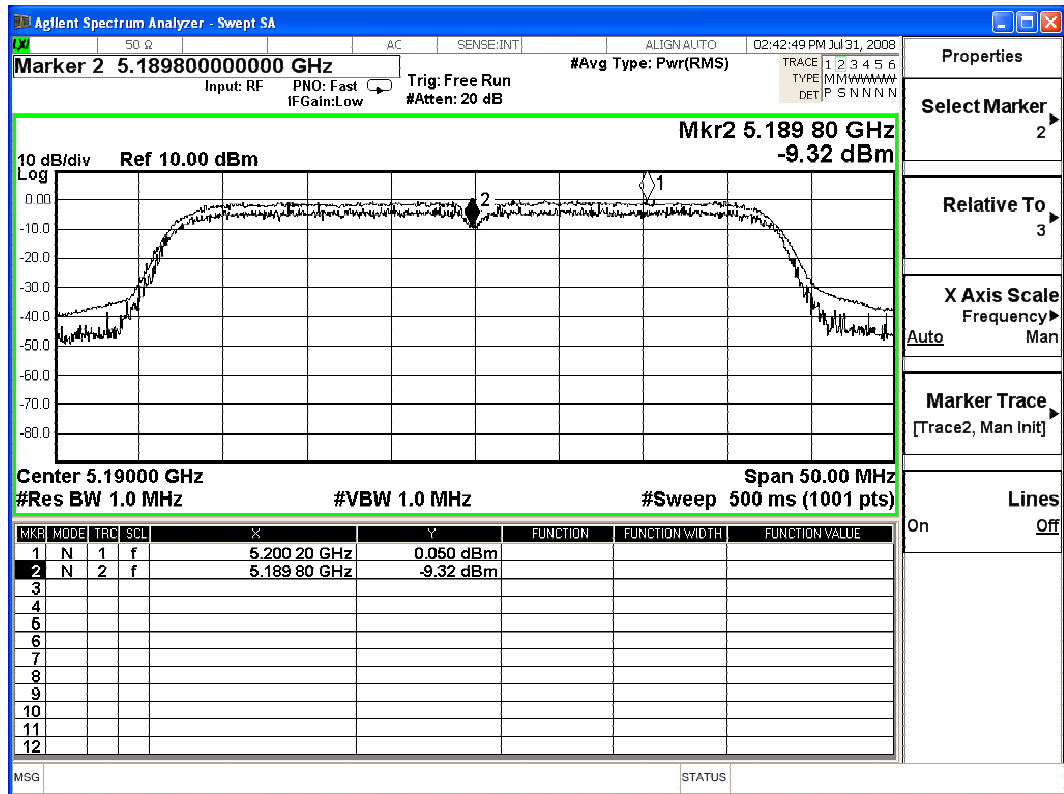
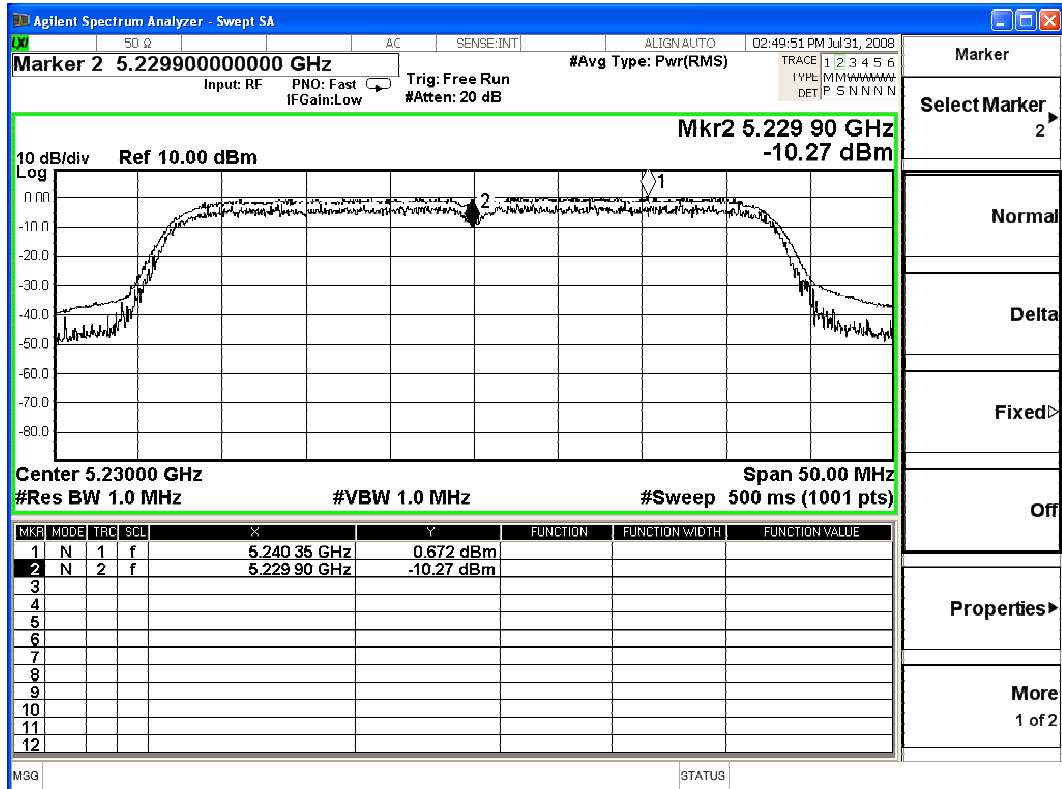


Ant A-Channel 01:



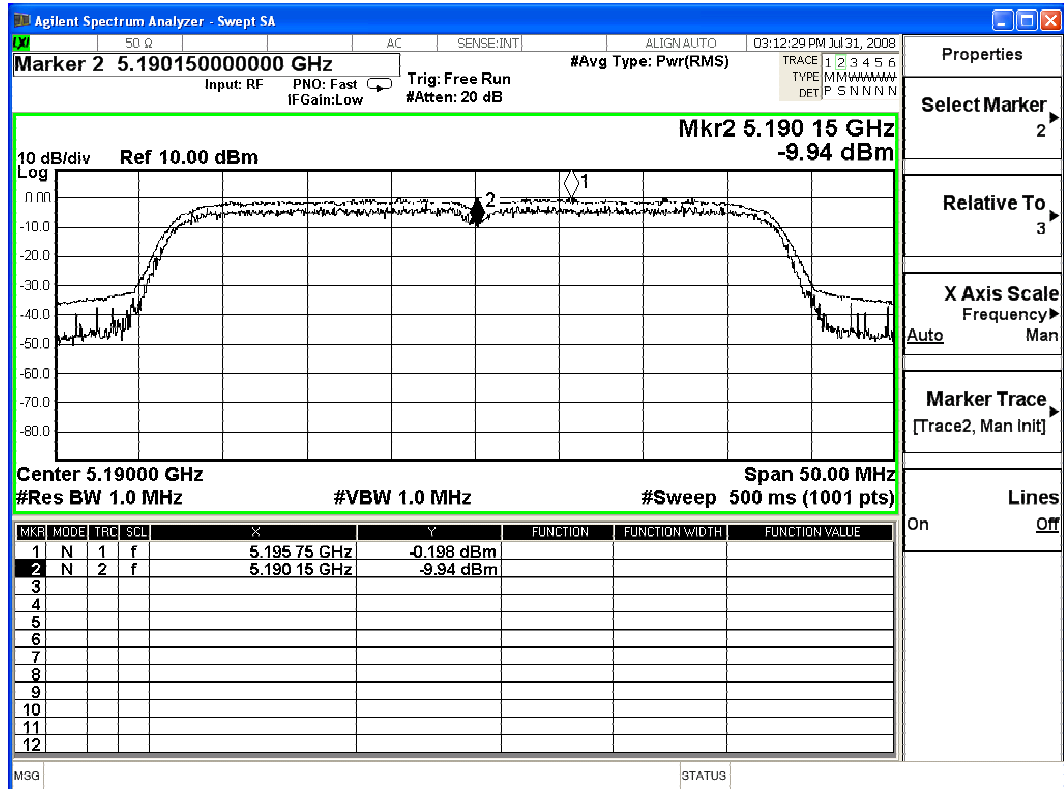
Ant A-Channel 02:



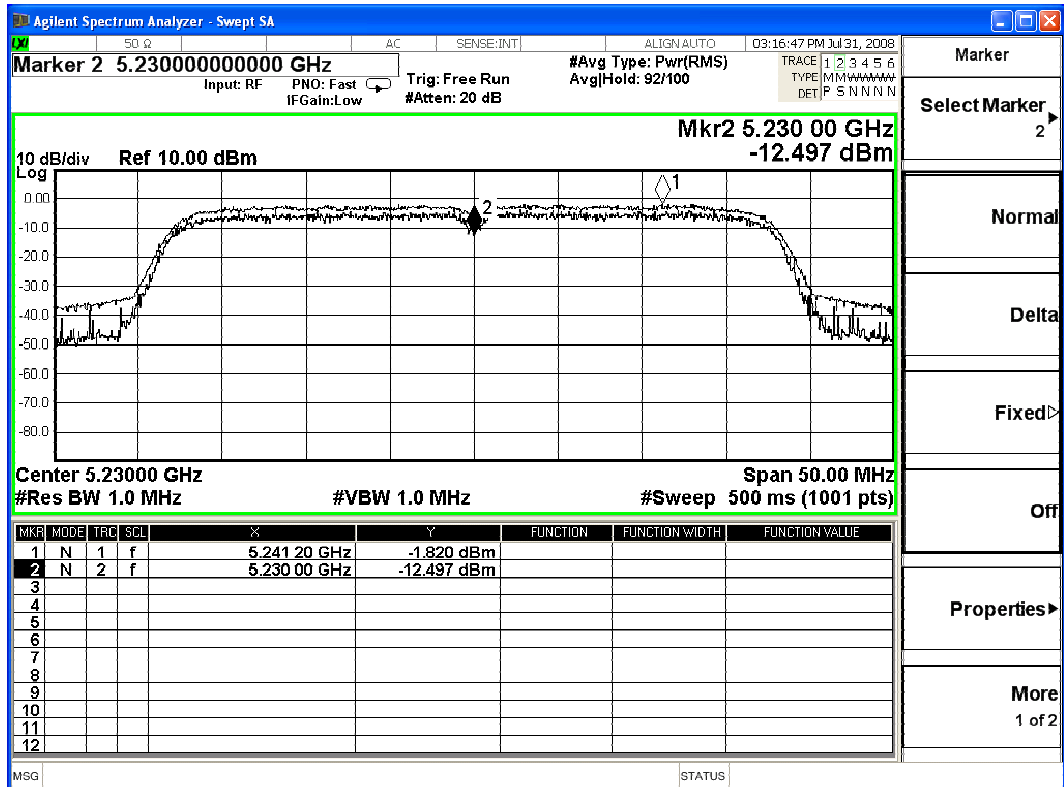
Product : ROS Home Center
Test Item : Peak Excursion
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band)-Antenna B

Channel No.	Frequency (MHz)	Measurement Level (dB)	Required Limit (dB)	Result
01	5190.00	9.742	≤ 13	Pass
02	5230.00	10.677	≤ 13	Pass

Ant B-Channel 01:



Ant B-Channel 02:



