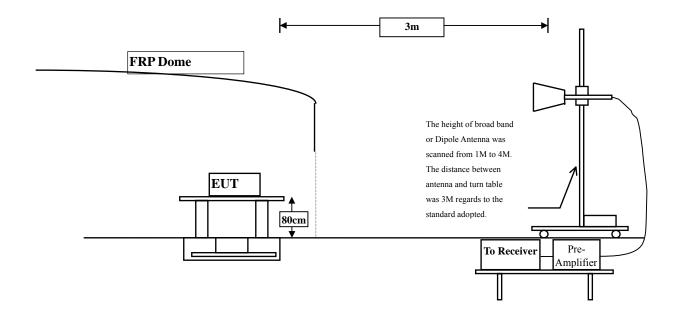
Radiated Emission Above 1GHz



6.3. Limits

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

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

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

6.4. Test Procedure

The EUT was setup according to ANSI C63.10, 2009 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 requirements.

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

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10, 2009 on radiated measurement.

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

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas. The measurement is divided into the Preliminary Measurement and the Final Measurement. The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna. The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

6.5. Uncertainty

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

6.6. Test Result of Radiated Emission

Product	:	AerialCast
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5180MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10360.000	12.930	38.570	51.500	-22.500	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
10360.000	13.724	38.510	52.234	-21.766	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	: No.3 OA	ic Radiated Emiss	sion Data a-6Mbps) (5220MHz	z)	
			• / \	,	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10440.000	13.322	38.330	51.652	-22.348	74.000
15600.000	*	*	*	*	74.000
20800.000	*	*	*	*	74.000
26000.000	*	*	*	*	74.000
31200.000	*	*	*	*	74.000
36400.000	*	*	*	*	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
10440.000	14.245	37.630	51.875	-22.125	74.000
20800.000	*	*	*	*	74.000
26000.000	*	*	*	*	74.000
31200.000	*	*	*	*	74.000
36400.000	*	*	*	*	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	 AerialCast Harmonic Radiated Emission Data 					
Test Site	No.3 OATS					
Test Mode			a-6Mbps) (5240MHz	Z)		
			······································	-)		
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
10480.000	13.693	38.010	51.704	-22.296	74.000	
15720.000	*	*	*	*	74.000	
20960.000	*	*	*	*	74.000	
26200.000	*	*	*	*	74.000	
31440000	*	*	*	*	74.000	
36680.000	*	*	*	*	74.000	
Average						
Detector:						
Vertical						
Peak Detector:						
10480.000	14.620	37.300	51.921	-22.079	74.000	
20960.000	*	*	*	*	74.000	
26200.000	*	*	*	*	74.000	
31440000	*	*	*	*	74.000	
36680.000	*	*	*	*	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	 AerialCast Harmonic Radiated Emission Data No.3 OATS 							
Test Site								
Test Mode	: Mode 1							
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBuV	dBuV/m	dB	dBuV/m			
Horizontal								
Peak Detector:								
10520.000	14.015	37.900	51.915	-22.085	74.000			
15780.000	*	*	*	*	74.000			
21040.000	*	*	*	*	74.000			
26300.000	*	*	*	*	74.000			
31560.000	*	*	*	*	74.000			
36820.000	*	*	*	*	74.000			
Average								
Detector:								
Vertical								
Peak Detector:								
10520.000	14.818	37.060	51.878	-22.122	74.000			
15780.000	*	*	*	*	74.000			
21040.000	*	*	*	*	74.000			
26300.000	*	*	*	*	74.000			
31560.000	*	*	*	*	74.000			
36820.000	*	*	*	*	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.

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Product Test Item Test Site Test Mode	 AerialCast Harmonic Radiated Emission Data No.3 OATS Mode 1: Transmit (802.11a-6Mbps) (5300MHz) 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
1 5	Factor	Level	Level	C		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
10600.000	14.550	36.990	51.539	-22.461	74.000	
15900.000	*	*	*	*	74.000	
21200.000	*	*	*	*	74.000	
26500.000	*	*	*	*	74.000	
31800.000	*	*	*	*	74.000	
37100.000	*	*	*	*	74.000	
Average						
Detector:						
Vertical						
Peak Detector:						
10600.000	14.881	36.800	51.681	-22.319	74.000	
15900.000	*	*	*	*	74.000	
21200.000	*	*	*	*	74.000	
26500.000	*	*	*	*	74.000	
31800.000	*	*	*	*	74.000	
37100.000	*	*	*	*	74.000	
Average						
Detector:						

Note:

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

Product Test Item Test Site	 AerialCast Harmonic Radiated Emission Data No.3 OATS 					
Test Mode			a-6Mbps) (5320MHz	z)		
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
10640.000	14.690	36.890	51.580	-22.420	74.000	
15960.000	*	*	*	*	74.000	
21280.000	*	*	*	*	74.000	
26600.000	*	*	*	*	74.000	
31920.000	*	*	*	*	74.000	
37240.000	*	*	*	*	74.000	
Average						
Detector:						
Vertical						
Peak Detector:						
10640.000	15.083	36.710	51.793	-22.207	74.000	
15960.000	*	*	*	*	74.000	
21280.000	*	*	*	*	74.000	
26600.000	*	*	*	*	74.000	
31920.000	*	*	*	*	74.000	
37240.000	*	*	*	*	74.000	
Average						
Detector:						

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- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average 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	 AerialCast Harmonic Radiated Emission Data 					
Test Site	 Harmonic Radiated Emission Data No.3 OATS 					
Test Mode			a-6Mbps) (5500MHz	z)		
1057 111040			<i>a</i> oniopo) (cooonin	-)		
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
11000.000	16.399	37.290	53.689	-20.311	74.000	
16500.000	*	*	*	*	74.000	
22000.000	*	*	*	*	74.000	
27500.000	*	*	*	*	74.000	
33000.000	*	*	*	*	74.000	
38500.000	*	*	*	*	74.000	
Average						
Detector:						
Vertical						
Peak Detector:						
11000.000	17.132	36.770	53.902	-20.098	74.000	
16500.000	*	*	*	*	74.000	
22000.000	*	*	*	*	74.000	
27500.000	*	*	*	*	74.000	
33000.000	*	*	*	*	74.000	
38500.000	*	*	*	*	74.000	
Average						
Detector:						

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	 AerialCast Harmonic Radiated Emission Data No.3 OATS Mode 1: Transmit (802.11a-6Mbps) (5580MHz) 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level	C		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
11160.000	16.664	32.860	49.525	-24.475	74.000	
16740.000	*	*	*	*	74.000	
22320.000	*	*	*	*	74.000	
27900.000	*	*	*	*	74.000	
33480.000	*	*	*	*	74.000	
39060.000	*	*	*	*	74.000	
Average						
Detector:						
Vertical						
Peak Detector:						
11160.000	17.643	32.990	50.633	-23.367	74.000	
16740.000	*	*	*	*	74.000	
22320.000	*	*	*	*	74.000	
27900.000	*	*	*	*	74.000	
33480.000	*	*	*	*	74.000	
39060.000	*	*	*	*	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	: AerialCast					
Test Item	: Harmonic Radiated Emission Data					
Test Site	: No.3 OATS					
Test Mode	: Mode 1	: Transmit (802.11	a-6Mbps) (5700MHz	z)		
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
11400.000	16.530	47.270	63.801	-10.199	74.000	
17100.000	*	*	*	*	74.000	
22800.000	*	*	*	*	74.000	
28500.000	*	*	*	*	74.000	
34200.000	*	*	*	*	74.000	
39900.000	*	*	*	*	74.000	
Average						
Detector:						
11400.000	16.530	33.970	50.501	-3.499	54.000	
Vertical						
Peak Detector:						
11400.000	17.138	36.560	53.698	-20.302	74.000	
17100.000	*	*	*	*	74.000	
22800.000	*	*	*	*	74.000	
28500.000	*	*	*	*	74.000	
34200.000	*	*	*	*	74.000	
39900.000	*	*	*	*	74.000	
Average						
Detector:						

Note:

