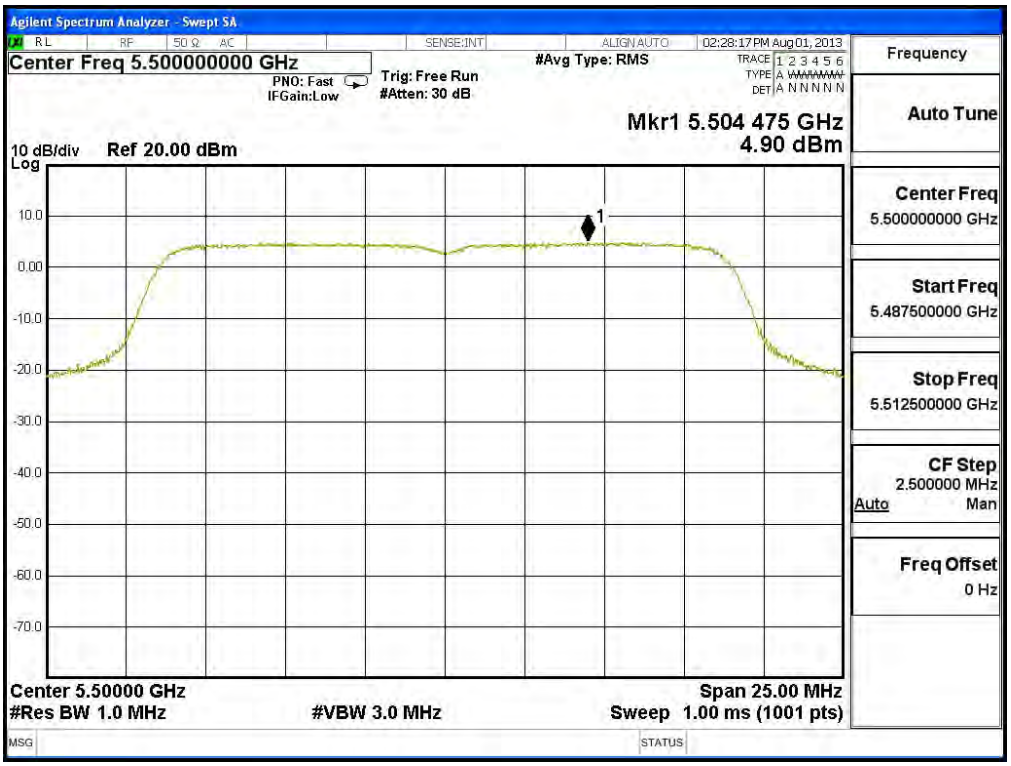

**Channel 60 – Chain A**



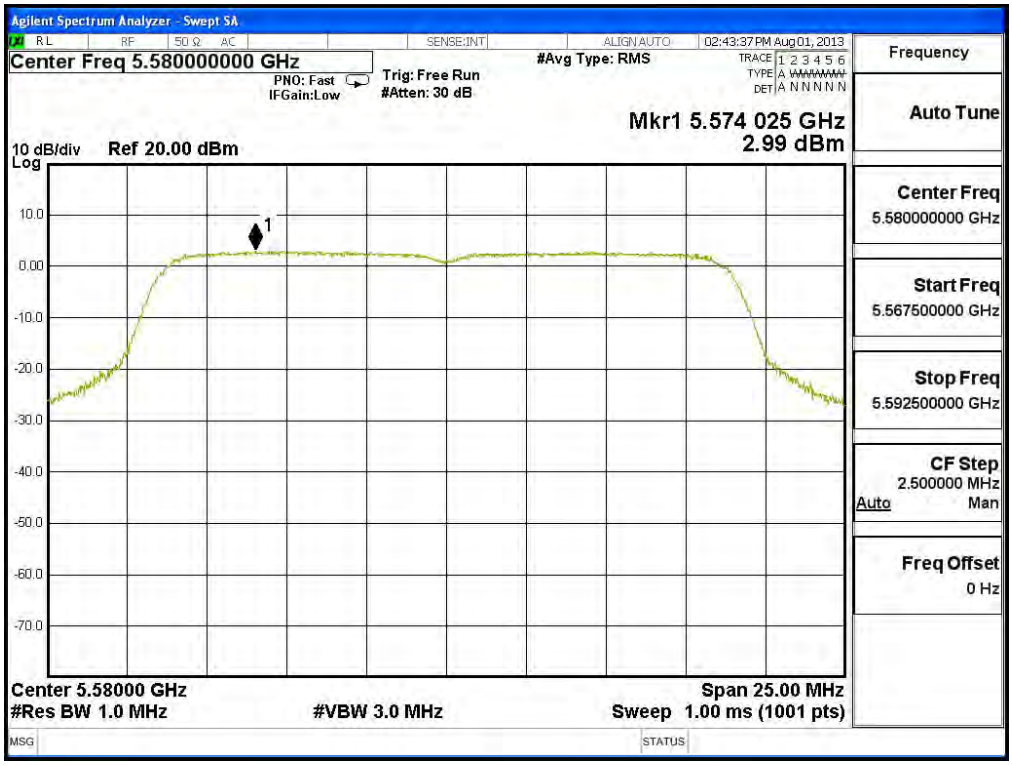
**Channel 64 – Chain A**



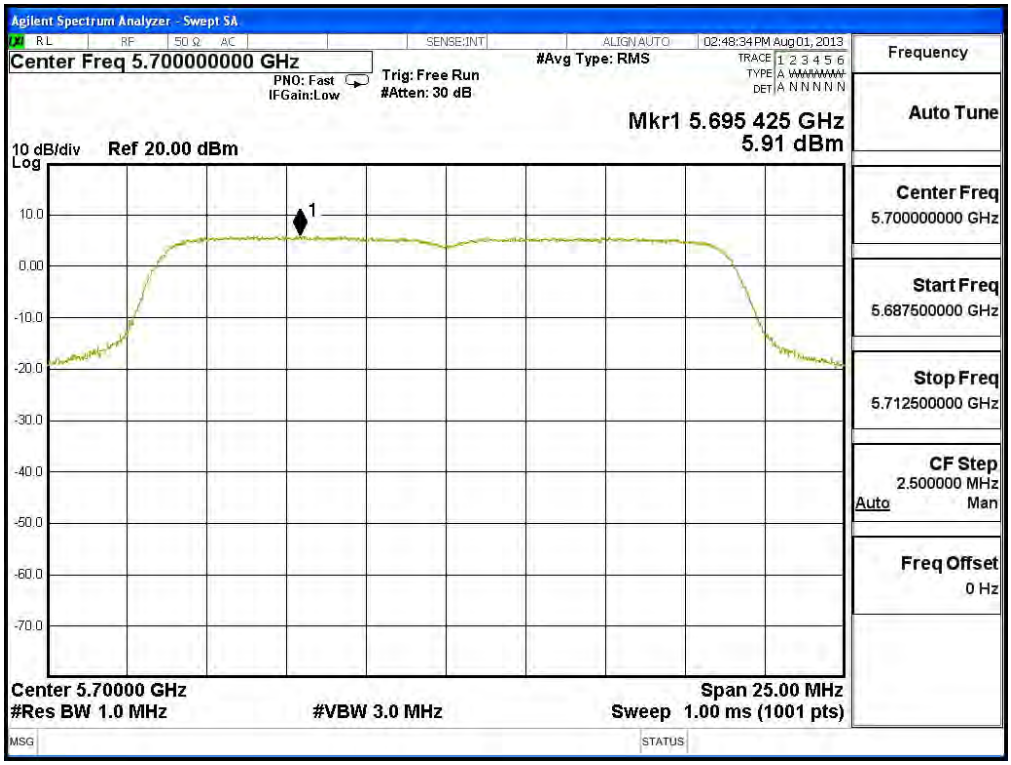

**Channel 100 – Chain A**



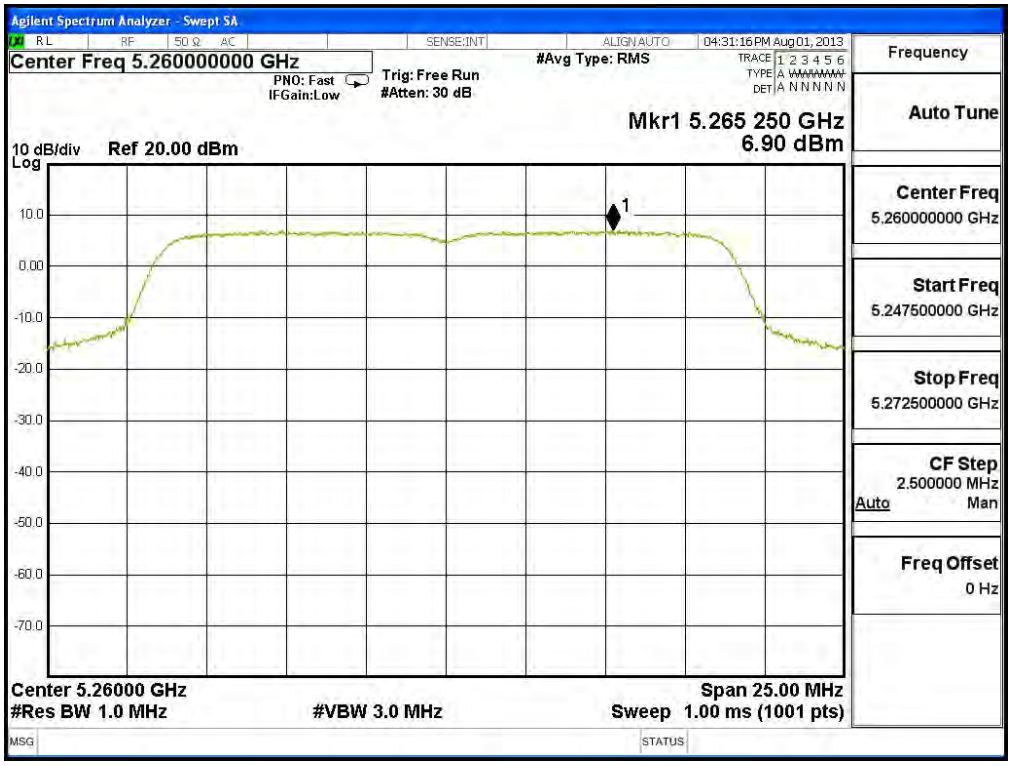
**Channel 120 – Chain A**



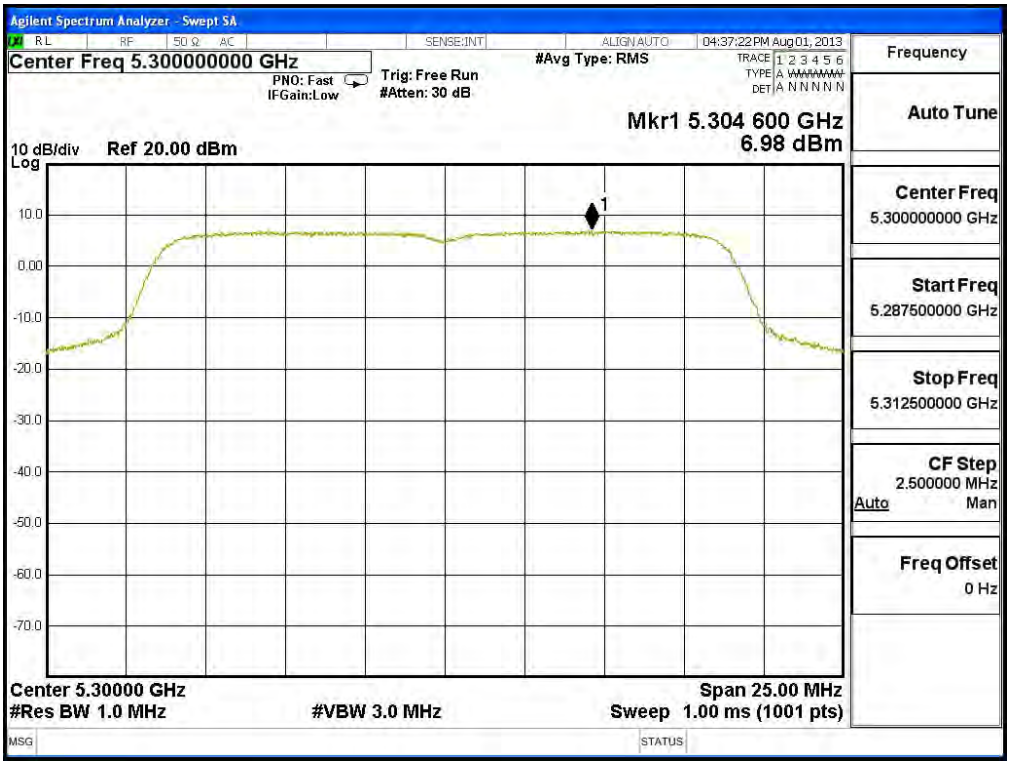

**Channel 140 – Chain A**



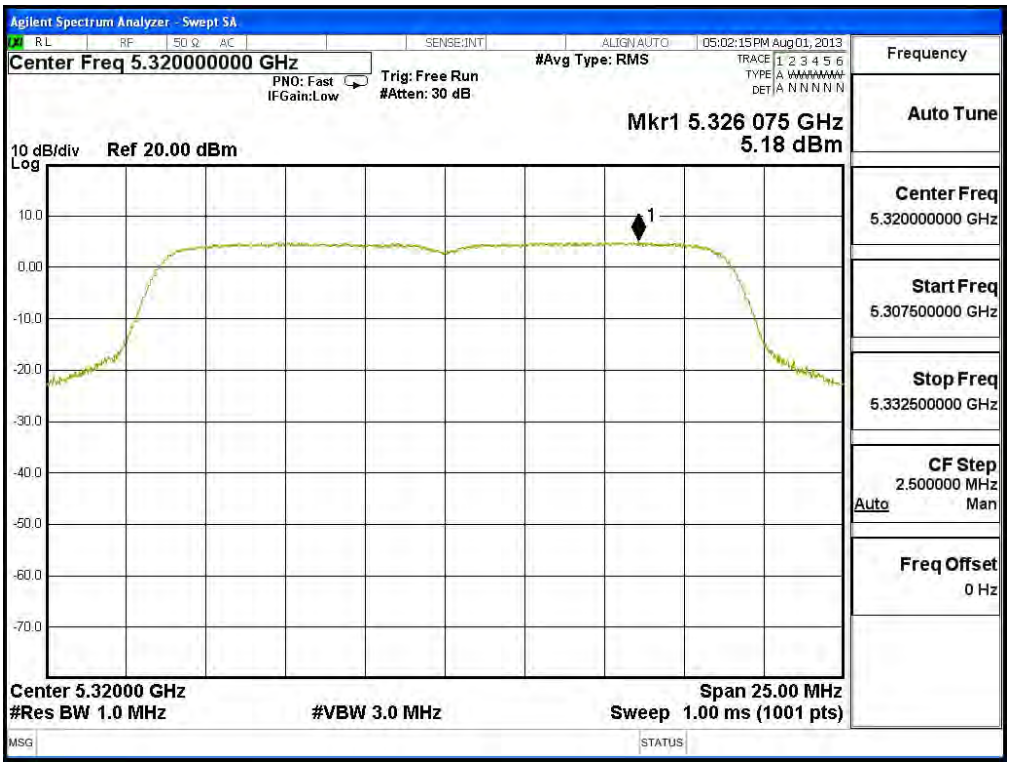
**Channel 52 – Chain B**



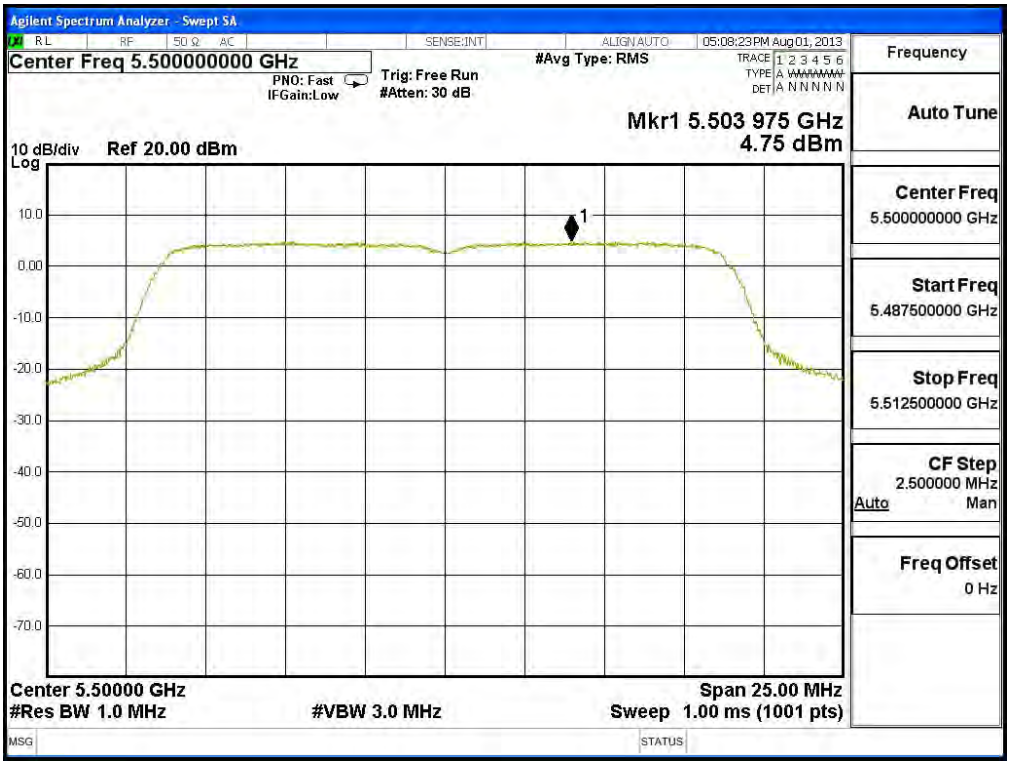

**Channel 60 – Chain B**



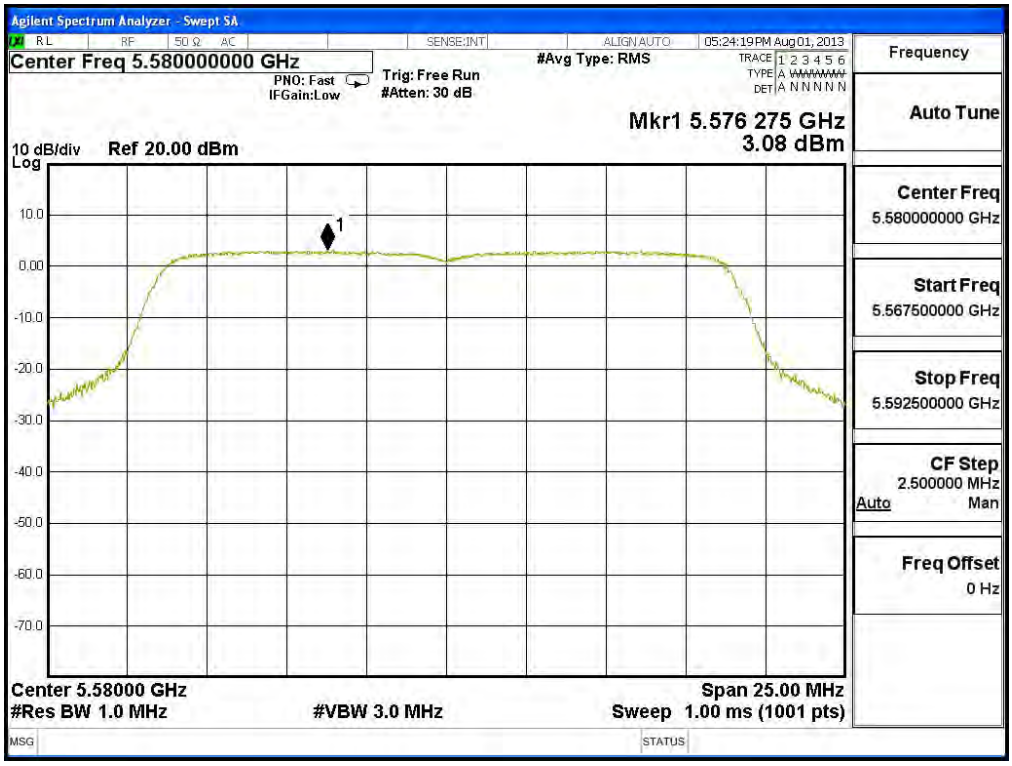
**Channel 64 – Chain B**



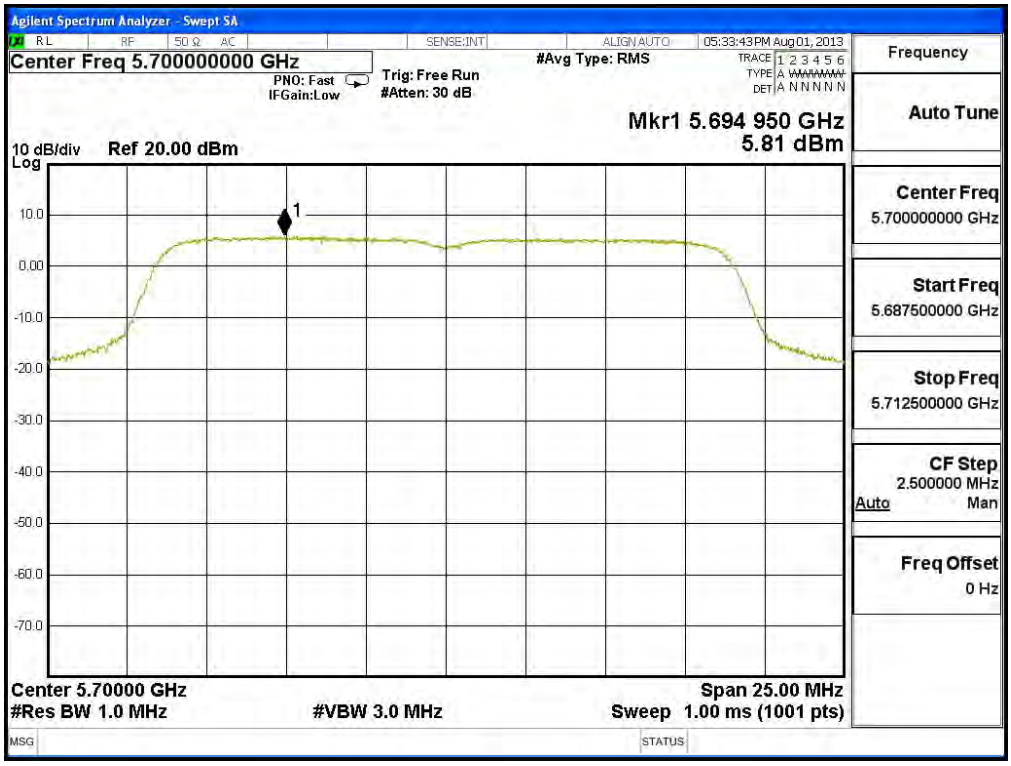

**Channel 100 – Chain B**



**Channel 120 – Chain B**




**Channel 140 – Chain B**

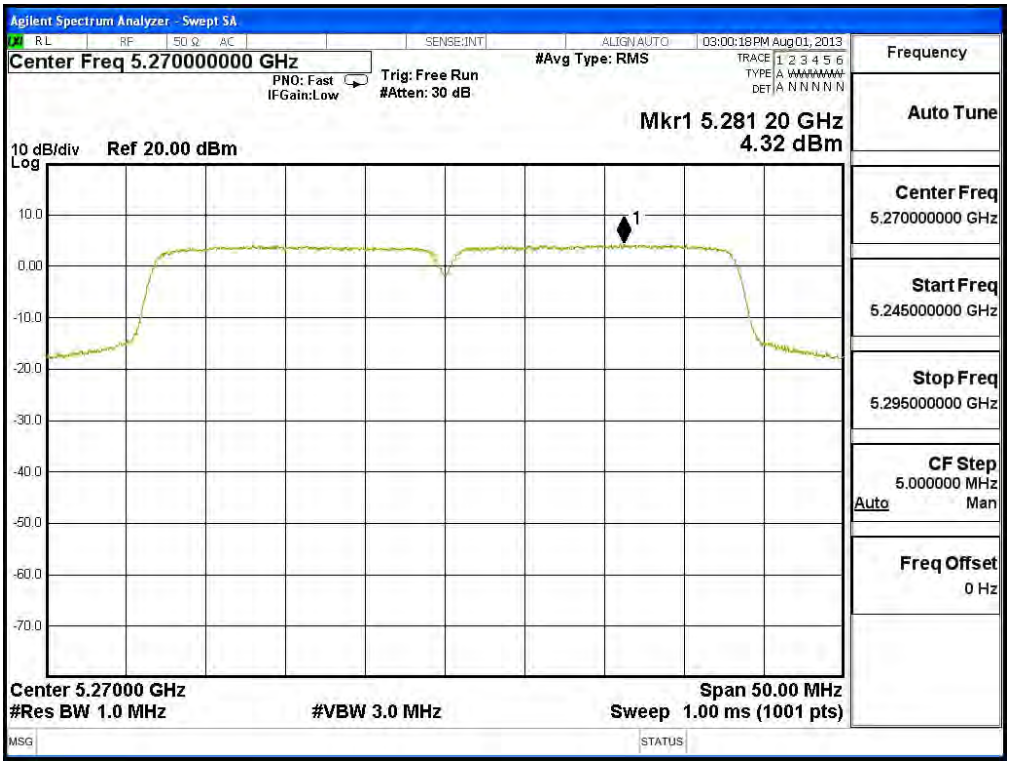


Product : SpectraGuard® Access Point / Sensor
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna)

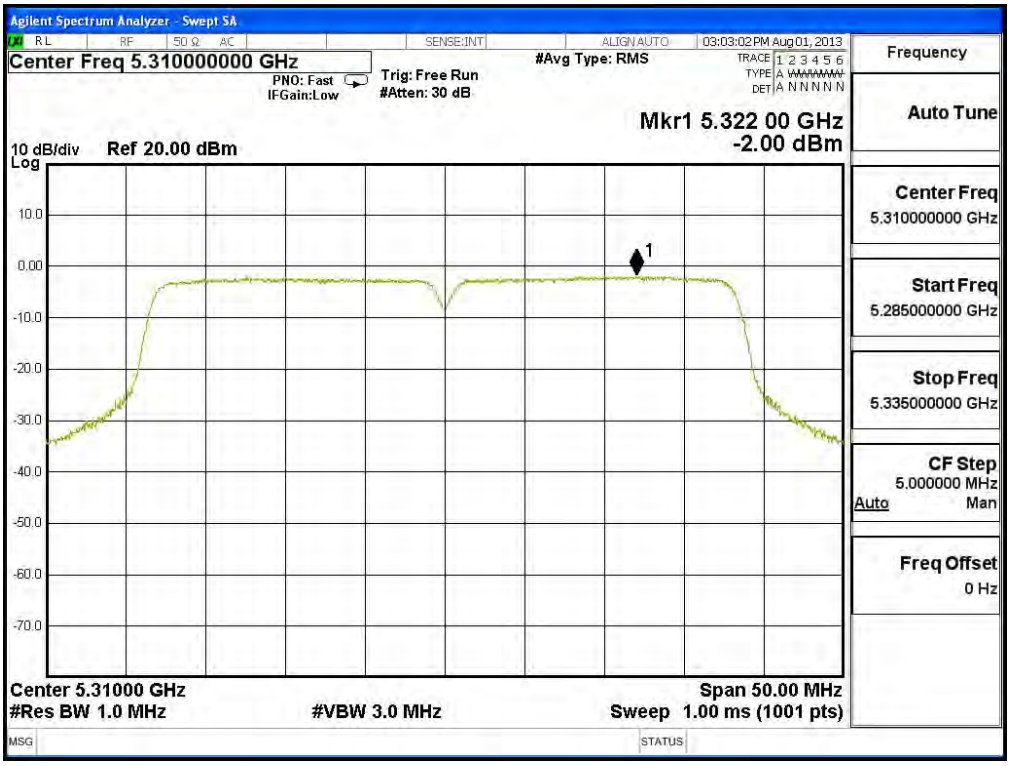
| Channel Number | Frequency (MHz) | Chain | PPSD/MHz (dBm) | Total PPSD/MHz (dBm)[1] | Required Limit (dBm) | Result |
|---|---|---|---|---|---|---|
| 54 | 5270 | A | 4.320 | 7.330 | <11 | Pass |
| | | B | 4.550 | 7.560 | <11 | Pass |
| 62 | 5310 | A | -2.000 | 1.010 | <11 | Pass |
| | | B | -1.830 | 1.180 | <11 | Pass |
| 102 | 5510 | A | -2.200 | 0.810 | <11 | Pass |
| | | B | -2.040 | 0.970 | <11 | Pass |
| 110 | 5550 | A | -1.750 | 1.260 | <11 | Pass |
| | | B | -1.600 | 1.410 | <11 | Pass |
| 134 | 5670 | A | -2.850 | 0.160 | <11 | Pass |
| | | B | -2.270 | 0.740 | <11 | Pass |

Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

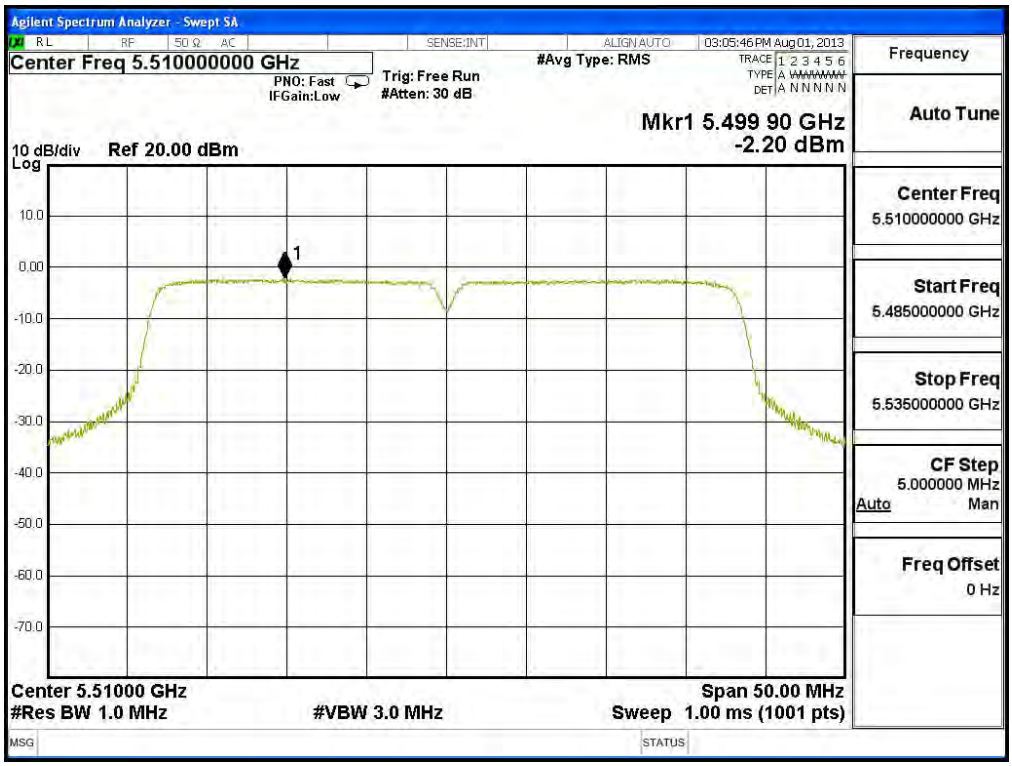
**Channel 54 – Chain A**



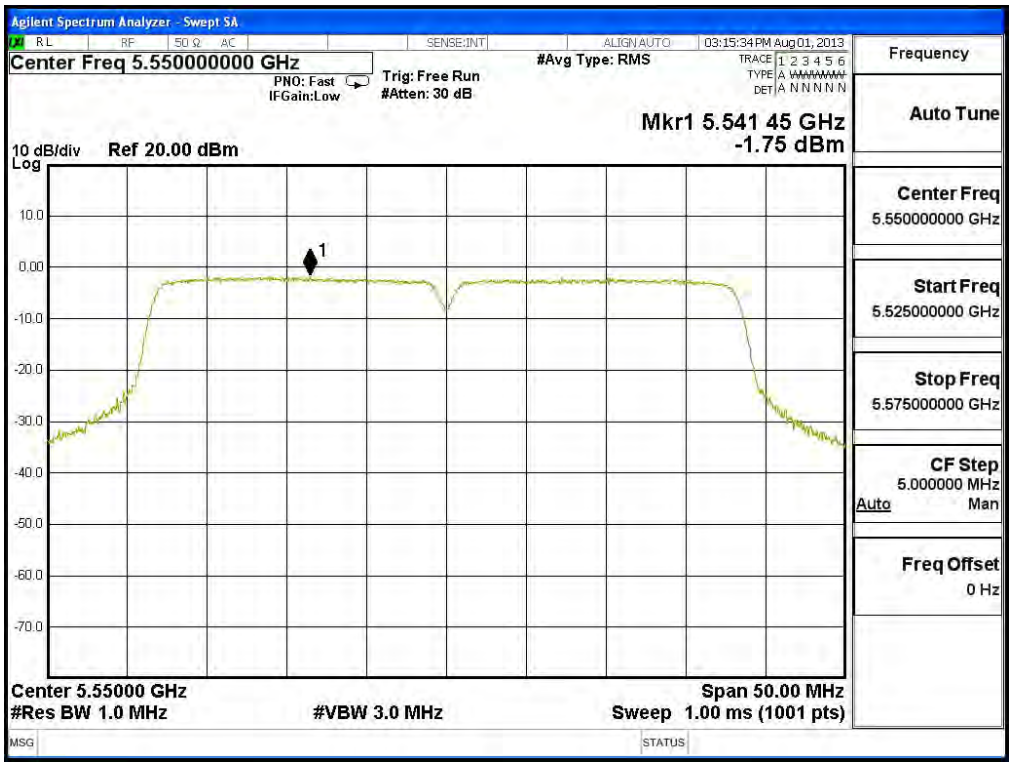

**Channel 62 – Chain A**



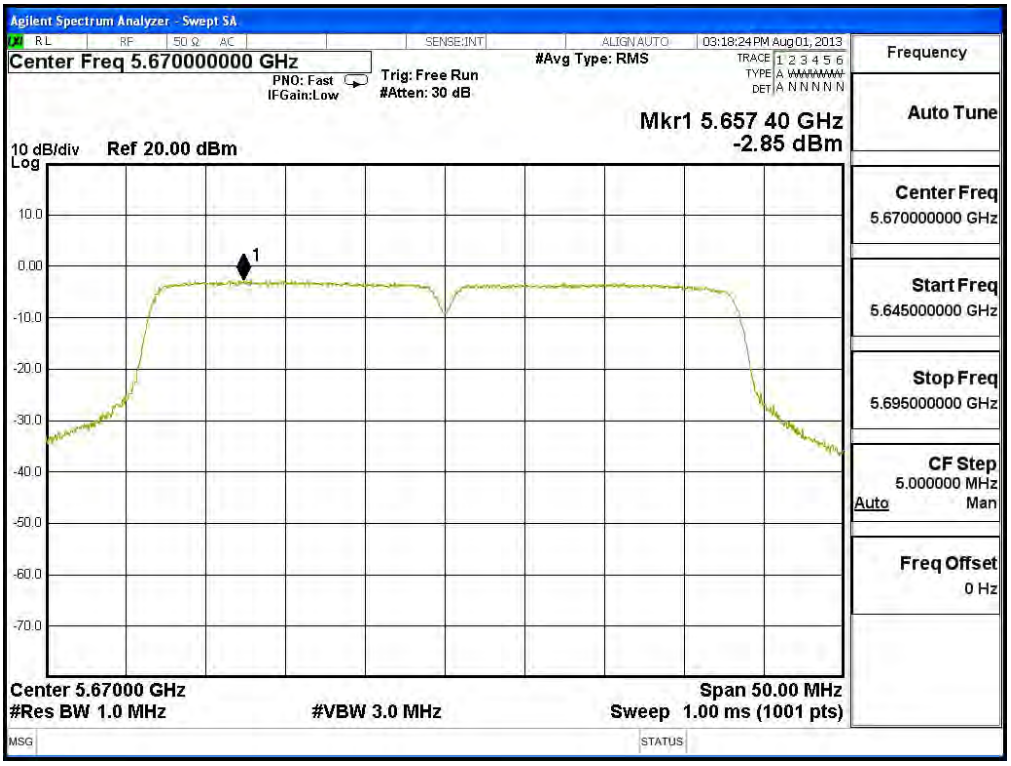
**Channel 102 – Chain A**



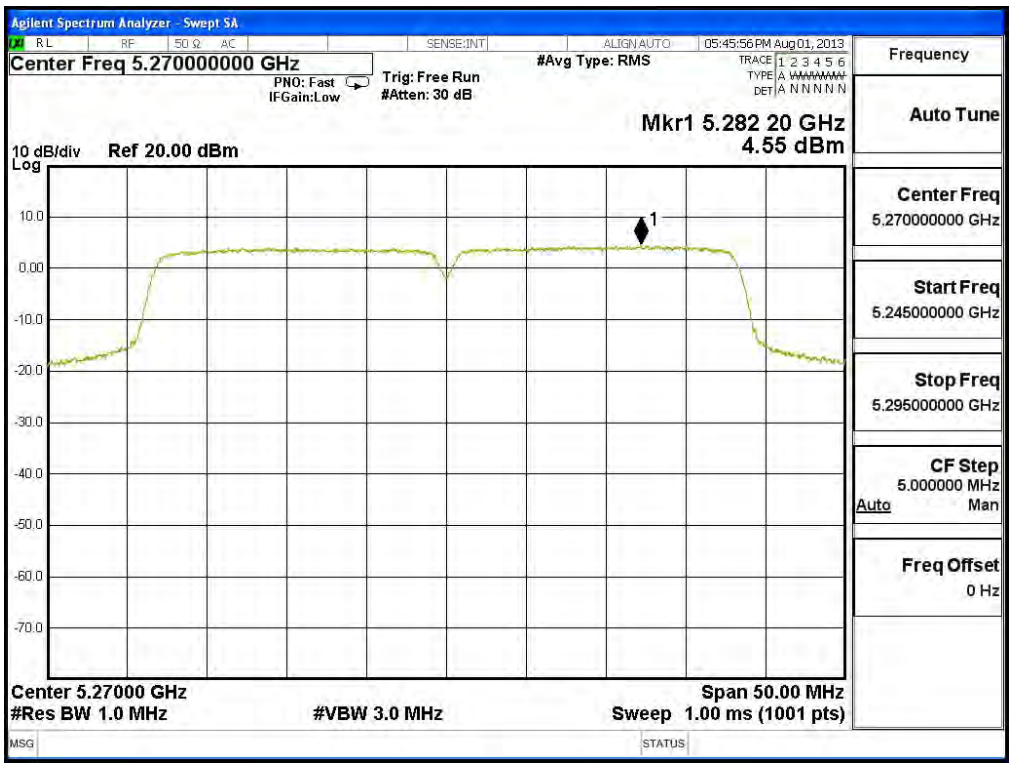

**Channel 110 – Chain A**



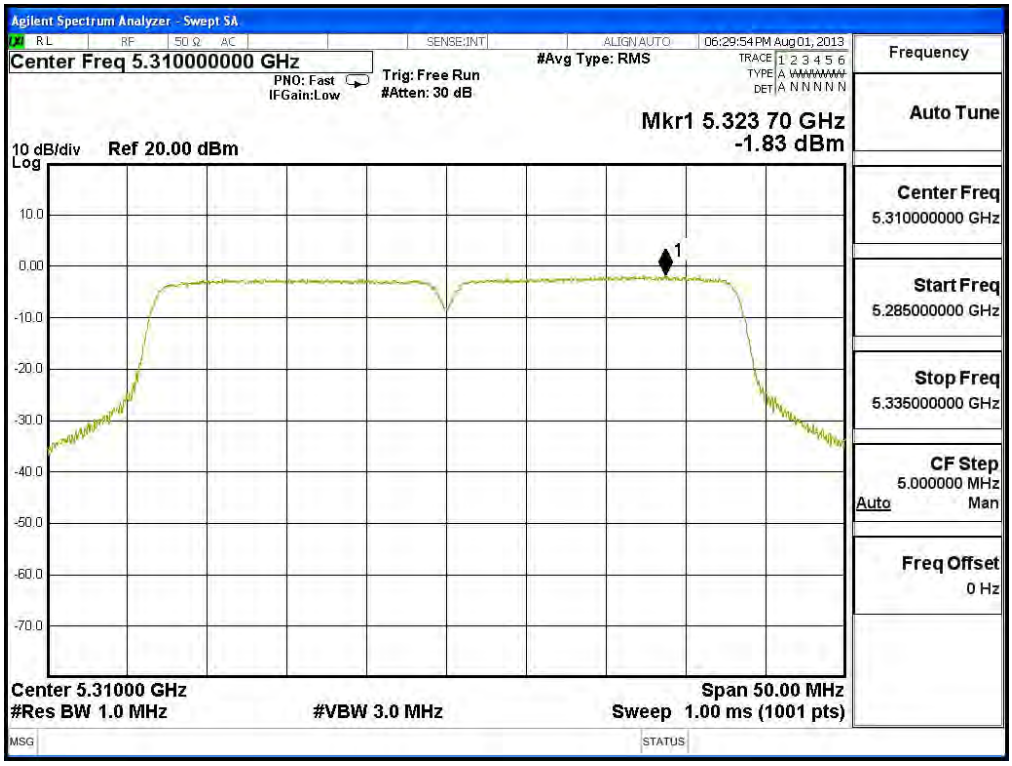
**Channel 134 – Chain A**



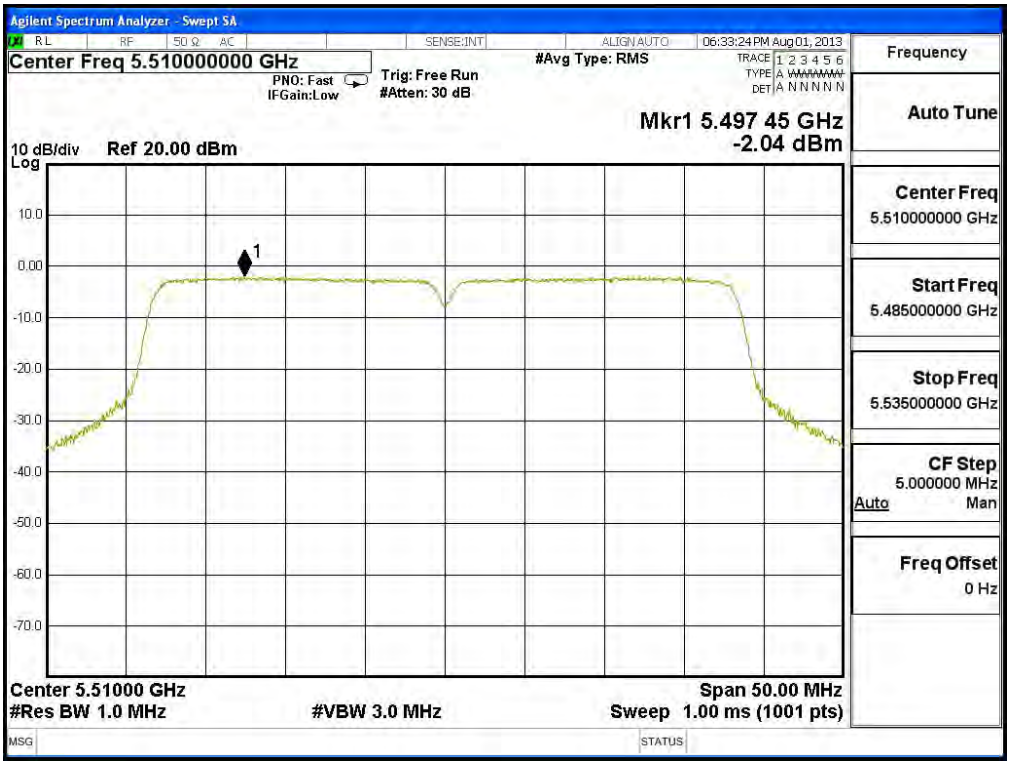

**Channel 54 – Chain B**



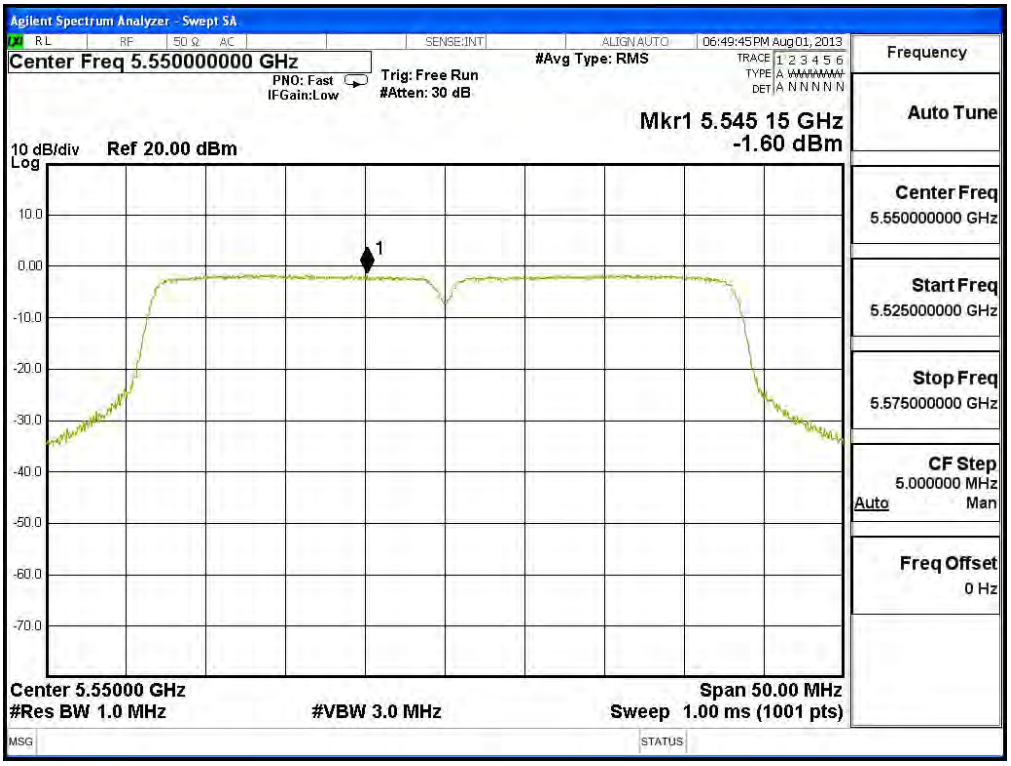
**Channel 62 – Chain B**



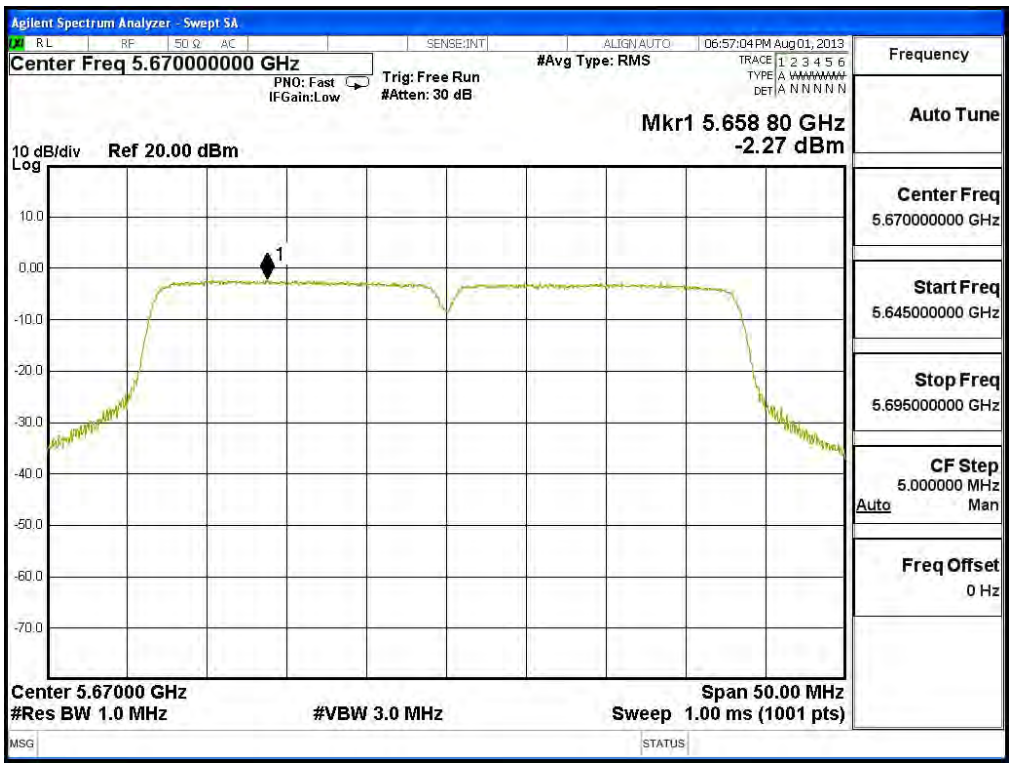

**Channel 102 – Chain B**



**Channel 110 – Chain B**




**Channel 134 – Chain B**



# 5. Peak Excursion

## 5.1. Test Equipment

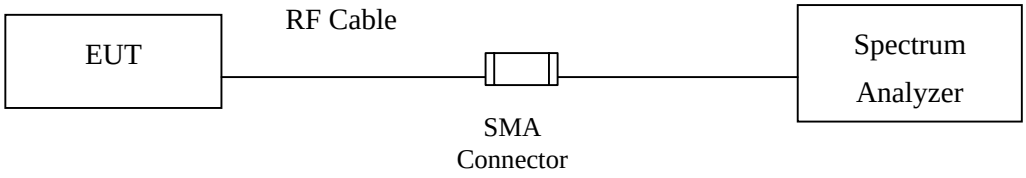
| | Equipment | Manufacturer | Model No./Serial No. | Last Cal. |
|---|---|---|---|---|
| | Spectrum Analyzer | R&S | FSP40 / 100170 | Jun, 2013 |
| | Spectrum Analyzer | Agilent | E4407B / US39440758 | Jun, 2013 |
| X | Spectrum Analyzer | Agilent | N9010A / MY48030495 | Apr., 2013 |

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.

