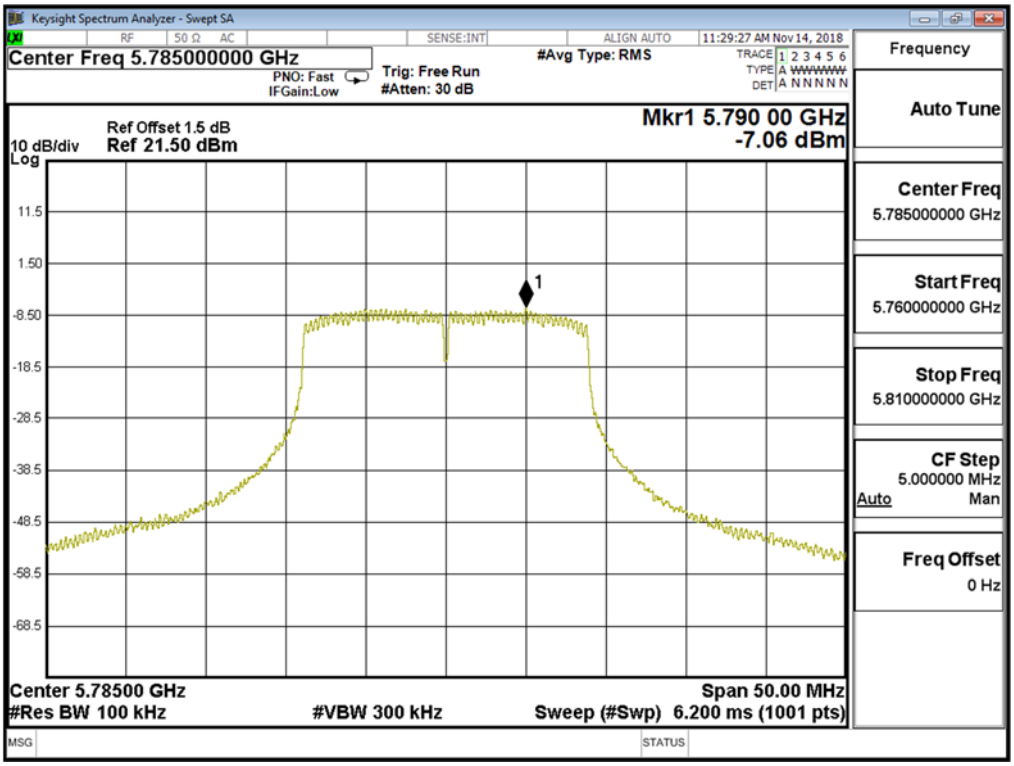
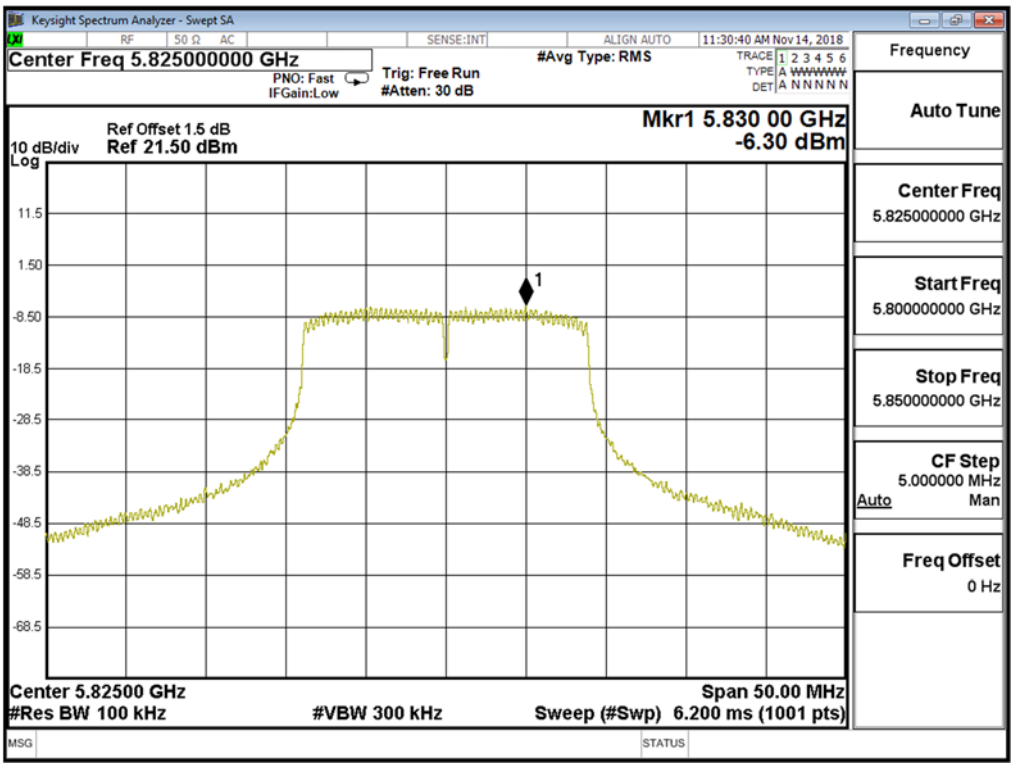
Channel 157



Channel 165



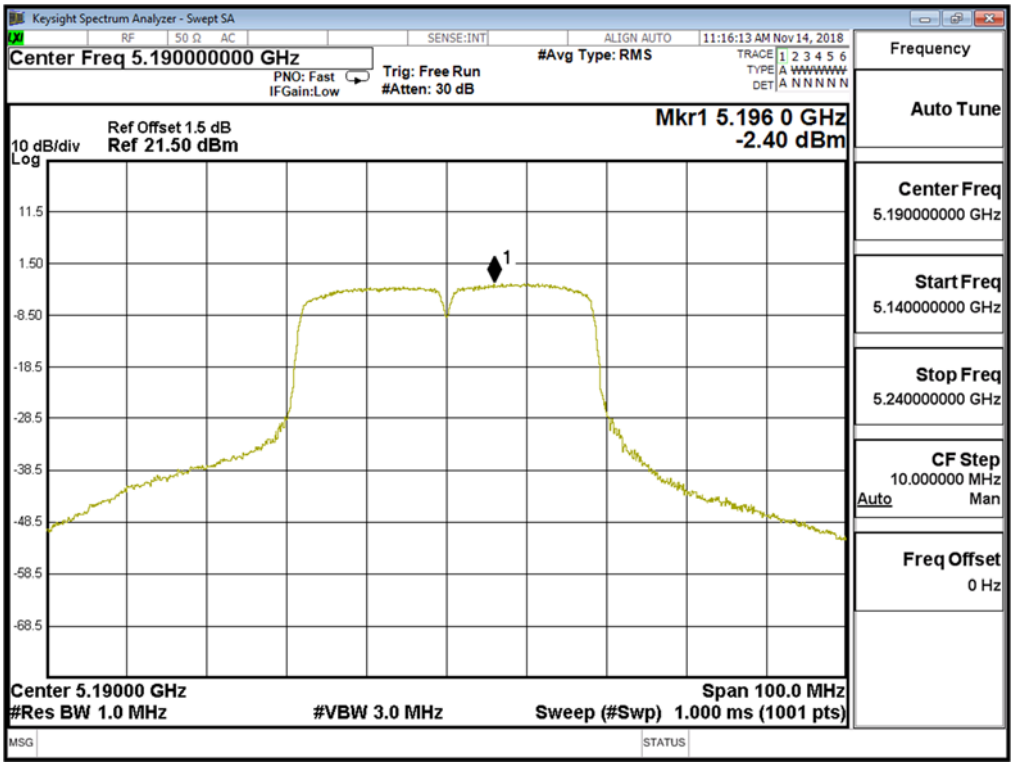
Product : NPort Device Server
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Date : 2018/11/26
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps)

Channel Number	Frequency (MHz)	Data Rata (Mbps)	Measurement Level (dBm)	Required Limit (dBm)	Result
38	5190	6	-2.400	11	Pass
46	5230	6	-0.760	11	Pass
54	5270	6	-0.940	11	Pass
62	5310	6	-3.350	11	Pass
102	5510	6	-4.770	11	Pass
110	5550	6	0.810	11	Pass
134	5670	6	-0.810	11	Pass

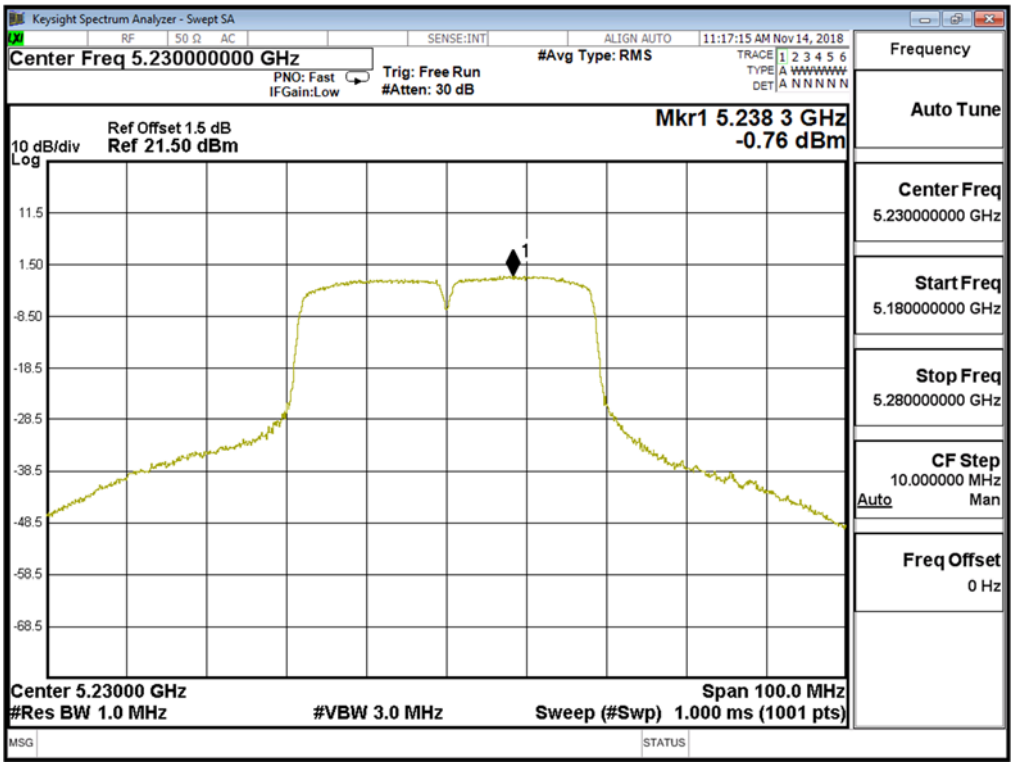
Channel Number	Frequency (MHz)	Data Rata (Mbps)	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
151	5755	6	-10.730	6.980	-3.750	<30	Pass
159	5795	6	-12.120	6.980	-5.140	<30	Pass

Note : The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

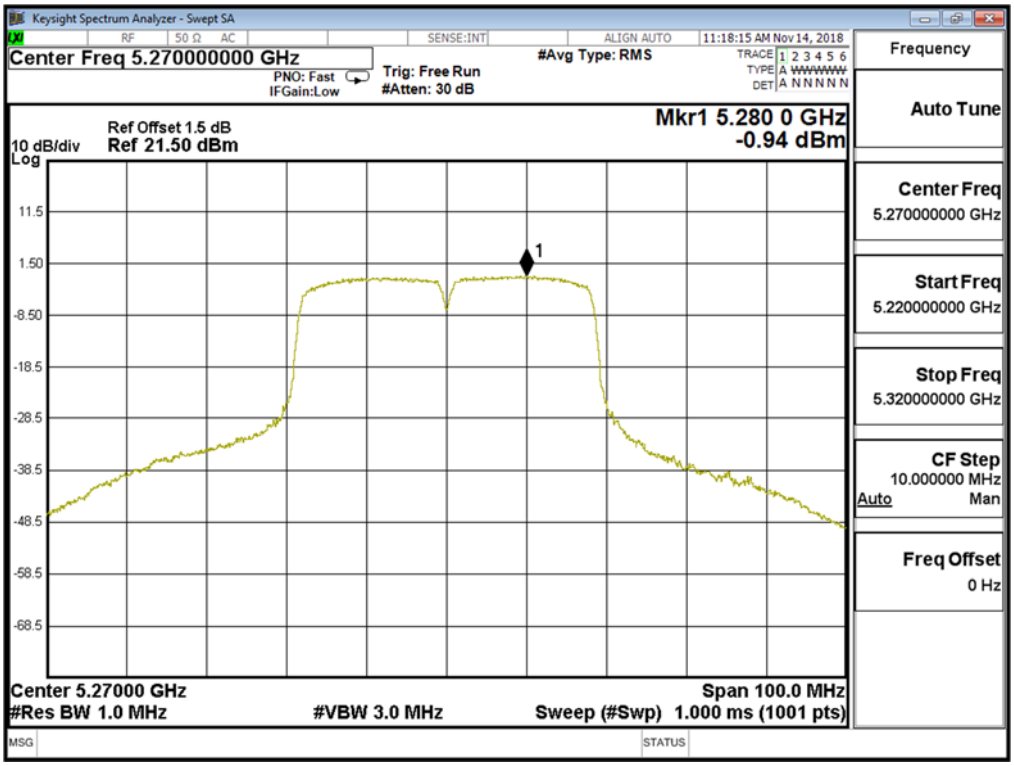
Channel 38:



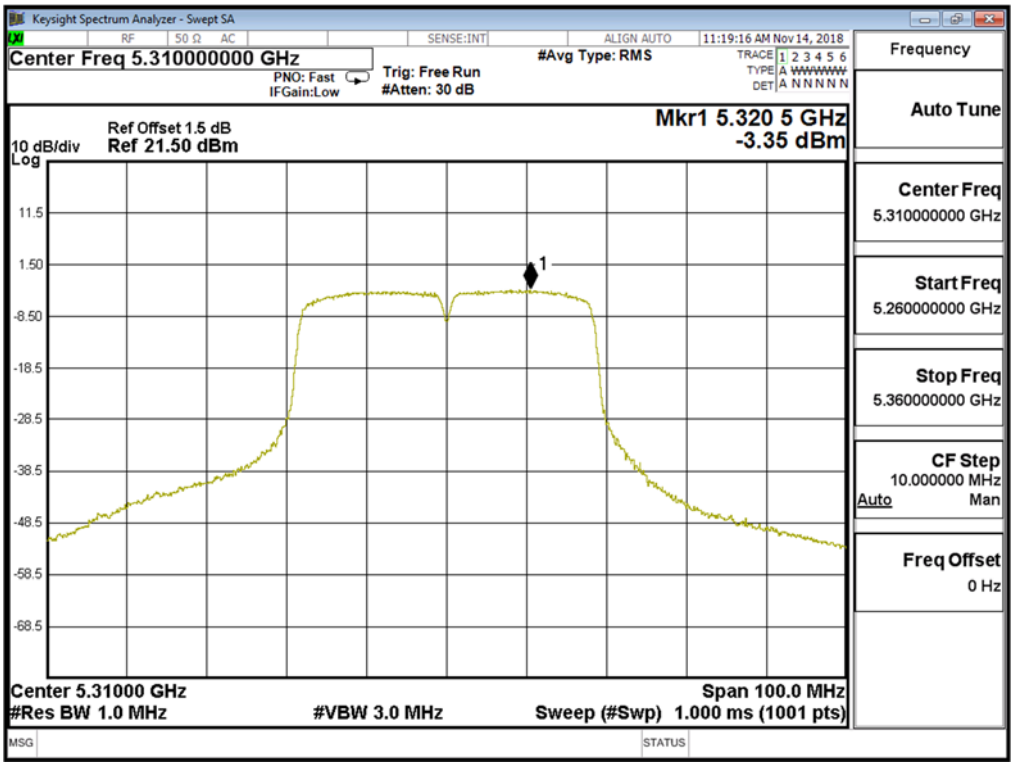
Channel 46:



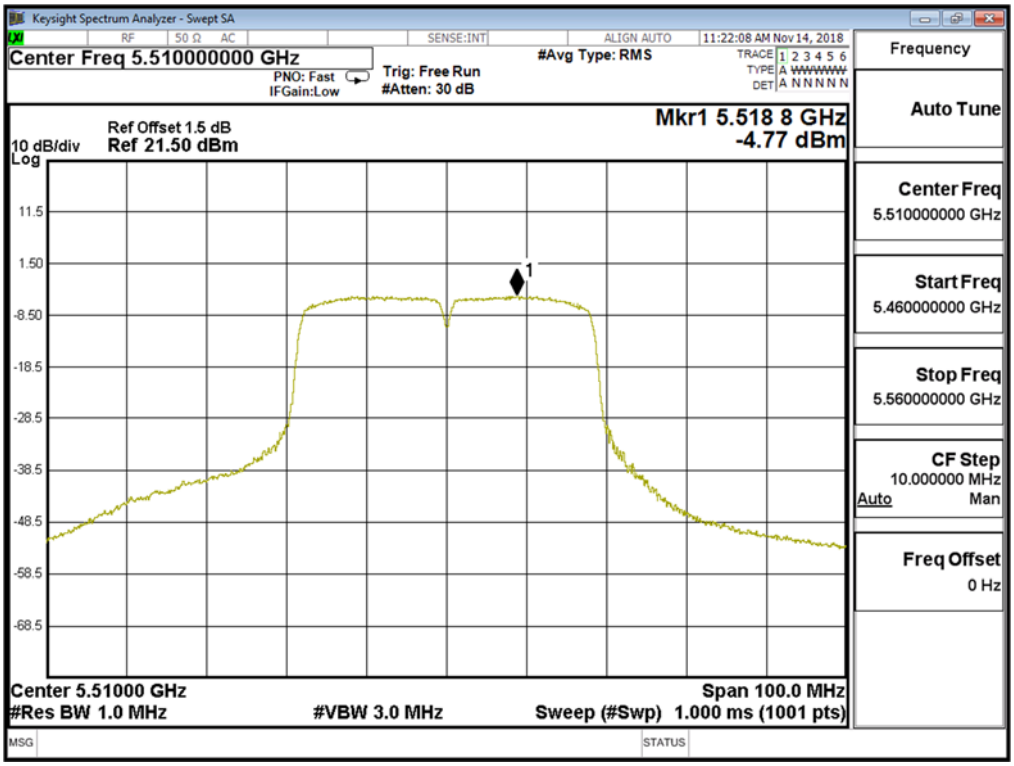
Channel 54:



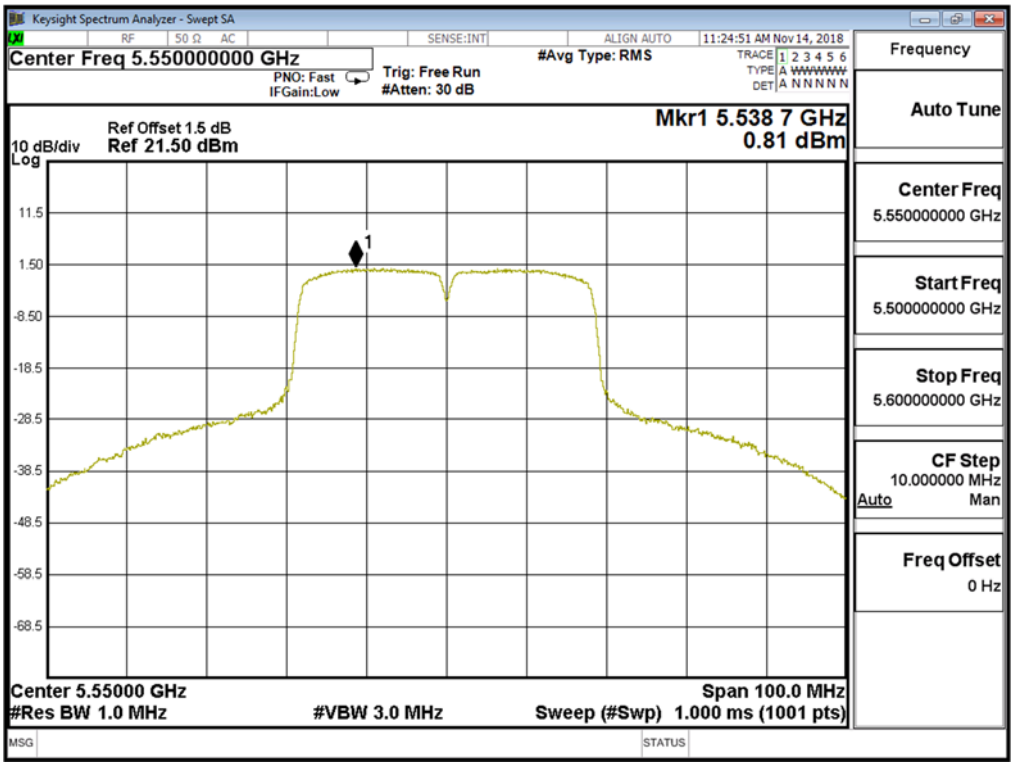
Channel 62:



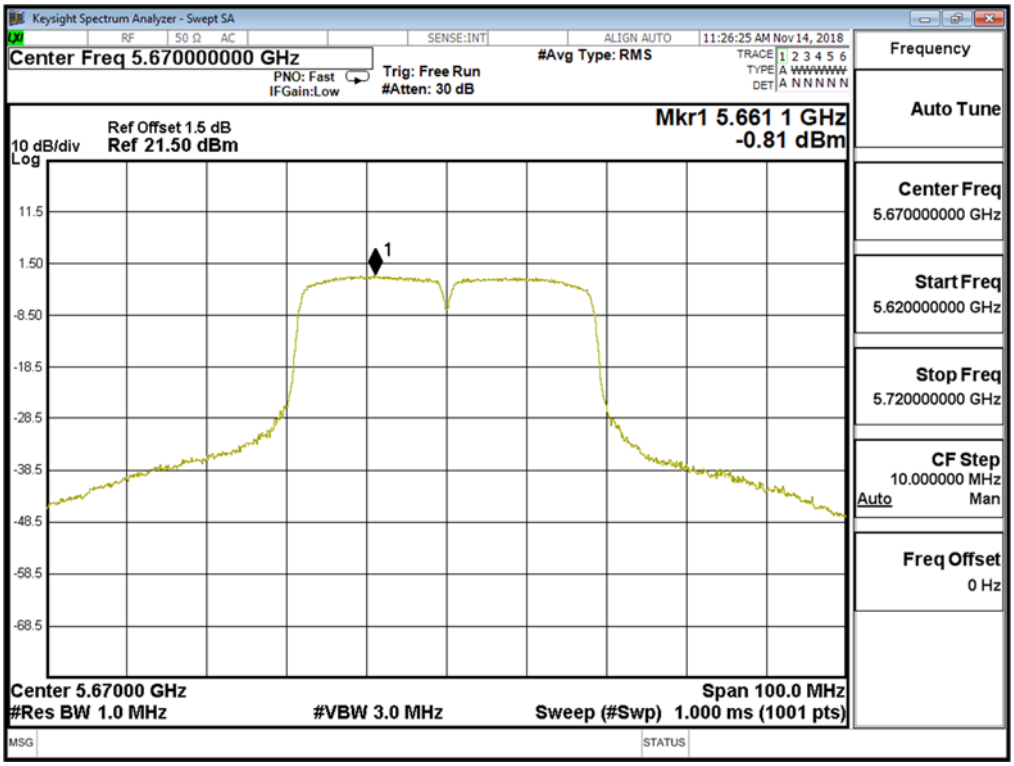
Channel 102:



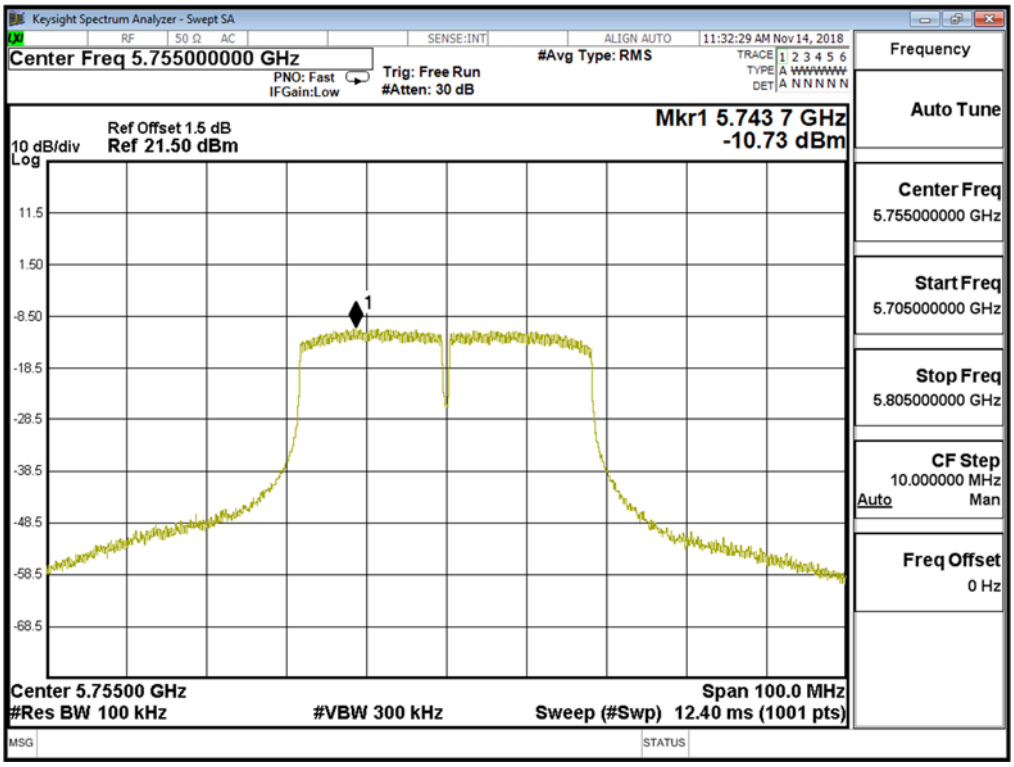
Channel 110:



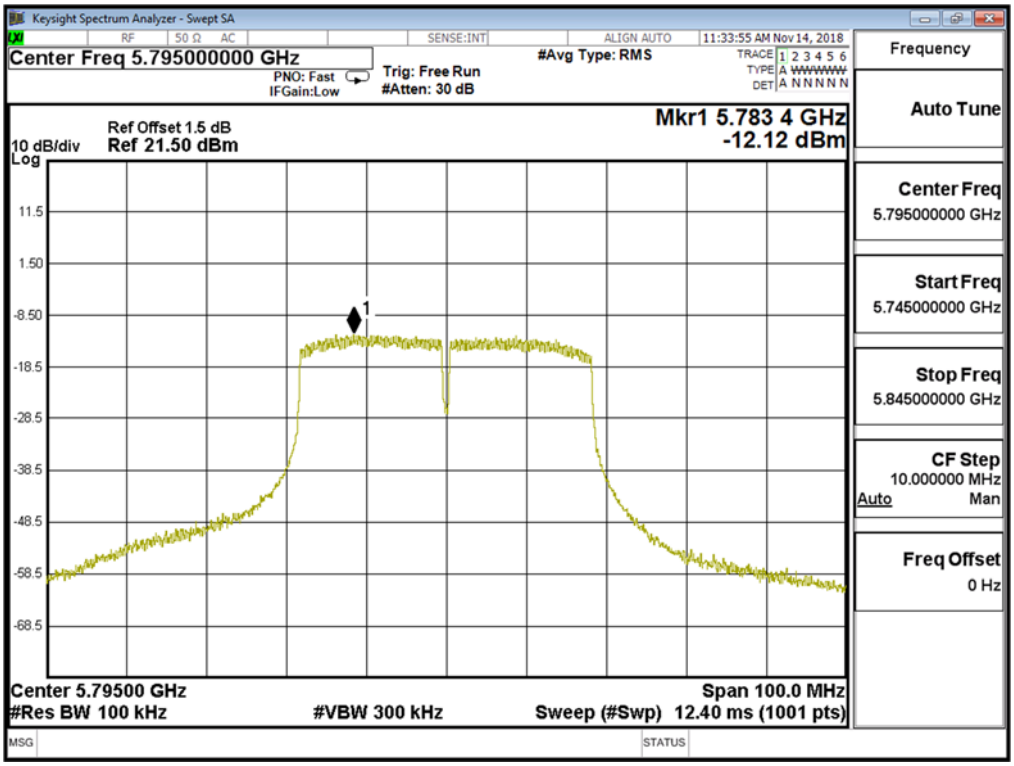
Channel 134:



Channel 151:



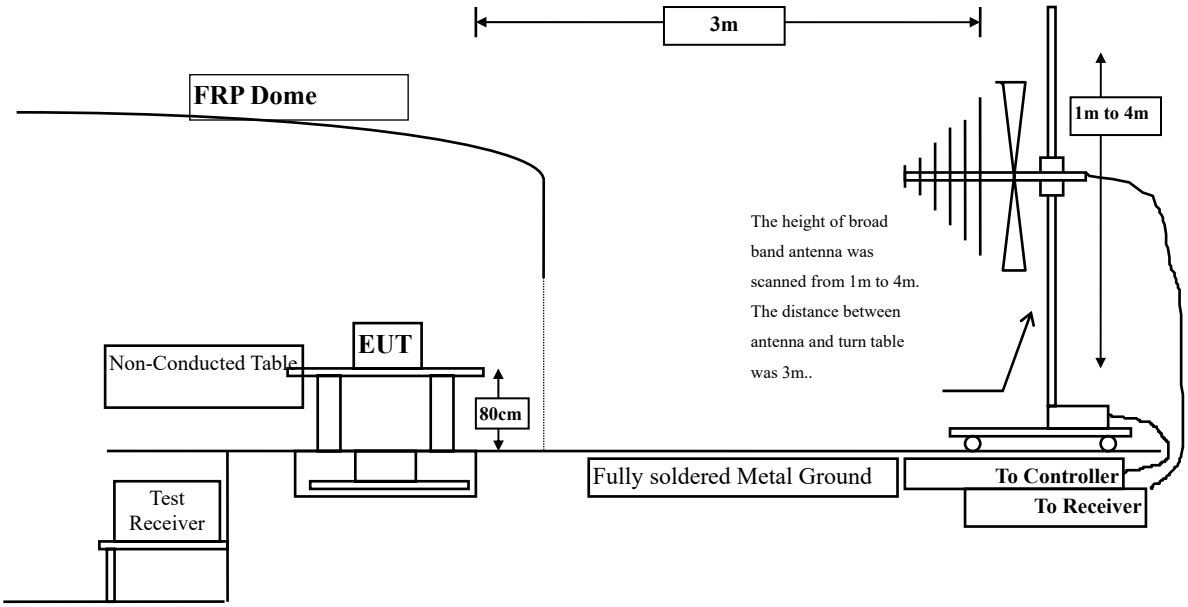
Channel 159:


Keysight Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
11:33:55 AM Nov 14, 2018
Center Freq 5.795000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Frequency
Auto Tune
Ref Offset 1.5 dB
10 dB/div
Log
Ref 21.50 dBm
Mkr1 5.783 4 GHz
-12.12 dBm
11.5
1.50
-8.50
-18.5
-28.5
-38.5
-48.5
-58.5
-68.5
Center Freq
5.795000000 GHz
Start Freq
5.745000000 GHz
Stop Freq
5.845000000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz
Center 5.79500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep (#Swp) 12.40 ms (1001 pts)
MSG
STATUS

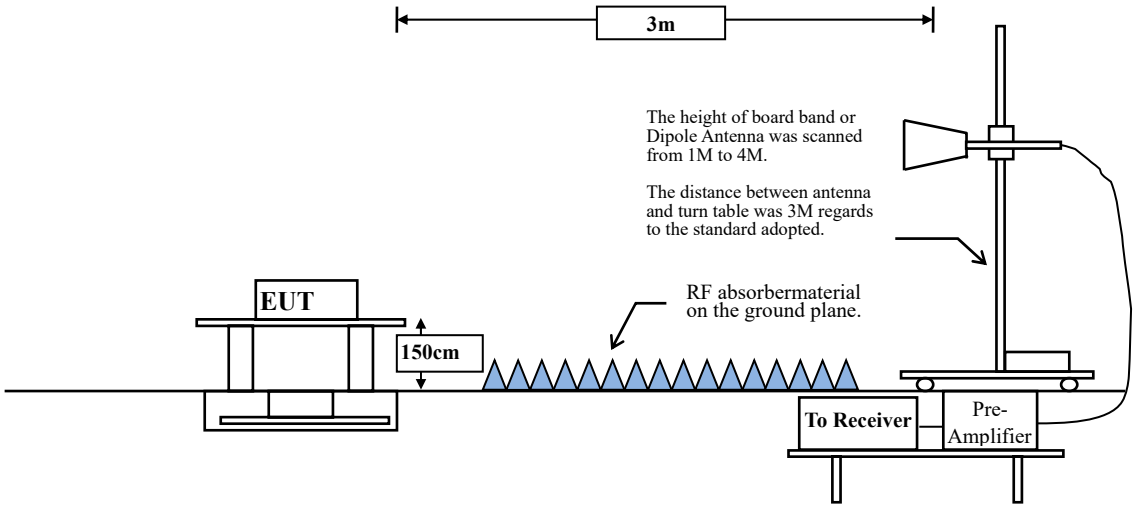
5. Radiated Emission

5.1. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



5.2. 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 (dBμV/m) = 20 log E field strength (uV/m)

5.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground,when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 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 between 1 meter and 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: 2013 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~1GHzare 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.

The measurement frequency range form 9kHz - 10th Harmonic of fundamental was investigated.

RBW and VBW Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW ≥ 3MHz.

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW = 10Hz, when duty cycle ≥ 98 %

VBW ≥ 1/T, when duty cycle < 98 %

(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

5GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11 a	98.10	2.0600	485	10
802.11 n20	97.95	1.9100	524	1000
802.11 n40	93.37	0.9104	1098	2000

Note: Duty Cycle Refer to Section 5

5.4. Uncertainty

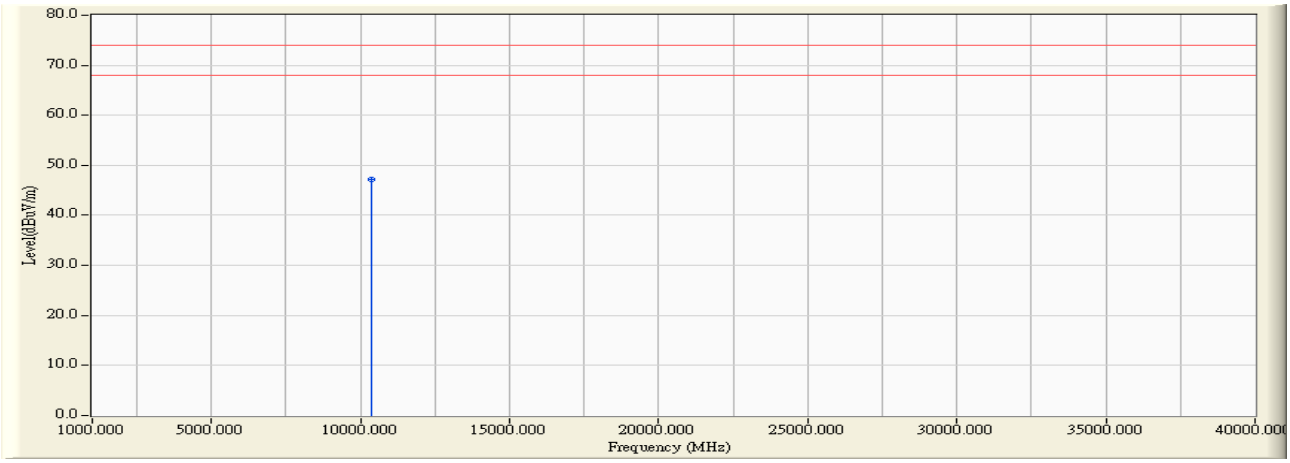
±4.08 dB below 1GHz

±4.22 dB above 1GHz

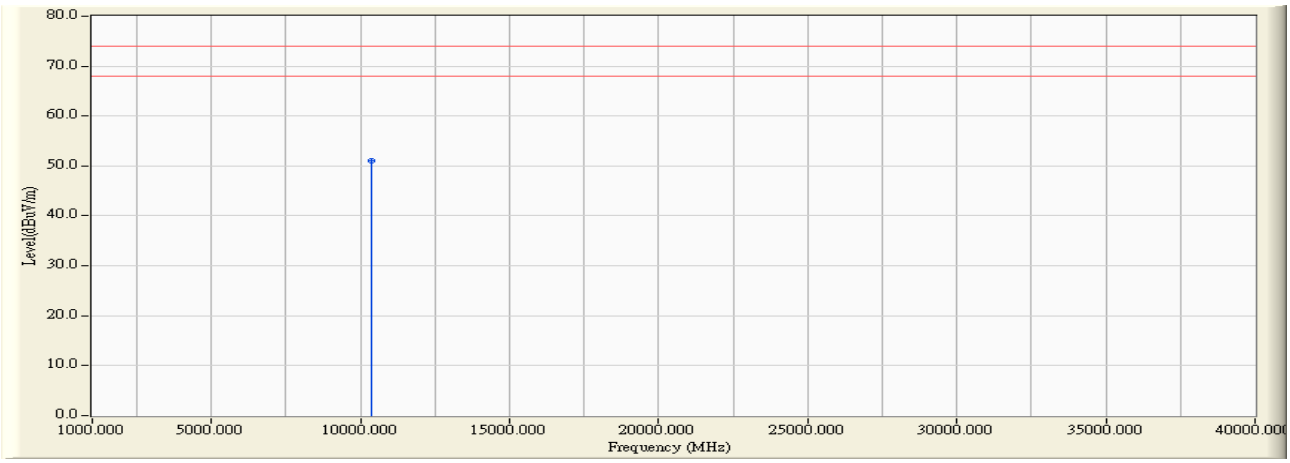
5.5. Test Result of Radiated Emission

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/08/06
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5180MHz)

Horizontal:



Vertical:



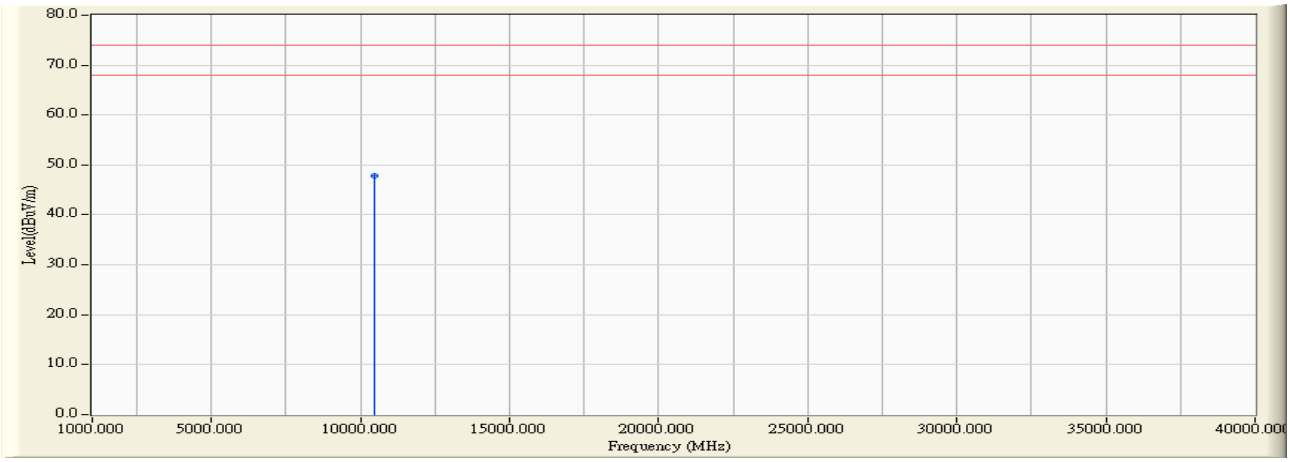
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10360.000	10.540	36.723	47.263	-26.737	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10360.000	12.044	38.908	50.951	-23.049	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

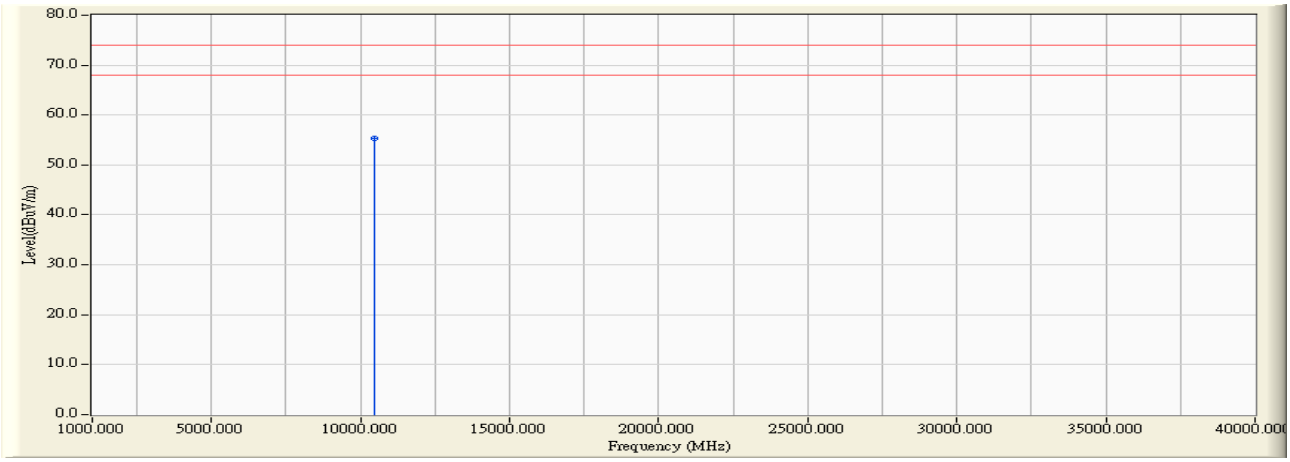
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/08/06
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5220MHz)

Horizontal:



Vertical:



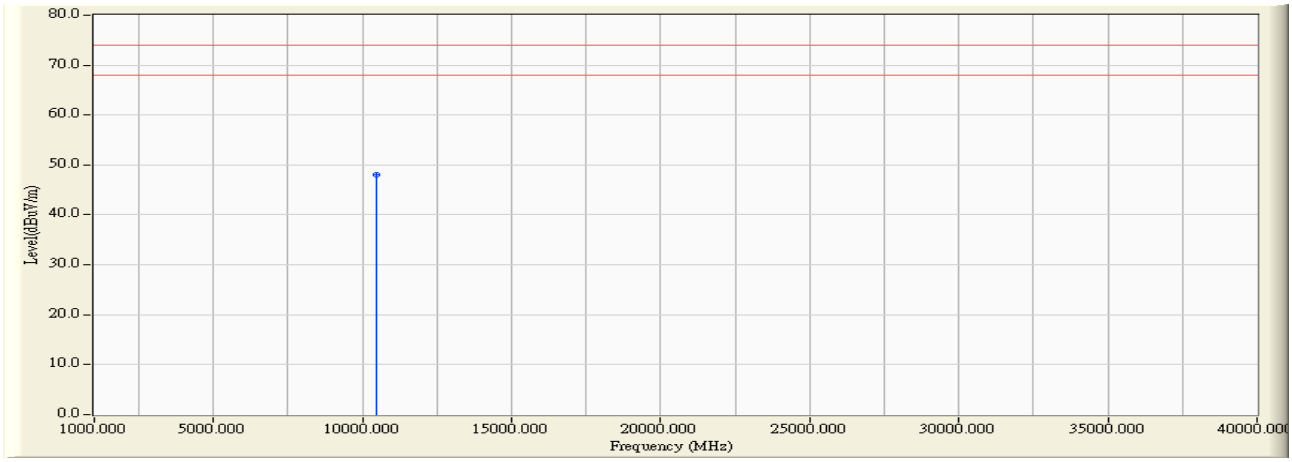
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10440.000	9.649	38.094	47.742	-26.258	74.000
Average					
Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10440.000	11.429	43.981	55.409	-18.591	74.000
Average					
Detector:					
10440.000	11.429	29.875	41.303	-12.697	54.000

Note:

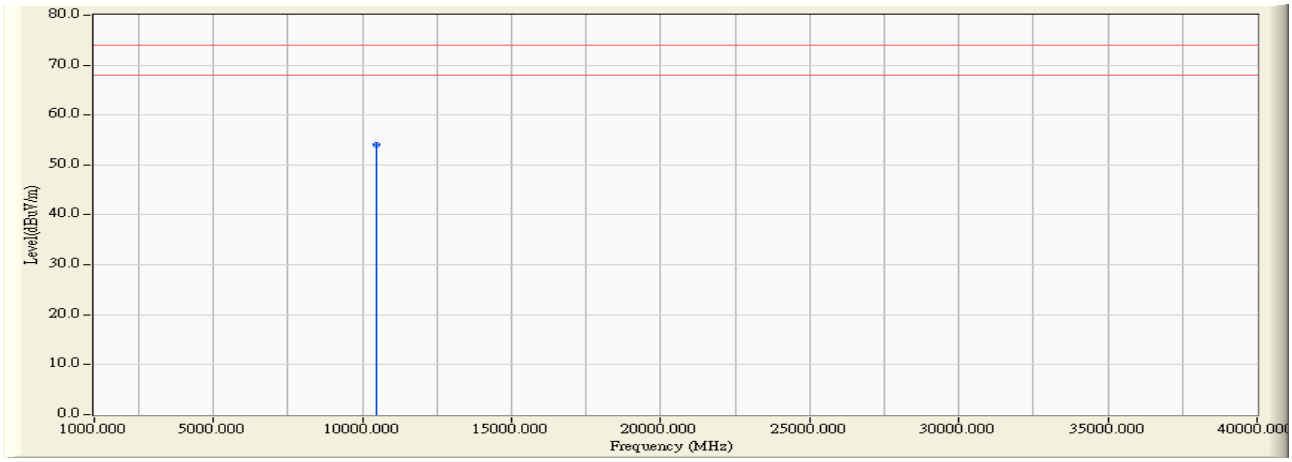
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/08/06
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5240MHz)

Horizontal:



Vertical:



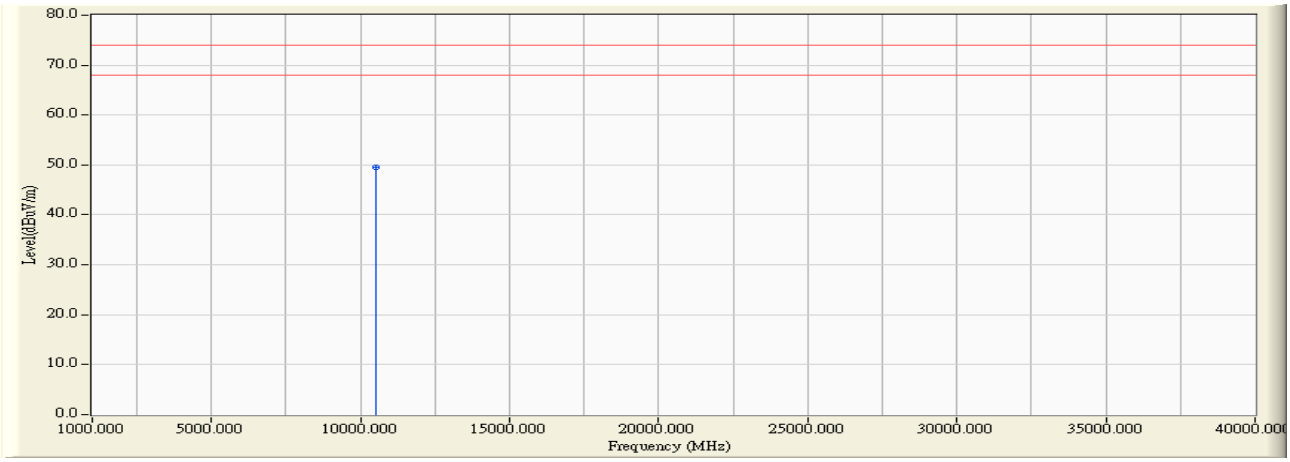
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10480.000	10.166	37.945	48.111	-25.889	74.000
Average					
Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10480.000	12.101	42.052	54.153	-19.847	74.000
Average					
Detector:					
10480.000	12.101	28.635	40.736	-13.264	54.000

Note:

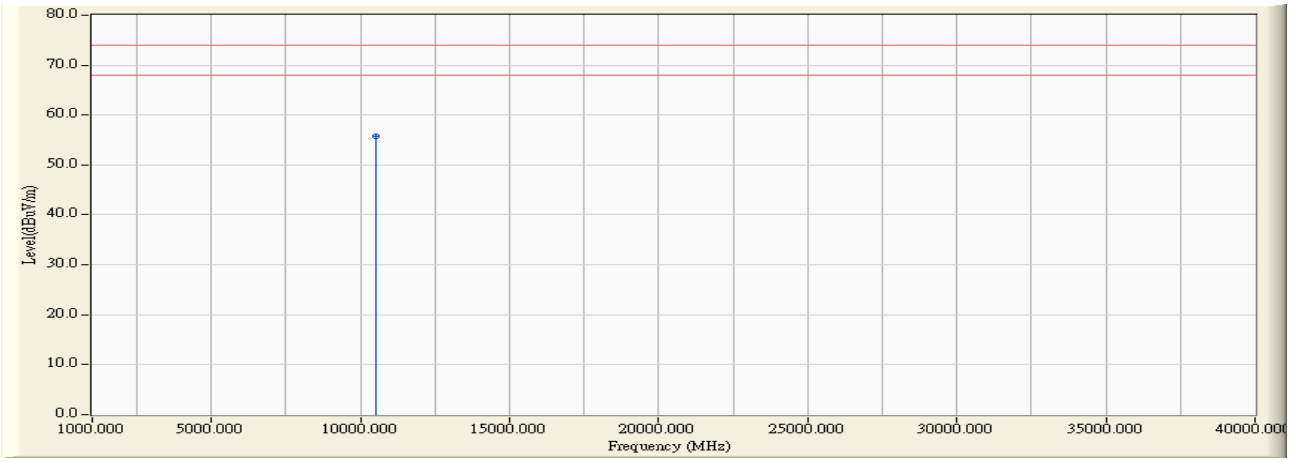
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/08/07
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5260MHz)

Horizontal:



Vertical:



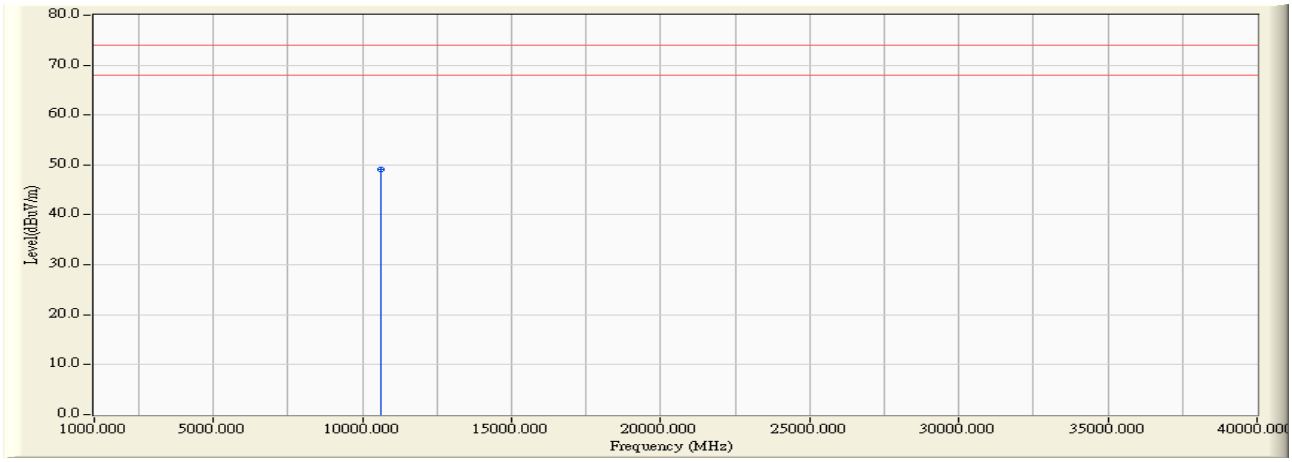
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10520.000	11.021	38.553	49.574	-24.426	74.000
Average					
Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10520.000	12.931	42.783	55.714	-18.286	74.000
Average					
Detector:					
10520.000	12.931	28.510	41.441	-12.559	54.000

Note:

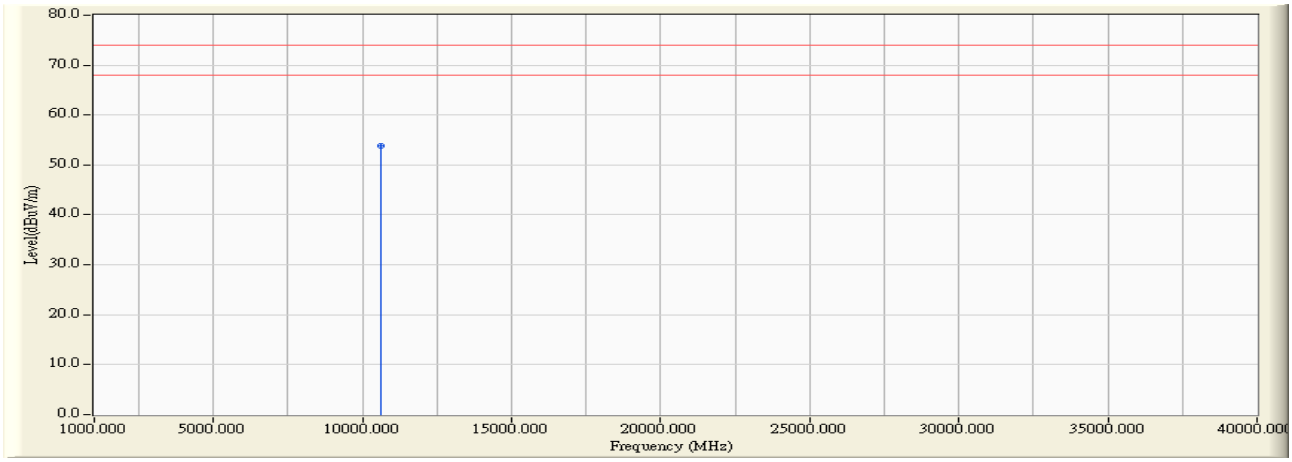
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/08/07
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5300MHz)

Horizontal:



Vertical:



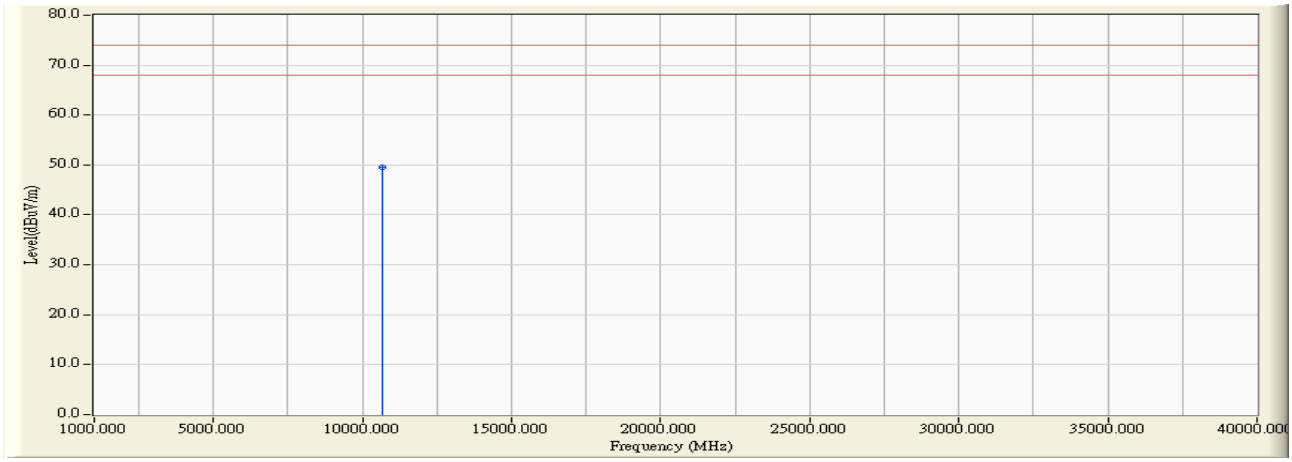
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10600.000	11.868	37.299	49.167	-24.833	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10600.000	13.403	40.513	53.916	-20.084	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

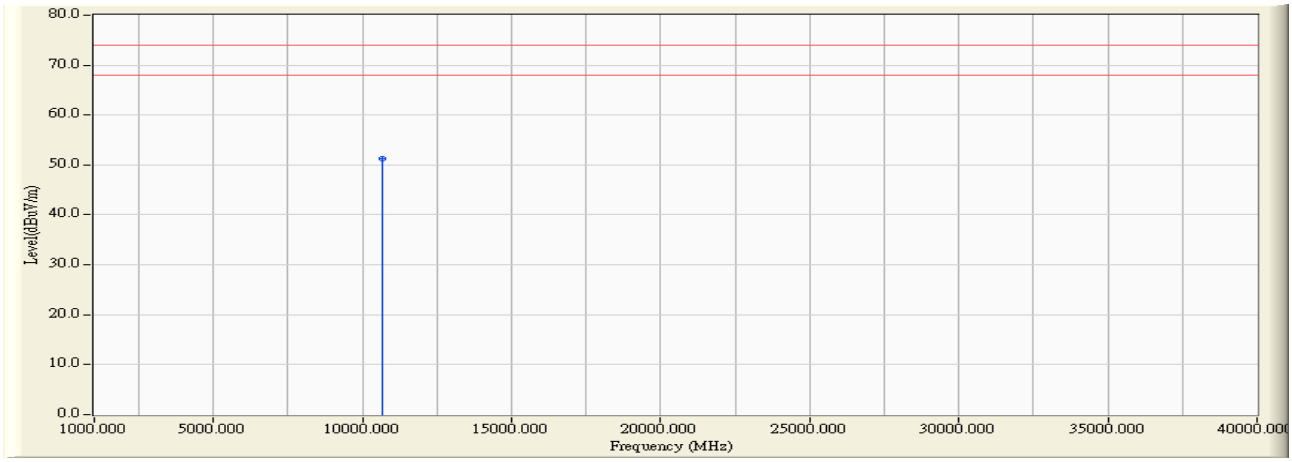
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/08/07
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5320MHz)

Horizontal:



Vertical:



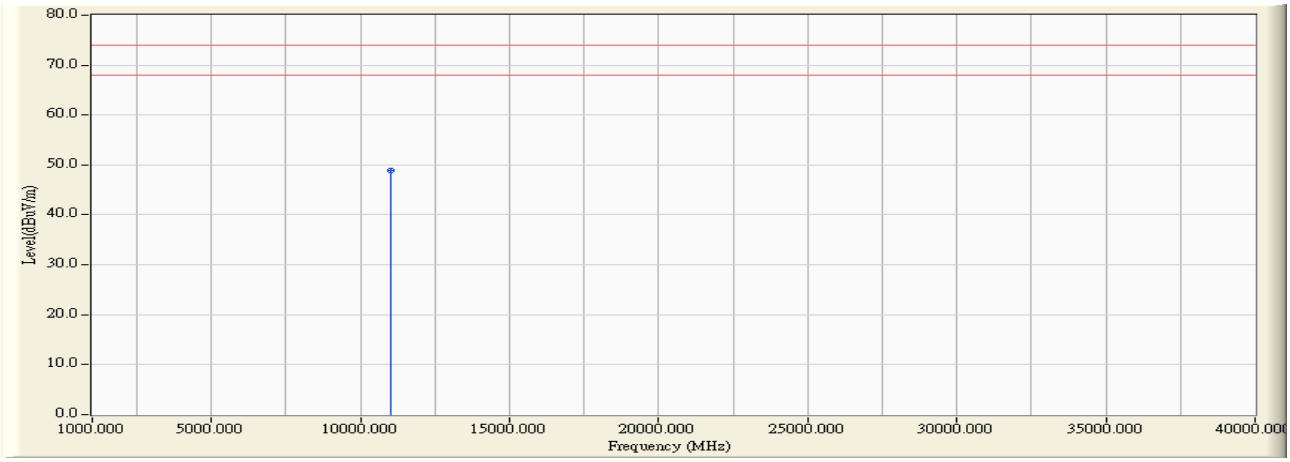
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10640.000	11.844	37.716	49.560	-24.440	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10640.000	13.517	37.824	51.341	-22.659	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

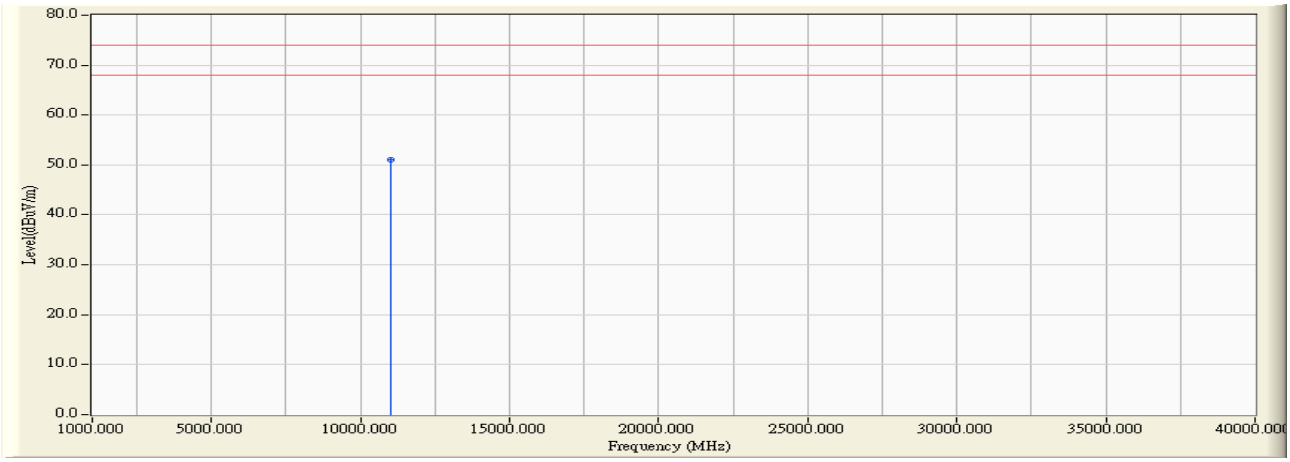
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/08/07
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5500MHz)

Horizontal:



Vertical:



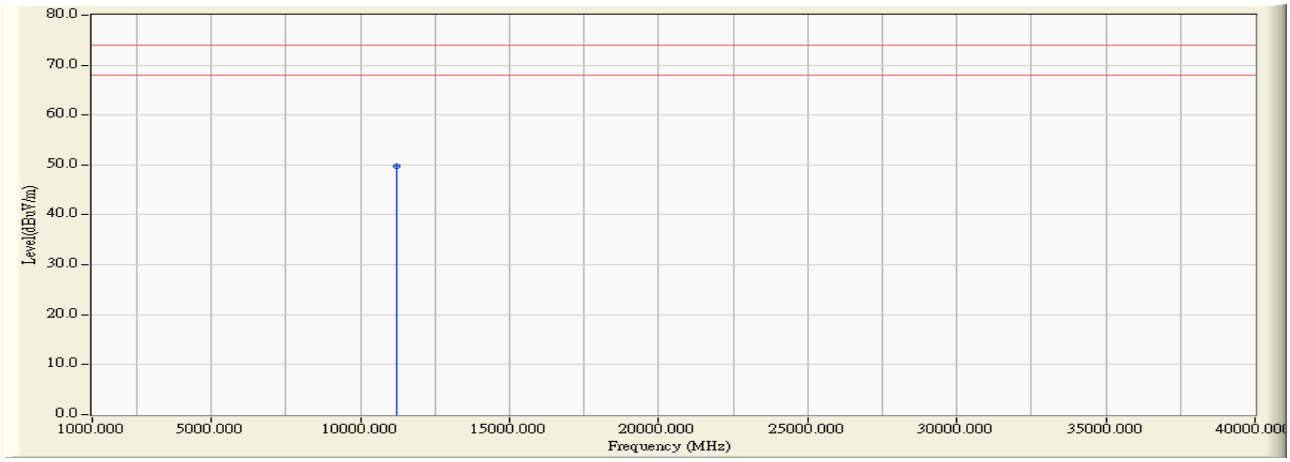
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11000.000	12.392	36.614	49.006	-24.994	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11000.000	14.514	36.452	50.966	-23.034	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

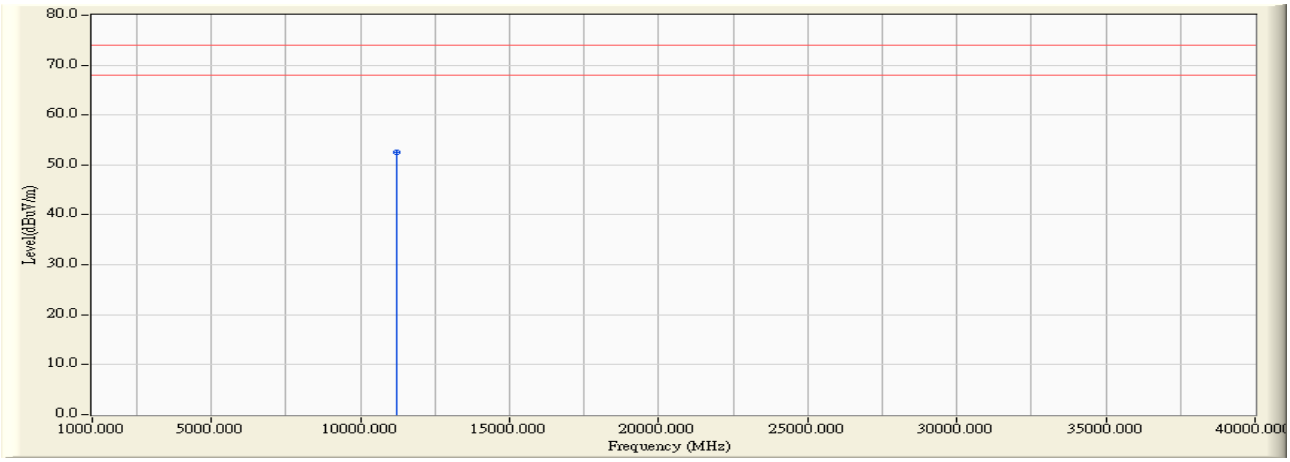
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/08/07
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5600MHz)

Horizontal:



Vertical:



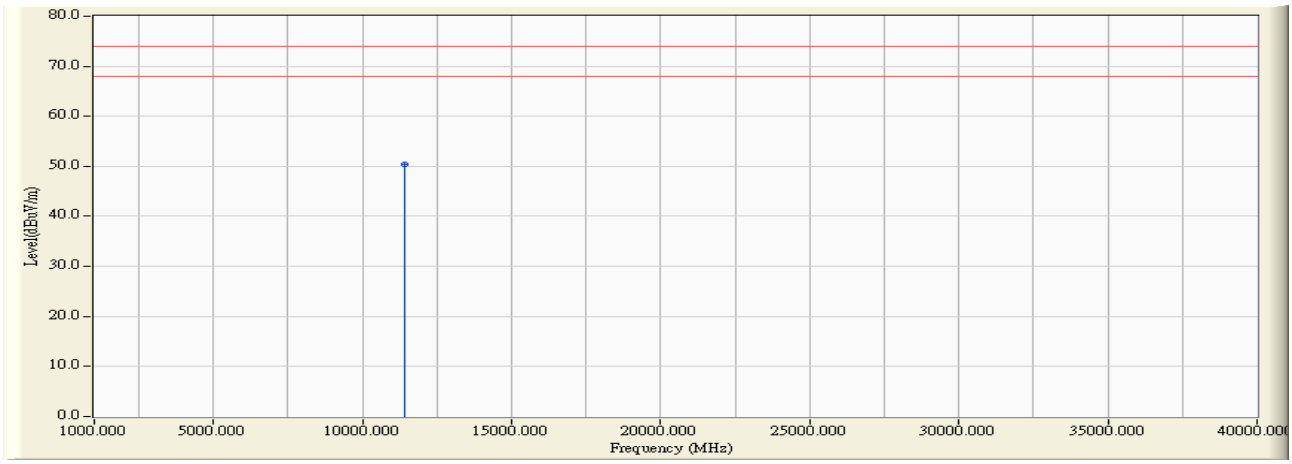
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11200.000	12.252	37.465	49.717	-24.283	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11200.000	14.486	38.009	52.495	-21.505	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

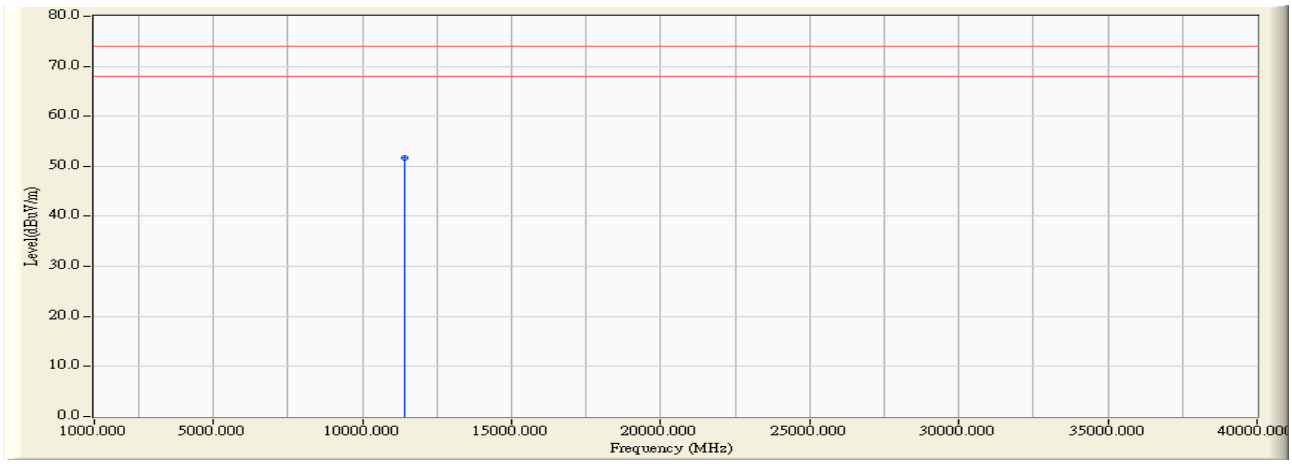
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/08/07
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5700MHz)

Horizontal:



Vertical:



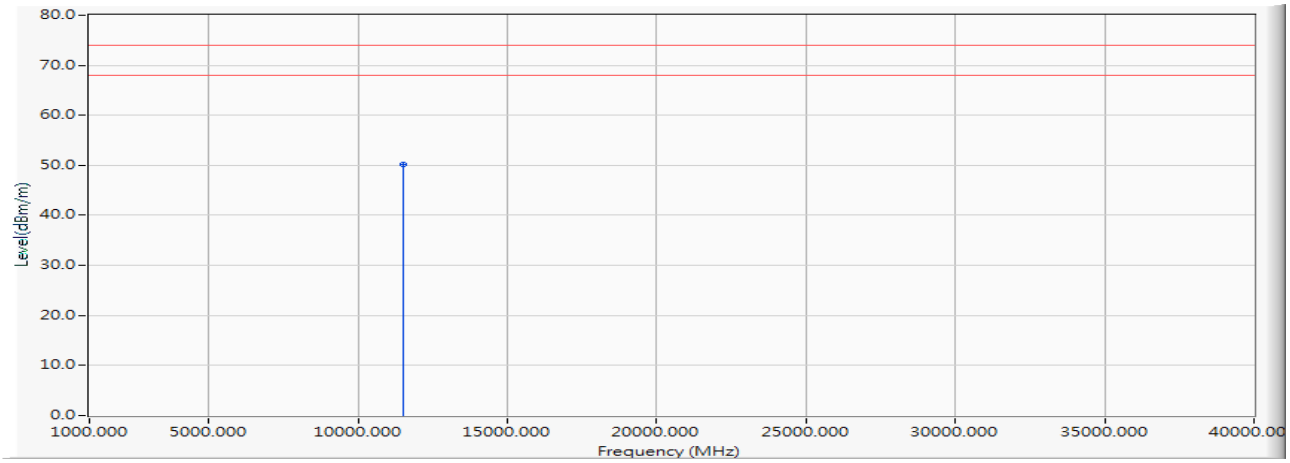
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11400.000	13.372	36.995	50.367	-23.633	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11400.000	14.922	36.765	51.687	-22.313	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

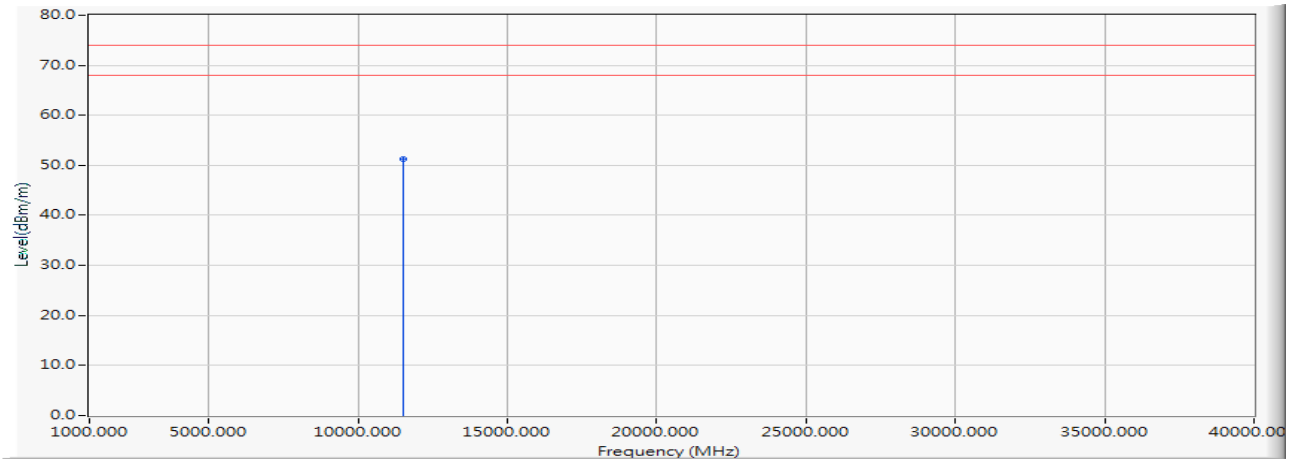
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/09/28
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5745MHz)

Horizontal:



Vertical:



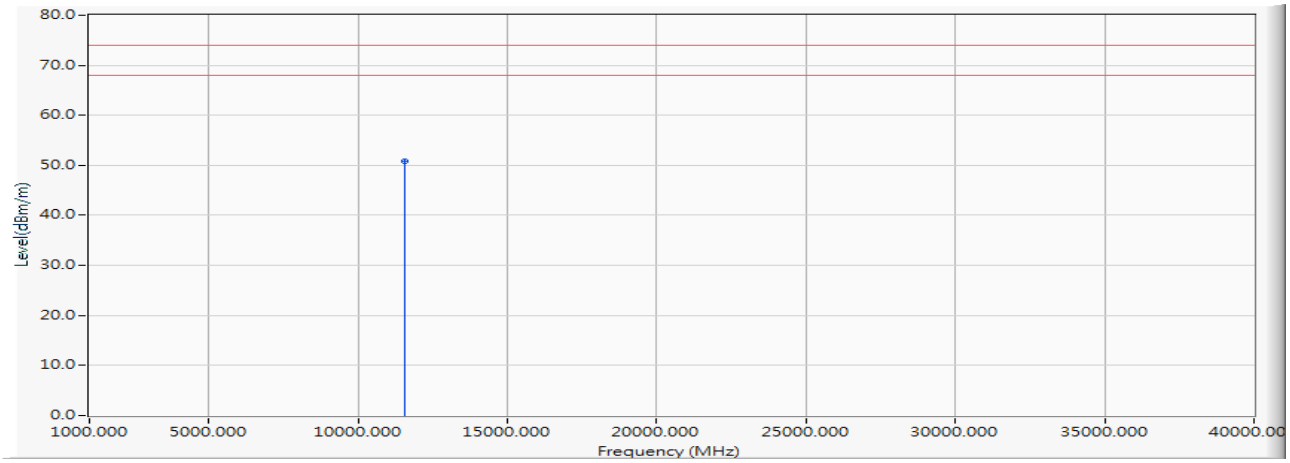
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11490.000	14.326	35.795	50.120	-23.880	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical Peak Detector:					
11490.000	15.842	35.493	51.334	-22.666	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

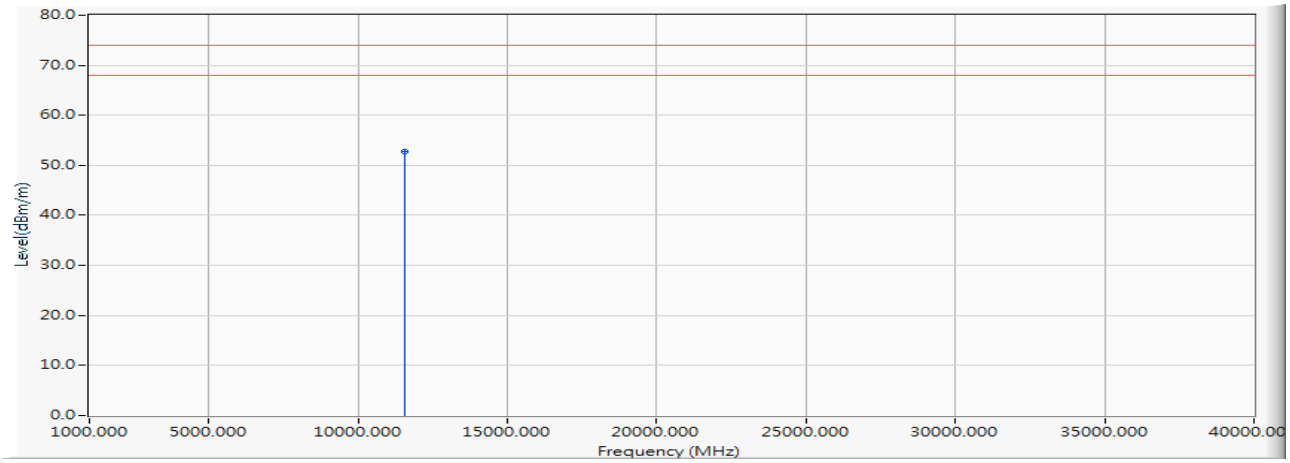
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/09/28
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5785MHz)

Horizontal:



Vertical:



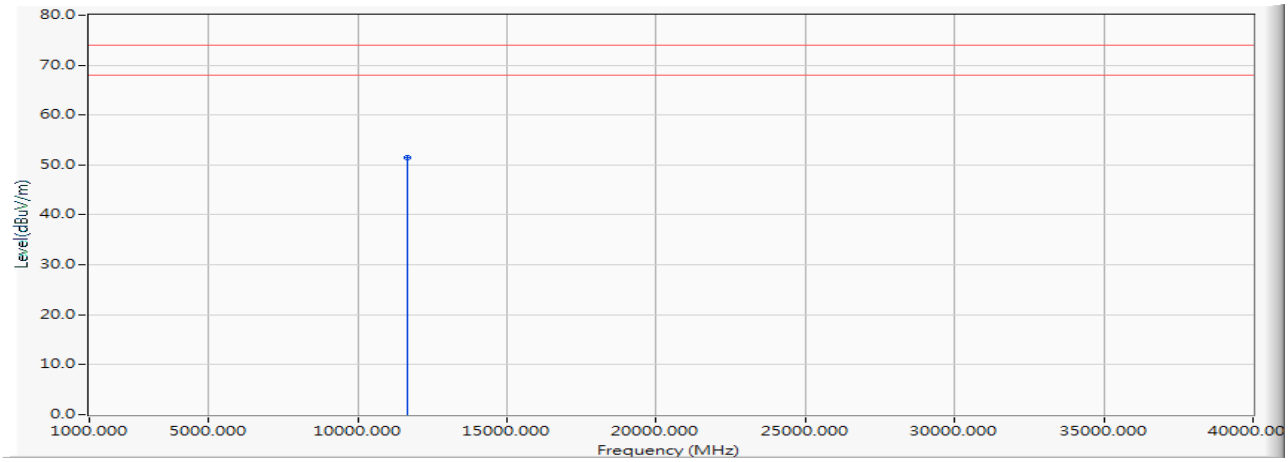
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11570.000	14.849	35.968	50.817	-23.183	74.000
Average					
Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11570.000	16.215	36.456	52.670	-21.330	74.000
Average					
Detector:					
--	--	--	--	--	54.000

Note:

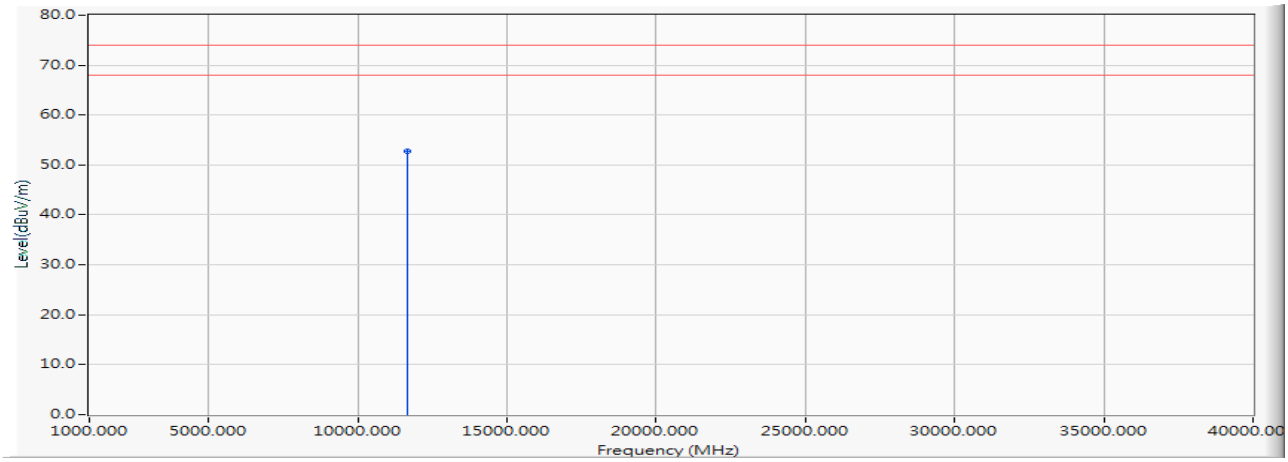
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/26
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5825MHz)

Horizontal:



Vertical:



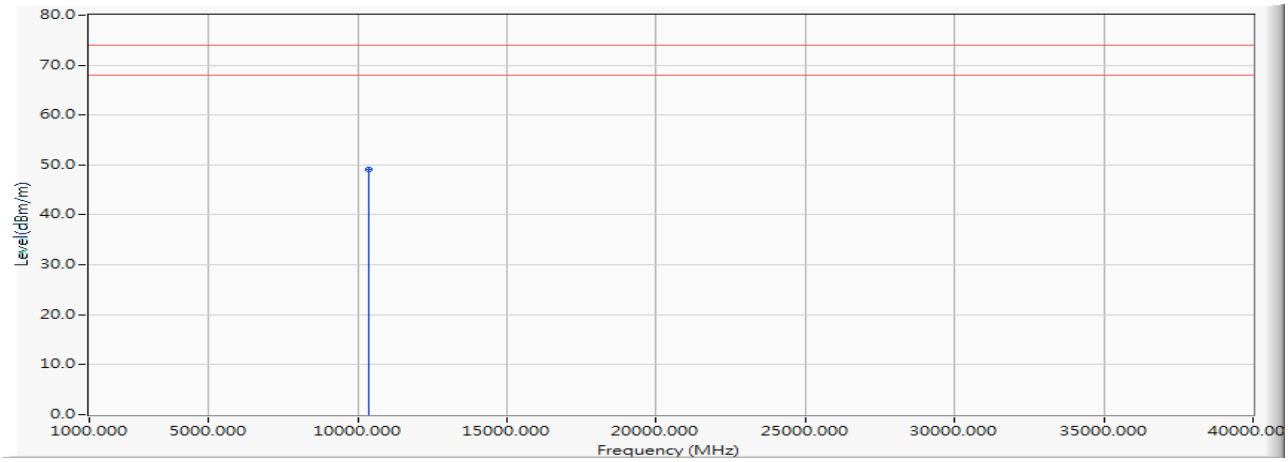
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11650.000	13.179	38.320	51.499	-22.501	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11650.000	14.634	38.173	52.807	-21.193	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

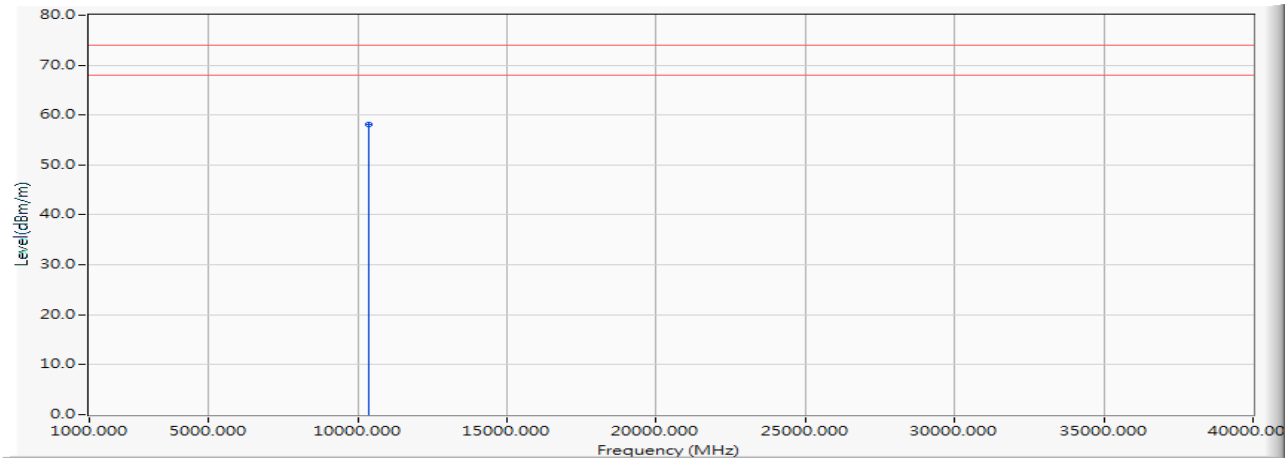
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5180MHz)

Horizontal:



Vertical:



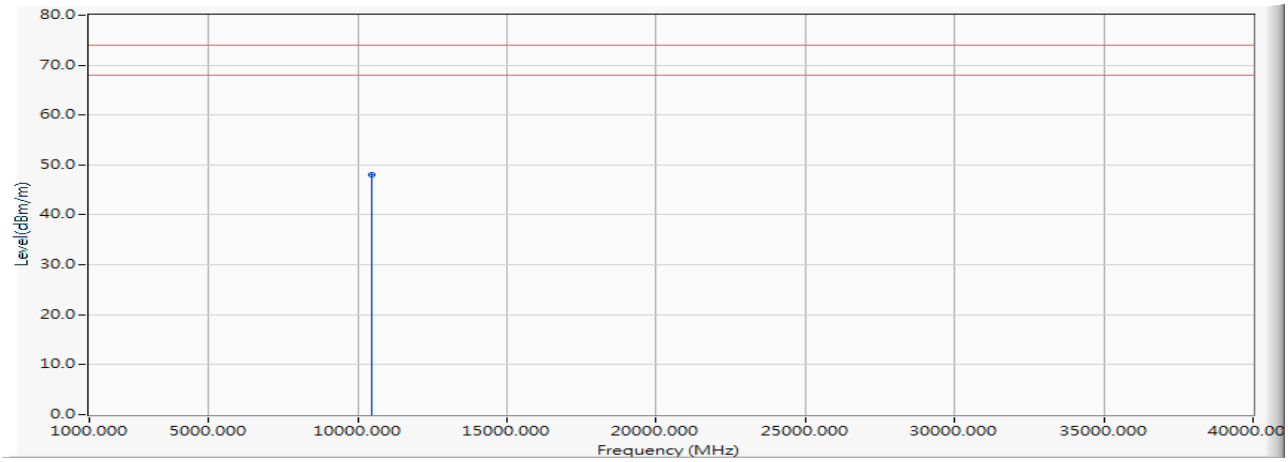
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10360.000	10.540	38.594	49.134	-24.866	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10360.000	12.044	46.097	58.140	-15.860	74.000
Average Detector:					
10360.000	12.044	32.882	44.925	-9.075	54.000

Note:

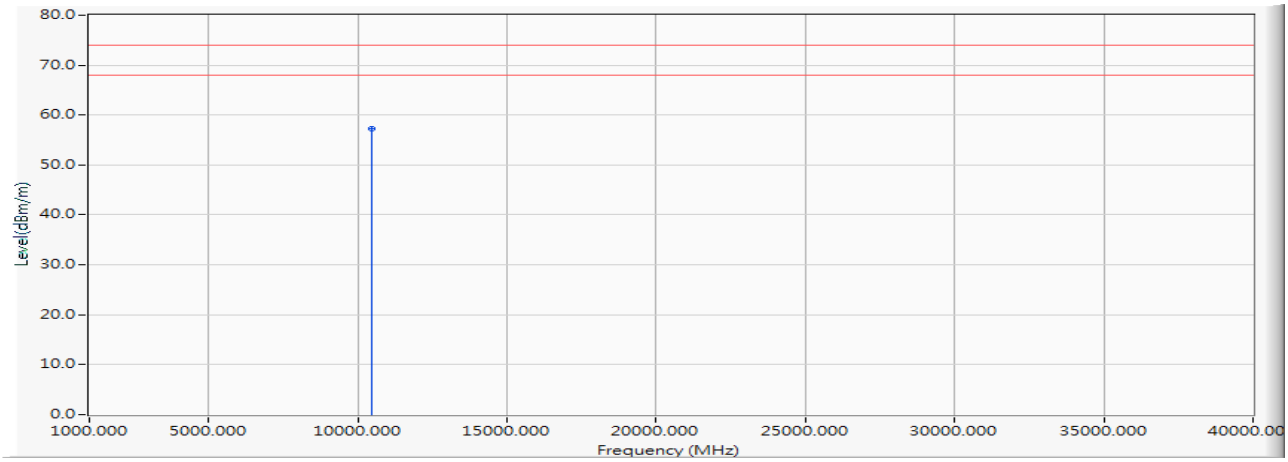
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5220MHz)

Horizontal:



Vertical:



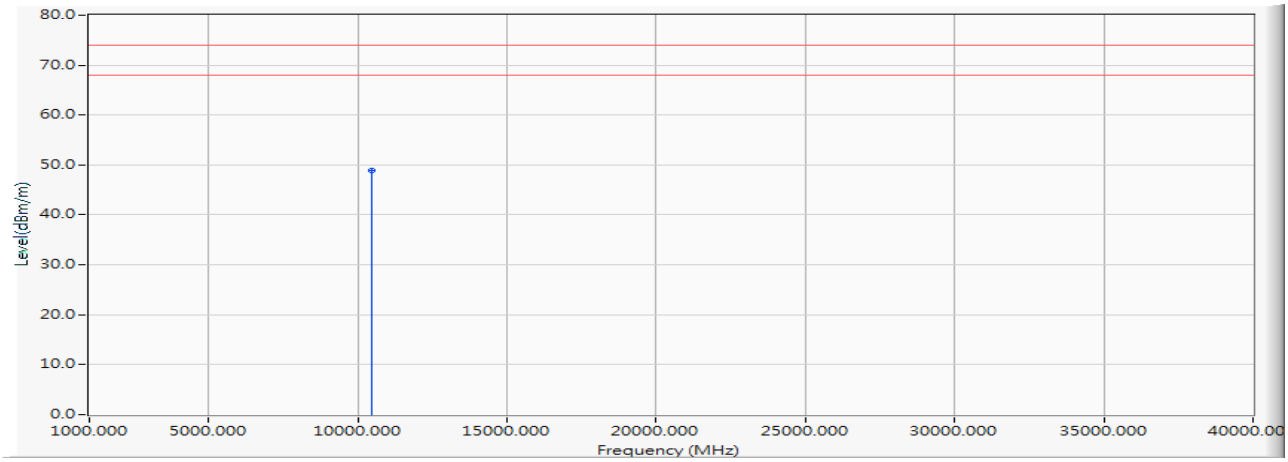
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10440.000	9.649	38.320	47.968	-26.032	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10440.000	11.429	45.911	57.339	-16.661	74.000
Average Detector:					
10440.000	11.429	33.870	45.298	-8.702	54.000

Note:

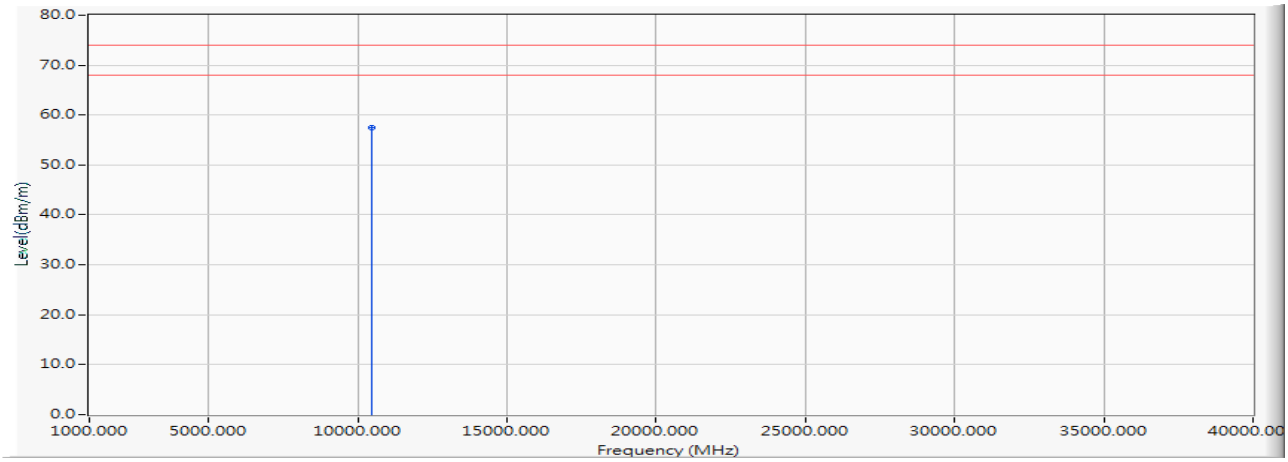
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5240MHz)

Horizontal:



Vertical:



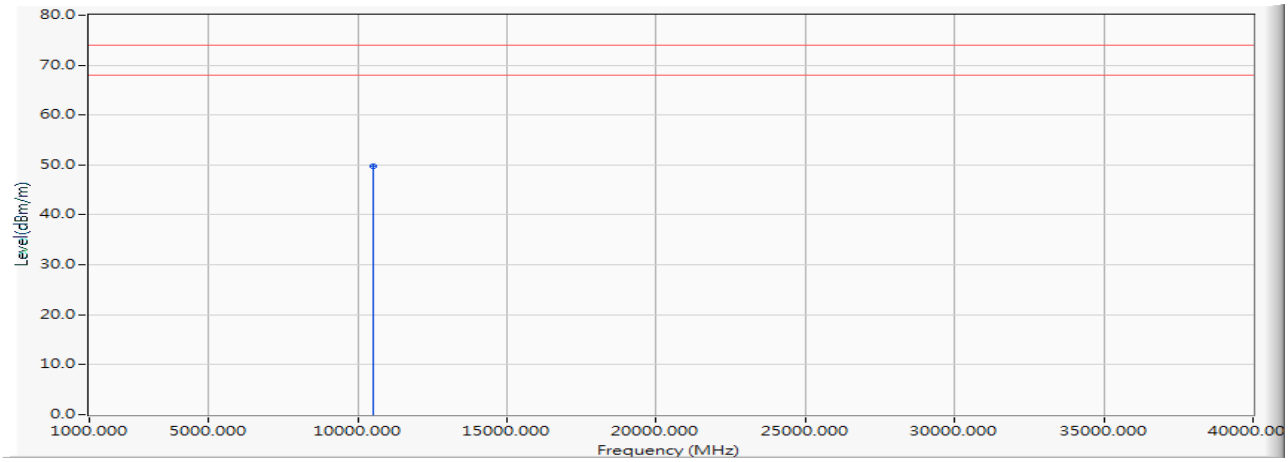
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10480.000	10.166	38.730	48.896	-25.104	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10480.000	12.101	45.362	57.463	-16.537	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

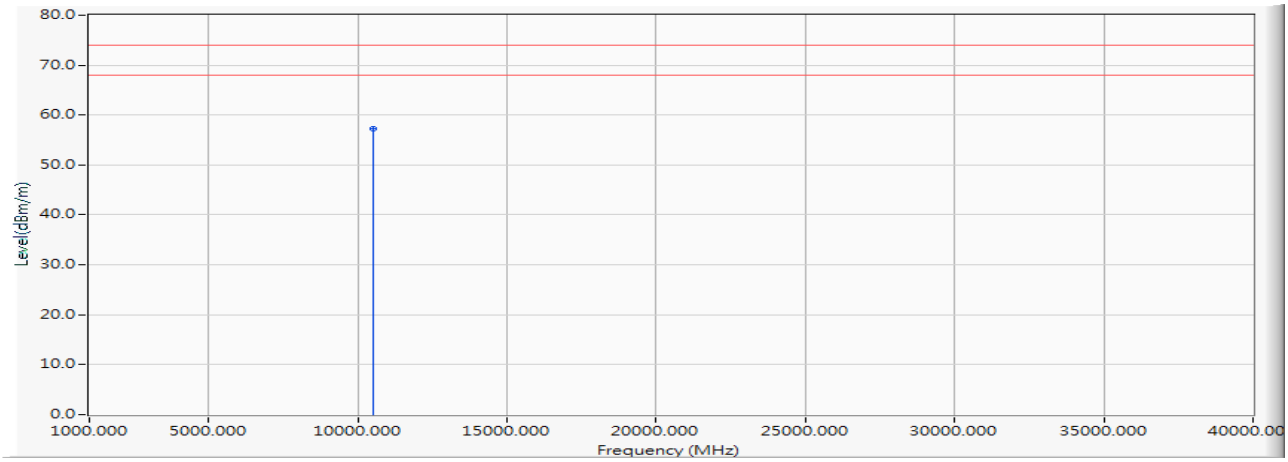
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5260MHz)

Horizontal:



Vertical:



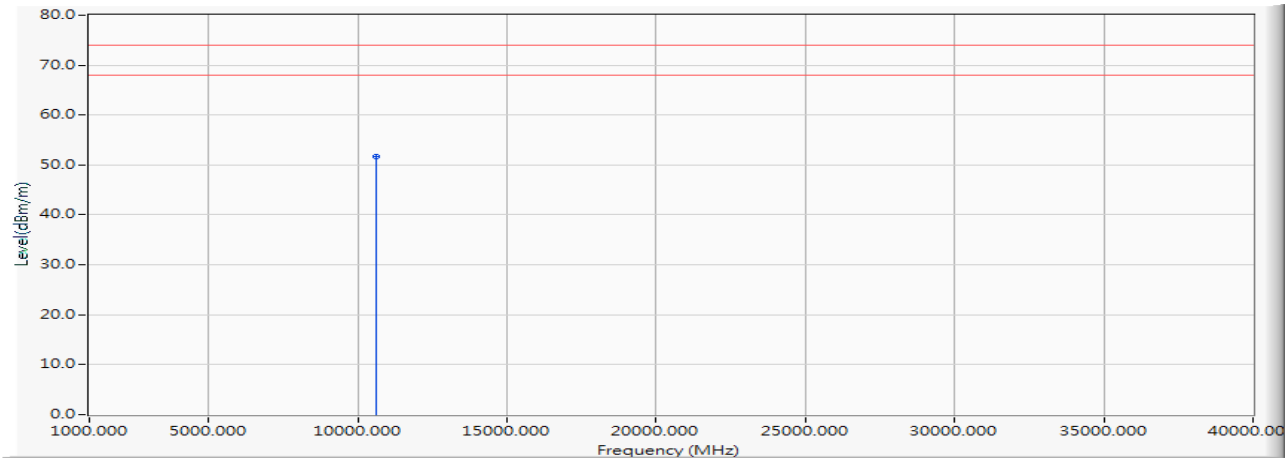
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10520.000	11.021	38.652	49.673	-24.327	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10520.000	12.931	44.429	57.360	-16.640	74.000
Average Detector:					
10520.000	12.931	31.702	44.633	-9.367	54.000

Note:

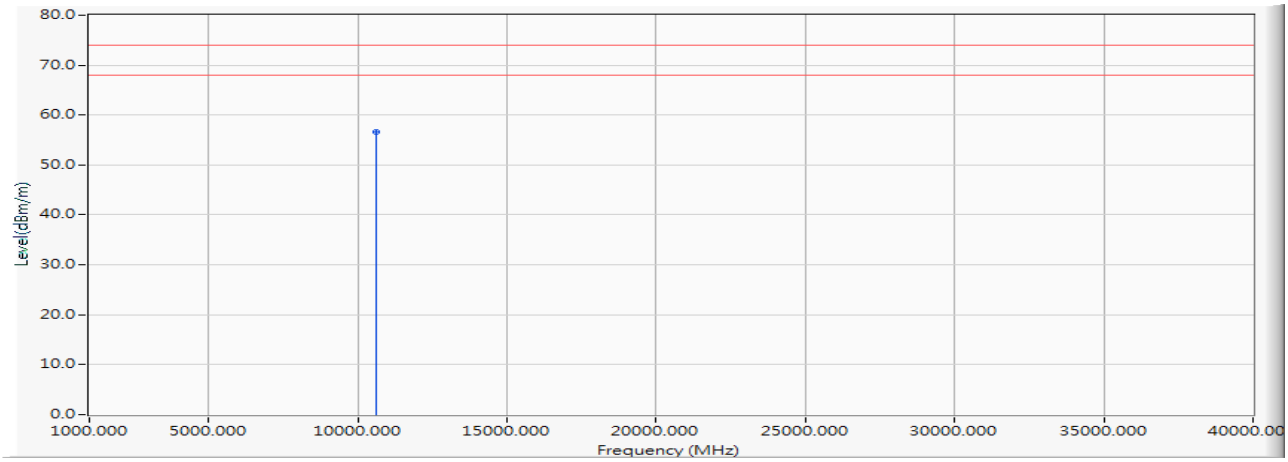
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5300MHz)

Horizontal:



Vertical:



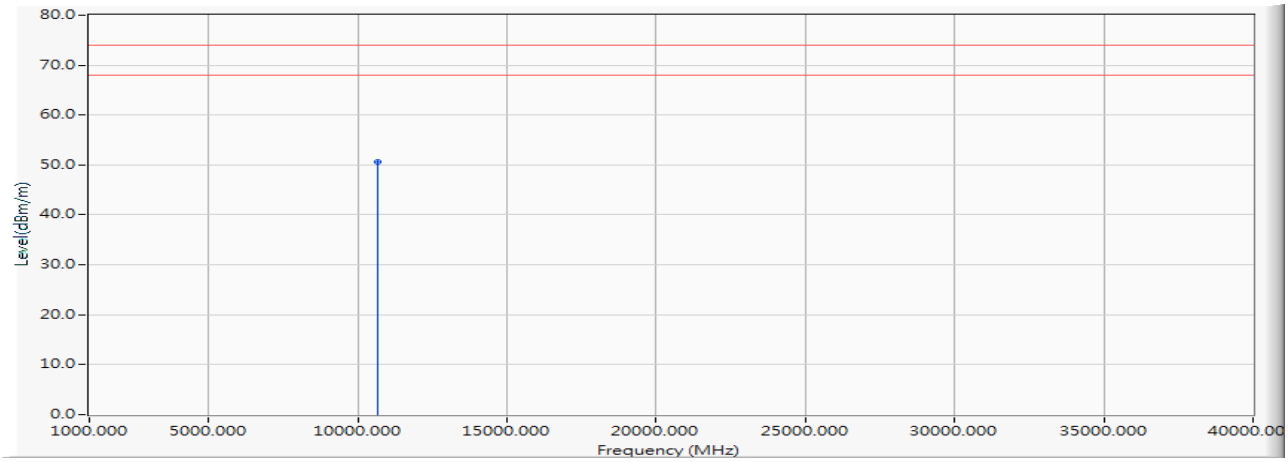
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10600.000	11.868	39.900	51.768	-22.232	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10600.000	13.403	43.269	56.672	-17.328	74.000
Average Detector:					
10600.000	13.403	31.017	44.420	-9.580	54.000

Note:

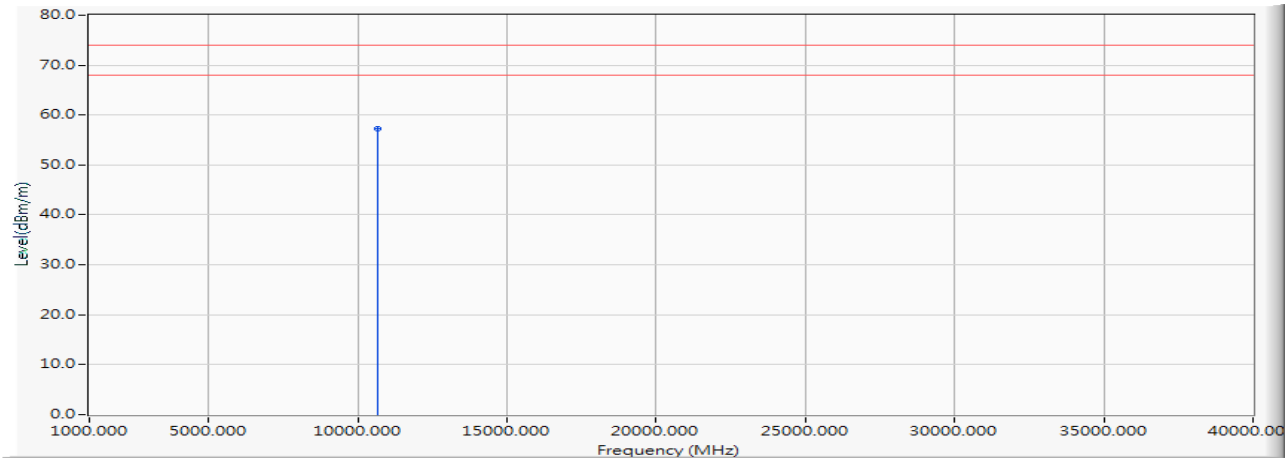
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5320MHz)

Horizontal:



Vertical:



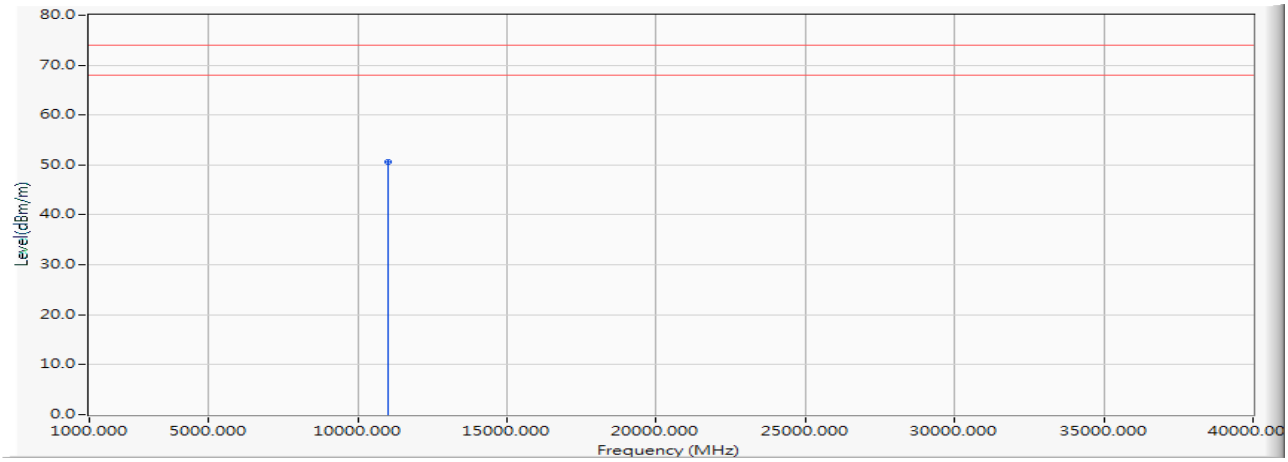
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10640.000	11.844	38.870	50.714	-23.286	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10640.000	13.517	43.702	57.219	-16.781	74.000
Average Detector:					
10640.000	13.517	31.648	45.165	-8.835	54.000

Note:

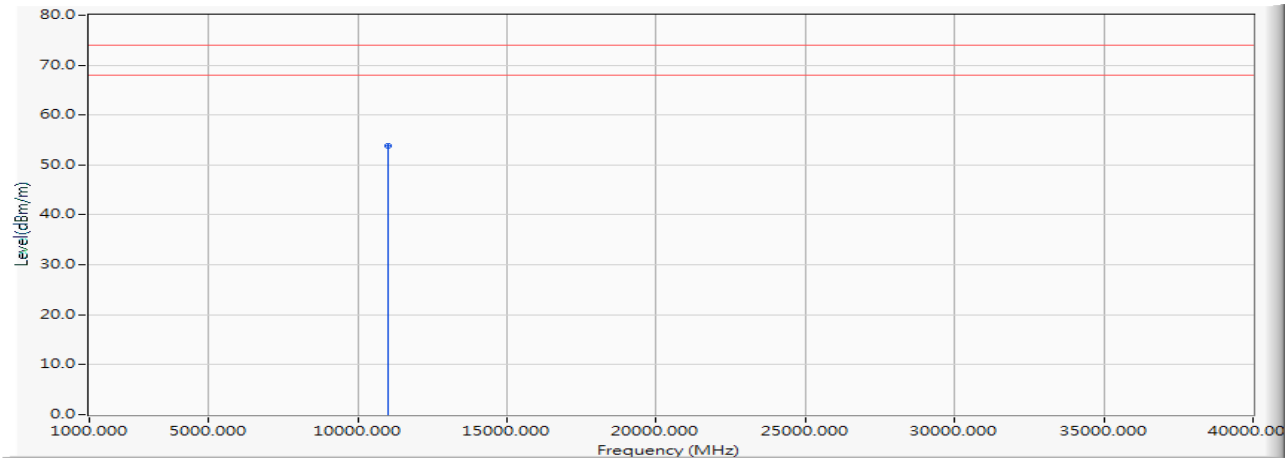
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5500MHz)