6. Undesirable Emission

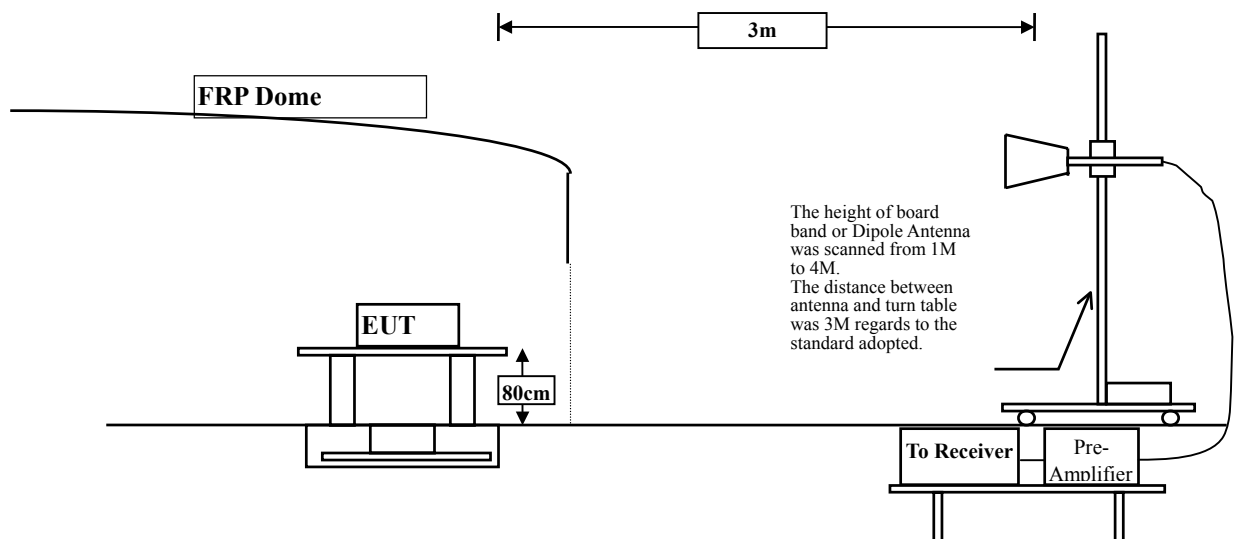
6.1. Test Equipment

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

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 3	X	Test Receiver	R & S	ESI 26 / 838786 / 004	May, 2008
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2008
	X	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2008
	X	Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May, 2008
	X	Horn Antenna	ETS	3115 / 0005-6160	July, 2008
	X	Pre-Amplifier	QTK	QTK-AMP-01 / 0001	July, 2008

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

6.2. Test Setup



6.3. Limits

Inside of the restricted band(section 15.205): Apply to 15.209 limit.

Outside of the restricted band (section 15.407):

5.15GHz - 5.35 GHz < -27 dBm/MHz EIRP,

5.47GHz - 5.725 GHz < -27 dBm/MHz EIRP,

5.725GHz - 5.825 GHz < -27 dBm/MHz EIRP,

<-17 dBm/MHz EIRP (all emission within the frequency range from the band edge to 10 MHz above or below the band edge).

6.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to FCC Public Notice DA 02-2138 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 C63.4:2003 on radiated measurement.

6.5. Uncertainty

± 3.8 dB below 1GHz

± 3.9 dB above 1GHz

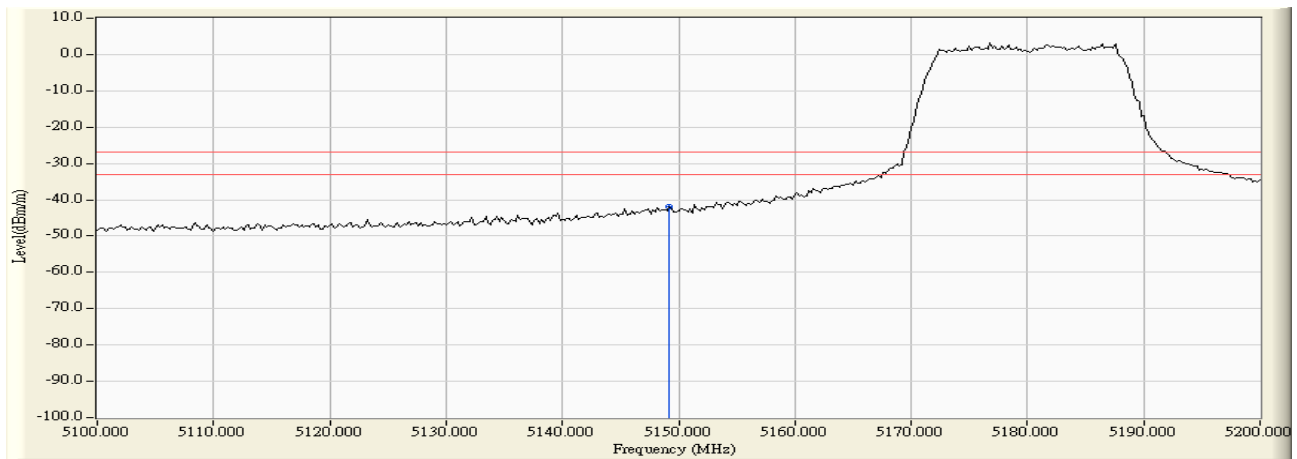
6.6. Test Result of Undesirable Emission

Product : ROS Home Center
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5180MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
1 (Peak)	5149.200	14.273	-56.293	-42.020	-15.020	-27.000	Pass

Figure Channel 1: Horizontal (Peak)



Note: Spectrum setting: Detector=Peak detector and maximum hold,
 RBW= 1MHz, VBW=3 MHz.

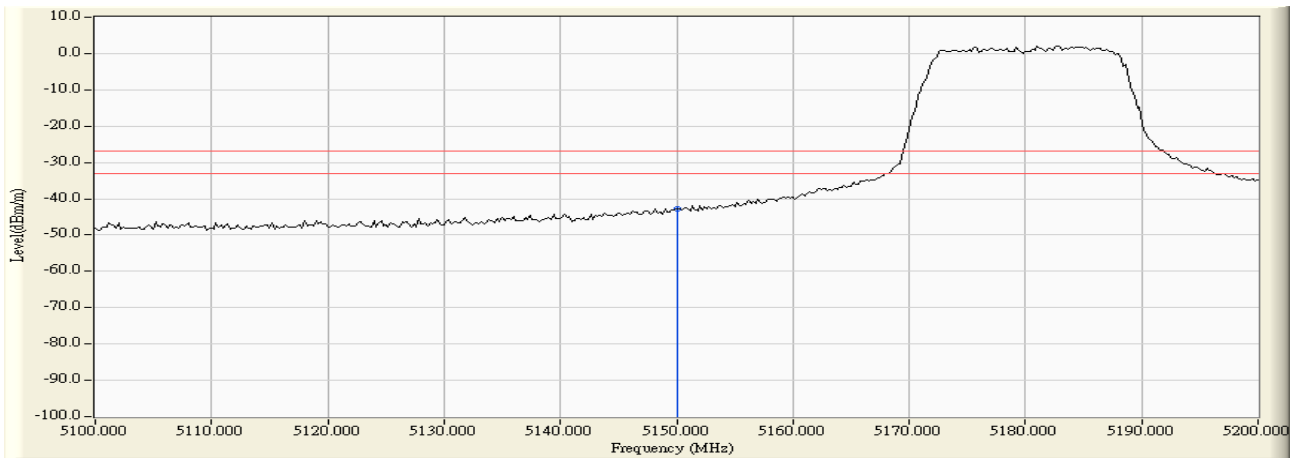
Product : ROS Home Center
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5180MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
1 (Peak)	5150.000	14.631	-57.509	-42.878	-19.932	-27.000	Pass

Figure Channel 1:

Vertical (Peak)



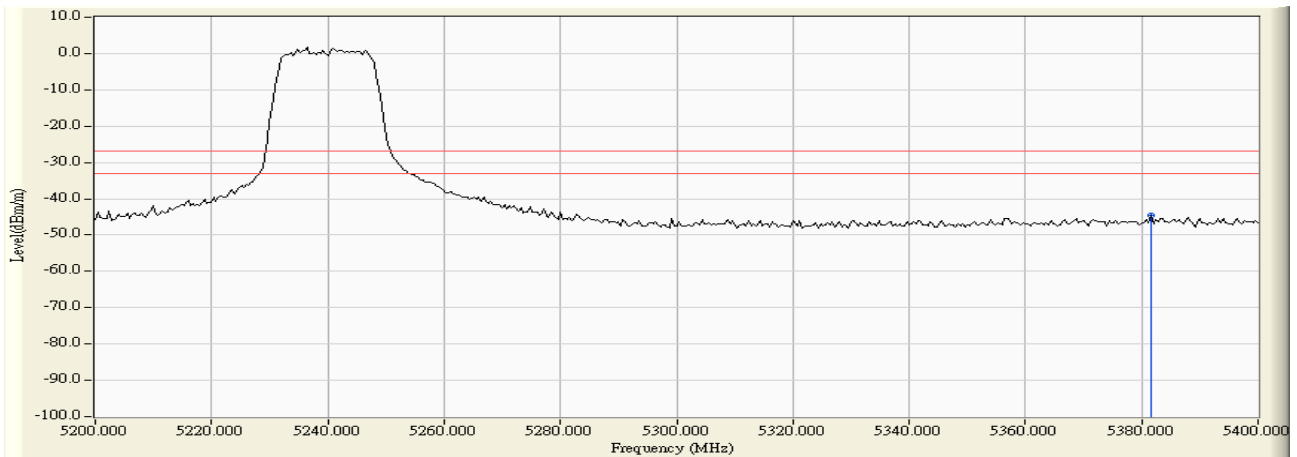
Note: Spectrum setting: Detector=Peak detector and maximum hold,
 RBW= 1MHz, VBW=3 MHz.

Product : ROS Home Center
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5240MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
4 (Peak)	5381.600	14.551	-59.113	-44.563	-17.563	-27.000	Pass

Figure Channel 4: Horizontal (Peak)



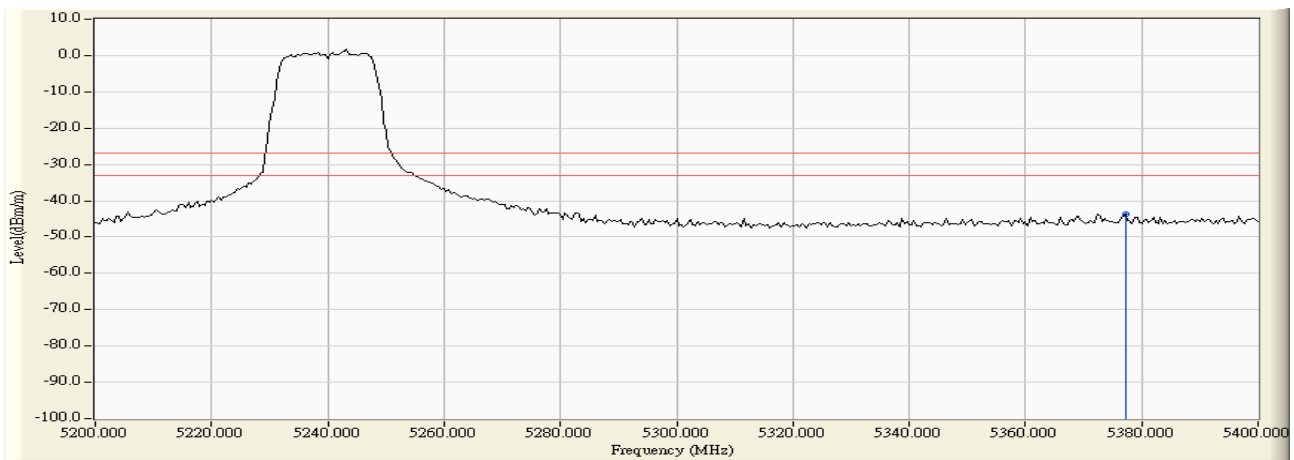
Note: Spectrum setting: Detector=Peak detector and maximum hold,
 RBW= 1MHz, VBW=3 MHz.