## 5.2. Test Setup

**Conduction Power Measurement**




## 5.3. Limits

The ratio of the peak excursion of the modulation envelope (measured suing a peak hold function) to the Maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

## 5.4. Test Procedure

The EUT was setup to ANSI C63.10, 2009; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

Step 1: Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth.
Step 2: Find the maximum of the peak-max-hold spectrum.
(Set RBW = 1 MHz, VBW ≥ 3 MHz, Detector = peak, Trace mode = max-hold, Allow the sweeps to continue until the trace stabilizes,Use the peak search function to find the peak of the spectrum.)
Step 3: Use the procedure found under KDB-789033 F) to measure the PPSD.
Step 4: Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD.

## 5.5. Uncertainty

± 1.27 dB

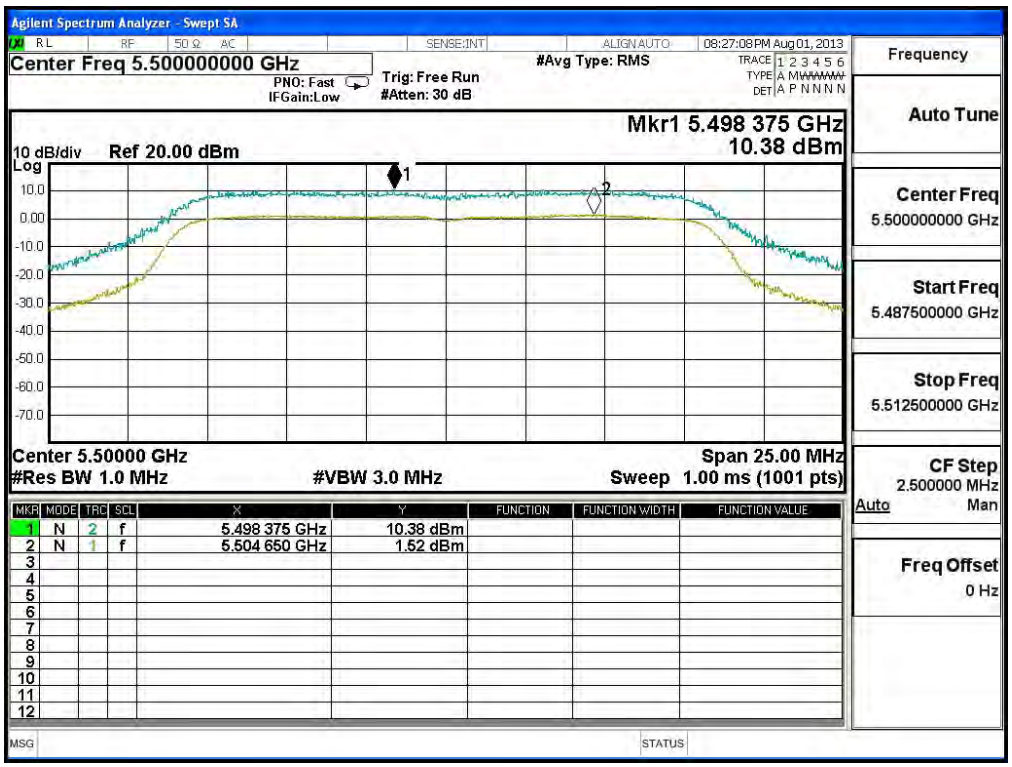
## 5.6. Test Result of Peak Excursion

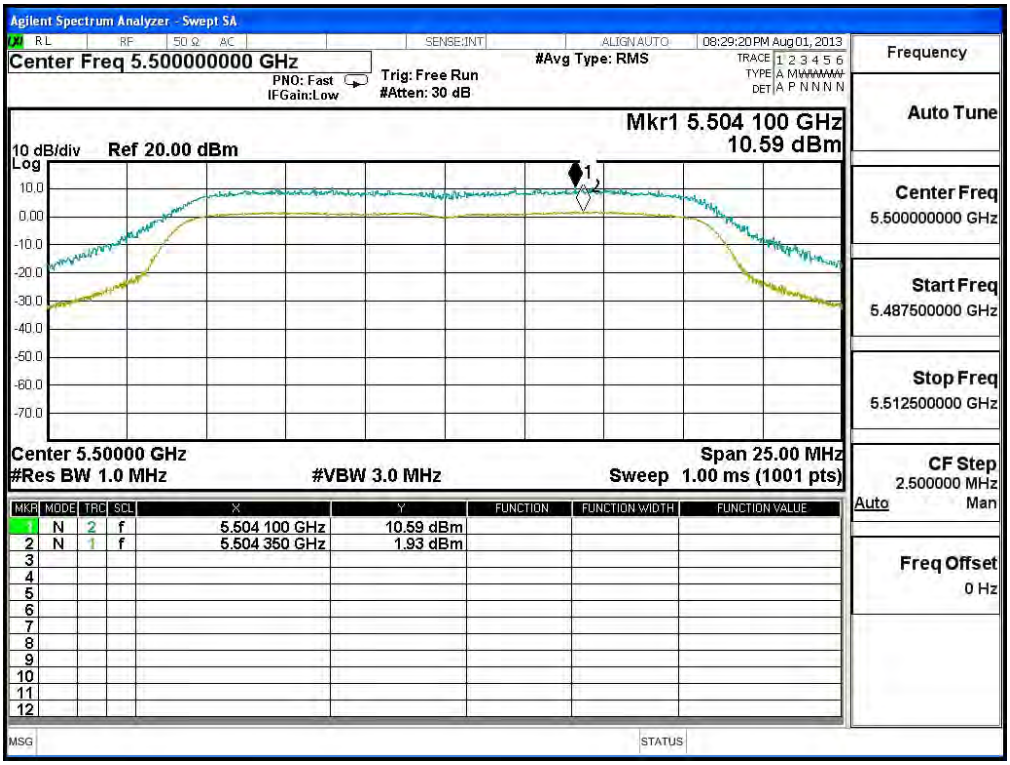
Product : SpectraGuard® Access Point / Sensor
Test Item : Peak Excursion
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna)

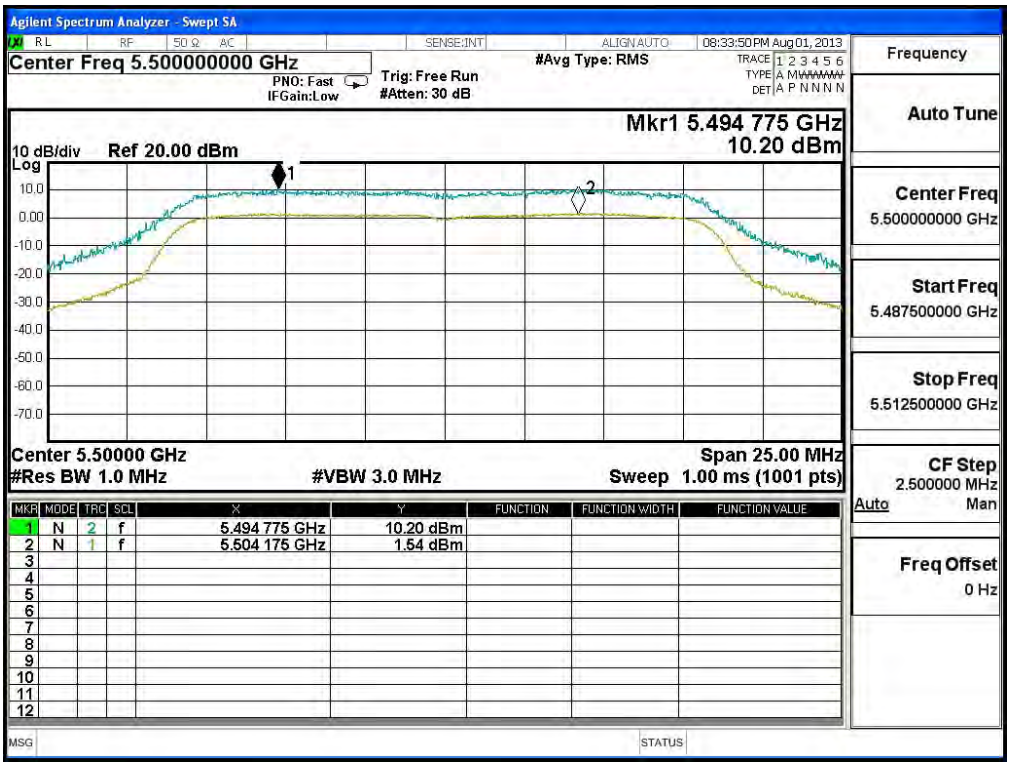
**CHAIN A**

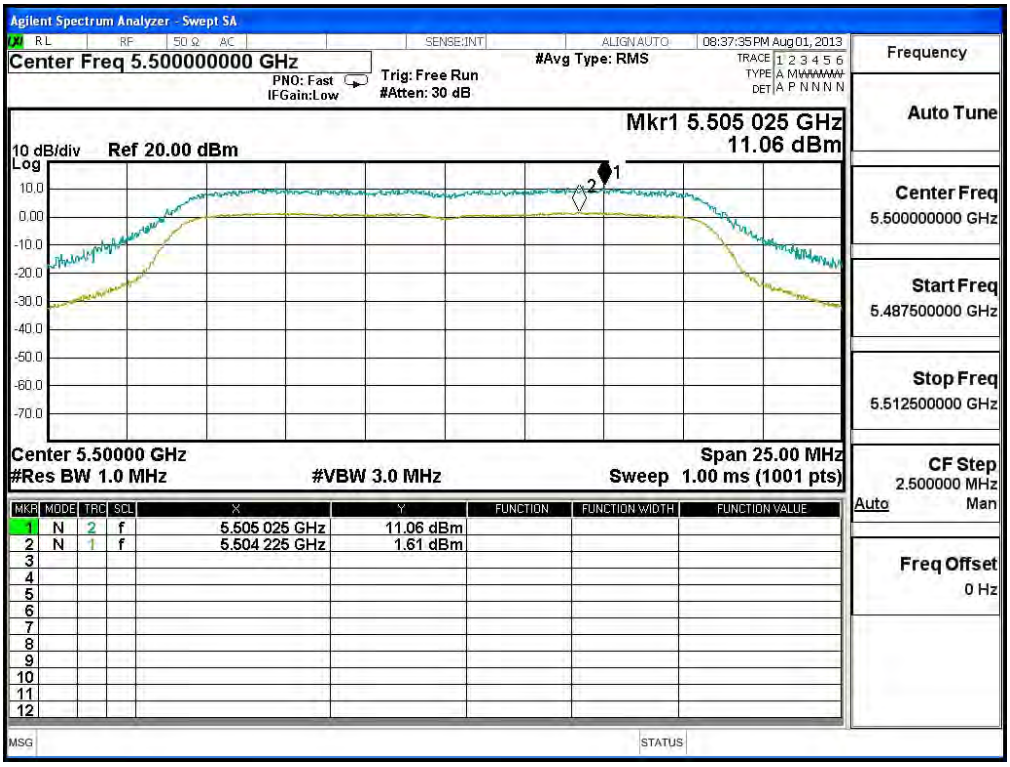
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Measurement Level (dB) | Required Limit (dB) | Result |
|---|---|---|---|---|---|
| 100 | 5500 | MCS (0) | 8.860 | <13 | Pass |
| | | MCS (2) | 8.660 | <13 | Pass |
| | | MCS (4) | 8.660 | <13 | Pass |
| | | MCS (7) | 9.450 | <13 | Pass |

**Channel 100:**




Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
08:29:20 PM Aug 01, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.504 100 GHz
10.59 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.504 100 GHz 10.59 dBm
2 N 1 f 5.504 350 GHz 1.93 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

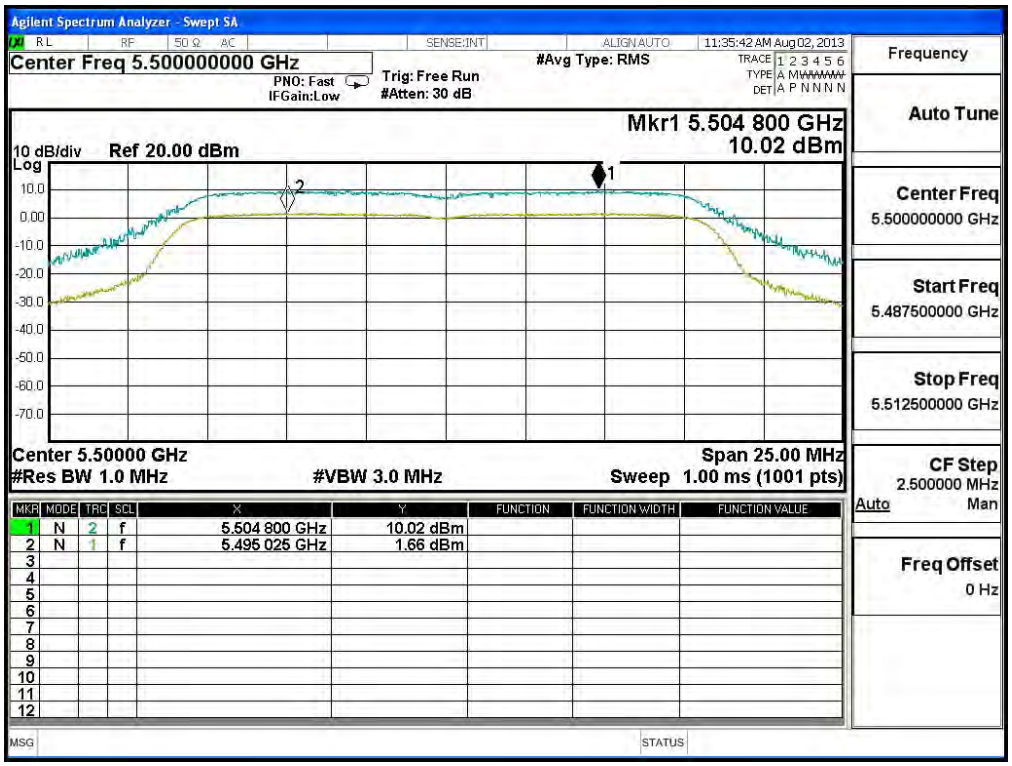

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
08:33:50 PM Aug 01, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.494 775 GHz
10.20 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.494 775 GHz 10.20 dBm
2 N 1 f 5.504 175 GHz 1.54 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

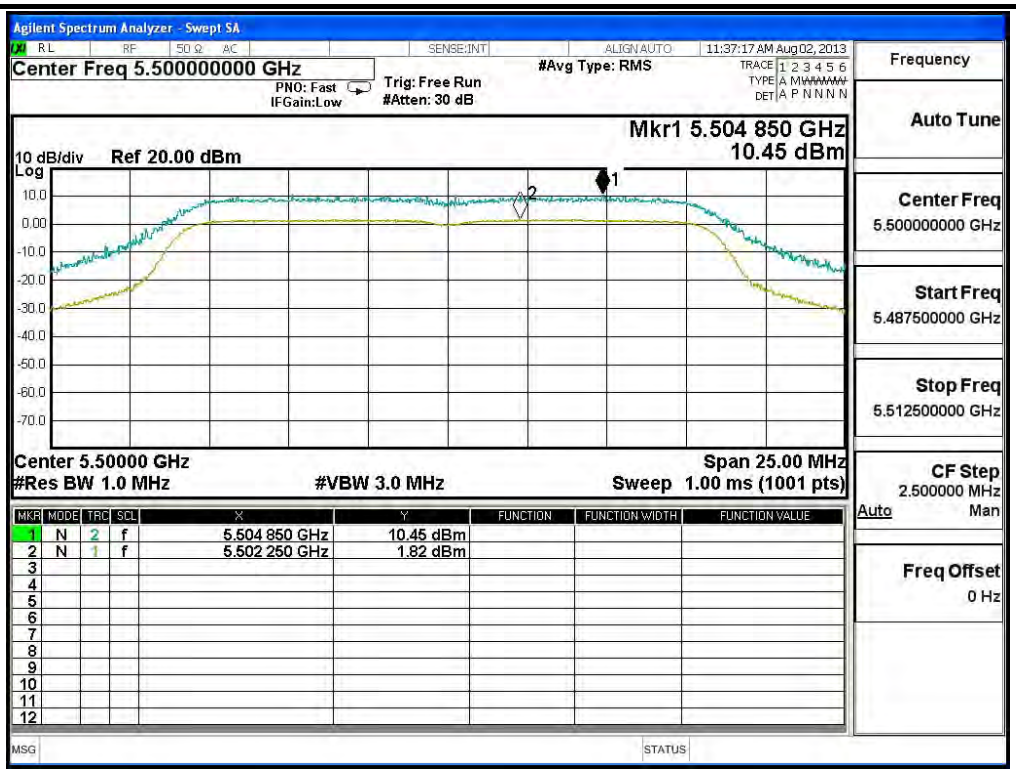

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
08:37:35 PM Aug 01, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.505 025 GHz
11.06 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.505 025 GHz 11.06 dBm
2 N 1 f 5.504 225 GHz 1.61 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

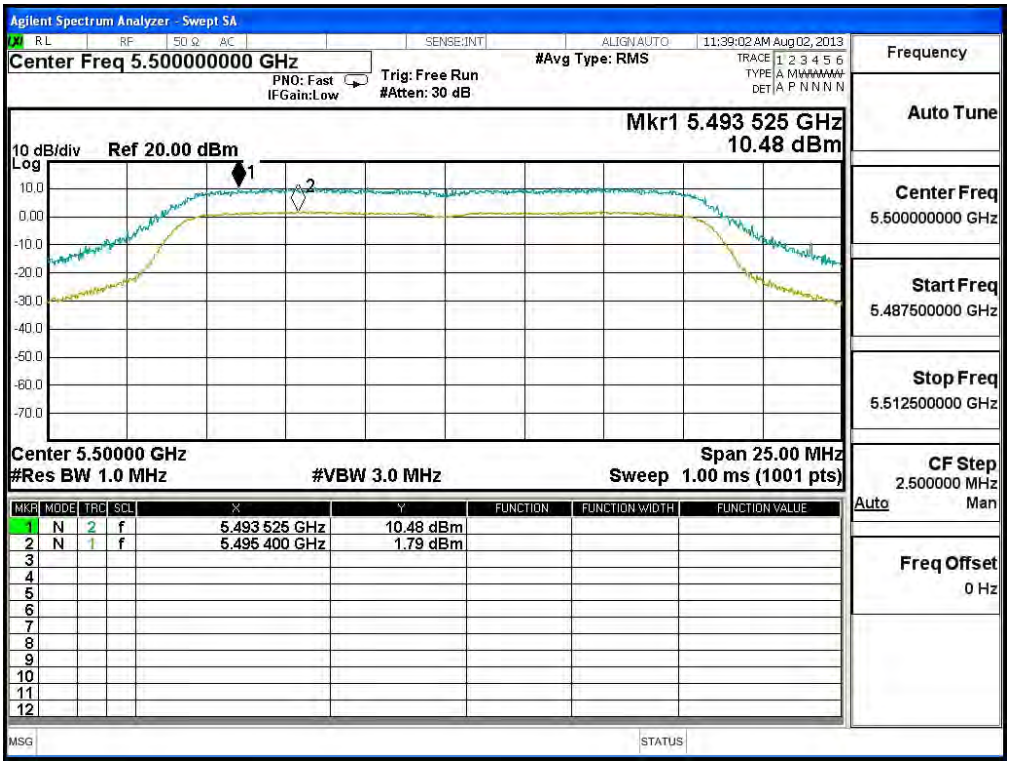
**CHAIN B**

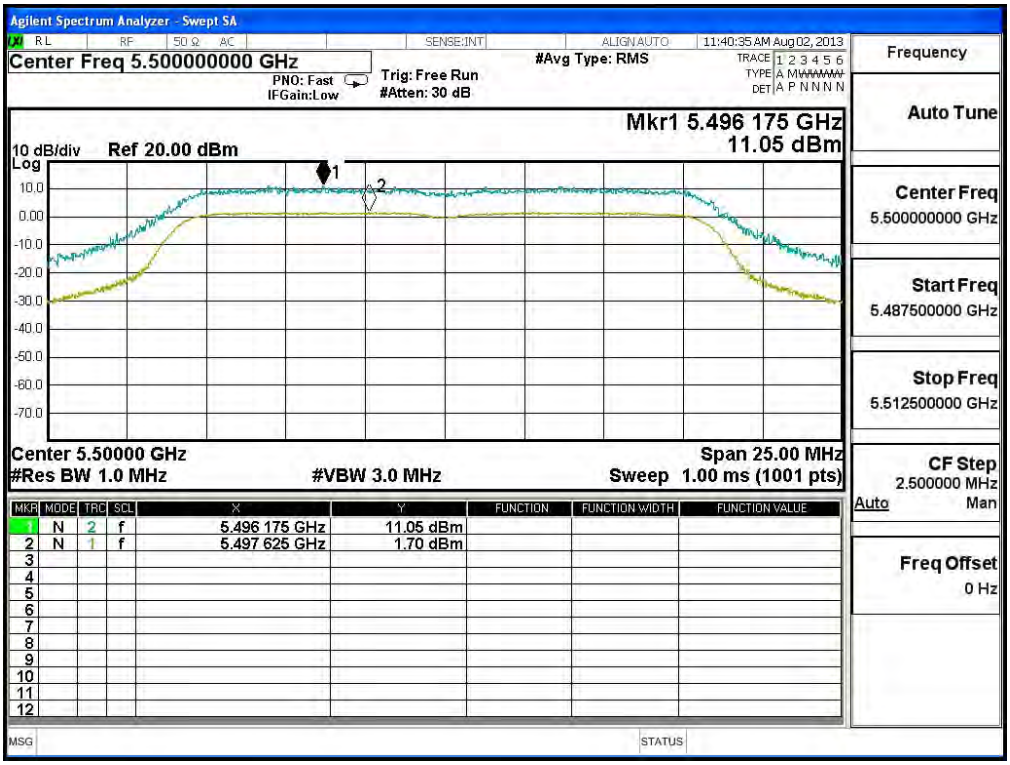
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Measurement Level (dB) | Required Limit (dB) | Result |
|---|---|---|---|---|---|
| 100 | 5500 | MCS (0) | 8.360 | <13 | Pass |
| | | MCS (2) | 8.630 | <13 | Pass |
| | | MCS (4) | 8.690 | <13 | Pass |
| | | MCS (7) | 9.350 | <13 | Pass |

**Channel 100:**




Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
11:37:17 AM Aug 02, 2013
Frequency
Auto Tune
Mkr1 5.504 850 GHz
10.45 dBm
10 dB/div
Log
Ref 20.00 dBm
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
1 N 2 f 5.504 850 GHz 10.45 dBm
2 N 1 f 5.502 250 GHz 1.82 dBm
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
11:39:02 AM Aug 02, 2013
Frequency
Auto Tune
Mkr1 5.493 525 GHz
10.48 dBm
10 dB/div
Log
Ref 20.00 dBm
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
1 N 2 f 5.493 525 GHz 10.48 dBm
2 N 1 f 5.495 400 GHz 1.79 dBm
MSG
STATUS

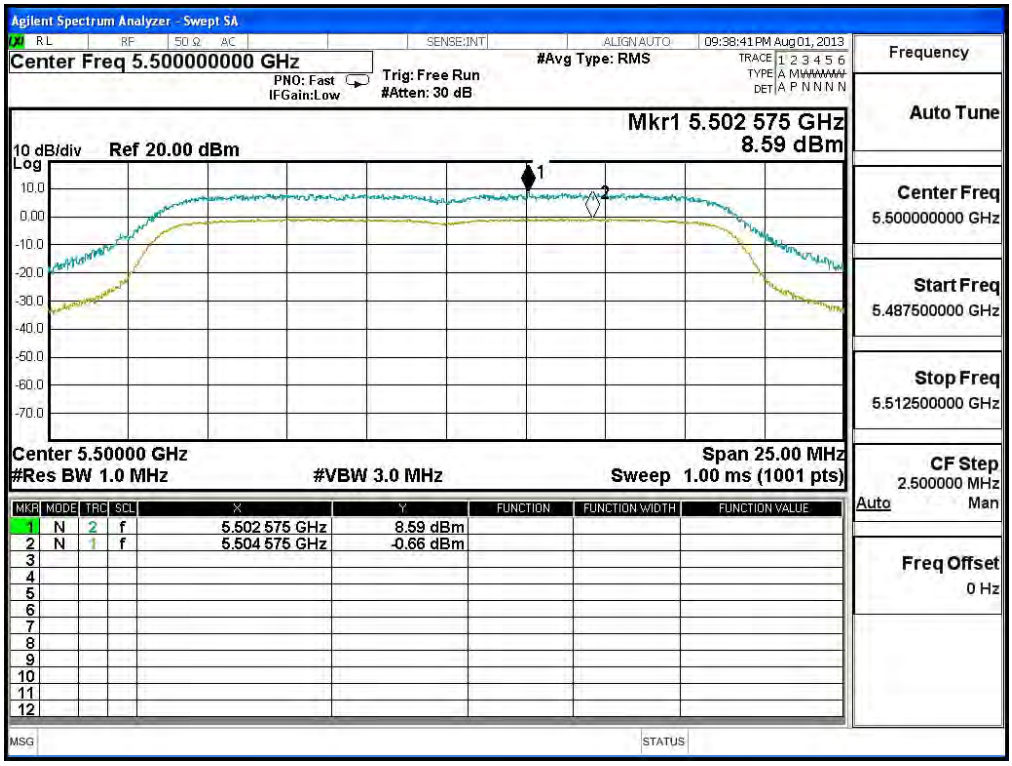

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
11:40:35 AM Aug 02, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.496 175 GHz
11.05 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.496 175 GHz 11.05 dBm
2 N 1 f 5.497 625 GHz 1.70 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

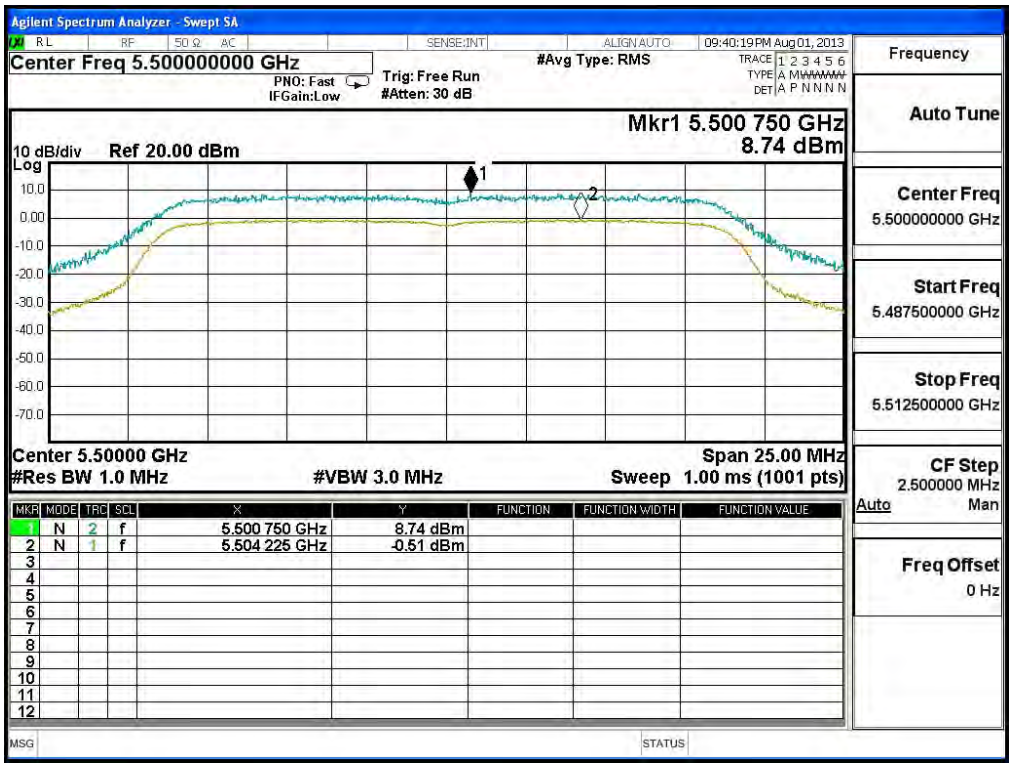
Product : SpectraGuard® Access Point / Sensor
Test Item : Peak Excursion
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna)

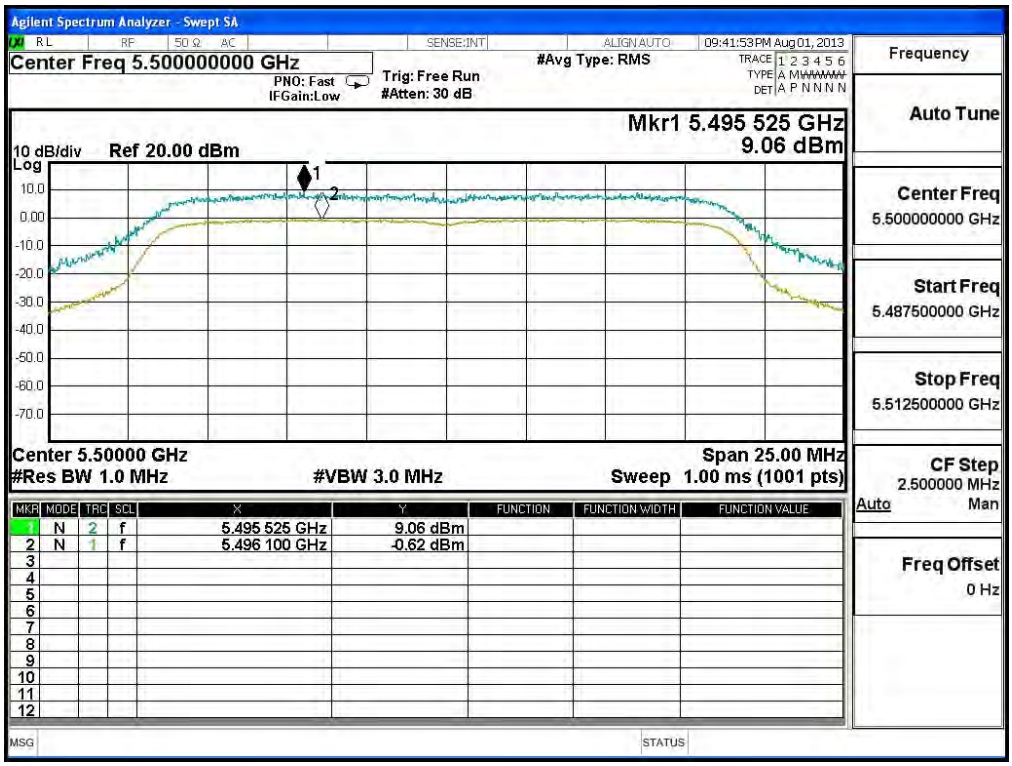
**Chain A**

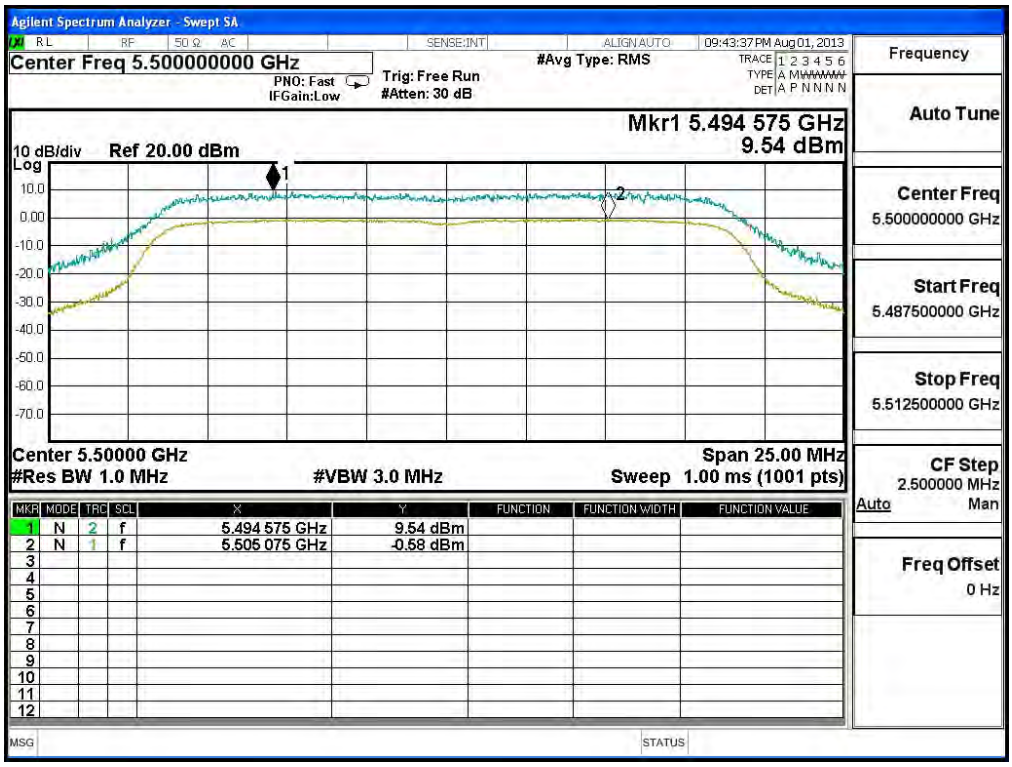
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Measurement Level (dB) | Required Limit (dB) | Result |
|---|---|---|---|---|---|
| 100 | 5500 | MCS (0) | 9.250 | <13 | Pass |
| | | MCS (2) | 9.250 | <13 | Pass |
| | | MCS (4) | 9.680 | <13 | Pass |
| | | MCS (7) | 10.390 | <13 | Pass |

**Channel 100:**


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
09:38:41 PM Aug 01, 2013
Mkr1 5.502 575 GHz
8.59 dBm
10 dB/div
Log
Ref 20.00 dBm
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 2 f 5.502 575 GHz 8.59 dBm
2 N 1 f 5.504 575 GHz -0.66 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
09:40:19 PM Aug 01, 2013
Mkr1 5.500 750 GHz
8.74 dBm
10 dB/div
Log
Ref 20.00 dBm
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 2 f 5.500 750 GHz 8.74 dBm
2 N 1 f 5.504 225 GHz -0.51 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

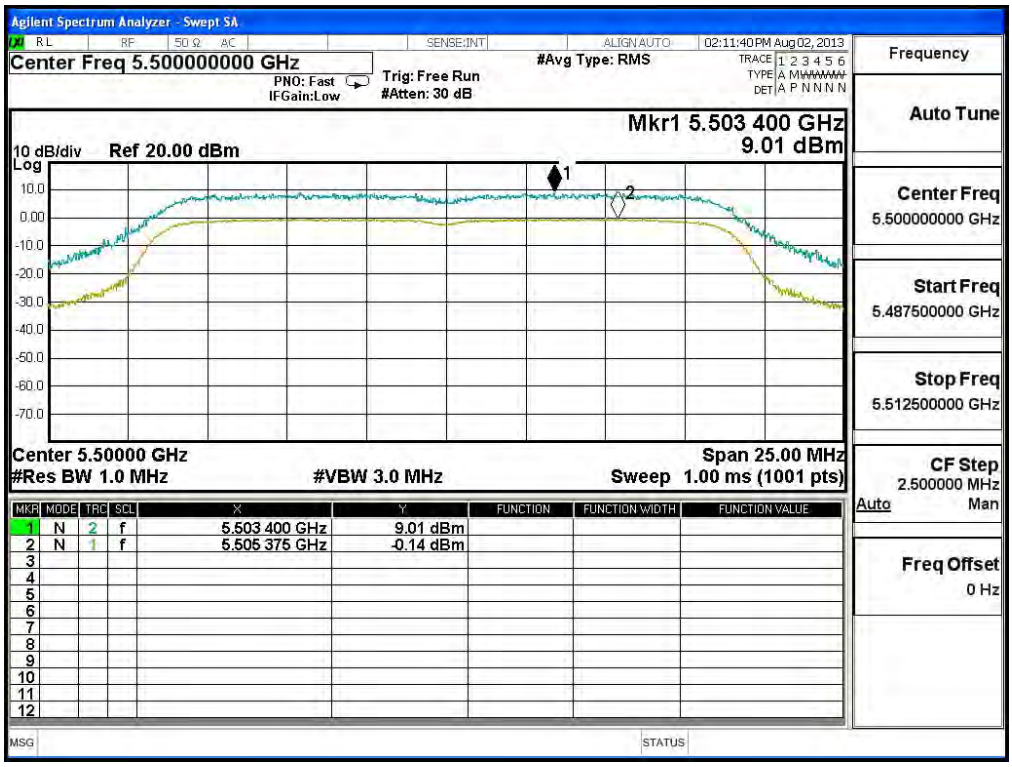

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
09:41:53 PM Aug 01, 2013
Mkr1 5.495 525 GHz
9.06 dBm
10 dB/div
Ref 20.00 dBm
Log
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 2 f 5.495 525 GHz 9.06 dBm
2 N 1 f 5.496 100 GHz -0.62 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

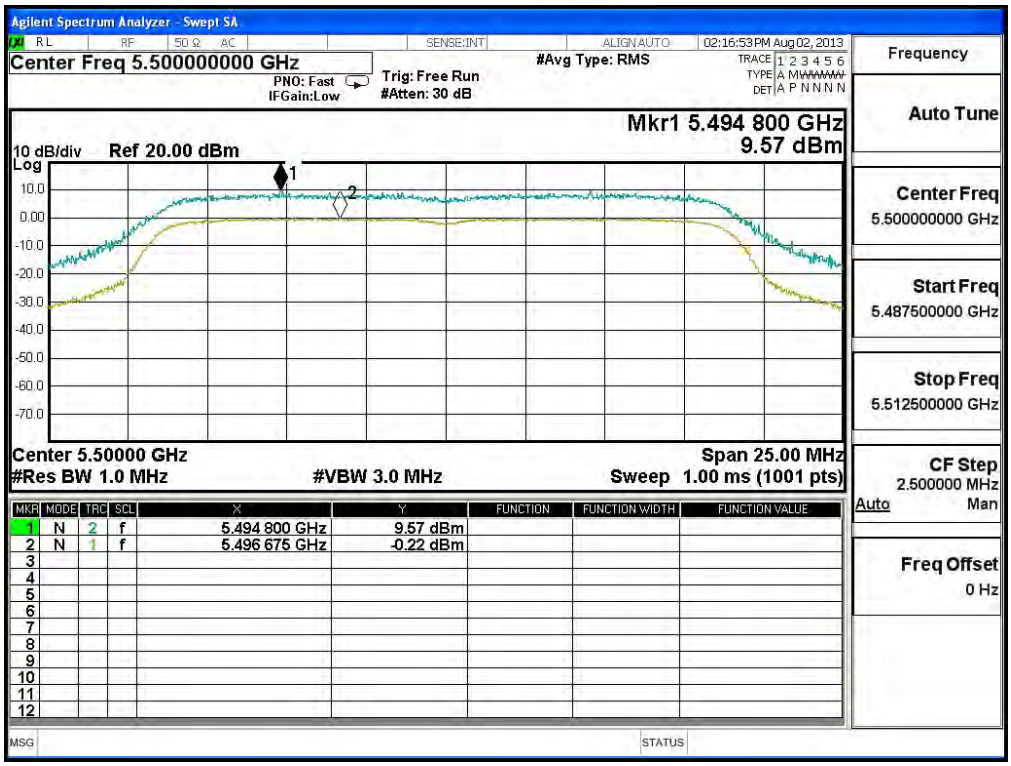

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
09:43:37 PM Aug 01, 2013
Mkr1 5.494 575 GHz
9.54 dBm
10 dB/div
Ref 20.00 dBm
Log
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 2 f 5.494 575 GHz 9.54 dBm
2 N 1 f 5.505 075 GHz -0.58 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

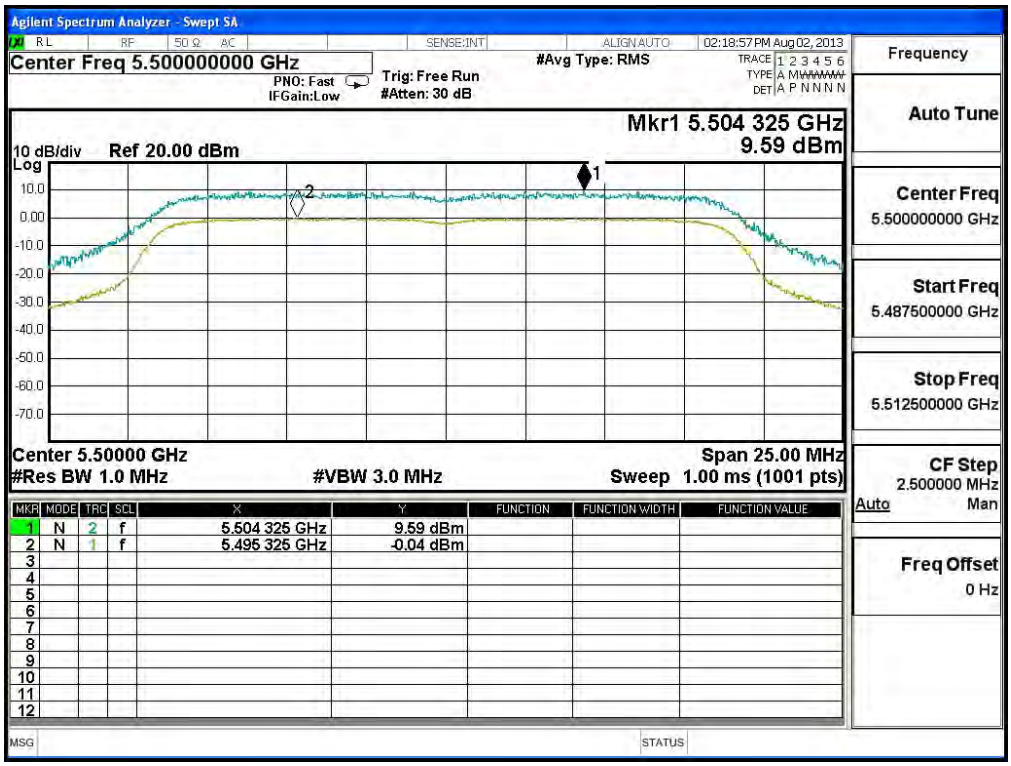
**Chain B**

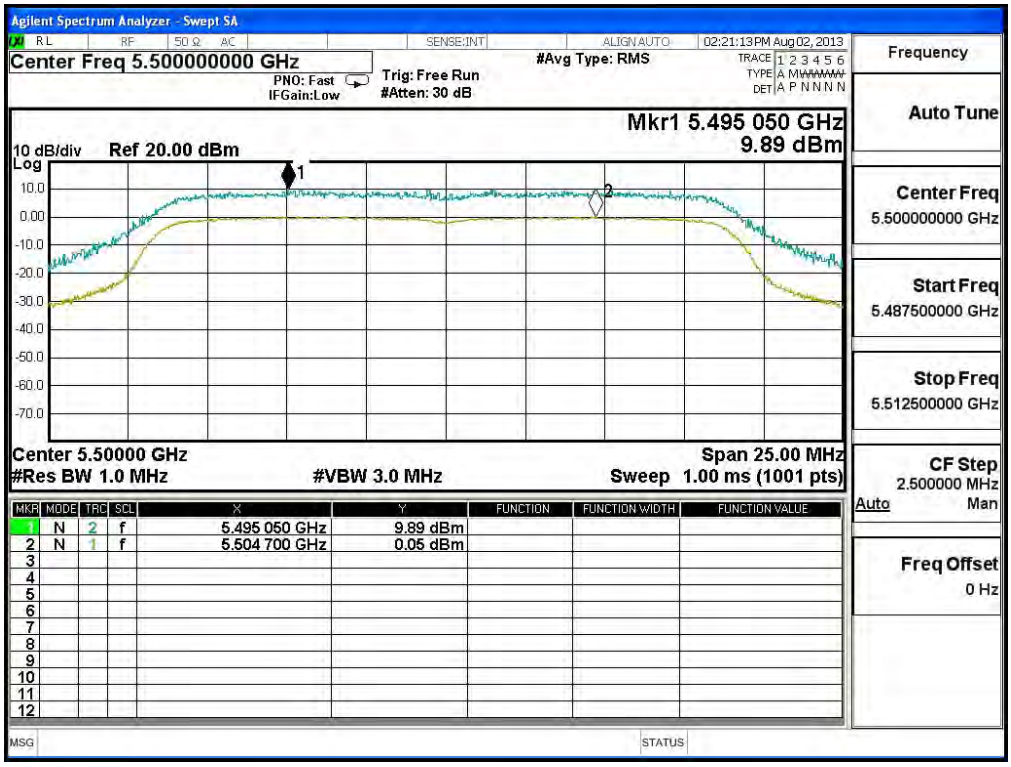
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Measurement Level (dB) | Required Limit (dB) | Result |
|---|---|---|---|---|---|
| 100 | 5500 | MCS (0) | 9.150 | <13 | Pass |
| | | MCS (2) | 9.790 | <13 | Pass |
| | | MCS (4) | 9.630 | <13 | Pass |
| | | MCS (7) | 9.840 | <13 | Pass |

**Channel 100:**




Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
02:16:53 PM Aug 02, 2013
Mkr1 5.494 800 GHz
9.57 dBm
10 dB/div
Ref 20.00 dBm
Log
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 2 f 5.494 800 GHz 9.57 dBm
2 N 1 f 5.496 675 GHz -0.22 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
02:18:57 PM Aug 02, 2013
Mkr1 5.504 325 GHz
9.59 dBm
10 dB/div
Ref 20.00 dBm
Log
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 2 f 5.504 325 GHz 9.59 dBm
2 N 1 f 5.495 325 GHz -0.04 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

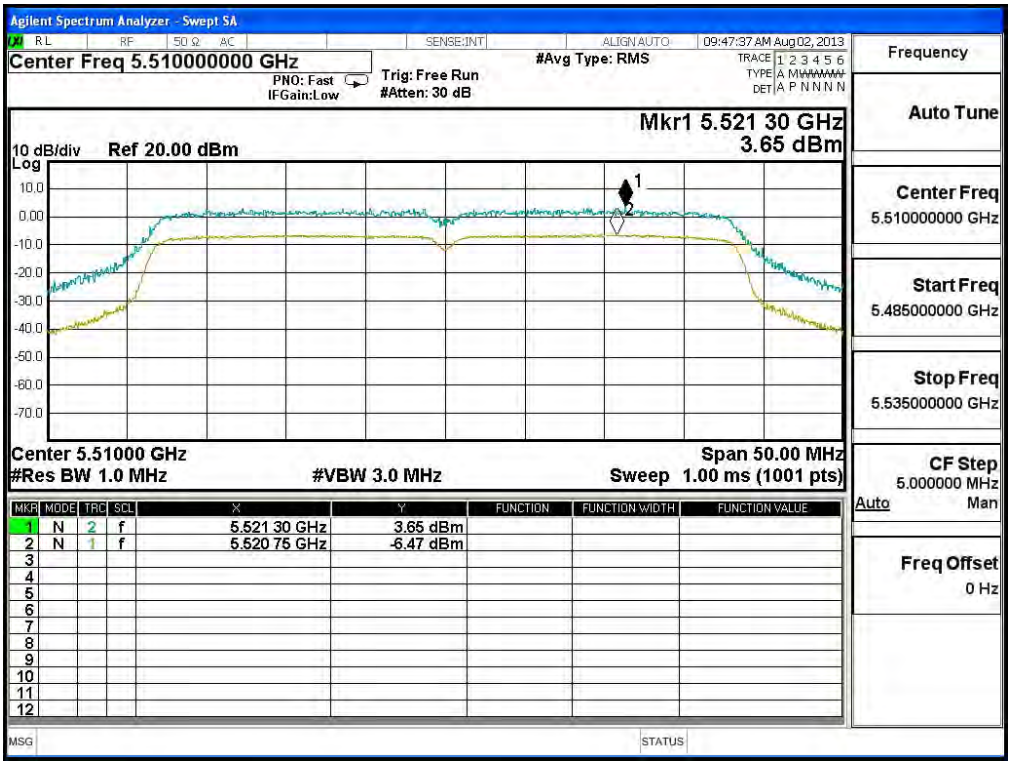

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
02:21:13 PM Aug 02, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.495 050 GHz
9.89 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.495 050 GHz 9.89 dBm
2 N 1 f 5.504 700 GHz 0.05 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

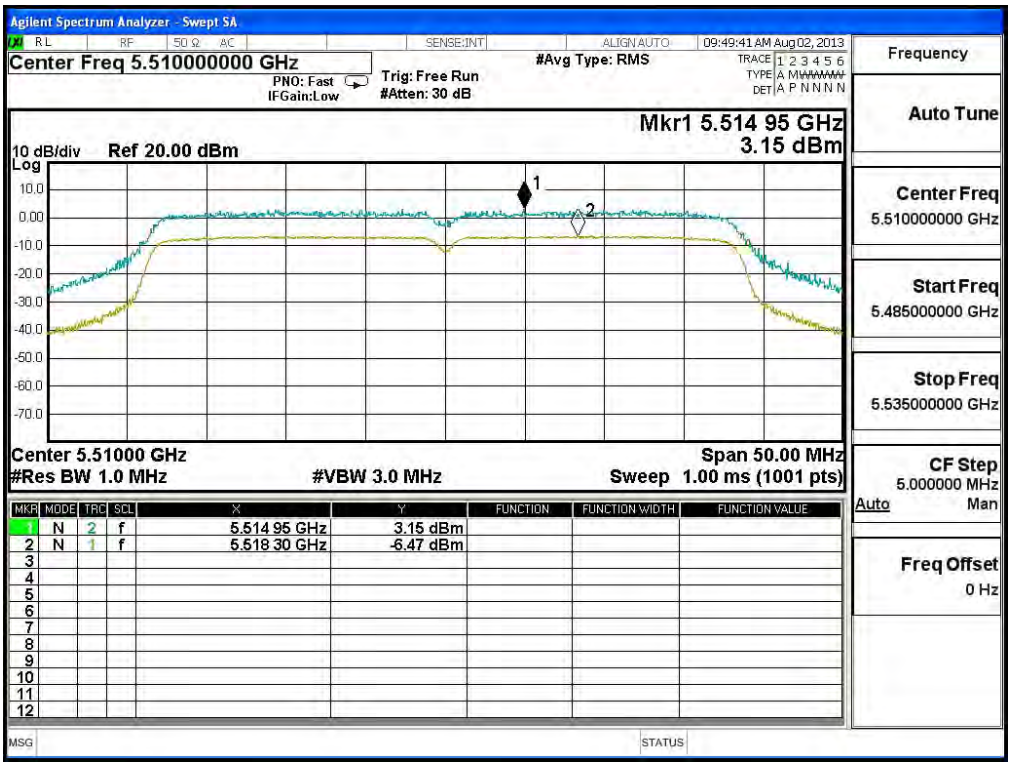
Product : SpectraGuard® Access Point / Sensor
Test Item : Peak Excursion
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna)