Horizontal:



Vertical:



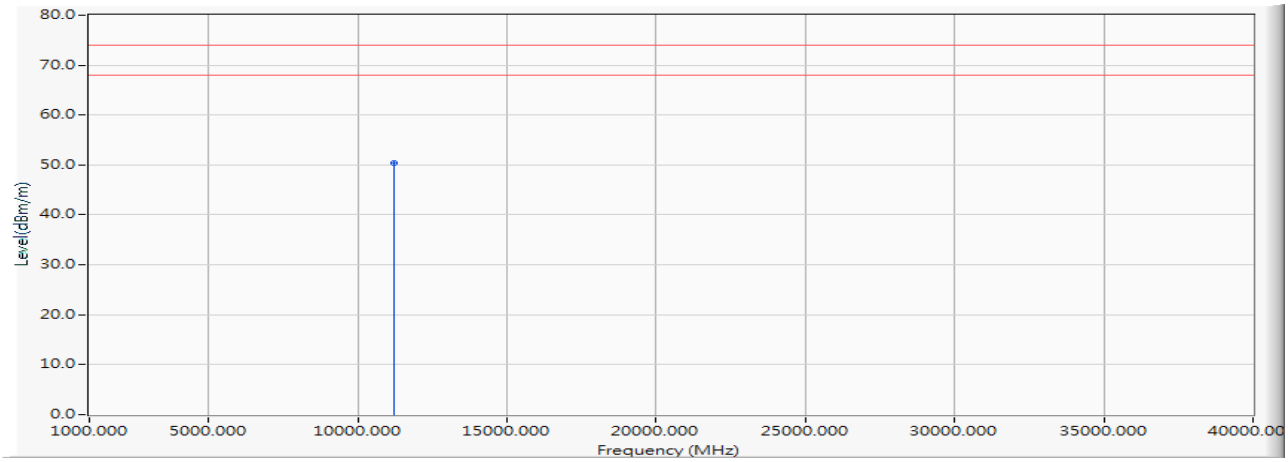
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11000.000	12.392	38.123	50.515	-23.485	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11000.000	14.514	39.229	53.743	-20.257	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

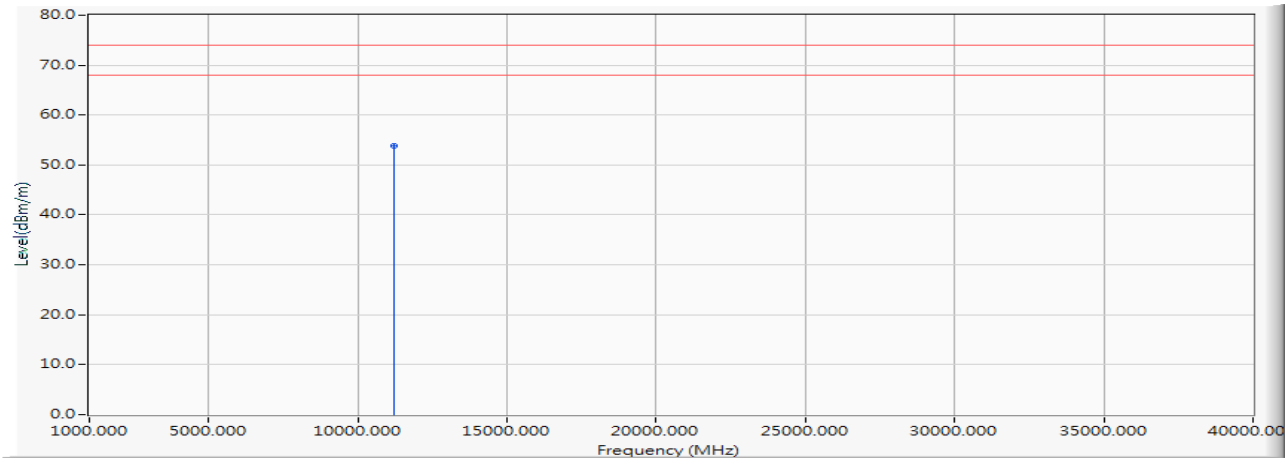
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5600MHz)

Horizontal:



Vertical:



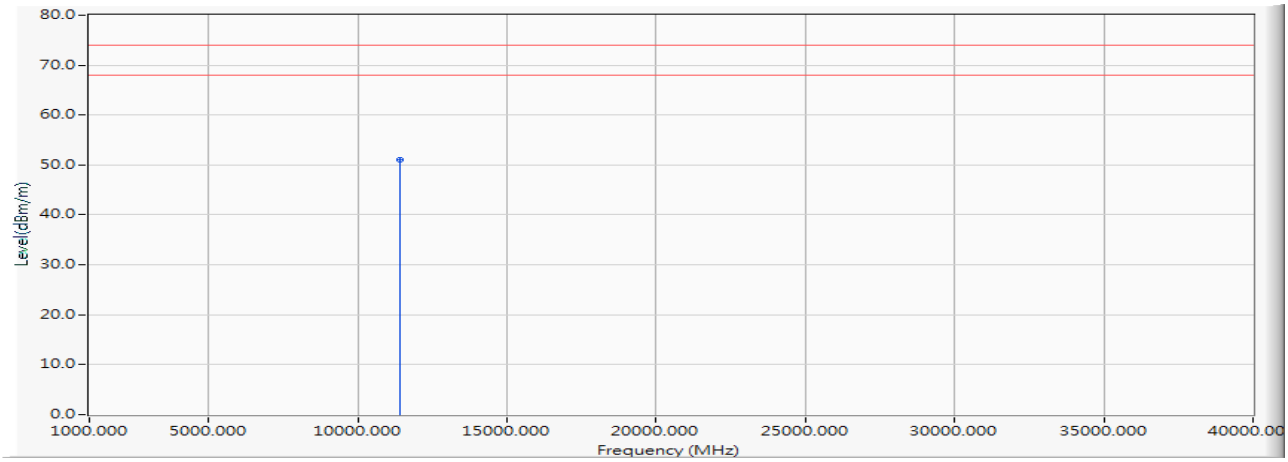
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11200.000	12.252	38.224	50.476	-23.524	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11200.000	14.486	39.406	53.892	-20.108	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

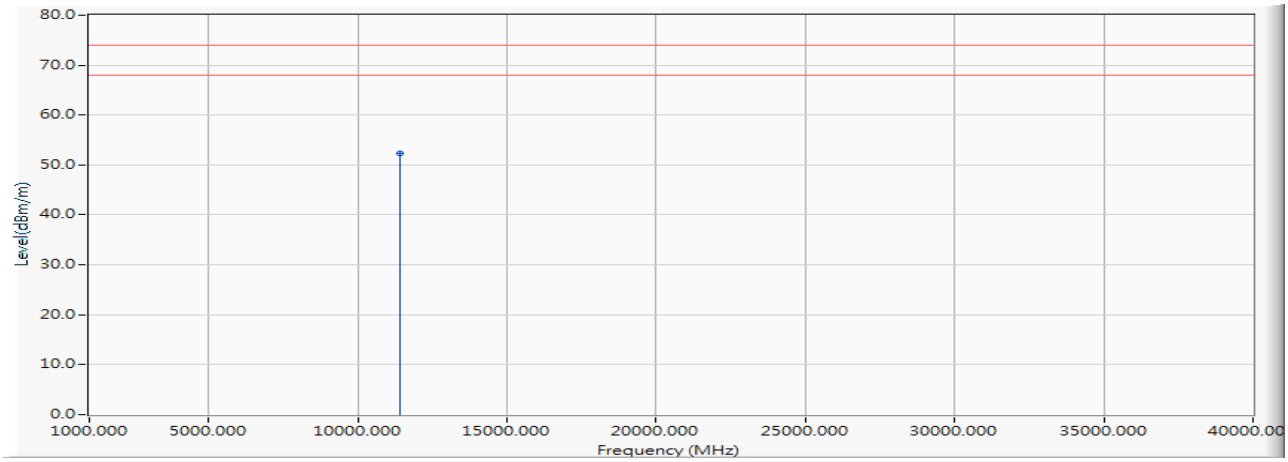
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5700MHz)

Horizontal:



Vertical:



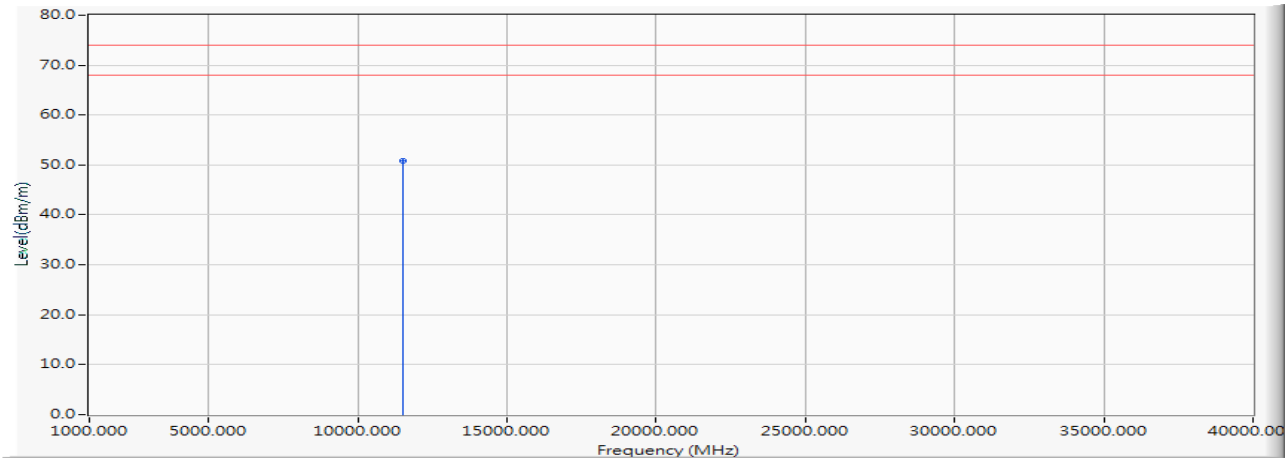
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11400.000	13.372	37.705	51.077	-22.923	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11400.000	14.922	37.345	52.267	-21.733	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

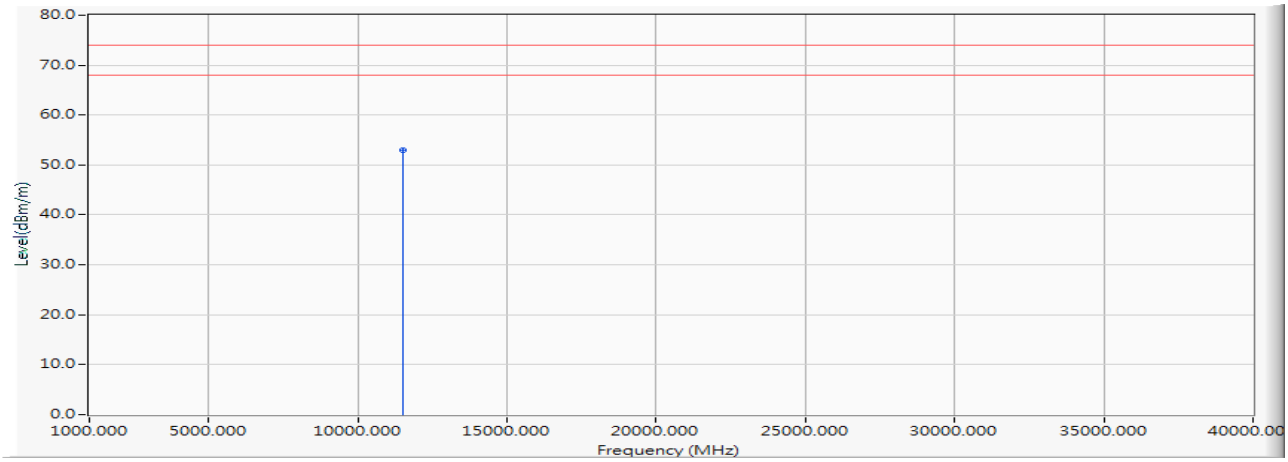
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5745MHz)

Horizontal:



Vertical:



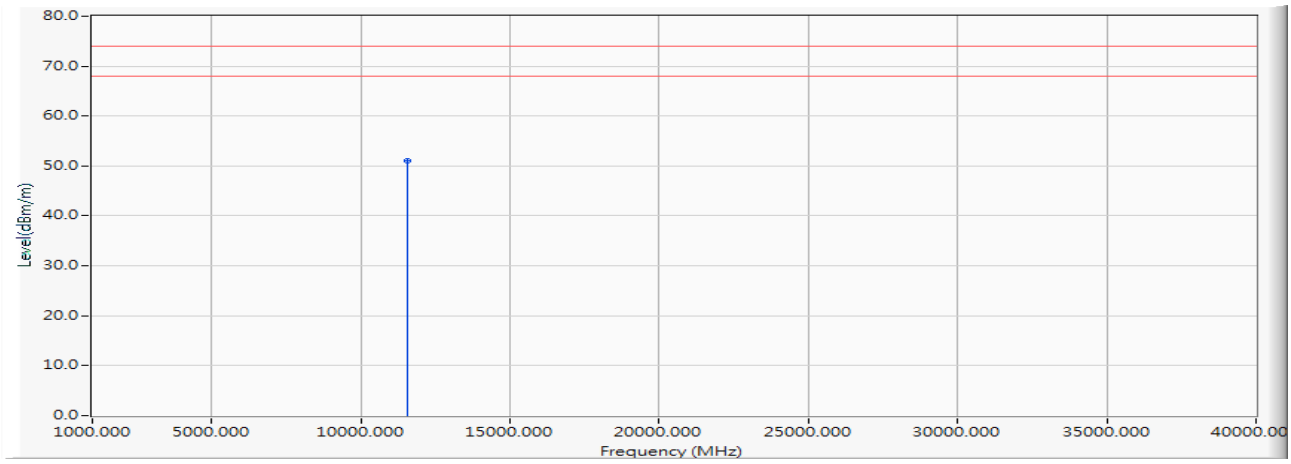
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11490.000	14.326	36.479	50.804	-23.196	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical Peak Detector:					
11490.000	15.842	37.151	52.992	-21.008	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

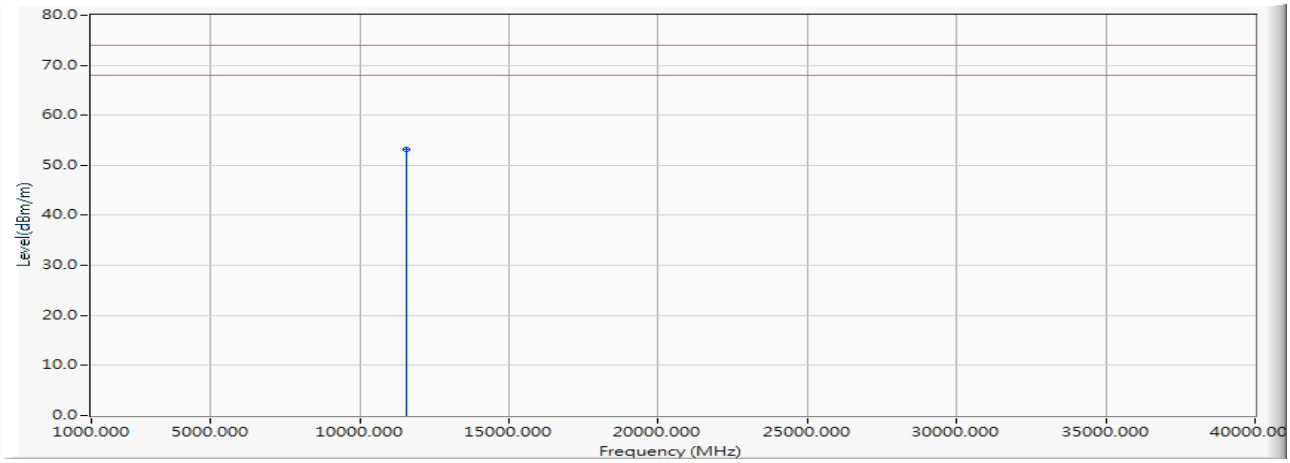
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5785MHz)

Horizontal:



Vertical:



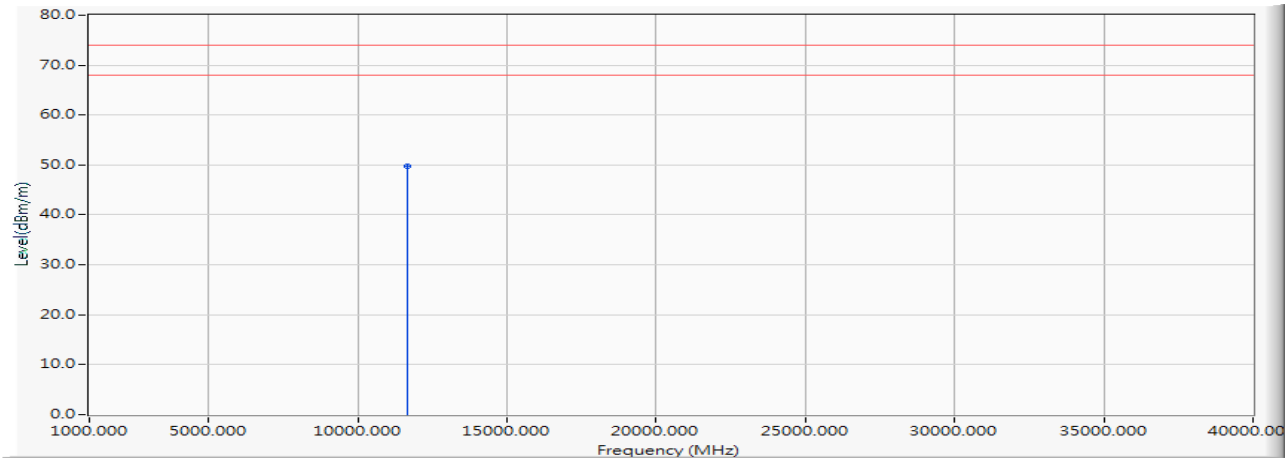
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11570.000	14.849	36.116	50.965	-23.035	74.000
Average					
Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11570.000	16.215	36.992	53.206	-20.794	74.000
Average					
Detector:					
--	--	--	--	--	54.000

Note:

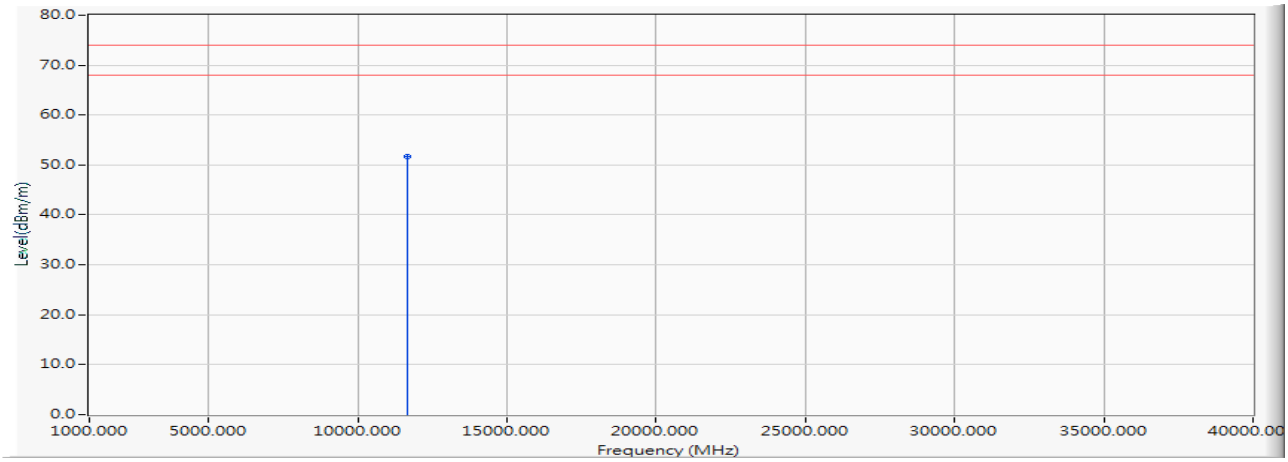
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5825MHz)

Horizontal:



Vertical:



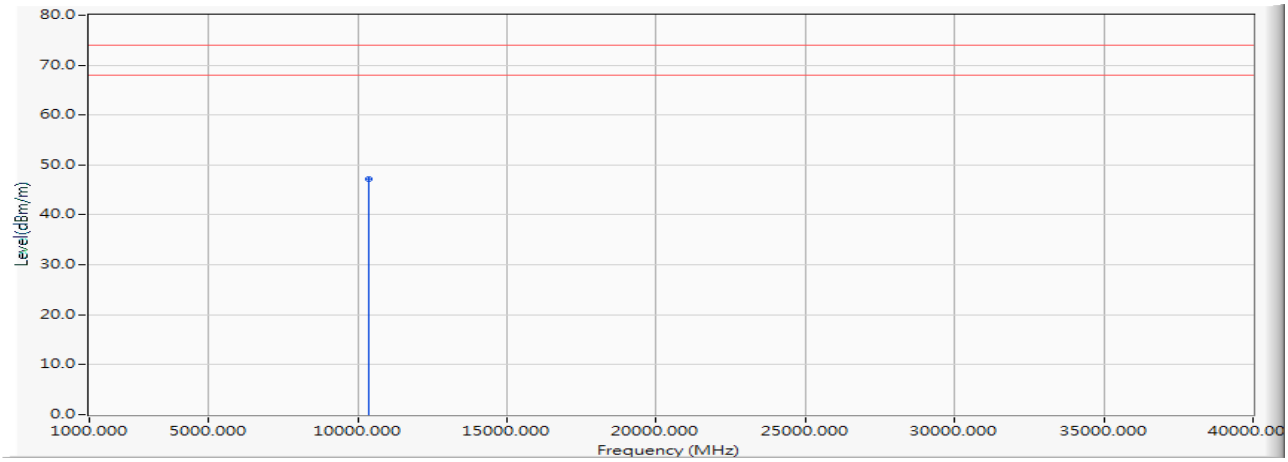
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11650.000	13.179	36.655	49.834	-24.166	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11650.000	14.634	37.140	51.774	-22.226	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

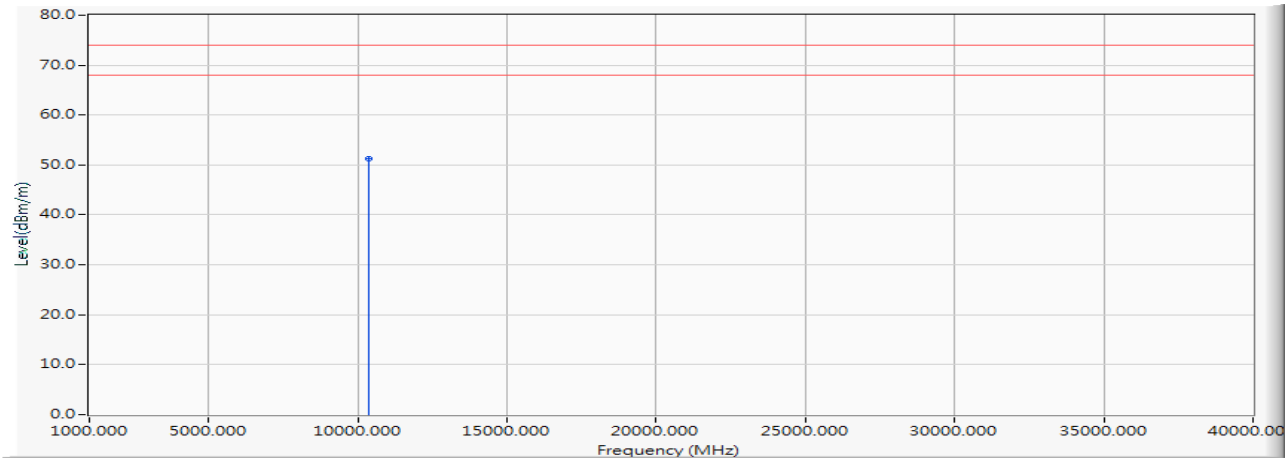
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5190MHz)

Horizontal:



Vertical:



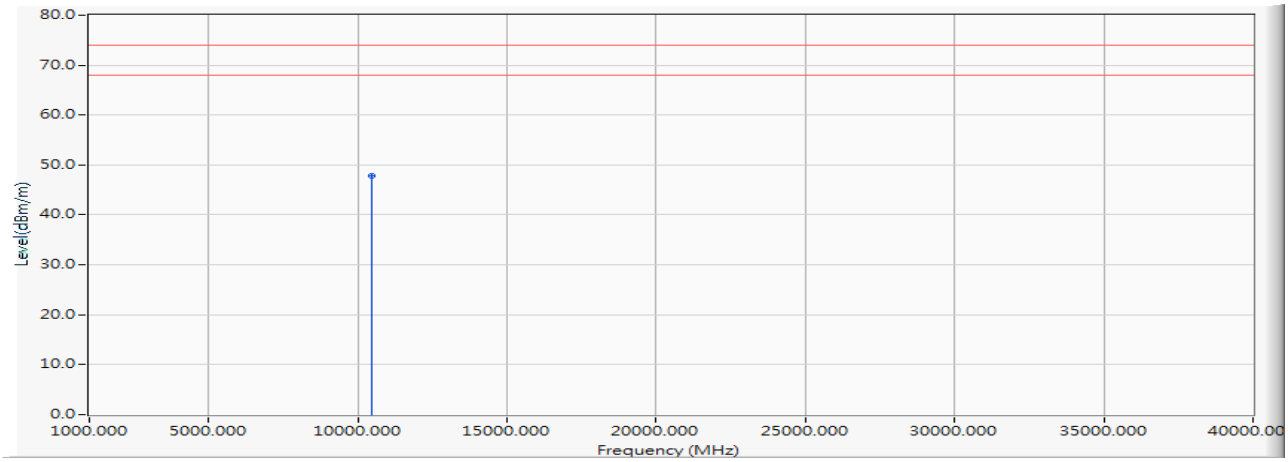
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10380.000	10.164	36.943	47.107	-26.893	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10380.000	11.729	39.443	51.173	-22.827	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

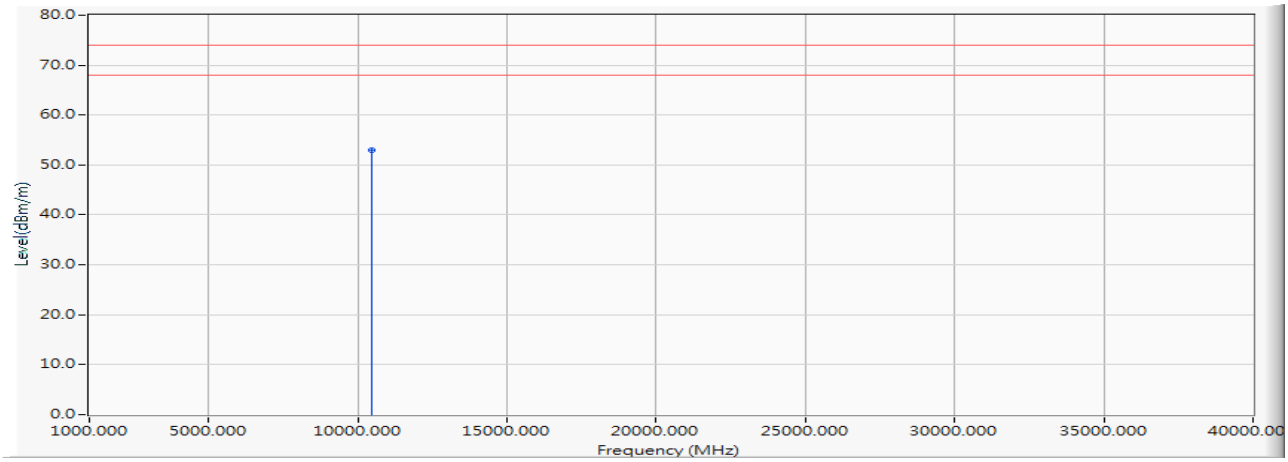
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5230MHz)

Horizontal:



Vertical:



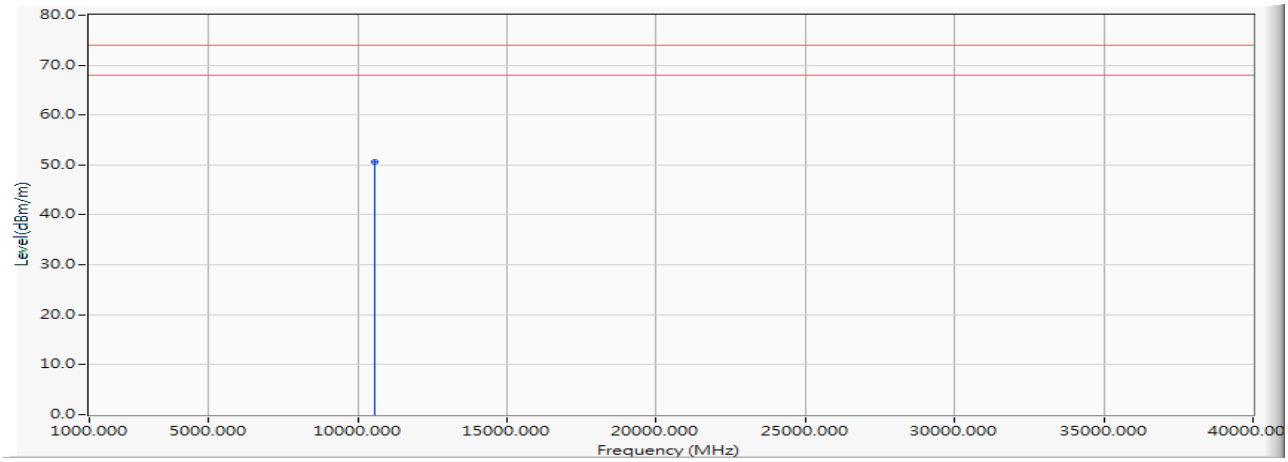
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10460.000	9.786	38.111	47.897	-26.103	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10460.000	11.644	41.230	52.874	-21.126	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

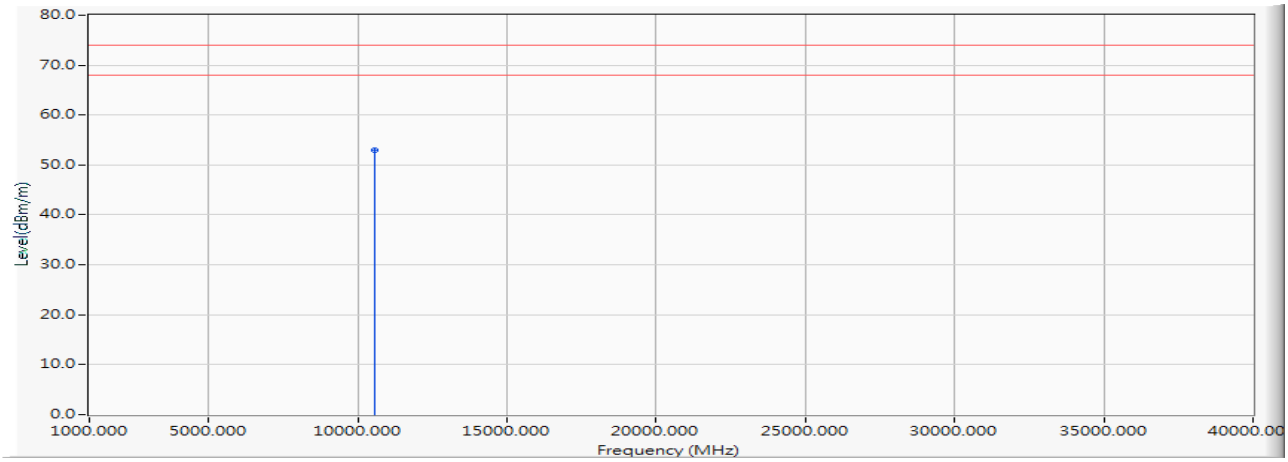
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5270MHz)

Horizontal:



Vertical:



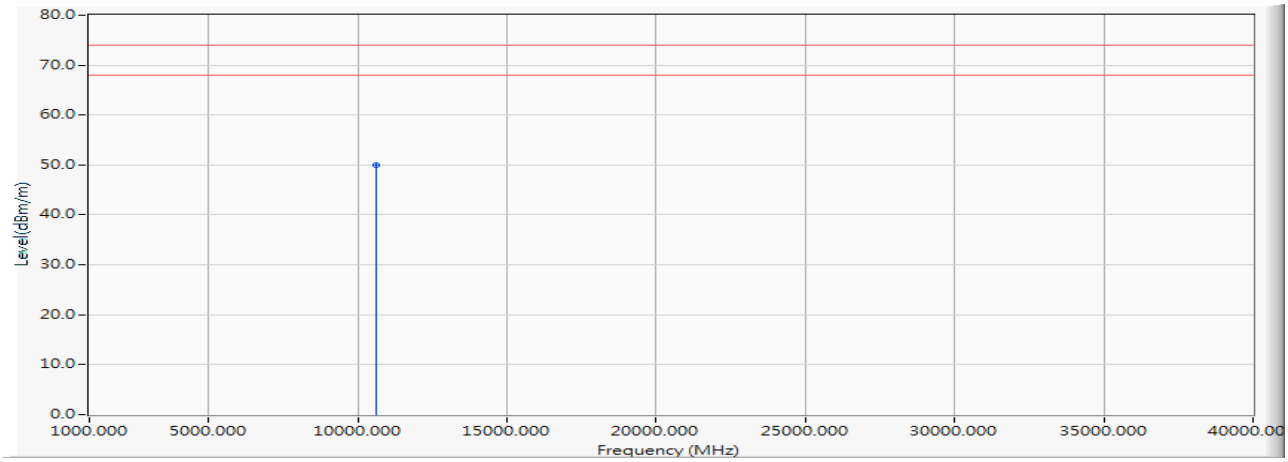
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10540.000	11.479	39.082	50.561	-23.439	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10540.000	13.289	39.627	52.916	-21.084	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

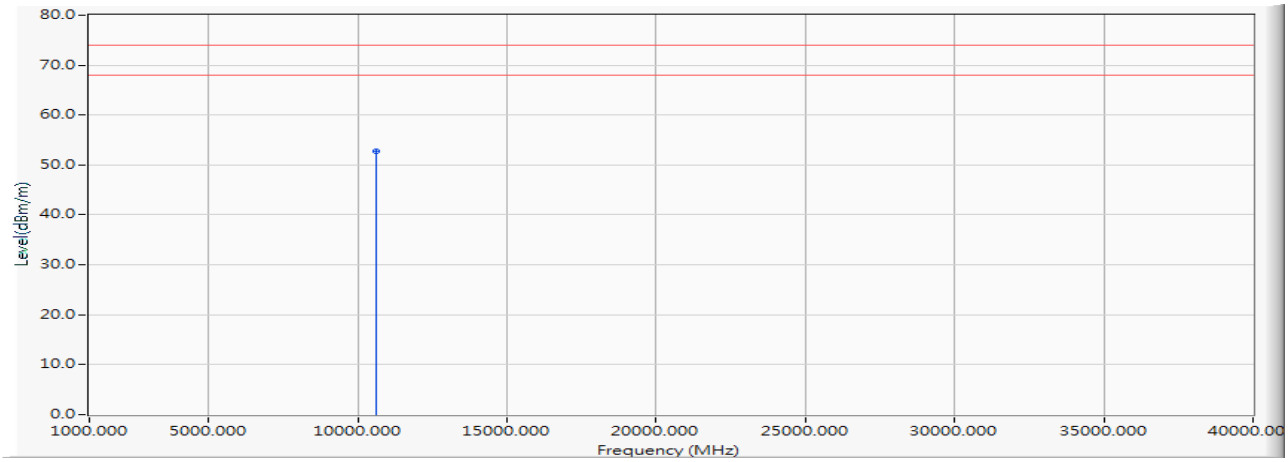
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5310MHz)

Horizontal:



Vertical:



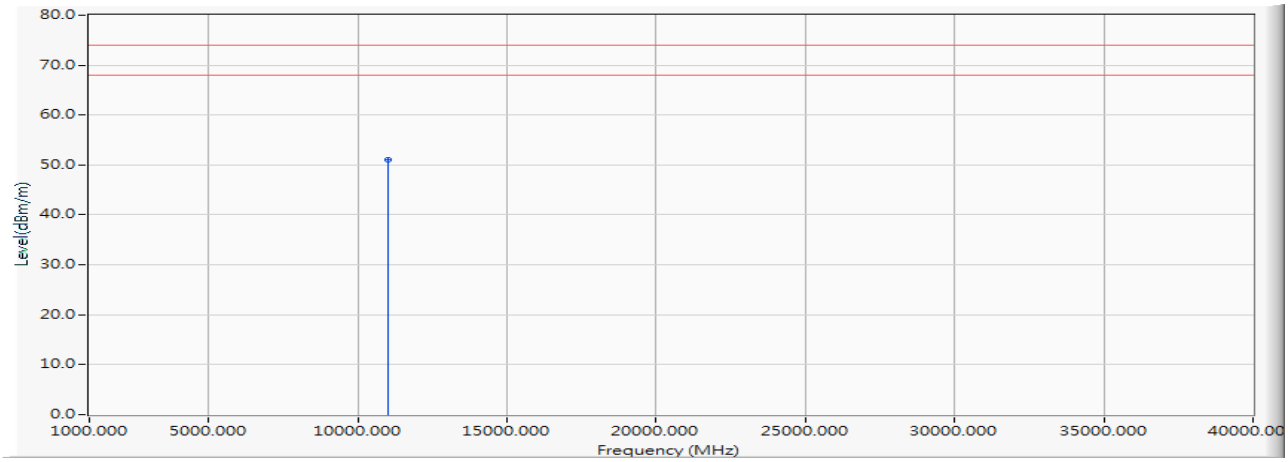
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10620.000	11.862	38.094	49.956	-24.044	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
10620.000	13.449	39.289	52.738	-21.262	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

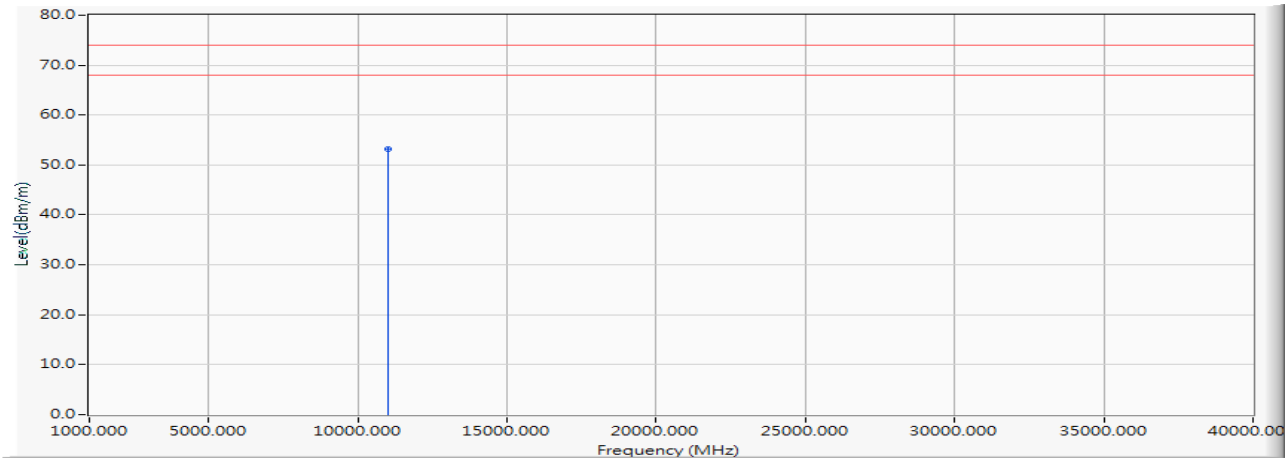
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5510MHz)

Horizontal:



Vertical:



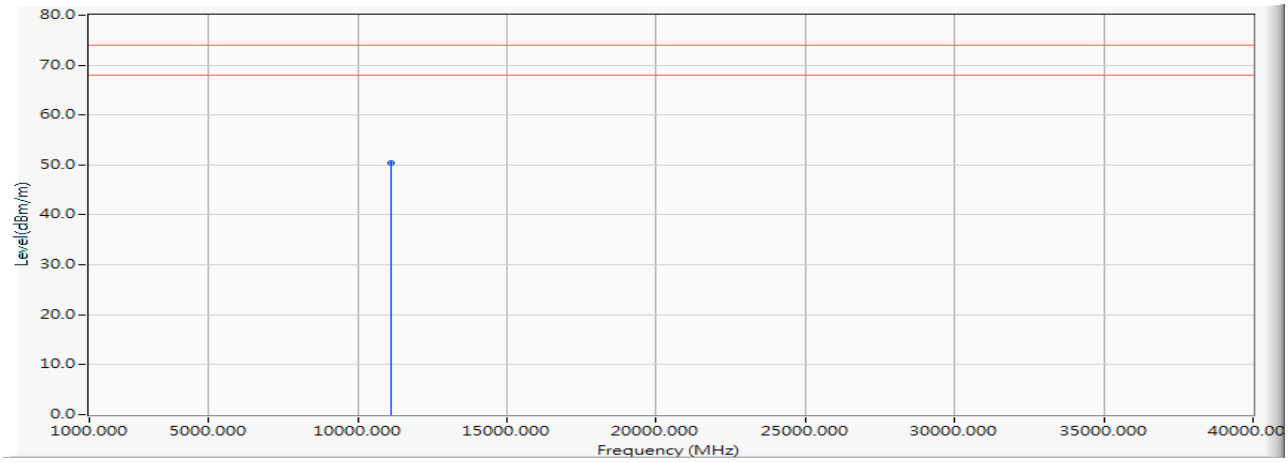
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11020.000	12.632	38.417	51.049	-22.951	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11020.000	14.778	38.417	53.195	-20.805	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

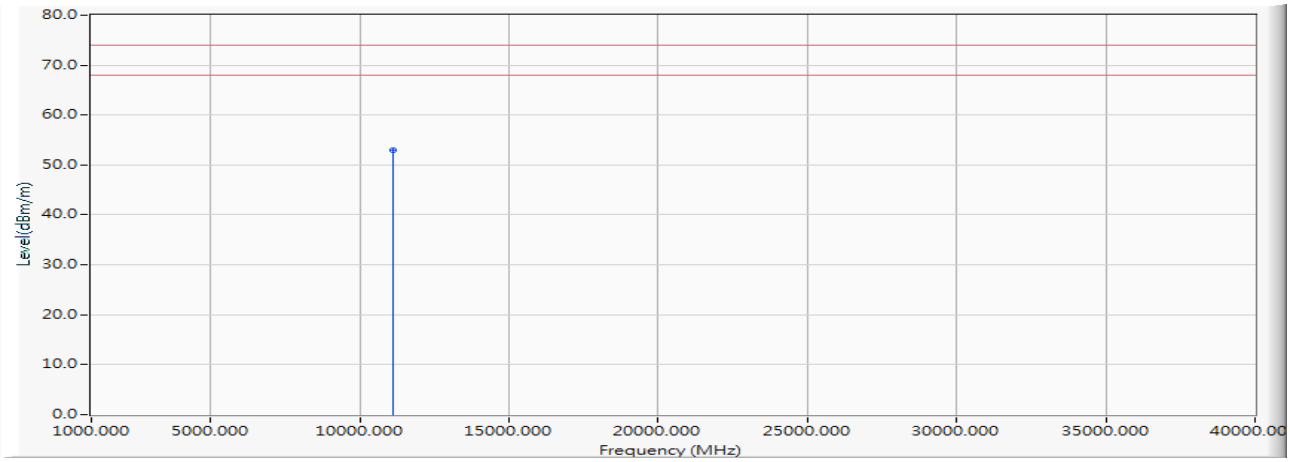
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5550MHz)

Horizontal:



Vertical:



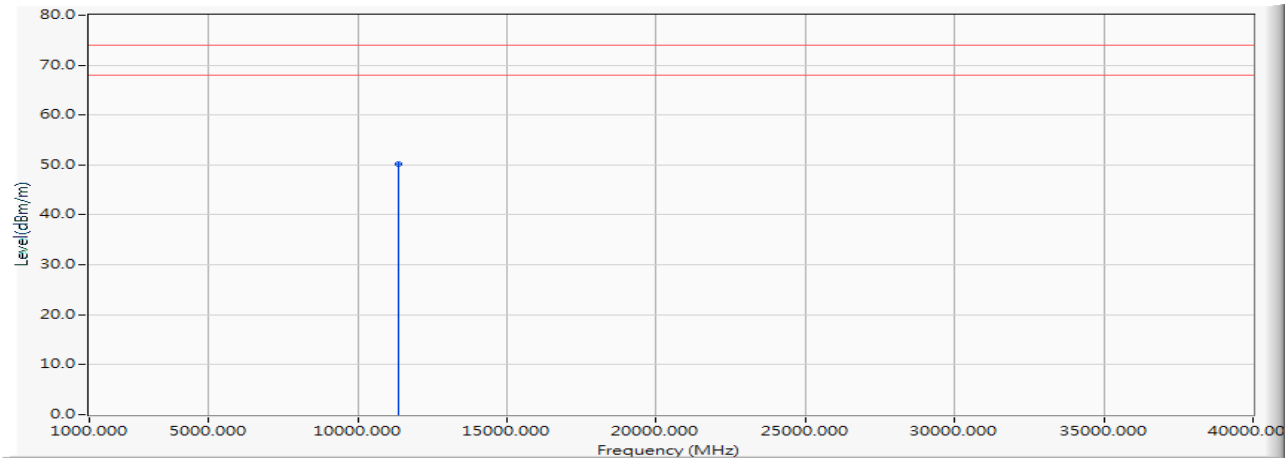
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11100.000	12.305	38.022	50.327	-23.673	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11100.000	14.559	38.346	52.905	-21.095	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

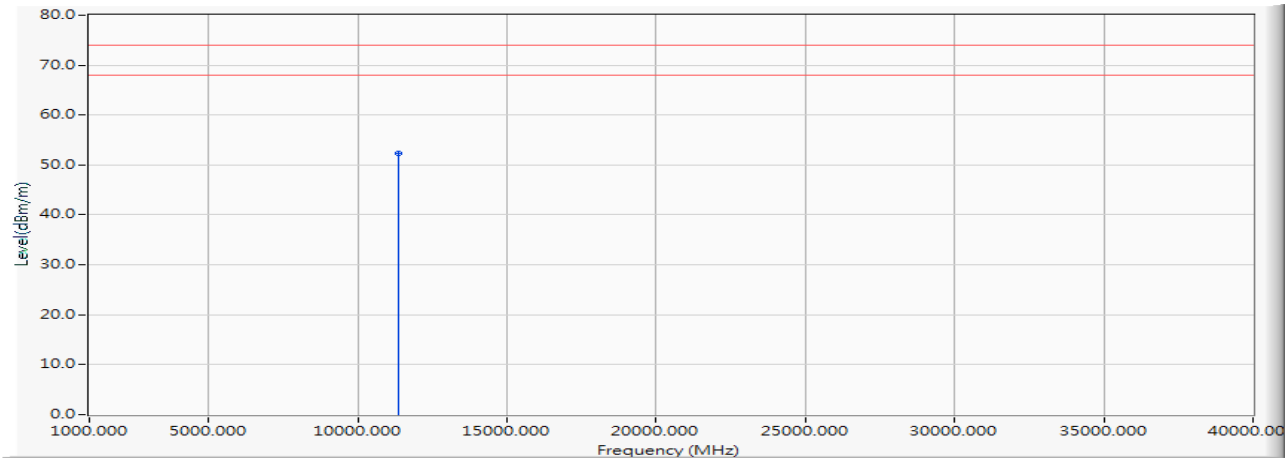
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5670MHz)

Horizontal:



Vertical:



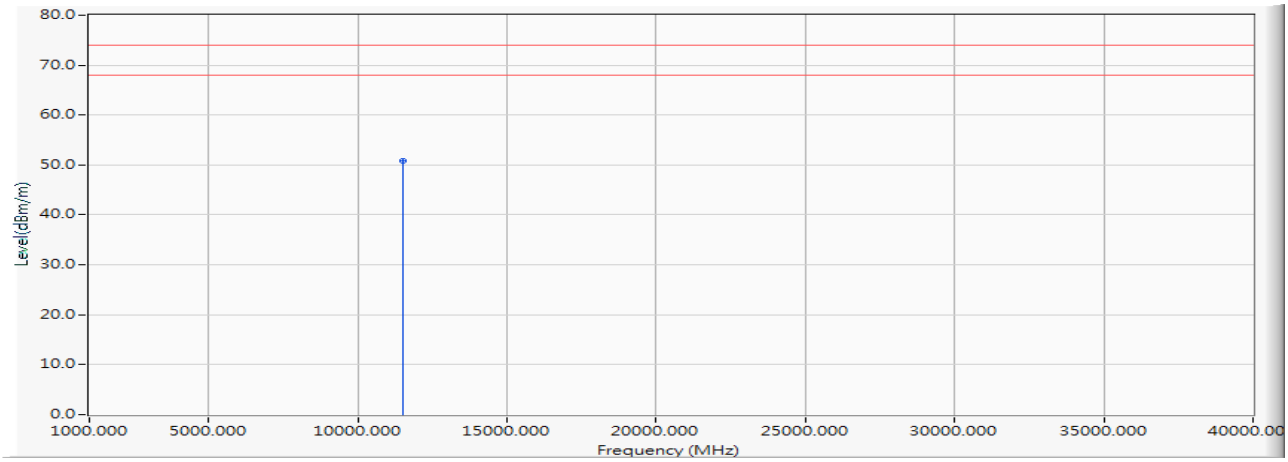
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11340.000	12.852	37.268	50.119	-23.881	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11340.000	14.594	37.643	52.237	-21.763	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

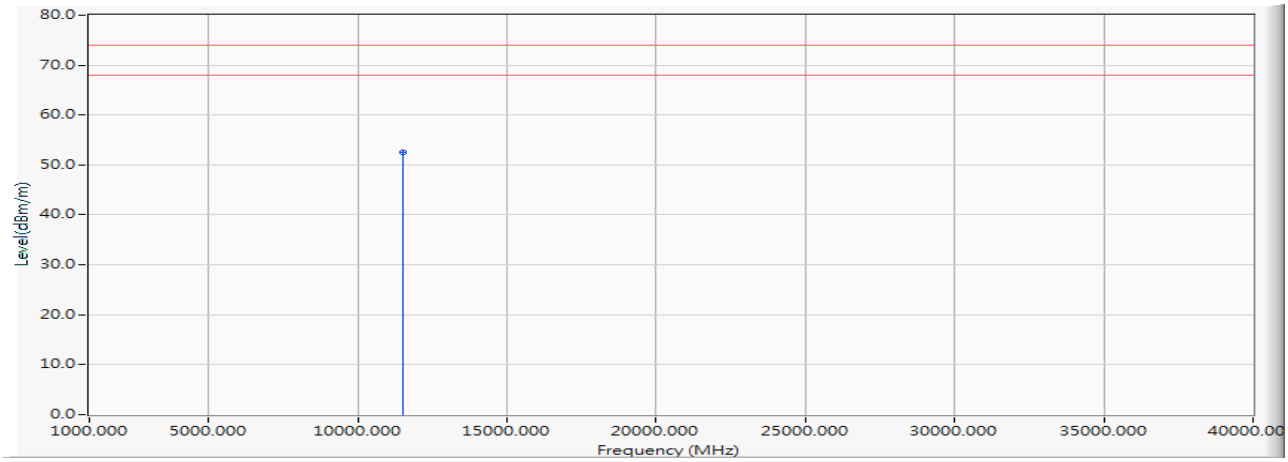
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5755MHz)

Horizontal:



Vertical:



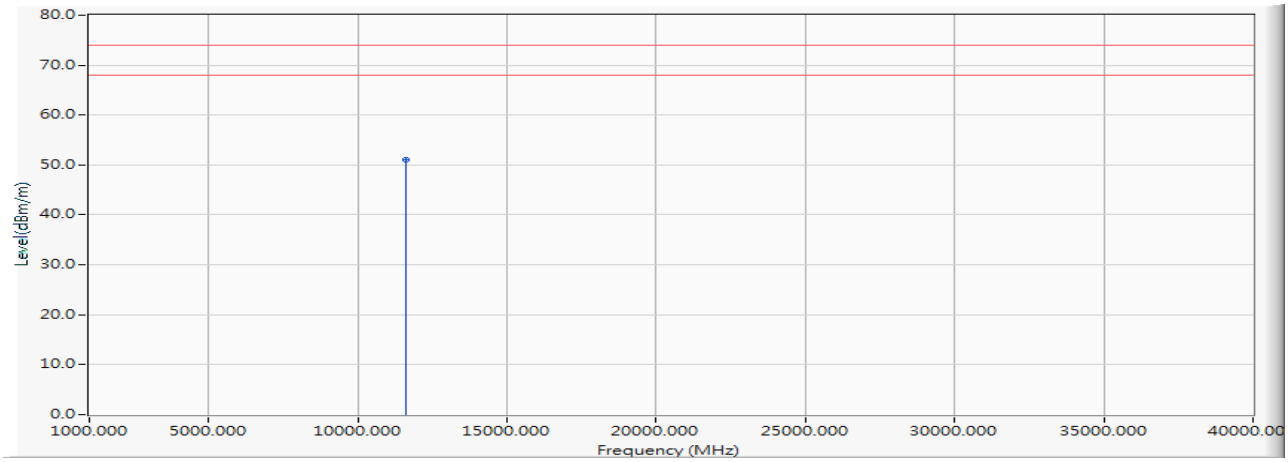
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11510.000	14.402	36.411	50.813	-23.187	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11510.000	15.894	36.619	52.513	-21.487	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

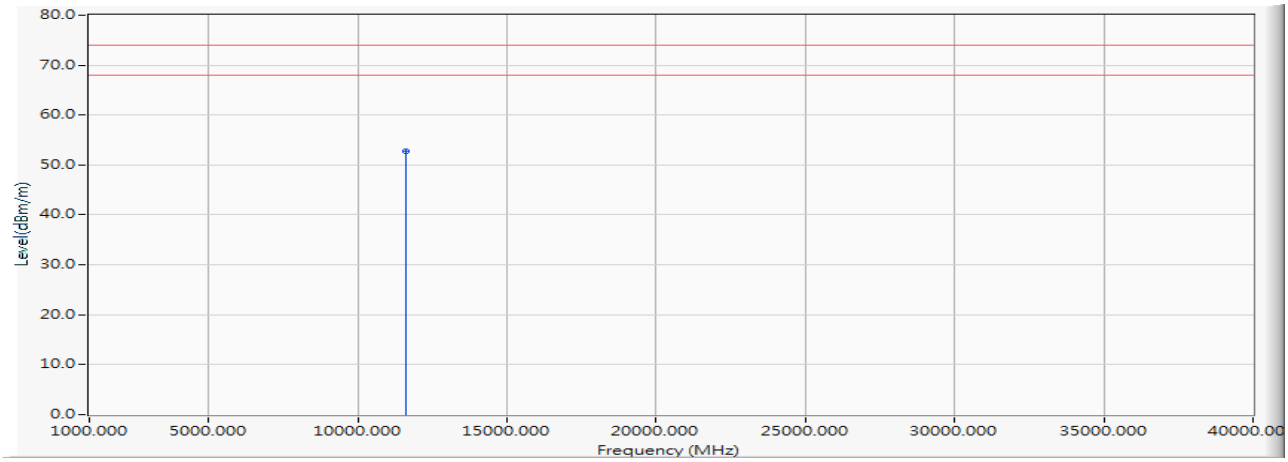
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2018/11/13
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5795MHz)

