Product : ROS Video DMA
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 13Mbps) (5220MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
64.920	-5.683	39.455	33.772	-6.228	40.000
216.240	-8.317	45.242	36.925	-9.075	46.000
365.620	-2.179	39.695	37.516	-8.484	46.000
499.480	-0.852	39.277	38.425	-7.575	46.000
600.360	-2.833	41.165	38.332	-7.668	46.000
701.240	0.198	38.012	38.210	-7.790	46.000
Vertical					
Peak Detector					
64.920	-5.683	39.404	33.721	-6.279	40.000
295.780	-7.455	44.360	36.905	-9.095	46.000
499.480	-0.852	38.395	37.543	-8.457	46.000
699.300	0.695	36.713	37.408	-8.592	46.000
846.740	2.601	34.554	37.155	-8.845	46.000
990.300	3.530	34.515	38.045	-15.955	54.000

Note:

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

Product : ROS Video DMA
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 13Mbps) (5300MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
99.840	-7.471	43.603	36.132	-7.368	43.500
243.400	-6.441	40.796	34.355	-11.645	46.000
433.520	-1.972	39.397	37.425	-8.575	46.000
650.800	2.175	37.553	39.728	-6.272	46.000
809.880	5.049	33.730	38.779	-7.221	46.000
1000.000	9.119	27.030	36.149	-17.851	54.000
Vertical					
Peak Detector					
216.240	-8.317	45.173	36.856	-9.144	46.000
295.780	-7.455	44.823	37.368	-8.632	46.000
499.480	-0.852	39.307	38.455	-7.545	46.000
699.300	0.695	35.488	36.183	-9.817	46.000
912.700	1.762	35.400	37.162	-8.838	46.000
990.300	3.530	34.367	37.897	-16.103	54.000

Note:

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

Product : ROS Video DMA
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 13Mbps) (5600MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
99.840	-7.471	42.944	35.473	-8.027	43.500
216.240	-10.707	48.004	37.297	-8.703	46.000
433.520	-1.972	39.927	37.955	-8.045	46.000
650.800	2.175	37.263	39.438	-6.562	46.000
846.740	5.741	34.384	40.125	-5.875	46.000
1000.000	9.119	28.303	37.422	-16.578	54.000
Vertical					
Peak Detector					
165.800	-7.719	42.320	34.601	-8.899	43.500
295.780	-7.455	43.979	36.524	-9.476	46.000
365.620	-2.179	39.760	37.581	-8.419	46.000
499.480	-0.852	39.040	38.188	-7.812	46.000
699.300	0.695	35.297	35.992	-10.008	46.000
990.300	3.530	34.116	37.646	-16.354	54.000

Note:

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

Product : ROS Video DMA
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 27Mbps) (5190MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
266.680	-4.963	43.346	38.383	-7.617	46.000
365.620	-1.329	40.170	38.841	-7.159	46.000
499.480	0.048	39.205	39.253	-6.747	46.000
699.300	2.875	36.814	39.689	-6.311	46.000
864.200	5.671	33.193	38.864	-7.136	46.000
990.300	6.770	34.347	41.117	-12.883	54.000
Vertical					
Peak Detector					
216.240	-8.317	45.335	37.018	-8.982	46.000
295.780	-7.455	43.507	36.052	-9.948	46.000
365.620	-2.179	39.481	37.302	-8.698	46.000
499.480	-0.852	39.162	38.310	-7.690	46.000
699.300	0.695	36.791	37.486	-8.514	46.000
792.420	2.889	35.152	38.041	-7.959	46.000

Note:

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

Product : ROS Video DMA
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 27Mbps) (5270MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
99.840	-7.471	43.670	36.199	-7.301	43.500
216.240	-10.707	48.071	37.364	-8.636	46.000
456.800	-0.067	37.918	37.851	-8.149	46.000
650.800	2.175	37.439	39.614	-6.386	46.000
864.200	5.671	33.443	39.114	-6.886	46.000
1000.000	9.119	26.200	35.319	-18.681	54.000
Vertical					
Peak Detector					
295.780	-7.455	44.749	37.294	-8.706	46.000
499.480	-0.852	38.293	37.441	-8.559	46.000
600.360	-2.833	42.969	40.136	-5.864	46.000
701.240	0.198	36.325	36.523	-9.477	46.000
846.740	2.601	34.776	37.377	-8.623	46.000
990.300	3.530	34.476	38.006	-15.994	54.000

Note:

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

Product : ROS Video DMA
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 27Mbps) (5590MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
99.840	-7.471	43.107	35.636	-7.864	43.500
154.160	-10.091	47.218	37.127	-6.373	43.500
216.240	-10.707	48.603	37.896	-8.104	46.000
433.520	-1.972	39.541	37.569	-8.431	46.000
650.800	2.175	37.923	40.098	-5.902	46.000
864.200	5.671	33.310	38.981	-7.019	46.000
998.060	8.386	27.239	35.625	-18.375	54.000
Vertical					
Peak Detector					
128.940	-4.128	37.929	33.801	-9.699	43.500
216.240	-8.317	44.743	36.426	-9.574	46.000
295.780	-7.455	44.623	37.168	-8.832	46.000
499.480	-0.852	39.659	38.807	-7.193	46.000
846.740	2.601	34.584	37.185	-8.815	46.000
990.300	3.530	34.640	38.170	-15.830	54.000

Note:

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

8. Band Edge

8.1. Test Equipment

RF Conducted Measurement:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2009
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2009
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2010
X	8-WAY Power Divider	JFW	50PD-647 / 526770 0916	Apr., 2010

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.
3. The power combiner is used for measure 11n mode.

RF Radiated Measurement:

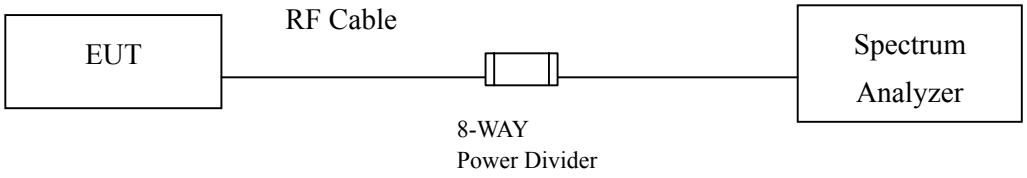
The following test equipments are used during the band edge tests:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3		Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2009
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2009
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2009
	X	Pre-Amplifier	Agilent	8447D/2944A09549	Sep., 2009
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2010
		Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2009
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2010
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

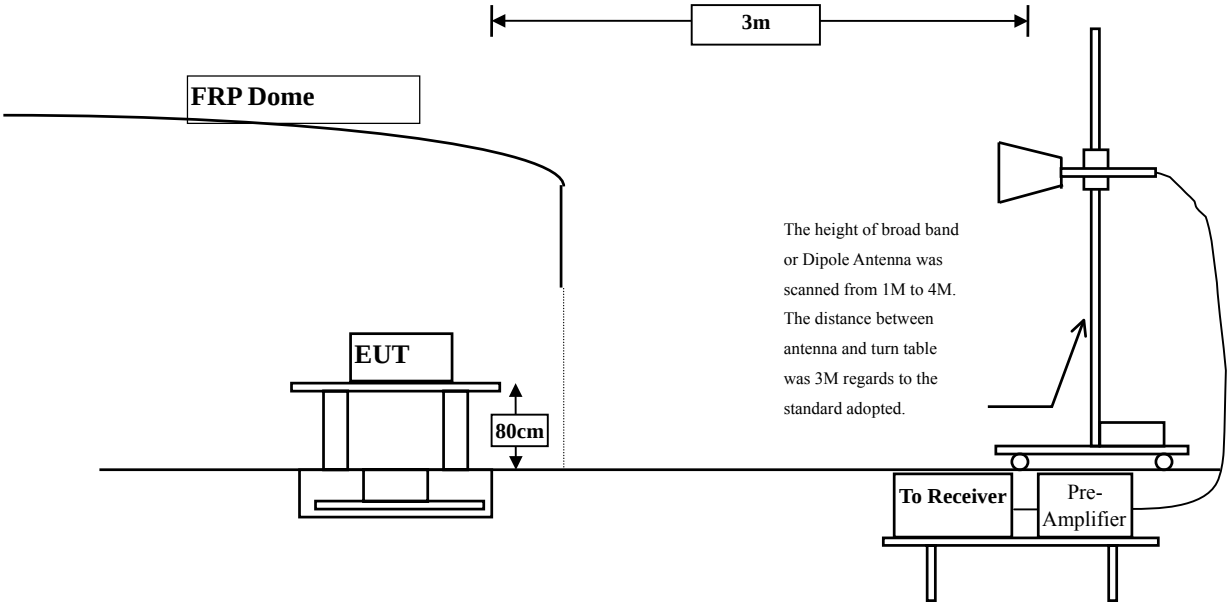
Note: 1. All instruments are calibrated every one year.
2. The test instruments marked by "X" are used to measure the final test results.