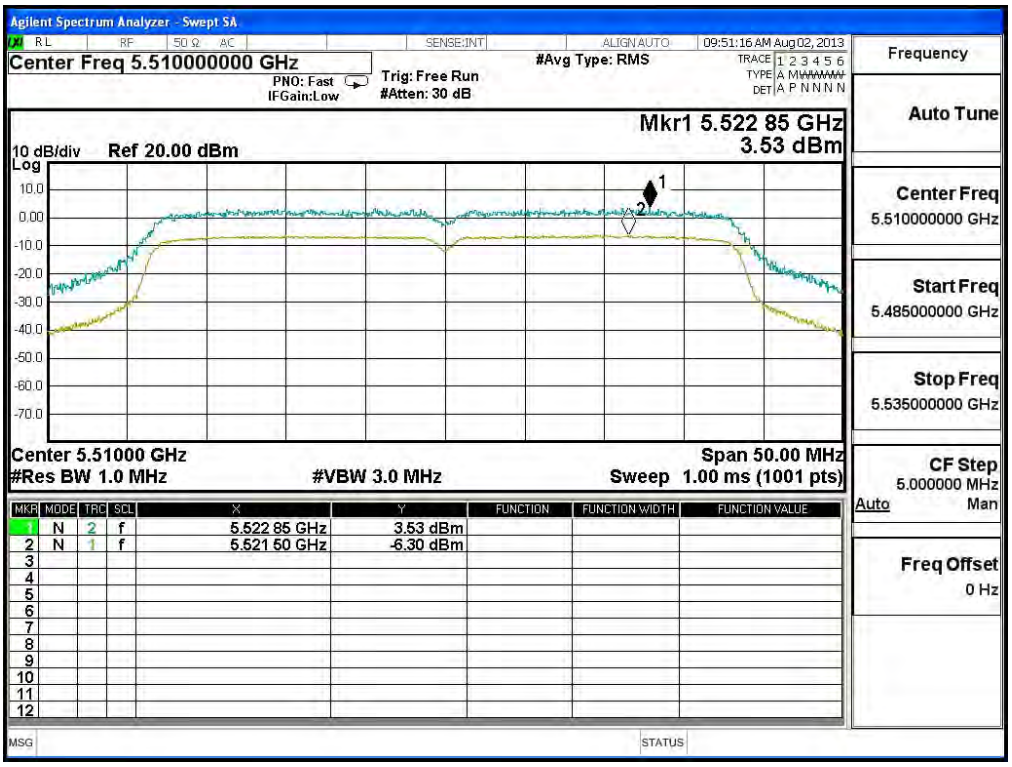
**Chain A**

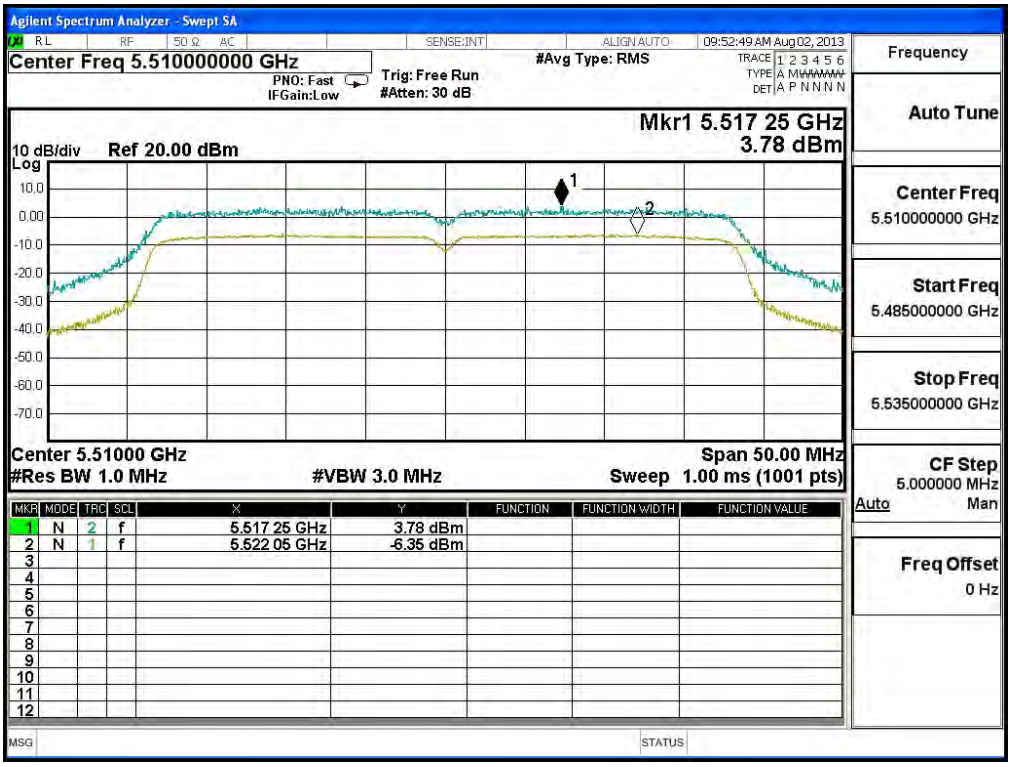
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Measurement Level (dB) | Required Limit (dB) | Result |
|---|---|---|---|---|---|
| 102 | 5510 | MCS (0) | 10.120 | <13 | Pass |
| | | MCS (2) | 9.620 | <13 | Pass |
| | | MCS (4) | 9.830 | <13 | Pass |
| | | MCS (7) | 10.130 | <13 | Pass |

**Channel 102:**




Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:49:41 AM Aug 02, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.514 95 GHz
3.15 dBm
10 dB/div
Ref 20.00 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.514 95 GHz 3.15 dBm
2 N 1 f 5.518 30 GHz -6.47 dBm
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

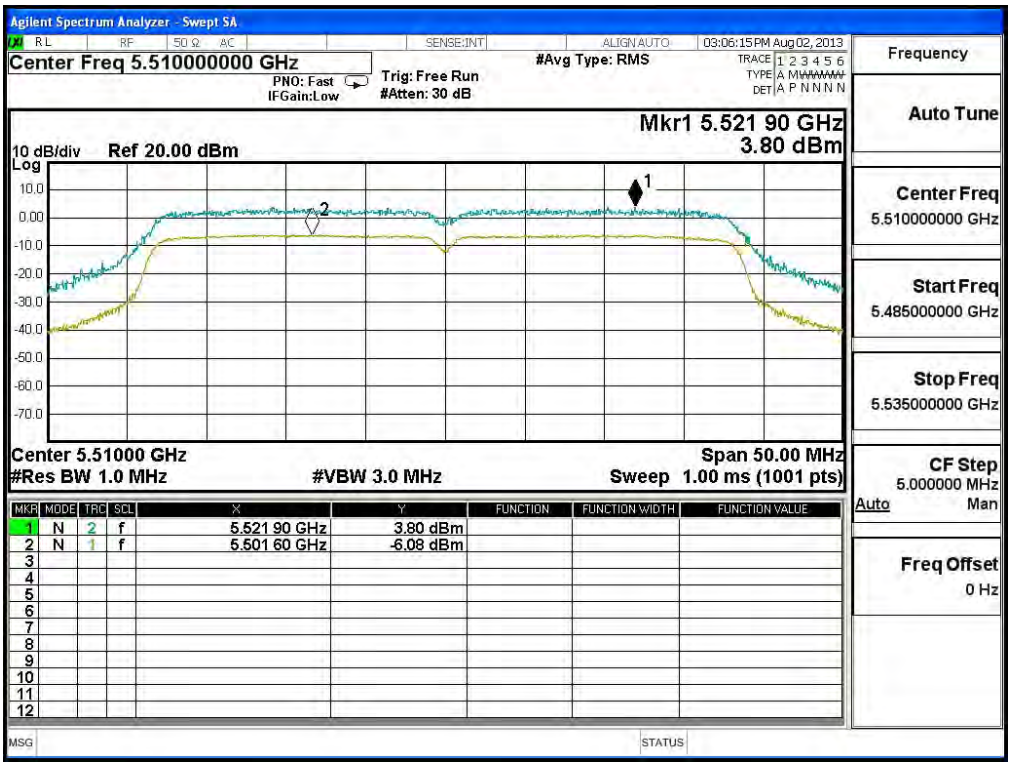

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:51:16 AM Aug 02, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.522 85 GHz
3.53 dBm
10 dB/div
Ref 20.00 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.522 85 GHz 3.53 dBm
2 N 1 f 5.521 50 GHz -6.30 dBm
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

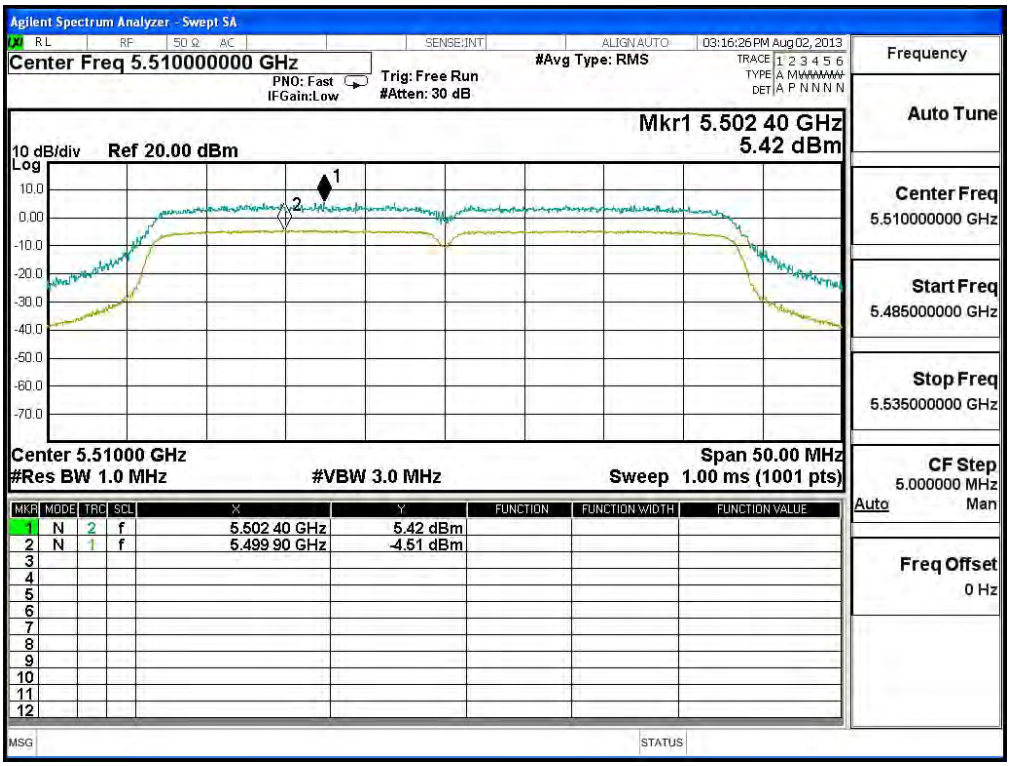

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:52:49 AM Aug 02, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.517 25 GHz
3.78 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.517 25 GHz 3.78 dBm
2 N 1 f 5.522 05 GHz -6.35 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

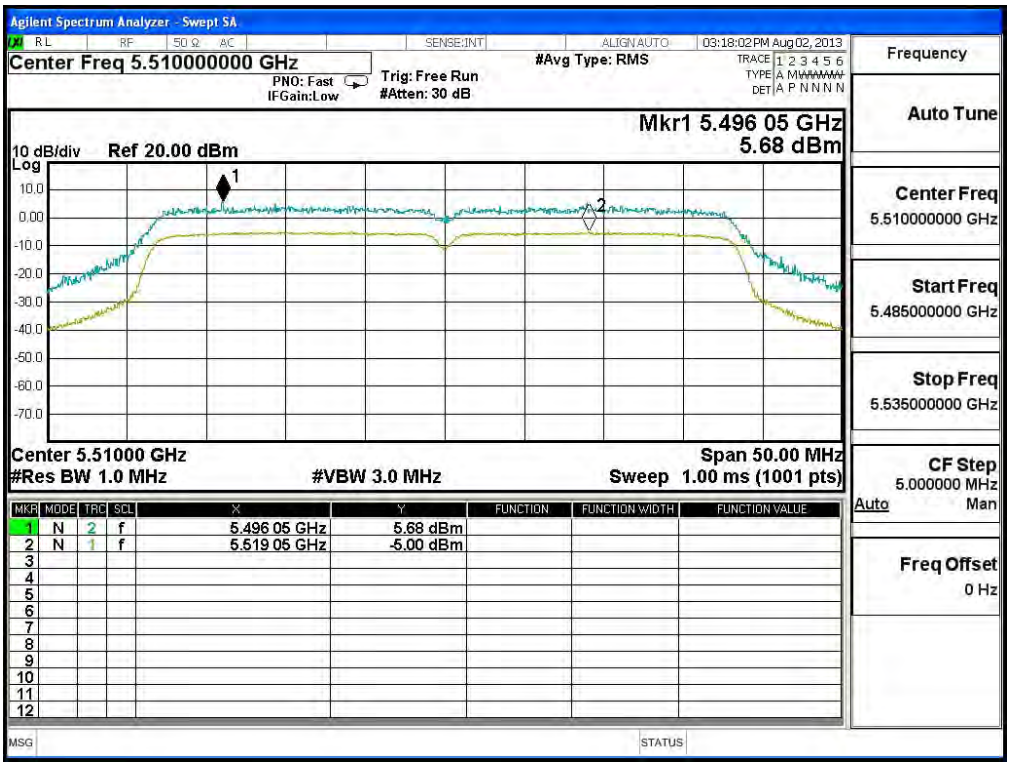
**Chain B**

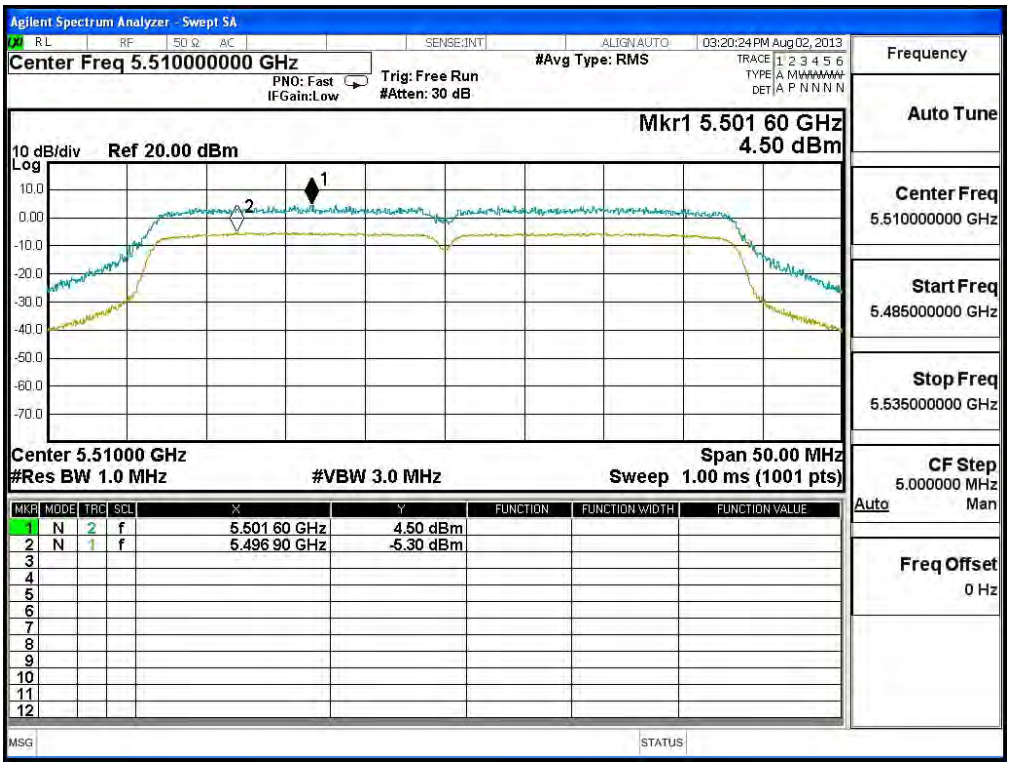
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Measurement Level (dB) | Required Limit (dB) | Result |
|---|---|---|---|---|---|
| 102 | 5510 | MCS (0) | 9.880 | <13 | Pass |
| | | MCS (2) | 9.930 | <13 | Pass |
| | | MCS (4) | 10.680 | <13 | Pass |
| | | MCS (7) | 9.800 | <13 | Pass |

**Channel 102:**




Agilent Spectrum Analyzer - Swept SA
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
03:16:26 PM Aug 02, 2013
Mkr1 5.502 40 GHz
5.42 dBm
10 dB/div
Log
Ref 20.00 dBm
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 2 f 5.502 40 GHz 5.42 dBm
2 N 1 f 5.499 90 GHz -4.51 dBm
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
03:18:02 PM Aug 02, 2013
Mkr1 5.496 05 GHz
5.68 dBm
10 dB/div
Log
Ref 20.00 dBm
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 2 f 5.496 05 GHz 5.68 dBm
2 N 1 f 5.519 05 GHz -5.00 dBm
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

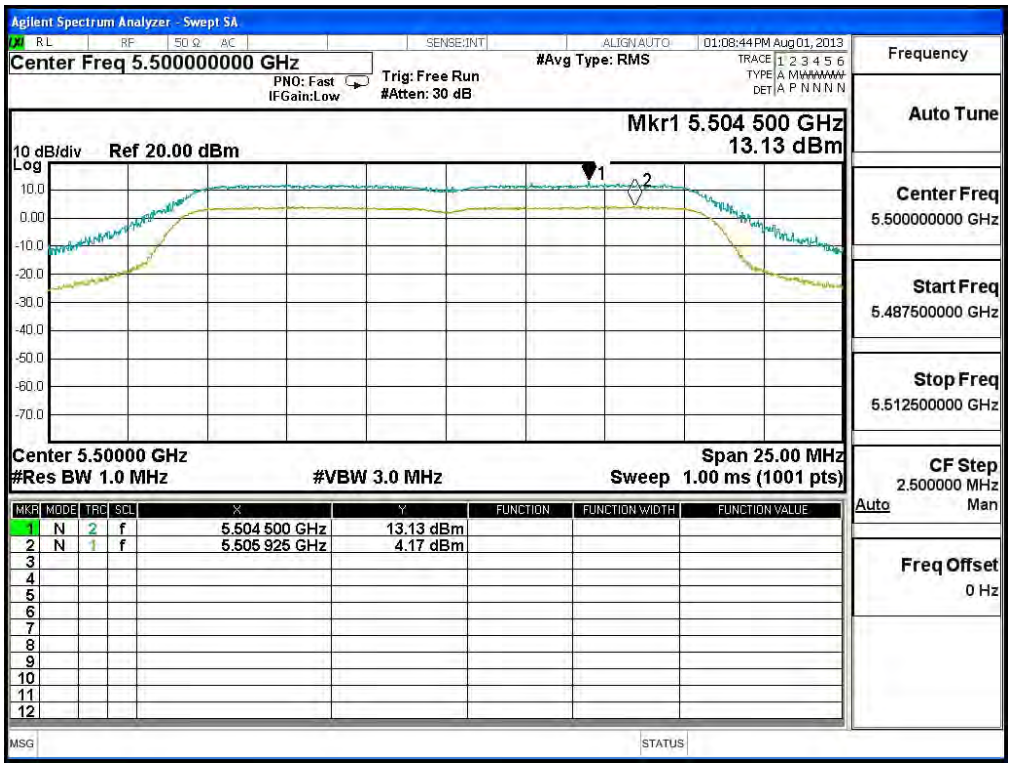

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
03:20:24 PM Aug 02, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.501 60 GHz
4.50 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.501 60 GHz 4.50 dBm
2 N 1 f 5.496 90 GHz -5.30 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

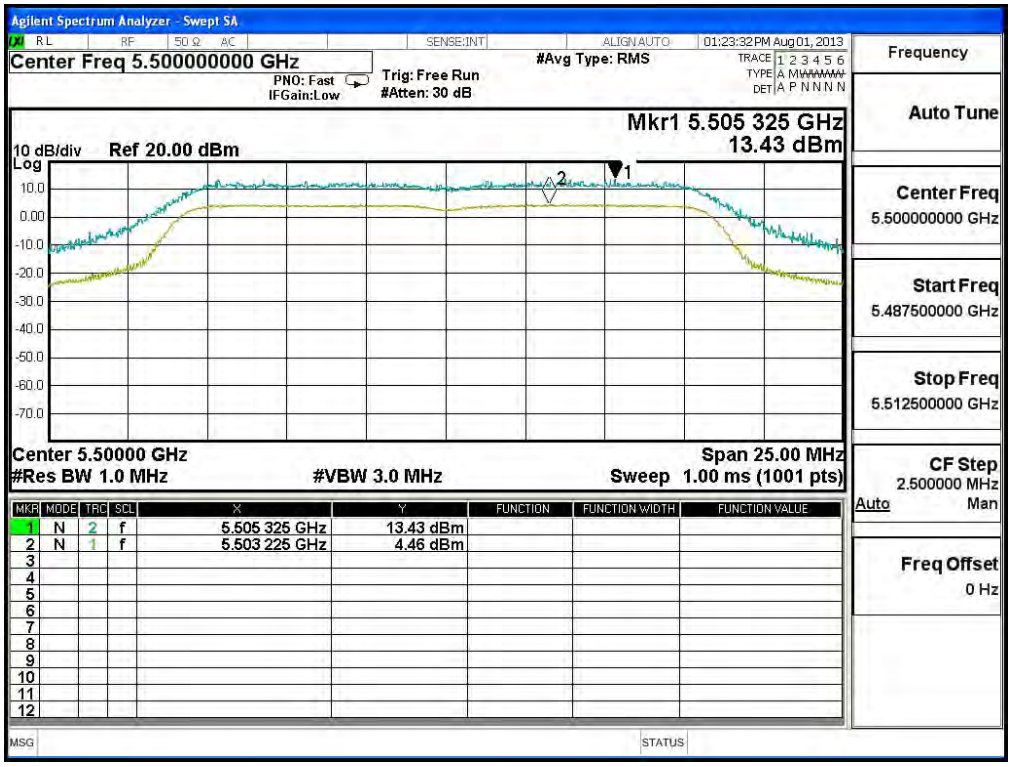
Product : SpectraGuard® Access Point / Sensor
Test Item : Peak Excursion
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna)

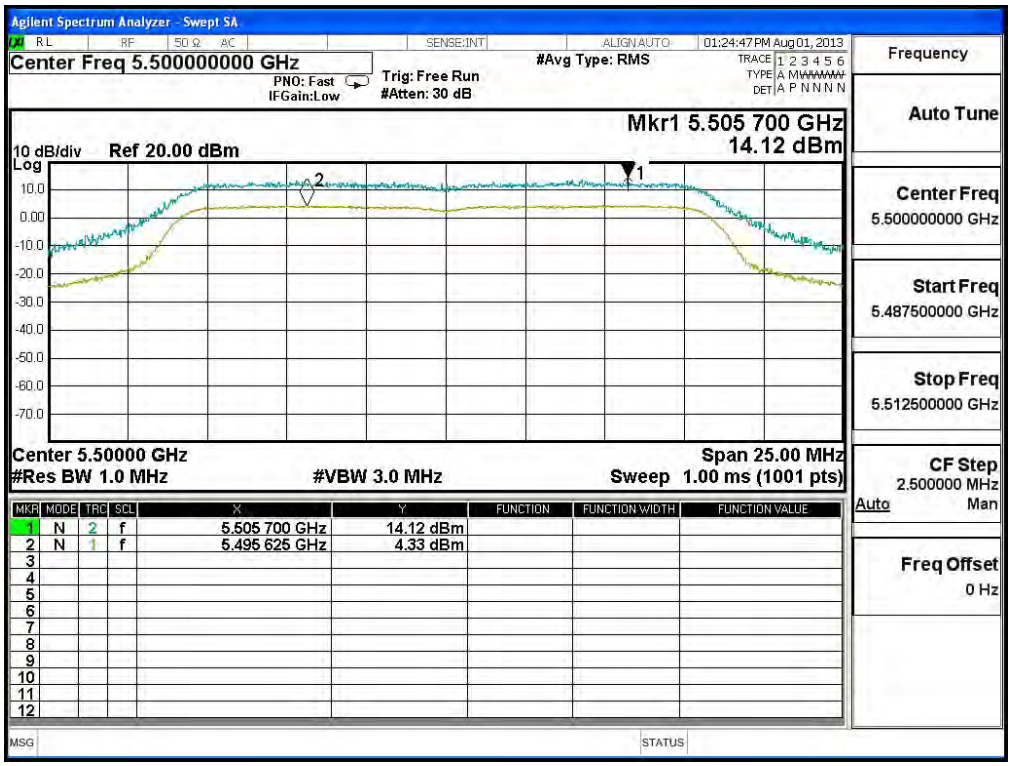
**CHAIN A**

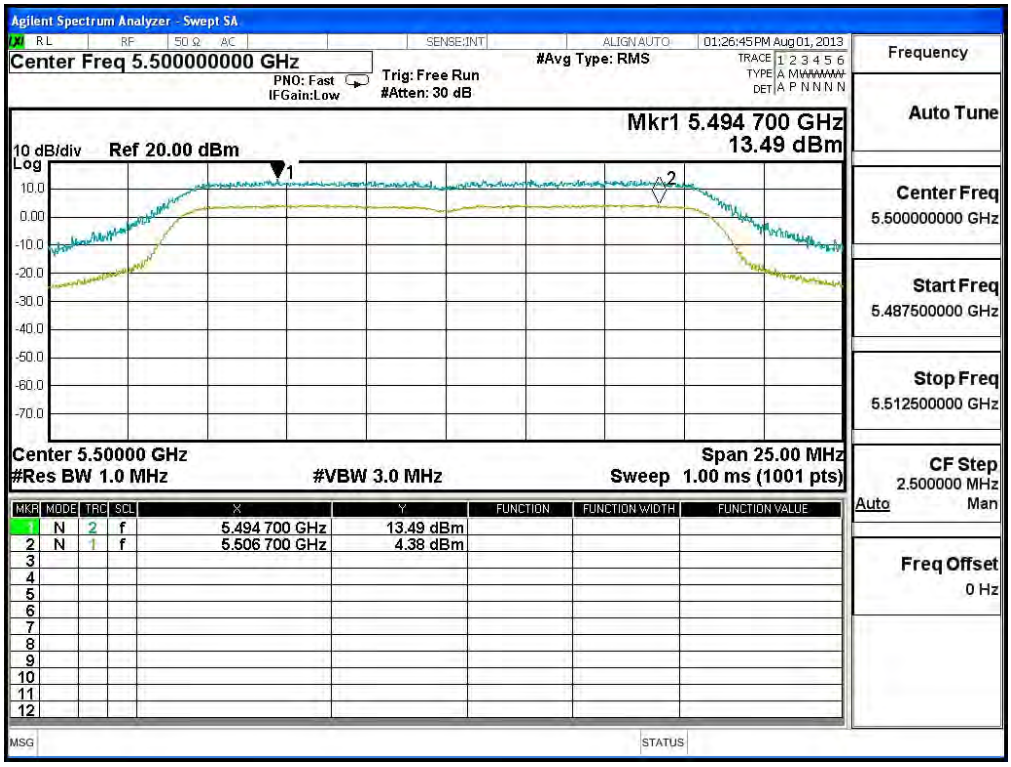
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Measurement Level (dB) | Required Limit (dB) | Result |
|---|---|---|---|---|---|
| 100 | 5500 | MCS (0) | 8.960 | <13 | Pass |
| | | MCS (2) | 8.970 | <13 | Pass |
| | | MCS (4) | 9.790 | <13 | Pass |
| | | MCS (7) | 9.110 | <13 | Pass |

**Channel 100:**




Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
01:23:32 PM Aug 01, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.505 325 GHz
13.43 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.505 325 GHz 13.43 dBm
2 N 1 f 5.503 225 GHz 4.46 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

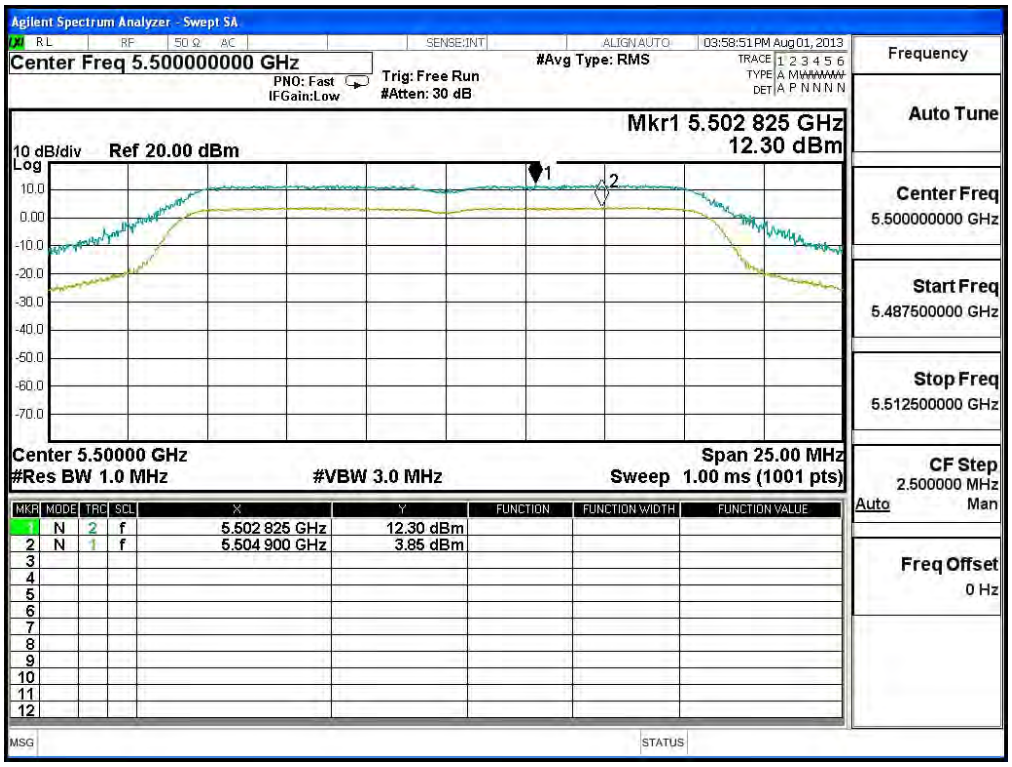

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
01:24:47 PM Aug 01, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.505 700 GHz
14.12 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.505 700 GHz 14.12 dBm
2 N 1 f 5.495 625 GHz 4.33 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

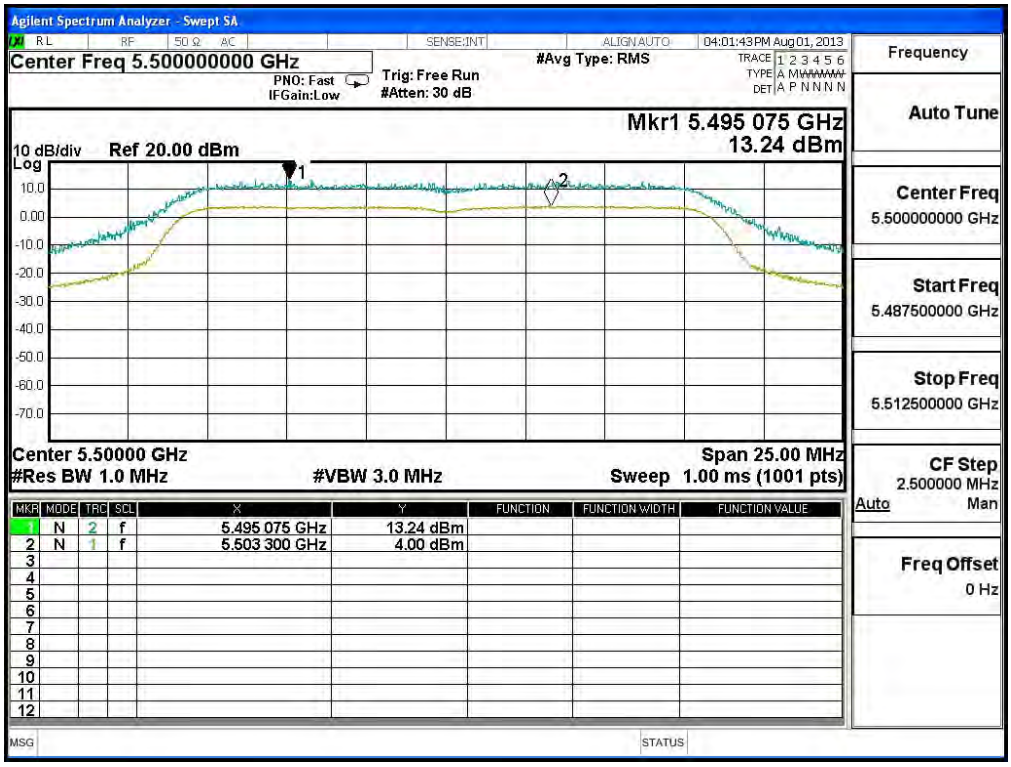

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
01:26:45 PM Aug 01, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.494 700 GHz
13.49 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.494 700 GHz 13.49 dBm
2 N 1 f 5.506 700 GHz 4.38 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

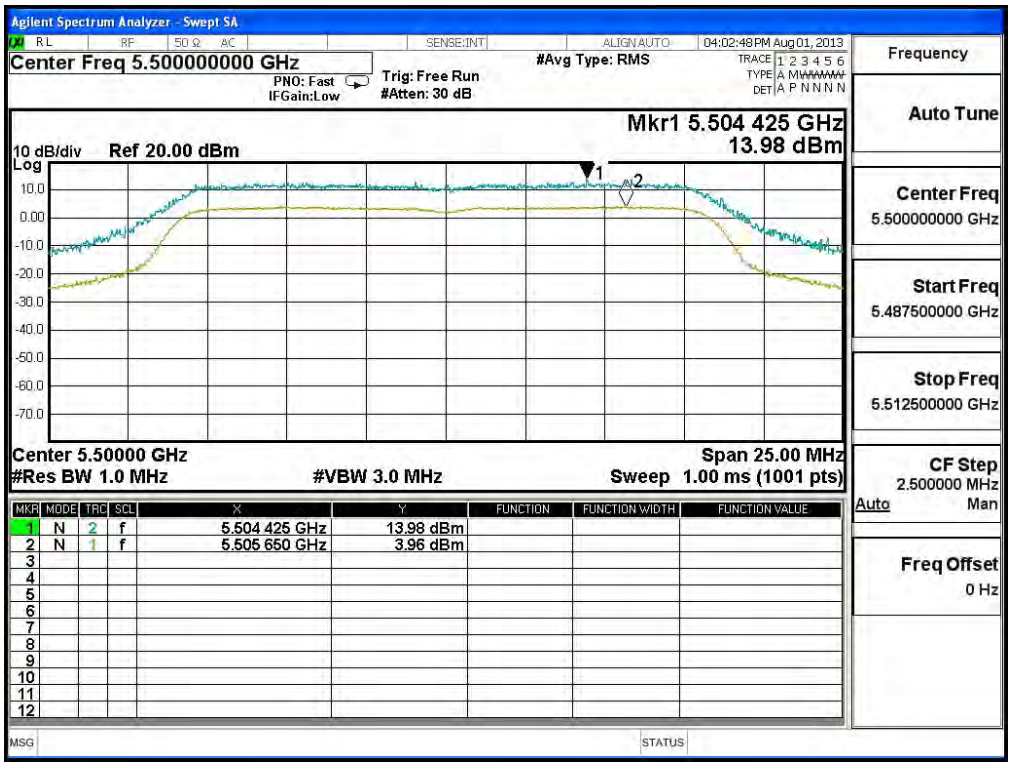
**CHAIN B**

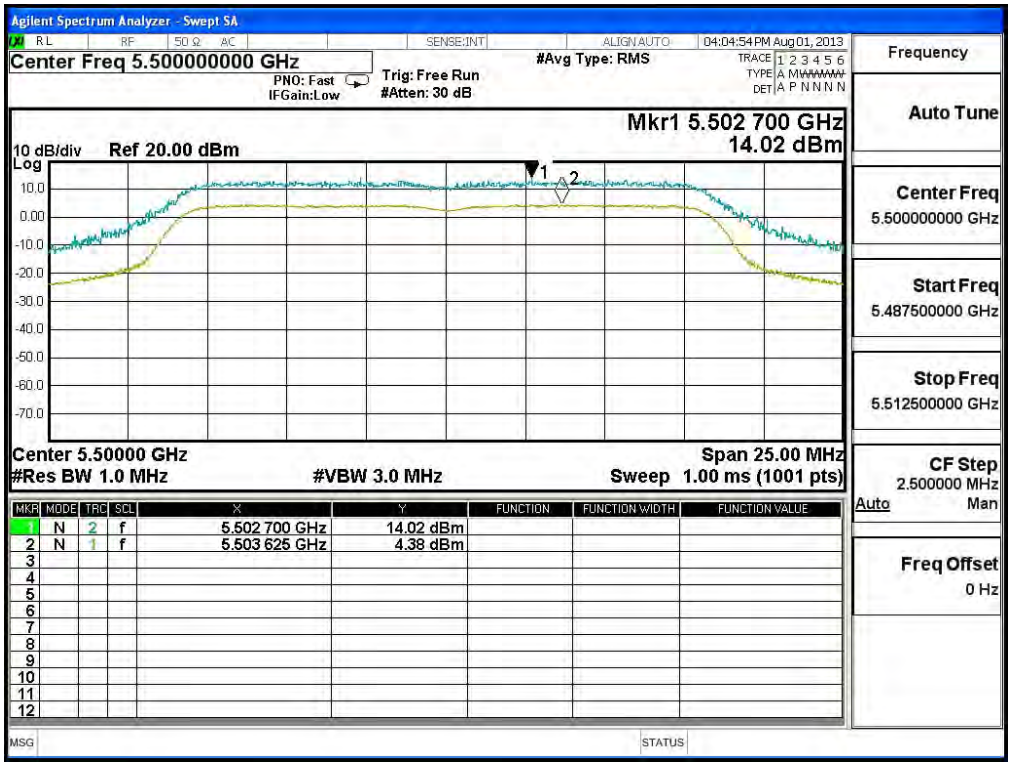
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Measurement Level (dB) | Required Limit (dB) | Result |
|---|---|---|---|---|---|
| 100 | 5500 | MCS (0) | 8.450 | <13 | Pass |
| | | MCS (2) | 9.240 | <13 | Pass |
| | | MCS (4) | 10.020 | <13 | Pass |
| | | MCS (7) | 9.640 | <13 | Pass |

**Channel 100:**




Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
04:01:43 PM Aug 01, 2013
Frequency
Auto Tune
Mkr1 5.495 075 GHz
13.24 dBm
10 dB/div
Log
Ref 20.00 dBm
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
1 N 2 f 5.495 075 GHz 13.24 dBm
2 N 1 f 5.503 300 GHz 4.00 dBm
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
04:02:48 PM Aug 01, 2013
Frequency
Auto Tune
Mkr1 5.504 425 GHz
13.98 dBm
10 dB/div
Log
Ref 20.00 dBm
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
1 N 2 f 5.504 425 GHz 13.98 dBm
2 N 1 f 5.505 650 GHz 3.96 dBm
MSG
STATUS

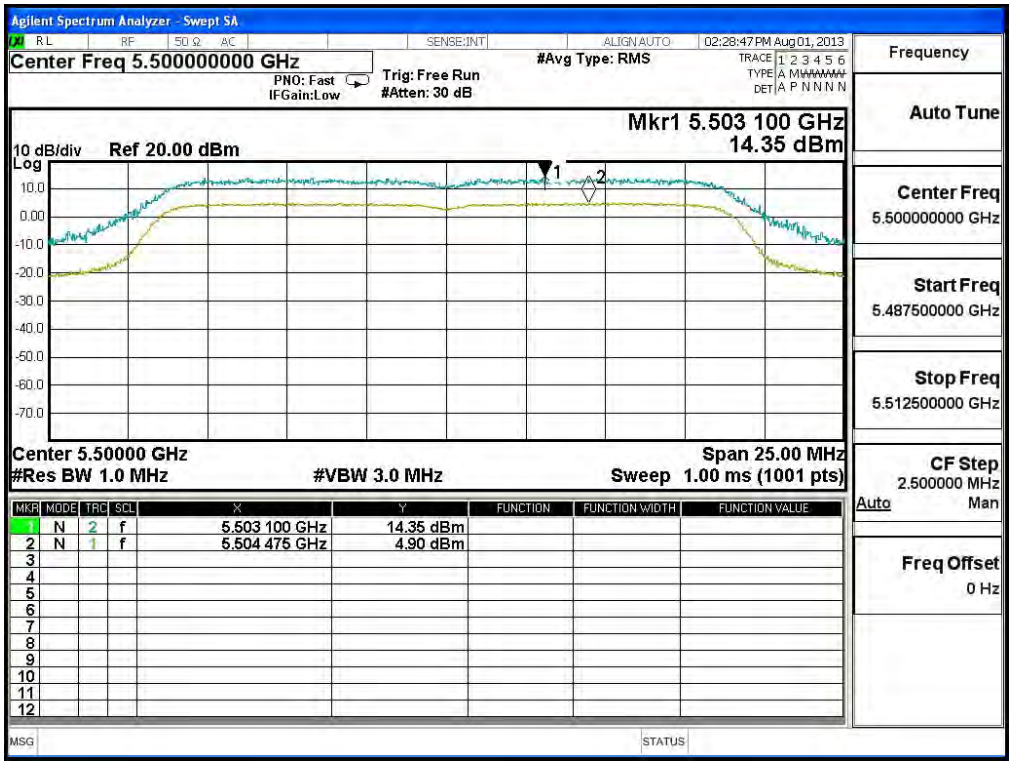

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
04:04:54 PM Aug 01, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.502 700 GHz
14.02 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.502 700 GHz 14.02 dBm
2 N 1 f 5.503 625 GHz 4.38 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

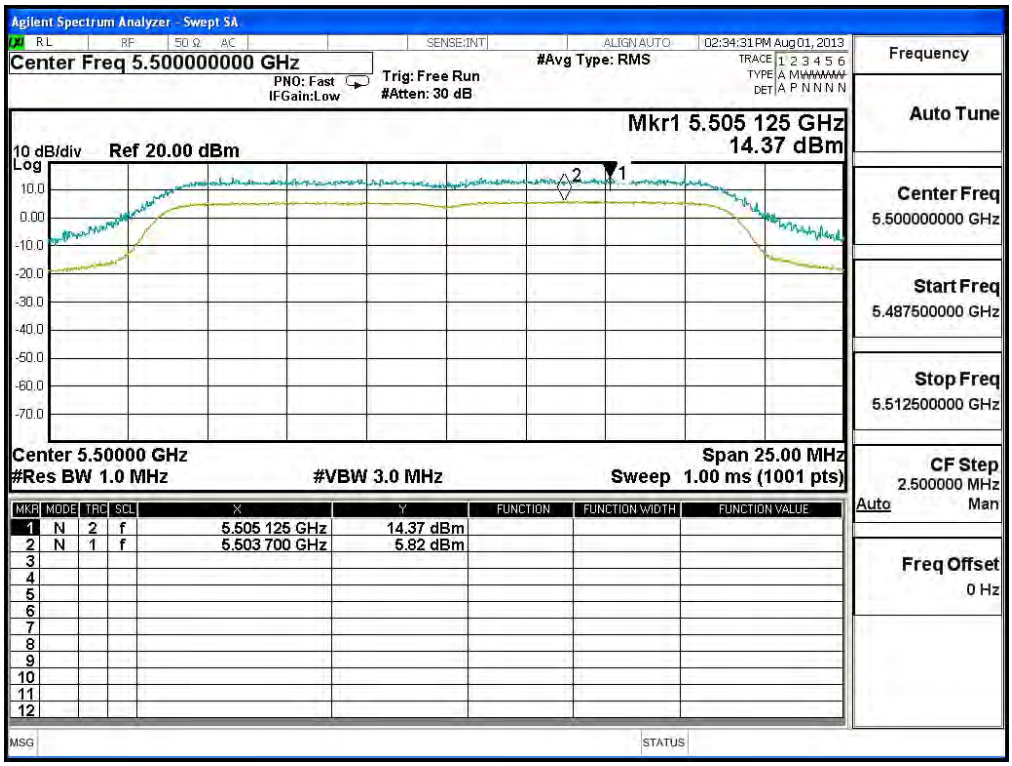
Product : SpectraGuard® Access Point / Sensor
Test Item : Peak Excursion
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna)

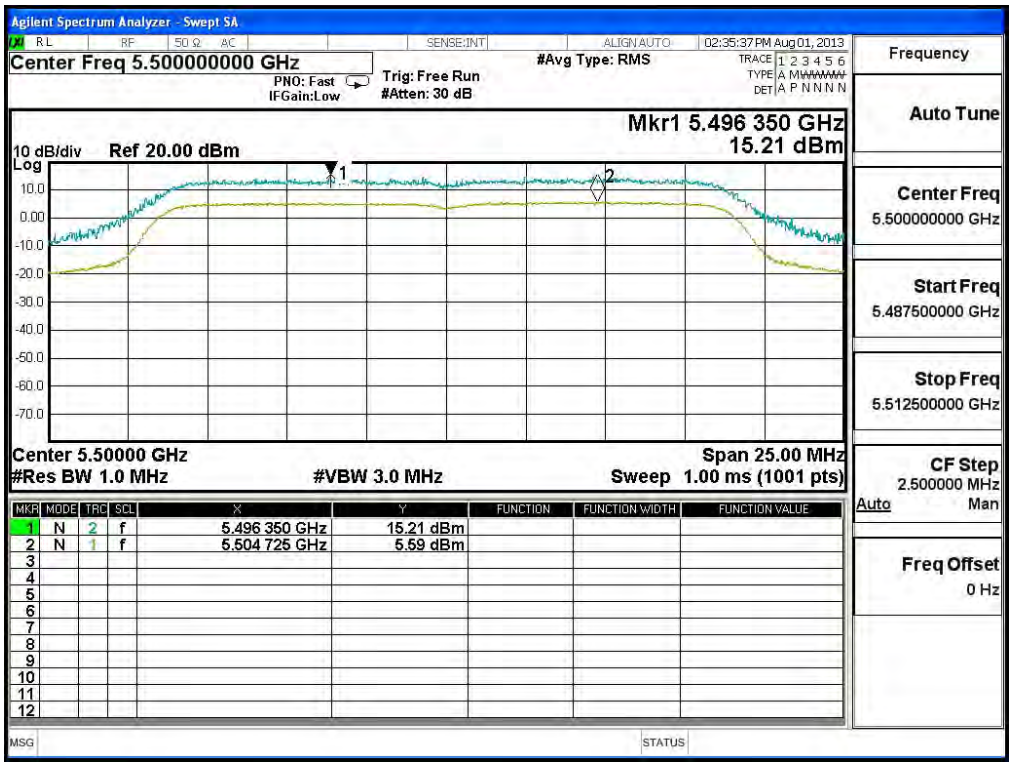
**Chain A**

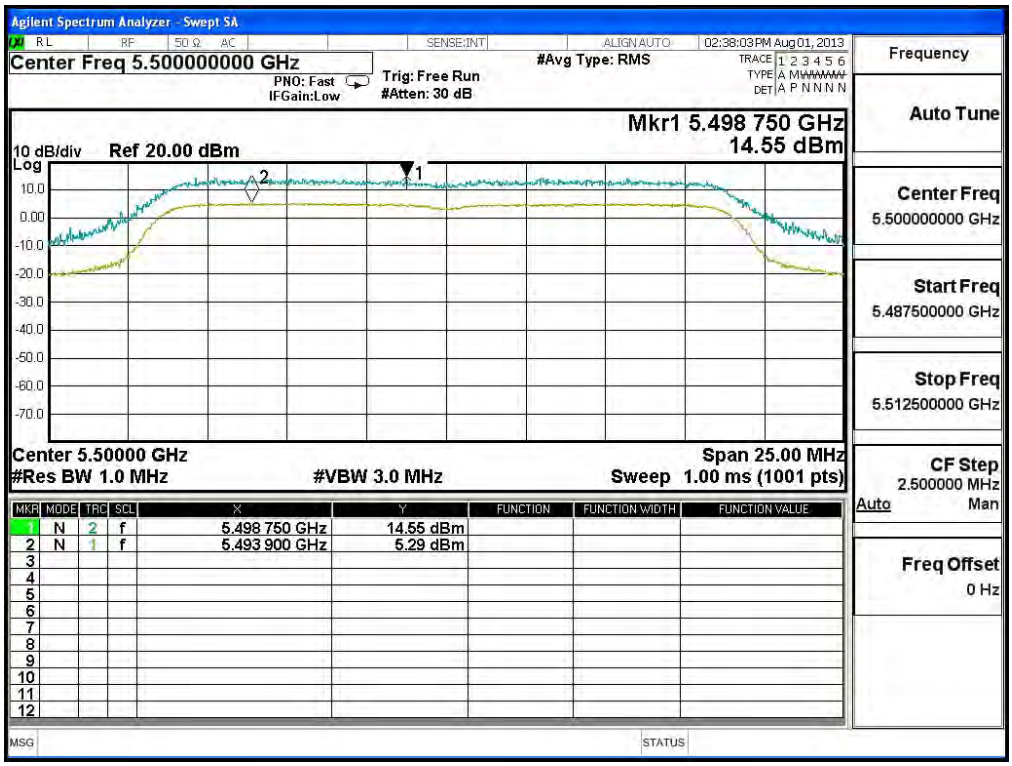
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Measurement Level (dB) | Required Limit (dB) | Result |
|---|---|---|---|---|---|
| 100 | 5500 | MCS (0) | 9.450 | <13 | Pass |
| | | MCS (2) | 8.550 | <13 | Pass |
| | | MCS (4) | 9.620 | <13 | Pass |
| | | MCS (7) | 9.260 | <13 | Pass |