Horizontal:



Vertical:



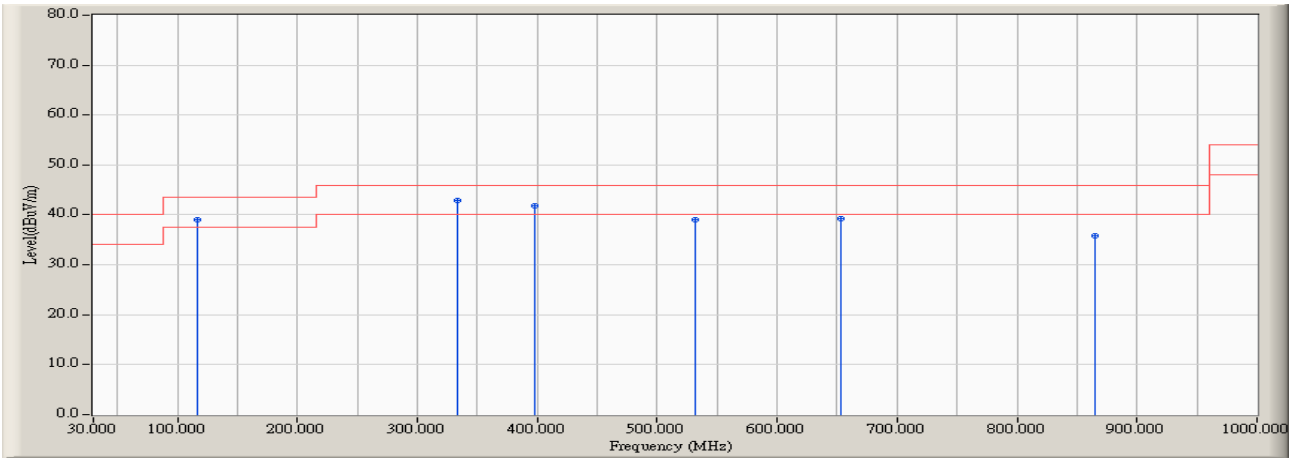
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11590.000	15.138	35.853	50.991	-23.009	74.000
Average Detector:					
--	--	--	--	--	54.000
Vertical					
Peak Detector:					
11590.000	16.461	36.228	52.689	-21.311	74.000
Average Detector:					
--	--	--	--	--	54.000

Note:

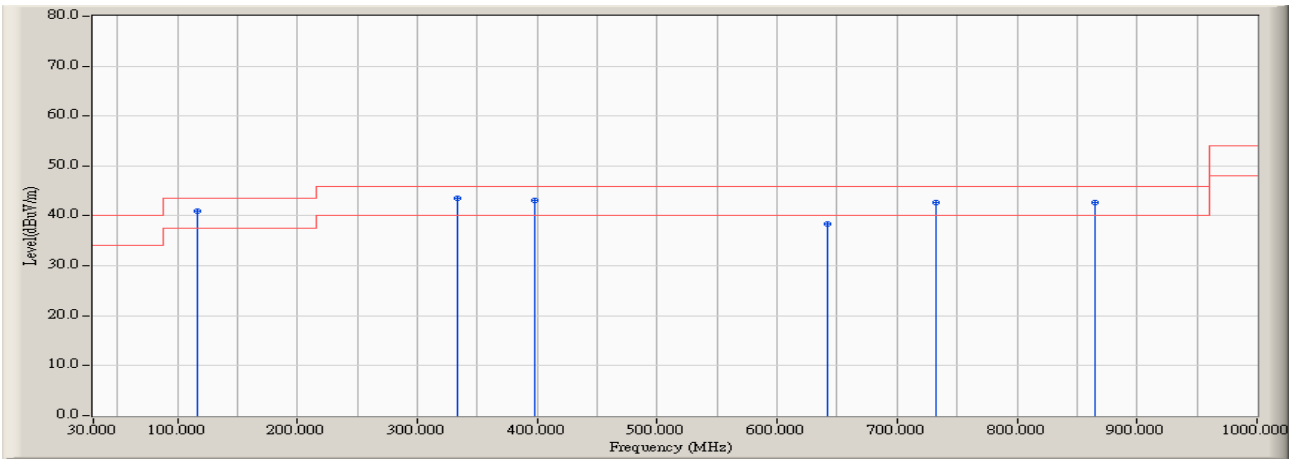
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured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

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/08/16
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5220MHz)-AC

Horizontal:



Vertical:



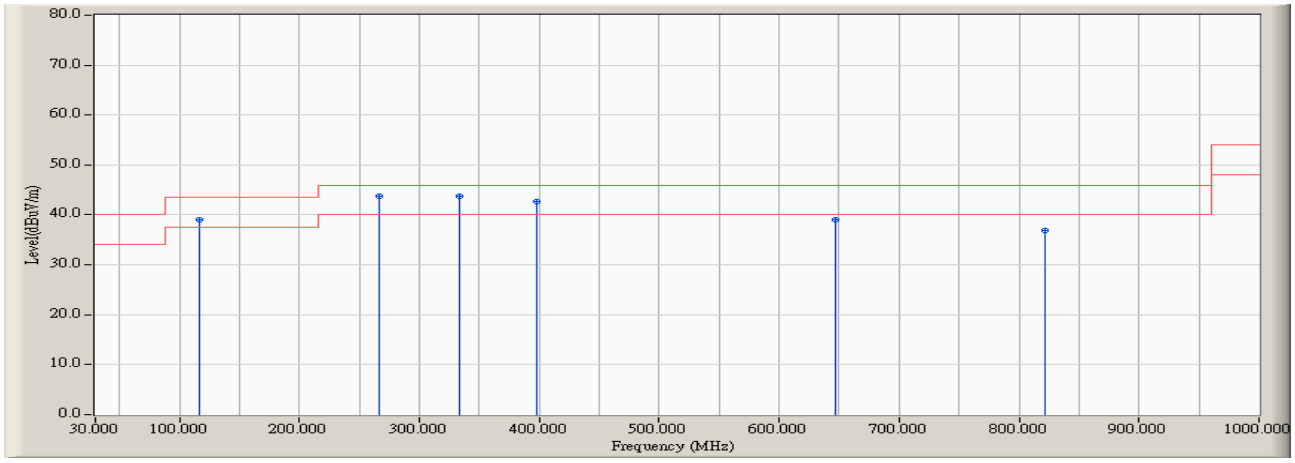
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.051	-8.210	47.345	39.135	-4.365	43.500
333.125	-2.872	45.664	42.792	-3.208	46.000
398.413	1.556	40.354	41.911	-4.089	46.000
532.099	3.999	34.958	38.958	-7.042	46.000
653.349	6.595	32.710	39.305	-6.695	46.000
864.760	7.825	28.004	35.829	-10.171	46.000
Vertical					
Peak Detector					
117.051	-6.625	47.599	40.973	-2.527	43.500
333.125	-3.977	47.494	43.517	-2.483	46.000
398.413	0.785	42.310	43.095	-2.905	46.000
642.468	4.083	34.302	38.385	-7.615	46.000
732.628	4.895	37.703	42.598	-3.402	46.000
864.760	7.917	34.702	42.618	-3.382	46.000

Note:

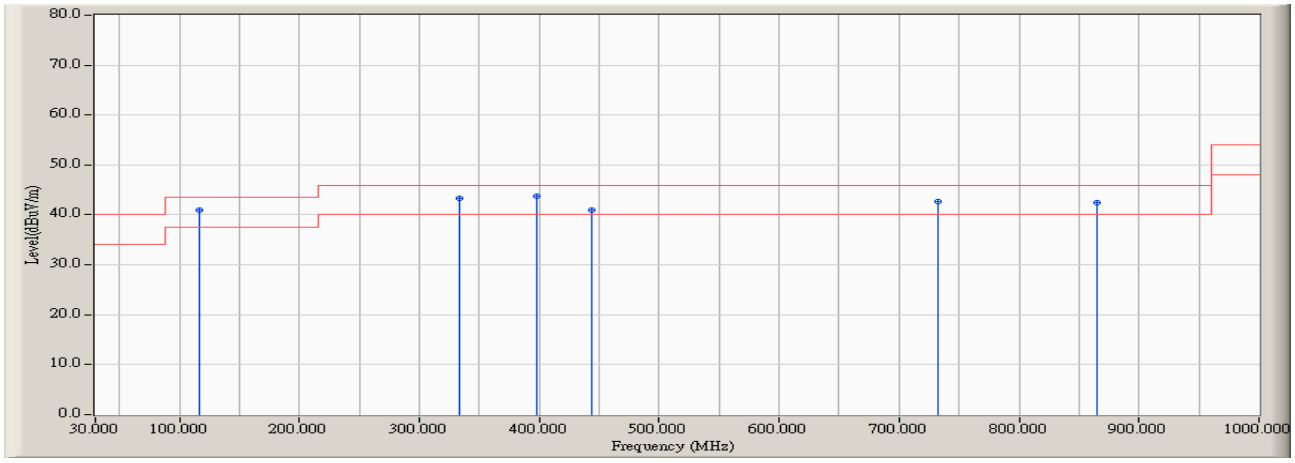
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/08/16
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5300MHz) -AC

Horizontal:



Vertical:



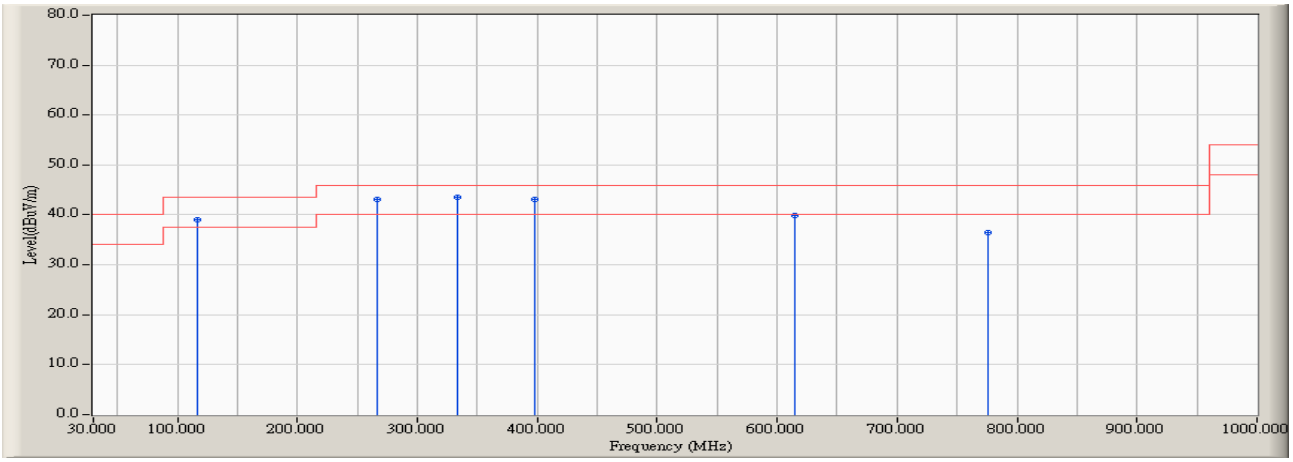
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.051	-8.210	47.183	38.973	-4.527	43.500
266.282	-5.210	49.070	43.860	-2.140	46.000
333.125	-2.872	46.649	43.777	-2.223	46.000
398.413	1.556	41.043	42.600	-3.400	46.000
647.131	6.670	32.407	39.076	-6.924	46.000
821.234	7.864	29.002	36.866	-9.134	46.000
Vertical					
Peak Detector					
117.051	-6.625	47.677	41.051	-2.449	43.500
333.125	-3.977	47.275	43.298	-2.702	46.000
398.413	0.785	42.993	43.778	-2.222	46.000
443.494	1.031	39.921	40.952	-5.048	46.000
732.628	4.895	37.884	42.779	-3.221	46.000
864.760	7.917	34.494	42.410	-3.590	46.000

Note:

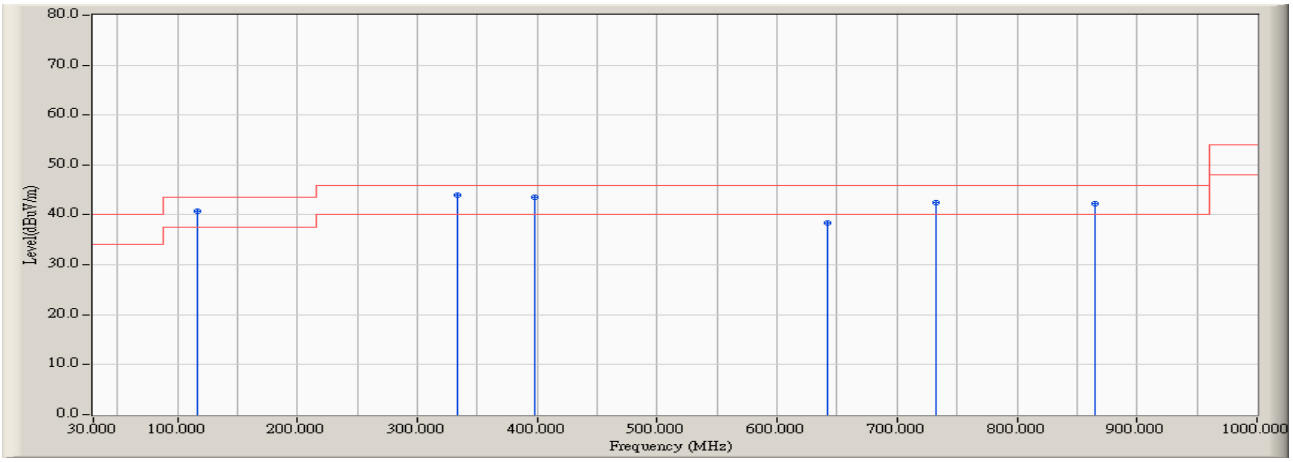
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/08/16
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5500MHz) -AC

Horizontal:



Vertical:



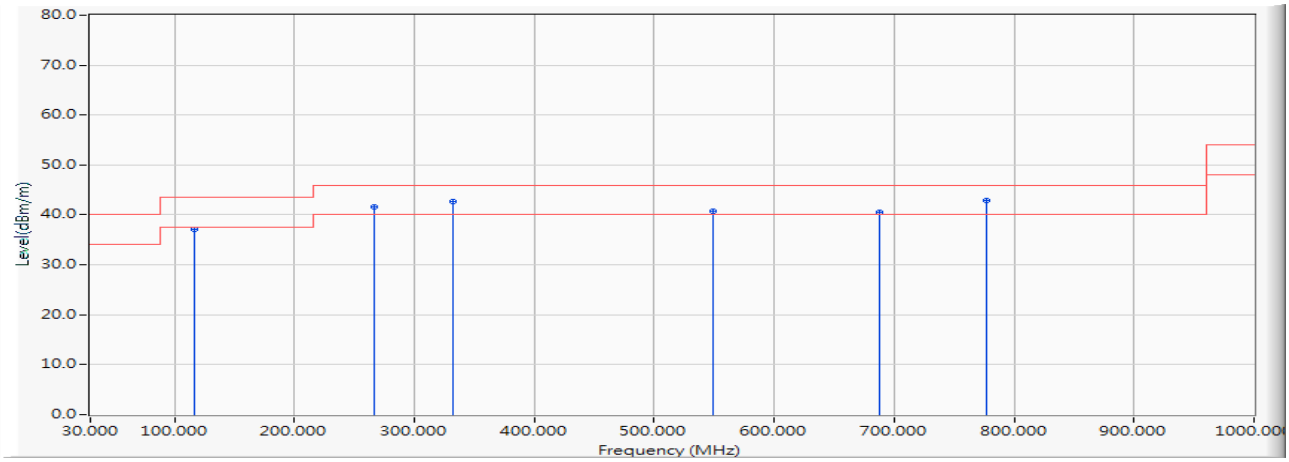
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.051	-8.210	47.237	39.027	-4.473	43.500
266.282	-5.210	48.314	43.104	-2.896	46.000
333.125	-2.872	46.331	43.459	-2.541	46.000
398.413	1.556	41.578	43.135	-2.865	46.000
614.487	7.086	32.796	39.882	-6.118	46.000
776.154	7.440	29.062	36.503	-9.497	46.000
Vertical					
Peak Detector					
117.051	-6.625	47.443	40.817	-2.683	43.500
333.125	-3.977	47.921	43.944	-2.056	46.000
398.413	0.785	42.666	43.451	-2.549	46.000
642.468	4.083	34.283	38.366	-7.634	46.000
732.628	4.895	37.489	42.384	-3.616	46.000
864.760	7.917	34.345	42.261	-3.739	46.000

Note:

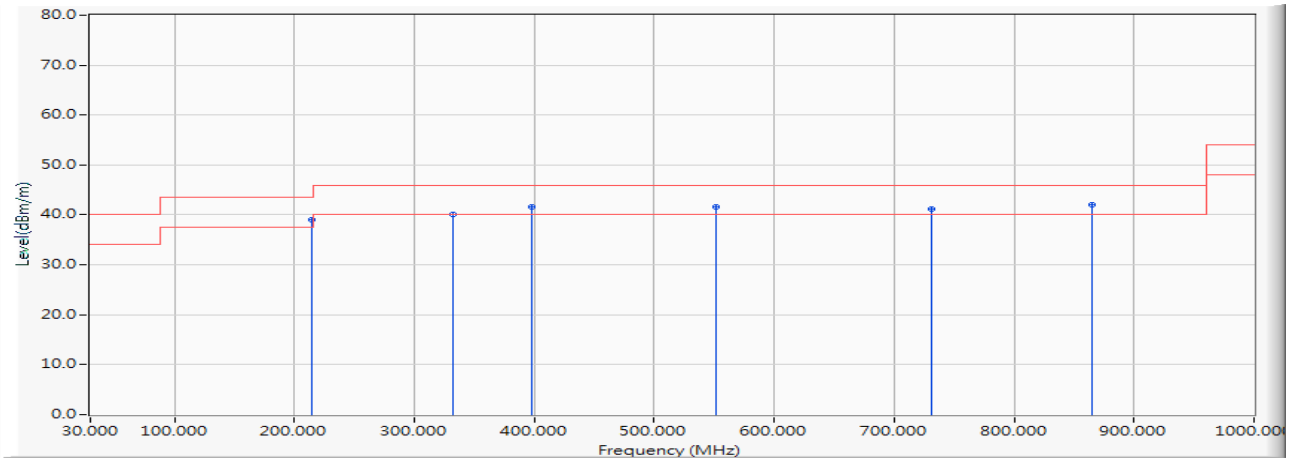
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/08/16
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5785MHz) -AC

Horizontal:



Vertical:



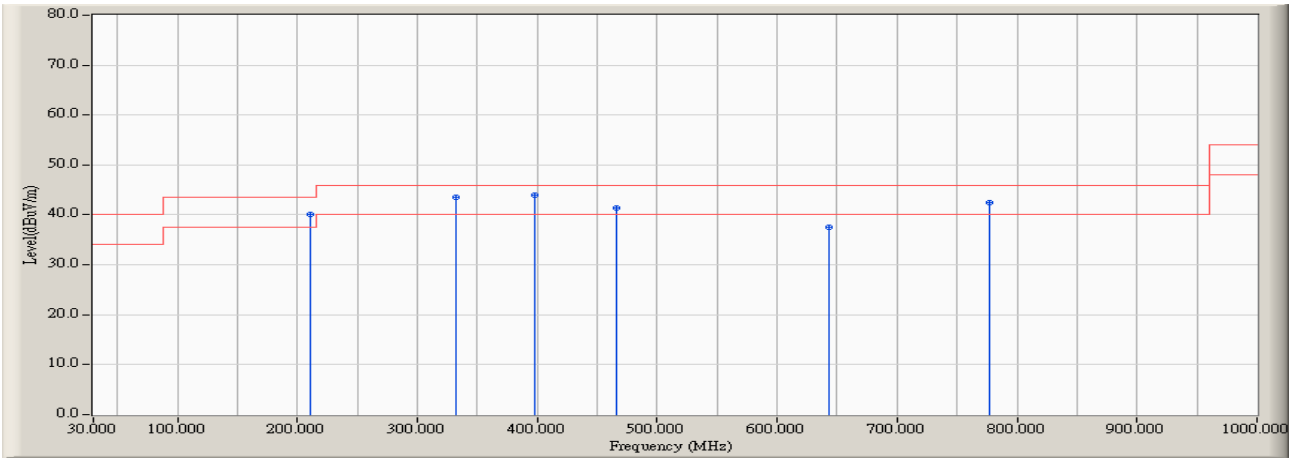
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector					
117.159	-8.247	45.310	37.063	-6.437	43.500
266.174	-5.210	46.734	41.524	-4.476	46.000
332.246	-2.933	45.625	42.692	-3.308	46.000
548.739	4.804	36.047	40.852	-5.148	46.000
687.913	6.191	34.302	40.494	-5.506	46.000
776.478	7.449	35.353	42.801	-3.199	46.000
Vertical					
Peak Detector					
214.159	0.138	38.791	38.930	-4.570	43.500
332.246	-4.047	44.213	40.166	-5.834	46.000
398.319	0.777	40.732	41.509	-4.491	46.000
551.551	2.605	39.081	41.686	-4.314	46.000
731.493	4.873	36.391	41.264	-4.736	46.000
865.043	7.922	34.060	41.982	-4.018	46.000

Note:

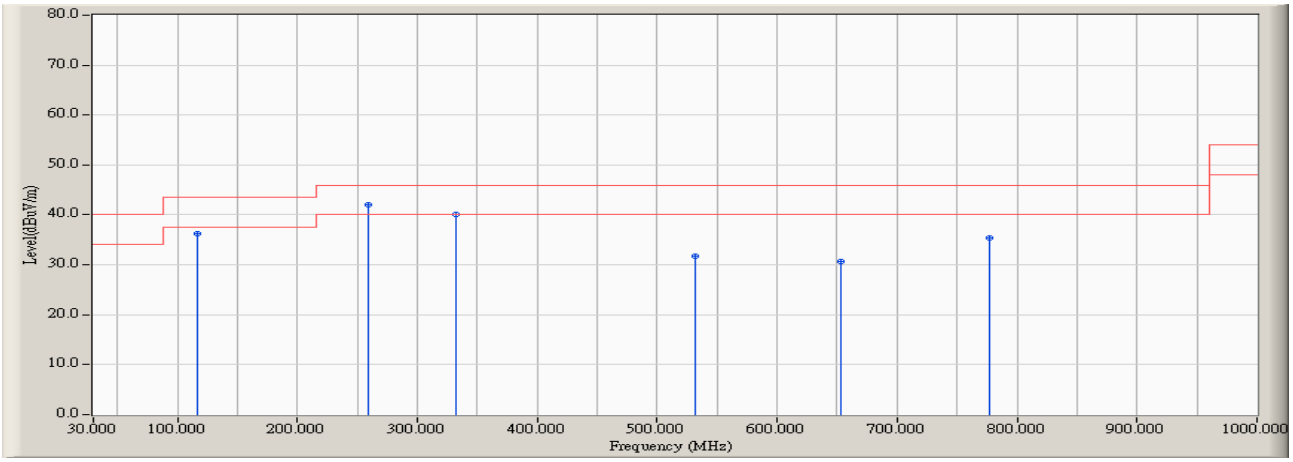
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5220MHz) -AC

Horizontal:



Vertical:



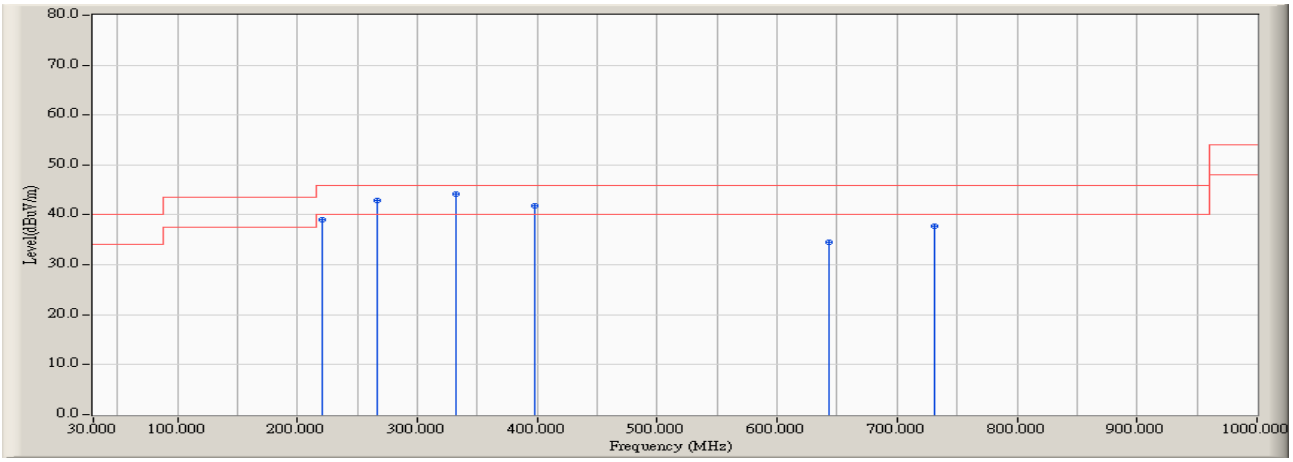
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
211.348	-8.307	48.393	40.086	-3.414	43.500
332.246	-2.933	46.483	43.550	-2.450	46.000
398.319	1.550	42.321	43.871	-2.129	46.000
465.797	2.210	39.169	41.379	-4.621	46.000
642.928	6.716	30.810	37.527	-8.473	46.000
776.478	7.449	34.935	42.383	-3.617	46.000
Vertical					
Peak Detector					
117.159	-6.651	42.895	36.243	-7.257	43.500
259.145	-1.418	43.353	41.935	-4.065	46.000
332.246	-4.047	44.185	40.138	-5.862	46.000
531.870	2.070	29.686	31.756	-14.244	46.000
652.768	4.126	26.511	30.637	-15.363	46.000
776.478	5.609	29.687	35.295	-10.705	46.000

Note:

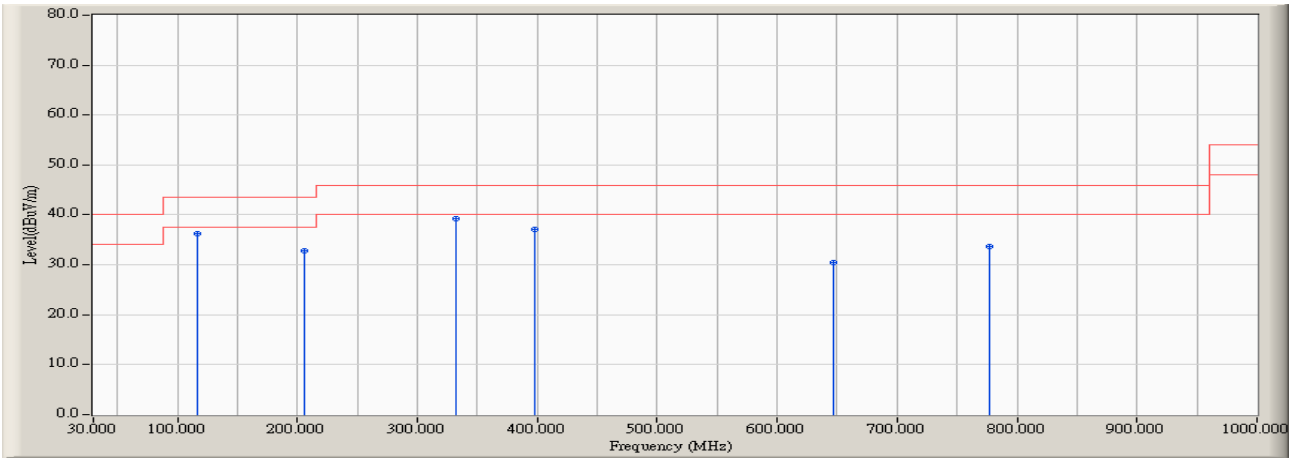
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5300MHz) -AC

Horizontal:



Vertical:



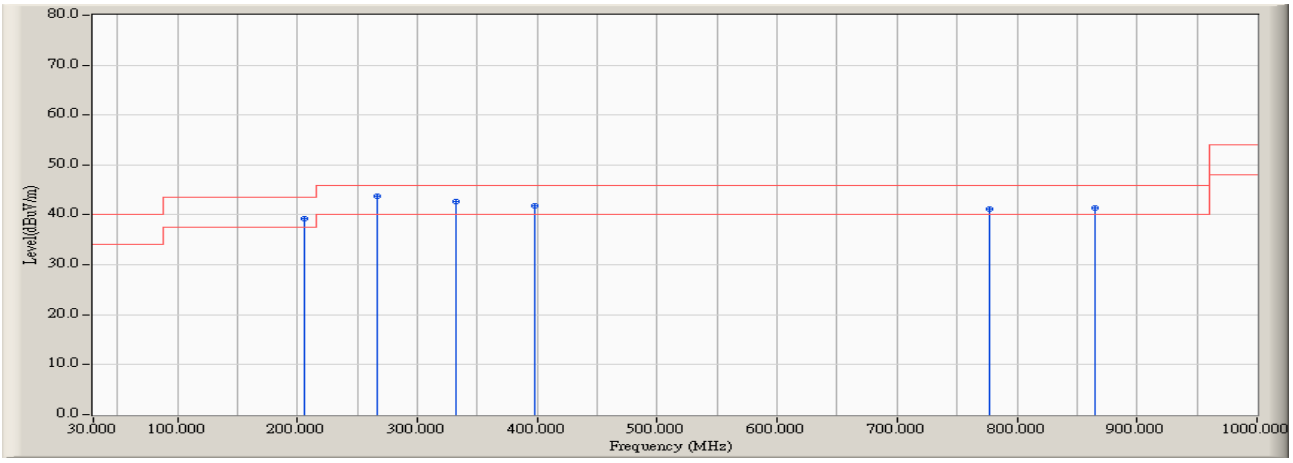
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
221.188	-7.537	46.609	39.072	-6.928	46.000
266.174	-5.210	48.147	42.937	-3.063	46.000
332.246	-2.933	47.118	44.185	-1.815	46.000
398.319	1.550	40.189	41.739	-4.261	46.000
642.928	6.716	27.813	34.530	-11.470	46.000
731.493	6.623	31.149	37.772	-8.228	46.000
Vertical					
Peak Detector					
117.159	-6.651	42.858	36.206	-7.294	43.500
205.725	0.244	32.570	32.814	-10.686	43.500
332.246	-4.047	43.298	39.251	-6.749	46.000
398.319	0.777	36.418	37.195	-8.805	46.000
647.145	4.104	26.260	30.364	-15.636	46.000
776.478	5.609	28.148	33.756	-12.244	46.000

Note:

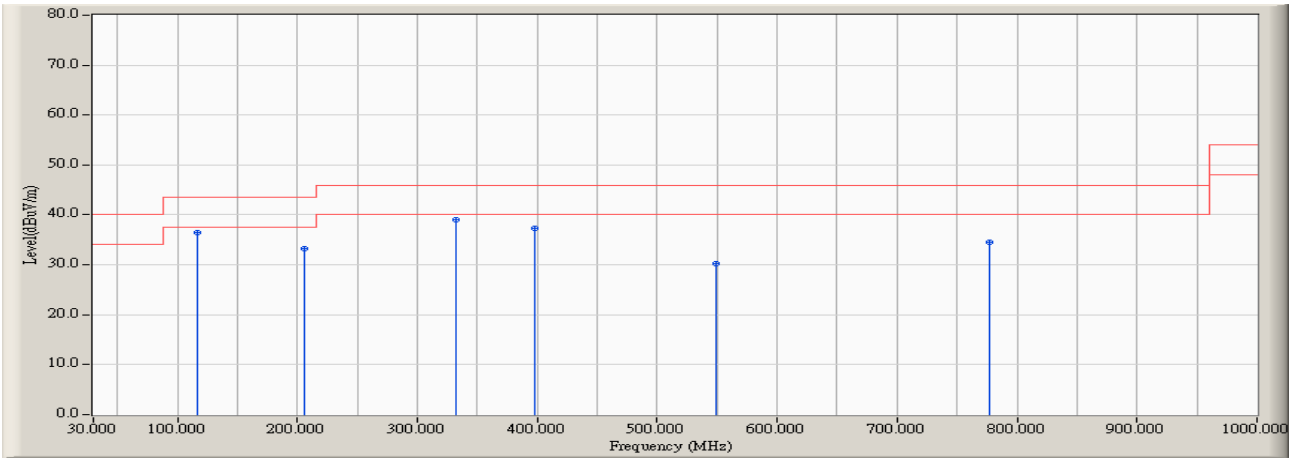
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5500MHz) -AC

Horizontal:



Vertical:



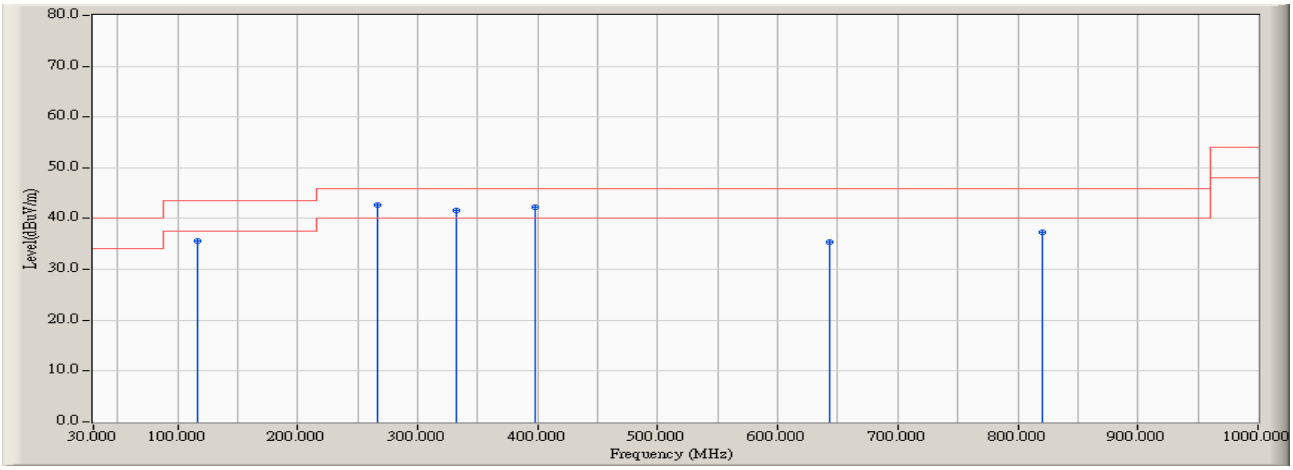
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
205.725	-8.752	48.018	39.266	-4.234	43.500
266.174	-5.210	49.020	43.810	-2.190	46.000
332.246	-2.933	45.640	42.707	-3.293	46.000
398.319	1.550	40.260	41.810	-4.190	46.000
776.478	7.449	33.765	41.213	-4.787	46.000
865.043	7.825	33.608	41.433	-4.567	46.000
Vertical					
Peak Detector					
117.159	-6.651	43.012	36.360	-7.140	43.500
205.725	0.244	33.087	33.331	-10.169	43.500
332.246	-4.047	43.080	39.033	-6.967	46.000
398.319	0.777	36.533	37.310	-8.690	46.000
548.739	2.529	27.709	30.238	-15.762	46.000
776.478	5.609	28.991	34.599	-11.401	46.000

Note:

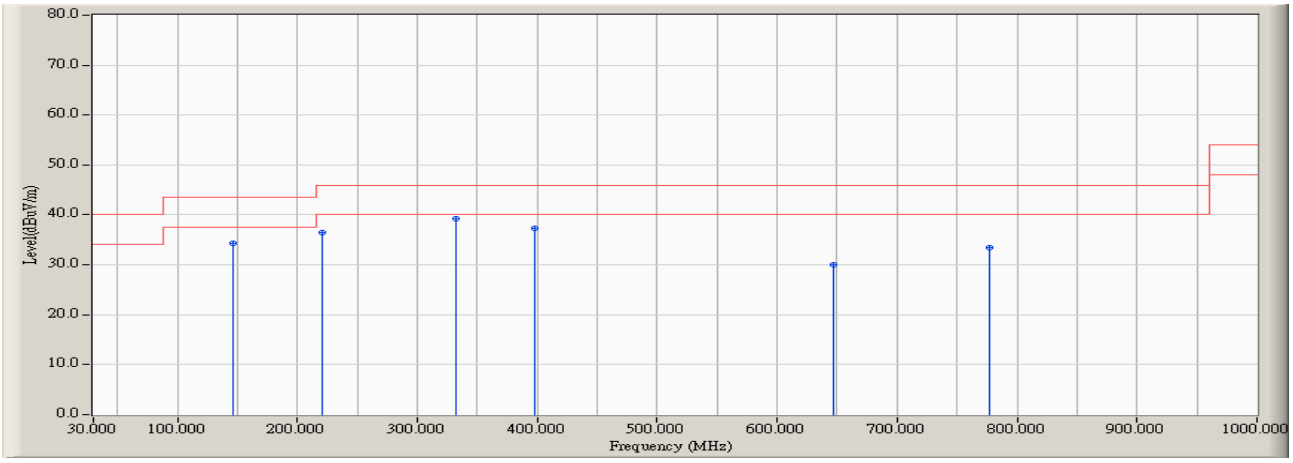
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5785MHz) -AC

Horizontal:



Vertical:



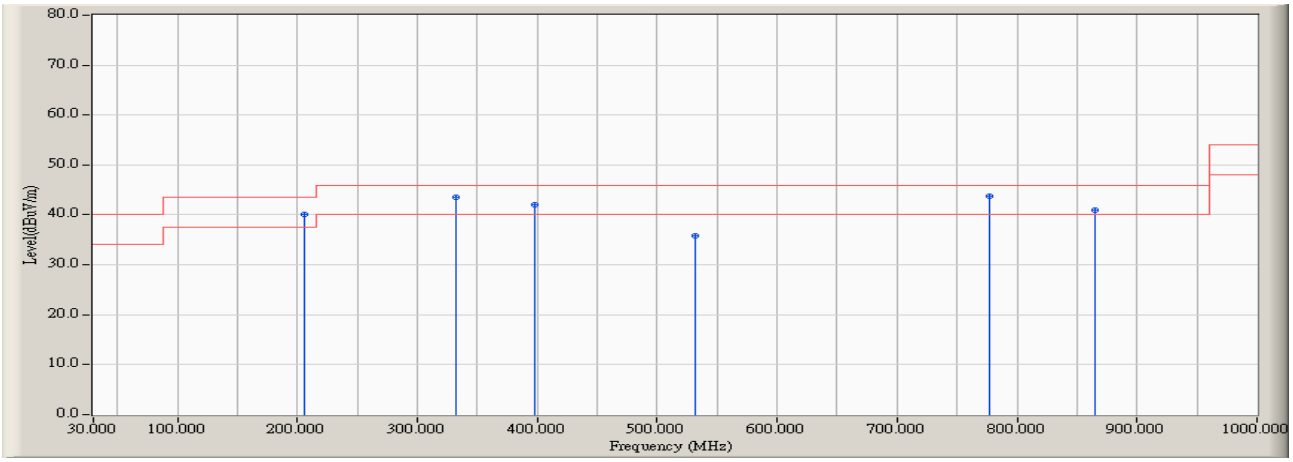
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.159	-8.247	43.746	35.499	-8.001	43.500
266.174	-5.210	47.788	42.578	-3.422	46.000
332.246	-2.933	44.455	41.522	-4.478	46.000
398.319	1.550	40.618	42.168	-3.832	46.000
642.928	6.716	28.672	35.389	-10.611	46.000
820.058	7.869	29.451	37.320	-8.680	46.000
Vertical					
Peak Detector					
146.681	-5.062	39.274	34.211	-9.289	43.500
221.188	0.045	36.457	36.502	-9.498	46.000
332.246	-4.047	43.375	39.328	-6.672	46.000
398.319	0.777	36.539	37.316	-8.684	46.000
647.145	4.104	25.858	29.962	-16.038	46.000
776.478	5.609	27.907	33.515	-12.485	46.000

Note:

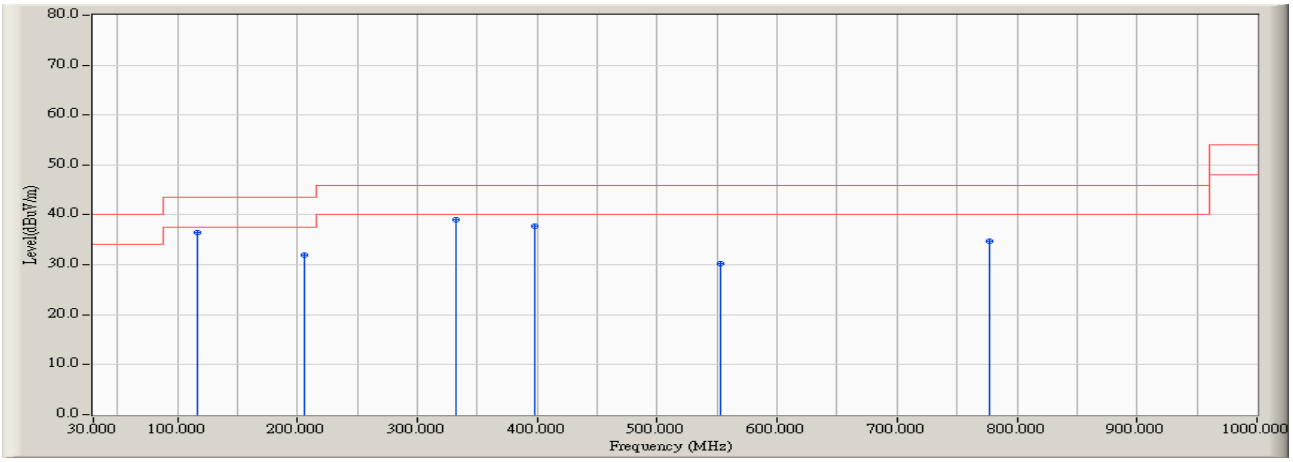
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5190MHz) -AC

Horizontal:



Vertical:



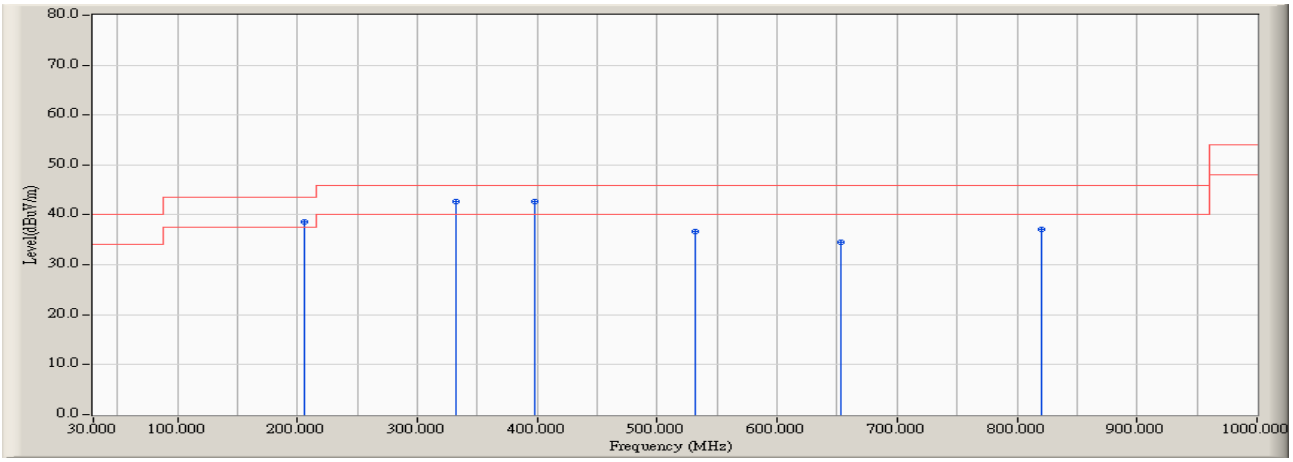
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
205.725	-8.752	48.791	40.039	-3.461	43.500
332.246	-2.933	46.435	43.502	-2.498	46.000
398.319	1.550	40.573	42.123	-3.877	46.000
531.870	3.988	31.926	35.913	-10.087	46.000
776.478	7.449	36.360	43.808	-2.192	46.000
865.043	7.825	33.117	40.942	-5.058	46.000
Vertical					
Peak Detector					
117.159	-6.651	43.025	36.373	-7.127	43.500
205.725	0.244	31.657	31.901	-11.599	43.500
332.246	-4.047	43.164	39.117	-6.883	46.000
398.319	0.777	36.948	37.725	-8.275	46.000
552.957	2.639	27.686	30.325	-15.675	46.000
776.478	5.609	29.089	34.697	-11.303	46.000

Note:

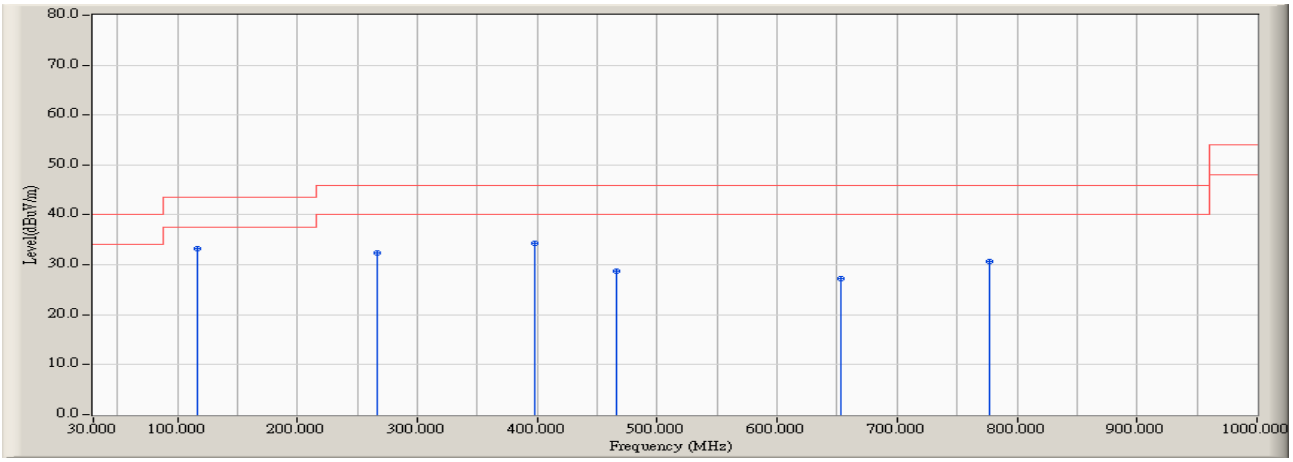
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5270MHz) -AC

Horizontal:



Vertical:



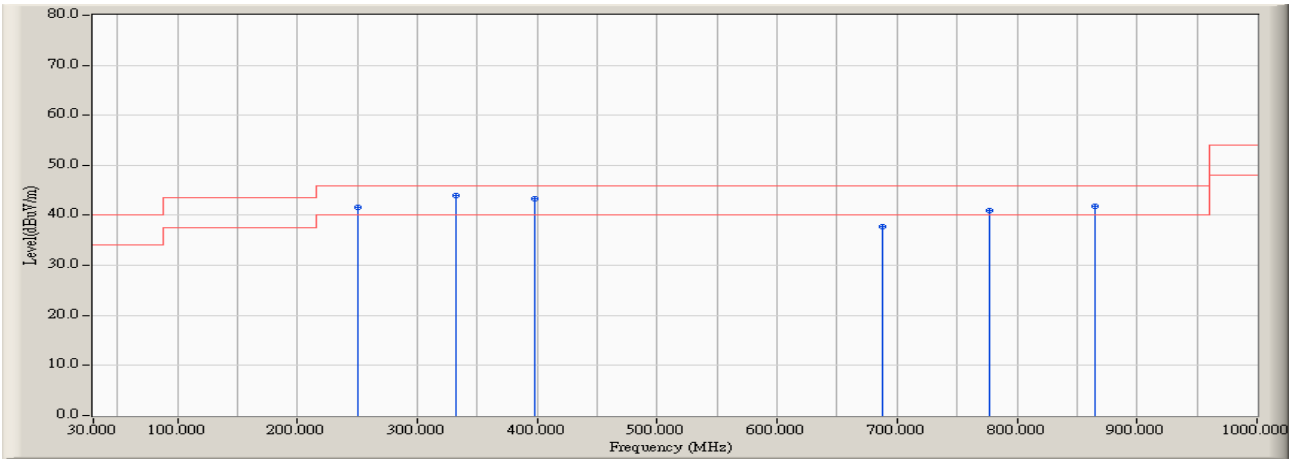
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
205.725	-8.752	47.392	38.640	-4.860	43.500
332.246	-2.933	45.700	42.767	-3.233	46.000
398.319	1.550	41.113	42.663	-3.337	46.000
531.870	3.988	32.618	36.605	-9.395	46.000
652.768	6.605	27.906	34.512	-11.488	46.000
820.058	7.869	29.317	37.186	-8.814	46.000
Vertical					
Peak Detector					
117.159	-6.651	39.805	33.153	-10.347	43.500
266.174	-2.272	34.760	32.487	-13.513	46.000
398.319	0.777	33.637	34.414	-11.586	46.000
465.797	1.120	27.528	28.648	-17.352	46.000
652.768	4.126	23.213	27.339	-18.661	46.000
776.478	5.609	25.142	30.750	-15.250	46.000

Note:

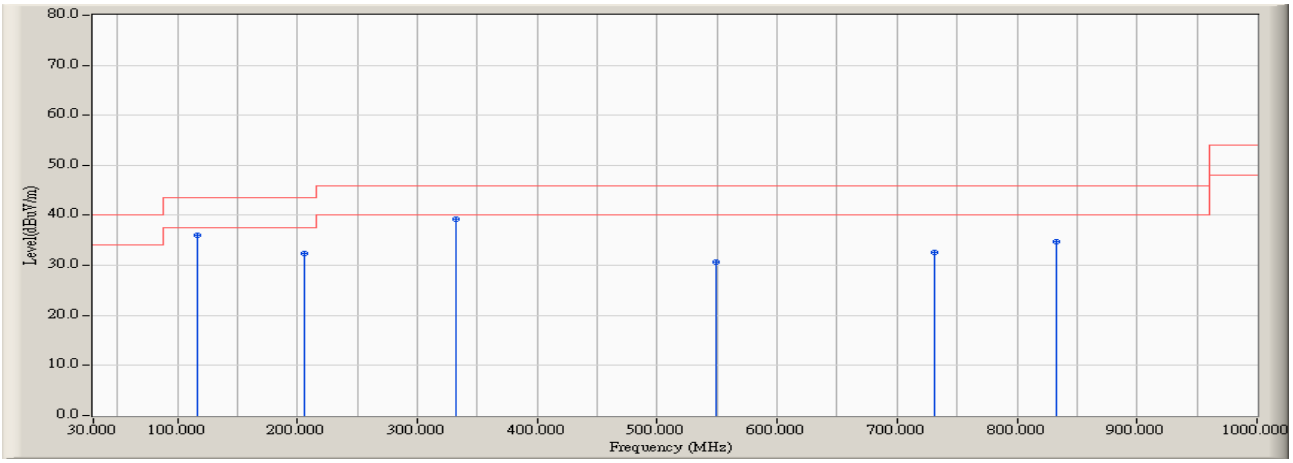
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5510MHz) -AC

Horizontal:



Vertical:



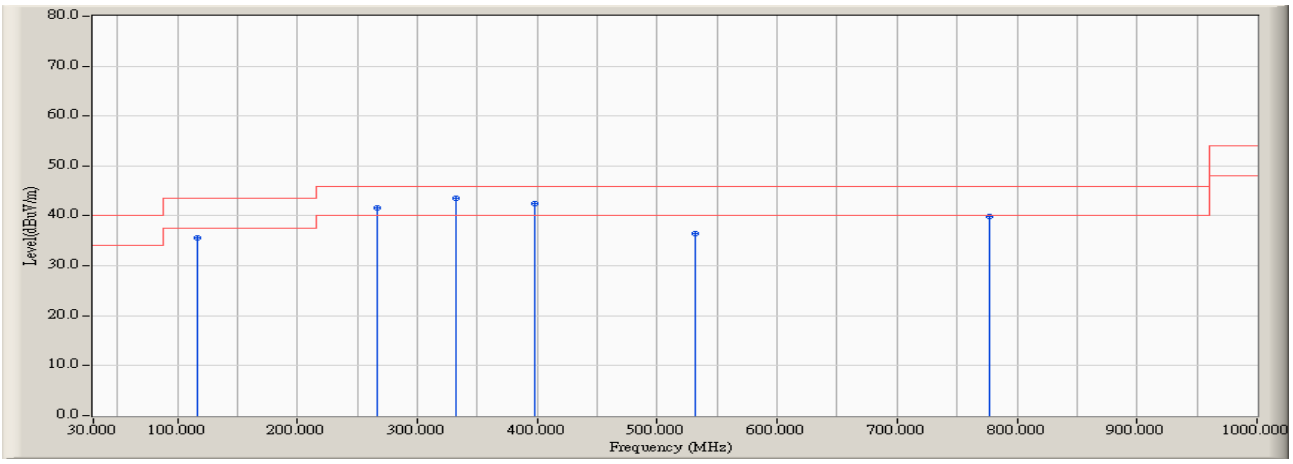
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
250.710	-5.268	46.961	41.693	-4.307	46.000
332.246	-2.933	46.980	44.047	-1.953	46.000
398.319	1.550	41.713	43.263	-2.737	46.000
687.913	6.191	31.480	37.672	-8.328	46.000
776.478	7.449	33.588	41.036	-4.964	46.000
865.043	7.825	34.047	41.872	-4.128	46.000
Vertical					
Peak Detector					
117.159	-6.651	42.768	36.116	-7.384	43.500
205.725	0.244	32.119	32.363	-11.137	43.500
332.246	-4.047	43.333	39.286	-6.714	46.000
548.739	2.529	28.140	30.669	-15.331	46.000
731.493	4.873	27.650	32.523	-13.477	46.000
832.710	6.959	27.828	34.787	-11.213	46.000

Note:

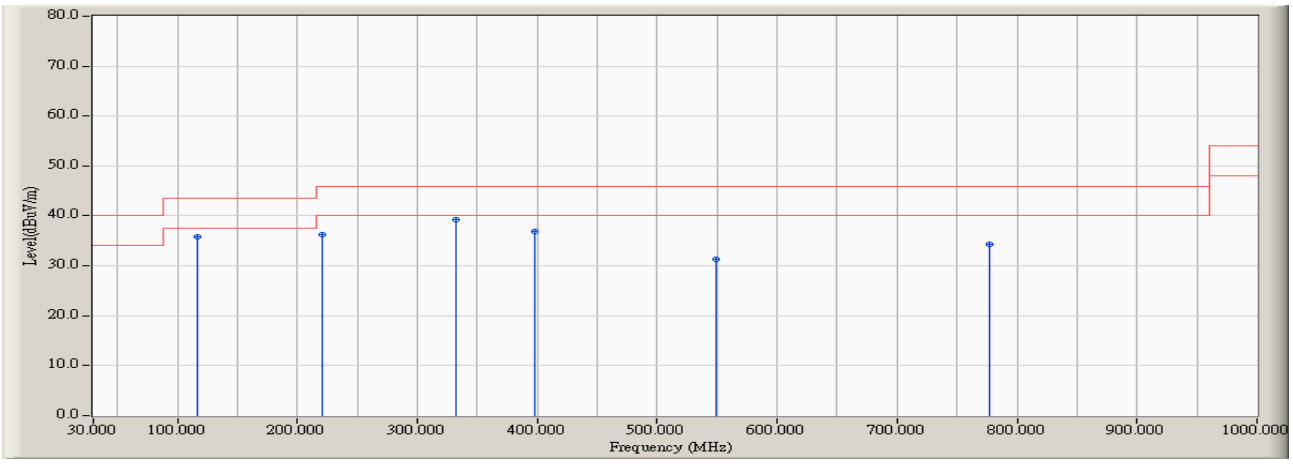
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5755MHz) -AC