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

Product Test Item Test Site Test Mode	 m : Harmonic Radiated Emission Data e : No.3 OATS 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
10360.000	12.930	37.810	50.740	-23.260	74.000	
15540.000	*	*	*	*	74.000	
20720.000	*	*	*	*	74.000	
25900.000	*	*	*	*	74.000	
31080.000	*	*	*	*	74.000	
36260.000	*	*	*	*	74.000	
Average						
Detector:						
Vertical						
Peak Detector:						
10360.000	13.724	37.520	51.244	-22.756	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	No.3 OATS						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level	C			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10440.000	13.322	37.930	51.252	-22.748	74.000		
15660.000	*	*	*	*	74.000		
20880.000	*	*	*	*	74.000		
26100.000	*	*	*	*	74.000		
31320.000	*	*	*	*	74.000		
36540.000	*	*	*	*	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
10440.000	13.322	37.930	51.252	-22.748	74.000		
20880.000	*	*	*	*	74.000		
26100.000	*	*	*	*	74.000		
31320.000	*	*	*	*	74.000		
36540.000	*	*	*	*	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	 AerialCast Harmonic Radiated Emission Data No.3 OATS Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5240MHz) 						
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10480.000	13.693	37.690	51.384	-22.616	74.000		
15720.000	*	*	*	*	74.000		
20960.000	*	*	*	*	74.000		
26200.000	*	*	*	*	74.000		
31440.000	*	*	*	*	74.000		
36680.000	*	*	*	*	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
10480.000	14.620	37.280	51.901	-22.099	74.000		
20960.000	*	*	*	*	74.000		
26200.000	*	*	*	*	74.000		
31440.000	*	*	*	*	74.000		
36680.000	*	*	*	*	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	: No.3 OA	ic Radiated Emiss		(52(0)(11-)	
Test Mode	: Mode 2:	Transmit (802.1)	In-20BW 14.4Mbps)	(5260MHZ)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
10520.000	14.015	37.020	51.035	-22.965	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
31560.000	*	*	*	*	74.000
36820.000	*	*	*	*	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
10520.000	14.818	37.330	52.148	-21.852	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
31560.000	*	*	*	*	74.000
36820.000	*	*	*	*	74.000
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 + 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	 AerialCast Harmonic Radiated Emission Data No.3 OATS Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5300MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level	-			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10600.000	14.550	36.850	51.399	-22.601	74.000		
15900.000	*	*	*	*	74.000		
21200.000	*	*	*	*	74.000		
26500000	*	*	*	*	74.000		
31800.000	*	*	*	*	74.000		
37100.000	*	*	*	*	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
10600.000	14.881	37.060	51.941	-22.059	74.000		
15900.000	*	*	*	*	74.000		
21200.000	*	*	*	*	74.000		
26500000	*	*	*	*	74.000		
31800.000	*	*	*	*	74.000		
37100.000	*	*	*	*	74.000		
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 + 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	 AerialCast Harmonic Radiated Emission Data No.3 OATS Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5320MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10640.000	43.980	37.180	51.870	-22.130	74.000		
15960.000	*	*	*	*	74.000		
21280.000	*	*	*	*	74.000		
26600.000	*	*	*	*	74.000		
31920.000	*	*	*	*	74.000		
37240.000	*	*	*	*	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
10640.000	15.083	34.990	50.073	-23.927	74.000		
15960.000	*	*	*	*	74.000		
21280.000	*	*	*	*	74.000		
26600.000	*	*	*	*	74.000		
31920.000	*	*	*	*	74.000		
37240.000	*	*	*	*	74.000		
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 + 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	: AerialCast						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5500MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11000.000	16.399	35.540	51.939	-22.061	74.000		
16500.000	*	*	*	*	74.000		
22000.000	*	*	*	*	74.000		
27500.000	*	*	*	*	74.000		
33000.000	*	*	*	*	74.000		
38500.000	*	*	*	*	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
11000.000	17.132	35.020	52.152	-21.848	74.000		
16500.000	*	*	*	*	74.000		
22000.000	*	*	*	*	74.000		
27500.000	*	*	*	*	74.000		
33000.000	*	*	*	*	74.000		
38500.000	*	*	*	*	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	: AerialCast						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5580MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11160.000	16.664	42.670	59.335	-14.665	74.000		
16740.000	*	*	*	*	74.000		
22320.000	*	*	*	*	74.000		
27900.000	*	*	*	*	74.000		
33480.000	*	*	*	*	74.000		
39060.000	*	*	*	*	74.000		
Average							
Detector:							
11160.000	16.664	28.070	44.735	-9.265	54.000		
Vertical							
Peak Detector:							
11160.000	17.643	34.830	52.473	-21.527	74.000		
16740.000	*	*	*	*	74.000		
22320.000	*	*	*	*	74.000		
27900.000	*	*	*	*	74.000		
33480.000	*	*	*	*	74.000		
39060.000	*	*	*	*	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	: AerialCast						
Test Item Test Site	: Harmonic Radiated Emission Data						
Test Mode	 No.3 OATS Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5700MHz) 						
Test Widde	. Widde 2.	11alisiliit (802.11	11-20D W 14.4W0ps)	(3700101112)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11400.000	16.530	46.620	63.151	-10.849	74.000		
17100.000	*	*	*	*	74.000		
22800.000	*	*	*	*	74.000		
28500.000	*	*	*	*	74.000		
34200.000	*	*	*	*	74.000		
39900.000	*	*	*	*	74.000		
Average							
Detector:							
11400.000	16.530	31.790	48.321	-5.679	54.000		
Vertical							
Peak Detector:							
11400.000	17.138	35.910	53.048	-20.952	74.000		
17100.000	*	*	*	*	74.000		
22800.000	*	*	*	*	74.000		
28500.000	*	*	*	*	74.000		
34200.000	*	*	*	*	74.000		
39900.000	*	*	*	*	74.000		
Average							
Detector:							

Note:

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

Product Test Item Test Site Test Mode	 AerialCast Harmonic Radiated Emission Data No.3 OATS Mode 3: Transmit (802.11n-40BW 30Mbps) (5190MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level	C			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10380.000	12.939	38.240	51.179	-22.821	74.000		
15570.000	*	*	*	*	74.000		
20760.000	*	*	*	*	74.000		
25950.000	*	*	*	*	74.000		
31140.000	*	*	*	*	74.000		
36330.000	*	*	*	*	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
10380.000	13.796	37.310	51.106	-22.894	74.000		
20760.000	*	*	*	*	74.000		
25950.000	*	*	*	*	74.000		
31140.000	*	*	*	*	74.000		
36330.000	*	*	*	*	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	Test Item:Harmonic Radiated Emission DataTest Site:No.3 OATS						
		X	1 / (,			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10460.000	13.508	37.780	51.288	-22.712	74.000		
15690.000	*	*	*	*	74.000		
20920.000	*	*	*	*	74.000		
26150.000	*	*	*	*	74.000		
31380.000	*	*	*	*	74.000		
36610.000	*	*	*	*	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
10460.000	14.433	37.520	51.953	-22.047	74.000		
20920.000	*	*	*	*	74.000		
26150.000	*	*	*	*	74.000		
31380.000	*	*	*	*	74.000		
36610.000	*	*	*	*	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	 AerialCast Harmonic Radiated Emission Data No.3 OATS Mode 3: Transmit (802.11n-40BW 30Mbps) (5270MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10540.000	14.151	36.850	51.000	-23.000	74.000		
15810.000	*	*	*	*	74.000		
21080.000	*	*	*	*	74.000		
26350.000	*	*	*	*	74.000		
31620.000	*	*	*	*	74.000		
36890.000	*	*	*	*	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
10540.000	14.829	36.860	51.688	-22.312	74.000		
15810.000	*	*	*	*	74.000		
21080.000	*	*	*	*	74.000		
26350.000	*	*	*	*	74.000		
31620.000	*	*	*	*	74.000		
36890.000	*	*	*	*	74.000		
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 + 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	 AerialCast Harmonic Radiated Emission Data No.3 OATS Mode 3: Transmit (802.11n-40BW 30Mbps) (5310MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level	-			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10620.000	14.623	36.840	51.463	-22.537	74.000		
15930.000	*	*	*	*	74.000		
21240.000	*	*	*	*	74.000		
26550.000	*	*	*	*	74.000		
31860.000	*	*	*	*	74.000		
37170.000	*	*	*	*	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
10620.000	14.970	36.300	51.270	-22.730	74.000		
15930.000	*	*	*	*	74.000		
21240.000	*	*	*	*	74.000		
26550.000	*	*	*	*	74.000		
31860.000	*	*	*	*	74.000		
37170.000	*	*	*	*	74.000		
Average							
Detectory							

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average 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	: AerialCa : Harmon : No.3 OA	ic Radiated Emis	sion Data				
Test Mode	: Mode 3: Transmit (802.11n-40BW 30Mbps) (5510MHz)						
_							
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11020.000	16.474	36.640	53.113	-20.887	74.000		
15930.000	*	*	*	*	74.000		
21240.000	*	*	*	*	74.000		
26550.000	*	*	*	*	74.000		
31860.000	*	*	*	*	74.000		
37170.000	*	*	*	*	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
11020.000	17.224	36.700	53.924	-20.076	74.000		
15930.000	*	*	*	*	74.000		
21240.000	*	*	*	*	74.000		
26550.000	*	*	*	*	74.000		
31860.000	*	*	*	*	74.000		
37170.000	*	*	*	*	74.000		
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 + 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	: AerialCa : Harmon : No.3 OA	ic Radiated Emis	sion Data				
Test Mode	: Mode 3: Transmit (802.11n-40BW 30Mbps) (5550MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
riequency	Factor	Level	Level	wargin	Liiiit		
MII-	dB			đŀ	dDa V/m		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11100.000	16.681	35.460	52.141	-21.859	74.000		
15930.000	*	*	*	*	74.000		
21240.000	*	*	*	*	74.000		
26550.000	*	*	*	*	74.000		
31860.000	*	*	*	*	74.000		
37170.000	*	*	*	*	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
11100.000	17.523	35.710	53.233	-20.767	74.000		
15930.000	*	*	*	*	74.000		
21240.000	*	*	*	*	74.000		
26550.000	*	*	*	*	74.000		
31860.000	*	*	*	*	74.000		
37170.000	*	*	*	*	74.000		
Average							
Detectory							

