Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(5G Band)(Dipole Antenna) -Channel 36

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5145.072	35.163	33.480	68.643	83.54	63.540	Pass
36 (Peak)	5150.000	35.135	30.504	65.639	83.54	63.540	Pass
36 (Peak)	5173.478	35.004	77.327	112.330	--	--	--
36 (Average)	5150.000	35.135	17.193	52.328	83.54	63.540	Pass
36 (Average)	5173.768	35.002	65.338	100.340	--	--	--

Figure Channel 36: Horizontal (Peak)

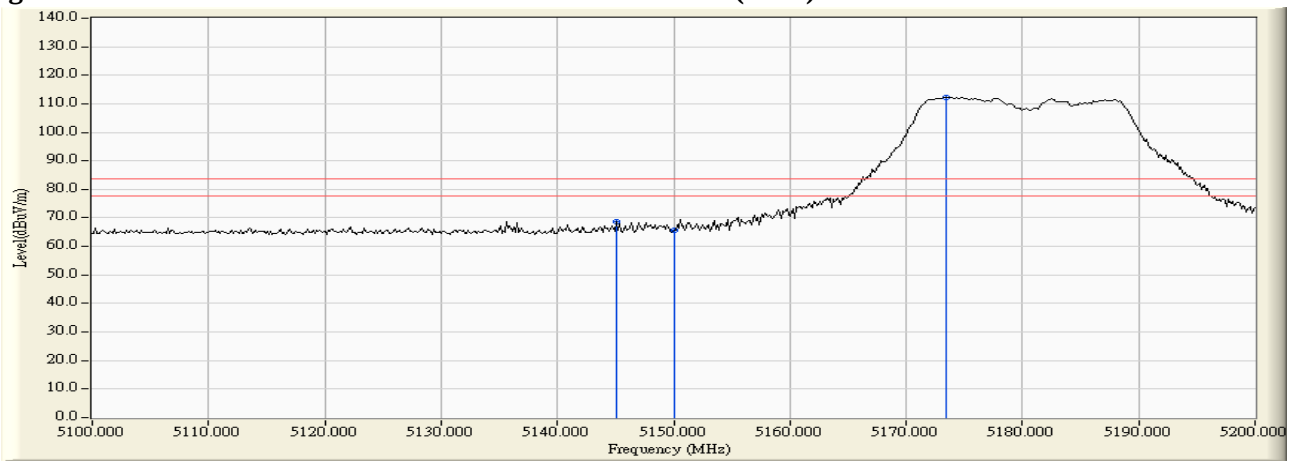
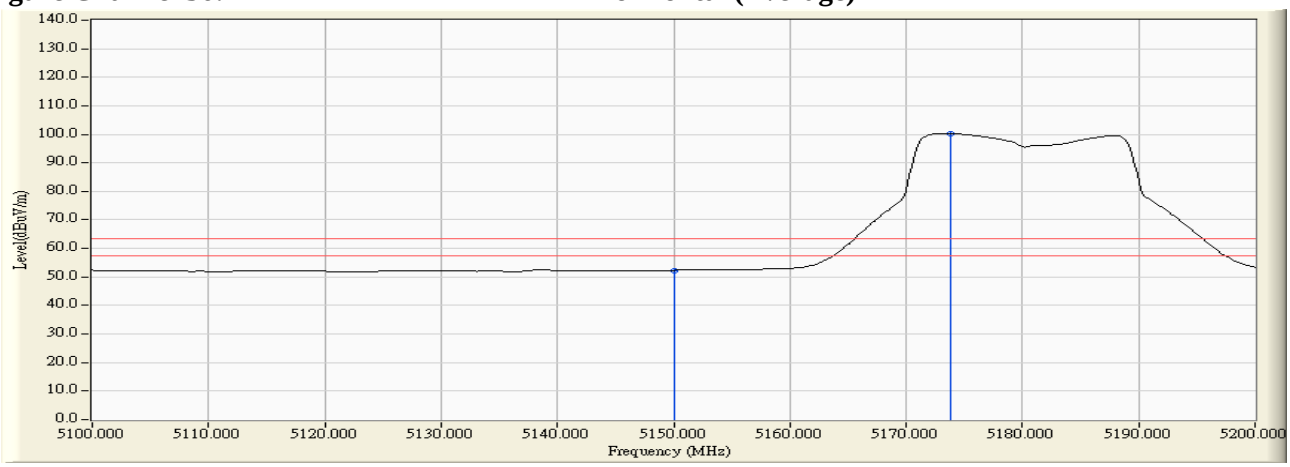


Figure Channel 36: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(5G Band)(Dipole Antenna) -Channel 36

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5149.275	37.054	44.996	82.050	83.54	63.540	Pass
36 (Peak)	5150.000	37.055	44.456	81.511	83.54	63.540	Pass
36 (Peak)	5184.928	37.076	90.730	127.807	--	--	--
36 (Average)	5150.000	37.055	20.313	57.368	83.54	63.540	Pass
36 (Average)	5185.362	37.076	78.279	115.356	--	--	--

Figure Channel 36: Vertical (Peak)

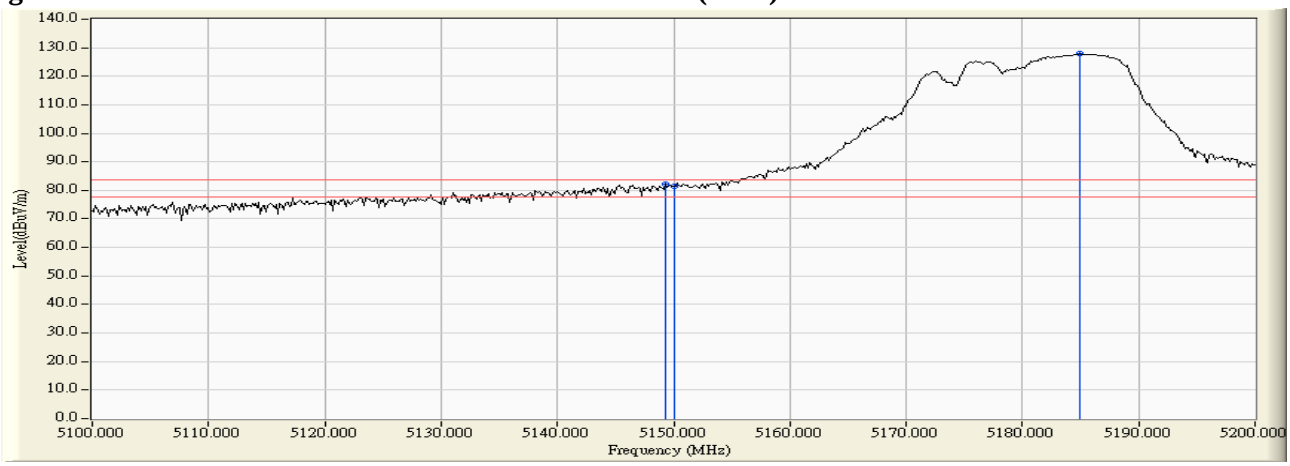
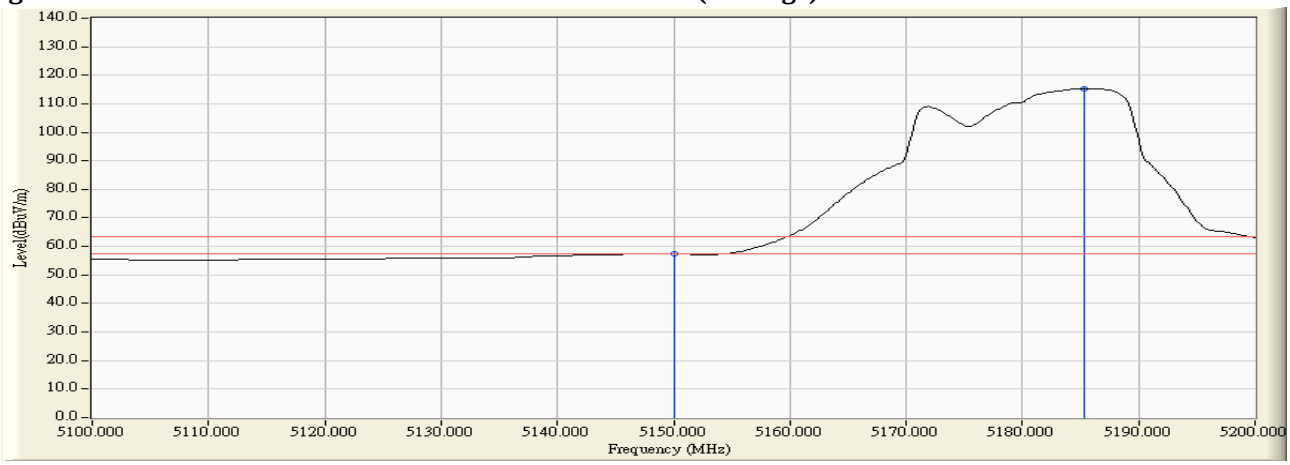


Figure Channel 36: Vertical (Average)



Note:

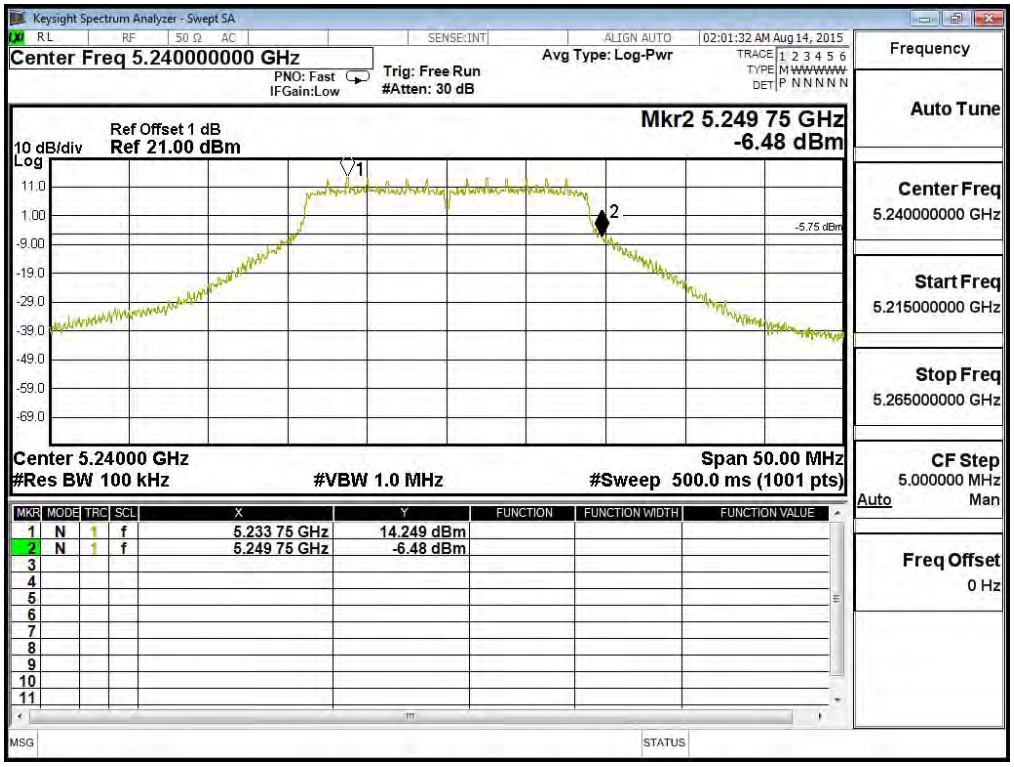
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(5G Band)(Dipole Antenna) Channel 48

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.75	<5250	PASS

NOTE: Accordance with 15.215 requirement.

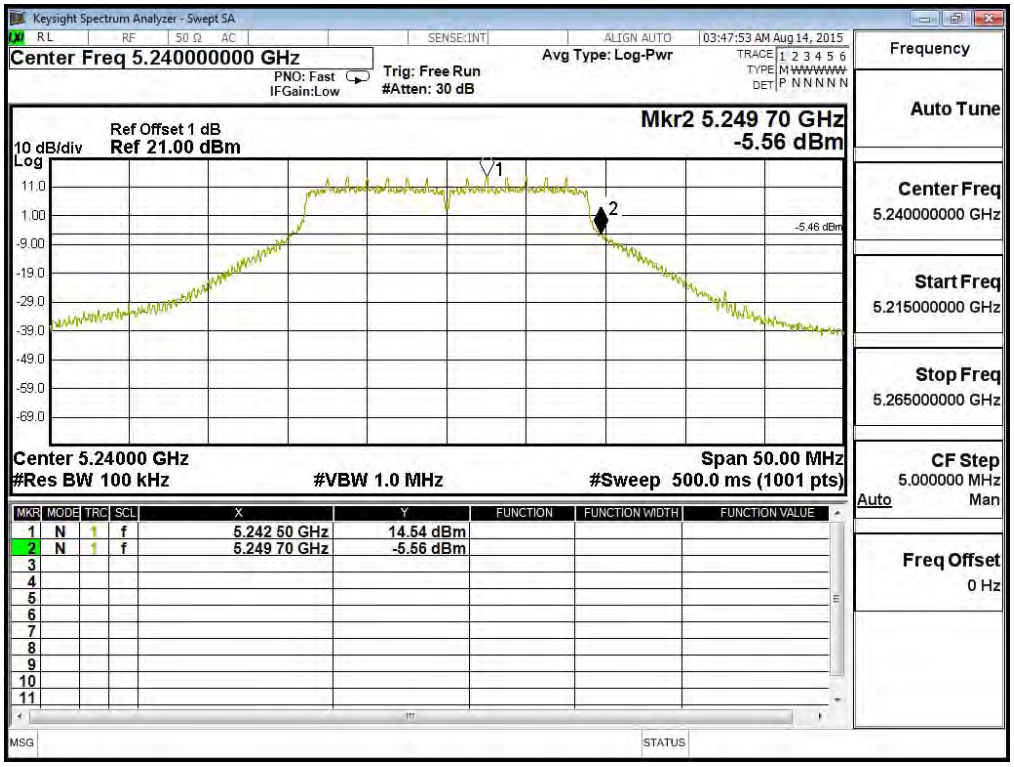


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(5G Band)(Dipole Antenna)-Channel 48

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.70	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(5G Band)(Dipole Antenna)-Channel 38

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
38 (Peak)	5147.247	35.151	32.872	68.023	83.54	63.540	Pass
38 (Peak)	5150.000	35.135	31.763	66.898	83.54	63.540	Pass
38 (Peak)	5182.029	34.955	74.094	109.049	--	--	--
38 (Average)	5150.000	35.135	17.516	52.651	83.54	63.540	Pass
38 (Average)	5182.753	34.950	60.395	95.346	--	--	--

Figure Channel 38: Horizontal (Peak)

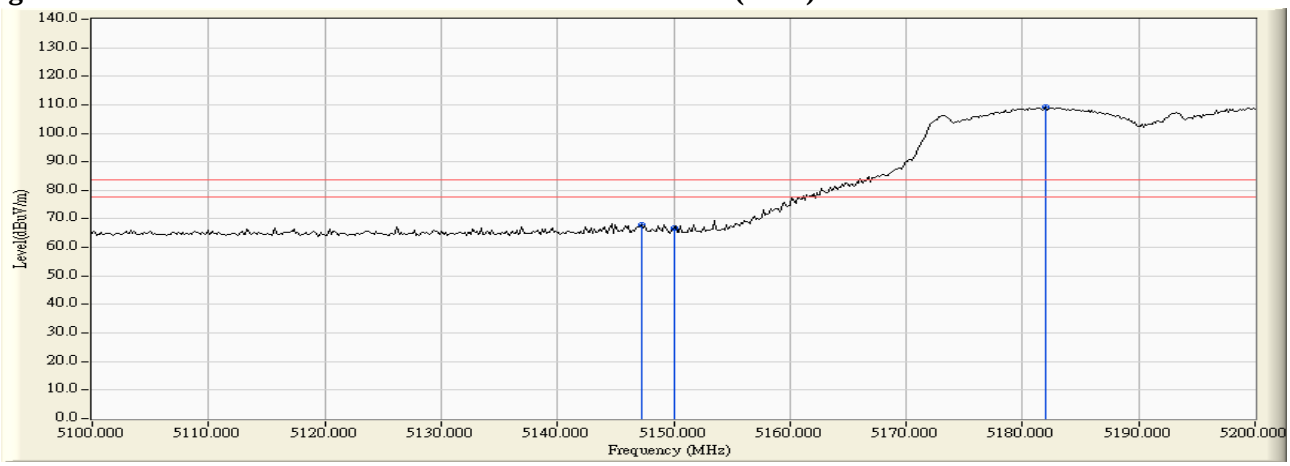
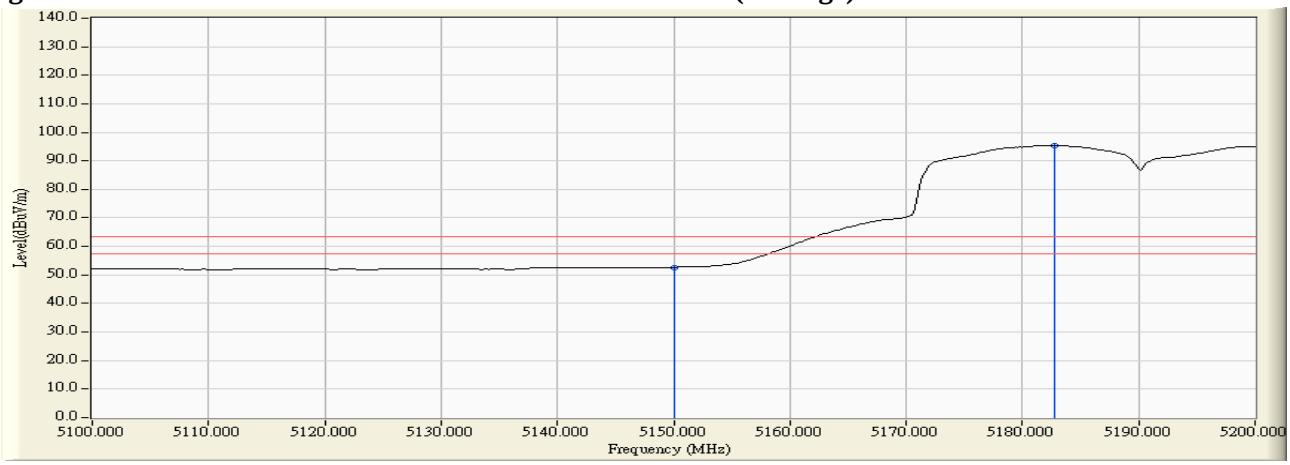


Figure Channel 38: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(5G Band)(Dipole Antenna)-Channel 38

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
38 (Peak)	5148.116	37.054	45.141	82.195	83.54	63.540	Pass
38 (Peak)	5150.000	37.055	44.073	81.128	83.54	63.540	Pass
38 (Peak)	5194.058	37.076	87.566	124.643	--	--	--
38 (Average)	5150.000	37.055	24.113	61.168	83.54	63.540	Pass
38 (Average)	5196.232	37.076	72.738	109.814	--	--	--

Figure Channel 38: Vertical (Peak)

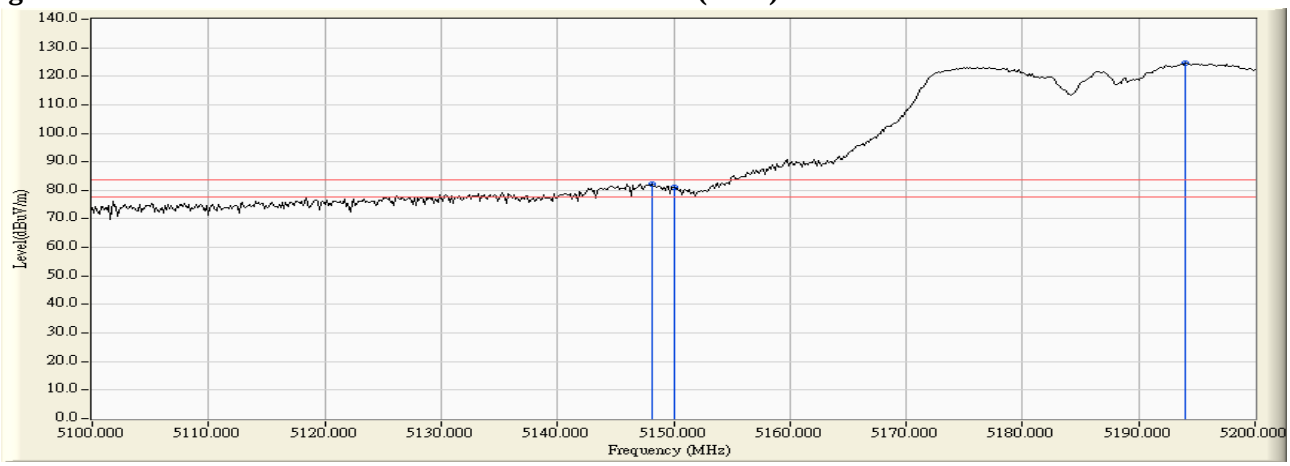
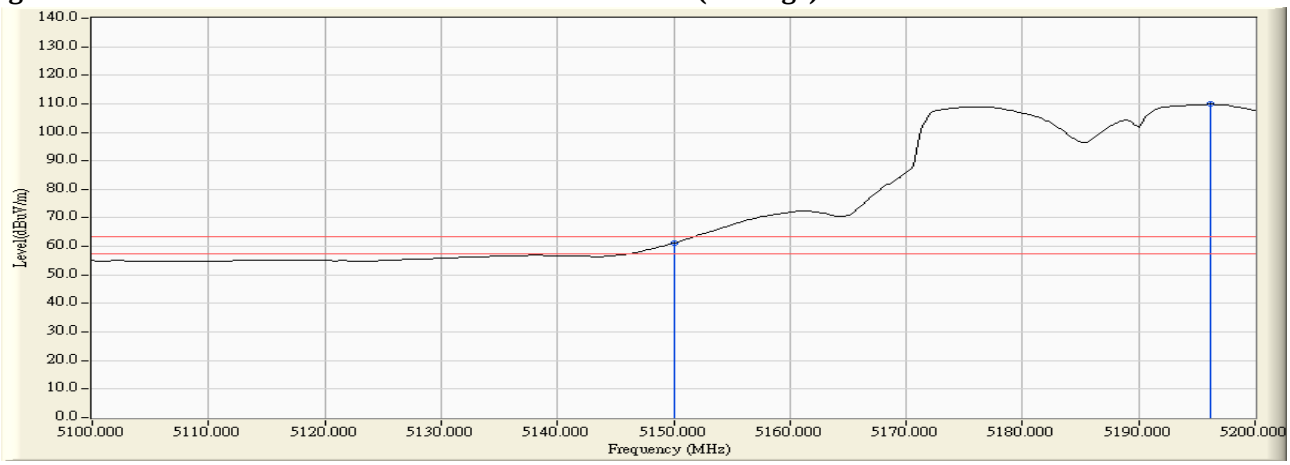


Figure Channel 38: Vertical (Average)



Note:

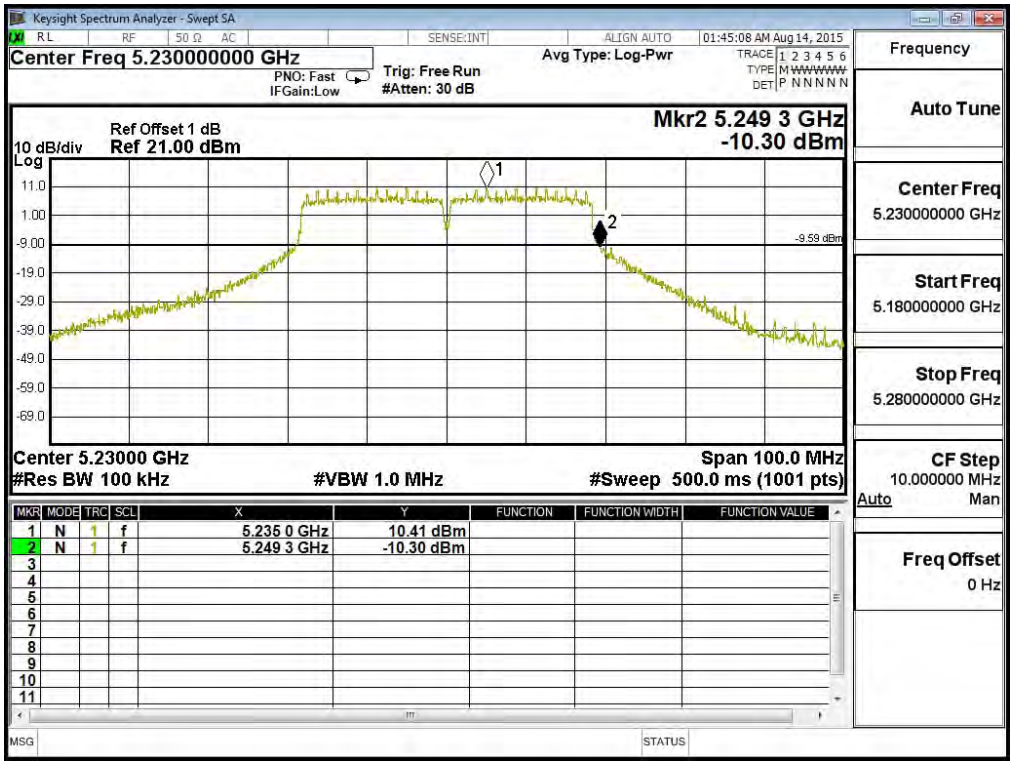
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(5G Band)(Dipole Antenna)-Channel 46

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5230	5249.30	<5250	PASS

NOTE: Accordance with 15.215 requirement.

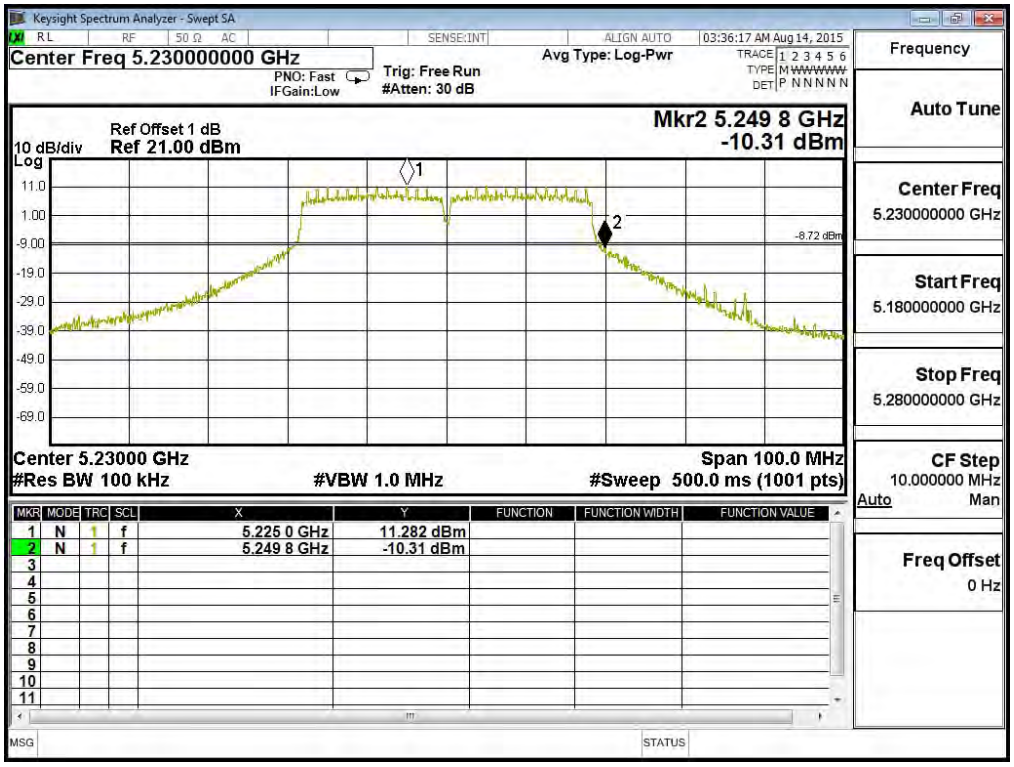


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(5G Band)(Dipole Antenna)-Channel 46

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5230	5249.80	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11ac-80BW-65Mbps)(5G Band)(Dipole Antenna)-Channel 42

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
42 (Peak)	5150.000	35.135	32.711	67.846	83.54	63.540	Pass
42 (Peak)	5190.870	34.902	65.026	99.928	--	--	--
42 (Average)	5150.000	35.135	18.549	53.684	83.54	63.540	Pass
42 (Average)	5192.174	34.893	49.587	84.480	--	--	--

Figure Channel 42: Horizontal (Peak)

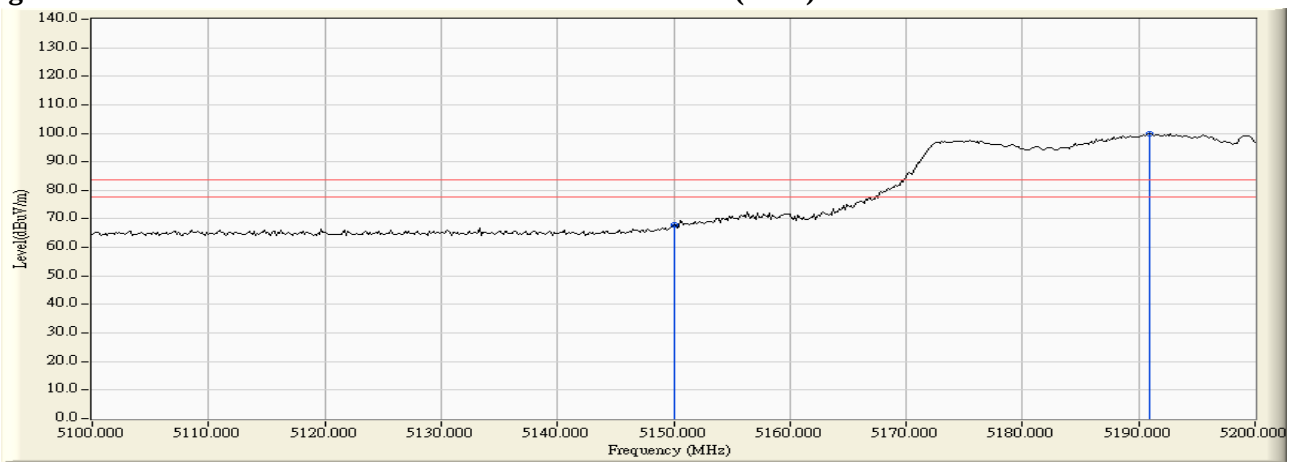
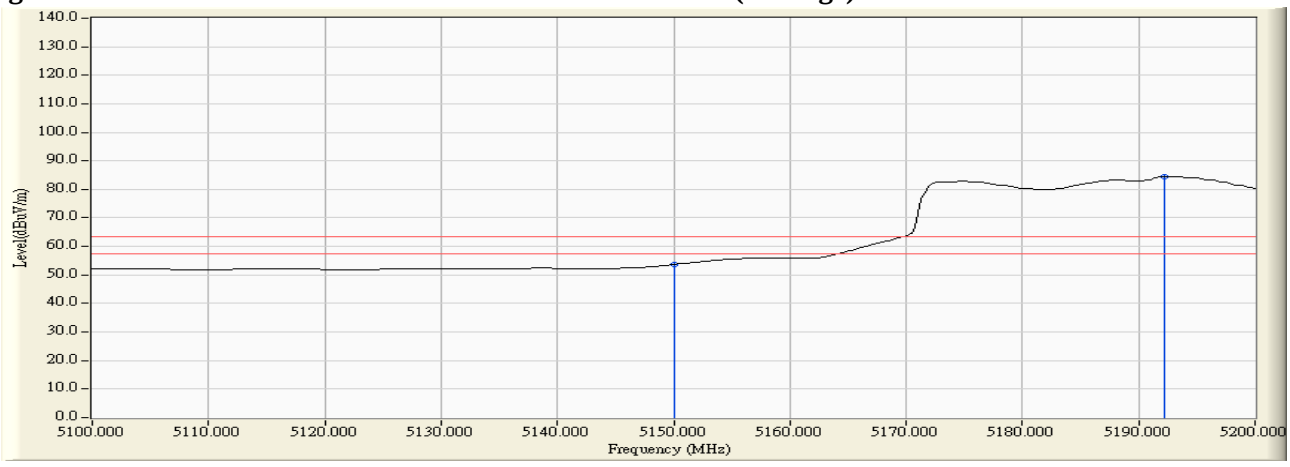


Figure Channel 42: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11ac-80BW-65Mbps)(5G Band)(Dipole Antenna) -Channel 42

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
42 (Peak)	5148.116	37.054	44.191	81.245	83.54	63.540	Pass
42 (Peak)	5150.000	37.055	40.985	78.040	83.54	63.540	Pass
42 (Peak)	5198.985	37.075	79.490	116.565	--	--	--
42 (Average)	5148.551	37.054	25.453	62.507	83.54	63.540	Pass
42 (Average)	5150.000	37.055	25.134	62.189	83.54	63.540	Pass
42 (Average)	5184.928	37.076	60.629	97.706	--	--	--

Figure Channel 42: Vertical (Peak)

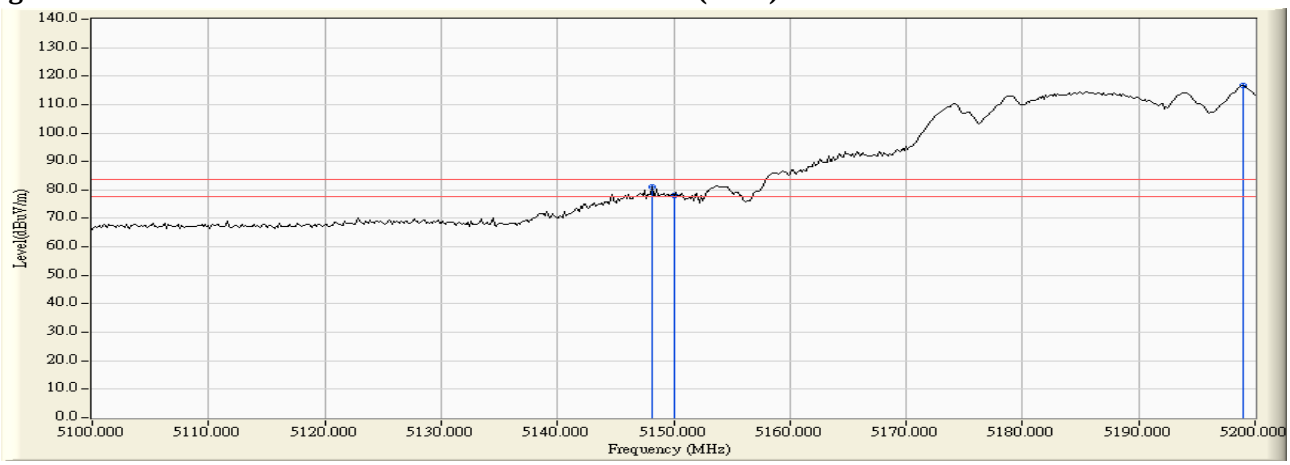
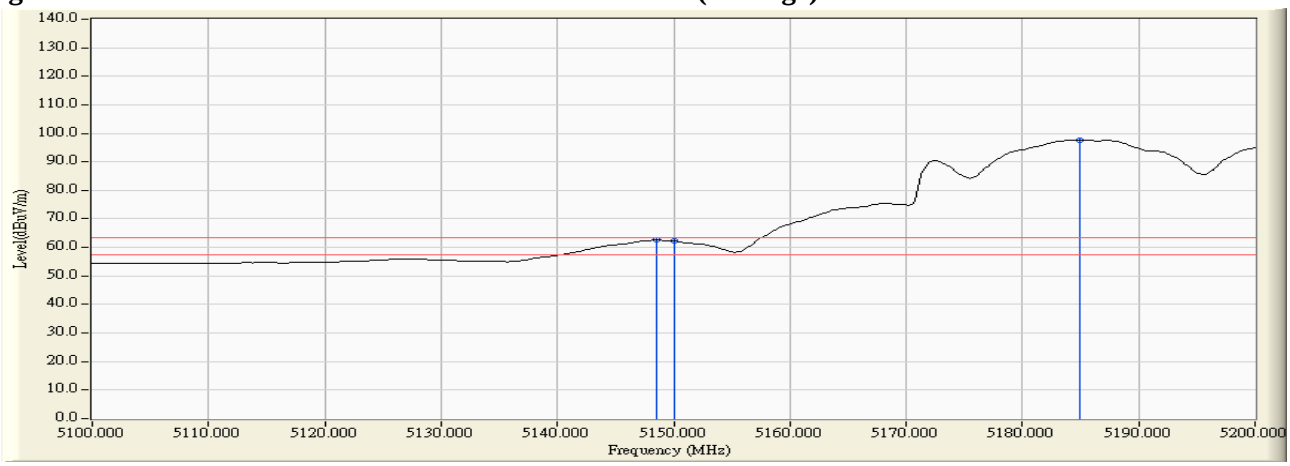


Figure Channel 42: Vertical (Average)



Note:

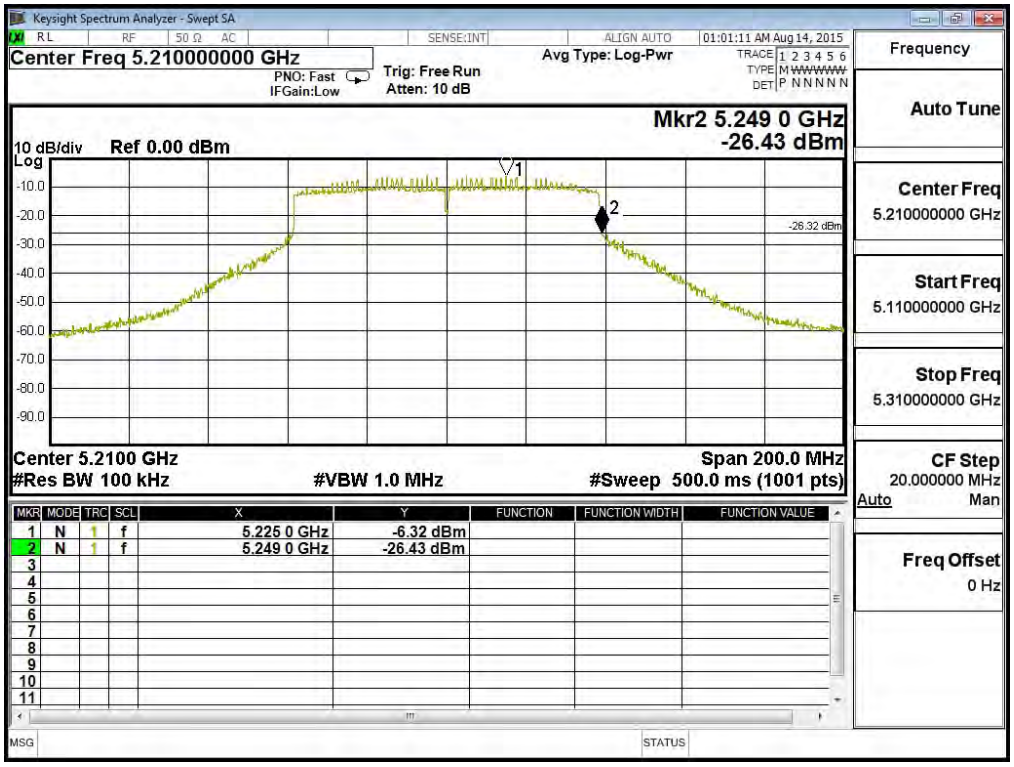
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11ac-80BW-65Mbps)(5G Band)(Dipole Antenna) -Channel 42

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5210	5249.00	<5250	PASS

NOTE: Accordance with 15.215 requirement.

