Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5700MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
11400.000	16.530	34.940	51.471	-22.529	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11400.000	17.138	34.970	52.108	-21.892	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000

Detector: * * * * * * * *

Note:

Average

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) (5270MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10540.000	14.151	33.970	48.120	-25.880	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					

Peak Detector:

I eak Delector.					
10540.000	14.829	39.240	54.068	-19.932	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average					
Detector:					
10540.000	14.829	24.550	39.378	-14.622	54.000

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) (5310MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
10620.000	14.623	35.090	49.713	-24.287	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Vertical

Peak Detector:	
-----------------------	--

10620.000	14.970	34.880	49.850	-24.150	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

74.000

*

*

*

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) (5510MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11020.000	16.474	33.320	49.793	-24.207	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11020.000	17.224	33.850	51.074	-22.926	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000

26550.000 Average Detector:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

*

4. Measurement Level = Reading Level + Correction Factor.

*

*

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) (5550MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal		·	· · ·		<u> </u>
Peak Detector:					
11100.000	16.681	34.490	51.171	-22.829	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11100.000	17.523	44.590	62.113	-11.887	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average					
Detector:					

11100.000

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

44.963

-9.037

54.000

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

27.440

4. Measurement Level = Reading Level + Correction Factor.

17.523

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

74.000

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) (5670MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11340.000	16.408	35.370	51.777	-22.223	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11340.000	17.167	35.260	52.427	-21.573	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000

Average					
Detector:					
*	*	*	*	*	*

*

*

*

Note:

28350.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correction Factor.

*

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product Test Item Test Site	 802.11 ac PCIe Module Harmonic Radiated Emission Data No.3 OATS 					
Test Mode	: Mode 4:	Transmit (802.11	ac-20BW-14.4Mbps)	(Dipole Antenna)) (5720MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
11440.000	16.779	33.770	50.549	-23.451	74.000	
11550.000	*	*	*	*	74.000	
17325.000	*	*	*	*	74.000	
20720.000	*	*	*	*	74.000	
25900.000	*	*	*	*	74.000	
31080.000	*	*	*	*	74.000	
36260.000	*	*	*	*	74.000	
Average						
Detector:						
*	*	*	*	*	*	
Vertical						
Peak Detector:						
11440.000	17.519	34.750	52.269	-21.731	74.000	
11550.000	*	*	*	*	74.000	
17325.000	*	*	*	*	74.000	
20720.000	*	*	*	*	74.000	
25900.000	*	*	*	*	74.000	
31080.000	*	*	*	*	74.000	
36260.000	*	*	*	*	74.000	
Average						
Detector:						
*	*	*	*	*	*	

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

Product Test Item Test Site	 802.11 ac PCIe Module Harmonic Radiated Emission Data 						
Test Mode	 No.3 OATS Mode 5: Transmit (802.11ac-40BW-30Mbps)(Dipole Antenna) (5710MHz) 						
			I I I I I I I I I I I I I I I I I I I	I the second second			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11420.000	16.648	34.810	51.457	-22.543	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11420.000	17.311	35.080	52.390	-21.610	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item Test Site		ac PCIe Module nic Radiated Emiss ATS	sion Data				
Test Mode	: Mode 6: Transmit (802.11ac-80BW-65Mbps)(Dipole Antenna) (5290MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10580.000	14.423	34.840	49.263	-24.737	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
10580.000	14.849	35.260	50.109	-23.891	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item	 802.11 ac PCIe Module Harmonic Radiated Emission Data 						
Test Site	 No.3 OATS Mode 6: Transmit (802.11ac-80BW-65Mbps)(Dipole Antenna) (5530MHz) 						
Test Mode	: Mode 6:	: Transmit (802.11	ac-80B w-65Mbps)(1	Jipole Antenna) (5530MHZ)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11060.000	16.580	34.960	51.540	-22.460	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11060.000	17.375	35.320	52.695	-21.305	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module Harmonic Radiated Emission Data No.3 OATS Mode 6: Transmit (802.11ac-80BW-65Mbps)(Dipole Antenna) (5610MHz) 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
11220.000	16.589	35.080	51.670	-22.330	74.000	
17325.000	*	*	*	*	74.000	
20720.000	*	*	*	*	74.000	
25900.000	*	*	*	*	74.000	
31080.000	*	*	*	*	74.000	
36260.000	*	*	*	*	74.000	
Average						
Detector:						
*	*	*	*	*	*	
Vertical						
Peak Detector:						
11220.000	17.620	34.860	52.480	-21.520	74.000	
17325.000	*	*	*	*	74.000	
20720.000	*	*	*	*	74.000	
25900.000	*	*	*	*	74.000	
31080.000	*	*	*	*	74.000	
36260.000	*	*	*	*	74.000	
Average						
Detector:						
*	*	*	*	*	*	

-

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site						
Test Mode	: Mode 6	: Transmit (802.11	lac-80BW-65Mbps)(l	Dipole Antenna) ((5690MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
11380.000	16.480	35.430	51.911	-22.089	74.000	
11550.000	*	*	*	*	74.000	
17325.000	*	*	*	*	74.000	
20720.000	*	*	*	*	74.000	
25900.000	*	*	*	*	74.000	
31080.000	*	*	*	*	74.000	
36260.000	*	*	*	*	74.000	
Average						
Detector:						
*	*	*	*	*	*	
Vertical						
Peak Detector:						
11380.000	17.125	40.790	57.916	-16.084	74.000	
11550.000	*	*	*	*	74.000	
17325.000	*	*	*	*	74.000	
20720.000	*	*	*	*	74.000	
25900.000	*	*	*	*	74.000	
31080.000	*	*	*	*	74.000	
36260.000	*	*	*	*	74.000	
Average						
Detector:						
11380.000	17.125	22.190	39.316	-14.684	54.000	

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

Product	: 802.11 ac PCIe Module						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 7:	Transmit (802.11	a-6Mbps)(Grid DISH	H Antenna) (5260	MHz)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	dBµV/m		
Horizontal							
Peak Detector:							
10520.000	14.015	33.550	47.565	-26.435	74.000		
15780.000	*	*	*	*	74.000		
21040.000	*	*	*	*	74.000		
26300.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
10520.000	14.818	33.740	48.558	-25.442	74.000		
15780.000	*	*	*	*	74.000		
21040.000	*	*	*	*	74.000		
26300.000	*	*	*	*	74.000		
Average							

Detector:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

*

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 7: Transmit (802.11a-6Mbps)(Grid DISH Antenna) (5300MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10600.000	14.550	34.410	48.959	-25.041	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10600.000	14.881	34.850	49.731	-24.269	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 7: Transmit (802.11a-6Mbps)(Grid DISH Antenna) (5320MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
				JD	
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10640.000	14.690	33.380	48.070	-25.930	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10640.000	15.083	33.340	48.423	-25.577	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 7: Transmit (802.11a-6Mbps)(Grid DISH Antenna) (5500MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
				10	
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11000.000	16.399	33.080	49.479	-24.521	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11000.000	17.132	33.070	50.202	-23.798	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 7: Transmit (802.11a-6Mbps)(Grid DISH Antenna) (5580MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal			dDµ V/III	uD	dDµ V/III
Peak Detector:					
11160.000	16.664	33.690	50.355	-23.645	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11160.000	17.643	33.250	50.893	-23.107	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 7: Transmit (802.11a-6Mbps)(Grid DISH Antenna) (5700MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11400.000	16.530	34.400	50.931	-23.069	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11400.000	17.138	35.040	52.178	-21.822	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 8: Transmit (802.11n-20BW 14.4Mbps)(Grid DISH Antenna) (5260MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
10520.000	14.015	33.950	47.965	-26.035	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10520.000	14.818	34.020	48.838	-25.162	74.000

21040.000 * * * 74.0 26300.000 * * * 74.0 Average 74.0 Detector:	10520.000	14.818	34.020	48.838	-25.162	74.000
26300.000 * * * * 74.0 Average Detector:	15780.000	*	*	*	*	74.000
Average Detector:	21040.000	*	*	*	*	74.000
Detector:	26300.000	*	*	*	*	74.000
	Average					
* * * * * *	Detector:					
	*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 8: Transmit (802.11n-20BW 14.4Mbps)(Grid DISH Antenna) (5300MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10600.000	14.550	33.770	48.319	-25.681	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					

Peak Detector:

10600.000	14.881	34.240	49.121	-24.879	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 8: Transmit (802.11n-20BW 14.4Mbps)(Grid DISH Antenna) (5320MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10640.000	14.690	33.980	48.670	-25.330	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10640.000	15.083	34.330	49.413	-24.587	74.000
					- 1 000

15960.000	*	*	*	*	74.000
13900.000					74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 8: Transmit (802.11n-20BW 14.4Mbps)(Grid DISH Antenna) (5500MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11000.000	16.399	33.850	50.249	-23.751	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11000.000	17.132	34.480	51.612	-22.388	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					

Detector:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

*

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 8: Transmit (802.11n-20BW 14.4Mbps)(Grid DISH Antenna) (5580MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
11160.000	16.664	33.870	50.535	-23.465	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11160.000	17.643	34.550	52.193	-21.807	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000

Detector:					
*	*	*	*	*	*

Average

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 8: Transmit (802.11n-20BW 14.4Mbps)(Grid DISH Antenna) (5700MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
11400.000	16.530	33.660	50.191	-23.809	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11400.000	17.138	34.480	51.618	-22.382	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000

Detector:					
*	*	*	*	*	*

Average

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 9: Transmit (802.11n-40BW 30Mbps)(Grid DISH Antenna) (5270MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10540.000	14.151	34.030	48.180	-25.820	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					

10540.000	14.829	33.710	48.538	-25.462	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 9: Transmit (802.11n-40BW 30Mbps)(Grid DISH Antenna) (5310MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10620.000	14.623	35.180	49.803	-24.197	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Vertical

Peak Detector:

10620.000	14.970	34.690	49.660	-24.340	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 9: Transmit (802.11n-40BW 30Mbps)(Grid DISH Antenna) (5510MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
11020.000	16.474	33.950	50.423	-23.577	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11020.000	17.224	33.540	50.764	-23.236	74.000
					74.000

11020.000	17.224	55.540	30.704	-25.230	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 9: Transmit (802.11n-40BW 30Mbps)(Grid DISH Antenna) (5550MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal		•	•		•
Peak Detector:					
11100.000	16.681	33.800	50.481	-23.519	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11100.000	17.523	34.690	52.213	-21.787	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average					

Detector:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

*

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 9: Transmit (802.11n-40BW 30Mbps)(Grid DISH Antenna) (5670MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
11340.000	16.408	34.950	51.357	-22.643	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11340.000	17.167	34.580	51.747	-22.253	74.000

11340.000	17.167	34.580	51.747	-22.253	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module Harmonic Radiated Emission Data No.3 OATS Mode 10 Transmit (802.11ac-20BW-14.4Mbps)(Grid DISH Antenna) (5720MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11440.000	16.779	33.650	50.429	-23.571	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11440.000	17.519	33.740	51.259	-22.741	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module Harmonic Radiated Emission Data No.3 OATS Mode 11: Transmit (802.11ac-40BW-30Mbps)(Grid DISH Antenna) (5710MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11420.000	16.648	34.390	51.037	-22.963	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11420.000	17.311	34.380	51.690	-22.310	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module Harmonic Radiated Emission Data No.3 OATS Mode 12: Transmit (802.11ac-80BW-65Mbps)(Grid DISH Antenna) (5290MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10580.000	14.423	34.890	49.313	-24.687	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
10580.000	14.849	34.130	48.979	-25.021	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module Harmonic Radiated Emission Data No.3 OATS Mode 12: Transmit (802.11ac-80BW-65Mbps)(Grid DISH Antenna) (5530MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11060.000	16.580	33.440	50.020	-23.980	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11060.000	17.375	33.770	51.145	-22.855	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module Harmonic Radiated Emission Data No.3 OATS Mode 12: Transmit (802.11ac-80BW-65Mbps)(Grid DISH Antenna) (5610MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11220.000	16.589	34.480	51.070	-22.930	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11220.000	17.620	34.440	52.060	-21.940	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item Test Site Test Mode	: Harmon : No.3 OA		sion Data 11ac-80BW-65Mbps)	(Grid DISH Ante	nna) (5690MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11380.000	16.480	33.250	49.731	-24.269	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11380.000	17.125	33.360	50.486	-23.514	74.000
11550.000	*	*	*	*	74.000
17325.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module Harmonic Radiated Emission Data No.3 OATS Mode 13: Transmit (802.11a-6Mbps)(Omni Antenna) (5260MHz) 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBµV	dBµV/m	dB	dBµV/m	
Horizontal						
Peak Detector:						
10520.000	14.015	33.660	47.675	-26.325	74.000	
15780.000	*	*	*	*	74.000	
21040.000	*	*	*	*	74.000	
26300.000	*	*	*	*	74.000	
Average						
Detector:						
*	*	*	*	*	*	
Vertical						
Peak Detector:						
10520.000	14.818	33.770	48.588	-25.412	74.000	
15780.000	*	*	*	*	74.000	
21040.000	*	*	*	*	74.000	
26300.000	*	*	*	*	74.000	
Average						
Detector:						

*

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

*

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 13: Transmit (802.11a-6Mbps)(Omni Antenna) (5300MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
10600.000	14.550	35.220	49.769	-24.231	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10640.000	15.083	35.840	50.923	-23.077	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 13: Transmit (802.11a-6Mbps)(Omni Antenna) (5320MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10640.000	14.690	35.360	50.050	-23.950	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10640.000	15.083	35.770	50.853	-23.147	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Average Detector:

Note:

Product Test Item		c PCIe Module c Radiated Emiss	ion Data					
Test Site	: No.3 OA	: No.3 OATS						
Test Mode	: Mode 13	: Transmit (802.1	1a-6Mbps)(Omni An	tenna) (5500MHz	z)			
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBµV	$dB\mu V/m$	dB	$dB\mu V/m$			
Horizontal								
Peak Detector:								
11000.000	16.399	33.920	50.319	-23.681	74.000			
16500.000	*	*	*	*	74.000			
22000.000	*	*	*	*	74.000			
27500.000	*	*	*	*	74.000			
Average								
Detector:								
*	*	*	*	*	*			
Vertical								
Peak Detector:								
11000.000	17.132	34.150	51.282	-22.718	74.000			
16500.000	*	*	*	*	74.000			
22000.000	*	*	*	*	74.000			
27500.000	*	*	*	*	74.000			

measurements as necessary.

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- $\mbox{4.} \quad \mbox{Measurement Level} = \mbox{Reading Level} + \mbox{Correction Factor}.$

*

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average

7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

*

*

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 13: Transmit (802.11a-6Mbps)(Omni Antenna) (5580MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
11160.000	16.664	34.250	50.915	-23.085	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11160.000	17.643	35.050	52.693	-21.307	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product Test Item Test Site Test Mode	: Harmonio : No.3 OA		sion Data 1a-6Mbps)(Omni An	tenna) (5700MH:	z)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11400.000	16.530	34.470	51.001	-22.999	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11400.000	17.138	34.960	52.098	-21.902	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 14: Transmit (802.11n-20BW 14.4Mbps)(Omni Antenna) (5260MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
10520.000	14.015	34.330	48.345	-25.655	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10520.000	14.818	35.090	49.908	-24.092	74.000
					74 000

10320.000	14.010	33.090	49.908	-24.092	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 14: Transmit (802.11n-20BW 14.4Mbps)(Omni Antenna) (5300MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10600.000	14.550	35.450	49.999	-24.001	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector					

Peak Detector:

I can Detector.					
10600.000	14.881	34.990	49.871	-24.129	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 14: Transmit (802.11n-20BW 14.4Mbps)(Omni Antenna) (5320MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
10640.000	14.690	34.880	49.570	-24.430	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10640.000	15.083	35.110	50.193	-23.807	74.000
					74,000

15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 14: Transmit (802.11n-20BW 14.4Mbps)(Omni Antenna) (5500MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
11000.000	16.399	33.860	50.259	-23.741	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11000.000	17.132	34.070	51.202	-22.798	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000

Detector:					
*	*	*	*	*	*

Note:

Average

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

*

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 14: Transmit (802.11n-20BW 14.4Mbps)(Omni Antenna) (5580MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
11160.000	16.664	34.350	51.015	-22.985	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11160.000	17.643	35.220	52.863	-21.137	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000

Detector: * * * * * *

Note:

Average

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 14: Transmit (802.11n-20BW 14.4Mbps)(Omni Antenna) (5700MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11400.000	16.530	34.720	51.251	-22.749	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11400.000	17.138	34.910	52.048	-21.952	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					

*

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 15: Transmit (802.11n-40BW 30Mbps)(Omni Antenna) (5270MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
10540.000	14.151	33.890	48.040	-25.960	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Vertical

Peak Detector:

10540.000	14.829	35.270	50.098	-23.902	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 15: Transmit (802.11n-40BW 30Mbps)(Omni Antenna) (5310MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
	uD		αDμ // Π	uD	dDµ V/III
Horizontal					
Peak Detector:					
10620.000	14.623	35.150	49.773	-24.227	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Vertical

Peak Detector:

10620.000	14.970	34.830	49.800	-24.200	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 15: Transmit (802.11n-40BW 30Mbps)(Omni Antenna) (5510MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11020.000	16.474	34.810	51.283	-22.717	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11020.000	17.224	34.290	51.514	-22.486	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					

*

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 15: Transmit (802.11n-40BW 30Mbps)(Omni Antenna) (5550MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11100.000	16.681	34.580	51.261	-22.739	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11100.000	17.523	35.150	52.673	-21.327	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average					
Detector:					

*

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 15: Transmit (802.11n-40BW 30Mbps)(Omni Antenna) (5670MHz)

Frequency	Correct	Reading Level	Measurement	Margin	Limit
	Factor		Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11340.000	16.408	34.880	51.287	-22.713	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11340.000	17.167	35.360	52.527	-21.473	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
Detector:					

*

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product Test Item	802.11 ac PCIe ModuleHarmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 16: Transmit (802.11ac-20BW-14.4Mbps)(Omni Antenna) (5720MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11440.000	16.779	34.580	51.359	-22.641	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11440.000	17.519	34.770	52.289	-21.711	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product	: 802.11 ac PCIe Module						
Test Item	: Harmonic Radiated Emission Data						
Test Site Test Mode	: No.3 OA : Mode 17		1ac-40BW-30Mbps)	(Omni Antonno) ($(5710MH_{\pi})$		
Test Mode	. Mode 17	7. Transmit (802.)	11ac-40B w-301v10ps)	(Omm Antenna) (3/10MHZ)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11420.000	16.648	34.840	51.487	-22.513	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11420.000	17.311	35.260	52.570	-21.430	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product	: 802.11 ac PCIe Module							
Test Item	: Harmonic Radiated Emission Data							
Test Site	: No.3 OATS							
Test Mode	: Mode I	: Mode 18: Transmit (802.11ac-80BW-65Mbps)(Omni Antenna) (5290MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBuV	dBuV/m	dB	dBuV/m			
Horizontal								
Peak Detector:								
10580.000	14.423	34.740	49.163	-24.837	74.000			
11550.000	*	*	*	*	74.000			
17325.000	*	*	*	*	74.000			
20720.000	*	*	*	*	74.000			
25900.000	*	*	*	*	74.000			
31080.000	*	*	*	*	74.000			
36260.000	*	*	*	*	74.000			
Average								
Detector:								
*	*	*	*	*	*			
Vertical								
Peak Detector:								
10580.000	14.849	35.210	50.059	-23.941	74.000			
11550.000	*	*	*	*	74.000			
17325.000	*	*	*	*	74.000			
20720.000	*	*	*	*	74.000			
25900.000	*	*	*	*	74.000			
31080.000	*	*	*	*	74.000			
36260.000	*	*	*	*	74.000			
Average								
Detector:								
*	*	*	*	*	*			

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

Product Test Item	 802.11 ac PCIe Module Harmonic Radiated Emission Data 						
Test Site	 Harmonic Radiated Emission Data No.3 OATS 						
Test Mode	 Mole 18: Transmit (802.11ac-80BW-65Mbps)(Omni Antenna) (5530MHz) 						
1000111000		00 11 0 1151110 (00 - 11		(• • • • • • • • • • • • • • • • • • •			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11060.000	16.580	34.970	51.550	-22.450	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11060.000	17.375	35.440	52.815	-21.185	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product		c PCIe Module					
Test Item	: Harmonic Radiated Emission Data						
Test Site	 No.3 OATS Mode 18: Transmit (802.11ac-80BW-65Mbps)(Omni Antenna) (5610MHz) 						
Test Mode	: Mode 18	8: Transmit (802.)	11ac-80BW-65Mbps)	(Omni Antenna) ((3610MHZ)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11220.000	16.589	34.660	51.250	-22.750	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11220.000	17.620	35.270	52.890	-21.110	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item	: 802.11 ac PCIe Module						
Test Item Test Site	 Harmonic Radiated Emission Data No.3 OATS 						
Test Mode			1ac-80BW-65Mbps)	(Omni Antenna) ((5690MHz)		
Test Mode	. Whote he	5. ITalishint (002.)	11ac-00D W-051M0p3)	(Omm / memia) ((50)01112)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11380.000	16.480	35.110	51.591	-22.409	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11380.000	17.125	35.790	52.916	-21.084	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product	: 802.11 ac PCIe Module						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 19	9: Transmit (802.1	11a-6Mbps)(Panel An	tenna) (5260MH	z)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	dBµV/m		
Horizontal							
Peak Detector:							
10520.000	43.137	34.610	48.625	-25.375	74.000		
15780.000	*	*	*	*	74.000		
21040.000	*	*	*	*	74.000		
26300.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
10520.000	14.818	34.380	49.198	-24.802	74.000		
15780.000	*	*	*	*	74.000		
21040.000	*	*	*	*	74.000		
26300.000	*	*	*	*	74.000		
Average							
Detector:							

*

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 19: Transmit (802.11a-6Mbps)(Panel Antenna) (5300MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal		•	•		•
Peak Detector:					
10600.000	14.550	35.330	49.879	-24.121	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10600.000	14.881	36.340	51.221	-22.779	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 19: Transmit (802.11a-6Mbps)(Panel Antenna) (5320MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10640.000	14.690	35.790	50.480	-23.520	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10640.000	15.083	36.240	51.323	-22.677	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product Test Item Test Site Test Mode	: Harmon : No.3 OA		ion Data 1a-6Mbps)(Panel An	tenna) (5500MHz	z)
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11000.000	16.399	34.590	50.989	-23.011	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
* Vertical	*	*	*	*	*

al Dat Pe

Peak Detector:					
11000.000	17.132	34.460	51.592	-22.408	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 19: Transmit (802.11a-6Mbps)(Panel Antenna) (5580MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11160.000	16.664	34.580	51.245	-22.755	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11160.000	17.643	34.710	52.353	-21.647	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 19: Transmit (802.11a-6Mbps)(Panel Antenna) (5700MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11400.000	16.530	35.290	51.821	-22.179	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11400.000	17.138	35.410	52.548	-21.452	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 20: Transmit (802.11n-20BW 14.4Mbps)(Panel Antenna) (5260MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
10520.000	14.015	34.630	48.645	-25.355	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10520.000	14.818	34.510	49.328	-24.672	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 20: Transmit (802.11n-20BW 14.4Mbps)(Panel Antenna) (5300MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
10600.000	14.550	34.810	49.359	-24.641	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					

Peak Detector:

10600.000	14.881	36.170	51.051	-22.949	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 20: Transmit (802.11n-20BW 14.4Mbps)(Panel Antenna) (5320MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10640.000	14.690	34.510	49.200	-24.800	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10640.000	15.083	34.720	49.803	-24.197	74.000

10640.000	15.083	34.720	49.803	-24.197	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 20: Transmit (802.11n-20BW 14.4Mbps)(Panel Antenna) (5500MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
11000.000	16.399	34.630	51.029	-22.971	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11000.000	17.132	34.610	51.742	-22.258	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000

Detector:					
*	*	*	*	*	*

Average

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 20: Transmit (802.11n-20BW 14.4Mbps)(Panel Antenna) (5580MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11160.000	16.664	34.490	51.155	-22.845	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11160.000	17.643	34.770	52.413	-21.587	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					

Detector:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

74.000

*

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 20: Transmit (802.11n-20BW 14.4Mbps)(Panel Antenna) (5700MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
11400.000	16.530	34.490	51.021	-22.979	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11400.000	17.138	34.860	51.998	-22.002	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000

Detector:					
*	*	*	*	*	

*

Note:

28500.000 Average

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 21: Transmit (802.11n-40BW 30Mbps)(Panel Antenna) (5270MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10540.000	14.829	34.810	49.638	-24.362	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
X 7 4• 1					

Vertical

Peak Detector:

10540.000	14.829	35.170	49.998	-24.002	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 21: Transmit (802.11n-40BW 30Mbps)(Panel Antenna) (5310MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10620.000	14.623	34.860	49.483	-24.517	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*

Vertical

Peak Detector:

10620.000	14.970	35.970	50.940	-23.060	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average Detector:					
	de	.1.	.t.		
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 21: Transmit (802.11n-40BW 30Mbps)(Panel Antenna) (5510MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
				JD	ID W/
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11020.000	16.474	34.590	51.063	-22.937	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11020.000	17.224	35.160	52.384	-21.616	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					

*

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 21: Transmit (802.11n-40BW 30Mbps)(Panel Antenna) (5550MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
11100.000	16.681	34.520	51.201	-22.799	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11100.000	17.523	35.120	52.643	-21.357	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 21: Transmit (802.11n-40BW 30Mbps)(Panel Antenna) (5670MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11340.000	16.408	34.690	51.097	-22.903	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11340.000	17.167	35.420	52.587	-21.413	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
Detector:					

*

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product Test Item Test Site	 802.11 ac PCIe Module Harmonic Radiated Emission Data 						
Test Mode	: No.3 OATS Mode 22: Transmit (802 11ag 20PW 14 4Mbrs)(Papel Antenna) (5720MHz)						
Test Mode	: Mode 22: Transmit (802.11ac-20BW-14.4Mbps)(Panel Antenna) (5720MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11440.000	16.779	33.750	50.529	-23.471	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11440.000	17.519	33.670	51.189	-22.811	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product	: 802.11 ac PCIe Module						
Test Item Test Site	 Harmonic Radiated Emission Data No.3 OATS 						
Test Mode	 Mode 23: Transmit (802.11ac-40BW-30Mbps)(Panel Antenna) (5710MHz) 						
Test Wode	. 10000 2.	5. Hunshitt (002.)		(1 uner / interina) ((57101112)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11420.000	16.648	34.420	51.067	-22.933	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11420.000	17.311	34.360	51.670	-22.330	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product	: 802.11 a	ac PCIe Module					
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 24: Transmit (802.11ac-80BW-65Mbps)(Panel Antenna) (5290MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10580.000	14.423	34.930	49.353	-24.647	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
10580.000	14.849	34.710	49.559	-24.441	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item		c PCIe Module ic Radiated Emiss	sion Data				
Test Site	: No.3 OATS						
Test Mode	: Mode 24: Transmit (802.11ac-80BW-65Mbps)(Panel Antenna) (5530MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11060.000	16.580	33.460	50.040	-23.960	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11060.000	17.375	33.740	51.115	-22.885	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item	 802.11 ac PCIe Module Harmonic Radiated Emission Data 						
Test Site	 Harmonic Radiated Emission Data No.3 OATS 						
Test Mode	Mode 24: Transmit (802.11ac-80BW-65Mbps)(Panel Antenna) (5610MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11220.000	16.589	34.830	51.420	-22.580	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11220.000	17.620	34.960	52.580	-21.420	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product	: 802.11 ac PCIe Module						
Test Item Test Site	 Harmonic Radiated Emission Data No.3 OATS 						
Test Mode	 Mode 24: Transmit (802.11ac-80BW-65Mbps)(Panel Antenna) (5690MHz) 						
Test Wode	. 10000 2-	. Hunshint (002.)		(1 anoi 7 intenna) ((50)000112)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11380.000	16.480	33.190	49.671	-24.329	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11380.000	17.125	33.150	50.276	-23.724	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item Test Site Test Mode	: Harmoni : No.3 OA		sion Data 1a-6Mbps)(Sector Ar	ntenna) (5260MH	[z)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10520.000	14.015	45.270	59.285	-14.715	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
10520.000	14.015	28.280	42.295	-11.705	54.000
Vertical					
Peak Detector:					
10520.000	14.818	42.660	57.478	-16.522	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
10500.000	4 4 9 4 9	• • • • • •		10 000	

10520.000

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

41.718

-12.282

54.000

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

26.900

4. Measurement Level = Reading Level + Correction Factor.

14.818

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module				
Test Item	:	Harmonic R	Harmonic Radiated Emission Data			
Test Site	:	No.3 OATS	No.3 OATS			
Test Mode	:	Mode 25: T	Mode 25: Transmit (802.11a-6Mbps)(Sector Antenna) (5300MHz)			
Frequency	Co	rrect	Reading	Measurement	Margin	Limit

· ·		•		e e	
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10600.000	14.550	34.790	49.339	-24.661	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10600.000	14.881	35.490	50.371	-23.629	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

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

Dreduct

000 44

. .

Product	: 802.11 ac PCIe Module					
Test Item	: Harmonic Radiated Emission Data					
Test Site	: No.3 OATS					
Test Mode	: Mode 25	: Transmit (802.)	11a-6Mbps)(Sector A	ntenna) (5320MH	lz)	
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBµV	$dB\mu V/m$	dB	$dB\mu V/m$	
Horizontal						
Peak Detector:						
10640.000	14.690	34.940	49.630	-24.370	74.000	
15960.000	*	*	*	*	74.000	
21280.000	*	*	*	*	74.000	
26600.000	*	*	*	*	74.000	
Average						
Detector:						
*	*	*	*	*	*	
Vertical						
Peak Detector:						
10640.000	15.083	35.170	50.253	-23.747	74.000	
15960.000	*	*	*	*	74.000	
21280.000	*	*	*	*	74.000	
26600.000	*	*	*	*	74.000	
Average						
Detector:						

Note:

*

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module Harmonic Radiated Emission Data No.3 OATS Mode 25: Transmit (802.11a-6Mbps)(Sector Antenna) (5500MHz) 				
Frequency	Correct	Reading	Measurement	Margin	Limit
1	Factor	Level	Level	C	
MHz	dB	dBµV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
11000.000	16.399	33.780	50.179	-23.821	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector: *	*	*	*	*	*
	*	*	*	*	*
Vertical					
Peak Detector:	15 100	22.450	50.600	22 200	7 4 000
11000.000	17.132	33.470	50.602	-23.398	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					

Detector:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 25: Transmit (802.11a-6Mbps)(Sector Antenna) (5580MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11160.000	16.664	47.560	64.225	-9.775	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
11160.000	16.664	31.280	47.945	-6.055	54.000
Vertical					
Peak Detector:					
11160.000	17.643	46.630	64.273	-9.727	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
11160.000	17.643	28.980	46.623	-7.377	54.000

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

Product Test Item Test Site Test Mode	: Harmonic : No.3 OAT		ion Data 1a-6Mbps)(Sector Ai	ntenna) (5700MH	z)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level	C	
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
11400.000	17.138	34.920	52.058	-21.942	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector: *	*	*	*	*	*
Vertical					
Peak Detector:					
11400.000	17.138	35.410	52.548	-21.452	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					

Detector:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 26: Transmit (802.11n-20BW 14.4Mbps)(Sector Antenna) (5260MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
10520.000	14.015	46.120	60.135	-13.865	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
10520.000	14.015	29.770	43.785	-10.215	54.000
Vertical					
Peak Detector:					
10520.000	14.818	42.270	57.088	-16.912	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
10520.000	14.818	26.810	41.628	-12.372	54.000

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 26: Transmit (802.11n-20BW 14.4Mbps)(Sector Antenna) (5300MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBµV/m	dB	dBµV/m
Horizontal		·	·		·
Peak Detector:					
10600.000	14.550	46.920	61.469	-12.531	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average Detector:					
10600.000	14.550	29.250	43.799	-10.201	54.000
Vertical					
Peak Detector:					
10600.000	14.881	44.920	59.801	-14.199	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average Detector:					
10600.000	14.881	28.840	43.721	-10.279	54.000

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 26: Transmit (802.11n-20BW 14.4Mbps)(Sector Antenna) (5320MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
				-	
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10640.000	14.690	35.660	50.350	-23.650	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10640.000	15.083	35.170	50.253	-23.747	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000

Detector: * * * * * * *

Note:

Average

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

74.000

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 26: Transmit (802.11n-20BW 14.4Mbps)(Sector Antenna) (5500MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11000.000	16.399	33.360	49.759	-24.241	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11000.000	17.132	33.520	50.652	-23.348	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000

Detector:					
*	*	*	*	*	*

*

*

*

Note:

27500.000

Average

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 26: Transmit (802.11n-20BW 14.4Mbps)(Sector Antenna) (5580MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11160.000	16.664	47.220	63.885	-10.115	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average Detector:					
11160.000	16.664	29.220	45.885	-8.115	54.000
Vertical					
Peak Detector:					
11160.000	17.643	48.400	66.043	-7.957	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average Detector:					
11160.000	17.643	31.330	48.973	-5.027	54.000

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 26: Transmit (802.11n-20BW 14.4Mbps)(Sector Antenna) (5700MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
	dD	dDμ v	dDμ V/III	dD	dDμv/m
Horizontal					
Peak Detector:					
11400.000	16.530	34.410	50.941	-23.059	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11400.000	17.138	34.610	51.748	-22.252	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					

*

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	: 802.11 ac PCIe Module				
Test Item	: Harmonic	Radiated Emiss	sion Data		
Test Site	: No.3 OAT	ſS			
Test Mode	: Mode 27:	Transmit (802.1	1n-40BW 30Mbps)(S	Sector Antenna) (3	5270MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10540.000	14.151	45.260	59.410	-14.590	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average					
Detector:					
10540.000	14.151	28.330	42.480	-11.520	54.000
Vertical					
Peak Detector:					
10540.000	14.829	46.420	61.248	-12.752	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000

Detector:					
10540.000	14.829	29.050	43.878	-10.122	54.000

Average

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 27: Transmit (802.11n-40BW 30Mbps)(Sector Antenna) (5310MHz)

Correct	Reading	Measurement	Margin	Limit
dB	dBµV	dBµV/m	dB	dBµV/m
14.623	34.870	49.493	-24.507	74.000
*	*	*	*	74.000
*	*	*	*	74.000
*	*	*	*	74.000
*	*	*	*	*
	Factor dB 14.623 * * *	Factor Level dB dBμV 14.623 34.870 * * * * * * * * * * * *	Factor Level Level dB dBμV dBμV/m 14.623 34.870 49.493 * * * * * * * * * * * *	Factor Level Level dB dBμV dBμV/m dB 14.623 34.870 49.493 -24.507 * * * * * * * * * * * * * * * * * * * *

Vertical

Peak Detector:

10620.000	14.970	34.950	49.920	-24.080	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 27: Transmit (802.11n-40BW 30Mbps)(Sector Antenna) (5510MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11020.000	16.474	33.690	50.163	-23.837	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11020.000	17.224	33.310	50.534	-23.466	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					

Detector:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 27: Transmit (802.11n-40BW 30Mbps)(Sector Antenna) (5550MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal		· · ·			
Peak Detector:					
11100.000	16.681	48.120	64.801	-9.199	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average Detector:					
11100.000	16.681	31.670	48.351	-5.649	54.000
Vertical					
Peak Detector:					
11100.000	17.523	49.110	66.633	-7.367	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average Detector:					
11100.000	17.523	31.680	49.203	-4.797	54.000

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

Product	:	802.11 ac PCIe Module
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 27: Transmit (802.11n-40BW 30Mbps)(Sector Antenna) (5670MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
				-	
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11340.000	16.408	35.170	51.577	-22.423	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11340.000	17.167	35.600	52.767	-21.233	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					

Detector:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

*

*

*

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correction Factor.