Product : ROS Home Center
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5240MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
4 (Peak)	5377.200	14.841	-58.500	-43.658	-16.658	-27.000	Pass

Figure Channel 4: Vertical (Peak)



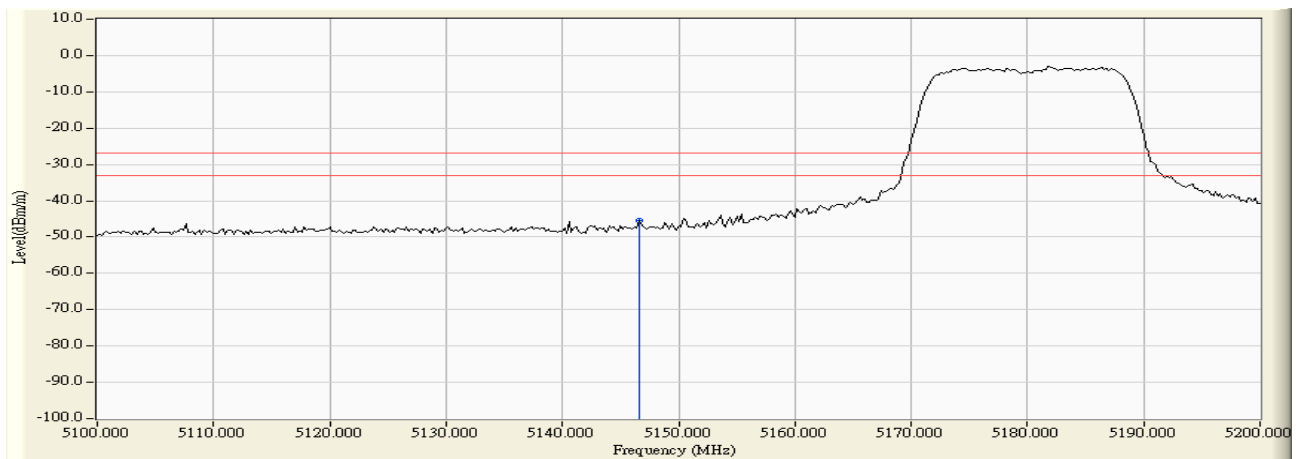
Note: Spectrum setting: Detector=Peak detector and maximum hold,
 RBW= 1MHz, VBW=3 MHz.

Product : ROS Home Center
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5180MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
1 (Peak)	5146.600	14.275	-59.859	-45.584	-18.584	-27.000	Pass

Figure Channel 1: Horizontal (Peak)



Note: Spectrum setting: Detector=Peak detector and maximum hold,
 RBW= 1MHz, VBW=3 MHz.

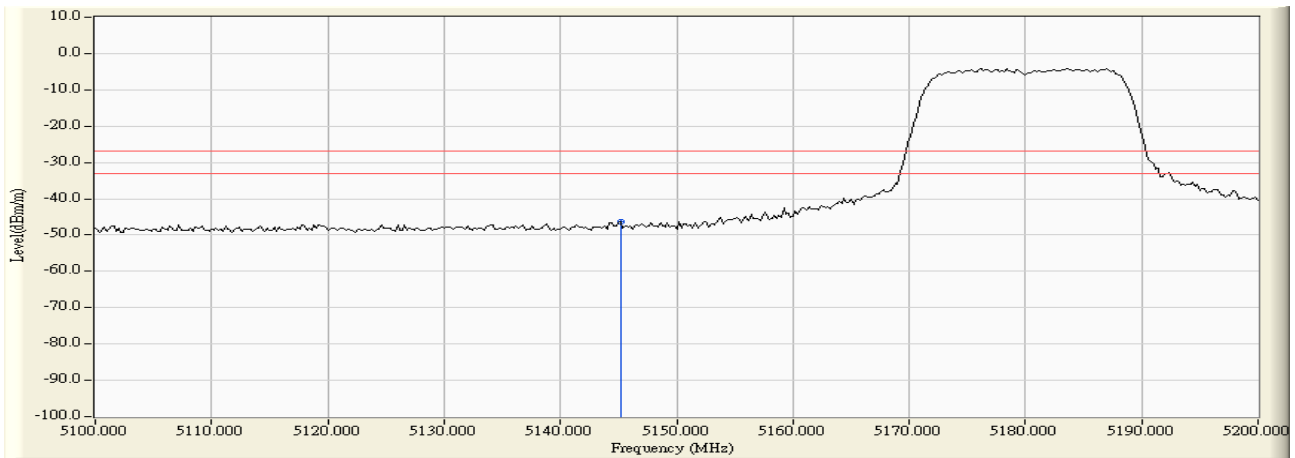
Product : ROS Home Center
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5180MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
1 (Peak)	5145.200	14.638	-61.065	-46.427	-19.427	-27.000	Pass

Figure Channel 1:

Vertical (Peak)



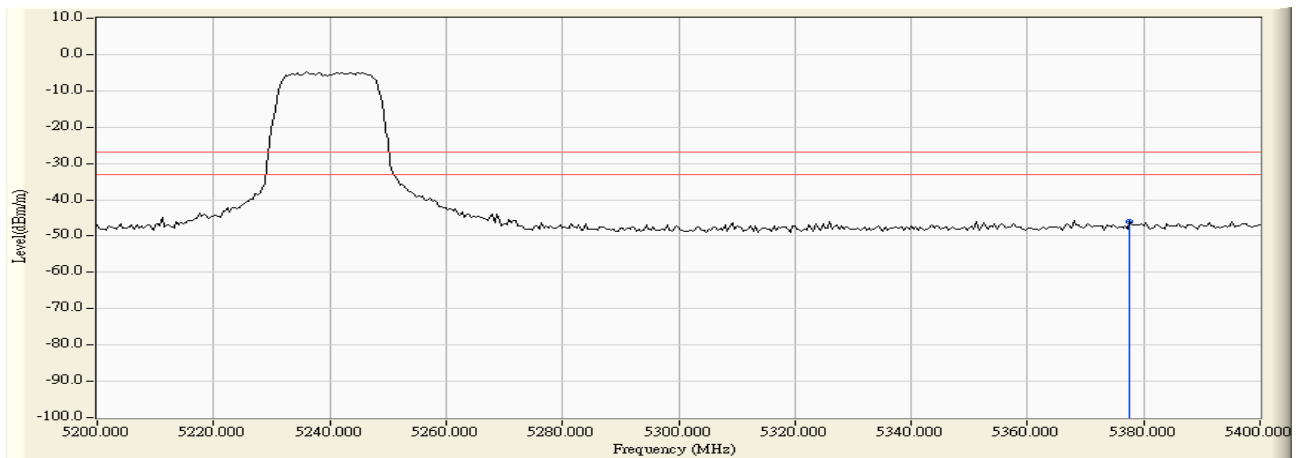
Note: Spectrum setting: Detector=Peak detector and maximum hold,
 RBW= 1MHz, VBW=3 MHz.

Product : ROS Home Center
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5240MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
4 (Peak)	5377.600	14.542	-60.584	-46.042	-19.042	-27.000	Pass

Figure Channel 4: Horizontal (Peak)



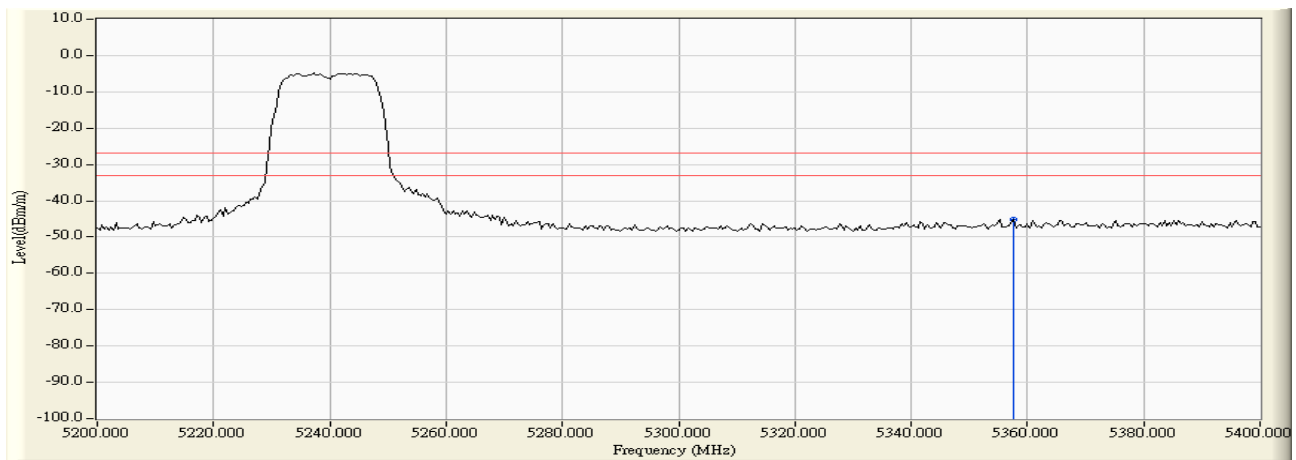
Note: Spectrum setting: Detector=Peak detector and maximum hold,
 RBW= 1MHz, VBW=3 MHz.

Product : ROS Home Center
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5240MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
4 (Peak)	5357.600	14.796	-60.083	-45.287	-18.287	-27.000	Pass

Figure Channel 4: Vertical (Peak)



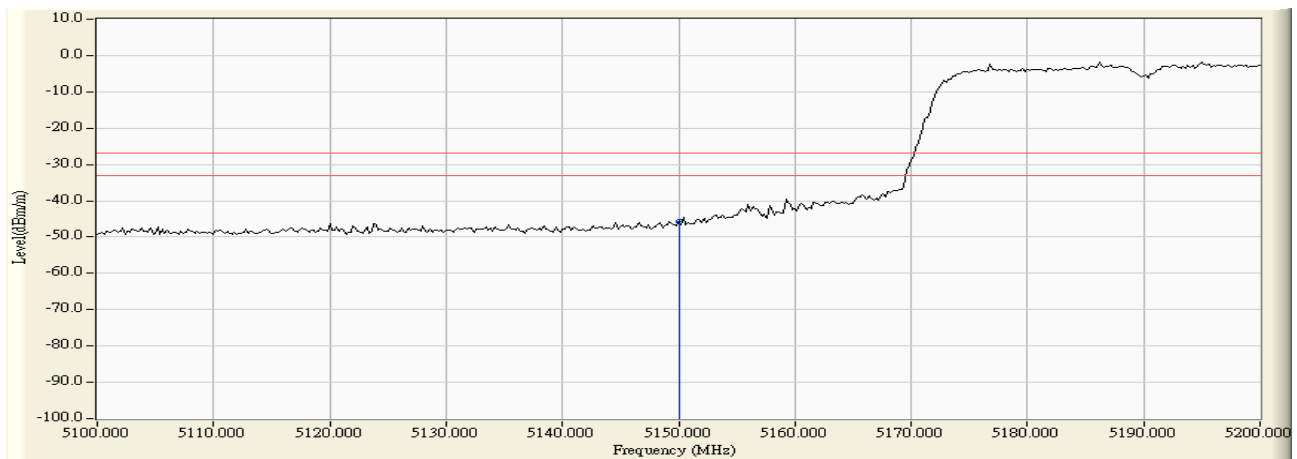
Note: Spectrum setting: Detector=Peak detector and maximum hold,
 RBW= 1MHz, VBW=3 MHz.

Product : ROS Home Center
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band) (5190MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
1 (Peak)	5150.000	14.272	-59.903	-45.631	-18.631	-27.000	Pass

Figure Channel 1: Horizontal (Peak)



Note: Spectrum setting: Detector=Peak detector and maximum hold,
 RBW= 1MHz, VBW=3 MHz.