8.2. Test Setup

RF Conducted Measurement



RF Radiated Measurement:



8.3. Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.
Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

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

Remarks : 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

8.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.
The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2003 on radiated measurement.
The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz.
The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Aug 2002 DA 02-2138 for compliance to FCC 47CFR Subpart E requirements.

8.5. Uncertainty

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

8.6. Test Result of Band Edge

Product : ROS Video DMA
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps)-Channel 36

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Reading Level [dBuV]	Correction Factor [dB/m]	Emission Level [dBuV/m]	Detector
Horizontal	5180	34.966	75.29	110.256	Peak
Horizontal	5180	34.966	62.55	97.516	Average
Vertical	5180	37.073	75.1	112.174	Peak
Vertical	5180	37.073	62.58	99.654	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	5150	110.256	42.471	67.785	Peak
Horizontal	5150	97.516	52.315	45.201	Average
Vertical	5150	112.174	42.471	69.703	Peak
Vertical	5150	99.654	52.315	47.339	Average

Note:

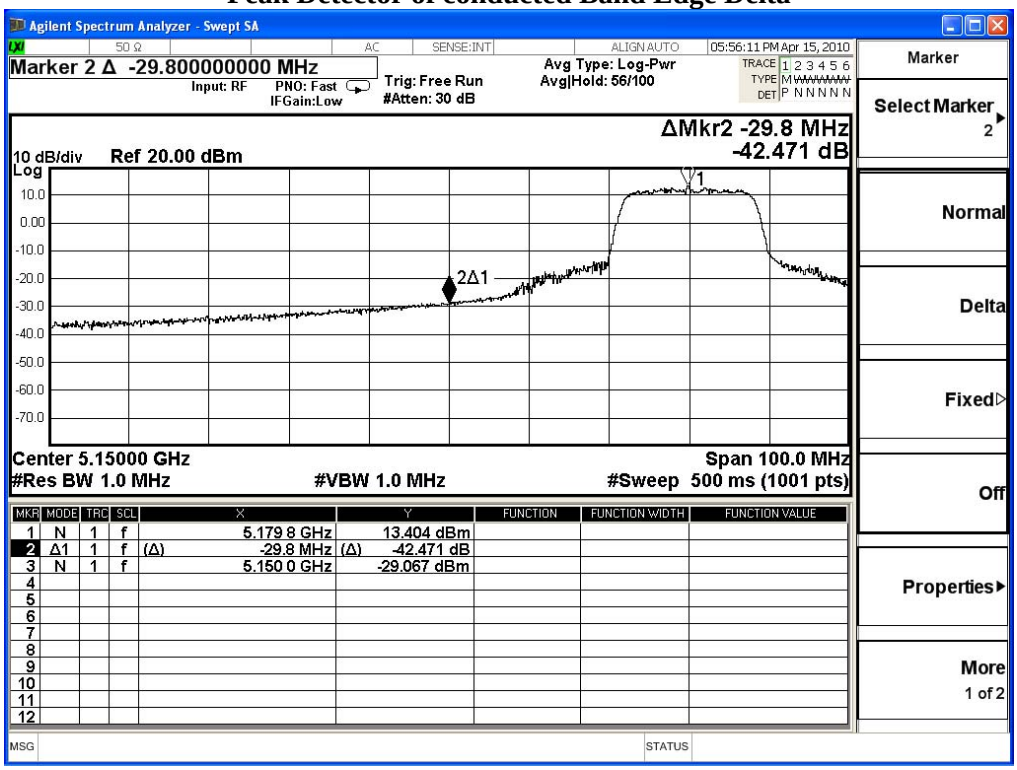
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

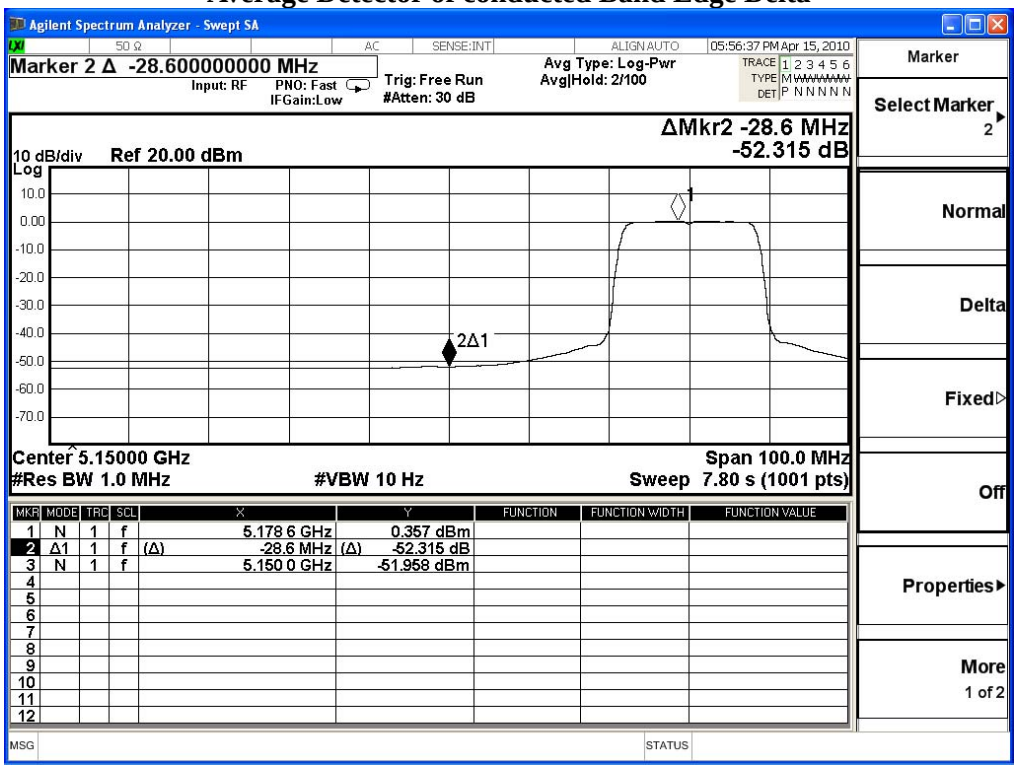
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : ROS Video DMA
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) -Channel 64

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Detector
Horizontal	5320	35.635	72.29	107.924	Peak
Horizontal	5320	35.635	61.29	96.924	Average
Vertical	5320	37.552	71.98	109.531	Peak
Vertical	5320	37.552	61.29	98.841	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	5350	107.924	39.317	68.607	Peak
Horizontal	5350	96.924	50.795	46.129	Average
Vertical	5350	109.531	39.317	70.214	Peak
Vertical	5350	98.841	50.795	48.046	Average

Note:

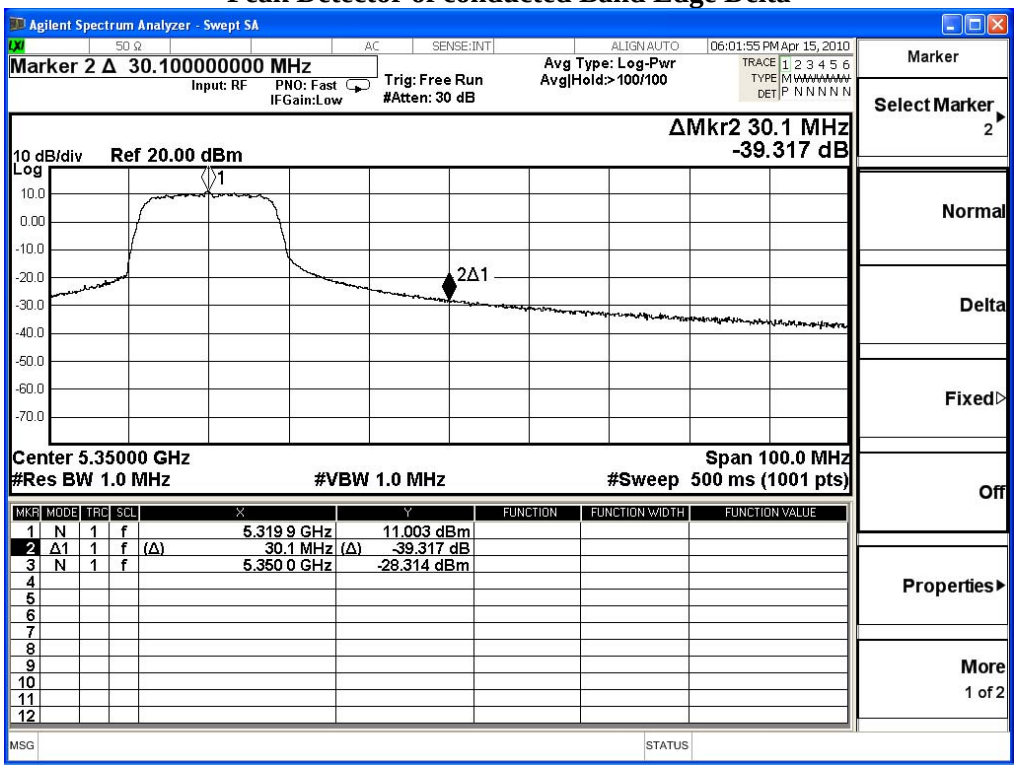
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

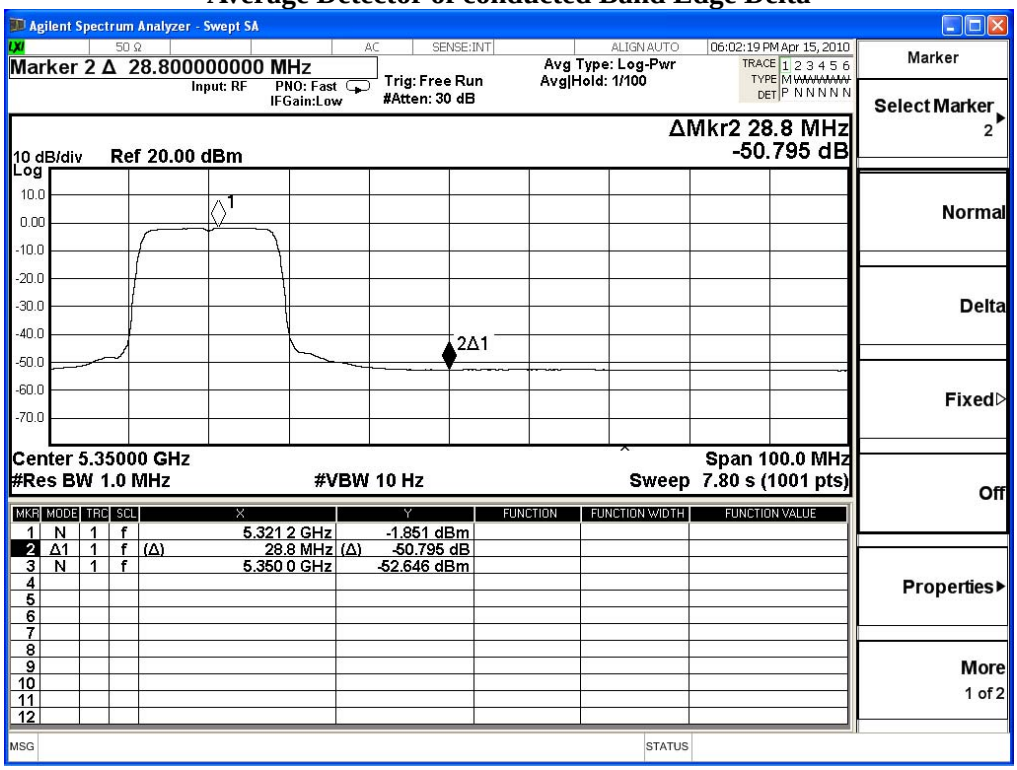
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : ROS Video DMA
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11a-6Mbps) -Channel 100

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Detector
Horizontal	5500	36.684	71.306	107.99	Peak
Horizontal	5500	36.684	56.996	93.68	Average
Vertical	5500	38.145	69.955	108.1	Peak
Vertical	5500	38.145	57.155	95.3	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	5458.4	107.99	44.24	63.75	Peak
Horizontal	5460	93.68	51.93	41.75	Average
Vertical	5458.4	108.1	44.24	63.86	Peak
Vertical	5460	95.3	51.93	43.37	Average

Note:

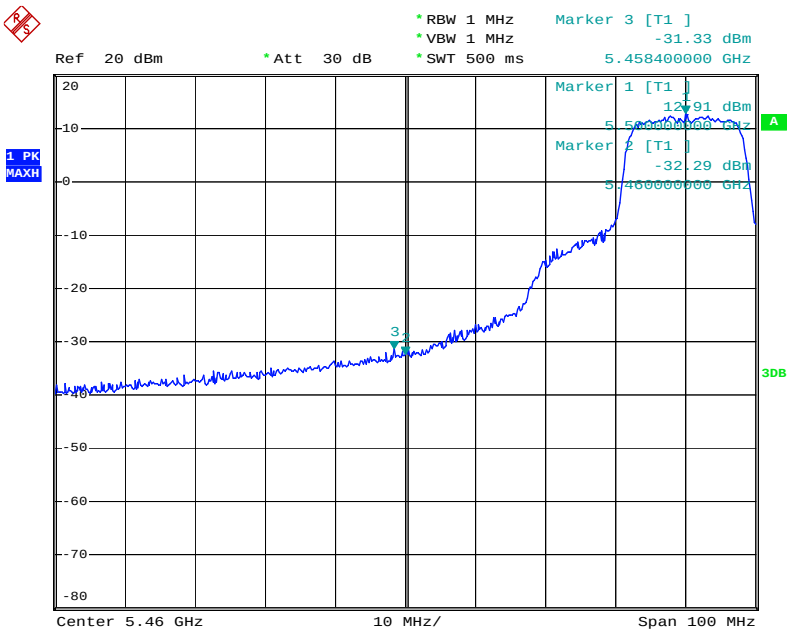
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



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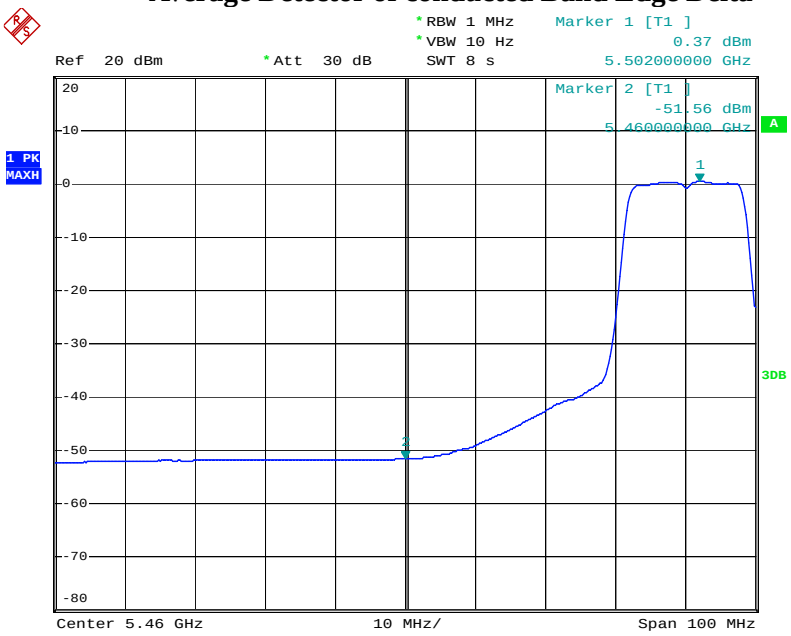
Average Detector of conducted Band Edge Delta



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Product : ROS Video DMA
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 13Mbps) -Channel 36