**Channel 100:**




Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
02:34:31 PM Aug 01, 2013
Mkr1 5.505 125 GHz
14.37 dBm
10 dB/div
Ref 20.00 dBm
Log
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 2 f 5.505 125 GHz 14.37 dBm
2 N 1 f 5.503 700 GHz 5.82 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

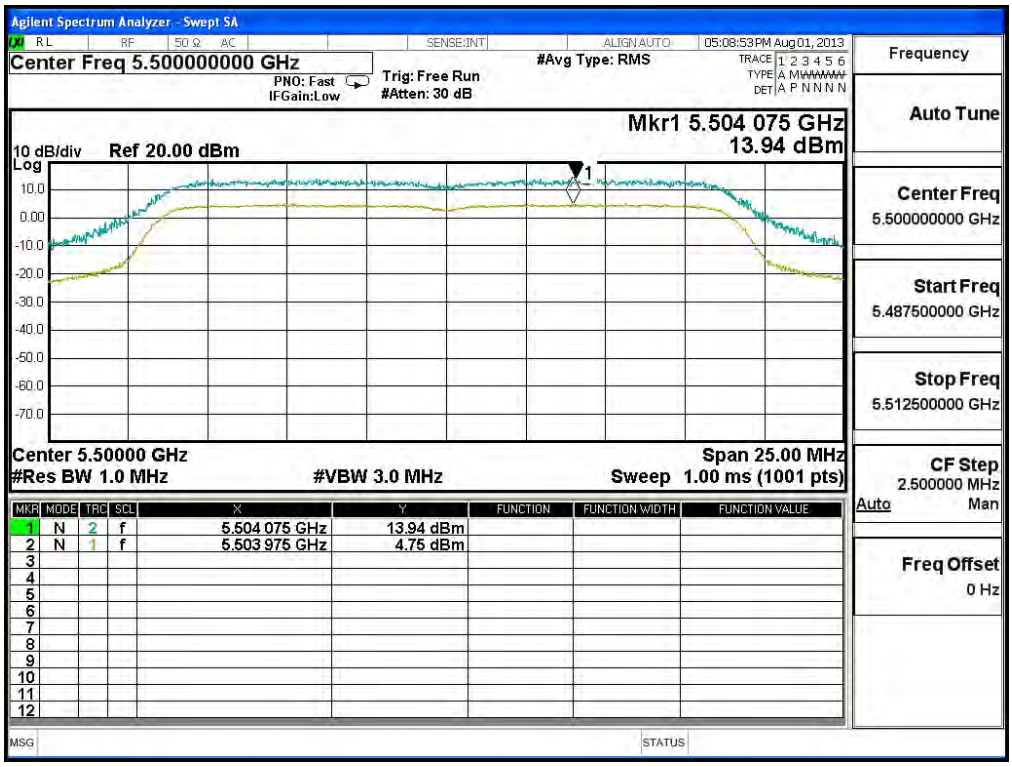

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
02:35:37 PM Aug 01, 2013
Mkr1 5.496 350 GHz
15.21 dBm
10 dB/div
Ref 20.00 dBm
Log
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
1 N 2 f 5.496 350 GHz 15.21 dBm
2 N 1 f 5.504 725 GHz 5.59 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

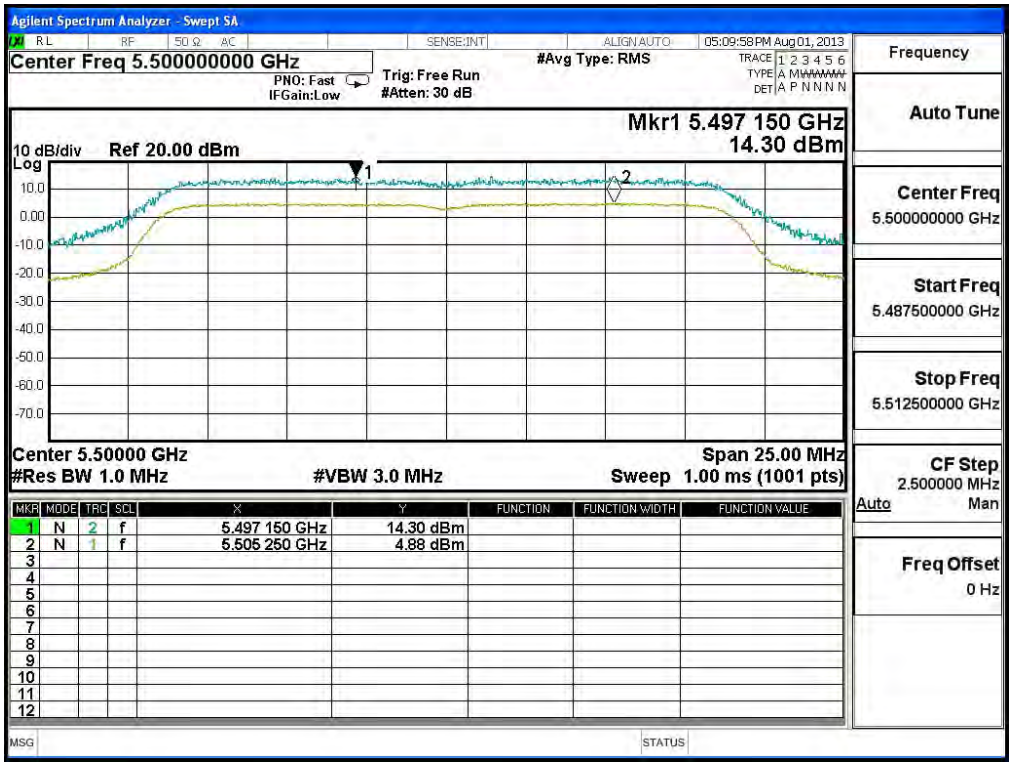

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
02:38:03 PM Aug 01, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.498 750 GHz
14.55 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.498 750 GHz 14.55 dBm
2 N 1 f 5.493 900 GHz 5.29 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

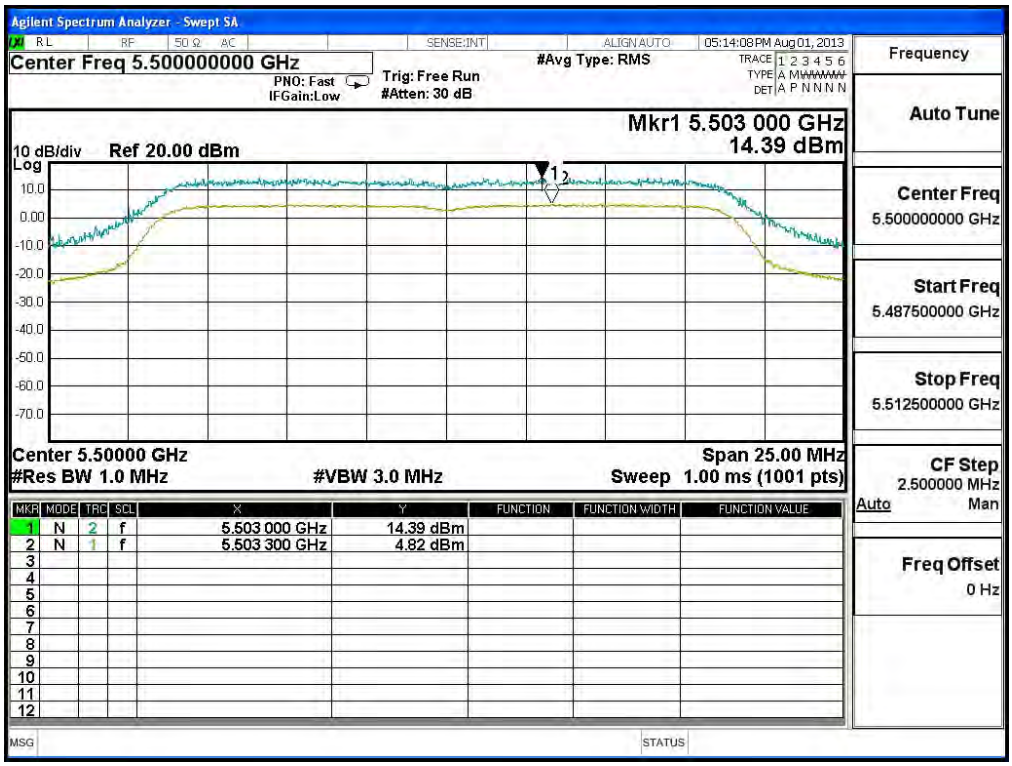
**Chain B**

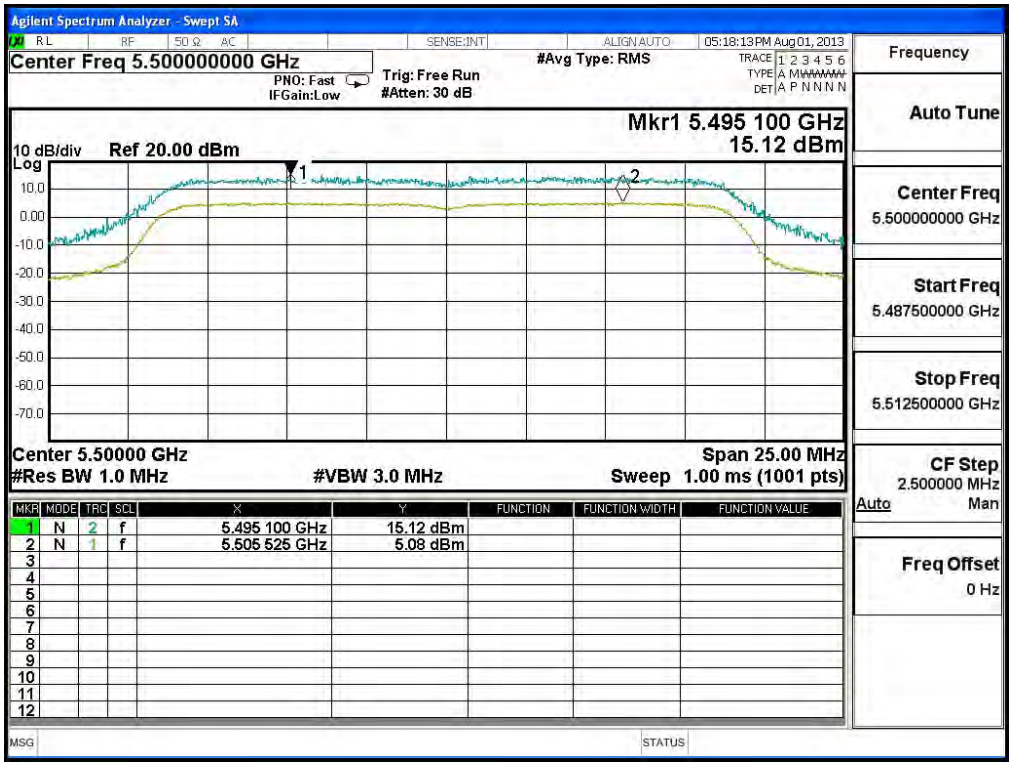
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Measurement Level (dB) | Required Limit (dB) | Result |
|---|---|---|---|---|---|
| 100 | 5500 | MCS (0) | 9.190 | <13 | Pass |
| | | MCS (2) | 9.420 | <13 | Pass |
| | | MCS (4) | 9.570 | <13 | Pass |
| | | MCS (7) | 10.040 | <13 | Pass |

**Channel 100:**




Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
05:09:58 PM Aug 01, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.497 150 GHz
14.30 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.497 150 GHz 14.30 dBm
2 N 1 f 5.505 250 GHz 4.88 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
05:14:08 PM Aug 01, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.503 000 GHz
14.39 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.503 000 GHz 14.39 dBm
2 N 1 f 5.503 300 GHz 4.82 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

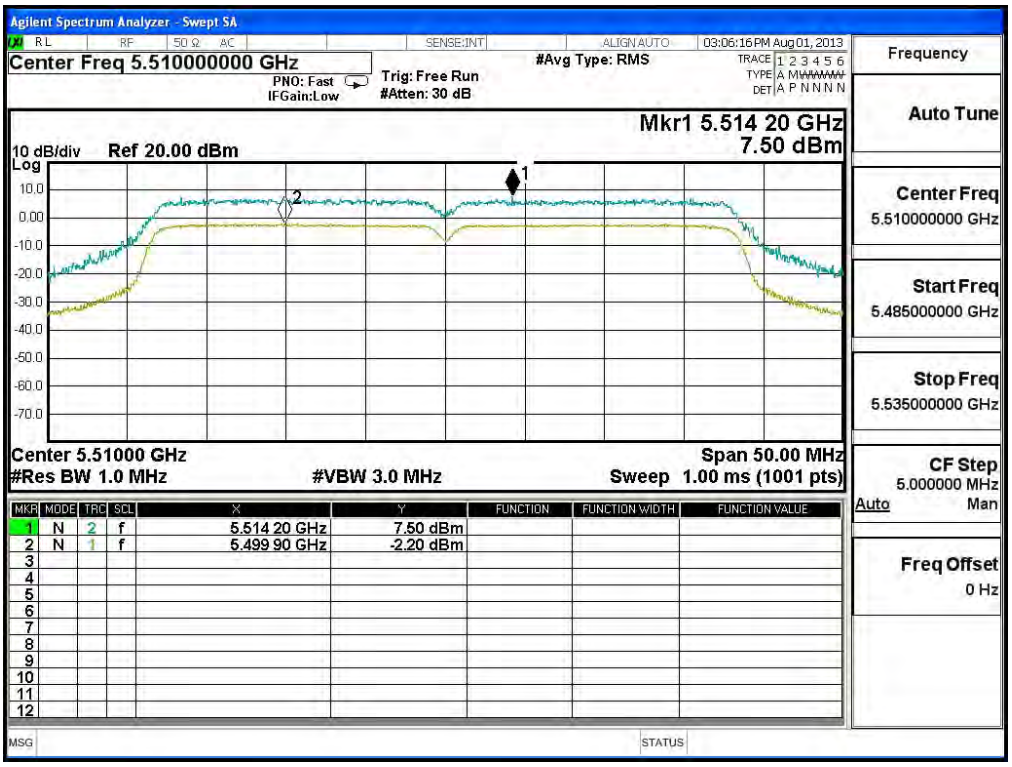

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
05:18:13 PM Aug 01, 2013
Center Freq 5.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.495 100 GHz
15.12 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 25.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.495 100 GHz 15.12 dBm
2 N 1 f 5.505 525 GHz 5.08 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
5.487500000 GHz
Stop Freq
5.512500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

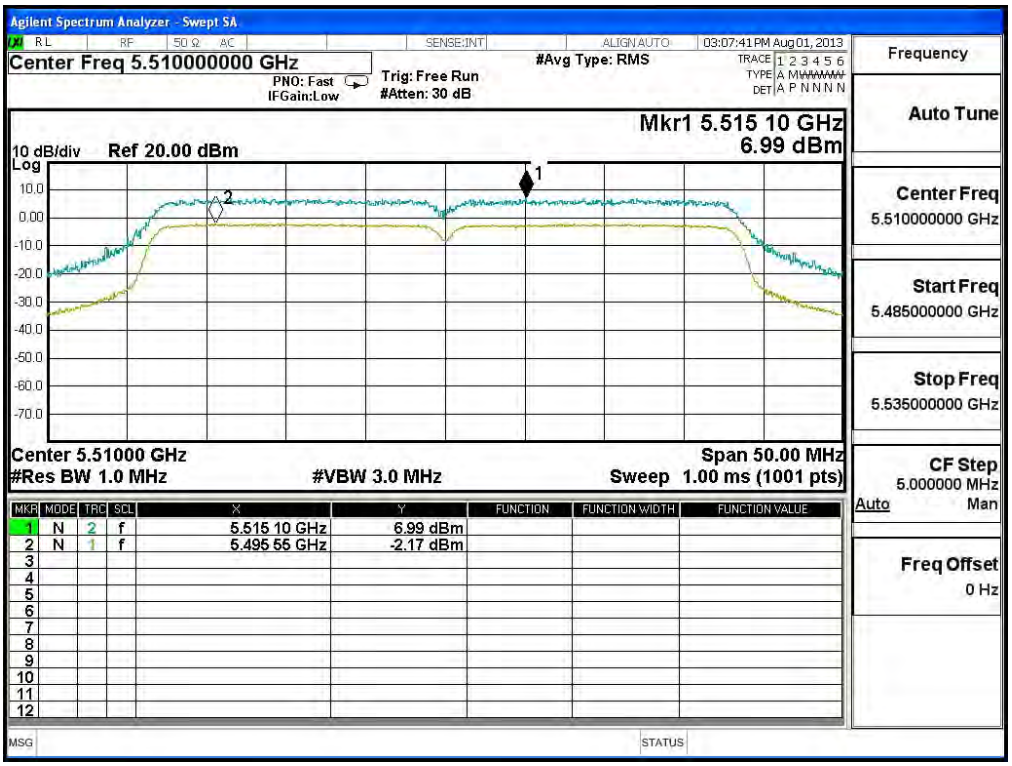
Product : SpectraGuard® Access Point / Sensor
Test Item : Peak Excursion
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna)

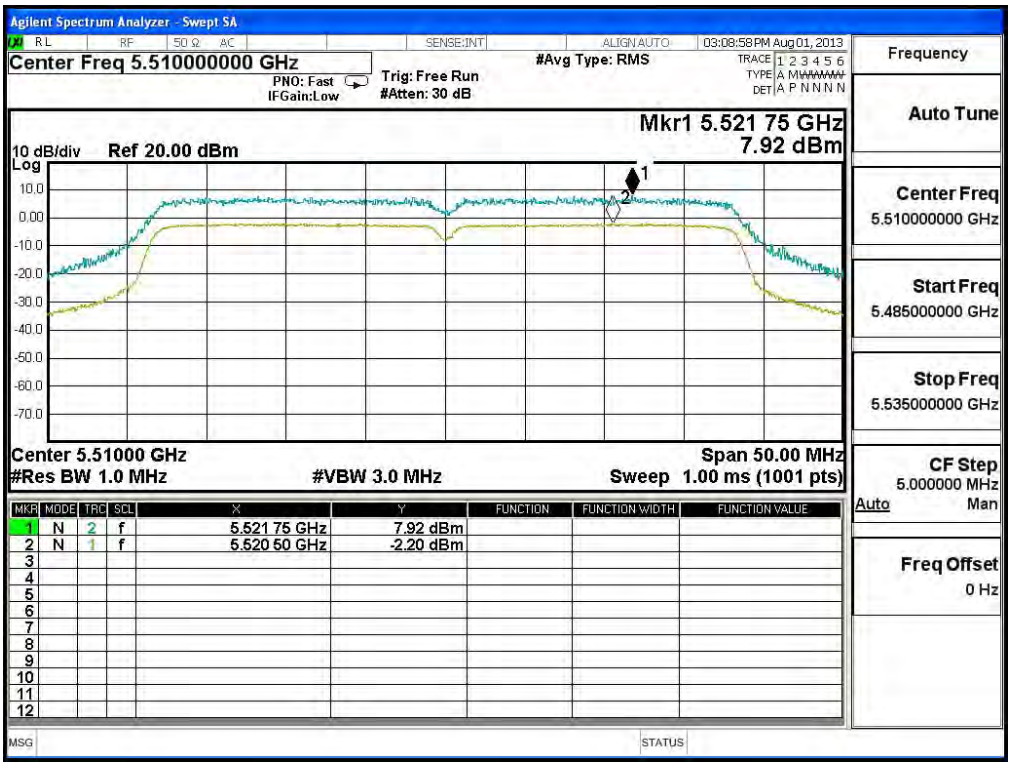
**Chain A**

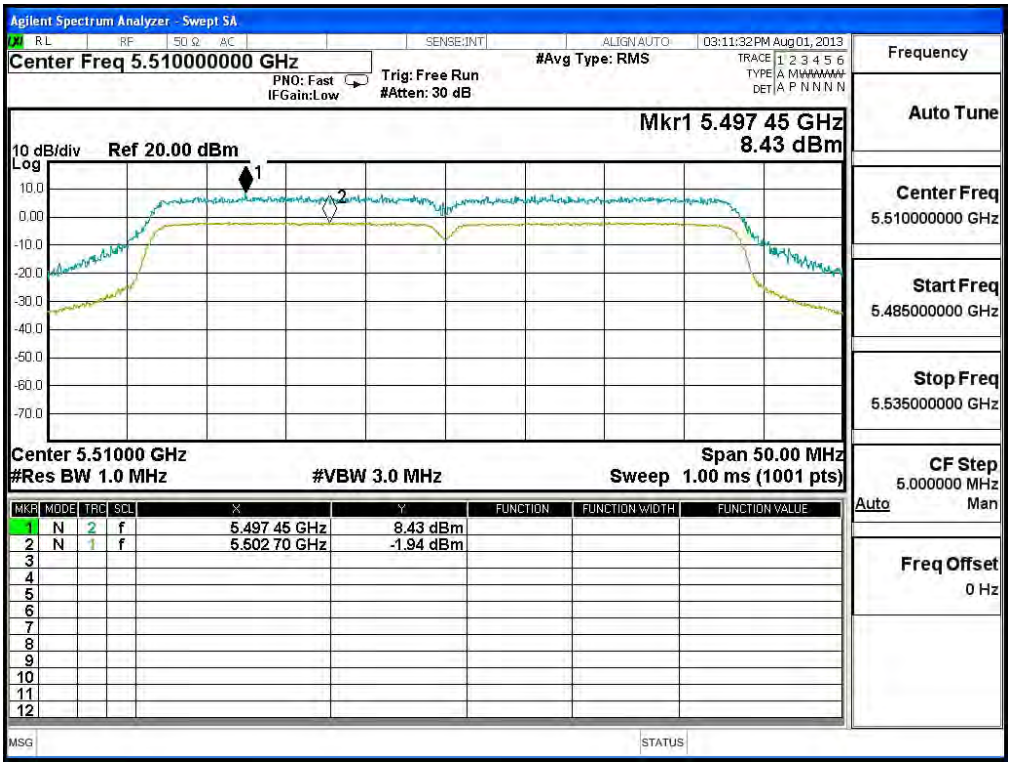
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Measurement Level (dB) | Required Limit (dB) | Result |
|---|---|---|---|---|---|
| 102 | 5510 | MCS (0) | 9.700 | <13 | Pass |
| | | MCS (2) | 9.160 | <13 | Pass |
| | | MCS (4) | 9.490 | <13 | Pass |
| | | MCS (7) | 10.370 | <13 | Pass |

**Channel 102:**




Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
03:07:41 PM Aug 01, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.515 10 GHz
6.99 dBm
10 dB/div
Ref 20.00 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.515 10 GHz 6.99 dBm
2 N 1 f 5.495 55 GHz -2.17 dBm
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

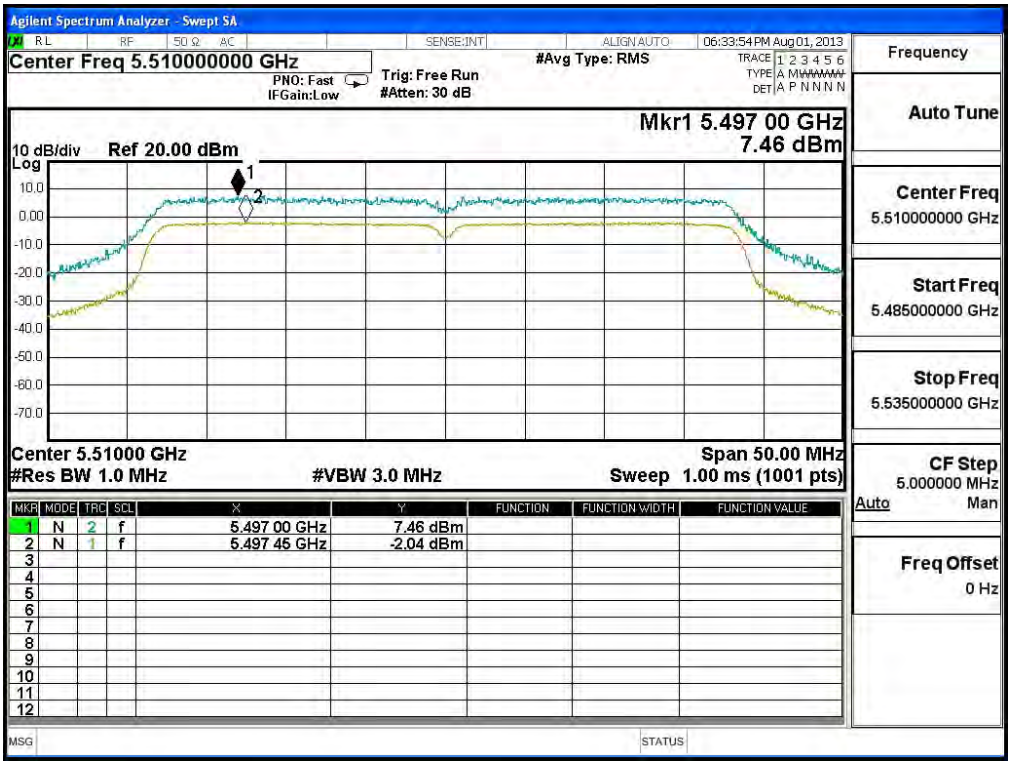

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
03:08:58 PM Aug 01, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.521 75 GHz
7.92 dBm
10 dB/div
Ref 20.00 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.521 75 GHz 7.92 dBm
2 N 1 f 5.520 50 GHz -2.20 dBm
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

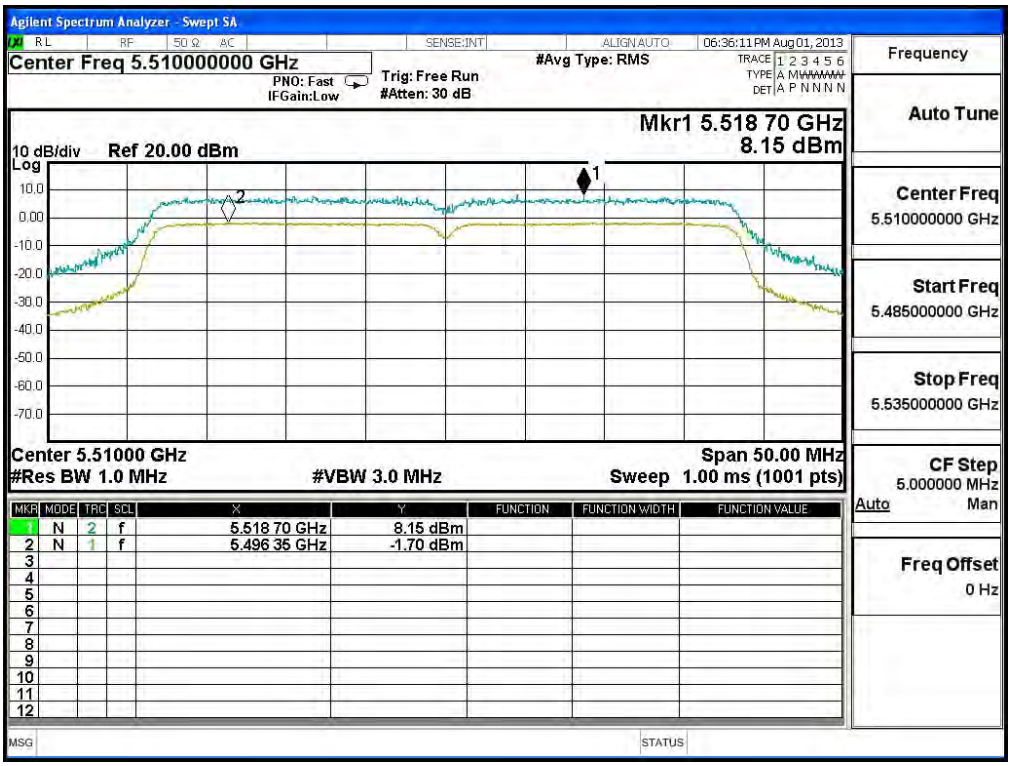

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
03:11:32 PM Aug 01, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.497 45 GHz
8.43 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.497 45 GHz 8.43 dBm
2 N 1 f 5.502 70 GHz -1.94 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

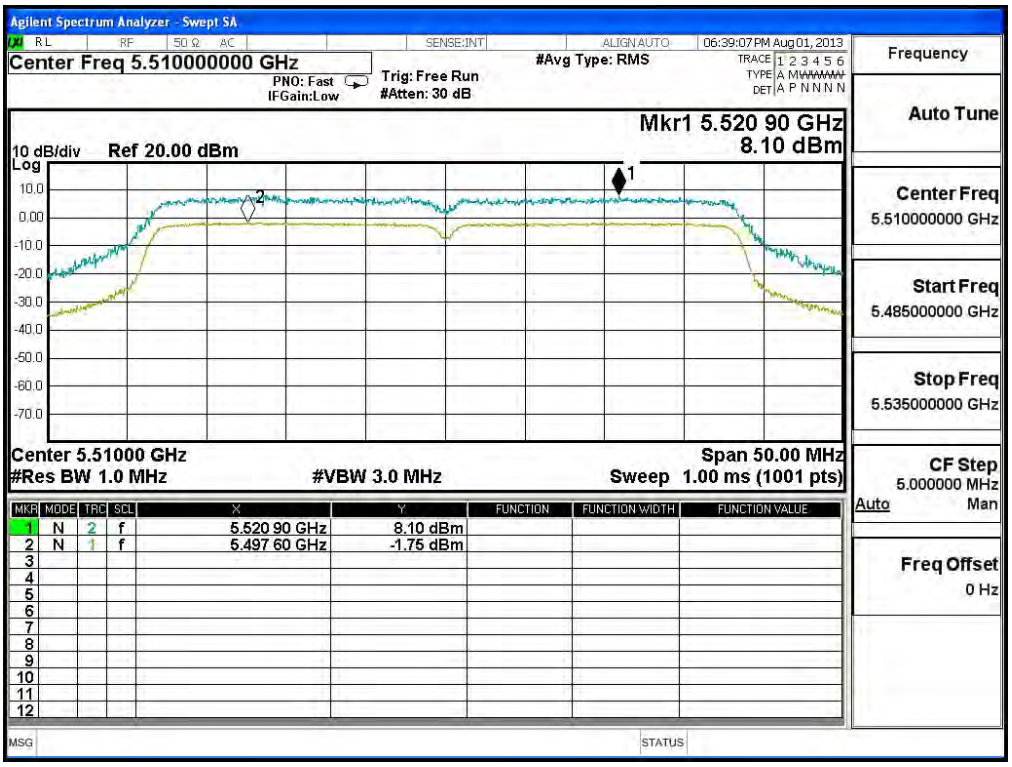
**Chain B**

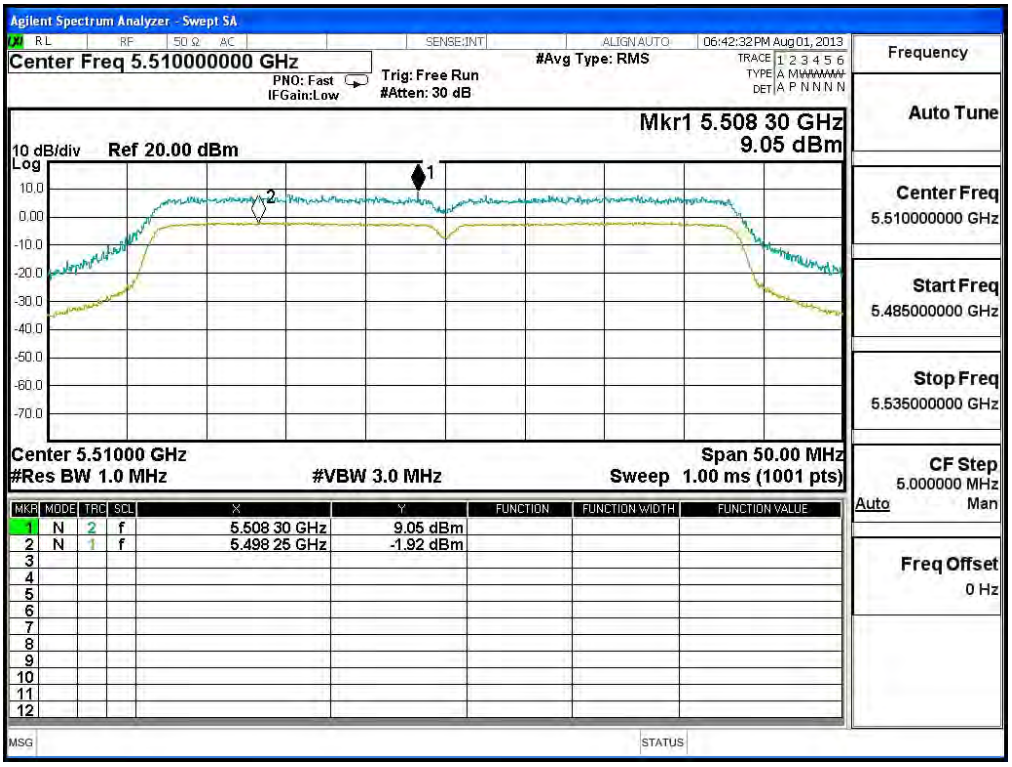
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Measurement Level (dB) | Required Limit (dB) | Result |
|---|---|---|---|---|---|
| 102 | 5510 | MCS (0) | 9.500 | <13 | Pass |
| | | MCS (2) | 9.850 | <13 | Pass |
| | | MCS (4) | 9.850 | <13 | Pass |
| | | MCS (7) | 10.970 | <13 | Pass |

**Channel 102:**




Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:36:11 PM Aug 01, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.518 70 GHz
8.15 dBm
10 dB/div
Ref 20.00 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.518 70 GHz 8.15 dBm
2 N 1 f 5.496 35 GHz -1.70 dBm
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:39:07 PM Aug 01, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.520 90 GHz
8.10 dBm
10 dB/div
Ref 20.00 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.520 90 GHz 8.10 dBm
2 N 1 f 5.497 60 GHz -1.75 dBm
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:42:32 PM Aug 01, 2013
Center Freq 5.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A MWWWWW
DET A P N N N N
Mkr1 5.508 30 GHz
9.05 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 2 f 5.508 30 GHz 9.05 dBm
2 N 1 f 5.498 25 GHz -1.92 dBm
3
4
5
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.510000000 GHz
Start Freq
5.485000000 GHz
Stop Freq
5.535000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

# 6. Radiated Emission

## 6.1. Test Equipment

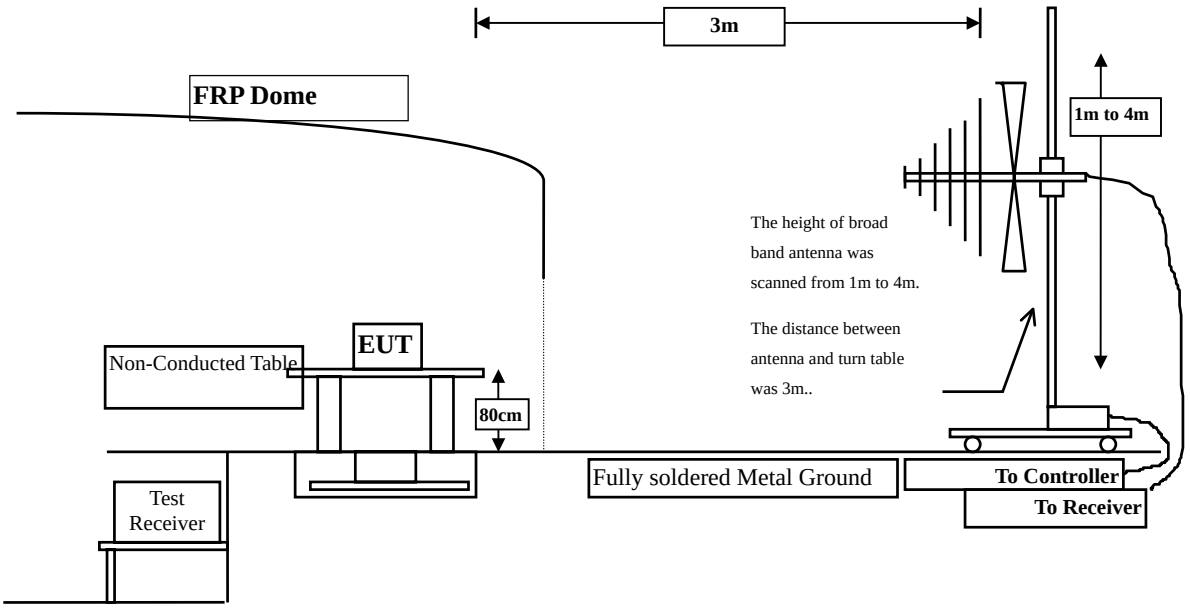
The following test equipments are used during the radiated emission test:

| Test Site | | Equipment | Manufacturer | Model No./Serial No. | Last Cal. |
|---|---|---|---|---|---|
| ☒Site # 3 | X | Loop Antenna | Teseq | HLA6120 / 26739 | Jul., 2013 |
| | X | Bilog Antenna | Schaffner Chase | CBL6112B/2673 | Sep., 2012 |
| | X | Horn Antenna | Schwarzbeck | BBHA9120D/D305 | Sep., 2012 |
| | X | Horn Antenna | Schwarzbeck | BBHA9170/208 | Jul., 2013 |
| | X | Pre-Amplifier | QTK | QTK-AMP-03 / 0003 | May, 2013 |
| | X | Pre-Amplifier | QTK | AP-180C / CHM_0906076 | Sep., 2012 |
| | X | Pre-Amplifier | MITEQ | AMF-4D-180400-45-6P/ 925975 | Mar, 2013 |
| | X | Spectrum Analyzer | Agilent | E4407B / US39440758 | May, 2013 |
| | X | Test Receiver | R & S | ESCS 30/ 825442/018 | Sep., 2012 |
| | X | Coaxial Cable | QuieTek | QTK-CABLE/ CAB5 | Feb., 2013 |
| | X | Controller | QuieTek | QTK-CONTROLLER/ CTRL3 | N/A |
| | X | Coaxial Switch | Anritsu | MP59B/6200265729 | N/A |

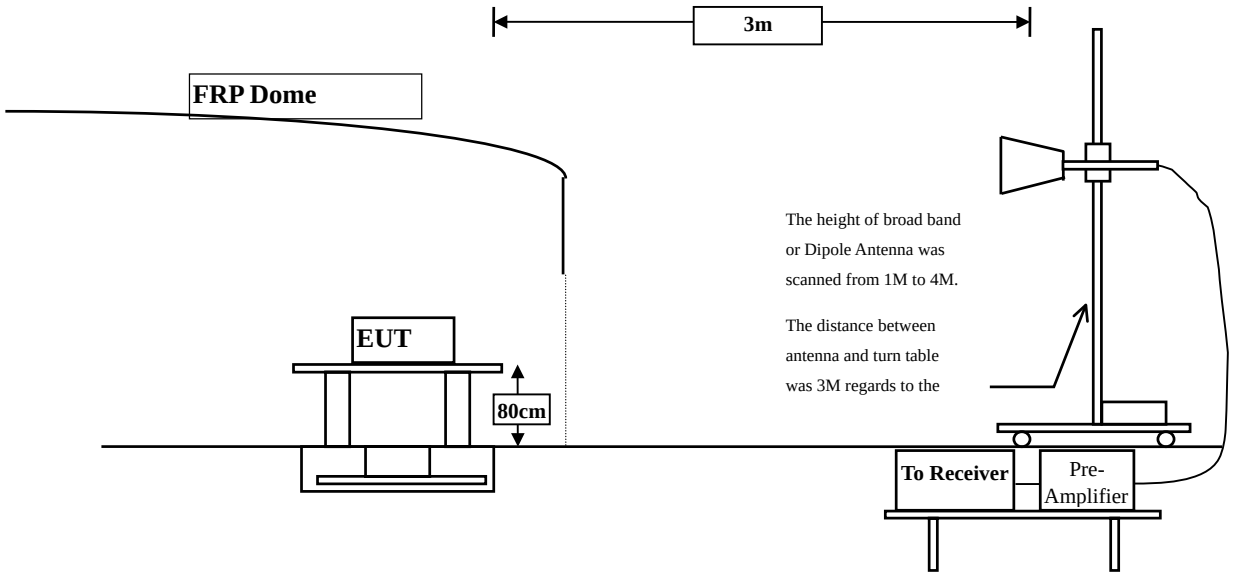
Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

## 6.2. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz




## 6.3. 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 (dBuV/m) = 20 log E field strength (uV/m)

## 6.4. Test Procedure

The EUT was setup according to ANSI C63.10, 2009 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, 2009 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 form 9KHz - 10th Harmonic of fundamental was investigated.

## 6.5. Uncertainty

± 3.8 dB below 1GHz

± 3.9 dB above 1GHz

## 6.6. Test Result of Radiated Emission

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

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10520.000 | 14.015 | 39.850 | 53.865 | -20.135 | 74.000 |
| 15780.000 | * | * | * | * | 74.000 |
| 21040.000 | * | * | * | * | 74.000 |
| 26300.000 | * | * | * | * | 74.000 |
| 31560.000 | * | * | * | * | 74.000 |
| 36820.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10520.000 | 14.818 | 41.460 | 56.278 | -17.722 | 74.000 |
| 15780.000 | * | * | * | * | 74.000 |
| 21040.000 | * | * | * | * | 74.000 |
| 26300.000 | * | * | * | * | 74.000 |
| 31560.000 | * | * | * | * | 74.000 |
| 36820.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| 10520.000 | 14.818 | 28.400 | 43.218 | -10.782 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

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

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10600.000 | 14.550 | 39.320 | 53.869 | -20.131 | 74.000 |
| 15900.000 | * | * | * | * | 74.000 |
| 21200.000 | * | * | * | * | 74.000 |
| 26500.000 | * | * | * | * | 74.000 |
| 31800.000 | * | * | * | * | 74.000 |
| 37100.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10600.000 | 14.881 | 39.100 | 53.981 | -20.019 | 74.000 |
| 15900.000 | * | * | * | * | 74.000 |
| 21200.000 | * | * | * | * | 74.000 |
| 26500.000 | * | * | * | * | 74.000 |
| 31800.000 | * | * | * | * | 74.000 |
| 37100.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

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

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10640.000 | 14.690 | 38.870 | 53.560 | -20.440 | 74.000 |
| 15960.000 | * | * | * | * | 74.000 |
| 21280.000 | * | * | * | * | 74.000 |
| 26600.000 | * | * | * | * | 74.000 |
| 31920.000 | * | * | * | * | 74.000 |
| 37240.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10640.000 | 15.083 | 37.360 | 52.443 | -21.557 | 74.000 |
| 15960.000 | * | * | * | * | 74.000 |
| 21280.000 | * | * | * | * | 74.000 |
| 26600.000 | * | * | * | * | 74.000 |
| 31920.000 | * | * | * | * | 74.000 |
| 37240.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

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

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11000.000 | 16.399 | 36.810 | 53.209 | -20.791 | 74.000 |
| 16500.000 | * | * | * | * | 74.000 |
| 22000.000 | * | * | * | * | 74.000 |
| 27500.000 | * | * | * | * | 74.000 |
| 33000.000 | * | * | * | * | 74.000 |
| 38500.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11000.000 | 17.132 | 36.220 | 53.352 | -20.648 | 74.000 |
| 16500.000 | * | * | * | * | 74.000 |
| 22000.000 | * | * | * | * | 74.000 |
| 27500.000 | * | * | * | * | 74.000 |
| 33000.000 | * | * | * | * | 74.000 |
| 38500.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

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

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11160.000 | 16.664 | 37.300 | 53.965 | -20.035 | 74.000 |
| 16740.000 | * | * | * | * | 74.000 |
| 22320.000 | * | * | * | * | 74.000 |
| 27900.000 | * | * | * | * | 74.000 |
| 33480.000 | * | * | * | * | 74.000 |
| 39060.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11160.000 | 17.643 | 38.680 | 56.323 | -17.677 | 74.000 |
| 16740.000 | * | * | * | * | 74.000 |
| 22320.000 | * | * | * | * | 74.000 |
| 27900.000 | * | * | * | * | 74.000 |
| 33480.000 | * | * | * | * | 74.000 |
| 39060.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| 11160.000 | 17.643 | 24.490 | 42.133 | -11.867 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