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average 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	: AerialCa : Harmon : No.3 OA	ic Radiated Emiss	sion Data				
Test Mode	: Mode 3: Transmit (802.11n-40BW 30Mbps) (5670MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
1 5	Factor	Level	Level	C			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11340.000	16.408	35.840	52.247	-21.753	74.000		
15930.000	*	*	*	*	74.000		
21240.000	*	*	*	*	74.000		
26550.000	*	*	*	*	74.000		
31860.000	*	*	*	*	74.000		
37170.000	*	*	*	*	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
11340.000	17.167	35.990	53.157	-20.843	74.000		
15930.000	*	*	*	*	74.000		
21240.000	*	*	*	*	74.000		
26550.000	*	*	*	*	74.000		
31860.000	*	*	*	*	74.000		
37170.000	*	*	*	*	74.000		
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 + 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	 AerialCast General Radiated Emission No.3 OATS Mode 1: Transmit (802.11a-6Mbps) (5220MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector							
161.920	-11.626	47.213	35.588	-7.912	43.500		
392.780	-2.096	36.327	34.231	-11.769	46.000		
483.960	-0.688	36.919	36.232	-9.768	46.000		
600.360	3.977	33.950	37.927	-8.073	46.000		
712.880	3.569	27.806	31.375	-14.625	46.000		
961.200	6.450	43.499	49.949	-4.051	54.000		
Vertical Peak Detector							
111.480	-0.954	35.740	34.786	-8.714	43.500		
181.320	-9.512	44.271	34.759	-8.741	43.500		
222.060	-8.789	43.212	34.423	-11.577	46.000		
286.080	-8.097	45.106	37.009	-8.991	46.000		
365.620	-2.179	34.574	32.395	-13.605	46.000		
747.800	2.166	30.672	32.838	-13.162	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	 AerialCast General Radiated Emission No.3 OATS Mode 1: Transmit (802.11a-6Mbps) (5300MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector							
222.060	-10.439	45.017	34.578	-11.422	46.000		
505.300	0.308	31.268	31.576	-14.424	46.000		
664.380	2.062	29.952	32.014	-13.986	46.000		
747.800	3.296	29.620	32.916	-13.084	46.000		
858.380	5.972	31.844	37.816	-8.184	46.000		
961.200	6.450	43.202	49.652	-4.348	54.000		
Vertical Peak Detector							
101.780	-0.021	34.656	34.634	-8.866	43.500		
171.620	-0.021	41.884	33.132	-8.800			
					43.500		
229.820	-8.512	44.640	36.128	-9.872	46.000		
363.680	-2.393	37.978	35.585	-10.415	46.000		
480.080	-4.359	32.641	28.282	-17.718	46.000		
961.200	7.260	33.483	40.743	-13.257	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.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product	: AerialCast						
Test Item	: General Radiated Emission						
Test Site	: No.3 OATS						
Test Mode	: Mode 1:	Transmit (802.11	a-6Mbps) (5580MHz	2)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector							
152.220	-10.135	41.859	31.724	-11.776	43.500		
402.480	-2.263	33.788	31.525	-14.475	46.000		
513.060	1.550	30.172	31.722	-14.278	46.000		
625.580	1.770	28.788	30.558	-15.442	46.000		
697.360	3.171	27.379	30.550	-15.450	46.000		
961.200	6.450	43.013	49.463	-4.537	54.000		
Vertical							
Peak Detector							
134.760	-4.648	37.232	32.584	-10.916	43.500		
355.920	-3.488	38.783	35.295	-10.705	46.000		
480.080	-4.359	36.246	31.887	-14.113	46.000		
600.360	-2.833	29.121	26.288	-19.712	46.000		
747.800	2.166	29.746	31.912	-14.088	46.000		
961.200	7.260	36.865	44.125	-9.875	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.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item	: AerialCast : General Radiated Emission						
Test Site	No.3 OATS						
Test Mode			n-20BW 14.4Mbps) ((5220MHz)			
1000 111000				(022011112)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector							
171.620	-10.242	44.542	34.300	-9.200	43.500		
406.360	-2.500	35.772	33.272	-12.728	46.000		
559.620	1.664	33.160	34.824	-11.176	46.000		
608.120	4.384	29.852	34.236	-11.764	46.000		
720.640	3.511	31.804	35.315	-10.685	46.000		
961.200	6.450	43.648	50.098	-3.902	54.000		
Vertical							
Peak Detector							
159.980	-6.185	38.478	32.293	-11.207	43.500		
288.020	-8.189	44.244	36.055	-9.945	46.000		
390.840	-3.099	37.207	34.108	-11.892	46.000		
509.180	-0.158	31.207	31.049	-14.951	46.000		
687.660	2.444	27.477	29.921	-16.079	46.000		
961.200	7.260	36.351	43.611	-10.389	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.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: No.3 OA	Radiated Emissio	n n-20BW 14.4Mbps) ((5300MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
148.340	-10.254	41.038	30.784	-12.716	43.500
408.300	-2.866	38.357	35.491	-10.509	46.000
474.260	0.024	36.979	37.002	-8.998	46.000
600.360	3.977	34.330	38.307	-7.693	46.000
720.640	3.511	32.508	36.019	-9.981	46.000
961.200	6.450	43.038	49.488	-4.512	54.000
Vertical Peak Detector					
111.480	-0.954	37.405	36.451	-7.049	43.500
235.640	-9.330	48.536	39.206	-6.794	46.000
390.840	-3.099	35.414	32.315	-13.685	46.000
480.080	-4.359	40.738	36.379	-9.621	46.000
666.320	-1.809	32.539	30.731	-15.269	46.000
961.200	7.260	36.131	43.391	-10.609	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.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	 AerialCast General Radiated Emission No.3 OATS Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5580MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector							
159.980	-11.775	43.334	31.559	-11.941	43.500		
355.920	-2.528	40.571	38.043	-7.957	46.000		
460.680	1.589	34.277	35.866	-10.134	46.000		
600.360	3.977	35.394	39.371	-6.629	46.000		
720.640	3.511	31.599	35.110	-10.890	46.000		
825.400	6.250	24.043	30.293	-15.707	46.000		
Vertical							
Peak Detector							
159.980	-6.185	41.531	35.346	-8.154	43.500		
288.020	-8.189	43.397	35.208	-10.792	46.000		
365.620	-2.179	40.213	38.034	-7.966	46.000		
480.080	-4.359	36.693	32.334	-13.666	46.000		
681.840	1.484	28.552	30.036	-15.964	46.000		
961.200	7.260	36.174	43.434	-10.566	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.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	 AerialCast General Radiated Emission No.3 OATS Mode 3: Transmit (802.11n-40BW 30Mbps) (5190MHz) 							
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m			
Horizontal								
Peak Detector								
101.780	-7.141	42.502	35.361	-8.139	43.500			
152.220	-10.135	40.694	30.559	-12.941	43.500			
369.500	-1.098	35.487	34.389	-11.611	46.000			
468.440	1.195	33.790	34.985	-11.015	46.000			
600.360	3.977	36.226	40.203	-5.797	46.000			
961.200	6.450	42.479	48.929	-5.071	54.000			
Vertical Peak Detector								
119.240	-3.541	34.451	30.910	-12.590	43.500			
237.580	-8.970	49.206	40.236	-5.764	45.500			
357.860	-3.734	49.200	36.895	-9.105	46.000			
480.080	-4.359	40.02 <i>9</i> 35.967	31.608	-14.392	46.000			
687.660	-4.339	28.304	30.748	-14.392	46.000			
831.220	2.561	33.565	36.126	-9.874	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	: AerialCas : General R : No.3 OAT	Radiated Emissio	n		
Test Mode			n-40BW 30Mbps) (52	270MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
49.400	-11.018	44.021	33.003	-6.997	40.000
225.940	-9.878	45.873	35.994	-10.006	46.000
398.600	-2.268	36.141	33.873	-12.127	46.000
600.360	3.977	35.177	39.154	-6.846	46.000
747.800	3.296	29.772	33.068	-12.932	46.000
961.200	6.450	42.999	49.449	-4.551	54.000
Vertical					
Peak Detector					
165.800	-7.719	43.118	35.399	-8.101	43.500
276.380	-8.653	45.953	37.300	-8.700	46.000
369.500	-2.868	38.155	35.287	-10.713	46.000
480.080	-4.359	39.388	35.029	-10.971	46.000
664.380	-1.918	34.414	32.496	-13.504	46.000
961.200	7.260	36.736	43.996	-10.004	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.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site	: AerialCas : General H : No.3 OA	Radiated Emissio	n		
Test Mode	: Mode 3: 7	Fransmit (802.11	n-40BW 30Mbps) (53	550MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
175.500	-10.017	46.537	36.519	-6.981	43.500
396.660	-2.296	35.982	33.686	-12.314	46.000
476.200	-0.252	39.170	38.918	-7.082	46.000
600.360	3.977	33.844	37.821	-8.179	46.000
666.320	2.031	31.468	33.500	-12.500	46.000
961.200	6.450	43.395	49.845	-4.155	54.000
Vertical					
Peak Detector					
169.680	-8.728	42.051	33.323	-10.177	43.500
299.660	-6.855	42.258	35.403	-10.597	46.000
373.380	-2.373	35.882	33.509	-12.491	46.000
503.360	-0.852	29.721	28.869	-17.131	46.000
637.220	-3.649	31.262	27.613	-18.387	46.000
961.200	7.260	34.913	42.173	-11.827	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.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

7. Band Edge

7.1. **Test Equipment**

RF Conducted Measurement

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

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

Note:

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

RF Radiated Measurement:

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

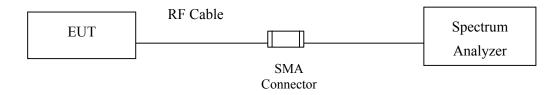
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
\Box Site # 3	Bilog Antenna		Schaffner Chase	CBL6112B/2673	Sep., 2013
	Х	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2013
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2013
	Pre-Amplifier		QTK	QTK-AMP-03 / 0003	May, 2013
	Х	Pre-Amplifier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

Note: 1. All instruments are calibrated every one year.

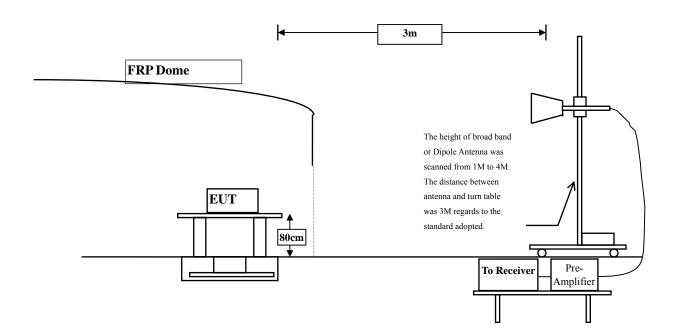
2. The test instruments marked by "X" are used to measure the final test results.