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product Test Item Test Site	 802.11 ac PCIe Module Harmonic Radiated Emission Data No.3 OATS 					
Test Mode			1ac-20BW-14.4Mbp	s)(Sector Antenna	a) (5720MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
11440.000	16.779	38.470	55.249	-18.751	74.000	
11550.000	*	*	*	*	74.000	
17325.000	*	*	*	*	74.000	
20720.000	*	*	*	*	74.000	
25900.000	*	*	*	*	74.000	
31080.000	*	*	*	*	74.000	
36260.000	*	*	*	*	74.000	
Average						
Detector:						
11440.000	16.779	22.760	39.539	-14.461	54.000	
Vertical						
Peak Detector:						
11440.000	17.519	38.220	55.739	-18.261	74.000	
11550.000	*	*	*	*	74.000	
17325.000	*	*	*	*	74.000	
20720.000	*	*	*	*	74.000	
25900.000	*	*	*	*	74.000	
31080.000	*	*	*	*	74.000	
36260.000	*	*	*	*	74.000	
Average						
Detector:						
11440.000	17.519	23.320	40.839	-13.161	54.000	

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: 802.11 ac PCIe Module						
Test Item Test Site	: Harmonic Radiated Emission Data						
Test Mode	 No.3 OATS Mode 29: Transmit (802.11ac-40BW-30Mbps)(Sector Antenna) (5710MHz) 						
Test Mode	. Mode 2	9. ITalisilit (802.)	11ac-40B W-301010ps)	(Sector Antenna)	(571011112)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11420.000	16.648	34.300	50.947	-23.053	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11420.000	17.311	34.280	51.590	-22.410	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product	: 802.11 ac PCIe Module						
Test Item	: Harmonic Radiated Emission Data						
Test Site	 No.3 OATS Mode 30: Transmit (802.11ac-80BW-65Mbps)(Sector Antenna) (5290MHz) 						
Test Mode	: Mode 3	0: Transmit (802.)	llac-80BW-65Mbps)	(Sector Antenna)	(5290MHz)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10580.000	14.423	34.730	49.153	-24.847	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
10580.000	14.849	34.740	49.589	-24.411	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item	802.11 ac PCIe ModuleHarmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 30	0: Transmit (802.1	11ac-80BW-65Mbps)	(Sector Antenna)	(5530MHz)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11060.000	16.580	33.370	49.950	-24.050	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11060.000	17.375	33.310	50.685	-23.315	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item Test Site	 802.11 ac PCIe Module Harmonic Radiated Emission Data 						
Test Mode	 No.3 OATS Mode 30: Transmit (802.11ac-80BW-65Mbps)(Sector Antenna) (5610MHz) 						
Test Wode	. Wrote 50. Transmit ($\frac{602.11ac}{60B}$ w $-\frac{65100}{6}$ (Sector Amenina) ($\frac{5010}{10}$ ($\frac{1}{2}$)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11220.000	16.589	36.080	52.670	-21.330	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		
Vertical							
Peak Detector:							
11220.000	17.620	35.940	53.560	-20.440	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
*	*	*	*	*	*		

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

Product Test Item	 802.11 ac PCIe Module Harmonic Radiated Emission Data 						
Test Site	: No.3 OATS						
Test Mode	: Mode 30: Transmit (802.11ac-80BW-65Mbps)(Sector Antenna) (5690MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11380.000	16.480	41.730	58.211	-15.789	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
11380.000	16.480	24.680	41.161	-12.839	54.000		
Vertical							
Peak Detector:							
11380.000	17.125	39.230	56.356	-17.644	74.000		
11550.000	*	*	*	*	74.000		
17325.000	*	*	*	*	74.000		
20720.000	*	*	*	*	74.000		
25900.000	*	*	*	*	74.000		
31080.000	*	*	*	*	74.000		
36260.000	*	*	*	*	74.000		
Average							
Detector:							
11380.000	17.125	22.980	40.106	-13.894	54.000		

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site	 802.11 ac PCIe Module General Radiated Emission No.3 OATS 					
Test Mode	: Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) (5300MHz)					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBµV	dBµV/m	dB	dBµV/m	
Horizontal						
Peak Detector						
108.725	-7.307	44.207	36.900	-6.600	43.500	
254.928	-5.113	40.774	35.662	-10.338	46.000	
391.290	-1.904	41.264	39.360	-6.640	46.000	
603.565	4.622	33.782	38.404	-7.596	46.000	
782.101	4.297	36.176	40.473	-5.527	46.000	
883.319	6.172	35.082	41.254	-4.746	46.000	
Vertical						
Peak Detector						
128.406	-4.119	42.335	38.216	-5.284	43.500	
380.043	-1.440	41.302	39.862	-6.138	46.000	
517.812	-0.719	38.153	37.434	-8.566	46.000	
689.319	2.525	34.108	36.633	-9.367	46.000	
782.101	3.046	36.175	39.221	-6.779	46.000	
957.826	6.832	34.708	41.540	-4.460	46.000	

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

Product Test Item Test Site	 802.11 ac PCIe Module General Radiated Emission No.3 OATS 					
Test Mode	: Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) (5580MHz)					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBµV	dBµV/m	dB	dBµV/m	
Horizontal						
Peak Detector						
128.406	-10.068	42.335	32.267	-11.233	43.500	
389.884	-1.761	42.482	40.720	-5.280	46.000	
595.130	3.963	34.591	38.554	-7.446	46.000	
714.623	3.562	36.022	39.584	-6.416	46.000	
820.058	5.836	35.333	41.169	-4.831	46.000	
918.464	6.388	34.793	41.181	-4.819	46.000	
Vertical						
Peak Detector						
129.812	-4.151	41.931	37.780	-5.720	43.500	
382.855	-2.110	42.014	39.904	-6.096	46.000	
507.971	-0.350	38.299	37.948	-8.052	46.000	
686.507	2.371	35.549	37.920	-8.080	46.000	
825.681	3.393	35.849	39.242	-6.758	46.000	
945.174	6.593	34.986	41.579	-4.421	46.000	

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5300MHz) 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBµV	dBµV/m	dB	dBµV/m	
Horizontal						
Peak Detector						
105.913	-6.721	40.348	33.628	-9.872	43.500	
291.478	-4.238	41.619	37.382	-8.618	46.000	
392.696	-2.085	42.860	40.775	-5.225	46.000	
609.188	4.228	35.006	39.234	-6.766	46.000	
768.043	4.230	34.652	38.882	-7.118	46.000	
905.812	5.762	35.260	41.022	-4.978	46.000	
Vertical						
Peak Detector						
112.942	-1.630	39.500	37.870	-5.630	43.500	
378.638	-1.584	41.612	40.028	-5.972	46.000	
526.246	-0.417	35.723	35.306	-10.694	46.000	
686.507	2.371	35.549	37.920	-8.080	46.000	
825.681	3.393	35.849	39.242	-6.758	46.000	
952.203	6.630	35.384	42.014	-3.986	46.000	

-

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5580MHz) 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m	
Horizontal						
Peak Detector						
107.319	-6.999	40.182	33.184	-10.316	43.500	
266.174	-4.970	41.564	36.593	-9.407	46.000	
387.072	-1.533	42.384	40.851	-5.149	46.000	
596.536	4.016	35.259	39.275	-6.725	46.000	
777.884	4.177	35.392	39.569	-6.431	46.000	
894.565	5.079	35.005	40.085	-5.915	46.000	
Vertical						
Peak Detector						
145.275	-6.252	43.147	36.895	-6.605	43.500	
382.855	-2.110	42.014	39.904	-6.096	46.000	
506.565	-0.582	35.149	34.566	-11.434	46.000	
685.101	2.239	35.648	37.887	-8.113	46.000	
782.101	3.046	36.175	39.221	-6.779	46.000	
946.580	6.596	34.518	41.114	-4.886	46.000	

-

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) (5270MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	dBµV/m		
Horizontal							
Peak Detector							
129.812	-10.120	42.104	31.984	-11.516	43.500		
252.116	-5.573	41.149	35.576	-10.424	46.000		
401.130	-2.269	41.558	39.289	-6.711	46.000		
609.188	4.228	34.600	38.828	-7.172	46.000		
786.319	4.671	34.655	39.326	-6.674	46.000		
928.304	6.909	34.307	41.215	-4.785	46.000		
Vertical							
Peak Detector							
129.812	-4.151	42.104	37.953	-5.547	43.500		
381.449	-1.656	42.028	40.372	-5.628	46.000		
519.217	-0.492	35.517	35.025	-10.975	46.000		
683.696	1.948	35.234	37.182	-8.818	46.000		
806.000	3.908	35.526	39.434	-6.566	46.000		

953.609

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

40.183

-5.817

46.000

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

33.546

4. Measurement Level = Reading Level + Correction Factor.

6.637

- 5. Correction Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data is under the limit of average detection.
- 7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: General : No.3 OA		n n-40BW 30Mbps)(Di	pole Antenna) (5	550MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	$dB\mu V/m$
Horizontal					
Peak Detector					
256.333	-5.081	41.513	36.432	-9.568	46.000
388.478	-1.647	42.173	40.526	-5.474	46.000
578.261	3.310	35.977	39.287	-6.713	46.000
692.130	3.646	35.459	39.105	-6.895	46.000
831.304	6.099	35.711	41.811	-4.189	46.000
939.551	6.399	34.373	40.772	-5.228	46.000
Vertical					
Peak Detector					
134.029	-4.557	42.772	38.216	-5.284	43.500
380.043	-1.440	41.784	40.344	-5.656	46.000
505.159	-0.784	34.837	34.054	-11.946	46.000
689.319	2.525	35.387	37.912	-8.088	46.000
806.000	3.908	35.526	39.434	-6.566	46.000
942.362	6.584	34.791	41.375	-4.625	46.000

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n ac-20BW-14.4Mbps)	(Dipole Antenna)	(5720MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
266.174	-4.970	42.152	37.181	-8.819	46.000
389.884	-1.761	42.059	40.297	-5.703	46.000
578.261	3.310	35.977	39.287	-6.713	46.000
692.130	3.646	35.459	39.105	-6.895	46.000
801.783	5.101	34.763	39.864	-6.136	46.000
932.522	6.858	34.954	41.811	-4.189	46.000
Vertical					
Peak Detector					
135.435	-4.789	43.001	38.212	-5.288	43.500
382.855	-2.110	41.974	39.864	-6.136	46.000
507.971	-0.350	35.779	35.428	-10.572	46.000
689.319	2.525	35.387	37.912	-8.088	46.000
791.942	2.897	36.644	39.541	-6.459	46.000
943.768	6.593	34.553	41.146	-4.854	46.000

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



Product Test Item Test Site Test Mode	: General : No.3 OA		n ac-40BW-30Mbps)(E	Dipole Antenna) (5710MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
101.696	-7.157	42.704	35.547	-7.953	43.500
385.667	-1.408	41.995	40.586	-5.414	46.000
578.261	3.310	35.977	39.287	-6.713	46.000
693.536	3.566	35.077	38.642	-7.358	46.000
818.652	5.672	34.717	40.389	-5.611	46.000
933.928	6.630	34.735	41.366	-4.634	46.000
Vertical Peak Detector					
131.217	-4.272	42.482	38.210	-5.290	43.500
380.043	-1.440	41.784	40.344	-5.656	46.000
540.304	0.105	35.953	36.058	-9.942	46.000
689.319	2.525	35.387	37.912	-8.088	46.000
807.406	3.671	35.398	39.069	-6.931	46.000
945.174	6.593	35.220	41.813	-4.187	46.000

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: General : No.3 OA		n ac-80BW-65Mbps)(E	Dipole Antenna) (A	5290MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
101.696	-7.157	40.104	32.947	-10.553	43.500
259.145	-5.049	42.310	37.261	-8.739	46.000
389.884	-1.761	42.436	40.674	-5.326	46.000
606.377	4.638	34.755	39.392	-6.608	46.000
759.609	4.370	34.841	39.211	-6.789	46.000
947.986	6.636	34.959	41.595	-4.405	46.000
Vertical Peak Detector					
112.942	-1.630	40.019	38.389	-5.111	43.500
259.145	-1.630 -7.480	40.019	37.731	-3.111 -8.269	43.500 46.000
382.855	-2.110	43.211 41.974	39.864	-6.136	46.000
537.493	-0.111	41.974 36.006	35.895	-10.105	46.000
791.942	-0.111 2.897	36.644	39.541	-6.459	46.000
955.014	6.649	35.086	41.736	-0.439	46.000
933.014	0.049	55.080	41./30	-4.204	40.000

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: General : No.3 OA		n ac-80BW-65Mbps)(D	Dipole Antenna) (5530MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
105.913	-6.721	39.271	32.551	-10.949	43.500
392.696	-2.085	42.248	40.163	-5.837	46.000
545.928	3.585	35.678	39.263	-6.737	46.000
680.884	2.862	35.561	38.423	-7.577	46.000
793.348	5.193	34.732	39.924	-6.076	46.000
935.333	6.448	34.587	41.035	-4.965	46.000
Vertical Peak Detector					
111.536	-0.981	40.130	39.150	-4.350	43.500
381.449	-0.981	40.130	38.532	-4.330 -7.468	45.300
507.971	-0.350	40.188 35.779	35.428	-10.572	46.000
689.319	-0.330	35.387	37.912	-10.372	46.000
808.812	2.525 3.447	35.491	38.938	-8.088 -7.062	46.000
956.420	6.713	35.300	42.012	-7.062	46.000
930.420	0./15	55.500	42.012	-3.900	40.000

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 7: Transmit (802.11a-6Mbps)(Grid DISH Antenna) (5300MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	dBµV/m		
Horizontal							
Peak Detector							
149.493	-10.223	42.104	31.881	-11.619	43.500		
271.797	-5.217	42.288	37.071	-8.929	46.000		
378.638	-1.038	42.149	41.111	-4.889	46.000		
592.319	3.744	29.695	33.439	-12.561	46.000		
791.942	5.212	31.912	37.124	-8.876	46.000		
931.116	7.081	31.171	38.252	-7.748	46.000		
Vertical							
Peak Detector							
112.942	-1.630	38.514	36.884	-6.616	43.500		
374.420	-2.179	41.790	39.611	-6.389	46.000		
520.623	-0.316	30.706	30.390	-15.610	46.000		
685.101	2.239	31.204	33.443	-12.557	46.000		
808.812	3.447	30.693	34.140	-11.860	46.000		
949.391	6.615	31.362	37.977	-8.023	46.000		

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n a-6Mbps)(Grid DISH	[Antenna) (5580]	MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
141.058	-10.460	42.203	31.743	-11.757	43.500
283.043	-5.069	42.088	37.019	-8.981	46.000
389.884	-1.761	42.595	40.833	-5.167	46.000
585.290	3.397	31.014	34.411	-11.589	46.000
790.536	5.204	30.596	35.799	-10.201	46.000
915.652	6.087	31.874	37.960	-8.040	46.000
Vertical Peak Detector					
138.246	-5.662	41.945	36.283	-7.217	43.500
277.420	-8.699	42.612	33.913	-12.087	46.000
385.667	-2.971	42.430	39.458	-6.542	46.000
685.101	2.239	31.204	33.443	-12.557	46.000
807.406	3.671	30.863	34.534	-11.466	46.000
942.362	6.584	31.651	38.235	-7.765	46.000

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n n-20BW 14.4Mbps)(Grid DISH Anter	nna) (5300MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
104.507	-6.647	38.550	31.903	-11.597	43.500
270.391	-4.997	42.319	37.323	-8.677	46.000
370.203	-1.080	41.804	40.725	-5.275	46.000
604.971	4.781	32.465	37.245	-8.755	46.000
787.725	4.886	30.500	35.386	-10.614	46.000
924.087	6.248	31.478	37.726	-8.274	46.000
Vertical Peak Detector					
117.159	-3.074	40.597	37.523	-5.977	43.500
254.928	-7.647	41.030	33.384	-12.616	46.000
368.797	-2.770	41.760	38.990	-7.010	46.000
538.899	0.097	31.110	31.207	-14.793	46.000
782.101	3.046	31.887	34.933	-11.067	46.000
940.957	6.566	30.935	37.500	-8.500	46.000

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n n-20BW 14.4Mbps)(Grid DISH Anter	nna) (5580MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
145.275	-10.355	42.402	32.047	-11.453	43.500
277.420	-5.731	42.612	36.880	-9.120	46.000
389.884	-1.761	42.595	40.833	-5.167	46.000
604.971	4.781	32.465	37.245	-8.755	46.000
825.681	6.260	31.724	37.984	-8.016	46.000
932.522	6.858	30.666	37.523	-8.477	46.000
Vertical					
Peak Detector					
121.377	-3.825	40.255	36.430	-7.070	43.500
257.739	-7.542	41.467	33.926	-12.074	46.000
367.391	-2.512	41.508	38.996	-7.004	46.000
524.841	-0.383	31.277	30.894	-15.106	46.000
687.913	2.458	31.499	33.957	-12.043	46.000
932.522	6.075	31.800	37.874	-8.126	46.000

_

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n n-40BW 30Mbps)(Gr	rid DISH Antenna	a) (5270MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
150.899	-10.178	42.618	32.440	-11.060	43.500
370.203	-1.080	41.804	40.725	-5.275	46.000
545.928	3.585	31.344	34.929	-11.071	46.000
713.217	3.567	31.471	35.037	-10.963	46.000
822.870	6.077	31.139	37.217	-8.783	46.000
931.116	7.081	31.171	38.252	-7.748	46.000
Vertical					
Peak Detector					
108.725	-0.372	38.715	38.343	-5.157	43.500
270.391	-9.226	42.520	33.294	-12.706	46.000
368.797	-2.770	41.760	38.990	-7.010	46.000
683.696	1.948	30.836	32.784	-13.216	46.000
817.246	3.263	31.888	35.151	-10.849	46.000
943.768	6.593	31.327	37.920	-8.080	46.000

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n n-40BW 30Mbps)(Gr	rid DISH Antenna	a) (5550MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
141.058	-10.460	41.419	30.959	-12.541	43.500
266.174	-4.970	41.193	36.222	-9.778	46.000
381.449	-1.016	41.352	40.336	-5.664	46.000
599.348	3.984	29.867	33.851	-12.149	46.000
815.841	5.290	31.107	36.397	-9.603	46.000
929.710	7.135	29.712	36.847	-9.153	46.000
Vertical					
Peak Detector					
125.594	-4.060	40.348	36.288	-7.212	43.500
264.768	-7.688	42.193	34.505	-11.495	46.000
387.072	-3.065	42.277	39.212	-6.788	46.000
686.507	2.371	30.680	33.051	-12.949	46.000
822.870	3.442	31.169	34.611	-11.389	46.000
947.986	6.611	30.741	37.352	-8.648	46.000

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 10 Transmit (802.11ac-20BW-14.4Mbps)(Grid DISH Antenna) (5720MHz) 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBµV	dBµV/m	dB	dBµV/m	
Horizontal						
Peak Detector						
150.899	-10.178	42.578	32.400	-11.100	43.500	
270.391	-4.997	42.614	37.618	-8.382	46.000	
394.101	-2.247	42.288	40.041	-5.959	46.000	
606.377	4.638	30.765	35.402	-10.598	46.000	
791.942	5.212	30.651	35.863	-10.137	46.000	
925.493	6.353	31.835	38.188	-7.812	46.000	
Vertical						
Peak Detector						
108.725	-0.372	38.728	38.356	-5.144	43.500	
257.739	-7.542	41.556	34.015	-11.985	46.000	
371.609	-2.706	41.968	39.263	-6.737	46.000	
683.696	1.948	30.528	32.476	-13.524	46.000	
821.464	3.378	31.201	34.580	-11.420	46.000	
943.768	6.593	30.658	37.251	-8.749	46.000	

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 11: Transmit (802.11ac-40BW-30Mbps)(Grid DISH Antenna) (5710MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	dBµV/m		
Horizontal							
Peak Detector							
141.058	-10.460	42.178	31.718	-11.782	43.500		
268.986	-4.943	42.640	37.697	37.697-8.30340.447-5.553	46.000 46.000		
391.290	391.290 -1.904	42.351	40.447				
603.565	4.622	30.599	35.221	-10.779	46.000		
761.014	4.351	31.330	35.681	-10.319	46.000		
881.913	6.290	32.199	38.488	-7.512	46.000		
Vertical							
Peak Detector							
121.377	-3.825	40.374	36.549	-6.951	43.500		
260.551	-7.457	41.778	34.321	-11.679	46.000		
365.986	-2.246	41.286	39.040	-6.960	46.000		
687.913	2.458	30.989	33.447	-12.553	46.000		
807.406	3.671	31.512	35.183	-10.817	46.000		
955.014	6.649	30.783	37.433	-8.567	46.000		

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.

3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

4. Measurement Level = Reading Level + Correct Factor.

5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.

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

7. The emission levels of other frequencies are very lower than the limit and not show in test report.

8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 12: Transmit (802.11ac-80BW-65Mbps)(Grid DISH Antenna) (5290MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	dBµV/m		
Horizontal							
Peak Detector							
104.507	-6.647	38.228	31.581	-11.919	43.500		
271.797	-5.217	42.414	37.197	-8.803	46.000		
388.478	-1.647	42.188	40.541	-5.459	46.000		
604.971	4.781	29.770	34.550	-11.450	46.000		
783.507	4.369	30.931	35.300	-10.700	46.000		
932.522	6.858	30.875	37.732	-8.268	46.000		
Vertical							
Peak Detector							
138.246	-5.662	41.769	36.107	-7.393	43.500		
278.826	-8.750	41.906	33.156	-12.844	46.000		
368.797	-2.770	41.676	38.906	-7.094	46.000		
690.725	2.504	30.230	32.734	-13.266	46.000		
807.406	3.671	30.505	34.176	-11.824	46.000		
940.957	6.566	30.489	37.054	-8.946	46.000		
NT /							

-

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 12: Transmit (802.11ac-80BW-65Mbps)(Grid DISH Antenna) (5690MHz) 							
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBµV	dBµV/m	dB	dBµV/m			
Horizontal								
Peak Detector								
149.493	-10.223	42.403	32.180	-11.320	43.500			
267.580	-4.959	42.345	37.386	-8.614	46.000			
364.580	364.580 -1.385	41.232	39.848 -6.15	-6.152	46.000 46.000 46.000			
547.333	3.365	31.780	35.146	35.146-10.85434.915-11.085				
761.014	4.351	30.564	34.915					
888.942	6.263	31.346	31.346 37.609		46.000			
Vertical								
Peak Detector								
121.377	-3.825	39.985	36.160	-7.340	43.500			
266.174	-8.053	42.212	34.158	-11.842	46.000			
367.391	-2.512	41.211	38.699	-7.301	46.000			
543.116	-0.476	30.438	29.962	-16.038	46.000			
773.667	2.606	31.056	33.662	-12.338	46.000			
936.739	5.854	30.965	36.819	-9.181	46.000			
Note								

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 13: Transmit (802.11a-6Mbps)(Omni Antenna) (5300MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	dBµV/m		
Horizontal							
Peak Detector							
104.507	-6.647	38.784	32.137	-11.363	43.500		
305.536	-2.939	36.691	33.753	-12.247	46.000		
461.580	1.526	36.707	38.233	-7.767	46.000		
699.159	2.897	29.356	32.252	-13.748	46.000		
866.449	5.566	30.750	36.316	-9.684	46.000		
997.188	8.063	30.584	38.648	-15.352	54.000		
Vertical Peak Detector							
111.536	-0.981	38.833	37.853	-5.647	43.500		
344.899	-3.084	37.154	34.070	-11.930	46.000		
461.580	-3.367	37.353	33.986	-12.014	46.000		
690.725	2.504	30.573	33.077	-12.923	46.000		
806.000	3.908	30.900	34.808	-11.192	46.000		
943.768	6.593	31.156	37.749	-8.251	46.000		

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 13: Transmit (802.11a-6Mbps)(Omni Antenna) (5580MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	dBµV/m		
Horizontal							
Peak Detector							
105.913	-6.721	38.666	31.946	-11.554	43.500		
305.536	-2.939	36.691	33.753	-12.247	46.000		
461.580	1.526	37.353	38.879	-7.121	46.000		
692.130	3.646	30.851	34.497	-11.503	46.000		
855.203	6.581	31.325	37.905	-8.095	46.000		
997.188	8.063	32.155	40.219	-13.781	54.000		
Vertical							
Peak Detector							
118.565	-3.386	38.938	35.552	-7.948	43.500		
346.304	-3.109	37.499	34.391	-11.609	46.000		
461.580	-3.367	37.353	33.986	-12.014	46.000		
686.507	2.371	30.972	33.343	-12.657	46.000		
793.348	2.873	31.347	34.219	-11.781	46.000		
943.768	6.593	31.553	38.146	-7.854	46.000		

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 14: Transmit (802.11n-20BW 14.4Mbps)(Omni Antenna) (5300MHz) 							
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBµV	dBµV/m	dB	dBµV/m			
Horizontal								
Peak Detector								
101.696	-7.157	38.651	31.494	-12.006	43.500			
306.942	-3.194	36.460	33.267	-12.733	46.000			
462.986	1.017	36.182	37.199	-8.801	46.000			
713.217	3.567	29.271	32.837	-13.163	46.000			
852.391	6.311	30.488	36.798	-9.202	46.000			
998.594	8.591	30.261	38.851	-15.149	54.000			
Vertical								
Peak Detector								
117.159	-3.074	38.352	35.278	-8.222	43.500			
342.087	-3.588	36.866	33.278	-12.722	46.000			
464.391	-4.651	36.620	31.968	-14.032	46.000			
694.942	1.965	29.894	31.859	-14.141	46.000			
825.681	3.393	30.781	34.174	-11.826	46.000			
947.986	6.611	30.119	36.730	-9.270	46.000			

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n 1n-20BW 14.4Mbps))(Omni Antenna)	(5580MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
108.725	-7.307	38.961	31.654	-11.846	43.500
312.565	-4.081	37.560	33.479	-12.521	46.000
453.145	-1.210	37.739	36.529	-9.471	46.000
592.319	3.744	30.784	34.528	-11.472	46.000
820.058	5.836	31.129	36.965	-9.035	46.000
1000.000	9.119	30.496	39.615	-14.385	54.000
Vertical Peak Detector					
114.348	-2.256	39.045	36.789	-6.711	43.500
343.493	-3.321	37.363	34.042	-11.958	46.000
513.594	-0.791	32.574	31.783	-14.217	46.000

513.594	-0.791	32.574	31.783	-14.217	46.000
682.290	1.601	31.421	33.022	-12.978	46.000
824.275	3.474	31.871	35.345	-10.655	46.000
945.174	6.593	30.490	37.083	-8.917	46.000

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 15: Transmit (802.11n-40BW 30Mbps)(Omni Antenna) (5270MHz) 							
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBµV	dBµV/m	dB	dBµV/m			
Horizontal								
Peak Detector								
108.725	-7.307	39.360	32.053	-11.447	43.500			
305.536	-2.939	36.315	33.377	-12.623	46.000			
455.957	-0.437	37.923	37.486	-8.514	46.000			
596.536	4.016	31.202	35.218	-10.782	46.000			
883.319	6.172	30.839	37.011	-8.989	46.000			
1000.000	9.119	32.017	41.136	-12.864	54.000			
Vertical								
Peak Detector								
119.971	-3.705	38.649	34.944	-8.556	43.500			
202.913	-7.727	38.011	30.284	-13.216	43.500			
344.899	-3.084	37.629	34.545	-11.455	46.000			
496.725	-1.645	33.883	32.237	-13.763	46.000			
814.435	3.185	30.898	34.083	-11.917	46.000			
953.609	6.637	30.901	37.538	-8.462	46.000			

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 15: Transmit (802.11n-40BW 30Mbps)(Omni Antenna) (5550MHz) 							
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBµV	dBµV/m	dB	dBµV/m			
Horizontal								
Peak Detector								
104.507	-6.647	38.665	32.018	-11.482	43.500			
347.710	-2.250	36.303	34.053	-11.947	46.000			
460.174	1.425	37.249	38.675	-7.325	46.000			
578.261	578.261 3.310	30.968	34.278	34.278-11.72235.406-10.594	46.000 46.000			
758.203	4.362	31.044	35.406					
998.594	8.591	30.644	39.234	-14.766	54.000			
Vertical								
Peak Detector								
118.565	-3.386	38.608	35.222	-8.278	43.500			
349.116	-3.642	37.471	33.829	-12.171	46.000			
496.725	-1.645	33.051	31.405	-14.595	46.000			
682.290	1.601	30.724	32.325	-13.675	46.000			
798.971	2.795	30.442	33.237	-12.763	46.000			
943.768	6.593	30.647	37.240	-8.760	46.000			

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 16: Transmit (802.11ac-20BW-14.4Mbps)(Omni Antenna) (5720MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	$dB\mu V/m$		
Horizontal							
Peak Detector							
107.319	-6.999	39.277	32.279	-11.221	43.500		
346.304	-2.215	36.592	34.377	-11.623	46.000		
470.014	1.259	36.244	37.503	-8.497	46.000		
697.754	3.111	30.593	33.704	-12.296	46.000		
855.203	6.581	31.573	38.153 -7.847	-7.847	46.000		
995.783	7.551	31.336	38.887	-15.113	54.000		
Vertical							
Peak Detector							
112.942	-1.630	39.021	37.391	-6.109	43.500		
337.870	-4.375	38.081	33.705	-12.295	46.000		
462.986	-4.034	37.086	33.052	-12.948	46.000		
683.696	1.948	31.028	32.976	-13.024	46.000		
806.000	3.908	30.488	34.396	-11.604	46.000		
940.957	6.566	30.477	37.042	-8.958	46.000		
Note:							

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: General : No.3 OA		n 1ac-40BW-30Mbps)(Omni Antenna) (5710MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
108.725	-7.307	39.381	32.074	-11.426	43.500
306.942	-3.194	36.936	33.743	-12.257	46.000
465.797	0.638	36.789	37.427	-8.573	46.000
606.377	4.638	30.742	35.379	-10.621	46.000
887.536	6.207	31.185	37.392	-8.608	46.000
997.188	8.063	30.566	38.630	-15.370	54.000
Vertical Peak Detector					
118.565	-3.386	38.965	35.579	-7.921	43.500
336.464	-4.639	37.742	33.102	-12.898	46.000
510.783	-0.199	30.727	30.528	-15.472	46.000
689.319	2.525	30.869	33.394	-12.606	46.000
810.217	3.229	32.175	35.404	-10.596	46.000
952.203	6.630	30.967	37.597	-8.403	46.000

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.

3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

4. Measurement Level = Reading Level + Correct Factor.

5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.

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

7. The emission levels of other frequencies are very lower than the limit and not show in test report.

8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site	: General I : No.3 OA				
Test Mode	: Mode 18	: Transmit (802.1	1ac-80BW-65Mbps)(Omni Antenna) (5290MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
101.696	-7.157	38.753	31.596	-11.904	43.500
349.116	-2.304	37.263	34.958	-11.042	46.000
458.768	0.846	37.580	38.425	-7.575	46.000
709.000	3.458	29.787	33.245	-12.755	46.000
877.696	5.660	29.580	35.240	-10.760	46.000
1000.000	9.119	29.254	38.373	-15.627	54.000
Vertical					
Peak Detector					
118.565	-3.386	38.520	35.134	-8.366	43.500
336.464	-4.639	37.780	33.140	-12.860	46.000
462.986	-4.034	36.817	32.783	-13.217	46.000
685.101	2.239	30.386	32.625	-13.375	46.000
806.000	3.908	31.599	35.507	-10.493	46.000
942.362	6.584	30.973	37.557	-8.443	46.000

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: General : No.3 OA		n 1ac-80BW-65Mbps)(Omni Antenna) (5690MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
105.913	-6.721	38.834	32.114	-11.386	43.500
304.130	-2.997	35.942	32.945	-13.055	46.000
457.362	0.192	37.285	37.477	-8.523	46.000
610.594	4.024	30.455	34.479	-11.521	46.000
842.551	5.353	29.425	34.779	-11.221	46.000
997.188	8.063	31.216	39.280	-14.720	54.000
Vertical					
Peak Detector					
112.942	-1.630	38.460	36.830	-6.670	43.500
346.304	-3.109	36.965	33.857	-12.143	46.000
512.188	-0.482	30.757	30.275	-15.725	46.000
690.725	2.504	30.251	32.755	-13.245	46.000
827.087	3.199	31.290	34.489	-11.511	46.000
953.609	6.637	31.078	37.715	-8.285	46.000
Note:					

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item	 802.11 ac PCIe Module General Radiated Emission 						
Test Site	 General Radiated Emission No.3 OATS 						
Test Mode			1a-6Mbps)(Panel Ant	tenna) (5300MHz	z)		
Test Widde	. Widde I	7. Iranshit (002.1		(550014112	-)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m		
Horizontal							
Peak Detector							
257.739	-5.065	40.312	35.247	-10.753	46.000		
377.232	-1.116	40.957	39.840	-6.160	46.000		
462.986	1.017	38.095	39.112	-6.888	46.000		
612.000	3.819	29.646	33.465	-12.535	46.000		
825.681	6.260	31.109	37.369	-8.631	46.000		
932.522	6.858	30.462	37.319	-8.681	46.000		
Vertical							
Peak Detector							
110.130	-0.531	38.613	38.082	-5.418	43.500		
363.174	-2.587	41.251	38.664	-7.336	46.000		
461.580	-3.367	38.193	34.826	-11.174	46.000		
685.101	2.239	30.965	33.204	-12.796	46.000		
777.884	2.641	31.901	34.541	-11.459	46.000		
947.986	6.611	30.797	37.408	-8.592	46.000		

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n a-6Mbps)(Grid DISH	I Antenna) (5580]	MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
256.333	-5.081	39.683	34.602	-11.398	46.000
374.420	-1.202	41.172	39.970	-6.030	46.000
462.986	1.017	38.388	39.405	-6.595	46.000
602.159	4.254	30.791	35.045	-10.955	46.000
818.652	5.672	31.153	36.825	-9.175	46.000
932.522	6.858	30.586	37.443	-8.557	46.000
Vertical					
Peak Detector					
110.130	-0.531	38.613	38.082	-5.418	43.500
365.986	-2.246	41.084	38.838	-7.162	46.000
461.580	-3.367	38.439	35.072	-10.928	46.000
685.101	2.239	30.965	33.204	-12.796	46.000
777.884	2.641	31.901	34.541	-11.459	46.000
939.551	6.392	30.564	36.956	-9.044	46.000

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n 1n-20BW 14.4Mbps)	(Panel Antenna)	(5300MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
104.507	-6.647	38.731	32.084	-11.416	43.500
361.768	-1.548	40.738	39.190	-6.810	46.000
464.391	0.568	38.249	38.816	-7.184	46.000
604.971	4.781	31.682	36.462	-9.538	46.000
794.754	5.177	31.195	36.372	-9.628	46.000
931.116	7.081	31.313	38.394	-7.606	46.000
Vertical					
Peak Detector					
112.942	-1.630	39.179	37.549	-5.951	43.500
360.362	-3.627	40.829	37.202	-8.798	46.000
462.986	-4.034	38.387	34.353	-11.647	46.000
609.188	-1.569	31.535	29.966	-16.034	46.000
755.391	3.286	31.120	34.406	-11.594	46.000
942.362	6.584	30.971	37.555	-8.445	46.000

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n 1n-20BW 14.4Mbps)	(Panel Antenna)	(5580MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
108.725	-7.307	39.184	31.877	-11.623	43.500
373.014	-1.153	40.967	39.814	-6.186	46.000
468.609	1.216	37.637	38.853	-7.147	46.000
689.319	3.584	31.028	34.612	-11.388	46.000
828.493	6.324	31.127	37.451	-8.549	46.000
940.957	6.407	30.968	37.375	-8.625	46.000
Vertical					
Peak Detector					
111.536	-0.981	38.569	37.589	-5.911	43.500
380.043	-1.440	40.263	38.823	-7.177	46.000
537.493	-0.111	32.496	32.385	-13.615	46.000
755.391	3.286	30.449	33.735	-12.265	46.000
845.362	3.146	30.096	33.243	-12.757	46.000
943.768	6.593	30.093	36.686	-9.314	46.000

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 21: Transmit (802.11n-40BW 30Mbps)(Panel Antenna) (5270MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	dBµV/m		
Horizontal							
Peak Detector							
108.725	-7.307	38.956	31.649	-11.851	43.500		
361.768	-1.548	40.336	38.788	-7.212	46.000		
460.174	1.425	38.939	40.365	-5.635	46.000		
617.623	2.864	32.248	35.112	-10.888	46.000		
796.159	5.162	31.086	36.249	-9.751	46.000		
922.681	6.316	31.616	37.932	-8.068	46.000		
Vertical							
Peak Detector							
110.130	-0.531	39.122	38.591	-4.909	43.500		
253.522	-7.611	39.939	32.327	-13.673	46.000		
378.638	-1.584	41.054	39.470	-6.530	46.000		
495.319	-2.022	32.610	30.589	-15.411	46.000		
759.609	2.506	32.062	34.568	-11.432	46.000		
947.986	6.611	30.982	37.593	-8.407	46.000		

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n 1n-40BW 30Mbps)(F	Panel Antenna) (5	550MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
105.913	-6.721	38.623	31.903	-11.597	43.500
364.580	-1.385	40.761	39.377	-6.623	46.000
467.203	0.939	38.023	38.962	-7.038	46.000
692.130	3.646	31.568	35.214	-10.786	46.000
822.870	6.077	31.094	37.172	-8.828	46.000
928.304	6.909	30.637	37.545	-8.455	46.000
Vertical					
Peak Detector					
110.130	-0.531	39.054	38.523	-4.977	43.500
254.928	-7.647	39.597	31.951	-14.049	46.000
377.232	-1.768	40.472	38.703	-7.297	46.000
689.319	2.525	30.388	32.913	-13.087	46.000
807.406	3.671	31.301	34.972	-11.028	46.000
943.768	6.593	30.623	37.216	-8.784	46.000

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n 1ac-20BW-14.4Mbps	s)(Panel Antenna)	(5720MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector					
104.507	-6.647	38.723	32.076	-11.424	43.500
370.203	-1.080	40.467	39.388	-6.612	46.000
471.420	0.933	36.879	37.812	-8.188	46.000
717.435	3.541	29.625	33.165	-12.835	46.000
853.797	6.548	31.959	38.507	-7.493	46.000
931.116	7.081	30.553	37.634	-8.366	46.000
Vertical					
Peak Detector					
118.565	-3.386	39.152	35.766	-7.734	43.500
246.493	-8.207	40.131	31.924	-14.076	46.000
378.638	-1.584	40.696	39.112	-6.888	46.000
683.696	1.948	30.044	31.992	-14.008	46.000
806.000	3.908	30.874	34.782	-11.218	46.000
926.899	5.943	32.572	38.515	-7.485	46.000
Nota					

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: General : No.3 OA		n Lac-40BW-30Mbps)(Panel Antenna) (:	5710MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
107.319	-6.999	39.142	32.144	-11.356	43.500
361.768	-1.548	40.400	38.852	-7.148	46.000
461.580	1.526	38.279	39.805	-6.195	46.000
609.188	4.228	30.696	34.924	-11.076	46.000
791.942	5.212	31.429	36.641	-9.359	46.000
926.899	6.620	32.572	39.191	-6.809	46.000
Vertical					
Peak Detector					
107.319	-6.999	39.142	32.144	-11.356	43.500
361.768	-1.548	40.400	38.852	-7.148	46.000
461.580	1.526	38.279	39.805	-6.195	46.000
609.188	4.228	30.696	34.924	-11.076	46.000
791.942	5.212	31.429	36.641	-9.359	46.000
926.899	6.620	32.572	39.191	-6.809	46.000

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.

3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

4. Measurement Level = Reading Level + Correct Factor.

5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.

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

7. The emission levels of other frequencies are very lower than the limit and not show in test report.

8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item	 802.11 ac PCIe Module General Radiated Emission 						
Test Site	: No.3 OATS						
Test Mode	: Mode 24	4: Transmit (802.1	1ac-80BW-65Mbps)(Panel Antenna) (5290MHz)		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m		
Horizontal							
Peak Detector							
108.725	-7.307	39.148	31.841	-11.659	43.500		
377.232	-1.116	40.746	39.629	-6.371	46.000		
588.101	3.501	30.742	34.243	-11.757	46.000		
723.058	3.493	32.295	35.788	-10.212	46.000		
855.203	6.581	31.072	37.652	-8.348	46.000		
943.768	6.494	30.838	37.332	-8.668	46.000		
Vertical							
Peak Detector							
110.130	-0.531	39.273	38.742	-4.758	43.500		
238.058	-8.864	40.061	31.197	-14.803	46.000		
374.420	-2.179	40.960	38.781	-7.219	46.000		
683.696	1.948	31.353	33.301	-12.699	46.000		
803.188	3.392	31.667	35.059	-10.941	46.000		
939.551	6.392	31.142	37.534	-8.466	46.000		
N.T							

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 24: Transmit (802.11ac-80BW-65Mbps)(Panel Antenna) (5530MHz) 				
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
108.725	-7.307	39.148	31.841	-11.659	43.500
347.710	-2.250	40.589	38.339	-7.661	46.000
464.391	0.568	38.550	39.117	-6.883	46.000
604.971	4.781	30.965	35.745	-10.255	46.000
828.493	6.324	31.184	37.508	-8.492	46.000
946.580	6.584	31.861	38.445	-7.555	46.000
Vertical					
Peak Detector					
112.942	-1.630	38.878	37.248	-6.252	43.500
242.275	-8.456	41.053	32.596	-13.404	46.000
373.014	-2.442	41.277	38.835	-7.165	46.000
690.725	2.504	30.668	33.172	-12.828	46.000
810.217	3.229	31.096	34.325	-11.675	46.000
953.609	6.637	31.963	38.600	-7.400	46.000
Note:					

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- No emission found between lowest internal used/generated frequency to 30MHz. 8.

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 25: Transmit (802.11a-6Mbps)(Sector Antenna) (5300MHz) 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBµV	dBµV/m	dB	dBµV/m	
Horizontal						
Peak Detector						
104.507	-6.647	43.481	36.834	-6.666	43.500	
346.304	-2.215	40.740	38.525	-7.475	46.000	
462.986	1.017	38.273	39.290	-6.710	46.000	
609.188	4.228	30.452	34.680	-11.320	46.000	
803.188	5.066	31.120	36.185	-9.815	46.000	
932.522	6.858	30.815	37.672	-8.328	46.000	
Vertical						
Peak Detector						
136.841	-5.190	41.576	36.386	-7.114	43.500	
343.493	-3.321	40.897	37.576	-8.424	46.000	
462.986	-4.034	38.272	34.238	-11.762	46.000	
690.725	2.504	31.229	33.733	-12.267	46.000	
827.087	3.199	30.930	34.129	-11.871	46.000	
931.116	6.341	31.514	37.855	-8.145	46.000	

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n 1a-6Mbps)(Sector Ar	ntenna) (5580MH	(z)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
108.725	-7.307	43.733	36.426	-7.074	43.500
344.899	-2.415	41.151	38.736	-7.264	46.000
458.768	0.846	39.107	39.952	-6.048	46.000
687.913	3.342	30.522	33.864	-12.136	46.000
853.797	6.548	31.228	37.776	-8.224	46.000
1000.000	9.119	31.388	40.507	-13.493	54.000
Vertical					
Peak Detector					
136.841	-5.190	41.576	36.386	-7.114	43.500
343.493	-3.321	41.418	38.097	-7.903	46.000
516.406	-0.960	30.891	29.931	-16.069	46.000
689.319	2.525	30.988	33.513	-12.487	46.000
807.406	3.671	30.845	34.516	-11.484	46.000
943.768	6.593	31.106	37.699	-8.301	46.000

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

Product Test Item Test Site Test Mode	 802.11 ac PCIe Module General Radiated Emission No.3 OATS Mode 26: Transmit (802.11n-20BW 14.4Mbps)(Sector Antenna) (5300MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	dBµV/m		
Horizontal							
Peak Detector							
107.319	-6.999	43.632	36.634	-6.866	43.500		
340.681	-3.787	41.084	37.298	-8.702	46.000		
455.957	-0.437	39.719	39.282	-6.718	46.000		
588.101	3.501	31.101	34.602	-11.398	46.000		
768.043	4.230	31.224	35.454	-10.546	46.000		
932.522	6.858	30.815	37.672	-8.328	46.000		
Vertical							
Peak Detector	5.660	41.045	26.002	7.017	12 500		
138.246	-5.662	41.945	36.283	-7.217	43.500		
343.493	-3.321	41.418	38.097	-7.903	46.000		
462.986	-4.034	38.272	34.238	-11.762	46.000		
687.913	2.458	31.035	33.493	-12.507	46.000		
806.000	3.908	31.267	35.175	-10.825	46.000		
952.203	6.630	31.592	38.222	-7.778	46.000		

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n 1n-20BW 14.4Mbps)	(Sector Antenna)	(5580MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector					
107.319	-6.999	43.632	36.634	-6.866	43.500
342.087	-3.360	40.976	37.616	-8.384	46.000
462.986	1.017	38.273	39.290	-6.710	46.000
606.377	4.638	32.139	36.776	-9.224	46.000
787.725	4.886	30.854	35.740	-10.260	46.000
932.522	6.858	30.815	37.672	-8.328	46.000
Vertical Peak Detector					
129.812	-4.151	41.269	37.118	-6.382	43.500
342.087	-3.588	40.976	37.388	-8.612	46.000
462.986	-4.034	38.272	34.238	-11.762	46.000
689.319	2.525	31.031	33.556	-12.444	46.000
828.493	2.982	30.917	33.898	-12.102	46.000
956.420	6.713	31.411	38.123	-7.877	46.000

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

Product	: 802.11 ac PCIe Module					
Test Item	: General Radiated Emission					
Test Site	: No.3 O	ATS				
Test Mode	: Mode 2	7: Transmit (802.1	1n-40BW 30Mbps)(S	Sector Antenna) (S	5270MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBµV	dBµV/m	dB	$dB\mu V/m$	
Horizontal						
Peak Detector						
108.725	-7.307	43.099	35.792	-7.708	43.500	
342.087	-3.360	39.828	36.468	-9.532	46.000	
457.362	0.192	38.379	38.571	-7.429	46.000	
718.841	3.534	29.677	33.211	-12.789	46.000	
852.391	6.311	30.963	37.273	-8.727	46.000	
942.362	6.451	30.007	36.459	-9.541	46.000	
Vertical						
Peak Detector						
129.812	-4.151	42.407	38.256	-5.244	43.500	
349.116	-3.642	40.490	36.848	-9.152	46.000	
462.986	-4.034	37.981	33.947	-12.053	46.000	
685.101	2.239	30.172	32.411	-13.589	46.000	
825.681	3.393	30.601	33.994	-12.006	46.000	
950.797	6.619	30.678	37.297	-8.703	46.000	

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

Product	: 802.11 ac PCIe Module						
Test Item	: General Radiated Emission						
Test Site	: No.3 OA	ATS					
Test Mode	: Mode 27: Transmit (802.11n-40BW 30Mbps)(Sector Antenna) (5550MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m		
Horizontal							
Peak Detector							
108.725	-7.307	43.941	36.634	-6.866	43.500		
349.116	-2.304	40.806	38.501	-7.499	46.000		
467.203	0.939	37.629	38.568	-7.432	46.000		
680.884	2.862	30.456	33.318	-12.682	46.000		
852.391	6.311	31.555	37.865	-8.135	46.000		
1000.000	9.119	31.015	40.134	-13.866	54.000		
Vertical							
Peak Detector							
129.812	-4.151	43.156	39.005	-4.495	43.500		
344.899	-3.084	40.816	37.732	-8.268	46.000		
462.986	-4.034	37.981	33.947	-12.053	46.000		
690.725	2.504	30.917	33.421	-12.579	46.000		
807.406	3.671	30.725	34.396	-11.604	46.000		
945.174	6.593	30.761	37.354	-8.646	46.000		

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

Product Test Item Test Site Test Mode	: General : No.3 OA		n 1ac-20BW-14.4Mbps)(Sector Antenna) (5720MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector					
108.725	-7.307	43.941	36.634	-6.866	43.500
339.275	-3.939	41.367	37.428	-8.572	46.000
464.391	0.568	38.036	38.603	-7.397	46.000
689.319	3.584	30.660	34.244	-11.756	46.000
825.681	6.260	30.755	37.015	-8.985	46.000
942.362	6.451	31.179	37.631	-8.369	46.000
Vertical					
Peak Detector					
136.841	-5.190	42.302	37.112	-6.388	43.500
344.899	-3.084	40.911	37.827	-8.173	46.000
464.391	-4.651	38.036	33.384	-12.616	46.000
689.319	2.525	30.661	33.186	-12.814	46.000
811.623	3.123	31.169	34.293	-11.707	46.000
949.391	6.615	31.506	38.121	-7.879	46.000
Note:					

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: General : No.3 OA		n 1ac-40BW-30Mbps)(Sector Antenna)	(5710MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
105.913	-6.721	43.809	37.089	-6.411	43.500
313.971	-4.136	40.940	36.804	-9.196	46.000
460.174	1.425	38.845	40.271	-5.729	46.000
690.725	3.705	30.917	34.622	-11.378	46.000
824.275	6.185	31.319	37.504	-8.496	46.000
950.797	6.682	30.938	37.620	-8.380	46.000
Vertical					
Peak Detector					
138.246	-5.662	42.053	36.391	-7.109	43.500
340.681	-3.847	41.334	37.488	-8.512	46.000
460.174	-3.359	38.845	35.487	-10.513	46.000
690.725	2.504	30.917	33.421	-12.579	46.000
807.406	3.671	31.311	34.982	-11.018	46.000
953.609	6.637	32.738	39.375	-6.625	46.000

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: General : No.3 OA		1 1ac-80BW-65Mbps)(Sector Antenna)	(5290MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
107.319	-6.999	43.742	36.744	-6.756	43.500
257.739	-5.065	39.986	34.921	-11.079	46.000
464.391	0.568	38.122	38.689	-7.311	46.000
607.783	4.433	30.504	34.937	-11.063	46.000
828.493	6.324	30.963	37.287	-8.713	46.000
952.203	6.556	31.548	38.104	-7.896	46.000
Vertical					
Peak Detector					
127.000	-4.087	42.220	38.133	-5.367	43.500
349.116	-3.642	40.805	37.163	-8.837	46.000
465.797	0.638	35.073	35.711	-10.289	46.000
685.101	2.239	30.885	33.124	-12.876	46.000
808.812	3.447	31.643	35.090	-10.910	46.000
953.609	6.637	32.738	39.375	-6.625	46.000
Noto:					

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: General : No.3 OA		n 1ac-80BW-65Mbps)(Sector Antenna)	(5530MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector					
98.884	-7.565	43.888	36.324	-7.176	43.500
333.652	-4.023	41.868	37.845	-8.155	46.000
461.580	1.526	38.968	40.494	-5.506	46.000
658.391	2.117	31.455	33.571	-12.429	46.000
818.652	5.672	31.354	37.026	-8.974	46.000
932.522	6.858	31.446	38.303	-7.697	46.000
Vertical					
Peak Detector					
136.841	-5.190	42.302	37.112	-6.388	43.500
346.304	-3.109	40.944	37.836	-8.164	46.000
464.391	-4.651	38.122	33.470	-12.530	46.000
683.696	1.948	31.225	33.173	-12.827	46.000
807.406	3.671	31.311	34.982	-11.018	46.000
953.609	6.637	32.738	39.375	-6.625	46.000
Note:					

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

6. Band Edge

6.1. Test Equipment

RF Conducted Measurement

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

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

Note:

- 1. All equipment is calibrated once a year or as required by manufacturer.
- 2. All equipment is calibrated to traceable calibration procedures.
- 3. The test instruments marked by "X" are used to measure the final test results.