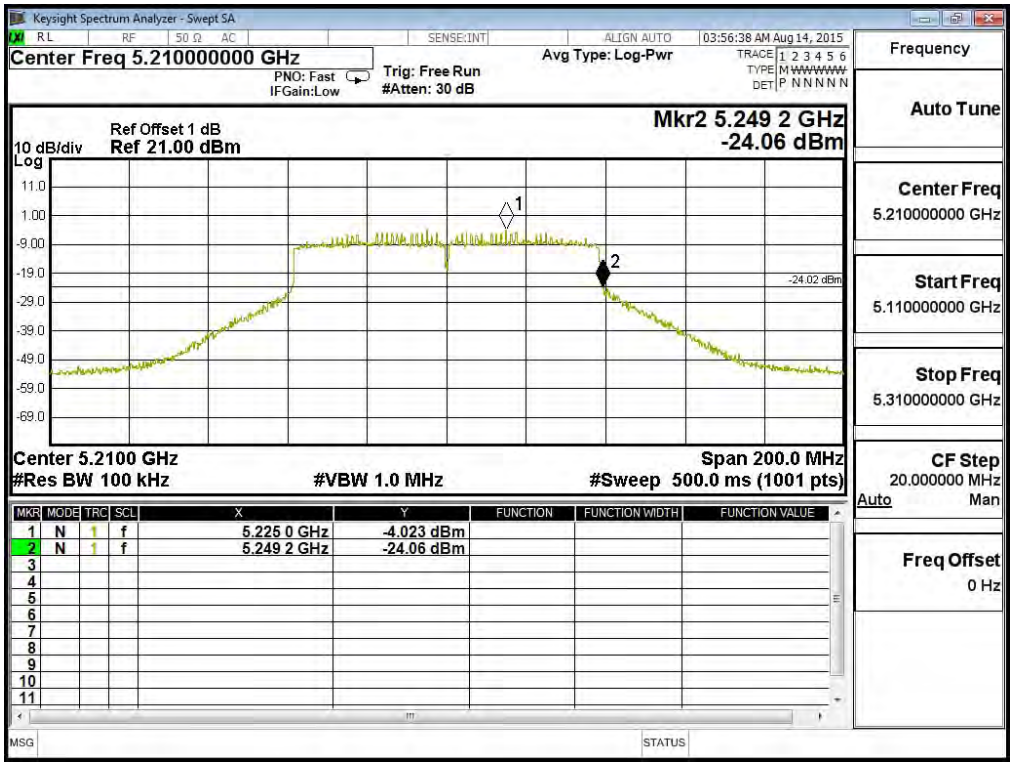


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11ac-80BW-65Mbps)(5G Band)(Dipole Antenna)-Channel 42

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5210	5249.20	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11a_6Mbps)(Grid DISH Antenna)-Channel 36

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5148.261	35.145	44.980	80.125	83.54	63.540	Pass
36 (Peak)	5150.000	35.135	44.582	79.717	83.54	63.540	Pass
36 (Peak)	5176.377	34.987	92.002	126.989	--	--	--
36 (Average)	5150.000	35.135	21.766	56.901	83.54	63.540	Pass
36 (Average)	5186.232	34.932	79.102	114.033	--	--	--

Figure Channel 36: Horizontal (Peak)

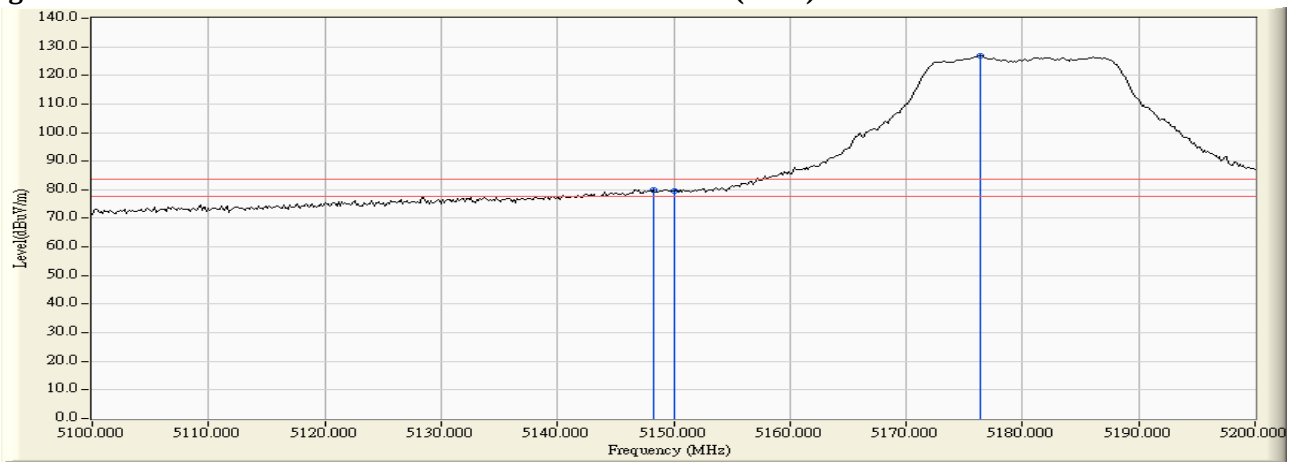
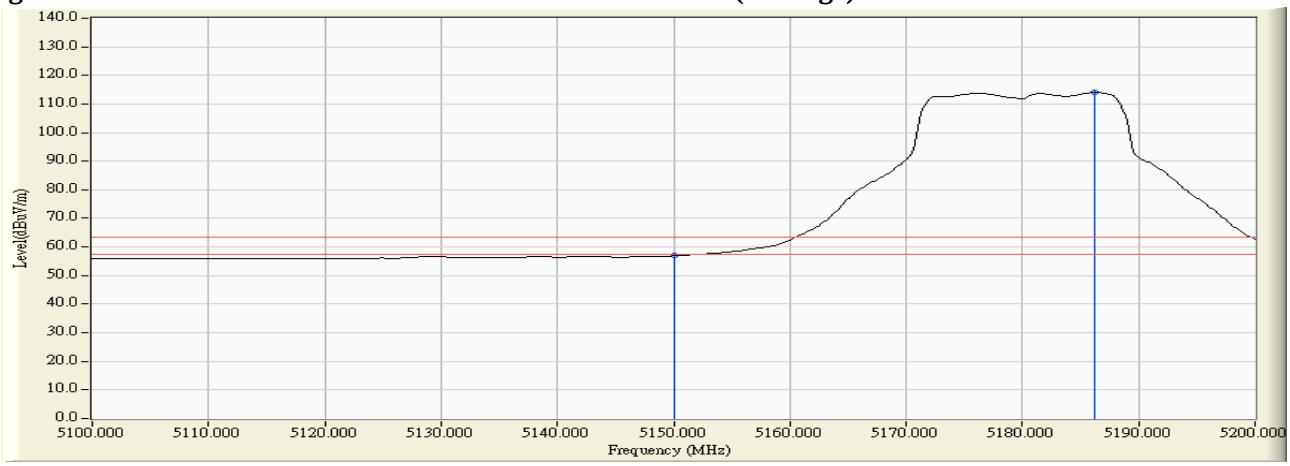


Figure Channel 36: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11a_6Mbps)(Grid DISH Antenna)-Channel 36

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5148.841	37.054	45.095	82.149	83.54	63.540	Pass
36 (Peak)	5150.000	37.055	44.447	81.502	83.54	63.540	Pass
36 (Peak)	5185.507	37.077	93.333	130.410	--	--	--
36 (Average)	5150.000	37.055	22.112	59.167	83.54	63.540	Pass
36 (Average)	5185.797	37.078	79.974	117.052	--	--	--

Figure Channel 36: Vertical (Peak)

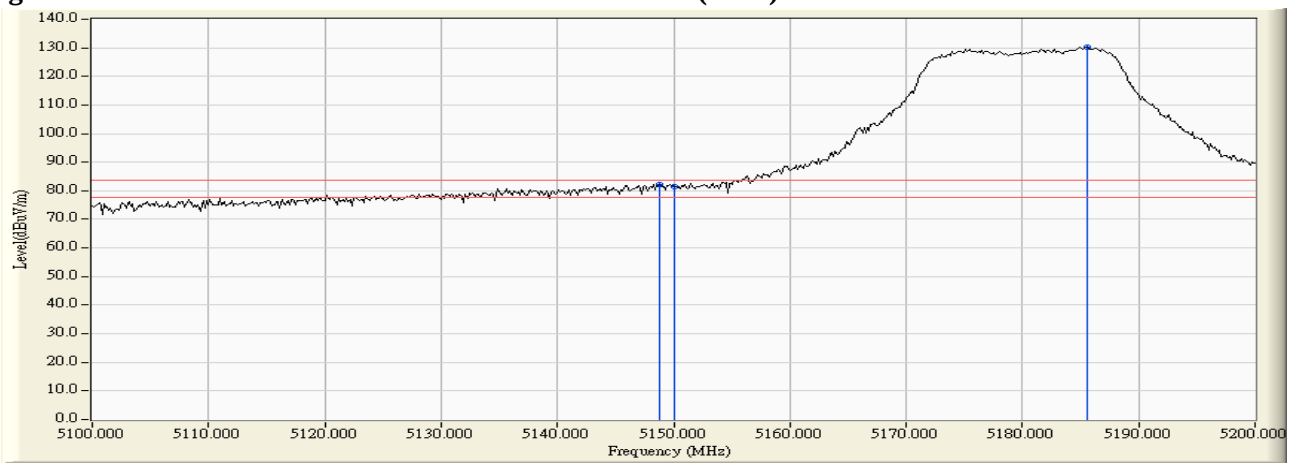
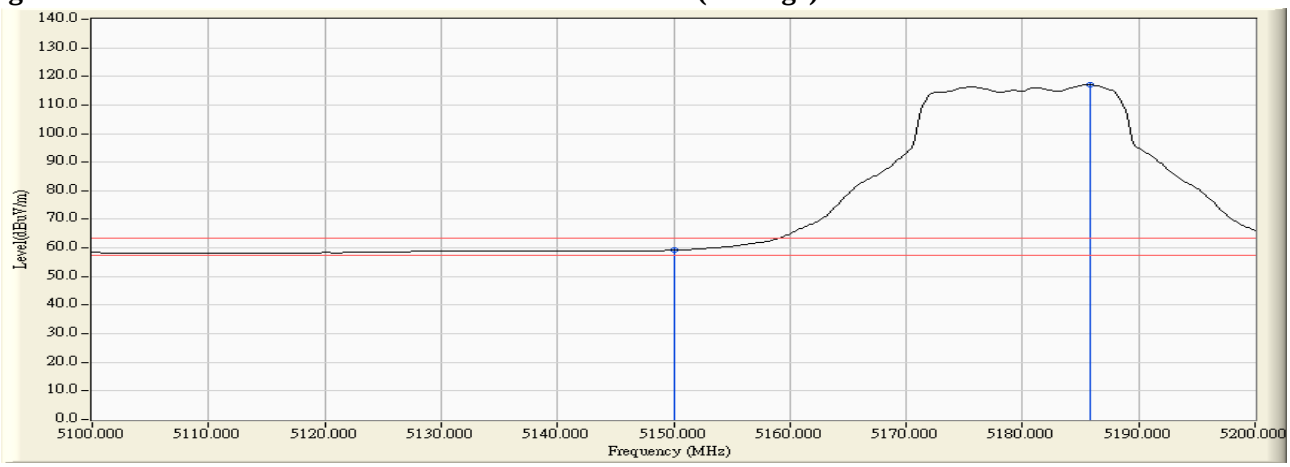


Figure Channel 36: Vertical (Average)



Note:

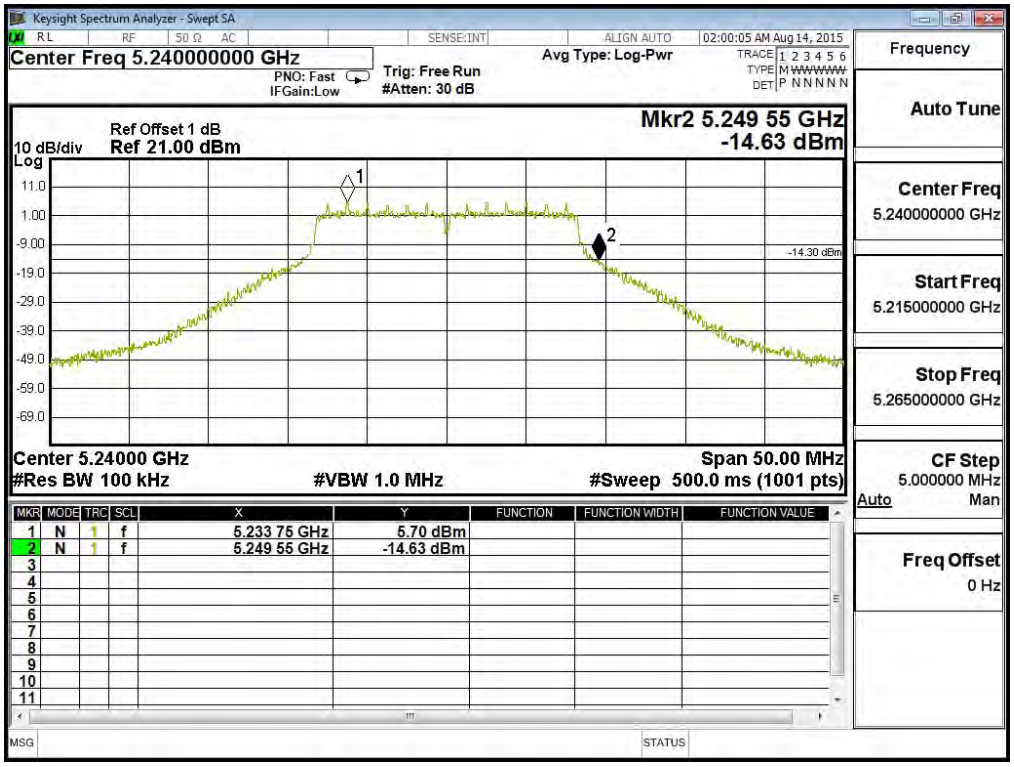
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11a_6Mbps)(Grid DISH Antenna)-Channel 48

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.55	<5250	PASS

NOTE: Accordance with 15.215 requirement.

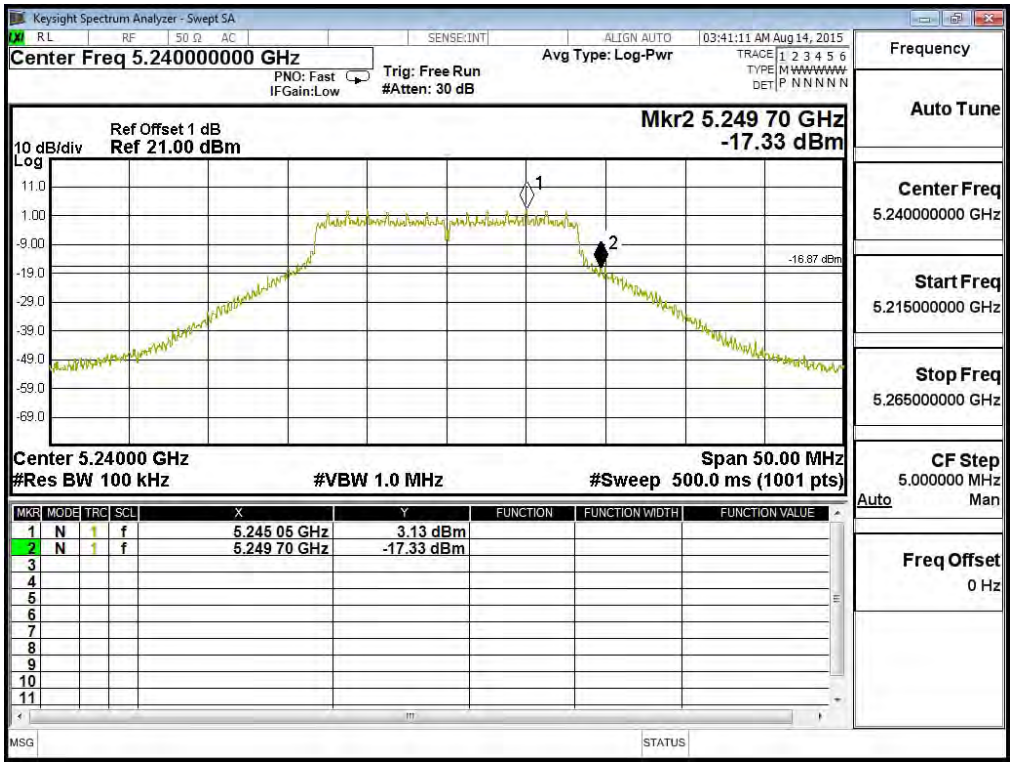


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit (802.11a_6Mbps)(Grid DISH Antenna)-Channel 48

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5248.70	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Grid DISH Antenna)
-Channel 36

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5147.971	35.147	44.733	79.880	83.54	63.540	Pass
36 (Peak)	5150.000	35.135	43.940	79.075	83.54	63.540	Pass
36 (Peak)	5175.217	34.993	91.354	126.347	--	--	--
36 (Average)	5150.000	35.135	21.410	56.545	83.54	63.540	Pass
36 (Average)	5173.768	35.002	78.711	113.713	--	--	--

Figure Channel 36: Horizontal (Peak)

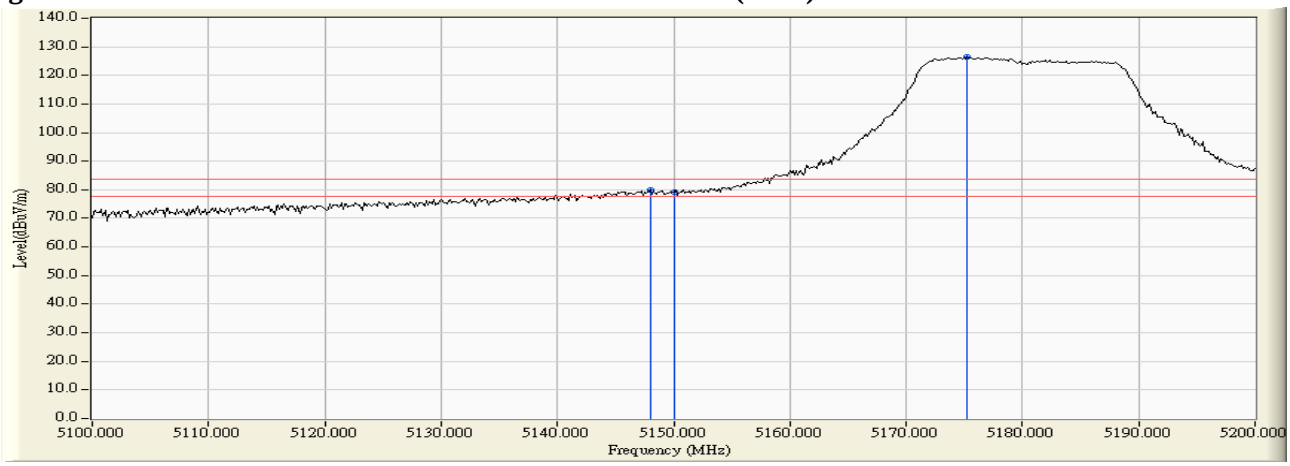
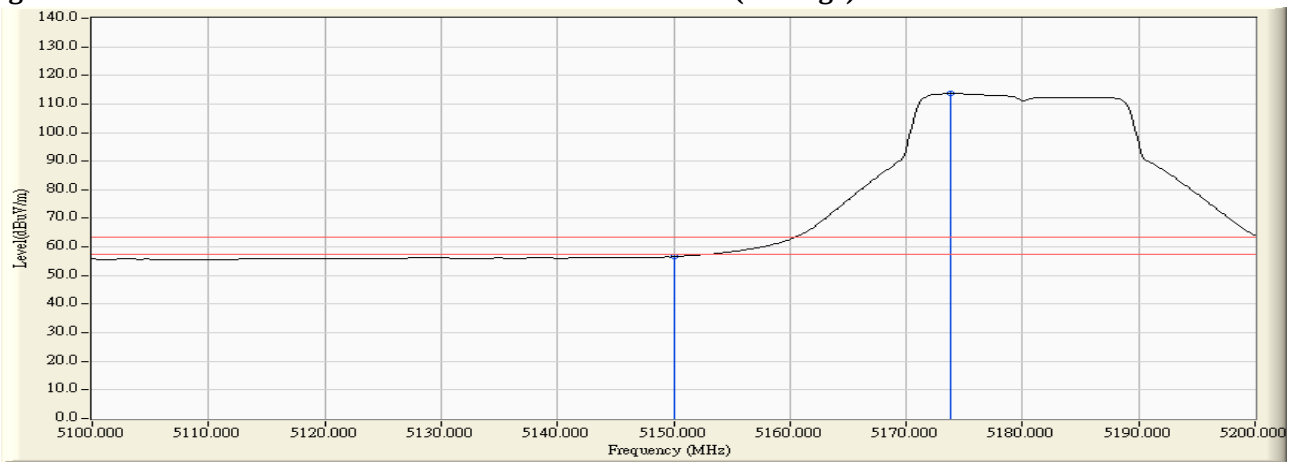


Figure Channel 36: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Grid DISH Antenna)
-Channel 36

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5148.116	37.054	45.300	82.354	83.54	63.540	Pass
36 (Peak)	5150.000	37.055	45.250	82.305	83.54	63.540	Pass
36 (Peak)	5185.362	37.076	92.366	129.443	--	--	--
36 (Average)	5150.000	37.055	22.093	59.148	83.54	63.540	Pass
36 (Average)	5184.638	37.077	79.239	116.316	--	--	--

Figure Channel 36: Vertical (Peak)

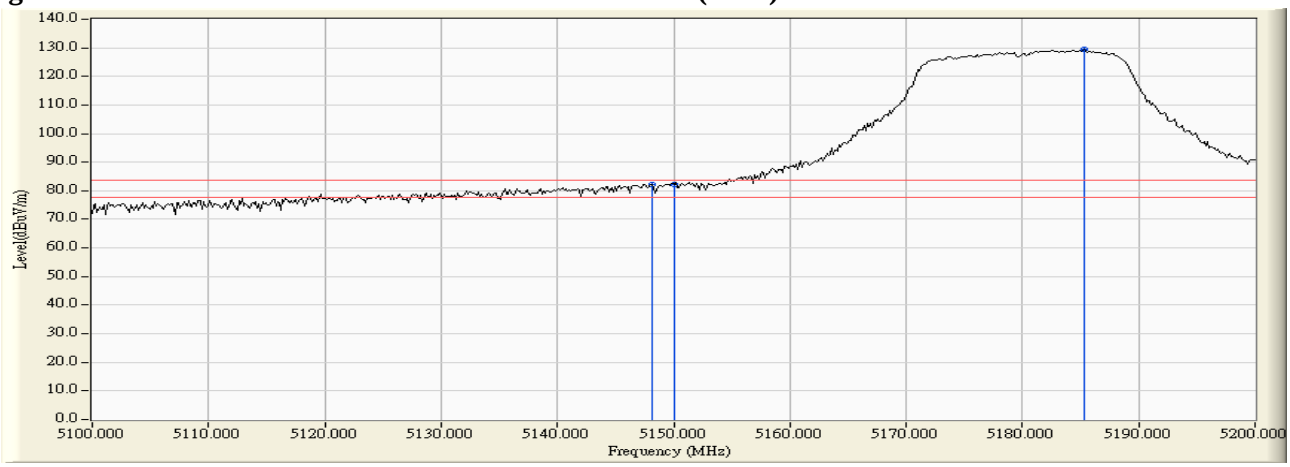
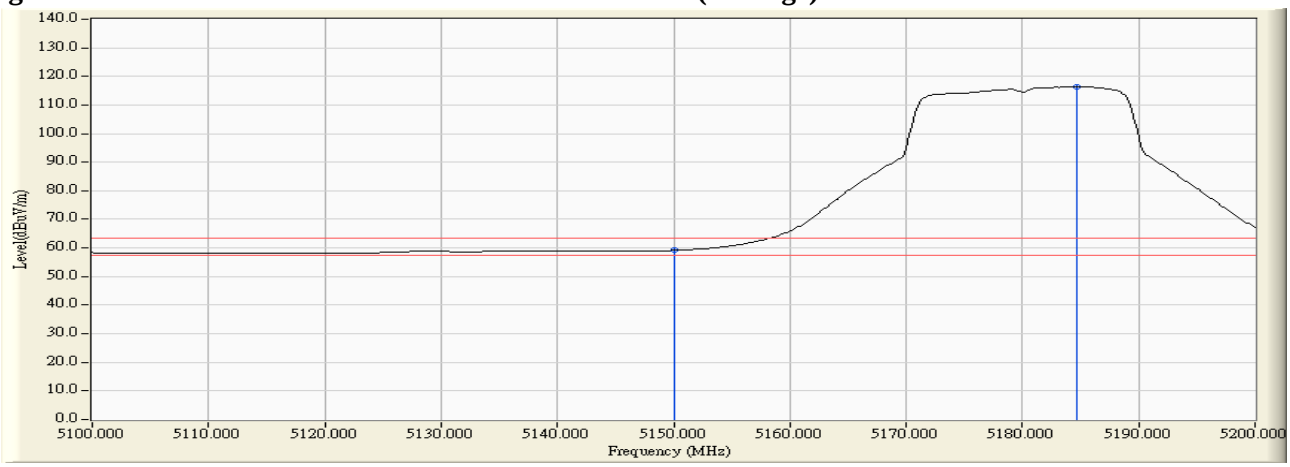


Figure Channel 36: Vertical (Average)



Note:

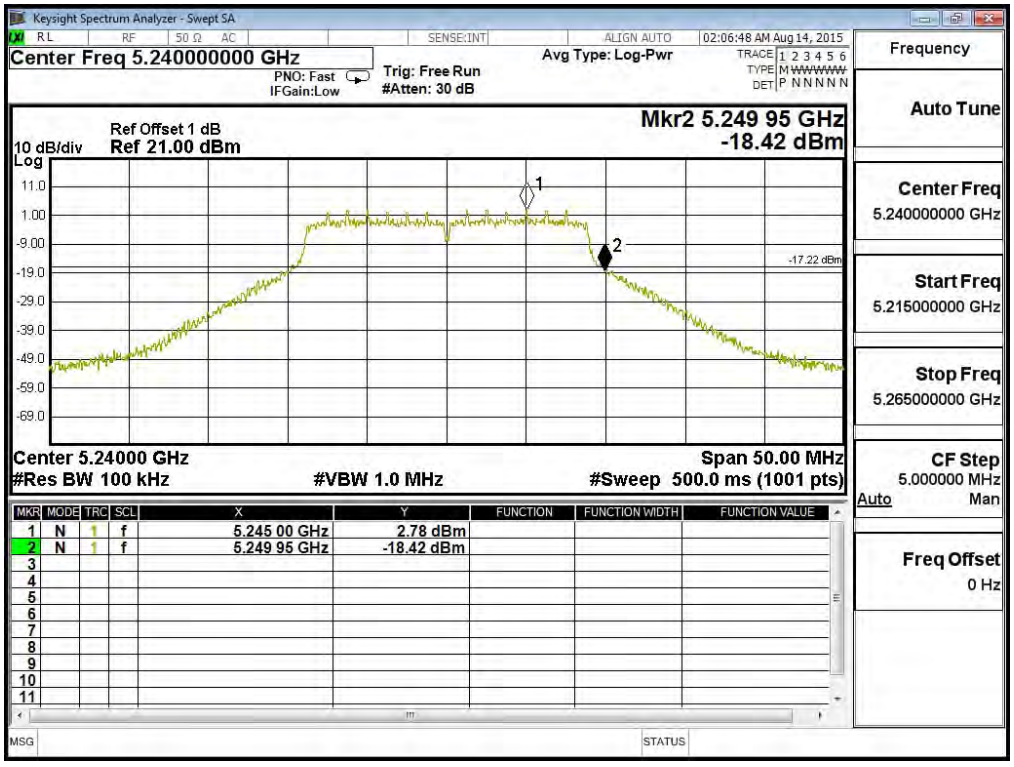
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Grid DISH Antenna) -Channel 48

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.95	<5250	PASS

NOTE: Accordance with 15.215 requirement.