7.2. Test Setup

RF Conducted Measurement:



RF Radiated Measurement:



7.3. Limits

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

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

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

Remarks : 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)

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

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

7.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2009 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz. The EUT was setup to ANSI C63.10, 2009; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

7.5. Uncertainty

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

7.6. Test Result of Band Edge

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	·	Mode 1: Transmit (802,11a-6Mbps)-Channel 36

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
36 (Peak)	5150.000	3.340	42.620	45.960	74.00	54.00	Pass
36 (Peak)	5177.000	3.246	95.648	98.893			
36 (Average)	5150.000	3.340	29.629	32.969	74.00	54.00	Pass
36 (Average)	5175.600	3.251	86.633	89.883			



Horizontal (Peak)

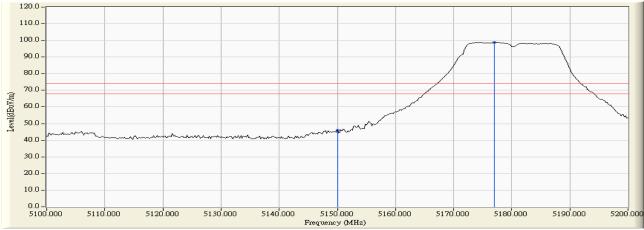


Figure Channel 36:

Horizontal (Average)



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

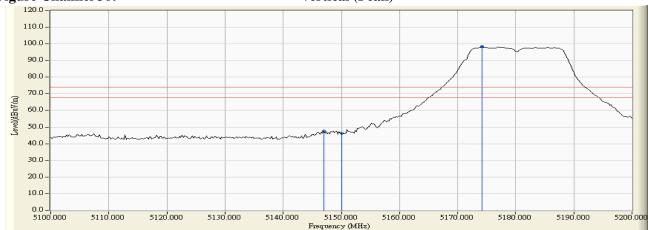
- 2. Peak measurements: RBW = 1MHz, VBW = 3MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)-Channel 36

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
36 (Peak)	5147.000	5.252	42.278	47.530	74.00	54.00	Pass
36 (Peak)	5150.000	5.260	40.907	46.167	74.00	54.00	Pass
36 (Peak)	5174.200	5.327	93.015	98.341			
36 (Average)	5150.000	5.260	28.570	33.830	74.00	54.00	Pass
36 (Average)	5177.600	5.336	83.541	88.876			

Figure Channel 36:

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. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 64

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
64 (Peak)	5317.400	3.820	95.680	99.501			
64 (Peak)	5350.000	3.716	46.069	49.786	74.00	54.00	Pass
64 (Average)	5317.600	3.820	86.526	90.346			
64 (Average)	5350.000	3.716	32.544	36.261	74.00	54.00	Pass

Figure Channel 64:

Horizontal (Peak)

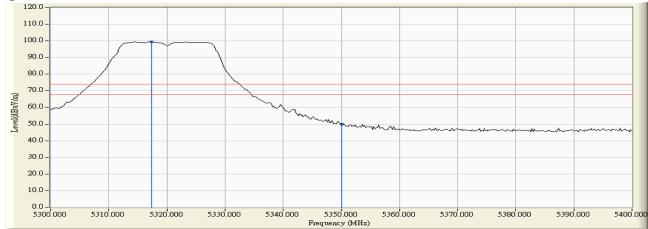
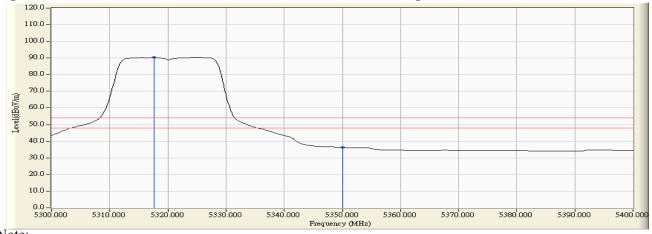


Figure Channel 64:

Horizontal (Average)



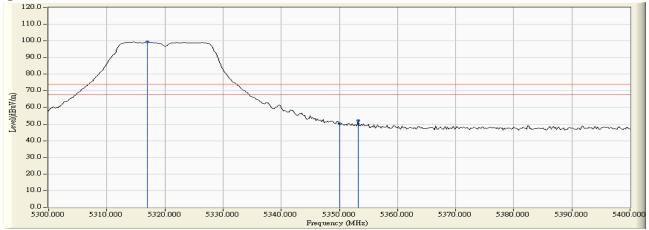
- All readings above 1GHz are performed with peak and/or average measurements as necessary. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto. "*", means this data is the worst emission level. 1.
- 2. 3.
- 4.
- 5. Measurement Level = Reading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

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 64

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
64 (Peak)	5317.000	5.732	93.650	99.383			
64 (Peak)	5350.000	5.691	44.610	50.302	74.00	54.00	Pass
64 (Peak)	5353.200	5.688	46.280	51.967	74.00	54.00	Pass
64 (Average)	5317.600	5.732	84.539	90.271			
64 (Average)	5350.000	5.691	31.878	37.570	74.00	54.00	Pass

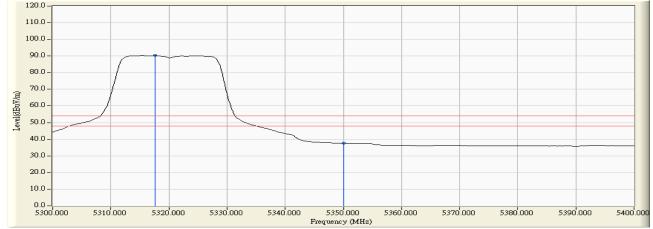
Figure Channel 64:

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. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 100

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
100 (Peak)	5460.000	4.354	41.049	45.403	74.00	54.00	Pass
100 (Peak)	5505.400	4.845	95.609	100.455			
100 (Average)	5427.000	3.915	28.836	32.751	74.00	54.00	Pass
100 (Average)	5460.000	4.354	26.554	30.908	74.00	54.00	Pass
100 (Average)	5504.400	4.845	86.698	91.543			

Figure Channel 100:

Horizontal (Peak)

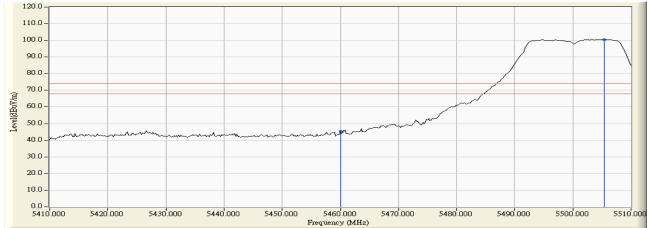
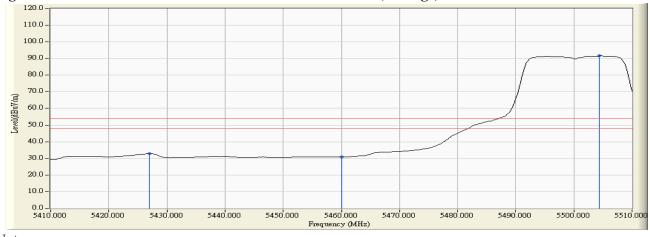


Figure Channel 100:

Horizontal (Average)



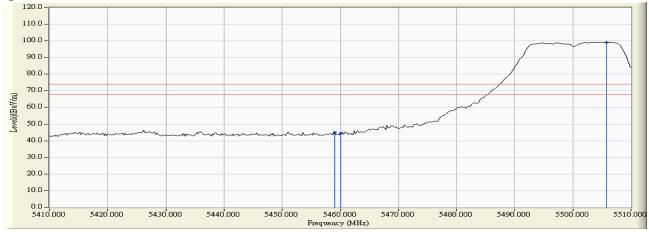
- All readings above 1GHz are performed with peak and/or average measurements as necessary. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto. 1.
- 2.
- 3.
- "*", means this data is the worst emission level. 4.
- Measurement Level = Reading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

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 100

Channel No.	Frequency		U	Emission Level		U	Result
entwinter i to:	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	1000010
100 (Peak)	5459.000	6.033	38.883	44.917	74.00	54.00	Pass
100 (Peak)	5460.000	6.041	38.426	44.467	74.00	54.00	Pass
100 (Peak)	5505.800	6.284	92.918	99.203			
100 (Average)	5428.000	5.820	26.950	32.770	74.00	54.00	Pass
100 (Average)	5460.000	6.041	25.331	31.372	74.00	54.00	Pass
100 (Average)	5505.200	6.289	84.008	90.297			

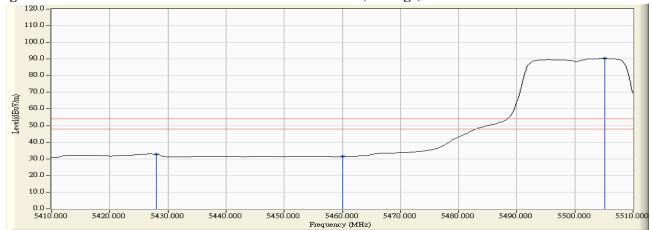
Figure Channel 100:

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. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 100

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-68.680	-50.346	-23.346	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5470.000	19.335	-68.660	-49.325	-22.325	-27.000	Pass

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 140

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-67.220	-48.571	-21.571	-27.000	Pass

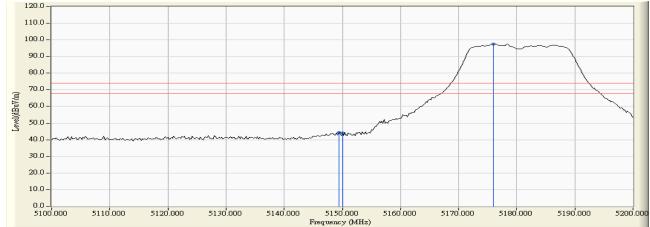
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	19.372	-69.180	-49.808	-22.808	-27.000	Pass

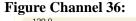
Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 36

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level		U	Result
Channel NO.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
36 (Peak)	5149.400	3.342	40.938	44.281	74.00	54.00	Pass
36 (Peak)	5150.000	3.340	40.893	44.233	74.00	54.00	Pass
36 (Peak)	5176.000	3.249	94.316	97.565			
36 (Average)	5150.000	3.340	27.760	31.100	74.00	54.00	Pass
36 (Average)	5176.600	3.246	83.822	87.068			