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Reading Level [dBuV]	Correction Factor [dB/m]	Emission Level [dBuV/m]	Detector
Horizontal	5180	34.966	70.28	105.246	Peak
Horizontal	5180	34.966	56.28	91.246	Average
Vertical	5180	37.073	69.2	106.274	Peak
Vertical	5180	37.073	57.21	94.284	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	5150	105.246	42.649	62.597	Peak
Horizontal	5150	91.246	50.926	40.32	Average
Vertical	5150	106.274	42.649	63.625	Peak
Vertical	5150	94.284	50.926	43.358	Average

Note:

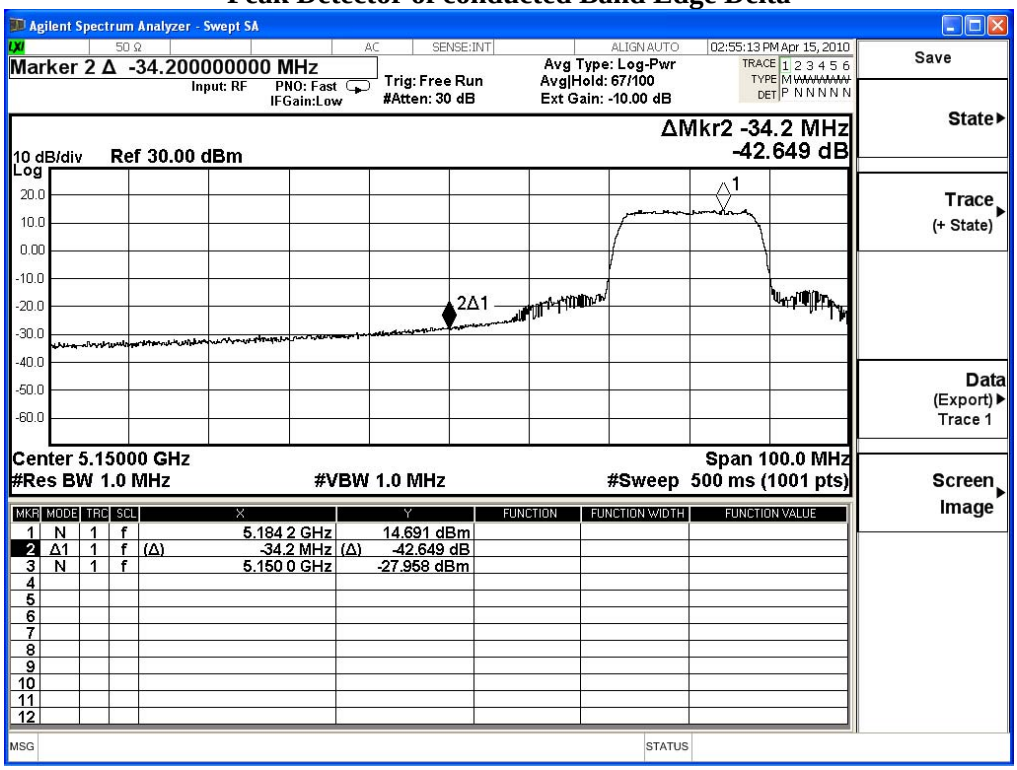
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

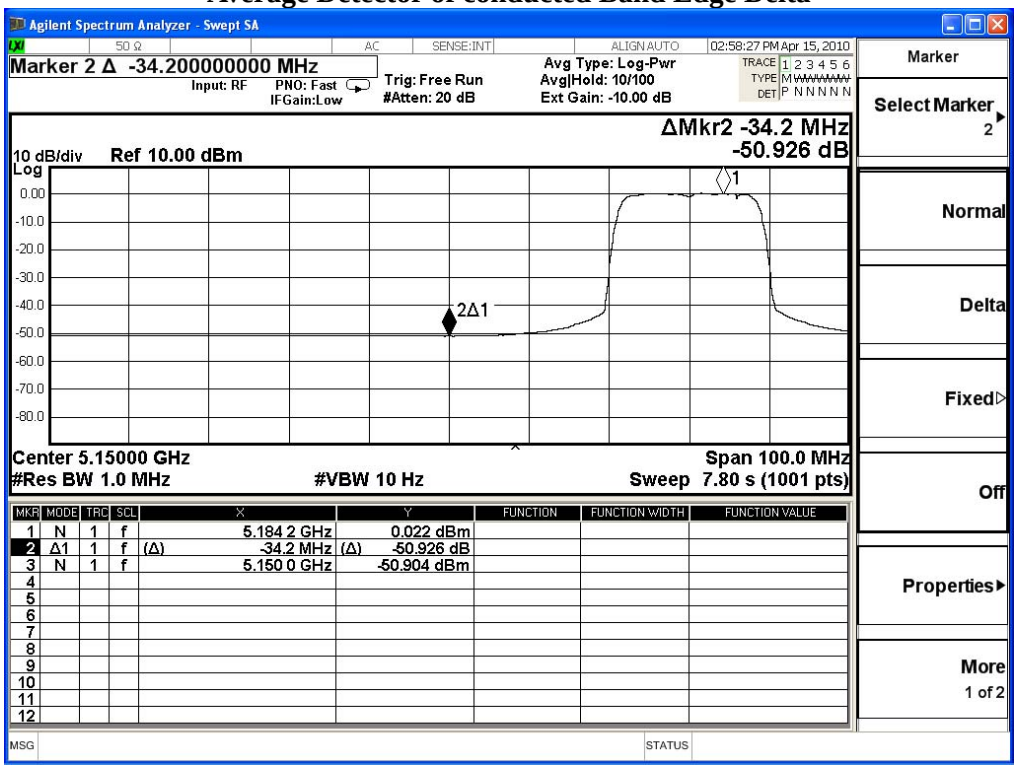
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : ROS Video DMA
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 13Mbps) -Channel 64

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Detector
Horizontal	5320	35.635	70.11	105.744	Peak
Horizontal	5320	35.635	54.21	89.844	Average
Vertical	5320	37.552	69.45	107.001	Peak
Vertical	5320	37.552	57.24	94.791	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	5350	105.744	43.637	62.107	Peak
Horizontal	5350	89.844	46.878	42.966	Average
Vertical	5350	107.001	43.637	63.364	Peak
Vertical	5350	94.791	46.878	47.913	Average

Note:

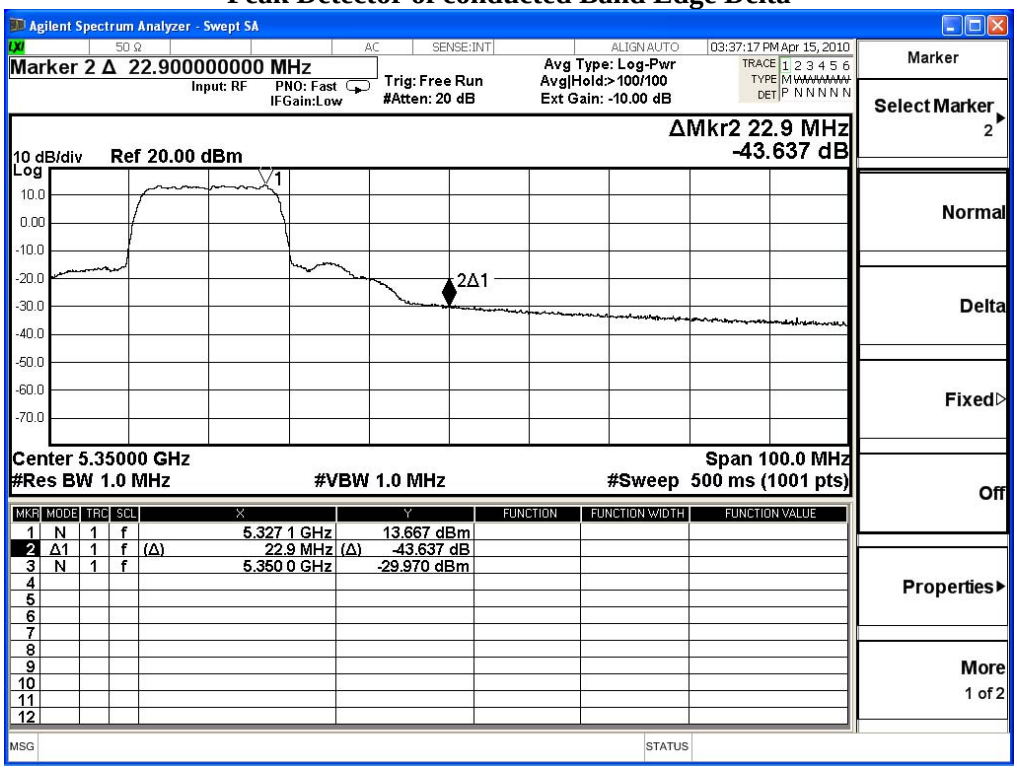
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