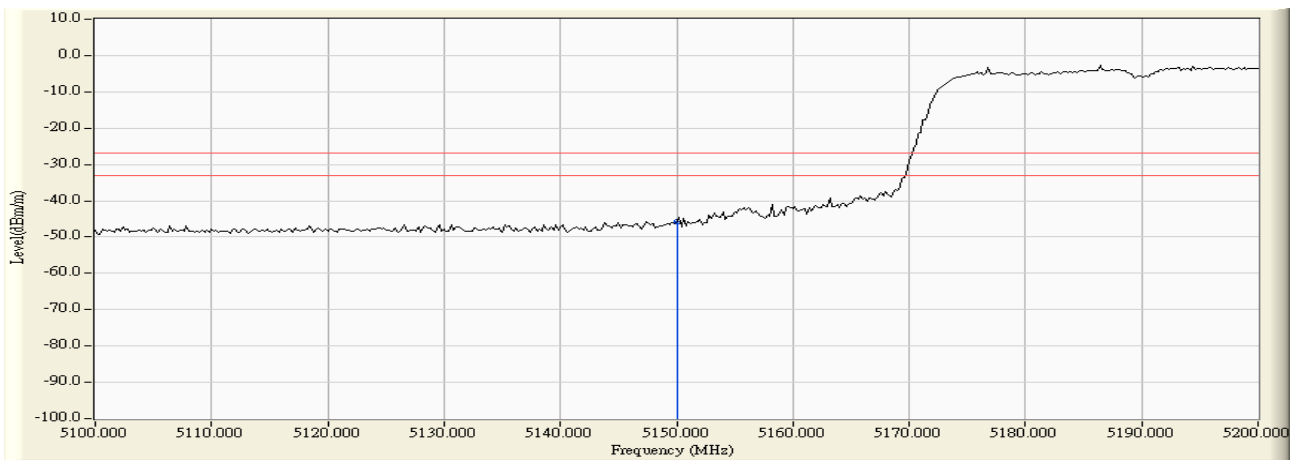
Product : ROS Home Center
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band) (5190MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
1 (Peak)	5150.000	14.631	-60.250	-45.619	-18.619	-27.000	Pass

Figure Channel 1:

Vertical (Peak)



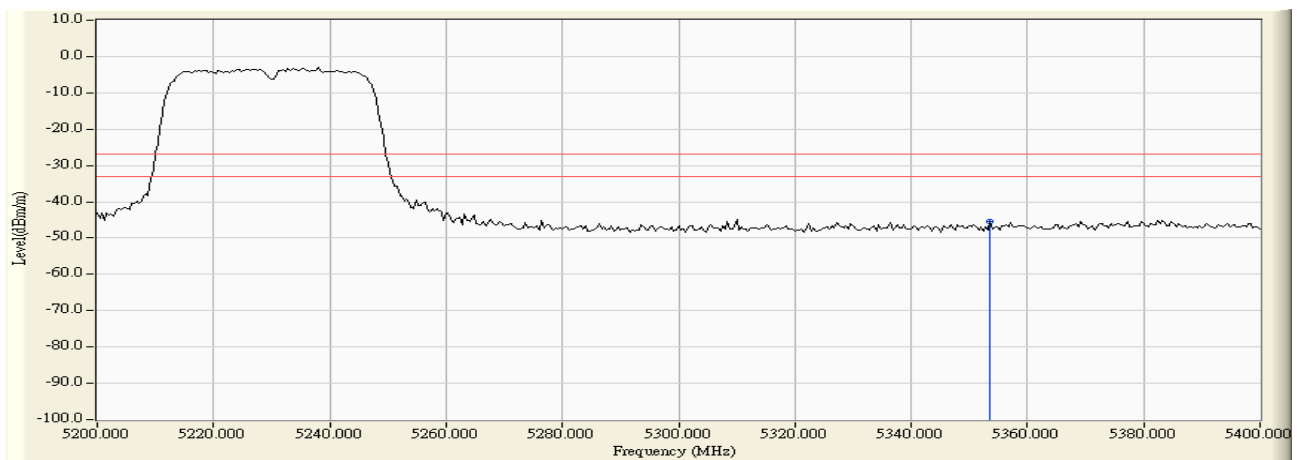
Note: Spectrum setting: Detector=Peak detector and maximum hold,
 RBW= 1MHz, VBW=3 MHz.

Product : ROS Home Center
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band) (5230MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
4 (Peak)	5353.600	14.476	-59.937	-45.461	-18.461	-27.000	Pass

Figure Channel 4: Horizontal (Peak)



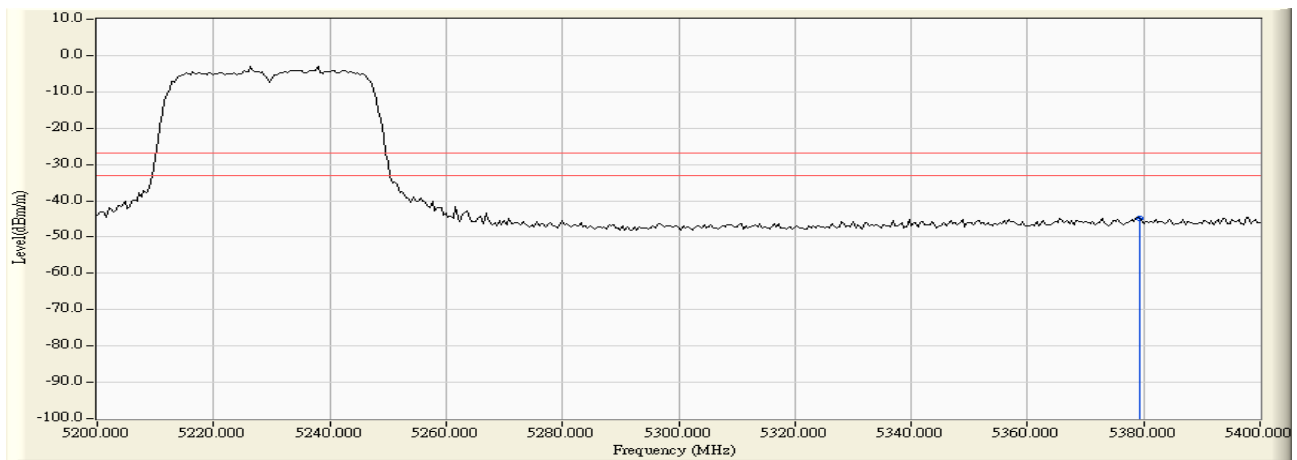
Note: Spectrum setting: Detector=Peak detector and maximum hold,
 RBW= 1MHz, VBW=3 MHz.

Product : ROS Home Center
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band) (5230MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
4 (Peak)	5379.200	14.845	-59.607	-44.762	-17.762	-27.000	Pass

Figure Channel 4: Vertical (Peak)



Note: Spectrum setting: Detector=Peak detector and maximum hold, RBW= 1MHz, VBW=3 MHz.

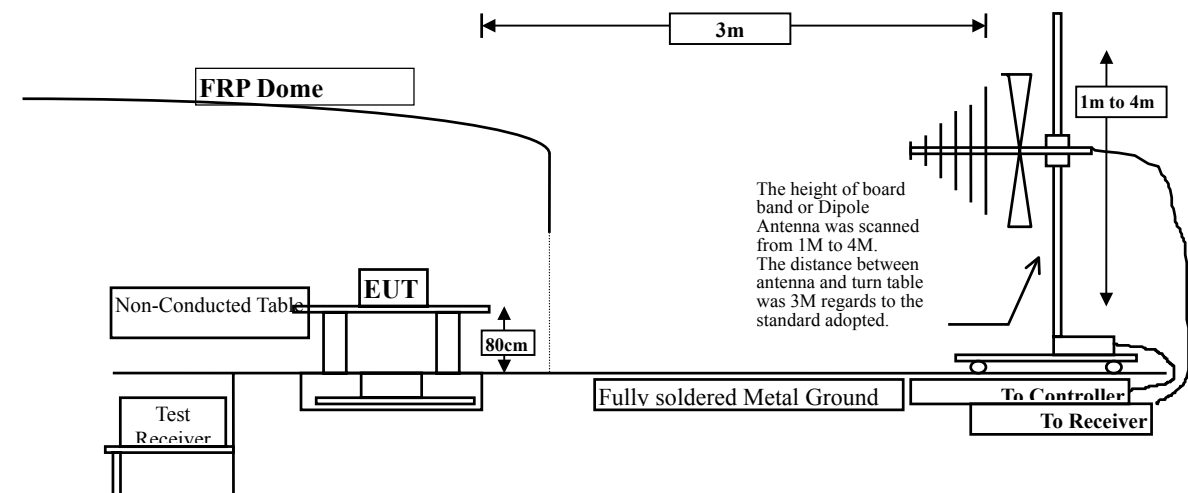
7. Radiated Emission

7.1. Test Equipment

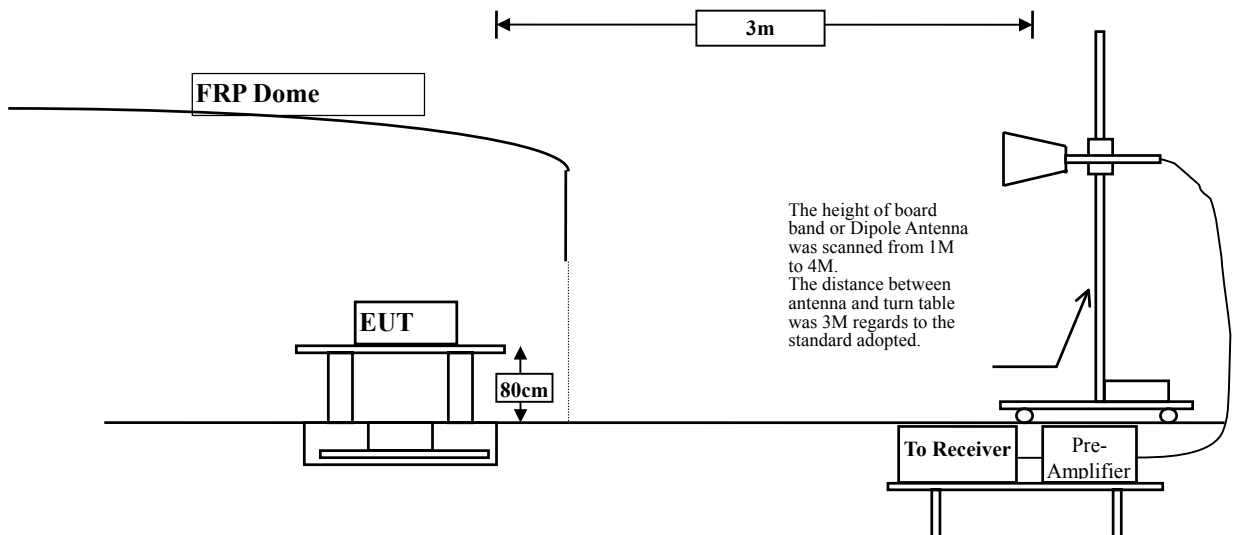
The following test equipments are used during the radiated emission test:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 3	X	Test Receiver	R & S	ESI 26 / 838786 / 004	May, 2008
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2008
	X	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2008
	X	Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May, 2008
	X	Horn Antenna	ETS	3115 / 0005-6160	July, 2008
	X	Pre-Amplifier	QTK	QTK-AMP-01 / 0001	July, 2008

- 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.



7.2. Test Setup



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

Remarks: E field strength (dBuV/m) = 20 log E field strength (uV/m)

7.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to FCC Public Notice DA 02-2138 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 C63.4:2003 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz. The frequency range from 30MHz to 10th harmonics is checked.