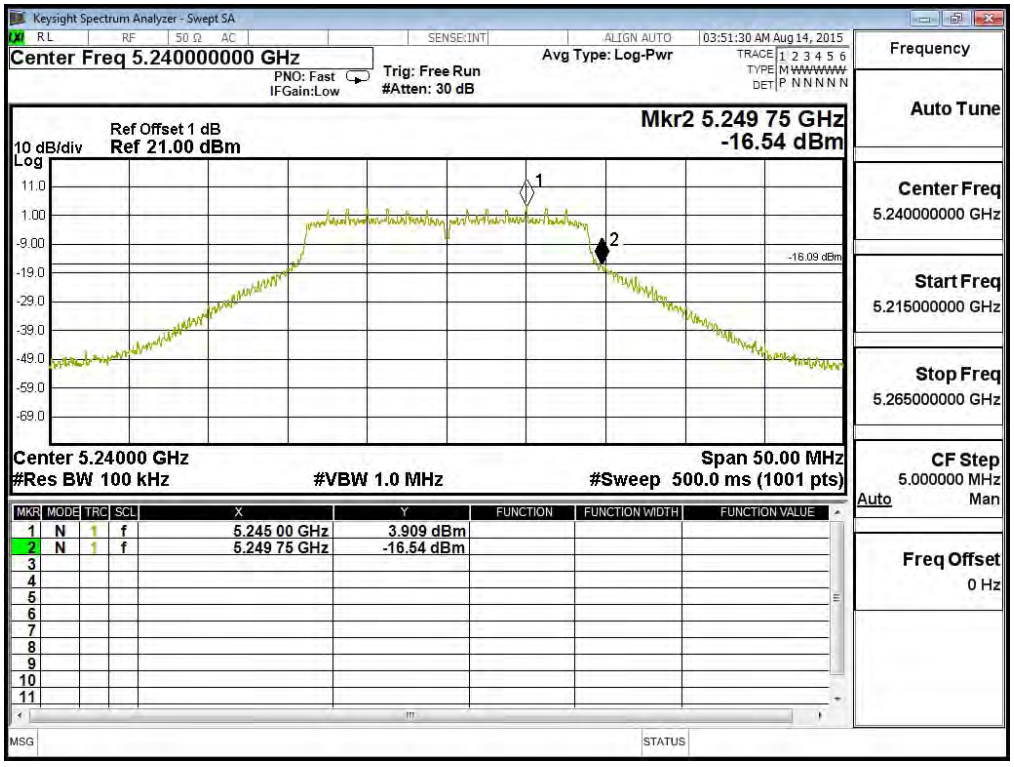


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Grid DISH Antenna) -Channel 48

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.75	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit (802.11n-40BW_30Mbps)(5G Band)(Grid DISH Antenna)
-Channel 38

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
38 (Peak)	5150.000	35.135	44.135	79.270	83.54	63.540	Pass
38 (Peak)	5193.623	34.884	86.865	121.749	--	--	--
38 (Average)	5150.000	35.135	23.744	58.879	83.54	63.540	Pass
38 (Average)	5192.319	34.892	72.230	107.122	--	--	--

Figure Channel 38: Horizontal (Peak)

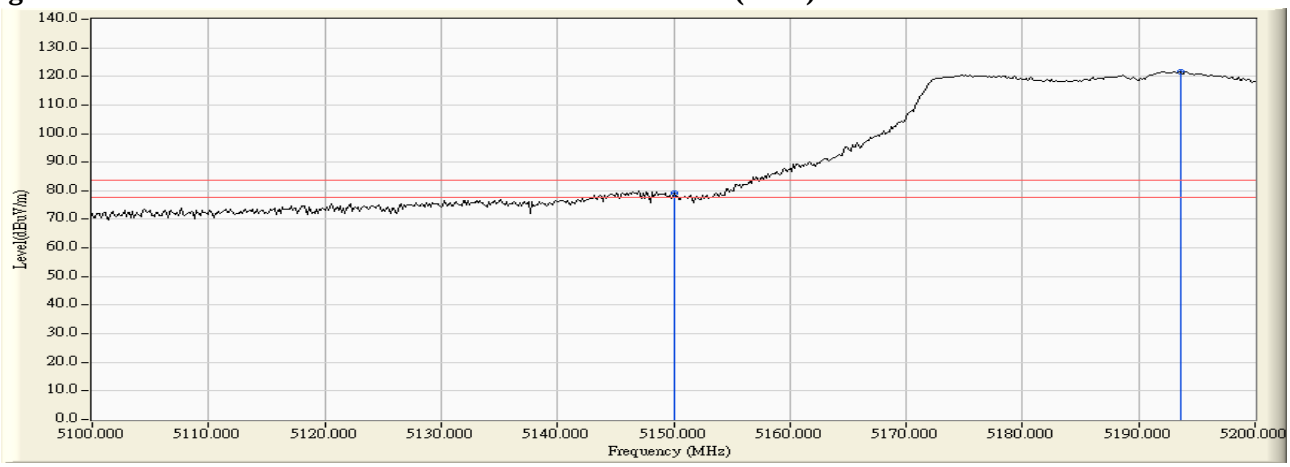
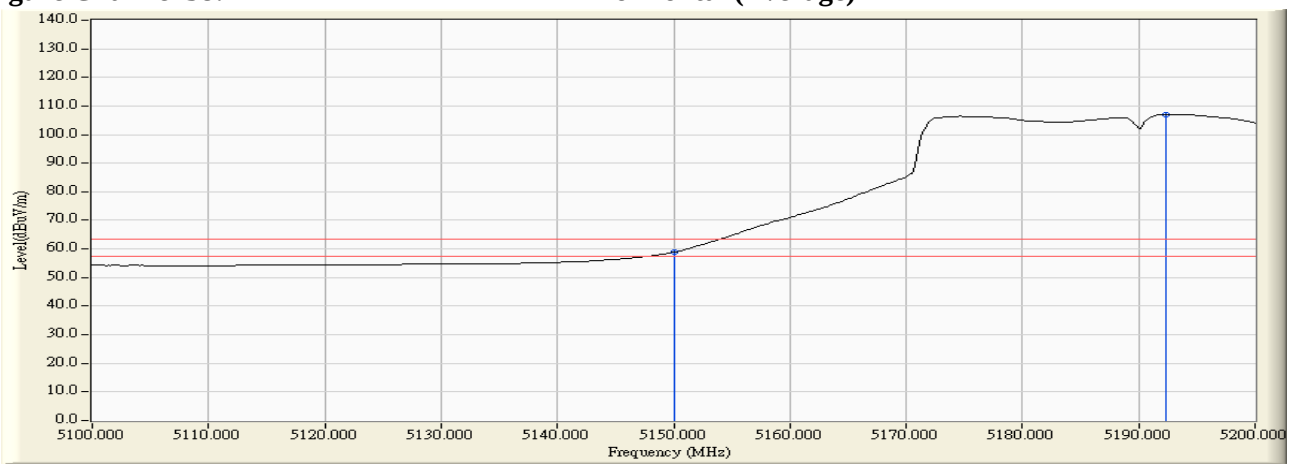


Figure Channel 38: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit (802.11n-40BW_30Mbps)(5G Band)(Grid DISH Antenna)
-Channel 38

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
38 (Peak)	5147.826	37.053	45.454	82.507	83.54	63.540	Pass
38 (Peak)	5150.000	37.055	41.130	78.185	83.54	63.540	Pass
38 (Peak)	5185.797	37.078	87.171	124.249	--	--	--
38 (Average)	5150.000	37.055	25.362	62.417	83.54	63.540	Pass
38 (Average)	5185.362	37.076	72.602	109.679	--	--	--

Figure Channel 38: Vertical (Peak)

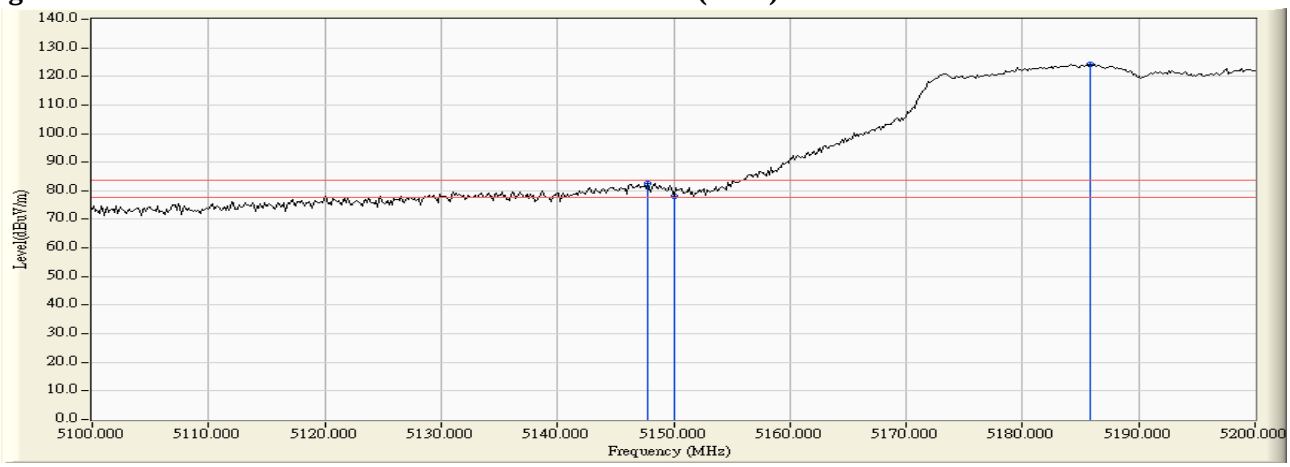
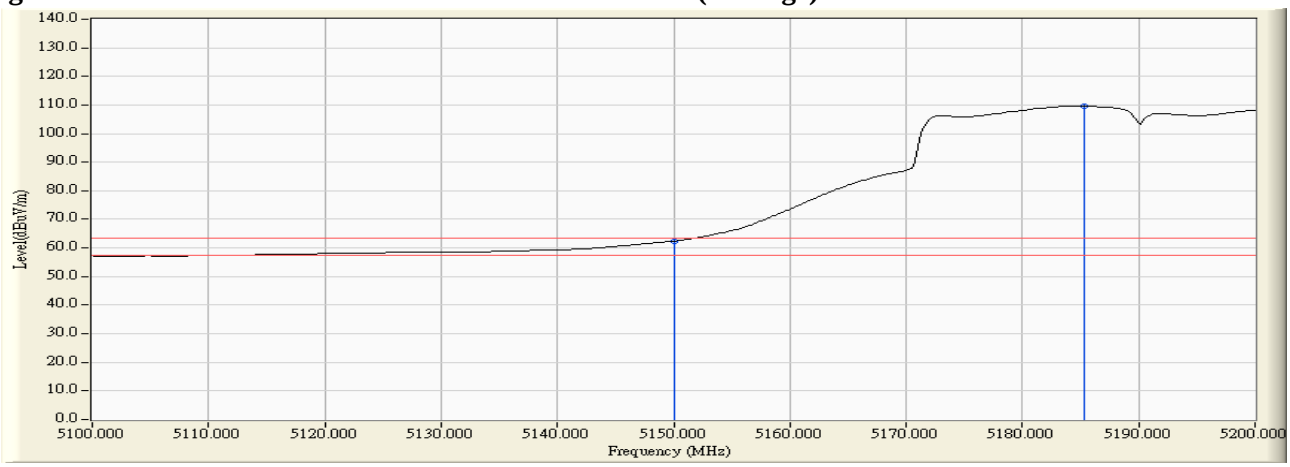


Figure Channel 38: Vertical (Average)



Note:

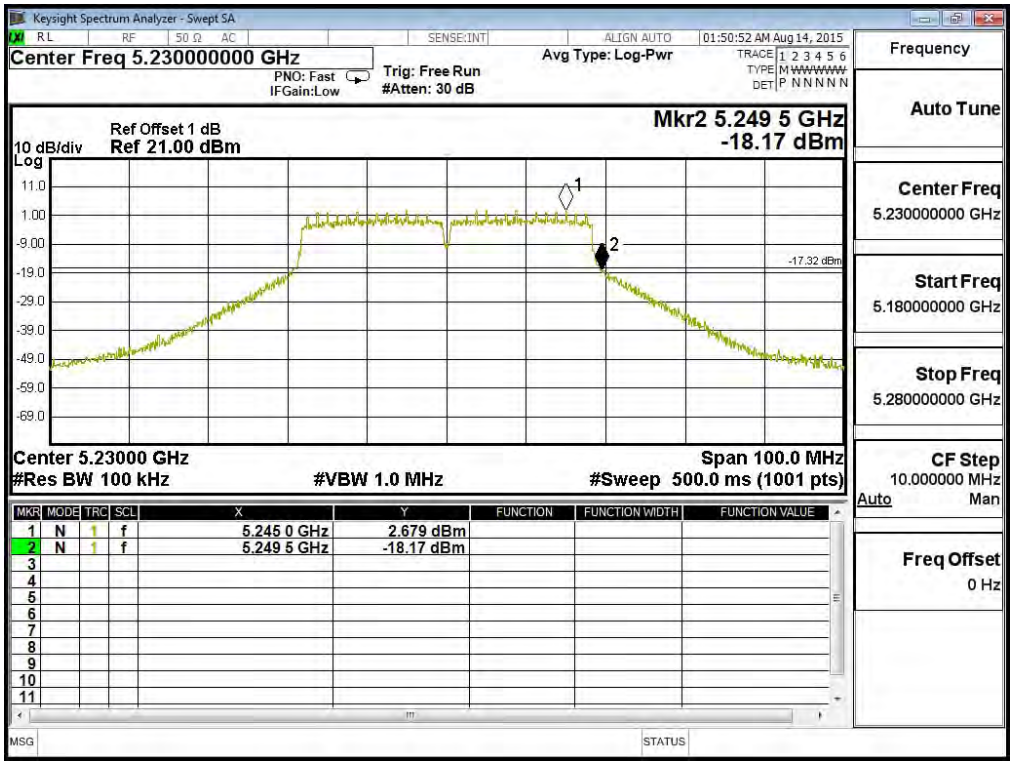
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit (802.11n-40BW_30Mbps)(5G Band)(Grid DISH Antenna)
-Channel 46

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5230	5249.50	<5250	PASS

NOTE: Accordance with 15.215 requirement.

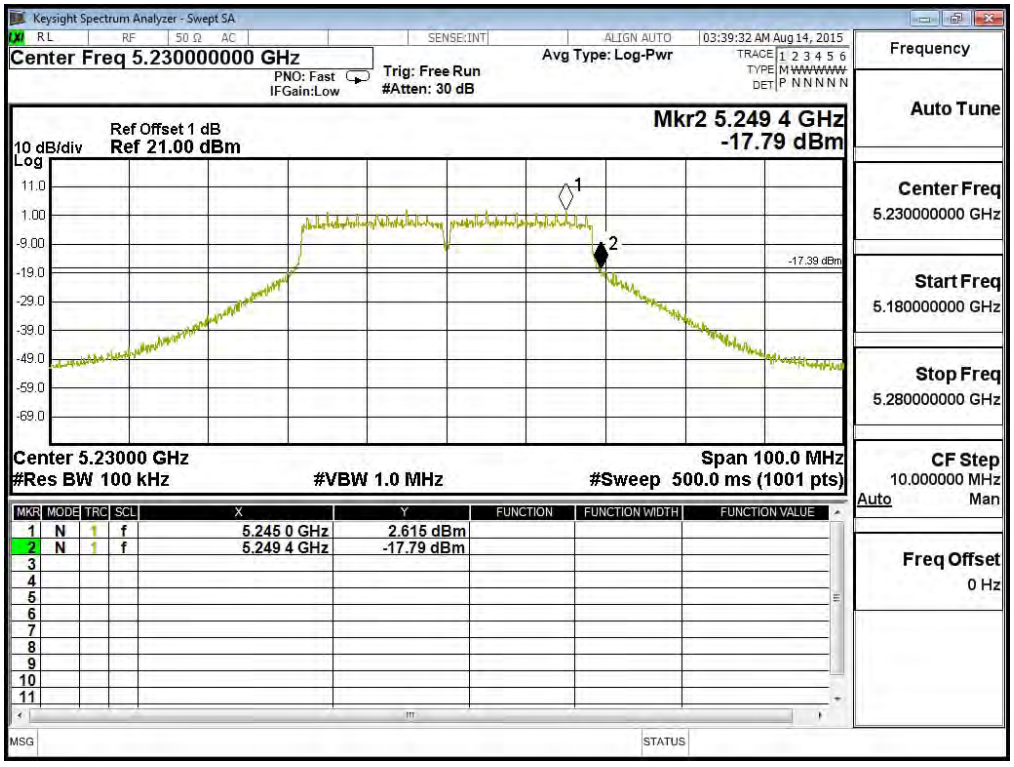


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit (802.11n-40BW_30Mbps)(5G Band)(Grid DISH Antenna)
-Channel 46

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5230	5249.40	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Grid DISH Antenna)
-Channel 42

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
42 (Peak)	5150.000	35.135	38.687	73.822	83.54	63.540	Pass
42 (Peak)	5198.841	34.848	76.369	111.218	--	--	--
42 (Average)	5150.000	35.135	23.655	58.790	83.54	63.540	Pass
42 (Average)	5184.203	34.943	59.090	94.033	--	--	--

Figure Channel 42: Horizontal (Peak)

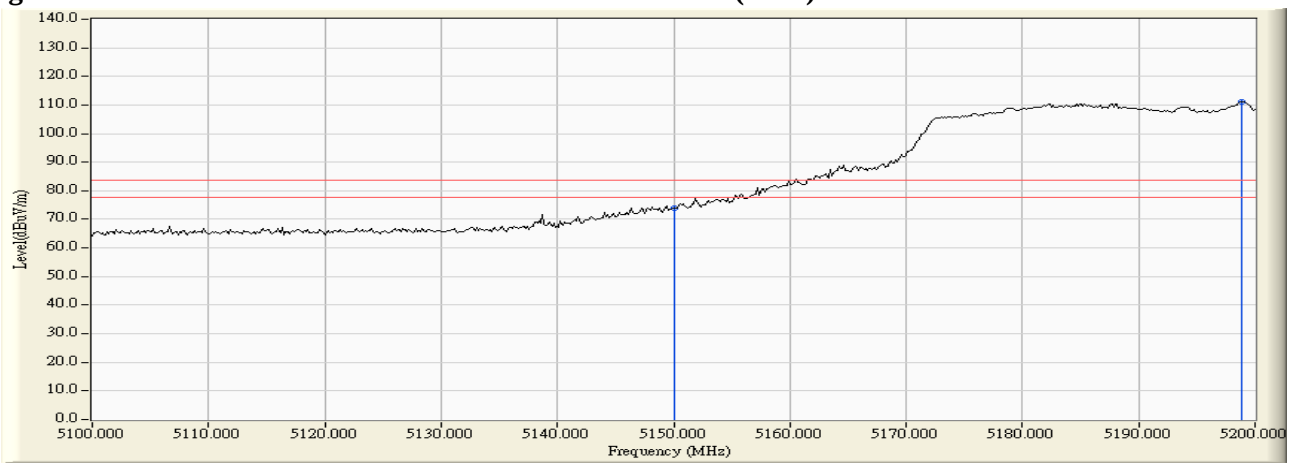
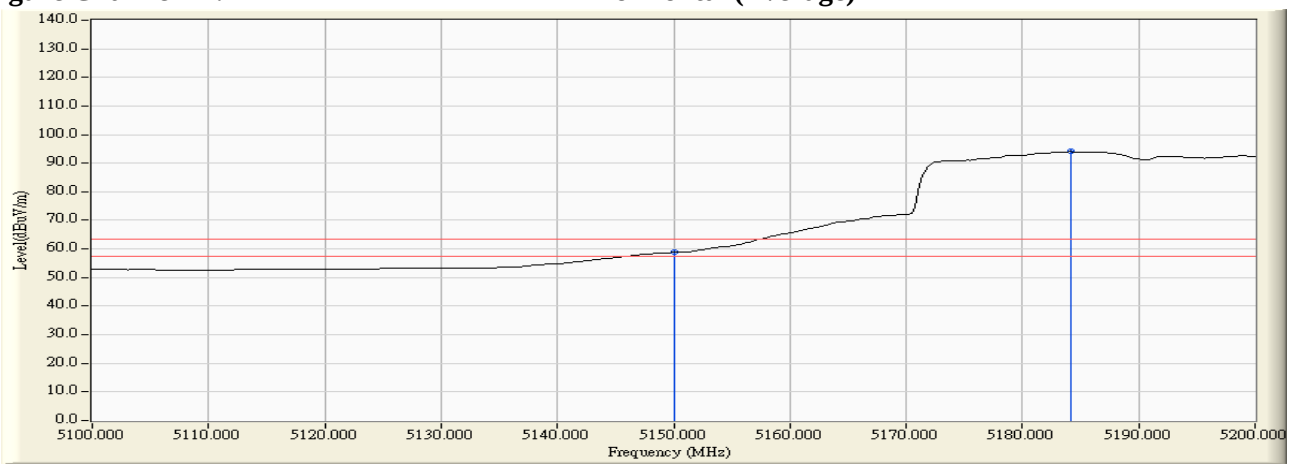


Figure Channel 42: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Grid DISH Antenna)
-Channel 42

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
42 (Peak)	5147.971	37.054	40.903	77.956	83.54	63.540	Pass
42 (Peak)	5150.000	37.055	39.169	76.224	83.54	63.540	Pass
42 (Peak)	5199.565	37.078	77.585	114.664	--	--	--
42 (Average)	5150.000	37.055	24.530	61.585	83.54	63.540	Pass
42 (Average)	5192.319	37.077	60.196	97.273	--	--	--

Figure Channel 42: Vertical (Peak)

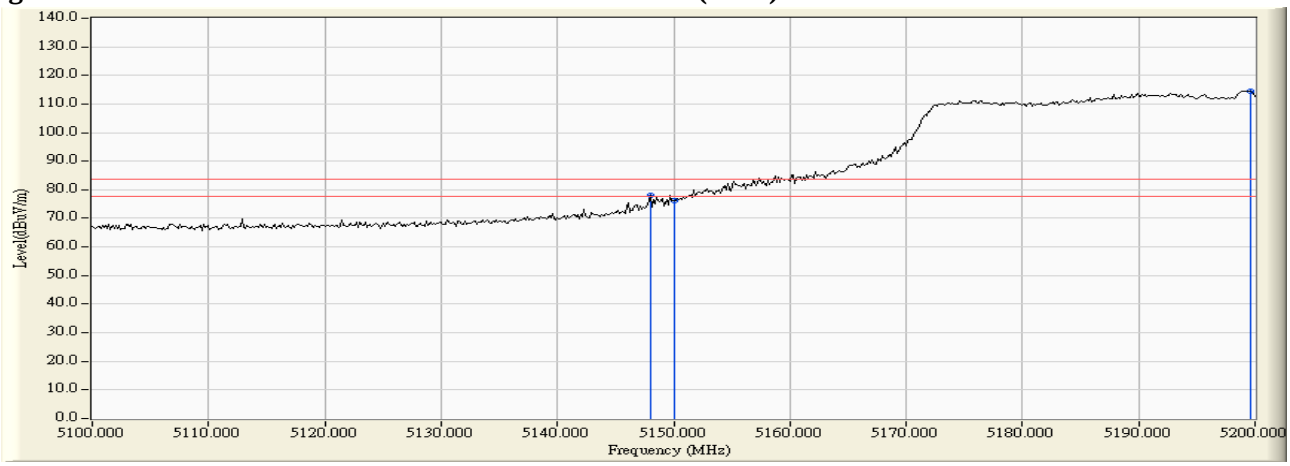
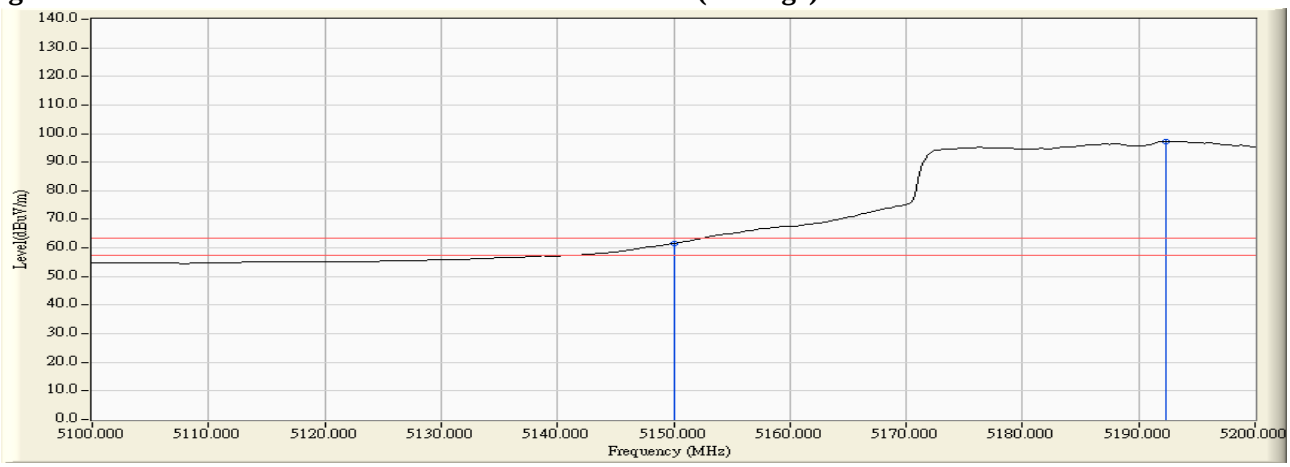


Figure Channel 42: Vertical (Average)



Note:

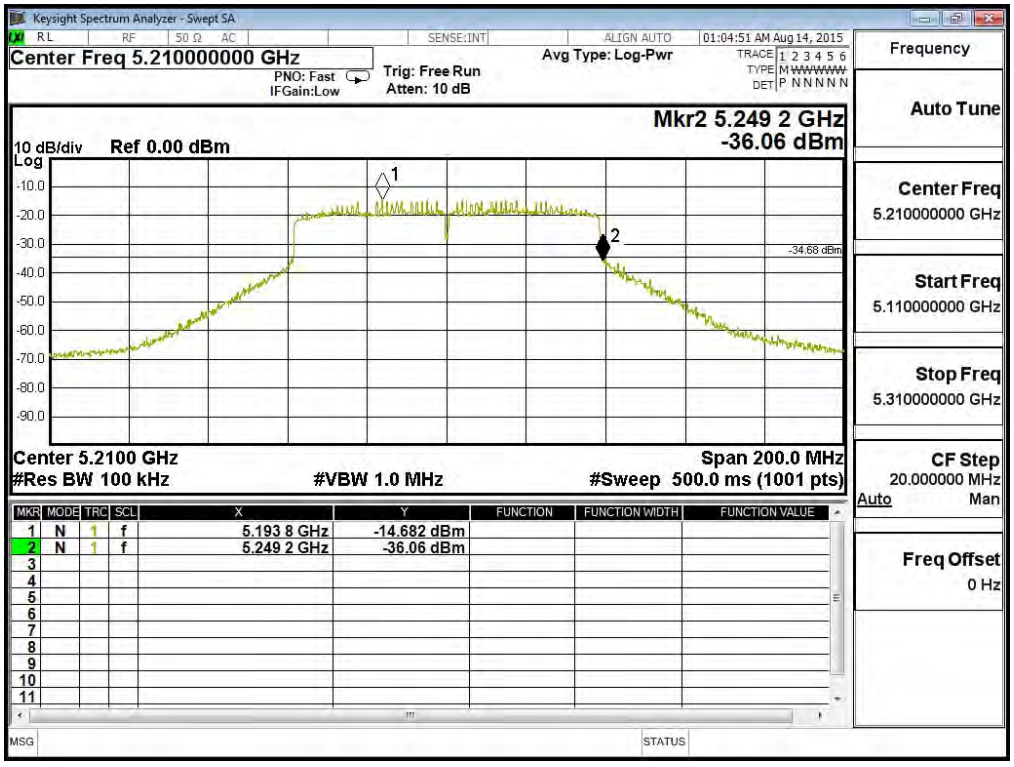
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Grid DISH Antenna)
-Channel 42

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5210	5249.20	<5250	PASS

NOTE: Accordance with 15.215 requirement.

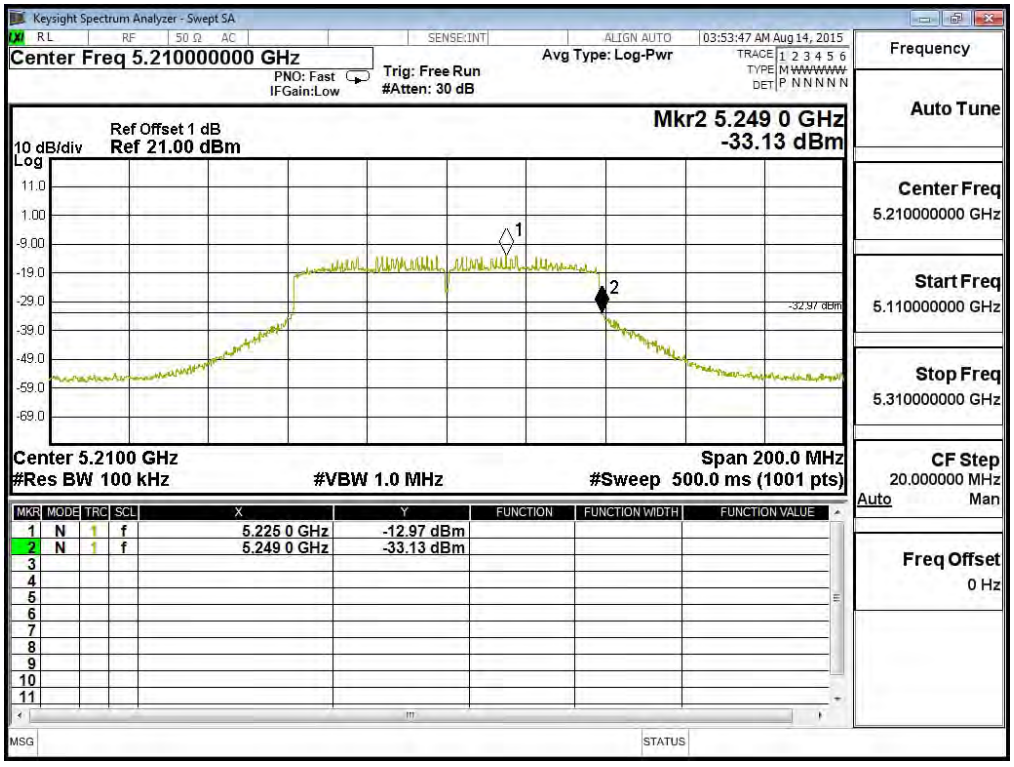


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Grid DISH Antenna) -Channel 42

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5210	5249.00	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 9: Transmit (802.11a_6Mbps)(Omni Antenna)-Channel 36

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5148.406	35.144	31.831	66.975	83.54	63.540	Pass
36 (Peak)	5150.000	35.135	30.031	65.166	83.54	63.540	Pass
36 (Peak)	5185.942	34.933	69.984	104.917	--	--	--
36 (Average)	5150.000	35.135	16.864	51.999	83.54	63.540	Pass
36 (Average)	5185.652	34.935	58.201	93.136	--	--	--

Figure Channel 36: Horizontal (Peak)

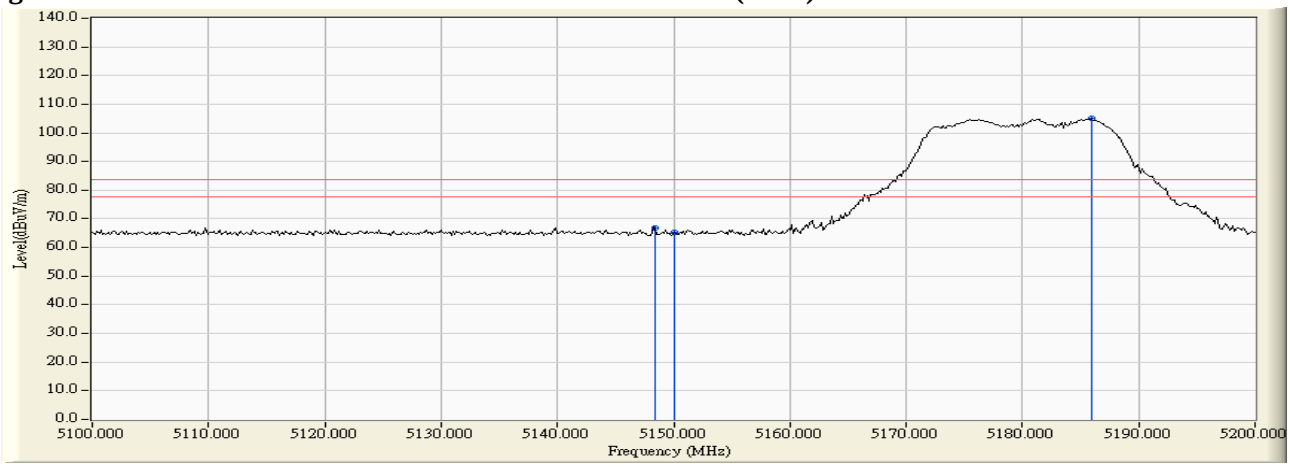
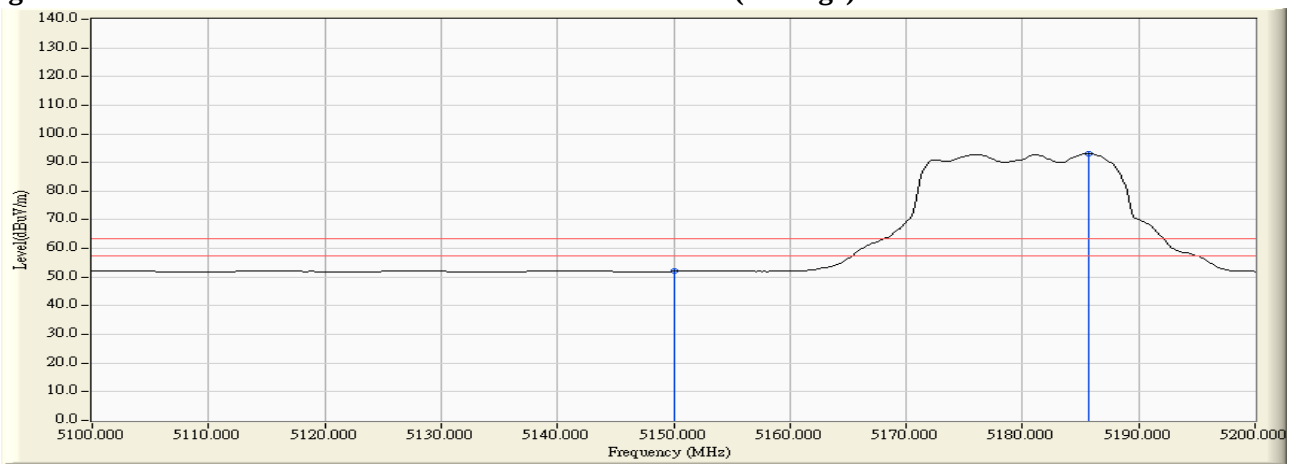


Figure Channel 36: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 9: Transmit (802.11a_6Mbps)(Omni Antenna)-Channel 36

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5148.841	37.054	45.302	82.356	83.54	63.540	Pass
36 (Peak)	5150.000	37.055	44.971	82.026	83.54	63.540	Pass
36 (Peak)	5184.058	37.076	92.492	129.568	--	--	--
36 (Average)	5150.000	37.055	20.847	57.902	83.54	63.540	Pass
36 (Average)	5183.913	37.077	79.438	116.514	--	--	--

Figure Channel 36: Vertical (Peak)

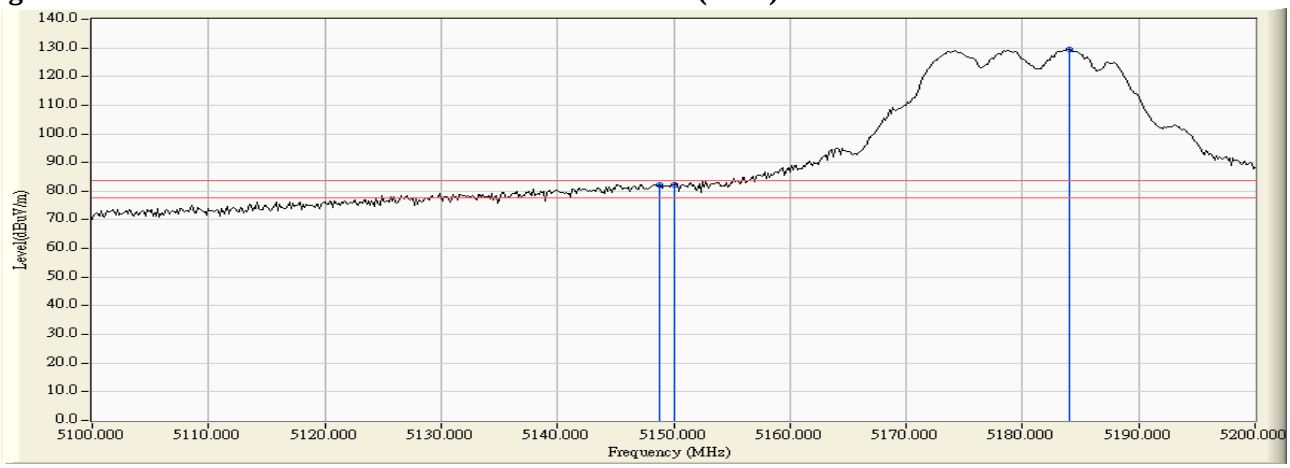
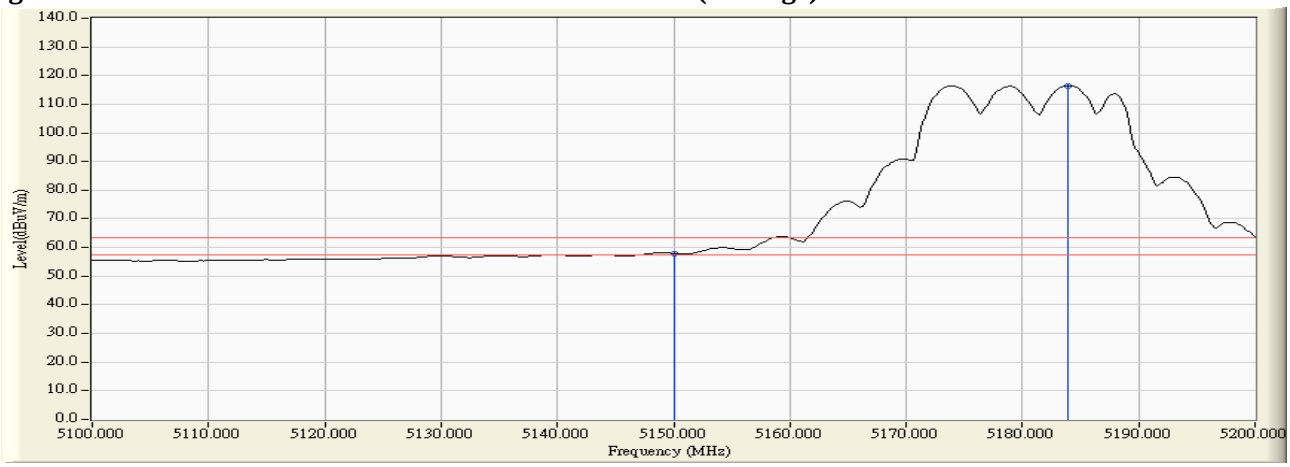


Figure Channel 36: Vertical (Average)



Note:

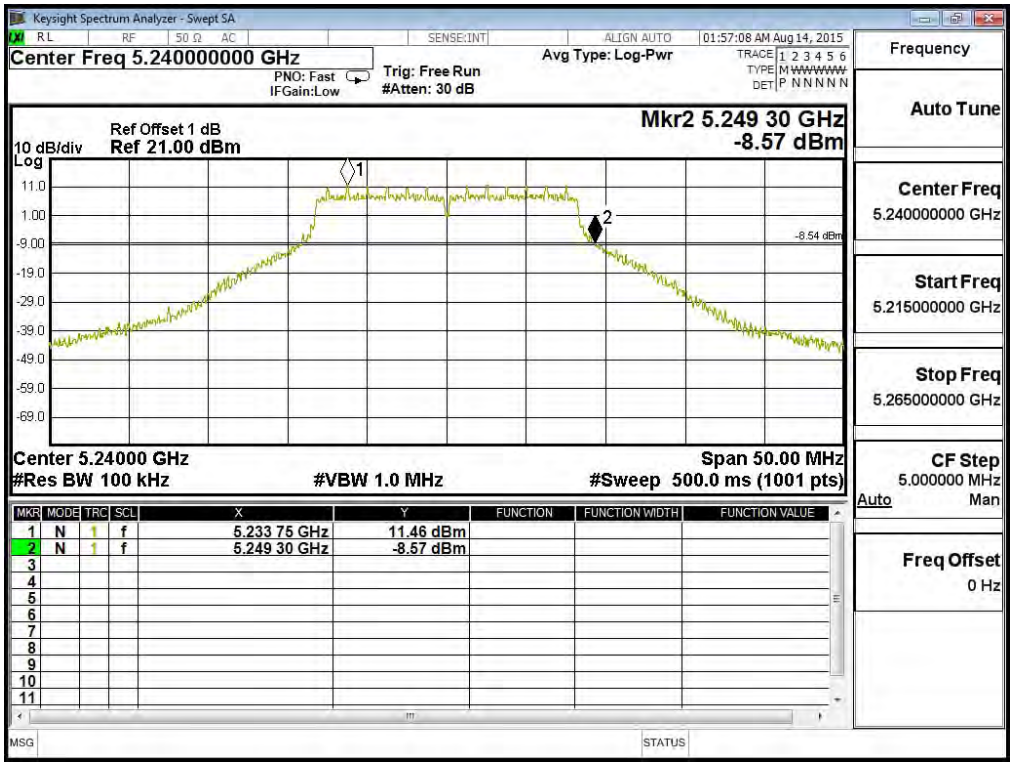
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 9: Transmit (802.11a_6Mbps)(Omni Antenna)-Channel 48

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.30	<5250	PASS

NOTE: Accordance with 15.215 requirement.