RF Radiated Measurement:

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

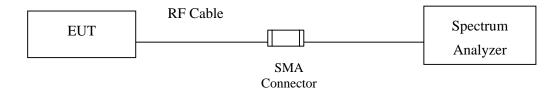
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 3		Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2015
	Х	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2015
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2015
		Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2015
	Х	Pre-Amplifier	QTK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

- 1. All equipment is calibrated once a year or as required by manufacturer.
- 2. All equipment is calibrated to traceable calibration procedures.
- 3. The test instruments marked by "X" are used to measure the final test results.

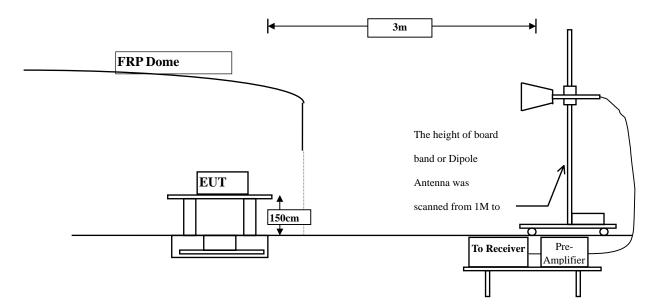


6.2. Test Setup

RF Conducted Measurement:



RF Radiated Measurement:





6.3. Limits

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

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

FCC Part 15 Subpart C Paragraph 15.209 Limits									
Frequency MHz	$\frac{1}{10} \frac{1}{10} \frac$								
30-88	100	40							
88-216	150	43.5							
216-960	200	46							
Above 960	500	54							

Remarks : 1. RF Voltage $(dB\mu V) = 20 \log RF$ Voltage (uV)

2. In the Above Table, the tighter limit applies at the band edges.

3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

6.4. Test Procedure

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was

positioned such that the distance from antenna to the EUT was 3 meters.

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

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

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz. The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

6.5. Uncertainty

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



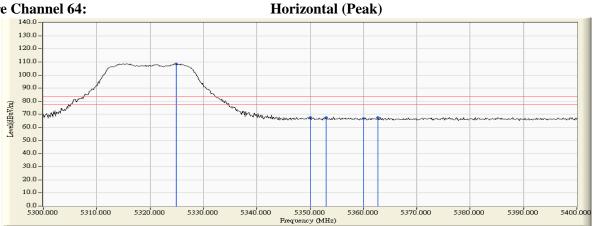
Test Result of Band Edge 6.6.

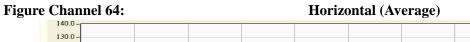
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) -Channel 64 (5320MHz)

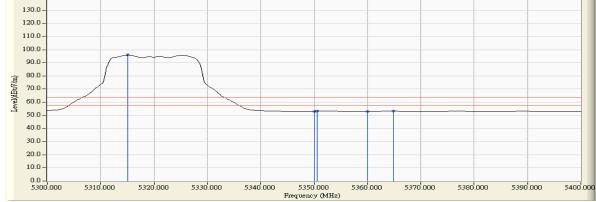
RF Radiated Measurement (Horizontal):

	Engguener	Correct	Reading	Emission	Peak Limit	Average Limit (dBµV/m)	
Channel No.	Frequency (MHz)	Factor	Level	Level	$(dB\mu V/m)$	· · ·	Result
	(IVIIIZ)	(dB)	(dBµV)	(dBµV/m)	(uDµ v/III)		
64 (Peak)	5324.928	35.625	72.985	108.609			
64 (Peak)	5350.000	35.571	31.884	67.455	83.540	63.540	Pass
64 (Peak)	5353.043	35.565	31.950	67.515	83.540	63.540	Pass
64 (Peak)	5360.000	35.550	31.430	66.979	83.540	63.540	Pass
64 (Peak)	5362.753	35.544	31.976	67.519	83.540	63.540	Pass
64 (Average)	5315.072	35.645	60.260	95.905			
64 (Average)	5350.000	35.571	17.484	53.055	83.540	63.540	Pass
64 (Average)	5350.580	35.570	17.668	53.238	83.540	63.540	Pass
64 (Average)	5360.000	35.550	17.317	52.866	83.540	63.540	Pass
64 (Average)	5364.928	35.539	17.658	53.197	83.540	63.540	Pass

Figure Channel 64:







- 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 1: Transmit (802.11a-6Mbps)(Dipole Antenna) -Channel 64 (5320MHz)

RF Radiated Measurement (Vertical):

Channal Na	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Decult
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	(dBµV/m)	Result
64 (Peak)	5314.348	37.553	89.977	127.529			
64 (Peak)	5350.000	37.546	42.781	80.327	83.540	63.540	Pass
64 (Peak)	5351.739	37.547	44.343	81.889	83.540	63.540	Pass
64 (Peak)	5360.000	37.544	40.865	78.409	83.540	63.540	Pass
64 (Peak)	5360.870	37.544	42.875	80.418	83.540	63.540	Pass
64 (Average)	5314.203	37.552	76.633	114.185			
64 (Average)	5350.000	37.546	19.520	57.066	83.540	63.540	Pass
64 (Average)	5350.290	37.546	19.566	57.112	83.540	63.540	Pass
64 (Average)	5360.000	37.544	19.097	56.641	83.540	63.540	Pass
64 (Average)	5363.188	37.542	19.335	56.878	83.540	63.540	Pass

Figure Channel 64:

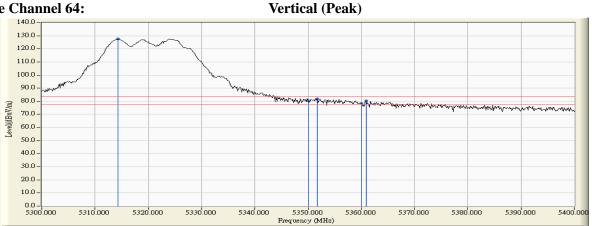


Figure Channel 64:

Vertical (Average)



- 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



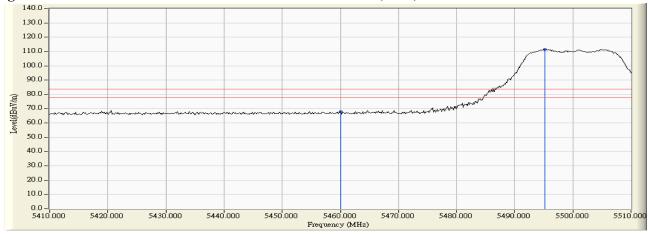
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) -Channel 100 (5500MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
100 (Peak)	5460.000	36.240	31.756	67.996	83.540	63.540	Pass
100 (Peak)	5495.217	36.652	74.895	111.548			
100 (Average)	5448.696	36.095	18.520	54.614	83.540	63.540	Pass
100 (Average)	5460.000	36.240	17.503	53.743	83.540	63.540	Pass
100 (Average)	5495.217	36.652	62.188	98.841			

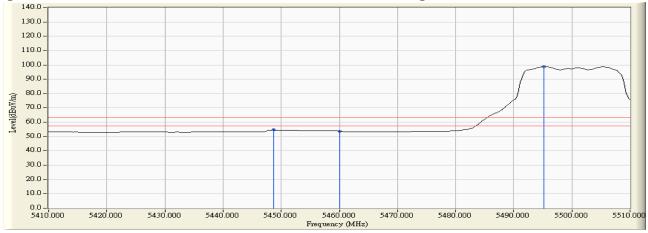
Figure Channel 100:

Horizontal (Peak)





Horizontal (Average)



- 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 1: Transmit (802.11a-6Mbps)(Dipole Antenna) -Channel 100 (5500MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Kesuit
100 (Peak)	5459.275	37.922	43.516	81.438	83.540	63.540	Pass
100 (Peak)	5460.000	37.927	43.090	81.017	83.540	63.540	Pass
100 (Peak)	5496.377	38.135	92.011	130.146			
100 (Average)	5457.536	37.911	20.000	57.911	83.540	63.540	Pass
100 (Average)	5460.000	37.927	19.557	57.484	83.540	63.540	Pass
100 (Average)	5496.522	38.136	77.902	116.037			

Figure Channel 100:

Vertical (Peak)

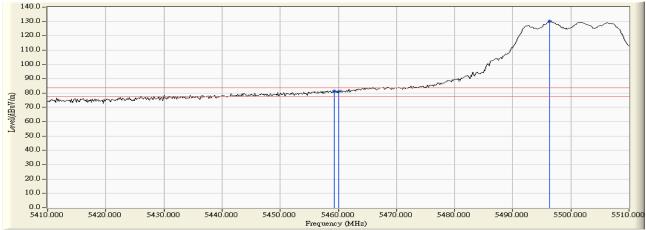
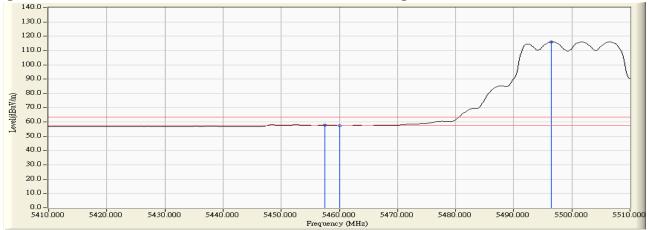
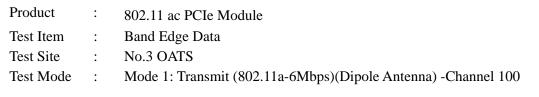


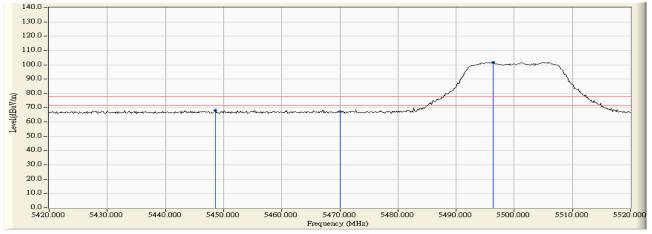
Figure Channel 100:

Vertical (Average)



- 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

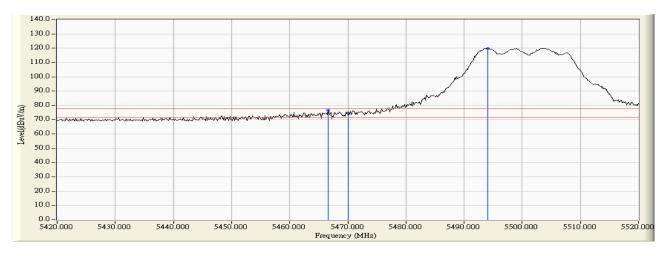




RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5448.551	36.093	32.390	68.483	-9.277	77.760	Pass
Horizontal	5470.000	36.370	30.672	67.042	-10.718	77.760	Pass
Horizontal	5496.377	36.660	65.161	101.821			

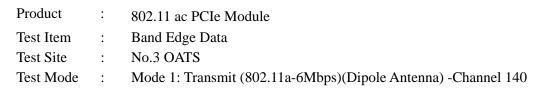
Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$

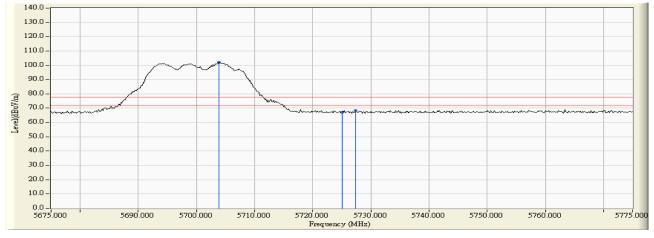


RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5466.667	37.972	38.613	76.584	-1.176	77.760	Pass
Vertical	5470.000	37.994	36.807	74.800	-2.960	77.760	Pass
Vertical	5494.058	38.129	81.761	119.890			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$

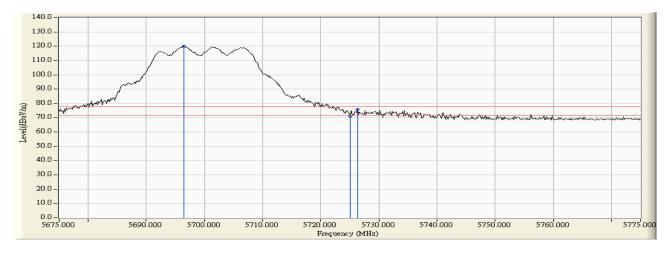




RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5703.841	36.390	65.556	101.946			
Horizontal	5725.000	36.391	30.746	67.137	-10.623	77.760	Pass
Horizontal	5727.319	36.390	31.746	68.136	-9.624	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5696.449	37.735	82.535	120.270			
Vertical	5725.000	37.729	33.170	70.899	-6.861	77.760	Pass
Vertical	5726.304	37.728	38.036	75.764	-1.996	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$



Produ	ict	:	802.	11	ac	PCIe	Module
			-			-	

Test Item Band Edge Data : No.3 OATS :

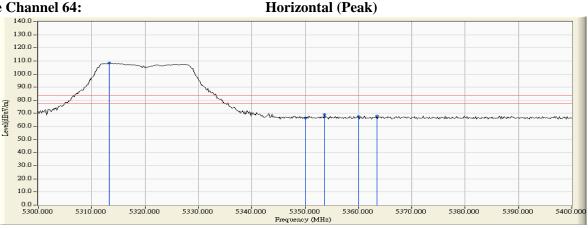
Test Site

Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) -Channel 64 (5320MHz) Test Mode :

RF Radiated Measurement (Horizontal):

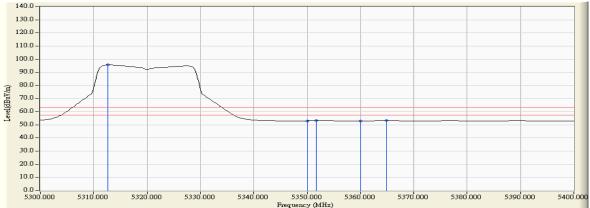
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Decult
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
64 (Peak)	5313.333	35.649	72.637	108.286			
64 (Peak)	5350.000	35.571	30.795	66.366	83.540	63.540	Pass
64 (Peak)	5353.623	35.563	33.654	69.217	83.540	63.540	Pass
64 (Peak)	5360.000	35.550	31.828	67.377	83.540	63.540	Pass
64 (Peak)	5363.478	35.541	32.425	67.967	83.540	63.540	Pass
64 (Average)	5312.609	35.650	59.943	95.593			
64 (Average)	5350.000	35.571	17.520	53.091	83.540	63.540	Pass
64 (Average)	5351.739	35.568	17.699	53.267	83.540	63.540	Pass
64 (Average)	5360.000	35.550	17.368	52.917	83.540	63.540	Pass
64 (Average)	5364.928	35.539	17.658	53.197	83.540	63.540	Pass







Horizontal (Average)



- 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 : No.3 OATS

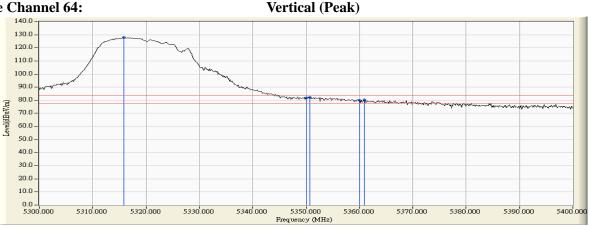
Test Site :

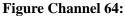
Test Mode Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) -Channel 64 (5320MHz) :

RF Radiated Measurement (Vertical):

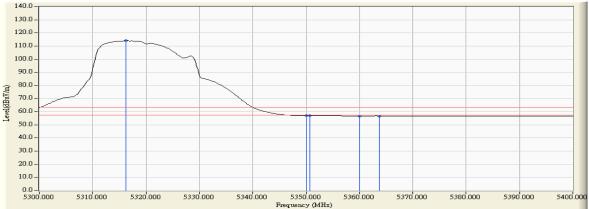
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Decult
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	(dBµV/m)	Result
64 (Peak)	5315.797	37.553	90.299	127.851			
64 (Peak)	5350.000	37.546	44.274	81.820	83.540	63.540	Pass
64 (Peak)	5350.725	37.547	44.834	82.380	83.540	63.540	Pass
64 (Peak)	5360.000	37.544	42.485	80.029	83.540	63.540	Pass
64 (Peak)	5360.870	37.544	42.642	80.185	83.540	63.540	Pass
64 (Average)	5316.232	37.552	76.407	113.959			
64 (Average)	5350.000	37.546	19.439	56.985	83.540	63.540	Pass
64 (Average)	5350.725	37.547	19.566	57.112	83.540	63.540	Pass
64 (Average)	5360.000	37.544	19.216	56.760	83.540	63.540	Pass
64 (Average)	5363.768	37.543	19.291	56.833	83.540	63.540	Pass







Vertical (Average)



- 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)(Dipole Antenna) -Channel 100 (5500MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
100 (Peak)	5456.667	36.197	32.345	68.542	83.540	63.540	Pass
100 (Peak)	5460.000	36.240	29.935	66.175	83.540	63.540	Pass
100 (Peak)	5502.174	36.699	73.041	109.739			
100 (Average)	5448.696	36.095	18.486	54.580	83.540	63.540	Pass
100 (Average)	5460.000	36.240	17.449	53.689	83.540	63.540	Pass
100 (Average)	5502.609	36.701	59.705	96.406			

Figure Channel 100:

Horizontal (Peak)

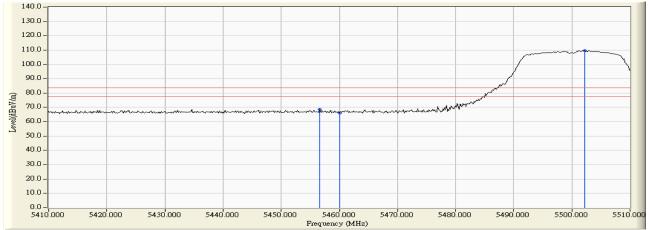
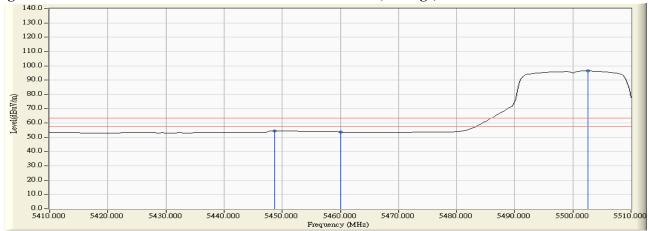


Figure Channel 100:

Horizontal (Average)



- 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

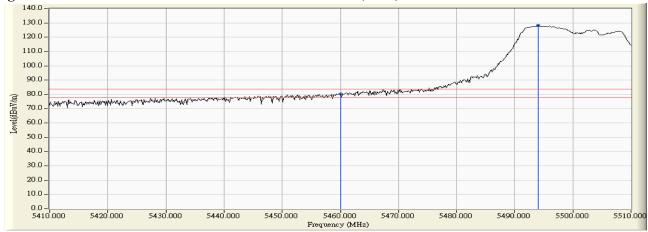
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) -Channel 100 (5500MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
100 (Peak)	5460.000	37.927	42.428	80.355	83.540	63.540	Pass
100 (Peak)	5494.058	38.129	90.075	128.204			
100 (Average)	5454.203	37.889	20.093	57.982	83.540	63.540	Pass
100 (Average)	5460.000	37.927	19.559	57.486	83.540	63.540	Pass
100 (Average)	5493.913	38.128	76.309	114.437			

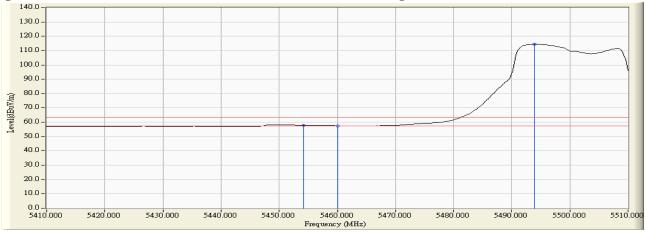
Figure Channel 100:

Vertical (Peak)





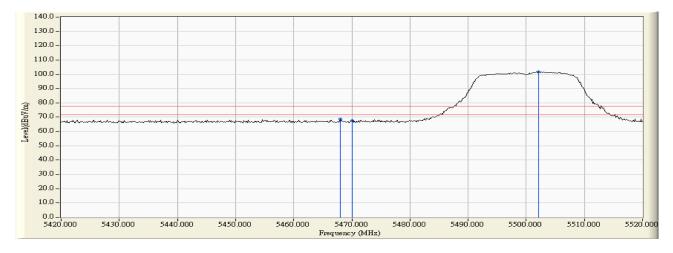
Vertical (Average)



- 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)(Dipole Antenna) -Channel 100

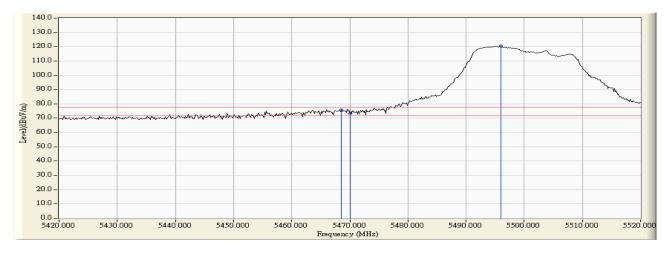


RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5467.971	36.344	32.244	68.588	-9.172	77.760	Pass
Horizontal	5470.000	36.370	31.245	67.615	-10.145	77.760	Pass
Horizontal	5502.174	36.699	65.056	101.754			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 =$

-27dBm+104.76=77.76dBuV/m.

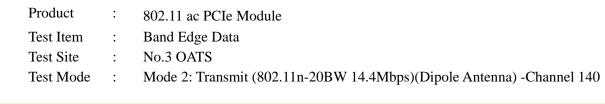


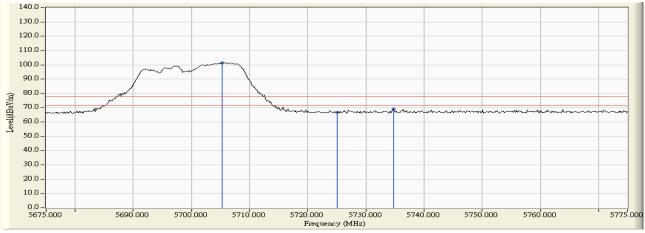
RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5468.551	37.984	37.877	75.861	-1.899	77.760	Pass
Vertical	5470.000	37.994	35.346	73.339	-4.421	77.760	Pass
Vertical	5495.942	38.133	82.306	120.440			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76=77.76dBuV/m.$



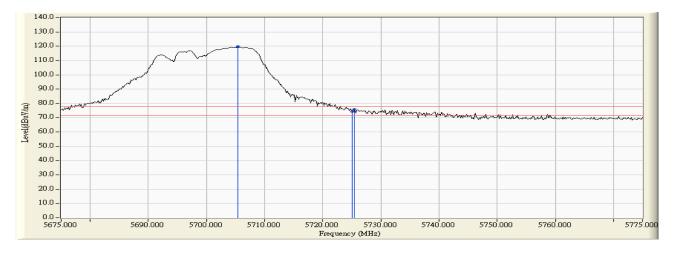




RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5705.290	36.392	65.115	101.507			
Horizontal	5725.000	36.391	30.386	66.777	-10.983	77.760	Pass
Horizontal	5734.710	36.385	32.683	69.068	-8.692	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$



RF Radiated Measurement:

	Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	(dB)	$(dB\mu V/m)$	Kesun
Vertical	5705.435	37.741	82.040	119.781			
Vertical	5725.000	37.729	36.599	74.328	-3.432	77.760	Pass
Vertical	5725.435	37.729	37.924	75.653	-2.107	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$

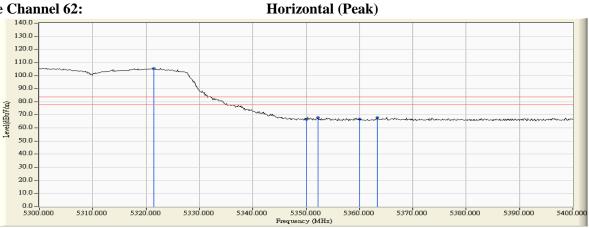


Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) -Channel 62 (5310MHz)

RF Radiated Measurement (Horizontal):

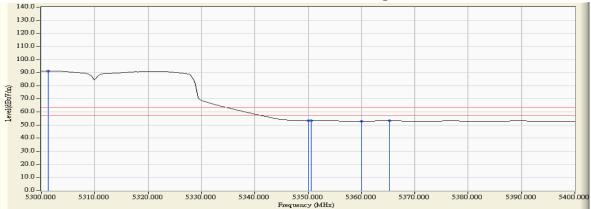
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Desult
	(MHz)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	(dBµV/m)	Result
62 (Peak)	5321.449	35.631	69.878	105.509			
62 (Peak)	5350.000	35.571	30.830	66.401	83.540	63.540	Pass
62 (Peak)	5352.174	35.566	32.415	67.982	83.540	63.540	Pass
62 (Peak)	5360.000	35.550	31.434	66.983	83.540	63.540	Pass
62 (Peak)	5363.333	35.542	32.368	67.910	83.540	63.540	Pass
62 (Average)	5301.304	35.674	55.714	91.388			
62 (Average)	5350.000	35.571	17.734	53.305	83.540	63.540	Pass
62 (Average)	5350.580	35.570	17.875	53.445	83.540	63.540	Pass
62 (Average)	5360.000	35.550	17.416	52.965	83.540	63.540	Pass
62 (Average)	5365.217	35.538	17.658	53.196	83.540	63.540	Pass

Figure Channel 62:





Horizontal (Average)



- 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	2.11 ac PCIe Module
---------------	---------------------

Test Item Band Edge Data :

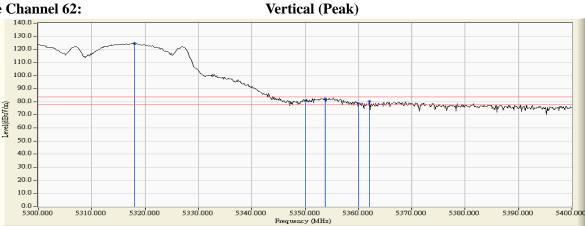
Test Site : No.3 OATS

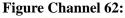
Test Mode Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) -Channel 62 (5310MHz) :

RF Radiated Measurement (Vertical):

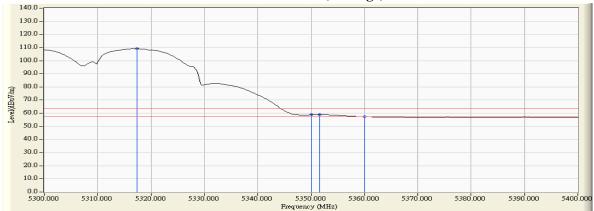
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Decult
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
62 (Peak)	5317.971	37.552	87.150	124.702			
62 (Peak)	5350.000	37.546	42.980	80.526	83.540	63.540	Pass
62 (Peak)	5353.768	37.546	44.833	82.378	83.540	63.540	Pass
62 (Peak)	5360.000	37.544	41.077	78.621	83.540	63.540	Pass
62 (Peak)	5362.029	37.543	42.635	80.178	83.540	63.540	Pass
62 (Average)	5317.391	37.551	71.535	109.087			
62 (Average)	5350.000	37.546	21.287	58.833	83.540	63.540	Pass
62 (Average)	5351.594	37.546	21.397	58.943	83.540	63.540	Pass
62 (Average)	5360.000	37.544	19.902	57.446	83.540	63.540	Pass

Figure Channel 62:





Vertical (Average)



- 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 : 80	02.11 ac PCIe Module
--------------	----------------------

Test Item : Band Edge Data

Test Site : No.3 OATS

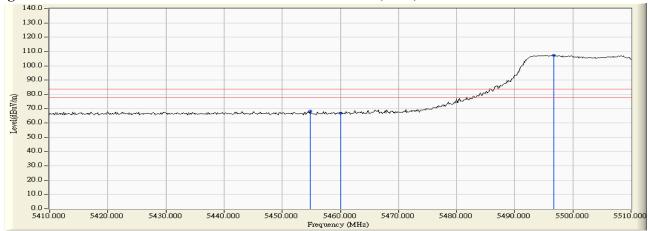
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) -Channel 102 (5510MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
102 (Peak)	5454.783	36.173	32.001	68.174	83.540	63.540	Pass
102 (Peak)	5460.000	36.240	30.490	66.730	83.540	63.540	Pass
102 (Peak)	5496.667	36.663	70.675	107.337			
102 (Average)	5448.261	36.089	18.527	54.616	83.540	63.540	Pass
102 (Average)	5460.000	36.240	17.553	53.793	83.540	63.540	Pass
102 (Average)	5495.217	36.652	56.891	93.544			

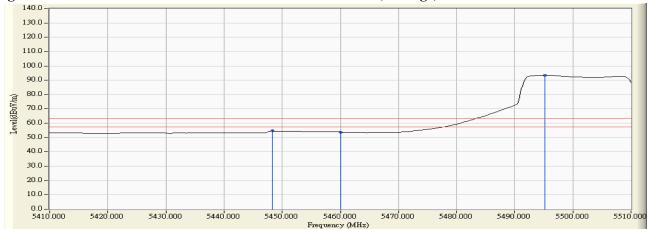
Figure Channel 102:

Horizontal (Peak)





Horizontal (Average)



- 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

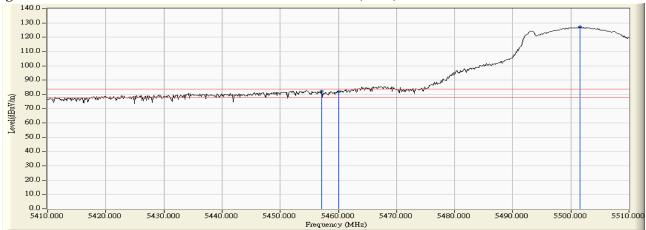
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) -Channel 102 (5510MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
102 (Peak)	5457.102	37.908	44.373	82.281	83.540	63.540	Pass
102 (Peak)	5460.000	37.927	43.776	81.703	83.540	63.540	Pass
102 (Peak)	5501.594	38.149	88.937	127.086			
102 (Average)	5459.130	37.921	21.088	59.010	83.540	63.540	Pass
102 (Average)	5460.000	37.927	20.993	58.920	83.540	63.540	Pass
102 (Average)	5501.449	38.148	73.221	111.370			

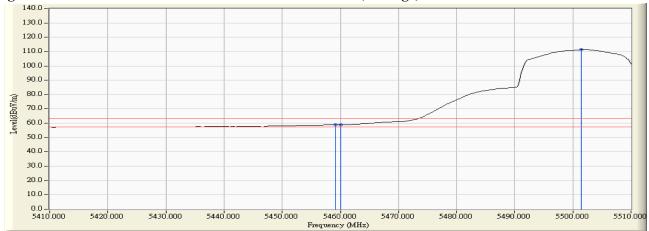
Figure Channel 102:

Vertical (Peak)





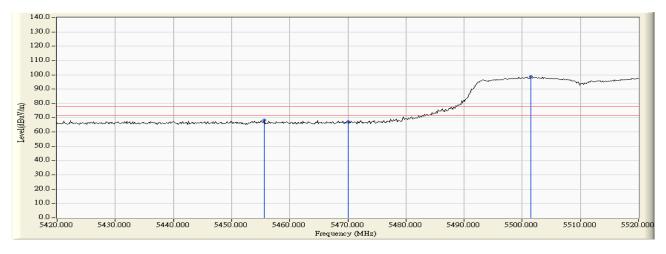
Vertical (Average)



- 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



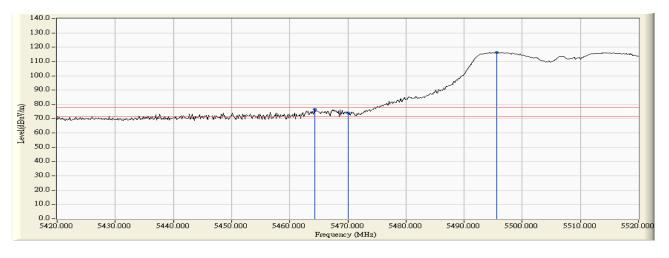
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna) -Channel 102



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5455.652	36.184	32.140	68.324	-9.436	77.760	Pass
Horizontal	5470.000	36.370	30.724	67.094	-10.666	77.760	Pass
Horizontal	5501.449	36.694	61.878	98.572			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$

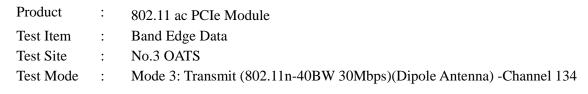


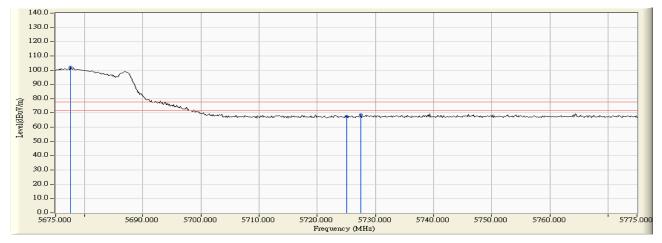
RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5464.348	37.957	38.481	76.437	-1.323	77.760	Pass
Vertical	5470.000	37.994	35.837	73.830	-3.930	77.760	Pass
Vertical	5495.652	38.132	78.292	116.425			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$



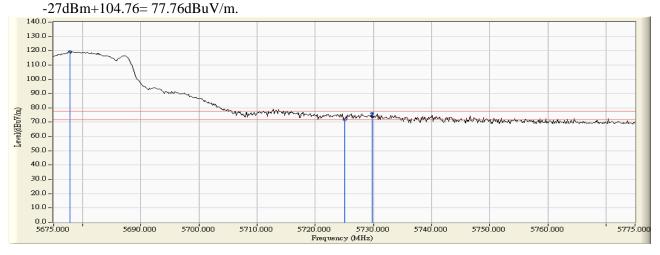




RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5677.609	36.297	65.747	102.044			
Horizontal	5725.000	36.391	31.316	67.707	-10.053	77.760	Pass
Horizontal	5727.464	36.389	32.189	68.579	-9.181	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = 27 ID + 104.76 = 77.76 ID V/$



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5677.753	37.701	81.757	119.458			
Vertical	5725.000	37.729	33.843	71.572	-6.188	77.760	Pass
Vertical	5729.783	37.725	38.457	76.182	-1.578	77.760	Pass

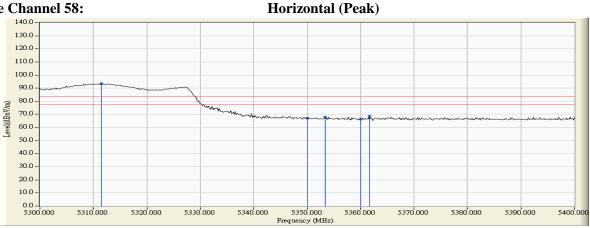
Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$

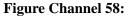
802.11 ac PCIe Module Product : Band Edge Data Test Item : Test Site No.3 OATS : Test Mode Mode 6: Transmit (802.11ac-80BW-65Mbps)(Dipole Antenna) - Channel 58 :

RF Radiated Measurement (Horizontal):

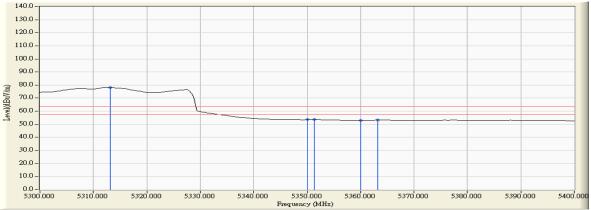
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit		
	(MHz)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	(dBµV/m)	Result	
58 (Peak)	5311.449	35.653	57.942	93.595				
58 (Peak)	5350.000	35.571	31.484	67.055	83.540	63.540	Pass	
58 (Peak)	5353.333	35.564	32.372	67.936	83.540	63.540	Pass	
58 (Peak)	5360.000	35.550	31.029	66.578	83.540	63.540	Pass	
58 (Peak)	5361.739	35.546	33.316	68.862	83.540	63.540	Pass	
58 (Average)	5313.188	35.648	42.436	78.085				
58 (Average)	5350.000	35.571	17.997	53.568	83.540	63.540	Pass	
58 (Average)	5351.304	35.568	18.036	53.604	83.540	63.540	Pass	
58 (Average)	5360.000	35.550	17.331	52.880	83.540	63.540	Pass	
58 (Average)	5363.188	35.542	17.644	53.186	83.540	63.540	Pass	







Horizontal (Average)



- 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

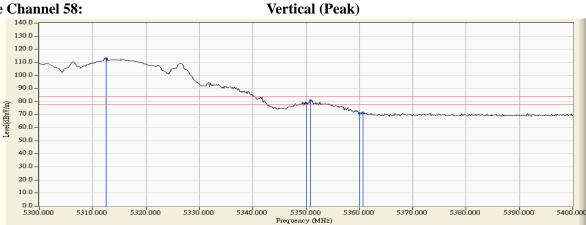


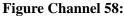
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 6: Transmit (802.11ac-80BW-65Mbps)(Dipole Antenna) -Channel 58