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

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11400.000 | 16.530 | 48.420 | 64.951 | -9.049 | 74.000 |
| 17100.000 | * | * | * | * | 74.000 |
| 22800.000 | * | * | * | * | 74.000 |
| 28500.000 | * | * | * | * | 74.000 |
| 34200.000 | * | * | * | * | 74.000 |
| 39900.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| 11400.000 | 16.530 | 34.450 | 50.981 | -3.019 | 54.000 |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11400.000 | 17.138 | 40.660 | 57.798 | -16.202 | 74.000 |
| 17100.000 | * | * | * | * | 74.000 |
| 22800.000 | * | * | * | * | 74.000 |
| 28500.000 | * | * | * | * | 74.000 |
| 34200.000 | * | * | * | * | 74.000 |
| 39900.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| 11400.000 | 17.138 | 27.940 | 45.078 | -8.922 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5260MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10520.000 | 14.015 | 40.340 | 54.355 | -19.645 | 74.000 |
| 15780.000 | * | * | * | * | 74.000 |
| 21040.000 | * | * | * | * | 74.000 |
| 26300.000 | * | * | * | * | 74.000 |
| 31560.000 | * | * | * | * | 74.000 |
| 36820.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| 10520.000 | 14.015 | 30.570 | 44.585 | -9.415 | 54.000 |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10520.000 | 14.818 | 39.420 | 54.238 | -19.762 | 74.000 |
| 15780.000 | * | * | * | * | 74.000 |
| 21040.000 | * | * | * | * | 74.000 |
| 26300.000 | * | * | * | * | 74.000 |
| 31560.000 | * | * | * | * | 74.000 |
| 36820.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| 10520.000 | 14.818 | 26.320 | 41.138 | -12.862 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5300MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10600.000 | 14.550 | 40.280 | 54.829 | -19.171 | 74.000 |
| 15900.000 | * | * | * | * | 74.000 |
| 21200.000 | * | * | * | * | 74.000 |
| 26500000 | * | * | * | * | 74.000 |
| 31800.000 | * | * | * | * | 74.000 |
| 37100.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| 10600.000 | 14.550 | 27.680 | 42.229 | -11.771 | 54.000 |
| | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10600.000 | 14.881 | 38.560 | 53.441 | -20.559 | 74.000 |
| 15900.000 | * | * | * | * | 74.000 |
| 21200.000 | * | * | * | * | 74.000 |
| 26500000 | * | * | * | * | 74.000 |
| 31800.000 | * | * | * | * | 74.000 |
| 37100.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5320MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10640.000 | 14.690 | 38.630 | 53.320 | -20.680 | 74.000 |
| 15960.000 | * | * | * | * | 74.000 |
| 21280.000 | * | * | * | * | 74.000 |
| 26600.000 | * | * | * | * | 74.000 |
| 31920.000 | * | * | * | * | 74.000 |
| 37240.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10640.000 | 15.083 | 36.550 | 51.633 | -22.367 | 74.000 |
| 15960.000 | * | * | * | * | 74.000 |
| 21280.000 | * | * | * | * | 74.000 |
| 26600.000 | * | * | * | * | 74.000 |
| 31920.000 | * | * | * | * | 74.000 |
| 37240.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5500MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11000.000 | 16.399 | 36.320 | 52.719 | -21.281 | 74.000 |
| 16500.000 | * | * | * | * | 74.000 |
| 22000.000 | * | * | * | * | 74.000 |
| 27500.000 | * | * | * | * | 74.000 |
| 33000.000 | * | * | * | * | 74.000 |
| 38500.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11000.000 | 17.132 | 36.830 | 53.962 | -20.038 | 74.000 |
| 16500.000 | * | * | * | * | 74.000 |
| 22000.000 | * | * | * | * | 74.000 |
| 27500.000 | * | * | * | * | 74.000 |
| 33000.000 | * | * | * | * | 74.000 |
| 38500.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5580MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11160.000 | 16.664 | 35.570 | 52.235 | -21.765 | 74.000 |
| 16740.000 | * | * | * | * | 74.000 |
| 22320.000 | * | * | * | * | 74.000 |
| 27900.000 | * | * | * | * | 74.000 |
| 33480.000 | * | * | * | * | 74.000 |
| 39060.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11160.000 | 17.643 | 36.100 | 53.743 | -20.257 | 74.000 |
| 16740.000 | * | * | * | * | 74.000 |
| 22320.000 | * | * | * | * | 74.000 |
| 27900.000 | * | * | * | * | 74.000 |
| 33480.000 | * | * | * | * | 74.000 |
| 39060.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5700MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11400.000 | 16.530 | 45.570 | 62.101 | -11.899 | 74.000 |
| 17100.000 | * | * | * | * | 74.000 |
| 22800.000 | * | * | * | * | 74.000 |
| 28500.000 | * | * | * | * | 74.000 |
| 34200.000 | * | * | * | * | 74.000 |
| 39900.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| 11400.000 | 16.530 | 31.570 | 48.101 | -5.899 | 54.000 |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11400.000 | 17.138 | 39.170 | 56.308 | -17.692 | 74.000 |
| 17100.000 | * | * | * | * | 74.000 |
| 22800.000 | * | * | * | * | 74.000 |
| 28500.000 | * | * | * | * | 74.000 |
| 34200.000 | * | * | * | * | 74.000 |
| 39900.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| 11400.000 | 17.138 | 28.490 | 45.628 | -8.372 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) (5270MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10540.000 | 14.151 | 36.740 | 50.890 | -23.110 | 74.000 |
| 15810.000 | * | * | * | * | 74.000 |
| 21080.000 | * | * | * | * | 74.000 |
| 26350.000 | * | * | * | * | 74.000 |
| 31620.000 | * | * | * | * | 74.000 |
| 36890.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10540.000 | 14.829 | 35.880 | 50.708 | -23.292 | 74.000 |
| 15810.000 | * | * | * | * | 74.000 |
| 21080.000 | * | * | * | * | 74.000 |
| 26350.000 | * | * | * | * | 74.000 |
| 31620.000 | * | * | * | * | 74.000 |
| 36890.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) (5310MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10620.000 | 14.623 | 36.430 | 51.053 | -22.947 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10620.000 | 14.970 | 36.240 | 51.210 | -22.790 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) (5510MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11020.000 | 16.474 | 35.710 | 52.183 | -21.817 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11020.000 | 17.224 | 36.310 | 53.534 | -20.466 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) (5550MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11020.000 | 46.058 | 36.310 | 53.534 | -20.466 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11100.000 | 17.523 | 35.060 | 52.583 | -21.417 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) (5670MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11340.000 | 16.408 | 43.750 | 60.157 | -13.843 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| 11340.000 | 16.408 | 29.760 | 46.167 | -7.833 | 54.000 |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11340.000 | 17.167 | 38.000 | 55.167 | -18.833 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| 11340.000 | 17.167 | 25.290 | 42.457 | -11.543 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna) (5260MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10520.000 | 14.015 | 38.410 | 52.425 | -21.575 | 74.000 |
| 15780.000 | * | * | * | * | 74.000 |
| 21040.000 | * | * | * | * | 74.000 |
| 26300.000 | * | * | * | * | 74.000 |
| 31560.000 | * | * | * | * | 74.000 |
| 36820.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10520.000 | 14.818 | 41.600 | 56.418 | -17.582 | 74.000 |
| 15780.000 | * | * | * | * | 74.000 |
| 21040.000 | * | * | * | * | 74.000 |
| 26300.000 | * | * | * | * | 74.000 |
| 31560.000 | * | * | * | * | 74.000 |
| 36820.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| 10520.000 | 14.818 | 29.560 | 44.378 | -9.622 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna) (5300MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10600.000 | 14.550 | 38.130 | 52.679 | -21.321 | 74.000 |
| 15900.000 | * | * | * | * | 74.000 |
| 21200.000 | * | * | * | * | 74.000 |
| 26500.000 | * | * | * | * | 74.000 |
| 31800.000 | * | * | * | * | 74.000 |
| 37100.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10600.000 | 14.881 | 38.750 | 53.631 | -20.369 | 74.000 |
| 15900.000 | * | * | * | * | 74.000 |
| 21200.000 | * | * | * | * | 74.000 |
| 26500.000 | * | * | * | * | 74.000 |
| 31800.000 | * | * | * | * | 74.000 |
| 37100.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna) (5320MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10640.000 | 14.690 | 37.080 | 51.770 | -22.230 | 74.000 |
| 15960.000 | * | * | * | * | 74.000 |
| 21280.000 | * | * | * | * | 74.000 |
| 26600.000 | * | * | * | * | 74.000 |
| 31920.000 | * | * | * | * | 74.000 |
| 37240.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10640.000 | 15.083 | 38.900 | 53.983 | -20.017 | 74.000 |
| 15960.000 | * | * | * | * | 74.000 |
| 21280.000 | * | * | * | * | 74.000 |
| 26600.000 | * | * | * | * | 74.000 |
| 31920.000 | * | * | * | * | 74.000 |
| 37240.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna) (5500MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11000.000 | 16.399 | 36.920 | 53.319 | -20.681 | 74.000 |
| 16500.000 | * | * | * | * | 74.000 |
| 22000.000 | * | * | * | * | 74.000 |
| 27500.000 | * | * | * | * | 74.000 |
| 33000.000 | * | * | * | * | 74.000 |
| 38500.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11000.000 | 17.132 | 38.050 | 55.182 | -18.818 | 74.000 |
| 16500.000 | * | * | * | * | 74.000 |
| 22000.000 | * | * | * | * | 74.000 |
| 27500.000 | * | * | * | * | 74.000 |
| 33000.000 | * | * | * | * | 74.000 |
| 38500.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| 11000.000 | 17.132 | 26.090 | 43.222 | -10.778 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna) (5580MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11160.000 | 16.664 | 36.470 | 53.135 | -20.865 | 74.000 |
| 16740.000 | * | * | * | * | 74.000 |
| 22320.000 | * | * | * | * | 74.000 |
| 27900.000 | * | * | * | * | 74.000 |
| 33480.000 | * | * | * | * | 74.000 |
| 39060.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11160.000 | 17.643 | 38.980 | 56.623 | -17.377 | 74.000 |
| 16740.000 | * | * | * | * | 74.000 |
| 22320.000 | * | * | * | * | 74.000 |
| 27900.000 | * | * | * | * | 74.000 |
| 33480.000 | * | * | * | * | 74.000 |
| 39060.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| 11160.000 | 17.643 | 25.390 | 43.033 | -10.967 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna) (5700MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11400.000 | 16.530 | 37.090 | 53.621 | -20.379 | 74.000 |
| 17100.000 | * | * | * | * | 74.000 |
| 22800.000 | * | * | * | * | 74.000 |
| 28500.000 | * | * | * | * | 74.000 |
| 34200.000 | * | * | * | * | 74.000 |
| 39900.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11400.000 | 17.138 | 39.530 | 56.668 | -17.332 | 74.000 |
| 17100.000 | * | * | * | * | 74.000 |
| 22800.000 | * | * | * | * | 74.000 |
| 28500.000 | * | * | * | * | 74.000 |
| 34200.000 | * | * | * | * | 74.000 |
| 39900.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| 11400.000 | 17.138 | 27.050 | 44.188 | -9.812 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna) (5260MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10520.000 | 14.015 | 38.600 | 52.615 | -21.385 | 74.000 |
| 15780.000 | * | * | * | * | 74.000 |
| 21040.000 | * | * | * | * | 74.000 |
| 26300.000 | * | * | * | * | 74.000 |
| 31560.000 | * | * | * | * | 74.000 |
| 36820.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10520.000 | 14.818 | 43.560 | 58.378 | -15.622 | 74.000 |
| 15780.000 | * | * | * | * | 74.000 |
| 21040.000 | * | * | * | * | 74.000 |
| 26300.000 | * | * | * | * | 74.000 |
| 31560.000 | * | * | * | * | 74.000 |
| 36820.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| 10520.000 | 14.818 | 28.130 | 42.948 | -11.052 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna) (5300MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10600.000 | 14.550 | 38.480 | 53.029 | -20.971 | 74.000 |
| 15900.000 | * | * | * | * | 74.000 |
| 21200.000 | * | * | * | * | 74.000 |
| 26500000 | * | * | * | * | 74.000 |
| 31800.000 | * | * | * | * | 74.000 |
| 37100.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10600.000 | 14.881 | 41.370 | 56.251 | -17.749 | 74.000 |
| 15900.000 | * | * | * | * | 74.000 |
| 21200.000 | * | * | * | * | 74.000 |
| 26500000 | * | * | * | * | 74.000 |
| 31800.000 | * | * | * | * | 74.000 |
| 37100.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| 10600.000 | 14.881 | 28.370 | 43.251 | -10.749 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna) (5320MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10640.000 | 14.690 | 38.190 | 52.880 | -21.120 | 74.000 |
| 15960.000 | * | * | * | * | 74.000 |
| 21280.000 | * | * | * | * | 74.000 |
| 26600.000 | * | * | * | * | 74.000 |
| 31920.000 | * | * | * | * | 74.000 |
| 37240.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10640.000 | 15.083 | 38.190 | 53.273 | -20.727 | 74.000 |
| 15960.000 | * | * | * | * | 74.000 |
| 21280.000 | * | * | * | * | 74.000 |
| 26600.000 | * | * | * | * | 74.000 |
| 31920.000 | * | * | * | * | 74.000 |
| 37240.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna) (5500MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11000.000 | 16.399 | 36.930 | 53.329 | -20.671 | 74.000 |
| 16500.000 | * | * | * | * | 74.000 |
| 22000.000 | * | * | * | * | 74.000 |
| 27500.000 | * | * | * | * | 74.000 |
| 33000.000 | * | * | * | * | 74.000 |
| 38500.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11000.000 | 17.132 | 39.390 | 56.522 | -17.478 | 74.000 |
| 16500.000 | * | * | * | * | 74.000 |
| 22000.000 | * | * | * | * | 74.000 |
| 27500.000 | * | * | * | * | 74.000 |
| 33000.000 | * | * | * | * | 74.000 |
| 38500.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| 11000.000 | 17.132 | 26.120 | 43.252 | -10.748 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna) (5580MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11160.000 | 16.664 | 36.030 | 52.695 | -21.305 | 74.000 |
| 16740.000 | * | * | * | * | 74.000 |
| 22320.000 | * | * | * | * | 74.000 |
| 27900.000 | * | * | * | * | 74.000 |
| 33480.000 | * | * | * | * | 74.000 |
| 39060.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11160.000 | 17.643 | 36.310 | 53.953 | -20.047 | 74.000 |
| 16740.000 | * | * | * | * | 74.000 |
| 22320.000 | * | * | * | * | 74.000 |
| 27900.000 | * | * | * | * | 74.000 |
| 33480.000 | * | * | * | * | 74.000 |
| 39060.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna) (5700MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11400.000 | 16.530 | 37.260 | 53.791 | -20.209 | 74.000 |
| 17100.000 | * | * | * | * | 74.000 |
| 22800.000 | * | * | * | * | 74.000 |
| 28500.000 | * | * | * | * | 74.000 |
| 34200.000 | * | * | * | * | 74.000 |
| 39900.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11400.000 | 17.138 | 38.560 | 55.698 | -18.302 | 74.000 |
| 17100.000 | * | * | * | * | 74.000 |
| 22800.000 | * | * | * | * | 74.000 |
| 28500.000 | * | * | * | * | 74.000 |
| 34200.000 | * | * | * | * | 74.000 |
| 39900.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| 11400.000 | 17.138 | 28.000 | 45.138 | -8.862 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna) (5270MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10540.000 | 14.151 | 37.050 | 51.200 | -22.800 | 74.000 |
| 15810.000 | * | * | * | * | 74.000 |
| 21080.000 | * | * | * | * | 74.000 |
| 26350.000 | * | * | * | * | 74.000 |
| 31620.000 | * | * | * | * | 74.000 |
| 36890.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10540.000 | 14.829 | 40.790 | 55.618 | -18.382 | 74.000 |
| 15810.000 | * | * | * | * | 74.000 |
| 21080.000 | * | * | * | * | 74.000 |
| 26350.000 | * | * | * | * | 74.000 |
| 31620.000 | * | * | * | * | 74.000 |
| 36890.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| 10540.000 | 14.829 | 27.650 | 42.478 | -11.522 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna) (5310MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 10620.000 | 14.623 | 36.120 | 50.743 | -23.257 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 74.000 |
| **Average Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 10620.000 | 14.970 | 36.520 | 51.490 | -22.510 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna) (5510MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11020.000 | 16.474 | 35.740 | 52.213 | -21.787 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11020.000 | 17.224 | 35.570 | 52.794 | -21.206 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna) (5550MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11100.000 | 16.681 | 35.690 | 52.371 | -21.629 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11100.000 | 17.523 | 35.150 | 52.673 | -21.327 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : SpectraGuard® Access Point / Sensor
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna) (5670MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector:** | | | | | |
| 11340.000 | 16.408 | 35.770 | 52.177 | -21.823 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 74.000 |
| **Average** | | | | | |
| **Detector:** | | | | | |
| -- | | | | | |
| **Vertical** | | | | | |
| **Peak Detector:** | | | | | |
| 11340.000 | 17.167 | 35.270 | 52.437 | -21.563 | 74.000 |
| 15930.000 | * | * | * | * | 74.000 |
| 21240.000 | * | * | * | * | 74.000 |
| 26550.000 | * | * | * | * | 74.000 |
| 31860.000 | * | * | * | * | 74.000 |
| 37170.000 | * | * | * | * | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

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

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector** | | | | | |
| 202.660 | -10.889 | 48.206 | 37.317 | -6.183 | 43.500 |
| 386.960 | -1.524 | 40.843 | 39.319 | -6.681 | 46.000 |
| 474.260 | 0.024 | 35.568 | 35.591 | -10.409 | 46.000 |
| 641.100 | 1.348 | 27.119 | 28.467 | -17.533 | 46.000 |
| 722.580 | 3.496 | 27.484 | 30.980 | -15.020 | 46.000 |
| 852.560 | 6.342 | 30.680 | 37.022 | -8.978 | 46.000 |
| **Vertical** | | | | | |
| **Peak Detector** | | | | | |
| 121.180 | -3.814 | 34.323 | 30.509 | -12.991 | 43.500 |
| 224.000 | -8.699 | 42.825 | 34.126 | -11.874 | 46.000 |
| 400.540 | -5.156 | 40.875 | 35.720 | -10.280 | 46.000 |
| 567.380 | -5.426 | 34.233 | 28.807 | -17.193 | 46.000 |
| 800.180 | 2.801 | 33.430 | 36.231 | -9.769 | 46.000 |
| 965.080 | 7.932 | 26.622 | 34.554 | -19.446 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

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

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector** | | | | | |
| 156.100 | -10.461 | 40.092 | 29.630 | -13.870 | 43.500 |
| 280.260 | -5.507 | 40.878 | 35.371 | -10.629 | 46.000 |
| 418.000 | -3.234 | 29.883 | 26.649 | -19.351 | 46.000 |
| 596.480 | 4.017 | 29.863 | 33.880 | -12.120 | 46.000 |
| 773.020 | 4.206 | 25.889 | 30.095 | -15.905 | 46.000 |
| 934.040 | 6.612 | 30.253 | 36.865 | -9.135 | 46.000 |
| **Vertical** | | | | | |
| **Peak Detector** | | | | | |
| 177.440 | -8.339 | 39.806 | 31.467 | -12.033 | 43.500 |
| 276.380 | -8.653 | 46.520 | 37.867 | -8.133 | 46.000 |
| 447.100 | -7.746 | 28.484 | 20.738 | -25.262 | 46.000 |
| 542.160 | -0.269 | 35.314 | 35.045 | -10.955 | 46.000 |
| 701.240 | 0.198 | 33.185 | 33.383 | -12.617 | 46.000 |
| 809.880 | 3.279 | 34.800 | 38.079 | -7.921 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : SpectraGuard® Access Point / Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5300MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector** | | | | | |
| 136.700 | -10.363 | 35.659 | 25.296 | -18.204 | 43.500 |
| 222.060 | -10.439 | 41.836 | 31.397 | -14.603 | 46.000 |
| 425.760 | -3.093 | 35.273 | 32.180 | -13.820 | 46.000 |
| 567.380 | 1.664 | 24.385 | 26.049 | -19.951 | 46.000 |
| 749.740 | 3.320 | 31.202 | 34.522 | -11.478 | 46.000 |
| 910.760 | 6.164 | 26.820 | 32.985 | -13.015 | 46.000 |
| **Vertical** | | | | | |
| **Peak Detector** | | | | | |
| 130.880 | -4.239 | 35.214 | 30.975 | -12.525 | 43.500 |
| 282.200 | -8.461 | 45.043 | 36.582 | -9.418 | 46.000 |
| 429.640 | -9.902 | 34.149 | 24.247 | -21.753 | 46.000 |
| 530.520 | -0.517 | 33.072 | 32.555 | -13.445 | 46.000 |
| 709.000 | 0.058 | 30.925 | 30.983 | -15.017 | 46.000 |
| 889.420 | 2.512 | 25.993 | 28.505 | -17.495 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : SpectraGuard® Access Point / Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5580MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector** | | | | | |
| 119.240 | -9.621 | 32.607 | 22.986 | -20.514 | 43.500 |
| 210.420 | -10.972 | 46.914 | 35.943 | -7.557 | 43.500 |
| 406.360 | -2.500 | 34.579 | 32.079 | -13.921 | 46.000 |
| 666.320 | 2.031 | 33.729 | 35.761 | -10.239 | 46.000 |
| 806.000 | 4.968 | 26.525 | 31.493 | -14.507 | 46.000 |
| 875.840 | 5.271 | 28.651 | 33.922 | -12.078 | 46.000 |
| **Vertical** | | | | | |
| **Peak Detector** | | | | | |
| 152.220 | -6.215 | 35.585 | 29.370 | -14.130 | 43.500 |
| 266.680 | -8.213 | 45.321 | 37.108 | -8.892 | 46.000 |
| 408.300 | -6.606 | 36.060 | 29.454 | -16.546 | 46.000 |
| 528.580 | -0.462 | 33.601 | 33.139 | -12.861 | 46.000 |
| 703.180 | 0.139 | 30.311 | 30.449 | -15.551 | 46.000 |
| 811.820 | 3.121 | 32.733 | 35.853 | -10.147 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : SpectraGuard® Access Point / Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) (5270MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector** | | | | | |
| 97.900 | -7.650 | 36.671 | 29.020 | -14.480 | 43.500 |
| 280.260 | -5.507 | 39.746 | 34.239 | -11.761 | 46.000 |
| 419.940 | -3.234 | 28.649 | 25.415 | -20.585 | 46.000 |
| 646.920 | 1.793 | 23.698 | 25.491 | -20.509 | 46.000 |
| 749.740 | 3.320 | 33.250 | 36.570 | -9.430 | 46.000 |
| 875.840 | 5.271 | 28.511 | 33.782 | -12.218 | 46.000 |
| **Vertical** | | | | | |
| **Peak Detector** | | | | | |
| 138.640 | -5.795 | 33.871 | 28.076 | -15.424 | 43.500 |
| 288.020 | -8.189 | 43.253 | 35.064 | -10.936 | 46.000 |
| 416.060 | -8.415 | 32.983 | 24.568 | -21.432 | 46.000 |
| 542.160 | -0.269 | 32.401 | 32.132 | -13.868 | 46.000 |
| 809.880 | 3.279 | 32.038 | 35.317 | -10.683 | 46.000 |
| 920.460 | 5.517 | 28.083 | 33.600 | -12.400 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : SpectraGuard® Access Point / Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) (5550MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector** | | | | | |
| 121.180 | -9.834 | 32.280 | 22.446 | -21.054 | 43.500 |
| 210.420 | -10.972 | 45.638 | 34.667 | -8.833 | 43.500 |
| 385.020 | -1.350 | 32.284 | 30.934 | -15.066 | 46.000 |
| 582.900 | 3.445 | 30.872 | 34.317 | -11.683 | 46.000 |
| 738.100 | 2.826 | 24.620 | 27.446 | -18.554 | 46.000 |
| 914.640 | 6.083 | 30.464 | 36.547 | -9.453 | 46.000 |
| **Vertical** | | | | | |
| **Peak Detector** | | | | | |
| 187.140 | -11.507 | 39.855 | 28.348 | -15.152 | 43.500 |
| 319.060 | -6.897 | 44.684 | 37.787 | -8.213 | 46.000 |
| 474.260 | -4.556 | 36.640 | 32.083 | -13.917 | 46.000 |
| 608.120 | -1.576 | 37.723 | 36.147 | -9.853 | 46.000 |
| 774.960 | 2.337 | 26.611 | 28.948 | -17.052 | 46.000 |
| 926.280 | 5.821 | 26.724 | 32.545 | -13.455 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : SpectraGuard® Access Point / Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna) (5300MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector** | | | | | |
| 123.120 | -9.891 | 31.990 | 22.099 | -21.401 | 43.500 |
| 383.080 | -1.164 | 33.499 | 32.335 | -13.665 | 46.000 |
| 493.660 | -0.536 | 29.768 | 29.232 | -16.768 | 46.000 |
| 641.100 | 1.348 | 29.293 | 30.641 | -15.359 | 46.000 |
| 765.260 | 4.253 | 30.812 | 35.065 | -10.935 | 46.000 |
| 916.580 | 6.144 | 29.094 | 35.238 | -10.762 | 46.000 |
| **Vertical** | | | | | |
| **Peak Detector** | | | | | |
| 165.800 | -7.719 | 35.105 | 27.386 | -16.114 | 43.500 |
| 470.380 | -4.674 | 32.366 | 27.692 | -18.308 | 46.000 |
| 598.420 | -2.979 | 35.098 | 32.119 | -13.881 | 46.000 |
| 718.700 | -0.313 | 31.821 | 31.508 | -14.492 | 46.000 |
| 844.800 | 3.181 | 30.560 | 33.741 | -12.259 | 46.000 |
| 916.580 | 1.524 | 28.598 | 30.122 | -15.878 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : SpectraGuard® Access Point / Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna) (5580MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector** | | | | | |
| 185.200 | -12.336 | 39.784 | 27.448 | -16.052 | 43.500 |
| 400.540 | -2.276 | 40.098 | 37.822 | -8.178 | 46.000 |
| 480.080 | -0.329 | 31.934 | 31.605 | -14.395 | 46.000 |
| 641.100 | 1.348 | 29.466 | 30.814 | -15.186 | 46.000 |
| 774.960 | 4.187 | 29.422 | 33.609 | -12.391 | 46.000 |
| 920.460 | 6.467 | 30.123 | 36.590 | -9.410 | 46.000 |
| **Vertical** | | | | | |
| **Peak Detector** | | | | | |
| 175.500 | -8.257 | 37.700 | 29.442 | -14.058 | 43.500 |
| 423.820 | -9.517 | 30.939 | 21.422 | -24.578 | 46.000 |
| 532.460 | -0.563 | 36.458 | 35.895 | -10.105 | 46.000 |
| 699.300 | 0.695 | 30.312 | 31.007 | -14.993 | 46.000 |
| 829.280 | 2.864 | 31.002 | 33.866 | -12.134 | 46.000 |
| 916.580 | 1.524 | 29.718 | 31.242 | -14.758 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : SpectraGuard® Access Point / Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna) (5300MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector** | | | | | |
| 57.160 | -13.583 | 39.702 | 26.119 | -13.881 | 40.000 |
| 419.940 | -3.234 | 31.730 | 28.496 | -17.504 | 46.000 |
| 505.300 | 0.308 | 31.642 | 31.950 | -14.050 | 46.000 |
| 683.780 | 2.828 | 29.645 | 32.473 | -13.527 | 46.000 |
| 840.920 | 5.191 | 30.114 | 35.305 | -10.695 | 46.000 |
| 943.740 | 6.492 | 29.038 | 35.531 | -10.469 | 46.000 |
| **Vertical** | | | | | |
| **Peak Detector** | | | | | |
| 192.960 | -9.878 | 40.172 | 30.294 | -13.206 | 43.500 |
| 416.060 | -8.415 | 34.399 | 25.984 | -20.016 | 46.000 |
| 542.160 | -0.269 | 34.669 | 34.400 | -11.600 | 46.000 |
| 646.920 | -4.957 | 29.623 | 24.666 | -21.334 | 46.000 |
| 823.460 | 3.462 | 29.811 | 33.274 | -12.726 | 46.000 |
| 968.960 | 8.191 | 29.061 | 37.252 | -16.748 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : SpectraGuard® Access Point / Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna) (5580MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector** | | | | | |
| 119.240 | -9.621 | 33.357 | 23.736 | -19.764 | 43.500 |
| 224.000 | -10.339 | 43.149 | 32.810 | -13.190 | 46.000 |
| 418.000 | -3.234 | 32.062 | 28.828 | -17.172 | 46.000 |
| 643.040 | 1.441 | 30.513 | 31.954 | -14.046 | 46.000 |
| 786.600 | 4.712 | 28.926 | 33.638 | -12.362 | 46.000 |
| 951.500 | 6.641 | 29.593 | 36.234 | -9.766 | 46.000 |
| **Vertical** | | | | | |
| **Peak Detector** | | | | | |
| 163.860 | -7.204 | 35.884 | 28.680 | -14.820 | 43.500 |
| 427.700 | -10.022 | 31.496 | 21.474 | -24.526 | 46.000 |
| 515.000 | -1.090 | 33.261 | 32.171 | -13.829 | 46.000 |
| 681.840 | 1.484 | 29.571 | 31.055 | -14.945 | 46.000 |
| 809.880 | 3.279 | 30.312 | 33.591 | -12.409 | 46.000 |
| 928.220 | 6.203 | 29.895 | 36.098 | -9.902 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : SpectraGuard® Access Point / Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna) (5270MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector** | | | | | |
| 115.360 | -8.770 | 34.437 | 25.667 | -17.833 | 43.500 |
| 181.320 | -12.152 | 39.665 | 27.513 | -15.987 | 43.500 |
| 398.600 | -2.268 | 32.547 | 30.279 | -15.721 | 46.000 |
| 559.620 | 1.664 | 28.992 | 30.656 | -15.344 | 46.000 |
| 687.660 | 3.294 | 29.475 | 32.769 | -13.231 | 46.000 |
| 873.900 | 5.200 | 29.315 | 34.515 | -11.485 | 46.000 |
| **Vertical** | | | | | |
| **Peak Detector** | | | | | |
| 142.520 | -6.267 | 35.557 | 29.290 | -14.210 | 43.500 |
| 421.880 | -9.024 | 32.024 | 23.000 | -23.000 | 46.000 |
| 524.700 | -0.379 | 33.074 | 32.695 | -13.305 | 46.000 |
| 695.420 | 1.878 | 30.664 | 32.542 | -13.458 | 46.000 |
| 825.400 | 3.430 | 30.053 | 33.483 | -12.517 | 46.000 |
| 918.520 | 4.126 | 30.332 | 34.458 | -11.542 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : SpectraGuard® Access Point / Sensor
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna) (5550MHz)

| Frequency | Correct Factor | Reading Level | Measurement Level | Margin | Limit |
|---|---|---|---|---|---|
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| **Horizontal** | | | | | |
| **Peak Detector** | | | | | |
| 119.240 | -9.621 | 30.447 | 20.826 | -22.674 | 43.500 |
| 194.900 | -11.012 | 40.604 | 29.592 | -13.908 | 43.500 |
| 418.000 | -3.234 | 29.431 | 26.197 | -19.803 | 46.000 |
| 612.000 | 3.819 | 27.610 | 31.429 | -14.571 | 46.000 |
| 782.720 | 4.325 | 28.113 | 32.438 | -13.562 | 46.000 |
| 934.040 | 6.612 | 29.038 | 35.650 | -10.350 | 46.000 |
| **Vertical** | | | | | |
| **Peak Detector** | | | | | |
| 169.680 | -8.728 | 37.968 | 29.240 | -14.260 | 43.500 |
| 369.500 | -2.868 | 35.363 | 32.495 | -13.505 | 46.000 |
| 536.340 | -0.305 | 28.128 | 27.823 | -18.177 | 46.000 |
| 753.620 | 3.187 | 29.139 | 32.326 | -13.674 | 46.000 |
| 856.440 | 0.562 | 28.189 | 28.751 | -17.249 | 46.000 |
| 920.460 | 5.517 | 27.952 | 33.469 | -12.531 | 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 + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

# 7. Band Edge

## 7.1. 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, 2013 |
| | Spectrum Analyzer | Agilent | E4407B / US39440758 | Jun, 2013 |
| X | Spectrum Analyzer | Agilent | N9010A / MY48030495 | Apr., 2013 |

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:

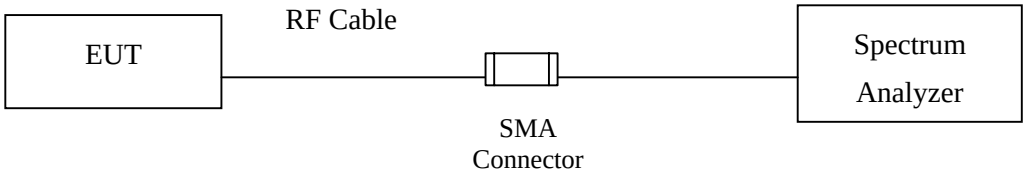
The following test equipments are used during the band edge tests:

| Test Site | | Equipment | Manufacturer | Model No./Serial No. | Last Cal. |
|---|---|---|---|---|---|
| ☒Site # 3 | | Bilog Antenna | Schaffner Chase | CBL6112B/2673 | Sep., 2012 |
| | X | Horn Antenna | Schwarzbeck | BBHA9120D/D305 | Sep., 2012 |
| | | Horn Antenna | Schwarzbeck | BBHA9170/208 | Jul., 2013 |
| | | Pre-Amplifier | QTK | QTK-AMP-03 / 0003 | May, 2013 |
| | X | Pre-Amplifier | QTK | AP-180C / CHM_0906076 | Sep., 2012 |
| | | Pre-Amplifier | MITEQ | AMF-4D-180400-45-6P/ 925975 | Mar, 2013 |
| | X | Spectrum Analyzer | Agilent | E4407B / US39440758 | May, 2013 |
| | | Test Receiver | R & S | ESCS 30/ 825442/018 | Sep., 2012 |
| | X | Coaxial Cable | QuieTek | QTK-CABLE/ CAB5 | Feb., 2013 |
| | X | Controller | QuieTek | QTK-CONTROLLER/ CTRL3 | N/A |
| | X | Coaxial Switch | Anritsu | MP59B/6200265729 | N/A |

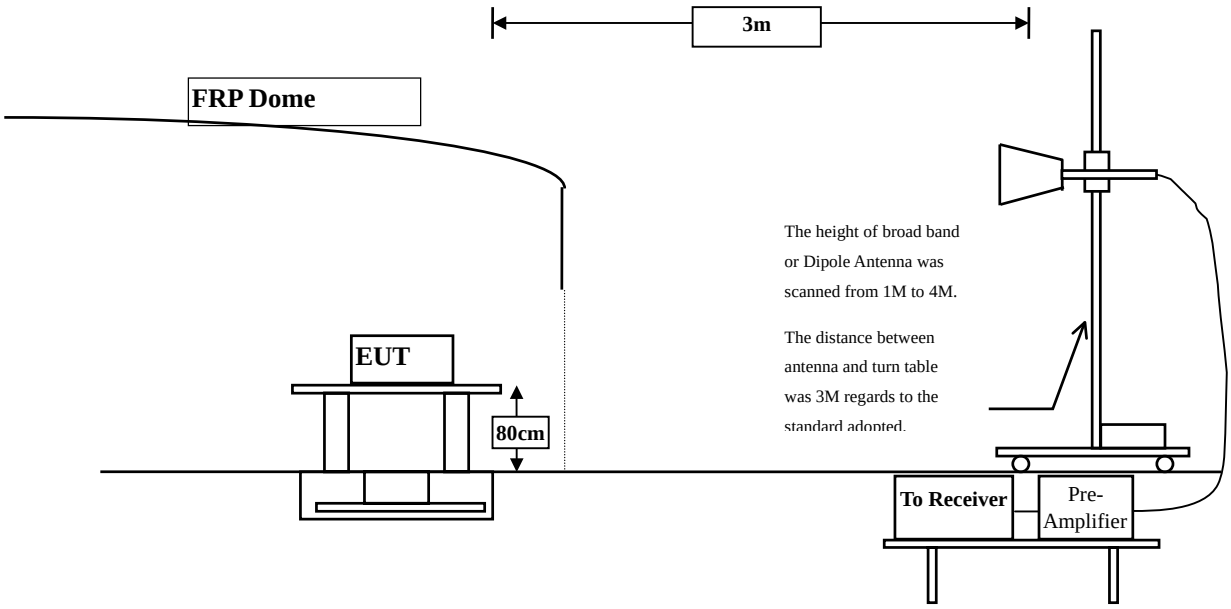
Note: 1. All instruments are calibrated every one year.
2. The test instruments marked by "X" are used to measure the final test results.

## 7.2. Test Setup

**RF Conducted Measurement:**




**RF Radiated Measurement:**



## 7.3. 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 | dBuV/m@3m |
| 30-88 | 100 | 40 |
| 88-216 | 150 | 43.5 |
| 216-960 | 200 | 46 |
| Above 960 | 500 | 54 |

Remarks : 1. RF Voltage (dBuV) = 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.

## 7.4. 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 C63.10:2009 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, 2009; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

## 7.5. Uncertainty

± 3.8 dB below 1GHz

± 3.9 dB above 1GHz

## 7.6. Test Result of Band Edge

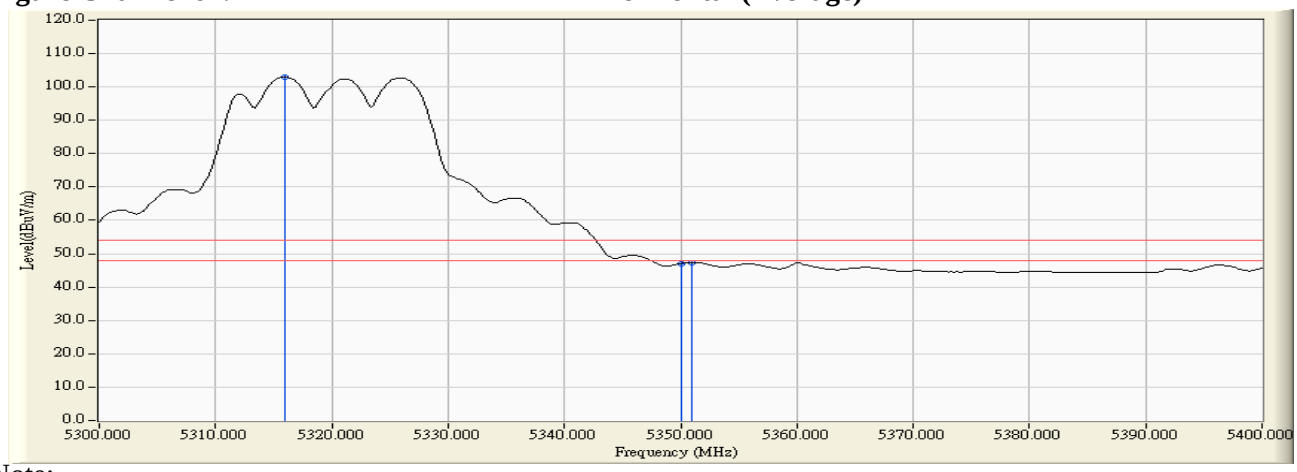
Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) -Channel 64

**RF Radiated Measurement (Horizontal):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 64 (Peak) | 5325.800 | 3.794 | 108.667 | 112.461 | -- | -- | Pass |
| 64 (Peak) | 5350.000 | 3.716 | 58.040 | 61.757 | 74.00 | 54.00 | Pass |
| 64 (Peak) | 5351.000 | 3.713 | 59.102 | 62.815 | 74.00 | 54.00 | Pass |
| 64 (Average) | 5316.000 | 3.824 | 99.077 | 102.902 | -- | -- | Pass |
| 64 (Average) | 5350.000 | 3.716 | 43.314 | 47.031 | 74.00 | 54.00 | Pass |
| 64 (Average) | 5351.000 | 3.713 | 43.686 | 47.399 | 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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) -Channel 64

**RF Radiated Measurement (Vertical):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 64 (Peak) | 5324.400 | 5.723 | 97.132 | 102.856 | -- | -- | Pass |
| 64 (Peak) | 5350.000 | 5.691 | 51.951 | 57.643 | 74.00 | 54.00 | Pass |
| 64 (Peak) | 5357.000 | 5.682 | 53.246 | 58.928 | 74.00 | 54.00 | Pass |
| 64 (Average) | 5324.400 | 5.723 | 86.924 | 92.648 | -- | -- | Pass |
| 64 (Average) | 5350.000 | 5.691 | 40.000 | 45.692 | 74.00 | 54.00 | Pass |

**Figure Channel 64: Vertical (Peak)**

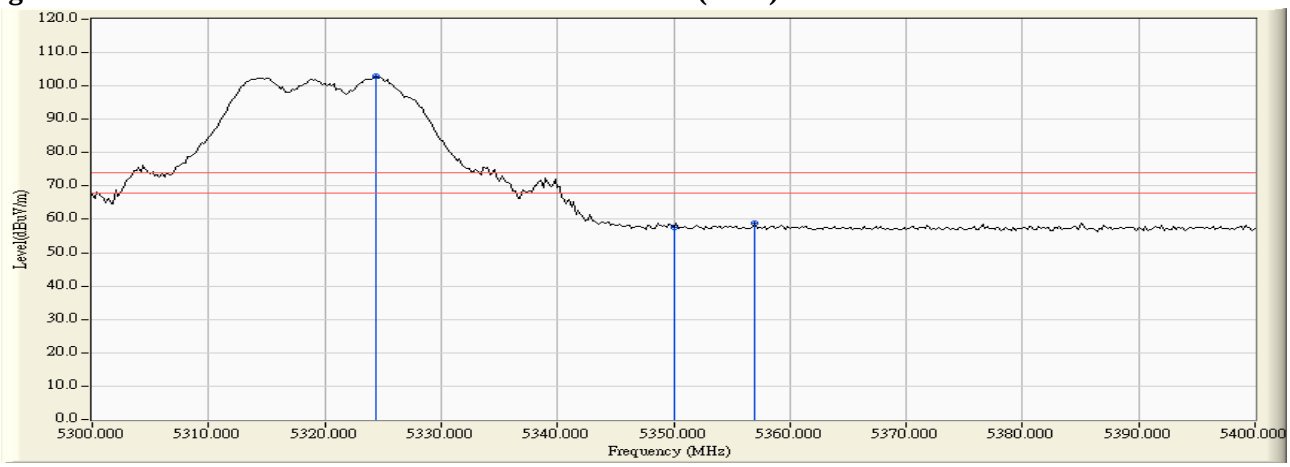
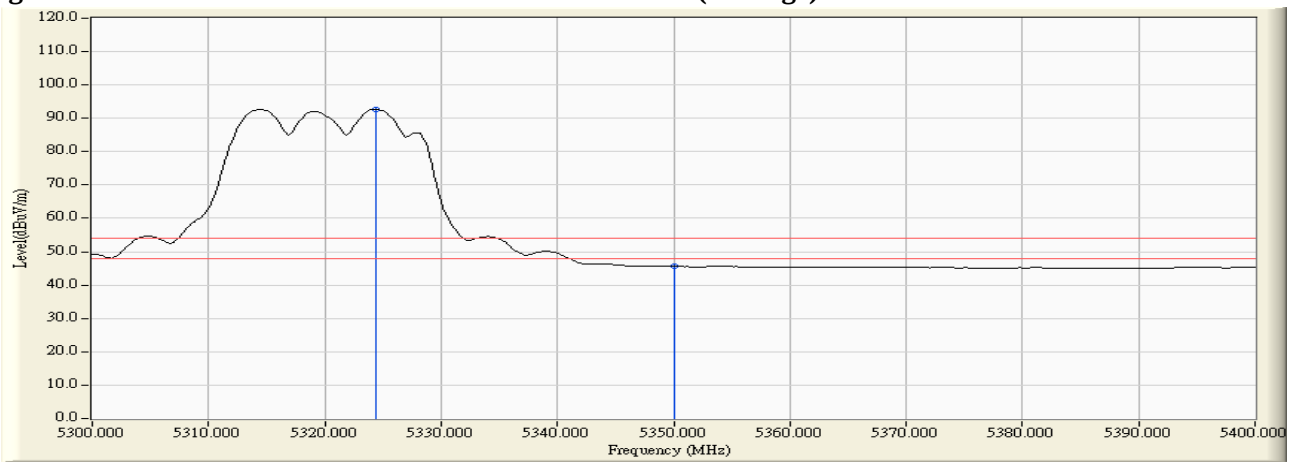



**Figure Channel 64: Vertical (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) -Channel 100

**RF Radiated Measurement (Horizontal):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 100 (Peak) | 5424.200 | 3.877 | 57.451 | 61.329 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5460.000 | 4.354 | 52.771 | 57.125 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5503.400 | 4.837 | 105.928 | 110.766 | -- | -- | Pass |
| 100 (Average) | 5423.800 | 3.872 | 46.239 | 50.111 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5460.000 | 4.354 | 41.044 | 45.398 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5503.800 | 4.842 | 95.496 | 100.337 | -- | -- | Pass |

**Figure Channel 100: Horizontal (Peak)**

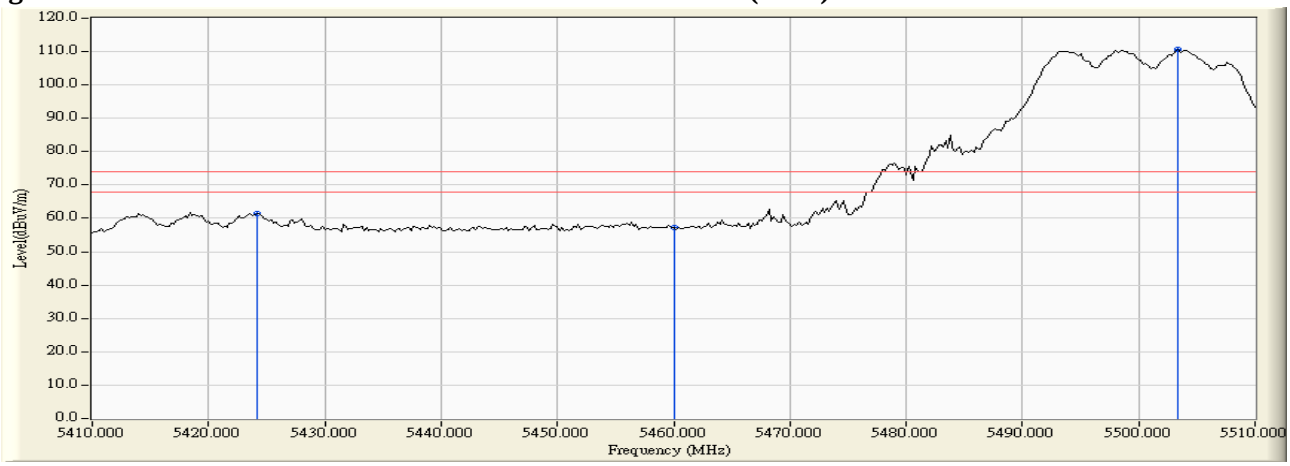
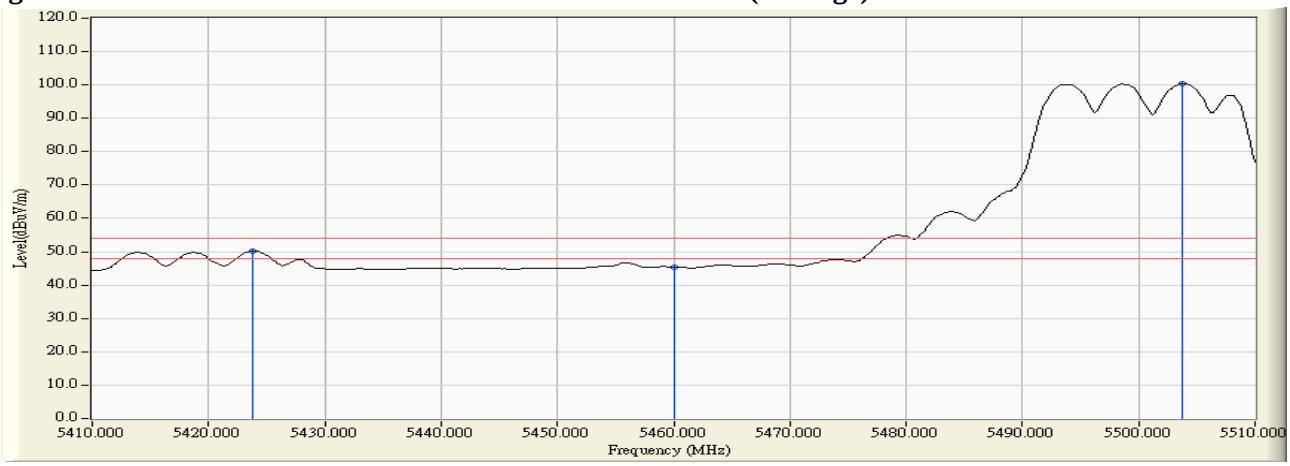



**Figure Channel 100: Horizontal (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) -Channel 100

**RF Radiated Measurement (Vertical):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 100 (Peak) | 5454.000 | 5.999 | 53.460 | 59.459 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5460.000 | 6.041 | 50.753 | 56.794 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5495.800 | 6.262 | 93.457 | 99.719 | -- | -- | Pass |
| 100 (Average) | 5460.000 | 6.041 | 39.564 | 45.605 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5495.600 | 6.261 | 83.848 | 90.110 | -- | -- | Pass |

**Figure Channel 100: Vertical (Peak)**

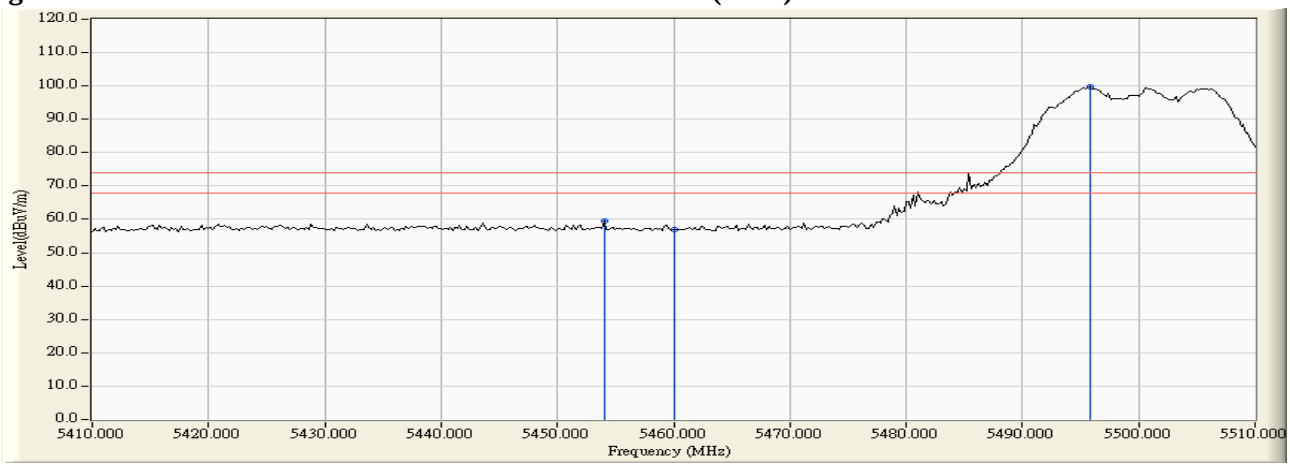
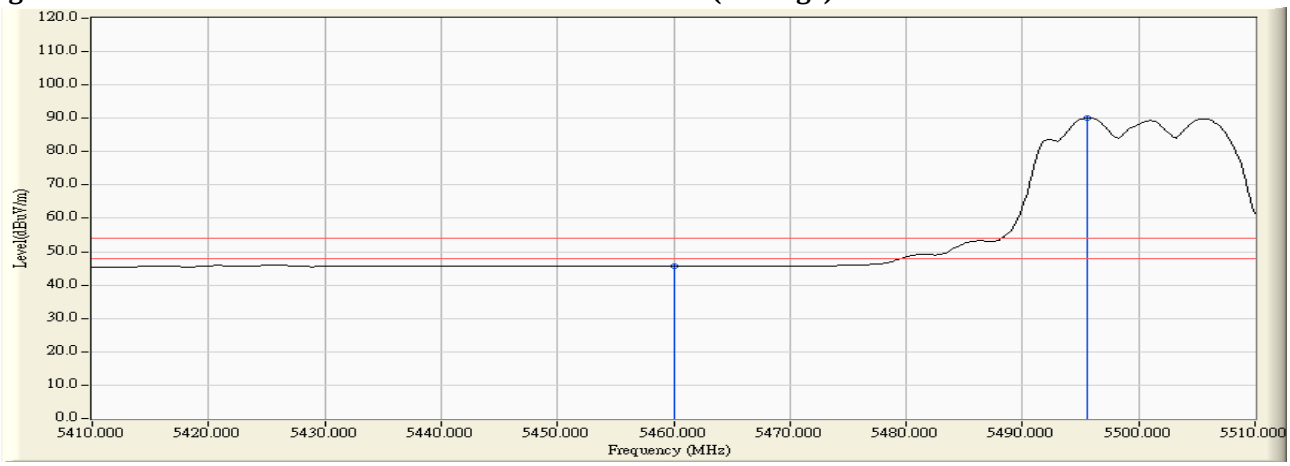



**Figure Channel 100: Vertical (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole 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 | -66.670 | -48.336 | -21.336 | -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 | -68.420 | -49.085 | -22.085 | -27.000 | Pass |

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole 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 | -62.300 | -43.651 | -16.651 | -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 | -67.350 | -47.978 | -20.978 | -27.000 | Pass |

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) -Channel 64

**RF Radiated Measurement (Horizontal):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 64 (Peak) | 5318.800 | 3.816 | 106.735 | 110.551 | -- | -- | Pass |
| 64 (Peak) | 5350.000 | 3.716 | 54.296 | 58.013 | 74.00 | 54.00 | Pass |
| 64 (Average) | 5315.400 | 3.827 | 95.186 | 99.013 | -- | -- | Pass |
| 64 (Average) | 5350.000 | 3.716 | 40.471 | 44.188 | 74.00 | 54.00 | Pass |
| 64 (Average) | 5360.000 | 3.684 | 40.844 | 44.528 | 74.00 | 54.00 | Pass |