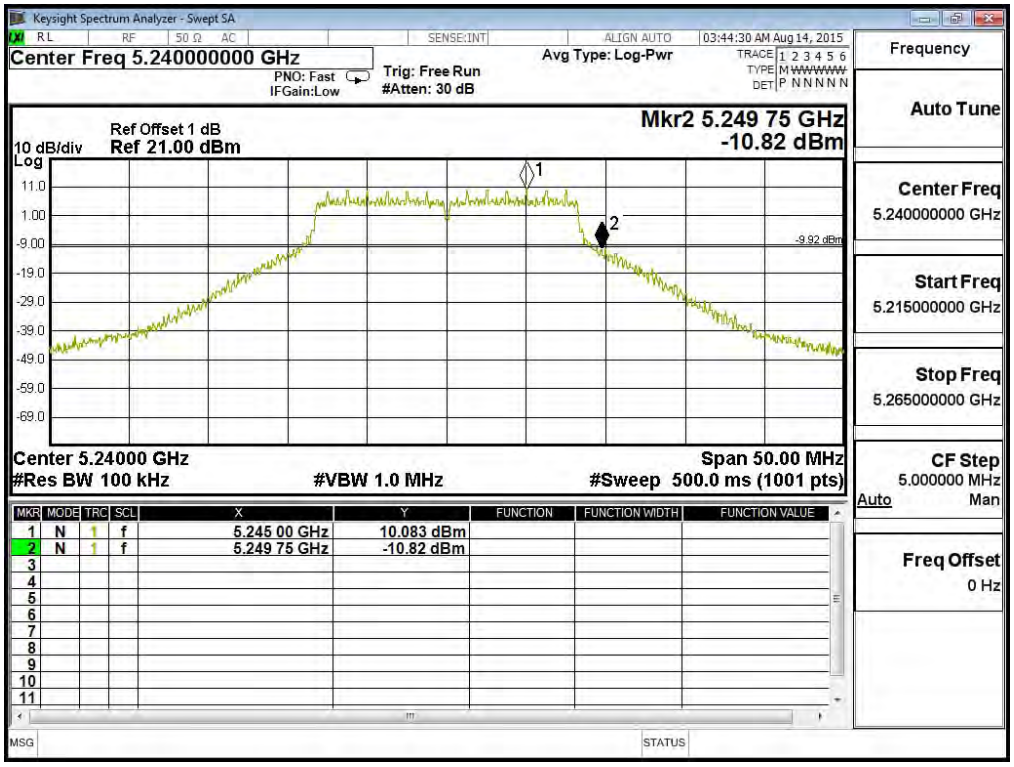


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 9: Transmit (802.11a_6Mbps)(Omni Antenna)-Channel 48

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.75	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 10: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Omni Antenna) -Channel 36

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5147.681	35.148	30.938	66.086	83.54	63.540	Pass
36 (Peak)	5150.000	35.135	30.304	65.439	83.54	63.540	Pass
36 (Peak)	5174.783	34.996	69.251	104.247	--	--	--
36 (Average)	5150.000	35.135	16.880	52.015	83.54	63.540	Pass
36 (Average)	5173.768	35.002	57.565	92.567	--	--	--

Figure Channel 36: Horizontal (Peak)

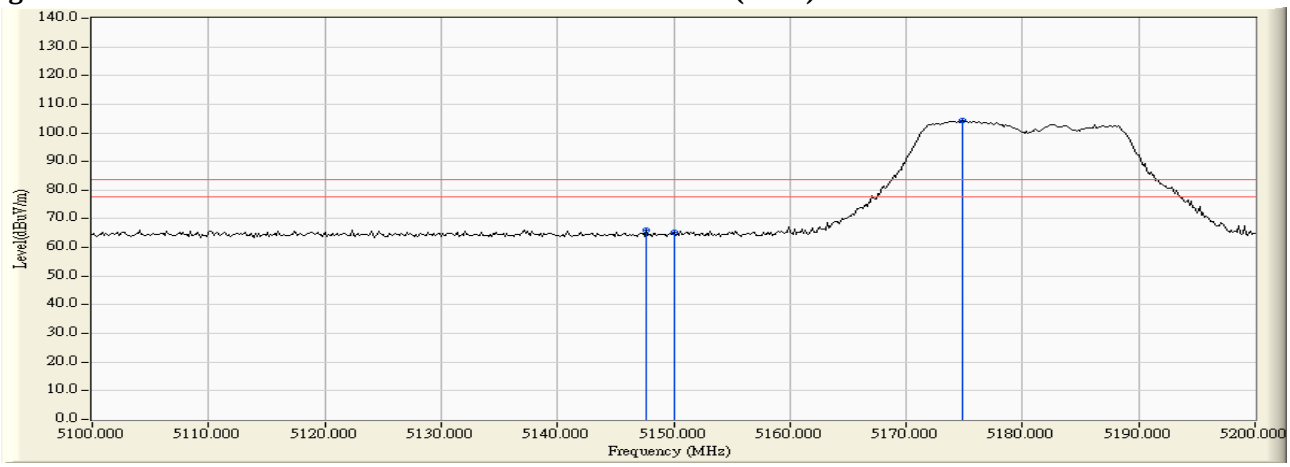
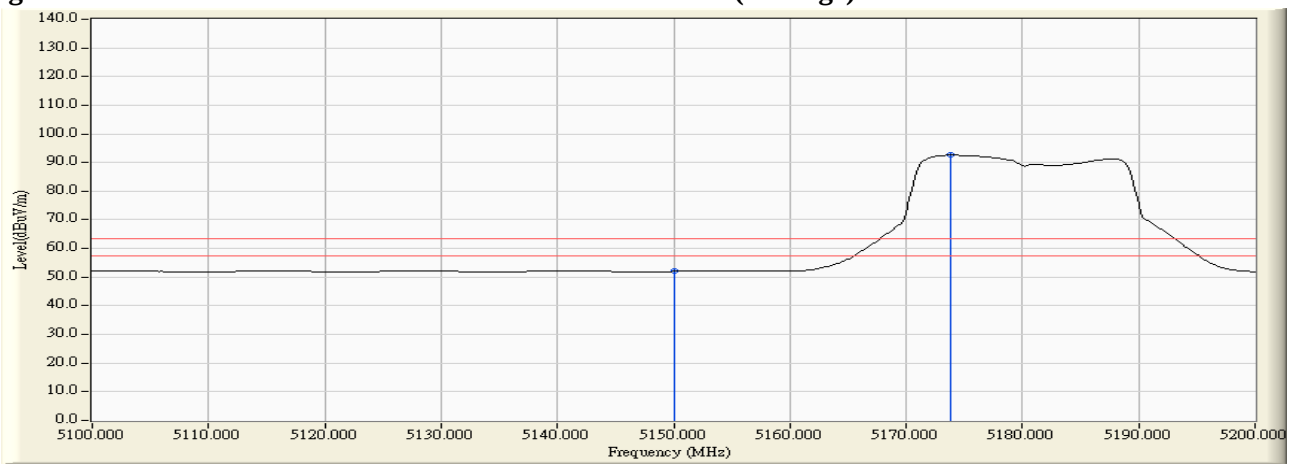


Figure Channel 36: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 10: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Omni Antenna) -Channel 36

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5149.565	37.055	45.559	82.614	83.54	63.540	Pass
36 (Peak)	5150.000	37.055	43.788	80.843	83.54	63.540	Pass
36 (Peak)	5175.942	37.071	92.445	129.516	--	--	--
36 (Average)	5150.000	37.055	21.146	58.201	83.54	63.540	Pass
36 (Average)	5174.783	37.071	79.118	116.189	--	--	--

Figure Channel 36: Vertical (Peak)

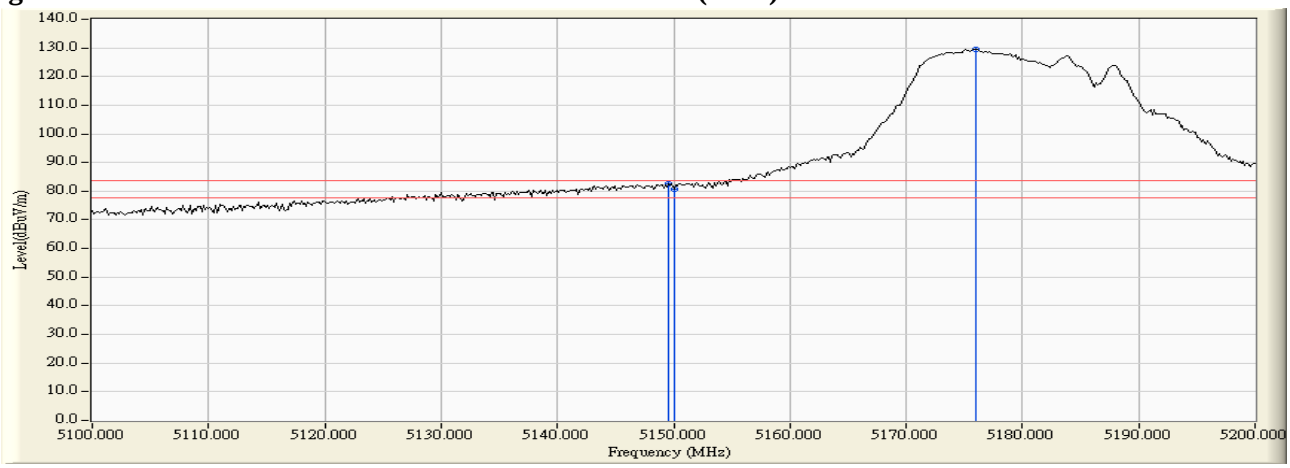
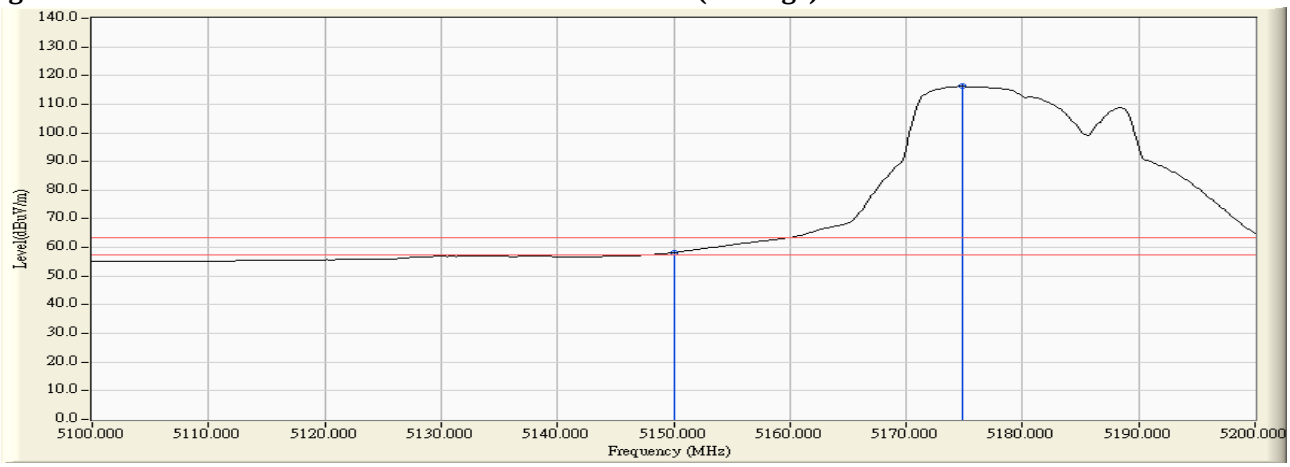


Figure Channel 36: Vertical (Average)



Note:

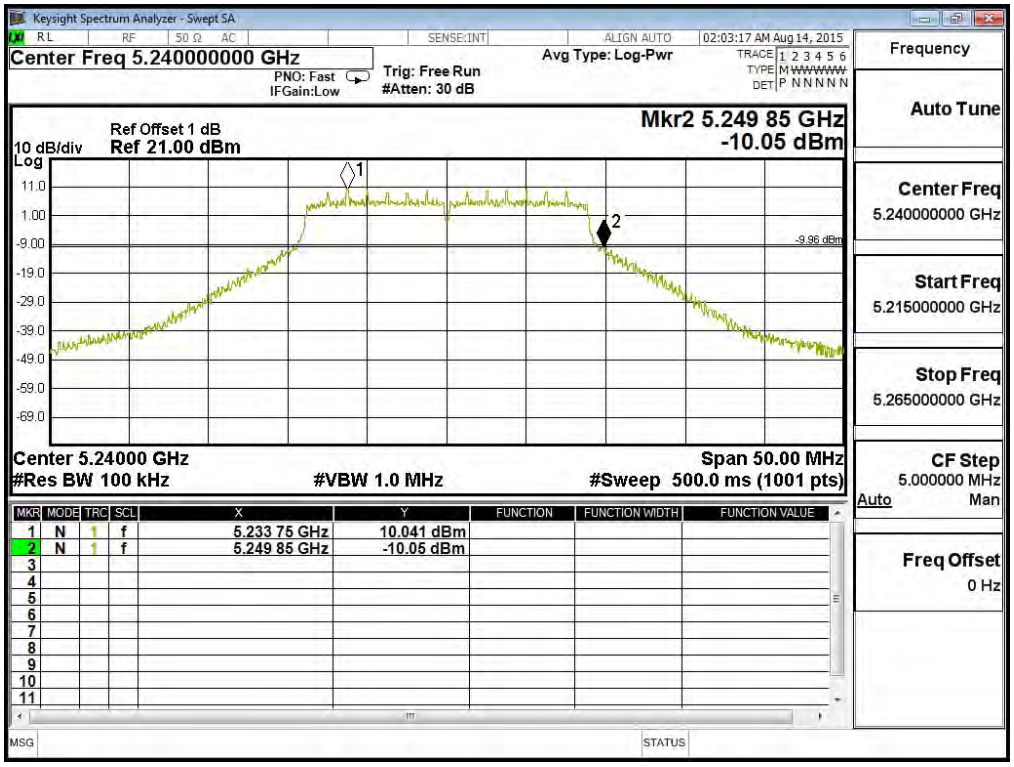
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 10: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Omni Antenna)- Channel 48

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.85	<5250	PASS

NOTE: Accordance with 15.215 requirement.

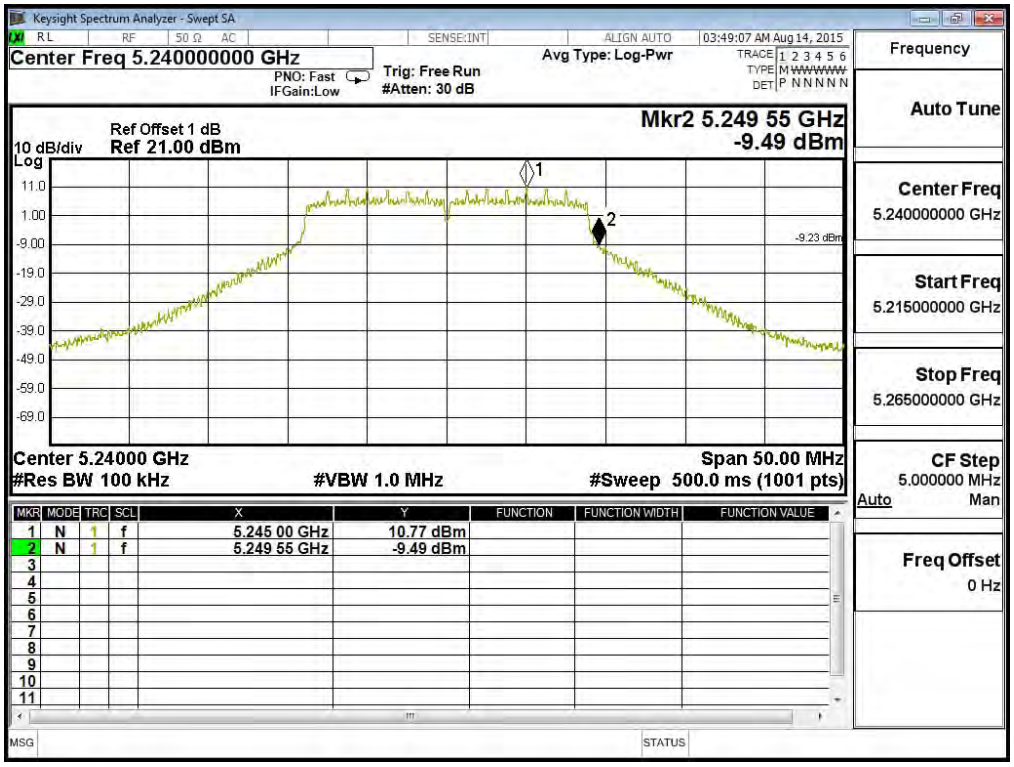


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 10: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Omni Antenna)-Channel 48

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.55	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 11: Transmit (802.11n-40BW_30Mbps)(5G Band)(Omni Antenna)-Channel 38

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
38 (Peak)	5124.203	35.280	31.224	66.504	83.54	63.540	Pass
38 (Peak)	5150.000	35.135	30.300	65.435	83.54	63.540	Pass
38 (Peak)	5181.594	34.958	65.365	100.322	--	--	--
38 (Average)	5150.000	35.135	17.060	52.195	83.54	63.540	Pass
38 (Average)	5183.478	34.946	52.262	87.209	--	--	--

Figure Channel 38: Horizontal (Peak)

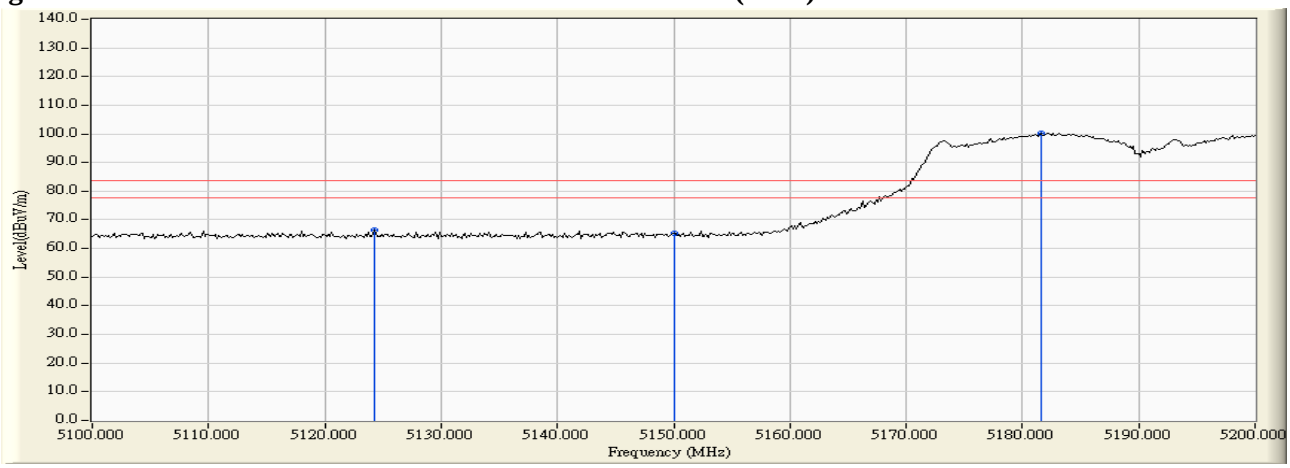
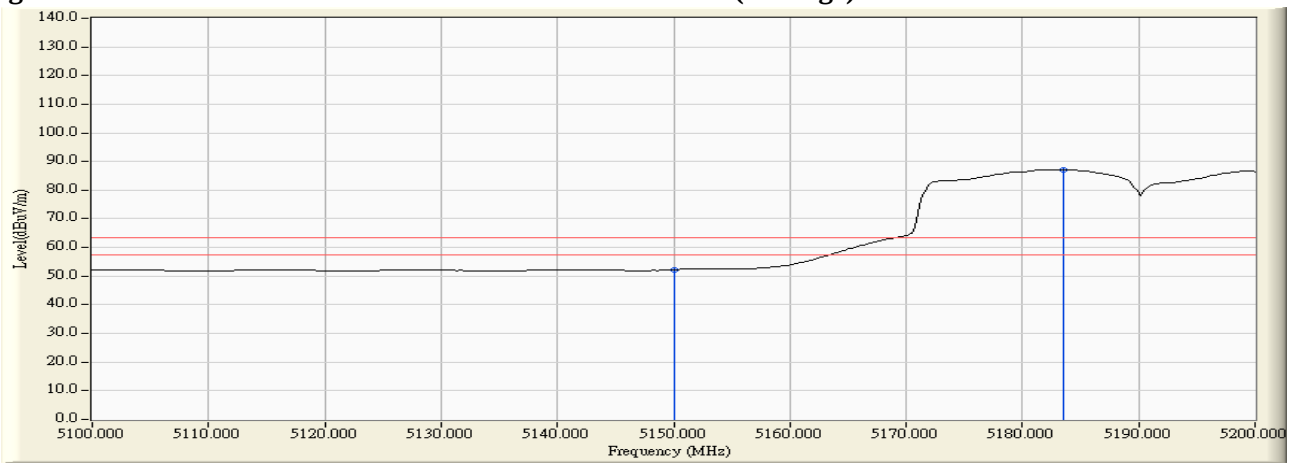


Figure Channel 38: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 11: Transmit (802.11n-40BW_30Mbps)(5G Band)(Omni Antenna)-Channel 38

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
38 (Peak)	5147.826	37.053	45.341	82.394	83.54	63.540	Pass
38 (Peak)	5150.000	37.055	43.262	80.317	83.54	63.540	Pass
38 (Peak)	5185.942	37.077	87.991	125.069	--	--	--
38 (Average)	5150.000	37.055	24.037	61.092	83.54	63.540	Pass
38 (Average)	5184.783	37.077	73.298	110.375	--	--	--

Figure Channel 38: Vertical (Peak)

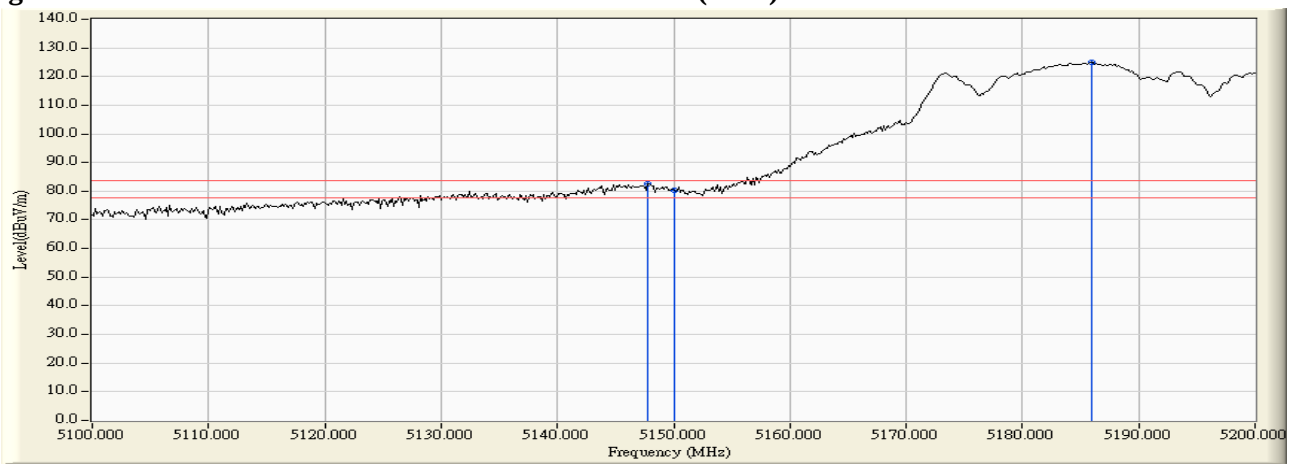
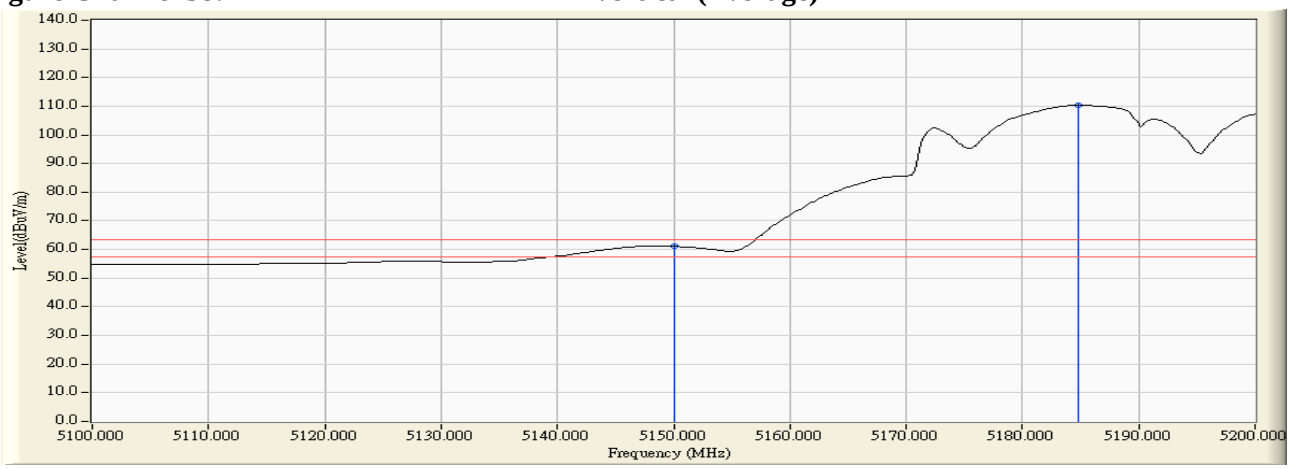


Figure Channel 38: Vertical (Average)



Note:

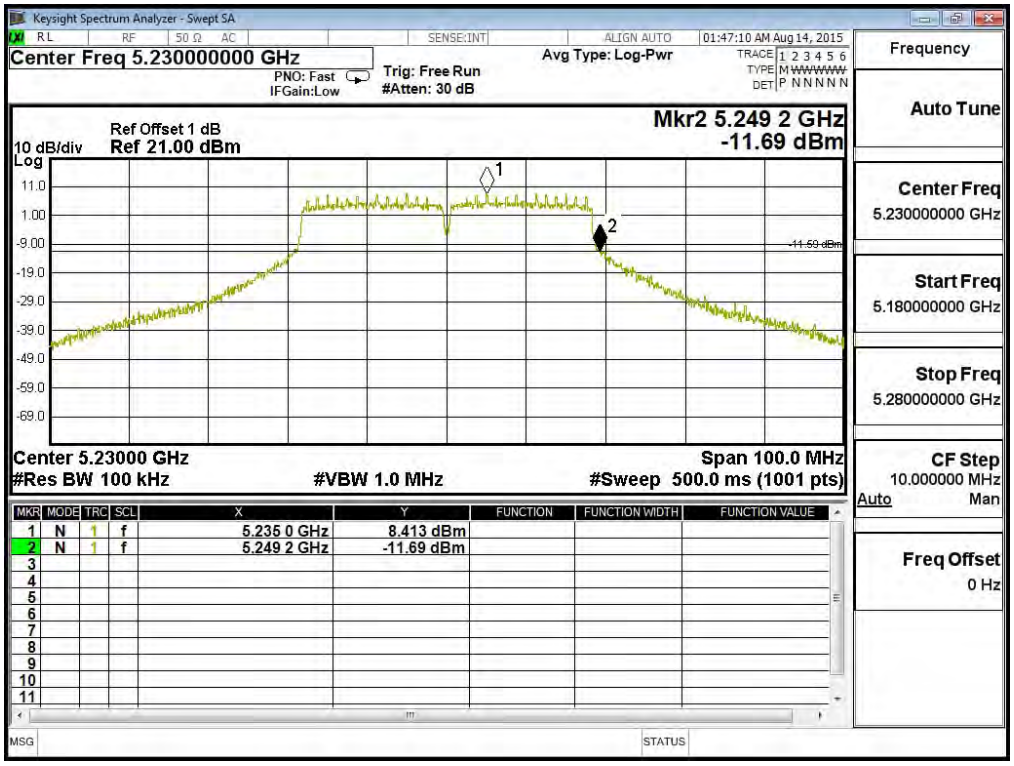
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 11: Transmit (802.11n-40BW_30Mbps)(5G Band)(Omni Antenna)-Channel 46

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5230	5249.20	<5250	PASS

NOTE: Accordance with 15.215 requirement.

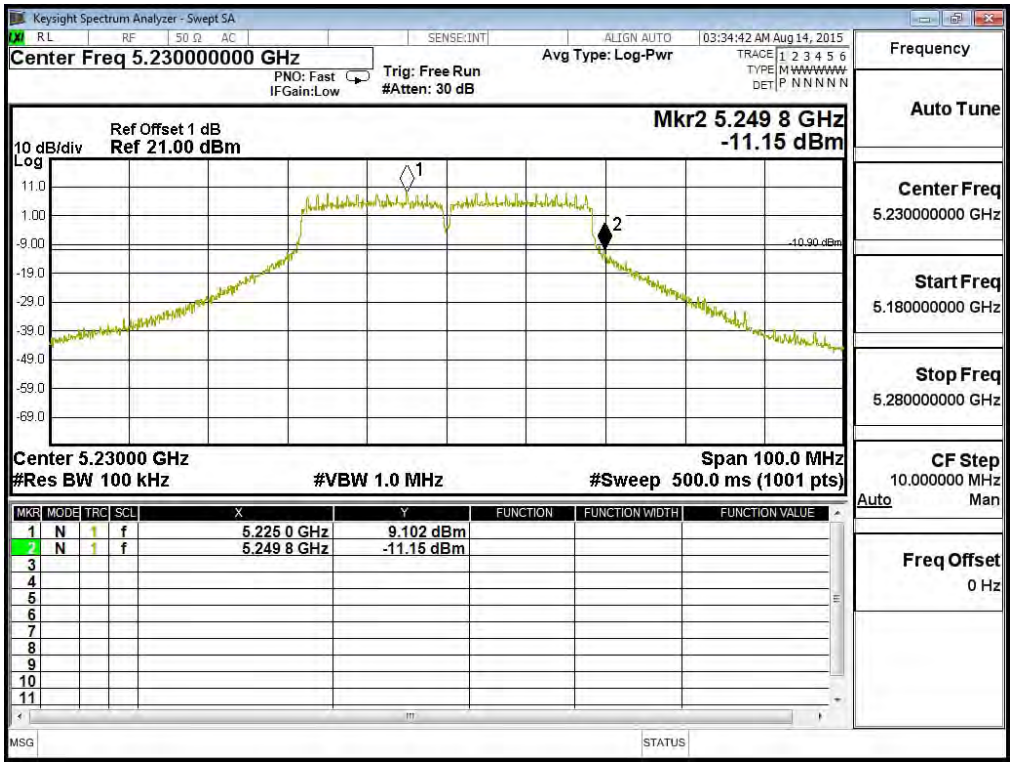


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 11: Transmit (802.11n-40BW_30Mbps)(5G Band)(Omni Antenna)-Channel 46

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5230	5249.80	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 12: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Omni Antenna)-Channel 42

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
42 (Peak)	5134.638	35.221	30.799	66.020	83.54	63.540	Pass
42 (Peak)	5150.000	35.135	30.019	65.154	83.54	63.540	Pass
42 (Peak)	5191.159	34.901	55.037	89.937	--	--	--
42 (Average)	5150.000	35.135	16.998	52.133	83.54	63.540	Pass
42 (Average)	5192.174	34.893	41.199	76.092	--	--	--

Figure Channel 42: Horizontal (Peak)

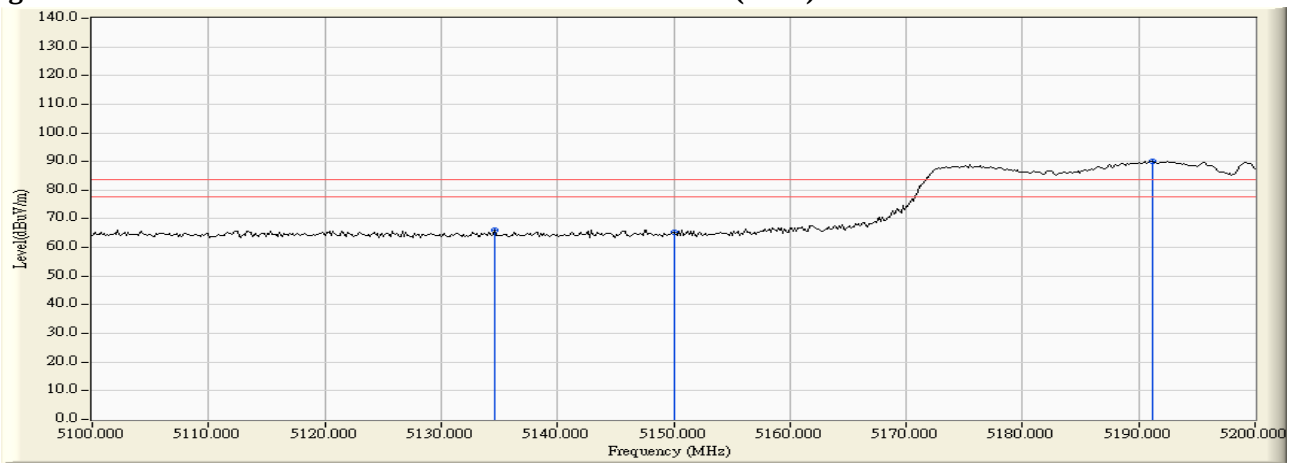
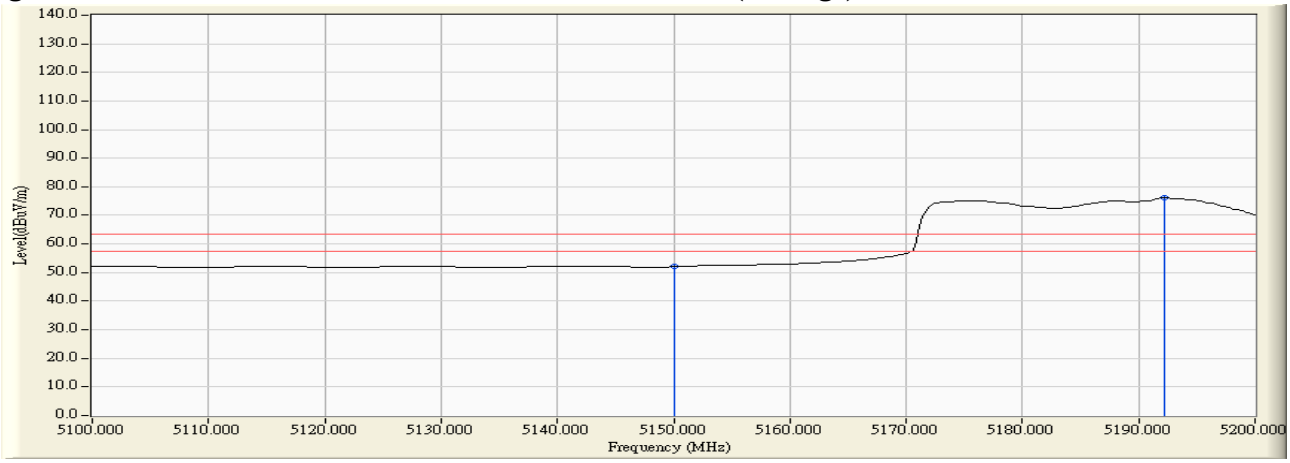