RF Radiated Measurement (Vertical):

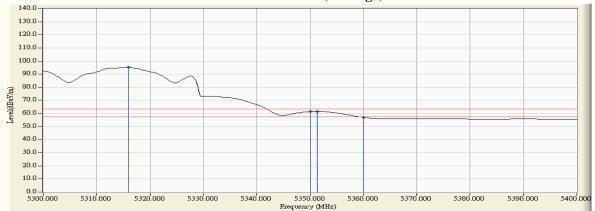
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Decult
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
58 (Peak)	5312.464	37.553	75.243	112.796			
58 (Peak)	5350.000	37.546	40.905	78.451	83.540	63.540	Pass
58 (Peak)	5350.870	37.547	43.181	80.727	83.540	63.540	Pass
58 (Peak)	5360.000	37.544	33.462	71.006	83.540	63.540	Pass
58 (Peak)	5360.725	37.544	33.709	71.252	83.540	63.540	Pass
58 (Average)	5315.942	37.552	57.644	95.196			
58 (Average)	5350.000	37.546	23.889	61.435	83.540	63.540	Pass
58 (Average)	5351.304	37.546	24.109	61.655	83.540	63.540	Pass
58 (Average)	5360.000	37.544	19.502	57.046	83.540	63.540	Pass

Figure Channel 58:





Vertical (Average)



- 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 (802.11ac-80BW-65Mbps)(Dipole Antenna) -Channel 106

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
106 (Peak)	5459.420	36.233	33.461	69.694	83.540	63.540	Pass
106 (Peak)	5460.000	36.240	32.501	68.741	83.540	63.540	Pass
106 (Peak)	5509.710	36.677	70.057	106.734			
106 (Average)	5448.261	36.089	18.776	54.865	83.540	63.540	Pass
106 (Average)	5460.000	36.240	18.270	54.510	83.540	63.540	Pass
106 (Average)	5507.681	36.695	53.024	89.718			

Figure Channel 106:

Horizontal (Peak)

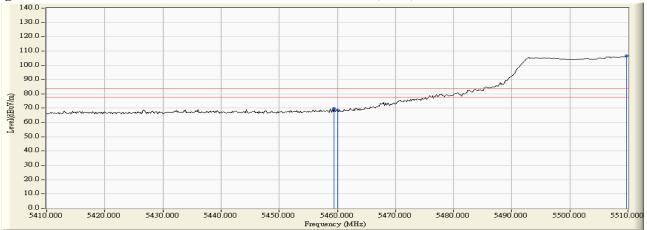
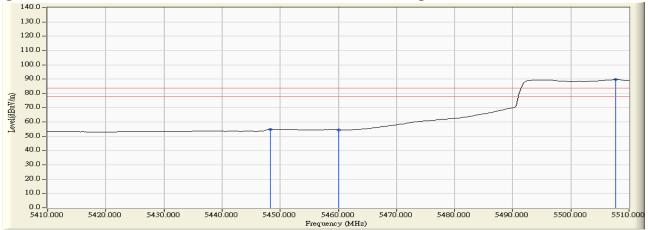


Figure Channel 106:

Horizontal (Average)



- 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



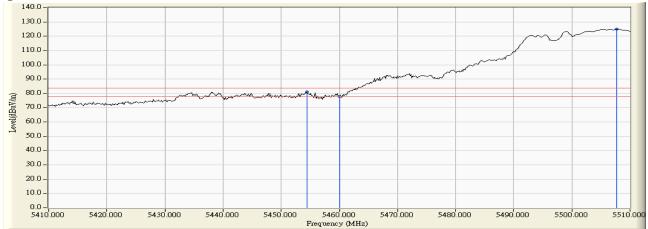
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 6: Transmit (802.11ac-80BW-65Mbps)(Dipole Antenna) -Channel 106

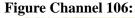
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
106 (Peak)	5454.493	37.891	43.347	81.238	83.540	63.540	Pass
106 (Peak)	5460.000	37.927	39.840	77.767	83.540	63.540	Pass
106 (Peak)	5507.681	38.140	86.773	124.913			
106 (Average)	5448.116	37.850	24.444	62.294	83.540	63.540	Pass
106 (Average)	5460.000	37.927	23.573	61.500	83.540	63.540	Pass
106 (Average)	5507.391	38.142	68.072	106.214			

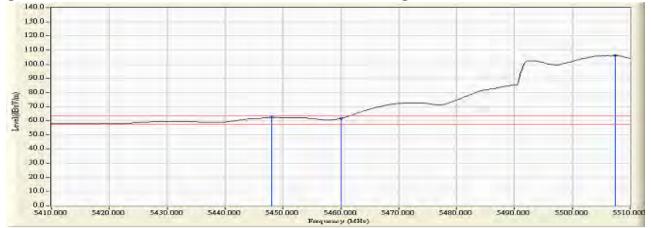
Figure Channel 106:

Vertical (Peak)



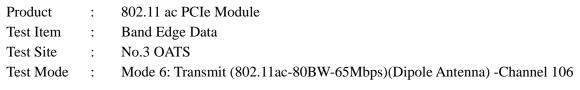


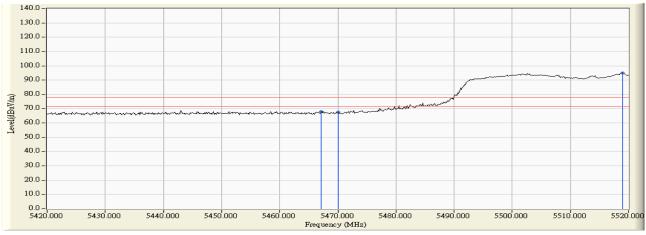
Vertical (Average)



- 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



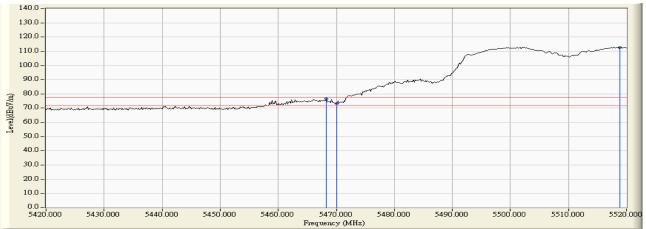




RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5467.102	36.333	31.754	68.087	-9.673	77.760	Pass
Horizontal	5470.000	36.370	31.261	67.631	-10.129	77.760	Pass
Horizontal	5518.985	36.599	58.328	94.927			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5468.261	37.982	38.503	76.485	-1.275	77.760	Pass
Vertical	5470.000	37.994	35.275	73.268	-4.492	77.760	Pass
Vertical	5518.841	38.064	74.724	112.788			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$



Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5260	А	5250.80	>5250	PASS
5260	В	5250.95	>5250	PASS



	ectrur		yzer - Swe										
M RL Center	Fre	RF eq 5.	50 Ω .26000	AC 0000 GI	Hz NO: Fast C	1		Avg Typ	ALIGNAUTO e: Log-Pwr	TF	PM Sep 09, 2015 ACE 1 2 3 4 5 6 TYPE MWWWWW	Frequency	
10 dB/di	iv	Ref	20.00 c	IF	NU: Fast C Gain:Low	#Atten: 3			Mkr	2 5.25	0 80 GHz 46 dBm	Auto Tune	
Log 10.0 0.00					netherite	1 monthe-porton	for the lucato	wheelwahn				Center Freq 5.26000000 GHz	
-10.0 -20.0 -30.0 -40.0			weather	radial weight	/				William II.	Mutantra	-13.42 dBm	Start Freq 5.235000000 GHz	
-50.0	C. P. C. P. C. C.	unadel	- and a state							- Conto	M QUEEN MANDEN & BEEN	Stop Freq 5.28500000 GHz	
Center #Res B	3W 1	00 k			#VB	W 1.0 MHz				00.0 ms	50.00 MHz (1001 pts)	CF Step 5.000000 MHz Auto Mar	
MKF MOD 1 N 2 N 3 4 5		f f		× 5.253 8 5.250 8		6.577 dl -13.46 dl	Bm	NCTION FL	INCTION WIDTH	FUNC	TION VALUE	Freq Offset 0 Hz	
6 7 8 9 10 11													
MSG									STATUS	2	3		

	6 Frequency
IFGain:Low #Atten: 30 dB DETIP NNNN Mkr2 5.250 95 GHz	Auto Tu
dBm -13.93 dBm	_
ulater male and a state of the	nter Fr
-13.63 dBm	
5.235000	Start Fr
The second	Stop Fr
Sta	
#VBW 1.0 MHz #Sweep 500.0 ms (1001 pts) 5.000	CF Ste
X FUNCTION FUNCTION WIDTH FUNCTION VALUE A	M
5.265 0 GHz 6.370 dBm 5.250 95 GHz -13.93 dBm Free	Freq Offse
	0



Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5580		5589.50	<5600	PASS
5660	A	5650.95	>5650	PASS
5580	D	5588.85	<5600	PASS
5660	В	5651.15	>5650	PASS



								ept SA	lyzer - Sw	rum An RE	t Spec	ilen R I
Frequency	M Aug 26, 2015 CE 1 2 3 4 5 6 PE M M M M M M	TRA	e: Log-Pwr	Avg Typ			Hz NO: Fast C	0000 G	50 S		ter	en
Auto Tune	ET P N N N N N		-		DdB	#Atten: 30	NU: Fast C Gain:Low		_	-		
Auto Tune	50 GHz 44 dBm		Mkr					1Bm	20.00	Rei	B/div	
Center Fred								11111				og 10.0
5.58000000 GHz				superlineting	ptolouban	and whet was	palred				1	0.00
a constant a ser	-11.31.dBm	-	í	1	_		d					10.0
Start Freq			WWWWWWWWWWWW				and a	MUNICAL	-			20.0
5.555000000 GHz		Mar	A MANTEROOM	-	-		-		millentile		-	80.0
1.4.2 0.000.00.00	WHITTHE MANAGE	WWW.		-	-		-		manilan	perman	-	40.0
Oton From	A LING AND A		-							aver 1.	syden.	50.0
Stop Freq 5.60500000 GHz		-	-	-	-							50.0
0.00000000000					-			-				70.0
CF Step	0.00 MHz			-					0 GHz			
5.000000 MHz Auto Mar		00.0 ms (Sweep 5	1		1.0 MHz	#VB		kHz	/ 100	s BV	Re
Hato Mai	IN VALUE	FUNCTI	INCTION WIDTH	NCTION FI		¥ 8.69 dl	6 CHal	× 5.573 1		TRC SCL	MODE	KB 1
From Office					3m	-11.44 di		5.589		1 f	N	23
Freq Offset 0 Hz	-										_	4
0112				-		_						5
		-										7
												8
		2										0
	4											11
-	2											

g-Pwr	Avg Type: Lo	na Dun	Tria: From			88500	5.58	25	ker	ar
Mkr2 5.5			#Atten: 3	PNO: Fast (FGain:Low			_			
	- 1	_		1	dBm	20.00	Ref	1	B/div) di og
	2	na malateria	where the advantage of the					÷		0.0
	2			and all				-		0.0
Minutality	and and	_			madelanonal			-		0.0 10.0
COMIN AN		1				Providence -	-per per	Nor Albert	-	0.0 0.0
									C. C	0.0 0.0
Sp eep 500.0	#Sw	łz	W 1.0 MHz	#VB						
N WIDTH			Y 4 33 di		X 5 595					KR 1
			-15.80 di				f	1	N	2 3 4 5 6
										8 9
										0
Mkr2 5.5	1 ************************************	30 dB	#Atten: 30	#VB	PNO FGai	PNO IFGai	PRO IFGai 20.00 dBm 	PRO IFGai	PRO IFGai Ref 20.00 dBm Ref 20.00 dBm S.58000 GHz AV 100 KHz TRE SCL X 1 f S.585 00 0	IFGai



F 50 Ω ALIGNAUTO 11:15:23 AM Aug 26, 2015 50950000000 GHz Avg Type: Log-Pwr TRACE 1 2 3 4 5 6	
	Marker
PNO: Fast C Trig: Free Run TYPE MWWWWW DET PNN NN N	Select Marker
Mkr2 5.650 95 GHz ef 20.00 dBm -14.48 dBm	2
1 strature to all advised on the strate of	Norma
-14,41 dBm	
autor and a second a	Delta
	Fixed
00 GHz Span 50.00 MHz kHz #VBW 1.0 MHz #Sweep 500.0 ms (1001 pts)	Of
L Y FUNCTION VIDTH FUNCTION VALUE 5.653 75 GHz 5.658 dBm	
5.650 95 GHz -14.48 dBm	Properties
	More 1 of 2
STATUS	

SENSE:INT ALIGNAUTO 02:40:10 PM Aug 26, 201: Avg Type: Log-Pwr TRACE 1 2 3 4 5	
t 🕞 Trig: Free Run TYPE MWWWWW) /
Mkr2 5.651 15 GH	Next Pea
-15.27 dBm	
where the stand of	Next Pk Righ
-15.11 dBr	
	Next Pk Le
	NextFrLe
and a second sec	
William Control of Con	Marker Delt
Span 50.00 MH:	
/BW 1.0 MHz #Sweep 500.0 ms (1001 pts	
Y FUNCTION FUNCTION WIDTH FUNCTION VALUE 4.89 dBm	
-15.27 dBm	
	Mkr→RefL
	-
	Mor
	1 of
2	0



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)(Dipole Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5260	А	5250.35	>5250	PASS
5260	В	5250.50	>5250	PASS



Agile	nt Spe	etrur	n Ana	yzer - Sw											
v¤ Cer	nter	Fre	RF q 5	50 S	2 AC	00 GI	Iz		SEI		Avg Ty	ALIGNAUTO De: Log-Pwr	TR	PM Sep 09, 2015 ACE 1 2 3 4 5 6 YPE MWWWWW	Frequency
				_	_		NO: Fa Gain:L	ast 🖵 .ow	#Atten: 3			Mkr	in a start	DET P NNNNN	Auto Tune
10 c Log	B/di	v	Ref	20.00	dBm	1	-		_					.12 dBm	
10.0	1.1	-						\rightarrow	molientralies	A Real	moutothicken				Center Freq
0,00 -10.0		-				_	2	V() and an and an	and a constant of the second	(Julia (Marcia) - 43	and a for the second particular		-	-13.09 dBm	5.260000000 GHz
-20.0					areal	And and and	*		-			WWWW STUDY WWW			Start Freq
-30.0		-		AN AN AN AN								, with	WWWWWWWW		5.235000000 GHz
-40.0 -50.0	real	North	w-think	Childen Own Pu				-					. dabe	a for the second second	
-60.0		_		-				_					-		Stop Freq 5.285000000 GHz
-70,0	1													1000	
Cei #Re) GHz (Hz	<u>.</u>		#	¢VB₩	1.0 MHz			#Sweep 5		50.00 MHz (1001 pts)	CF Step 5.000000 MHz
MKR 1	MODE	TRC	SCL			× 5.253 7	75 CH	7	Y 6.91 d		NCTION F	JNCTION WIDTH	FUNC		<u>Auto</u> Man
234	N	1	f			5.250 3			-13.12 di	3m	-				Freq Offset 0 Hz
56													C.		UHZ
7 8 9							_	-							
<u>10</u> 11														~	
MSG		ianm	ent (Complet	ed							STATU		2	

E de antiene area)2:17:41 PM Sep 09, 2015	LIGNAUTO		SE:INT	SEM		AC	50 Ω	RF		RL
Frequency	TRACE 1 2 3 4 5 6	Log-Pwr	Avg Typ	-	-		0000 G	.26000	eq 5	ter F	en
1265	TYPE MWWWWW DET P NNNNN				Trig: Free #Atten: 30	PNO: Fast G Gain:Low					
Auto Tur	5.250 50 GHz -14.28 dBm	Mkr2			1		Bm	20.00 d	Ref	3/div	
Center Fre	A		1				17.14			(1)	og 10.0
5.26000000 GH			whicherden	marketel	malanthrollin	higher	1.1.1	1211		1	0.00
0.200000000	-13.67 dBm				1						10.0
Otent Fre		Maler	-			N	J.W.			1.000	20.0
Start Fre		and the will be a		-			- udul + part			-	30.0
5.235000000 GH	was and the work of the	NY NY						PANTY DOWN	-	_	40.0
	May Manager Charger and		1	-				PARTY -	ingran ha	-	
Stop Fre	and the second		1	1			1.00			-	50.0
5.285000000 GH										1	50.0 70.0
	Span 50.00 MHz			-				0 GHz	26000	tor 5	
CF Ste 5.000000 MH	.0 ms (1001 pts)	weep 50	1		1.0 MHz	#VB				s BW	
Auto Ma	FUNCTION VALUE	CTION WIDTH	ICTION FI		Y		×	-	IC SCL	MODE T	IKB I
					6.330 df	0 GHz			f	N	
Freq Offs				sm	-14.28 dE	50 GHz	5.250		r	N	2
01									-	-	4
											6
											7
											8
				11							10
	2		-	_				-		-	11
		STATUS									G



:	802.11 ac PCIe Module
:	Band Edge Data
:	No.3 OATS
:	Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna)
	: :

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5580	•	5589.50	<5600	PASS
5660	A	5650.45	>5650	PASS
5580	D	5590.00	<5600	PASS
5660	В	5650.40	>5650	PASS



	AM Aug 26, 2015	10:57:12/	ALIGNAUTO		ISE:INT	SEN		AC	50 Ω	RF	L.	RL
Narker Select Marker Z N N Norma	ACE 123456 YPE MWWWWWW DET P NNNNN	TRA	Avg Type: Log-Pwr		Trig: Free Run		Z 0: Fast 🕞	00000 GH	950000	2 5.58		
	IFGailleuw Artech of the											
	50 GHz 40 dBm		Mkr2					IBm	20.00 0	Ref	B/div	
							01				L i	9
Norm		-		mounterharton	mohrahart	molevillandary	metherhow		1.11		110	
	-11.31 dBm		2		1		1				11.1	00
L			Den.				ć	with			-	0.0
Del		-	ANNAL MARKED				-	WINNAMPROV	- 11			D.O
Del		Wyunday	TON.	-	· · · · · ·			And a second sec	- NIVER W		-	D.O
	Manhumanape	WAL THE			-				Pr All Marrow	Aretant	1 Charles	0.C
	A NOW AND A NOW		-								ANW MAN	D.O
Fixed		-		-	-					-	-	0.Q
		_		-	-				_		-	0.0
1	0.00 000		1						011-	5000		
0	50.00 MHz (1001 pts)		Sweep 5(1.0 MHz	#VBM			.5800		
			ICTION WIDTH			~		×	AT 200	TRC SCL		_
1		PONCI	ICTION WIDTH		3m	8.69 dE	GHz	5.573 75		1 f	N	
					3m	-11.40 dE	GHz	5.589 50		1 f	N	2
Properties										-		4
					-						-	5
					-							7
Mo					-					_	_	8 9
1 0					1							0
	*			-	_		1					1
	2											

Marker	M Aug 26, 2015 CE 1 2 3 4 5 6	TI	ALIGNAUTO e: Log-Pwr	Avg Ty	SENSE: INT	-		AC 00000 0		RF 5.590	25	L ker	
Select Marker	PE MWMMMM	1.00		19.2	30 dB	Trig: Fre #Atten: 3	PNO: Fast (IFGain:Low					1	1
2	00 GHz 33 dBm	r2 5.59 -16	Mkr		1	1		dBm	20.00	Ref	v	B/div	
Norma				01							1	-	og 10.0
NOTINA			2	to a stander	any mark workers	into contraction dans	mandred		_		-	-	00.0
	-16.27 dBm		A CONTRACTOR		-	_	worth					-	10.0 20.0
Delta			and water		1			AN COMMENT		1111		1	20.0
		Wine	. ml		-		_	a la	Ways	-			40.0
	WAL-WALLAND	- ALE			1				WAR	utimotion	and Hal	-	50.0
Fixed					-			-				1	50.0
1			_	-	-		_	-	_		-	-	70.0
	0.00 MHz	Span		-	_	8.000			GHz				
Of	(1001 pts)					N 1.0 MHz	#VB		Hz	100 k			-
	ON VALUE	FUNC	NCTION WIDTH	NCTION F		Y 3.73 d	50 GHz	×		f	TRC	MODE	KR 1
1 South of						-16.33 d	00 GHz			f	1	N	23
Properties					_							-	4
													6
More													7 8
1 of 2													9
		1		1			1						11
	2												



		nalyzer - Sw									
XI RL Marker	8 256		AC 00000 G	114	SENS	E:INT	Ava Two	ALIGNAUTO e: Log-Pwr		M Aug 26, 2015 CE 1 2 3 4 5 6	Marker
warker	2 5.0	504500	F	PNO: Fast Gain:Low	Trig: Free F #Atten: 30		CAR LAP	e. Logi wi	TY D	PE MWMMMM ET P N N N N N	Select Marker
10 dB/di	v Re	ef 20.00	dBm					Mkr		45 GHz 59 dBm	2
10.0				1.1	and when have been a	. I. wheel	- Androny				Norma
-10.0				²			1			-14.55 dBm	1
-20.0		ol	un applier and					Marrall Minding	THATTA		Delta
-40.0 -50.0 mm	www.whi	author viviation							The stand and the stand	- De la construction	
-60.0											Fixed
#Res B	W 100	111 111		#VBV	V 1.0 MHz	_			00.0 ms (0.00 MHz (1001 pts)	Of
MKR MODE	1 f		5.653 7 5.650 4	75 GHz	5.449 dBr -14.59 dBr	m	ICTION FU	NCTION WIDTH	FUNCTI	ON VALUE	
3 4 5 6			5.650 4		-14.09 GBI	n					Properties
7 8 9 10											Mor 1 of
11 ¢	1-1-	1				-		STATUS		2	

Marker	M Aug 26, 2015 CE 1 2 3 4 5 6	TRA	LIGNAUTO	Avg Type	ISE:INT			00000 0	50 Ω 04000	BF 5.65	r 2	2.2	l R lar
Select Marker						#Atten: 30	PNO: Fast (FGain:Low		-		÷.,		
2	40 GHz 70 dBm	2 5.650 -15.	Mkr2			1		dBm	20.00	Ref	liv	B/di	
				1									.og 10.0
Norma		_		hadharding	potential	and with with any	A2			-	-		0.00
_	-15.67 dBm		Pa 4	4			¥					1	10.0
Delt	· · · · · ·		MAN WING					MUNANSO			-	1.00	20.0 30.0
		Whethere					_	ANT.	NIN	-		1.0	40.0
	Not-weil-stephenese	anya	_						No. An	and the said	NAPOLE	D RAIN	50.0
Fixed		_			-				-		-	1	60.0
	10 10 1										-)	70.0
Of	50.00 MHz (1001 pts)		Sweep 50	#	_	1.0 MHz	#VB) GHz (Hz	6000 100 k			
	ION VALUE	FUNCT	ICTION WIDTH	TION FUI		Y 4.33 dE	50 GHz	X 5.667		C SCL		MODE	IKR 1
South						-15.70 dE	40 GHz			f		N	23
Properties				-	-					-	-	-	4
		_		-									6
Mor													8
1 of:	*												10 11
	2												1



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)(Dipole Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5270	А	5250.80	>5250	PASS
5270	В	5251.10	>5250	PASS



Agilent Sp	ectru		yzer - Swa										
RL Cente	r Fre	RF eq 5	50 Ω .27000	AC	SHz	Fast 🗔	1	NSE(INT)	Avg Typ	ALIGNAUTO	TRA	M Sep 09, 2015 CE 1 2 3 4 5 6 (PE M WWWWWW	Frequency
				2	IFGain:		#Atten: 3			Mł	r2 5.25		Auto Tune
10 dB/d Log	iv	Ref	20.00 0	dBm	-			-	-	-	-15.	80 dBm	
10.0 0.00	-				1	I de la desta de	al Maria	-	here halfer halfer have been by				Center Freq 5.270000000 GHz
-10.0								Y			-	-15.12 dBm	
-20.0	-		aduction	and a day works	-			-	_	Constant Martin Balance	Martin Contraction		Start Freq 5.220000000 GHz
-40.0	ninderse	where	Advanta								- makeleter	e when man locand	
-60.0													Stop Freq 5.320000000 GHz
Center #Res E						#VBN	(1.0 MHz			#Sweep 5		100.0 MHz (1001 pts)	CF Step 10.000000 MHz
MKR MOD	E TRO			×			Y		NCTION FL	JNCTION WIDTH	FUNCT	ION VALUE	<u>Auto</u> Man
1 N 2 N 3 4 5	1	f			35 0 GH 50 8 GH		4.88 d -15.80 d	Bm Bm					Freq Offset 0 Hz
6 7 8 9 10													
10	1											2	
MSG										STATU	5		

Center l	Freq 5.2	50 Ω AC	00 GH	Z O:Fast G				ALIGNAUTO : Log-Pwr	TRAC	4 Sep 09, 2015 E 1 2 3 4 5 6 PE MWWWWW T P N N N N	Frequency
10 dB/div	Auto Tune										
Log 10.0 0.00				Indededated	And and a starting		-baladatatat				Center Fre 5.270000000 GH
-10.0 -20.0 -30.0 -40.0		and a state of the	a the shirt of the state	2				athat to maintance	munder for the former	16.02 dBm	Start Fre 5.220000000 GH
-50.0	edistran ^{ia} uctific ^y									Albeddensed and	Stop Free 5.320000000 GH
	.27000 C / 100 kH	z	×	#VBV	V 1.0 MHz	FUNC		Sweep 5			CF Ste 10.000000 MH Auto Ma
1 N 2 N 3 4 5 6	1 f 1 f		5.265 0 5.251 1		3.983 dE -16.70 dE						Freq Offse 0 H
7 8 9 10 11											



:	802.11 ac PCIe Module
:	Band Edge Data
:	No.3 OATS
:	Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna)
	: :

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5550	•	5570.00	<5600	PASS
5670	A	5650.70	>5650	PASS
5550	D	5569.40	<5600	PASS
5670	В	5651.00	>5650	PASS



RF 50 Ω AC	SENSE:INT	ALIGNAUTO	11:35:22 AM Aug 26, 2015						
570000000000 GHz PNO: Fa	st 🕞 Trig: Free Run	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6	Peak Search					
IFGain:Low #Atten: 30 dB Mkr2 5.570 0 GHz 10 dB/div Ref 20.00 dBm -15.35 dBm									
, au	Lill - harry - halles	and the second sec		Next Pk Righ					
Jul marked and a start of the start			-14.55 dBm	Next Pk Lef					
				Marker Delta					
				Mkr→C					
5.545 0 GH	5.45 dBm			Mkr→RefLv					
				More 1 of 2					
	67000000000 GHz PNO: Fai IFGainLo ef 20.00 dBm ef 20.00 dBm of 20.00 d	67000000000 GHz PNO: Fast IFGain:Low atten: 30 dB ef 20.00 dBm 1 1 1 1 1 1 1 1 1 1 1 1 1	Avg Type: Log-Pwr PN0: Fast PN0: Fast Trig: Free Run #Atten: 30 dB Mk ef 20.00 dBm 2 0 dBm 00 GHz 0 kHz #VBW 1.0 MHz FUNCTION WIDTH 5.545 0 GHz 5.45 dBm	S7000000000 GHz Trig: Free Run Avg Type: Log-Pwr TRACE [1 2 3 4 5 6 PN0: Fast Trig: Free Run Mkr2 5.570 0 GHz -15.35 dBm ef 20.00 dBm -15.35 dBm -15.35 dBm 000 GHz -11 -1 -1 000 GHz -1435 dBm -1435 dBm 000 GHz -15.35 dBm -15.35 dBm 2 -1435 dBm -1435 dBm					

Peak Search	13:00:05 PM Aug 26, 2015 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	ALIGNAUTO : Log-Pwr		SENSE:INT		GHz PNO: Fast (IFGain:Low			RF 5.56	25		RL arł
Next Pea	5.569 4 GHz -19.67 dBm	Mkr2 5.569 4 GHz dB/div Ref 20.00 dBm -19.67 dBm										
Next Pk Rigi			1 1	-laber montelectual	(willing on live) and	adalaha						9 0.0 00
and and	-19.56 dBm	2										0.0 0.0
Next Pk Le		Weller Bradwall de Vice					and a mail is a mail of the					0.0 1.0
Marker Del	man hely on the strange the							-WARRONNY"	San	n-eh	in	0.0 0.0
Mkr→C	Span 100.0 MHz 0 ms (1001 pts)	Sweep 50	#	MHz	SW 1.0	#VB) GHz (Hz	5000 100 k			ent
-	FUNCTION VALUE	ICTION WIDTH	CTION FUI	44 dBm		50 GHz	×		SCL	TRC	MODE	
Mkr→RefL				67 dBm		9 4 GHz			f	1	N	
Mor 1 of												7 3 9 0
	2	4							1			



							lyzer - Swa				
Peak Search	01:26:38PM Aug 26, 2015 TRACE 1 2 3 4 5 6 TYPE M MARAAMAA	ALIGNAUTO	Avg	SENSE:II		00000 G	50 Ω 07000	8F 2 5.65		Mar	
NextPeak	IFGain:Low #Atten: 30 dB Der P NNNN Mkr2 5.650 7 GHz										
Next Pk Right	-21.99 dBm				1	dBm	20.00 0	Ref	B/div	10 d Log 10.0	
Next Pk Lef		and	Matala aladadada	Ashedolokakan youdy	22	Andrewson				-10.0 -20.0 -30.0	
Marker Delta	Mall who are and						and the aspect of the second	militadas	monalid	-40.0 -50.0 -60.0	
Mkr→Cl	Span 100.0 MHz 00.0 ms (1001 pts)			1.0 MHz	#VBW			.67000 100	s BW	#Re	
Mkr→RefLv	FUNCTION VALUE	FUNCTION WIDTH	FUNCTION	- <u>1.81 dBm</u> -21.99 dBm	0 GHz 7 GHz			RC SCL 1 f 1 f	N N N	1 2 3 4 5	
More 1 of 2										6 7 8 9 10 11	
	2	STATUS			- F				_	< MSG	

Peak Search	28 PM Aug 26, 2015 TRACE 1 2 3 4 5 6 TYPE M WWWWW DET P N N N N N	TR.	ALIGNAUTO :: Log-Pwr		sense::INT ree Run : 30 dB		Hz PNO: Fast (FGain:Low	00000 G	50 Q 10000	8F 5.65	r 2 !	1.6	RI ar
NextPea	51 0 GHz 2.85 dBm		Mł						20.00	Ref	iv	B/div	
Next Pk Righ				And the second	les, weekstellerberte		الموالية الم					1.1.1	og 10.0
Next Pk Lei	-22.71 dBm		Think we have been been	-			2	- break and the			_		10.0 20.0 30.0
Marker Delt	Annalination	and Marylala							Alex Reported	شع سيدل	All South	وعلقهم	10.0 50.0 50.0 70.0
Mkr→C	n 100.0 MHz s (1001 pts)	500.0 ms				W 1.0 M	#VB		GHz Hz	100 H	SW 1	s B	en Re
Mkr→RefL			ICTION WIDTH	NCTION FUN	dBm dBm		5 0 GHz 1 0 GHz			f f	1	N	1 2 3 4 5
Mor 1 of													6 7 8 9



		802.11 ac PCIe Module Band Edge Data
		Band Edge Data
Test Site		
Test Mode	:	Mode 6: Transmit (802.11ac-80BW-65Mbps)(Dipole Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5290	А	5250.20	>5250	PASS
5290	В	5251.00	>5250	PASS



	02:08:14 PM Sep 09, 2015	ALIGNAUTO	Ĩ.	ISE:INT	SEL		AC AC	lyzer - Sw	RE	n spec
Frequency	TRACE 1 2 3 4 5 6 TYPE MWWWWWWW DET P N N N N N	: Log-Pwr		Run	Trig: Free	NU: Fast	AC 0000 GH PI	5.29000	Freq	ter
Auto Tune	r2 5.250 2 GHz	Mk) dB	#Atten: 30	Gain:Low			20	
-	-31.97 dBm		1	-		-	IBm	20.00	Re	B/div
Center Free 5.290000000 GH										
and a second day		-	allansonation	aimana	A MANA	الللاردوميل				-
Start Free 5.190000000 GH	-31.26 dBm					2		=		
5.19000000 GH		Managenterlander		-			- Antonipatron Burry	1		
Stop Free	Man wanter and a second and a second and a second sec	-		-				otrad at the second	the start	-
5.390000000 GH;				-				-		-
CF Ster 20.000000 MH	Span 200.0 MHz 00.0 ms (1001 pts)	Sweep 5	#		N 1.0 MHz	#VB			5.2900 V 100	
<u>Auto</u> Mar	FUNCTION VALUE	CTION WIDTH	CTION FUN		Y		×		TRC SCI	
Freq Offse				3m 3m	-11.264 df -31.97 df		5.273 5.250		1 f 1 f	NN
0 H:			-		_			-		
								1		
								-		
	3	1	+	1		1			ł	-
	5	STATUS								

	OGHz PNO: Fast	🚽 Trig: Free R	un	vpe: Log-Pwr	TYPE	23456 ////////////////////////////////////	Frequency
f 20.00 dBm	IFGain:Low	#Atten: 30 d	8	Mk	r2 5.251 (O GHZ	Auto Tun
							Center Fre 5.29000000 GH
	2	n manunalin pr	LLYAL ALATA Constant of the second	un la		_31.55.dBm	Start Fre 5.190000000 GH
anoren belliter a former and				my south of the	Mar .	uniaten Aux	Stop Fre 5.39000000 GH
kHz	#VB				00.0 ms (10	01 pts)	CF Ste 20.000000 Mi Auto Mi
		-11.548 dBm		FUNCTION WIDTH	FUNCTION		Freq Offs
		f 20.00 dBm	f 20.00 dBm	f 20.00 dBm	Mk	Mkr2 5.251 (-32.20 -32.20 	Mkr2 5.251 0 GHz f 20.00 dBm -32.20 dBm -32.20 dBm -31.50 dBm -31.50 dBm -31.50 dBm -31.50 dBm -31.50 dBm



:	802.11 ac PCIe Module
:	Band Edge Data
:	No.3 OATS
:	Mode 6: Transmit (802.11ac-80BW-65Mbps)(Dipole Antenna)
	: :

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5530	•	5569.00	<5600	PASS
5690	A	5650.20	>5650	PASS
5530	D	5569.20	<5600	PASS
5690	В	5650.60	>5650	PASS



	01:47:02 PM Aug 26, 2015	ALIGNAUTO		ISE:INT	SEN	1	AC	lyzer - Swe 50 Ω	RF	L	R
Peak Search	TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	e: Log-Pwr	Avg Typ	Run	Trig: Free	0: Fast G	AC 0000 GH PI	900000	2 5.56	ker :	lar
Next Peak		Mkr2 5.569 0 GHz 0 dB/div Ref 20.00 dBm -28.94 dBm									
Next Pk Righ				⊘ ¹							.og 10.0 0.00 10.0
Next Pk Lef	-27.92 dBm	2	nder Al AM Angeline			-	the walk				20.0 30.0 40.0
Marker Delta	and another department of the second						and the second s	Contract (100	Longiano		40.0 50.0 60.0 70.0
Mkr→Cf	Span 200.0 MHz 0.0 ms (1001 pts)				/ 1.0 MHz	#VB\			.5300 / 100	s BV	Re
Mkr→RefLv		NCTION WIDTH	ICTION	3m	-7.92 dE -28.94 dE	0 GHz 0 GHz	5.535 5.569		1 f 1 f	N N N	1 2 3 4 5 6
More 1 of 2	*										7 8 9 10

Peak Search	M Aug 26, 2015 CE 1 2 3 4 5 6 (PE M WWWWW	TRAC	ALIGNAUTO : Log-Pwr >100/100	Avg Type Avg Hold	SE:INT		lz IO: Fast ◯	0000 GH		2 5.5		l RI
NextPea	9 2 GHz	A	• 15 IV		dB	#Atten: 30	io: rast C	IFG	1.12	÷	-	
	29 dBm	-33.7	1974 1974					Bm	f 20.00 c	Re	B/div	0 dE
						_	1.1	1 - 281	1.000			10.0
Next Pk Rigi		-	_								-	0,00
		_			5052540		202			-		10.0
		-	2	allburghormous	MUNHAU	. Allon Maille	Herendell				-	20.0
Next Pk Le	-53,33 dBm		7	-							-	30.0
	-		white and the		-			- Alaman Mark			1	40.0
and the start	Auron Maria	anthe marking	فيرر					and the second s	and a stand of the stand of the stand		-	50.0
Marker Del	anoned the market				_					elelowalde:		60.0
	-		1	1							1	70.0
	200.0 MHz						40 (D)			5.5300		
Mkr→C	(1001 pts)		12 13 11 1 1			1.0 MHz	#VBI		141.000	N 100	-	
	ON VALUE	FUNCTI	ICTION WIDTH	CTION FUI	m	-13.325 dB		5.525 (TRC SC	N	икн т 1
		-			m	-33.729 dB	2 GHz	5.569 2		f	N	2
Mkr→RefL											_	4
												6
Mo												8
1 of												9
	141				_							11



Agilent Sp	ectrur	n Anal	yzer - Swi	ept SA												
Marke	r 2 5	RP 6.650	50 Ω 02000	AC 00000	GH	z	st 🗔	Tria	SENS	Bun	Avg Ty		nauto g-Pwr	TR	PM Aug 26, 2015 ACE 1 2 3 4 5 6 YPE MWWWWW DET P N N N N N	Peak Search
10 dB/di	iB/div Ref 20.00 dBm					Mkr2 5.650 2 GHz								NextPeak		
10.0. 0.00						2	.uni.		INU .	attern preton	-Udmesous	und -				Next Pk Right
-10.0 -20.0 -30.0				and the state	-	2		-				here	and the second s		-14.42 dBm	Next Pk Lef
-40.0 -50.0	charp ^a d	pull-spit.for	the for the second sector										array a	Waryth and White	- Wallangelaury	
-60.0	-															Marker Delta
Center #Res E	3W 1	00 k				#	VBW	1.0 P	ИНZ	E FIN	TION	_	eep 5	00.0 ms	200.0 MHz (1001 pts)	Mkr→Cl
MKR MOD 1 N 2 N 3 4 5 6	1	f		5.6 5.6	50 2	3 GHz 2 GHz	2	5.1 -15.0	58 dB 08 dB	m			NWIDTH			Mkr→RefLv
7 8 9 10 11															~	More 1 of 2
K ASG													STATUS		2	

Peak Search	M Aug 26, 2015 CE 1 2 3 4 5 6 PE M WWWWW ET P N N N N N	TRAC	ALIGNAUTO :: Log-Pwr			Trig: Free #Atten: 30	Hz NO: Fast 🕞 Gain:Low			RF 5.65	er 2 :	RL Irke
NextPeal	0 6 GHz 17 dBm	r2 5.650 -15.	Mk			Witten. ou	Gain.Low		20.00	Ref	div	dB/e
Next Pk Righ				-Idas mar-	ation julia.	nunkulu,	- Jan Malak					9 .0 .0
terreti a dur	-14.32 dBm		- Drowney				2	Normal Value		_		.0
Next Pk Lef	all and a state of the state of	nouton-topping	and and					and the second s	when the stand	Hallow .	al Mult	.0
Marker Delt												0.
Mkr→C	00.0 MHz 1001 pts)		Sweep 5	#		1.0 MHz	#VBW				er 5.6 BW 1	
	DN VALUE	FUNCTIO	ICTION WIDTH	TION FU	FUNC	Y		×				
Mkr→RefLv						5.68 dE -15.17 dE	0 GHz 6 GHz			f		NN
Mor 1 of:												

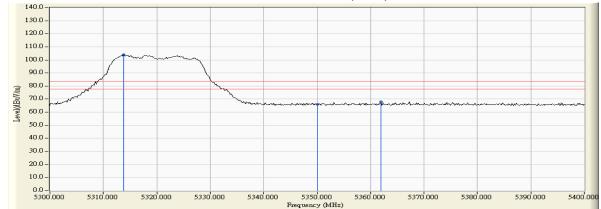
- Product : 802.11 ac PCIe Module Test Item : Band Edge Data Test Site : No.3 OATS
- Test Mode : Mode 7: Transmit (802.11a-6Mbps)(Grid DISH Antenna) -Channel 64 (5320MHz)

RF Radiated Measurement (Horizontal):

	Eraguanay	Correct	Reading	Emission	Peak Limit	Average Limit (dBµV/m)	
Channel No.	Frequency (MHz)	Factor	Level	Level	$(dB\mu V/m)$		Result
	(IVIIIZ)	(dB)	(dBµV)	$(dB\mu V/m)$	(uDµ v/III)		
64 (Peak)	5313.768	35.648	68.439	104.087			
64 (Peak)	5350.000	35.571	30.544	66.115	83.540	63.540	Pass
64 (Peak)	5361.884	35.546	32.485	68.030	83.540	63.540	Pass
64 (Average)	5313.768	35.648	55.721	91.369			
64 (Average)	5350.000	35.571	17.620	53.191	83.540	63.540	Pass

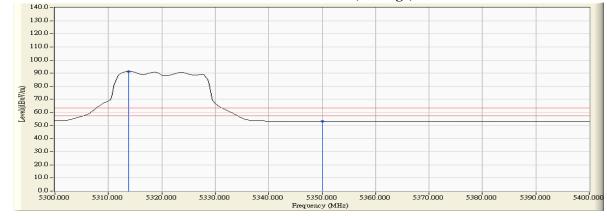
Figure Channel 64:

Horizontal (Peak)





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.