**Figure Channel 64: Horizontal (Peak)**

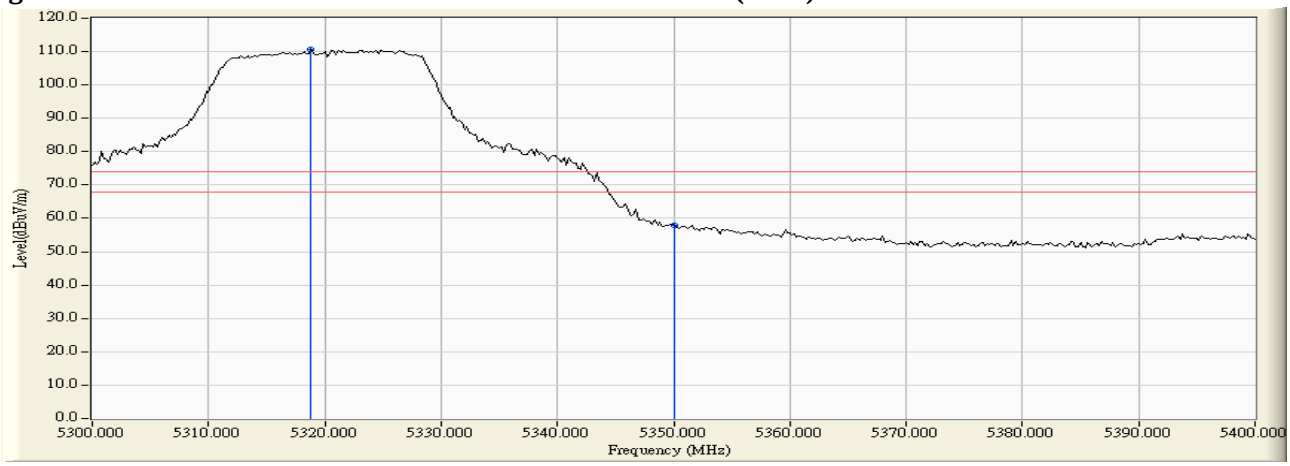
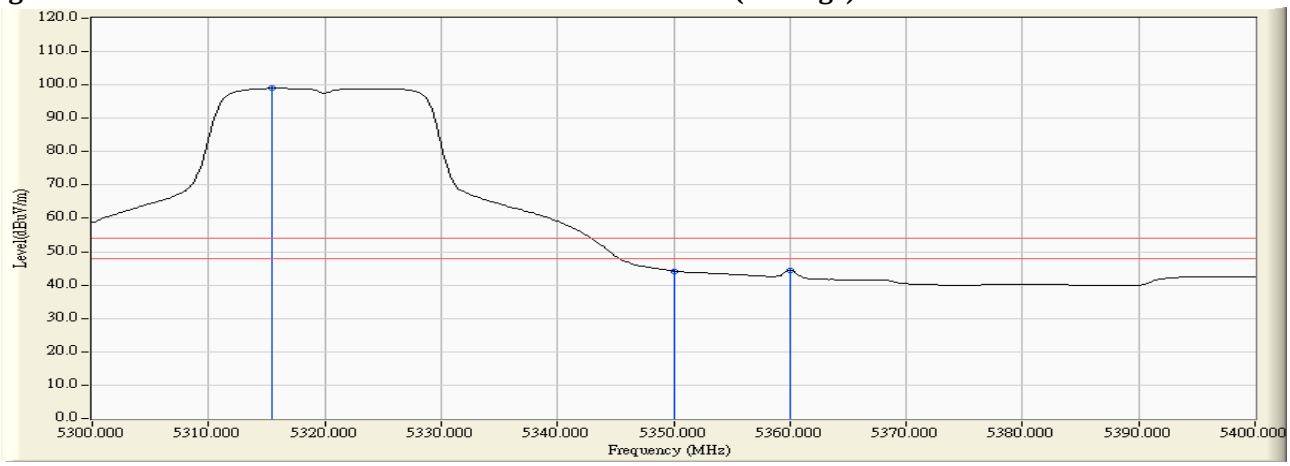



**Figure Channel 64: Horizontal (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) -Channel 64

**RF Radiated Measurement (Vertical):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 64 (Peak) | 5315.000 | 5.736 | 94.564 | 100.300 | -- | -- | Pass |
| 64 (Peak) | 5350.000 | 5.691 | 44.465 | 50.157 | 74.00 | 54.00 | Pass |
| 64 (Peak) | 5352.200 | 5.689 | 45.842 | 51.531 | 74.00 | 54.00 | Pass |
| 64 (Average) | 5315.200 | 5.735 | 82.324 | 88.059 | -- | -- | Pass |
| 64 (Average) | 5350.000 | 5.691 | 31.812 | 37.504 | 74.00 | 54.00 | Pass |

**Figure Channel 64: Vertical (Peak)**

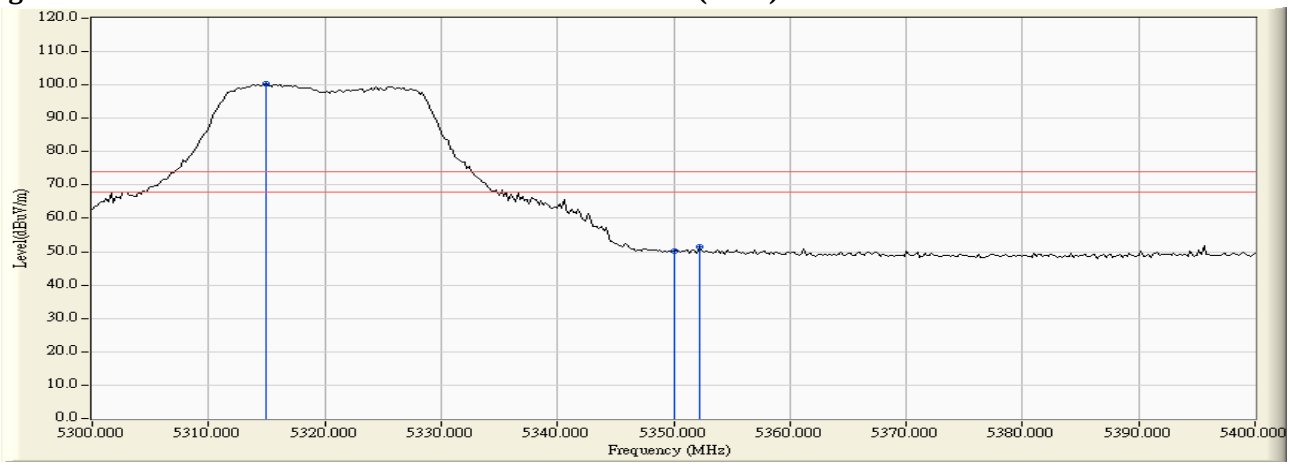
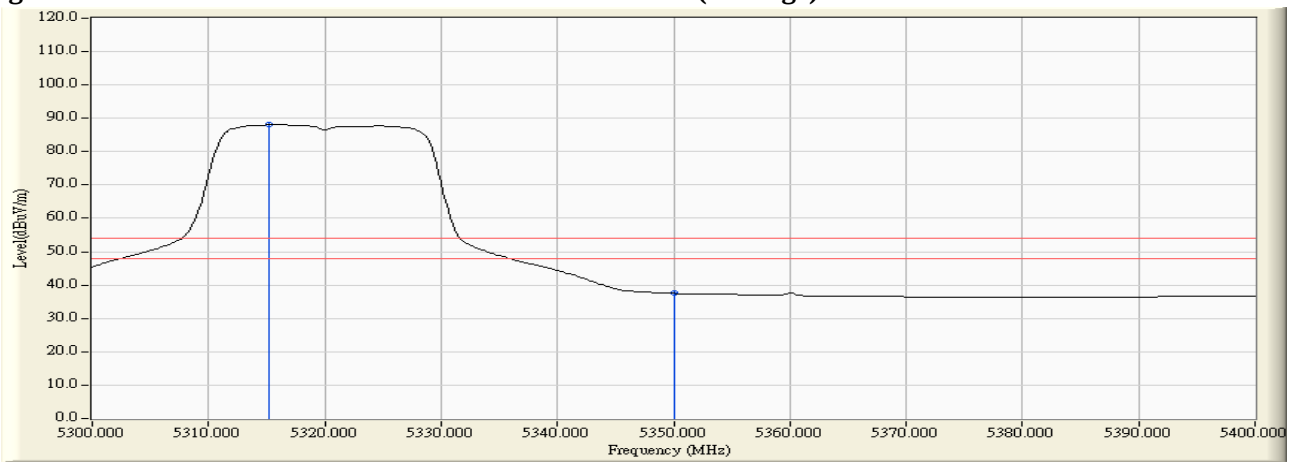



**Figure Channel 64: Vertical (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) -Channel 100

**RF Radiated Measurement (Horizontal):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 100 (Peak) | 5426.800 | 3.913 | 53.973 | 57.886 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5460.000 | 4.354 | 48.229 | 52.583 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5500.600 | 4.818 | 103.067 | 107.886 | -- | -- | Pass |
| 100 (Average) | 5423.800 | 3.872 | 41.565 | 45.437 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5460.000 | 4.354 | 35.929 | 40.283 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5495.800 | 4.786 | 91.452 | 96.237 | -- | -- | Pass |

**Figure Channel 100: Horizontal (Peak)**

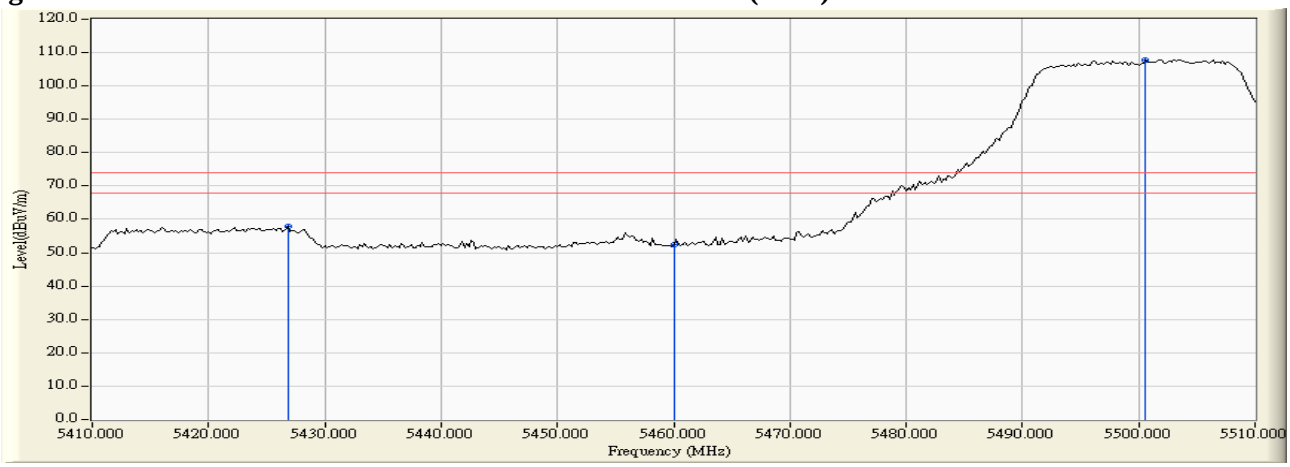
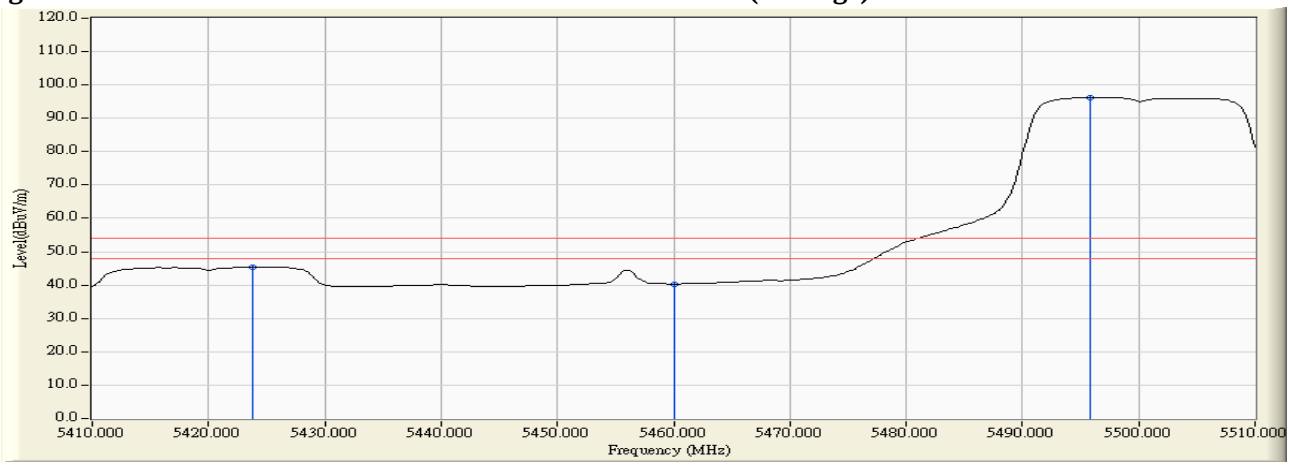



**Figure Channel 100: Horizontal (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) -Channel 100

**RF Radiated Measurement (Vertical):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 100 (Peak) | 5426.600 | 5.810 | 45.503 | 51.314 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5460.000 | 6.041 | 42.361 | 48.402 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5496.800 | 6.266 | 94.342 | 100.607 | -- | -- | Pass |
| 100 (Average) | 5424.400 | 5.795 | 33.112 | 38.907 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5460.000 | 6.041 | 31.017 | 37.058 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5504.600 | 6.289 | 81.901 | 88.190 | -- | -- | Pass |

**Figure Channel 100: Vertical (Peak)**

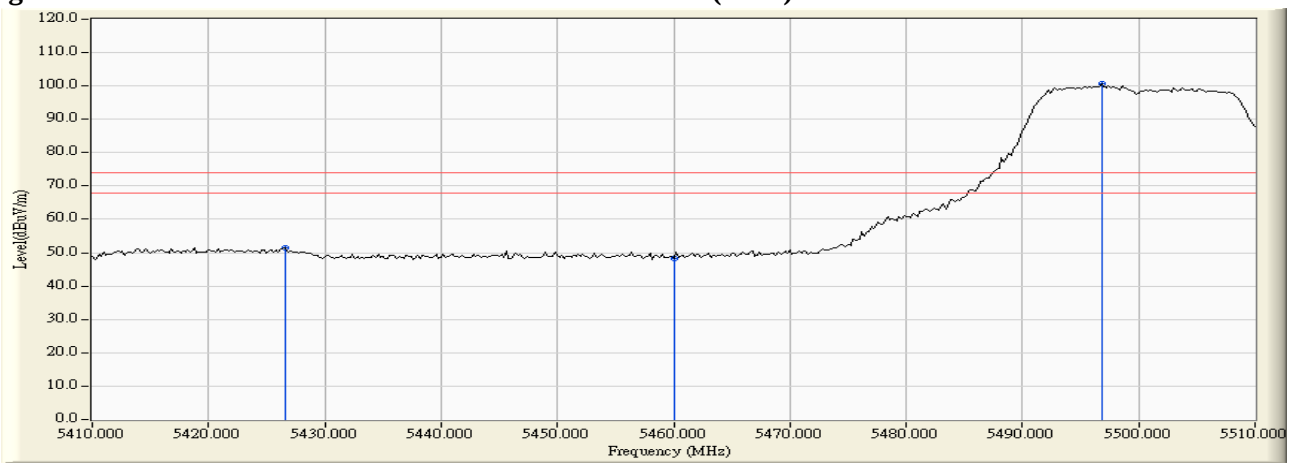
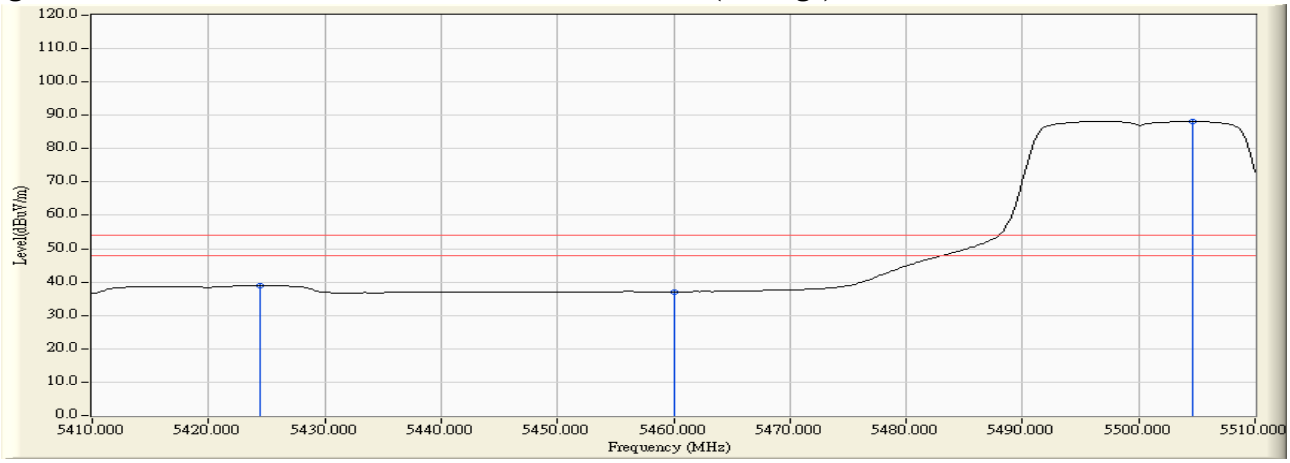



**Figure Channel 100: Vertical (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole 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 | -66.710 | -48.376 | -21.376 | -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 | -68.230 | -48.895 | -21.895 | -27.000 | Pass |

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole 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 | -60.070 | -41.421 | -14.421 | -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 | -67.630 | -48.258 | -21.258 | -27.000 | Pass |

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) -Channel 62

**RF Radiated Measurement (Horizontal):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 62 (Peak) | 5319.400 | 3.814 | 98.905 | 102.719 | -- | -- | Pass |
| 62 (Peak) | 5350.000 | 3.716 | 55.640 | 59.357 | 74.00 | 54.00 | Pass |
| 62 (Average) | 5318.600 | 3.817 | 86.875 | 90.692 | -- | -- | Pass |
| 62 (Average) | 5350.000 | 3.716 | 41.581 | 45.298 | 74.00 | 54.00 | Pass |

**Figure Channel 62: Horizontal (Peak)**

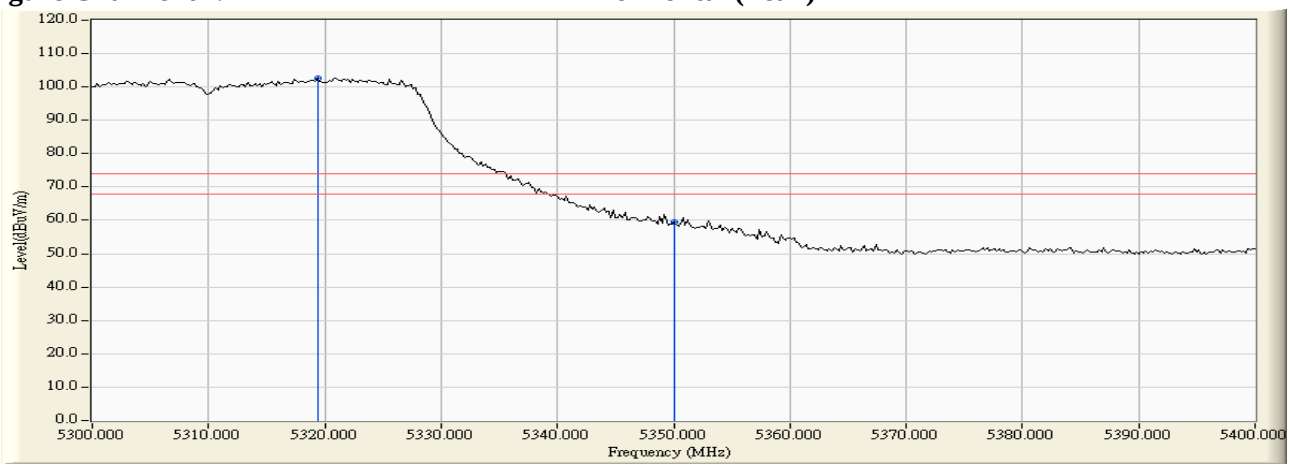
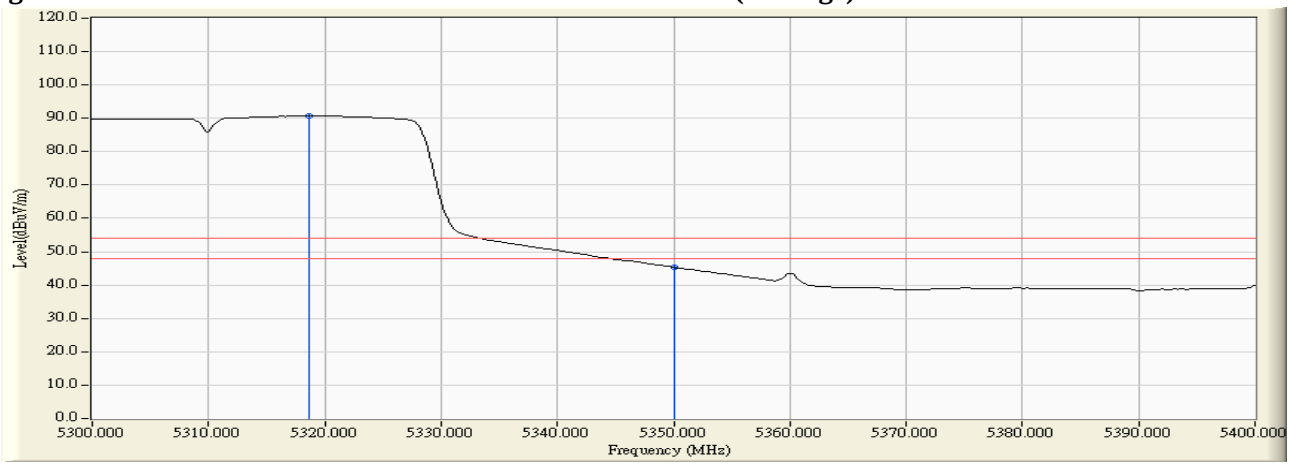



**Figure Channel 62: Horizontal (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) -Channel 62

**RF Radiated Measurement (Vertical):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 62 (Peak) | 5319.000 | 5.731 | 87.871 | 93.601 | -- | -- | Pass |
| 62 (Peak) | 5350.000 | 5.691 | 44.898 | 50.590 | 74.00 | 54.00 | Pass |
| 62 (Peak) | 5353.000 | 5.688 | 46.322 | 52.010 | 74.00 | 54.00 | Pass |
| 62 (Average) | 5321.600 | 5.727 | 75.936 | 81.663 | -- | -- | Pass |
| 62 (Average) | 5350.000 | 5.691 | 33.073 | 38.765 | 74.00 | 54.00 | Pass |

**Figure Channel 62: Vertical (Peak)**

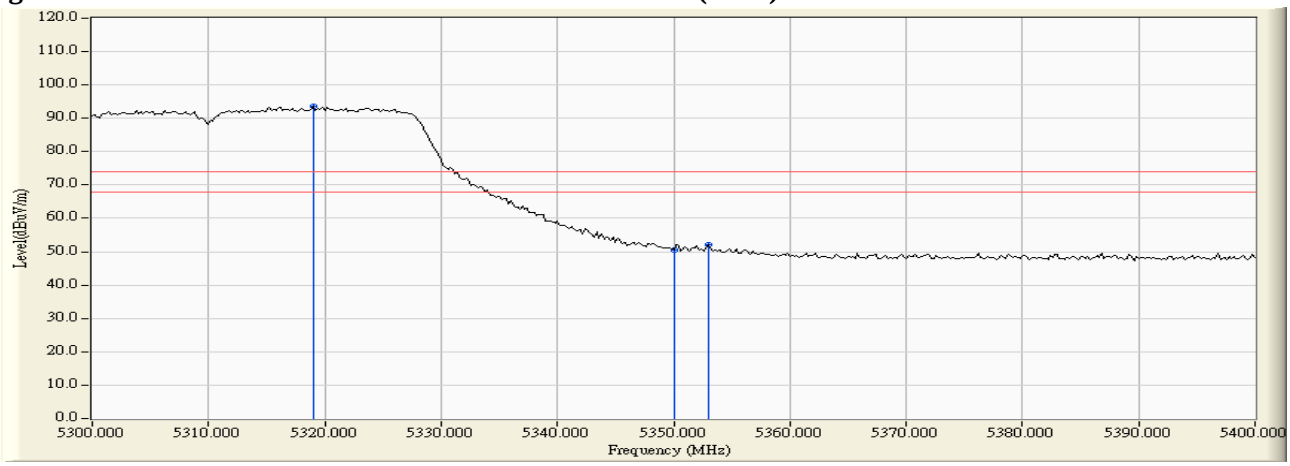
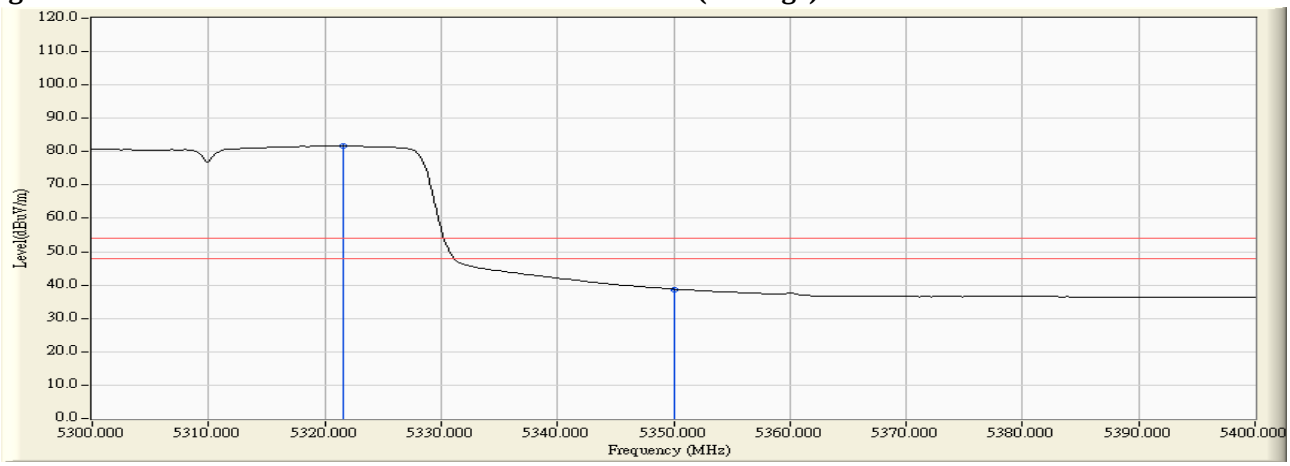



**Figure Channel 62: Vertical (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) -Channel 102

**RF Radiated Measurement (Horizontal):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 102 (Peak) | 5456.100 | 4.302 | 50.111 | 54.413 | 74.00 | 54.00 | Pass |
| 102 (Peak) | 5460.000 | 4.354 | 49.362 | 53.716 | 74.00 | 54.00 | Pass |
| 102 (Peak) | 5521.200 | 4.719 | 98.528 | 103.247 | -- | -- | Pass |
| 102 (Average) | 5456.100 | 4.302 | 39.250 | 43.552 | 74.00 | 54.00 | Pass |
| 102 (Average) | 5460.000 | 4.354 | 36.458 | 40.812 | 74.00 | 54.00 | Pass |
| 102 (Average) | 5520.000 | 4.729 | 86.033 | 90.762 | -- | -- | Pass |

**Figure Channel 102: Horizontal (Peak)**

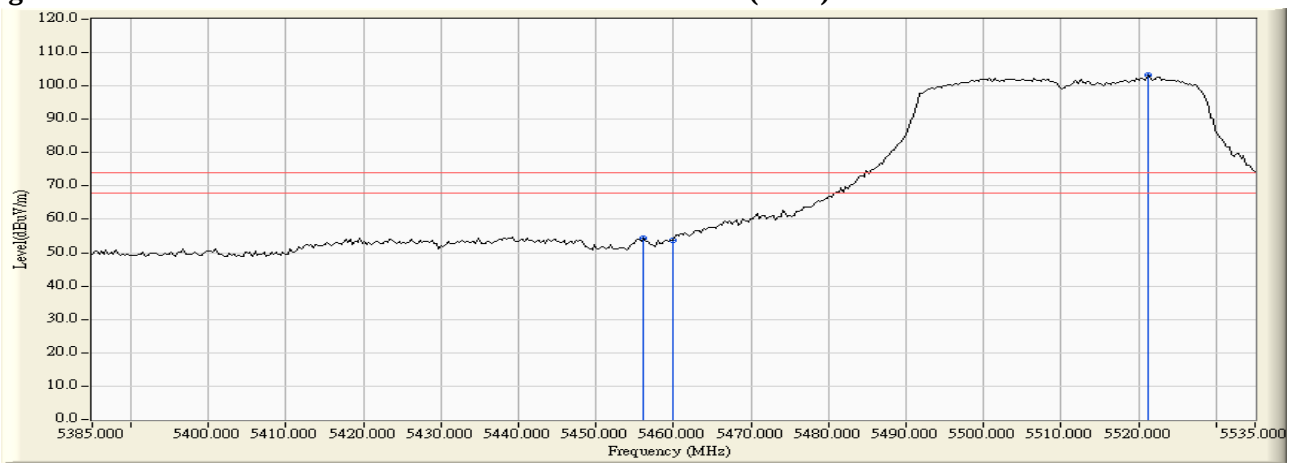
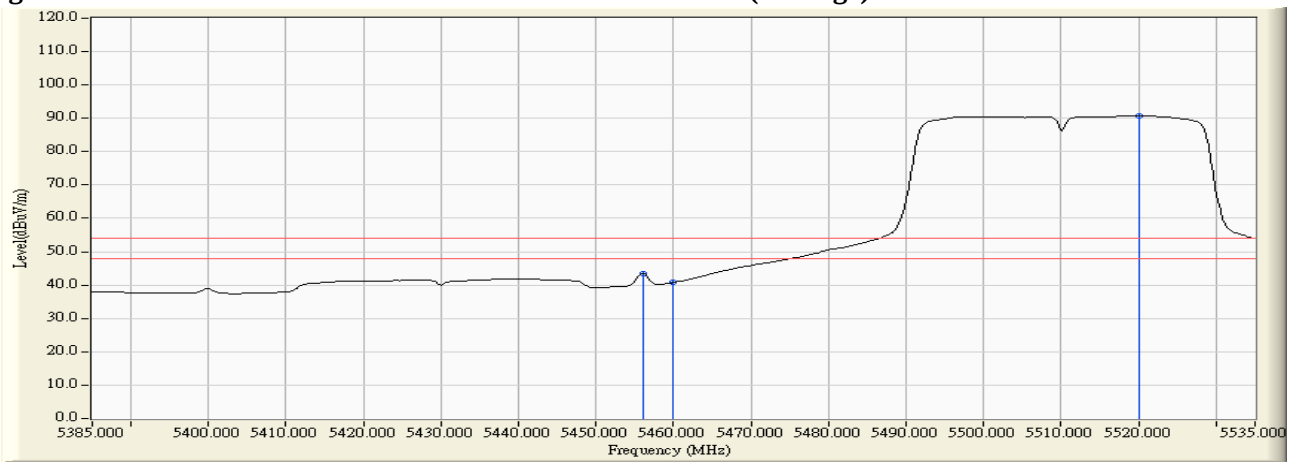



**Figure Channel 102: Horizontal (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) -Channel 102

**RF Radiated Measurement (Vertical):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 102 (Peak) | 5460.000 | 6.041 | 42.679 | 48.720 | 74.00 | 54.00 | Pass |
| 102 (Peak) | 5498.400 | 6.270 | 86.741 | 93.011 | -- | -- | Pass |
| 102 (Average) | 5460.000 | 6.041 | 30.775 | 36.816 | 74.00 | 54.00 | Pass |
| 102 (Average) | 5498.400 | 6.270 | 74.113 | 80.383 | -- | -- | Pass |

**Figure Channel 102: Vertical (Peak)**

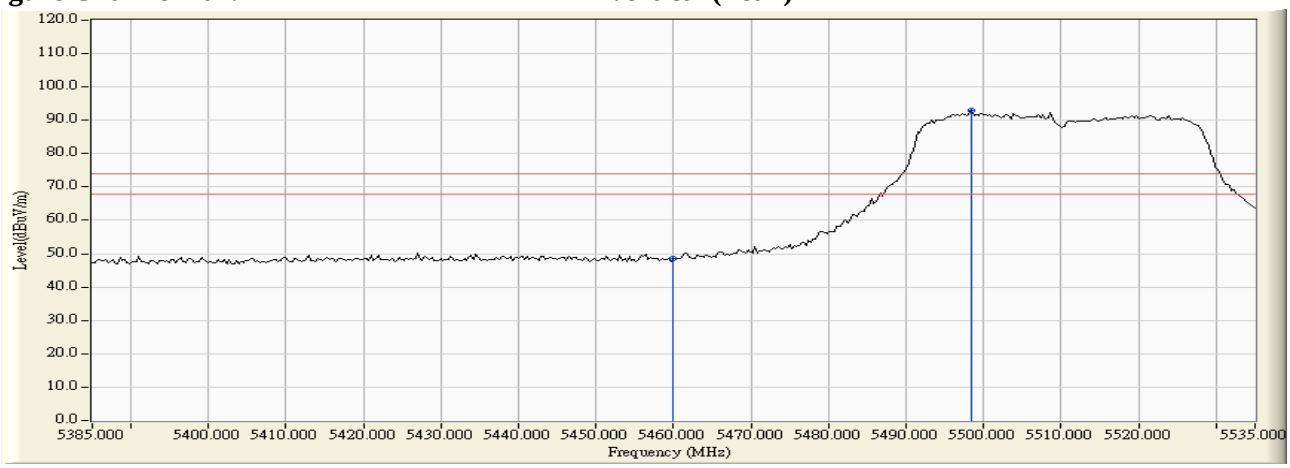
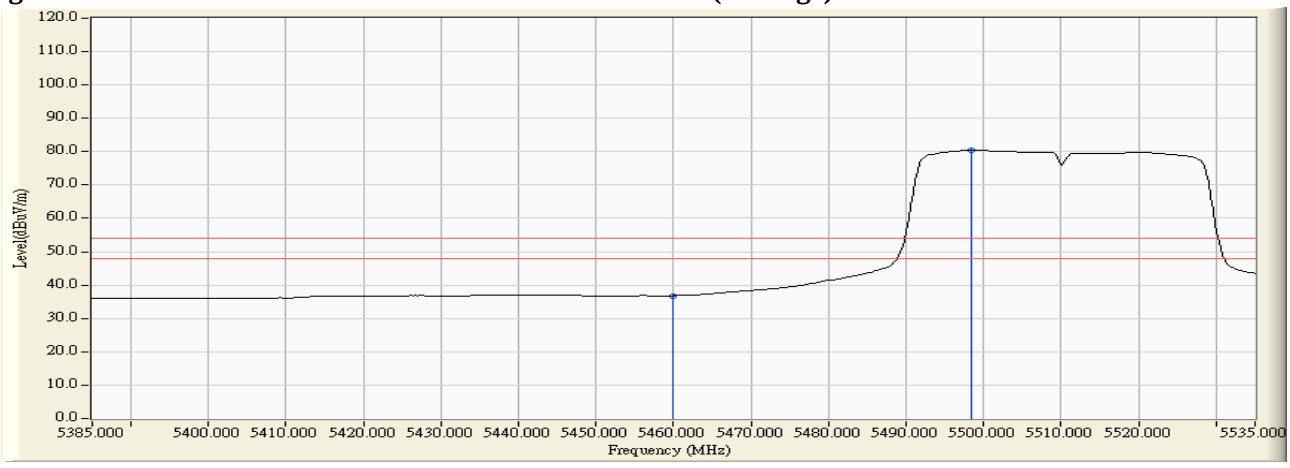



**Figure Channel 102: Vertical (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole 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 | 18.334 | -64.460 | -46.126 | -19.126 | -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 | -68.220 | -48.885 | -21.885 | -27.000 | Pass |

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole 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 | -63.540 | -44.891 | -17.891 | -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 | -68.710 | -49.338 | -22.338 | -27.000 | Pass |

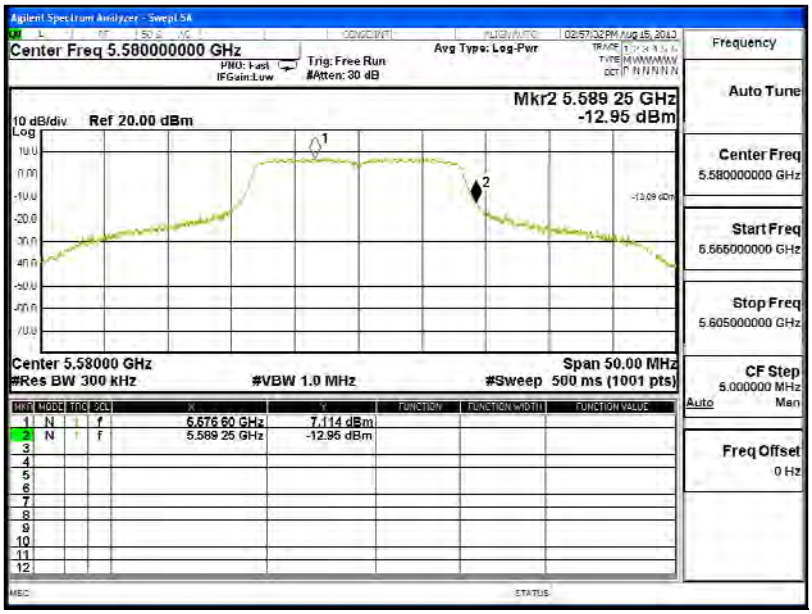
Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna)

**Chain A**

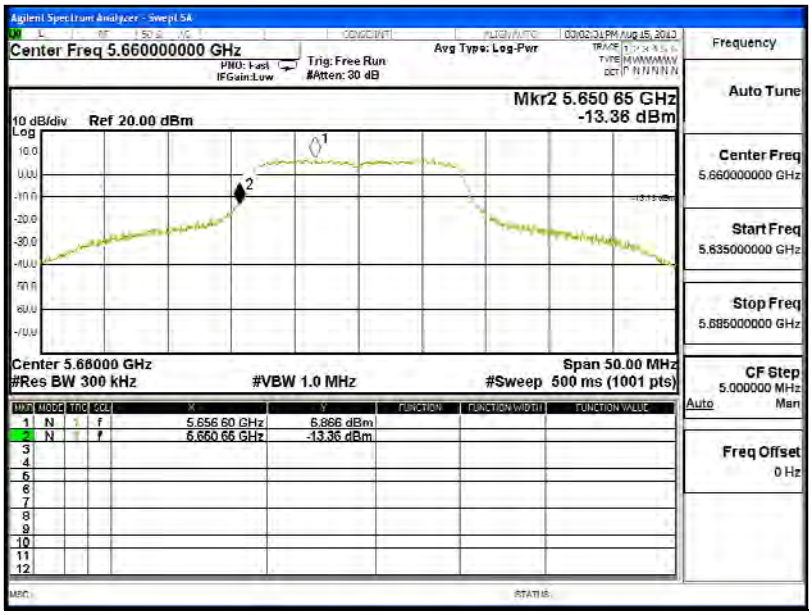
| Test Frequency (MHz) | Measurement Level (20dB BW) (MHz) | Limit (MHz) | Result |
|---|---|---|---|
| 5580 | 5589.25 | <5600 | PASS |
| 5660 | 5650.65 | >5650 | PASS |

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

5580MHz




5660MHz



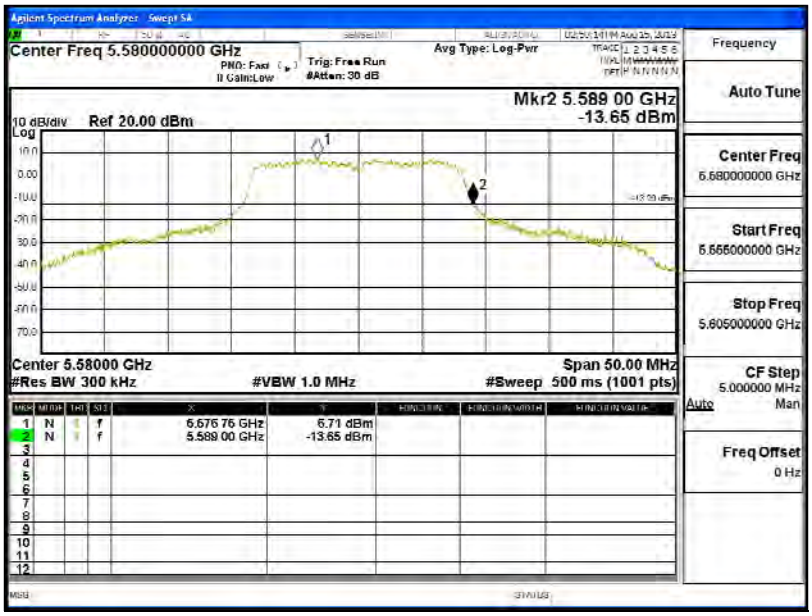
Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna)

**Chain B**

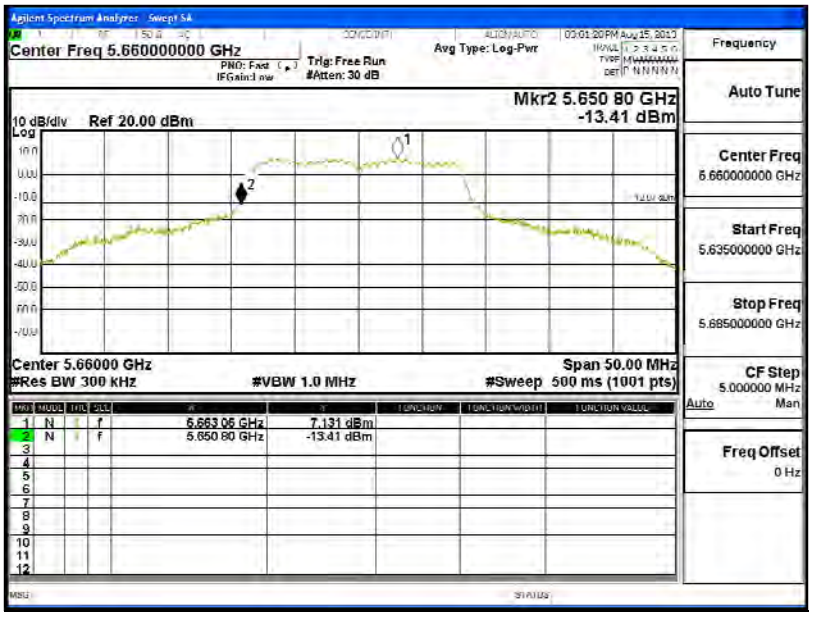
| Test Frequency (MHz) | Measurement Level (20dB BW) (MHz) | Limit (MHz) | Result |
|---|---|---|---|
| 5580 | 5589.00 | <5600 | PASS |
| 5660 | 5650.80 | >5650 | PASS |

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

5580MHz




5660MHz



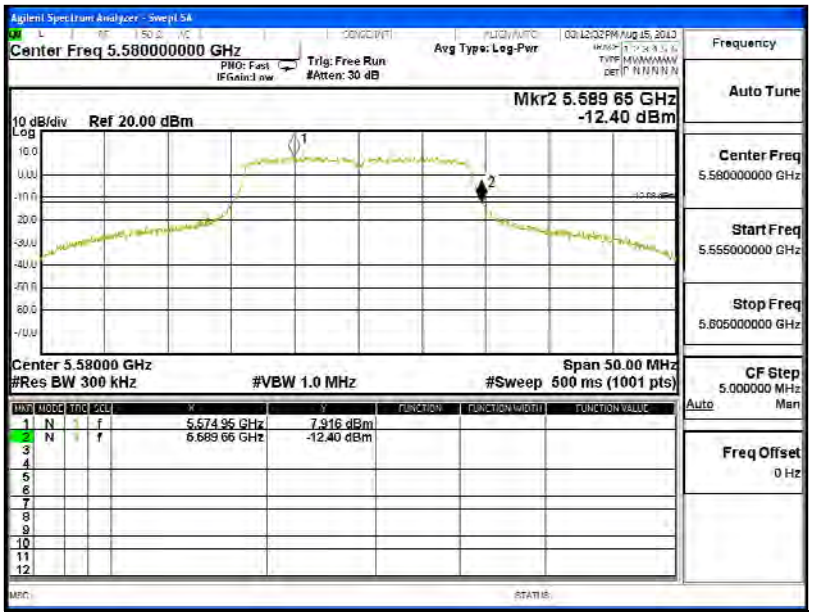
Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna)

**Chain A**

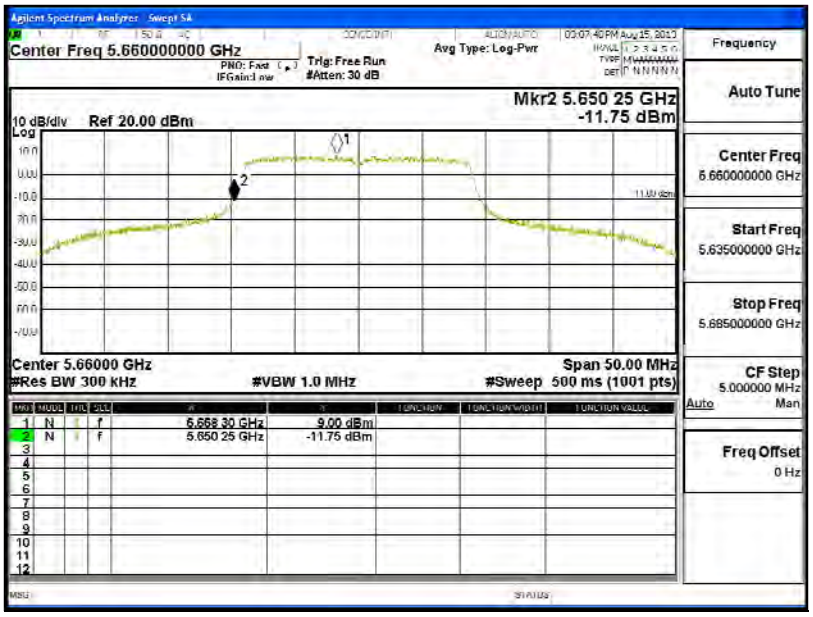
| Test Frequency (MHz) | Measurement Level (20dB BW) (MHz) | Limit (MHz) | Result |
|---|---|---|---|
| 5580 | 5589.65 | <5600 | PASS |
| 5660 | 5650.25 | >5650 | PASS |

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

5580MHz




5660MHz



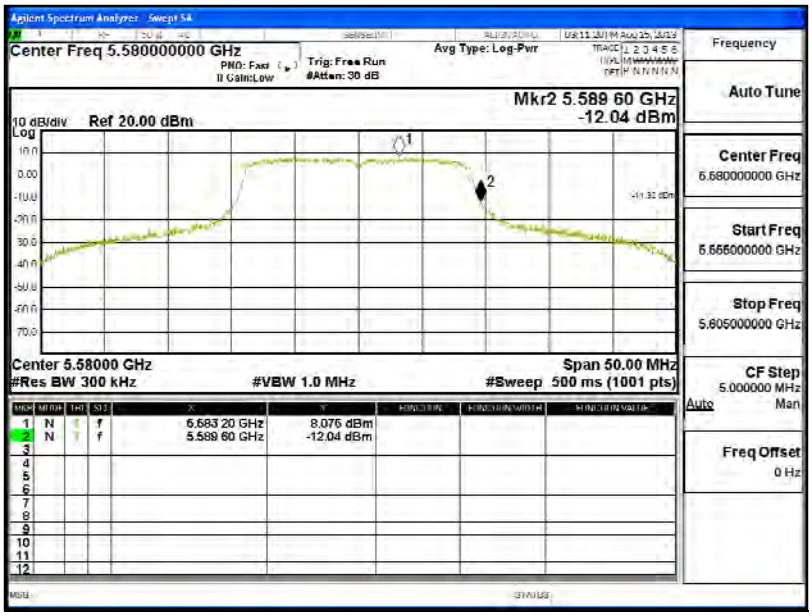
Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna)

**Chain B**

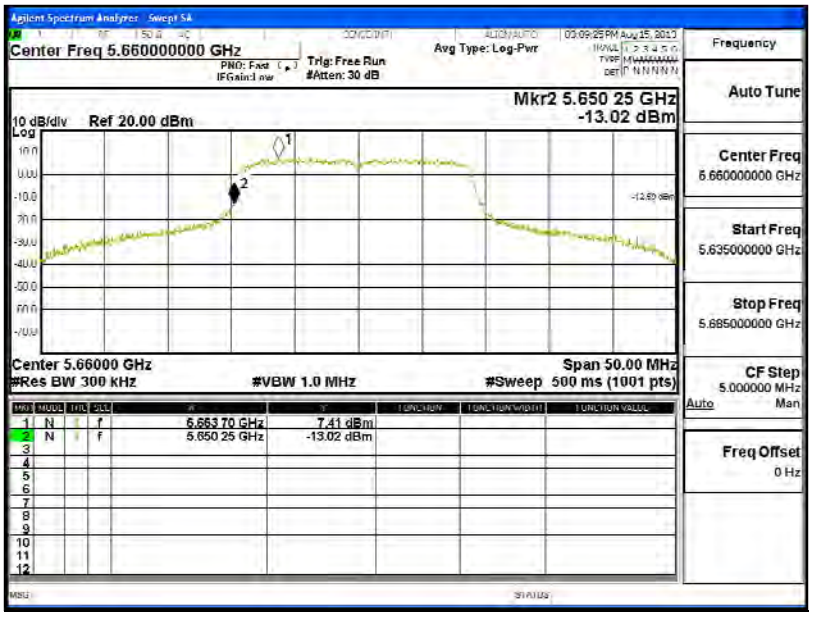
| Test Frequency (MHz) | Measurement Level (20dB BW) (MHz) | Limit (MHz) | Result |
|---|---|---|---|
| 5580 | 5589.60 | <5600 | PASS |
| 5660 | 5650.25 | >5650 | PASS |

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

5580MHz




5660MHz



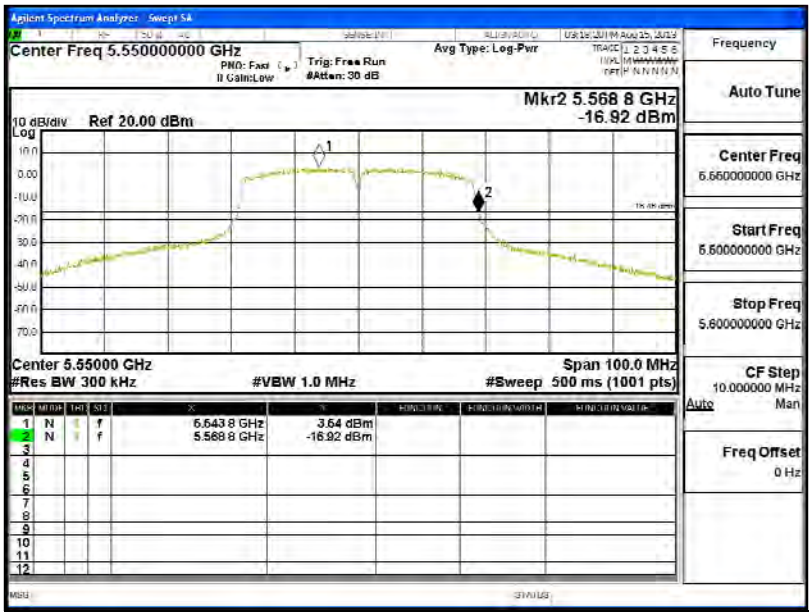
Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna)