Figure Channel 42: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 12: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Omni Antenna)-Channel 42

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
42 (Peak)	5148.406	37.054	43.038	80.092	83.54	63.540	Pass
42 (Peak)	5150.000	37.055	41.168	78.223	83.54	63.540	Pass
42 (Peak)	5198.841	37.074	79.001	116.076	--	--	--
42 (Average)	5148.841	37.054	25.319	62.373	83.54	63.540	Pass
42 (Average)	5150.000	37.055	25.042	62.097	83.54	63.540	Pass
42 (Average)	5184.928	37.076	60.929	98.006	--	--	--

Figure Channel 42: Vertical (Peak)

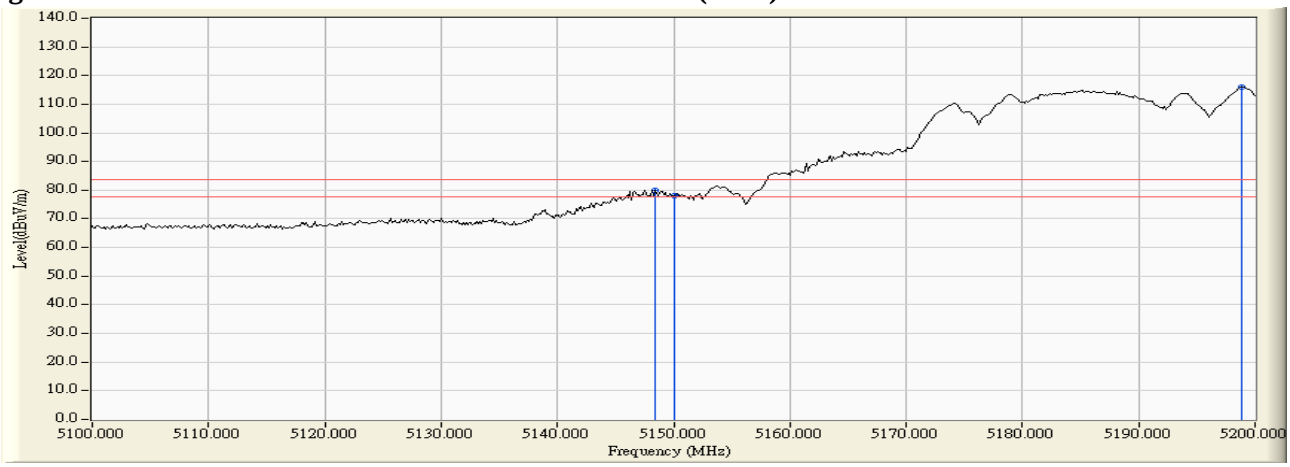
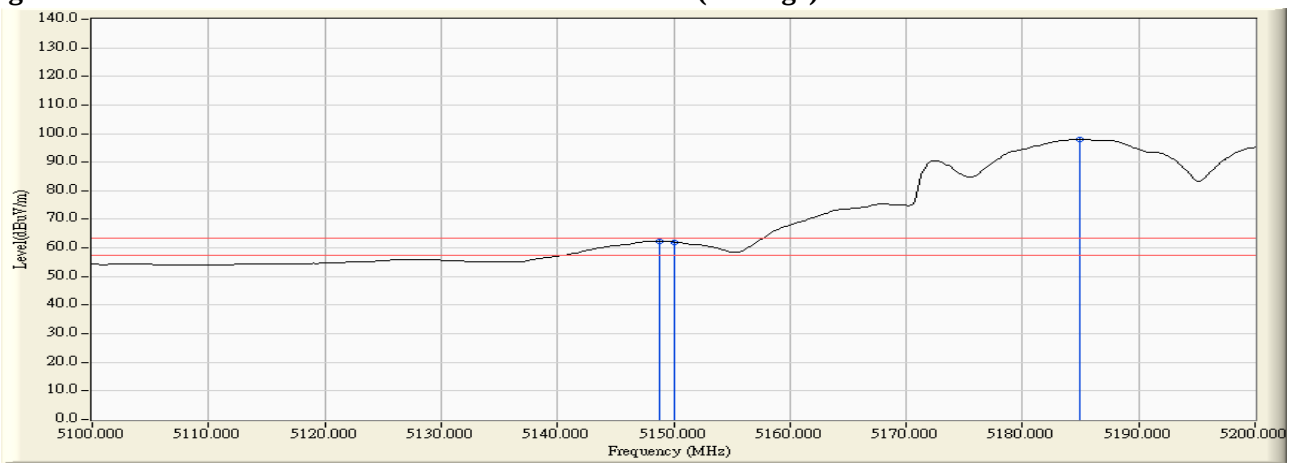


Figure Channel 42: Vertical (Average)



Note:

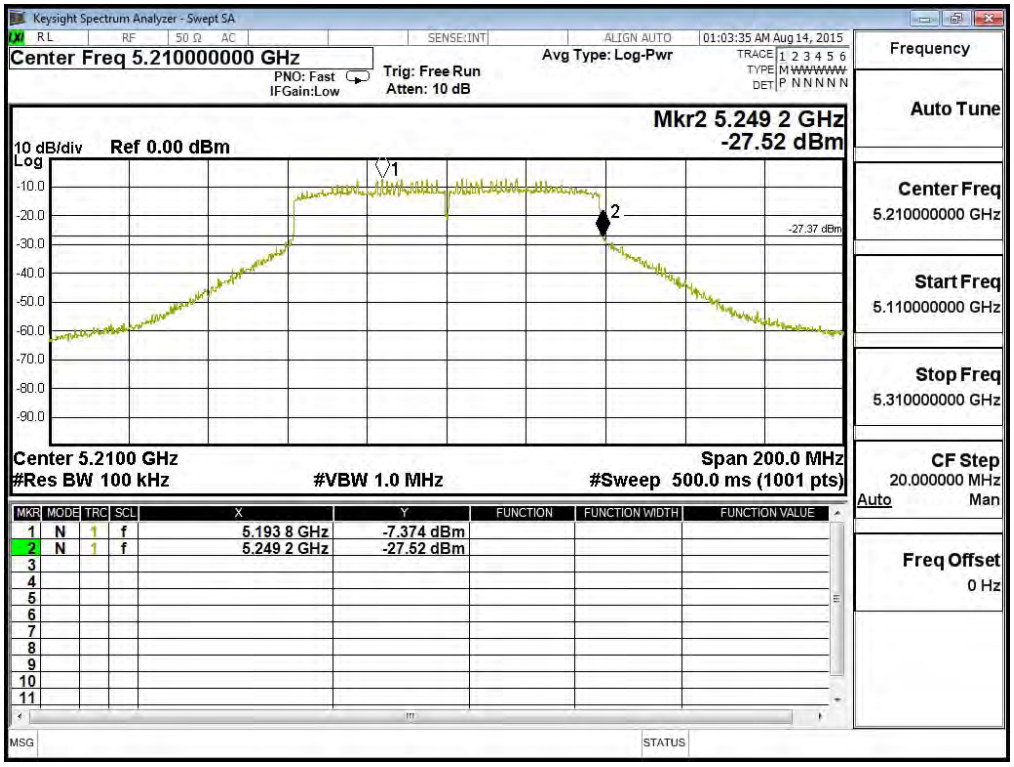
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 12: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Omni Antenna)-Channel 42

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5210	5249.20	<5250	PASS

NOTE: Accordance with 15.215 requirement.

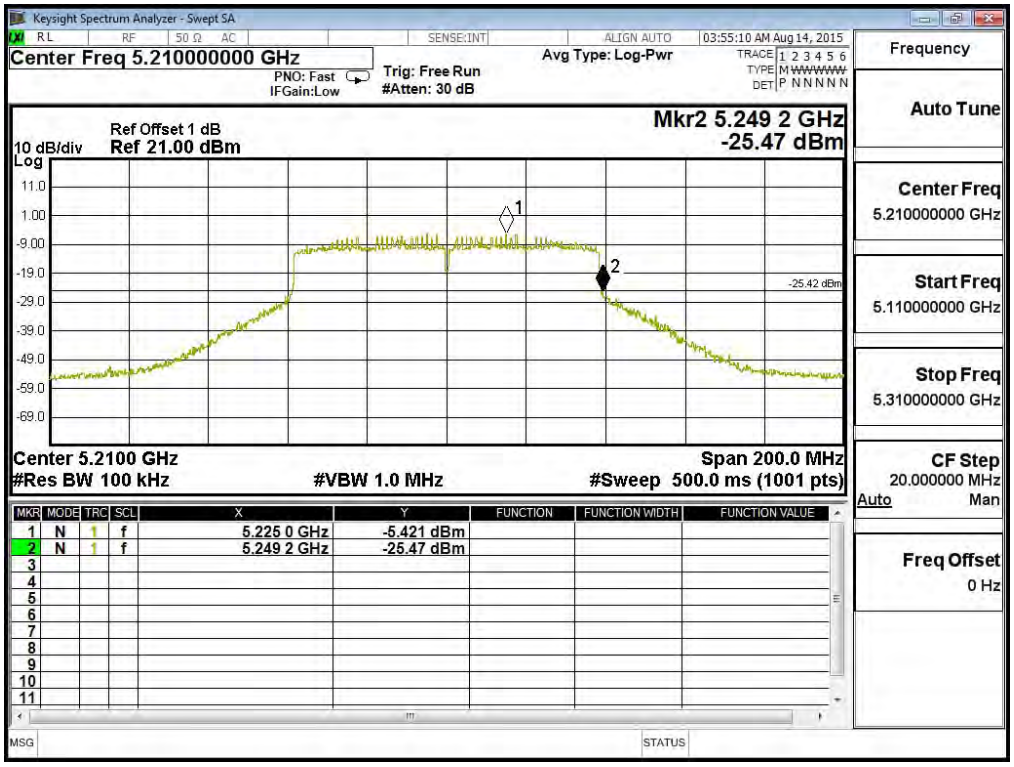


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 12: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Omni Antenna)-Channel 42

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5210	5249.20	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 13: Transmit (802.11a_6Mbps)(Panel Antenna)-Channel 36

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5150.000	35.135	43.123	78.258	83.54	63.540	Pass
36 (Peak)	5176.522	34.986	90.245	125.231	--	--	--
36 (Average)	5150.000	35.135	21.108	56.243	83.54	63.540	Pass
36 (Average)	5177.247	34.981	77.266	112.248	--	--	--

Figure Channel 36: Horizontal (Peak)

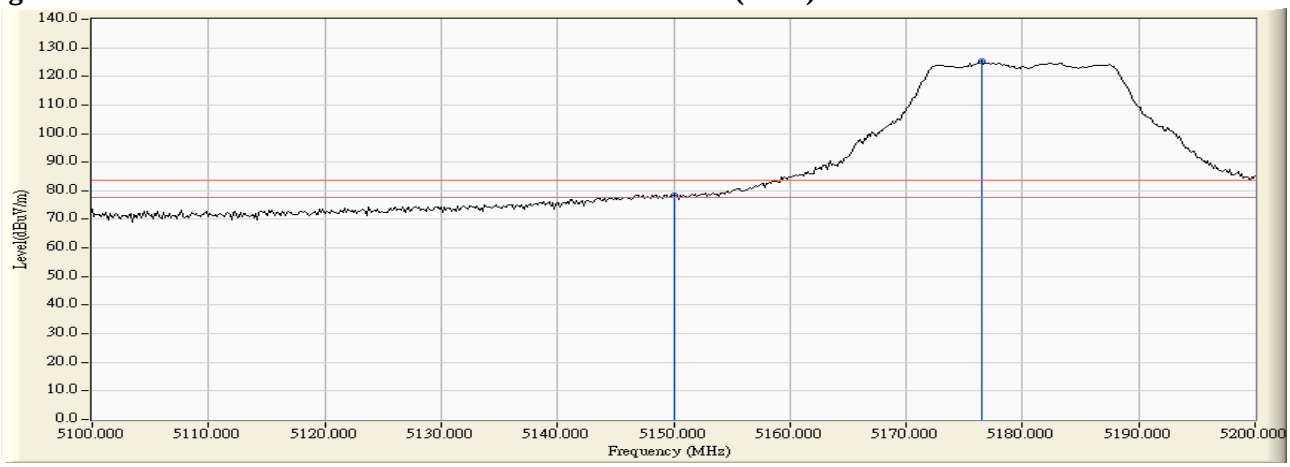
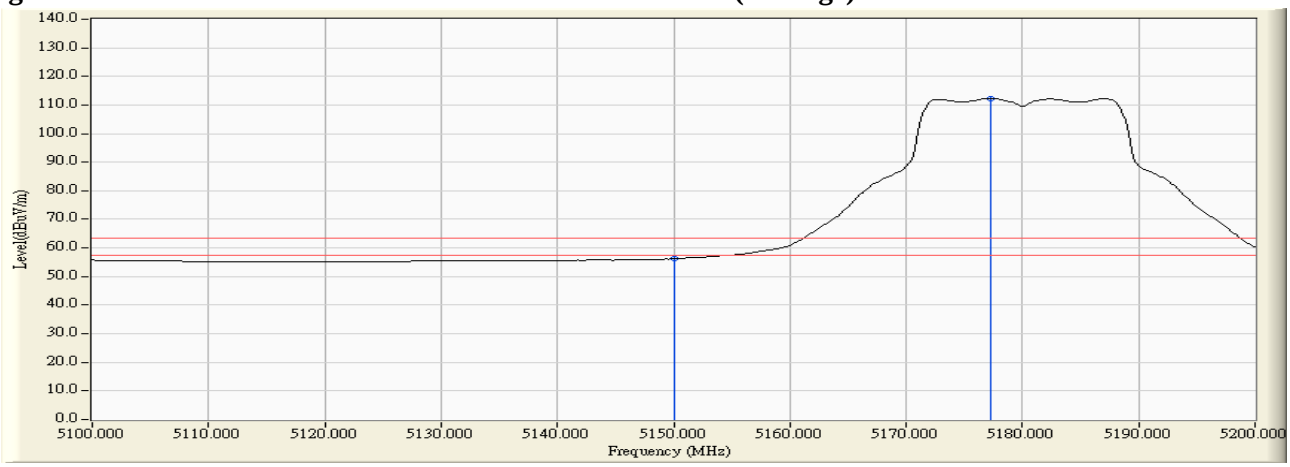


Figure Channel 36: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 13: Transmit (802.11a_6Mbps)(Panel Antenna)-Channel 36

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5148.985	37.054	45.880	82.934	83.54	63.540	Pass
36 (Peak)	5150.000	37.055	44.800	81.855	83.54	63.540	Pass
36 (Peak)	5176.522	37.072	92.906	129.978	--	--	--
36 (Average)	5150.000	37.055	22.513	59.568	83.54	63.540	Pass
36 (Average)	5177.391	37.072	79.221	116.293	--	--	--

Figure Channel 36: Vertical (Peak)

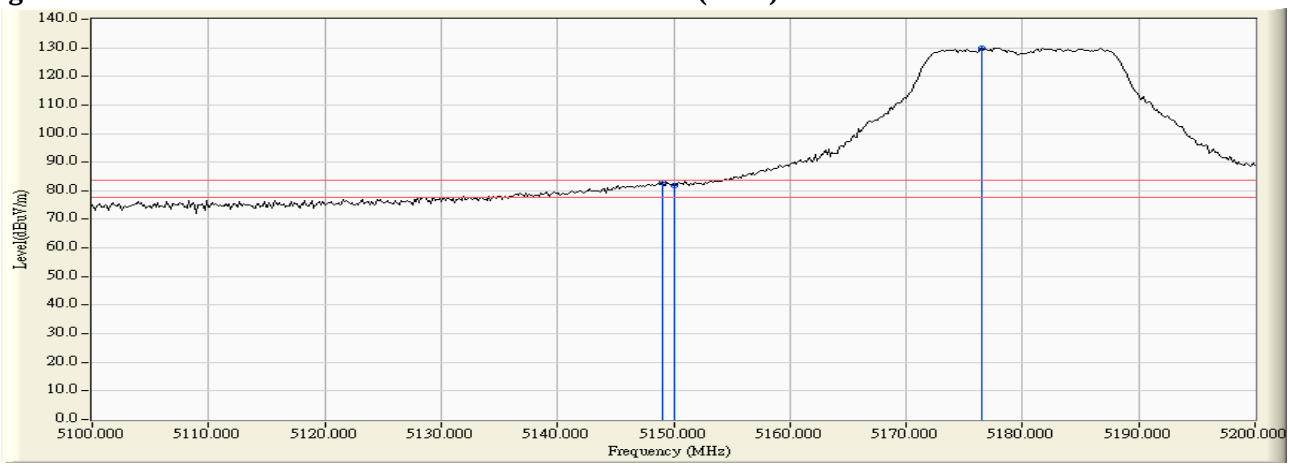
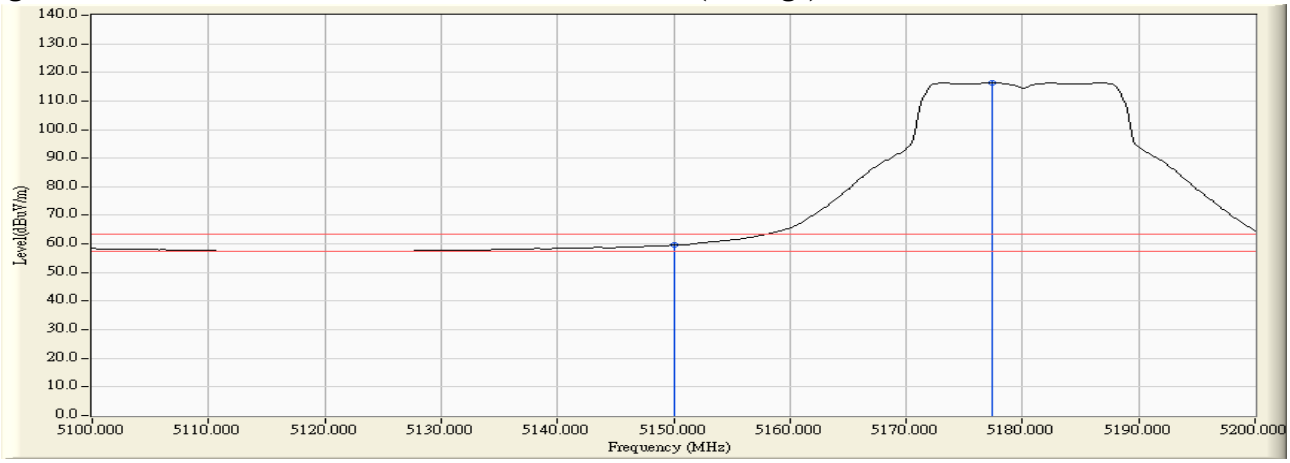


Figure Channel 36: Vertical (Average)



Note:

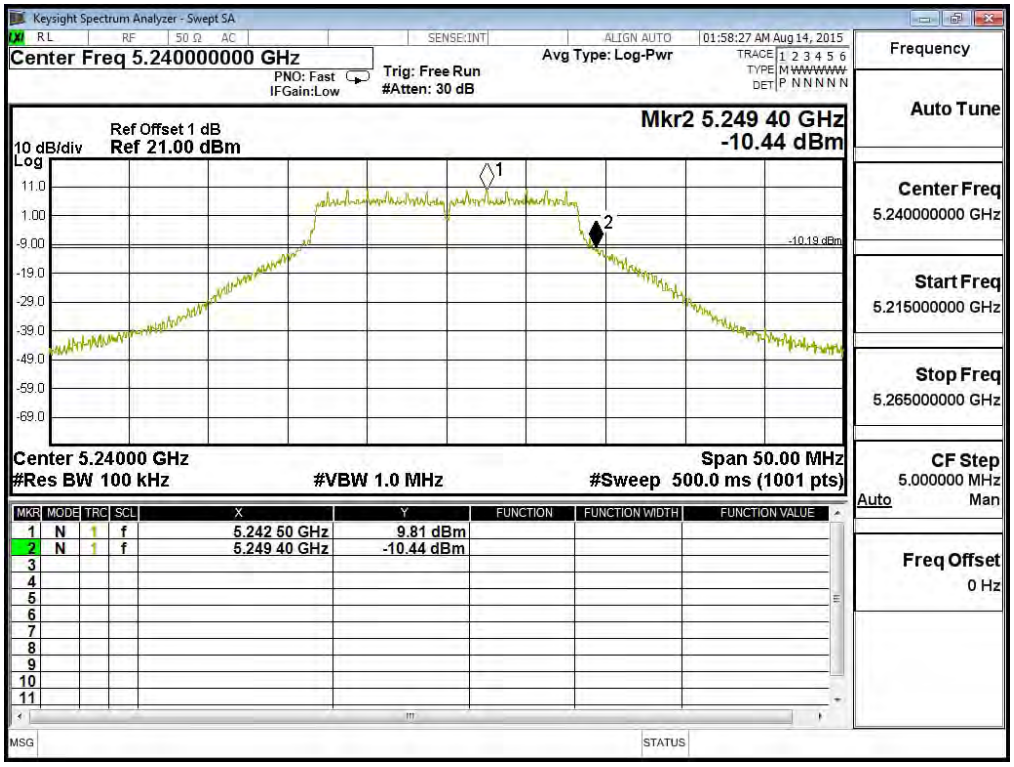
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 13: Transmit (802.11a_6Mbps)(Panel Antenna)-Channel 48

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.40	<5250	PASS

NOTE: Accordance with 15.215 requirement.

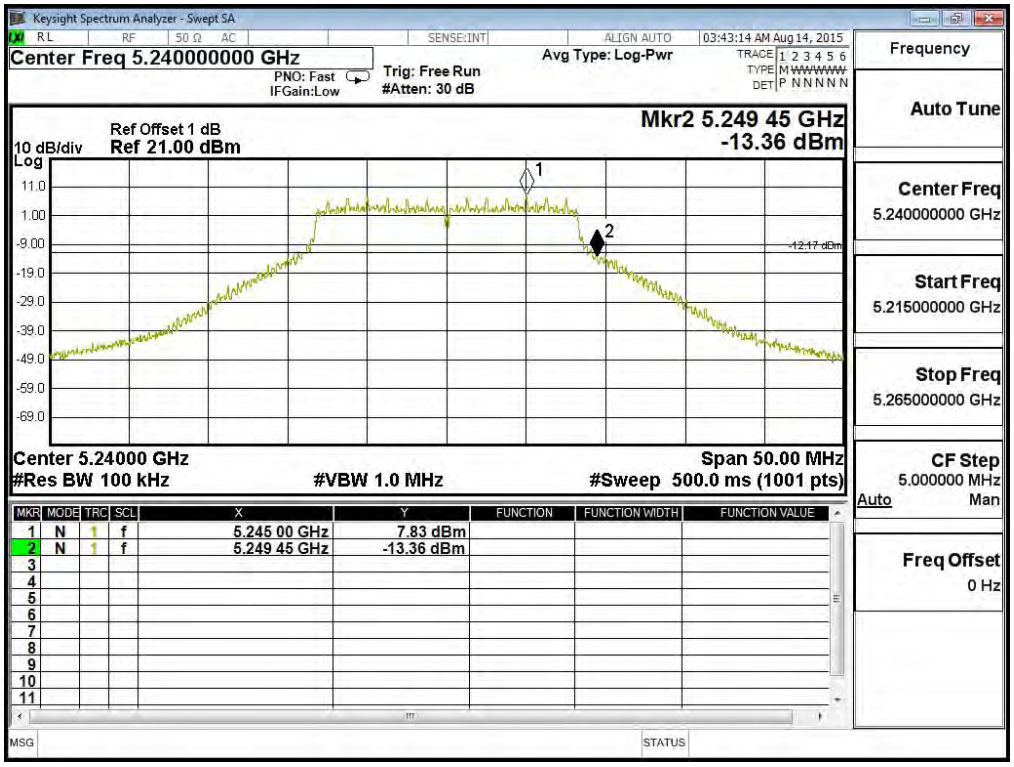


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 13: Transmit (802.11a_6Mbps)(Panel Antenna)-Channel 48

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.45	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 14: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Panel Antenna)-Channel 36

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5150.000	35.135	43.552	78.687	83.54	63.540	Pass
36 (Peak)	5186.232	34.932	89.362	124.293	--	--	--
36 (Average)	5150.000	35.135	20.441	55.576	83.54	63.540	Pass
36 (Average)	5186.957	34.927	76.840	111.767	--	--	--

Figure Channel 36: Horizontal (Peak)

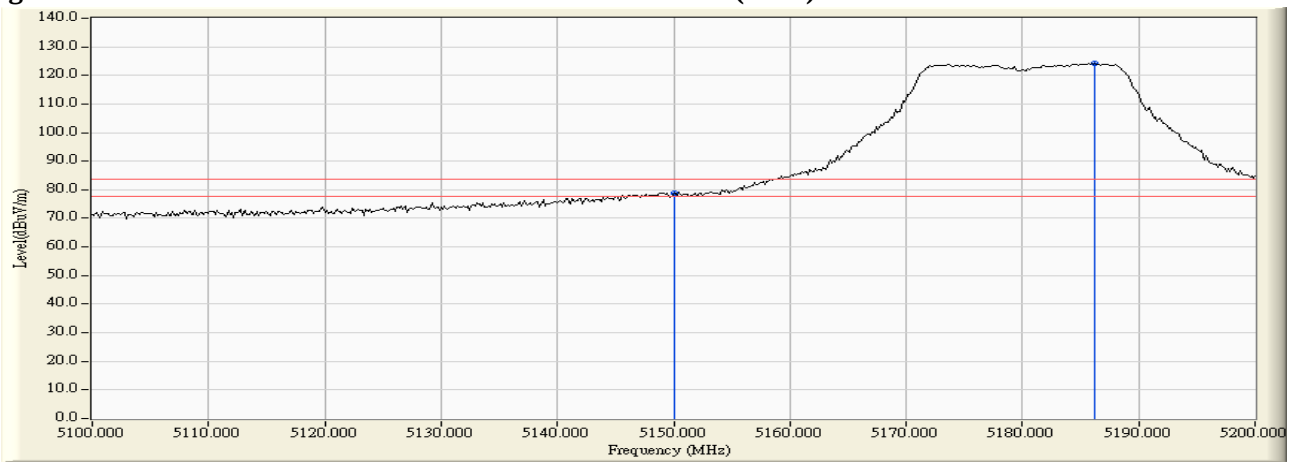
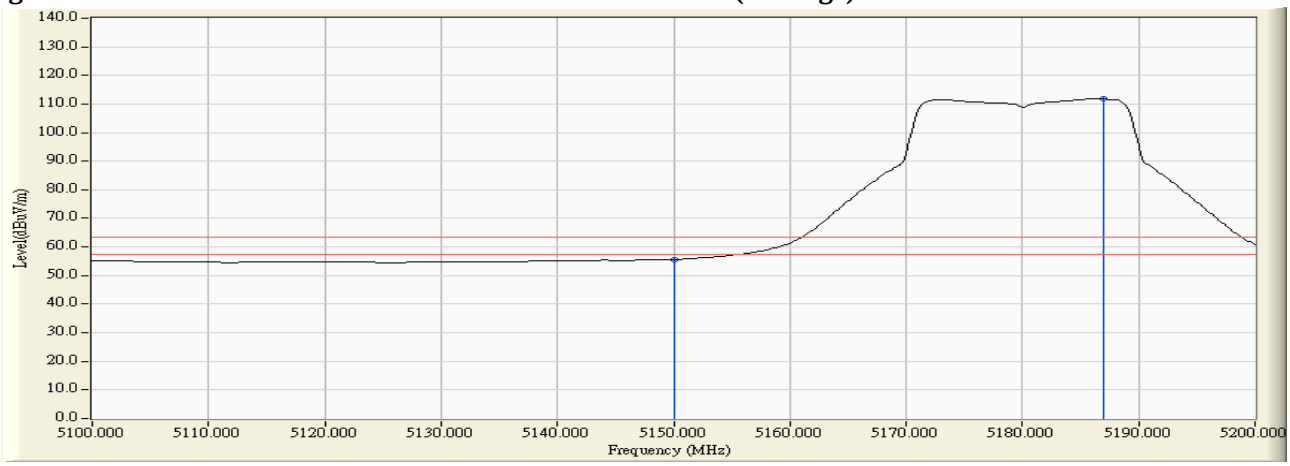


Figure Channel 36: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 14: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Panel Antenna)-Channel 36

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5148.985	37.054	45.827	82.881	83.54	63.540	Pass
36 (Peak)	5150.000	37.055	45.418	82.473	83.54	63.540	Pass
36 (Peak)	5179.130	37.073	92.455	129.528	--	--	--
36 (Average)	5150.000	37.055	22.535	59.590	83.54	63.540	Pass
36 (Average)	5177.681	37.072	78.862	115.934	--	--	--

Figure Channel 36: Vertical (Peak)

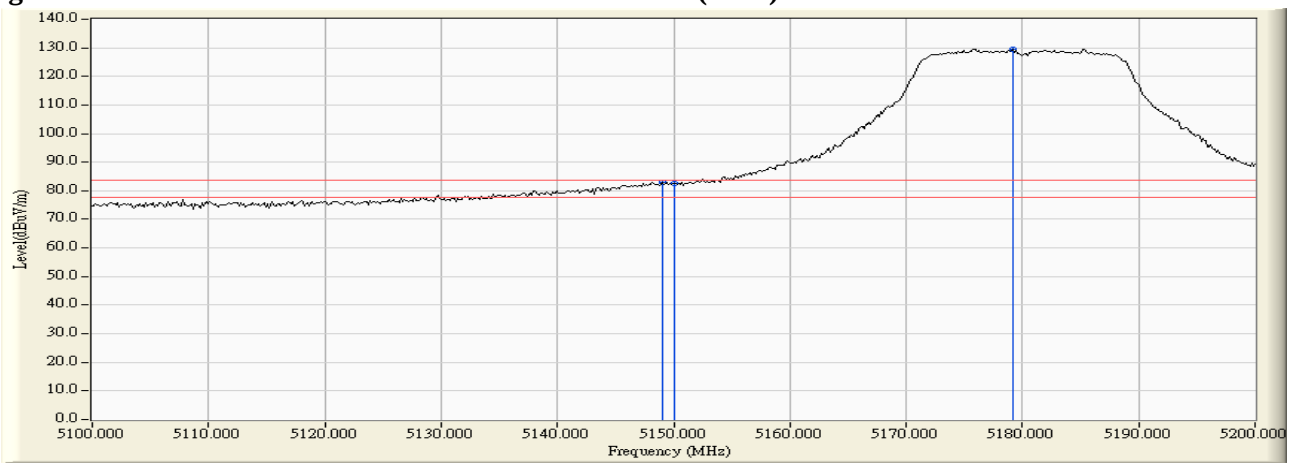
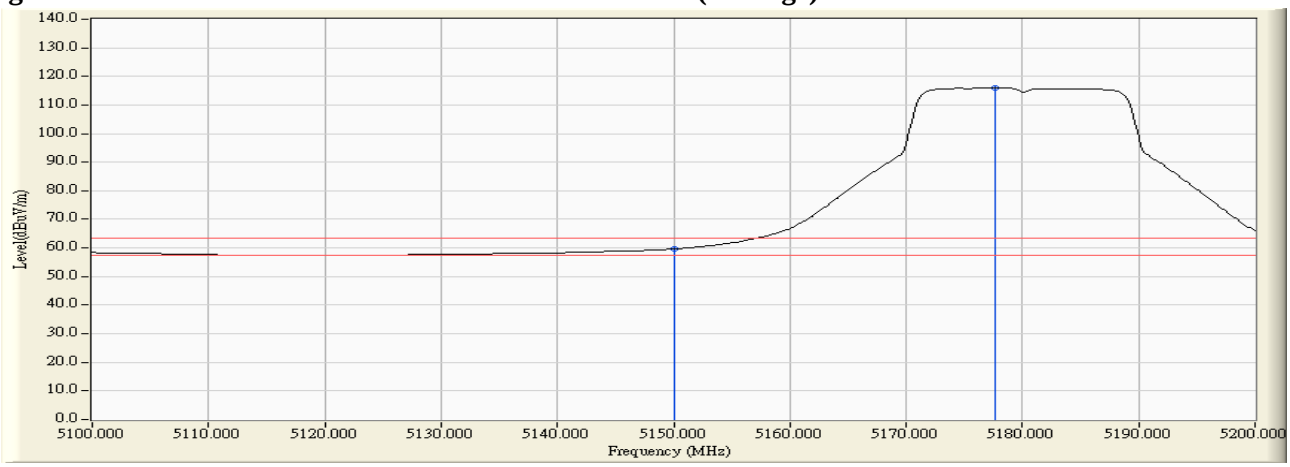


Figure Channel 36: Vertical (Average)



Note:

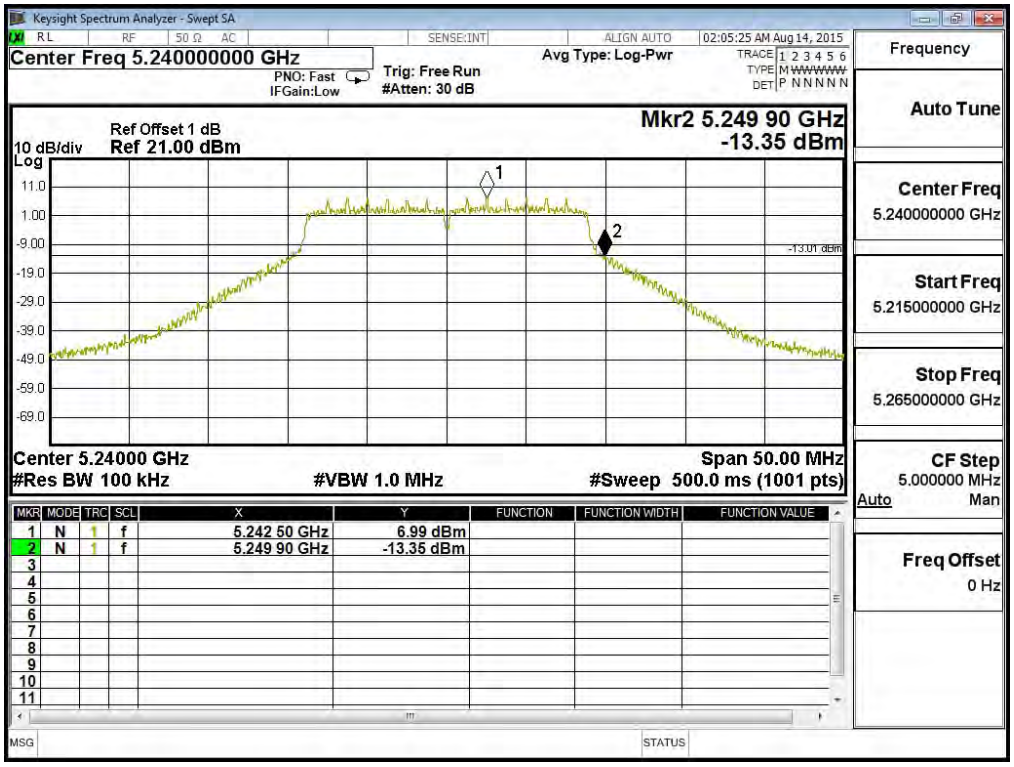
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 14: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Panel Antenna)-Channel 48

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.90	<5250	PASS

NOTE: Accordance with 15.215 requirement.