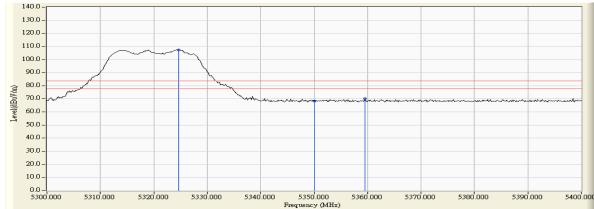
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 7: Transmit (802.11a-6Mbps)(Grid DISH Antenna) -Channel 64 (5320MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chaimer No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
64 (Peak)	5324.638	37.550	69.753	107.303			
64 (Peak)	5350.000	37.546	30.745	68.291	83.540	63.540	Pass
64 (Peak)	5359.565	37.544	32.574	70.118	83.540	63.540	Pass
64 (Average)	5314.058	37.552	57.989	95.541			
64 (Average)	5350.000	37.546	17.875	55.421	83.540	63.540	Pass

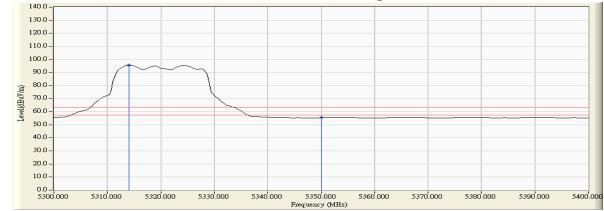
Figure Channel 64:

Vertical (Peak)





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



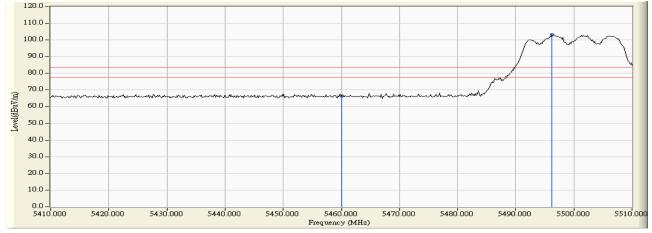
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 7: Transmit (802.11a-6Mbps)(Grid DISH Antenna) -Channel 100
		(5500MHz)

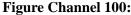
RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Kesuit
100 (Peak)	5460.000	36.240	30.163	66.403	83.540	63.540	Pass
100 (Peak)	5496.232	36.660	66.759	103.419			
100 (Average)	5448.116	36.088	18.688	54.775	83.540	63.540	Pass
100 (Average)	5460.000	36.240	17.623	53.863	83.540	63.540	Pass
100 (Average)	5496.522	36.662	54.202	90.863			

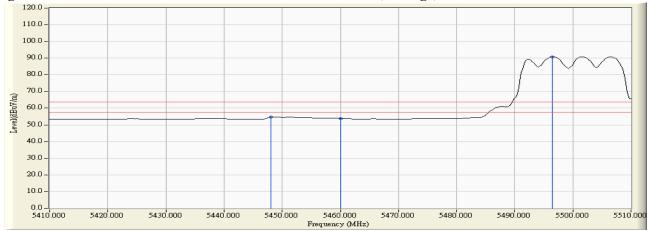


Horizontal (Peak)





Horizontal (Average)



- 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 (802.11a-6Mbps)(Grid DISH Antenna) -Channel 100
		(5500MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
100 (Peak)	5431.739	37.744	32.285	70.029	83.540	63.540	Pass
100 (Peak)	5460.000	37.927	30.797	68.724	83.540	63.540	Pass
100 (Peak)	5503.333	38.154	69.939	108.093			
100 (Average)	5449.130	37.856	18.929	56.785	83.540	63.540	Pass
100 (Average)	5460.000	37.927	17.954	55.881	83.540	63.540	Pass
100 (Average)	5503.768	38.155	57.943	96.098			

Figure Channel 100:

Vertical (Peak)

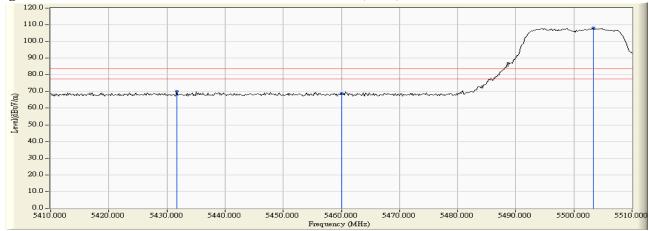
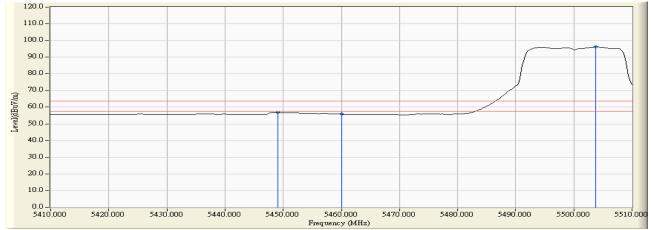
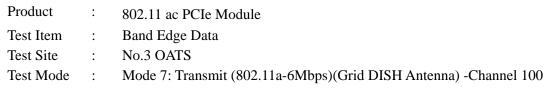


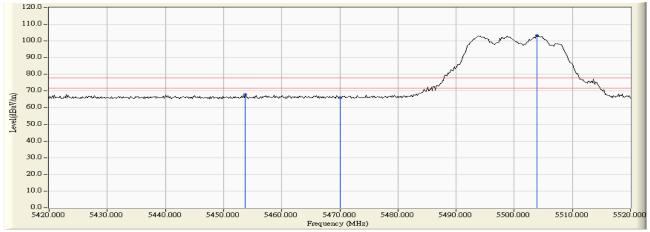
Figure Channel 100:

Vertical (Average)



- 2. Peak measurements: RBW = 1MHz, VBW = 3MHz, 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

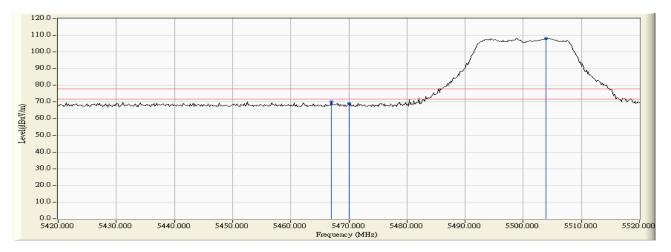




RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5453.768	36.160	31.720	67.880	-9.880	77.760	Pass
Horizontal	5470.000	36.370	29.590	65.960	-11.800	77.760	Pass
Horizontal	5503.913	36.710	66.712	103.422			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$

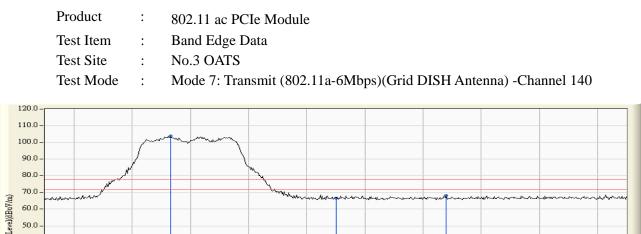


RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5466.957	37.974	32.220	70.193	-7.567	77.760	Pass
Vertical	5470.000	37.994	31.210	69.203	-8.557	77.760	Pass
Vertical	5503.913	38.155	70.068	108.223			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$

60.0 50.0 40.0 30.0 20.0 10.0 -0.0 -





5690.000

5700.000

5710.000

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5696.594	36.375	67.572	103.948			
Horizontal	5725.000	36.391	30.310	66.701	-11.059	77.760	Pass
Horizontal	5743.985	36.378	31.898	68.277	-9.483	77.760	Pass

0.000 5730.000 Frequency (MHz)

5740.000

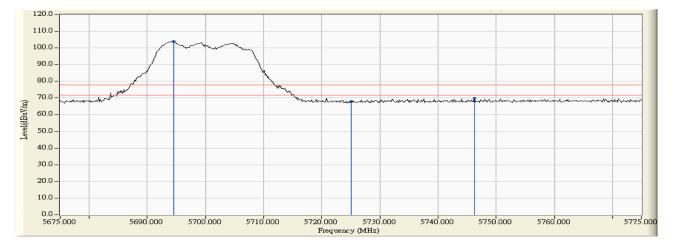
5750.000

5760.000

5775.000

5720.000

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 =$ -27dBm+104.76=77.76dBuV/m.



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5694.565	37.734	66.109	103.843			
Vertical	5725.000	37.729	30.100	67.829	-9.931	77.760	Pass
Vertical	5746.304	37.709	32.072	69.781	-7.979	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 =$ -27dBm+104.76=77.76dBuV/m.

Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site		No 3 OATS

Test Site : No.3 OATS Test Mode : Mode 8: Transmit (802.11n-20BW 14.4Mbps)(Grid DISH Antenna) -Channel 64

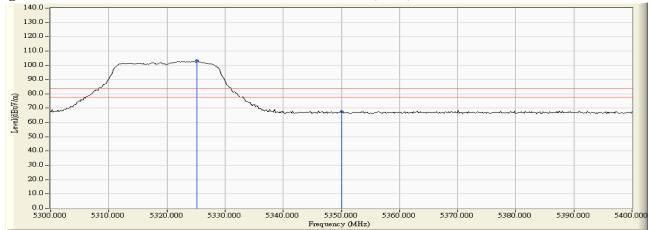
(5320MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
64 (Peak)	5325.217	35.624	67.558	103.182			
64 (Peak)	5350.000	35.571	31.864	67.435	83.540	63.540	Pass
64 (Average)	5324.783	35.625	54.599	90.223			
64 (Average)	5350.000	35.571	17.635	53.206	83.540	63.540	Pass

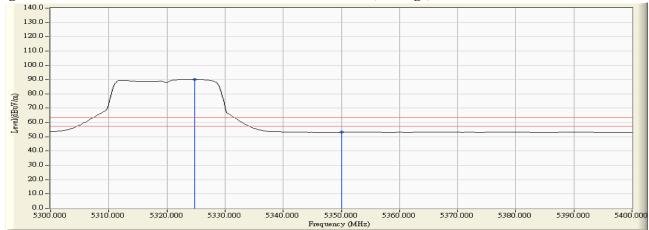
Figure Channel 64:

Horizontal (Peak)





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		Pand Edga Data

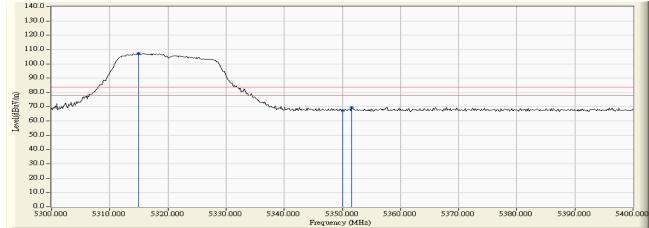
- Test Item : Band Edge Data
- Test Site : No.3 OATS
- Test Mode : Mode 8: Transmit (802.11n-20BW 14.4Mbps)(Grid DISH Antenna) -Channel 64 (5320MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
64 (Peak)	5314.928	37.552	69.741	107.293			
64 (Peak)	5350.000	37.546	29.613	67.159	83.540	63.540	Pass
64 (Peak)	5351.594	37.546	31.887	69.433	83.540	63.540	Pass
64 (Average)	5315.797	37.553	57.586	95.138			
64 (Average)	5350.000	37.546	17.887	55.433	83.540	63.540	Pass

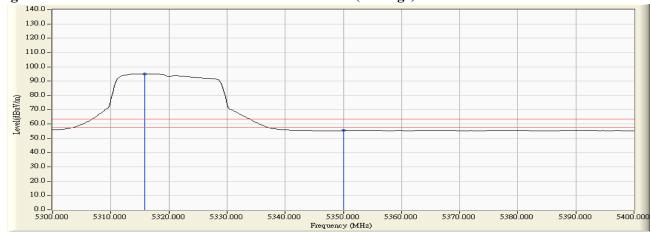
Figure Channel 64:

Vertical (Peak)





Vertical (Average)



- 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 (802.11n-20BW 14.4Mbps)(Grid DISH Antenna) -Channel 100 (5500MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
100 (Peak)	5455.652	36.184	31.722	67.906	83.540	63.540	Pass
100 (Peak)	5460.000	36.240	29.571	65.811	83.540	63.540	Pass
100 (Peak)	5495.072	36.652	66.676	103.328			
100 (Average)	5448.696	36.095	18.645	54.739	83.540	63.540	Pass
100 (Average)	5460.000	36.240	17.659	53.899	83.540	63.540	Pass
100 (Average)	5495.217	36.652	54.243	90.896			



Horizontal (Peak)

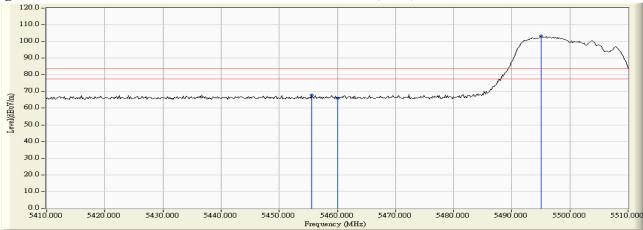
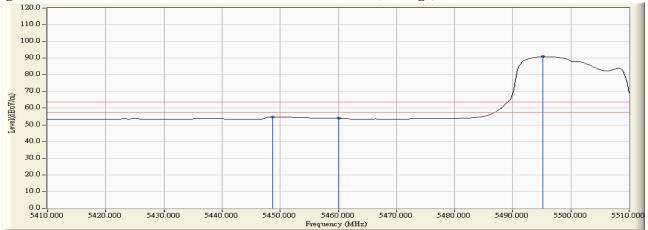


Figure Channel 100:

Horizontal (Average)



- 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 (802.11n-20BW 14.4Mbps)(Grid DISH Antenna) -Channel 100 (5500MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
100 (Peak)	5437.102	37.779	33.290	71.069	83.540	63.540	Pass
100 (Peak)	5460.000	37.927	31.244	69.171	83.540	63.540	Pass
100 (Peak)	5505.217	38.157	69.652	107.809			
100 (Average)	5449.130	37.856	18.895	56.751	83.540	63.540	Pass
100 (Average)	5460.000	37.927	17.972	55.899	83.540	63.540	Pass
100 (Average)	5506.087	38.151	57.794	95.945			

Figure Channel 100:

Vertical (Peak)

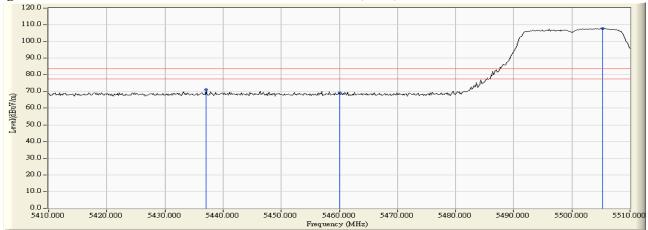
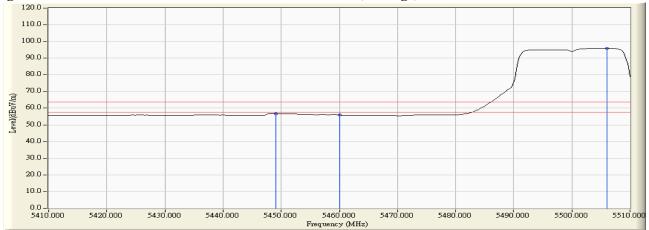


Figure Channel 100:

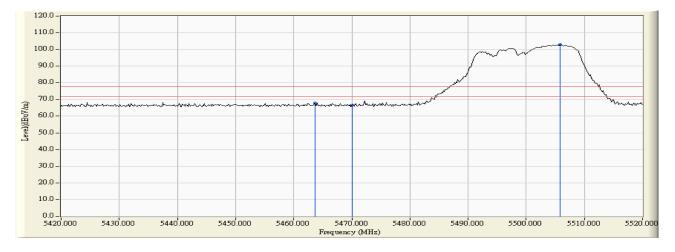
Vertical (Average)



- 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 (802.11n-20BW 14.4Mbps)(Grid DISH Antenna) -Channel 100

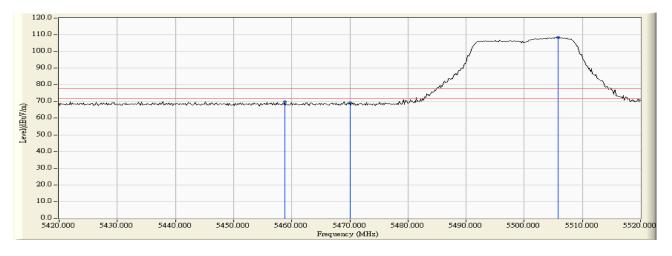


RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5463.623	36.288	31.674	67.961	-9.799	77.760	Pass
Horizontal	5470.000	36.370	30.206	66.576	-11.184	77.760	Pass
Horizontal	5505.797	36.710	66.229	102.939			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 =$

-27dBm+104.76=77.76dBuV/m.



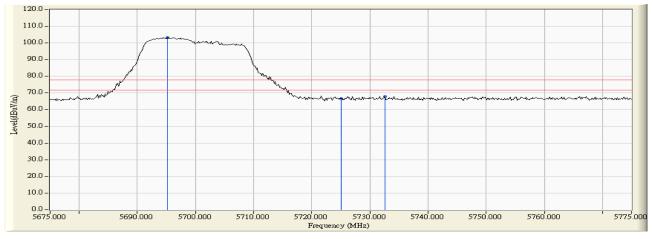
RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5458.841	37.919	32.033	69.953	-7.807	77.760	Pass
Vertical	5470.000	37.994	31.177	69.170	-8.590	77.760	Pass
Vertical	5505.797	38.152	70.285	108.438			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$



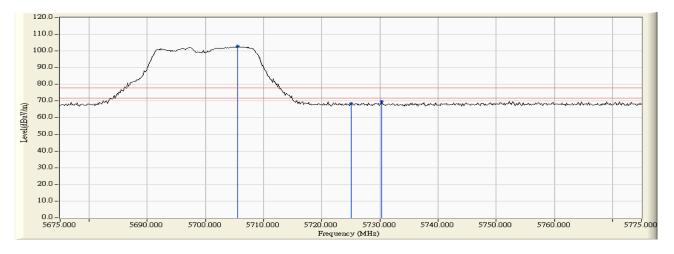




RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5695.145	36.373	66.800	103.173			
Horizontal	5725.000	36.391	30.130	66.521	-11.239	77.760	Pass
Horizontal	5732.536	36.386	31.650	68.036	-9.724	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$



RF Radiated Measurement:

	Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	(dB)	$(dB\mu V/m)$	Result
Vertical	5705.580	37.742	65.144	102.885			
Vertical	5725.000	37.729	30.891	68.620	-9.140	77.760	Pass
Vertical	5730.362	37.724	32.042	69.766	-7.994	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$

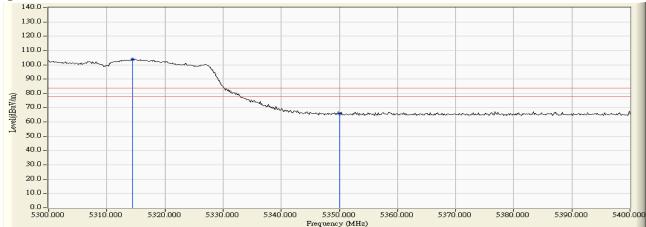
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 9: Transmit (802.11n-40BW 30Mbps)(Grid DISH Antenna) -Channel 62 (5310MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
62 (Peak)	5314.493	35.646	68.279	103.925			
62 (Peak)	5350.000	35.571	30.212	65.783	83.540	63.540	Pass
62 (Average)	5314.783	35.646	54.935	90.580			
62 (Average)	5350.000	35.571	17.847	53.418	83.540	63.540	Pass

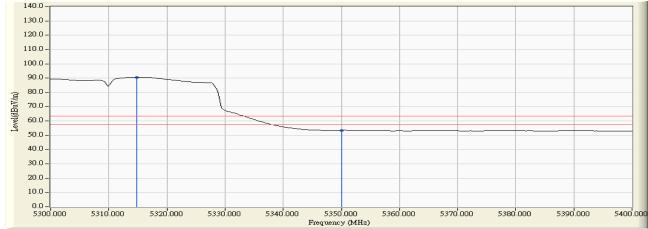
Figure Channel 62:

Horizontal (Peak)





Horizontal (Average)



- 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

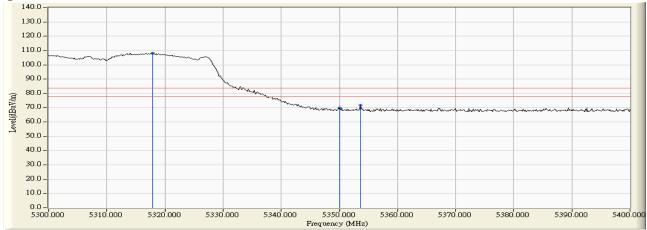
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 9: Transmit (802.11n-40BW 30Mbps)(Grid DISH Antenna) -Channel 62
		(5310MHz)

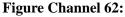
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Kesuit
62 (Peak)	5317.826	37.552	70.684	108.236			
62 (Peak)	5350.000	37.546	32.211	69.757	83.540	63.540	Pass
62 (Peak)	5353.623	37.545	34.017	71.563	83.540	63.540	Pass
62 (Average)	5316.667	37.552	57.093	94.645			
62 (Average)	5350.000	37.546	18.266	55.812	83.540	63.540	Pass

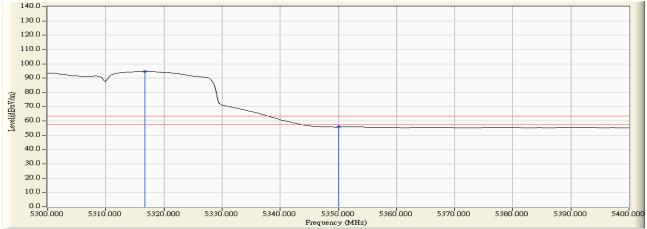
Figure Channel 62:

Vertical (Peak)





Vertical (Average)



- 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 (802.11n-40BW 30Mbps)(Grid DISH Antenna) -Channel 102 (5510MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
102 (Peak)	5451.739	36.134	31.671	67.805	83.540	63.540	Pass
102 (Peak)	5460.000	36.240	30.049	66.289	83.540	63.540	Pass
102 (Peak)	5499.565	36.682	66.751	103.432			
102 (Average)	5448.406	36.091	18.678	54.769	83.540	63.540	Pass
102 (Average)	5460.000	36.240	17.664	53.904	83.540	63.540	Pass
102 (Average)	5496.522	36.662	53.538	90.199			



Horizontal (Peak)

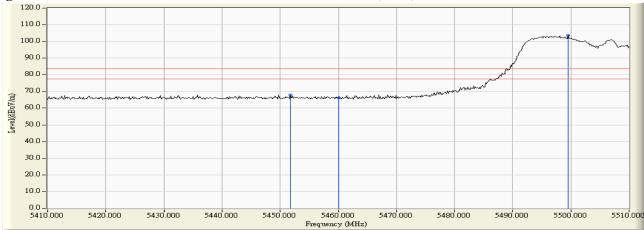
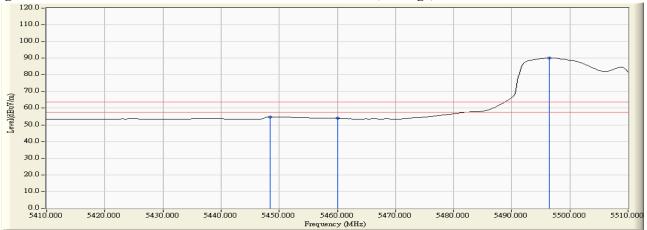


Figure Channel 102:

Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.

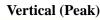
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. The antenna distance is 1m, average limit is 54dBuV + 9.54dB = 63.54dBuV, peak limit is 74dBuV + 9.54dB = 83.54dBuV.
- 5. Measurement Level = Reading Level + Correct Factor.
- 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 (802.11n-40BW 30Mbps)(Grid DISH Antenna) -Channel 102 (5510MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
102 (Peak)	5448.985	37.856	31.604	69.459	83.540	63.540	Pass
102 (Peak)	5460.000	37.927	29.773	67.700	83.540	63.540	Pass
102 (Peak)	5502.898	38.153	70.797	108.949			
102 (Average)	5449.130	37.856	18.923	56.779	83.540	63.540	Pass
102 (Average)	5460.000	37.927	18.000	55.927	83.540	63.540	Pass
102 (Average)	5503.913	38.155	57.179	95.334			

Figure Channel 102:



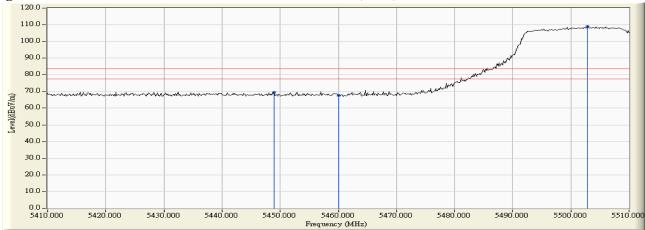
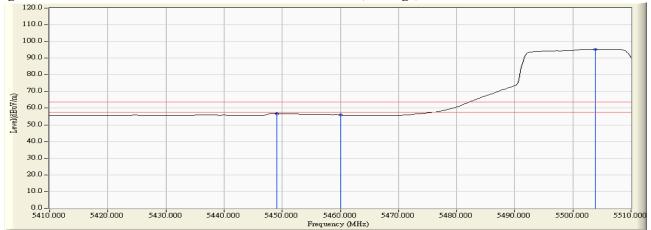


Figure Channel 102:

Vertical (Average)

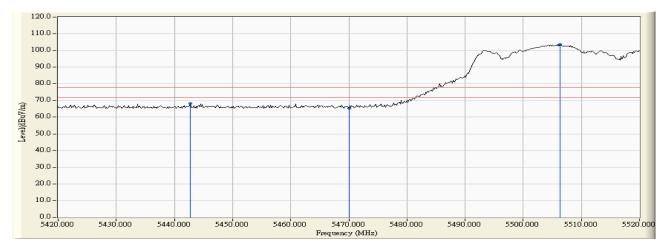


Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. 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



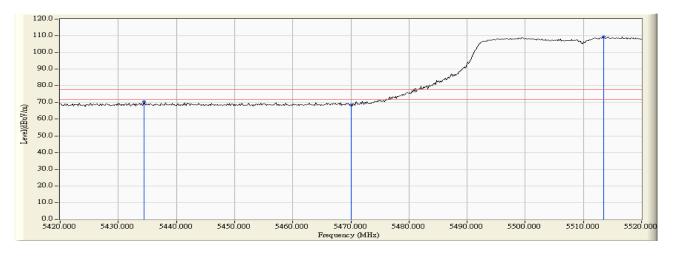
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 9: Transmit (802.11n-40BW 30Mbps)(Grid DISH Antenna) -Channel 102



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5442.753	36.018	32.102	68.120	-9.640	77.760	Pass
Horizontal	5470.000	36.370	28.961	65.331	-12.429	77.760	Pass
Horizontal	5506.377	36.706	66.918	103.623			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$

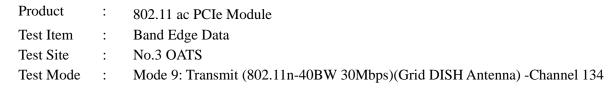


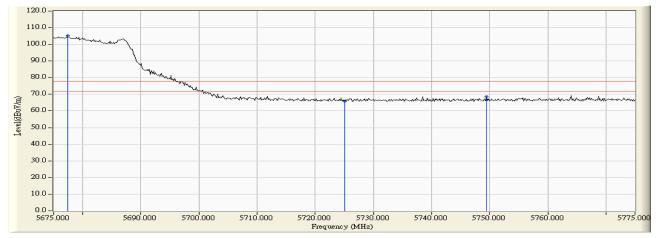
RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5434.493	37.761	32.726	70.488	-7.272	77.760	Pass
Vertical	5470.000	37.994	30.635	68.628	-9.132	77.760	Pass
Vertical	5513.478	38.100	71.284	109.384			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$



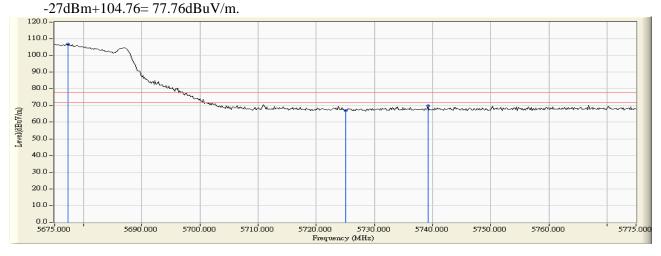




RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5677.464	36.296	68.941	105.238			
Horizontal	5725.000	36.391	29.479	65.870	-11.890	77.760	Pass
Horizontal	5749.493	36.375	32.219	68.595	-9.165	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = 27 dBm + 104.76 - 77.76 dBm V/m$



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5677.319	37.701	69.119	106.819			
Vertical	5725.000	37.729	29.103	66.832	-10.928	77.760	Pass
Vertical	5739.203	37.716	32.093	69.809	-7.951	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$



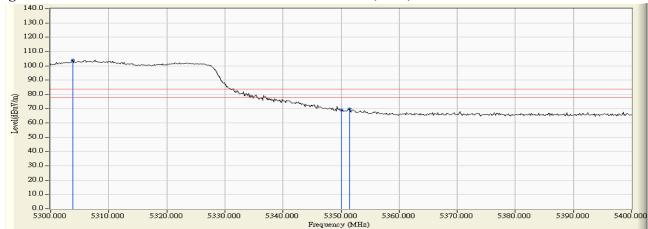
:	802.11 ac PCIe Module
:	Band Edge Data
:	No.3 OATS
:	Mode 12: Transmit (802.11ac-80BW-65Mbps)(Grid DISH Antenna) -Channel 58
	: : :

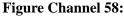
RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Kesuit
58 (Peak)	5303.768	35.670	68.353	104.022			
58 (Peak)	5350.000	35.571	33.472	69.043	83.540	63.540	Pass
58 (Peak)	5351.449	35.567	34.142	69.710	83.540	63.540	Pass
58 (Average)	5307.247	35.662	52.250	87.912			
58 (Average)	5350.000	35.571	19.816	55.387	83.540	63.540	Pass

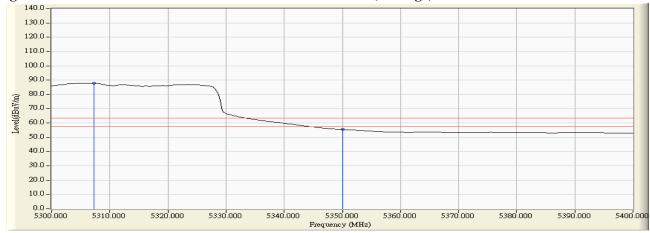
Figure Channel 58:

Horizontal (Peak)





Horizontal (Average)



- 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



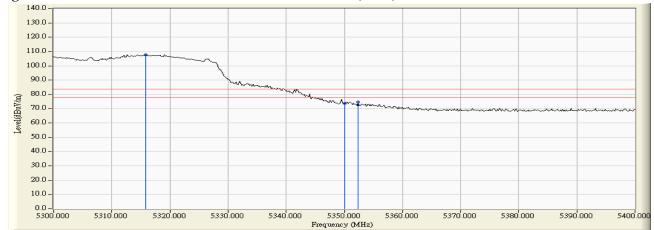
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 12: Transmit (802.11ac-80BW-65Mbps)(Grid DISH Antenna) -Channel 58

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
58 (Peak)	5315.797	37.553	70.180	107.732			
58 (Peak)	5350.000	37.546	35.958	73.504	83.540	63.540	Pass
58 (Peak)	5352.319	37.545	36.960	74.506	83.540	63.540	Pass
58 (Average)	5316.087	37.552	54.411	91.963			
58 (Average)	5350.000	37.546	21.011	58.557	83.540	63.540	Pass

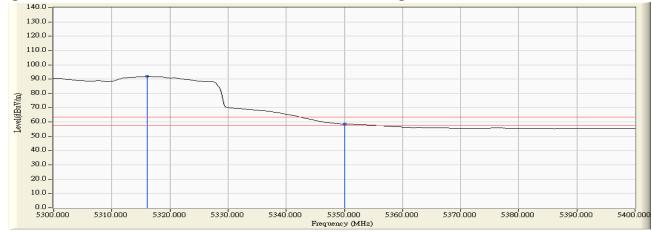
Figure Channel 58:

Vertical (Peak)





Vertical (Average)



- 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



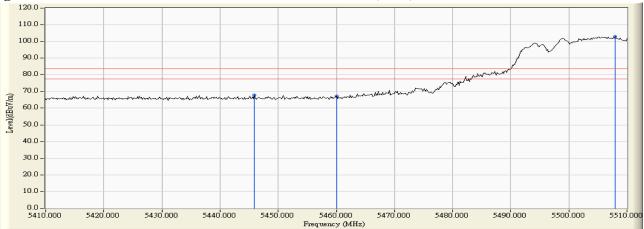
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 12: Transmit (802.11ac-80BW-65Mbps)(Grid DISH Antenna) -Channel 106

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
106 (Peak)	5445.942	36.060	31.952	68.011	83.540	63.540	Pass
106 (Peak)	5460.000	36.240	30.948	67.188	83.540	63.540	Pass
106 (Peak)	5507.971	36.691	66.215	102.907			
106 (Average)	5448.406	36.091	18.756	54.847	83.540	63.540	Pass
106 (Average)	5460.000	36.240	17.889	54.129	83.540	63.540	Pass
106 (Average)	5505.362	36.714	50.728	87.442			

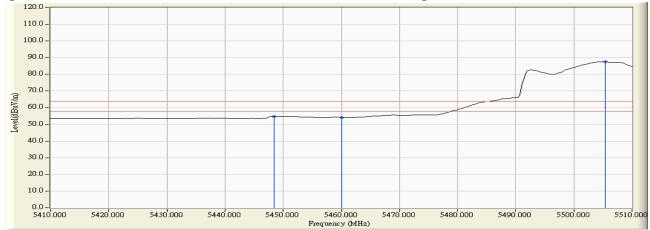
Figure Channel 106:

Horizontal (Peak)





Horizontal (Average)



- 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



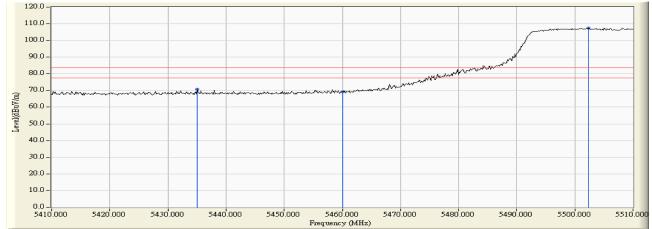
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 12: Transmit (802.11ac-80BW-65Mbps)(Grid DISH Antenna) -Channel 106

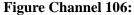
RF Radiated Measurement (Vertical):

Channel N	No. Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Kesuit
106 (Peal	k) 5435.072	37.766	32.976	70.741	83.540	63.540	Pass
106 (Peal	k) 5460.000	37.927	31.390	69.317	83.540	63.540	Pass
106 (Peal	k) 5502.319	38.151	69.422	107.573			
106 (Avera	ige) 5460.000	37.927	18.732	56.659	83.540	63.540	Pass
106 (Avera	ige) 5501.594	38.149	53.657	91.806			

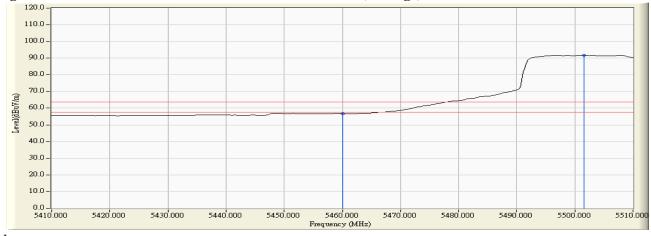
Figure Channel 106:

Vertical (Peak)





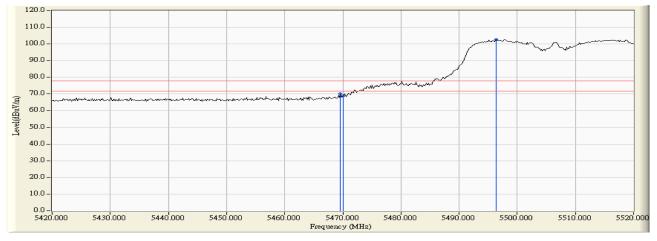
Vertical (Average)



- 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



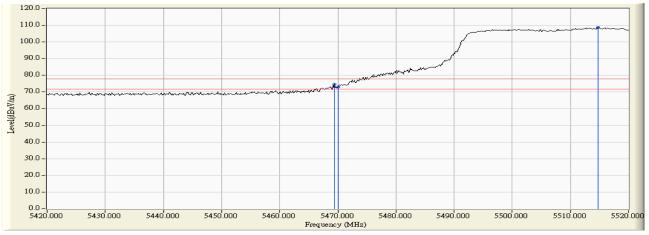
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 12: Transmit (802.11ac-80BW-65Mbps)(Grid DISH Antenna) -Channel 106



<u>RF</u> Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5469.565	36.365	33.758	70.122	-7.638	77.760	Pass
Horizontal	5470.000	36.370	32.382	68.752	-9.008	77.760	Pass
Horizontal	5496.377	36.660	65.855	102.515			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$



<u>RF</u> Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5469.420	37.989	36.786	74.776	-2.984	77.760	Pass
Vertical	5470.000	37.994	34.957	72.950	-4.810	77.760	Pass
Vertical	5514.783	38.092	70.490	108.582			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m.$



Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 7: Transmit (802.11a-6Mbps)(Grid DISH Antenna)

Test Frequency Chain		Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5260	А	5250.75	>5250	PASS
5260 B		5251.00	>5250	PASS



5260MHz (Chain A)	

Agilent Sp	ectrur					7							
Center	Fre	RF eq 5.1	50 Ω 26000		GHz				Avg Ty	ALIGNAUTO	TR/	PM Sep 09, 2015 ACE 1 2 3 4 5 6 YPE M WARAWAY	Frequency
1			-			:Fast 🖵 in:Low	#Atten: 30	dB	1.1	MLe	7 e 7	75 GHz	Auto Tune
10 dB/di Log	iv .	Ref 2	20.00	dBm						IVINI		.97 dBm	
10.0 0,00	-												Center Freq 5.26000000 GHz
-10.0 -20.0 -30.0						when his	burburtinedrag	pratronterelle	nonationly				Start Freq 5.235000000 GHz
-40.0 -50.0 -60.0	-	-	wysellete (mi	www.compatible	Vatavia					and a company	Negline Nersense	-40.88 dBm	Stop Freq
-70.0 Center #Res B	W 1	00 kl				#VBW	1.0 MHz			#Sweep 5	00.0 ms		CF Step 5.000000 MHz Auto Man
MKE MODE 1 N 2 N 3 4 5 6	1 1 1	f f			375 (075 (-20.879 dE -40.97 dE	3m	NCTION	UNCTION WIDTH	FUNCT	ION VALUE	Freq Offset 0 Hz
6 7 8 9 10 11													
MSG								-		STATU	5	2	

	SENSE:INT HZ PNO: Fast Gain:Low #Atten: 30 dB	ALIGNAUTO Avg Type: Log-Pwr	03:46:15 PM Sep 09, 2015 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	Frequency
dB/div Ref 20.00 dBm	Connega and and and and and and and and and an	Mkr2	2 5.251 00 GHz -41.15 dBm	Auto Tune
99 0.0 00				Center Fre 5.260000000 GH
		1 undered has day	-41.05 dBm	Start Fre 5.235000000 G⊦
0.0 0.0		and the second straight at the second straigh	Weberge out the second and	Stop Fre 5.285000000 GH
enter 5.26000 GHz Res BW 100 kHz	#VBW 1.0 MHz	#Sweep 50	Span 50.00 MHz 00.0 ms (1001 pts)	CF Ste 5.000000 MH Auto Ma
1 N 1 f 5.265	00 GHz -21.048 dBm 00 GHz -41.15 dBm			Freq Offs 0 F
7 7 3 3 3 9				



Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 7: Transmit (802.11a-6Mbps)(Grid DISH Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5580	•	5589.20	<5600	PASS
5660	A	5650.65	>5650	PASS
5580	D	5589.35	<5600	PASS
5660	В	5650.85	>5650	PASS



Agilent Sp	ectrur	n Analyz	er - Swe	pt SA								
Marke	r 2 5	RF	50 Ω 20000	AC 00000 G	Hz	- Contractor	SEINT	Avg Typ	ALIGNAUTO	TR	AM Aug 26, 2015 ACE 1 2 3 4 5 6	Marker
				P IF	NO: Fast C Gain:Low	Trig: Free #Atten: 30		1.1		1.00	DET P N N N N N	Select Marker
10 dB/d	iv	Ref 2	0.00 c	IBm		1			Mkr		20 GHz .82 dBm	2
10.0							_				No. and	
0,00		-					_					Normal
-10.0	-				0	1			-	-		1
-20.0		11.1	- 1		polosof	al handhardard	weather that le	moundaily		i		Delta
-40.0	-	1			and and			1	2		-40.62 dBm	
-50.0				and mound for				1	MANA MANA			
-60.0		- and the state	and a start of the					-		Whityingtheset		Fixed
-70,0											1000	
Center #Res E					#VB	W 1.0 MHz			#Sweep 5		50.00 MHz (1001 pts)	Off
	E TRC	SCL f		× 5.5737	T CHa	Y -20.620 dB		NCTION FI	JNCTION WIDTH	FUNC		
2 N 3	1	f		5.589 2	0 GHz	-40.82 dB						Same and
4							-					Properties
6 7							-					
8												More
10 11												1 of 2
MSG									STATU	s	3	L