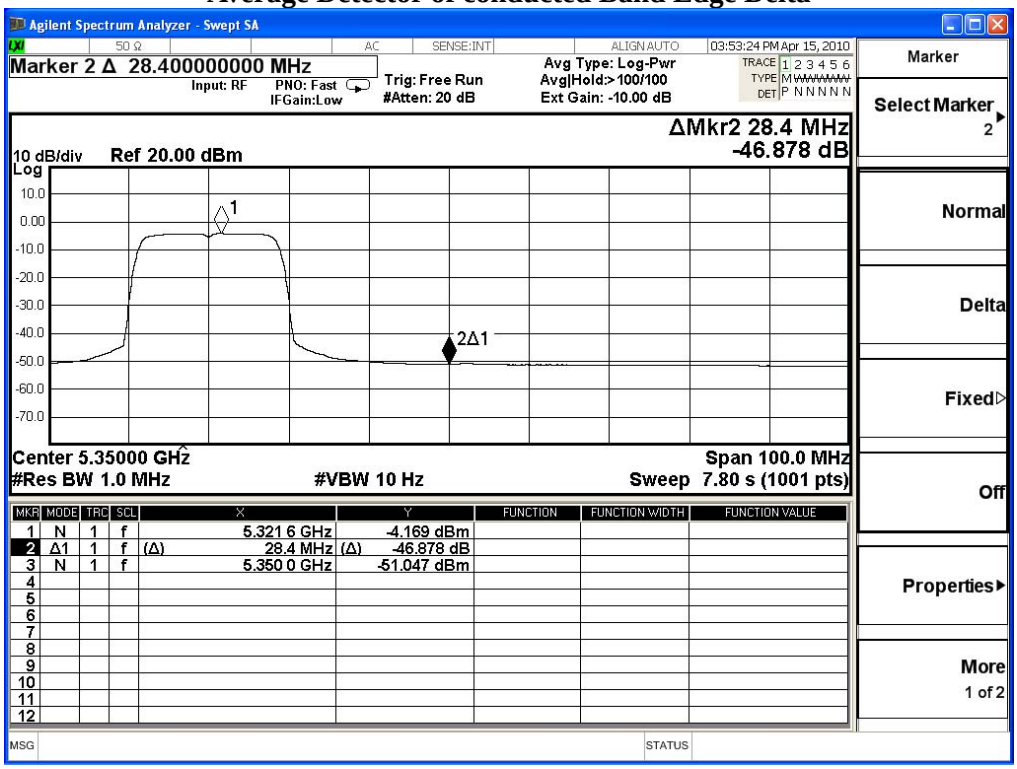
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : ROS Video DMA
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11n-20BW 13Mbps) -Channel 100

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Detector
Horizontal	5500	36.684	69.636	106.32	Peak
Horizontal	5500	36.684	55.616	92.3	Average
Vertical	5500	38.145	69.055	107.2	Peak
Vertical	5500	38.145	56.055	94.2	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	5456.2	106.32	43.9	62.42	Peak
Horizontal	5460	92.3	47	45.3	Average
Vertical	5456.2	107.2	43.9	63.3	Peak
Vertical	5460	94.2	47	47.2	Average

Note:

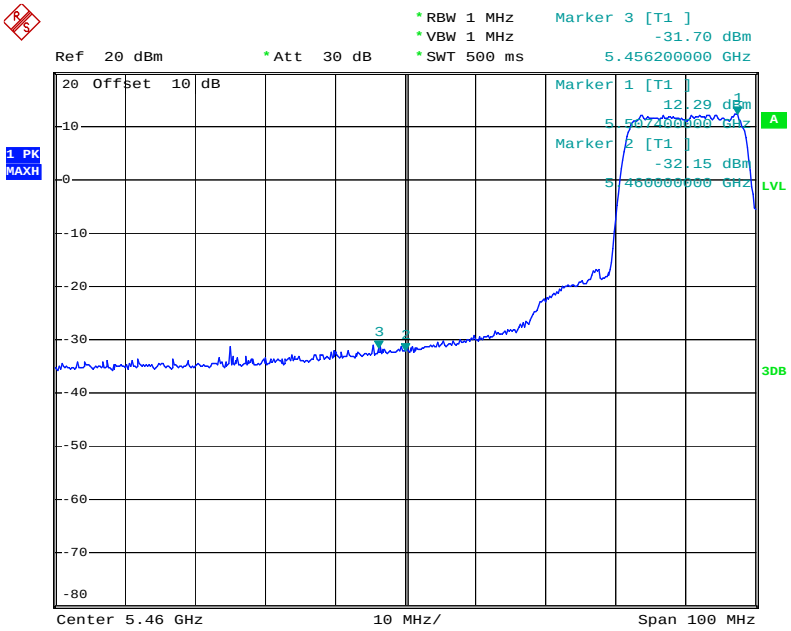
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



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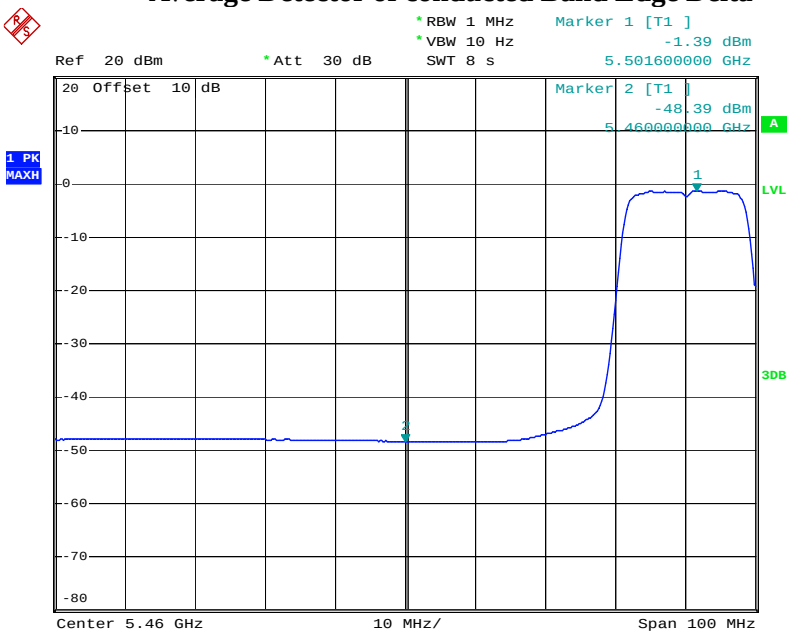
Average Detector of conducted Band Edge Delta



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Product : ROS Video DMA
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 27Mbps) -Channel 38

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Reading Level [dBuV]	Correction Factor [dB/m]	Emission Level [dBuV/m]	Detector
Horizontal	5190	34.907	69.38	104.288	Peak
Horizontal	5190	34.907	52.9	87.808	Average
Vertical	5190	37.077	68.8	105.878	Peak
Vertical	5190	37.077	53.28	90.358	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	5150	104.288	40.333	63.955	Peak
Horizontal	5150	87.808	41.931	45.877	Average
Vertical	5150	105.878	40.333	65.545	Peak
Vertical	5150	90.358	41.931	48.427	Average

Note:

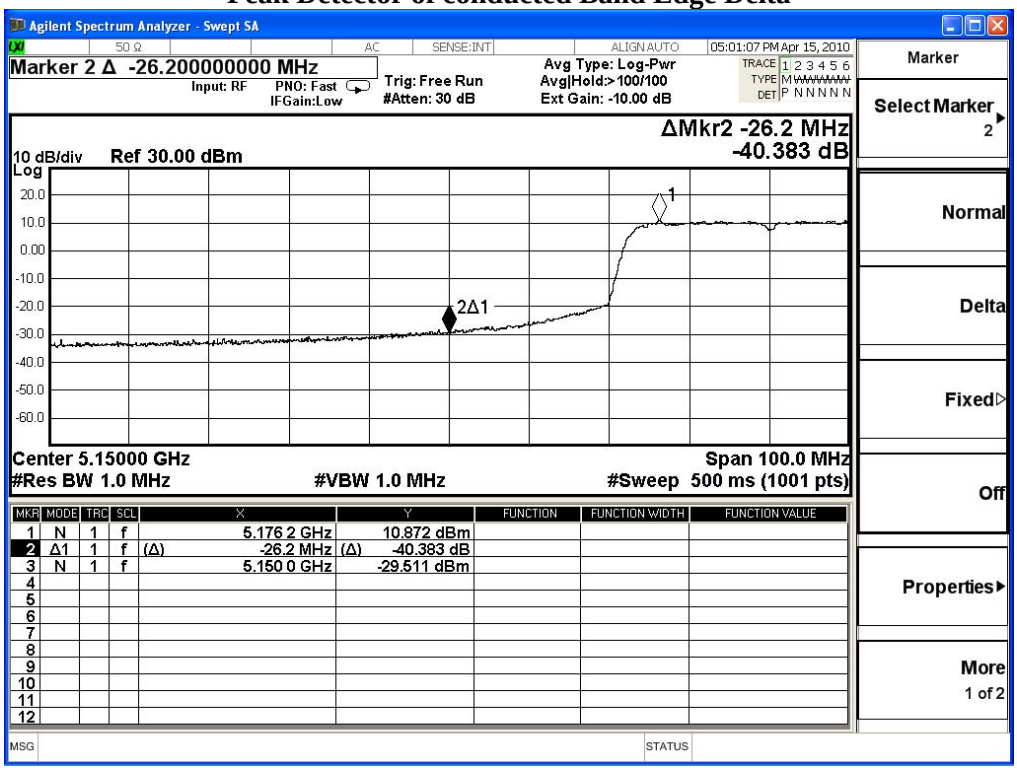
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

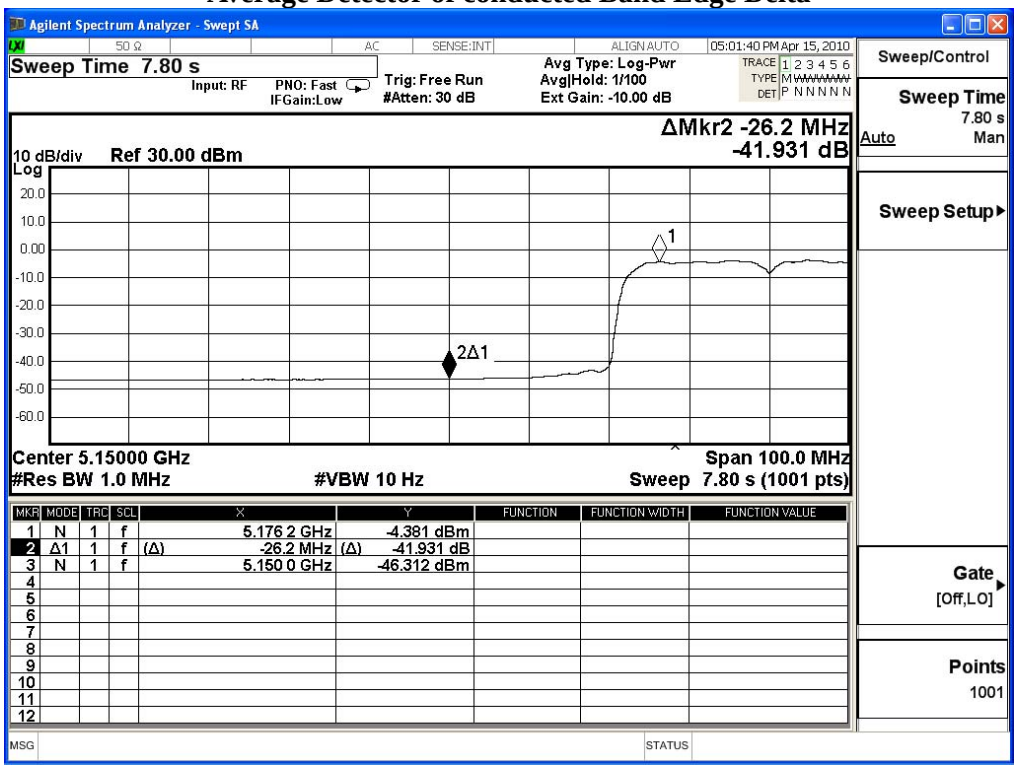
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : ROS Video DMA
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 27Mbps) -Channel 62

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Detector
Horizontal	5310	37.553	68.67	106.223	Peak
Horizontal	5310	37.553	52.17	89.723	Average
Vertical	5310	37.553	68.59	106.143	Peak
Vertical	5310	37.553	51.49	89.043	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	5350	106.223	39.176	67.047	Peak
Horizontal	5350	89.723	41.622	48.101	Average
Vertical	5350	106.143	39.176	66.967	Peak
Vertical	5350	89.043	41.622	47.421	Average

Note:

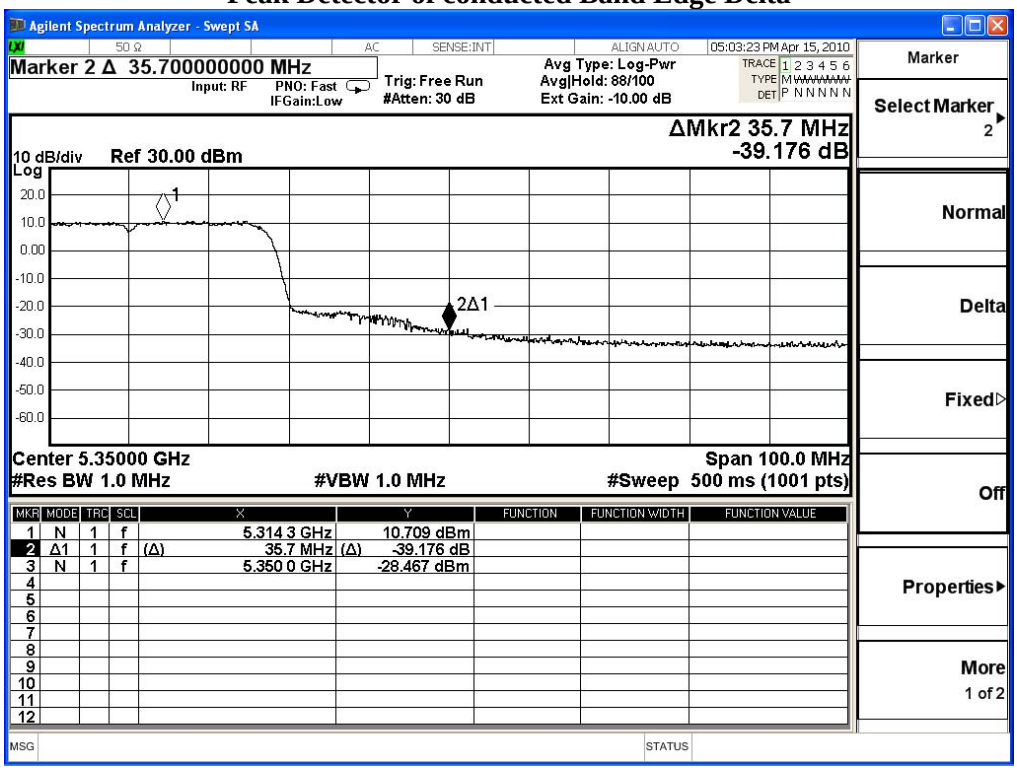
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