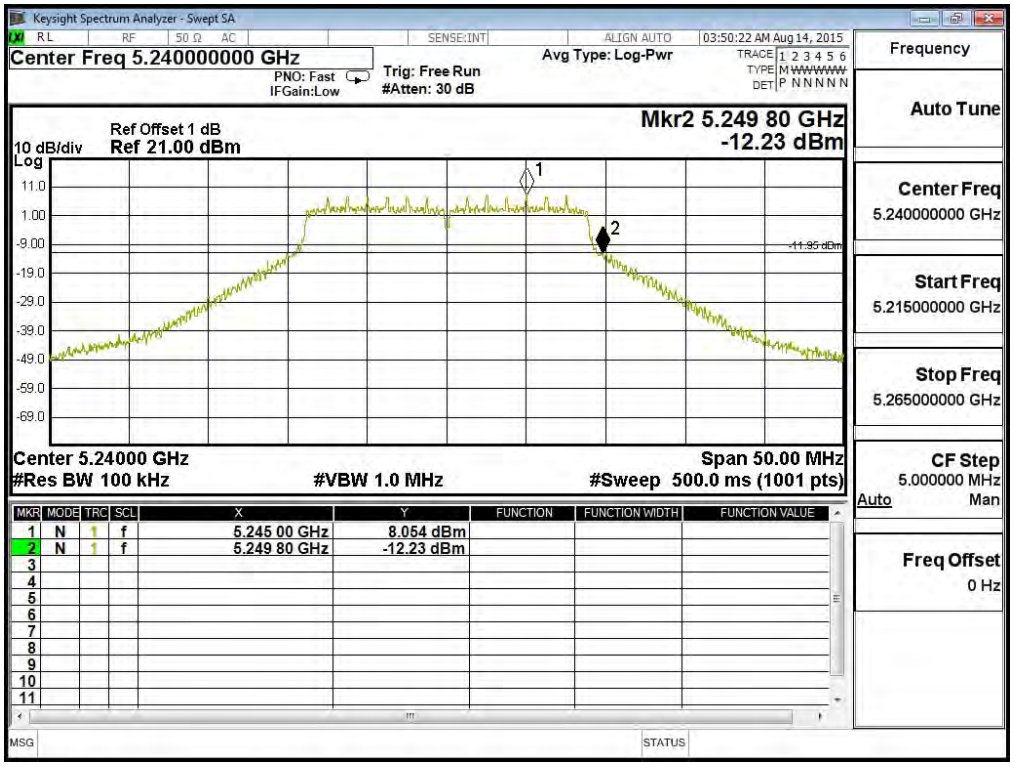


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 14: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Panel Antenna)-Channel 48

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.80	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 15: Transmit (802.11n-40BW_30Mbps)(5G Band)(Panel Antenna)-Channel 38

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
38 (Peak)	5150.000	35.135	37.021	72.156	83.54	63.540	Pass
38 (Peak)	5186.087	34.932	83.809	118.741	--	--	--
38 (Average)	5150.000	35.135	22.526	57.661	83.54	63.540	Pass
38 (Average)	5187.681	34.923	69.801	104.724	--	--	--

Figure Channel 38: Horizontal (Peak)

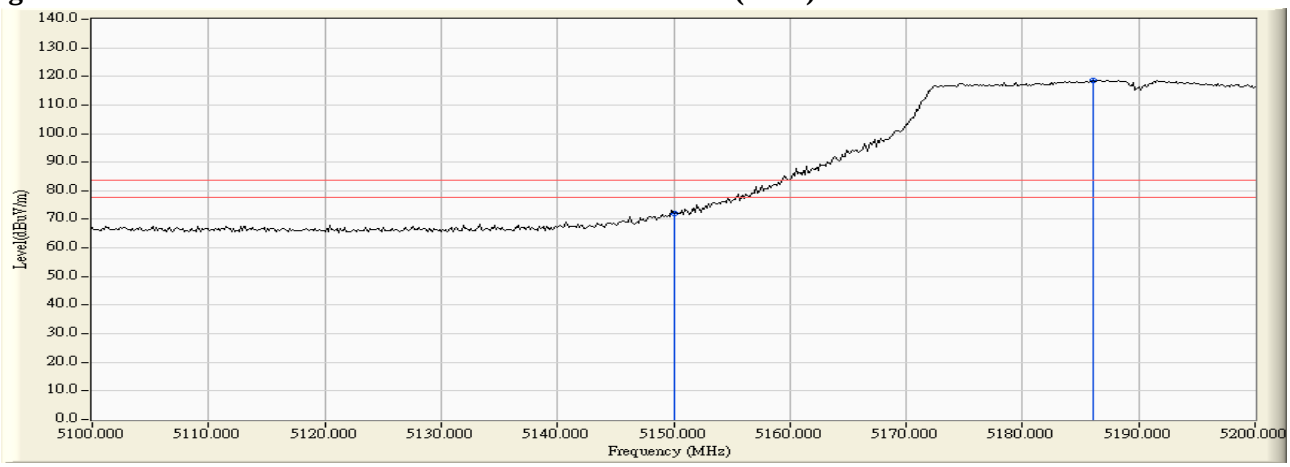
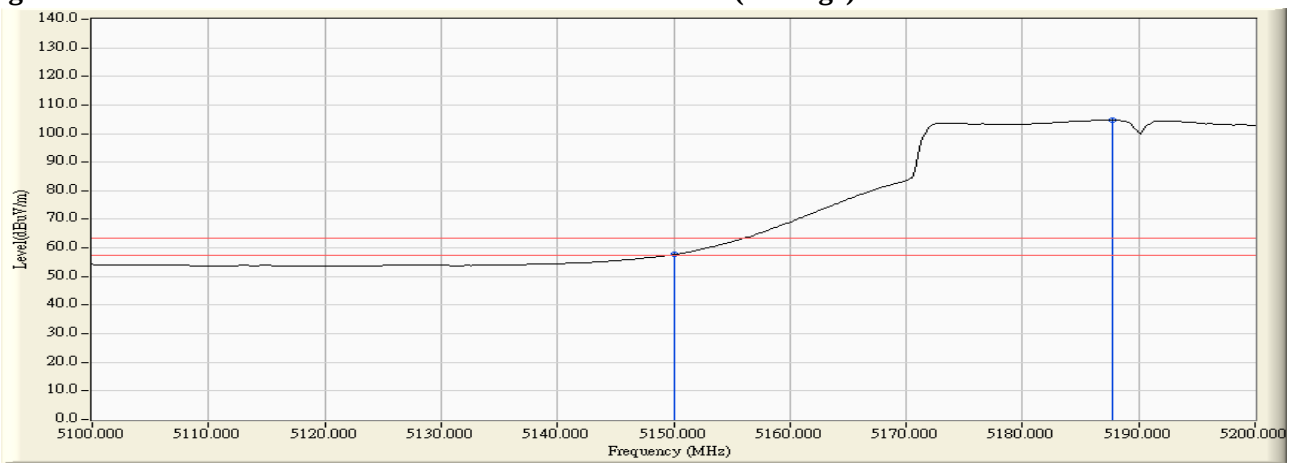


Figure Channel 38: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 15: Transmit (802.11n-40BW_30Mbps)(5G Band)(Panel Antenna)-Channel 38

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
38 (Peak)	5150.000	37.055	39.576	76.631	83.54	63.540	Pass
38 (Peak)	5179.420	37.073	87.006	124.079	--	--	--
38 (Average)	5150.000	37.055	25.019	62.074	83.54	63.540	Pass
38 (Average)	5185.507	37.077	72.057	109.134	--	--	--

Figure Channel 38: Vertical (Peak)

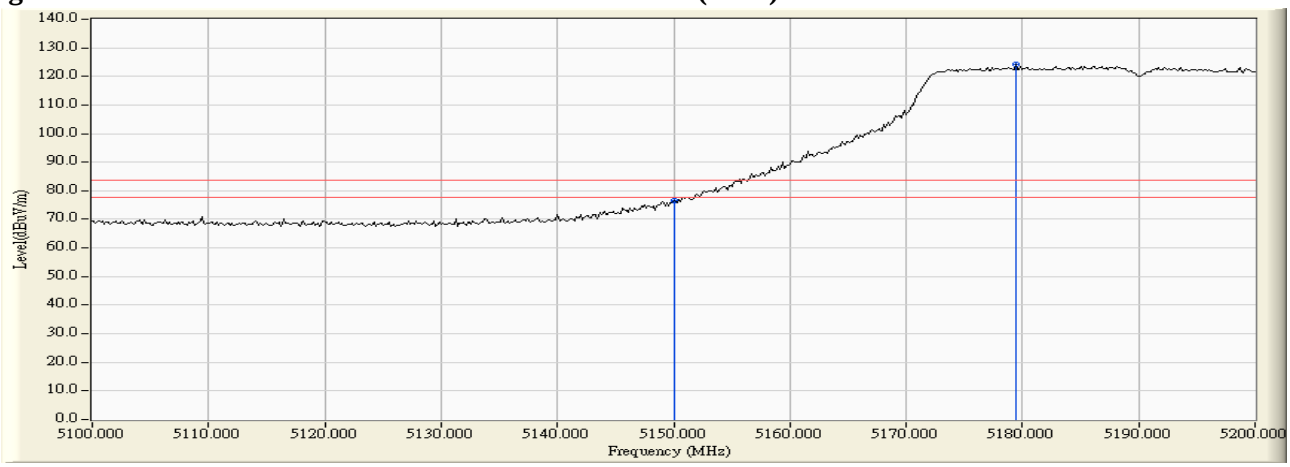
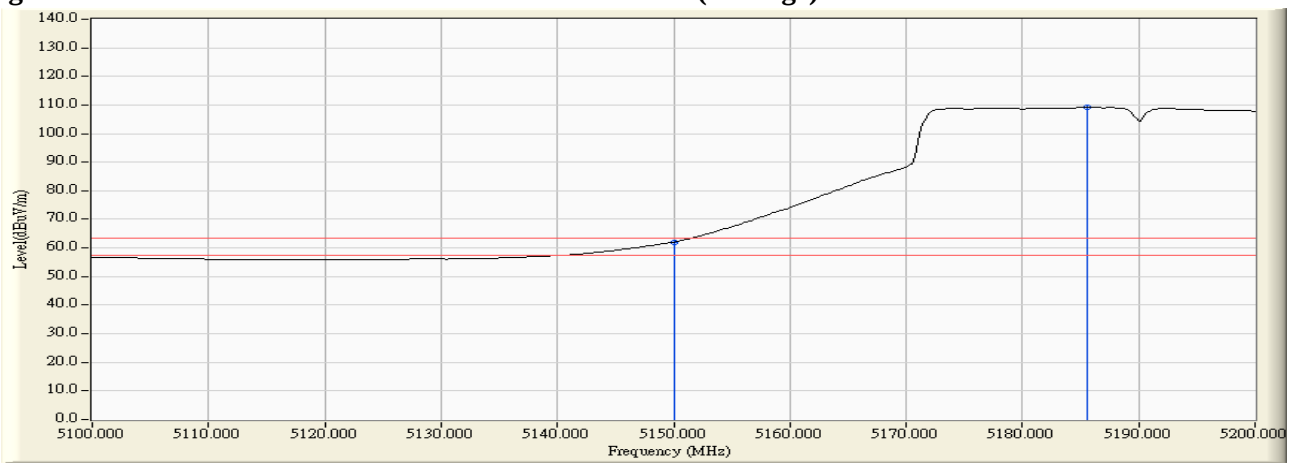


Figure Channel 38: Vertical (Average)



Note:

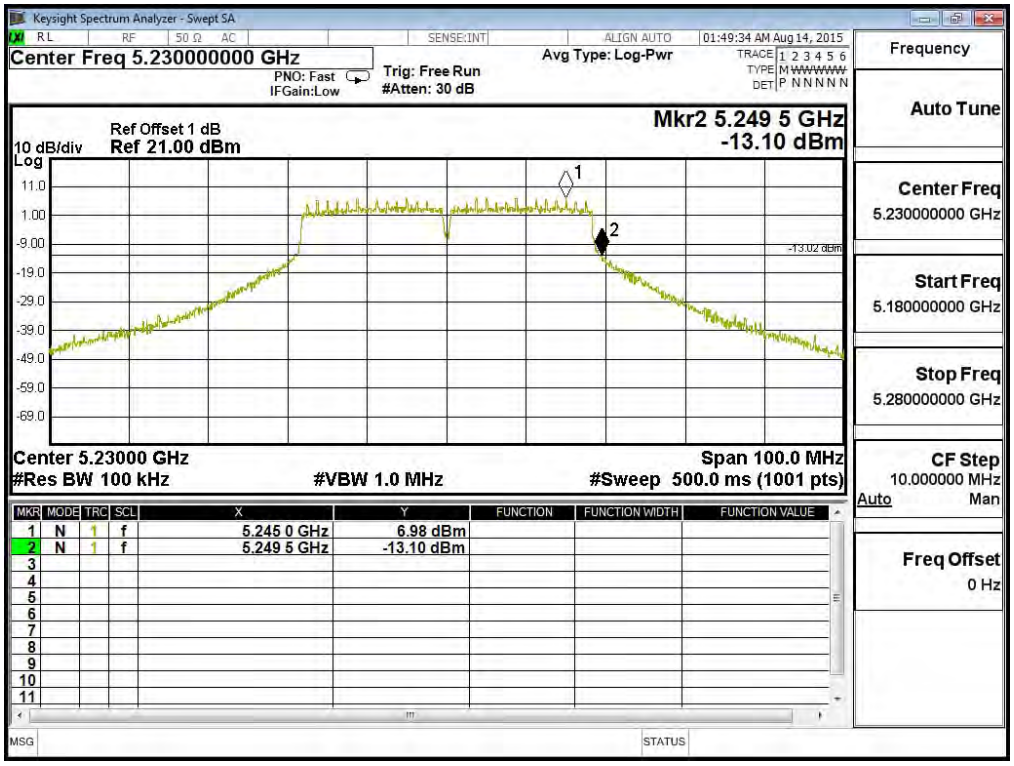
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 15: Transmit (802.11n-40BW_30Mbps)(5G Band)(Panel Antenna)-Channel 46

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5230	5249.50	<5250	PASS

NOTE: Accordance with 15.215 requirement.

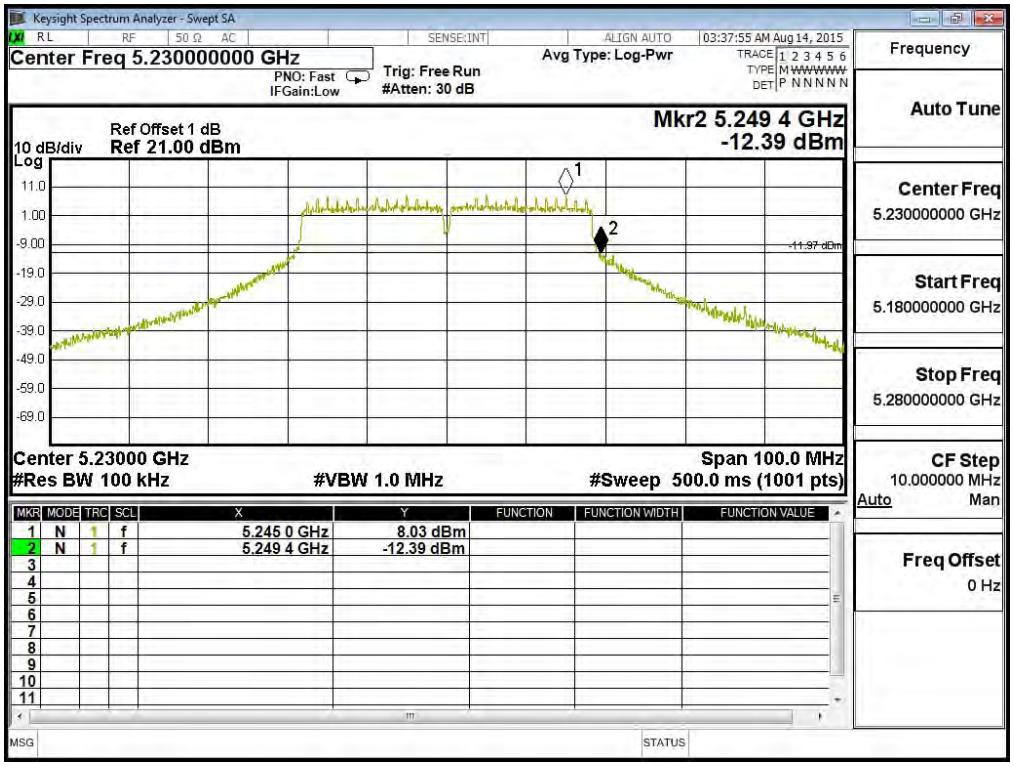


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 15: Transmit (802.11n-40BW_30Mbps)(5G Band)(Panel Antenna)-Channel 46

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5230	5249.40	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 16: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Panel Antenna)-Channel 42

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
42 (Peak)	5150.000	35.135	39.327	74.462	83.54	63.540	Pass
42 (Peak)	5199.130	34.849	74.436	109.285	--	--	--
42 (Average)	5150.000	35.135	23.303	58.438	83.54	63.540	Pass
42 (Average)	5187.536	34.925	57.276	92.200	--	--	--

Figure Channel 42: Horizontal (Peak)

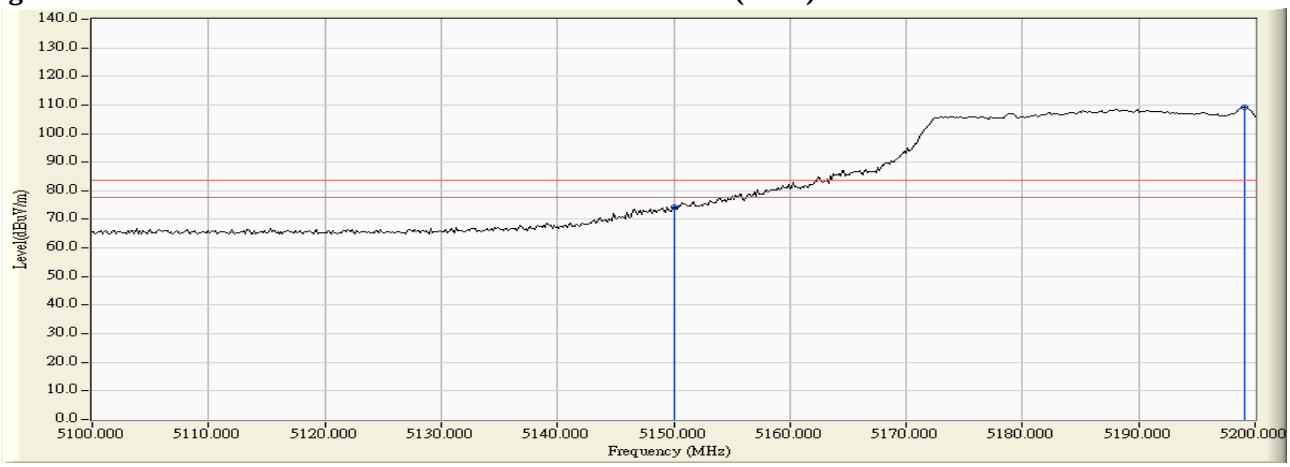
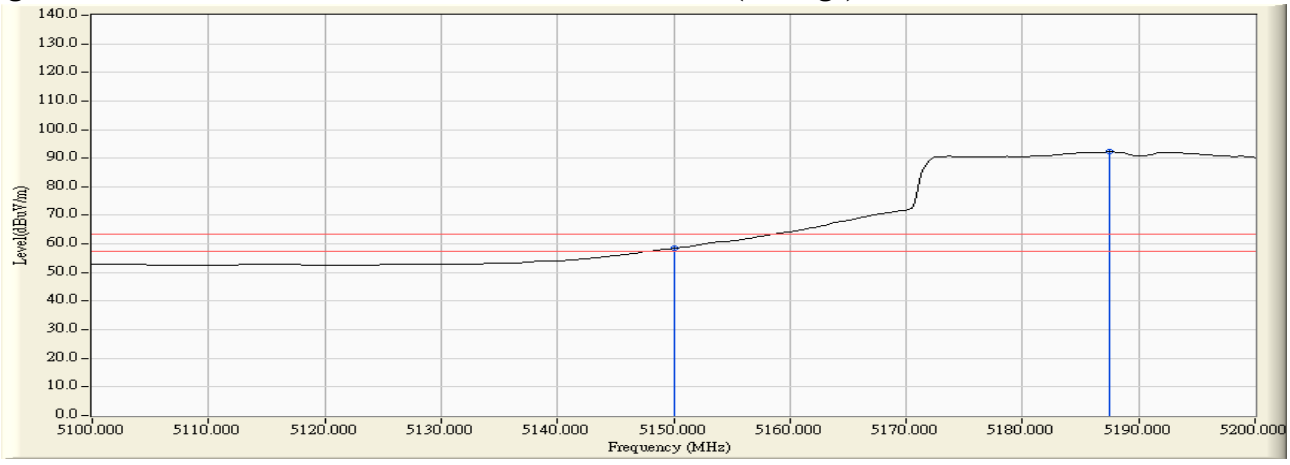


Figure Channel 42: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 16: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Panel Antenna)-Channel 42

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
42 (Peak)	5146.667	37.052	42.609	79.662	83.54	63.540	Pass
42 (Peak)	5150.000	37.055	41.537	78.592	83.54	63.540	Pass
42 (Peak)	5198.985	37.075	76.435	113.510	--	--	--
42 (Average)	5150.000	37.055	25.641	62.696	83.54	63.540	Pass
42 (Average)	5181.449	37.074	59.290	96.364	--	--	--

Figure Channel 42: Vertical (Peak)

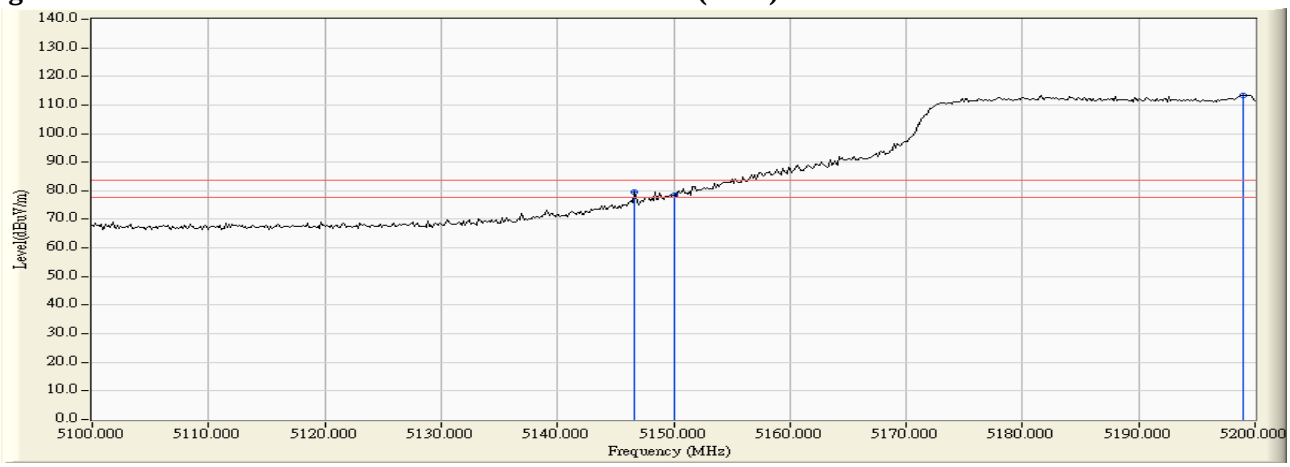
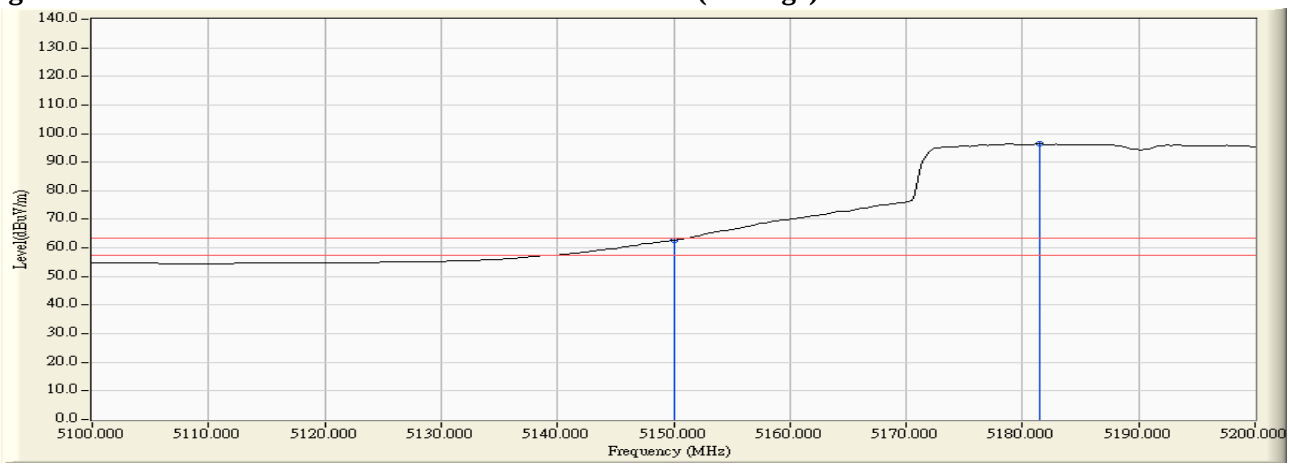


Figure Channel 42: Vertical (Average)



Note:

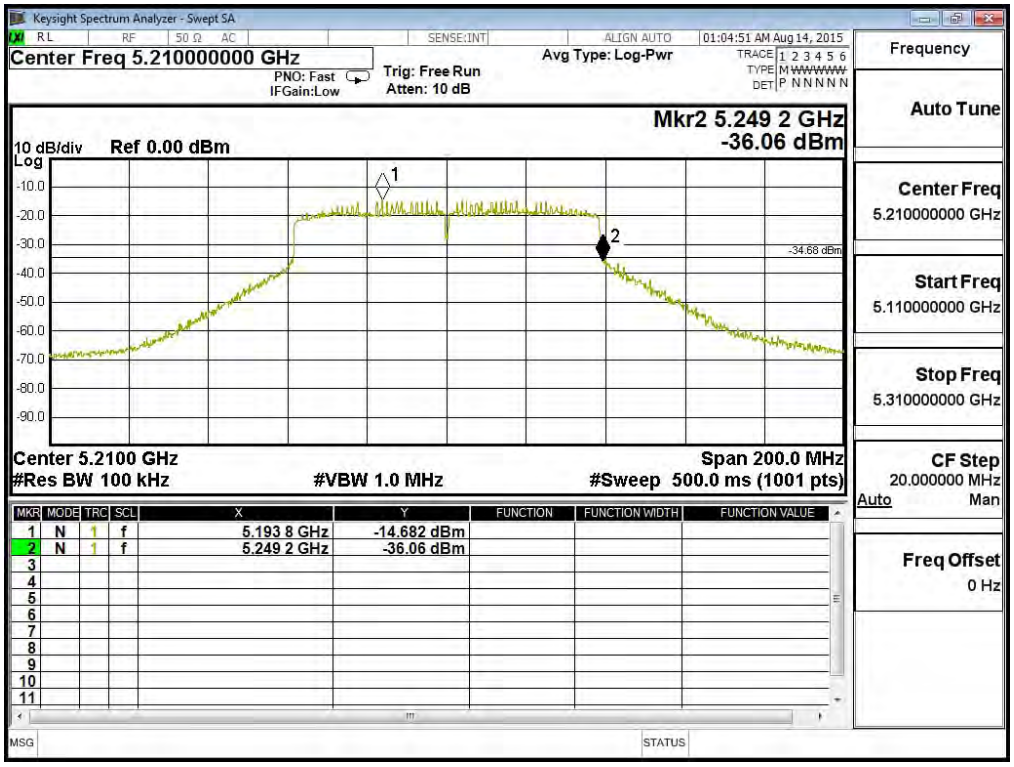
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 16: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Panel Antenna)-Channel 42

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5210	5249.20	<5250	PASS

NOTE: Accordance with 15.215 requirement.

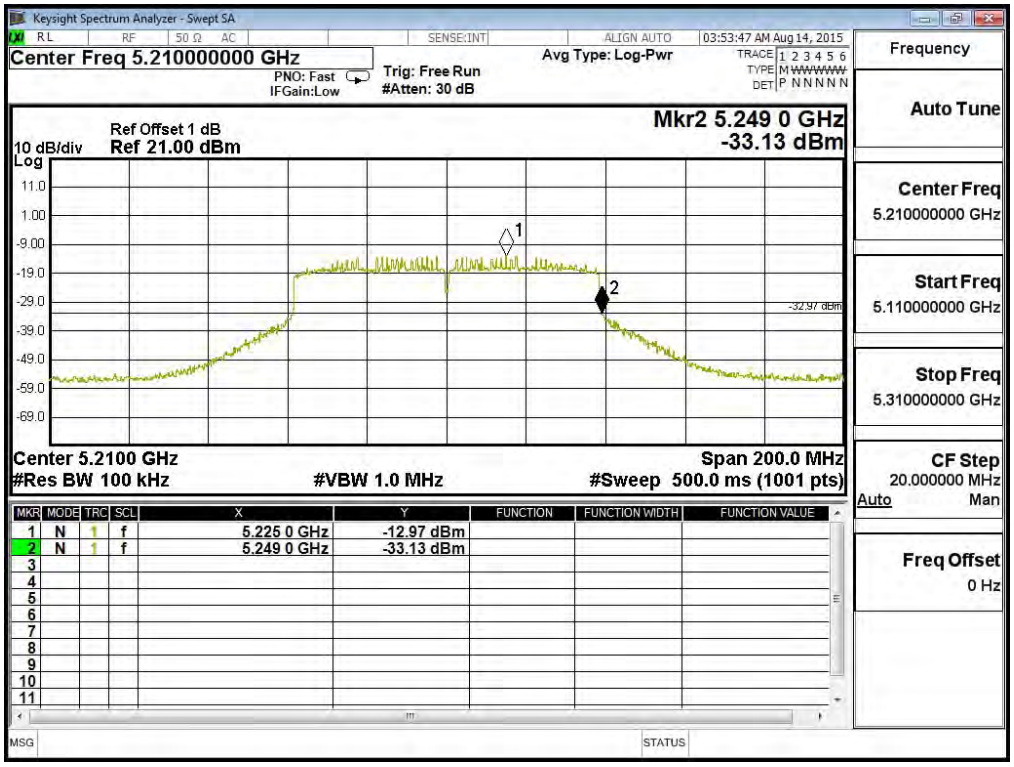


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 16: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Panel Antenna)-Channel 42

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5210	5249.00	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 17: Transmit (802.11a_6Mbps)(Sector Antenna)-Channel 36

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5150.000	35.135	41.323	76.458	83.54	63.540	Pass
36 (Peak)	5179.130	34.971	87.615	122.586	--	--	--
36 (Average)	5150.000	35.135	19.540	54.675	83.54	63.540	Pass
36 (Average)	5173.768	35.002	75.335	110.337	--	--	--

Figure Channel 36: Horizontal (Peak)

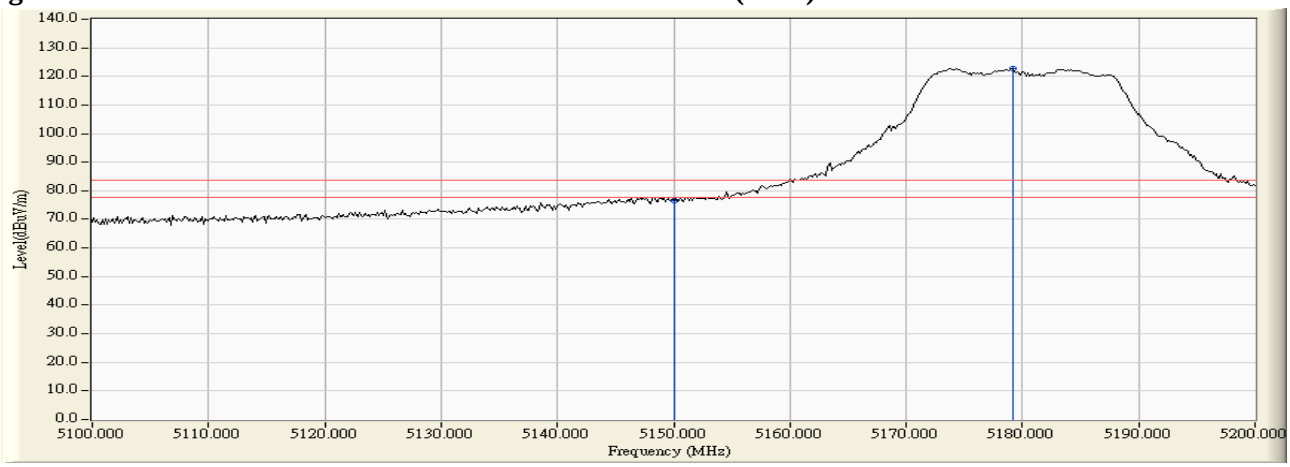
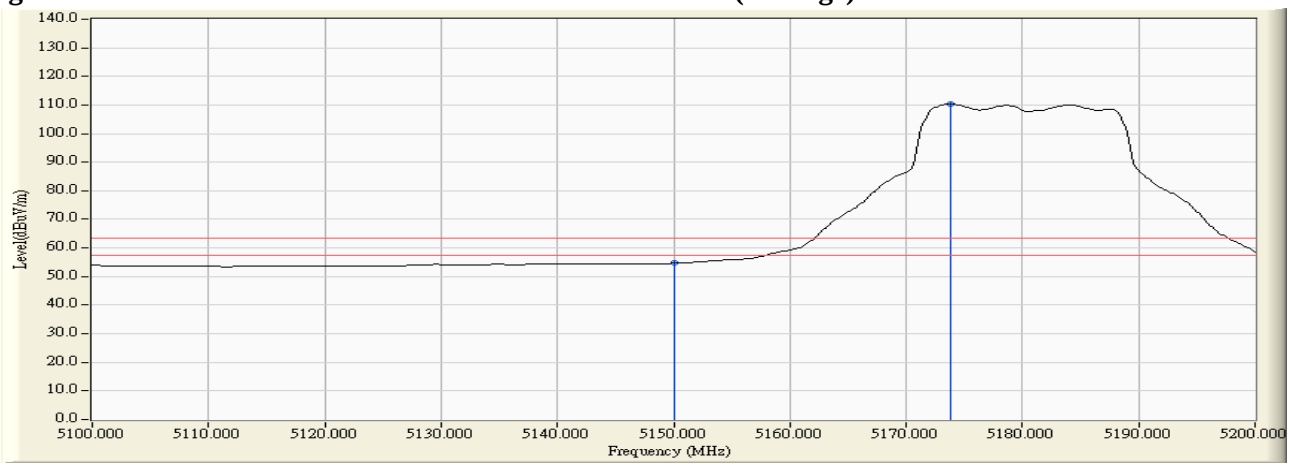


Figure Channel 36: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 17: Transmit (802.11a_6Mbps)(Sector Antenna)-Channel 36

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5148.261	37.053	46.119	83.173	83.54	63.540	Pass
36 (Peak)	5150.000	37.055	45.325	82.380	83.54	63.540	Pass
36 (Peak)	5182.609	37.075	93.327	130.402	--	--	--
36 (Average)	5150.000	37.055	21.634	58.689	83.54	63.540	Pass
36 (Average)	5185.942	37.077	79.425	116.503	--	--	--