7.5. Uncertainty

± 3.8 dB below 1GHz

± 3.9 dB above 1GHz

7.6. Test Result of Radiated Emission

Product : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5180MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
10360.000	12.977	34.450	47.427	-26.573	74.000
15540.000	15.276	37.400	52.675	-21.325	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average Detector:					
10360.000	12.977	23.580	36.557	-17.443	54.000
15540.000	15.276	24.200	39.476	-14.524	54.000
20720.000	*	*	*	*	54.000
25900.000	*	*	*	*	54.000
31080.000	*	*	*	*	54.000
36260.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5180MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Vertical					
Peak Detector:					
10360.000	12.977	34.820	47.797	-26.203	74.000
15540.000	15.276	37.250	52.525	-21.475	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
10360.000	12.977	23.990	36.967	-17.033	54.000
15540.000	15.276	24.200	39.476	-14.524	54.000
20720.000	*	*	*	*	54.000
25900.000	*	*	*	*	54.000
31080.000	*	*	*	*	54.000
36260.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5220MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10440.000	13.218	34.570	47.788	-26.212	74.000
15660.000	14.994	37.190	52.184	-21.816	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
31320.000	*	*	*	*	74.000
36540.000	*	*	*	*	74.000
Average					
Detector:					
10440.000	13.218	23.885	37.103	-16.897	54.000
15660.000	14.994	24.200	39.194	-14.806	54.000
20880.000	*	*	*	*	54.000
26100.000	*	*	*	*	54.000
31320.000	*	*	*	*	54.000
36540.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5220MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Vertical					
Peak Detector:					
10440.000	13.218	34.740	47.958	-26.042	74.000
15660.000	14.994	37.860	52.854	-21.146	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
31320.000	*	*	*	*	74.000
36540.000	*	*	*	*	74.000
Average					
Detector:					
10440.000	13.218	23.965	37.183	-16.817	54.000
15660.000	14.994	24.100	39.094	-14.906	54.000
20880.000	*	*	*	*	54.000
26100.000	*	*	*	*	54.000
31320.000	*	*	*	*	54.000
36540.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter 802.11a (5240MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10480.000	13.343	34.380	47.723	-26.277	74.000
15720.000	14.730	37.140	51.869	-22.131	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
31440.000	*	*	*	*	74.000
36680.000	*	*	*	*	74.000
Average					
Detector:					
10480.000	13.343	23.850	37.193	-16.807	54.000
15720.000	14.730	24.250	38.980	-15.020	54.000
20960.000	*	*	*	*	54.000
26200.000	*	*	*	*	54.000
31440.000	*	*	*	*	54.000
36680.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5240MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Vertical					
Peak Detector:					
10480.000	13.343	34.380	47.723	-26.277	74.000
15720.000	14.730	37.440	52.169	-21.831	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
31440.000	*	*	*	*	74.000
36680.000	*	*	*	*	74.000
Average					
Detector:					
10480.000	13.343	24.500	37.843	-16.157	54.000
15720.000	14.730	24.250	38.980	-15.020	54.000
20960.000	*	*	*	*	54.000
26200.000	*	*	*	*	54.000
31440.000	*	*	*	*	54.000
36680.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5180MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10360.000	12.977	34.850	47.827	-26.173	74.000
15540.000	15.276	37.150	52.425	-21.575	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
10360.000	12.977	24.100	37.077	-16.923	54.000
15540.000	15.276	24.120	39.396	-14.604	54.000
20720.000	*	*	*	*	54.000
25900.000	*	*	*	*	54.000
31080.000	*	*	*	*	54.000
36260.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5180MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Vertical					
Peak Detector:					
10360.000	12.977	34.880	47.857	-26.143	74.000
15540.000	15.276	37.930	53.205	-20.795	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
10360.000	12.977	23.960	36.937	-17.063	54.000
15540.000	15.276	23.880	39.156	-14.844	54.000
20720.000	*	*	*	*	54.000
25900.000	*	*	*	*	54.000
31080.000	*	*	*	*	54.000
36260.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5220MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10440.000	13.218	34.320	47.538	-26.462	74.000
15660.000	14.994	37.580	52.574	-21.426	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
31320.000	*	*	*	*	74.000
36540.000	*	*	*	*	74.000
Average					
Detector:					
10440.000	13.218	23.850	37.068	-16.932	54.000
15660.000	14.994	24.250	39.244	-14.756	54.000
20880.000	*	*	*	*	54.000
26100.000	*	*	*	*	54.000
31320.000	*	*	*	*	54.000
36540.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5220MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Vertical					
Peak Detector:					
10440.000	13.218	34.750	47.968	-26.032	74.000
15660.000	14.994	37.350	52.344	-21.656	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
31320.000	*	*	*	*	74.000
36540.000	*	*	*	*	74.000
Average					
Detector:					
10440.000	13.218	24.300	37.518	-16.482	54.000
15660.000	14.994	24.630	39.624	-14.376	54.000
20880.000	*	*	*	*	54.000
26100.000	*	*	*	*	54.000
31320.000	*	*	*	*	54.000
36540.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5240MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10480.000	13.343	34.660	48.003	-25.997	74.000
15720.000	14.730	37.490	52.219	-21.781	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
31440.000	*	*	*	*	74.000
36680.000	*	*	*	*	74.000
Average					
Detector:					
10480.000	13.343	23.850	37.193	-16.807	54.000
15720.000	14.730	24.250	38.980	-15.020	54.000
20960.000	*	*	*	*	54.000
26200.000	*	*	*	*	54.000
31440.000	*	*	*	*	54.000
36680.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5240MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Vertical					
Peak Detector:					
10480.000	13.343	34.660	48.003	-25.997	74.000
15720.000	14.730	37.810	52.539	-21.461	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
31440.000	*	*	*	*	74.000
36680.000	*	*	*	*	74.000
Average					
Detector:					
10480.000	13.343	23.960	37.303	16.697	54.000
15720.000	14.730	24.250	38.980	15.020	54.000
20960.000	*	*	*	*	54.000
26200.000	*	*	*	*	54.000
31440.000	*	*	*	*	54.000
36680.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band) (5190MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10380.000	13.040	41.020	54.059	-19.941	74.000
15570.000	15.264	33.350	48.614	-25.386	74.000
20760.000	*	*	*	*	74.000
25950.000	*	*	*	*	74.000
31140.000	*	*	*	*	74.000
36330.000	*	*	*	*	74.000
Average					
Detector:					
10380.000	13.040	23.650	36.689	-17.311	54.000
15570.000	15.264	29.260	44.524	-9.476	54.000
20760.000	*	*	*	*	54.000
25950.000	*	*	*	*	54.000
31140.000	*	*	*	*	54.000
36330.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band) (5190MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Vertical					
Peak Detector:					
10380.000	13.040	42.171	55.210	-18.790	74.000
15570.000	15.264	37.036	52.300	-21.700	74.000
20760.000	*	*	*	*	74.000
25950.000	*	*	*	*	74.000
31140.000	*	*	*	*	74.000
36330.000	*	*	*	*	74.000
Average					
Detector:					
10380.000	13.040	23.140	36.180	-17.82	54.000
15570.000	15.264	29.140	44.404	-9.596	54.000
20760.000	*	*	*	*	54.000
25950.000	*	*	*	*	54.000
31140.000	*	*	*	*	54.000
36330.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band) (5230MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10460.000	13.281	39.779	53.060	-20.940	74.000
15690.000	14.863	29.497	44.360	-29.640	74.000
20920.000	*	*	*	*	74.000
26150.000	*	*	*	*	74.000
31380.000	*	*	*	*	74.000
36610.000	*	*	*	*	74.000
Average					
Detector:					
10460.000	13.281	23.180	36.461	-17.539	54.000
15690.000	14.863	29.600	44.463	-9.537	54.000
20920.000	*	*	*	*	54.000
26150.000	*	*	*	*	54.000
31380.000	*	*	*	*	54.000
36610.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band) (5230MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Vertical					
Peak Detector:					
10460.000	13.281	39.799	53.080	-20.920	74.000
15690.000	14.863	28.787	43.650	-30.350	74.000
20920.000	*	*	*	*	74.000
26150.000	*	*	*	*	74.000
31380.000	*	*	*	*	74.000
36610.000	*	*	*	*	74.000
Average					
Detector:					
10460.000	13.281	23.680	36.961	-17.039	54.000
15690.000	14.863	29.340	44.203	-9.797	54.000
20920.000	*	*	*	*	54.000
26150.000	*	*	*	*	54.000
31380.000	*	*	*	*	54.000
36610.000	*	*	*	*	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. “ * ”, means this data is the too weak instrument of signal is unable to test.
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 : ROS Home Center
 Test Item : General Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5220MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
198.780	9.569	15.988	25.557	-17.943	43.500
499.480	18.228	17.286	35.514	-10.486	46.000
637.220	20.989	13.879	34.868	-11.132	46.000
747.800	21.019	18.156	39.175	-6.825	46.000
792.420	22.104	9.651	31.755	-14.245	46.000
996.123	23.460	22.261	45.721	-8.279	54.000
Vertical					
Peak Detector					
198.780	9.588	13.756	23.344	-20.156	43.500
499.480	18.429	9.655	28.084	-17.916	46.000
697.360	20.635	3.416	24.051	-21.949	46.000
749.740	23.178	14.481	37.659	-8.341	46.000
901.060	23.650	6.337	29.987	-16.013	46.000
996.120	22.660	22.363	45.023	-8.977	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.

Product : ROS Home Center
 Test Item : General Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5220MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
249.220	13.141	12.213	25.354	-20.646	46.000
299.660	14.132	9.685	23.817	-22.183	46.000
499.480	18.228	18.629	36.857	-9.143	46.000
637.220	20.989	11.871	32.860	-13.140	46.000
747.800	21.019	18.159	39.178	-6.822	46.000
996.120	23.460	20.336	43.796	-10.204	54.000
Vertical					
Peak Detector					
497.540	18.301	9.864	28.165	-17.835	46.000
641.100	20.339	8.590	28.929	-17.071	46.000
749.740	23.178	4.999	28.177	-17.823	46.000
901.060	23.650	5.978	29.628	-16.372	46.000
961.200	23.009	9.266	32.275	-21.725	54.000
996.120	22.660	21.553	44.213	-9.787	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.

Product : ROS Home Center
 Test Item : General Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band) (5190MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
299.660	14.132	10.655	24.787	-21.213	46.000
497.540	18.401	18.223	36.624	-9.376	46.000
637.220	20.989	15.641	36.630	-9.370	46.000
747.800	21.019	17.562	38.581	-7.419	46.000
792.420	22.104	9.491	31.595	-14.405	46.000
996.120	23.460	22.456	45.916	-8.084	54.000
Vertical					
Peak Detector					
198.780	9.588	13.981	23.569	-19.931	43.500
499.480	18.429	11.876	30.305	-15.695	46.000
641.100	20.339	9.285	29.624	-16.376	46.000
749.740	23.178	15.476	38.654	-7.346	46.000
901.060	23.650	6.528	30.178	-15.822	46.000
996.120	22.660	20.375	43.035	-10.965	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.