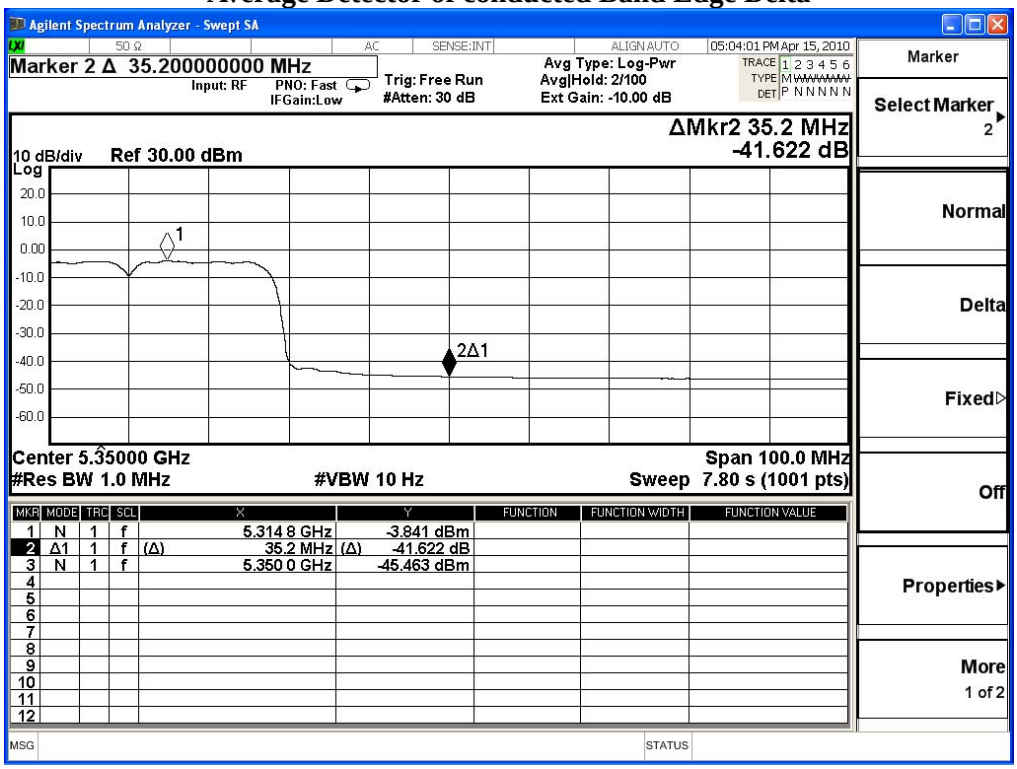
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : ROS Video DMA
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n-40BW 27Mbps) -Channel 102

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Reading Level [dB(uV)]	Correction Factor [dB/m]	Emission Level [dB(uV/m)]	Detector
Horizontal	5510	36.684	70.606	107.29	Peak
Horizontal	5510	36.684	56.496	93.18	Average
Vertical	5510	38.145	69.835	107.98	Peak
Vertical	5510	38.145	56.055	94.2	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	5456.6	107.29	39.89	67.4	Peak
Horizontal	5460	93.18	42.24	50.94	Average
Vertical	5456.6	107.98	39.89	68.09	Peak
Vertical	5460	94.2	42.24	51.96	Average

Note:

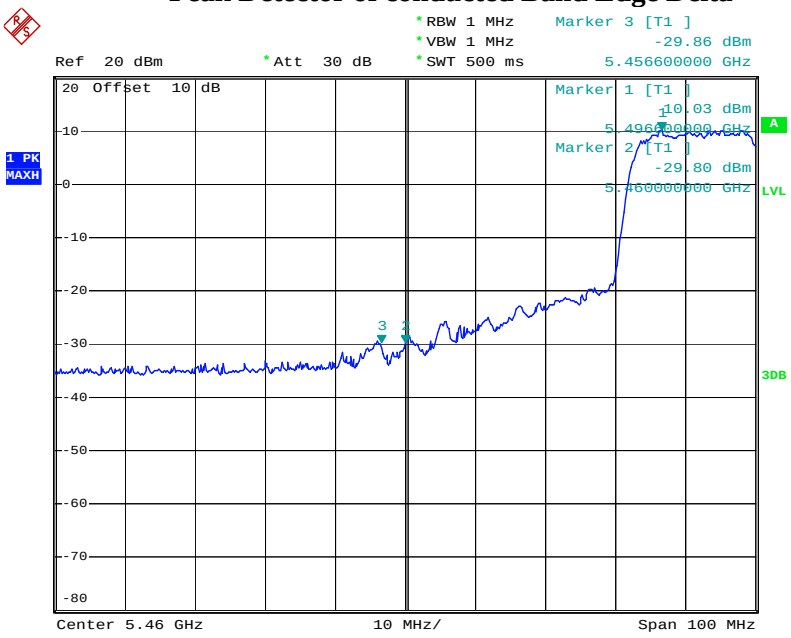
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



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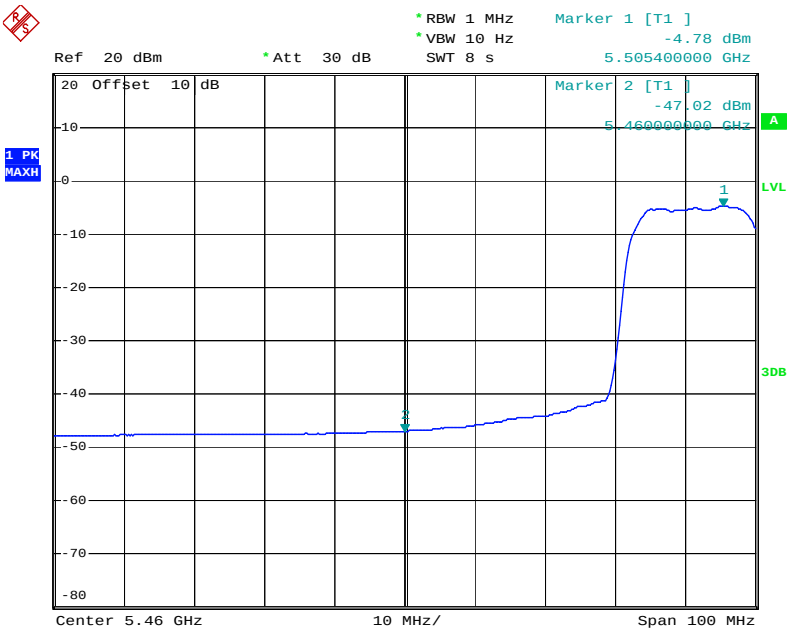
Average Detector of conducted Band Edge Delta



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9. Frequency Stability

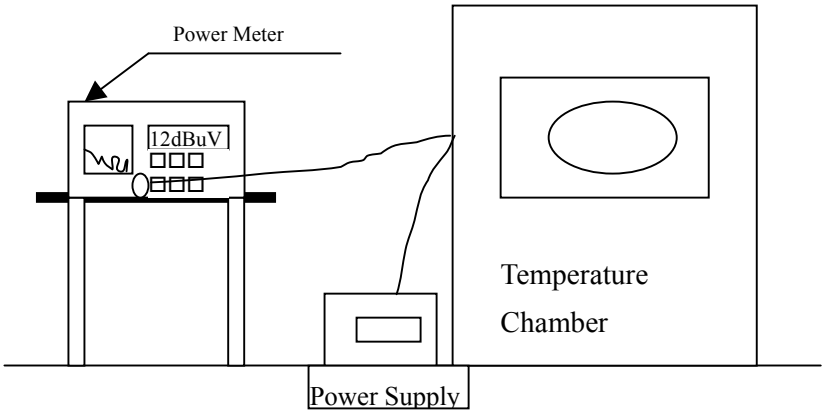
9.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2009
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2009
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2010

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.

9.2. Test Setup



9.3. Limits

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

9.4. Test Procedure

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

9.5. Uncertainty

± 150 Hz

9.6. Test Result of Frequency Stability

Product : ROS Video DMA
Test Item : Frequency Stability
Test Site : Temperature Chamber
Test Mode : Carrier Wave (for 802.11a/n-20MHz Channel) (Beginning)

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	36	5180.00	5180.0100	-0.01
		38	5190.00	5190.0089	-0.01
		44	5220.00	5220.0095	-0.01
		48	5240.00	5240.0100	-0.01
		52	5260.00	5260.0085	-0.01
		54	5270.00	5270.0098	-0.01
		60	5300.00	5300.0089	-0.01
		62	5310.00	5310.0100	-0.01
		64	5320.00	5320.0100	-0.01
		100	5500.00	5500.0093	-0.01
		102	5510.00	5510.0100	-0.01
		118	5590.00	5590.0100	-0.01
		120	5600.00	5600.0097	-0.01
		134	5670.00	5670.0100	-0.01
		140	5700.00	5700.0095	-0.01
Tnom (50) °C	Vnom (120)V	36	5180.00	5180.0100	-0.01
		38	5190.00	5190.0089	-0.01
		44	5220.00	5220.0095	-0.01
		48	5240.00	5240.0099	-0.01
		52	5260.00	5260.0100	-0.01
		54	5270.00	5270.0098	-0.01
		60	5300.00	5300.0089	-0.01
		62	5310.00	5310.0100	-0.01
		64	5320.00	5320.0100	-0.01
		100	5500.00	5500.0100	-0.01
		102	5510.00	5510.0100	-0.01
		118	5590.00	5590.0100	-0.01
		120	5600.00	5600.0097	-0.01
		134	5670.00	5670.0100	-0.01
		140	5700.00	5700.0095	-0.01