Figure Channel 36: Vertical (Peak)

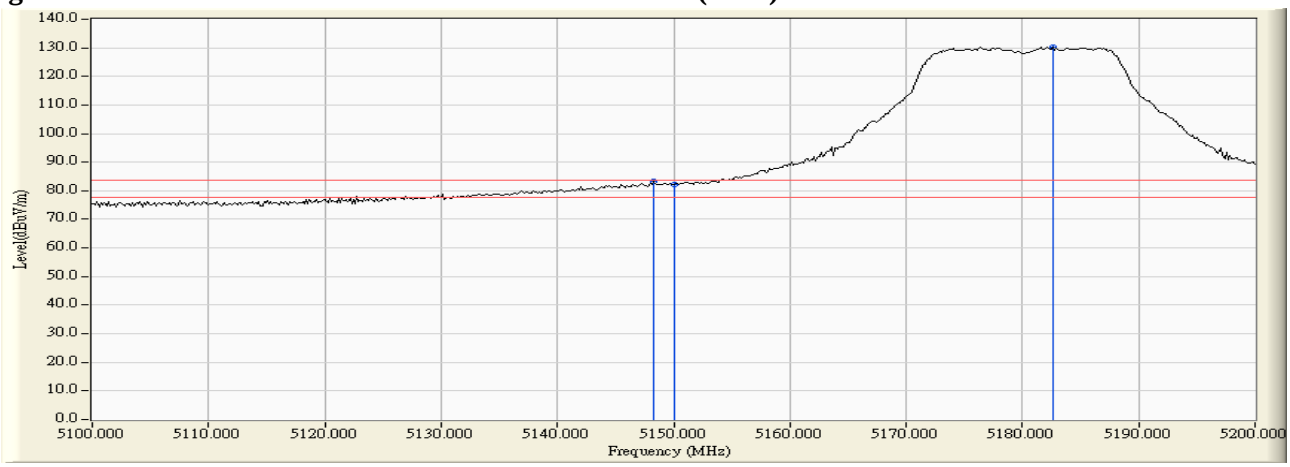
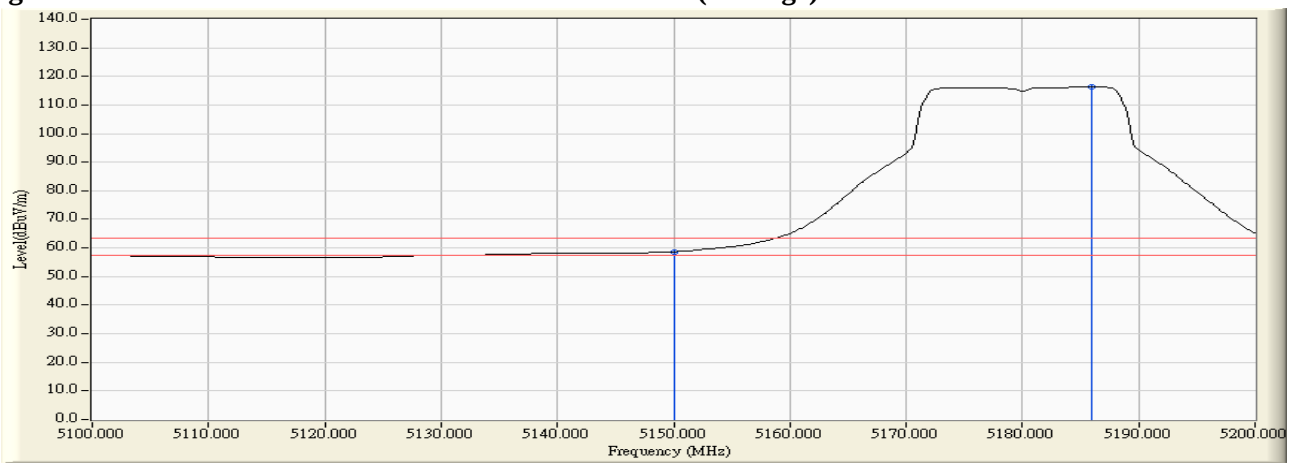


Figure Channel 36: Vertical (Average)



Note:

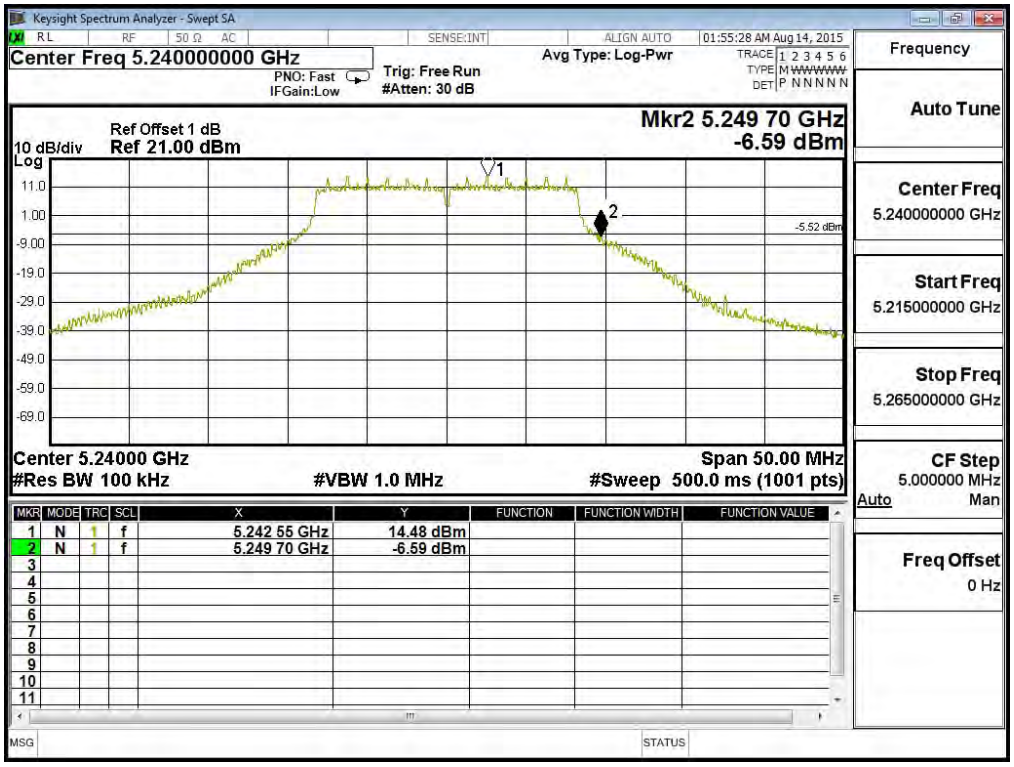
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 17: Transmit (802.11a_6Mbps)(Sector Antenna)-Channel 48

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.70	<5250	PASS

NOTE: Accordance with 15.215 requirement.

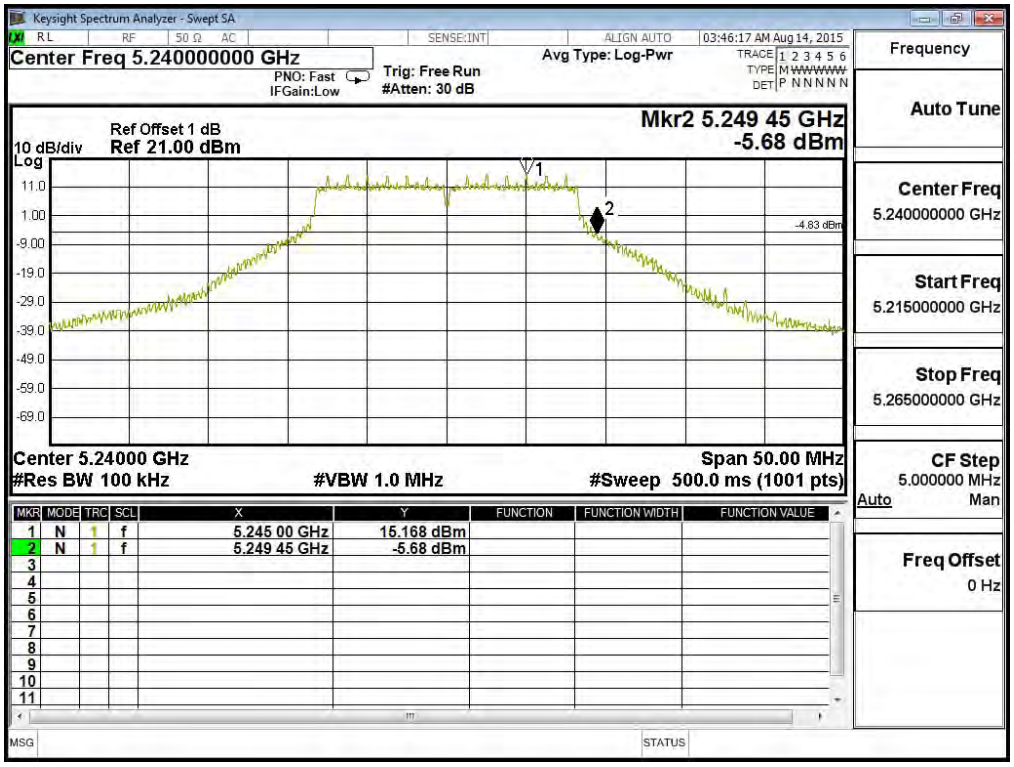


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 17: Transmit (802.11a_6Mbps)(Sector Antenna)-Channel 48

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.45	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 18: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Sector Antenna)-Channel 36

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5150.000	35.135	42.244	77.379	83.54	63.540	Pass
36 (Peak)	5185.507	34.935	87.541	122.476	--	--	--
36 (Average)	5150.000	35.135	19.516	54.651	83.54	63.540	Pass
36 (Average)	5185.362	34.935	74.794	109.730	--	--	--

Figure Channel 36: Horizontal (Peak)

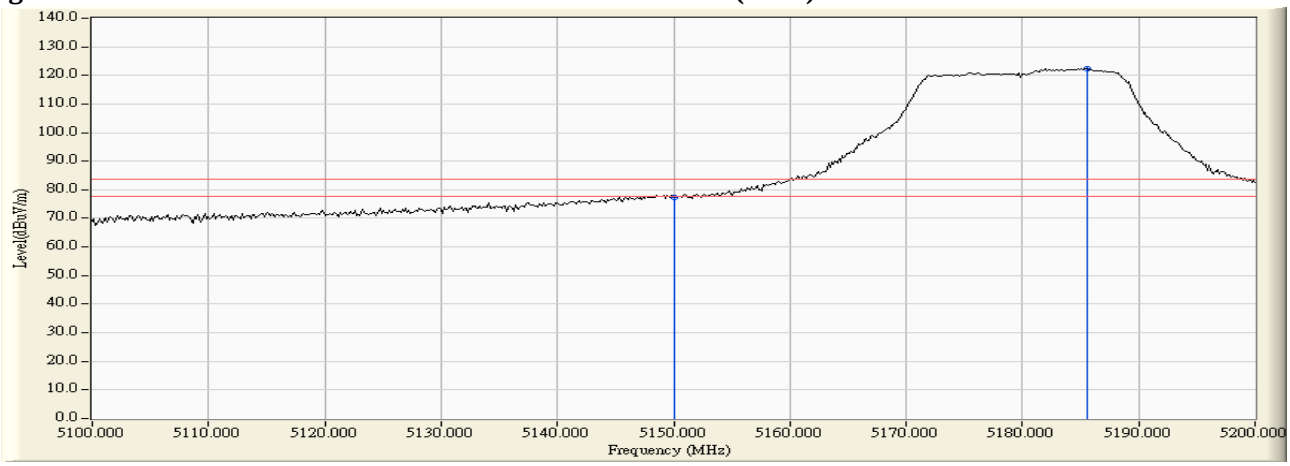
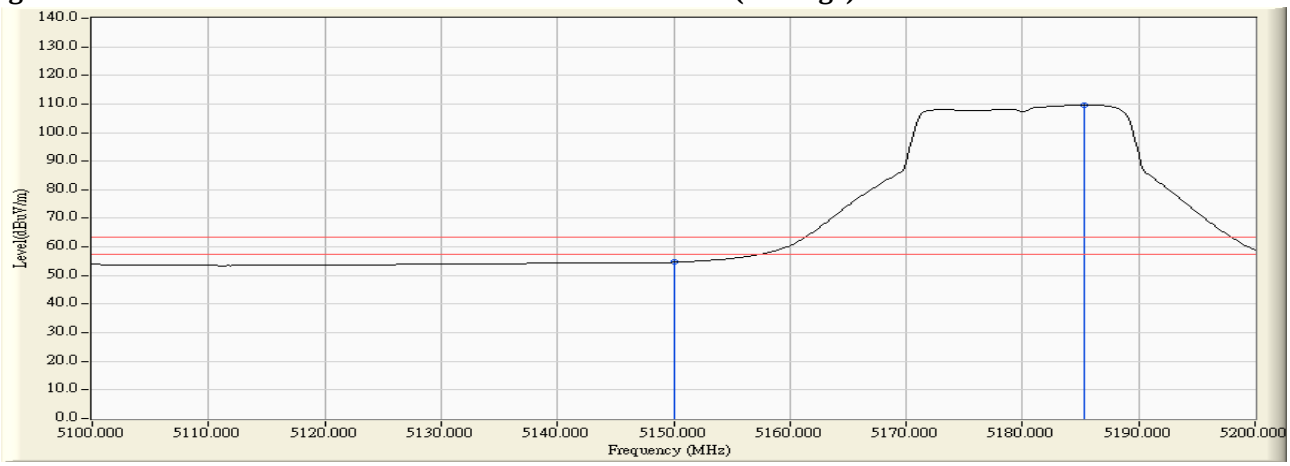


Figure Channel 36: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 18: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Sector Antenna)-Channel 36

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5148.841	37.054	45.393	82.447	83.54	63.540	Pass
36 (Peak)	5150.000	37.055	45.393	82.448	83.54	63.540	Pass
36 (Peak)	5185.217	37.078	92.705	129.782	--	--	--
36 (Average)	5150.000	37.055	21.626	58.681	83.54	63.540	Pass
36 (Average)	5174.203	37.071	78.662	115.733	--	--	--

Figure Channel 36: Vertical (Peak)

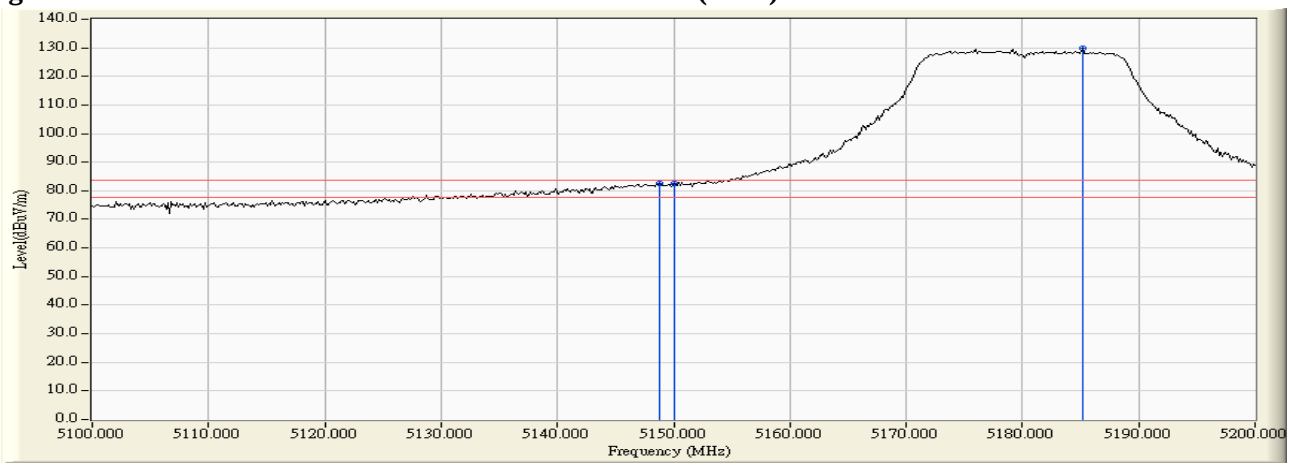
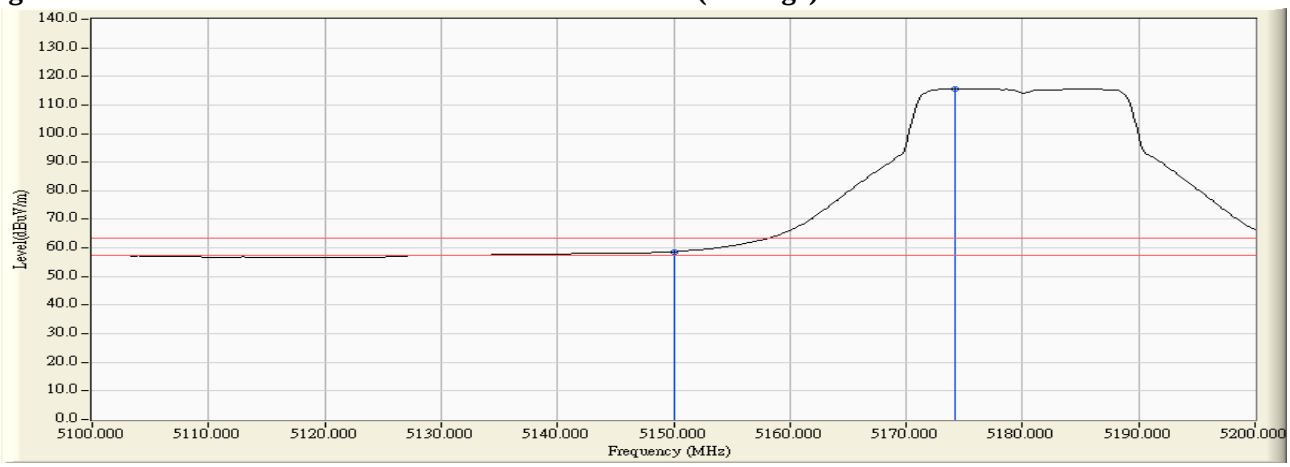


Figure Channel 36: Vertical (Average)



Note:

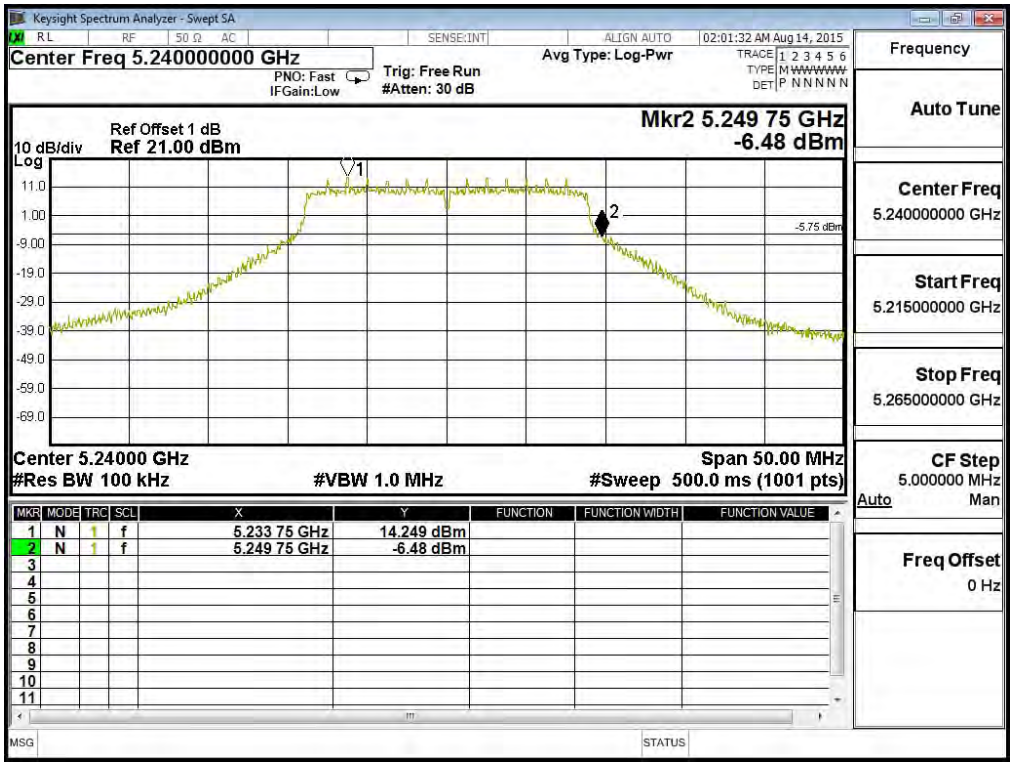
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 18: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Sector Antenna)-Channel 48

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.75	<5250	PASS

NOTE: Accordance with 15.215 requirement.

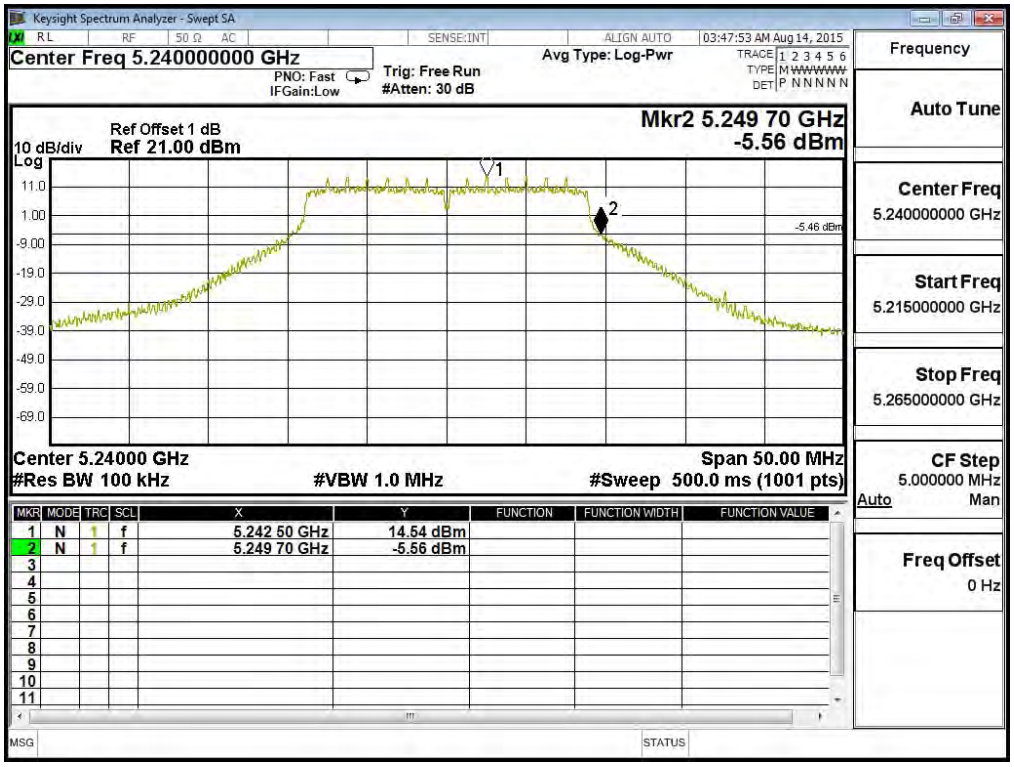


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 18: Transmit (802.11n-20BW_14.4Mbps)(5G Band)(Sector Antenna)-Channel 48

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5240	5249.70	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 19: Transmit (802.11n-40BW_30Mbps)(5G Band)(Sector Antenna)-Channel 38

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
38 (Peak)	5150.000	35.135	40.757	75.892	83.54	63.540	Pass
38 (Peak)	5193.623	34.884	82.638	117.522	--	--	--
38 (Average)	5150.000	35.135	22.295	57.430	83.54	63.540	Pass
38 (Average)	5176.522	34.986	68.293	103.279	--	--	--

Figure Channel 38: Horizontal (Peak)

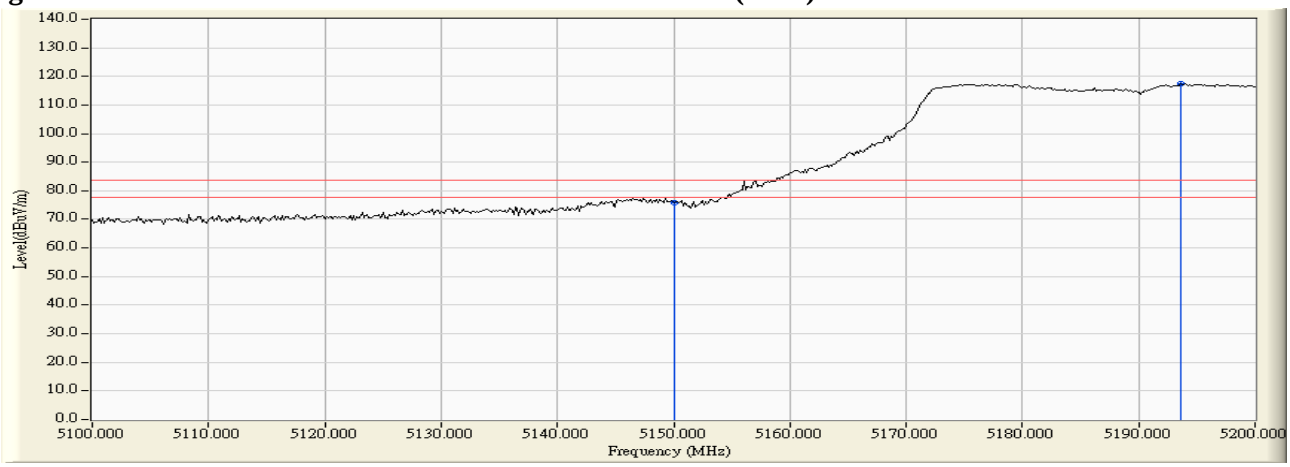
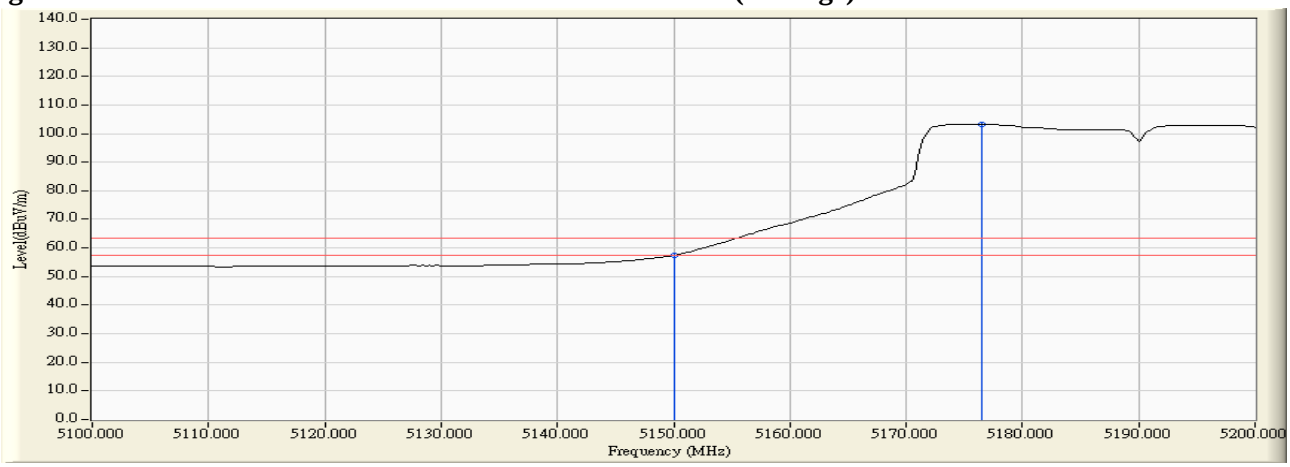


Figure Channel 38: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 19: Transmit (802.11n-40BW_30Mbps)(5G Band)(Sector Antenna)-Channel 38

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
38 (Peak)	5146.812	37.053	45.502	82.555	83.54	63.540	Pass
38 (Peak)	5150.000	37.055	43.443	80.498	83.54	63.540	Pass
38 (Peak)	5192.753	37.077	87.785	124.862	--	--	--
38 (Average)	5150.000	37.055	25.115	62.170	83.54	63.540	Pass
38 (Average)	5185.942	37.077	72.649	109.727	--	--	--

Figure Channel 38: Vertical (Peak)

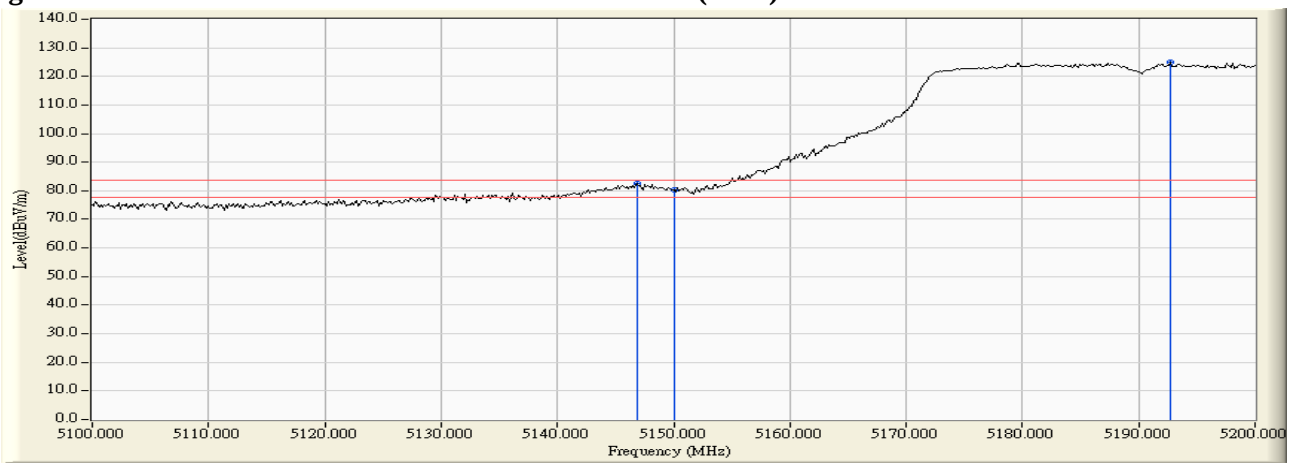
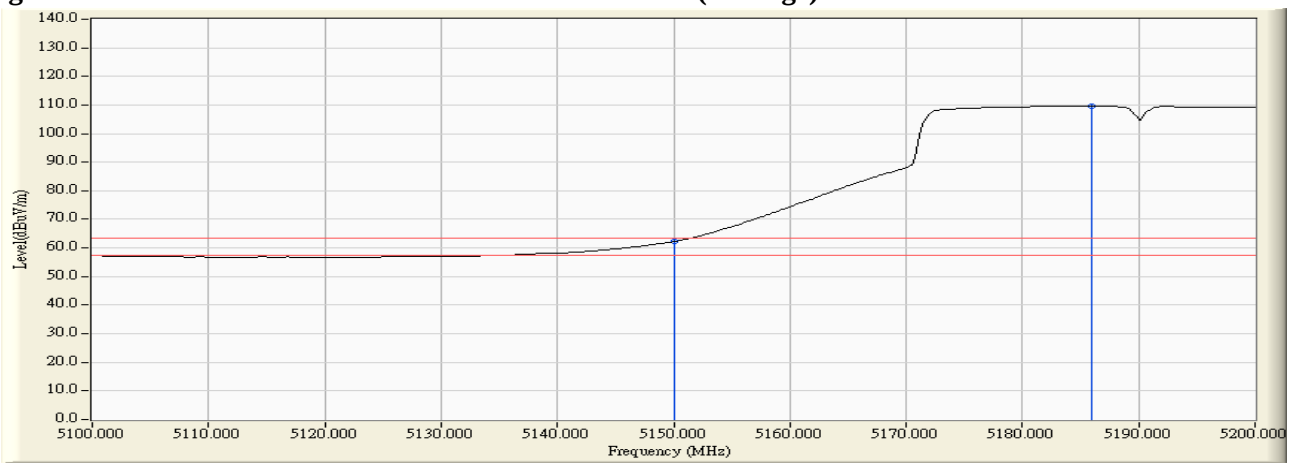


Figure Channel 38: Vertical (Average)



Note:

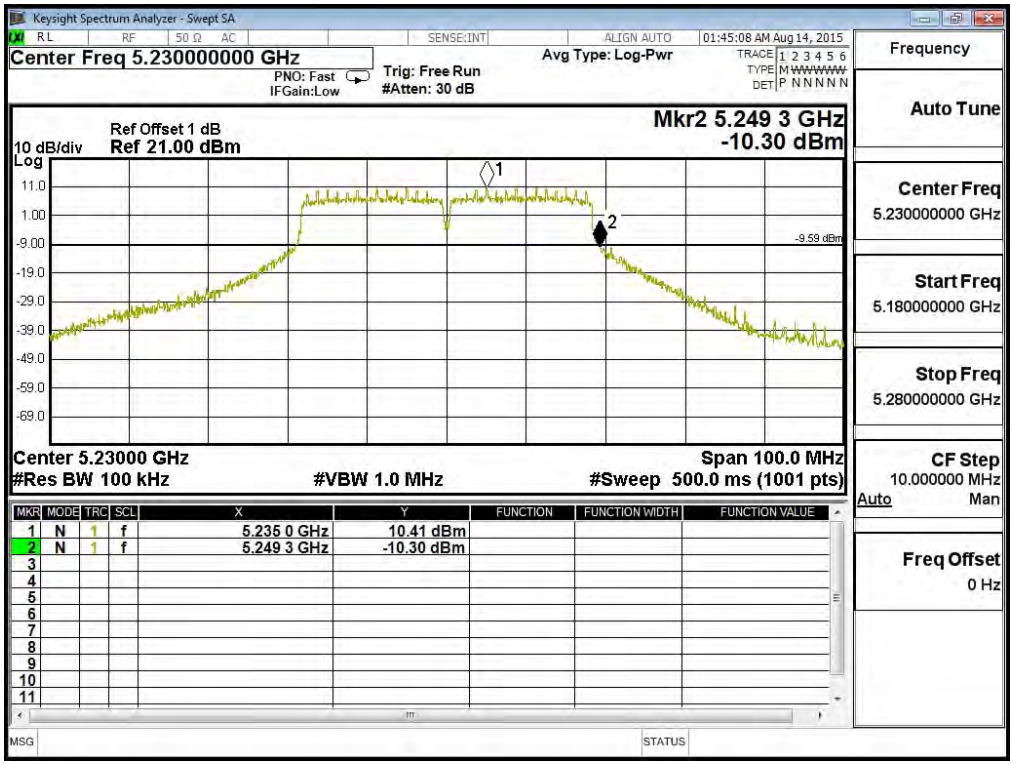
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 19: Transmit (802.11n-40BW_30Mbps)(5G Band)(Sector Antenna)-Channel 46

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5230	5249.30	<5250	PASS

NOTE: Accordance with 15.215 requirement.