8. Band Edge

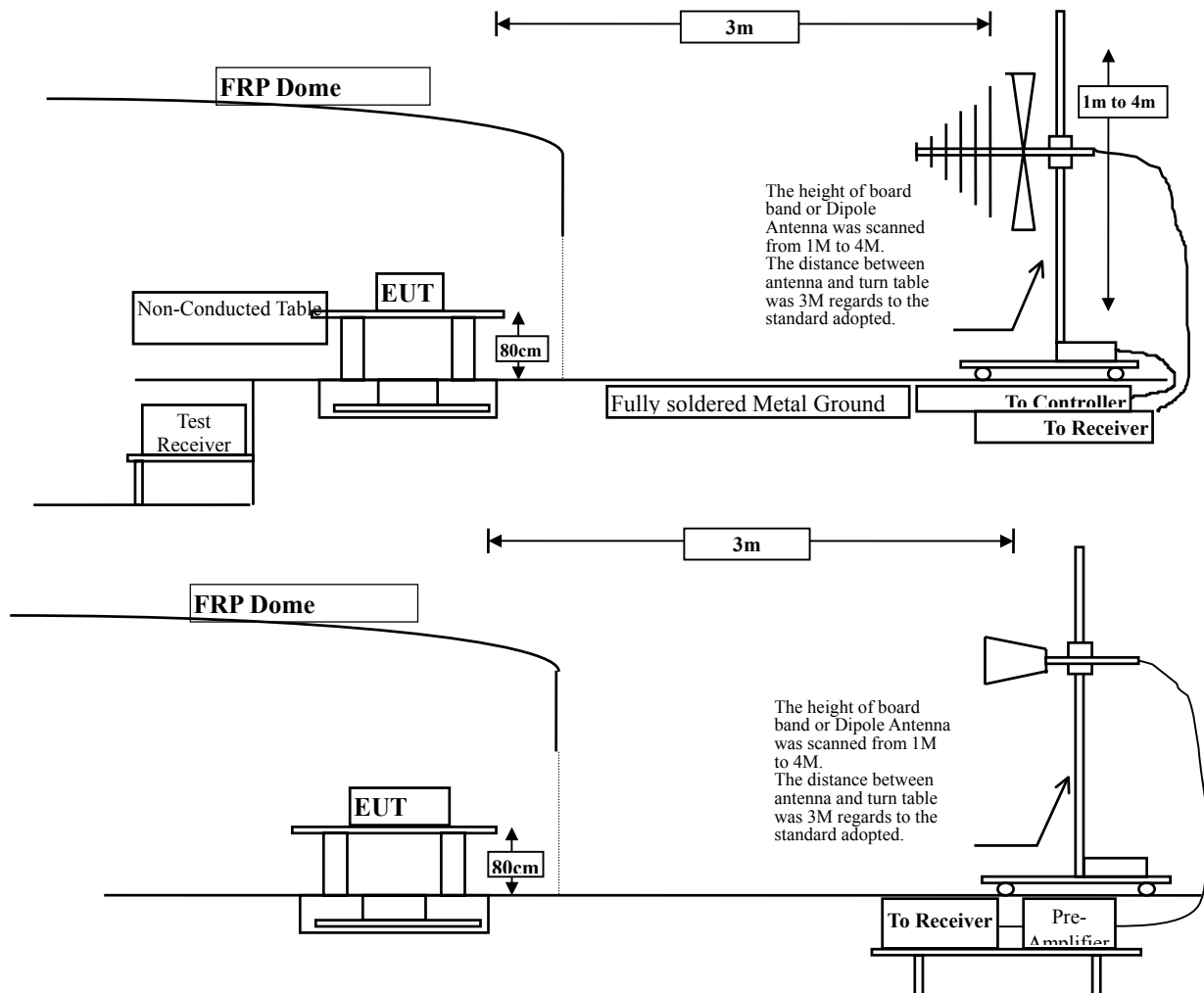
8.1. Test Equipment

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

Test Site	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 3	X Test Receiver	R & S	ESI 26 / 838786 / 004	May, 2008
	X Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2008
	X Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2008
	X Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May, 2008
	X Horn Antenna	ETS	3115 / 0005-6160	July, 2008
	X Pre-Amplifier	QTK	QTK-AMP-01 / 0001	July, 2008

8.2. Test Setup

RF Radiated Measurement:



8.3. 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.

8.4. 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 C63.4:2003 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 C63.4, 2003; tested to DTS test procedure of Aug 2002 DA 02-2138 for compliance to FCC 47CFR Subpart E requirements.

8.5. Uncertainty

- ± 3.8 dB below 1GHz
- ± 3.9 dB above 1GHz

8.6. Test Result of Band Edge

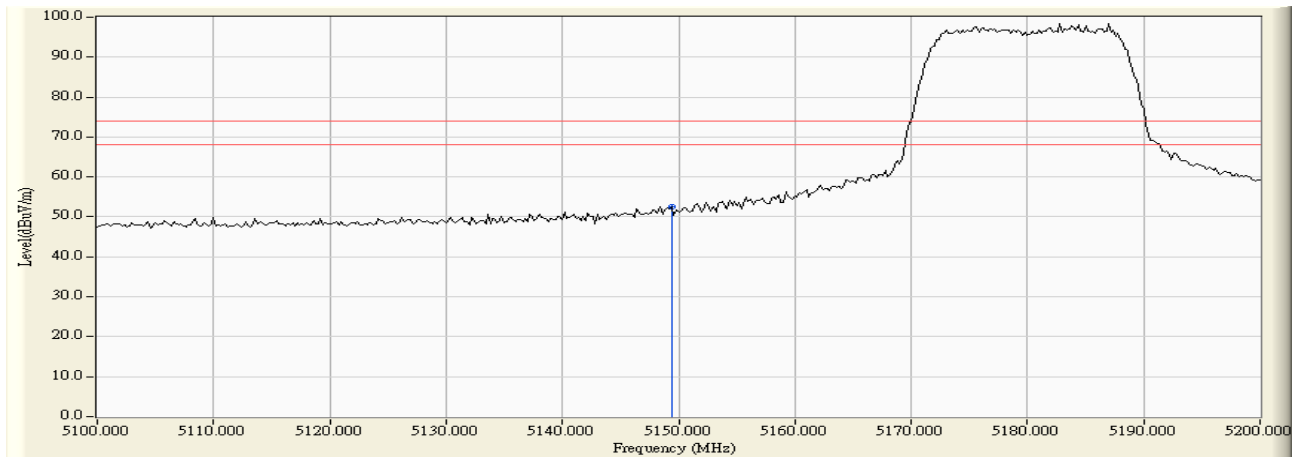
Product : ROS Home Center
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5180MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5149.400	4.306	48.326	52.631	74.00	54.00	Pass

Figure Channel 01:

Horizontal (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

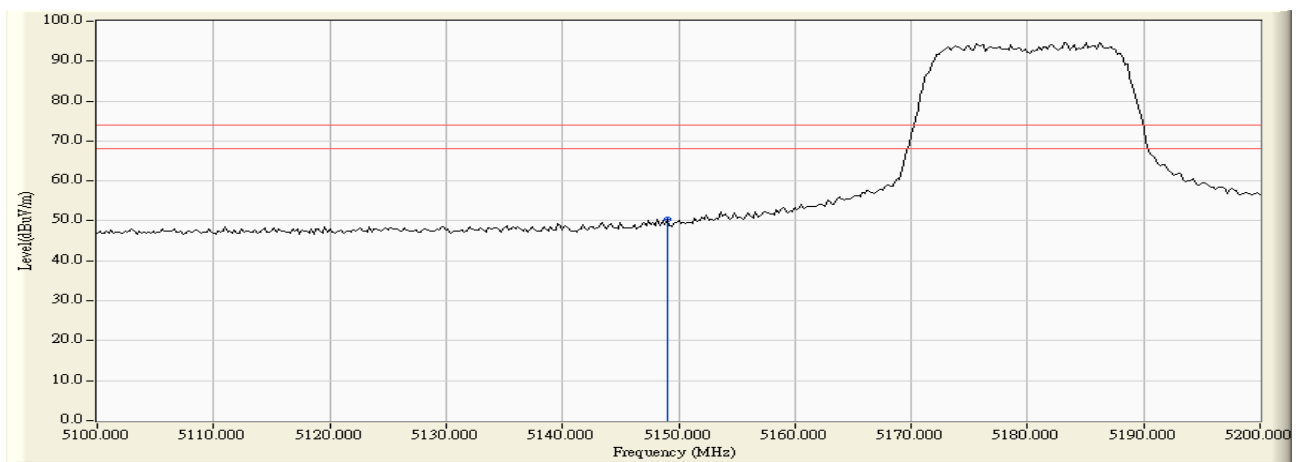
Product : ROS Home Center
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5180MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5149.000	4.305	45.975	50.280	74.00	54.00	Pass

Figure Channel 01:

Vertical (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

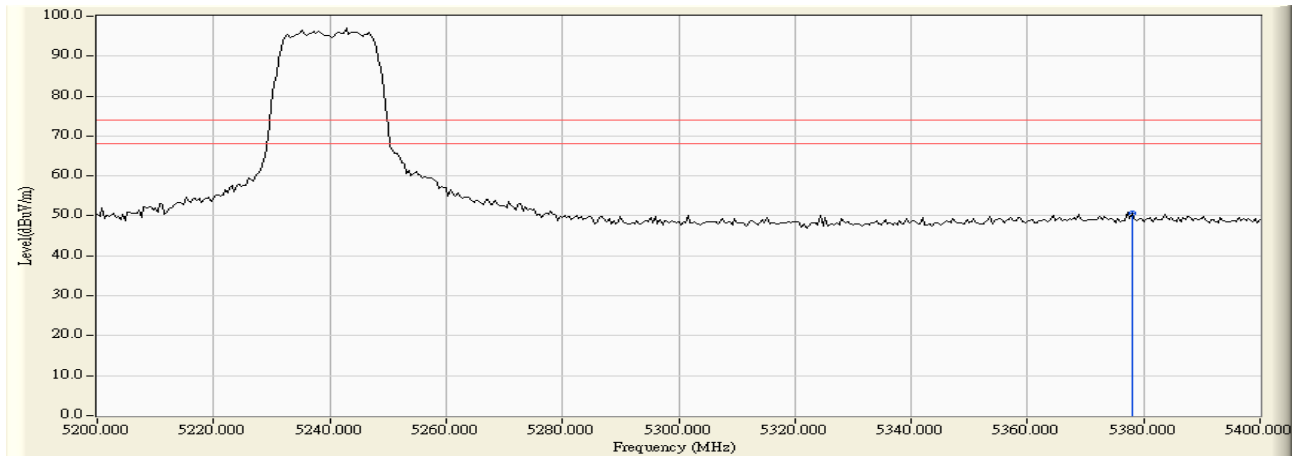
Product : ROS Home Center
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5240MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
04 (Peak)	5378.000	4.462	46.225	50.687	74.00	54.00	Pass
04 (Average)	--	--	--	--	74.00	54.00	Pass

Figure Channel 04:

Horizontal (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

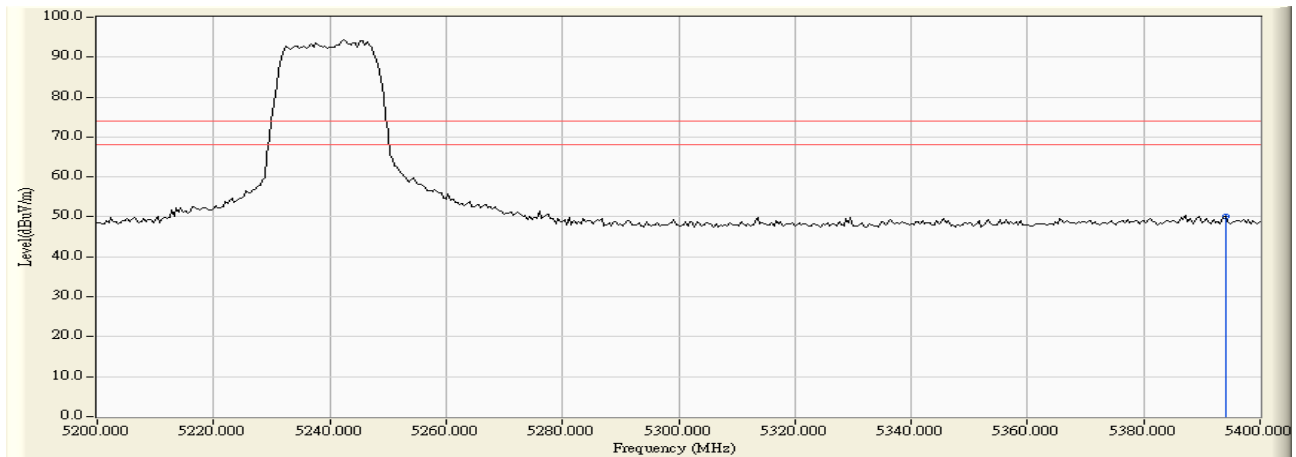
Product : ROS Home Center
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5240MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
04 (Peak)	5394.000	4.477	45.737	50.214	74.00	54.00	Pass
04 (Average)	--	--	--	--	74.00	54.00	Pass