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-20) °C	Vnom (120)V	36	5180.00	5180.0098	-0.01
		38	5190.00	5190.0099	-0.01
		44	5220.00	5220.0095	-0.01
		48	5240.00	5240.0099	-0.01
		52	5260.00	5260.0089	-0.01
		54	5270.00	5270.0098	-0.01
		60	5300.00	5300.0089	-0.01
		62	5310.00	5310.0100	-0.01
		64	5320.00	5320.0100	-0.01
		100	5500.00	5500.0100	-0.01
		102	5510.00	5510.0100	-0.01
		118	5590.00	5590.0100	-0.01
		120	5600.00	5600.0100	-0.01
		134	5670.00	5670.0100	-0.01
		140	5700.00	5700.0095	-0.01

Product : ROS Video DMA
Test Item : Frequency Stability
Test Site : Temperature Chamber
Test Mode : Carrier Wave (for 802.11a/n-20MHz Channel) (AFTER 2mins)

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	36	5180.00	5180.0100	-0.01
		38	5190.00	5190.0089	-0.01
		44	5220.00	5220.0095	-0.01
		48	5240.00	5240.0100	-0.01
		52	5260.00	5260.0085	-0.01
		54	5270.00	5270.0098	-0.01
		60	5300.00	5300.0089	-0.01
		62	5310.00	5310.0100	-0.01
		64	5320.00	5320.0100	-0.01
		100	5500.00	5500.0093	-0.01
		102	5510.00	5510.0100	-0.01
		118	5590.00	5590.0100	-0.01
		120	5600.00	5600.0097	-0.01
		134	5670.00	5670.0100	-0.01
		140	5700.00	5700.0095	-0.01
Tnom (50) °C	Vnom (120)V	36	5180.00	5180.0100	-0.01
		38	5190.00	5190.0089	-0.01
		44	5220.00	5220.0095	-0.01
		48	5240.00	5240.0099	-0.01
		52	5260.00	5260.0100	-0.01
		54	5270.00	5270.0098	-0.01
		60	5300.00	5300.0089	-0.01
		62	5310.00	5310.0100	-0.01
		64	5320.00	5320.0100	-0.01
		100	5500.00	5500.0100	-0.01
		102	5510.00	5510.0100	-0.01
		118	5590.00	5590.0100	-0.01
		120	5600.00	5600.0097	-0.01
		134	5670.00	5670.0100	-0.01
		140	5700.00	5700.0095	-0.01

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-20) °C	Vnom (120)V	36	5180.00	5180.0098	-0.01
		38	5190.00	5190.0099	-0.01
		44	5220.00	5220.0095	-0.01
		48	5240.00	5240.0099	-0.01
		52	5260.00	5260.0089	-0.01
		54	5270.00	5270.0098	-0.01
		60	5300.00	5300.0089	-0.01
		62	5310.00	5310.0100	-0.01
		64	5320.00	5320.0100	-0.01
		100	5500.00	5500.0100	-0.01
		102	5510.00	5510.0100	-0.01
		118	5590.00	5590.0100	-0.01
		120	5600.00	5600.0100	-0.01
		134	5670.00	5670.0100	-0.01
		140	5700.00	5700.0095	-0.01

Product : ROS Video DMA
Test Item : Frequency Stability
Test Site : Temperature Chamber
Test Mode : Carrier Wave (for 802.11a/n-20MHz Channel) (AFTER 5mins)

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	36	5180.00	5180.0100	-0.01
		38	5190.00	5190.0100	-0.01
		44	5220.00	5220.0095	-0.01
		48	5240.00	5240.0100	-0.01
		52	5260.00	5260.0095	-0.01
		54	5270.00	5270.0098	-0.01
		60	5300.00	5300.0089	-0.01
		62	5310.00	5310.0100	-0.01
		64	5320.00	5320.0100	-0.01
		100	5500.00	5500.0093	-0.01
		102	5510.00	5510.0100	-0.01
		118	5590.00	5590.0100	-0.01
		120	5600.00	5600.0097	-0.01
		134	5670.00	5670.0100	-0.01
		140	5700.00	5700.0095	-0.01
Tnom (50) °C	Vnom (120)V	36	5180.00	5180.0100	-0.01
		38	5190.00	5190.0089	-0.01
		44	5220.00	5220.0100	-0.01
		48	5240.00	5240.0099	-0.01
		52	5260.00	5260.0100	-0.01
		54	5270.00	5270.0098	-0.01
		60	5300.00	5300.0089	-0.01
		62	5310.00	5310.0100	-0.01
		64	5320.00	5320.0100	-0.01
		100	5500.00	5500.0100	-0.01
		102	5510.00	5510.0100	-0.01
		118	5590.00	5590.0100	-0.01
		120	5600.00	5600.0097	-0.01
		134	5670.00	5670.0100	-0.01
		140	5700.00	5700.0095	-0.01

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-20) °C	Vnom (120)V	36	5180.00	5180.0098	-0.01
		38	5190.00	5190.0099	-0.01
		44	5220.00	5220.0099	-0.01
		48	5240.00	5240.0099	-0.01
		52	5260.00	5260.0089	-0.01
		54	5270.00	5270.0098	-0.01
		60	5300.00	5300.0100	-0.01
		62	5310.00	5310.0100	-0.01
		64	5320.00	5320.0100	-0.01
		100	5500.00	5500.0100	-0.01
		102	5510.00	5510.0100	-0.01
		118	5590.00	5590.0100	-0.01
		120	5600.00	5600.0100	-0.01
		134	5670.00	5670.0100	-0.01
		140	5700.00	5700.0100	-0.01

Product : ROS Video DMA
Test Item : Frequency Stability
Test Site : Temperature Chamber
Test Mode : Carrier Wave (for 802.11a/n-20MHz Channel) (AFTER 10mins)

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (20) °C	Vnom (120)V	36	5180.00	5180.0100	-0.01
		38	5190.00	5190.0089	-0.01
		44	5220.00	5220.0095	-0.01
		48	5240.00	5240.0100	-0.01
		52	5260.00	5260.0085	-0.01
		54	5270.00	5270.0098	-0.01
		60	5300.00	5300.0089	-0.01
		62	5310.00	5310.0100	-0.01
		64	5320.00	5320.0100	-0.01
		100	5500.00	5500.0093	-0.01
		102	5510.00	5510.0100	-0.01
		118	5590.00	5590.0100	-0.01
		120	5600.00	5600.0097	-0.01
		134	5670.00	5670.0100	-0.01
		140	5700.00	5700.0095	-0.01
Tnom (50) °C	Vnom (120)V	36	5180.00	5180.0100	-0.01
		38	5190.00	5190.0089	-0.01
		44	5220.00	5220.0095	-0.01
		48	5240.00	5240.0100	-0.01
		52	5260.00	5260.0100	-0.01
		54	5270.00	5270.0098	-0.01
		60	5300.00	5300.0089	-0.01
		62	5310.00	5310.0100	-0.01
		64	5320.00	5320.0100	-0.01
		100	5500.00	5500.0100	-0.01
		102	5510.00	5510.0100	-0.01
		118	5590.00	5590.0100	-0.01
		120	5600.00	5600.0097	-0.01
		134	5670.00	5670.0100	-0.01
		140	5700.00	5700.0095	-0.01

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-20) °C	Vnom (120)V	36	5180.00	5180.0098	-0.01
		38	5190.00	5190.0099	-0.01
		44	5220.00	5220.0095	-0.01
		48	5240.00	5240.0099	-0.01
		52	5260.00	5260.0100	-0.01
		54	5270.00	5270.0098	-0.01
		60	5300.00	5300.0089	-0.01
		62	5310.00	5310.0100	-0.01
		64	5320.00	5320.0100	-0.01
		100	5500.00	5500.0100	-0.01
		102	5510.00	5510.0100	-0.01
		118	5590.00	5590.0100	-0.01
		120	5600.00	5600.0100	-0.01
		134	5670.00	5670.0100	-0.01
		140	5700.00	5700.0100	-0.01

10 EMI Reduction Method During Compliance Testing

No modification was made during testing.