**Chain A**

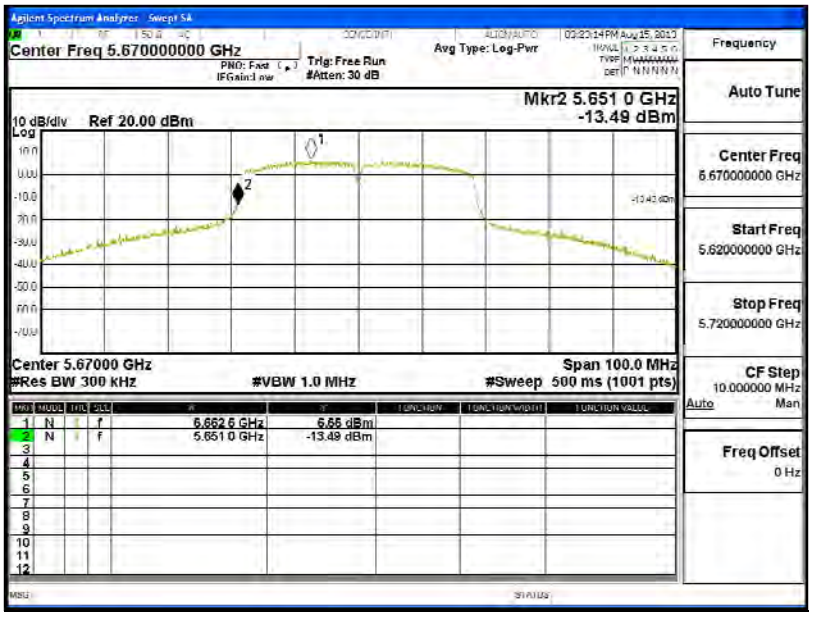
| Test Frequency (MHz) | Measurement Level (20dB BW) (MHz) | Limit (MHz) | Result |
|---|---|---|---|
| 5550 | 5568.80 | <5600 | PASS |
| 5670 | 5651.00 | >5650 | PASS |

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

5550MHz




5670MHz



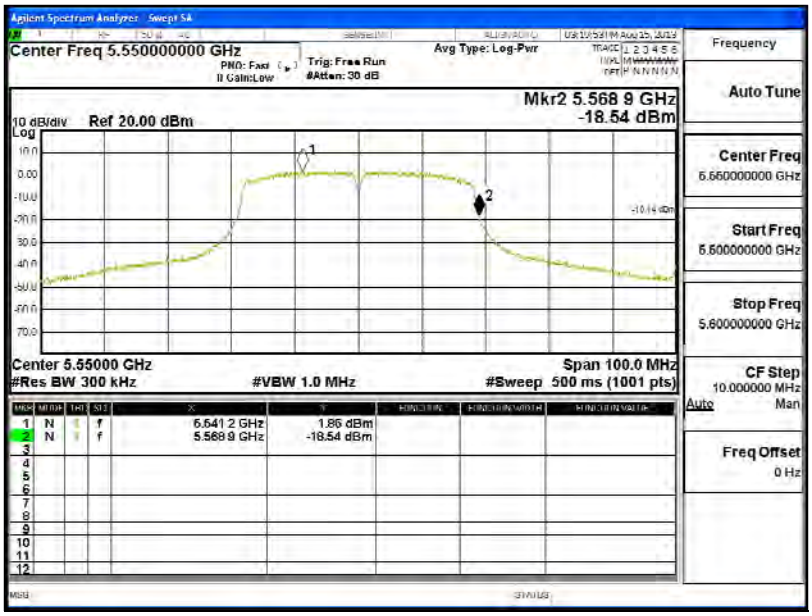
Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna)

**Chain B**

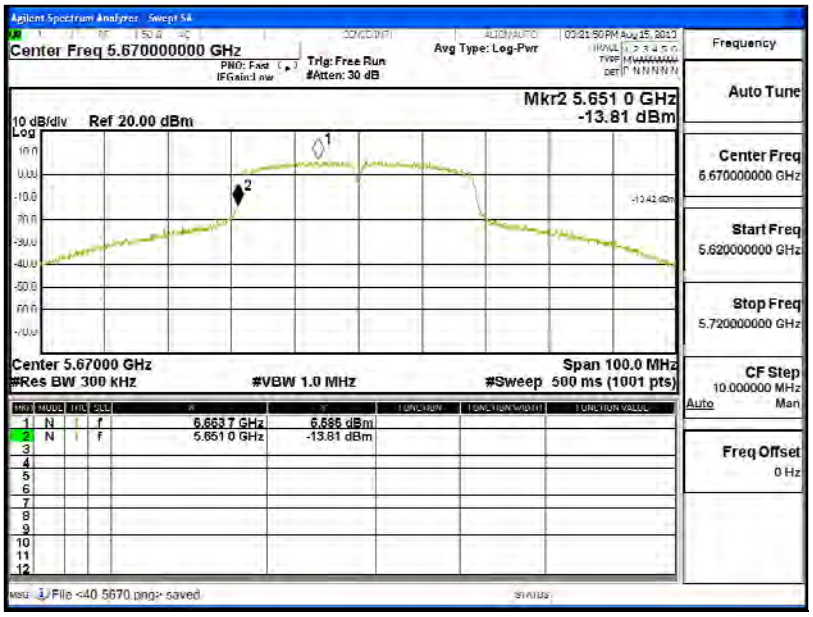
| Test Frequency (MHz) | Measurement Level (20dB BW) (MHz) | Limit (MHz) | Result |
|---|---|---|---|
| 5550 | 5568.90 | <5600 | PASS |
| 5670 | 5651.00 | >5650 | PASS |

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

5550MHz




5670MHz



Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna) -Channel 64

**RF Radiated Measurement (Horizontal):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 64 (Peak) | 5313.600 | 3.834 | 102.711 | 106.544 | -- | -- | Pass |
| 64 (Peak) | 5350.000 | 3.716 | 56.458 | 60.175 | 74.00 | 54.00 | Pass |
| 64 (Peak) | 5353.800 | 3.704 | 58.999 | 62.703 | 74.00 | 54.00 | Pass |
| 64 (Average) | 5323.600 | 3.801 | 93.033 | 96.834 | -- | -- | Pass |
| 64 (Average) | 5350.000 | 3.716 | 37.746 | 41.463 | 74.00 | 54.00 | Pass |
| 64 (Average) | 5354.000 | 3.703 | 39.558 | 43.261 | 74.00 | 54.00 | Pass |

**Figure Channel 64: Horizontal (Peak)**

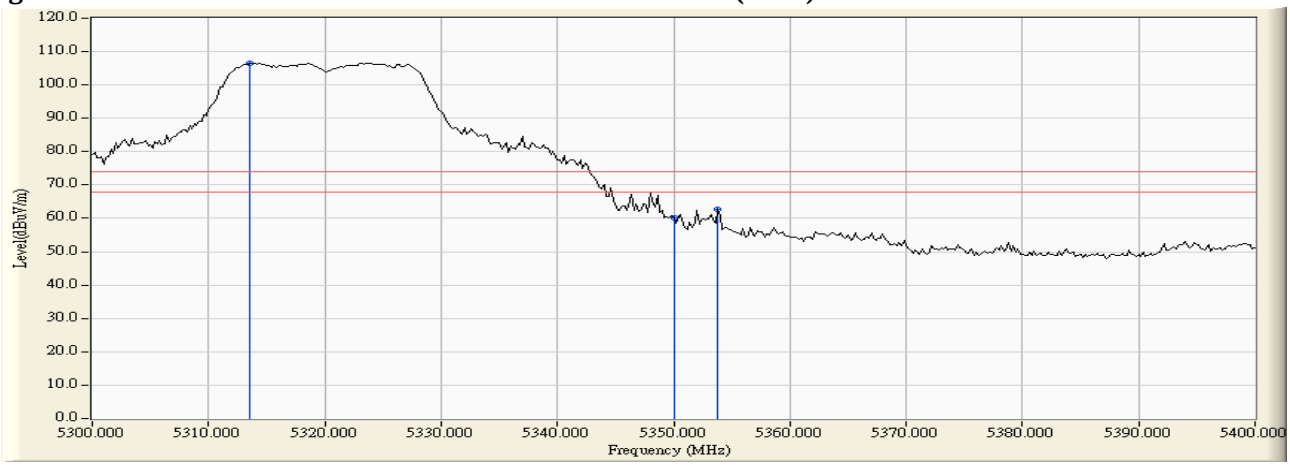
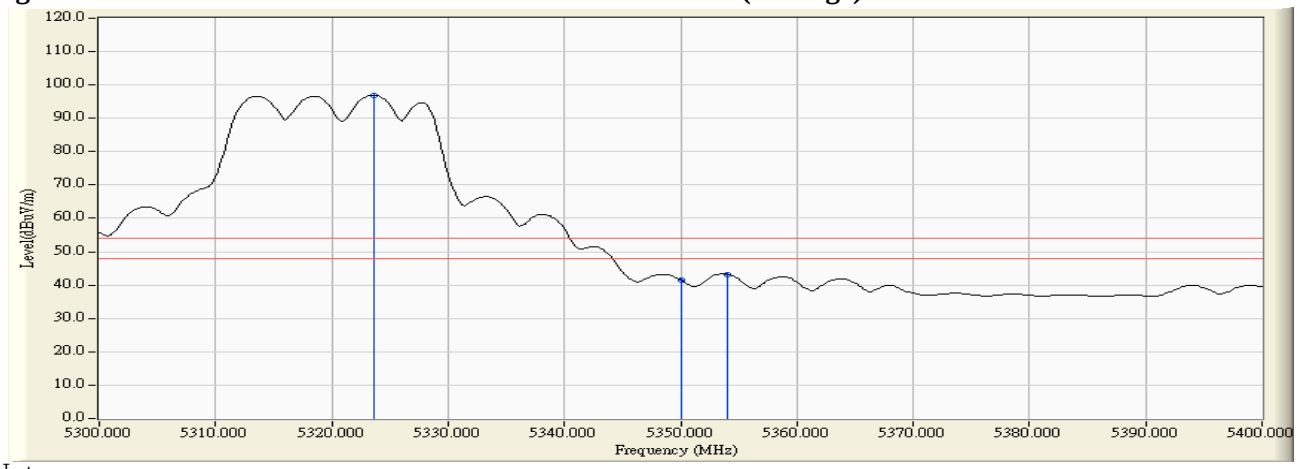



**Figure Channel 64: Horizontal (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna) -Channel 64

**RF Radiated Measurement (Vertical):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 64 (Peak) | 5325.800 | 5.722 | 104.595 | 110.317 | -- | -- | Pass |
| 64 (Peak) | 5350.000 | 5.691 | 56.993 | 62.685 | 74.00 | 54.00 | Pass |
| 64 (Peak) | 5351.400 | 5.690 | 60.615 | 66.305 | 74.00 | 54.00 | Pass |
| 64 (Average) | 5326.400 | 5.721 | 94.175 | 99.896 | -- | -- | Pass |
| 64 (Average) | 5350.000 | 5.691 | 38.916 | 44.608 | 74.00 | 54.00 | Pass |
| 64 (Average) | 5356.000 | 5.683 | 40.125 | 45.808 | 74.00 | 54.00 | Pass |

**Figure Channel 64: Vertical (Peak)**

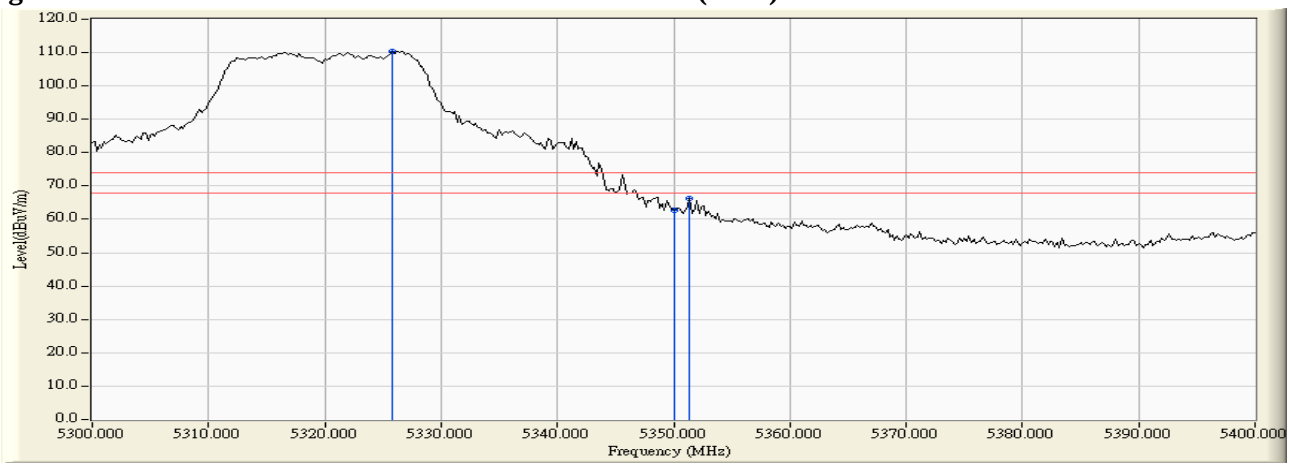



**Figure Channel 64: Vertical (Average)**


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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna) -Channel 100

**RF Radiated Measurement (Horizontal):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 100 (Peak) | 5458.600 | 4.335 | 53.536 | 57.871 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5460.000 | 4.354 | 51.987 | 56.341 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5497.200 | 4.795 | 105.436 | 110.231 | -- | -- | Pass |
| 100 (Average) | 5426.600 | 3.909 | 41.399 | 45.309 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5457.600 | 4.322 | 39.242 | 43.564 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5460.000 | 4.354 | 36.148 | 40.502 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5497.200 | 4.795 | 95.653 | 100.448 | -- | -- | Pass |

**Figure Channel 100: Horizontal (Peak)**

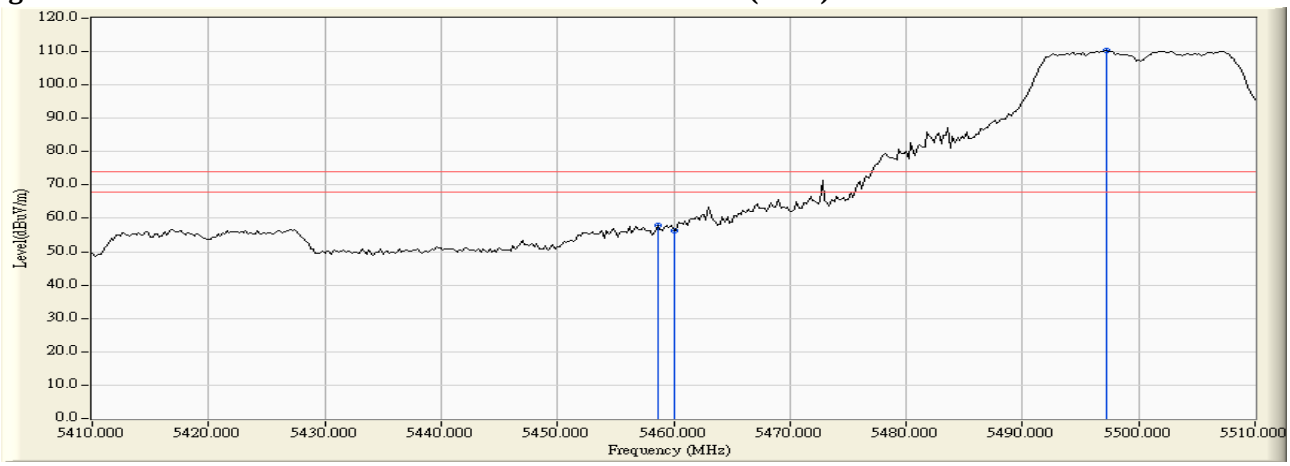
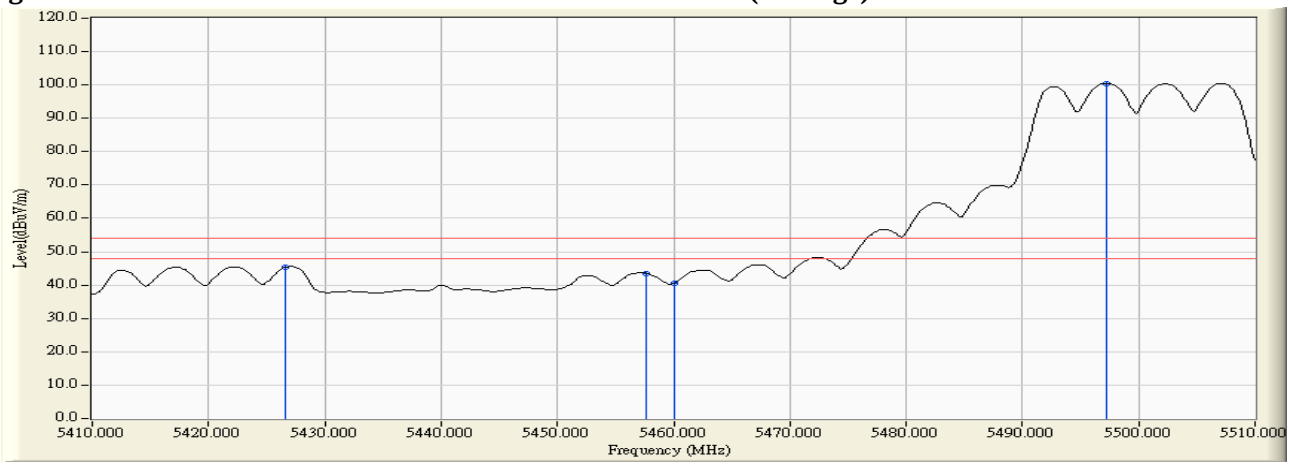



**Figure Channel 100: Horizontal (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna) -Channel 100

**RF Radiated Measurement (Vertical):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 100 (Peak) | 5455.600 | 6.010 | 53.159 | 59.169 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5460.000 | 6.041 | 51.882 | 57.923 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5495.800 | 6.262 | 104.104 | 110.366 | -- | -- | Pass |
| 100 (Average) | 5426.000 | 5.806 | 40.001 | 45.807 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5455.600 | 6.010 | 37.768 | 43.778 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5460.000 | 6.041 | 37.264 | 43.305 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5495.600 | 6.261 | 93.408 | 99.670 | -- | -- | Pass |

**Figure Channel 100: Vertical (Peak)**

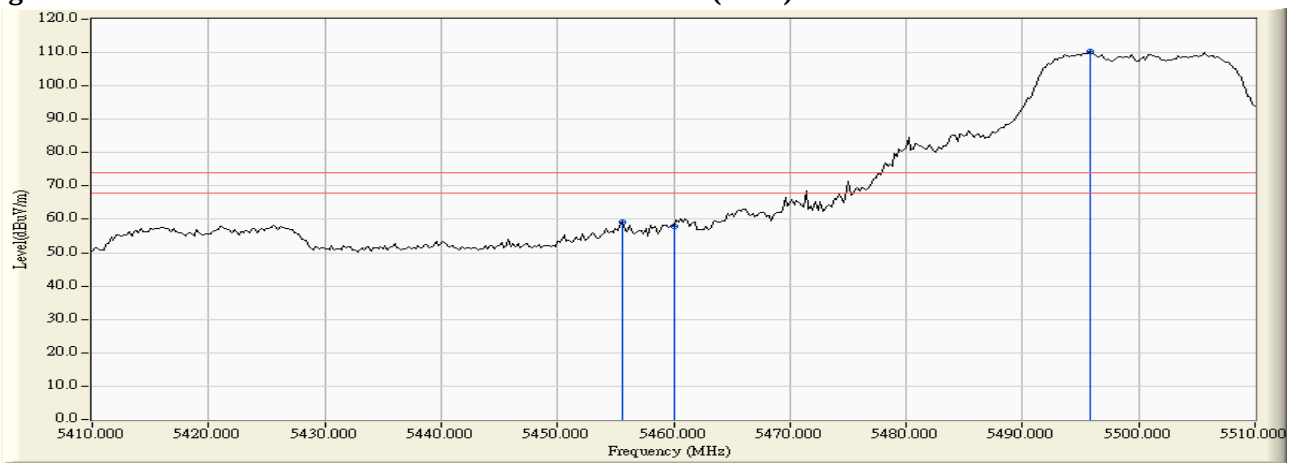
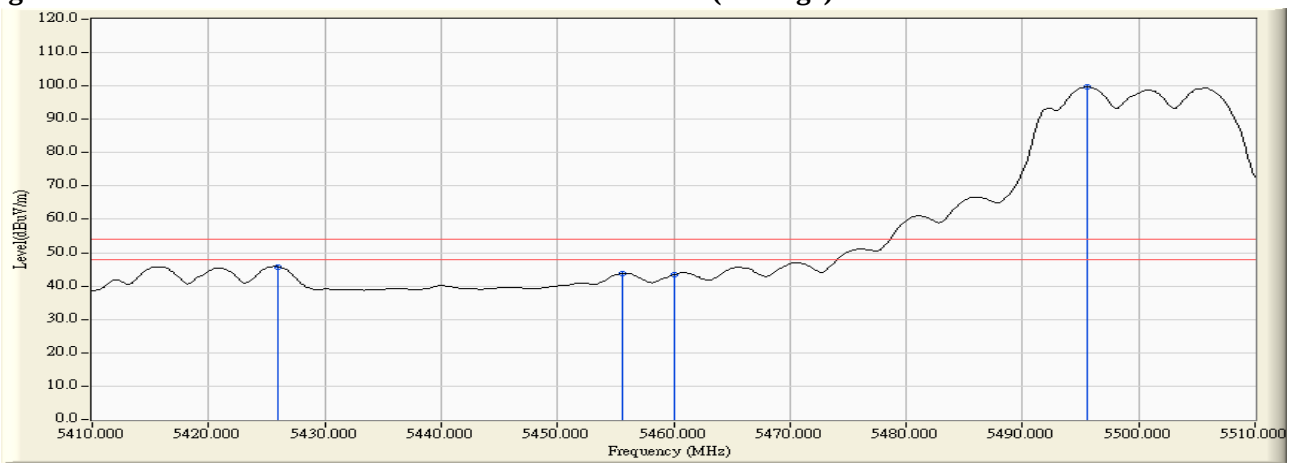



**Figure Channel 100: Vertical (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA 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 | -64.440 | -46.106 | -19.106 | -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 | -67.430 | -48.095 | -21.095 | -27.000 | Pass |

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA 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 | -58.740 | -40.091 | -13.091 | -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 | -59.290 | -39.918 | -12.918 | -27.000 | Pass |

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna) -Channel 64

**RF Radiated Measurement (Horizontal):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 64 (Peak) | 5314.200 | 3.831 | 104.250 | 108.081 | -- | -- | Pass |
| 64 (Peak) | 5350.000 | 3.716 | 57.104 | 60.821 | 74.00 | 54.00 | Pass |
| 64 (Peak) | 5350.800 | 3.714 | 59.625 | 63.339 | 74.00 | 54.00 | Pass |
| 64 (Average) | 5326.200 | 3.793 | 92.067 | 95.860 | -- | -- | Pass |
| 64 (Average) | 5350.000 | 3.716 | 39.584 | 43.301 | 74.00 | 54.00 | Pass |

**Figure Channel 64: Horizontal (Peak)**

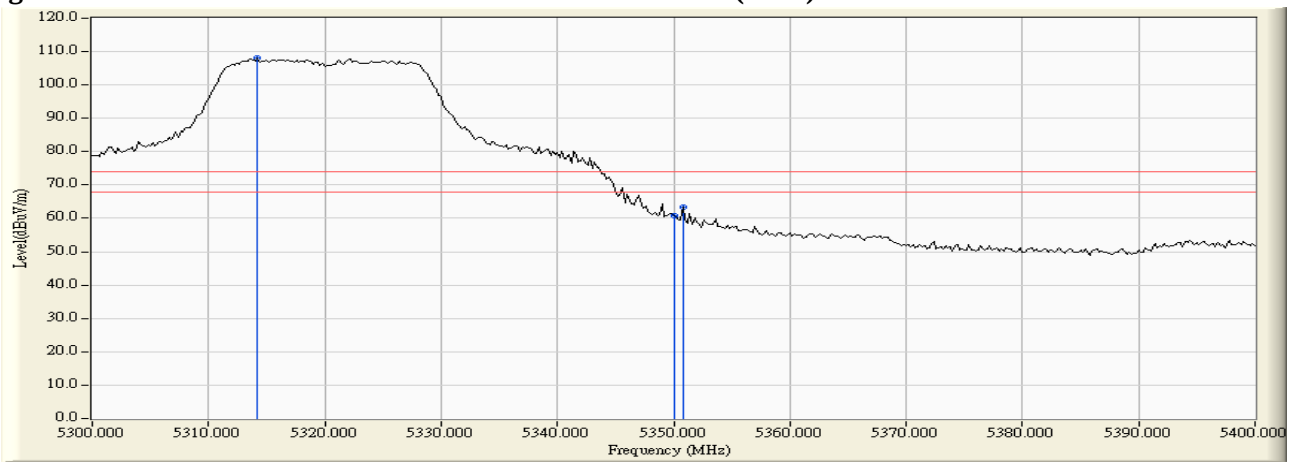
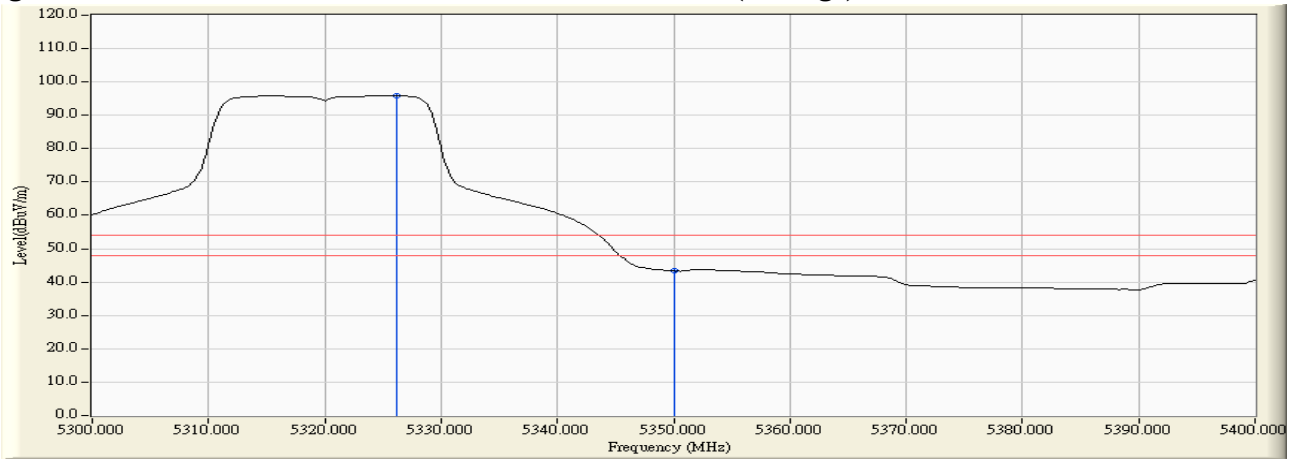



**Figure Channel 64: Horizontal (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna) -Channel 64

**RF Radiated Measurement (Vertical):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 64 (Peak) | 5314.200 | 5.737 | 103.972 | 109.709 | -- | -- | Pass |
| 64 (Peak) | 5350.000 | 5.691 | 56.081 | 61.773 | 74.00 | 54.00 | Pass |
| 64 (Peak) | 5350.800 | 5.690 | 58.935 | 64.626 | 74.00 | 54.00 | Pass |
| 64 (Average) | 5325.800 | 5.722 | 92.409 | 98.131 | -- | -- | Pass |
| 64 (Average) | 5350.000 | 5.691 | 39.728 | 45.420 | 74.00 | 54.00 | Pass |

**Figure Channel 64: Vertical (Peak)**

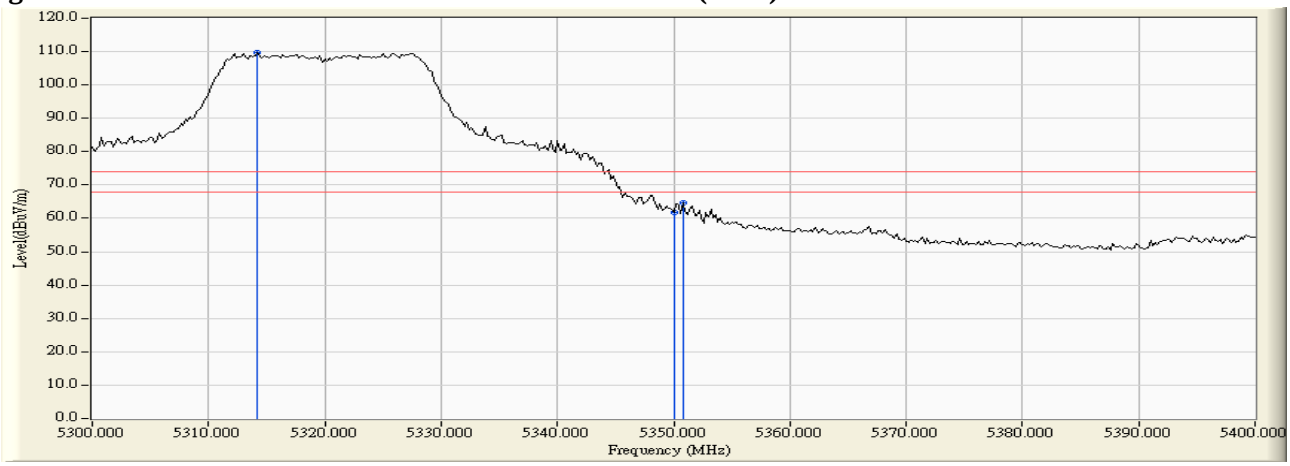
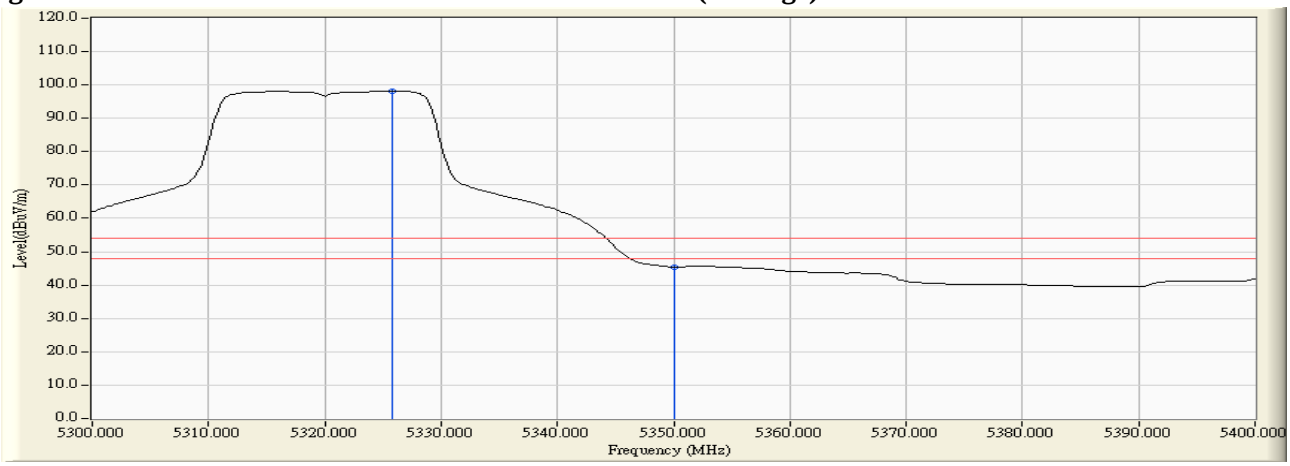



**Figure Channel 64: Vertical (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna) -Channel 100

**RF Radiated Measurement (Horizontal):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 100 (Peak) | 5426.600 | 3.909 | 51.853 | 55.763 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5460.000 | 4.354 | 55.175 | 59.529 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5495.000 | 4.780 | 105.355 | 110.135 | -- | -- | Pass |
| 100 (Average) | 5426.000 | 3.902 | 40.212 | 44.114 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5460.000 | 4.354 | 38.988 | 43.342 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5495.000 | 4.780 | 93.292 | 98.072 | -- | -- | Pass |

**Figure Channel 100: Horizontal (Peak)**

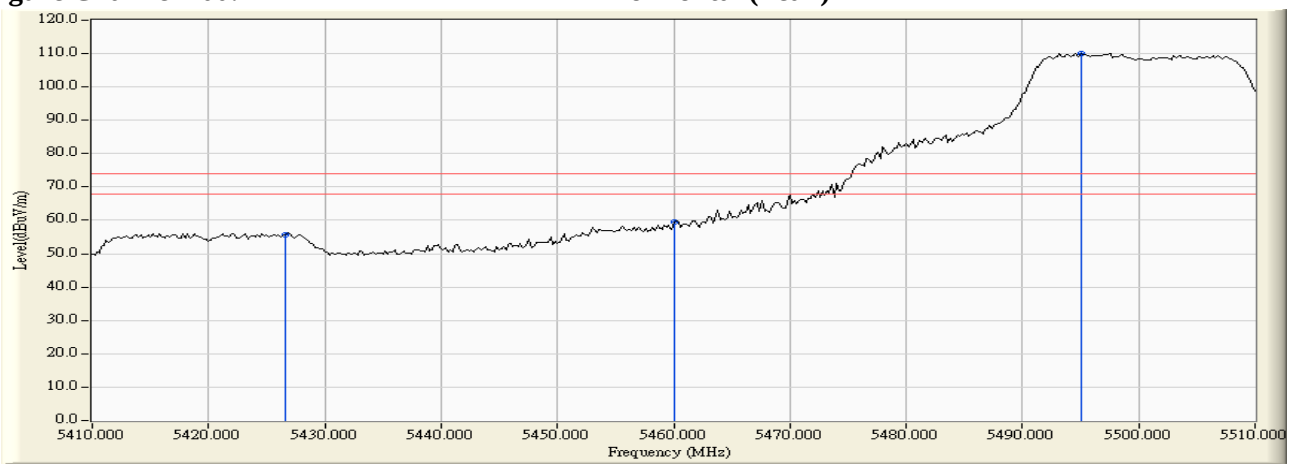
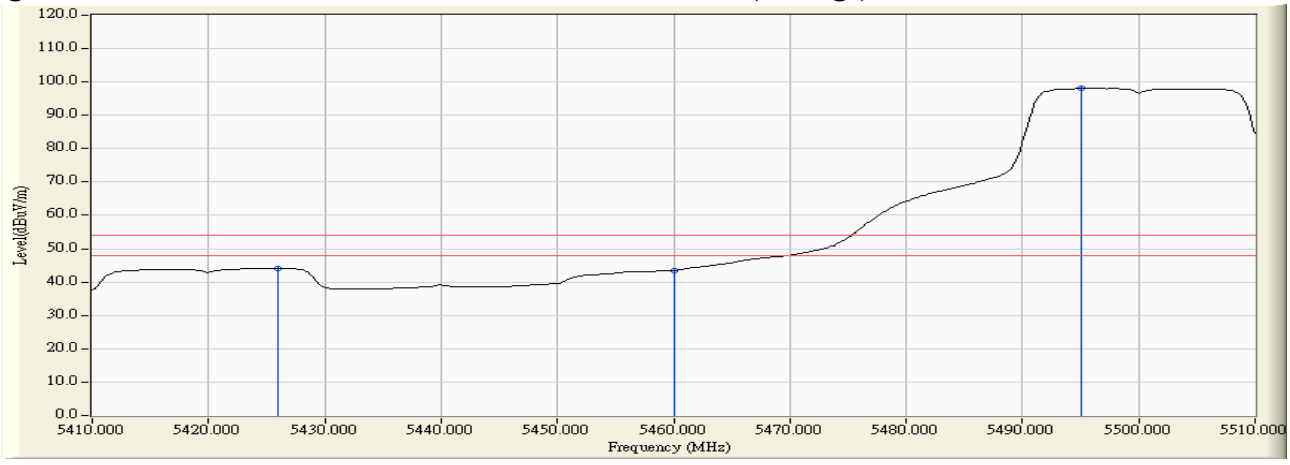



**Figure Channel 100: Horizontal (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna) -Channel 100

**RF Radiated Measurement (Vertical):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 100 (Peak) | 5455.000 | 6.005 | 53.645 | 59.651 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5460.000 | 6.041 | 53.056 | 59.097 | 74.00 | 54.00 | Pass |
| 100 (Peak) | 5505.800 | 6.284 | 104.242 | 110.527 | -- | -- | Pass |
| 100 (Average) | 5426.600 | 5.810 | 38.500 | 44.311 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5460.000 | 6.041 | 38.231 | 44.272 | 74.00 | 54.00 | Pass |
| 100 (Average) | 5495.200 | 6.260 | 92.243 | 98.503 | -- | -- | Pass |

**Figure Channel 100: Vertical (Peak)**

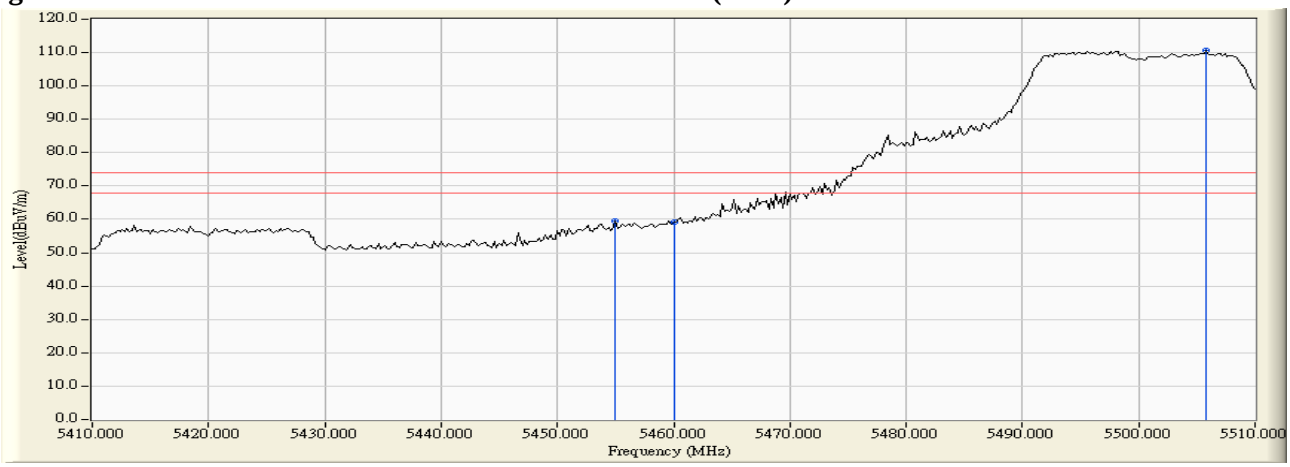
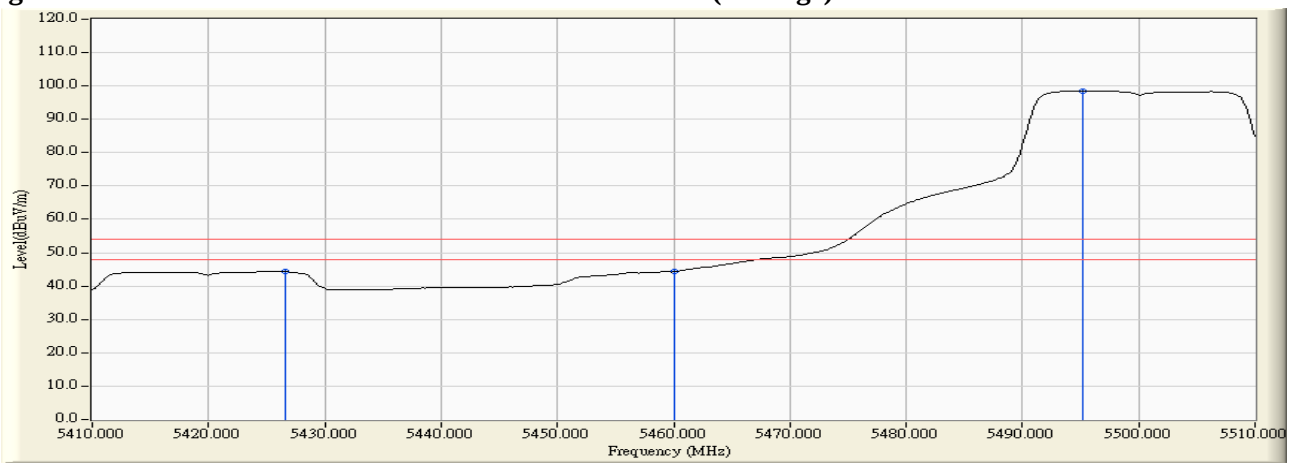



**Figure Channel 100: Vertical (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA 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 | -62.900 | -44.566 | -17.566 | -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 | -64.670 | -45.335 | -18.335 | -27.000 | Pass |

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA 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 | -56.090 | -37.441 | -10.441 | -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 | -59.600 | -40.228 | -13.228 | -27.000 | Pass |

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna) -Channel 62

**RF Radiated Measurement (Horizontal):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 62 (Peak) | 5317.400 | 3.820 | 98.068 | 101.889 | -- | -- | Pass |
| 62 (Peak) | 5350.000 | 3.716 | 61.740 | 65.457 | 74.00 | 54.00 | Pass |
| 62 (Peak) | 5350.800 | 3.714 | 62.830 | 66.544 | 74.00 | 54.00 | Pass |
| 62 (Average) | 5321.000 | 3.810 | 85.780 | 89.589 | -- | -- | Pass |
| 62 (Average) | 5350.000 | 3.716 | 44.997 | 48.714 | 74.00 | 54.00 | Pass |

**Figure Channel 62: Horizontal (Peak)**

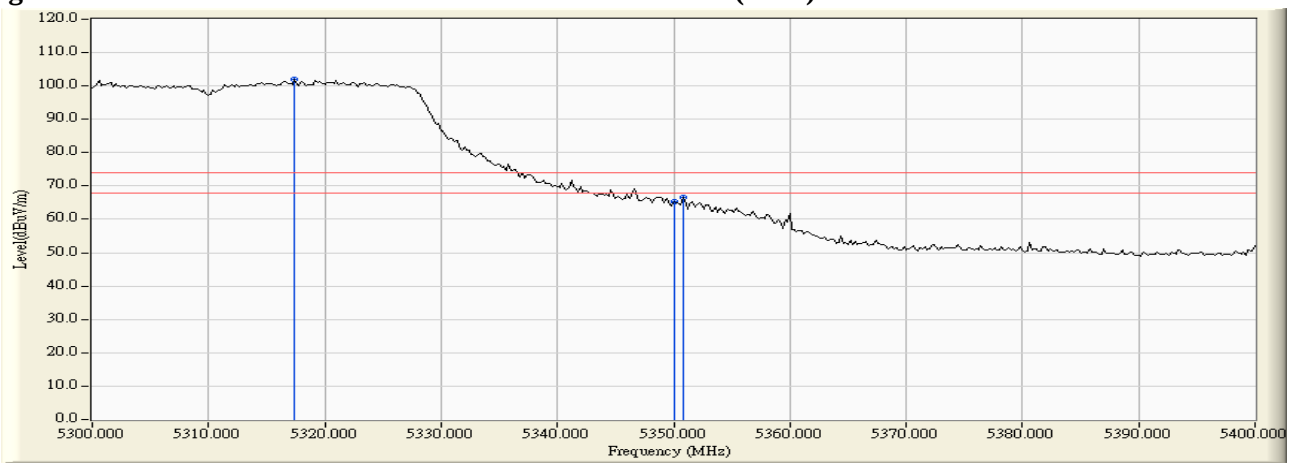
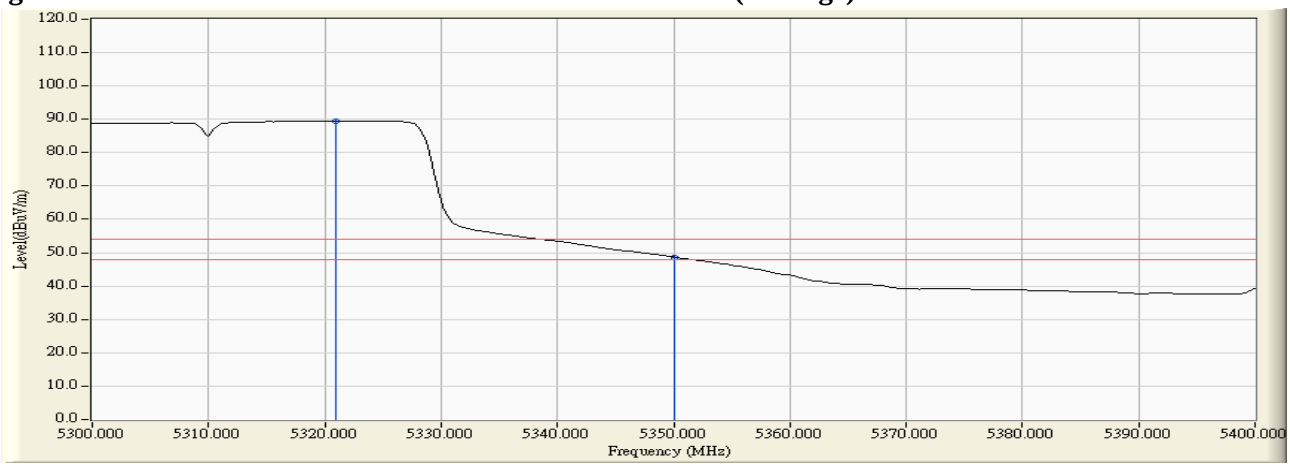



**Figure Channel 62: Horizontal (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna) -Channel 62

**RF Radiated Measurement (Vertical):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 62 (Peak) | 5313.000 | 5.738 | 98.474 | 104.212 | -- | -- | Pass |
| 62 (Peak) | 5350.000 | 5.691 | 64.150 | 69.842 | 74.00 | 54.00 | Pass |
| 62 (Average) | 5302.400 | 5.753 | 86.071 | 91.823 | -- | -- | Pass |
| 62 (Average) | 5350.000 | 5.691 | 45.593 | 51.285 | 74.00 | 54.00 | Pass |

**Figure Channel 62: Vertical (Peak)**

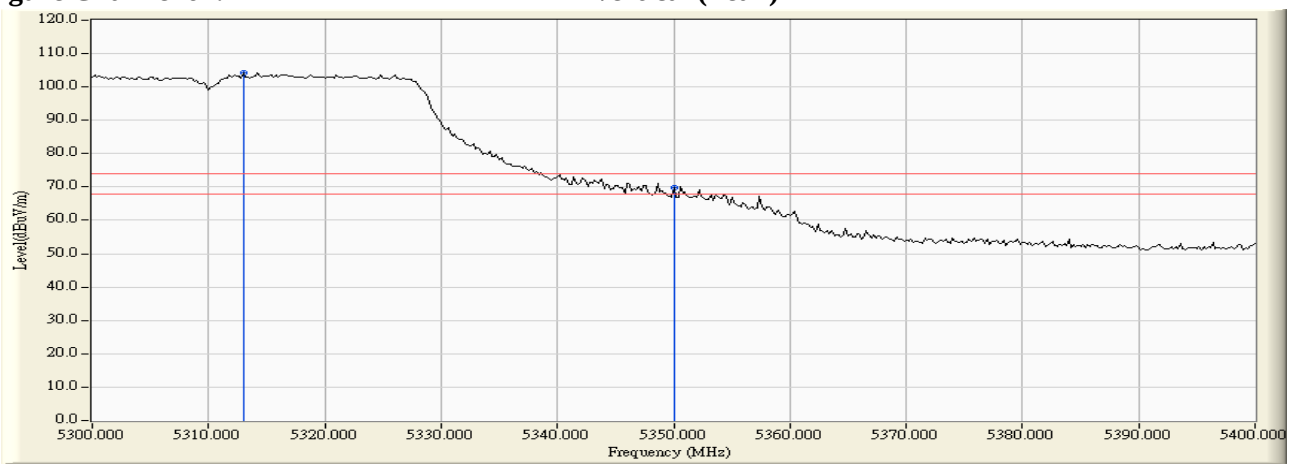
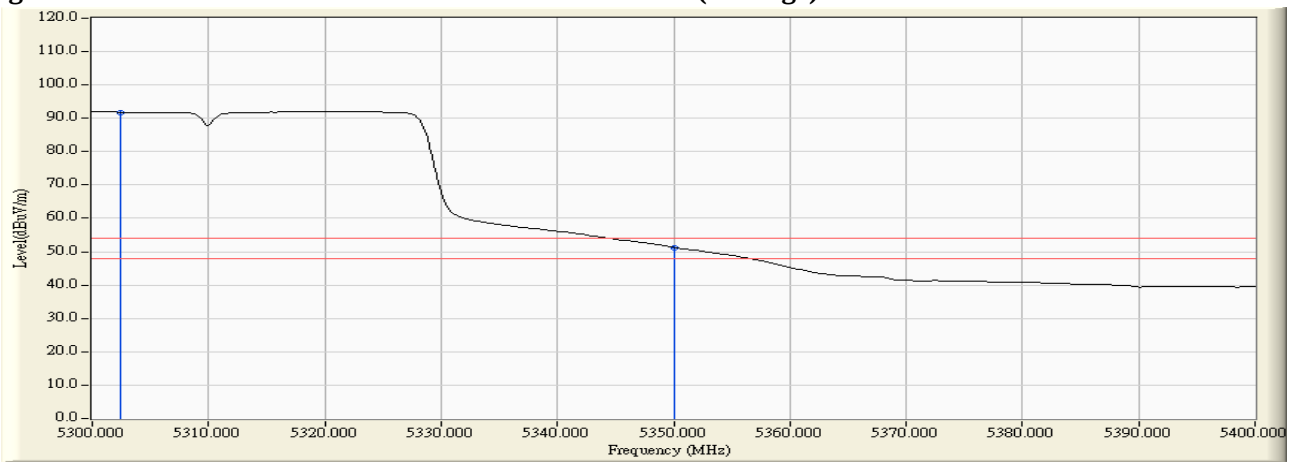



**Figure Channel 62: Vertical (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna) -Channel 102

**RF Radiated Measurement (Horizontal):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 102 (Peak) | 5460.000 | 4.354 | 59.115 | 63.469 | 74.00 | 54.00 | Pass |
| 102 (Peak) | 5496.600 | 4.792 | 99.444 | 104.235 | -- | -- | Pass |
| 102 (Average) | 5460.000 | 4.354 | 41.586 | 45.940 | 74.00 | 54.00 | Pass |
| 102 (Average) | 5498.100 | 4.801 | 87.510 | 92.311 | -- | -- | Pass |