Marker	2:29:45 PM Aug 26, 2015 TRACE 1 2 3 4 5 6	ALIGNAUTO	Avg Typ		- Andrews		00000 G	50 Ω 93500	RF 5.58	r 2 :		l R lar
Select Marker	TYPE MWWWWW DET P N N N N N	- 057	1.4		Atten: 30	PNO: Fast Gain:Low				-		
2	5.589 35 GHz -45.37 dBm	Mkr2		2	<u> </u>		dBm	20.00	Ref	iv	B/di	
Norma										-)	.og 10.0
												0.00 10.0
Delt			1 wheel		and wells enhabeline	have				-		20.0
Den	-45.31 dBm	2			and the second second	- A -						30.0 40.0
Fixed		thing water and		1		delle .	-	- Uniter of the				50.0 60.0
Fixed				-						ALCOPT-		70.0
Of	Span 50.00 MHz 0 ms (1001 pts)		1		W 1.0 MHz	#VB) GHz (Hz	8000 100 k			
	FUNCTION VALUE	CTION WIDTH	TION FL		Y -25.31 dE	50 GHz	× 5.582 5		SCL	E TRO	MODE	IKR 1
Properties					-45.37 dE		5.589 3		f	1	N	2345
												6 7 8
Mor 1 of												9 10
	2		-	+		-				1	-	11



Agilent Sp			wept SA									
Marker	256		Ω AC	17	SENSE			ALIGNAUTO : Log-Pwr	TRA	M Aug 26, 2015	Marker	
maritor	2 0.0		PM	10: Fast G Jain:Low	Trig: Free R #Atten: 30 dl	' Trig: Free Run #Atten: 30 dB			TY D	PE MWWWWW ET P N N N N N	Select Marker	
10 dB/di	v Re	f 20.00	dBm					Mkr		65 GHz 41 dBm	2	
Log 10.0 0.00											Normal	
-20.0				And	l San Arendraid region	davalaradary	duala			-43.31 dBm	Delta	
-50.0 -60.0		د. مىلىمەنلىرىنى ب	alabora With a shift					The advertised of the second second	Alwaysonalise		Fixed⊳	
Center #Res B	W 100	kHz	×	#VBV	√ 1.0 MHz	FUNCTIO		Sweep 51	00.0 ms (0.00 MHz 1001 pts)	Off	
1 N 2 N 3 4 5			5.653 7 5.650 6	5 GHz 5 GHz	-23.308 dBm -43.41 dBm	1			FUNCTI		Properties►	
6 7 8 9 10 11										*	More 1 of 2	
MSG								STATUS				

TYP DE	-					00000 GI	00000	0.00			
2 5.650				Trig: Free #Atten: 3	NO: Fast (Gain:Low					-	
-43.8	Mkr2					dBm	20.00	Ref	liv	B/div	
			_	_					1		.og 10.0
-			-							1.1	0.00 10.0
		\$1	1				-		-		20.0
_		indested winder	- Contractory	-unlatedlike landelate					-	-	30.0
	WHITTER	h			y North	and all			_		40.0 50.0
	"Throw when the	-				Lawkorn .	and a state of the			1	60.0
			-							1	70.0
	Sweep 50	1	2	W 1.0 MHz	#VB						
FUNCTIO	ICTION WIDTH	ICTION FL		Y -23 731 di	0 GHz	×					MKR 1
								f	1	N	2345
											67
											8 9 10
											11
100	Span 50.0	Span 50.0 #Sweep 500.0 ms (100	Span 50.00 #Sweep 500.0 ms (100	FUNCTION FUNCTION FUNCTION Sm	Span 50.0 W 1.0 MHz #Sweep 500.0 ms (100	Automatication Automatication 2 2 4 4 4 5 5 5 5 5 6 5 7 5 8 5 9 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6 9 7 9 7 9 6 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9<	2 3	Control Control <t< td=""><td>Augher - May barley advantage P</td><td>Australia balas adastarias a 5.666000 GHz Starias adastarias adastarintexecencides adastarias adastarias adastarias adastaria</td><td>Image: selection with the last selection of the sel</td></t<>	Augher - May barley advantage P	Australia balas adastarias a 5.666000 GHz Starias adastarias adastarintexecencides adastarias adastarias adastarias adastaria	Image: selection with the last selection of the sel



Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 8: Transmit (802.11n-20BW 14.4Mbps)(Grid DISH Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5260	А	5250.35	>5250	PASS
5260	В	5250.55	>5250	PASS



Agilent Spec	trum Analyze								
RL Center	RF Freq 5.26	50 Ω AC 500000000 GH	Z NO: Fast G	SENSE:	Avg un	ALIGNAUTO Type: Log-Pwr	TRA TY	M Sep 09, 2015 CE 1 2 3 4 5 6 PE M WWWWW	Frequency
10 dB/div	Ref 20		Sain:Low	#Atten: 30 dE	3	Mkı	2 5.250	30 GHz 00 dBm	Auto Tune
10.0 0.00 -10.0									Center Fred 5.26000000 GH;
-20.0			22	at not as the stand part	halidental	1		-40.98 dBm	Start Free 5.235000000 GH2
-50.0		anorite and the second				Mula de palasta	Norman and a second		Stop Free 5.285000000 GH
	5.26000 G V 100 kHz		#VBV	V 1.0 MHz		#Sweep 5		0.00 MHz (1001 pts)	CF Step 5.000000 MH
MKR MODE 1 N 2 N	TRE SCL 1 f 1 f	5.253 7 5.250 3		Y -20.979 dBm -41.00 dBm	FUNCTION	FUNCTION WIDTH	FUNCTI	ON VALUE	<u>Auto</u> Mar
3 4 5 6 7									Freq Offse 0 Ha
8 9 10 11								~	
MSG						STATU	s		

Cente	r Fre	RF 9 q 5. 2	50 Ω 26000	AC 0000 0	PNO:	Fast G			Avg Ty	ALIGNAUTO pe: Log-Pwr	TRAC	Sep 09, 2015 E 1 2 3 4 5 6 E MWWWWW T P N N N N	Frequency
10 dB/d	iv	Ref 2	0.00 c	IBm	IFGair	1:Low	#Atten.			Mkr	2 5.250		Auto Tune
10.0													Center Free 5.26000000 GH
-10.0					•	2	- Inentrasha	y pertition of	1 Innined har during			-41.45 dBm	Start Free 5.235000000 GH
-50.0	- 185		Nelson all all	en lour and the						milestant Warks	Walk - James and - b	-tan Portoniana	Stop Free 5.285000000 GH;
Center #Res E	3W 1	00 kH		×		#VBV	1.0 MH:	-		#Sweep 5			CF Stej 5.000000 MH <u>Auto</u> Ma
1 N 2 N 3 4 5 6 7	1	f		5.26	5 00 G 0 55 G		-21.45 c -41.68 c	Bm					Freq Offse 0 H
8 9 10 11												2	



Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 8: Transmit (802.11n-20BW 14.4Mbps)(Grid DISH Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5580	•	5589.75	<5600	PASS
5660	A	5650.45	>5650	PASS
5580	D	5589.70	<5600	PASS
5660	В	5650.50	>5650	PASS



Agilent Spe	etrum A	nalyzer - Swe	ept SA		SENSE	THE		ALIGNAUTO	10,10,01,0	4 Aug 26, 2015	
Marker	2 5.5	8975000	AC 00000 GH	Iz			Avg Typ	e: Log-Pwr	TRAC	E 1 2 3 4 5 6 E MWWWW	Marker
			Pl	NO: Fast 🖸 Gain:Low	#Atten: 30 d		1.0	_	D	PNNNNN	Select Marker
10 dB/div											
Log 10.0			172.51								
0.00			1: = 1						1		Norma
-10.0	= 1				1						
-20.0				mahul		health	- hand have been -	-			
-30.0				June martin	and and have all the bare her	a sour code us	when when haven	2		-39.38 dBm	Delta
-40.0		1	with	-				Tistul		-39.38 CIEM	1
-50.0	and.	- Long to heaven	at work a series of the	-			1	and and MAN	my wordenal		
-70.0	the state of the s									And the start had	Fixed
Center #Res B				#VBI	W 1.0 MHz		đ	#Sweep 5		0.00 MHz 1001 pts)	Of
MKR MODE			×		¥			JNCTION WIDTH	FUNCTIO	IN VALUE	1 N N
1 N 2 N	1 f 1 f		5.573 7 5.589 7		-19.375 dBn -39.54 dBn				-		
3 4		1									Properties •
5 6											
7 8						-					More
9 10											1 of 2
11 <									_	2	
MSG								STATUS	5		

Marker	2:38:17 PM Aug 26, 2015 TRACE 1 2 3 4 5 6 TYPE M WARMAN		Avg Type	SENSE INT	-		AC 00000 GH	50 Ω 970000	RF 5.589	25	L ker	1.0
Select Marker	DET P N N N N N	1.77.7.1		en: 30 dB		NO: Fast (Gain:Low						
2	.589 70 GHz -44.41 dBm	Mkr2 5.		2.0	1		IBm	20.00 c	Ref	v	B/div	
Norma											1.1.1	og 10.0
												0.00 10.0
Delt			-	harlan unbarlessel	1	mater					-	20.0 30.0
	-44.16 dBm	2										40.0
Fixed	comment of the second second	Walter Walter					- autor letter					50.0 50.0
1.0					-					_	1	70.0
0	pan 50.00 MHz 0 ms (1001 pts)		#	MHz	W 1.0 MH	#VB		GHz Hz	8000 100 k			
		CTION WIDTH	ICTION FUN	FL 16 dBm	-24.16	5 GHz	× 5.573 7		f SCL	TRC	MODE	IKR 1
Properties			1	41 dBm			5.589 7		f	1	N	2 3 4 5
										-	-	6 7 8
Mor 1 of												9
	2		1							-	_	11



Agilent Sp	pectrur	n Analy	zer - Swe	pt SA.					,			
Marke	r 2 5	RF 6.650	50 Ω 45000	AC 0000 G		-	E:INT	Avg T	ALIGNAUTO	TRA	AM Aug 26, 2015 ACE 1 2 3 4 5 6	Marker
1				P IFI	NO: Fast G Gain:Low	Trig: Free I #Atten: 30				7.15	YPE MWWWWWW DET PNNNNN	Select Marker
10 dB/d	liv	Ref 2	20.00 d	Bm					Mk	r2 5.650 -42	45 GHz 65 dBm	2
10.0	1						_					Normal
0,00 — -10.0 —	E		_			1						
-20.0			_		2	at multimetres property	Mulhully	mallender				Delta
-40.0	_		_		\$ ²	-	_	-	Lane .	_	-42,44 dBm	
-50.0			low works	Whythere				-	and a state of the	Winners a second	-	Fixed⊳
-70.0 —												1000
Center #Res E					#VB\	N 1.0 MHz			#Sweep :		50.00 MHz (1001 pts)	Off
		SCL f		× 5.653 7	5 GHz	Y -22.440 dBr		NCTION	FUNCTION WIDTH	FUNCT	ION VALUE	1. A.Y
2 N 3 4 5		f		5.650 4		-42.65 dBr	n					Properties►
6 7 8 9												More
10 11											*	1 of 2
MSG									STATU	JS		

Marker	02:55:58 PM Aug 26, 2015 TRACE 1 2 3 4 5 6 TYPE M MANANANAN	ALIGNAUTO Log-Pwr		ig: Free Run		0000 GH	50 Ω 50000	RP 5.650	25		R. lar
Select Marker	TYPE MWWWWWW DET P N N N N N	- 11-1	1997	itten: 30 dB	lO: Fast 🖵 iain:Low			-		-	
2	5.650 50 GHz -43.68 dBm	Mkr2				Bm	20.00 c	Ref	v	B/div	
		1					-		_	L.	og 10.0
Norma											00,0
-			1				_			1.7	10.0 20.0
Delt			valuel withing	situation untrational	2					-	80.0
	-43.45 dBm	Without	-		•	T. AN			_	-	40.0
Fixed	What we want a stand of a second of a second	Water Walling				and the second	-		- Halfin	-	50.0 50.0
1.00			-	-					_	-	70.0
0	Span 50.00 MHz 0.0 ms (1001 pts)	Sweep 50	#	MHz	#VBW		GHz Hz	6000 100 k			
		ICTION WIDTH	NCTION FUN	Y FL	CHz	× 5.665 00		SCL f	TRC	MODE	KR 1
Properties				3.68 dBm		5.650 50		Ť	1	N	2 3 4 5
											67
Mor											8 9
1 of	2						_				1
		STATUS									_



Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 9: Transmit (802.11n-40BW 30Mbps)(Grid DISH Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5270	А	5250.80	>5250	PASS
5270	В	5251.00	>5250	PASS



Agile	nt Spe	etrun		yzer - Sv												
Cer	L nter	Fre	RF q 5	.2700	Ω AC	00 GH	Z 10: Fast		SEI	Run	Avg T		GNAUTO og-Pwr	TR	PM Sep 09, 2015 ACE 1 2 3 4 5 6 YPE MWWWWW	Frequency
10 d	B/div		Ref	20.00	dBm	IFG	Gain:Low		#Atten: 30) dB			Mk	r2 5.2	50 8 GHz 92 dBm	Auto Tune
Log 10.0 0.00	(j															Center Free 5.270000000 GH;
-20.0 -30.0 -40.0	0.77						Abdela	ador Norton	Andreha berkung	prodult al relation	ntersket at her				42.06 dBm	Start Frec 5.220000000 GHz
-50.0 -60.0 -70.0		naday		and some	and the second	are and the second second		-				Man	here with the first	W. Malaninet	religible spece the	Stop Fred 5.320000000 GH;
			7000 00 k	GHz Hz			#V	BW	1.0 MHz			#Sw	/eep 5		100.0 MHz (1001 pts)	10.000000 MH
MKR 1	MODE	TRC 1	SCL f			× 5.275 (0 GHz		-22.06 di	3m	INCTION	FUNCTI	ON WIDTH	FUNC		Auto Mar
2345	N	1	f			5.250	B GHz		-42.92 di	3m						Freq Offse 0 Ha
6 7 8 9 10																
< MSG	-	<u> </u>					-			-			STATUS		3	

Center Fr	RF 50 Ω eq 5.27000	00000 GHz PNO: Fast	SENSE:INT		ALIGNAUTO : Log-Pwr	TYPE	2015 23456 2000 2000 2000 2000 2000 2000 2000 20	Frequency				
10 dB/div	Mkr2 5.251 0 GHz dB/div Ref 20.00 dBm -43.01 dBm											
10.0 0.00								Center Fre 5.270000000 G⊦				
-10.0		1,1,1,1	alandahada haladang paskalad	hat all offer had all all all all all all all all all a				Start Fre 5.22000000 GH				
-40.0	and and the second	and the second state of th			Halul parameter during	W. And State of Concession	-42.00 dDm	Stop Fre 5.320000000 GH				
Center 5.2 #Res BW 7	00 kHz	#Ve	W 1.0 MHz		Sweep 5	Span 100 00.0 ms (10	01 pts)	CF Ste 10.000000 MF Auto Ma				
1 N 1 2 N 1 3 4 5 6	f f	5.265 0 GHz 5.251 0 GHz	-22.881 dBm -43.01 dBm					Freq Offs 0 F				
7 8 9 10												



:	802.11 ac PCIe Module
:	Band Edge Data
:	No.3 OATS
:	Mode 9: Transmit (802.11n-40BW 30Mbps)(Grid DISH Antenna)
	: :

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5550	•	5569.80	<5600	PASS
5670	А	5650.30	>5650	PASS
5550	D	5569.30	<5600	PASS
5670	В	5650.80	>5650	PASS



Agilent Spectr	um Analyzer - Sw	vept SA				
Marker 2	RF 50 S	vept SA 2 AC 00000 GHz	SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	01:23:22 PM Aug 26, 2015 TRACE 1 2 3 4 5 6	Marker
	1.1.1.1.1.1	PNO: Fast IFGain:Low	Trig: Free Run #Atten: 30 dB	Vit switch	TYPE MWWWWW DET P N N N N N	Select Marker
10 dB/div	Ref 20.00	dBm	100	MI	r2 5.569 8 GHz -40.02 dBm	2
10.0 0.00						Norma
-10.0 -20.0		مراداتهن	allel all all all all all all all all al	da fadan kalanta kata s		
-30.0	_			2	-39.93 dBm	Delta
-50.0	الماليعين المحسوب المحاصر والمراجع المعالية المحا				and a second and a second and	Fixed▷
	55000 GHz 100 kHz	#V	BW 1.0 MHz	#Sweep 5	Span 100.0 MHz i00.0 ms (1001 pts)	Ofi
MKR MODE T	f	× 5.545 0 GHz	-19.927 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	
3 4 5		5.569 8 GHz	-40.02 dBm			Properties▶
6 7 8 9 10						More 1 of 2
11 C MSG			-	STATU	8	

Marker	12323PM Aug 26, 2015 TRACE 1 2 3 4 5 6 TYPE M MAAAAAAA		Avg Type		Trig: Free		AC 0000 GH	50 Ω 30000	RF 5.569	r 2 5		a R Mar
Select Marker	TYPE MWWWWW DET P N N N N N				#Atten: 30	0: Fast 🖵 ain:Low						
2	5.569 3 GHz -45.83 dBm				1		Bm	20.00 d	Ref 2	liv	dB/d	
Norma				_								Log 10.0
Nortin										-		0.00
- Dala					1			_		-	10.	-20.0
Delt		2	end hallers have	und all Actor and	Californing	The ball		_		_	1	-30.0
	-45.23 dBm	War.				Ĵ.	. and				1	-40.0 -50.0
Fixed	- the state of the	and a stand of the	-	-	_		and Amelonation	in the stand in the last		tomate		-60.0
	100					-					0	70.0
O	pan 100.0 MHz) ms (1001 pts)		#\$		1.0 MHz	#VBW			5000 00 kH			
	FUNCTION VALUE	CTION WIDTH	CTION FUN		Y -25.232 dE		× 5.545 0		f	E TRC	MOD	MKR 1
Properties					-45.83 dE		5.569 3		f		N	2345
												67
Mor 1 of												8 9 10
1 01	2											11
		STATUS										T



	ectrum Analyz										
Marker	2 5.650				SENSE:	Avg	ALIGNAU Type: Log-P	wr TRA	Aug26, 2015	Marker	
			PN IFG	0: Fast G ain:Low	#Atten: 30 dl					Select Marker	
10 dB/div	Ref 2	0.00 di	Bm					Mkr2 5.650 -42.	03 GHz 84 dBm	2	
Log 10.0		1		-				1.0	100		
0.00										Norma	
-10.0				<u>1</u>		_	_			1	
-20.0				r I ad ital	hilling .	whether with specific first	000			-	
-30,0				2	A. S. A. MALON MARKED ALS	NET-INFORMATION AND AND AND AND AND AND AND AND AND AN	without			Delta	
-40.0			- AND				Mary -	_	-42.62 dBm	11 1 1 1	
-60.0		Served Bernard and	estern New		11		the standard	When prover all some south		Fixed	
-70.0							-			Tixou	
	5.67000			Santiti	Santale .				00.0 MHz		
	W 100 kH	lz		#VB\	N 1.0 MHz			o 500.0 ms (Off	
MKR MODE	TRC SCL		× 5.655 (GHz	-22.617 dBm	FUNCTION	FUNCTION WI	DTH FUNCTI	IN VALUE	1	
2 N 3	1 f		5.650 3	GHz	-42.84 dBm						
4	-									Properties •	
6							-				
8						1				More	
10 11									*	1 of 2	
<									2		
MSG							SI	ATUS			

Marker	PM Aug 26, 2015 ACE 1 2 3 4 5 6	og-Pwr TRA	Avg Type:				AC 0000 GH	50 Ω 080000	RP 5.65	r 2 :		ı _R Nar
Select Marker	TYPE MWWWWWW DET P N N N N N	D	24.7		#Atten: 30	10: Fast 🖸 Gain:Low						
2	50 8 GHz .85 dBm	Mkr2 5.650 -43.			1		Bm	20.00 d	Ref	liv	B/di	0 d
Norma										-		.og 10.0
			1									0.00 10.0
Delt			and a high high high	provide la harrist	an Aladahatalan					-		20.0 30.0
	-43.38 dBm	_				◆ ²					1	40.0
Fixed	ي سيد و موسيت	and work of the second second second				-	-lating alute	-	-	-		50.0 60.0
1000				1							-	70.0
Of	100.0 MHz (1001 pts)	Span 1 veep 500.0 ms (#S		/ 1.0 MHz	#VBI) GHz (Hz	7000 100			
	TION VALUE	ON WIDTH FUNCTION			Y -23.377 dE		× 5.685 (f SOL	DE TRU	MODE	<u>мкв</u> 1
Properties	_				-43.85 dE		5.650 8		f		N	234
												5 6 7
Mor 1 of										-		8 9 10
1.01	2											11



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)(Grid DISH Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5290	А	5250.90	>5250	PASS
5290	В	5250.90	>5250	PASS



	ectrun		- Swept SA	l.										
Center	Fre		50 Ω AC	0 GH	Z 10: Fast		Trig: Fre		Avg		IGNAUTO Log-Pwr	TR	PM Sep 09, 2015 ACE 1 2 3 4 5 6 YPE MWWWWW	Frequency
10 dB/di	iv	Ref 20.	00 dBm	IFG	ain:Low		#Atten: 3	0 dB			Mk	r2 5.25	0 9 GHz	Auto Tune
Log 10.0 0.00														Center Freq 5.290000000 GHz
-20.0 -30.0					2	uiij	MMEANNAL MIMEANNAL	The Minneson	W.w. wildowsia	nut			-41.31 dBm	Start Freq 5.190000000 GHz
-50.0 -60.0		ny ng	- And a start of the start of t	and and a						14	Wardy and the scho	menuscalan	Stand and a	Stop Freq 5.390000000 GHz
Center #Res B			z		#VI	BW	1.0 MHz	1		#St	weep 5		200.0 MHz (1001 pts)	CF Step 20.000000 MHz
MKR MOD 1 N 2 N 3 4 5 6 7		SCL f f		5.273 (5.250 (Y -21.313 d -41.55 d	Bm	UNCTION	FUNCT	ION WIDTH	FUNC		Auto Man FreqOffset 0 Hz
7 8 9 10 11 <											STATUS		×	

Center Fr		Ω AC 000000 GHz PN0: Fast	SENSE	Avg Typ un	ALIGNAUTO e: Log-Pwr	TYPE	ep 09, 2015 1 2 3 4 5 6 MWWWWW P N N N N N	Frequency
10 dB/div	Ref 20.00	IFGain:Low	#Atten: 30 d	8	Mk	r2 5.250	1011111111	Auto Tun
	<u>Kel 20.00</u>							Center Fre 5.29000000 G⊦
-10.0 -20.0 -30.0 -40.0		2	u umauu n	WAL WILM Illerson win			-42.33 dBm	Start Fre 5.19000000 GH
-50.0 -60.0	t and the part of the little	and and the address			adul and a second	the grow and which it is not a set	han a fallen	Stop Fre 5.390000000 GH
Center 5.2 #Res BW '	100 kHz	#VE	BW 1.0 MHz		#Sweep 5	Span 20 00.0 ms (10	001 pts)	CF Ste 20.000000 MH Auto Ma
1 N 1 2 N 1 3 4 5 6	f	5.287 6 GHz 5.250 9 GHz	-22.33 dBm -42.40 dBm					Freq Offs 0 F
7 8 9 10 11							_	



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)(Grid DISH Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5530	•	5569.20	<5600	PASS
5690	A	5650.80	>5650	PASS
5530	D	5569.40	<5600	PASS
5690	В	5650.60	>5650	PASS



				lyzer - Sw														
Ma	ker	25	RF	50 s 92000	AC	00 GH	Iz			ISE:INT	Avg		IGNAUTO	01:56	TRACE	ug26,2015 1 2 3 4 5 6	Marker	
-						PN	IO: Fast iain:Low		rig: Free Atten: 30					1.1	DET	MWWWWW PNNNNN	Select Marker	
	B/di	v	Ref	20.00	dBm				C				M			2 GHz 7 dBm	2	
Log 10.)	1.1				-			-	= ;	_		-			-		Norma	
0.0 -10.0		1									-						Norma	
-20.0	1.7	-		-			7. 10	IN. MI	Menulu	ANA MA	Mullman		_				2.42	
-30.0							- diamondani					2	2			-39.86 dBm	Delta	
-50.0					-	Con any Market			_		_	1	No. No.					
-60.0		history	and generated	an Margan a Barris	un are					-				Market Bringer	Aright Horas	productions	Fixed	
		5.5 W 1		GHz			+4\ /E		0 MHz			#0				0.0 MHz 001 pts)		
1.0.0.0					×	_	#VE	WW 1.		F	INCTION	_	меер :	-	NOTION		Of	
1	NN	1	f f			5.525 (5.569 2	2 GHz	-19	9.856 di 40.47 di	3m 3m		-				_	1.5.7.4	
3 4 5						_											Properties	
67									-			-						
8 9 10																	More 1 of 2	
11 <												-	_			2		
MSG													STATU	IS				

Marker	4 Aug 26, 2015	TRAC	ALIGNAUTO : Log-Pwr	Avg Typ	SE:INT	Trig: Free		0000 GH	50 Ω 940000	RP 5.569	25	L ker	
Select Marker		Di		1.4		#Atten: 30	NO: Fast 📮 Gain:Low		2.5				
2	94 GHz 79 dBm		Mk			1		Bm	20.00 d	Ref	v	B/div	
Norma											1		og 10.0
Hortun											-		00.C
Delt				ulment		AUMANIN.			= :		-	-	20.0
Den	-44.51 dBm		2	and as an aday	and the state of t	ACCOMPCTICAL LT.	- Constant Contraction		_	-			30.0 40.0
Finad	a in the sector	Manan Blaylora	and a for the second		1	- 1		Alexander March March March	- Pri	1	1a.		50.0 50.0
Fixed	na hangada (dalara)					_					and the large		70.0
Of	00.0 MHz 1001 pts)		Sweep 5(#		1.0 MHz	#VBW			300 Q 100 k			
	IN VALUE	FUNCTIO	ICTION WIDTH	TION FU	FUNC	-24.51 dE	0 GHz	× 5.545 (SCL f	TRC 1	MODE	KR 1
Properties					m	-45.79 dE	4 GHz	5.569		f	1	N	2 3 4 5
Mor													6 7 8
1 of	*												9
	2												1



				yzer - Sv									,			
Ma	L ker	2 !	RF	50 S	2 AC	0 GH	Iz		1.1	NSE:INT	Avg		LIGNAUTO	TR	PM Aug 26, 2015 ACE 1 2 3 4 5 6	Marker
	4.4	1				PN	10: Fast iain:Low		Trig: Fre #Atten: 3						YPE MWWWWWW DET P N N N N N	Select Marker
	B/di	v	Ref	20.00	dBm				ς.	2			Mk		50 8 GHz .77 dBm	2
Log 10.1									_	-				1		
0,0		-	_	-	-			-	_			_				Normal
-10.0	1.1							1	1	-				1		1
-20.0			14			121		السياللا	umanuu	MUMAN	Mullin	44		£		Delta
-40.0	1						2							_	-42.64 dBm	
-50.0		_			and the second	a degran						2	Vierne Lander	-		2
-60.0		-	aduito	and a group of						1			10-ru	idea-oradea,	agel anogen and a specificant the	Fixed⊳
								1		1					000 0 0011-	
			900 100 k	GHz (Hz		-	#VE	3W 1	1.0 MHz			#\$	Sweep 5		200.0 MHz (1001 pts)	Off
MKR 1	MODE	TRC	SCL f		×	672.0	B GHz		Y 22.644 d		UNCTION	FUN	CTION WIDTH	FUNC		
23	N	1	f				3 GHz	-	-42.77 d	Bm	_			-		Contest in
4 5		-				_						-				Properties►
6																
89																More
10 11											_				2	1 of 2
MSG													STATUS			

Marker	E 1 2 3 4 5 6	TRACI	Log-Pwr		SE:INT			AC 00000 GH	50 Ω 060000	RF 5.65	r 2 !	rker	1.0
Select Marker		10. 10. 10 ¹ 4		1.4		#Atten: 30	NO: Fast Ģ Gain:Low					1	
2) 6 GHz I1 dBm	r2 5.650 -42.1	Mk			1		IBm.	20.00 c	Ref	iv	B/div	
Norm											-)	. og 10.0
		-				.4		1:	- 1				0.00 10.0
Delt	-			allenghander		alloraulu	- الماليل المحاسب		-		-	1.000	20.0
Bei	-41.90 dBm	_				/	2					-	30.0 40.0
Fixed		mound	I A BOTTAL AND IN THE AND INTERNAL AND IN THE AND IN THE AND INTERNAL AND IN THE AND INTERNAL	-				and and a start of the start of	- no Approximation				50.0 60.0
TIXCU		1									-		70.0
0	00.0 MHz 1001 pts)		Sweep 5	#		1.0 MHz	#VBN			900 100			
	N VALUE	FUNCTIO	ICTION WIDTH	TION FUN	FUNC	-21.90 dE	0 GHz	× 5.685 (6 501	E TRO	MODE	1 1
Properties						-42.11 dE		5.650 (f	1	N	2 3 4 5
											-		67
Moi 1 of													8 9 10
^	*										-	-	11



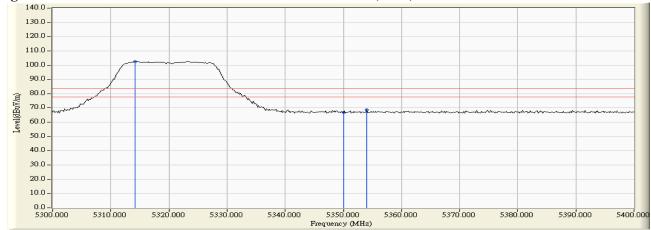
Product:802.11 ac PCIe ModuleTest Item:Band Edge DataTest Site:No.3 OATSTest Mode:Mode 13: Transmit (802.11a-6Mbps)(Omni Antenna) -Channel 64 (5320MHz)

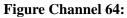
RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor	Reading Level	Emission Level	Peak Limit (dBµV/m)	Average Limit	Result
	× ,	(dB)	(dBµV)	$(dB\mu V/m)$	((dBµV/m)	
64 (Peak)	5314.203	35.646	66.919	102.566			
64 (Peak)	5350.000	35.571	31.106	66.677	83.540	63.540	Pass
64 (Peak)	5354.058	35.563	33.101	68.663	83.540	63.540	Pass
64 (Average)	5313.913	35.647	54.188	89.835			
64 (Average)	5350.000	35.571	17.420	52.991	83.540	63.540	Pass

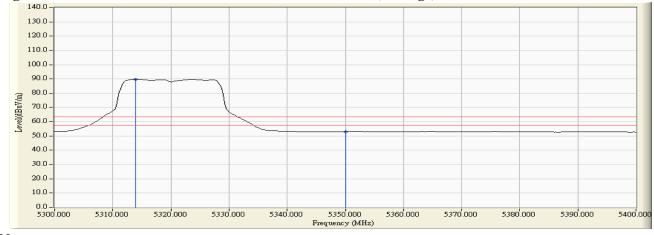
Figure Channel 64:

Horizontal (Peak)





Horizontal (Average)



- 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

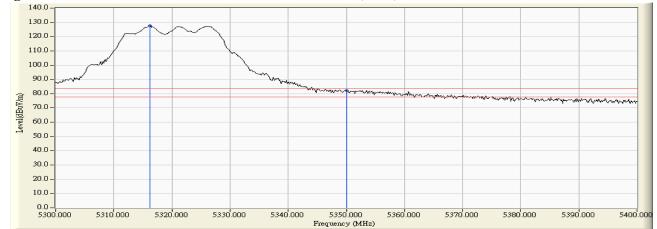
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 13: Transmit (802.11a-6Mbps)(Omni Antenna) -Channel 64 (5320MHz)

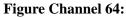
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
64 (Peak)	5316.232	37.552	90.049	127.601			
64 (Peak)	5350.000	37.546	44.783	82.329	83.540	63.540	Pass
64 (Average)	5326.087	37.551	76.641	114.191			
64 (Average)	5350.000	37.546	19.698	57.244	83.540	63.540	Pass

Figure Channel 64:

Vertical (Peak)





Vertical (Average)



- 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)(Omni Antenna) -Channel 100 (5500MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
100 (Peak)	5450.290	36.115	32.235	68.350	83.540	63.540	Pass
100 (Peak)	5460.000	36.240	30.115	66.355	83.540	63.540	Pass
100 (Peak)	5502.319	36.699	69.055	105.754			
100 (Average)	5448.696	36.095	18.478	54.572	83.540	63.540	Pass
100 (Average)	5460.000	36.240	17.390	53.630	83.540	63.540	Pass
100 (Average)	5502.464	36.701	56.353	93.053			

Figure Channel 100:

Horizontal (Peak)

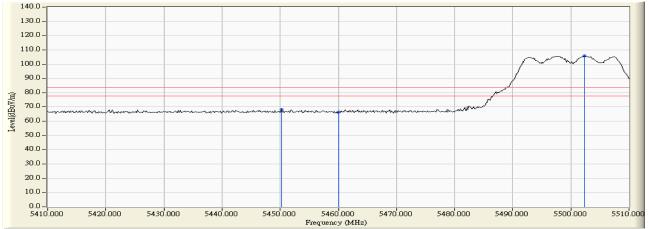
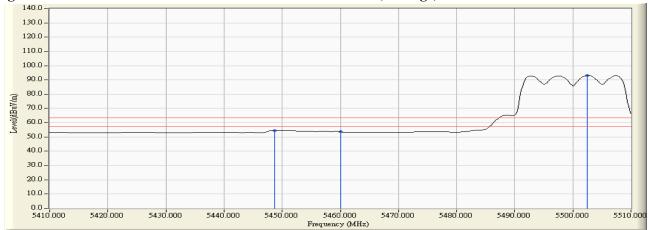


Figure Channel 100:

Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. 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



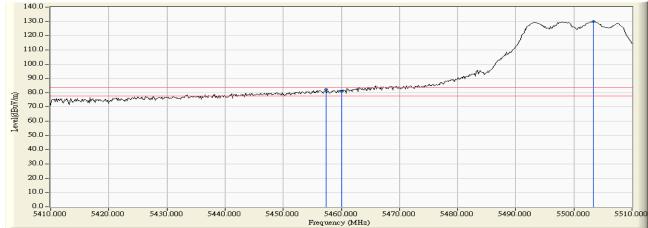
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 13: Transmit (802.11a-6Mbps)(Omni Antenna) -Channel 100 (5500MHz)

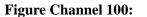
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
100 (Peak)	5457.391	37.910	44.137	82.047	83.540	63.540	Pass
100 (Peak)	5460.000	37.927	42.975	80.902	83.540	63.540	Pass
100 (Peak)	5503.333	38.154	91.885	130.039			
100 (Average)	5460.000	37.927	20.374	58.301	83.540	63.540	Pass
100 (Average)	5503.333	38.154	78.310	116.464			

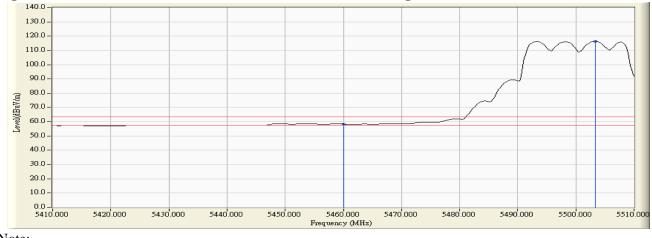
Figure Channel 100:

Vertical (Peak)





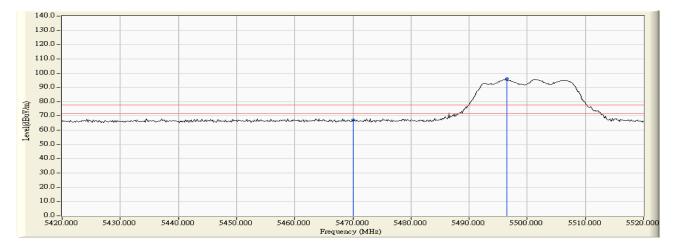
Vertical (Average)



- 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



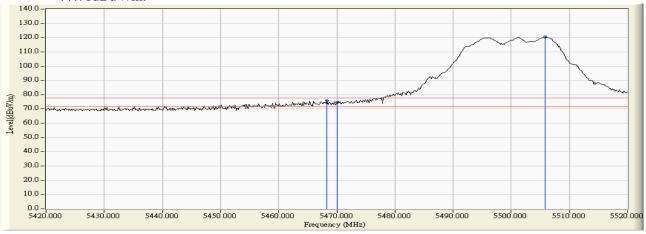
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 13: Transmit (802.11a-6Mbps)(Omni Antenna) -Channel 100



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5470.000	36.370	30.673	67.043	-10.717	77.760	Pass
Horizontal	5496.522	36.662	59.360	96.021			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m$.



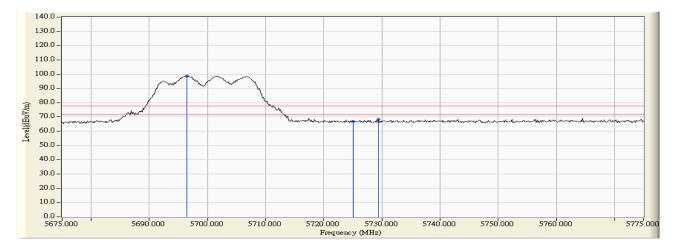
RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5468.261	37.982	37.694	75.676	-2.084	77.760	Pass
Vertical	5470.000	37.994	36.661	74.654	-3.106	77.760	Pass
Vertical	5505.797	38.152	82.322	120.475			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m$.



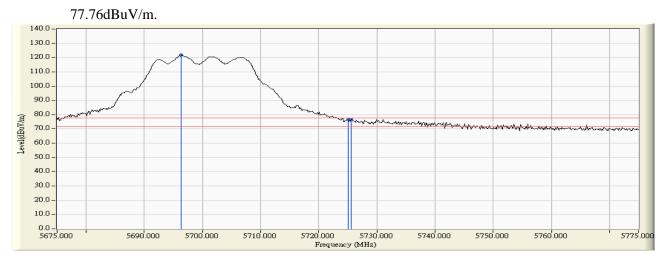
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 13: Transmit (802.11a-6Mbps)(Omni Antenna) -Channel 140



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5696.449	36.374	62.380	98.755			
Horizontal	5725.000	36.391	30.523	66.914	-10.846	77.760	Pass
Horizontal	5729.348	36.388	31.779	68.167	-9.593	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = -27d$



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5696.304	37.736	84.245	121.980			
Vertical	5725.000	37.729	38.863	76.592	-1.168	77.760	Pass
Vertical	5725.580	37.729	39.032	76.761	-0.999	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m$.