Figure Channel 36:

Horizontal (Peak)





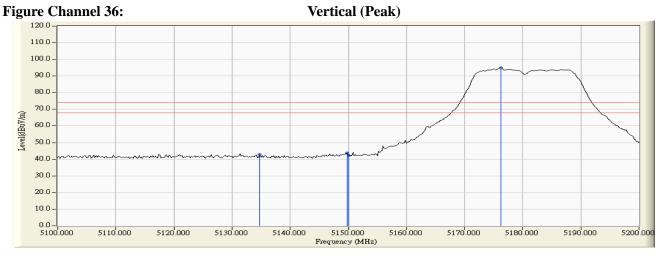
Horizontal (Average)

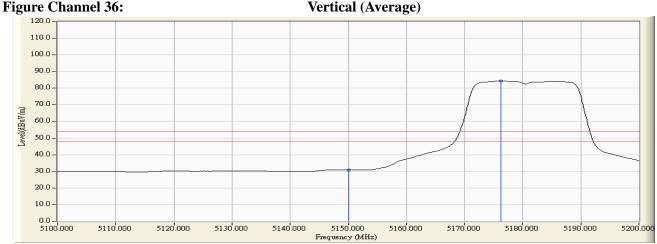


- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level =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

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 36

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
36 (Peak)	5134.800	5.218	37.544	42.762	74.00	54.00	Pass
36 (Peak)	5149.800	5.260	38.397	43.656	74.00	54.00	Pass
36 (Peak)	5150.000	5.260	36.736	41.996	74.00	54.00	Pass
36 (Peak)	5176.200	5.332	89.660	94.992			
36 (Average)	5150.000	5.260	25.679	30.939	74.00	54.00	Pass
36 (Average)	5176.200	5.332	78.899	84.231			





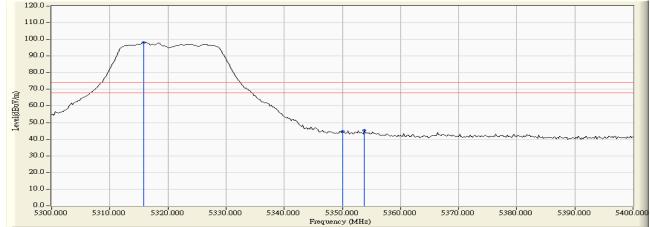
- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level =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

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 64

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
64 (Peak)	5315.800	3.826	94.374	98.200			
64 (Peak)	5350.000	3.716	40.905	44.622	74.00	54.00	Pass
64 (Peak)	5353.800	3.704	41.618	45.322	74.00	54.00	Pass
64 (Average)	5316.600	3.823	83.537	87.360			
64 (Average)	5350.000	3.716	28.194	31.911	74.00	54.00	Pass

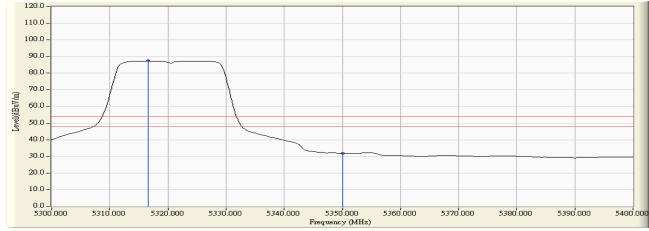
Figure Channel 64:

Horizontal (Peak)





Horizontal (Average)



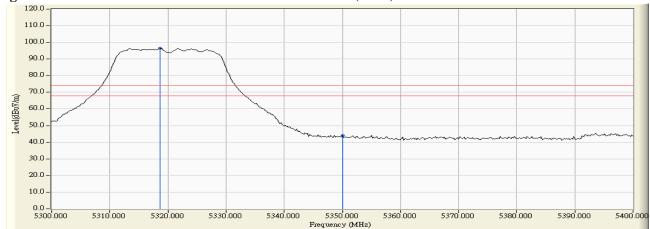
- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level =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

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 64

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
64 (Peak)	5318.600	5.731	90.680	96.411			
64 (Peak)	5350.000	5.691	38.371	44.063	74.00	54.00	Pass
64 (Average)	5316.000	5.733	80.752	86.486			
64 (Average)	5350.000	5.691	25.923	31.615	74.00	54.00	Pass

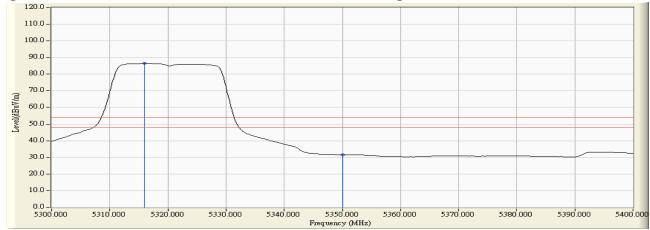
Figure Channel 64:

Vertical (Peak)





Vertical (Average)



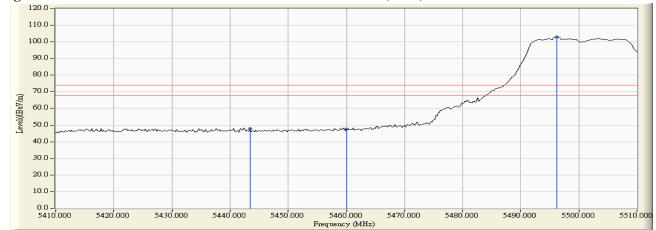
- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level =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

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 100

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
100 (Peak)	5443.400	4.134	43.676	47.810	74.00	54.00	Pass
100 (Peak)	5460.000	4.354	43.235	47.589	74.00	54.00	Pass
100 (Peak)	5496.200	4.788	98.220	103.008			
100 (Average)	5460.000	4.354	31.357	35.711	74.00	54.00	Pass
100 (Average)	5496.800	4.793	87.191	91.983			

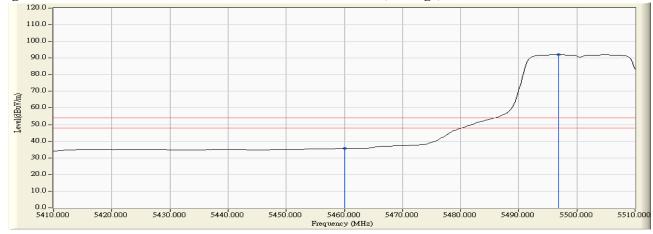
Figure Channel 100:

Horizontal (Peak)





Horizontal (Average)



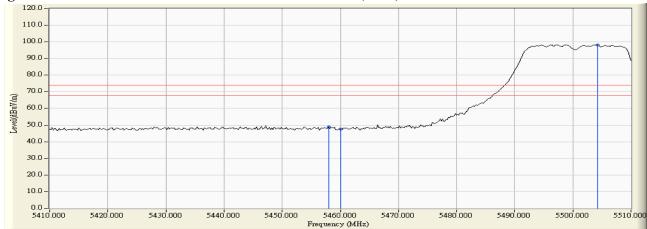
- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level =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

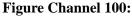
Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 100

Channel No.	1 2		0	Emission Level		Ç	Result
chamer 100.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	itesuit
100 (Peak)	5458.000	6.027	42.765	48.792	74.00	54.00	Pass
100 (Peak)	5460.000	6.041	41.604	47.645	74.00	54.00	Pass
100 (Peak)	5504.200	6.288	91.995	98.283			
100 (Average)	5460.000	6.041	30.320	36.361	74.00	54.00	Pass
100 (Average)	5497.200	6.267	81.392	87.658			

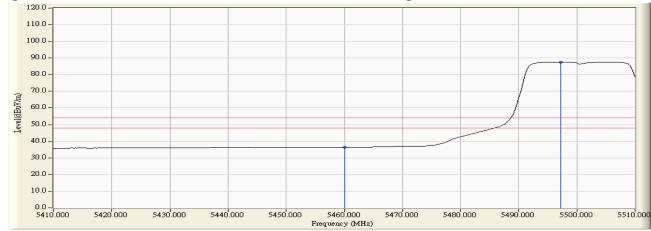
Figure Channel 100:

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. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 100

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizonta	l 5470.000	18.334	-68.140	-49.806	-22.806	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5470.000	19.335	-68.910	-49.575	-22.575	-27.000	Pass

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 140

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-68.220	-49.571	-22.571	-27.000	Pass

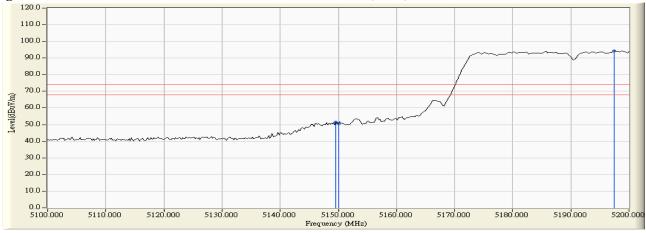
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	19.372	-68.790	-49.418	-22.418	-27.000	Pass

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 38

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
38 (Peak)	5149.600	3.342	48.143	51.485	74.00	54.00	Pass
38 (Peak)	5150.000	3.340	47.139	50.479	74.00	54.00	Pass
38 (Peak)	5197.400	3.163	91.087	94.250			
38 (Average)	5150.000	3.340	32.709	36.049	74.00	54.00	Pass
38 (Average)	5198.400	3.159	80.991	84.150			

Figure Channel 38:

Horizontal (Peak)





Horizontal (Average)



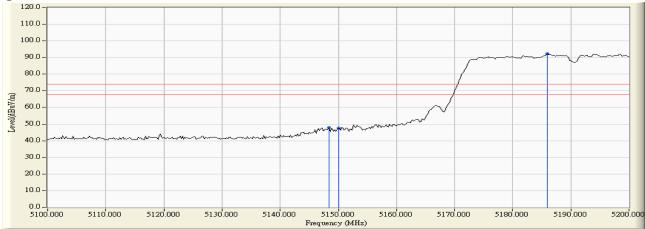
- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level =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