Figure Channel 04:

Vertical (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

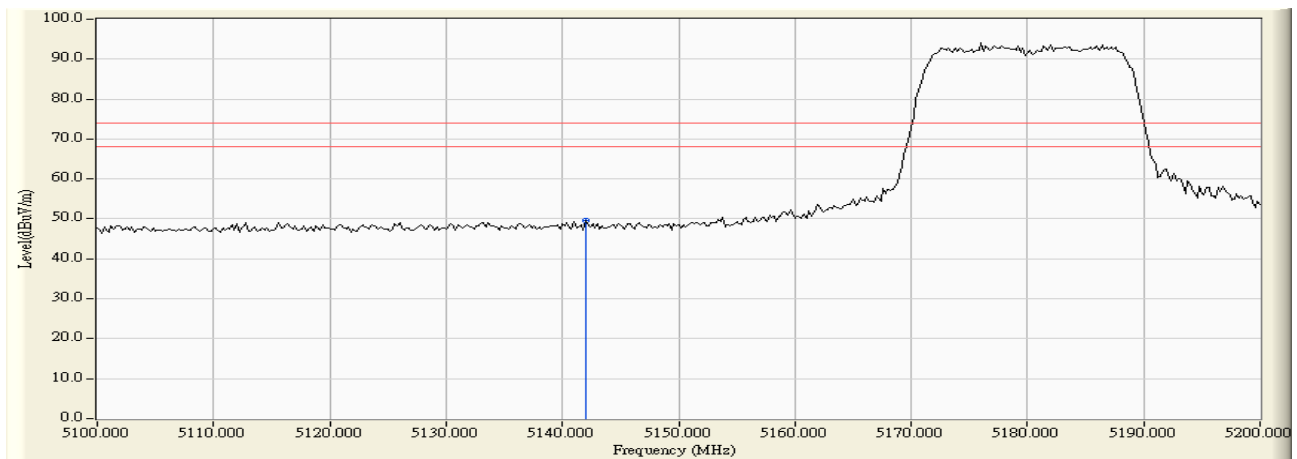
Note: The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : ROS Home Center
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5180MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5142.000	4.303	45.364	49.667	74.00	54.00	Pass
01 (Average)	--	--	--	--	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

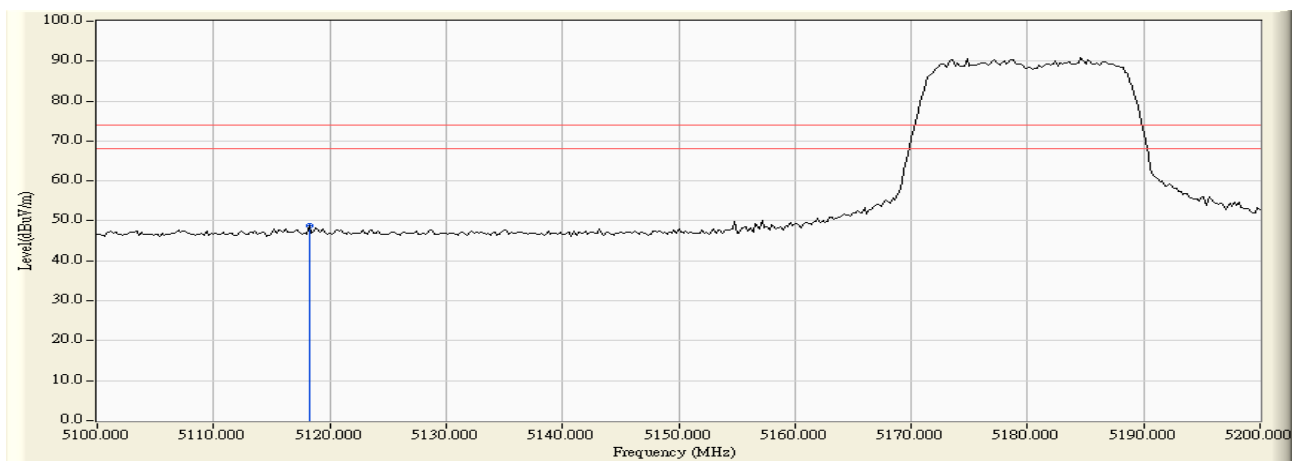
Product : ROS Home Center
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5180MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5118.200	4.294	44.392	48.686	74.00	54.00	Pass
01 (Average)	--	--	--	--	74.00	54.00	Pass

Figure Channel 01:

Vertical (Peak)



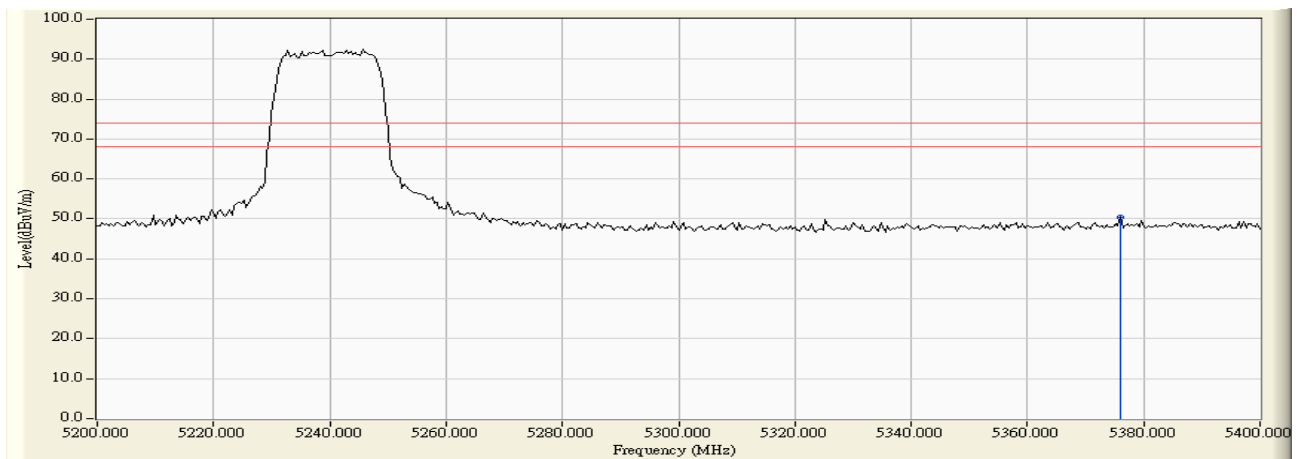
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : ROS Home Center
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5240MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
04 (Peak)	5376.000	4.461	45.813	50.274	74.00	54.00	Pass
04 (Average)	--	--	--	--	74.00	54.00	Pass

Figure Channel 04: Horizontal (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

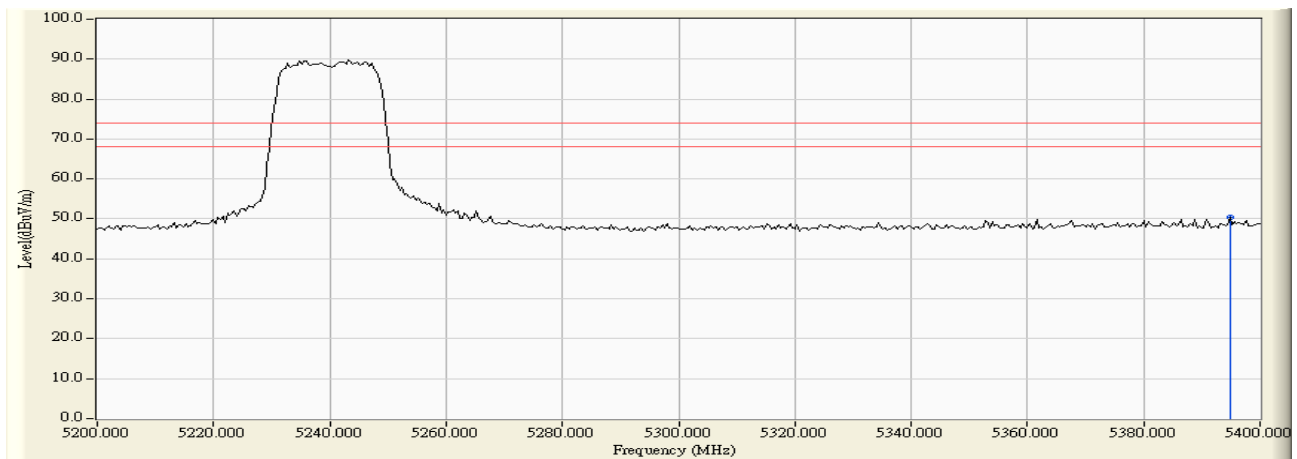
Product : ROS Home Center
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band) (5240MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
04 (Peak)	5394.800	4.477	45.984	50.461	74.00	54.00	Pass
04 (Average)	--	--	--	--	74.00	54.00	Pass

Figure Channel 04:

Vertical (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

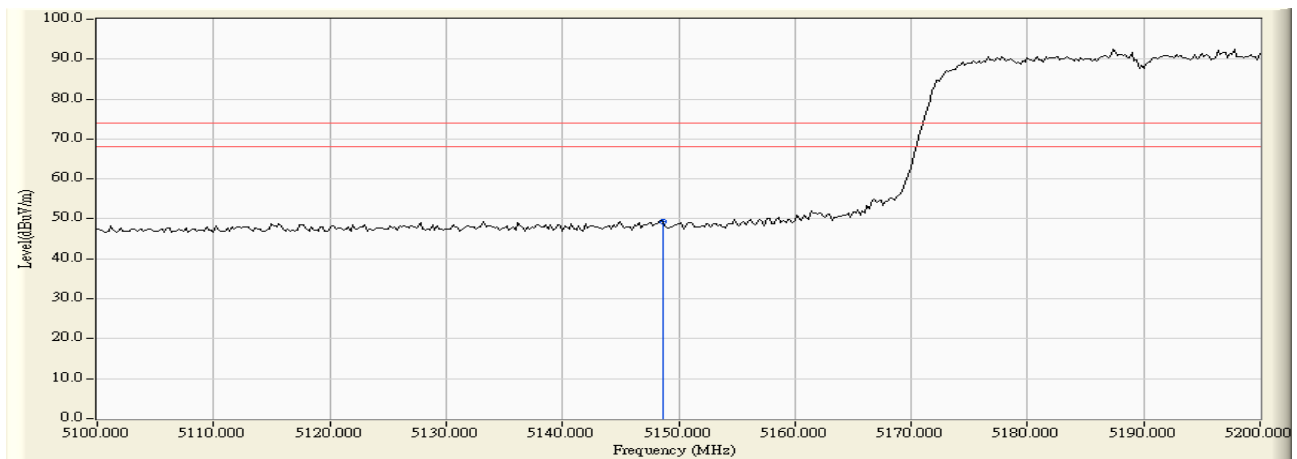
Note: The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : ROS Home Center
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band) (5190MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5148.600	4.304	45.030	49.335	74.00	54.00	Pass
01 (Average)	--	--	--	--	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)