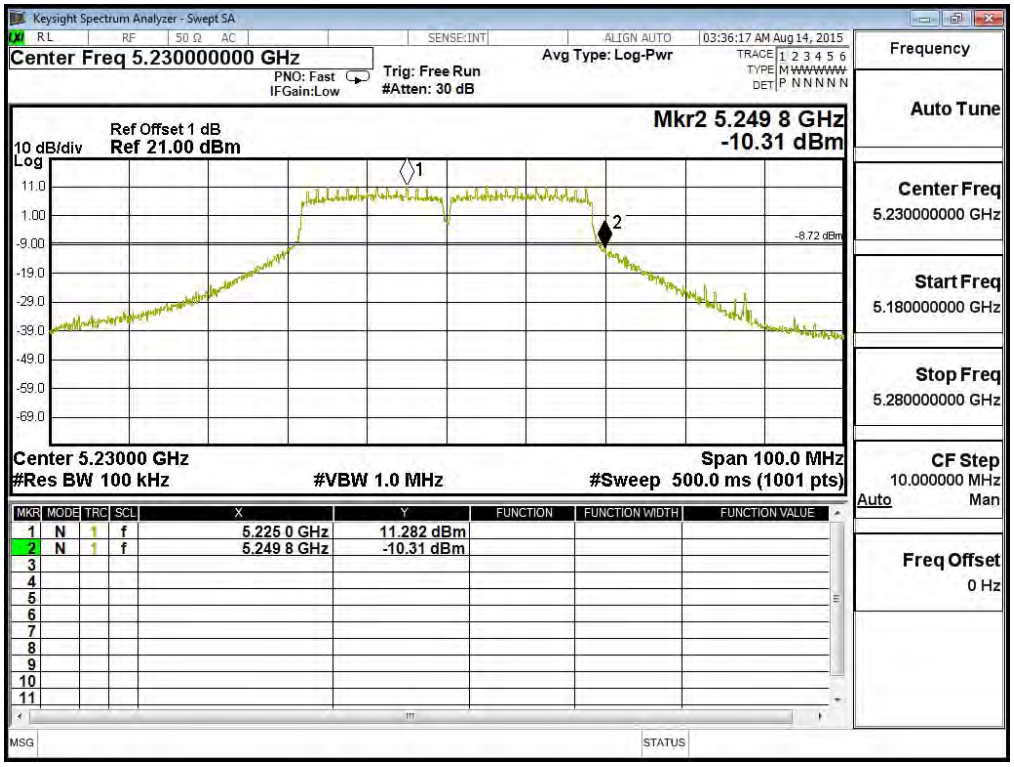


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 19: Transmit (802.11n-40BW_30Mbps)(5G Band)(Sector Antenna)-Channel 46

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5230	5249.80	<5250	PASS

NOTE: Accordance with 15.215 requirement.



Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 20: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Sector Antenna)-Channel 42

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
42 (Peak)	5150.000	35.135	38.623	73.758	83.54	63.540	Pass
42 (Peak)	5194.928	34.875	71.431	106.306	--	--	--
42 (Average)	5150.000	35.135	23.066	58.201	83.54	63.540	Pass
42 (Average)	5192.609	34.890	55.606	90.496	--	--	--

Figure Channel 42: Horizontal (Peak)

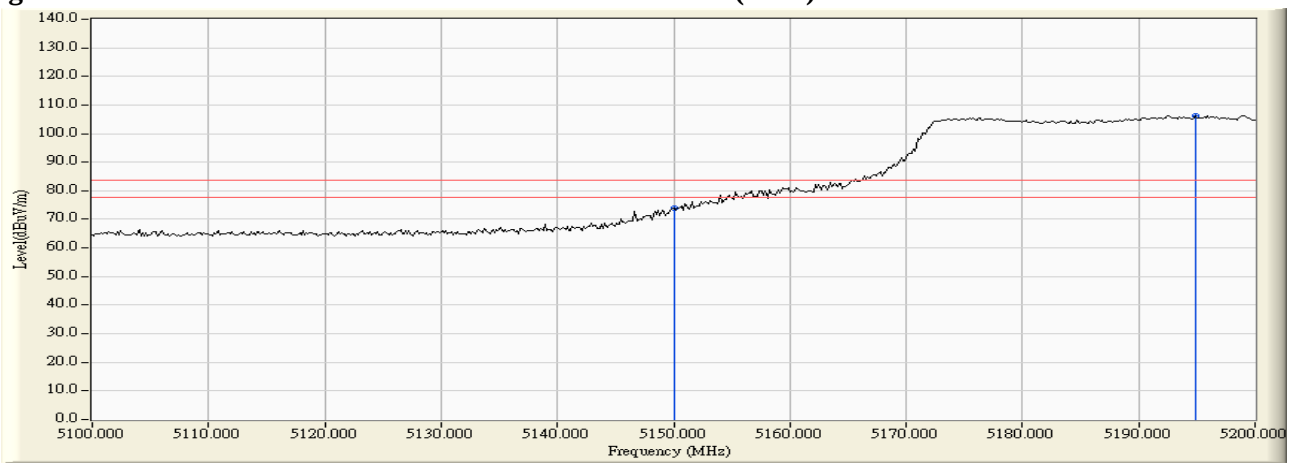
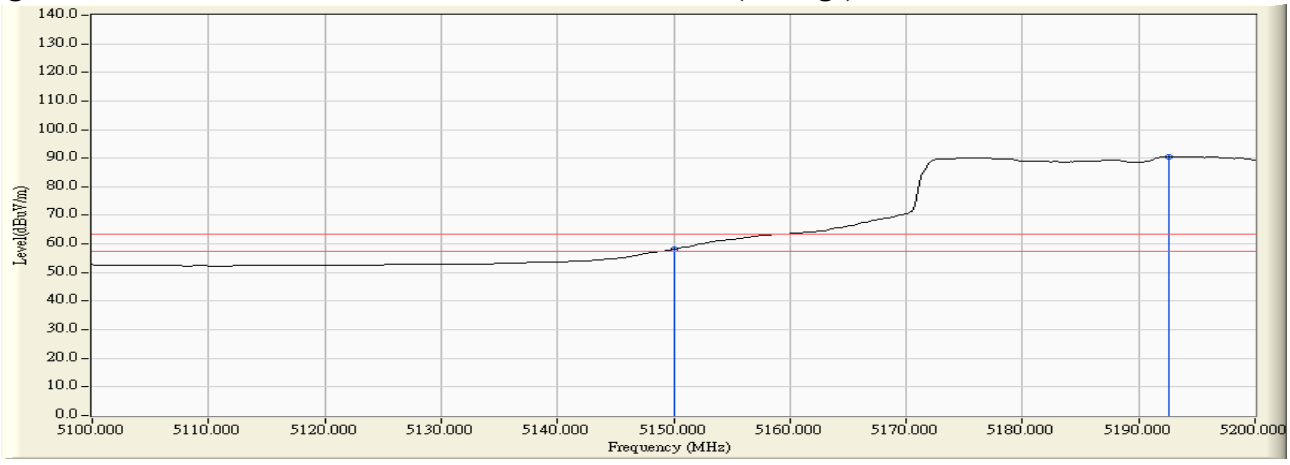


Figure Channel 42: Horizontal (Average)



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. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 20: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Sector Antenna)-Channel 42

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
42 (Peak)	5150.000	37.055	42.171	79.226	83.54	63.540	Pass
42 (Peak)	5198.985	37.075	77.530	114.605	--	--	--
42 (Average)	5150.000	37.055	25.565	62.620	83.54	63.540	Pass
42 (Average)	5192.464	37.077	59.840	96.917	--	--	--

Figure Channel 42: Vertical (Peak)

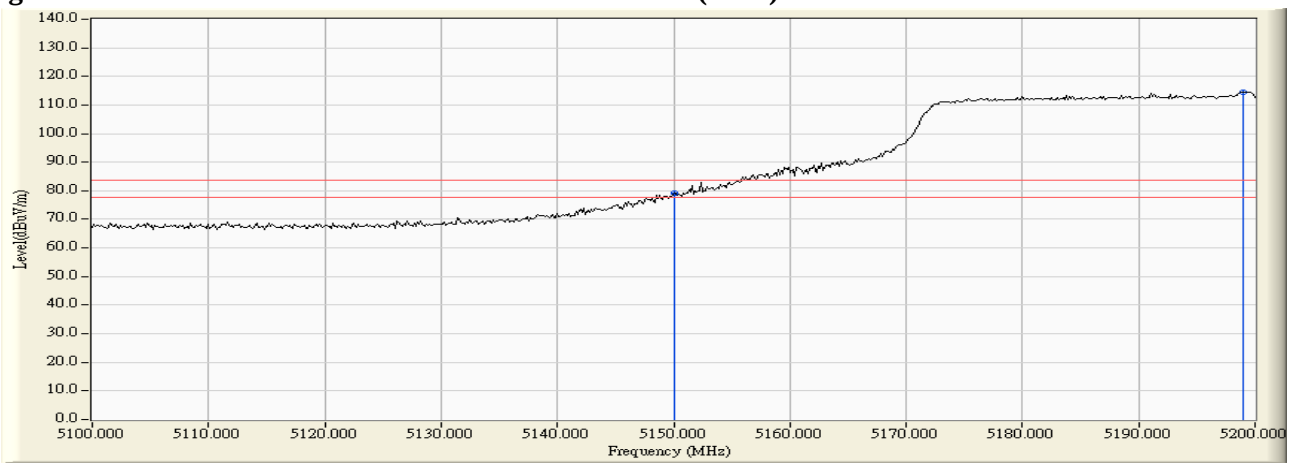
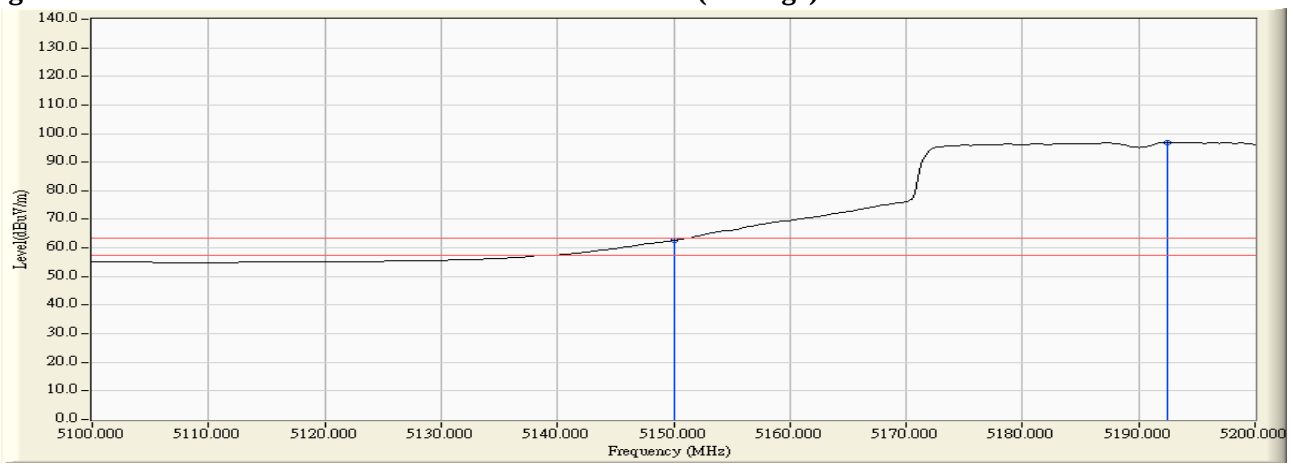


Figure Channel 42: Vertical (Average)



Note:

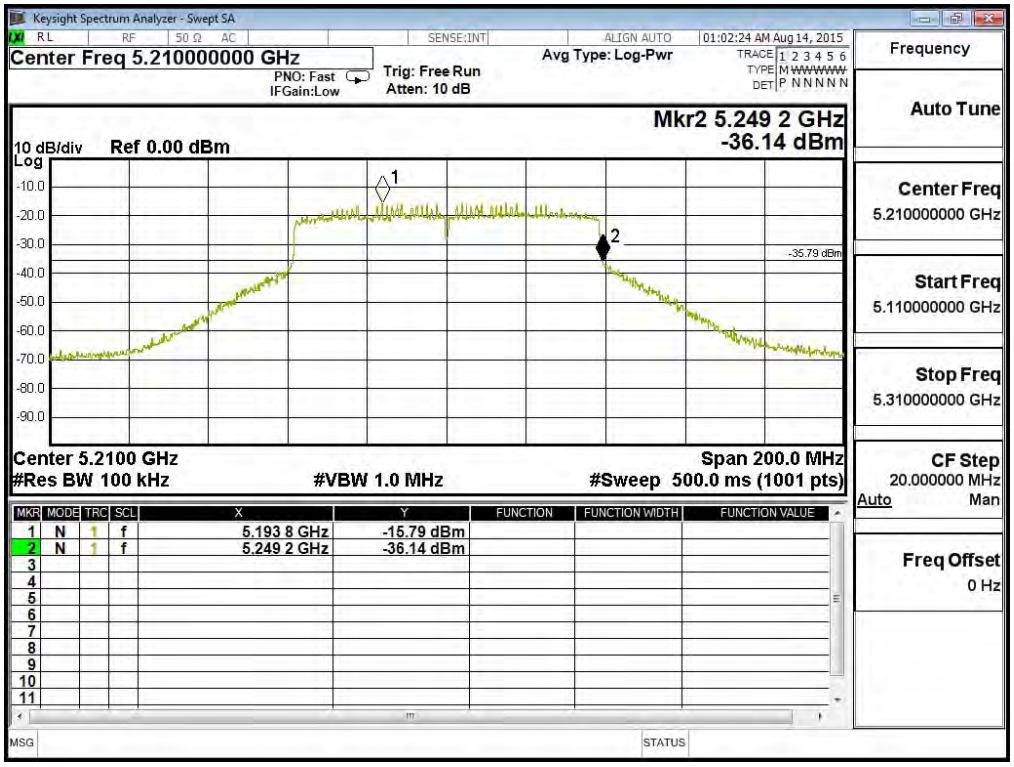
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
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 : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 20: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Sector Antenna)-Channel 42

Chain A

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5210	5249.20	<5250	PASS

NOTE: Accordance with 15.215 requirement.

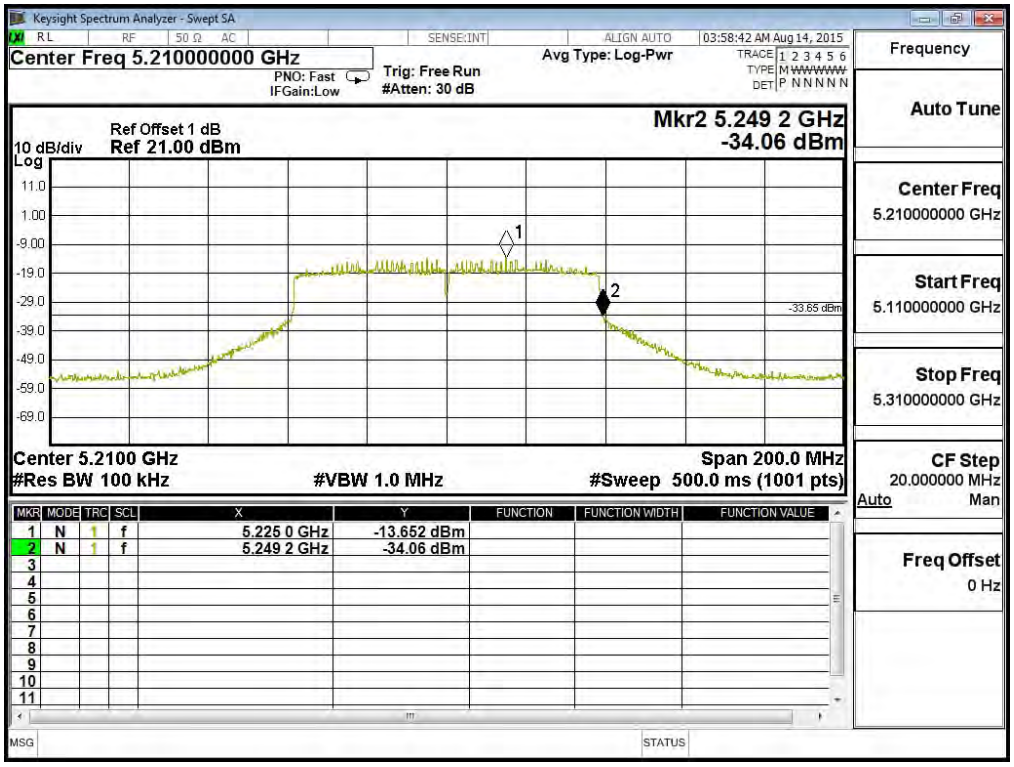


Product : 802.11 ac PCIe Module
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 20: Transmit (802.11ac-80BW_65Mbps)(5G Band)(Sector Antenna)-Channel 42

Chain B

Test Frequency (MHz)	Measurement Level (20dB BW) (MHz)	Limit (MHz)	Result
5210	5249.20	<5250	PASS

NOTE: Accordance with 15.215 requirement.



7. Frequency Stability

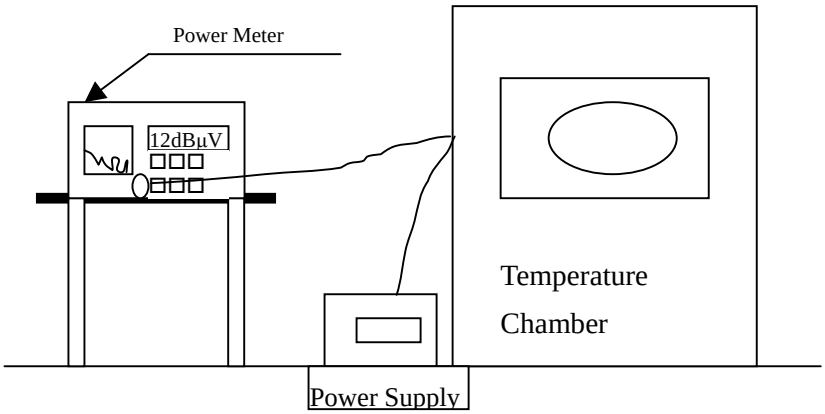
7.1. Test Equipment

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

Note:

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

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

7.4. Test Procedure

The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

7.5. Uncertainty

± 150 Hz

7.6. Test Result of Frequency Stability

Product : 802.11 ac PCIe Module
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) oC	Vnom (120)V	36	5180.0068	5180.0018	-0.0018
		38	5190.0043	5190.0013	-0.0013
		44	5220.0082	5220.0013	-0.0013
		46	5230.0069	5230.0018	-0.0018
		48	5240.0077	5240.0019	-0.0019
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (138)V	36	5180.0068	5180.0015	-0.0015
		38	5190.0043	5190.0016	-0.0016
		44	5220.0082	5220.0010	-0.0010
		46	5230.0069	5230.0012	-0.0012
		48	5240.0077	5240.0014	-0.0014
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (102)V	36	5180.0068	5180.0015	-0.0015
		38	5190.0043	5190.0018	-0.0018
		44	5220.0082	5220.0017	-0.0017
		46	5230.0069	5230.0020	-0.0020
		48	5240.0077	5240.0013	-0.0013
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (138)V	36	5180.0068	5180.0016	-0.0016
		38	5190.0043	5190.0015	-0.0015
		44	5220.0082	5220.0011	-0.0011
		46	5230.0069	5230.0013	-0.0013
		48	5240.0077	5240.0018	-0.0018
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (102)V	36	5180.0068	5180.0016	-0.0016
		38	5190.0043	5190.0015	-0.0015
		44	5220.0082	5220.0011	-0.0011
		46	5230.0069	5230.0013	-0.0013
		48	5240.0077	5240.0018	-0.0018

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	42	5210.0000	5210.0054	-0.0054
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmax (138)V	42	5210.0000	5210.0093	-0.0093
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmin (102)V	42	5210.0000	5210.0080	-0.0080
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmax (138)V	42	5210.0000	5210.0024	-0.0024
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmin (102)V	42	5210.0000	5210.0089	-0.0089

Chain B

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) oC	Vnom (120)V	36	5180.0068	5180.0011	-0.0011
		38	5190.0043	5190.0012	-0.0012
		44	5220.0082	5220.0011	-0.0011
		46	5230.0069	5230.0010	-0.0010
		48	5240.0077	5240.0018	-0.0018
Test Conditions			Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (138)V	36	5180.0068	5180.0012	-0.0012
		38	5190.0043	5190.0011	-0.0011
		44	5220.0082	5220.0012	-0.0012
		46	5230.0069	5230.0016	-0.0016
		48	5240.0077	5240.0013	-0.0013
Test Conditions			Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (102)V	36	5180.0068	5180.0016	-0.0016
		38	5190.0043	5190.0015	-0.0015
		44	5220.0082	5220.0020	-0.0020
		46	5230.0069	5230.0011	-0.0011
		48	5240.0077	5240.0013	-0.0013
Test Conditions			Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (138)V	36	5180.0068	5180.0015	-0.0015
		38	5190.0043	5190.0011	-0.0011
		44	5220.0082	5220.0017	-0.0017
		46	5230.0069	5230.0013	-0.0013
		48	5240.0077	5240.0015	-0.0015
Test Conditions			Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (102)V	36	5180.0068	5180.0017	-0.0017
		38	5190.0043	5190.0013	-0.0013
		44	5220.0082	5220.0011	-0.0011
		46	5230.0069	5230.0012	-0.0012
		48	5240.0077	5240.0016	-0.0016

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	42	5210.0000	5210.0088	-0.0088
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmax (138)V	42	5210.0000	5210.0017	-0.0017
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmin (102)V	42	5210.0000	5210.0035	-0.0035
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmax (138)V	42	5210.0000	5210.0048	-0.0048
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmin (102)V	42	5210.0000	5210.0007	-0.0007

Product : 802.11 ac PCIe Module
Test Item : Frequency Stability
Test Site : Temperature Chamber
Test Mode : Carrier Wave (Grid DISH Antenna)

Chain A

Test Conditions		Test Conditions	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) oC	Vnom (120)V	36	5180.0068	5180.0012	-0.0012
		38	5190.0043	5190.0012	-0.0012
		44	5220.0082	5220.0015	-0.0015
		46	5230.0069	5230.0010	-0.0010
		48	5240.0077	5240.0020	-0.0020
Test Conditions		Test Conditions	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (138)V	36	5180.0068	5180.0011	-0.0011
		38	5190.0043	5190.0012	-0.0012
		44	5220.0082	5220.0013	-0.0013
		46	5230.0069	5230.0012	-0.0012
		48	5240.0077	5240.0020	-0.0020
Test Conditions		Test Conditions	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (102)V	36	5180.0068	5180.0015	-0.0015
		38	5190.0043	5190.0016	-0.0016
		44	5220.0082	5220.0019	-0.0019
		46	5230.0069	5230.0016	-0.0016
		48	5240.0077	5240.0013	-0.0013
Test Conditions		Test Conditions	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (138)V	36	5180.0068	5180.0015	-0.0015
		38	5190.0043	5190.0016	-0.0016
		44	5220.0082	5220.0011	-0.0011
		46	5230.0069	5230.0014	-0.0014
		48	5240.0077	5240.0015	-0.0015
Test Conditions		Test Conditions	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (102)V	36	5180.0068	5180.0015	-0.0015
		38	5190.0043	5190.0016	-0.0016
		44	5220.0082	5220.0011	-0.0011
		46	5230.0069	5230.0014	-0.0014
		48	5240.0077	5240.0015	-0.0015

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	42	5210.0000	5210.0012	-0.0012
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmax (138)V	42	5210.0000	5210.0081	-0.0081
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmin (102)V	42	5210.0000	5210.0017	-0.0017
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmax (138)V	42	5210.0000	5210.0067	-0.0067
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmin (102)V	42	5210.0000	5210.0095	-0.0095

Chain B

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) oC	Vnom (120)V	36	5180.0068	5180.0013	-0.0013
		38	5190.0043	5190.0011	-0.0011
		44	5220.0082	5220.0016	-0.0016
		46	5230.0069	5230.0015	-0.0015
		48	5240.0077	5240.0020	-0.0020
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (138)V	36	5180.0068	5180.0012	-0.0012
		38	5190.0043	5190.0015	-0.0015
		44	5220.0082	5220.0016	-0.0016
		46	5230.0069	5230.0013	-0.0013
		48	5240.0077	5240.0013	-0.0013
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (102)V	36	5180.0068	5180.0014	-0.0014
		38	5190.0043	5190.0017	-0.0017
		44	5220.0082	5220.0012	-0.0012
		46	5230.0069	5230.0011	-0.0011
		48	5240.0077	5240.0015	-0.0015
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (138)V	36	5180.0068	5180.0013	-0.0013
		38	5190.0043	5190.0015	-0.0015
		44	5220.0082	5220.0013	-0.0013
		46	5230.0069	5230.0018	-0.0018
		48	5240.0077	5240.0010	-0.0010
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (102)V	36	5180.0068	5180.0013	-0.0013
		38	5190.0043	5190.0010	-0.0010
		44	5220.0082	5220.0015	-0.0015
		46	5230.0069	5230.0011	-0.0011
		48	5240.0077	5240.0019	-0.0019

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	42	5210.0000	5210.0065	-0.0065
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmax (138)V	42	5210.0000	5210.0094	-0.0094
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmin (102)V	42	5210.0000	5210.0016	-0.0016
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmax (138)V	42	5210.0000	5210.0069	-0.0069
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmin (102)V	42	5210.0000	5210.0017	-0.0017

Product : 802.11 ac PCIe Module
Test Item : Frequency Stability
Test Site : Temperature Chamber
Test Mode : Carrier Wave (Omni Antenna)

Chain A

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) oC	Vnom (120)V	36	5180.0068	5180.0016	-0.0016
		38	5190.0043	5190.0014	-0.0014
		44	5220.0082	5220.0013	-0.0013
		46	5230.0069	5230.0012	-0.0012
		48	5240.0077	5240.0012	-0.0012
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (138)V	36	5180.0068	5180.0020	-0.0020
		38	5190.0043	5190.0020	-0.0020
		44	5220.0082	5220.0015	-0.0015
		46	5230.0069	5230.0018	-0.0018
		48	5240.0077	5240.0020	-0.0020
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (102)V	36	5180.0068	5180.0017	-0.0017
		38	5190.0043	5190.0019	-0.0019
		44	5220.0082	5220.0010	-0.0010
		46	5230.0069	5230.0017	-0.0017
		48	5240.0077	5240.0016	-0.0016
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (138)V	36	5180.0068	5180.0012	-0.0012
		38	5190.0043	5190.0020	-0.0020
		44	5220.0082	5220.0018	-0.0018
		46	5230.0069	5230.0011	-0.0011
		48	5240.0077	5240.0012	-0.0012
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (102)V	36	5180.0068	5180.0012	-0.0012
		38	5190.0043	5190.0020	-0.0020
		44	5220.0082	5220.0018	-0.0018
		46	5230.0069	5230.0011	-0.0011
		48	5240.0077	5240.0012	-0.0012

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	42	5210.0000	5210.0122	-0.0122
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmax (138)V	42	5210.0000	5210.0049	-0.0049
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmin (102)V	42	5210.0000	5210.0077	-0.0077
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmax (138)V	42	5210.0000	5210.0109	-0.0109
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmin (102)V	42	5210.0000	5210.0069	-0.0069

Chain B

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) oC	Vnom (120)V	36	5180.0068	5180.0012	-0.0012
		38	5190.0043	5190.0016	-0.0016
		44	5220.0082	5220.0018	-0.0018
		46	5230.0069	5230.0015	-0.0015
		48	5240.0077	5240.0012	-0.0012
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (138)V	36	5180.0068	5180.0020	-0.0020
		38	5190.0043	5190.0018	-0.0018
		44	5220.0082	5220.0015	-0.0015
		46	5230.0069	5230.0011	-0.0011
		48	5240.0077	5240.0019	-0.0019
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (102)V	36	5180.0068	5180.0011	-0.0011
		38	5190.0043	5190.0016	-0.0016
		44	5220.0082	5220.0014	-0.0014
		46	5230.0069	5230.0011	-0.0011
		48	5240.0077	5240.0014	-0.0014
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (138)V	36	5180.0068	5180.0013	-0.0013
		38	5190.0043	5190.0017	-0.0017
		44	5220.0082	5220.0018	-0.0018
		46	5230.0069	5230.0019	-0.0019
		48	5240.0077	5240.0013	-0.0013
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (102)V	36	5180.0068	5180.0015	-0.0015
		38	5190.0043	5190.0019	-0.0019
		44	5220.0082	5220.0017	-0.0017
		46	5230.0069	5230.0012	-0.0012
		48	5240.0077	5240.0017	-0.0017

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	42	5210.0000	5210.0107	-0.0107
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmax (138)V	42	5210.0000	5210.0056	-0.0056
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmin (102)V	42	5210.0000	5210.0115	-0.0115
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmax (138)V	42	5210.0000	5210.0136	-0.0136
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmin (102)V	42	5210.0000	5210.0033	-0.0033

Product : 802.11 ac PCIe Module
Test Item : Frequency Stability
Test Site : Temperature Chamber
Test Mode : Carrier Wave (Panel Antenna)

Chain A

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) oC	Vnom (120)V	36	5180.0068	5180.0016	-0.0016
		38	5190.0043	5190.0014	-0.0014
		44	5220.0082	5220.0013	-0.0013
		46	5230.0069	5230.0012	-0.0012
		48	5240.0077	5240.0012	-0.0012
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (138)V	36	5180.0068	5180.0020	-0.0020
		38	5190.0043	5190.0020	-0.0020
		44	5220.0082	5220.0015	-0.0015
		46	5230.0069	5230.0018	-0.0018
		48	5240.0077	5240.0020	-0.0020
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (102)V	36	5180.0068	5180.0017	-0.0017
		38	5190.0043	5190.0019	-0.0019
		44	5220.0082	5220.0010	-0.0010
		46	5230.0069	5230.0017	-0.0017
		48	5240.0077	5240.0016	-0.0016
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (138)V	36	5180.0068	5180.0012	-0.0012
		38	5190.0043	5190.0020	-0.0020
		44	5220.0082	5220.0018	-0.0018
		46	5230.0069	5230.0011	-0.0011
		48	5240.0077	5240.0012	-0.0012
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (102)V	36	5180.0068	5180.0012	-0.0012
		38	5190.0043	5190.0020	-0.0020
		44	5220.0082	5220.0018	-0.0018
		46	5230.0069	5230.0011	-0.0011
		48	5240.0077	5240.0012	-0.0012

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	42	5210.0000	5210.0067	-0.0067
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmax (138)V	42	5210.0000	5210.0039	-0.0039
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmin (102)V	42	5210.0000	5210.0061	-0.0061
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmax (138)V	42	5210.0000	5210.0020	-0.0020
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmin (102)V	42	5210.0000	5210.0061	-0.0061

Chain B

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) oC	Vnom (120)V	36	5180.0068	5180.0012	-0.0012
		38	5190.0043	5190.0016	-0.0016
		44	5220.0082	5220.0018	-0.0018
		46	5230.0069	5230.0015	-0.0015
		48	5240.0077	5240.0012	-0.0012
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (138)V	36	5180.0068	5180.0020	-0.0020
		38	5190.0043	5190.0018	-0.0018
		44	5220.0082	5220.0015	-0.0015
		46	5230.0069	5230.0011	-0.0011
		48	5240.0077	5240.0019	-0.0019
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (102)V	36	5180.0068	5180.0011	-0.0011
		38	5190.0043	5190.0016	-0.0016
		44	5220.0082	5220.0014	-0.0014
		46	5230.0069	5230.0011	-0.0011
		48	5240.0077	5240.0014	-0.0014
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (138)V	36	5180.0068	5180.0013	-0.0013
		38	5190.0043	5190.0017	-0.0017
		44	5220.0082	5220.0018	-0.0018
		46	5230.0069	5230.0019	-0.0019
		48	5240.0077	5240.0013	-0.0013
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (102)V	36	5180.0068	5180.0015	-0.0015
		38	5190.0043	5190.0019	-0.0019
		44	5220.0082	5220.0017	-0.0017
		46	5230.0069	5230.0012	-0.0012
		48	5240.0077	5240.0017	-0.0017

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	42	5210.0000	5210.0076	-0.0076
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmax (138)V	42	5210.0000	5210.0072	-0.0072
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmin (102)V	42	5210.0000	5210.0046	-0.0046
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmax (138)V	42	5210.0000	5210.0095	-0.0095
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmin (102)V	42	5210.0000	5210.0016	-0.0016

Product : 802.11 ac PCIe Module
Test Item : Frequency Stability
Test Site : Temperature Chamber
Test Mode : Carrier Wave (Sector Antenna)

Chain A

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) oC	Vnom (120)V	36	5180.0068	5180.0017	-0.0017
		38	5190.0043	5190.0016	-0.0016
		44	5220.0082	5220.0015	-0.0015
		46	5230.0069	5230.0017	-0.0017
		48	5240.0077	5240.0018	-0.0018
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (138)V	36	5180.0068	5180.0016	-0.0016
		38	5190.0043	5190.0010	-0.0010
		44	5220.0082	5220.0011	-0.0011
		46	5230.0069	5230.0013	-0.0013
		48	5240.0077	5240.0010	-0.0010
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (102)V	36	5180.0068	5180.0019	-0.0019
		38	5190.0043	5190.0013	-0.0013
		44	5220.0082	5220.0020	-0.0020
		46	5230.0069	5230.0011	-0.0011
		48	5240.0077	5240.0014	-0.0014
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (138)V	36	5180.0068	5180.0017	-0.0017
		38	5190.0043	5190.0010	-0.0010
		44	5220.0082	5220.0013	-0.0013
		46	5230.0069	5230.0012	-0.0012
		48	5240.0077	5240.0010	-0.0010
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (102)V	36	5180.0068	5180.0017	-0.0017
		38	5190.0043	5190.0010	-0.0010
		44	5220.0082	5220.0013	-0.0013
		46	5230.0069	5230.0012	-0.0012
		48	5240.0077	5240.0010	-0.0010

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	42	5210.0000	5210.0099	-0.0099
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmax (138)V	42	5210.0000	5210.0025	-0.0025
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmin (102)V	42	5210.0000	5210.0001	-0.0001
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmax (138)V	42	5210.0000	5210.0078	-0.0078
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmin (102)V	42	5210.0000	5210.0007	-0.0007

Chain B

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) oC	Vnom (120)V	36	5180.0068	5180.0014	-0.0014
		38	5190.0043	5190.0017	-0.0017
		44	5220.0082	5220.0019	-0.0019
		46	5230.0069	5230.0012	-0.0012
		48	5240.0077	5240.0014	-0.0014
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (138)V	36	5180.0068	5180.0016	-0.0016
		38	5190.0043	5190.0014	-0.0014
		44	5220.0082	5220.0020	-0.0020
		46	5230.0069	5230.0012	-0.0012
		48	5240.0077	5240.0013	-0.0013
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (50) oC	Vnom (102)V	36	5180.0068	5180.0013	-0.0013
		38	5190.0043	5190.0019	-0.0019
		44	5220.0082	5220.0016	-0.0016
		46	5230.0069	5230.0010	-0.0010
		48	5240.0077	5240.0012	-0.0012
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (138)V	36	5180.0068	5180.0019	-0.0019
		38	5190.0043	5190.0019	-0.0019
		44	5220.0082	5220.0013	-0.0013
		46	5230.0069	5230.0010	-0.0010
		48	5240.0077	5240.0014	-0.0014
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (102)V	36	5180.0068	5180.0013	-0.0013
		38	5190.0043	5190.0015	-0.0015
		44	5220.0082	5220.0012	-0.0012
		46	5230.0069	5230.0013	-0.0013
		48	5240.0077	5240.0015	-0.0015

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	42	5210.0000	5210.0061	-0.0061
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmax (138)V	42	5210.0000	5210.0055	-0.0055
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (50) °C	Vmin (102)V	42	5210.0000	5210.0096	-0.0096
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmax (138)V	42	5210.0000	5210.0023	-0.0023
Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) °C	Vmin (102)V	42	5210.0000	5210.0033	-0.0033

8. Maximum e.i.r.p at any elevation angle above 30 degrees

Antenna Part No.	Antenna Type	(θ= 0°)			(θ above 30°)			
		Maximum Concuted output power (dBm)	Maximum Antenna gain (dBi)	Maximum EIRP (dBm)	Maximum Antenna gain (dBi)	Maximum Antenna gain Delta (dBi)	Maximum EIRP (dBm)	Limit
		(A)	(B)	(C) =(A)+(B)	(D)	(E)=(B)-(D)	(F) =(C)-(E)	
MA-WA55-30	Panel	16.16	30	46.16	4.04	25.96	20.2	21
MA-WB55-20	Sector	21.71	20	41.71	-1.42	21.42	20.29	21
PX3F-52-N7A	Grid DISH	17.48	33.5	50.98	3.3	30.2	20.78	21
SAA08-220570	Omni	23.49	10	33.49	-2.72	12.72	20.77	21

Note:

1. Only worse case mode is shown in the above table.

2. More details of the antenna, please refer to the antenna report.

9. EMI Reduction Method During Compliance Testing

No modification was made during testing.