Horizontal:



Vertical:



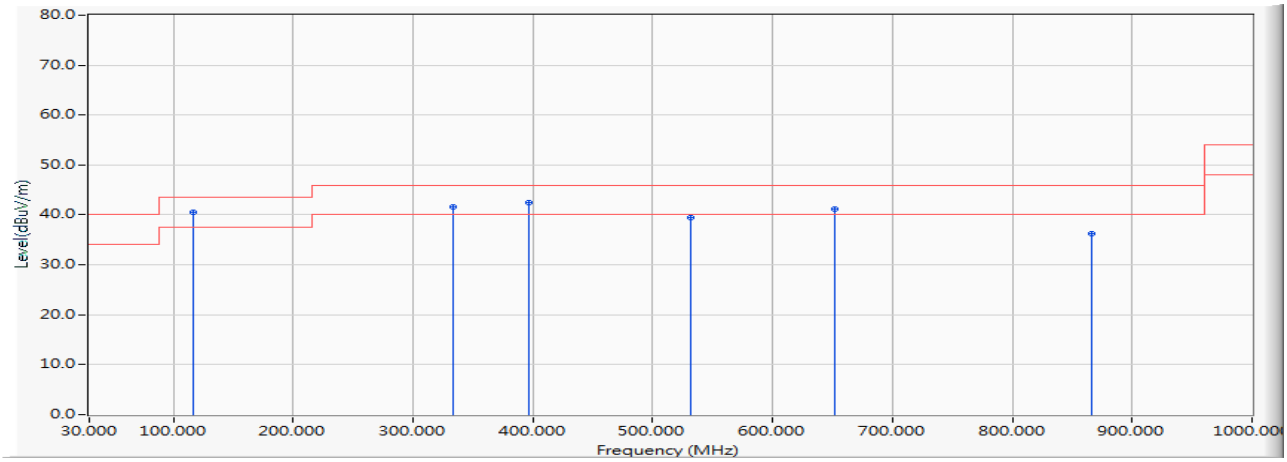
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.159	-8.247	43.935	35.688	-7.812	43.500
266.174	-5.210	46.778	41.568	-4.432	46.000
332.246	-2.933	46.425	43.492	-2.508	46.000
398.319	1.550	40.864	42.414	-3.586	46.000
531.870	3.988	32.530	36.517	-9.483	46.000
776.478	7.449	32.438	39.886	-6.114	46.000
Vertical					
Peak Detector					
117.159	-6.651	42.563	35.911	-7.589	43.500
221.188	0.045	36.307	36.352	-9.648	46.000
332.246	-4.047	43.218	39.171	-6.829	46.000
398.319	0.777	36.169	36.946	-9.054	46.000
548.739	2.529	28.719	31.248	-14.752	46.000
776.478	5.609	28.618	34.226	-11.774	46.000

Note:

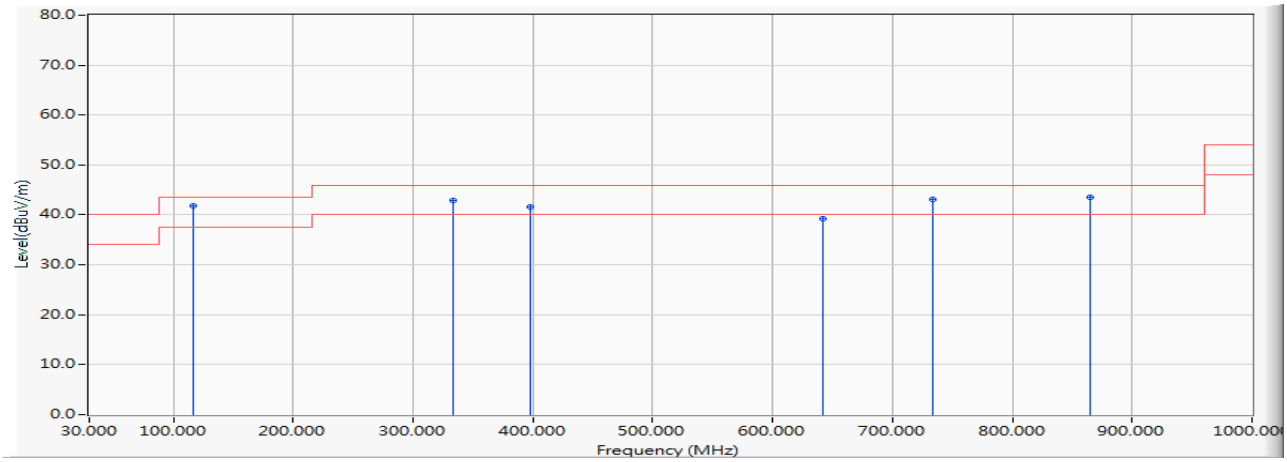
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/08/16
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5220MHz)-DC

Horizontal:



Vertical:



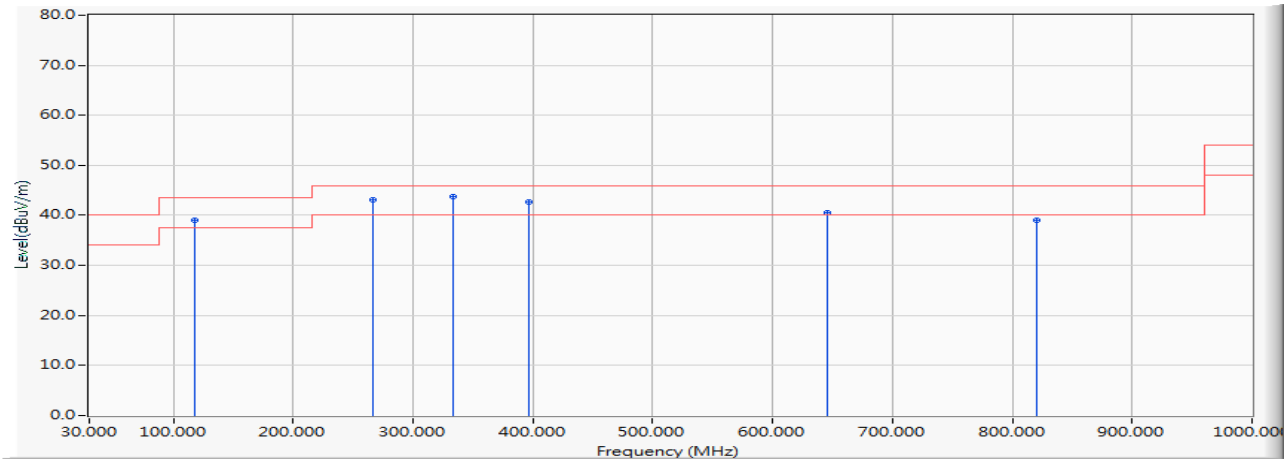
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.063	-8.483	48.999	40.517	-2.983	43.500
333.194	-3.054	44.645	41.592	-4.408	46.000
397.164	1.297	41.260	42.557	-3.443	46.000
531.647	3.833	35.678	39.511	-6.489	46.000
652.179	6.468	34.722	41.190	-4.810	46.000
865.861	7.744	28.527	36.270	-9.730	46.000
Vertical					
Peak Detector					
117.049	-6.894	48.820	41.927	-1.573	43.500
333.188	-4.158	47.110	42.952	-3.048	46.000
397.637	0.549	41.073	41.621	-4.379	46.000
641.592	3.936	35.211	39.147	-6.853	46.000
733.614	4.823	38.368	43.190	-2.810	46.000
865.192	7.850	35.707	43.557	-2.443	46.000

Note:

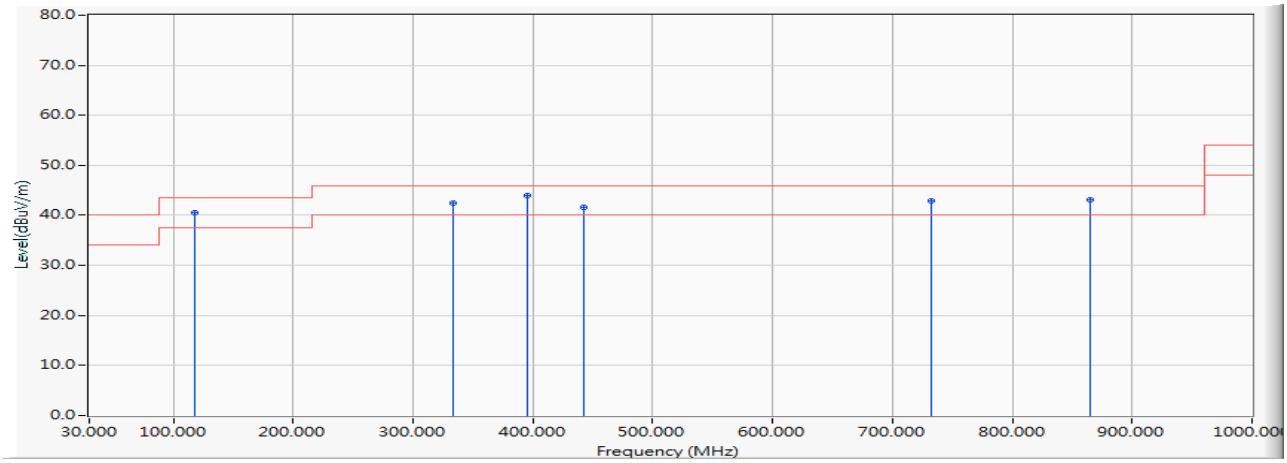
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/08/16
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5300MHz) -DC

Horizontal:



Vertical:



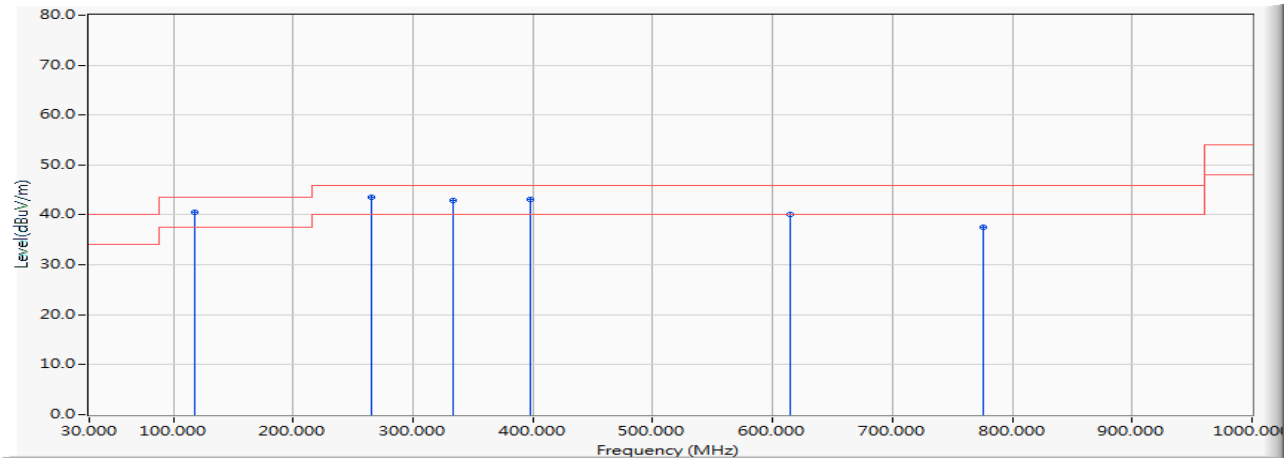
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.520	-8.638	47.758	39.120	-4.380	43.500
267.146	-5.456	48.673	43.217	-2.783	46.000
333.197	-3.054	46.769	43.716	-2.284	46.000
397.264	1.303	41.387	42.691	-3.309	46.000
645.167	6.545	34.072	40.617	-5.383	46.000
820.164	7.789	31.265	39.054	-6.946	46.000
Vertical					
Peak Detector					
117.504	-7.003	47.596	40.592	-2.908	43.500
333.164	-4.160	46.720	42.560	-3.440	46.000
395.016	0.360	43.607	43.967	-2.033	46.000
442.167	0.868	40.803	41.671	-4.329	46.000
732.147	4.791	38.126	42.917	-3.083	46.000
865.157	7.849	35.333	43.182	-2.818	46.000

Note:

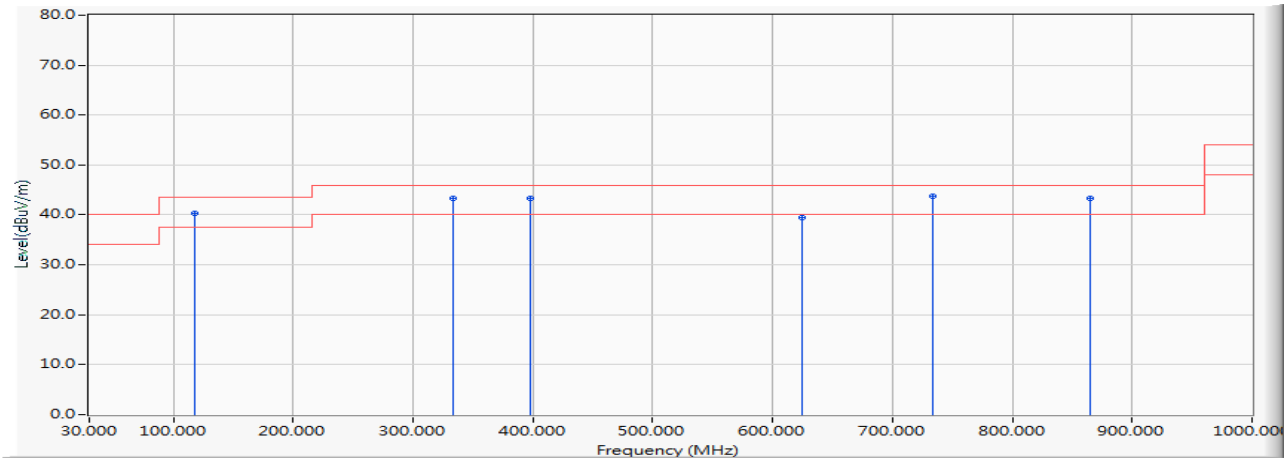
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/08/16
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)(5500MHz) -DC

Horizontal:



Vertical:



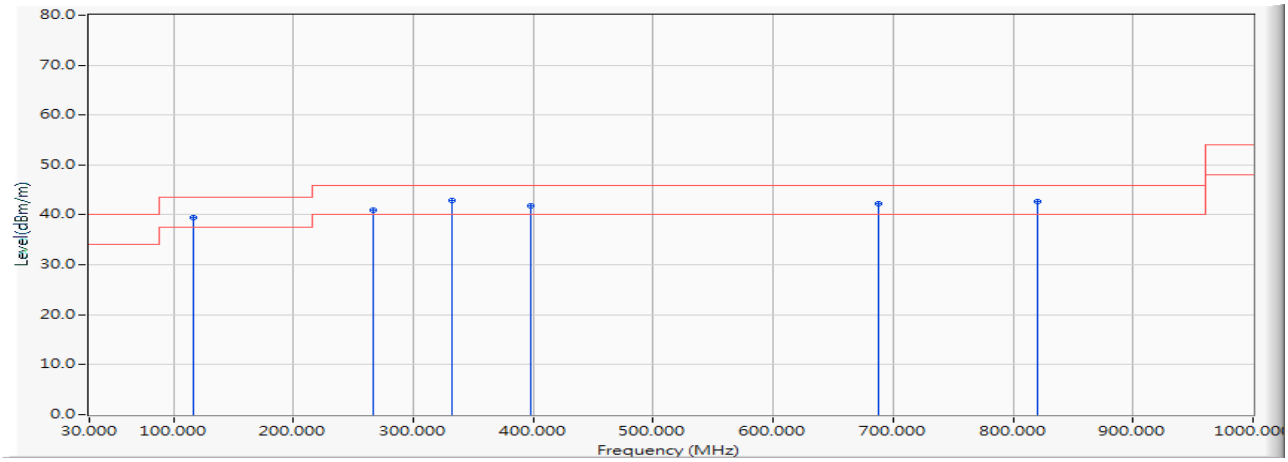
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.619	-8.671	49.288	40.617	-2.883	43.500
265.410	-5.463	49.080	43.617	-2.383	46.000
333.941	-3.002	45.912	42.911	-3.089	46.000
398.416	1.387	41.767	43.154	-2.846	46.000
615.175	6.876	33.279	40.154	-5.846	46.000
775.194	7.326	30.228	37.554	-8.446	46.000
Vertical					
Peak Detector					
117.568	-7.019	47.443	40.424	-3.076	43.500
333.108	-4.164	47.451	43.287	-2.713	46.000
398.154	0.592	42.780	43.372	-2.628	46.000
624.400	3.824	35.690	39.514	-6.486	46.000
733.515	4.820	38.831	43.651	-2.349	46.000
864.517	7.835	35.393	43.227	-2.773	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/08/16
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5785MHz) -DC

Horizontal:



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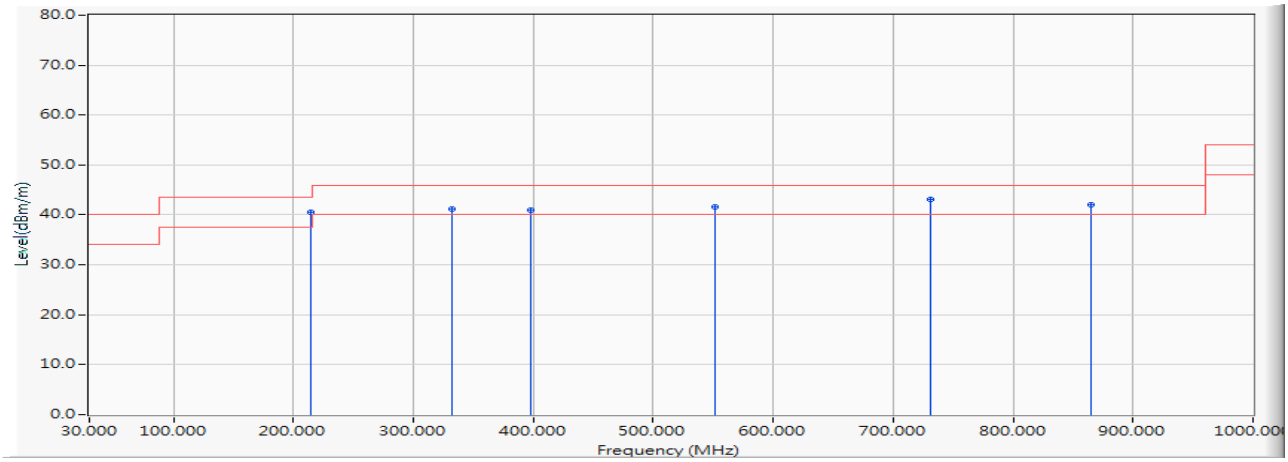


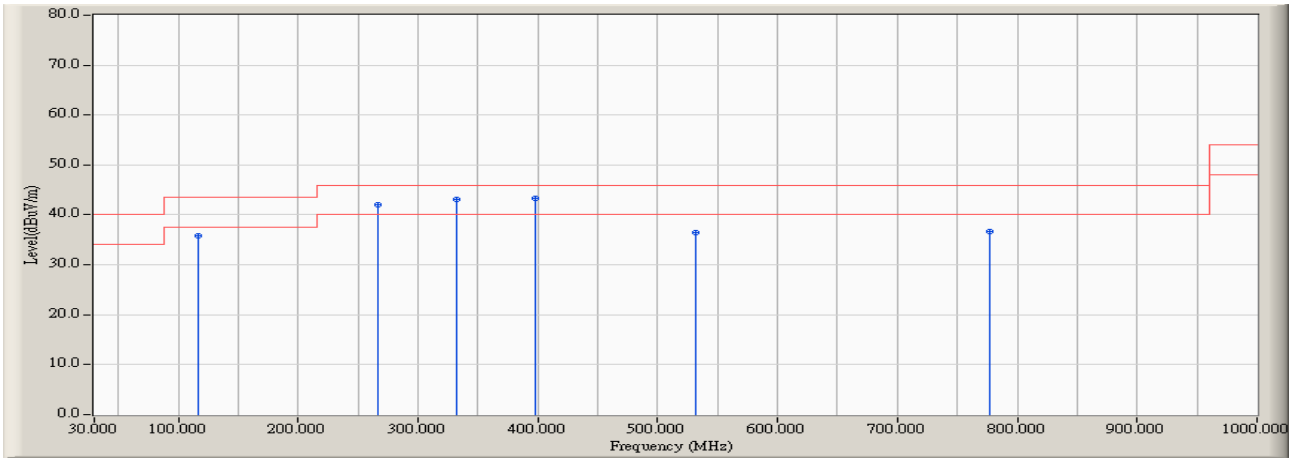
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector					
117.159	-8.247	47.741	39.494	-4.006	43.500
266.174	-5.210	46.262	41.052	-4.948	46.000
332.246	-2.933	45.851	42.918	-3.082	46.000
398.319	1.550	40.184	41.734	-4.266	46.000
687.913	6.191	36.130	42.322	-3.678	46.000
820.058	7.869	34.842	42.711	-3.289	46.000
Vertical					
Peak Detector					
214.159	0.138	40.291	40.430	-3.070	43.500
332.246	-4.047	45.213	41.166	-4.834	46.000
398.319	0.777	40.232	41.009	-4.991	46.000
551.551	2.605	39.081	41.686	-4.314	46.000
731.493	4.873	38.191	43.064	-2.936	46.000
865.043	7.922	34.060	41.982	-4.018	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5220MHz) -DC

Horizontal:



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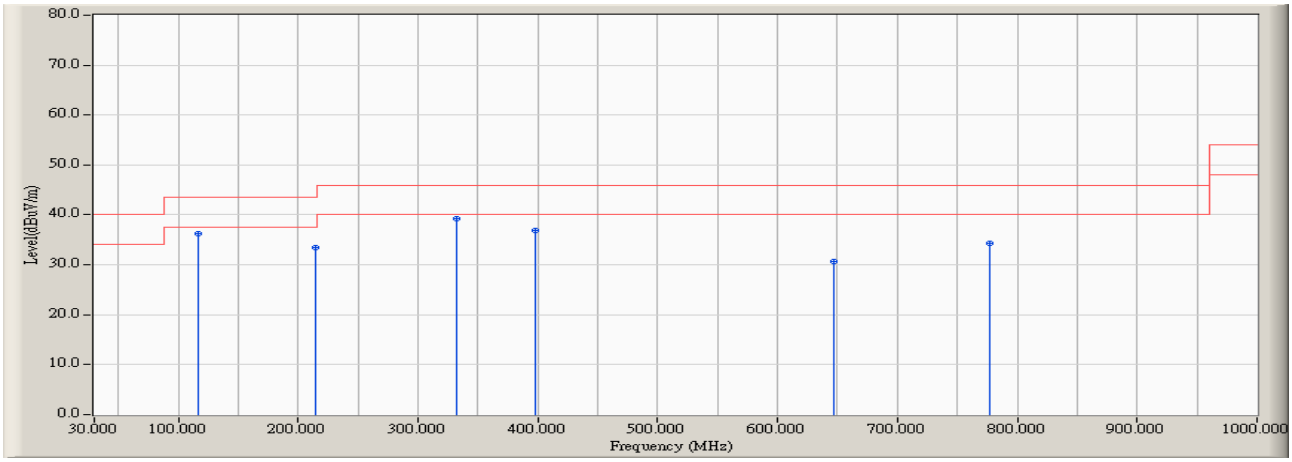


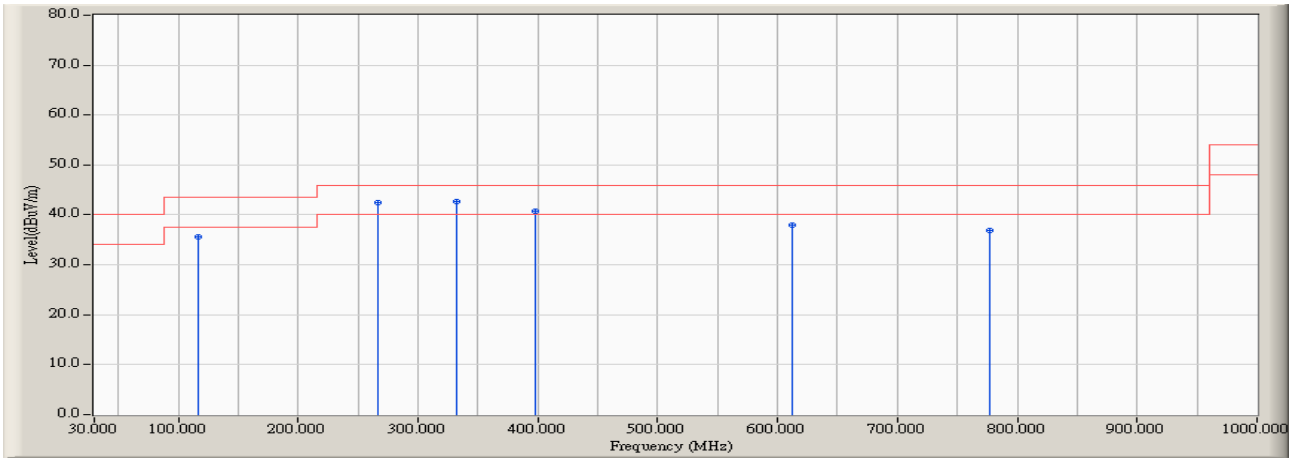
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.159	-8.247	44.115	35.868	-7.632	43.500
266.174	-5.210	47.174	41.964	-4.036	46.000
332.246	-2.933	45.968	43.035	-2.965	46.000
398.319	1.550	41.700	43.250	-2.750	46.000
531.870	3.988	32.380	36.367	-9.633	46.000
776.478	7.449	29.175	36.623	-9.377	46.000
Vertical					
Peak Detector					
117.159	-6.651	42.854	36.202	-7.298	43.500
214.159	0.138	33.374	33.513	-9.987	43.500
332.246	-4.047	43.256	39.209	-6.791	46.000
398.319	0.777	36.132	36.909	-9.091	46.000
647.145	4.104	26.587	30.691	-15.309	46.000
776.478	5.609	28.693	34.301	-11.699	46.000

Note:

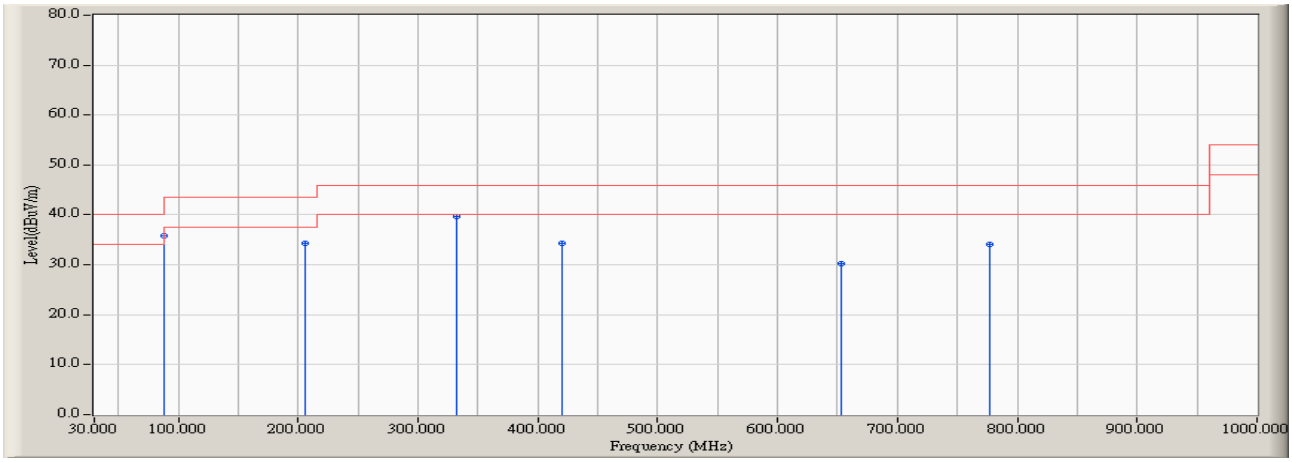
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5300MHz) -DC

Horizontal:



Vertical:



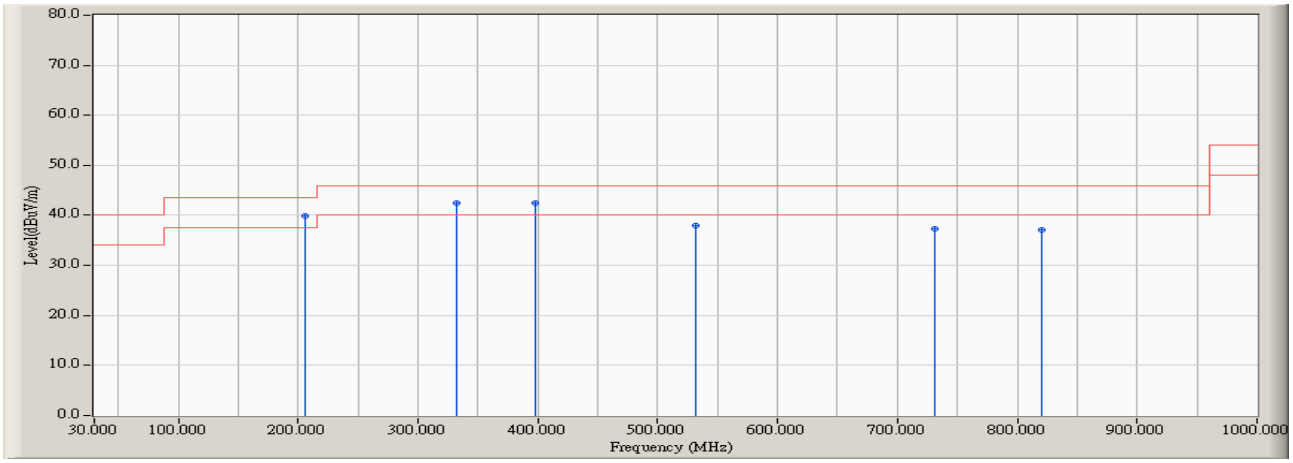
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.159	-8.247	43.743	35.496	-8.004	43.500
266.174	-5.210	47.720	42.510	-3.490	46.000
332.246	-2.933	45.653	42.720	-3.280	46.000
398.319	1.550	39.249	40.799	-5.201	46.000
612.000	7.109	30.836	37.945	-8.055	46.000
776.478	7.449	29.444	36.892	-9.108	46.000
Vertical					
Peak Detector					
87.638	-6.944	42.694	35.749	-4.251	40.000
205.725	0.244	34.176	34.420	-9.080	43.500
332.246	-4.047	43.629	39.582	-6.418	46.000
420.812	0.965	33.349	34.314	-11.686	46.000
652.768	4.126	26.109	30.235	-15.765	46.000
776.478	5.609	28.457	34.065	-11.935	46.000

Note:

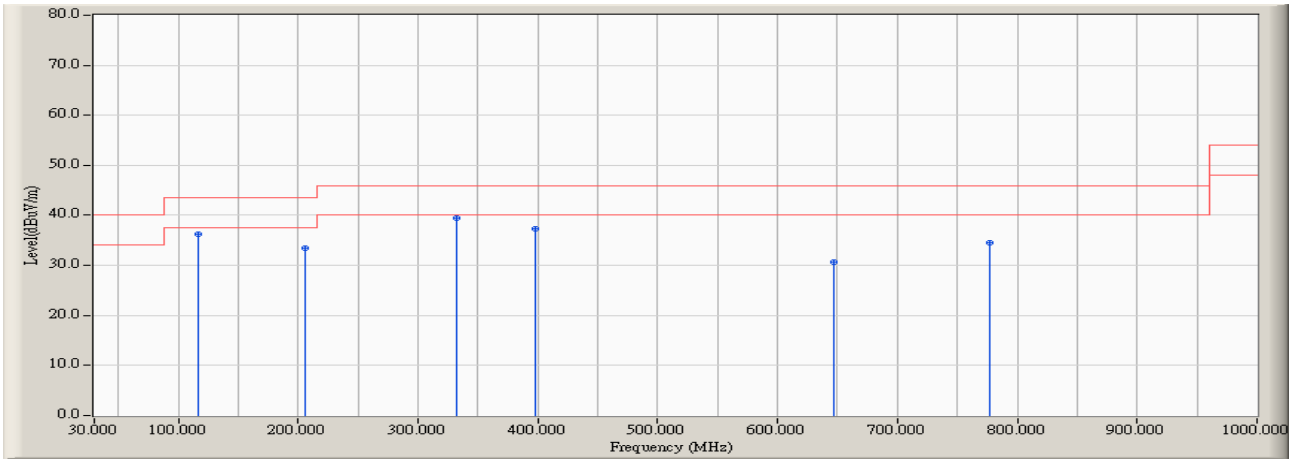
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5500MHz) -DC

Horizontal:



Vertical:



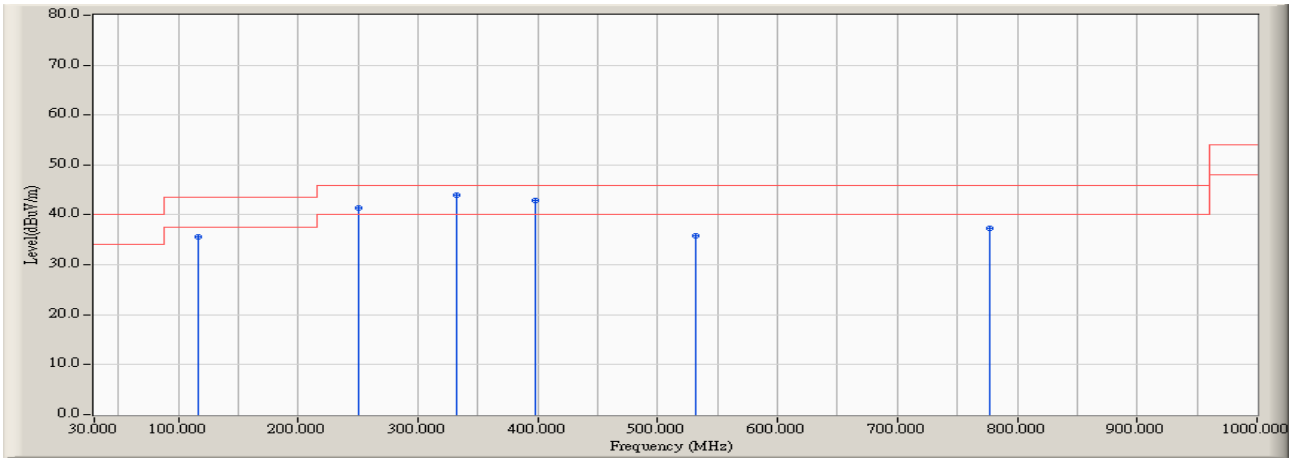
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
205.725	-8.752	48.623	39.871	-3.629	43.500
332.246	-2.933	45.335	42.402	-3.598	46.000
398.319	1.550	40.830	42.380	-3.620	46.000
531.870	3.988	33.990	37.977	-8.023	46.000
731.493	6.623	30.664	37.287	-8.713	46.000
820.058	7.869	29.312	37.181	-8.819	46.000
Vertical					
Peak Detector					
117.159	-6.651	42.819	36.167	-7.333	43.500
205.725	0.244	33.115	33.359	-10.141	43.500
332.246	-4.047	43.570	39.523	-6.477	46.000
398.319	0.777	36.441	37.218	-8.782	46.000
647.145	4.104	26.562	30.666	-15.334	46.000
776.478	5.609	28.945	34.553	-11.447	46.000

Note:

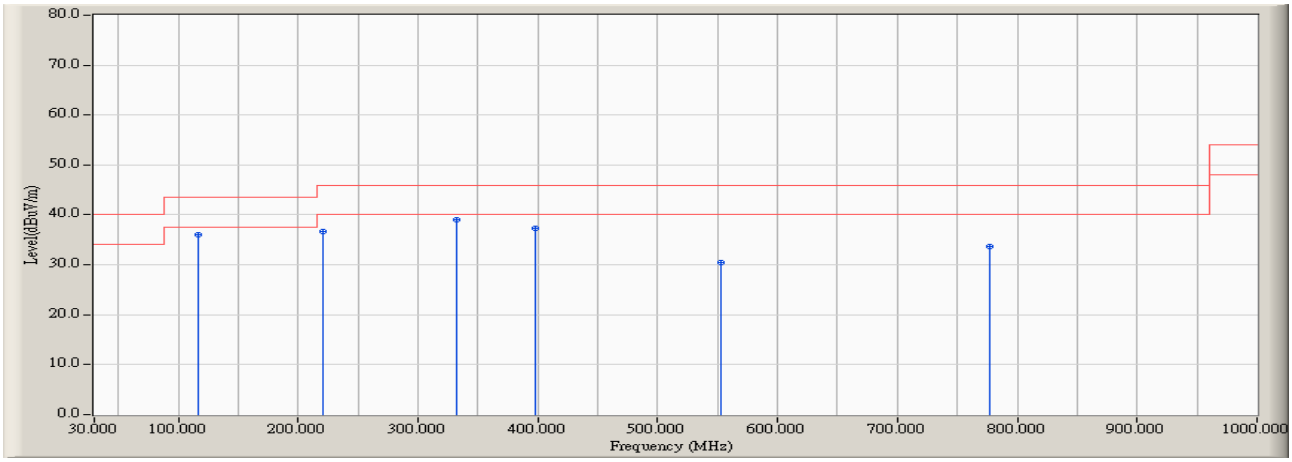
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)(5785MHz) -DC

Horizontal:



Vertical:



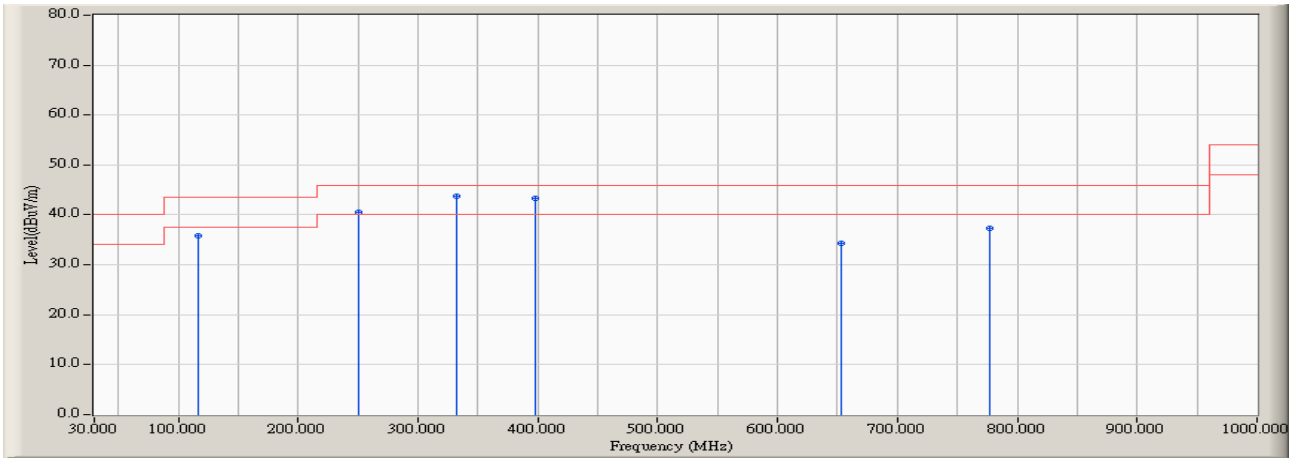
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.159	-8.247	43.881	35.634	-7.866	43.500
250.710	-5.268	46.641	41.373	-4.627	46.000
332.246	-2.933	46.843	43.910	-2.090	46.000
398.319	1.550	41.426	42.976	-3.024	46.000
531.870	3.988	31.886	35.873	-10.127	46.000
776.478	7.449	29.790	37.238	-8.762	46.000
Vertical					
Peak Detector					
117.159	-6.651	42.661	36.009	-7.491	43.500
221.188	0.045	36.629	36.674	-9.326	46.000
332.246	-4.047	42.989	38.942	-7.058	46.000
398.319	0.777	36.509	37.286	-8.714	46.000
552.957	2.639	27.870	30.509	-15.491	46.000
776.478	5.609	28.123	33.731	-12.269	46.000

Note:

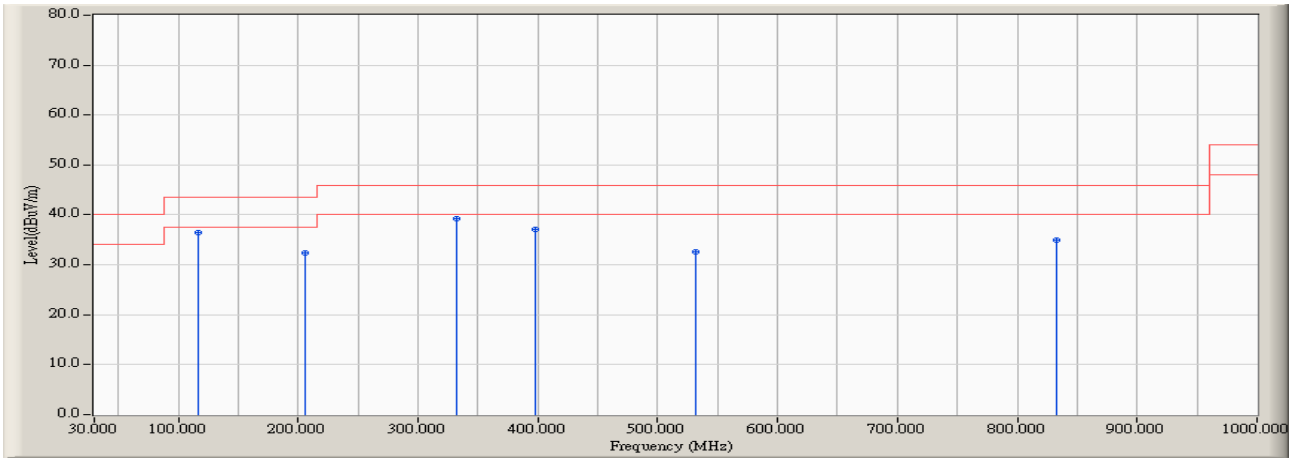
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5190MHz) -DC

Horizontal:



Vertical:



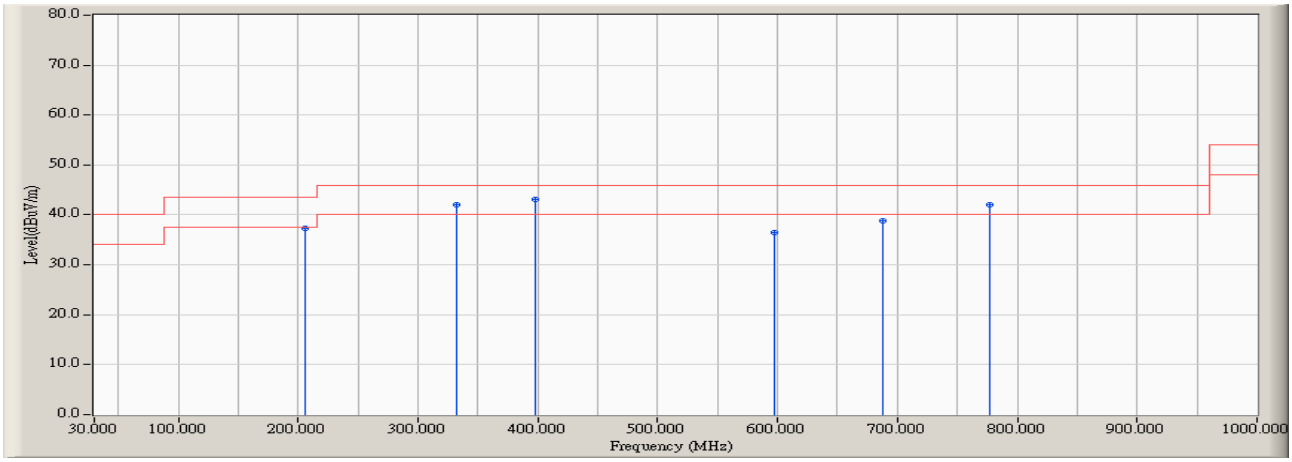
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.159	-8.247	43.989	35.742	-7.758	43.500
250.710	-5.268	45.807	40.539	-5.461	46.000
332.246	-2.933	46.728	43.795	-2.205	46.000
398.319	1.550	41.844	43.394	-2.606	46.000
652.768	6.605	27.650	34.256	-11.744	46.000
776.478	7.449	29.839	37.287	-8.713	46.000
Vertical					
Peak Detector					
117.159	-6.651	43.073	36.421	-7.079	43.500
205.725	0.244	32.067	32.311	-11.189	43.500
332.246	-4.047	43.244	39.197	-6.803	46.000
398.319	0.777	36.279	37.056	-8.944	46.000
531.870	2.070	30.559	32.629	-13.371	46.000
832.710	6.959	28.044	35.003	-10.997	46.000

Note:

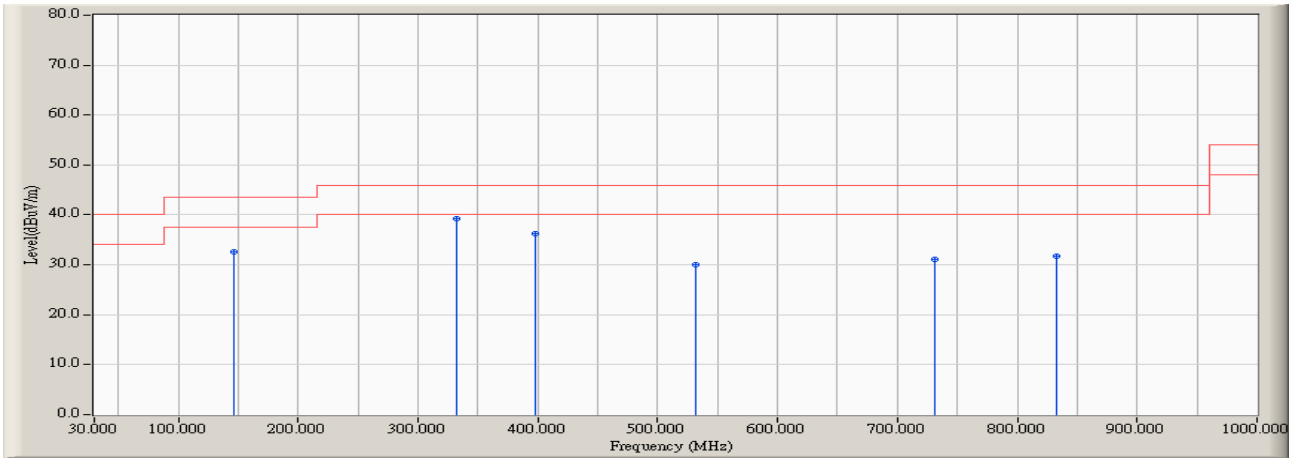
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5270MHz) -DC

Horizontal:



Vertical:



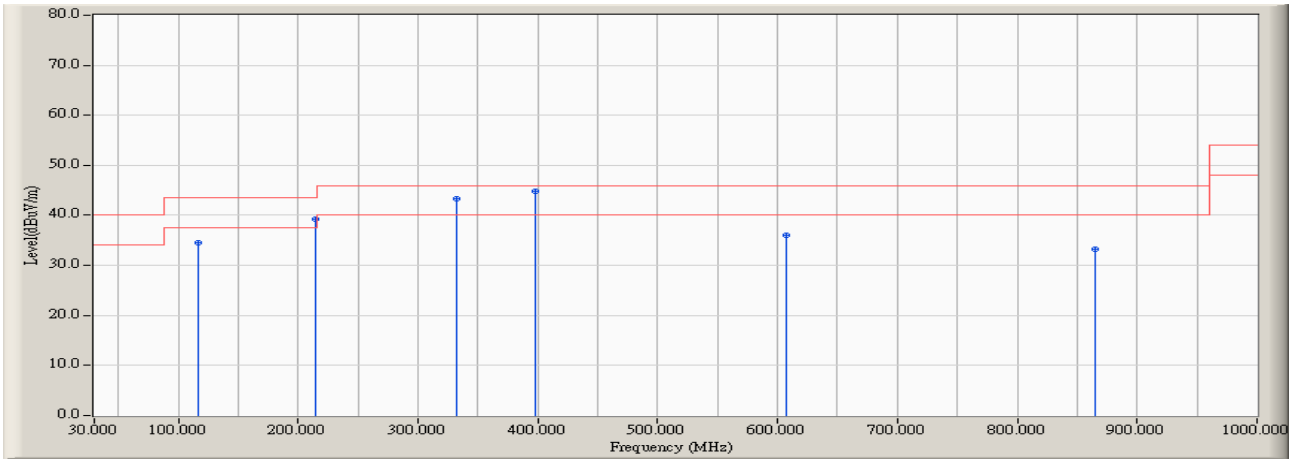
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
205.725	-8.752	46.176	37.424	-6.076	43.500
332.246	-2.933	45.015	42.082	-3.918	46.000
398.319	1.550	41.638	43.188	-2.812	46.000
597.942	7.158	29.375	36.533	-9.467	46.000
687.913	6.191	32.619	38.811	-7.189	46.000
776.478	7.449	34.576	42.024	-3.976	46.000
Vertical					
Peak Detector					
146.681	-5.062	37.684	32.621	-10.879	43.500
332.246	-4.047	43.272	39.225	-6.775	46.000
398.319	0.777	35.421	36.198	-9.802	46.000
531.870	2.070	27.882	29.952	-16.048	46.000
731.493	4.873	26.296	31.169	-14.831	46.000
832.710	6.959	24.738	31.697	-14.303	46.000

Note:

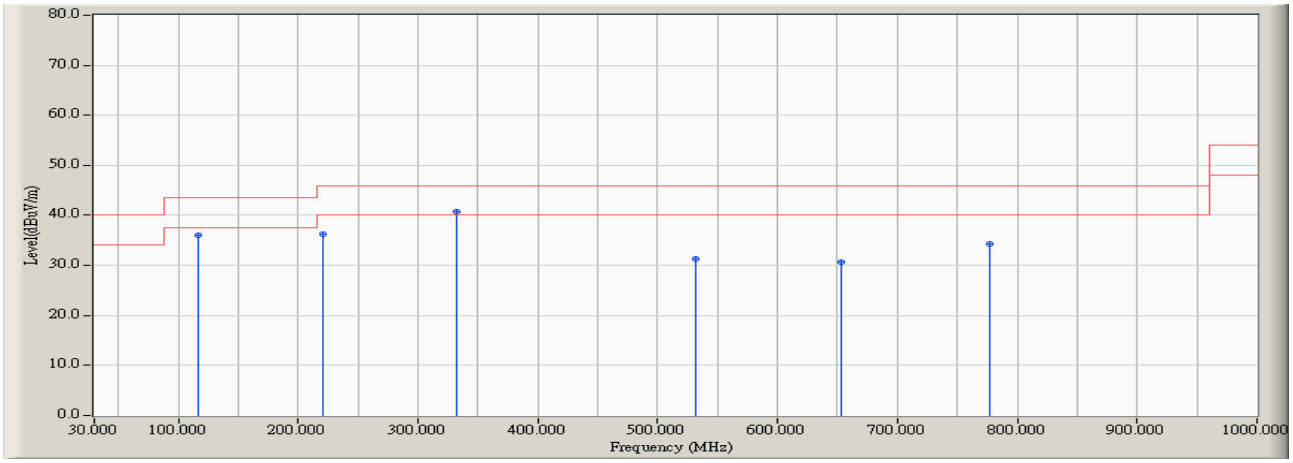
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5510MHz) -DC

Horizontal:



Vertical:



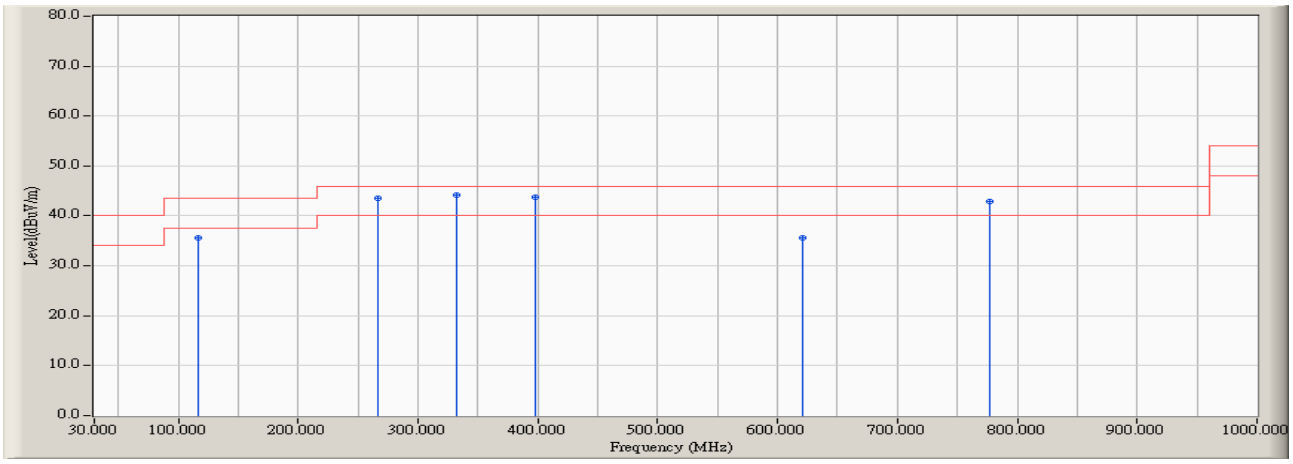
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.159	-8.247	42.699	34.452	-9.048	43.500
214.159	-8.093	47.367	39.274	-4.226	43.500
332.246	-2.933	46.195	43.262	-2.738	46.000
398.319	1.550	43.245	44.795	-1.205	46.000
607.783	7.161	28.843	36.004	-9.996	46.000
865.043	7.825	25.440	33.265	-12.735	46.000
Vertical					
Peak Detector					
117.159	-6.651	42.602	35.950	-7.550	43.500
221.188	0.045	36.109	36.154	-9.846	46.000
332.246	-4.047	44.746	40.699	-5.301	46.000
531.870	2.070	29.221	31.291	-14.709	46.000
652.768	4.126	26.509	30.635	-15.365	46.000
776.478	5.609	28.619	34.227	-11.773	46.000

Note:

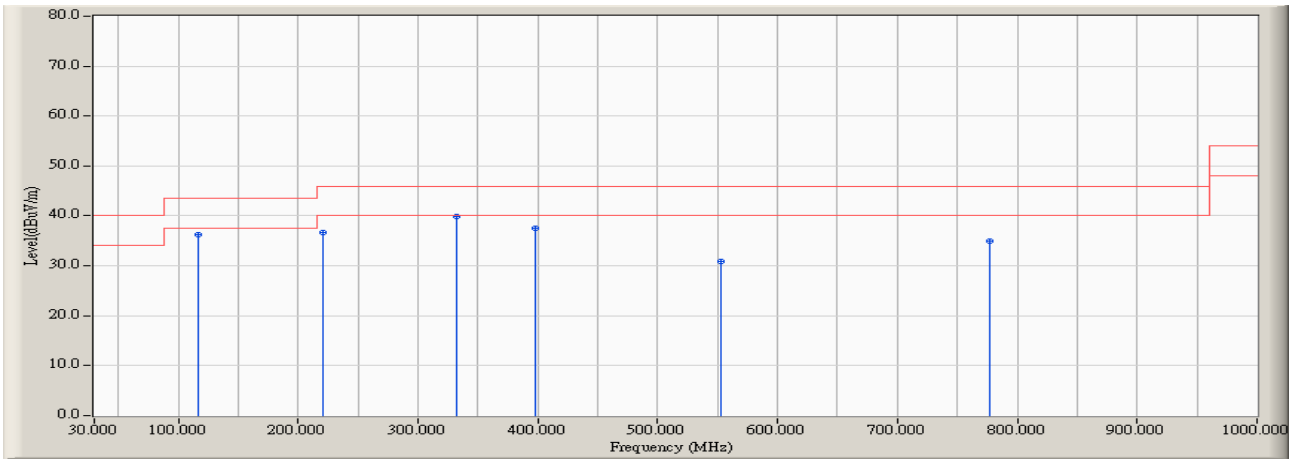
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

Product	:	NPort Device Server
Test Item	:	General Radiated Emission
Test Site	:	No.3 OATS
Test Date	:	2018/11/07
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)(5755MHz) -DC

Horizontal:



Vertical:



Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
117.159	-8.247	43.890	35.643	-7.857	43.500
266.174	-5.210	48.850	43.640	-2.360	46.000
332.246	-2.933	47.095	44.162	-1.838	46.000
398.319	1.550	42.268	43.818	-2.182	46.000
620.435	7.019	28.590	35.609	-10.391	46.000
776.478	7.449	35.483	42.931	-3.069	46.000
Vertical					
Peak Detector					
117.159	-6.651	42.991	36.339	-7.161	43.500
221.188	0.045	36.627	36.672	-9.328	46.000
332.246	-4.047	43.848	39.801	-6.199	46.000
398.319	0.777	36.751	37.528	-8.472	46.000
552.957	2.639	28.310	30.949	-15.051	46.000
776.478	5.609	29.254	34.862	-11.138	46.000

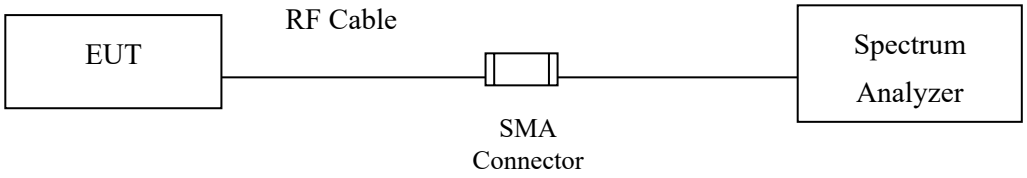
Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz..