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 38

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
38 (Peak)	5148.400	5.256	42.819	48.075	74.00	54.00	Pass
38 (Peak)	5150.000	5.260	42.211	47.471	74.00	54.00	Pass
38 (Peak)	5186.000	5.359	86.817	92.175			
38 (Average)	5150.000	5.260	28.204	33.464	74.00	54.00	Pass
38 (Average)	5198.800	5.383	76.168	81.551			

Figure Channel 38:

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. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

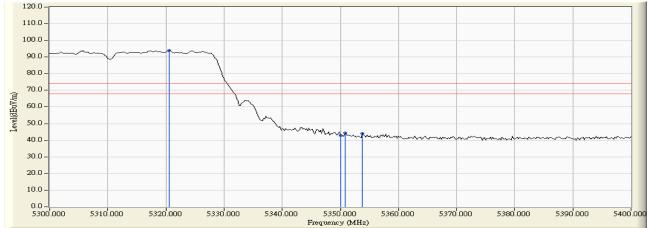


Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 62

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
62 (Peak)	5320.600	3.810	90.011	93.821			
62 (Peak)	5350.000	3.716	39.089	42.806	74.00	54.00	Pass
62 (Peak)	5350.800	3.714	40.701	44.415	74.00	54.00	Pass
62 (Peak)	5353.800	3.704	40.261	43.965	74.00	54.00	Pass
62 (Average)	5319.800	3.813	80.175	83.988			
62 (Average)	5350.000	3.716	27.786	31.503	74.00	54.00	Pass

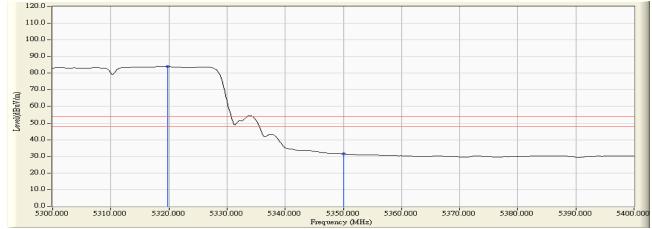
Figure Channel 62:

Horizontal (Peak)





Horizontal (Average)



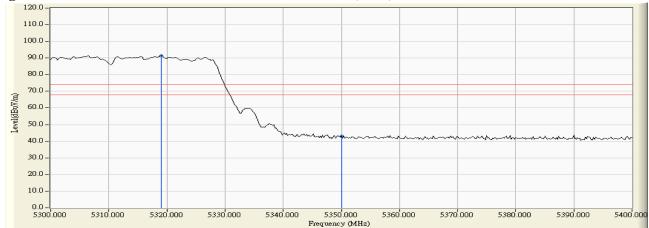
- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level =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

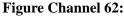
:	AerialCast
:	Band Edge Data
:	No.3 OATS
:	Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 62
	:

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
62 (Peak)	5319.000	5.731	85.627	91.357			
62 (Peak)	5350.000	5.691	37.551	43.243	74.00	54.00	Pass
62 (Average)	5318.600	5.731	74.778	80.509			
62 (Average)	5350.000	5.691	25.299	30.991	74.00	54.00	Pass

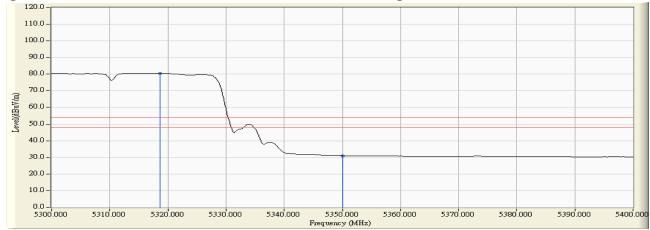
Figure Channel 62:

Vertical (Peak)





Vertical (Average)



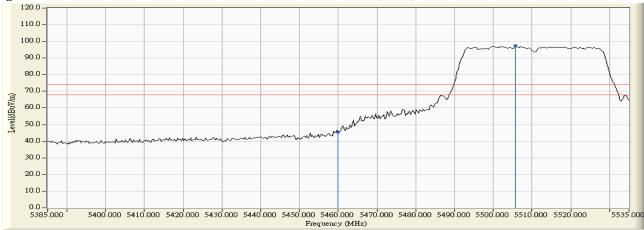
- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level =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

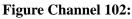
Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 102

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
102 (Peak)	5460.000	4.354	41.063	45 417	(uBu v/III) 74.00	54.00	Pass
102 (Peak)	5505.600	4.844	92.534	97.378			
102 (Average)	5460.000	4.354	29.315	33.669	74.00	54.00	Pass
102 (Average)	5503.800	4.842	82.572	87.413			

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. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

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

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
102 (Peak)	5459.400	6.037	39.499	45.536	74.00	54.00	Pass
102 (Peak)	5460.000	6.041	39.058	45.099	74.00	54.00	Pass
102 (Peak)	5505.900	6.284	87.917	94.201			
102 (Average)	5460.000	6.041	26.720	32.761	74.00	54.00	Pass
102 (Average)	5503.800	6.287	77.604	83.890			

Figure Channel 102:

Vertical (Peak)

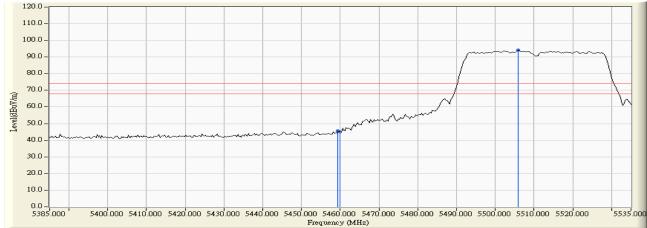


Figure Channel 102:

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. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

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

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-67.420	-49.086	-22.086	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5470.000	19.335	-68.920	-49.585	-22.585	-27.000	Pass

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 134

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-68.990	-50.341	-23.341	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	19.372	-69.140	-49.768	-22.768	-27.000	Pass

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)

Test Frequency	Measurement Level (20dB BW)	Limit	Result
(MHz)	(MHz)	(MHz)	
5580	5589.35	<5600	PASS
5660	5650.50	>5650	PASS

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement. 5580MHz

Aglient Spectrum Analyzer - Swe					
NARL NT 50 ຊ Center Freq 5.58000	AC 0000 GHz	SENSE:INT	ALIGN AUTO Avg Type: Log-Pwr	06:10:31 AMNoy 09, 201	Frequency
•	PNO: Fast (IEGain:Low	Trig: Free Run #Atten: 30 dB	Mk	12 5.589 35 GHz	Auto Tun
10 dB/dlv Ref 20.00 c	iBm		1	-24.41 dBm	Center Fre 5.580000000 GH
10.0 20.0 10.0			2	-24.15 000	Start Fre 5.555000000 GH
sn n sv					Stop Fre 5.605000000 GH
enter 5.58000 GHz Res BW 300 kHz		W 1.0 MHz		Span 50.00 MH 500 ms (1001 pts	CF Ste 5.000000 MH
888 MINDE 1809 SID 1 N 1 f 2 N 1 f	× 5.584 80 GHz	-4.15 dBm	EINCLEN FUNCTION WIDT	EINCHIN WITH	Auto Ma
2 N 1 f 3 4 5 6 7 7	5.589 35 GHz	-24.41 dBm			Freq Offso 0 F
8 9 10 11 12					
sg			STATU	s	-

			0101112		
Agilent Spectrum Analyz	er - Swept SA	GENGERIN		07:17:25 PMNov 20, 2010	
	660000000 GHz	Trig: Free Run Atten: 30 dB	Avg Type: Log-Pwr Avg Hold>100/100	TYPE MULTURE PRINT 20,2010	<u> </u>
10 dB/div Ref 2	0.00 dBm	Atten. 30 db	Mkr	2 5.650 50 GHz -29.310 dBm	
					Center Fre 6.66000000 GH
20 0 10 0	2			-28.67 (Br)	Start Fre 5.635000000 GH
20.0 10.0					Stop Fre 5.68500000 GH
enter 5.66000 (Res BW 100 kH		BW 300 kHz	#Sweep	Span 50.00 MHz 500 ms (1001 pts)	CF Ste 5.000000 Mi
REMODE TRO SOL 1 N 1 f 2 N 1 f	5.664 15 GHz 5.650 50 GHz	-8.648 dBm -29.310 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	Auto Ma
3 4 5 6 7					Freq Offs 0 F
8 9 10 11 12					
sg		I	STATU	3	1

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 14.4Mbps)

Chain A

Test Frequency	Measurement Level (20dB BW)	Limit	Result
(MHz)	(MHz)	(MHz)	
5580	5590.65	<5600	PASS
5660	5650.30	>5650	PASS

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement. 5580MHz

Frequency	17 AMNUV 12, 2013 IRACE 1 2 0 4 5 6 TYPE MUNUMUM	TRAI	ALIGNAUTO : Log-Pwr	Avg Typ		7	lz 10:last ⊂ jain:Luw	AC.		Freq	ter
Auto Tur	0 65 GHz 3.16 dBm		Mkr			Bracelli V	ain:cow		ef 20.00 (Re	3/div
Center Fre 6.68000000 G				~		0 ¹					
Start Fre 5.555000000 GI	22.01 dUm	and the second	¢ ²	,			/	مرد	manum		
Stop Fre 5.605000000 Gi	- Andrew all										
CF Ste 5.000000 M Auto M	n 50.00 MHz s (1001 pts)	500 ms (#Sweep	CTION T	n.	/ 1.0 MHz	#VBV	×		5.580 V 300	s BV
Freq Offs 01					Bm 3m	-2.81 d -23.16 d		<u>5,577 0</u> 5,590 6		1 f	NN
			STATUS								