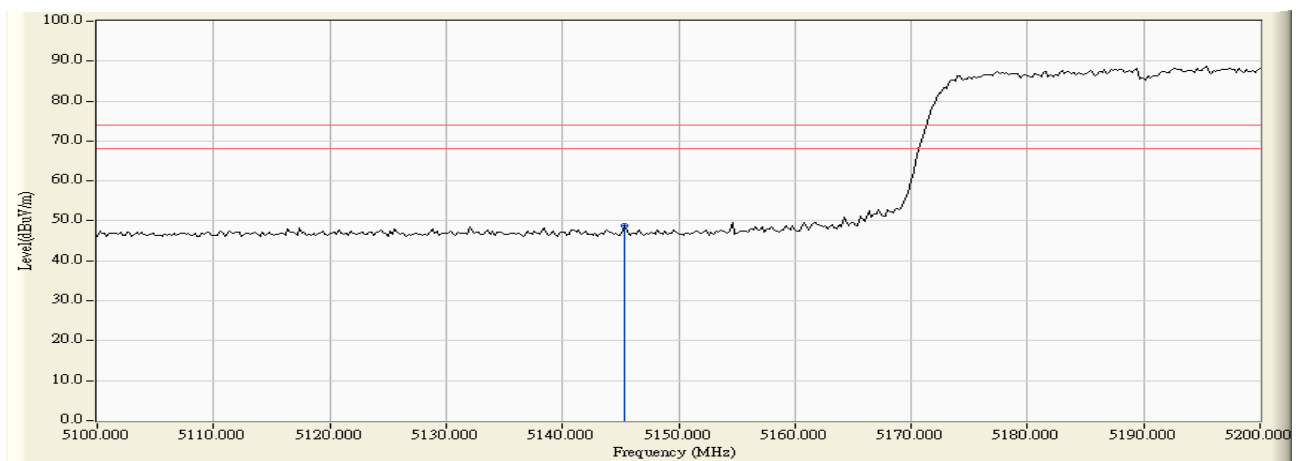
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : ROS Home Center
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band) (5190MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5145.400	4.304	44.412	48.716	74.00	54.00	Pass
01 (Average)	--	--	--	--	74.00	54.00	Pass

Figure Channel 01: Vertical (Peak)



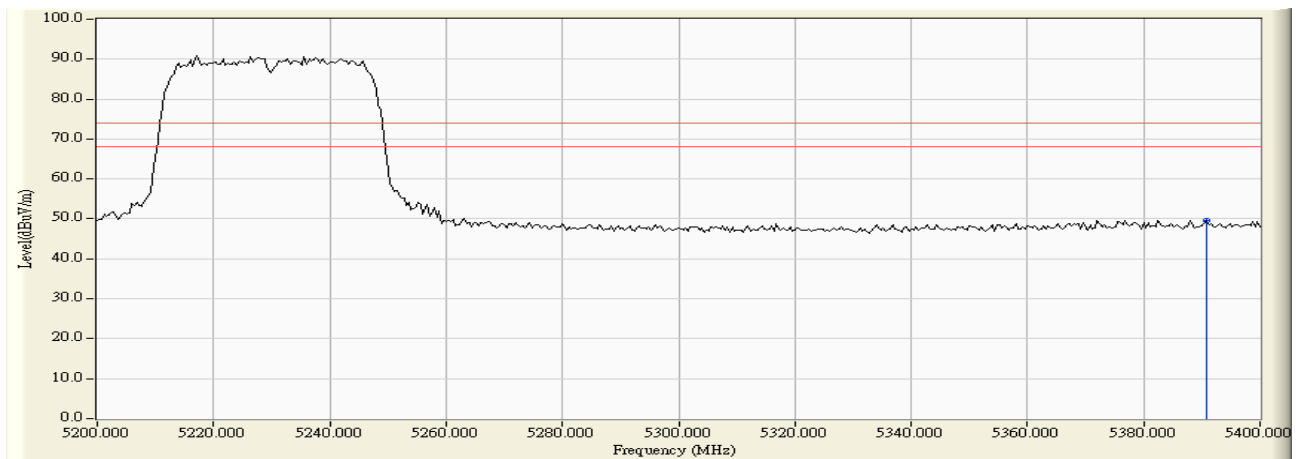
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : ROS Home Center
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band) (5230MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
04 (Peak)	5390.800	4.473	45.148	49.621	74.00	54.00	Pass
04 (Average)	--	--	--	--	74.00	54.00	Pass

Figure Channel 04: Horizontal (Peak)



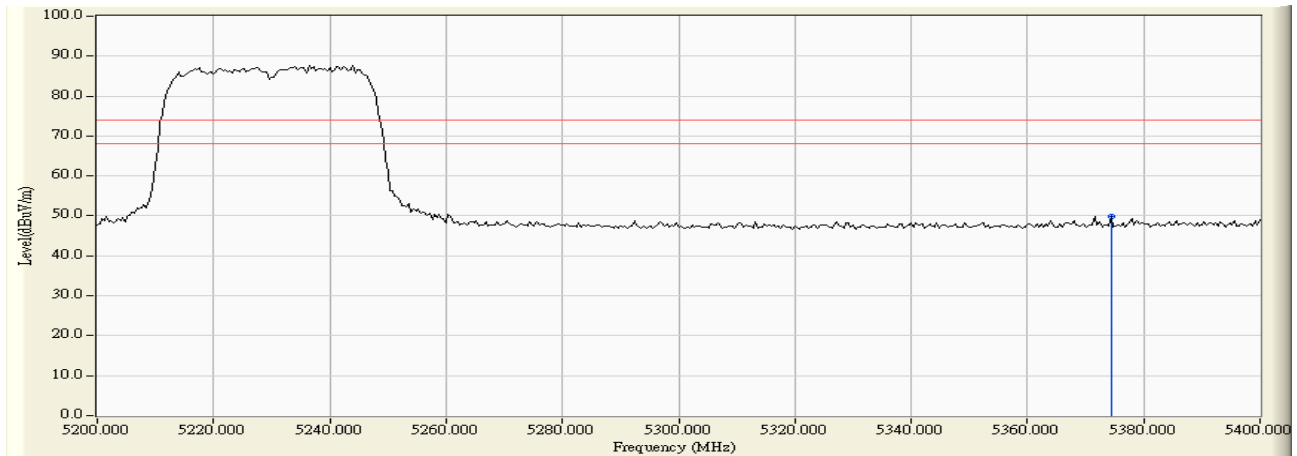
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : ROS Home Center
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band) (5230MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
04 (Peak)	5374.400	4.460	45.503	49.963	74.00	54.00	Pass
04 (Average)	--	--	--	--	74.00	54.00	Pass

Figure Channel 04: Vertical (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Note: The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

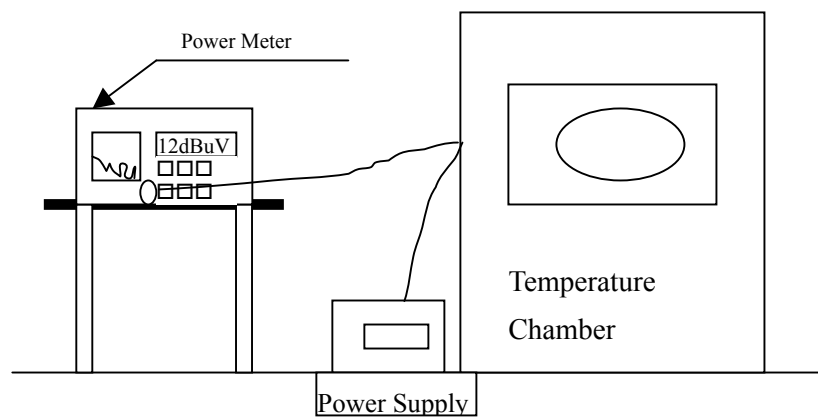
9. Frequency Stability

9.1. Test Equipment

Equipment	Manufacturer	Model No./Serial No.	Last Cal.	Remark
Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2008	
Temperature Chamber	WIT GROUP	TH-1S-B / WIT-02121901	June, 2008	

Note: All equipments are calibrated every one year.

9.2. Test Setup



9.3. 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

9.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Aug 2002 DA 02-2138 for compliance to FCC 47CFR Subpart E requirements.

9.5. Uncertainty

± 150 Hz

9.6. Test Result of Frequency Stability

Product : ROS Home Center
 Test Item : Frequency Stability
 Test Site : Temperature Chamber
 Test Mode : Mode 1: Transmitter 802.11a

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tnom (20) °C	Vnom (120)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00
Tnom (50) °C	Vnom (138)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00
Tnom (50) °C	Vnom (102)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00
Tnom (0) °C	Vnom (138)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00
Tnom (0) °C	Vnom (102)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00

Product : ROS Home Center
 Test Item : Frequency Stability
 Test Site : Temperature Chamber
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band)-Antenna A

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tnom (20) °C	Vnom (120)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00
Tnom (50) °C	Vnom (138)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00
Tnom (50) °C	Vnom (102)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00
Tnom (0) °C	Vnom (138)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00
Tnom (0) °C	Vnom (102)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00

Product : ROS Home Center
 Test Item : Frequency Stability
 Test Site : Temperature Chamber
 Test Mode : Mode 2: Transmitter 802.11n-20BW_13.5Mbps(5G Band)-Antenna B

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tnom (20) °C	Vnom (120)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00
Tnom (50) °C	Vnom (138)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00
Tnom (50) °C	Vnom (102)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00
Tnom (0) °C	Vnom (138)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00
Tnom (0) °C	Vnom (102)V	01	5180.00	5180.00	0.00
		03	5220.00	5220.00	0.00
		04	5240.00	5240.00	0.00

Product : ROS Home Center
 Test Item : Frequency Stability
 Test Site : Temperature Chamber
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band)-Antenna A

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tnom (20) °C	Vnom (120)V	01	5190.00	5190.00	0.00
		02	5230.00	5230.00	0.00
		--	--	--	--
Tnom (50) °C	Vnom (138)V	01	5190.00	5190.00	0.00
		02	5230.00	5230.00	0.00
		--	--	--	--
Tnom (50) °C	Vnom (102)V	01	5190.00	5190.00	0.00
		02	5230.00	5230.00	0.00
		--	--	--	--
Tnom (0) °C	Vnom (138)V	01	5190.00	5190.00	0.00
		02	5230.00	5230.00	0.00
		--	--	--	--
Tnom (0) °C	Vnom (102)V	01	5190.00	5190.00	0.00
		02	5230.00	5230.00	0.00
		--	--	--	--

Product : ROS Home Center
 Test Item : Frequency Stability
 Test Site : Temperature Chamber
 Test Mode : Mode 3: Transmitter 802.11n-40BW_27Mbps(5G Band)-Antenna B

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tnom (20) °C	Vnom (120)V	01	5190.00	5190.00	0.00
		02	5230.00	5230.00	0.00
		--	--	--	--
Tnom (50) °C	Vnom (138)V	01	5190.00	5190.00	0.00
		02	5230.00	5230.00	0.00
		--	--	--	--
Tnom (50) °C	Vnom (102)V	01	5190.00	5190.00	0.00
		02	5230.00	5230.00	0.00
		--	--	--	--
Tnom (0) °C	Vnom (138)V	01	5190.00	5190.00	0.00
		02	5230.00	5230.00	0.00
		--	--	--	--
Tnom (0) °C	Vnom (102)V	01	5190.00	5190.00	0.00
		02	5230.00	5230.00	0.00
		--	--	--	--

10. EMI Reduction Method During Compliance Testing

No modification was made during testing.