Product : 802.11 ac PCIe Module

- Test Item : Band Edge Data
- Test Site : No.3 OATS

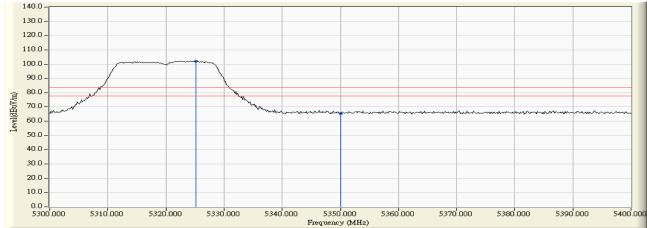
Test Mode : Mode 14: Transmit (802.11n-20BW 14.4Mbps)(Omni Antenna) -Channel 64 (5320MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
64 (Peak)	5325.217	35.624	66.423	102.047			
64 (Peak)	5350.000	35.571	29.819	65.390	83.540	63.540	Pass
64 (Average)	5324.638	35.624	53.682	89.307			
64 (Average)	5350.000	35.571	17.391	52.962	83.540	63.540	Pass

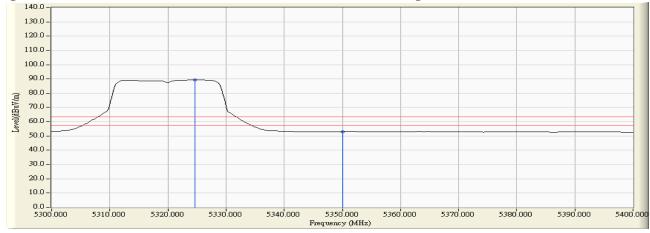
Figure Channel 64:

Horizontal (Peak)





Horizontal (Average)



- 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
T (T)		

Test Item Band Edge Data : No.3 OATS :

Test Site

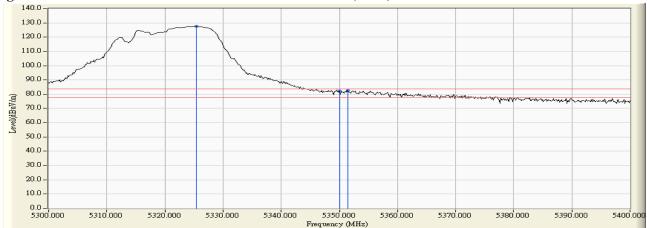
Test Mode Mode 14: Transmit (802.11n-20BW 14.4Mbps)(Omni Antenna) -Channel 64 (5320MHz) :

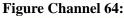
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
64 (Peak)	5325.362	37.550	90.245	127.795			
64 (Peak)	5350.000	37.546	44.465	82.011	83.540	63.540	Pass
64 (Peak)	5351.449	37.545	44.899	82.445	83.540	63.540	Pass
64 (Average)	5324.638	37.550	76.493	114.043			
64 (Average)	5350.000	37.546	19.761	57.307	83.540	63.540	Pass

Figure Channel 64:

Vertical (Peak)





Vertical (Average)



- 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

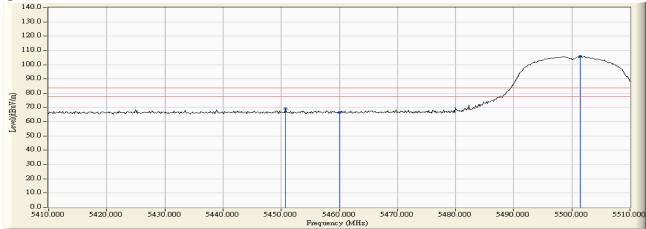
Test Mode : Mode 14: Transmit (802.11n-20BW 14.4Mbps)(Omni Antenna) -Channel 100 (5500MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
100 (Peak)	5450.725	36.121	32.810	68.930	83.540	63.540	Pass
100 (Peak)	5460.000	36.240	30.236	66.476	83.540	63.540	Pass
100 (Peak)	5501.449	36.694	69.089	105.783			
100 (Average)	5460.000	36.240	17.389	53.629	83.540	63.540	Pass
100 (Average)	5501.449	36.694	55.914	92.608			

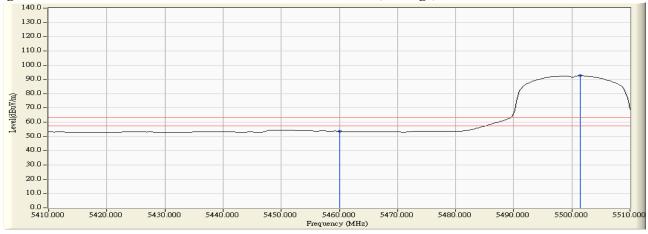
Figure Channel 100:

Horizontal (Peak)





Horizontal (Average)



- 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 : 8	802.11 ac PCIe Module
-------------	-----------------------

Test Site : No.3 OATS

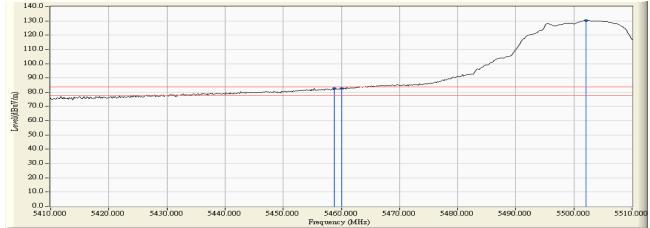
Test Mode : Mode 14: Transmit (802.11n-20BW 14.4Mbps)(Omni Antenna) -Channel 100 (5500MHz)

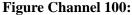
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
100 (Peak)	5458.841	37.919	44.754	82.674	83.540	63.540	Pass
100 (Peak)	5460.000	37.927	44.610	82.537	83.540	63.540	Pass
100 (Peak)	5502.029	38.151	91.984	130.134			
100 (Average)	5460.000	37.927	20.406	58.333	83.540	63.540	Pass
100 (Average)	5503.768	38.155	78.201	116.356			

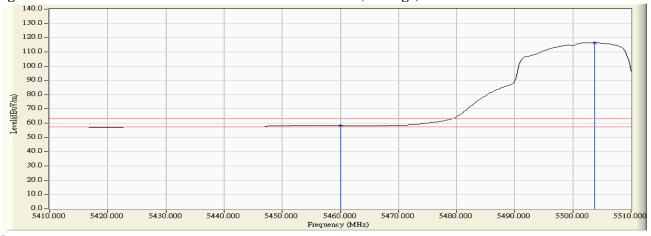
Figure Channel 100:

Vertical (Peak)





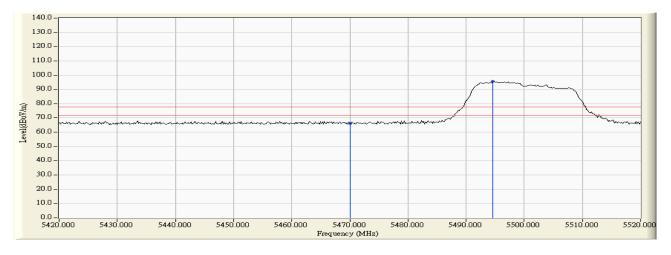
Vertical (Average)



- 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



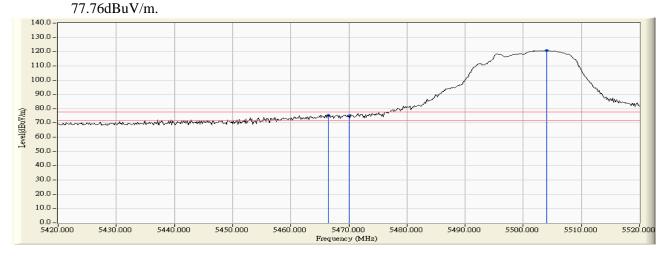
:	802.11 ac PCIe Module
:	Band Edge Data
:	No.3 OATS
:	Mode 14: Transmit (802.11n-20BW 14.4Mbps)(Omni Antenna) -Channel 100
	:



RF Radiated Measurement:

	Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	(dB)	$(dB\mu V/m)$	Result
Horizontal	5470.000	36.370	29.773	66.143	-11.617	77.760	Pass
Horizontal	5494.638	36.649	58.882	95.531			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = -27d$

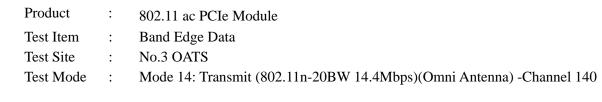


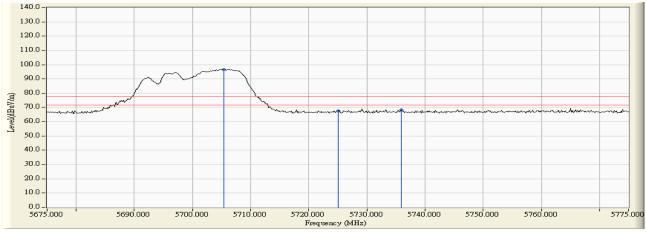
RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5466.522	37.971	37.577	75.547	-2.213	77.760	Pass
Vertical	5470.000	37.994	37.230	75.223	-2.537	77.760	Pass
Vertical	5504.058	38.155	82.637	120.792			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m$.



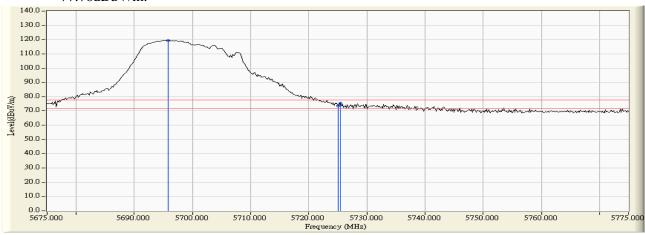




RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5705.435	36.392	60.248	96.641			
Horizontal	5725.000	36.391	31.020	67.411	-10.349	77.760	Pass
Horizontal	5735.870	36.384	31.763	68.147	-9.613	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = -27d$



77.76dBuV/m.

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5695.870	37.736	81.674	119.409			
Vertical	5725.000	37.729	35.711	73.440	-4.320	77.760	Pass
Vertical	5725.435	37.729	37.580	75.309	-2.451	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m$.

Product	:	802.11 ac PCIe Module

Test Site : No.3 OATS

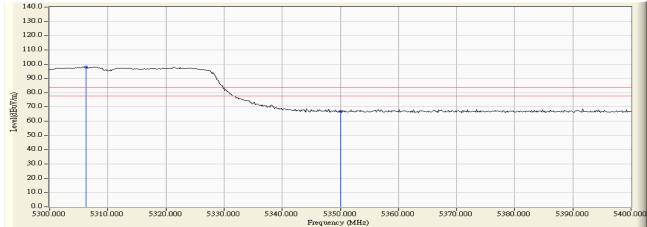
Test Mode : Mode 15: Transmit (802.11n-40BW 30Mbps)(Omni Antenna) -Channel 62 (5310MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
62 (Peak)	5306.232	35.664	62.359	98.023			
62 (Peak)	5350.000	35.571	31.279	66.850	83.540	63.540	Pass
62 (Average)	5305.942	35.665	48.270	83.934			
62 (Average)	5350.000	35.571	17.474	53.045	83.540	63.540	Pass

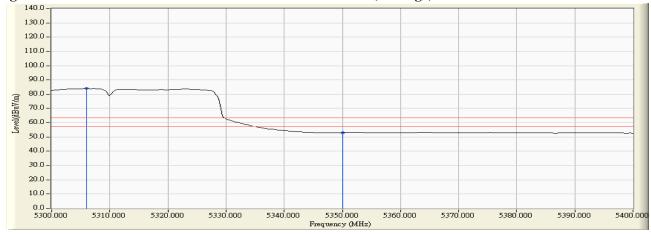
Figure Channel 62:

Horizontal (Peak)





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 Site : No.3 OATS

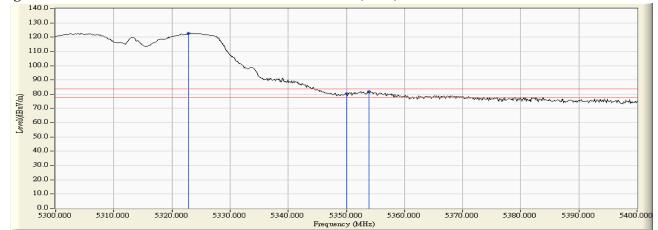
Test Mode : Mode 15: Transmit (802.11n-40BW 30Mbps)(Omni Antenna) -Channel 62 (5310MHz)

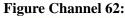
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Kesuit
62 (Peak)	5322.898	37.551	85.299	122.850			
62 (Peak)	5350.000	37.546	42.590	80.136	83.540	63.540	Pass
62 (Peak)	5353.913	37.546	44.451	81.996	83.540	63.540	Pass
62 (Average)	5323.478	37.550	69.966	107.517			
62 (Average)	5350.000	37.546	22.802	60.348	83.540	63.540	Pass

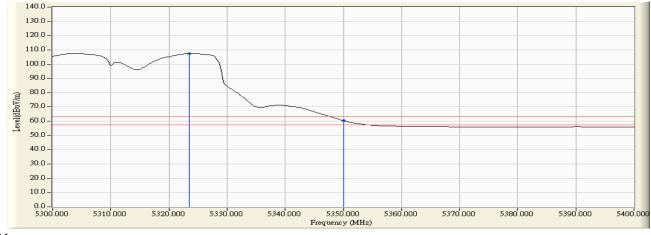
Figure Channel 62:

Vertical (Peak)





Vertical (Average)



- 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 Site : No.3 OATS

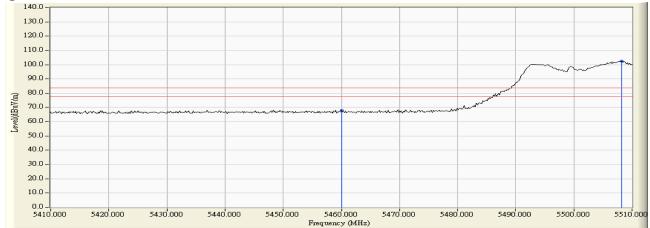
Test Mode : Mode 15: Transmit (802.11n-40BW 30Mbps)(Omni Antenna) -Channel 102 (5510MHz)

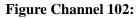
RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
102 (Peak)	5460.000	36.240	31.719	67.959	83.540	63.540	Pass
102 (Peak)	5508.261	36.689	65.636	102.325			
102 (Average)	5460.000	36.240	17.396	53.636	83.540	63.540	Pass
102 (Average)	5508.261	36.689	51.435	88.124			

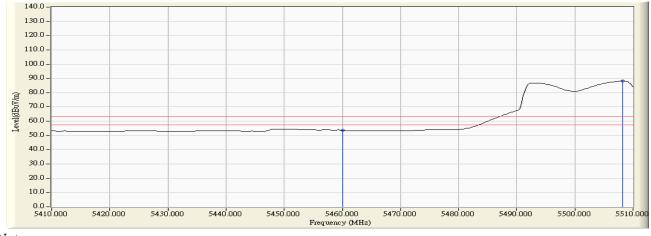
Figure Channel 102:

Horizontal (Peak)





Horizontal (Average)



- 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

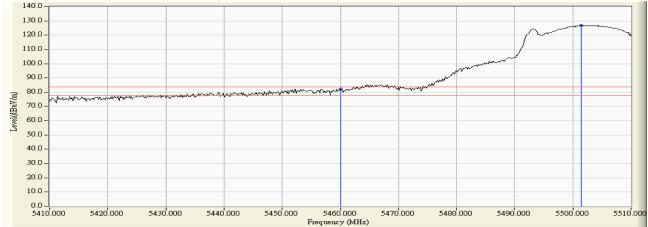
Test Mode	:	Mode 15: Transmit (802.11n-40BW 30Mbps)(Omni Antenna) -Channel 102 (5510MHz)
Test Site	:	No.3 OATS
Test Item	:	Band Edge Data
Product	:	802.11 ac PCIe Module

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
102 (Peak)	5460.000	37.927	44.337	82.264	83.540	63.540	Pass
102 (Peak)	5501.449	38.148	88.728	126.877			
102 (Average)	5460.000	37.927	20.939	58.866	83.540	63.540	Pass
102 (Average)	5502.898	38.153	73.355	111.507			

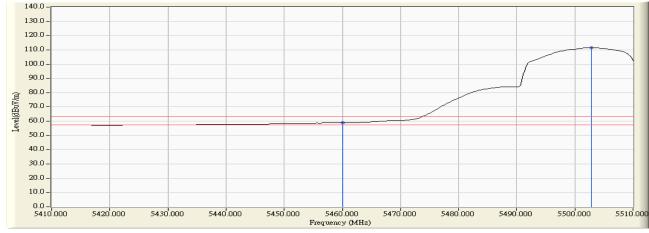
Figure Channel 102:

Vertical (Peak)





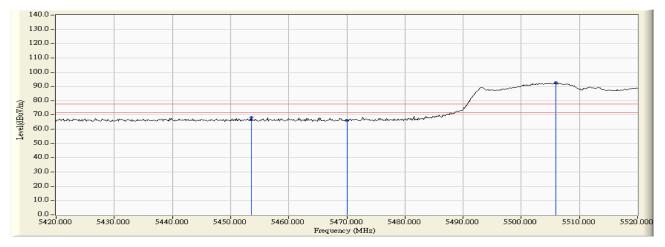
Vertical (Average)



- 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



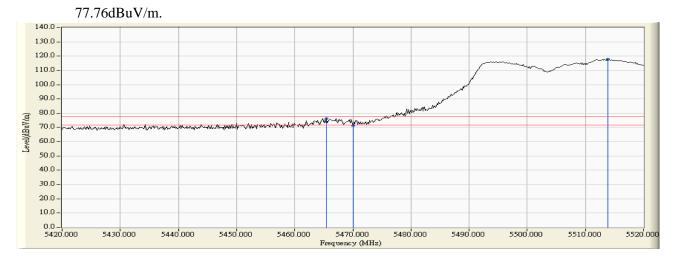
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 15: Transmit (802.11n-40BW 30Mbps)(Omni Antenna) -Channel 102



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV/m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5453.623	36.157	32.029	68.187	-9.573	77.760	Pass
Horizontal	5470.000	36.370	29.714	66.084	-11.676	77.760	Pass
Horizontal	5505.942	36.709	55.835	92.544			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 =$



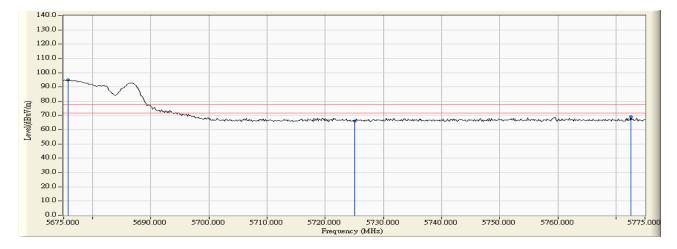
RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5465.507	37.964	38.261	76.225	-1.535	77.760	Pass
Vertical	5470.000	37.994	33.253	71.246	-6.514	77.760	Pass
Vertical	5513.913	38.098	79.714	117.811			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m$.



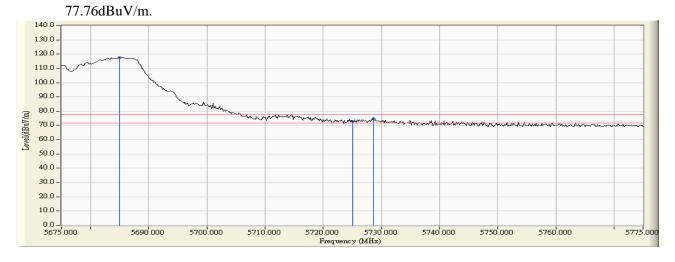
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 15: Transmit (802.11n-40BW 30Mbps)(Omni Antenna) -Channel 134



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5675.725	36.288	58.728	95.016			
Horizontal	5725.000	36.391	29.630	66.021	-11.739	77.760	Pass
Horizontal	5772.536	36.361	32.842	69.203	-8.557	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = -27d$



RF Radiated Measurement:

	Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	(dB)	$(dB\mu V/m)$	Result
Vertical	5685.000	37.716	79.811	117.528			
Vertical	5725.000	37.729	35.141	72.870	-4.890	77.760	Pass
Vertical	5728.623	37.726	36.915	74.641	-3.119	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m$.



Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 18: Transmit (802.11ac-80BW-65Mbps)(Omni Antenna) -Channel 58

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
58 (Peak)	5309.420	35.657	52.751	88.408			
58 (Peak)	5350.000	35.571	30.639	66.210	83.540	63.540	Pass
58 (Average)	5307.391	35.661	38.137	73.798			
58 (Average)	5350.000	35.571	17.534	53.105	83.540	63.540	Pass

Figure Channel 58:

Horizontal (Peak)

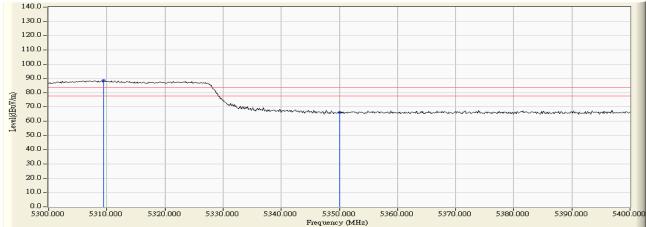


Figure Channel 58:

Horizontal (Average)



- 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



:	802.11 ac PCIe Module
:	Band Edge Data
:	No.3 OATS
:	Mode 18: Transmit (802.11ac-80BW-65Mbps)(Omni Antenna) -Channel 58

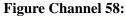
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
58 (Peak)	5303.478	37.554	75.796	113.350			
58 (Peak)	5350.000	37.546	41.927	79.473	83.540	63.540	Pass
58 (Peak)	5350.870	37.547	42.709	80.255	83.540	63.540	Pass
58 (Average)	5323.478	37.550	58.449	96.000			
58 (Average)	5350.000	37.546	24.856	62.402	83.540	63.540	Pass

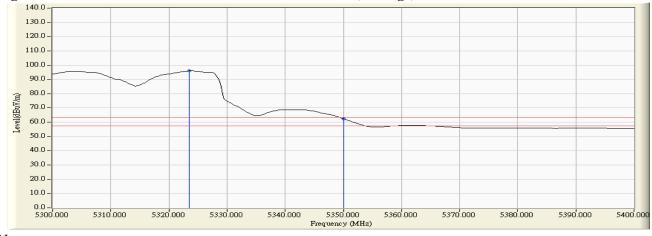
Figure Channel 58:

Vertical (Peak)





Vertical (Average)



- 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



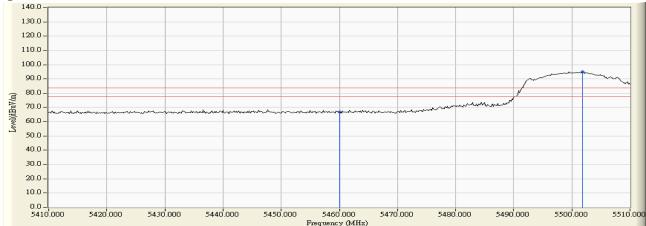
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 18: Transmit (802.11ac-80BW-65Mbps)(Omni Antenna) -Channel 106

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
106 (Peak)	5460.000	36.240	30.679	66.919	83.540	63.540	Pass
106 (Peak)	5501.884	36.696	58.229	94.926			
106 (Average)	5460.000	36.240	17.418	53.658	83.540	63.540	Pass
106 (Average)	5501.594	36.695	42.830	79.525			

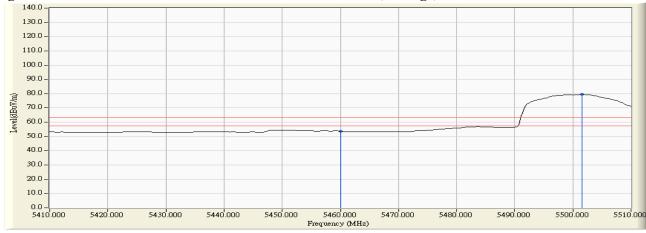
Figure Channel 106:

Horizontal (Peak)





Horizontal (Average)



- 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



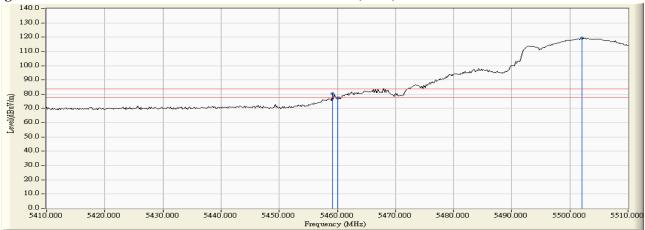
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 18: Transmit (802.11ac-80BW-65Mbps)(Omni Antenna) -Channel 106

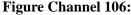
RF Radiated Measurement (Vertical):

Chann	nel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
		(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Kesuit
106 (Peak)	5459.130	37.921	42.584	80.506	83.540	63.540	Pass
106 (Peak)	5460.000	37.927	39.566	77.493	83.540	63.540	Pass
106 (Peak)	5502.029	38.151	81.150	119.300			
106 (A	verage)	5460.000	37.927	23.460	61.387	83.540	63.540	Pass
106 (A	verage)	5502.898	38.153	62.905	101.057			

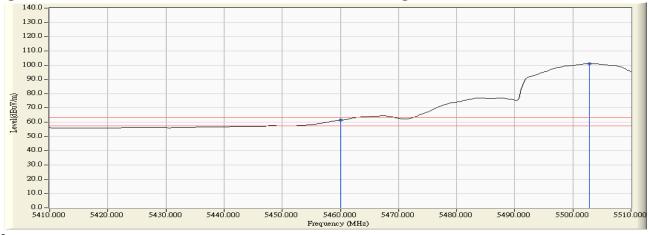
Figure Channel 106:

Vertical (Peak)





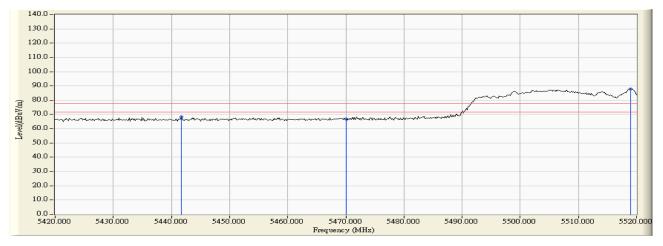
Vertical (Average)



- 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



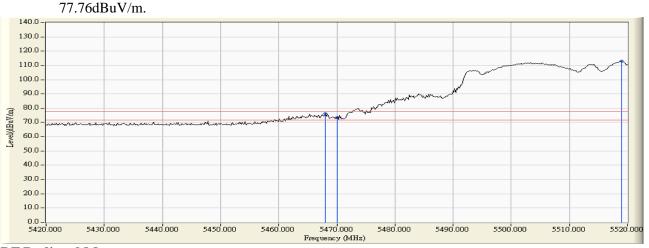
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 18: Transmit (802.11ac-80BW-65Mbps)(Omni Antenna) -Channel 106



<u>RF Radiated Measurement:</u>

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5441.739	36.005	32.140	68.145	-9.615	77.760	Pass
Horizontal	5470.000	36.370	30.521	66.891	-10.869	77.760	Pass
Horizontal	5518.985	36.599	51.399	87.998			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = -27d$



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5467.971	37.985	38.072	76.057	-1.703	77.760	Pass
Vertical	5470.000	37.994	35.579	73.573	-4.187	77.760	Pass
Vertical	5518.986	38.081	75.062	113.143			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m$.



Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 13: Transmit (802.11a-6Mbps)(Omni Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5260	А	5250.65	>5250	PASS
5260	В	5250.95	>5250	PASS



3456 Frequency	02:57:02 PM Sep 09, 2015 TRACE 1 2 3 4 5 6	ALIGNAUTO					AC	50 Ω	RF		
NINNE	TYPE M WANNAMA	: Log-Pwr	Avg Typ	ENSE:INT		lz NO: Fast ⊂	00000 GI			er Fr	XI RL Cent
Auto Tupo	DET P NNNN	Mire			#Atten: 3	NU: Fast C Gain:Low			1		
	2 5.250 65 GHz -17.85 dBm	IVIKIZ		2			dBm	20.00	Ref	/div	10 dE
Center Freq					1	0					Log 10.0
5.26000000 GHz			million fronting	an positivities	handhandhandaga	+2 military					0.00
	-17.46 dBm		Ju.				11				-10.0
5.235000000 GHz		and a state of the state		-		-	ADDREAMONTY				-30.0
	Muser Munuel & Maler		-	-				millelwy		-	-40.0
Stop Freq	and all the selection where			-				Pal II	anglade and	s. wy	-50.0
5.285000000 GHz											-60.0 -70.0
	Span 50.00 MHz		-	-	0.027			GHz			
1 pts) 5.000000 MHz	00.0 ms (1001 pts)			z	1.0 MHz	#VB		Hz		BW	
	FUNCTION VALUE	ICTION WIDTH	ICTION FU		2.535 d	5 GHz	× 5.253 7		f	ODE TE	
Freq Offset				Bm	-17.85 di	5 GHz	5.250 6		f	N 1	3
0 Hz											4
											6 7
						_					8
											10 11
2		STATUS									K NSG

enter Fre	RF 50 Ω AC	00 GHz	SENSE:INT	Avg Type:		36:50 PM Sep 09, 2015 TRACE 1 2 3 4 5 6 TYPE M WWWWWW	Frequency				
IFGain:Low #Atten: 30 dB Der/PNNNN Mkr2 5.250 95 GHz											
10 dB/div 10.0 0.00	Ref 20.00 dBn	(collector)	handadishmileenadariy minilisimilee	alternation and alter			Center Fre 5.260000000 GH				
-10.0 -20.0 -30.0 -40.0		partition and a		b. wh	What was a for the second second	-18.40 dBm	Start Fre 5.235000000 GH				
-50.0 40000000000000000000000000000000000						Undergarte presidente services	Stop Fre 5.285000000 GH				
Center 5.2 #Res BW 1	00 kHz	#VB	N 1.0 MHz		weep 500.0	oan 50.00 MHz ms (1001 pts) FUNCTION VALUE	CF Ste 5.000000 MF Auto Ma				
1 N 1 2 N 1 3 4 5 5 6 7		5.267 50 GHz 5.250 95 GHz	1.596 dBm -18.47 dBm				Freq Offs 0 H				
9 9 10 11						2					



Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 13: Transmit (802.11a-6Mbps)(Omni Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5580	•	5589.10	<5600	PASS
5660	А	5650.80	>5650	PASS
5580	P	5589.45	<5600	PASS
5660	В	5651.15	>5650	PASS



202 - 10 A	Aug 26, 2015	09:58:11 AM	ALIGN AUTO	1	ISE:INT	SEN		AC	50 Ω	RF		R1
Marker	123456 E M WWWW T P N N N N N	TRAC	: Log-Pwr	Avg Ty] Trig: Free	Hz NO: Fast G	00000 G	91000	5.58	ker 2	lar
Select Marker	PNNNNN	DE	- 77-			#Atten: 30	Gain:Low			_		
2	10 GHz 30 dBm	2 5.589 -16.3	Mkr			1		IBm	20.00 0	Ref	3/div	0 di
	100					1					L P	.og
Norm		1	1	and and and an	- Marthan Ha	- the should be	X.				1.5	0.00
	-15.75 dBm	-	2		1.000							10.0
			Vinda	,	-		and a	- ANNON MANY		-		20.0
Delt			Man Man Man					WALShart		-	-	30.0
		Wheel Wheel wheel			-		-		provident states		-	40.0
	With the West of t	100g	1			-				the state	Ami	50.0
Fixed								1				60.0
	e - 1			j							-	70.0
0	0.00 MHz 1001 pts)		Sweep 5			1.0 MHz	#VBI) GHz (Hz	5800 100 I		
	N VALUE	FUNCTIO	ICTION WIDTH	ICTION F		Y		×		RC SCL		
		-			3m 3m	4.25 dE -16.30 dE		5.5737 5.5891		f	NN	1
Properties				-						1.0		3
						_				-		5
1.34					-		_					67
Mor												8 9
1 of	*											10 11
	2		STATUS									<u>1</u>

Marker	Aug 26, 2015 E 1 2 3 4 5 6	TRA	LIGNAUTO		SENSE:INT	1 and and		AC 00000 0		RF 5.58	25		R1 arl
Select Marker	E MWWWWW T P N N N N N	D	1.000	1.4	30 dB	#Atten: 3	PNO: Fast C FGain:Low			-			
2	45 GHz 74 dBm		Mkr					dBm	20.00	Ref	v	B/div	
Norma											1		o.0
NOTING		-	1	what when the	an partiristinully	Winnibern britaline	miliater				-	1	00
	-20.62 dBm		2	1	*		1						0.0 0.0
Delt			which workers	M			p.Mar.	and and				1	0.0
		Man Martingland	WW		-	-		- WWW	WWW			+	0.0
	Wenning ARAIN	Mouton			-				photo	ary the work	to a literation	-	0.0
Fixed		-			-					11			0.0 0.0
	0.00 0011-			1					011-	0000			
0	0.00 MHz 1001 pts)		Sweep 5	#	Iz	/ 1.0 MHz	#VB		0 GHz kHz	100 k			
	N VALUE	FUNCTI	CTION WIDTH	ICTION FU		Y		×		SCL	TRC		
1.5.7.	i					-0.62 d -20.74 d	75 GHz 45 GHz			f f	1	NN	1 2 3
Properties								_	-				4
													6
Mor													8
1 of	*												0
	2		4								1		1



				-					yzer - Swo			
Marker	AM Aug 26, 2015	TRA	ALIGNAUTO : Log-Pwr		SENSE:INT	_	łz	00000 GI	50 Ω 080000	8F 5.65		Mark
Select Marker	PPE MWWWWW DET P N N N N N			1.4.7	en: 30 dB		NO: Fast 🕞 Gain:Low					
2	80 GHz 14 dBm		Mkr					IBm	20.00 0	Ref	3/div	10 dE
	1			-		1						Log 10.0
Norma				meterstande	walnu who	mouth	mberly			_	_	0,00
	-19.11 dBm	-	-	(martin marty)			¢2			-		-10.0
Delta	-19,11 001	-	with	A PARTY			-	- Withow				-20.0
Delta		60	willing on Thomas		- 1-	-		WWW	an al		-	-30.0
		AT WALKING							10 Martin			-50.0
Fixed	a with the advertised of					-				da. m	alkenter.	-60.0
		-		-	-	-			_			-70.0
1	50.00 MHz	Span :		-	and a	1			GHz			
Of	(1001 pts)		2 43 10 1 10 10		MHz	N 1.0	#VBV		Hz	100 H		
1.1	ION VALUE	FUNCT	ICTION WIDTH	UNCTION	86 dBm			× 5.653 7		f	N N	1
Properties					14 dBm	-1	0 GHz	5.650 8		f	N	3
Fiopendes												4
												67
Mor												8
1 of :	-											10 11
	2		STATUS									< ASG

Marker	E123456	02:48:50 PM TRAC	LIGNAUTO			-		000000		RF 2 5.65	1000	R lar
Select Marker	E MWAAWAA T P N N N N N		- 77	- 10-7		#Atten: 30	PNO: Fast IFGain:Low		1000	1		
2	15 GHz 50 dBm	2 5.651 -19.0	Mkr		-			dBm	f 20.00	Re	B/div	
Norm				1					-			og 10.0
North				al washing	partonteret	when Annahandury	miliakul					0.00
	-19.16 dBm			h						- 11	ler".	10.0 20.0
Delt	8		www.androwner				When	Lorderrorton			-	30.0
		Nother Why which	ny		-			N	white		-	40.0
Fixed	Nuetworkships	C. adda			1				Palana.	o-manager and	Ant-Ale-	50.0 50.0
TIXCU		-		-					_	-		70.0
	0.00 MHz			-		1.200			0 GHz			
0		_	Sweep 5		_	V 1.0 MHz	#VB		101111	100		
		FUNCTIO	ICTION WIDTH	ICTION FUI	Bm	0.835 dE	5 00 GHz			RC SCL	N	1
Properties					BM	-19.60 dE	1 15 GHz	5.051		I	N	34
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1										-		5 6
Mor					-							78
1 of												9
	2				_				-	-		11



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)(Omni Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5260	А	5250.30	>5250	PASS
5260	В	5250.55	>5250	PASS



								pt SA				
Frequency	M Sep 09, 2015 CE 1 2 3 4 5 6 PE M WWWWWW	TRA	LIGNAUTO		SE:INT	SEN			50 Ω .26000	RF req 5.		Cen
Auto Tune	PNNNNN	(and	- 77.	1.4		#Atten: 30	NO: Fast G Gain:Low	P (F)				
Auto Tune	30 GHz 64 dBm		Mkr					IBm	20.00 c	Ref	10 dB/div -09 10.0 0.00	10 dE
Center Freq	1				-			1.1				Log 10.0
5.260000000 GHz	-	-	-	abin manipung	withinthealty	por for the second second	wantharth					0,00
	-17.47 dBm							_				-10.0
Start Freq 5.235000000 GHz			May Warwight				1	Note Manager				-30.0
5.23500000 GH2	whethe the start of	MAN HANNA		-	_			Su.	white		-	-40.0
Stop Freq	applet the main									16 WT PHOLES	AND MIN	-50.0
5.285000000 GHz					-							-50.0
CF Step	0.00 MHz			-					GHz	26000	ter 5.	Cen
5.000000 MHz Auto Man	(1001 pts)		_			1.0 MHz	#VBV		Hz	1000		1 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -
<u>Auto</u> muti	ON VALUE	FUNCT	CTION WIDTH	CTION FUR	m	2.530 dB		× 5.253 7		f	N	
Freq Offset					m	-17.64 dB	0 GHz	5.250 3		f	N	2
0 Hz												4 5
							_					6 7 8
												9 10
	2				1							11
			STATUS									MSG

RL Center	r Fre	RF eq 5.2	50 Ω 6000	0000 G	Hz PNO: Fast IFGain:Low		Trig: Free #Atten: 30		Avg	ALIGNA Type: Log-I		TRA TY	M Sep 09, 2015 CE 1 2 3 4 5 6 PE M WWWWWW DET P N N N N N	Frequency
10 dB/d	iv	Ref 20).00 d	C	r-Gain:Low		Mattern of			Ņ	/kr2		55 GHz 39 dBm	Auto Tune
Log 10.0					en la contra	strat	work for the former	portionations	1 monuficada	muj				Center Free 5.260000000 GH
-10.0			provide a	wither	****					In Amerilying	Western March	hus	-17.76 dBm	Start Free 5.235000000 GH
-50.0	All roll	ndered a familier	~									and the second	Hundrawinakian (1)	Stop Free 5.285000000 GH
	3W 1	6000 G 00 kH;		~	#V	BW	1.0 MHz		INCTION	#Swee	p 500).0 ms (0.00 MHz (1001 pts)	CF Ste 5.000000 MH <u>Auto</u> Ma
1 N 2 N 3 4 5 6	1	f			5 0 GHz 55 GHz		2.238 dE -18.39 dE	3m		FONCTION V		FORCH		Freq Offse 0 H
7 8 9 10 11														



:	802.11 ac PCIe Module
:	Band Edge Data
:	No.3 OATS
:	Mode 14: Transmit (802.11n-20BW 14.4Mbps)(Omni Antenna)
	: :

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5580	•	5589.45	<5600	PASS
5660	A	5650.30	>5650	PASS
5580	D	5589.80	<5600	PASS
5660	В	5650.40	>5650	PASS



Agilent	Spec	trum	Analyza	er - Swe	pt SA				L of	mennel			40.40.07		
Agilent XI RL Mark	er 2	2 5.	^{RF} 5894	50 Ω	0000	0 GH	Iz		Trig: Fre		Avg T	ALIGNAUTO	TR	AM Aug 26, 2015 ACE 1 2 3 4 5 6	Marker
		1					NO: Fas Gain:Lo		#Atten: 3				1.2.27	YPE MWWWWW DET P N N N N N	Select Marker
10 dB.	/div	F	Ref 20	0.00 d	1Bm			٩.,	1			Mk	r2 5.589 -15	45 GHz .88 dBm	Select Marker 2 Normal Delta
Log 10.0	i.	17				51		1						177	
0.00 -							UNAN .	Interest	Andreahan	materitant	water martin				Norma
-10.0 -							1							-15.61 dBm	l
-20.0 -					and the	the spect			-		-	W South Wollies			D -14
-30.0 -	-			July In	Mayne	-	-	-				with the second	Manna -		Delta
-40.0		printer la	LANDAN	MAR									Mannan	Mundal	· · · · · · · · · · · · · · · · · · ·
-60.0	*****			-			-		122	1			-	Naphiliter Allowed	Fixed
-70.0		-	1	_	-	-	_	_	_	-	-	-			
Cento	er 5	.58	000 0	Hz	-			-			-		Span	50.00 MHz	
#Res						-	#\	VBW	1.0 MHz			#Sweep \$		(1001 pts)	Of
	ODE N		SCL f		×	573 71	5 GHz		Y 4.39 d		NCTION	FUNCTION WIDTH	FUNC	ION VALUE	
	N	1	f				5 GHz		-15.88 d						1 Souther
4 5	-	1				_							-		Properties
6											-				
89		-													More
10 11															1 of 2
<	1	ł						•					4	2	
MSG												STATU	IS		

Marker	PM Aug 26, 2015 RACE 1 2 3 4 5 6 TYPE M WWWWW DET P N N N N N	TR	ALIGNAUTO : Log-Pwr	Avg Typ	e Run	1	Hz PNO: Fast	AC 00000 G		RP 5.589	25		RI ar
Select Marker		1.1.1	_			#Atten: 30	FGain:Low	Ű		_			
2	9 80 GHz).75 dBm	2 5.589 -20	Mkr			-		dBm	20.00	Ref	v	B/div	
Norma											-	<u>Li</u>	9 0.0
Norma		-		where the low on	partentert	and water a free from	mahart				-		.00 0.0
-	-20.65 dBm		2				and a					-	0.0
Delt		-	WHEN BOARDAN		1		Ru.	Mannan		11	_	1	0.0
		Million Marries	My		-			NUM	WWW		_	-	0.0
	the state of the second st	Vings.	1						all a start a st	Hurdor	Maril	NON	0.0 0.0
Fixed				-	1		_		_	- 101		-	0.0
	50.00 MHz	Span							GHz	8000	5.5	ter	en
Ot	(1001 pts)		Sweep 5	#		/ 1.0 MHz	#VB			00 k			
		FUNC	NCTION WIDTH	ICTION FU		-0.65 di	50 GHz	×		SCL f	TRC	MODE	88) 1
200-40						-20.75 di	80 GHz			f	1	N	23
Properties					-								4
											1.1		6
Mor													8 9
1 of	*												0
	2		STATUS										



25.27.20	M Aug 26, 2015	11:26:38/	ALIGN AUTO	1	INSE:INT	SEL		AC	50 \$	RE	
Marker	CE 1 2 3 4 5 6	TRA	: Log-Pwr			Trig: Fre	Iz	AC 00000 GH	03000	5.65	ker 2
Select Marker		(-			#Atten: 3	NO: Fast Ģ Gain:Low	PI		1	
Select Marker	30 GHz 91 dBm		Mkr			6		dBm	20.00	Ref	3/div
	1	-				1					(i -
Norma		_	-	nounthroline	-	mollinharding	And the		-		_
	-18.65 dBm	-	-	And and an and A							
Delta		-	Charles Walling	-			1	and produce of			1
Dent		64P	and the second		1	_		- AND			_
	WAINWALINA	T Winger							WYW WWW	-	in lught
Fixed		_	-		-				-		MIN.
			-	-	-				_		1
Of	50.00 MHz (1001 pts)		Sweep 5	#	z	1.0 MHz	#VBW) GHz (Hz	6600 100	
1.7	ION VALUE	FUNCT	CTION WIDTH	NCTION FUN		Y		×	-	IC SCL	
1.25 . 7.4		-			IBm IBm	1.352 d -18.91 d	6 GHZ 0 GHZ	5.653 7 5.650 3		f	NN
Properties				-						-	
More											
1 of 2	*			-			-				
	2									1	