Agilent Spectrum Ani									
Center Freq	5.66000000 C		Trig: Free F	Run	Avg Type Avg Hold:		TRAC	4Nev 24, 2113 E 1 2 3 4 5 6 C M	Frequency
10 dB/dlv Ref	20.00 dBm	Gain:Luw	Atten: 30 d		orginee		2 5.650	30 GHz 37 dBm	Auto Tune
10.0 10.0 -10.0		Anoremante	Harr ^a to Boreija, gd	1	With may				Center Free 5.660000000 GH:
-20.0 30.0 40.0	water the second	↓ ²			(and a second	withour man	-25.51 dBm	Start Free 5.635000000 GH
50.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									Stop Fre 5.685000000 GH
Center 5.6600 #Res BW 100	kHz	#VBW :	300 kHz	Film		<u> </u>		0.00 MHz 1001 pts)	CF Ste 5.000000 MH
MKE MODE TRG SCU 1 N 1 F 2 N 1 F 3	5.663	16 GHz 30 GHz	-5.511 dBi -25.787 dBr	m		ICTION WIDTH	FUNCTIO	IN VALUE	Auto Ma Freq Offse 0 H
7 8 9 10 11 12									
15C						STATUS			

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 14.4Mbps)

Chain B

Test Frequency	Measurement Level (20dB BW)	Limit	Result
(MHz)	(MHz)	(MHz)	
5580	5589.90	<5600	PASS
5660	5650.25	>5650	PASS

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement. 5580MHz

								pt SA	alyzer - Swe	ctrum An		
Franciscon	VMNov 09, 2013		ALIGNAUTO		NSE: INT	SE		ΛC		RF		R
Frequency	0123456	TRAC	:Log-Pwr	Avg Typ			lz	0000 G	5.58000	Frea	nter) er
	FF MWWWWW ET P N N N N N	TYP				Trig: Free	NO: Fast 🗔	P				
	erp anana) dB	#Atten: 3	Sain:Low	IF				
Auto Tur	90 GHz	2 5.589	Mkr2									
	06 dBm	-26 (D.m.	f 20.00 d			
	00 00	20.						ыш	1 20.00 (Re	dB/dlv	og go.
	· •											10.0
Center Fre	· •				. 1						1	
5.580000000 Gł	· •				0 ¹						U	J.UU
	I 11			m	mon	www.	,///				n	in n
	I 1		2	1 1	ř.							
Start Fre	26103 (Ph)		r —				V				u —	U.U
			S.,				1					ຄຸ
5.555000000 G	· •							and a				10.0
		Terrer	200						and the second		"	
	-helener and	and a star							-96°		n -	nn
Stop Fre	- Second										• [ກກ
5.60500000 G												
5.605000000 GI	- I										U	/U.U
05.04	50.00 MHz								0 GHz			
CF Ste 6.000000 Mi	(1001 pts)	500 ms (#Sweep			1.0 MHz	#VBV		kHz	N 300	es BV	Re
	IN VALUE		ICITIN WIDTH	UUN IR							MIDE	
Auto Ma	INVAILE	FUNLTU	ALTIIN WIDTH	.TITIN P		-6.03 d	E CUL	×		1 f	يسعد	1
						-26.06 d		5.589 9			N	2
-					200						- 14	3
Freq Offs												4
01												5
					_							6
												78
					-						\vdash	9
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												1
												2
			SIAIUS									a:
			anarua									

gilent Spectrum Analyzer - Si		SENSE:INI	ALIGNAUTO	17232111MNnv21,2113	
enter Freq 5.6600			Avg Type: Log-Pwr Avg Hold>100/100	TRACE 1 2 0 4 5 6 TYPE MUMANUM DLI P NNNNN	Frequency
0 dB/dly Ref 20.00	IFGain:Luw	Atten: 30 dB	Mkr	1 5.656 65 GHz -6.020 dBm	Auto Tun
		1			Center Fre 5.66000000 GH
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	ar unumbring		La Carlor Carlor	-78.17 iPm	Start Fre 5.635000000 GF
50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0					Stop Fre 5.685000000 GH
enter 5.66000 GHz Res BW 100 kHz	#VBV	/ 300 kHz	#Sweep	8pan 50.00 MHz 500 ms (1001 pts) EUXIMION VALUE	CF Ste 5.000000 Mi Auto Mi
1 N 1 F 2 N 1 F 3 4 5 5	6.666 66 GHz 5.650 25 GHz	-6.020 dBm -27.015 dBm			Auto M Freq Offs
6 7 9 0 1					
2					

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps)

Chain A

Test Frequency	Measurement Level (20dB BW)	Limit	Result
(MHz)	(MHz)	(MHz)	
5550	5569.30	<5600	PASS
5670	5650.70	>5650	PASS

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

		0000			
gilent Spectrum Analyzer - Swe	spt SA				
। । । ॥ । । ৩০ Center Freq 5.55000		Trig: Free Run #Atten: 30 dB	ALIGNAUTO Avg Type: Log-Pwr	D4:44:36 AMNuv 12,2013 IKACL [2 3 4 5 6 IYPE MUNUM NNN N DET P NNNN N	Frequency
0 dB/div Ref 20.00 d	dBm		Mk	r2 5.569 3 GHz -26.57 dBm	Auto Tun
10.0			1		Center Fre
10.0	-munto	mammum			5.550000000 GH
0.0			* ²	-26.25 dDm	Start Fre
0.0	m		- V.		5.50000000 GH
U.U Antonio and a second and a			~~~~	warman and when a price	Stop Fre
70.0					5.600000000 GH
enter 5.55000 GHz Res BW 300 kHz	#VBW	1.0 MHz	#Sweep	Span 100.0 MHz 500 ms (1001 pts)	CF Ste 10.000000 MH
AN MARKE FINE FOR	X 6.560 3 GHz	-6.26 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Ma
2 N 1 F 3 4	5.569 3 GHz	-26.57 dBm			Freq Offs
5					01
7 8 9					
0					
2			STATUS		

5550MHz

Agilent Spectrum Analyzer - Swept SA				
Center Freq 5.670000000 GHz	SENSE:INT	Avg Type: Log-Pwr Avg Hold>100/100	16:21:02 PMNev 20, 2013 TBACF 1 2 3 4 5 h TYTE MWWWWW	Frequency
IFGain			DET P NNNN N	Auto Tune
10 dB/dlv Ref 20.00 dBm		Mk	r1 5.680 3 GHz -8.873 dBm	Auto Tulle
10.0				Center Free
10.00	man water and	1		5.67000000 GH
20.0			7687 i 2 hi	Start Free
40 0 algermander of rate proved and and			no-makerin	5.62000000 GH
50.0				Stop Free
-70.0				5.720000000 GH
Center 5.67000 GHz #Res BW 300 kHz	#VBW 1.0 MHz	#Sweep	Span 100.0 MHz 500 ms (1001 pts)	CF Step 10.000000 MH
MKH MIULF THO SID × 1 N 1 f 5.680 3 G		FUNCTION FUNCTION WIDTH	FUNCTION VALUE	Auto Mar
2 N 1 f 6,6607G	lz -29.329 dBm			Freq Offse
5				0 H
7 8 9				
10				
12 M8G		STATUS	L]	

Product	:	AerialCast
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 30Mbps)

Chain B

Test Frequency	Measurement Level (20dB BW)	Limit	Result
(MHz)	(MHz)	(MHz)	
5550	5569.10	<5600	PASS
5670	5650.80	>5650	PASS

NOTE: The 5600~5650MHz band is not used in accordance with 15.215 requirement. 5550MHz

glient Spectrum Analyzer - Sw					
enter Freq 5.55000	AC 00000 GHz	Trig: Free Run	Aug Type: Log-Pwr	07:30:50 AMNov 09, 2013	Frequency
0 dB/dly Ref 20.00 (PN0: Fast (IEGain: I ow	#Atten: 30 dB	M	rr2 5.569 1 GHz -28.76 dBm	Auto Tun
•9 10.0 10.0		1 	mprostan		Center Fre 5.55000000 GH
nn			22	-20.47 dDm	Start Fre 5.500000000 G⊦
0.0				. We share the second second second second	Stop Fre 5.60000000 GF
enter 5.55000 GHz Res BW 300 kHz	#VB	N 1.0 MHz	#Sweep	Span 100.0 MHz 500 ms (1001 pts)	CF Ste 10.000000 MH Auto Ma
1 N 1 f 2 N 1 f 3 4	5.540 1 GHz 5.569 1 GHz	-8.46 dBm -28.76 dBm			Freq Offse
5 6 7 8					01
9 0 1 2					
a			STATU	8	

Center Freg 5.67000000		-N53-: IN1			
	GHz	Avg Type	Log-Pwr T	21MNnv21,2113 RACF 1 2 3 4 5 6	Frequency
•	IFGain:Luw #Atten: 3	eRun Avg Hold: 0 dB	>100/100		
10 dB/dlv Ref 20.00 dBm				738GHz 627dBm	Auto Tune
10.0					Center Fre
0.00		1			5.67000000 GH
10.0	proversion	mannen			
-20.0	02	1 \		29.63 dBm	Start Fre
30.0 40.0	1		a construction		5.62000000 GH
50.0				- Constantin - Const	
60.0					Stop Fre
-70.0					5.72000000 GH
Center 5.67000 GHz #Res BW 300 kHz	#VBW 1.0 MHz		Spar #Sweep 500 ms	100.0 MHz (1001 pts)	CF Ste
MKR MIDE IRC SD X	Y		•	<u>` </u>	10.000000 MH Auto Ma
	738 GHz -9.627 d 508 GHz -29.949 d				
3 4					Freq Offse
6					0 F
7 8					
9					
11 12					
12			STATUS		

8. Frequency Stability

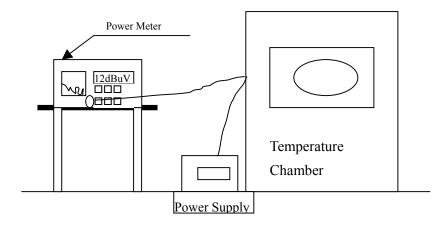
8.1. Test Equipment

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

Note:

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

8.2. Test Setup



8.3. Limits

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

8.4. Test Procedure

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

8.5. Uncertainty

± 150 Hz

8.6. Test Result of Frequency Stability

Product	:	AerialCast
Test Item	:	Frequency Stability
Test Site	:	Temperature Chamber
Test Mode	:	Carrier Wave

Chain A

Test Conditions		Channel	Frequency	Frequency	△F (MHz)
		Channel	(MHz)	(MHz)	∐r (Iviriz)
		36	5180.0000	5180.0068	-0.0068
		38	5190.0000	5190.0043	-0.0043
		44	5220.0000	5220.0082	-0.0082
		46	5230.0000	5230.0069	-0.0069
		48	5240.0000	5240.0077	-0.0077
		52	5260.0000	5270.0081	-0.0081
		54	5270.0000	5300.0062	-0.0062
T	V	60	5300.0000	5310.0058	-0.0058
Tnom (20) °C	Vnom (120)V	62	5310.0000	5320.0032	-0.0032
		64	5320.0000	5500.0093	-0.0093
		100	5500.0000	5510.0102	-0.0102
		102	5510.0000	5550.0100	-0.0100
		110	5550.0000	5580.0097	-0.0097
		116	5580.0000	5670.0082	-0.0082
		134	5670.0000	5700.0087	-0.0087
		140	5700.0000	5270.0081	-0.0081
		36	5180.0000	5180.0070	-0.0070
		38	5190.0000	5190.0040	-0.0040
		44	5220.0000	5220.0080	-0.0080
		46	5230.0000	5230.0070	-0.0070
		48	5240.0000	5240.0071	-0.0071
		52	5260.0000	5260.0083	-0.0083
		54	5270.0000	5270.0079	-0.0079
Tmax (50) °C	V_{max} (129) V	60	5300.0000	5300.0062	-0.0062
$1 \max(30) C$	Vmax (138)V	62	5310.0000	5310.0088	-0.0088
		64	5320.0000	5320.0073	-0.0073
		100	5500.0000	5500.0074	-0.0074
		102	5510.0000	5510.0069	-0.0069
		110	5550.0000	5550.0100	-0.0100
		116	5580.0000	5580.0094	-0.0094
		134	5670.0000	5670.0081	-0.0081
		140	5700.0000	5700.0077	-0.0077

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		36	5180.0000	5180.0069	-0.0069
		38	5190.0000	5190.0077	-0.0077
		44	5220.0000	5220.0088	-0.0088
		46	5230.0000	5230.0074	-0.0074
		48	5240.0000	5240.0066	-0.0066
		52	5260.0000	5260.0079	-0.0079
		54	5270.0000	5270.0092	-0.0092
T (50) %G		60	5300.0000	5300.0086	-0.0086
Tmax (50) °C	Vmin (102)V	62	5310.0000	5310.0061	-0.0061
		64	5320.0000	5320.0074	-0.0074
		100	5500.0000	5500.0073	-0.0073
		102	5510.0000	5510.0079	-0.0079
		110	5550.0000	5550.0099	-0.0099
		116	5580.0000	5580.0101	-0.0101
		134	5670.0000	5670.0088	-0.0088
		140	5700.0000	5700.0080	-0.0080
		36	5180.0000	5180.0064	-0.0064
		38	5190.0000	5190.0078	-0.0078
		44	5220.0000	5220.0094	-0.0094
		46	5230.0000	5230.0077	-0.0077
		48	5240.0000	5240.0082	-0.0082
		52	5260.0000	5260.0076	-0.0076
		54	5270.0000	5270.0093	-0.0093
$T = (10)^{9}$	V (120)V	60	5300.0000	5300.0084	-0.0084
Tmin (-10) °C	Vmax (138)V	62	5310.0000	5310.0097	-0.0097
		64	5320.0000	5320.0100	-0.0100
		100	5500.0000	5500.0067	-0.0067
		102	5510.0000	5510.0074	-0.0074
		110	5550.0000	5550.0088	-0.0088
		116	5580.0000	5580.0094	-0.0094
		134	5670.0000	5670.0084	-0.0084
		140	5700.0000	5700.0086	-0.0086

		36	5180.0000	5180.0064	-0.0064
		38	5190.0000	5190.0078	-0.0078
		44	5220.0000	5220.0094	-0.0094
		46	5230.0000	5230.0077	-0.0077
		48	5240.0000	5240.0082	-0.0082
		52	5260.0000	5260.0076	-0.0076
		54	5270.0000	5270.0093	-0.0093
Train (10) °C	V_{min} (102) V	60	5300.0000	5300.0084	-0.0084
Tmin (-10) °C	Vmin (102)V	62	5310.0000	5310.0097	-0.0097
		64	5320.0000	5320.0100	-0.0100
		100	5500.0000	5500.0067	-0.0067
		102	5510.0000	5510.0074	-0.0074
		110	5550.0000	5550.0088	-0.0088
		116	5580.0000	5580.0094	-0.0094
		134	5670.0000	5670.0084	-0.0084
		140	5700.0000	5700.0086	-0.0086

Chain B

Test C	Conditions	Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
		36	5180.0000	5180.0065	-0.0065
		38	5190.0000	5190.0040	-0.0040
		44	5220.0000	5220.0077	-0.0077
		46	5230.0000	5230.0067	-0.0067
		48	5240.0000	5240.0074	-0.0074
		52	5260.0000	5260.0084	-0.0084
		54	5270.0000	5270.0077	-0.0077
$T_{max}(20)$ %C	V_{max} (120) V_{max}	60	5300.0000	5300.0059	-0.0059
Tnom (20) °C	Vnom (120)V	62	5310.0000	5310.0057	-0.0057
		64	5320.0000	5320.0030	-0.0030
		100	5500.0000	5500.0090	-0.0090
		102	5510.0000	5510.0100	-0.0100
		110	5550.0000	5550.0098	-0.0098
		116	5580.0000	5580.0096	-0.0096
		134	5670.0000	5670.0080	-0.0080
		140	5700.0000	5700.0086	-0.0086
		36	5180.0000	5180.0069	-0.0069
		38	5190.0000	5190.0041	-0.0041
		44	5220.0000	5220.0077	-0.0077
		46	5230.0000	5230.0069	-0.0069
		48	5240.0000	5240.0064	-0.0064
		52	5260.0000	5260.0078	-0.0078
		54	5270.0000	5270.0073	-0.0073
$T_{max}(50)$ °C	V_{max} (129) V_{c}	60	5300.0000	5300.0060	-0.0060
Tmax (50) °C	Vmax (138)V	62	5310.0000	5310.0080	-0.0080
		64	5320.0000	5320.0069	-0.0069
		100	5500.0000	5500.0071	-0.0071
		102	5510.0000	5510.0061	-0.0061
		110	5550.0000	5550.0097	-0.0097
		116	5580.0000	5580.0093	-0.0093
		134	5670.0000	5670.0080	-0.0080
		140	5700.0000	5700.0074	-0.0074

		36	5180.0000	5180.0063	-0.0063
		38	5190.0000	5190.0074	-0.0074
		44	5220.0000	5220.0087	-0.0087
		46	5230.0000	5230.0070	-0.0070
		48	5240.0000	5240.0063	-0.0063
		52	5260.0000	5260.0077	-0.0077
		54	5270.0000	5270.0090	-0.0090
T	\mathbf{V}_{m} in (102) \mathbf{V}_{m}	60	5300.0000	5300.0084	-0.0084
Tmax (50) °C	Vmin (102)V	62	5310.0000	5310.0060	-0.0060
		64	5320.0000	5320.0072	-0.0072
		100	5500.0000	5500.0072	-0.0072
		102	5510.0000	5510.0077	-0.0077
		110	5550.0000	5550.0097	-0.0097
		116	5580.0000	5580.0099	-0.0099
		134	5670.0000	5670.0087	-0.0087
		140	5700.0000	5700.0079	-0.0079
		36	5180.0000	5180.0061	-0.0061
		38	5190.0000	5190.0077	-0.0077
		44	5220.0000	5220.0091	-0.0091
		46	5230.0000	5230.0077	-0.0077
		48	5240.0000	5240.0080	-0.0080
		52	5260.0000	5260.0071	-0.0071
		54	5270.0000	5270.0090	-0.0090
T	V	60	5300.0000	5300.0081	-0.0081
Tmin (-10) °C	Vmax (138)V	62	5310.0000	5310.0094	-0.0094
		64	5320.0000	5320.0094	-0.0094
		100	5500.0000	5500.0065	-0.0065
		102	5510.0000	5510.0071	-0.0071
		110	5550.0000	5550.0087	-0.0087
		116	5580.0000	5580.0092	-0.0092
		134	5670.0000	5670.0083	-0.0083
		140	5700.0000	5700.0085	-0.0085

Tmin (-10) °C	Vmin (102)V	36	5180.0000	5180.6300	-0.6300
		38	5190.0000	5190.0075	-0.0075
		44	5220.0000	5220.0084	-0.0084
		46	5230.0000	5230.0080	-0.0080
		48	5240.0000	5240.0087	-0.0087
		52	5260.0000	5260.0075	-0.0075
		54	5270.0000	5270.0089	-0.0089
		60	5300.0000	5300.7700	-0.7700
		62	5310.0000	5310.0090	-0.0090
		64	5320.0000	5320.0097	-0.0097
		100	5500.0000	5500.0079	-0.0079
		102	5510.0000	5510.0066	-0.0066
		110	5550.0000	5550.0074	-0.0074
		116	5580.0000	5580.0089	-0.0089
		134	5670.0000	5670.0077	-0.0077
		140	5700.0000	5700.0086	-0.0086

9. EMI Reduction Method During Compliance Testing

No modification was made during testing.