**Figure Channel 102: Horizontal (Peak)**

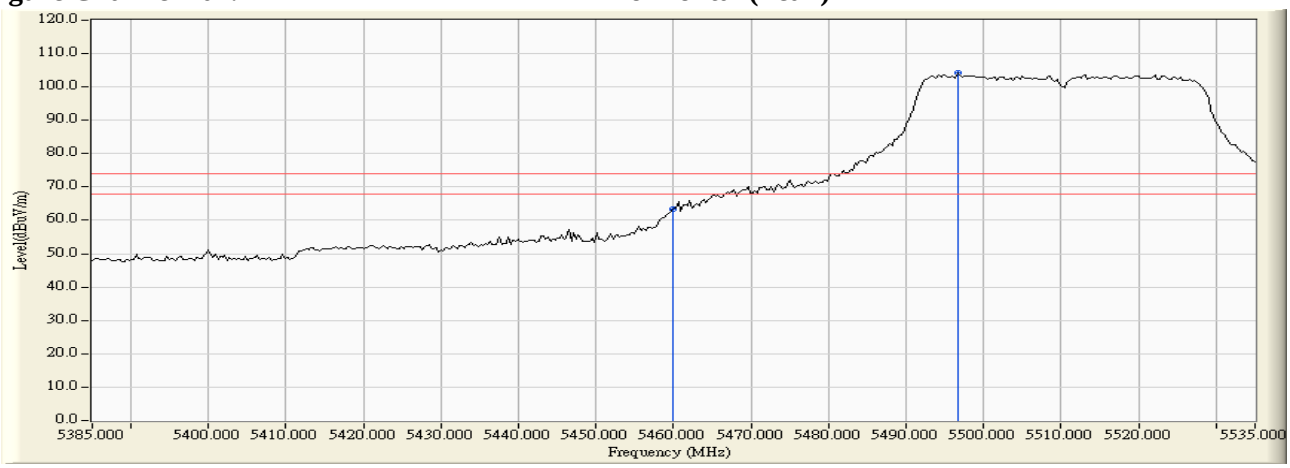
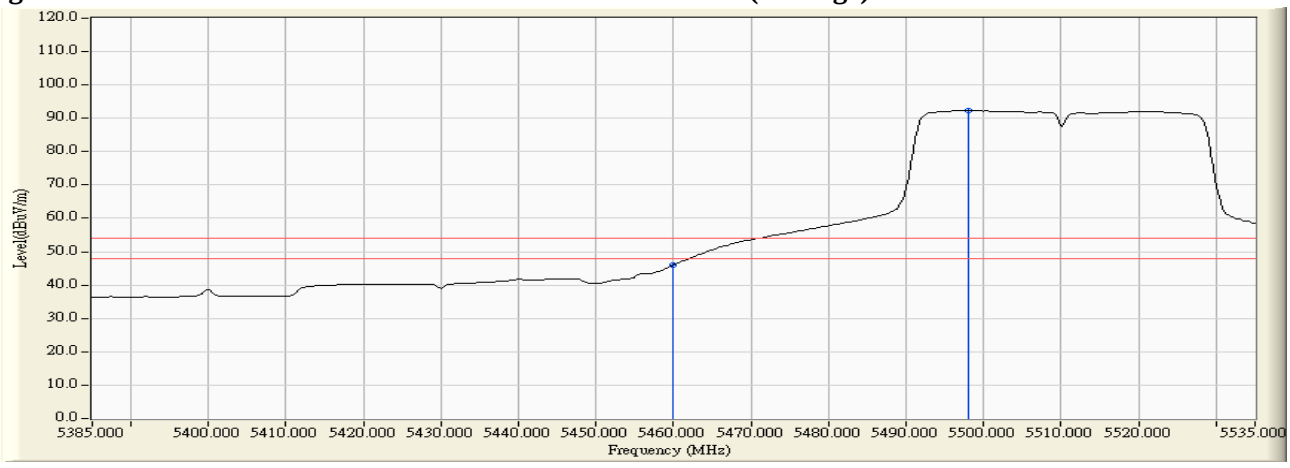



**Figure Channel 102: Horizontal (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna) -Channel 102

**RF Radiated Measurement (Vertical):**

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Arerage Limit (dBuV/m) | Result |
|---|---|---|---|---|---|---|---|
| 102 (Peak) | 5460.000 | 6.041 | 59.708 | 65.749 | 74.00 | 54.00 | Pass |
| 102 (Peak) | 5499.300 | 6.273 | 98.643 | 104.916 | -- | -- | Pass |
| 102 (Average) | 5460.000 | 6.041 | 39.910 | 45.951 | 74.00 | 54.00 | Pass |
| 102 (Average) | 5498.400 | 6.270 | 86.418 | 92.688 | -- | -- | Pass |

**Figure Channel 102: Vertical (Peak)**

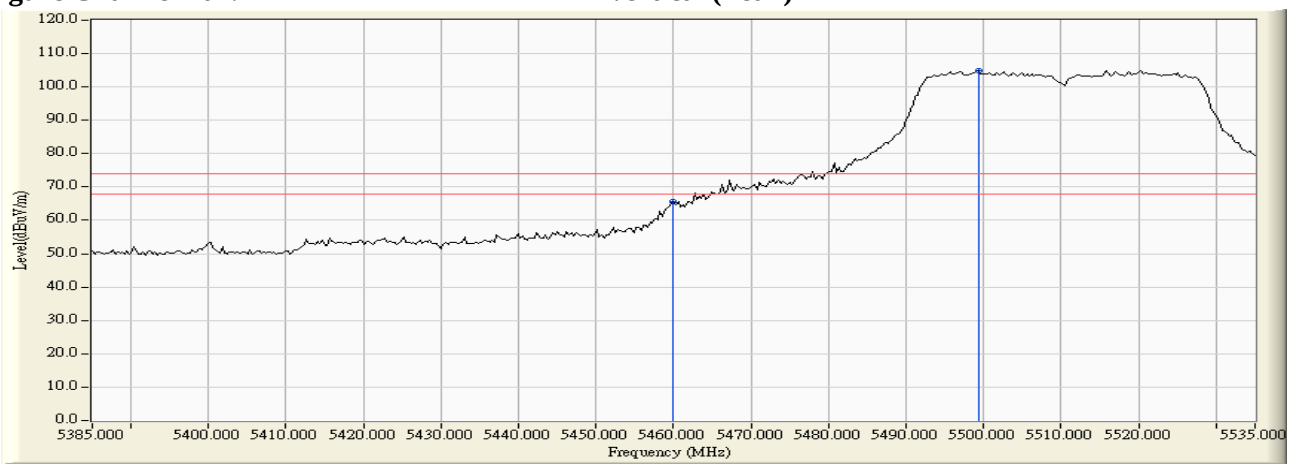
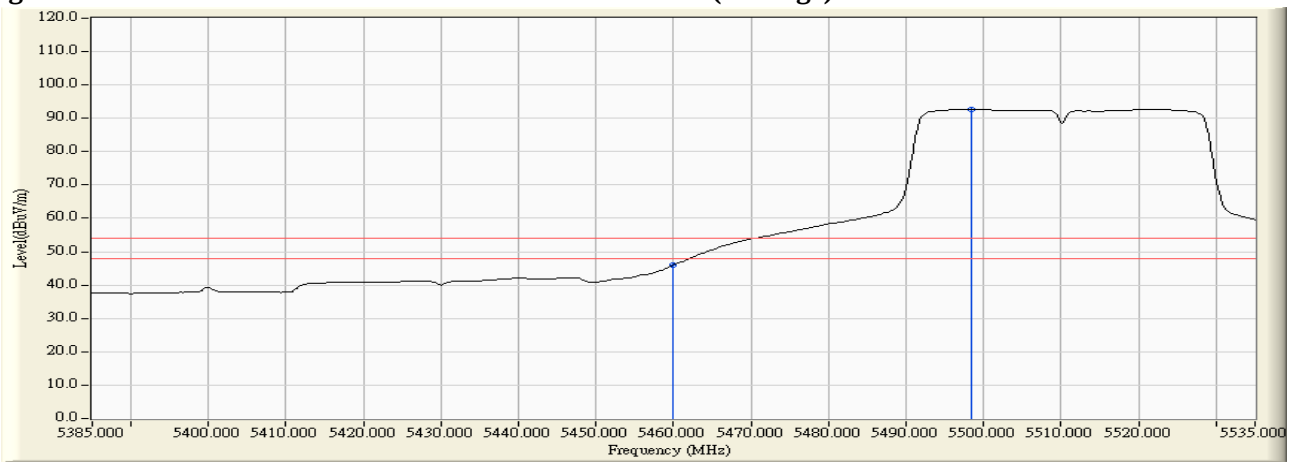



**Figure Channel 102: Vertical (Average)**




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 + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA 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 | 18.334 | -60.150 | -41.816 | -14.816 | -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 | -62.120 | -42.785 | -15.785 | -27.000 | Pass |

Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA 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 | -68.570 | -49.921 | -22.921 | -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 | -69.220 | -49.848 | -22.848 | -27.000 | Pass |

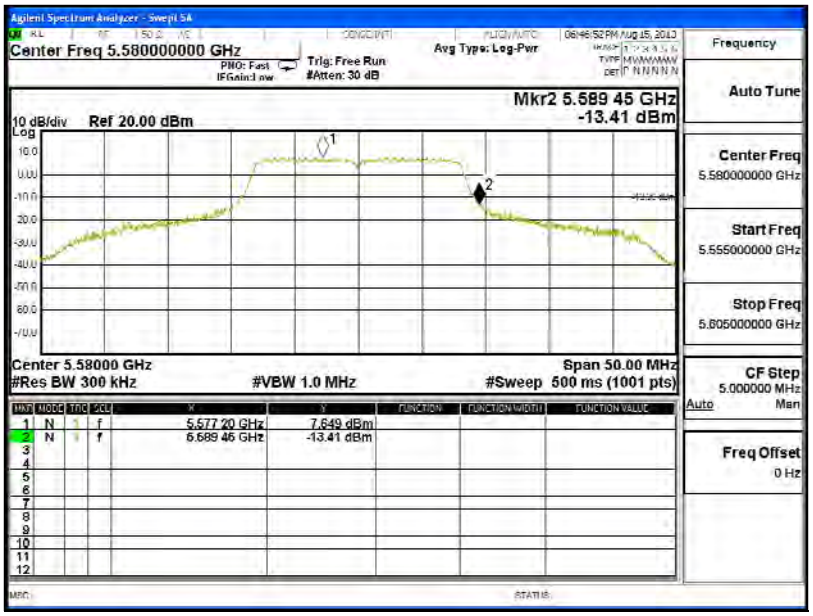
Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna)

**Chain A**

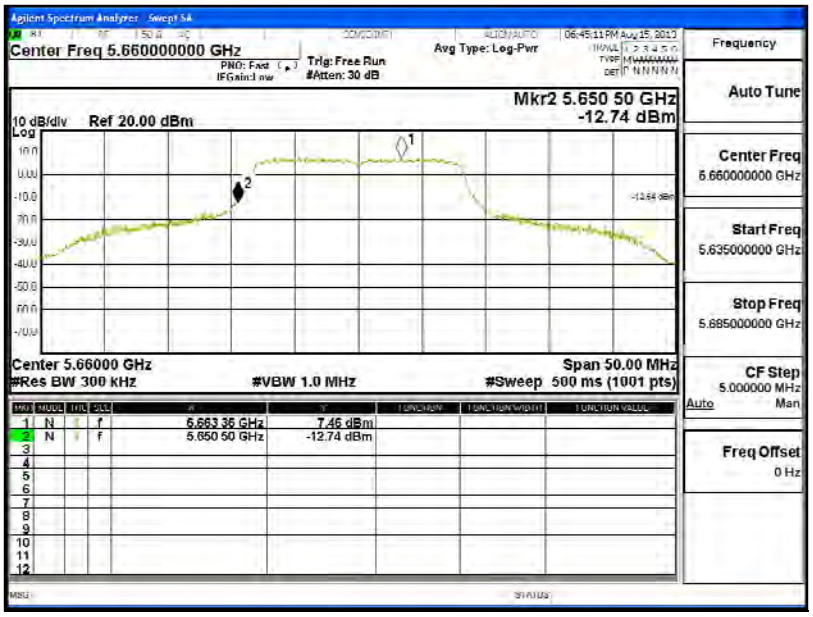
| Test Frequency (MHz) | Measurement Level (20dB BW) (MHz) | Limit (MHz) | Result |
|---|---|---|---|
| 5580 | 5589.45 | <5600 | PASS |
| 5660 | 5650.50 | >5650 | PASS |

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

5580MHz




5660MHz



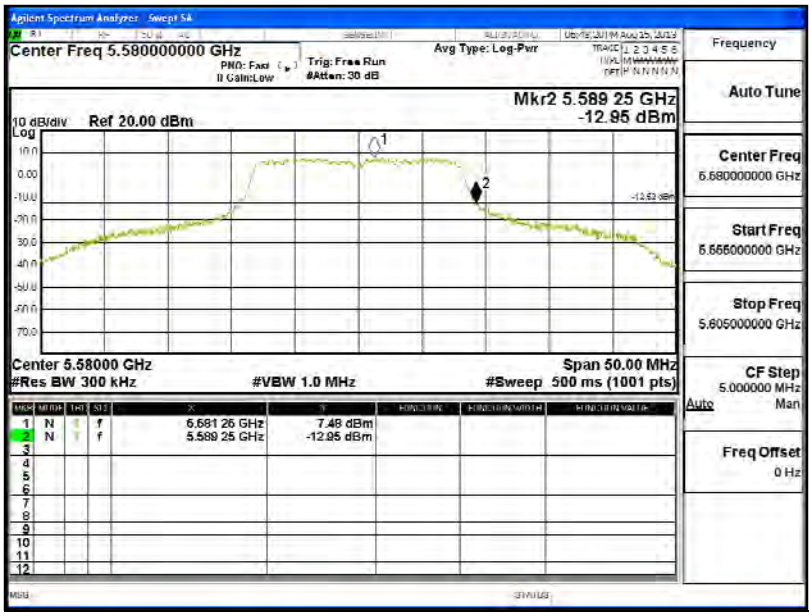
Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11a-6Mbps)(PIFA Antenna)

**Chain B**

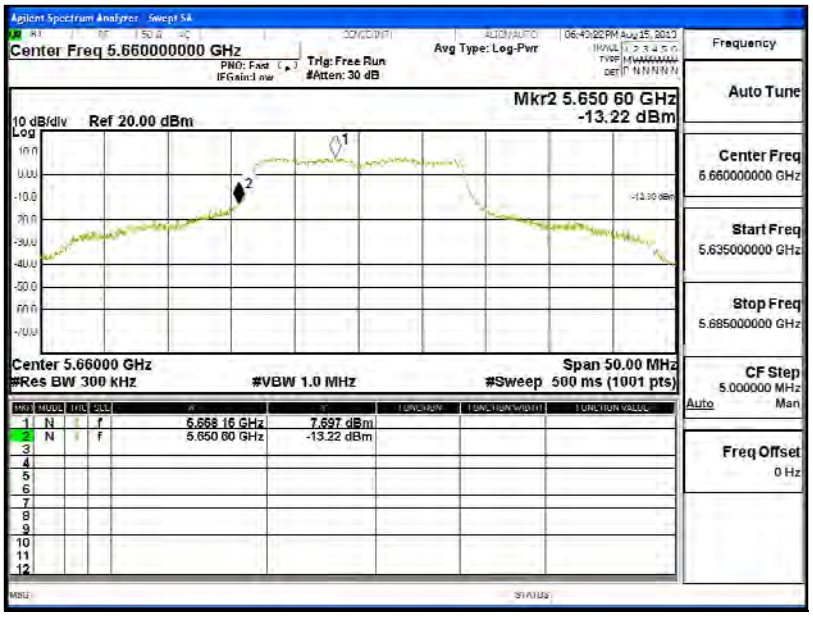
| Test Frequency (MHz) | Measurement Level (20dB BW) (MHz) | Limit (MHz) | Result |
|---|---|---|---|
| 5580 | 5589.25 | <5600 | PASS |
| 5660 | 5650.60 | >5650 | PASS |

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

5580MHz




5660MHz



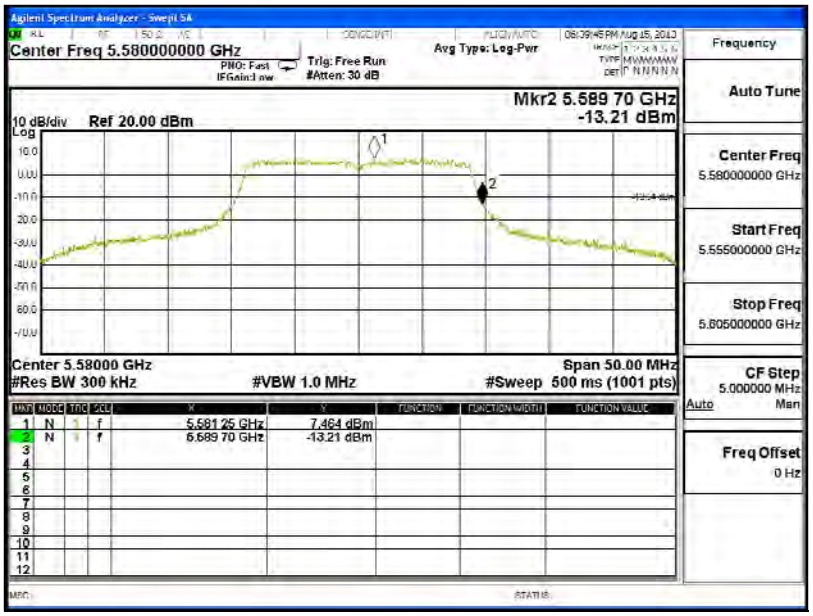
Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna)

**Chain A**

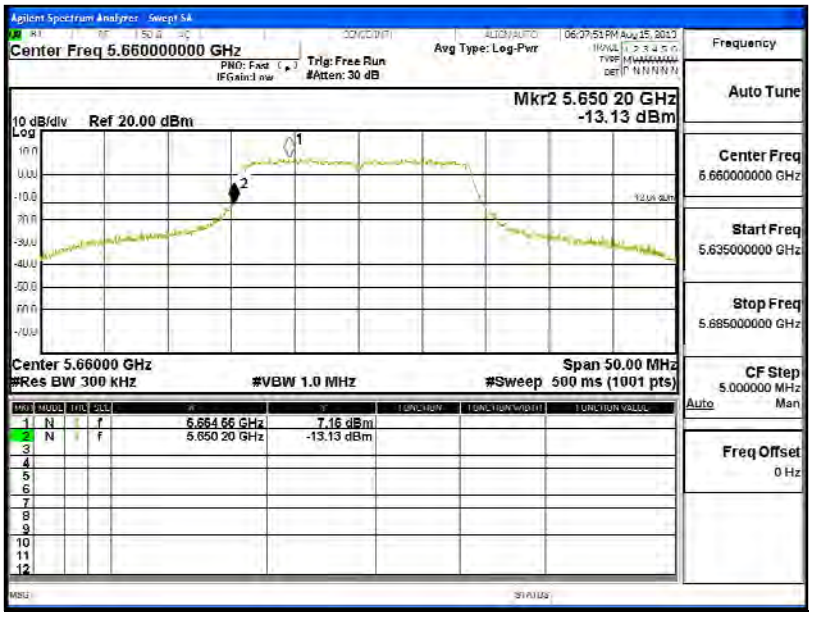
| Test Frequency (MHz) | Measurement Level (20dB BW) (MHz) | Limit (MHz) | Result |
|---|---|---|---|
| 5580 | 5589.70 | <5600 | PASS |
| 5660 | 5650.20 | >5650 | PASS |

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

5580MHz




5660MHz



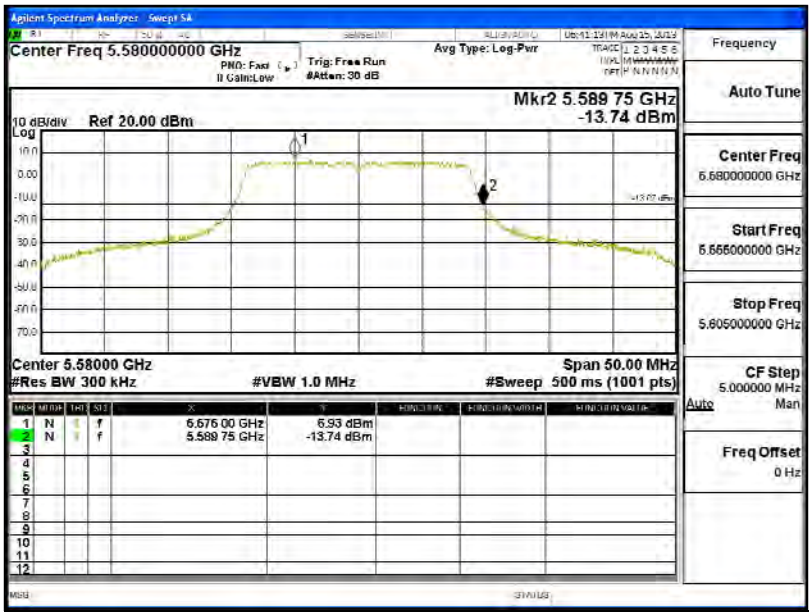
Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11n-20BW 14.4Mbps)(PIFA Antenna)

**Chain B**

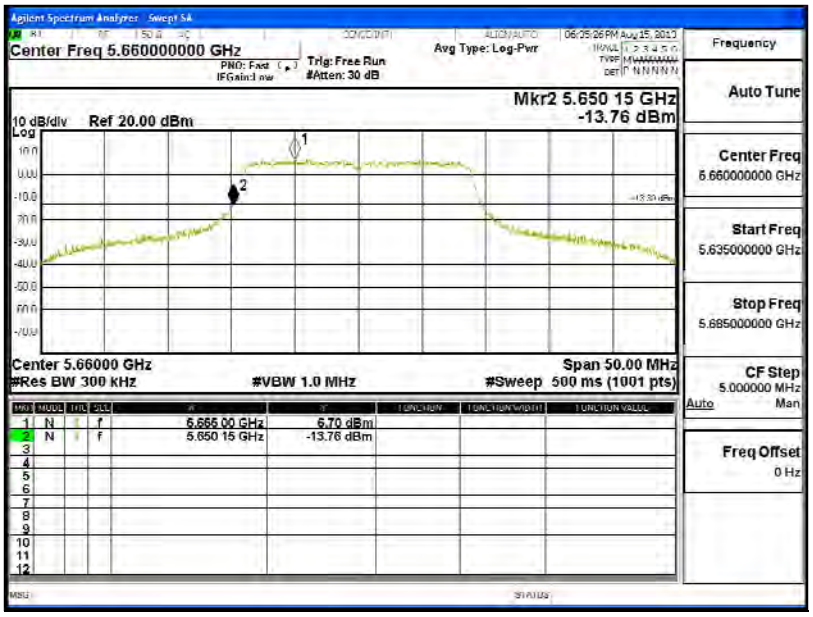
| Test Frequency (MHz) | Measurement Level (20dB BW) (MHz) | Limit (MHz) | Result |
|---|---|---|---|
| 5580 | 5589.75 | <5600 | PASS |
| 5660 | 5650.15 | >5650 | PASS |

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

5580MHz




5660MHz



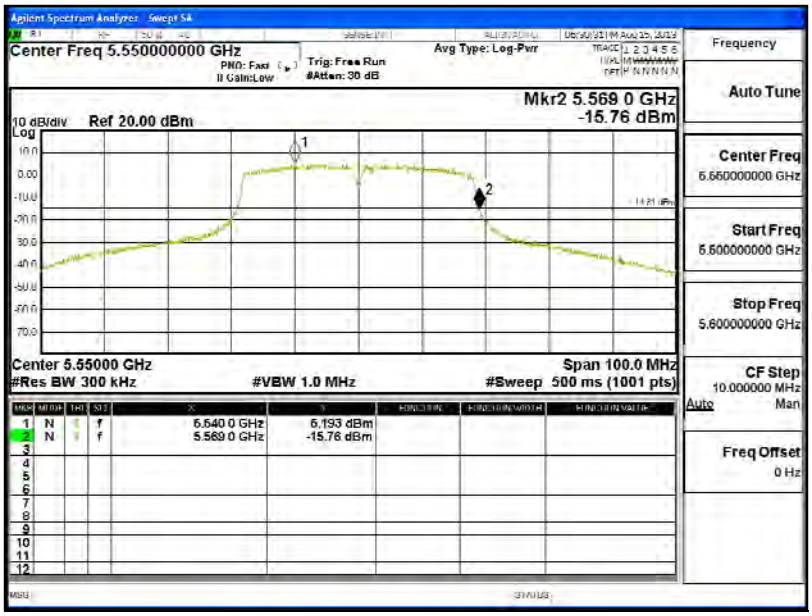
Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna)

**Chain A**

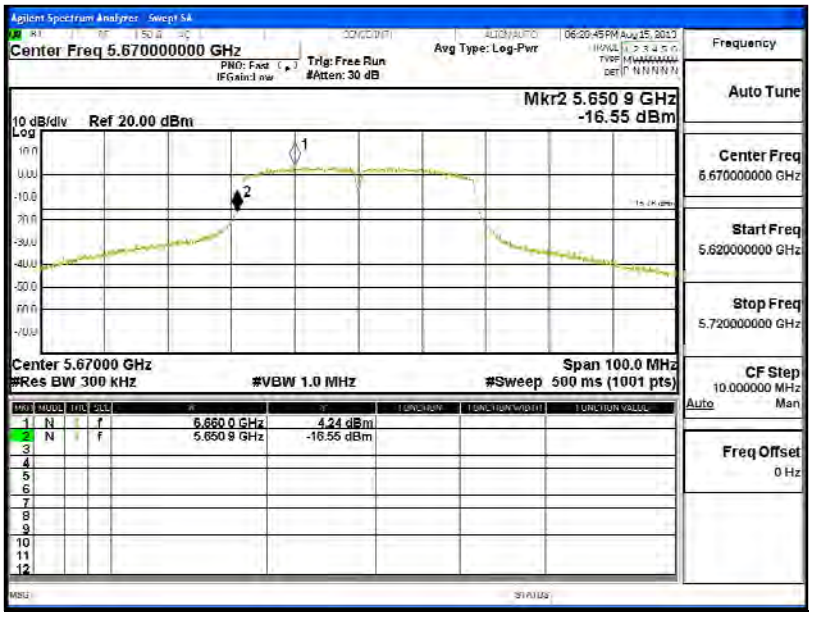
| Test Frequency (MHz) | Measurement Level (20dB BW) (MHz) | Limit (MHz) | Result |
|---|---|---|---|
| 5550 | 5569.00 | <5600 | PASS |
| 5670 | 5650.90 | >5650 | PASS |

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

5550MHz




5670MHz



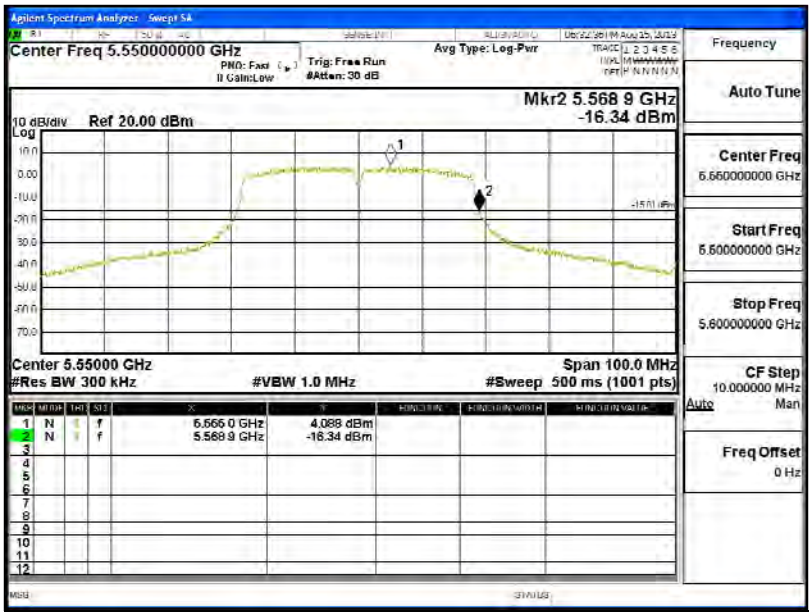
Product : SpectraGuard® Access Point / Sensor
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-40BW 30Mbps)(PIFA Antenna)

**Chain B**

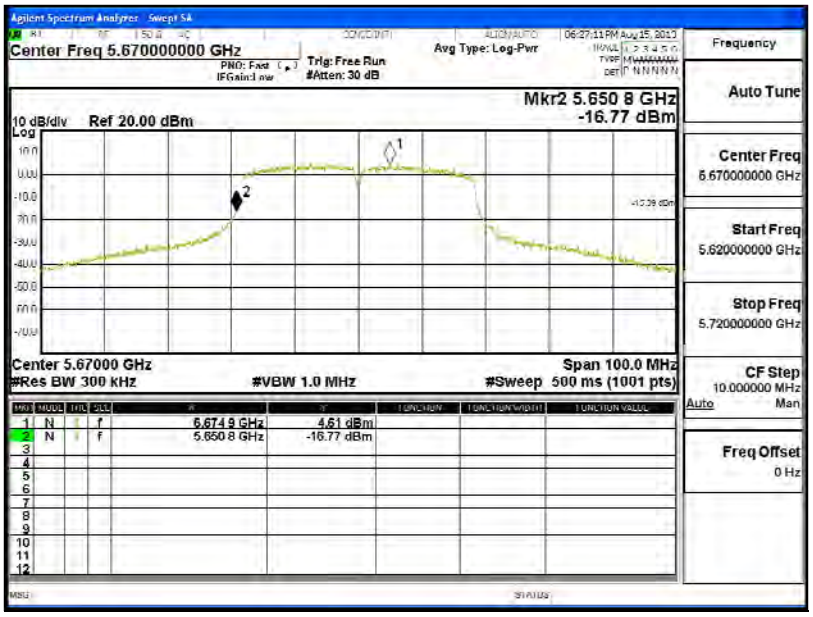
| Test Frequency (MHz) | Measurement Level (20dB BW) (MHz) | Limit (MHz) | Result |
|---|---|---|---|
| 5550 | 5568.90 | <5600 | PASS |
| 5670 | 5650.80 | >5650 | PASS |

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement.

5550MHz




5670MHz



# 8. Frequency Stability

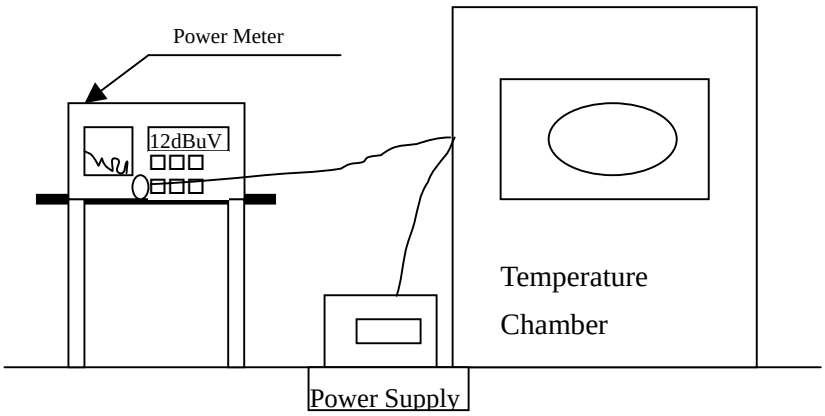
## 8.1. Test Equipment

| | Equipment | Manufacturer | Model No./Serial No. | Last Cal. |
|---|---|---|---|---|
| | Spectrum Analyzer | R&S | FSP40 / 100170 | Jun, 2013 |
| | Spectrum Analyzer | Agilent | E4407B / US39440758 | Jun, 2013 |
| X | Spectrum Analyzer | Agilent | N9010A / MY48030495 | Apr., 2013 |

Note:

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

## 8.2. Test Setup




## 8.3. Limits

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

## 8.4. Test Procedure

The EUT was setup to ANSI C63.10, 2009; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

## 8.5. Uncertainty

± 150 Hz

## 8.6. Test Result of Frequency Stability

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

**Chain A**

| Test Conditions | | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz) |
|---|---|---|---|---|---|
| Tnom (20) °C | Vnom (120)V | 52 | 5260.0000 | 5260.0085 | -0.0085 |
| | | 54 | 5270.0000 | 5270.0098 | -0.0098 |
| | | 60 | 5300.0000 | 5300.0089 | -0.0089 |
| | | 62 | 5310.0000 | 5310.0100 | -0.0100 |
| | | 64 | 5320.0000 | 5320.0100 | -0.0100 |
| | | 100 | 5500.0000 | 5500.0096 | -0.0096 |
| | | 102 | 5510.0000 | 5510.0100 | -0.0100 |
| | | 110 | 5550.0000 | 5550.0100 | -0.0100 |
| | | 116 | 5580.0000 | 5580.0099 | -0.0099 |
| | | 134 | 5670.0000 | 5670.0100 | -0.0100 |
| | | 140 | 5700.0000 | 5700.0095 | -0.0095 |
| Tmax (40) °C | Vmax (138)V | 52 | 5260.0000 | 5260.0085 | -0.0085 |
| | | 54 | 5270.0000 | 5270.0098 | -0.0098 |
| | | 60 | 5300.0000 | 5300.0085 | -0.0085 |
| | | 62 | 5310.0000 | 5310.0100 | -0.0100 |
| | | 64 | 5320.0000 | 5320.0100 | -0.0100 |
| | | 100 | 5500.0000 | 5500.0068 | -0.0068 |
| | | 102 | 5510.0000 | 5510.0100 | -0.0100 |
| | | 110 | 5550.0000 | 5550.0098 | -0.0098 |
| | | 116 | 5580.0000 | 5580.0087 | -0.0087 |
| | | 134 | 5670.0000 | 5670.0099 | -0.0099 |
| | | 140 | 5700.0000 | 5700.0095 | -0.0095 |
| Tmax (40) °C | Vmin (102)V | 52 | 5260.0000 | 5260.0085 | -0.0085 |
| | | 54 | 5270.0000 | 5270.0098 | -0.0098 |
| | | 60 | 5300.0000 | 5300.0085 | -0.0085 |
| | | 62 | 5310.0000 | 5310.0100 | -0.0100 |
| | | 64 | 5320.0000 | 5320.0100 | -0.0100 |
| | | 100 | 5500.0000 | 5500.0068 | -0.0068 |
| | | 102 | 5510.0000 | 5510.0100 | -0.0100 |
| | | 110 | 5550.0000 | 5550.0580 | -0.0580 |
| | | 116 | 5580.0000 | 5580.0097 | -0.0097 |
| | | 134 | 5670.0000 | 5670.0099 | -0.0099 |
| | | 140 | 5700.0000 | 5700.0095 | -0.0095 |

| Test Conditions | | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz) |
|---|---|---|---|---|---|
| Tmin (0) °C | Vmax (138)V | 52 | 5260.0000 | 5260.0085 | -0.0085 |
| | | 54 | 5270.0000 | 5270.0098 | -0.0098 |
| | | 60 | 5300.0000 | 5300.0089 | -0.0089 |
| | | 62 | 5310.0000 | 5310.0100 | -0.0100 |
| | | 64 | 5320.0000 | 5320.0100 | -0.0100 |
| | | 100 | 5500.0000 | 5500.0093 | -0.0093 |
| | | 102 | 5510.0000 | 5510.0096 | -0.0096 |
| | | 110 | 5550.0000 | 5550.0100 | -0.0100 |
| | | 116 | 5580.0000 | 5580.0098 | -0.0098 |
| | | 134 | 5670.0000 | 5670.0100 | -0.0100 |
| | | 140 | 5700.0000 | 5700.0095 | -0.0095 |
| Tmin (0) °C | Vmin (102)V | 52 | 5260.0000 | 5260.0085 | -0.0085 |
| | | 54 | 5270.0000 | 5270.0098 | -0.0098 |
| | | 60 | 5300.0000 | 5300.0089 | -0.0089 |
| | | 62 | 5310.0000 | 5310.0100 | -0.0100 |
| | | 64 | 5320.0000 | 5320.0100 | -0.0100 |
| | | 100 | 5500.0000 | 5500.0093 | -0.0093 |
| | | 102 | 5510.0000 | 5510.0096 | -0.0096 |
| | | 110 | 5550.0000 | 5550.0100 | -0.0100 |
| | | 116 | 5580.0000 | 5580.0098 | -0.0098 |
| | | 134 | 5670.0000 | 5670.0100 | -0.0100 |
| | | 140 | 5700.0000 | 5700.0095 | -0.0095 |

**Chain B**

| Test Conditions | | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz) |
|---|---|---|---|---|---|
| Tnom (20) °C | Vnom (120)V | 52 | 5260.0000 | 5260.0086 | -0.0086 |
| | | 54 | 5270.0000 | 5270.0101 | -0.0101 |
| | | 60 | 5300.0000 | 5300.0090 | -0.0090 |
| | | 62 | 5310.0000 | 5310.0103 | -0.0103 |
| | | 64 | 5320.0000 | 5320.0102 | -0.0102 |
| | | 100 | 5500.0000 | 5500.0098 | -0.0098 |
| | | 102 | 5510.0000 | 5510.0103 | -0.0103 |
| | | 110 | 5550.0000 | 5550.0102 | -0.0102 |
| | | 116 | 5580.0000 | 5580.0102 | -0.0102 |
| | | 134 | 5670.0000 | 5670.0102 | -0.0102 |
| | | 140 | 5700.0000 | 5700.0097 | -0.0097 |
| Tmax (40) °C | Vmax (138)V | 52 | 5260.0000 | 5260.0086 | -0.0086 |
| | | 54 | 5270.0000 | 5270.0101 | -0.0101 |
| | | 60 | 5300.0000 | 5300.0086 | -0.0086 |
| | | 62 | 5310.0000 | 5310.0103 | -0.0103 |
| | | 64 | 5320.0000 | 5320.0102 | -0.0102 |
| | | 100 | 5500.0000 | 5500.0070 | -0.0070 |
| | | 102 | 5510.0000 | 5510.0103 | -0.0103 |
| | | 110 | 5550.0000 | 5550.0100 | -0.0100 |
| | | 116 | 5580.0000 | 5580.0100 | -0.0100 |
| | | 134 | 5670.0000 | 5670.0101 | -0.0101 |
| | | 140 | 5700.0000 | 5700.0097 | -0.0097 |
| Tmax (40) °C | Vmin (102)V | 52 | 5260.0000 | 5260.0086 | -0.0086 |
| | | 54 | 5270.0000 | 5270.0101 | -0.0101 |
| | | 60 | 5300.0000 | 5300.0086 | -0.0086 |
| | | 62 | 5310.0000 | 5310.0103 | -0.0103 |
| | | 64 | 5320.0000 | 5320.0102 | -0.0102 |
| | | 100 | 5500.0000 | 5500.0070 | -0.0070 |
| | | 102 | 5510.0000 | 5510.0103 | -0.0103 |
| | | 110 | 5550.0000 | 5550.0100 | -0.0100 |
| | | 116 | 5580.0000 | 5580.0100 | -0.0100 |
| | | 134 | 5670.0000 | 5670.0101 | -0.0101 |
| | | 140 | 5700.0000 | 5700.0097 | -0.0097 |

| Test Conditions | | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz) |
|---|---|---|---|---|---|
| Tmin (0) °C | Vmax (138)V | 52 | 5260.0000 | 5260.0086 | -0.0086 |
| | | 54 | 5270.0000 | 5270.0101 | -0.0101 |
| | | 60 | 5300.0000 | 5300.0090 | -0.0090 |
| | | 62 | 5310.0000 | 5310.0103 | -0.0103 |
| | | 64 | 5320.0000 | 5320.0102 | -0.0102 |
| | | 100 | 5500.0000 | 5500.0095 | -0.0095 |
| | | 102 | 5510.0000 | 5510.0099 | -0.0099 |
| | | 110 | 5550.0000 | 5550.0102 | -0.0102 |
| | | 116 | 5580.0000 | 5580.0100 | -0.0100 |
| | | 134 | 5670.0000 | 5670.0102 | -0.0102 |
| | | 140 | 5700.0000 | 5700.0097 | -0.0097 |
| Tmin (0) °C | Vmin (102)V | 52 | 5260.0000 | 5260.0086 | -0.0086 |
| | | 54 | 5270.0000 | 5270.0101 | -0.0101 |
| | | 60 | 5300.0000 | 5300.0090 | -0.0090 |
| | | 62 | 5310.0000 | 5310.0103 | -0.0103 |
| | | 64 | 5320.0000 | 5320.0102 | -0.0102 |
| | | 100 | 5500.0000 | 5500.0095 | -0.0095 |
| | | 102 | 5510.0000 | 5510.0099 | -0.0099 |
| | | 110 | 5550.0000 | 5550.0102 | -0.0102 |
| | | 116 | 5580.0000 | 5580.0100 | -0.0100 |
| | | 134 | 5670.0000 | 5670.0102 | -0.0102 |
| | | 140 | 5700.0000 | 5700.0097 | -0.0097 |

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

**Chain A**

| Test Conditions | | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz) |
|---|---|---|---|---|---|
| Tnom (20) °C | Vnom (120)V | 52 | 5260.0000 | 5260.0085 | -0.0085 |
| | | 54 | 5270.0000 | 5270.0099 | -0.0099 |
| | | 60 | 5300.0000 | 5300.0091 | -0.0091 |
| | | 62 | 5310.0000 | 5310.0101 | -0.0101 |
| | | 64 | 5320.0000 | 5320.0103 | -0.0103 |
| | | 100 | 5500.0000 | 5500.0099 | -0.0099 |
| | | 102 | 5510.0000 | 5510.0101 | -0.0101 |
| | | 110 | 5550.0000 | 5550.0100 | -0.0100 |
| | | 116 | 5580.0000 | 5580.0098 | -0.0098 |
| | | 134 | 5670.0000 | 5670.0101 | -0.0101 |
| | | 140 | 5700.0000 | 5700.0094 | -0.0094 |
| Tmax (40) °C | Vmax (138)V | 52 | 5260.0000 | 5260.0086 | -0.0086 |
| | | 54 | 5270.0000 | 5270.0097 | -0.0097 |
| | | 60 | 5300.0000 | 5300.0084 | -0.0084 |
| | | 62 | 5310.0000 | 5310.0101 | -0.0101 |
| | | 64 | 5320.0000 | 5320.0100 | -0.0100 |
| | | 100 | 5500.0000 | 5500.0067 | -0.0067 |
| | | 102 | 5510.0000 | 5510.0101 | -0.0101 |
| | | 110 | 5550.0000 | 5550.0095 | -0.0095 |
| | | 116 | 5580.0000 | 5580.0088 | -0.0088 |
| | | 134 | 5670.0000 | 5670.0098 | -0.0098 |
| | | 140 | 5700.0000 | 5700.0096 | -0.0096 |
| Tmax (40) °C | Vmin (102)V | 52 | 5260.0000 | 5260.0085 | -0.0085 |
| | | 54 | 5270.0000 | 5270.0097 | -0.0097 |
| | | 60 | 5300.0000 | 5300.0086 | -0.0086 |
| | | 62 | 5310.0000 | 5310.0100 | -0.0100 |
| | | 64 | 5320.0000 | 5320.0100 | -0.0100 |
| | | 100 | 5500.0000 | 5500.0068 | -0.0068 |
| | | 102 | 5510.0000 | 5510.0101 | -0.0101 |
| | | 110 | 5550.0000 | 5550.0095 | -0.0095 |
| | | 116 | 5580.0000 | 5580.0097 | -0.0097 |
| | | 134 | 5670.0000 | 5670.0099 | -0.0099 |
| | | 140 | 5700.0000 | 5700.0093 | -0.0093 |

| Test Conditions | | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz) |
|---|---|---|---|---|---|
| Tmin (0) °C | Vmax (138)V | 52 | 5260.0000 | 5260.0083 | -0.0083 |
| | | 54 | 5270.0000 | 5270.0097 | -0.0097 |
| | | 60 | 5300.0000 | 5300.0088 | -0.0088 |
| | | 62 | 5310.0000 | 5310.0101 | -0.0101 |
| | | 64 | 5320.0000 | 5320.0101 | -0.0101 |
| | | 100 | 5500.0000 | 5500.0094 | -0.0094 |
| | | 102 | 5510.0000 | 5510.0095 | -0.0095 |
| | | 110 | 5550.0000 | 5550.0101 | -0.0101 |
| | | 116 | 5580.0000 | 5580.0097 | -0.0097 |
| | | 134 | 5670.0000 | 5670.0101 | -0.0101 |
| | | 140 | 5700.0000 | 5700.0096 | -0.0096 |
| Tmin (0) °C | Vmin (102)V | 52 | 5260.0000 | 5260.0083 | -0.0083 |
| | | 54 | 5270.0000 | 5270.0097 | -0.0097 |
| | | 60 | 5300.0000 | 5300.0088 | -0.0088 |
| | | 62 | 5310.0000 | 5310.0101 | -0.0101 |
| | | 64 | 5320.0000 | 5320.0101 | -0.0101 |
| | | 100 | 5500.0000 | 5500.0094 | -0.0094 |
| | | 102 | 5510.0000 | 5510.0095 | -0.0095 |
| | | 110 | 5550.0000 | 5550.0101 | -0.0101 |
| | | 116 | 5580.0000 | 5580.0097 | -0.0097 |
| | | 134 | 5670.0000 | 5670.0101 | -0.0101 |
| | | 140 | 5700.0000 | 5700.0096 | -0.0096 |

**Chain B**

| Test Conditions | | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz) |
|---|---|---|---|---|---|
| Tnom (20) °C | Vnom (120)V | 52 | 5260.0000 | 5260.0087 | -0.0087 |
| | | 54 | 5270.0000 | 5270.0102 | -0.0102 |
| | | 60 | 5300.0000 | 5300.0094 | -0.0094 |
| | | 62 | 5310.0000 | 5310.0100 | -0.0100 |
| | | 64 | 5320.0000 | 5320.0104 | -0.0104 |
| | | 100 | 5500.0000 | 5500.0101 | -0.0101 |
| | | 102 | 5510.0000 | 5510.0103 | -0.0103 |
| | | 110 | 5550.0000 | 5550.0102 | -0.0102 |
| | | 116 | 5580.0000 | 5580.0102 | -0.0102 |
| | | 134 | 5670.0000 | 5670.0103 | -0.0103 |
| | | 140 | 5700.0000 | 5700.0096 | -0.0096 |
| Tmax (40) °C | Vmax (138)V | 52 | 5260.0000 | 5260.0088 | -0.0088 |
| | | 54 | 5270.0000 | 5270.0100 | -0.0100 |
| | | 60 | 5300.0000 | 5300.0085 | -0.0085 |
| | | 62 | 5310.0000 | 5310.0103 | -0.0103 |
| | | 64 | 5320.0000 | 5320.0102 | -0.0102 |
| | | 100 | 5500.0000 | 5500.0071 | -0.0071 |
| | | 102 | 5510.0000 | 5510.0104 | -0.0104 |
| | | 110 | 5550.0000 | 5550.0098 | -0.0098 |
| | | 116 | 5580.0000 | 5580.0101 | -0.0101 |
| | | 134 | 5670.0000 | 5670.0102 | -0.0102 |
| | | 140 | 5700.0000 | 5700.0098 | -0.0098 |
| Tmax (40) °C | Vmin (102)V | 52 | 5260.0000 | 5260.0086 | -0.0086 |
| | | 54 | 5270.0000 | 5270.0100 | -0.0100 |
| | | 60 | 5300.0000 | 5300.0087 | -0.0087 |
| | | 62 | 5310.0000 | 5310.0103 | -0.0103 |
| | | 64 | 5320.0000 | 5320.0102 | -0.0102 |
| | | 100 | 5500.0000 | 5500.0070 | -0.0070 |
| | | 102 | 5510.0000 | 5510.0104 | -0.0104 |
| | | 110 | 5550.0000 | 5550.0100 | -0.0100 |
| | | 116 | 5580.0000 | 5580.0099 | -0.0099 |
| | | 134 | 5670.0000 | 5670.0101 | -0.0101 |
| | | 140 | 5700.0000 | 5700.0096 | -0.0096 |

| Test Conditions | | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz) |
|---|---|---|---|---|---|
| Tmin (0) °C | Vmax (138)V | 52 | 5260.0000 | 5260.0085 | -0.0085 |
| | | 54 | 5270.0000 | 5270.0100 | -0.0100 |
| | | 60 | 5300.0000 | 5300.0091 | -0.0091 |
| | | 62 | 5310.0000 | 5310.0105 | -0.0105 |
| | | 64 | 5320.0000 | 5320.0101 | -0.0101 |
| | | 100 | 5500.0000 | 5500.0095 | -0.0095 |
| | | 102 | 5510.0000 | 5510.0098 | -0.0098 |
| | | 110 | 5550.0000 | 5550.0103 | -0.0103 |
| | | 116 | 5580.0000 | 5580.0101 | -0.0101 |
| | | 134 | 5670.0000 | 5670.0104 | -0.0104 |
| | | 140 | 5700.0000 | 5700.0099 | -0.0099 |
| Tmin (0) °C | Vmin (102)V | 52 | 5260.0000 | 5260.0086 | -0.0086 |
| | | 54 | 5270.0000 | 5270.0101 | -0.0101 |
| | | 60 | 5300.0000 | 5300.0095 | -0.0095 |
| | | 62 | 5310.0000 | 5310.0104 | -0.0104 |
| | | 64 | 5320.0000 | 5320.0103 | -0.0103 |
| | | 100 | 5500.0000 | 5500.0099 | -0.0099 |
| | | 102 | 5510.0000 | 5510.0099 | -0.0099 |
| | | 110 | 5550.0000 | 5550.0102 | -0.0102 |
| | | 116 | 5580.0000 | 5580.0101 | -0.0101 |
| | | 134 | 5670.0000 | 5670.0102 | -0.0102 |
| | | 140 | 5700.0000 | 5700.0099 | -0.0099 |

## 9. EMI Reduction Method During Compliance Testing

No modification was made during testing.