Marker	Aug 26, 2015 E 1 2 3 4 5 6	TRA	ALIGNAUTO Log-Pwr			and the second second		2 AC		RF 5.65	25	1.0	R. ar
Select Marker	E MWWWWW T P N N N N N					#Atten: 30	PNO: Fast C FGain:Low	ĺ			1		
2	40 GHz 06 dBm		Mkr					dBm	20.00	Ref	v	B/div	
1				1		_					1		og 10.0
Norma		-		in northern lower	Jos Marchante	Involuition	multiple				Ē	-	0.00
-	-19.27 dBm		Ţ	1			1 ²						10.0 20.0
Delt			Non Manual Contraction		1		N .	In the second				1	80.0
		When White and	1Wy		-		-	e Wer	- ALINY		_	-	0.0
Fired	And and the state of the state	- and a		-	1		-		100	WID PLACE	ARA	gade	50.0 50.0
Fixed					-				_			-	0.0
	0.00 MHz	Span 5		_			-		0 GHz	6000	5.6	ter	en
Of			Sweep 5	#		1.0 MHz	#VB			100 k			
	IN VALUE	FUNCTI	ICTION WIDTH	ICTION FUI		0.727 di	00 GHz	× 5.665		f	TRC	MODE	KR 1
2.2.10						-20.06 dE	40 GHz			f	1	N	23
Properties										-			4
													6 7
Mor													8 9
1 of 2	*								_				0
	2												



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)(Omni Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5270	А	5251.20	>5250	PASS
5270	В	5251.00	>5250	PASS



Agile	nt Spe	ectrur		lyzer - Sw		ł									
Cer	L nter	Fre	RF	.2700	2 AC	O GH	z	st 😱	SE] Trig: Fre	NSE:INT	Avg T	ALIGNAUTO ype: Log-Pwi	r TRA	M Sep 09, 2015 CE 1 2 3 4 5 6 PE M WWWWWW	Frequency
10 0	B/div		Ref	20.00	dBm	IFG	Gain:Lo	SU (LL) DW	#Atten: 3			N	lkr2 5.25	1 2 GHz 28 dBm	Auto Tune
Log 10.0							Later	d der der	d Aphylada a	A1	with the state of	4			Center Freq 5.270000000 GHz
-10.0	1									Ť		1		-17.20 dBm	
-20.0 -30.0	-			1	and a start of the	a contraine	-			1		and a street of the street of	Here Repl.		Start Freq 5.220000000 GHz
-50.0 -60.0 -70.0	al dans	and the	(hugh) from	aled lover to the									and the same	hand) have a fact from the stand of the stan	Stop Freq 5.320000000 GHz
Cer #Re) GHz (Hz			#	VBW	1.0 MHz			#Sweep	Span 1 500.0 ms		Auto Tune Center Freq 5.27000000 GHz 5.22000000 GHz 5.22000000 GHz 5.32000000 GHz 5.32000000 GHz 10.000000 MHz Auto Man
MKR 1	MODE	TRC	SCL		×	5.275	0.00-		¥ 2.80 d		UNCTION	FUNCTION WIDT	H FUNCT	ON VALUE	<u>Auto</u> Man
23456	N	1	f			5.251			-17.28 d	Bm					Freq Offset 0 Hz
0 7 8 9 10 11															
MSG												STAT	us	2	-

	TRACE 1 2 3 4 5 6 TYPE MWWWWW	be: Log-Pwr	Avg Ty	Trig: Free Run	GHZ PNO: Fast G	000000 G	q 5.270	Fre	nter	Cen
Auto Tun	DET P NNNNN			#Atten: 30 dB	IFGain:Low				_	_
Auto Tui	2 5.251 0 GHz -17.90 dBm	Mkr		1.1) dBm	Ref 20.0	v F	B/div	10 di
Center Fre			- 1	1				_	10.00	Log 10.0
5.270000000 GH			with maintening the light	the test all and any production that we		-			n	0.00
	-17.75 dBm					_				-10.0
Start Fre		Will detarate			and the	and by the			1.2	-20.0
5.220000000 GH	Stepper 1	A THE REAL PROPERTY OF	-		-	And a state of the	(mill)			-40.0
Stop Fre	" all all all a section of a se		-			-	ALL PERMISSION	ملائي	man	-50.0
5.320000000 GH									-	-60.0 -70.0
CF Ste 10.000000 MH	Span 100.0 MHz 0.0 ms (1001 pts)	#Sween 50		1.0 MHz	#VB1		000 GH			
Auto Ma	and the second				<i>"</i> •• • •	×	230.55	TRO		
				2.253 dBm -17.90 dBm	50 GHz		f f	1	ZZ	1
1.15 1.10			11 a.						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3
Freq Offse					1 A A A A A A A A A A A A A A A A A A A					5
Freq Offse 0 H									_	
										7
										7



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)(Omni Antenna)	
Test Site	:	No.3 OATS	

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5550	•	5569.00	<5600	PASS
5670	A	5650.30	>5650	PASS
5550	D	5569.10	<5600	PASS
5670	В	5651.10	>5650	PASS



	PM Aug 26, 2015	01-21-100	ALIGNAUTO		ISE:INT	GEN	1		yzer - Swe 50 Ω	RF		R 1
Marker	ACE 123456	TRA	: Log-Pwr	Avg Typ		Trig: Free	Hz NO: Fast ♀	0000 GH				
Select Marke	DET PNNNNN	· · · · · ·				#Atten: 30	Gain:Low	IFC				
2	Mkr2 5.569 0 GHz -16.73 dBm								20.00 c	Ref	3/div	
		1.1				1		11111			l is i	og
Norm		:	11	maga		inter	alled	1.111	1.222.11		1	0.0
		· · · · ·	2	and the part of the	- and the local states in the states in	- and a state of the state of t	Carlinda de la Vista				1.	0.00
	-15.73 dBm						1				8	0.0
		_	Printing.			-		and shares		-	1	0.0
De	-	_	"Particle Prise					HYTHIN		_	-	0.0
		on the formation and			-				INVATION		-	0.0
	he al hour have	104							Man.	Je lubrate	-	0.0
Fixe	THE POPULA	-			1	1		1 - 7			1	0.0
FIAC	1 8			-		_					1.1.1	0.0
	0		· i									0.0
	100.0 MHz					1.147.6	Cont.) GHz			
c	(1001 pts)	00.0 ms	Sweep 50	#		1.0 MHz	#VBW		Hz	100 H	s BN	Re
		FUNCT	NCTION WIDTH	CTION FU		Y		X		RC SCL	MODE	KR
		-			3m	4.27 dE -16.73 dE		5.545		f	N	1
Dramartia					2111	-10.75 GE	0.0112	0.003		1.0	N	3
Propertie					-							4
							111					6
1 22					_							7 8
Mo												9
10	40	-			_							0
				-	1					-		

Marker	4 PM Aug 26, 2015		ALIGNAUTO		NSE:INT	SE		AC		RF			R
Warker	RACE 123456 TYPE MWMMMM	TR	: Log-Pwr	Avg Ty	e Run	Trig: Fre	Hz PNO: Fast	00000 G	91000	5.56	r 2 5	rke	lar
Select Marker	DET PNNNNN	10.00				#Atten: 3	Gain:Low	, IF					
2	69 1 GHz 1.30 dBm		Mk					dBm	20.00	Ref	iv	B/d	
								1000					.og 10.0
Norm		1		1	1	\bigcirc^1		1	1.222		_		0.00
		1		In whole and shall	mudululabe	and sheet a hard sheet	Historhister				1	111	10.0
	-21.28 dBm		2					1	1 1 1				20.0
Del			March	1	-		and the second se	and	100				30.0
		SUMALL.	and a second	-	1			a grande a		1		1	40.0
1 	heren	and a manufacture						-	and American	-			50.0
Fixed	1 million adamantes									-interest	anglain	a south	60.0
				_	1						-		70.0
	100.0.000	0.000							GHz	5000		L	
c	100.0 MHz s (1001 pts)		Sweep 5	3		1.0 MHz	#VBV				5.5 3W 1		
1	CTION VALUE		CTION WIDTH		F	Y		×		SCL	E TRC	MOD	IKR
					Bm	-1.283 di -21.30 di	0 GHz 1 GHz	5.545		f	1	NN	1
Properties					SW	-21.30 di	GHZ	0.005	1	Г		N	2
Fioperaes		199 										1	4
												-	67
Mo													8
1 of													10
	2	1			_						1	_	11
		IS	STATUS										SG



		ectrur		yzer - Sw										
	۹L دارمه	. 7 4	RF	50 Ω	AC 00000	CU		I SE	NSE:INT	Ave Tw	ALIGNAUTO		M Aug 26, 2015	Marker
Ivia	rker	23	0.00	03000	00000	PNO:	:Fast 🕞 n:Low	Trig: Fre #Atten: 3				DET P NNNN		Select Marker
10 0	dB/di	v	Ref	20.00	dBm			1			Mk	r2 5.65 -25	0 3 GHz 26 dBm	2
Log 10. 0.0	0 0							Malin		1				Norma
-20.1 -30.1							2				- Sungal and an and		-24.89 dBm	Delta
-50.1 -60.1 -70.1) mar	w to and	ور مراجعها	n of and the							- mage	Mand Salar Tadd Ara	and here in a second of the second	Fixed⊳
#R	nter es B	W 1	00 H	GHz Hz	 		#VBV	/ 1.0 MHz	_		#Sweep 5	00.0 ms	100.0 MHz (1001 pts)	Ofi
1 2 3 4 5	N N	1	f		5.6	55 0 0 50 3 0	GHz GHz	-4.886 dl -25.26 dl	3m					Properties▶
6 7 8 9 10 11													~	More 1 of 2
MSG											STATUS	6	3	

Marker	03:12:59 PM Aug 26, 2015	ALIGNAUTO		SENSE:INT	SE		AC	50 Ω	RF		RL
	TRACE 123456 TYPE MWWWWWW DET P N N N N N	pe: Log-Pwr	Avg I	Free Run		PNO: Fast C		110000	5.65	er 2 :	ark
Select Marker				en: 30 dB	#Atten: 3	FGain:Low	IF		_	_	_
2	r2 5.651 1 GHz -26.10 dBm	Mk					IBm	20.00 c	Ref	/div) dE
										1.1	o.o
Norm	1 2	1	1				11 - 11			-	.00
	1		A Real And and	a har shaled	aller and the later but	TRAIN	1		: 111		6.5
			Contraction of the second	- The second sec		12		11			0.0
Delt	-25.57 dBm	1				2					0.0
Den		Production of the second	-				Landon		-		0.0
1	hills	1 Million		-			presi	about			0.0
	" the shirt wanter dendered							(universities	Linger	week	0.0
Fixed						-	1				0.0
					1			_	-	_	0.0
· · · · ·	Span 100.0 MHz							GHz	7000	er 5.6	ent
0	00.0 ms (1001 pts)	#Sweep 50		ЛНz	W 1.0 MHz	#VB		Hz	100 k	BW '	Res
	FUNCTION VALUE	UNCTION WIDTH	UNCTION	الم ألم بي	Y		×		C SCL	DDE TRO	KR M
					-5.569 d	5 0 GHz			f	N 1 N 1	
Properties					-20.10 0		0.001		100		3
Froperaes				_		1.1					4
1											6
Mo		1									8
1 of		-						_		-	9
	*										1
	2	STATUS									G



Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 18: Transmit (802.11ac-80BW-65Mbps)(Omni Antenna)

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5290	А	5250.50	>5250	PASS
5290	В	5250.50	>5250	PASS



Agilent Spect										
Center F		50 Ω AC	Hz NO: Fast C	- Andrew	Run	Avg Typ	ALIGNAUTO e: Log-Pwr	TRA T)	M Sep 09, 2015 CE 1 2 3 4 5 6 (PE MWWWWW	Frequency
10 dB/div	Ref 20	ເ 00 dBm	Gain:Low	#Atten: 30			Mk	r2 5.25	0 5 GHz 53 dBm	Auto Tune
10.0 0.00				01						Center Freq 5.290000000 GHz
-10.0 -20.0 -30.0 -40.0			2	u	Latrof suite	ป้อมสีปีไหละแหละ.	annual and		-30.06 dBm	Start Freq 5.190000000 GHz
-50.0	- ASSAL STATE AND							Willing & Vinis Konstant	مردمين (انتظام الا ^{رد} الا ^{رد} ال	Stop Freq 5,39000000 GHz
Center 5 #Res BW	100 kHz		#VB	W 1.0 MHz				00.0 ms (200.0 MHz (1001 pts)	CF Step 20.000000 MHz <u>Auto</u> Man
MKR MODE 1 N 2 N 3 4 5 6	RC SCL 1 f 1 f	× 5.273 5.250	8 GHz 5 GHz	-10.063 dE -30.53 dE	3m	NCTION FU	NCTION WIDTH	FUNCTI	ON VALUE	Freq Offset 0 Hz
0 7 8 9 10 11									×	
MSG							STATUS	5		

Frequency	20:21 PM Sep 09, 2015 TRACE 1 2 3 4 5 6		Avg Type	E:INT		Hz	AC 00000 G		RF ea 5	r Fr	L Iter	
(Autor)	TYPE MWWWWWW DET PNNNNN				#Atten: 30	PNO: Fast G FGain:Low			-			
Auto Tun		Mkr2 5.250 5 GHz -30.66 dBm								iv	B/di	
Center Fr 5.290000000 G										-	1.1	og 10.0
0.2000000000			Maprontes	um utin	aimania.	اللله منه			-	-		10.0
Start Fr 5.190000000 G	-30.40 dBm	14.				2	-				-	20.0 30.0
Stop Fr	Mue Weteninsson	and the second second					Allen And and Contraction	and the second	Autor	uhio	-	40.0 50.0
5.390000000 G												50.0 70.0
CF St 20.000000 M	an 200.0 MHz ms (1001 pts)		#\$		1.0 MHz	#VB\	4		2900 100			
Auto M	FUNCTION VALUE	TION WIDTH	TION FUN	FUNC	Y -10.40 dB	5 0 GHz	×		C SCL	ETF	MODE	KR 1
Freq Offs 0					-30.66 dB	0 GHz			f	1	N	2 3 4 5
												5 6 7 8
	~											9
	2			*					1 1	1		1



:	802.11 ac PCIe Module
:	Band Edge Data
:	No.3 OATS
:	Mode 18: Transmit (802.11ac-80BW-65Mbps)(Omni Antenna)
	: :

Test Frequency	Chain	Measurement Level	Limit	Result
(MHz)		(20dB BW)	(MHz)	
		(MHz)		
5530		5569.20	<5600	PASS
5690	A	5651.00	>5650	PASS
5530	D	5569.20	<5600	PASS
5690	В	5651.00	>5650	PASS



		101.0100							yzer - Swe			
Marker	01:54:38 PM Aug 26, 2015 TRACE 1 2 3 4 5 6 TYPE M WWWWW DET P N N N N N		ALIGNAUTO Avg Type: Log-Pwr			-	RL RF 50 Ω AC Irker 2 5.569200000000 GHz					Marl
Select Marker					#Atten: 30 dB		PNO: Fast					
2	dB/div Ref 20.00 dBm -32.05 dBm -											
							-	1222			(i) - 1	Log 10.0
Norma		1	1	1	1							0.00
		1		In all prover	and mis	Minut			= 1		11=	-10.0
2.4			2	Inder bhy in be Westing	- AUTION AUTON	and the first the state of the second se				-		-20.0
Delt	-31.15 dBm	-	True	9						-	-	-30.0
1			and the state of t	-				all the second second			-	-40.0
Fixed▷	And some share and same	Contraction of the second	-	1	11				and marked	more	June	-50.0
					1							-70.0
-	200.0 MU-	Duon							-	200		
Off	ter 5.5300 GHz											
	CTION VALUE	FUNC	ICTION WIDTH	NCTION FL		Y		×				
		-	_		3m 3m	-11.154 dB -32.05 dB		5.525 (5.569)		f	N 1 N 1	2
Properties►				d 11		100	- 12 Li					3
		Ġ										5
More												7 8 9
1 of:		-										10
	2											11 <
		5	STATUS									ISG

Marker	03:23:54 PM Aug 26, 2015 TRACE 1 2 3 4 5 6 TYPE M MAAAAAAAA		ALIGNAUTO Avg Type: Log-Pwr		BUR] Trig: Free		0000 GI		BF 2 5.56	6	RL ar
Select Marker	TYPE MWWWWWW DET P NNNNN		10 2 1 C 2			#Atten: 30	NO: Fast 📮 Gain:Low			1		
	Mkr2 5.569 2 GHz 10 dB/div Ref 20.00 dBm -36.53 dBm -											
Norm						-				_	(ii)	. og 10.0
					-	1						0.00
-			11	Ulmana	un and	manuli			1		1,77	10.0 20.0
Delta	-36.34 dBm		2	-								30.0
			Constanting and the state					and a start where			-	40.0 50.0
Fixed⊳	interesting a gradient state	and have a second and a second	-		_				and a stand of the stand	tade in	can dina	60.0
										-		70.0
0	00.0 MHz 1001 pts)		Sweep 5	#		1.0 MHz	#VBW			5.5300 V 100		
	IN VALUE	FUNCTIO	ICTION WIDTH	TION FUN	FUNC	Y -16.337 dB		× 5.525		TRC SCL	MODE	IKR N
Properties►						-36.53 dB		5.569		1 f	N	2
										-		4
More 1 of 2	ł	-			_							6 7 8
												9 10
	2								-			11



								alyzer - Sw			
Marker	02:08:55 PM Aug 26, 2015 TRACE 1 2 3 4 5 6	ALIGNAUTO Avg Type: Log-Pwr		NSE:INT	SE	U7			RF		XI R Mar
Select Marker	TYPE MWWWWWW DET P N N N N N			Trig: Free Run #Atten: 30 dB		ker 2 5.651000000000 GHz PNO: Fast IFGain:Low					
2	5.651 0 GHz -19.61 dBm	Mkr					dBm	f 20.00	Rei	B/div	
Norma					⊘ 1						Log 10.0
1	-18.98 dBm		Inditional	- MUML-NA	-MINGULL	2					-10.0
Delta		Manager				-	all and the sulf				-20.0 -30.0
1	wine with physical and the in	and the second		-				1. Alverton de	and an approx	-	-40.0 -50.0
Fixed				1							-60.0
01	Span 200.0 MHz .0 ms (1001 pts)	Sweep 50	#		V 1.0 MHz	#VBV			i.6900 V 100		Cen
	FUNCTION VALUE	CTION WIDTH	NCTION IN FU	Bm	Y 1.022 di	8 GHz	× 5.673		TRC SCL	N	1
Properties				Bm	-19.61 dl	0 GHz	5.651		1 f	N	2 3 4 5 6
Mor 1 of									_		7 8 9 10
	*										11
		STATUS									ISG

Marker	03:36:55 PM Aug 26, 2015 TRACE 1 2 3 4 5 6 TYPE M MANAGAM		ALIGN AUTO Avg Type: Log-Pwr		SENSE:INT			AC 00000 G		RF 5.65	25		R lar
Select Marker	YPE MWWWWW DET P N N N N N	10 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		22.2	l dB	#Atten: 30	PNO: Fast G FGain:Low						
2	1 0 GHz .08 dBm	r2 5.65 -20	Mk					dBm	20.00	Ref	v	B/div	
Select Marker 2 M Normal Delta Fixed	N	-		1									og 10.0
	-			Managala	, anne anne		internet Martin			-	-		0.00
	-18.99 dBm						2				-	-	10.0
Delta			and the second				1	and states		1111			20.0 30.0
	Na manager	madilitary	The ship				_	a fer la ser a			_	· · · · · ·	40.0
Fixed	Watth Charles							-	VILIT	and in	deserved	WALAN	50.0
					-						-		50.0
			-						1.11			1	70.0
0	200.0 MHz (1001 pts)		Sweep 5	#		1.0 MHz	#VB			900 (100 k			
Fixed	ION VALUE	FUNCT	CTION WIDTH	TION FUI	FUN	Y		×				MODE	
1 5 3		-	_			1.01 dE -20.08 dE	7 6 GHz 1 0 GHz			f f	1	N	1
Properties				-									345
													67
Mor													89
1 of	*												10
	2				1								1



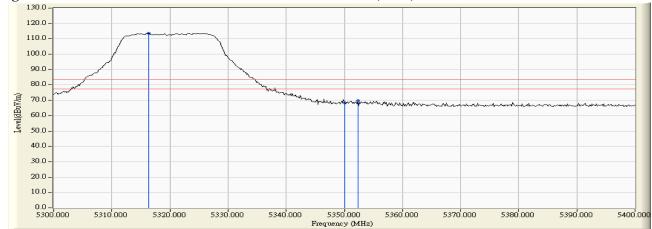
Product:802.11 ac PCIe ModuleTest Item:Band Edge DataTest Site:No.3 OATSTest Mode:Mode 19: Transmit (802.11a-6Mbps)(Panel Antenna) -Channel 64 (5320MHz)

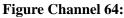
RF Radiated Measurement (Horizontal):

	Frequency	Correct	Reading	Emission	Peak Limit		
Channel No.	(MHz)	Factor	Level	Level	$(dB\mu V/m)$	Average Limit	Result
	(WITIZ)	(dB)	(dBµV)	$(dB\mu V/m)$	(uDµ v/III)	(dBµV/m)	
64 (Peak)	5316.377	35.641	77.989	113.631			
64 (Peak)	5350.000	35.571	32.742	68.313	83.540	63.540	Pass
64 (Peak)	5352.319	35.566	34.001	69.567	83.540	63.540	Pass
64 (Average)	5325.362	35.623	65.908	101.531			
64 (Average)	5350.000	35.571	17.802	53.373	83.540	63.540	Pass

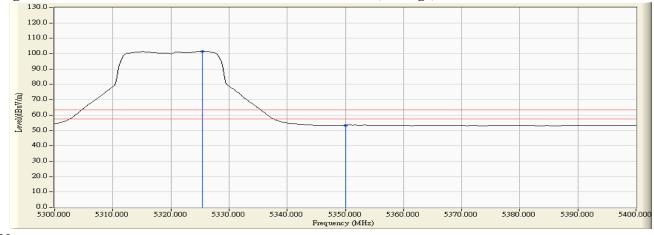
Figure Channel 64:

Horizontal (Peak)





Horizontal (Average)



- 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

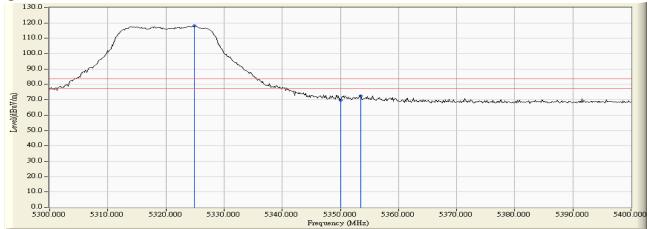
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 19: Transmit (802.11a-6Mbps)(Panel Antenna) -Channel 64 (5320MHz)

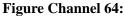
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit
64 (Peak)	5324.928	37.551	80.536	118.086			
64 (Peak)	5350.000	37.546	32.190	69.736	83.540	63.540	Pass
64 (Peak)	5353.478	37.545	35.056	72.602	83.540	63.540	Pass
64 (Average)	5324.493	37.550	67.376	104.926			
64 (Average)	5350.000	37.546	18.069	55.615	83.540	63.540	Pass

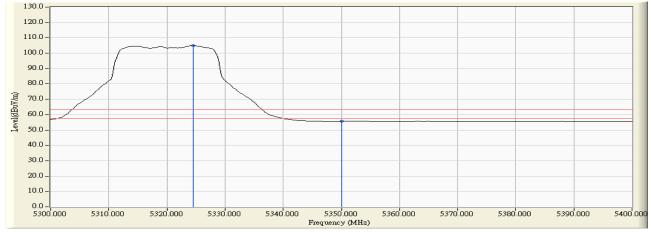
Figure Channel 64:

Vertical (Peak)





Vertical (Average)



- 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



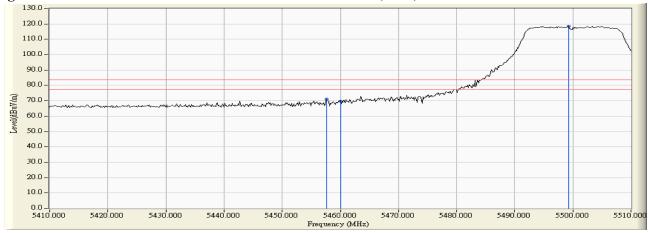
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 19: Transmit (802.11a-6Mbps)(Panel Antenna) -Channel 100 (5500MHz)

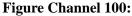
RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
100 (Peak)	5457.681	36.211	35.061	71.271	83.540	63.540	Pass
100 (Peak)	5460.000	36.240	33.603	69.843	83.540	63.540	Pass
100 (Peak)	5499.275	36.679	81.849	118.528			
100 (Average)	5460.000	36.240	18.064	54.304	83.540	63.540	Pass
100 (Average)	5503.623	36.708	69.418	106.126			

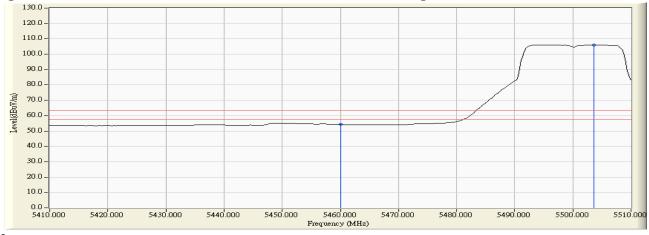
Figure Channel 100:

Horizontal (Peak)





Horizontal (Average)



- 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



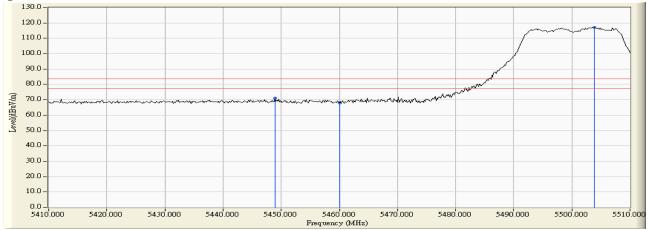
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 19: Transmit (802.11a-6Mbps)(Panel Antenna) -Channel 100 (5500MHz)

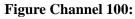
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Chaimer No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Kesult
100 (Peak)	5448.985	37.856	33.341	71.196	83.540	63.540	Pass
100 (Peak)	5460.000	37.927	30.069	67.996	83.540	63.540	Pass
100 (Peak)	5503.913	38.155	78.939	117.094			
100 (Average)	5448.551	37.853	18.823	56.675	83.540	63.540	Pass
100 (Average)	5460.000	37.927	17.696	55.623	83.540	63.540	Pass
100 (Average)	5503.623	38.154	66.251	104.405			

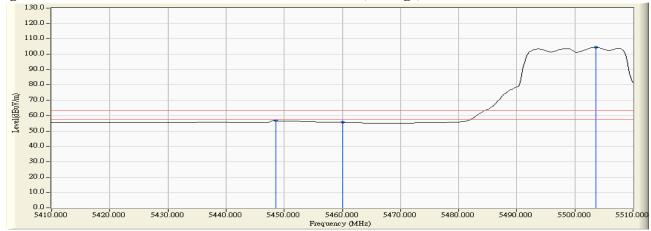
Figure Channel 100:

Vertical (Peak)





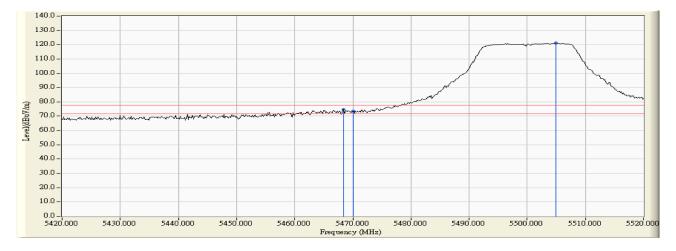
Vertical (Average)



- 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

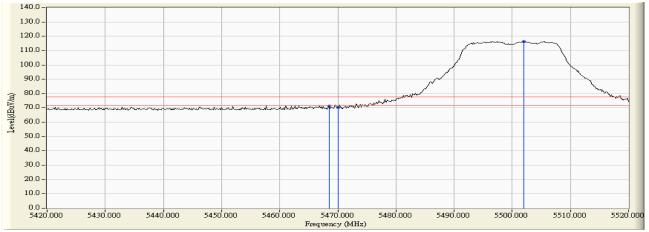


Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 19: Transmit (802.11a-6Mbps)(Panel Antenna) -Channel 100



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5468.406	36.350	38.455	74.804	-2.956	77.760	Pass
Horizontal	5470.000	36.370	37.064	73.434	-4.326	77.760	Pass
Horizontal	5504.928	36.716	84.539	121.256			

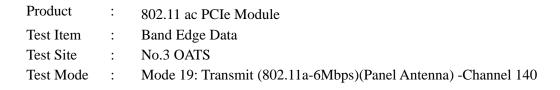
Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = 77.76dBuV/m$.

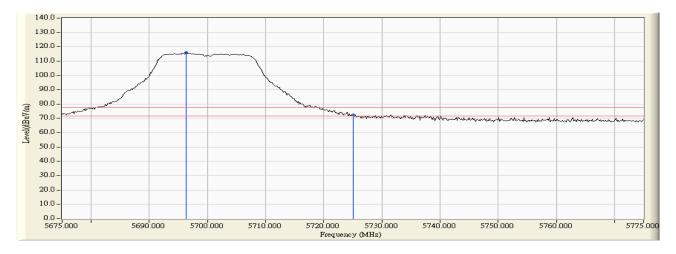


RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5468.551	37.984	33.503	71.487	-6.273	77.760	Pass
Vertical	5470.000	37.994	32.331	70.324	-7.436	77.760	Pass
Vertical	5502.029	38.151	78.254	116.404			

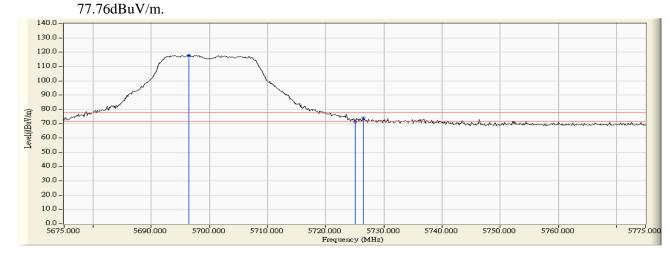






	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV/m)	Result
Horizontal	5696.304	36.375	79.425	115.800			
Horizontal	5725.000	36.391	35.983	72.374	-5.386	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = -27d$



RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5696.449	37.735	80.258	117.993			
Vertical	5725.000	37.729	33.730	71.459	-6.301	77.760	Pass
Vertical	5726.449	37.728	36.353	74.081	-3.679	77.760	Pass

Product : 802.11 ac PCIe Module

Test Item : Band Edge Data

Test Site : No.3 OATS

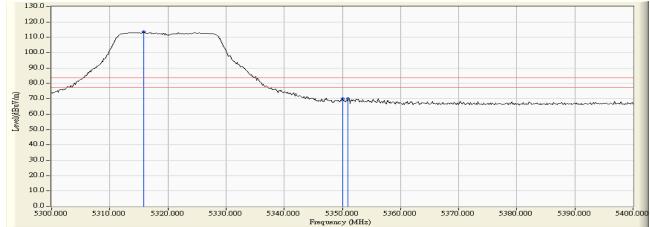
Test Mode : Mode 20: Transmit (802.11n-20BW 14.4Mbps)(Panel Antenna) - Channel 64 (5320MHz)

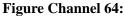
RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
64 (Peak)	5315.797	35.644	77.911	113.554			
64 (Peak)	5350.000	35.571	34.414	69.985	83.540	63.540	Pass
64 (Peak)	5351.015	35.569	34.648	70.217	83.540	63.540	Pass
64 (Average)	5313.478	35.648	65.302	100.950			
64 (Average)	5350.000	35.571	17.754	53.325	83.540	63.540	Pass

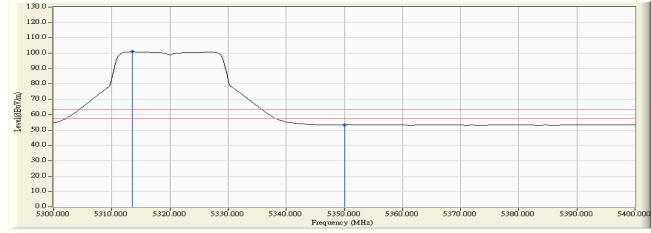
Figure Channel 64:

Horizontal (Peak)





Horizontal (Average)



- 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
T • T		

Test Item Band Edge Data : : No.3 OATS

Test Site

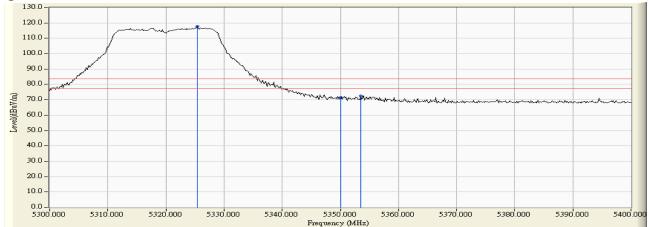
Test Mode Mode 20: Transmit (802.11n-20BW 14.4Mbps)(Panel Antenna) -Channel 64 (5320MHz) :

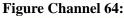
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
64 (Peak)	5325.362	37.550	80.173	117.723			
64 (Peak)	5350.000	37.546	33.763	71.309	83.540	63.540	Pass
64 (Peak)	5353.478	37.545	34.958	72.504	83.540	63.540	Pass
64 (Average)	5326.087	37.551	66.971	104.521			
64 (Average)	5350.000	37.546	18.048	55.594	83.540	63.540	Pass

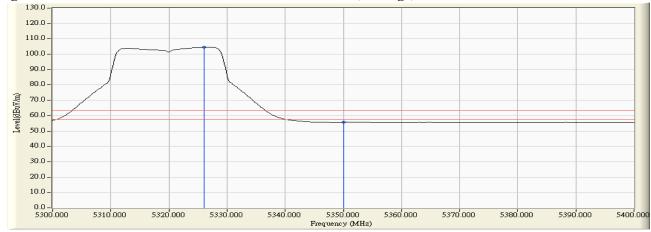
Figure Channel 64:

Vertical (Peak)





Vertical (Average)



- 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 Item : Band Edge Da Test Site : No.3 OATS

Test Site : No.3 OATS

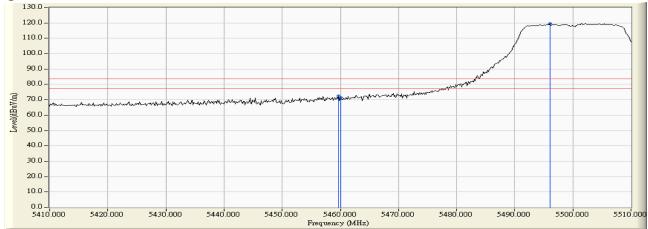
Test Mode : Mode 20: Transmit (802.11n-20BW 14.4Mbps)(Panel Antenna) - Channel 100 (5500MHz)

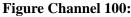
RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
100 (Peak)	5459.710	36.236	36.132	72.369	83.540	63.540	Pass
100 (Peak)	5460.000	36.240	35.091	71.331	83.540	63.540	Pass
100 (Peak)	5496.087	36.658	83.018	119.677			
100 (Average)	5460.000	36.240	18.128	54.368	83.540	63.540	Pass
100 (Average)	5503.768	36.709	70.252	106.961			

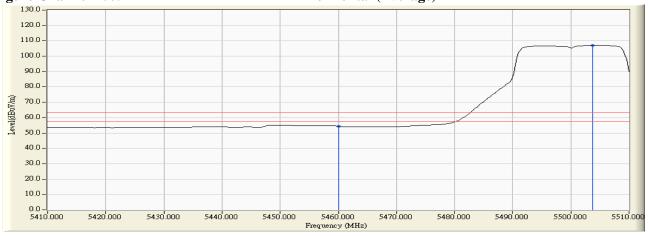
Figure Channel 100:

Horizontal (Peak)





Horizontal (Average)



- 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	2.11 ac PCIe Module
---------------	---------------------

Test Item : Band Edge Data

Test Site : No.3 OATS

Test Mode : Mode 20: Transmit (802.11n-20BW 14.4Mbps)(Panel Antenna) - Channel 100 (5500MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Kesult
100 (Peak)	5443.043	37.816	34.177	71.994	83.540	63.540	Pass
100 (Peak)	5460.000	37.927	32.065	69.992	83.540	63.540	Pass
100 (Peak)	5505.362	38.155	80.078	118.234			
100 (Average)	5448.261	37.851	18.822	56.673	83.540	63.540	Pass
100 (Average)	5460.000	37.927	17.772	55.699	83.540	63.540	Pass
100 (Average)	5502.609	38.152	66.871	105.023			

Figure Channel 100:

Vertical (Peak)

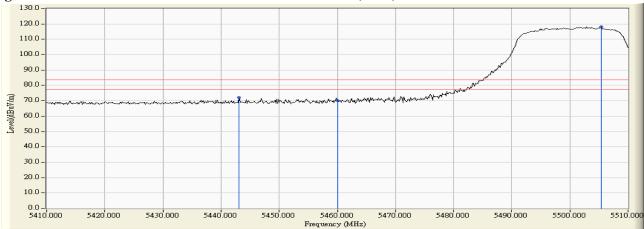
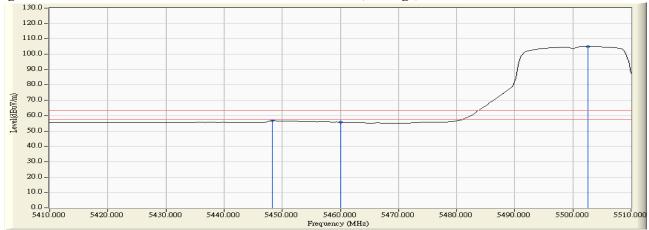


Figure Channel 100:

Vertical (Average)

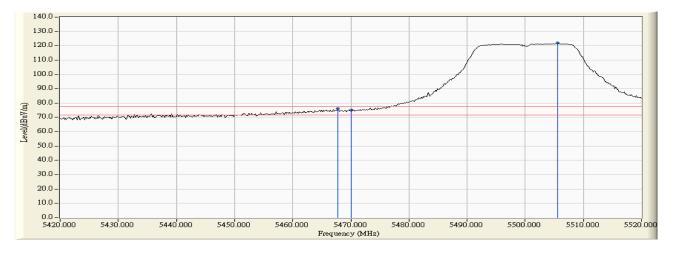


Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. 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



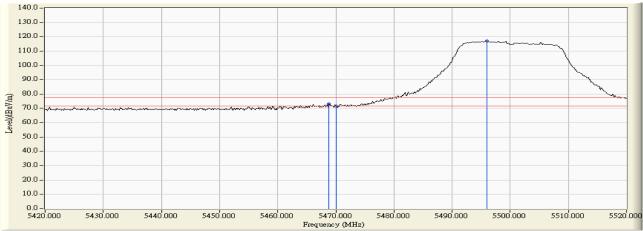
Product	:	802.11 ac PCIe Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 20: Transmit (802.11n-20BW 14.4Mbps)(Panel Antenna) -Channel 100



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5467.826	36.342	39.683	76.025	-1.735	77.760	Pass
Horizontal	5470.000	36.370	38.626	74.996	-2.764	77.760	Pass
Horizontal	5505.507	36.713	85.088	121.801			

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = -27d$

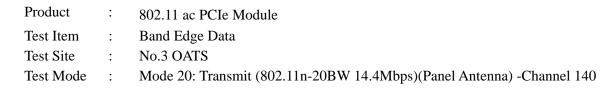


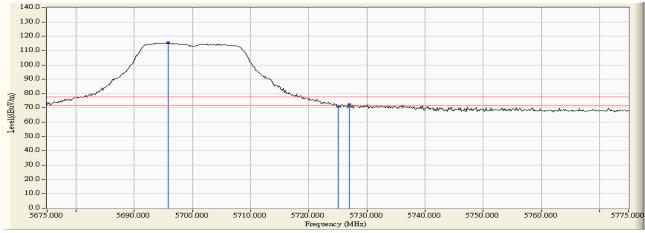


RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBµV/m)	Result
Vertical	5468.841	37.986	35.031	73.017	-4.743	77.760	Pass
Vertical	5470.000	37.994	33.795	71.788	-5.972	77.760	Pass
Vertical	5495.942	38.133	78.822	116.956			

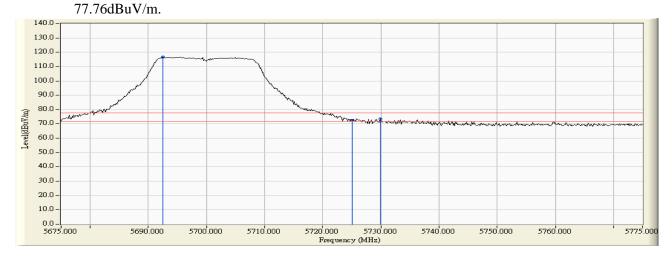






	Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	(dB)	$(dB\mu V/m)$	Kesuit
Horizontal	5695.870	36.375	79.084	115.458			
Horizontal	5725.000	36.391	34.421	70.812	-6.948	77.760	Pass
Horizontal	5727.029	36.389	36.135	72.525	-5.235	77.760	Pass

Note:1. The antenna distance is 1m, $E[dB\mu V/m] = EIRP[dBm] - 20 \log(d[meters]) + 104.77 = -27dBm+104.76 = -27d$



RF Radiated Measurement:

	Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	(dB)	$(dB\mu V/m)$	Kesuit
Vertical	5692.536	37.733	78.915	116.648			
Vertical	5725.000	37.729	34.847	72.576	-5.184	77.760	Pass
Vertical	5729.928	37.725	35.852	73.577	-4.183	77.760	Pass