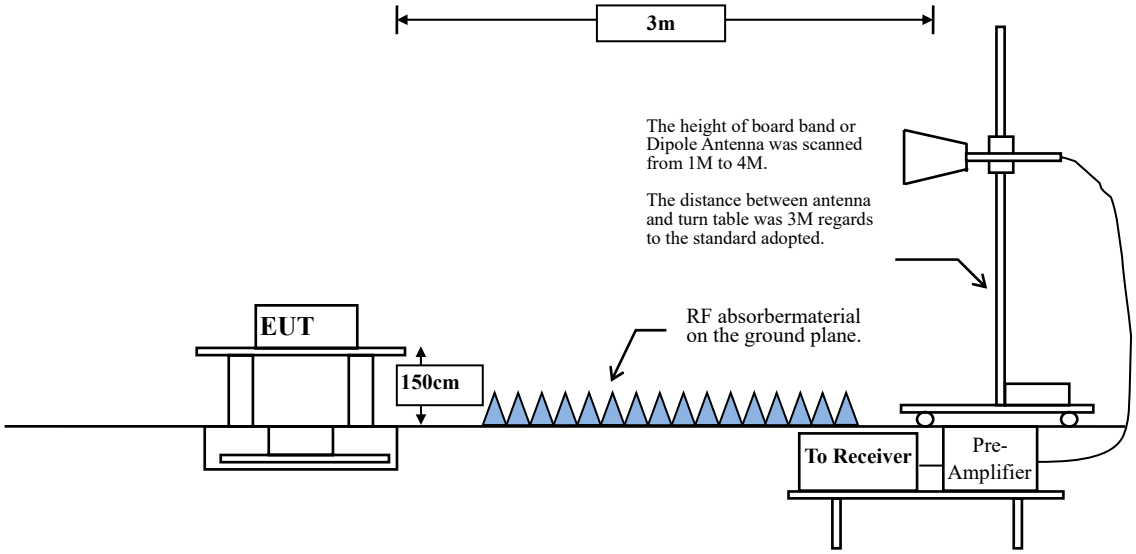
6. Band Edge

6.1. Test Setup

RF Conducted Measurement:



RF Radiated Measurement:



6.2. 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	dBμV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

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

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

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

6.3. Test Procedure

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3meters.

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

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

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz.

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

RBW and VBW Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW ≥ 3MHz.

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW = 10Hz, when duty cycle ≥ 98 %

VBW ≥ 1/T, when duty cycle < 98 %

(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

5GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11 a	98.10	2.0600	485	10
802.11 n20	97.95	1.9100	524	1000
802.11 n40	93.37	0.9104	1098	2000

Note: Duty Cycle Refer to Section 5

6.4. Uncertainty

±4.08 dB below 1GHz

±4.22 dB above 1GHz

6.5. Test Result of Band Edge

Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/08/09
Test Mode : Mode 1: Transmit (802.11a-6Mbps)-Channel 36 (5180MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
36 (Peak)	5150.000	10.470	44.781	55.252	74.00	54.00	Pass
36 (Peak)	5182.174	10.388	82.504	92.892	--	--	--
36 (Average)	5150.000	10.470	24.042	34.513	74.00	54.00	Pass
36 (Average)	5185.362	10.379	69.095	79.475	--	--	--

Figure Channel 36: Horizontal (Peak)

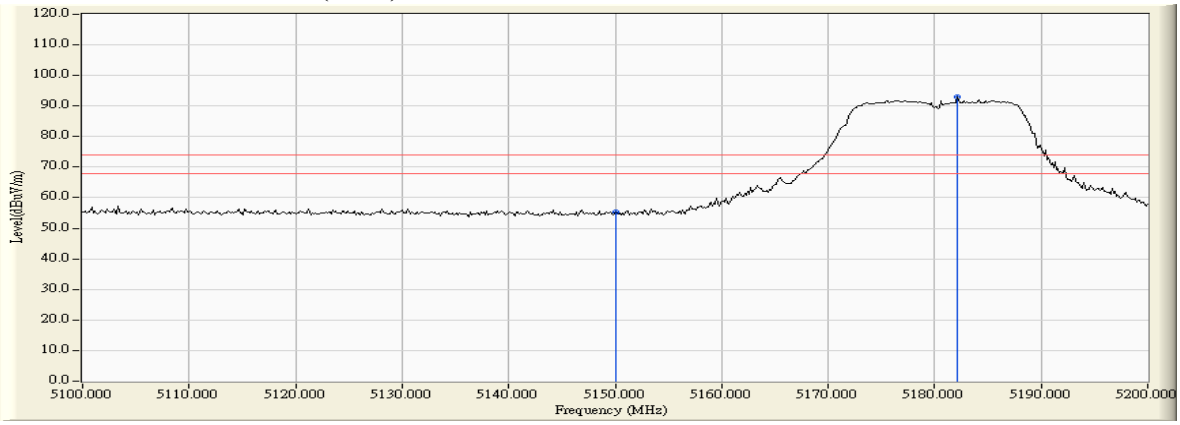
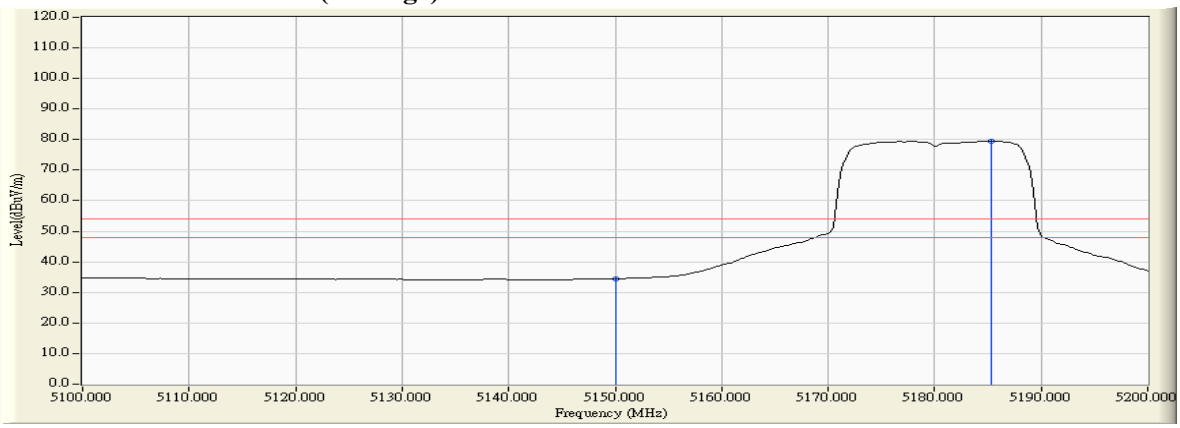


Figure Channel 36: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/08/09
Test Mode : Mode 1: Transmit (802.11a-6Mbps)-Channel 36 (5180MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
36 (Peak)	5150.000	12.390	50.910	63.300	74.00	54.00	Pass
36 (Peak)	5183.623	12.514	96.327	108.842	--	--	--
36 (Average)	5150.000	12.390	30.004	42.394	74.00	54.00	Pass
36 (Average)	5185.652	12.523	83.252	95.774	--	--	--

Figure Channel 36: Vertical (Peak)

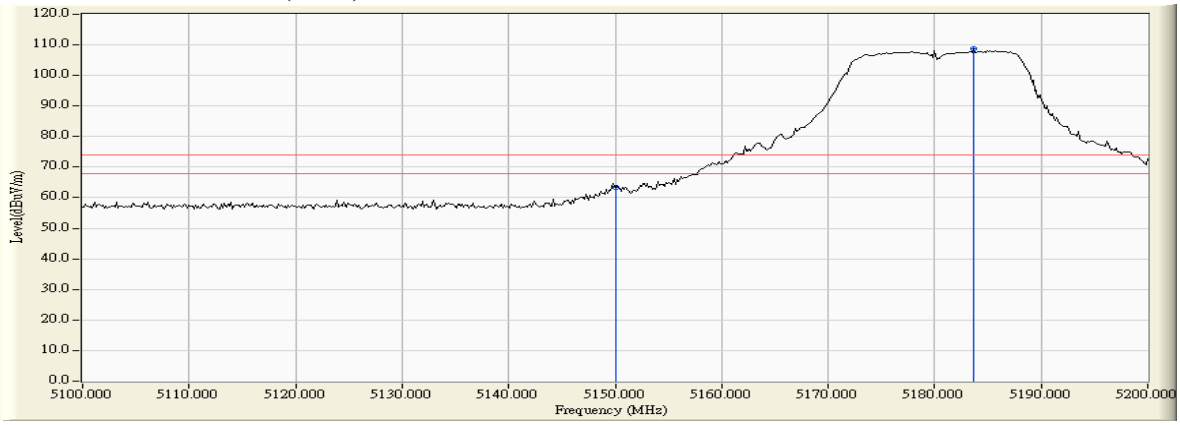
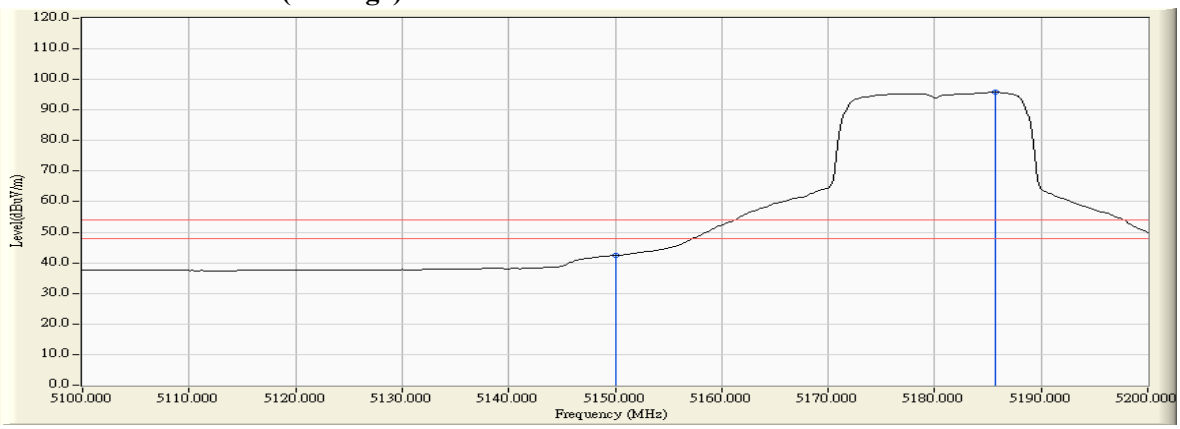


Figure Channel 36: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection..

Product	:	NPort Device Server
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2018/08/09
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 64 (5320MHz)

RF Radiated Measurement (Horizontal):

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)	5315.797	11.112	84.697	95.809	--	--	--
64 (Peak)	5350.000	11.024	44.958	55.982	74.00	54.00	Pass
64 (Peak)	5377.536	10.951	47.792	58.744	74.00	54.00	Pass
64 (Average)	5324.058	11.090	72.032	83.122	--	--	--
64 (Average)	5350.000	11.024	25.619	36.643	74.00	54.00	Pass

Figure Channel 64: Horizontal (Peak)

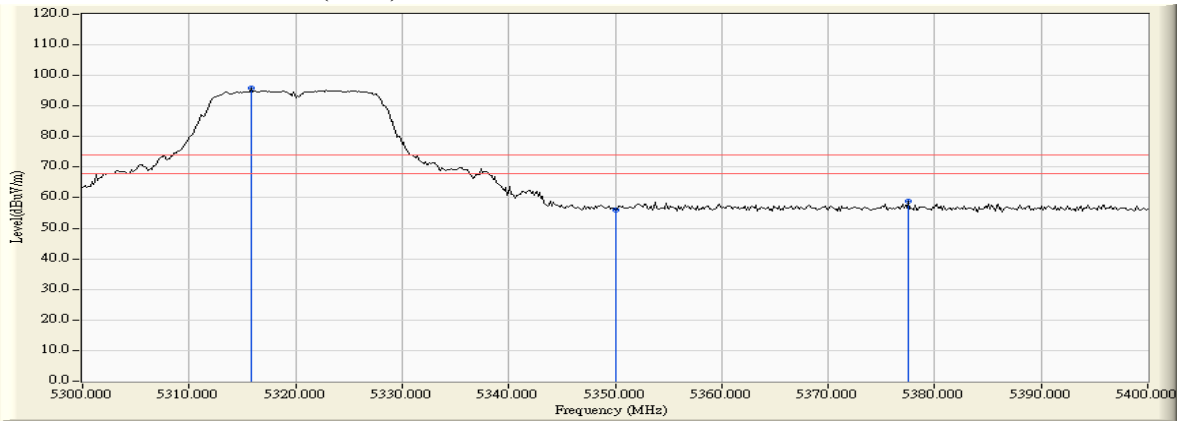
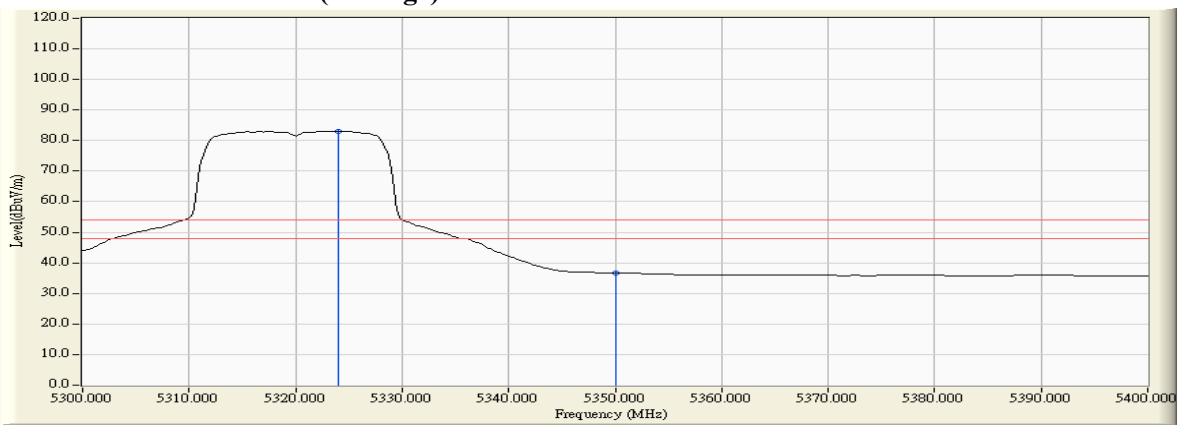


Figure Channel 64: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection..

Product	:	NPort Device Server
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2018/08/09
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 64 (5320MHz)

RF Radiated Measurement (Vertical):

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)	5315.797	13.021	98.676	111.696	--	--	--
64 (Peak)	5350.000	12.999	51.912	64.911	74.00	54.00	Pass
64 (Average)	5324.058	35.893	85.672	98.687	--	--	--
64 (Average)	5350.000	35.864	32.510	45.509	74.00	54.00	Pass

Figure Channel 64: Vertical (Peak)

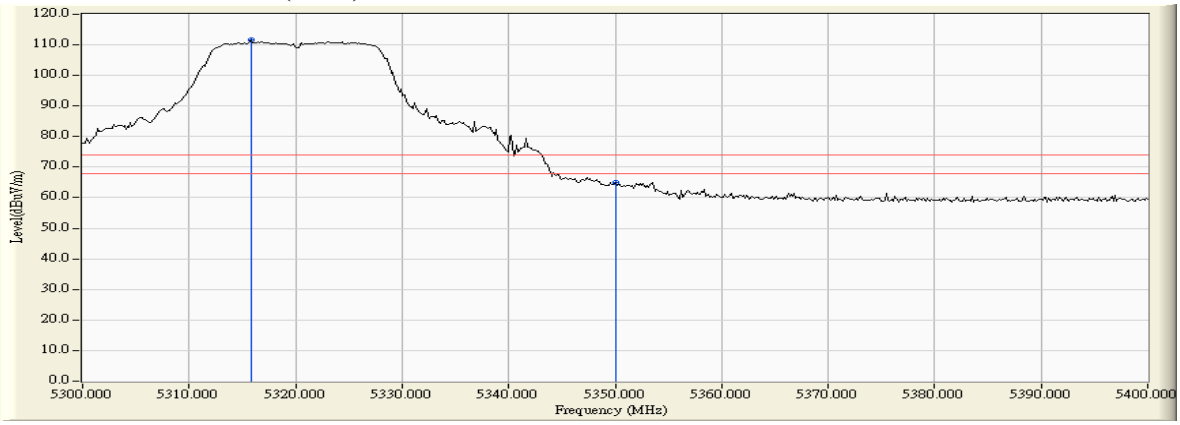
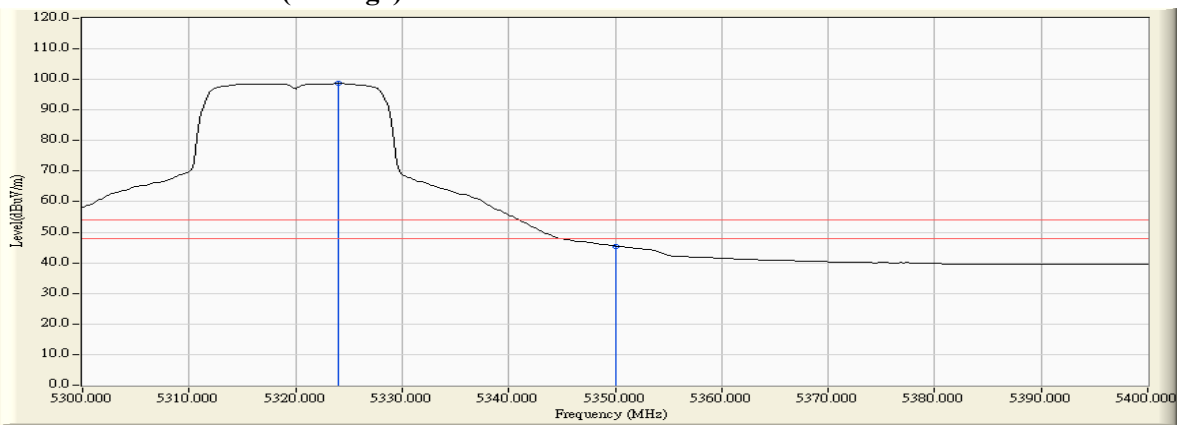


Figure Channel 64: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/08/09
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 100 (5500MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
100 (Peak)	5460.000	11.703	44.431	56.134	74.00	54.00	Pass
100 (Peak)	5505.507	12.200	82.752	94.952	--	--	--
100 (Average)	5460.000	11.703	24.099	35.802	74.00	54.00	Pass
100 (Average)	5496.522	12.144	70.808	82.952	--	--	--

Figure Channel 100: Horizontal (Peak)

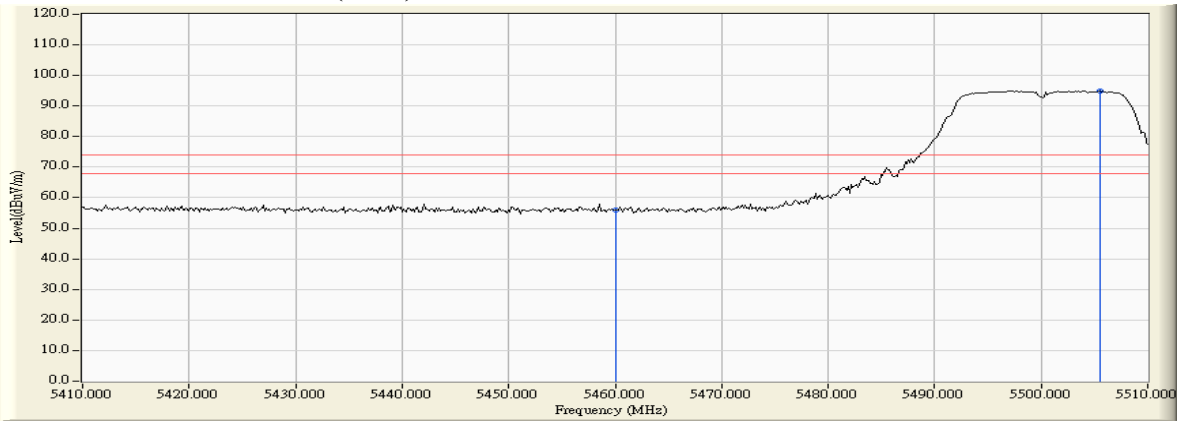
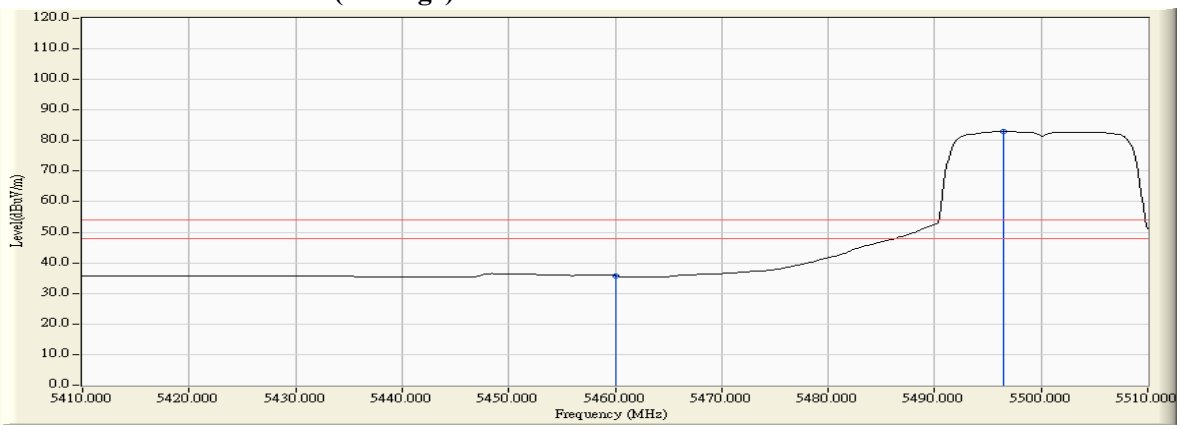


Figure Channel 100: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection..

Product	:	NPort Device Server
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2018/08/09
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 100 (5500MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
100 (Peak)	5414.928	13.072	48.033	61.104	74.00	54.00	Pass
100 (Peak)	5460.000	13.390	45.036	58.426	74.00	54.00	Pass
100 (Peak)	5503.768	13.641	95.853	109.494	--	--	--
100 (Average)	5460.000	13.390	26.216	39.606	74.00	54.00	Pass
100 (Average)	5496.667	13.620	82.514	96.133	--	--	--

Figure Channel 100: Vertical (Peak)

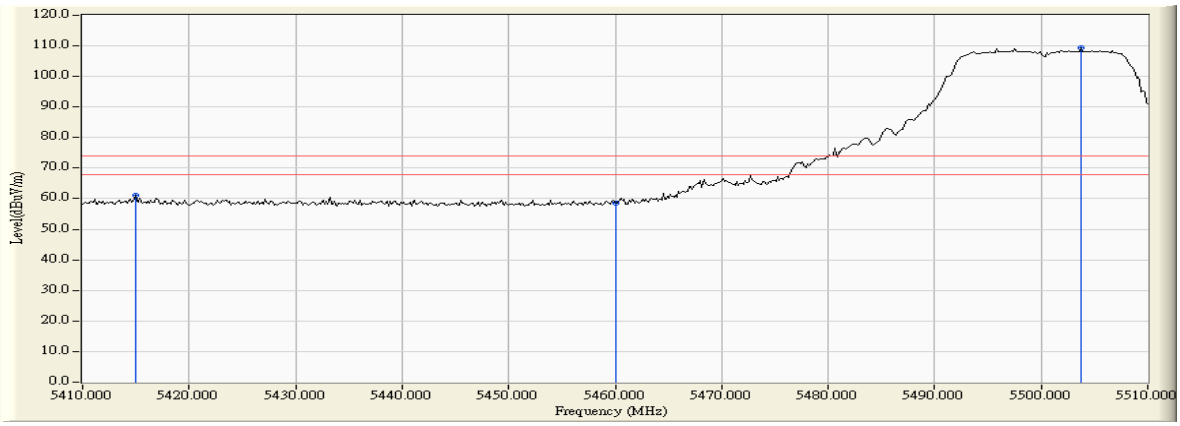
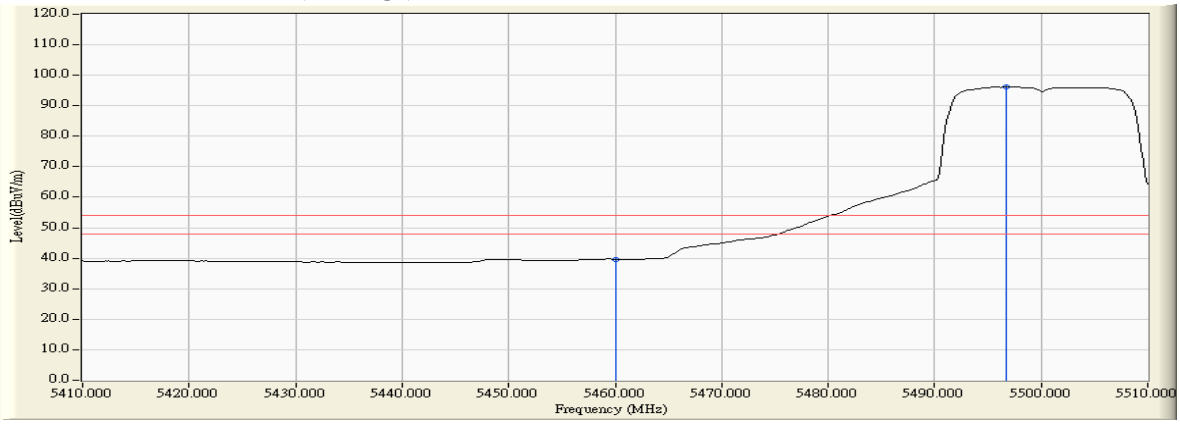


Figure Channel 100: Vertical (Average)



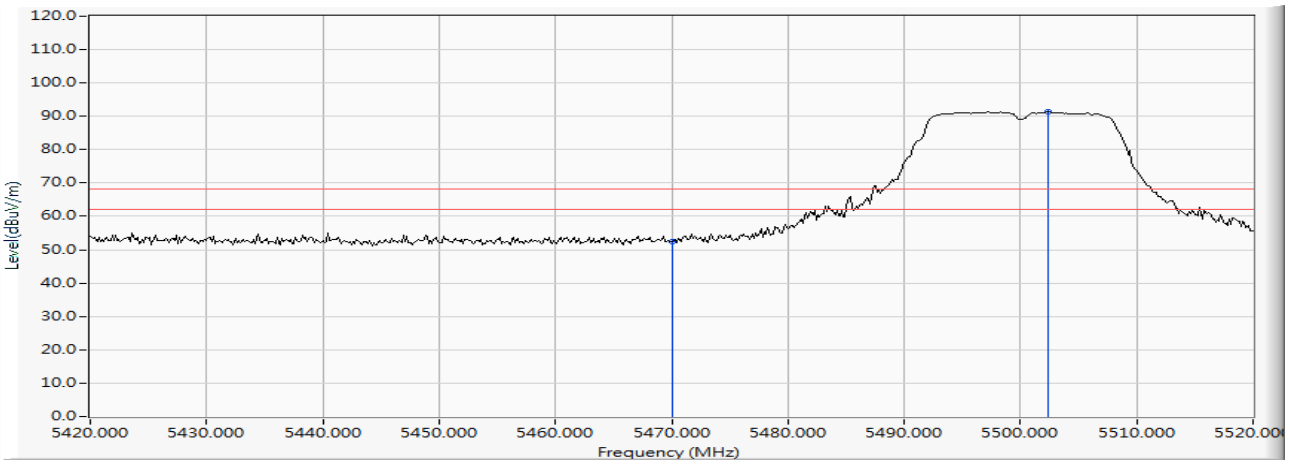
Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.

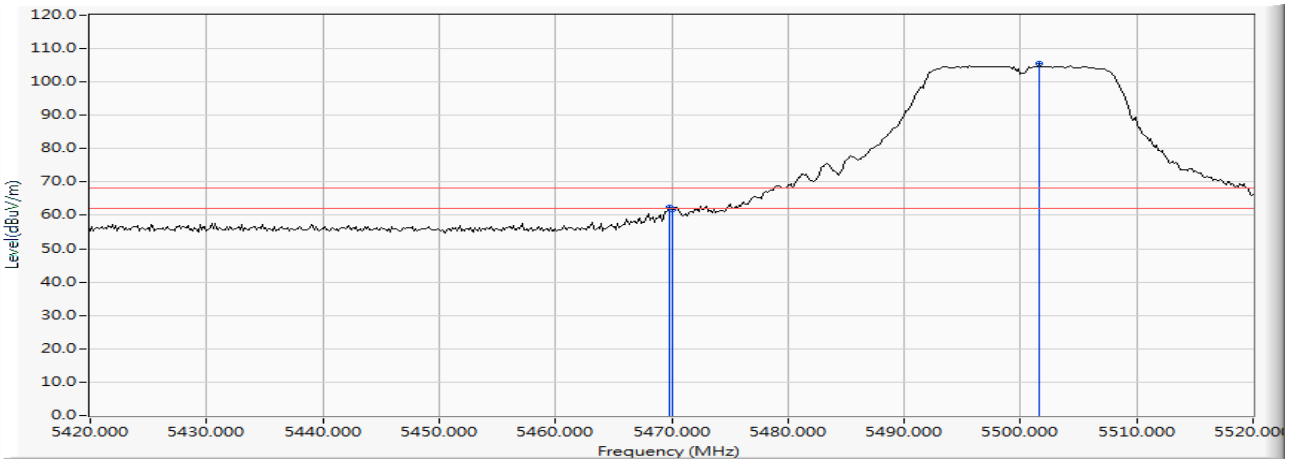
Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/09/28
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 100 (5500MHz)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Horizontal	5470.000	11.838	40.652	52.490	-15.730	68.220	Pass
Horizontal	5502.319	12.185	79.136	91.321	--	--	--



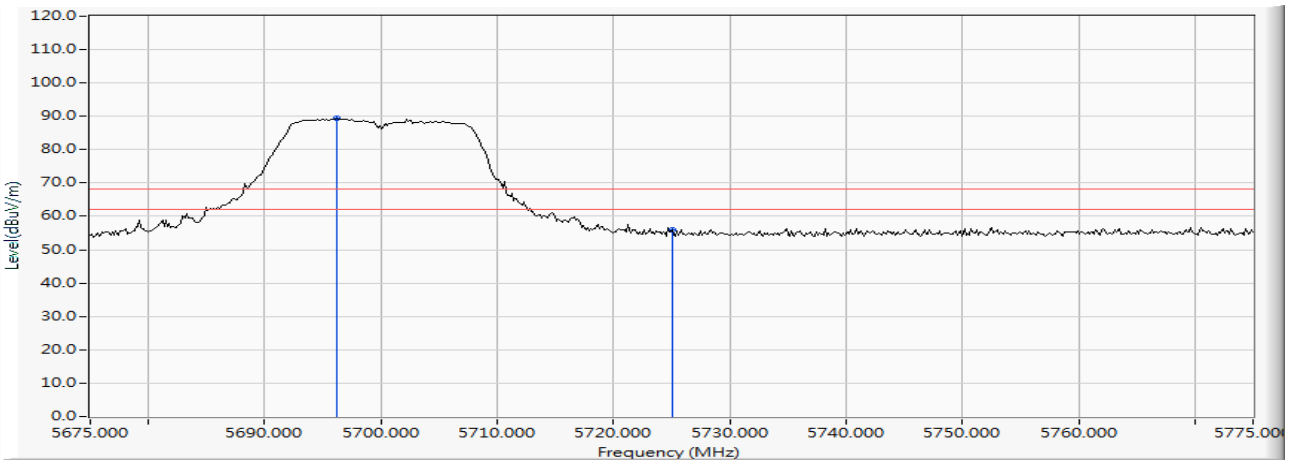
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Vertical	5469.855	13.460	48.945	62.406	-5.814	68.220	Pass
Vertical	5470.000	13.462	48.341	61.803	-6.417	68.220	--
Vertical	5501.594	13.634	91.856	105.490	--	--	--



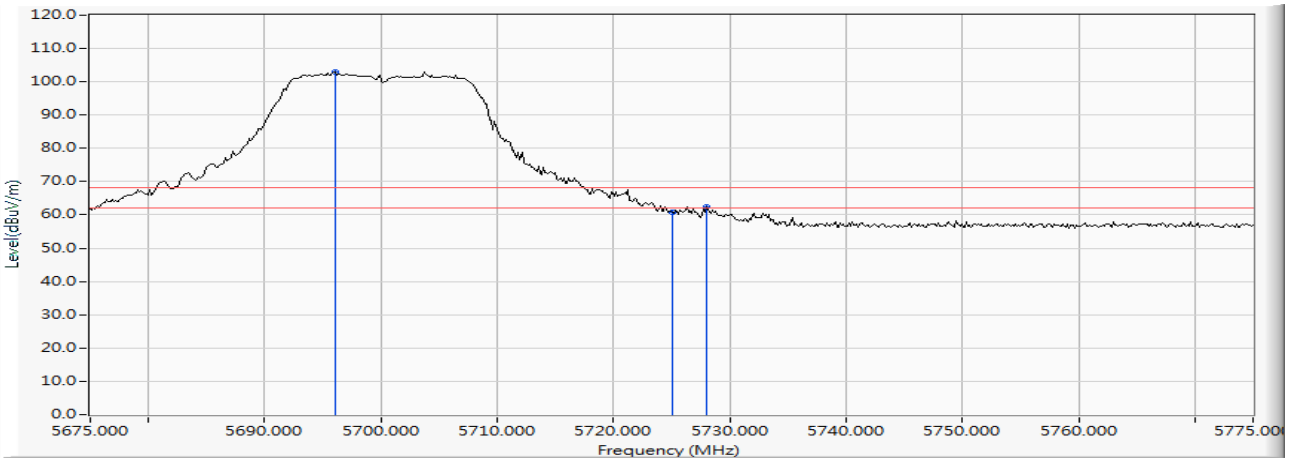
Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/09/28
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 140 (5700MHz)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Horizontal	5696.159	11.651	77.873	89.523	--	--	--
Horizontal	5725.000	11.592	44.464	56.056	-12.164	68.220	Pass



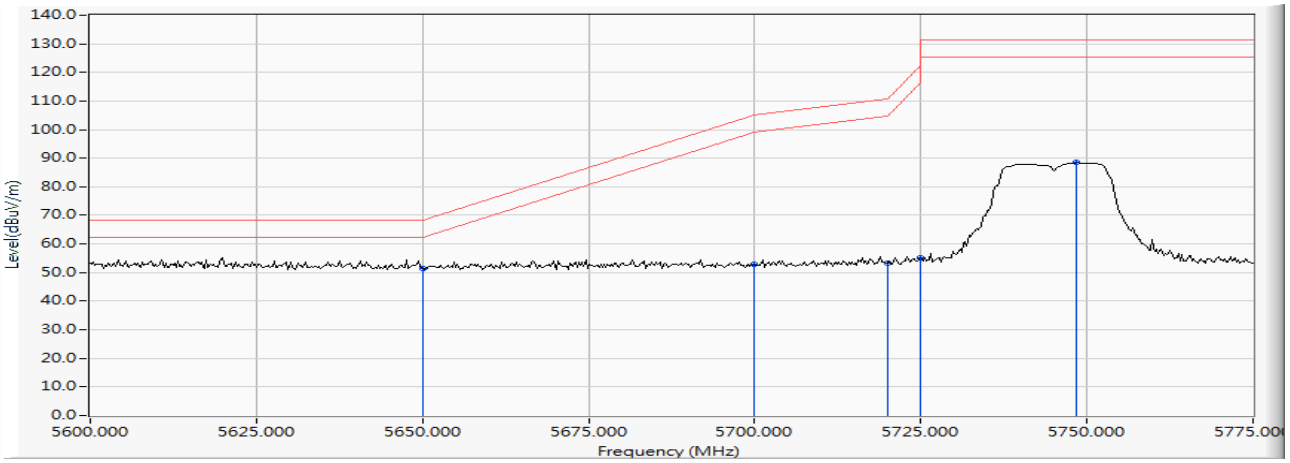
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Vertical	5696.014	13.011	89.956	102.967	--	--	--
Vertical	5725.000	12.930	47.949	60.879	-7.341	68.220	Pass
Vertical	5728.043	12.920	49.573	62.493	-5.727	68.220	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/09/28
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 149 (5745MHz)

RF Radiated Measurement:

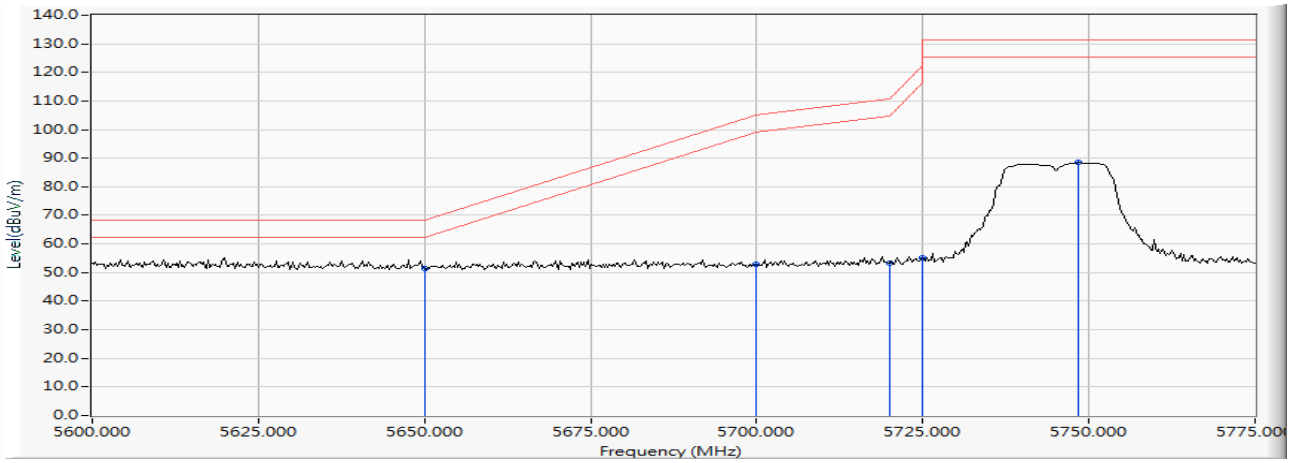
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Horizontal	5650.000	11.554	39.684	51.239	-16.981	68.220	Pass
Horizontal	5700.000	11.647	41.229	52.876	-52.324	105.200	Pass
Horizontal	5720.000	11.607	41.787	53.394	-57.406	110.800	Pass
Horizontal	5725.000	11.592	43.419	55.011	-67.189	122.200	Pass
Horizontal	5748.370	11.517	76.938	88.455	-42.745	131.200	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/09/28
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 149 (5745MHz)

RF Radiated Measurement:

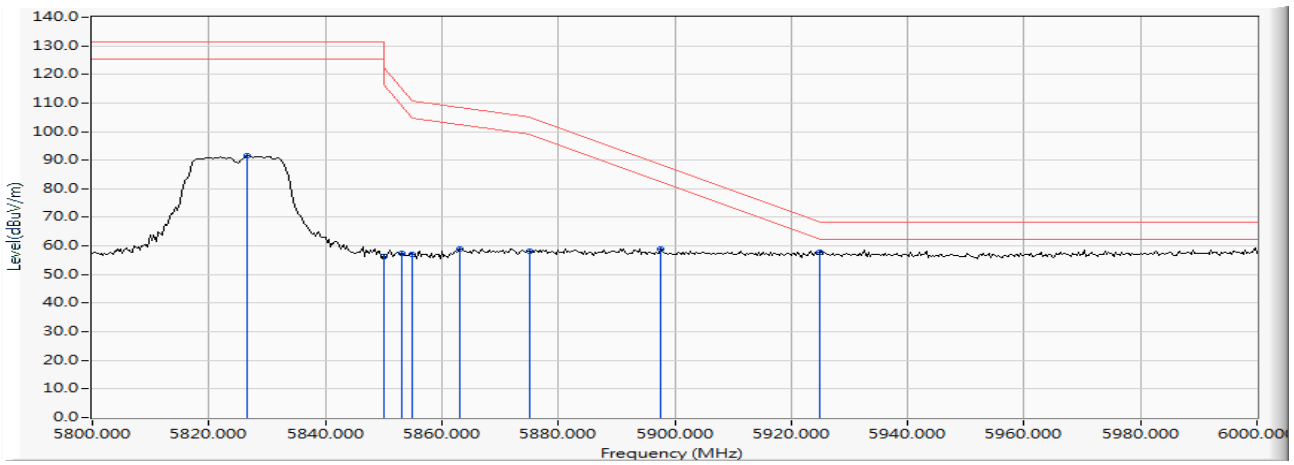
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Vertical	5650.000	35.749	40.642	53.671	-14.549	68.220	Pass
Vertical	5700.000	35.703	41.139	54.142	-51.058	105.200	Pass
Vertical	5720.000	35.639	47.352	60.299	-50.501	110.800	Pass
Vertical	5725.000	35.620	51.196	64.126	-58.074	122.200	Pass
Vertical	5748.623	35.528	87.889	100.736	-30.464	131.200	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 165 (5825MHz)

RF Radiated Measurement:

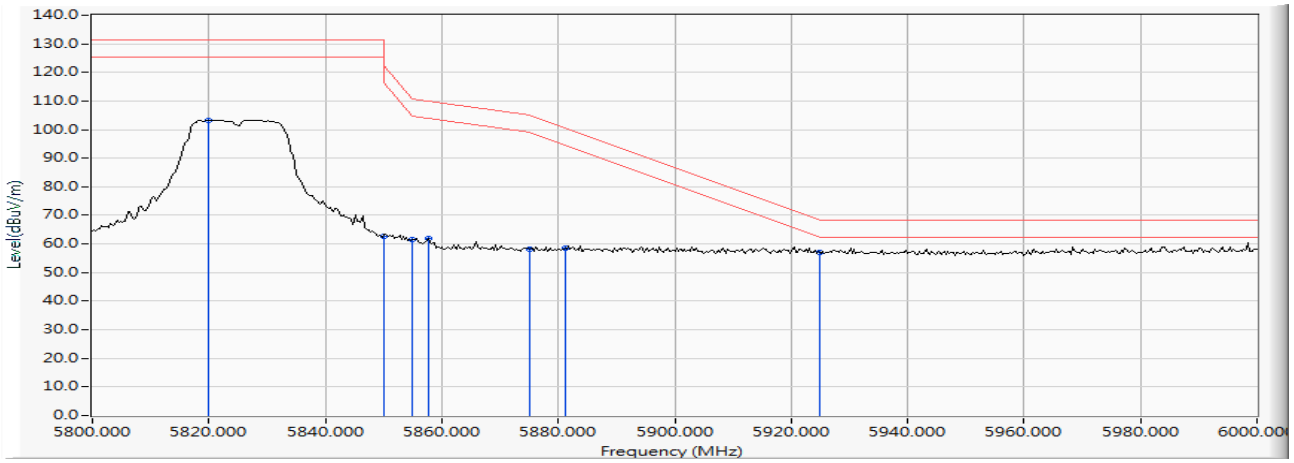
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Horizontal	5826.667	11.539	80.005	91.544	-39.656	131.200	Pass
Horizontal	5850.000	11.701	44.646	56.347	-65.853	122.200	Pass
Horizontal	5853.043	11.722	45.850	57.572	-57.690	115.262	Pass
Horizontal	5855.000	11.735	45.322	57.057	-53.743	110.800	Pass
Horizontal	5863.188	11.791	47.156	58.947	-49.560	108.507	Pass
Horizontal	5875.000	11.873	46.266	58.139	-47.061	105.200	Pass
Horizontal	5897.681	12.025	46.729	58.754	-29.662	88.416	Pass
Horizontal	5925.000	12.068	45.571	57.640	-10.560	68.200	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 1: Transmit (802.11a-6Mbps) - Channel 165 (5825MHz)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Measure Level (dBµV /m)	Margin (dB)	Limit (dBµV /m)	Result
Vertical	5820.000	12.711	90.636	103.347	-27.853	131.200	Pass
Vertical	5850.000	12.774	50.012	62.786	-59.414	122.200	Pass
Vertical	5855.000	12.784	48.627	61.411	-49.389	110.800	Pass
Vertical	5857.681	12.789	49.301	62.091	-47.958	110.049	Pass
Vertical	5875.000	12.825	45.474	58.299	-46.901	105.200	Pass
Vertical	5881.159	12.838	45.827	58.666	-41.976	100.642	Pass
Vertical	5925.000	12.911	44.057	56.968	-11.232	68.200	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 36 (5180MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5150.000	10.470	44.481	54.952	74.00	54.00	Pass
36 (Peak)	5184.348	10.383	83.861	94.244	--	--	--
36 (Average)	5150.000	10.470	26.177	36.648	74.00	54.00	Pass
36 (Average)	5185.362	10.379	73.989	84.369	--	--	--

Figure Channel 36: Horizontal (Peak)

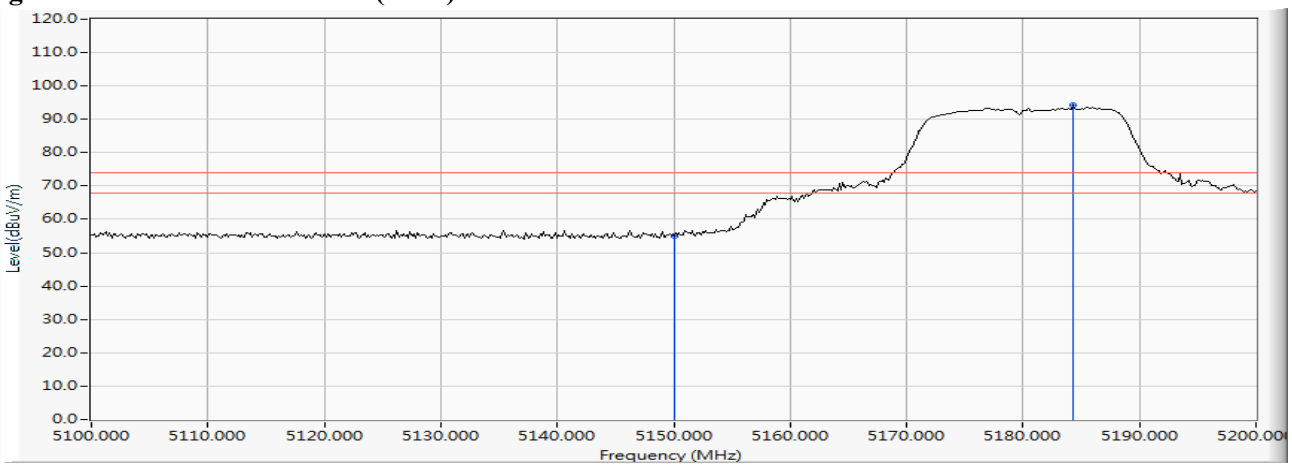
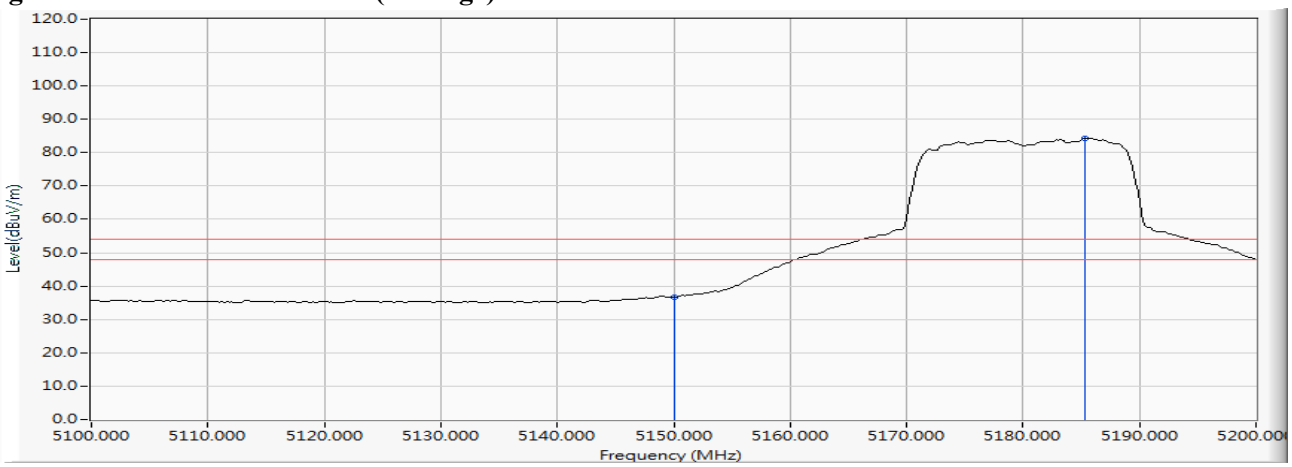


Figure Channel 36: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection..

Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 36 (5180MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
36 (Peak)	5150.000	12.390	53.822	66.212	74.00	54.00	Pass
36 (Peak)	5184.203	12.516	95.801	108.318	--	--	--
36 (Average)	5150.000	12.390	37.750	50.140	74.00	54.00	Pass
36 (Average)	5185.507	12.522	87.219	99.741	--	--	--

Figure Channel 36: Vertical (Peak)

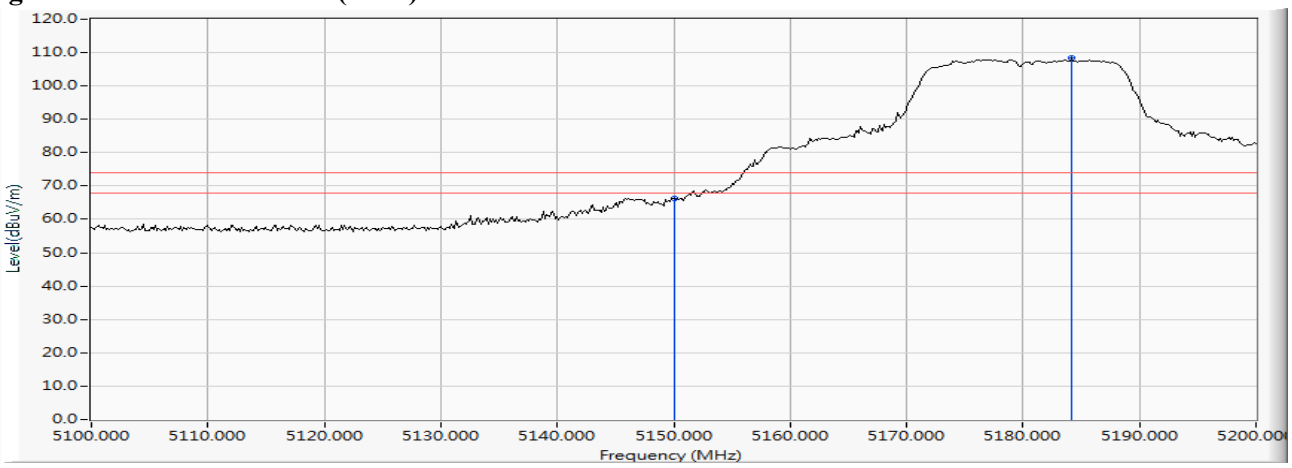
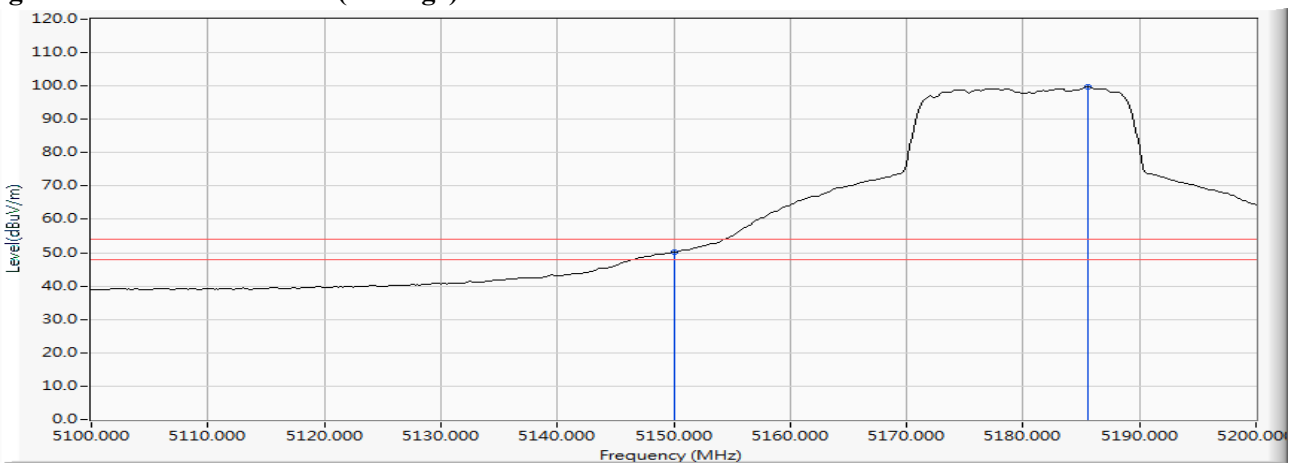


Figure Channel 36: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection..

Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 64 (5320MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
64 (Peak)	5316.957	11.109	86.206	97.315	--	--	--
64 (Peak)	5350.000	11.024	45.945	56.969	74.00	54.00	Pass
64 (Average)	5314.638	11.115	77.164	88.278	--	--	--
64 (Average)	5350.000	11.024	27.367	38.391	74.00	54.00	Pass

Figure Channel 64: Horizontal (Peak)

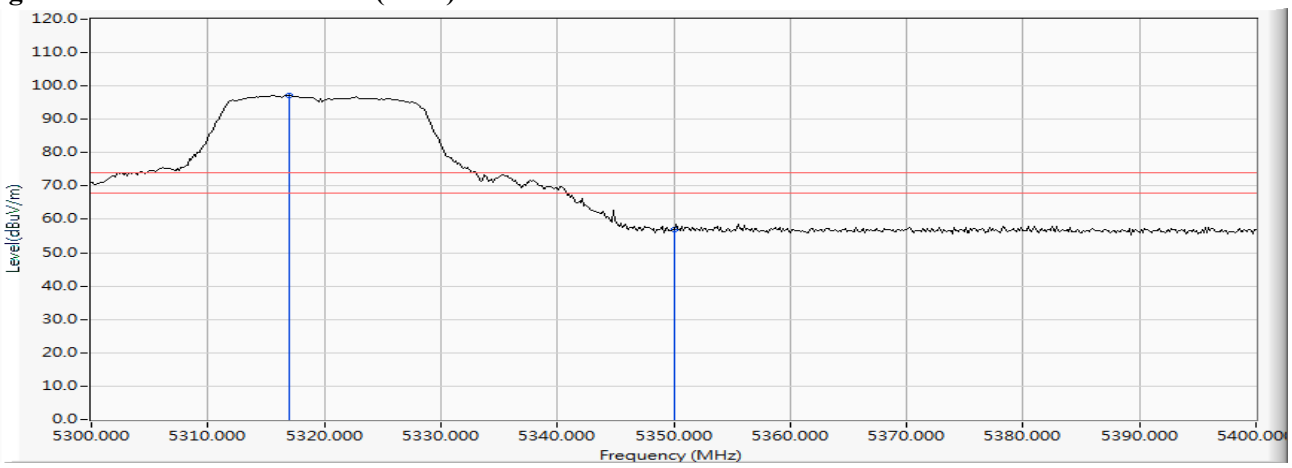
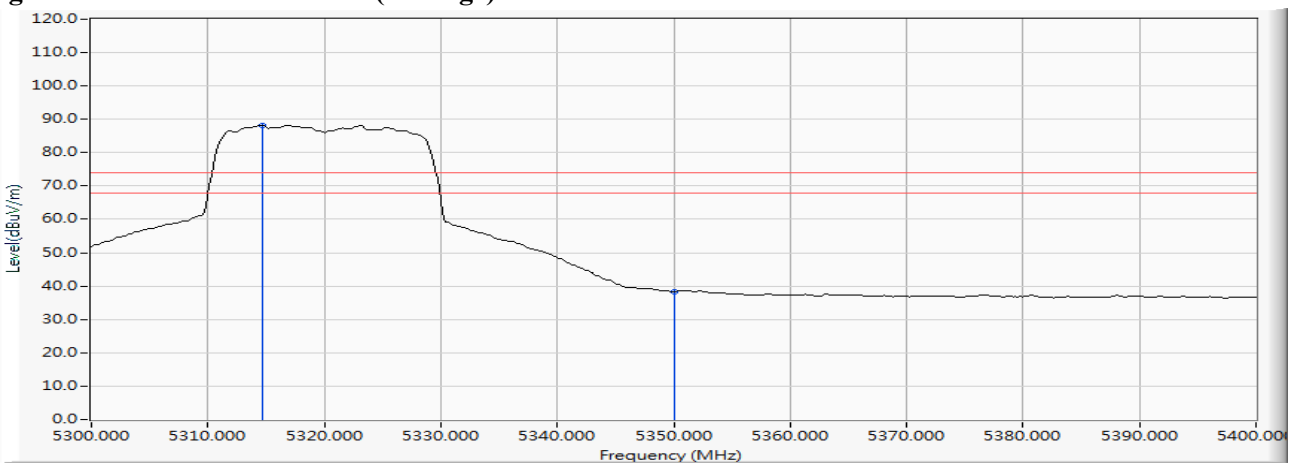


Figure Channel 64: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection..

Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 64 (5320MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
64 (Peak)	5324.348	13.014	97.927	110.942	--	--	--
64 (Peak)	5350.000	12.999	52.797	65.796	74.00	54.00	Pass
64 (Average)	5322.899	13.016	88.402	101.418	--	--	--
64 (Average)	5350.000	12.999	35.201	48.200	74.00	54.00	Pass

Figure Channel 64: Vertical (Peak)

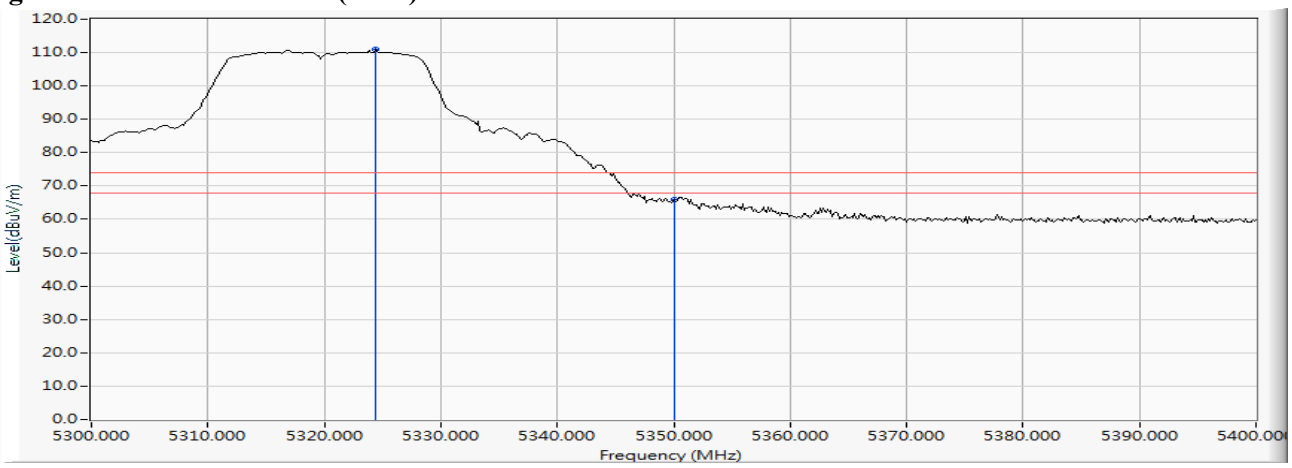
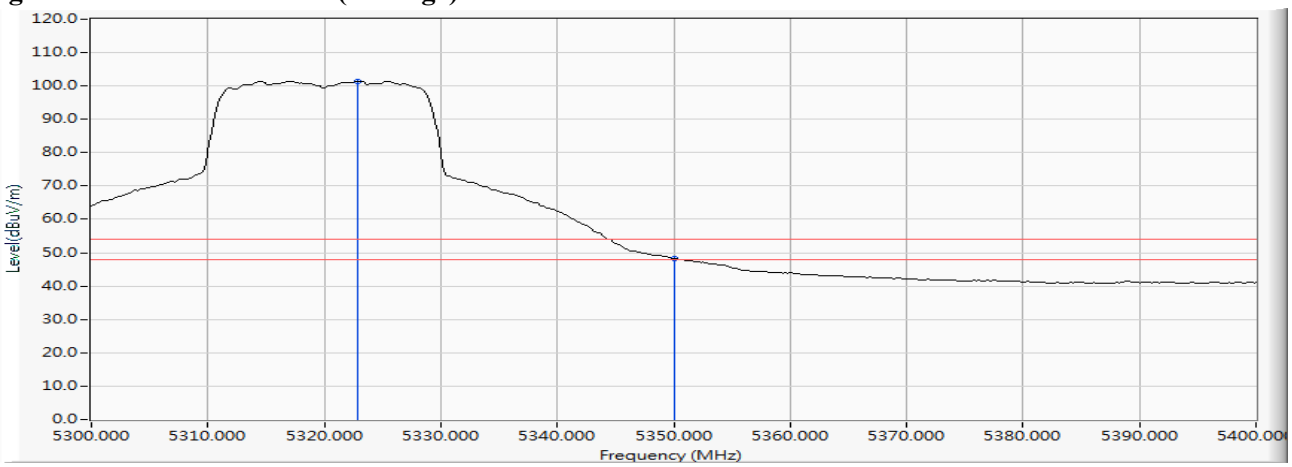


Figure Channel 64: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection..

Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100 (5500MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
100 (Peak)	5460.000	11.703	45.234	56.937	74.00	54.00	Pass
100 (Peak)	5505.507	12.200	85.478	97.678	--	--	--
100 (Average)	5460.000	11.703	25.411	37.114	74.00	54.00	Pass
100 (Average)	5505.507	12.200	75.775	87.975	--	--	--

Figure Channel 100: Horizontal (Peak)

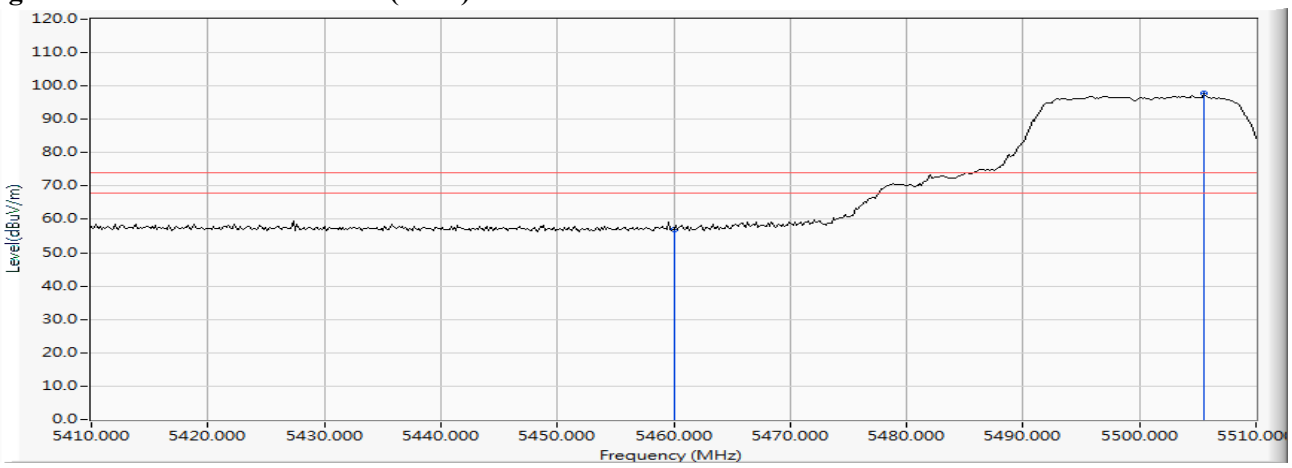
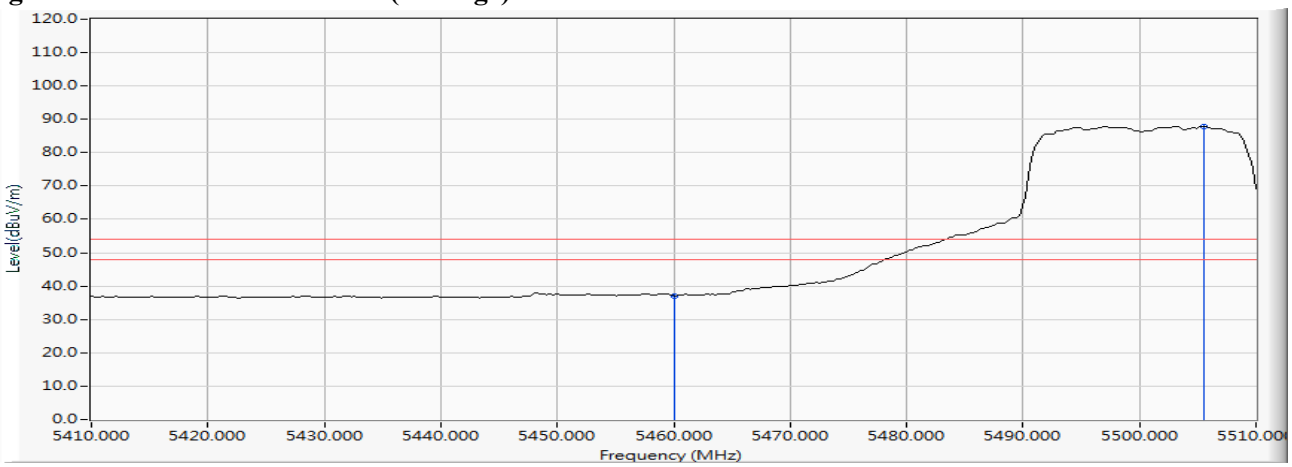


Figure Channel 100: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection..

Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100 (5500MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
100 (Peak)	5460.000	13.390	50.097	63.487	74.00	54.00	Pass
100 (Peak)	5505.507	13.642	95.606	109.247	--	--	--
100 (Average)	5460.000	13.390	30.557	43.947	74.00	54.00	Pass
100 (Average)	5497.101	13.621	86.214	99.834	--	--	--

Figure Channel 100: Vertical (Peak)

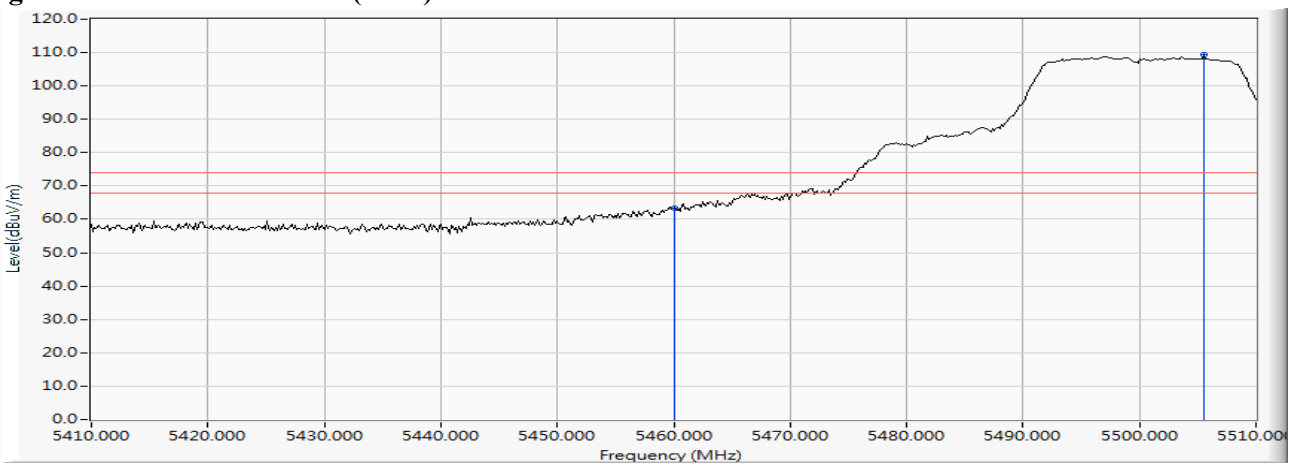
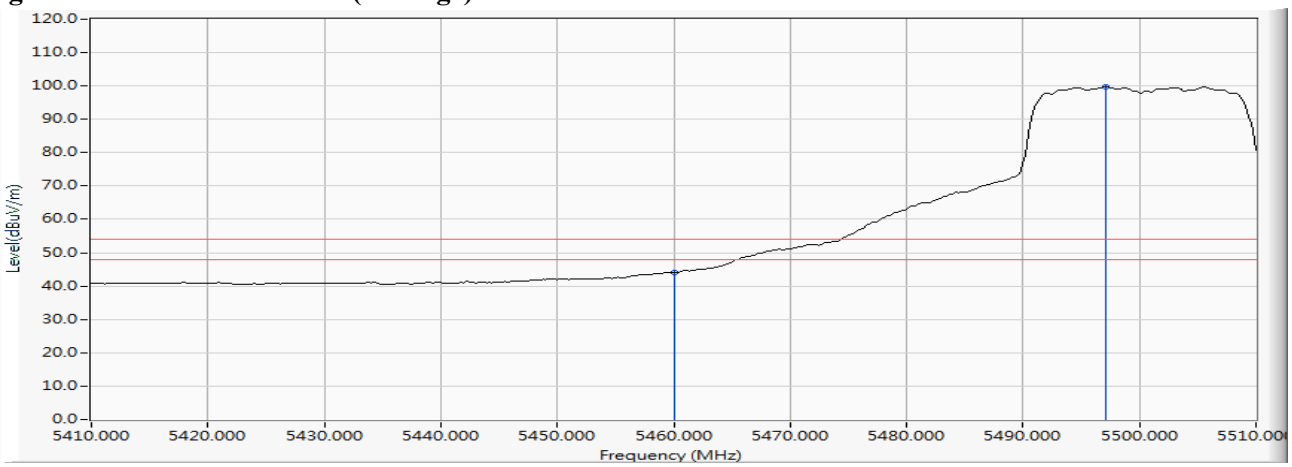


Figure Channel 100: Vertical (Average)



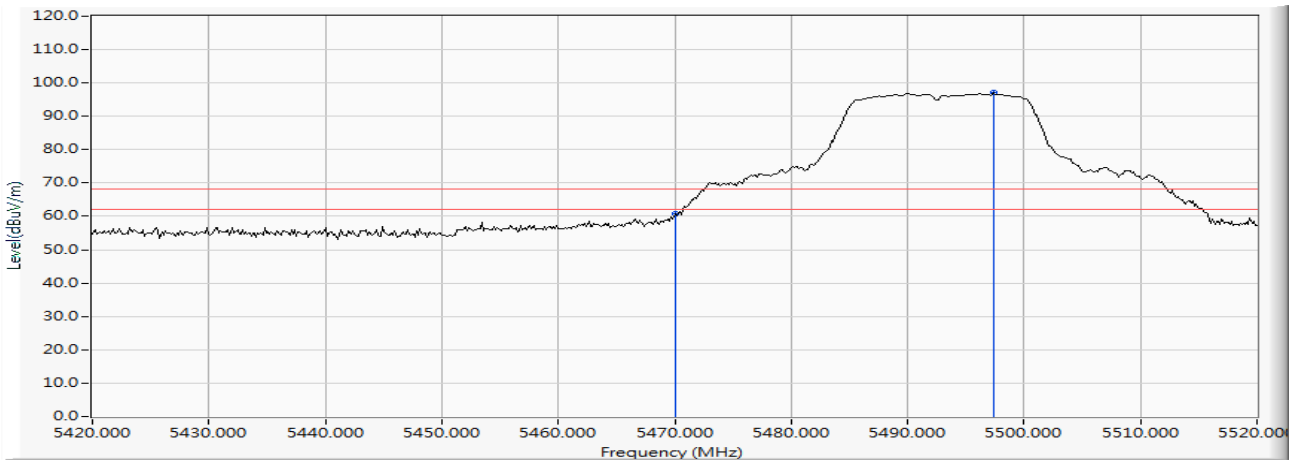
Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection..

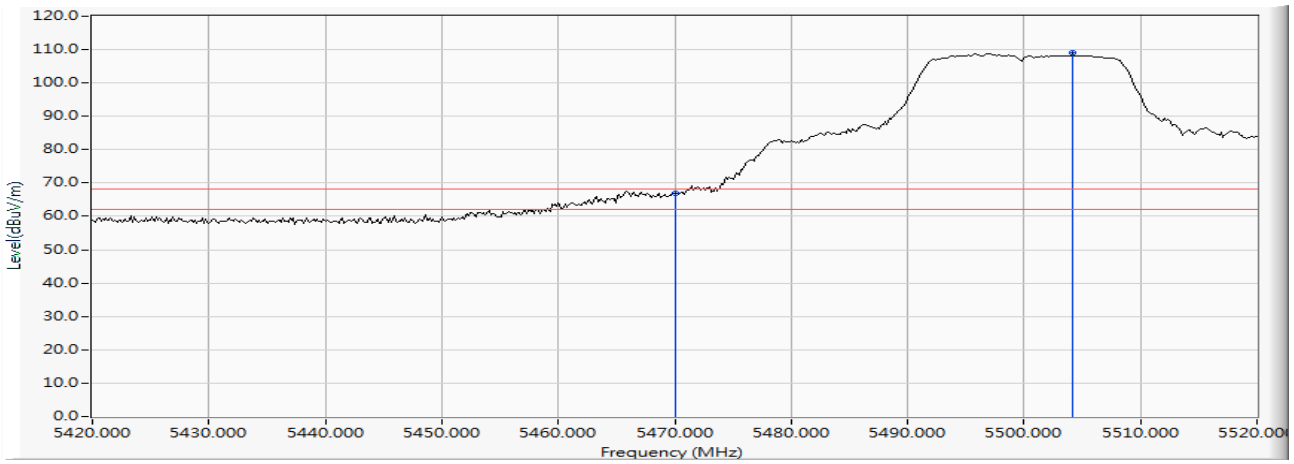
Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100 (5500MHz)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Horizontal	5470.000	11.838	48.929	60.767	-7.453	68.220	Pass
Horizontal	5497.391	12.150	84.970	97.121	--	--	--



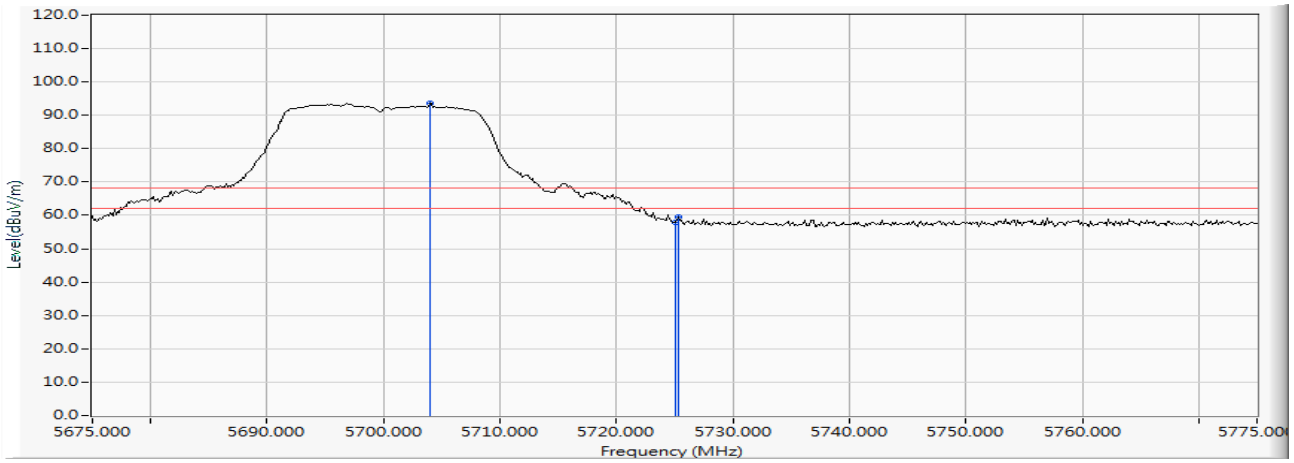
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Vertical	5470.000	13.462	53.452	66.914	-1.306	68.220	Pass
Vertical	5504.203	13.642	95.378	109.020	--	--	--



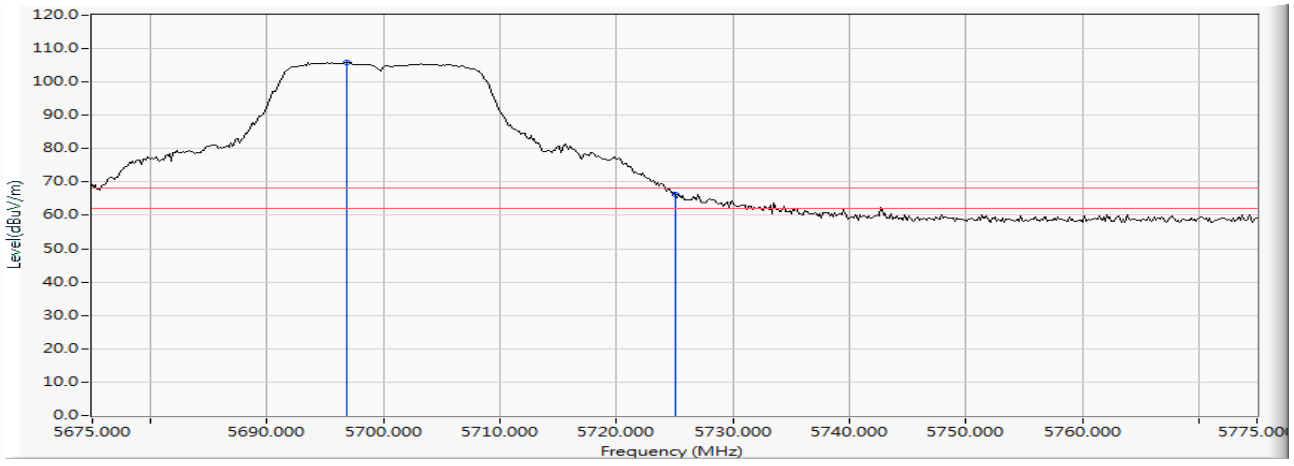
Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 140 (5700MHz)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Horizontal	5703.986	11.645	82.032	93.677	--	--	--
Horizontal	5725.000	11.592	46.332	57.924	-10.296	68.220	Pass
Horizontal	5725.290	11.591	47.915	59.506	-8.714	68.220	Pass



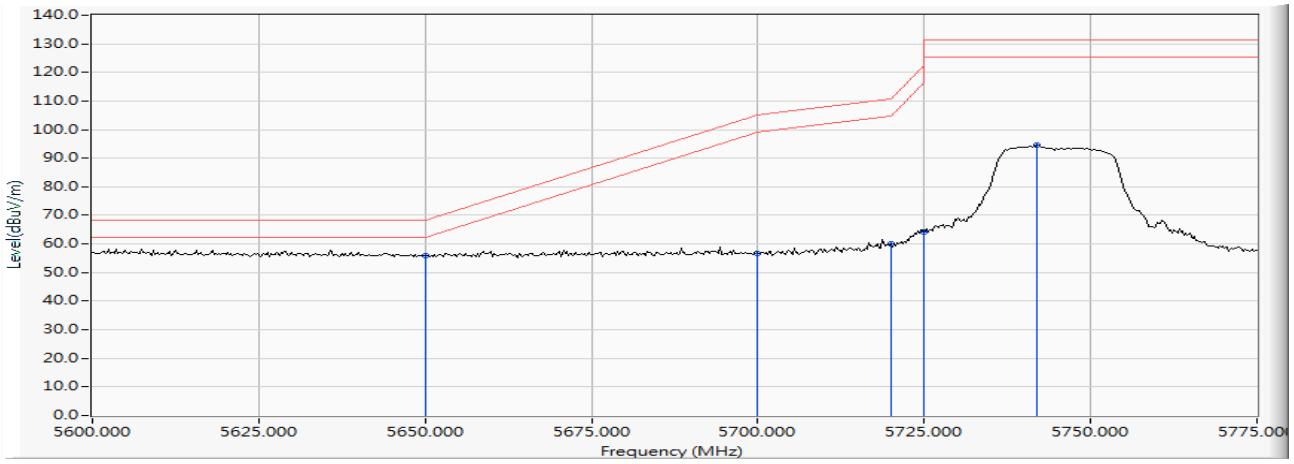
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Vertical	5696.884	13.009	92.947	105.956	--	--	--
Vertical	5725.000	12.930	53.337	66.267	-1.953	68.220	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 149 (5745MHz)

RF Radiated Measurement:

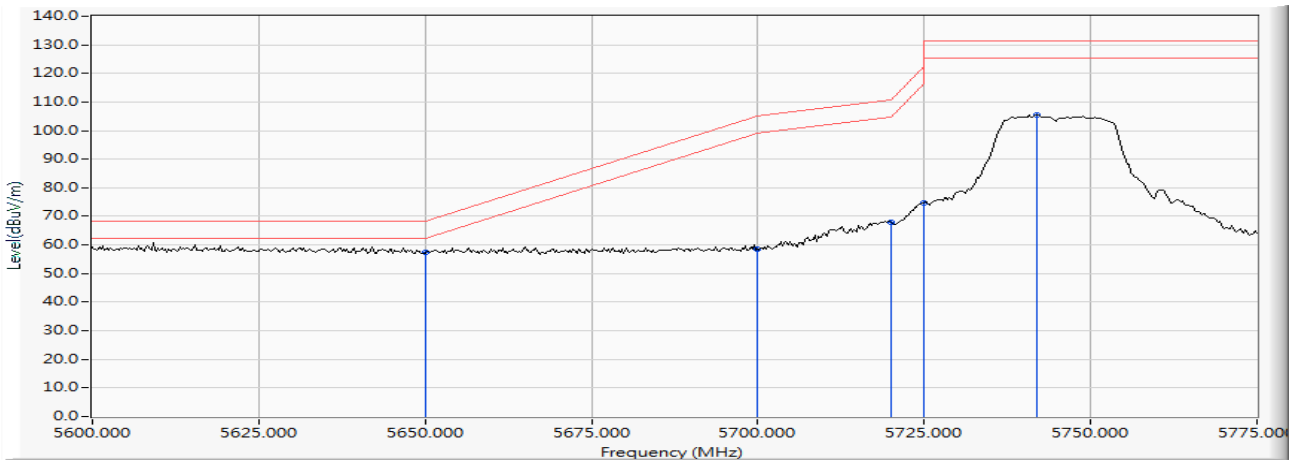
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Horizontal	5650.000	11.554	44.341	55.896	-12.324	68.220	Pass
Horizontal	5700.000	11.647	45.177	56.824	-48.376	105.200	Pass
Horizontal	5720.000	11.607	48.281	59.888	-50.912	110.800	Pass
Horizontal	5725.000	11.592	52.729	64.321	-57.879	122.200	Pass
Horizontal	5742.029	11.538	82.946	94.484	-36.716	131.200	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 149 (5745MHz)

RF Radiated Measurement:

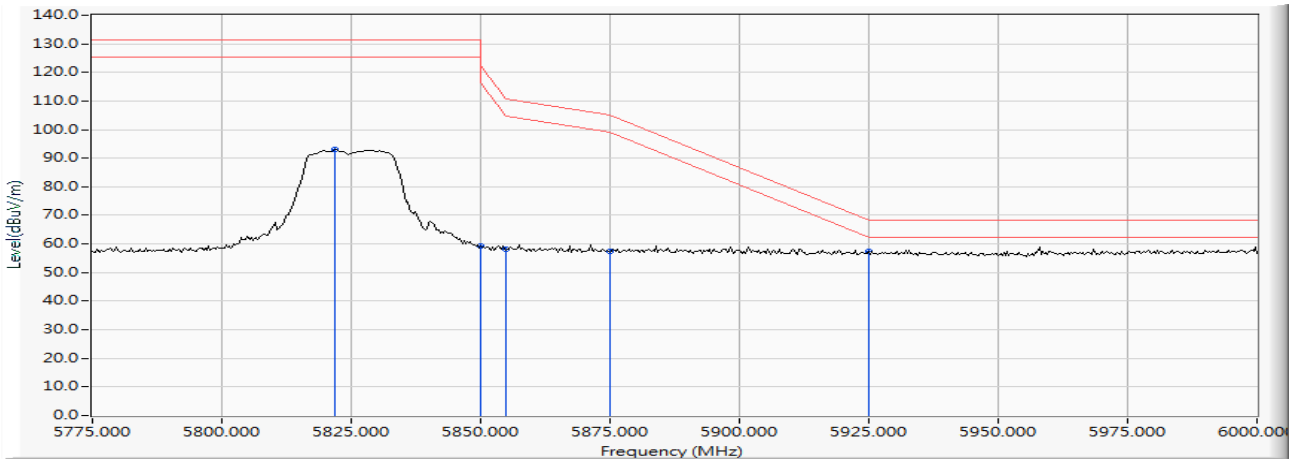
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Vertical	5650.000	13.029	44.275	57.304	-10.916	68.220	Pass
Vertical	5700.000	13.003	45.532	58.535	-46.665	105.200	Pass
Vertical	5720.000	12.947	55.070	68.017	-42.783	110.800	Pass
Vertical	5725.000	12.930	61.866	74.796	-47.404	122.200	Pass
Vertical	5742.029	12.871	92.554	105.425	-25.775	131.200	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 165 (5825MHz)

RF Radiated Measurement:

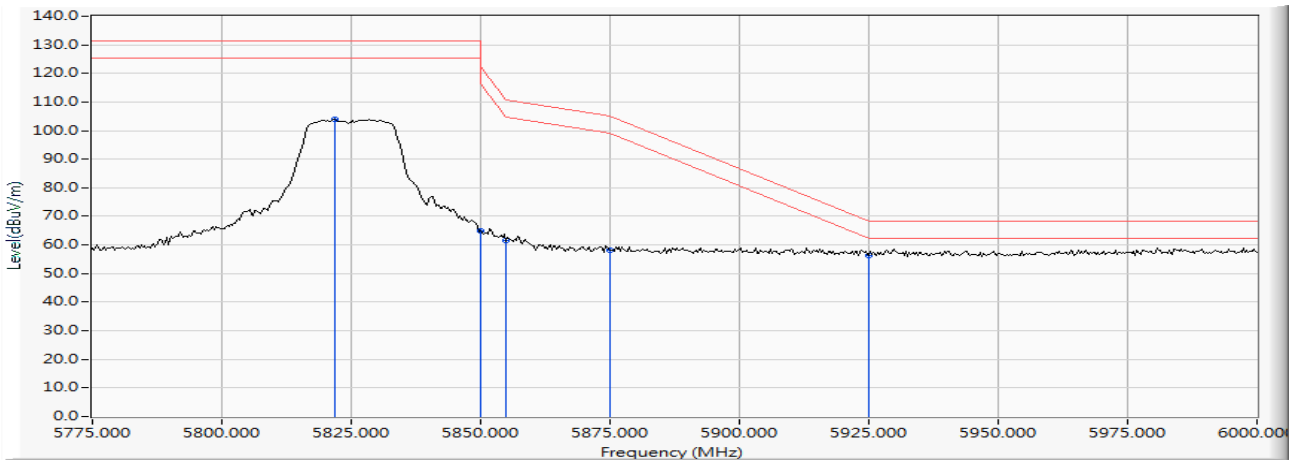
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Horizontal	5821.957	11.508	81.494	93.001	-38.199	131.200	Pass
Horizontal	5850.000	11.701	47.644	59.345	-62.855	122.200	Pass
Horizontal	5855.000	11.735	46.315	58.050	-52.750	110.800	Pass
Horizontal	5875.000	11.873	45.416	57.289	-47.911	105.200	Pass
Horizontal	5925.000	12.068	45.184	57.253	-10.947	68.200	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 165 (5825MHz)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Vertical	5821.957	12.716	91.316	104.031	-27.169	131.200	Pass
Vertical	5850.000	12.774	52.321	65.095	-57.105	122.200	Pass
Vertical	5855.000	12.784	48.932	61.716	-49.084	110.800	Pass
Vertical	5875.000	12.825	45.435	58.260	-46.940	105.200	Pass
Vertical	5925.000	12.911	43.461	56.372	-11.828	68.200	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 38 (5190MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
38 (Peak)	5150.000	10.470	45.642	56.113	74.00	54.00	Pass
38 (Peak)	5196.957	10.342	77.996	88.338	--	--	--
38 (Average)	5150.000	10.470	29.677	40.148	74.00	54.00	Pass
38 (Average)	5198.261	10.338	69.123	79.461	--	--	--

Figure Channel 38: Horizontal (Peak)

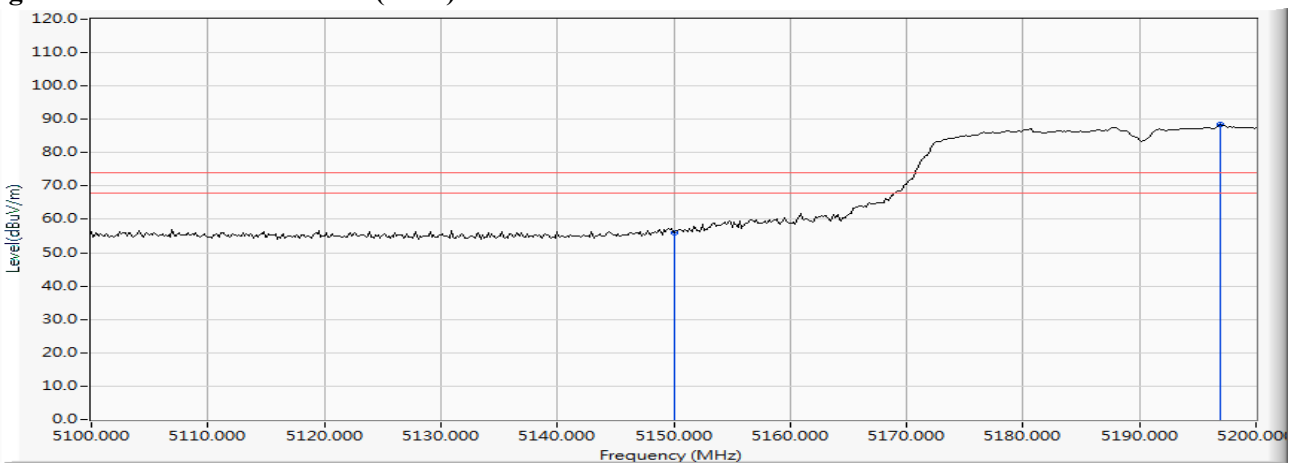
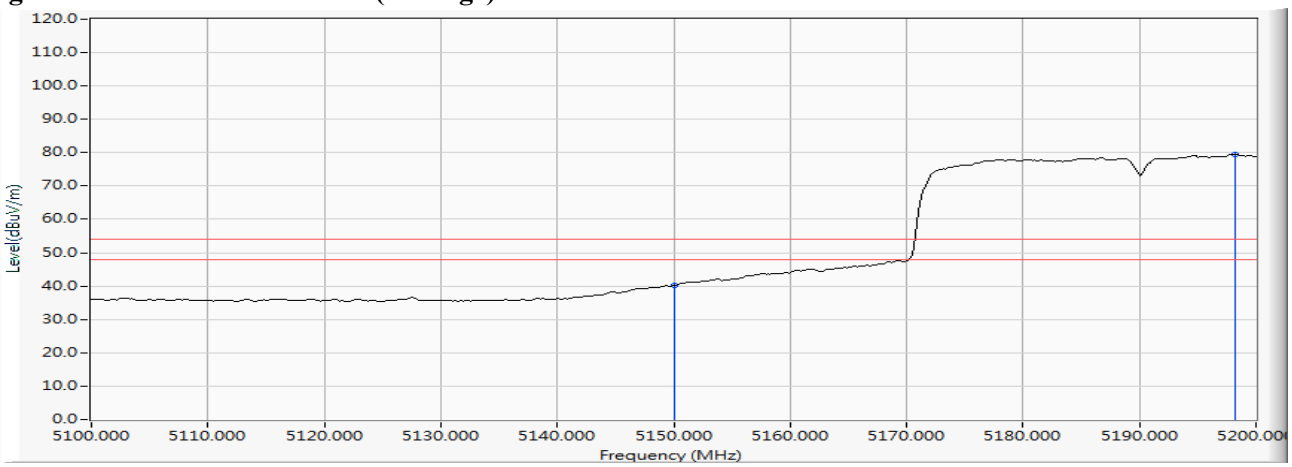


Figure Channel 38: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection..

Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 38 (5190MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
38 (Peak)	5150.000	12.390	54.872	67.262	74.00	54.00	Pass
38 (Peak)	5197.101	12.557	90.182	102.739	--	--	--
38 (Average)	5150.000	12.390	39.472	51.862	74.00	54.00	Pass
38 (Average)	5197.826	12.559	81.308	93.867	--	--	--

Figure Channel 38: Vertical (Peak)

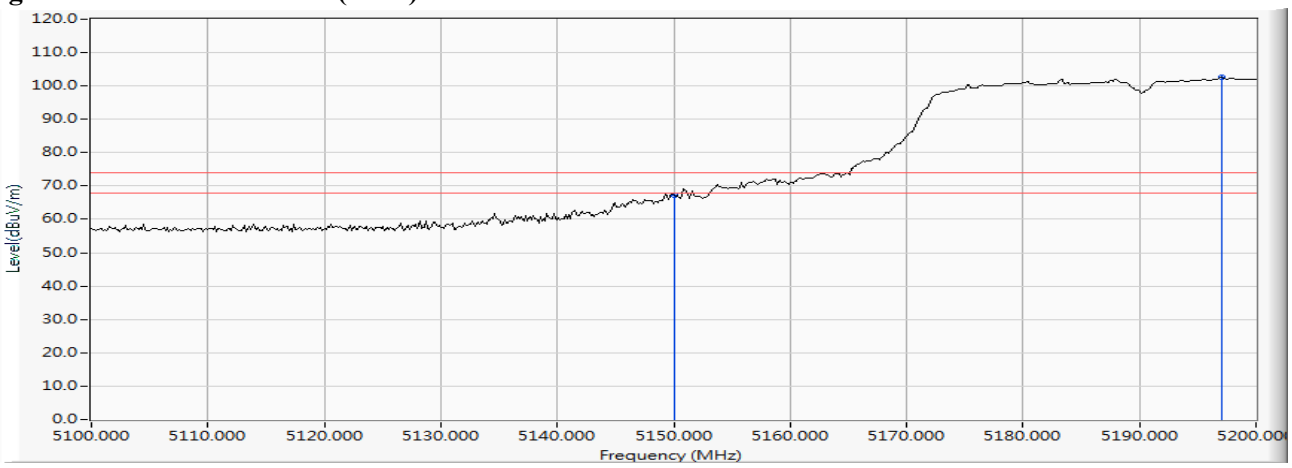
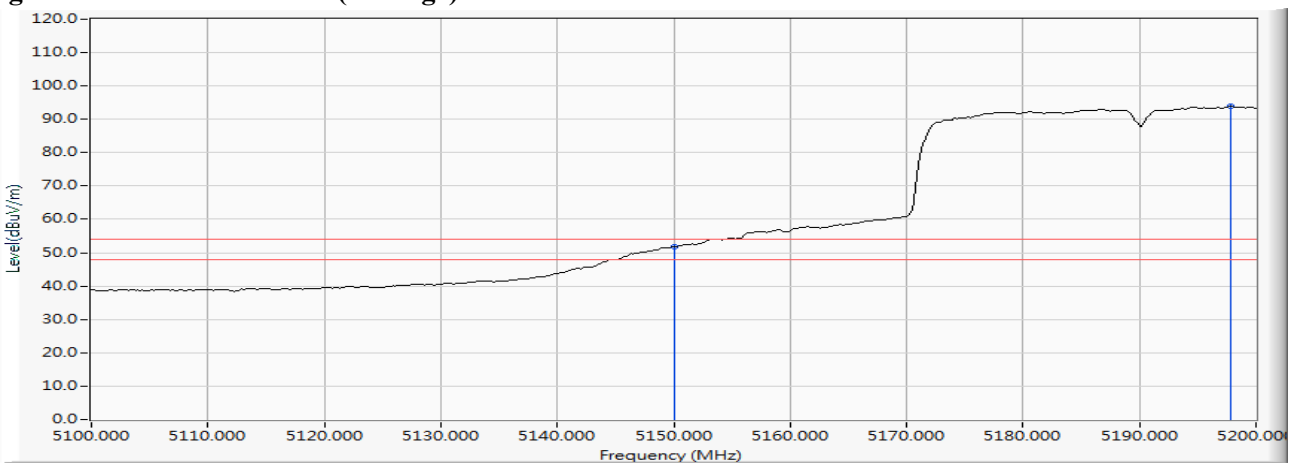


Figure Channel 38: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection..

Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 62 (5310MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
62 (Peak)	5301.449	11.147	82.196	93.344	--	--	--
62 (Peak)	5350.000	11.024	46.923	57.947	74.00	54.00	Pass
62 (Average)	5305.652	11.137	73.146	84.284	--	--	--
62 (Average)	5350.000	11.024	29.605	40.629	74.00	54.00	Pass

Figure Channel 62: Horizontal (Peak)

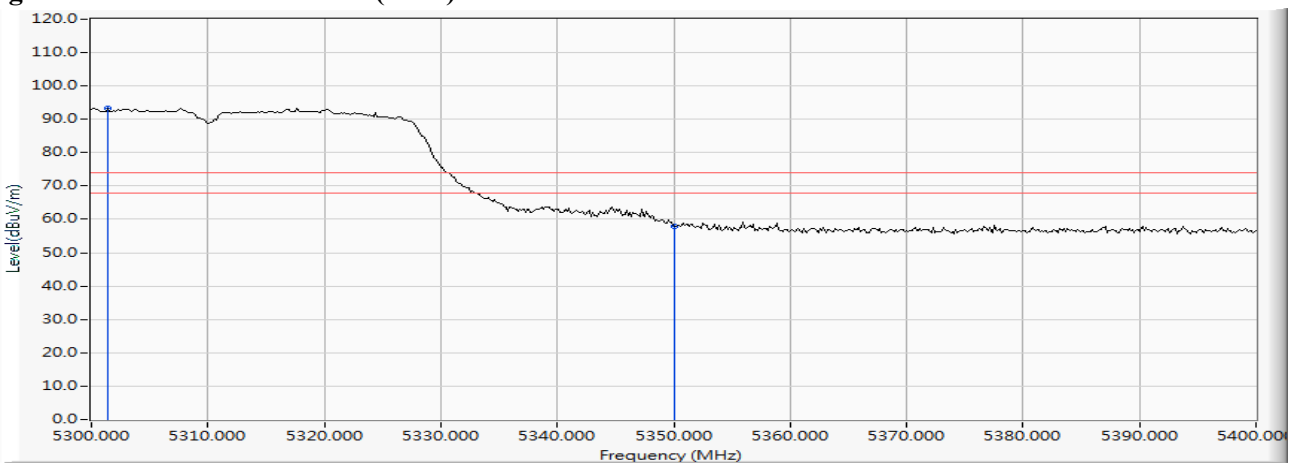
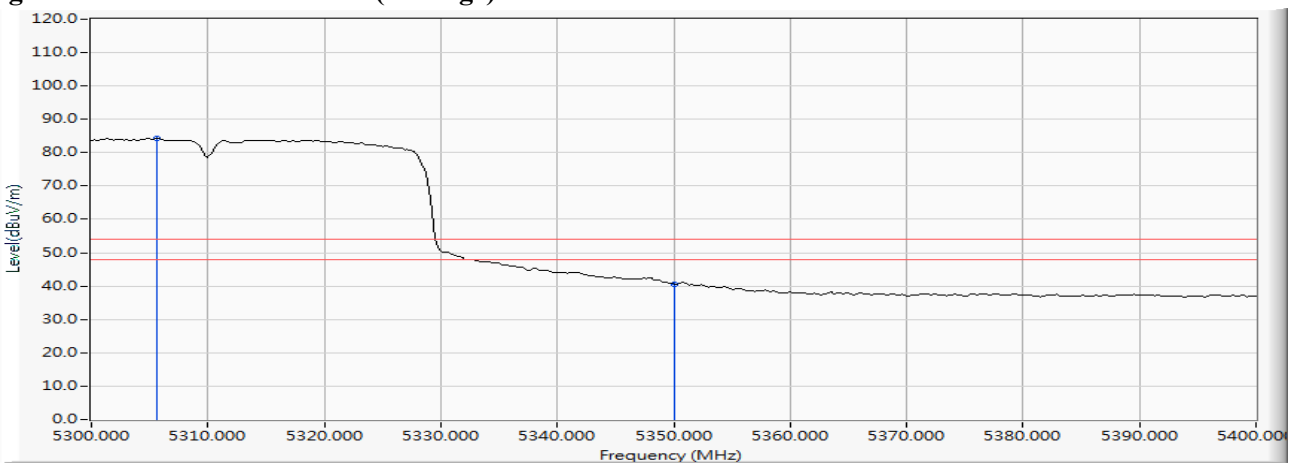


Figure Channel 62: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 62 (5310MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
62 (Peak)	5320.290	13.018	92.297	105.315	--	--	--
62 (Peak)	5350.000	12.999	58.636	71.635	74.00	54.00	Pass
62 (Average)	5314.638	13.021	83.012	96.033	--	--	--
62 (Average)	5350.000	12.999	39.432	52.431	74.00	54.00	Pass

Figure Channel 62: Vertical (Peak)

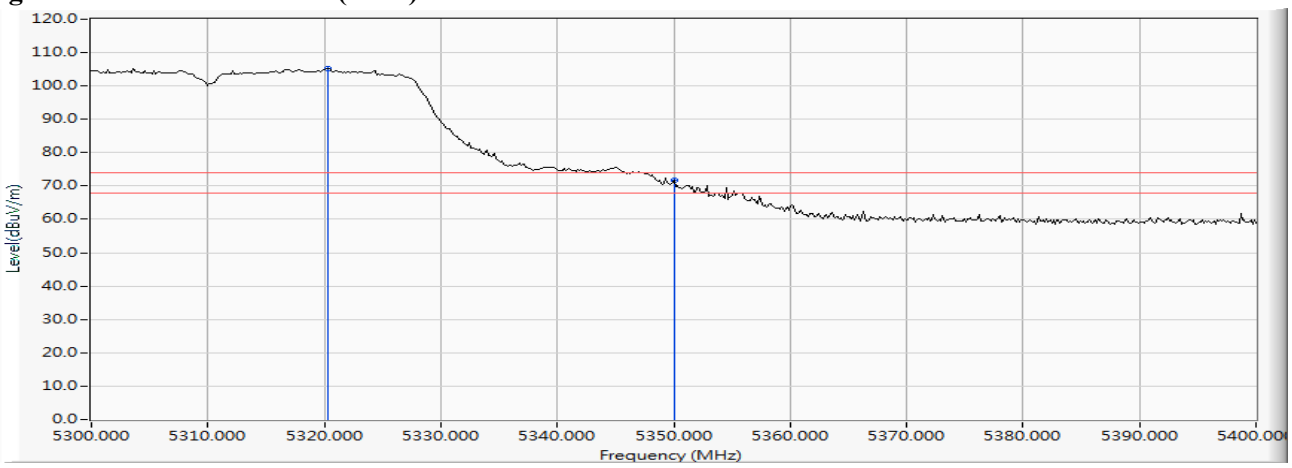
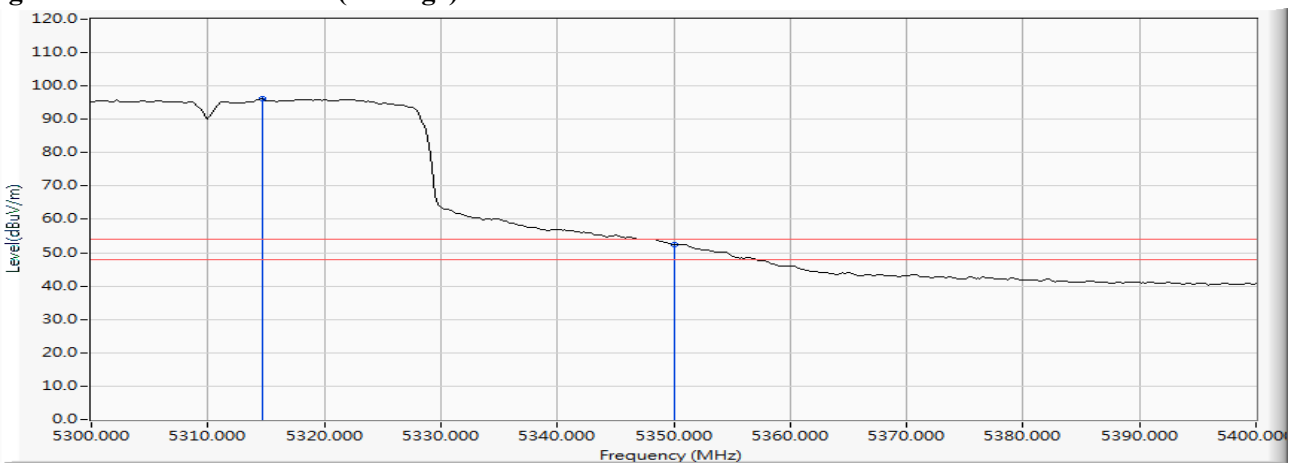


Figure Channel 62: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection..

Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102 (5510MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
102 (Peak)	5460.000	11.703	44.853	56.556	74.00	54.00	Pass
102 (Peak)	5504.058	12.197	74.828	87.025	--	--	--
102 (Average)	5460.000	11.703	25.165	36.868	74.00	54.00	Pass
102 (Average)	5500.580	12.173	65.170	77.343	--	--	--

Figure Channel 102: Horizontal (Peak)

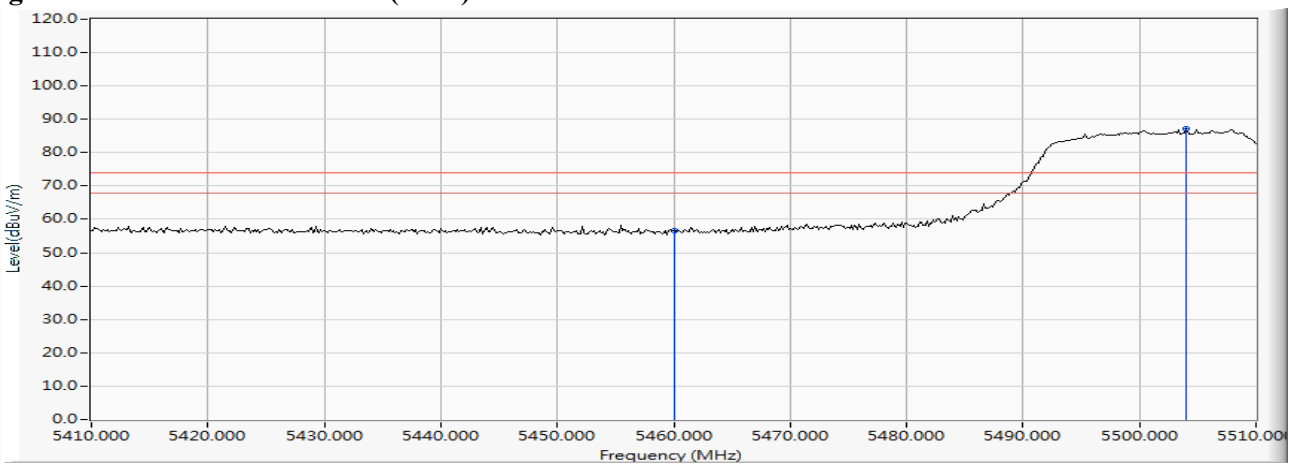
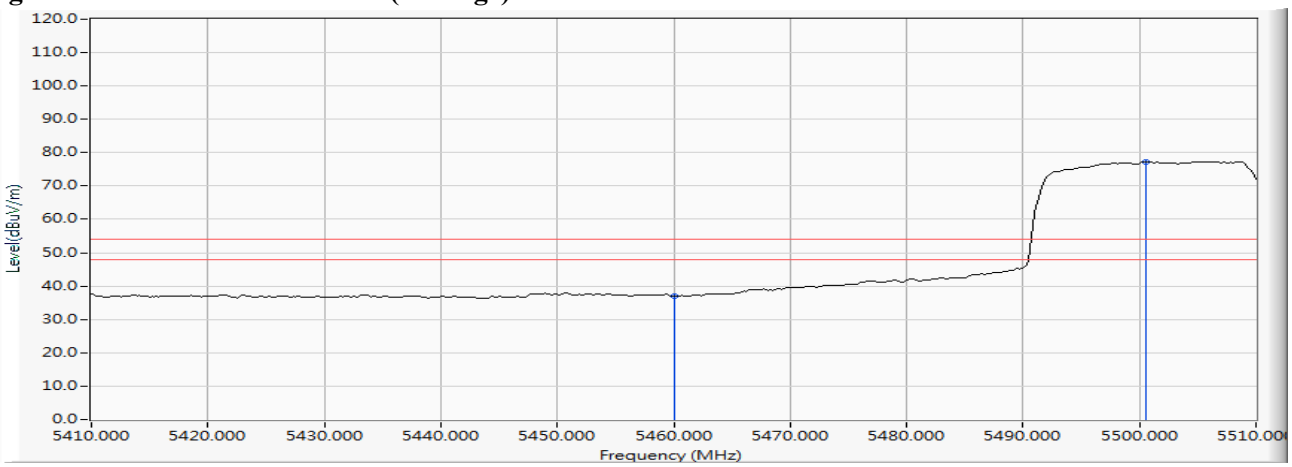


Figure Channel 102: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102 (5510MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Arerage Limit (dBμV/m)	Result
102 (Peak)	5460.000	13.390	46.800	60.190	74.00	54.00	Pass
102 (Peak)	5500.725	13.632	87.767	101.399	--	--	--
102 (Average)	5460.000	13.390	28.698	42.088	74.00	54.00	Pass
102 (Average)	5500.580	13.631	78.274	91.905	--	--	--

Figure Channel 102: Vertical (Peak)

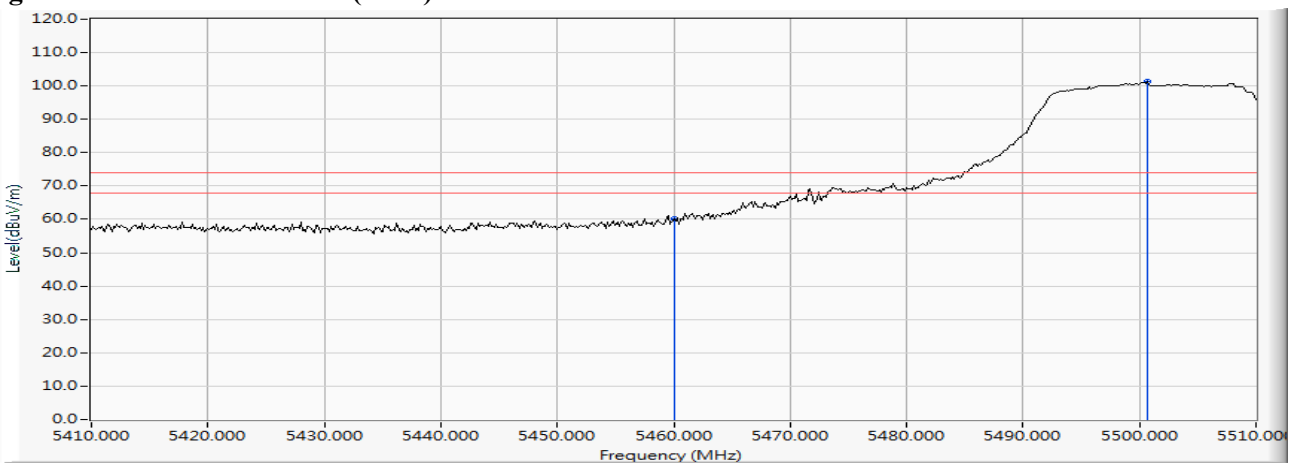
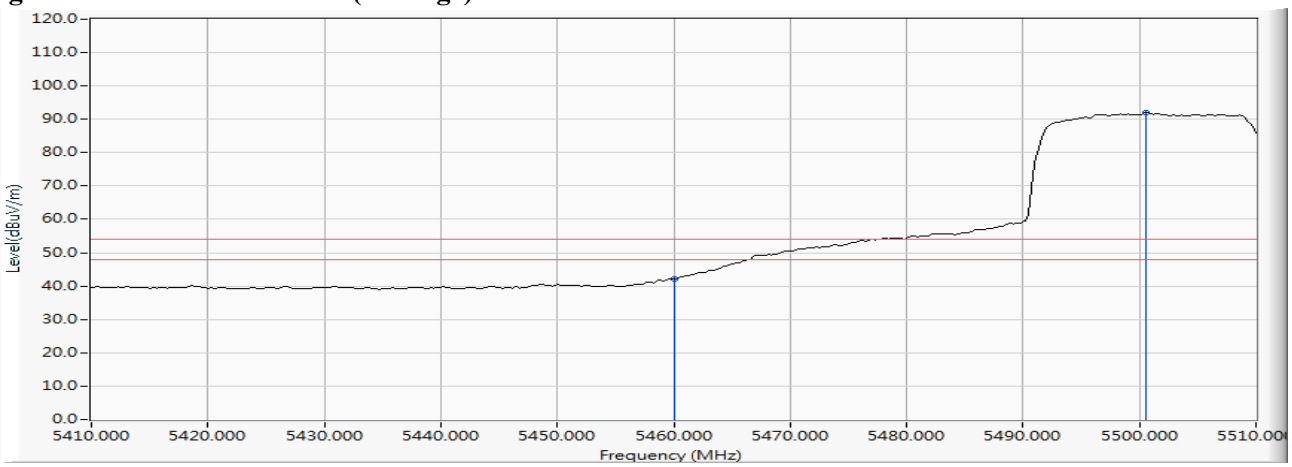


Figure Channel 102: Vertical (Average)



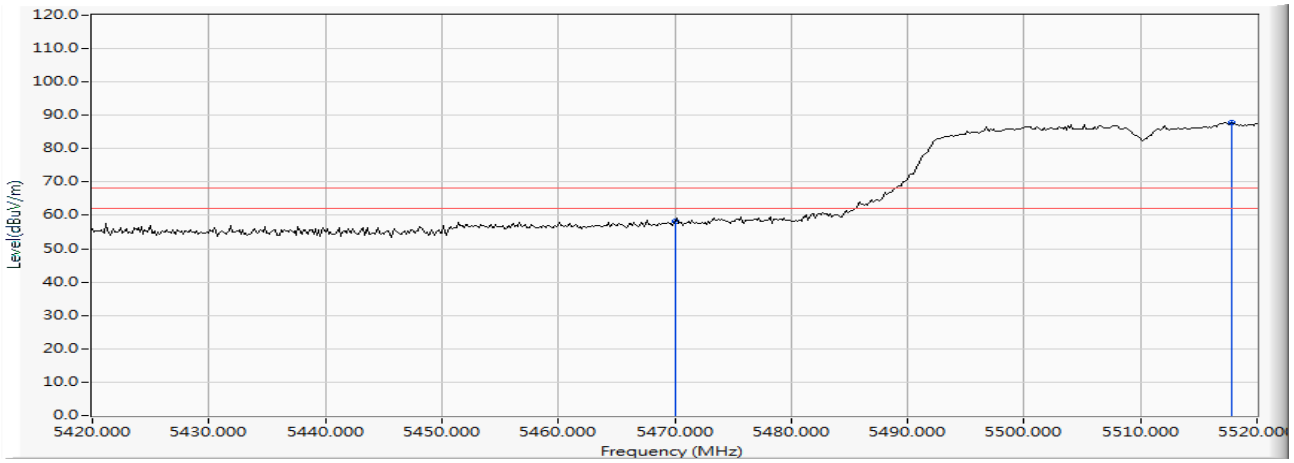
Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.

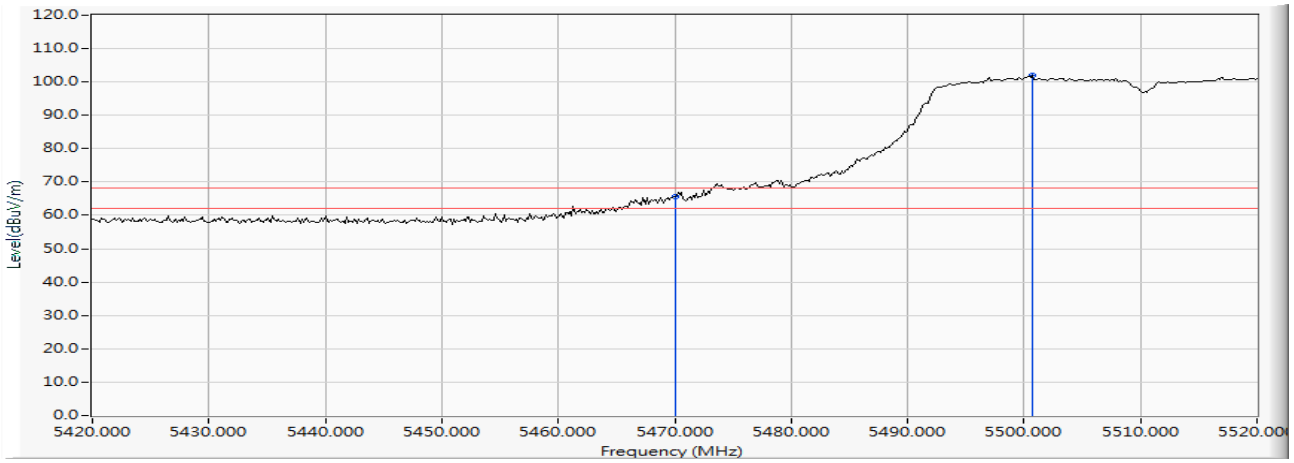
Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/09
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102 (5510MHz)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Horizontal	5470.000	11.838	46.414	58.252	-9.968	68.220	Pass
Horizontal	5517.826	12.100	75.676	87.776	--	--	--



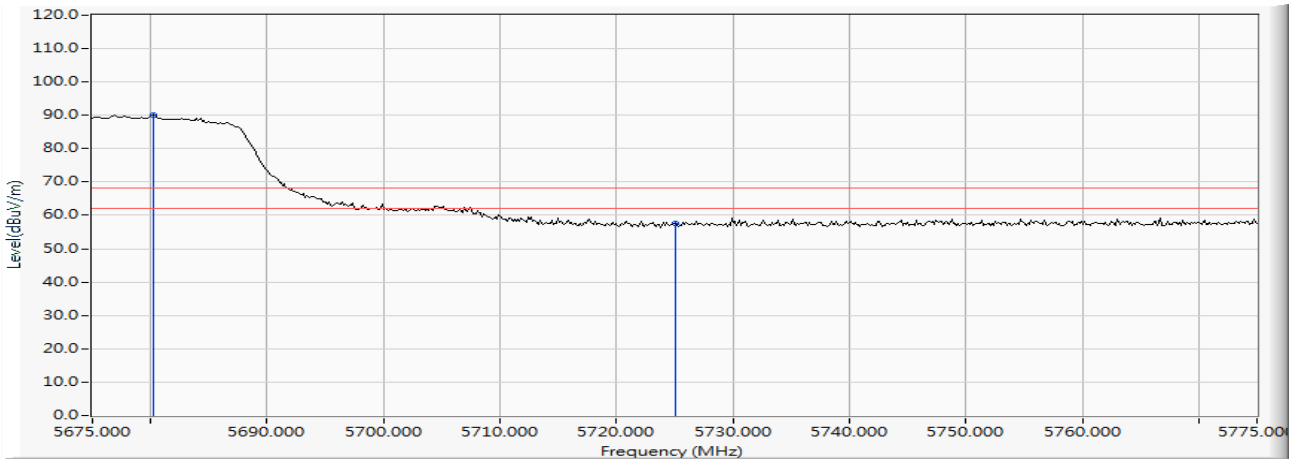
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Vertical	5470.000	13.462	52.067	65.529	-2.691	68.220	Pass
Vertical	5500.725	13.632	88.321	101.953	--	--	--



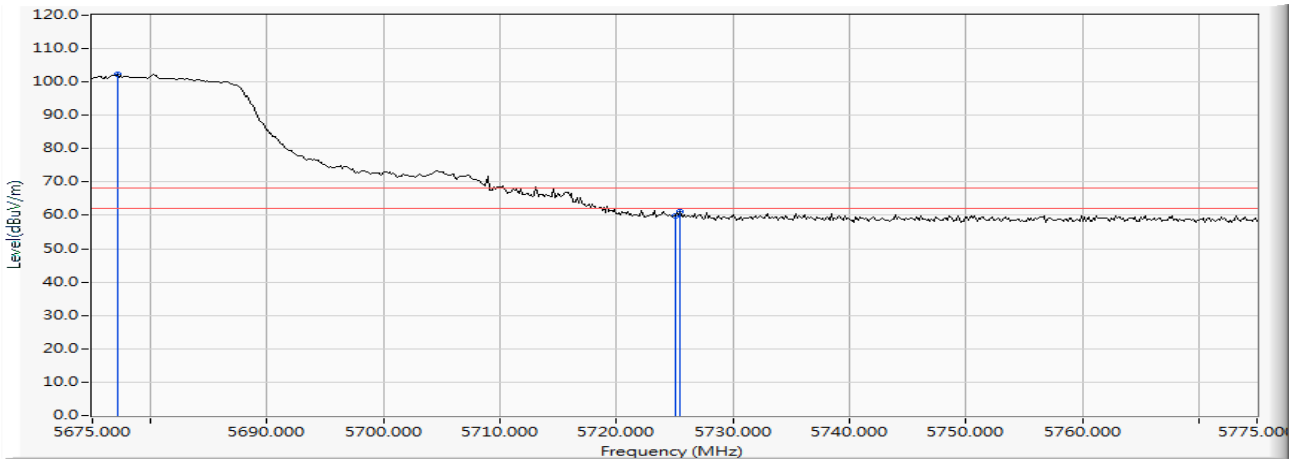
Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/12
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 134 (5670MHz)

RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Horizontal	5680.217	11.626	78.410	90.035	--	--	--
Horizontal	5725.000	11.592	46.100	57.692	-10.528	68.220	Pass



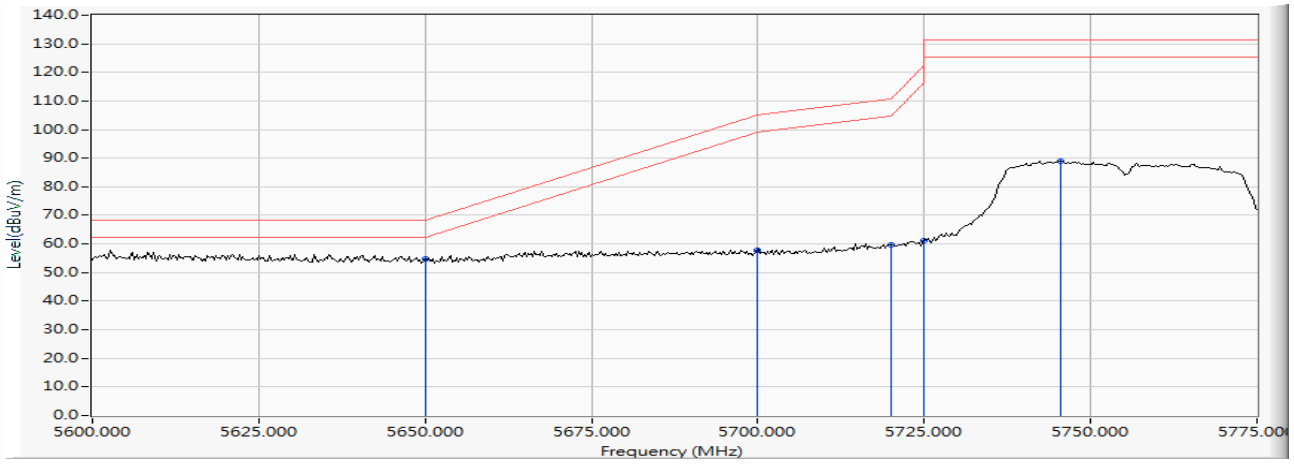
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Vertical	5677.174	35.733	89.320	102.343	--	--	--
Vertical	5725.000	35.620	46.987	59.917	-8.303	68.220	Pass
Vertical	5725.435	35.619	48.340	61.269	-6.951	68.220	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/12
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 151 (5755MHz)

RF Radiated Measurement:

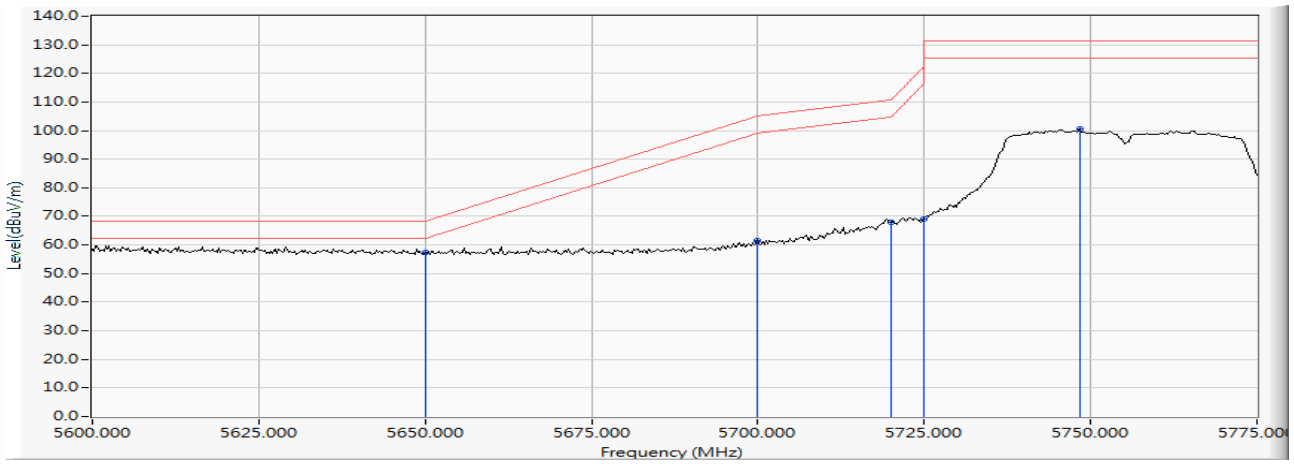
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Horizontal	5650.000	11.554	43.253	54.808	-13.412	68.220	Pass
Horizontal	5700.000	11.647	46.314	57.961	-47.239	105.200	Pass
Horizontal	5720.000	11.607	48.174	59.781	-51.019	110.800	Pass
Horizontal	5725.000	11.592	49.688	61.280	-60.920	122.200	Pass
Horizontal	5745.580	11.526	77.560	89.086	-42.114	131.200	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/12
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 151 (5755MHz)

RF Radiated Measurement:

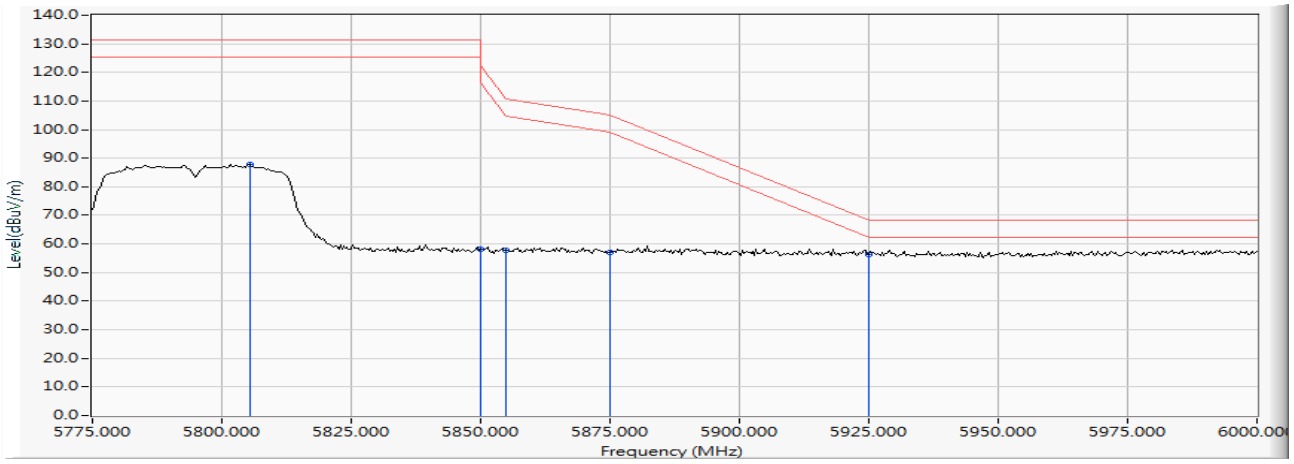
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Vertical	5650.000	13.029	44.239	57.268	-10.952	68.220	Pass
Vertical	5700.000	13.003	48.655	61.658	-43.542	105.200	Pass
Vertical	5720.000	12.947	55.170	68.117	-42.683	110.800	Pass
Vertical	5725.000	12.930	56.254	69.184	-53.016	122.200	Pass
Vertical	5748.370	12.848	87.796	100.644	-30.556	131.200	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/12
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 159 (5795MHz)

RF Radiated Measurement:

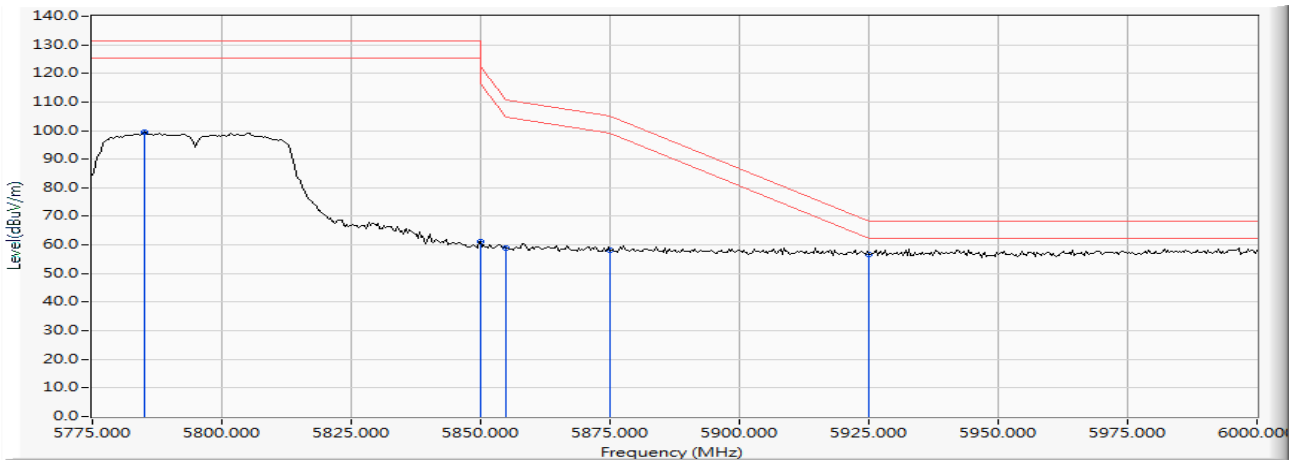
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Horizontal	5805.326	11.410	76.449	87.859	-43.341	131.200	Pass
Horizontal	5850.000	11.701	46.387	58.088	-64.112	122.200	Pass
Horizontal	5855.000	11.735	46.009	57.744	-53.056	110.800	Pass
Horizontal	5875.000	11.873	45.326	57.199	-48.001	105.200	Pass
Horizontal	5925.000	12.068	44.275	56.344	-11.856	68.200	Pass



Product : NPort Device Server
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2018/11/12
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 159 (5795MHz)

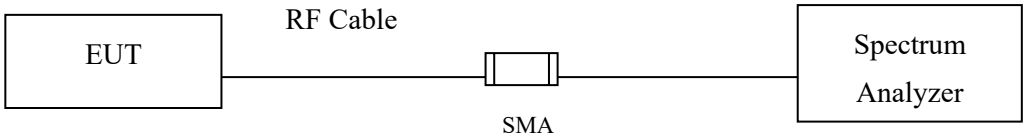
RF Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV /m)	Margin (dB)	Limit (dBμV /m)	Result
Vertical	5785.109	12.720	86.755	99.474	-31.726	131.200	Pass
Vertical	5850.000	12.774	48.451	61.225	-60.975	122.200	Pass
Vertical	5855.000	12.784	46.122	58.906	-51.894	110.800	Pass
Vertical	5875.000	12.825	45.407	58.232	-46.968	105.200	Pass
Vertical	5925.000	12.911	43.878	56.789	-11.411	68.200	Pass



7. Occupied Bandwidth

7.1. Test Setup



7.2. Limits

For the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz

7.3. .Test Procedure

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

7.4. Uncertainty

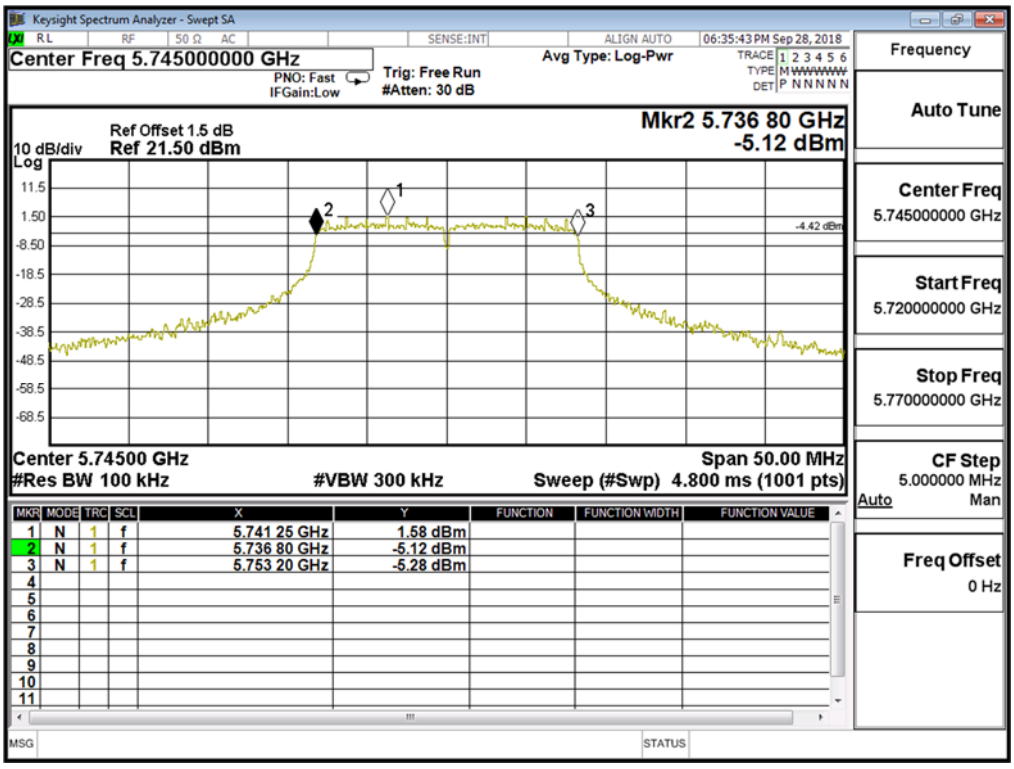
± 681.6Hz

7.5. Test Result of Occupied Bandwidth

Product : NPort Device Server
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2018/08/24
Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5745MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	16400	>500	Pass

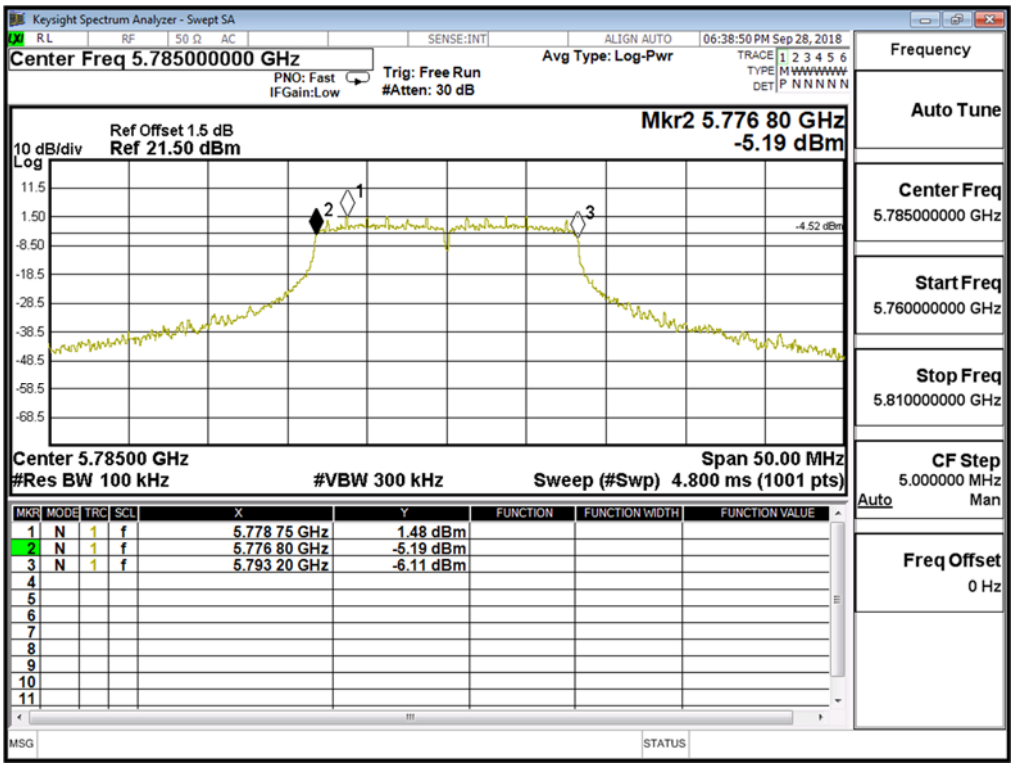
Figure Channel 149:



Product : NPort Device Server
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2018/08/24
Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5785MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	16400	>500	Pass

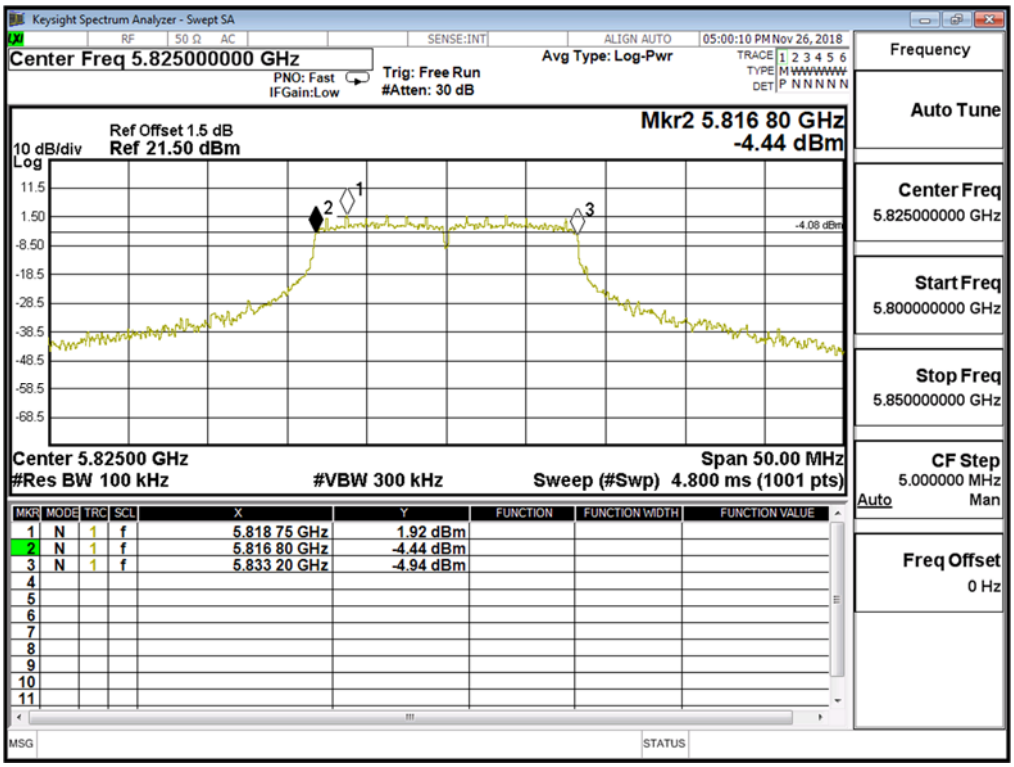
Figure Channel 157:



Product : NPort Device Server
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2018/08/24
Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5825MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825	16400	>500	Pass

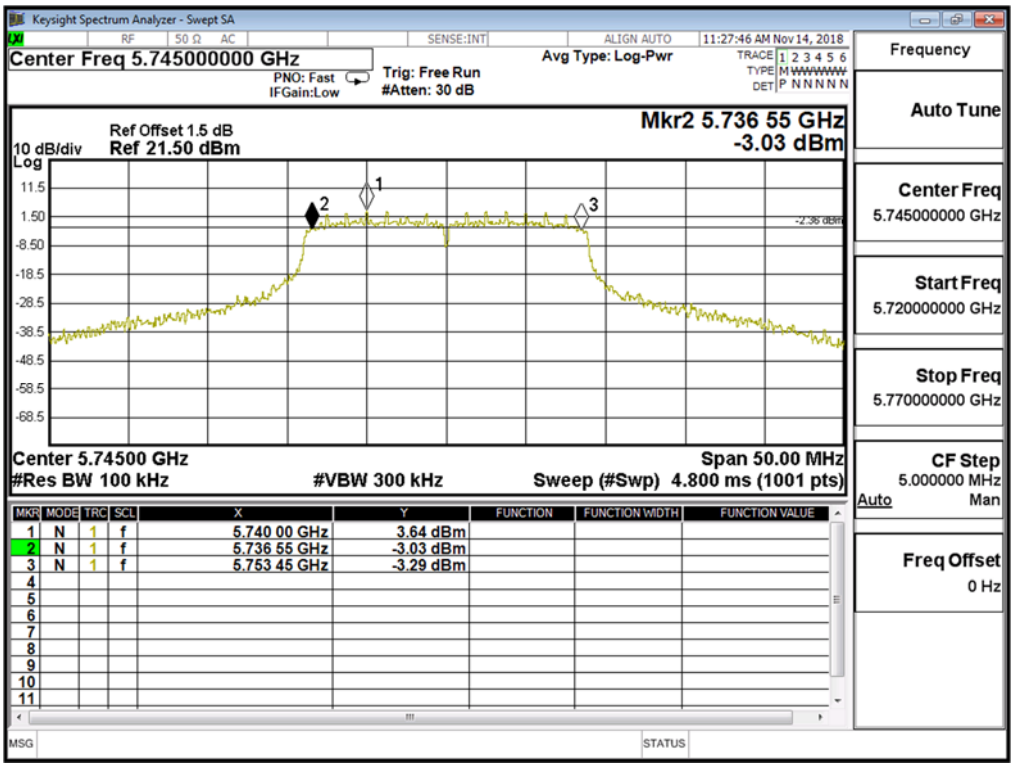
Figure Channel 165:



Product : NPort Device Server
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2018/11/26
Test Mode : Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5745MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	16900	>500	Pass

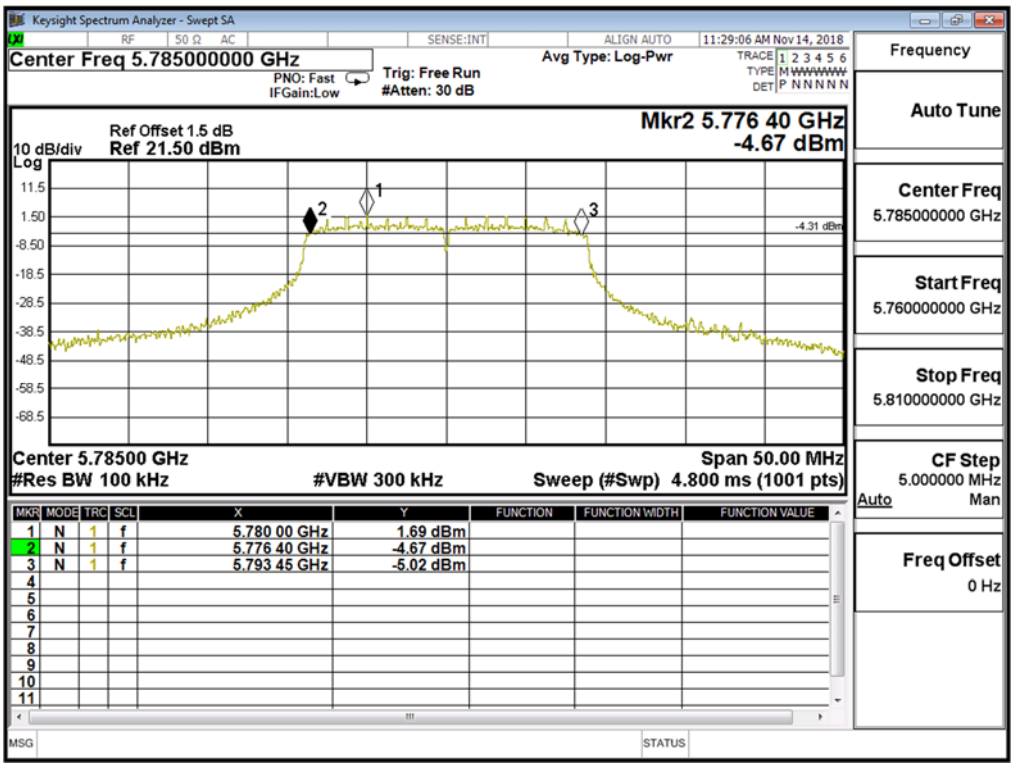
Figure Channel 149:



Product : NPort Device Server
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2018/11/26
Test Mode : Mode 1: Transmit (802.11a-6Mbps)Mode 1: Transmit (802.11a-6Mbps) (5785MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785	17050	>500	Pass

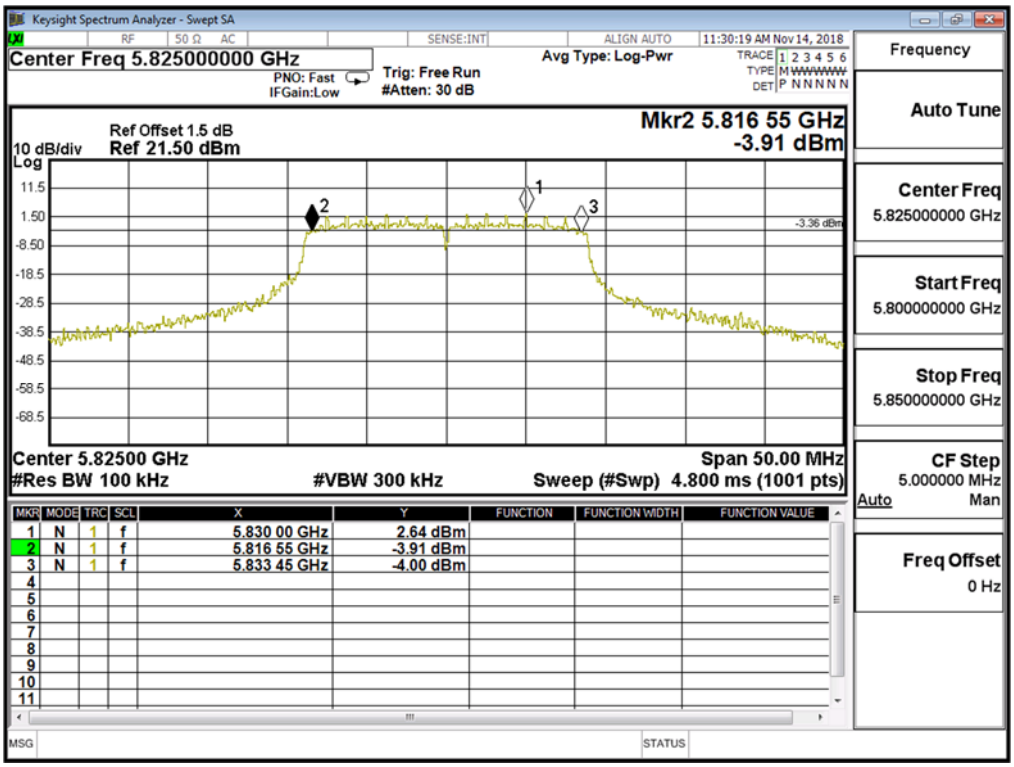
Figure Channel 157:



Product : NPort Device Server
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2018/11/26
Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5825MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825	16900	>500	Pass

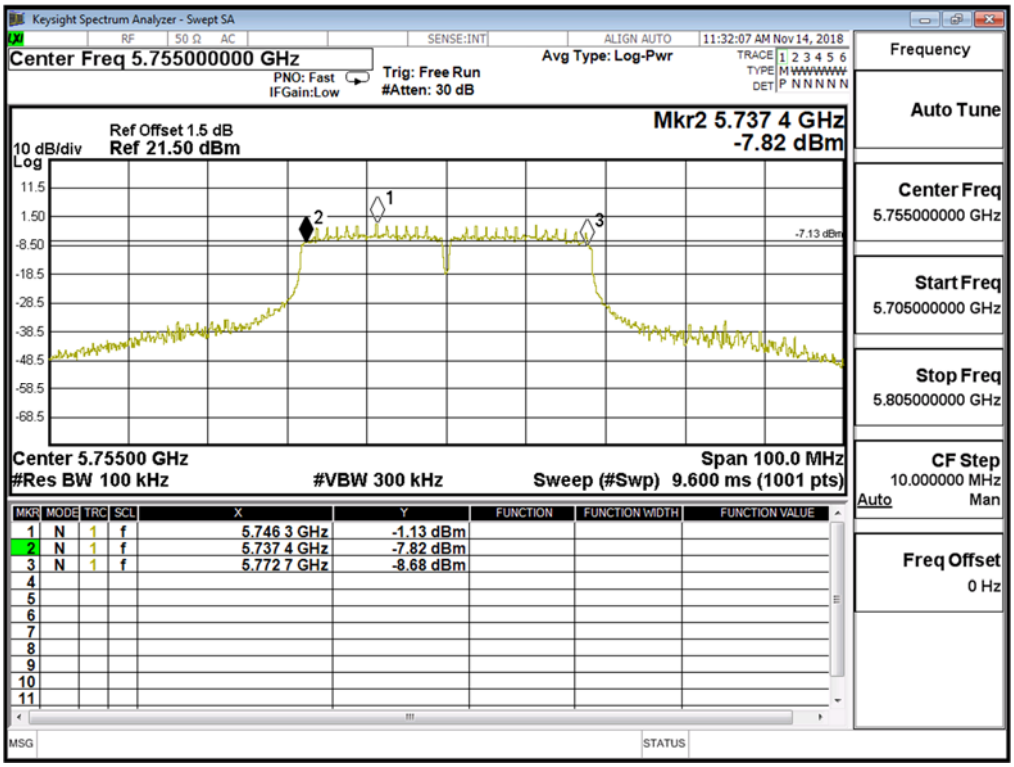
Figure Channel 165:



Product : NPort Device Server
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2018/11/26
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5755MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	35300	>500	Pass

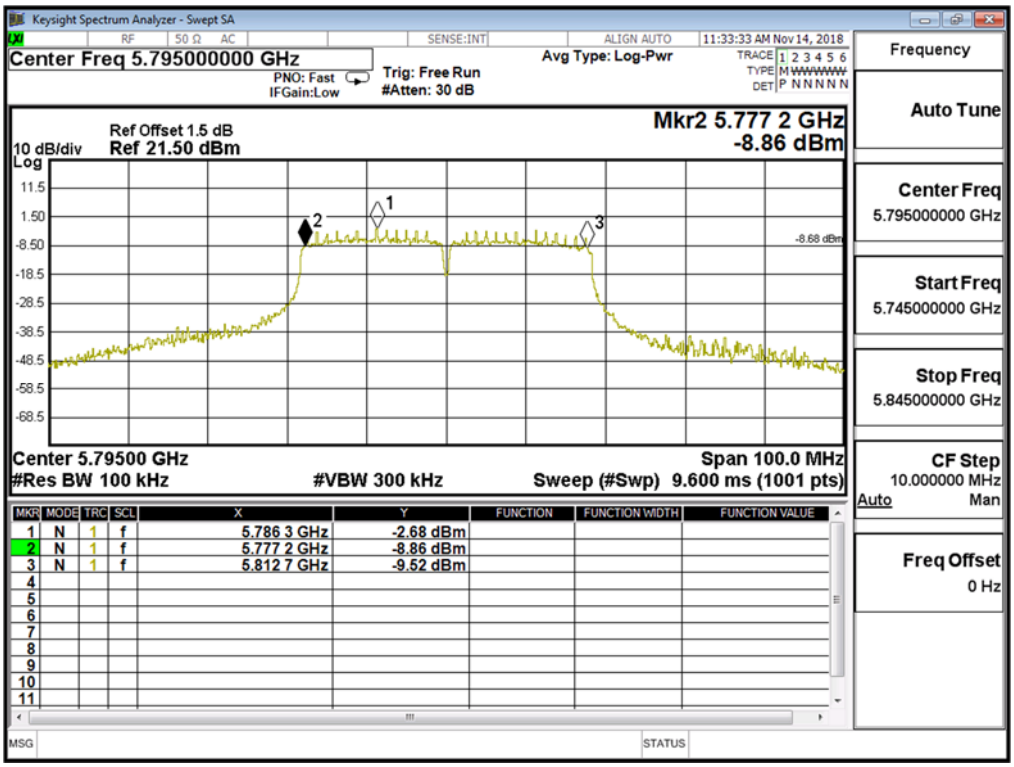
Figure Channel 151:



Product : NPort Device Server
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2018/11/26
Test Mode : Mode 3: Transmit (802.11n-40BW 15Mbps) (5795MHz)

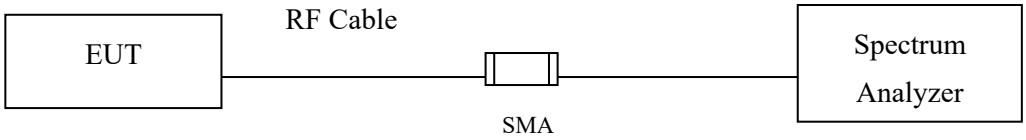
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
159	5795	35500	>500	Pass

Figure Channel 159:



8. Duty Cycle

8.1. Test Setup



8.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to test procedure of KDB789033 for compliance to FCC 47CFR 15.407 requirements.

8.3. Uncertainty

± 2.31msec

8.4. Test Result of Duty Cycle

Product : NPort Device Server
Test Item : Duty Cycle
Test Mode : Transmit
Test Date : 2018/11/07

Duty Cycle Formula:

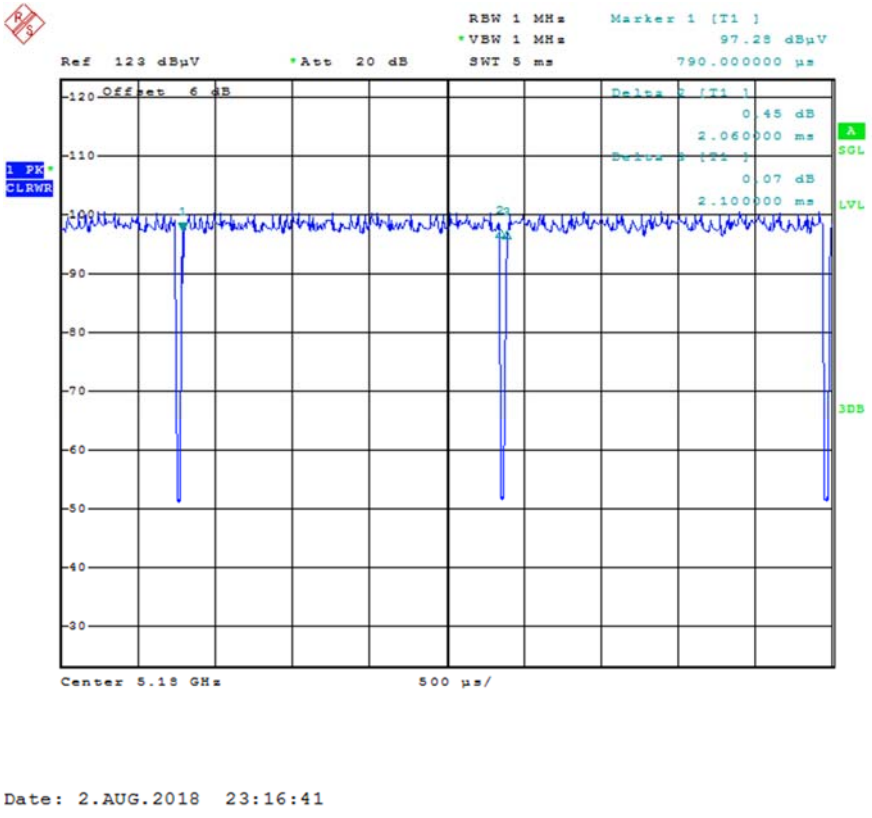
Duty Cycle = Ton / (Ton + Toff)

Duty Factor = 10 Log (1/Duty Cycle)

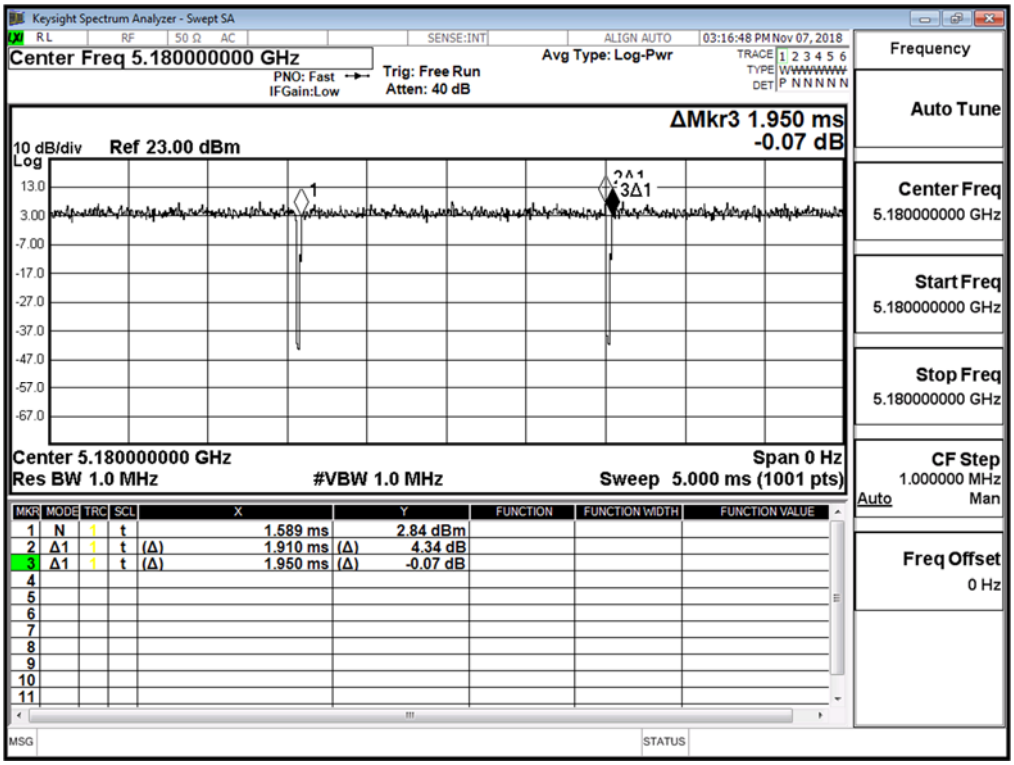
Results:

5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11 a	2.0600	2.1000	98.10	0.08
802.11 n20	1.9100	1.9500	97.95	0.09
802.11 n40	0.9104	0.9750	93.37	0.30

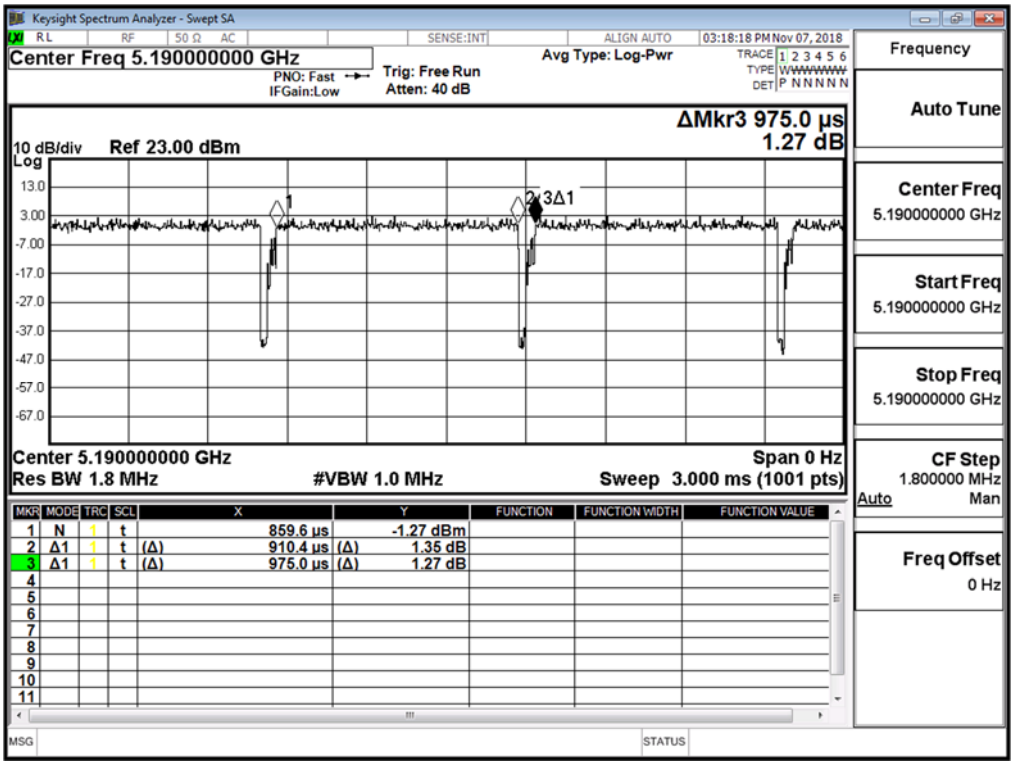
802.11a



802.11n20



802.11n40



9. EMI Reduction Method During Compliance Testing

No modification was made during testing.