

FCC Test Report

Product Name	Network Media Module
Model No	CY920-C,CY920-A
FCC ID.	ZQO-CY920C

Applicant	MICROCHIP TECHNOLOGY INC.
Address	2355 West Chandler Blvd.Chandler, Arizona, USA 85224-6199

Date of Receipt	June. 04, 2014
Issue Date	Oct. 27, 2014
Report No.	1460175R-RFUSP30V00-A
Report Version	V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

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Test Report

Issue Date: Oct. 27, 2014

Report No.: 1460175R-RFUSP30V00-A



Product Name	Network Media Module
Applicant	MICROCHIP TECHNOLOGY INC.
Address	2355 West Chandler Blvd.Chandler, Arizona, USA 85224-6199
Manufacturer	(1) Lite-On Technology (Changzhou) Co., Ltd. (2) Lite-On Network Communication (Dongguan) Limited
Model No.	CY920-C,CY920-A
FCC ID.	ZQO-CY920C
EUT Rated Voltage	DC 3.3V
EUT Test Voltage	AC 120V/60Hz
Trade Name	Network Media Module
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2013 ANSI C63.10: 2009, KDB 558074 D01 DTS Meas Guidance v03r02
Test Result	Complied

Documented By

:



(Senior Adm. Specialist / Leven Huang)

Tested By

:



(Engineer / Jack Hsu)

Approved By

:



(Director / Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Network Media Module
Trade Name	Network Media Module
Model No.	CY920-C,CY920-A
FCC ID.	ZQO-CY920C
Frequency Range	802.11b/g/n-20MHz:2412-2462MHz,802.11n-40MHz:2422-2452MHz 802.11a/n-20MHz:5745-5825MHz ,802.11n-40MHz:5755-5795MHz
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7 802.11a/n-20MHz: 5, n-40MHz: 2
Data Speed	802.11b: 1-11Mbps, 802.11a/g: 6-54Mbps, 802.11n: up to 150Mbps
Channel separation	802.11b/g/n-20MHz: 5 MHz, 802.11a/n-20MHz: 20MHz 802.11n-40MHz: 40MHz
Type of Modulation	802.11b:DSSS,DBPSK, DQPSK, CCK 802.11a/g/n: OFDM,BPSK, QPSK, 16QAM, 64QAM
Channel Control	Auto
Antenna Type	Dipole Antenna
Antenna Gain	Refer to the table "Antenna List"

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	WALSIN	PI_RFDPA870920IMLB301_V01	Dipole Antenna	1.84dBi for 2.4GHz 1.55dBi for 5725-5850GHz
2	WALSIN	PI_RFDPA870930IMLB301_V01	Dipole Antenna	1.10dBi for 2.4GHz 2.77dBi for 5725-5850GHz
3	WALSIN	RFDPA870933IMLB301	Dipole Antenna	1.32dBi for 2.4GHz 2.64dBi for 5725-5850GHz
4	WALSIN	RFDPA870930IMAB301	Dipole Antenna	1.20dBi for 2.4GHz
5	WALSIN	RFDPA870945IMAB301	Dipole Antenna	1.16dBi for 2.4GHz
6	WALSIN	RFDPA870900SBAB801 + RFCBA100630SA6B301	Dipole Antenna	0.7dBi for 2.4GHz
7	WALSIN	RFDPA870900SBAB801 + RFCBA100645SA6B301	Dipole Antenna	0.1dBi for 2.4GHz

Note: 1. The antennas of EUT is conform to FCC 15.203.

2. Only the higher gain antenna was tested and recorded in this report.

802.11b/g/n-20MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2412 MHz	Channel 02:	2417 MHz	Channel 03:	2422 MHz	Channel 04:	2427 MHz
Channel 05:	2432 MHz	Channel 06:	2437 MHz	Channel 07:	2442 MHz	Channel 08:	2447 MHz
Channel 09:	2452 MHz	Channel 10:	2457 MHz	Channel 11:	2462 MHz		

802.11n-40MHz (2.4G Band) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 3:	2422 MHz	Channel 4:	2427 MHz	Channel 5:	2432 MHz	Channel 6:	2437 MHz
Channel 7:	2442 MHz	Channel 8:	2447 MHz	Channel 9:	2452 MHz		

802.11a/n-20MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 149:	5745 MHz	Channel 153:	5765 MHz	Channel 157:	5785 MHz	Channel 161:	5805 MHz
Channel 165:	5825 MHz						

802.11n-40MHz (5G Band) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency
Channel 151:	5755 MHz	Channel 159:	5795 MHz

Note:

1. This device is a Network Media Module with a built-in WLAN transceiver.
2. Module contains a diversity function, only worst case is shown in the report.
3. Antenna no.1, no.2 and no.3 has divided into with core / without core, only worst case is shown in the report.
4. Module includes 2nd Source, the test item conducted emission and 30MHz – 1GHz radiated emission are tested at two modules (see report attachment 3) , brand differences are as follows:

Model Name	CY920-C		CY920-A (Remove Extended connector & Ethernet IC)	
	main source	2nd source	main source	2nd source
Flash U21	Macronix	WINBOND	Macronix	WINBOND
DDR U22	ESMT	ETRON	ESMT	ETRON
64pin connector J300,J301	Xinya	Xisheng	Xinya	Xisheng
u.fl CON1,CON2	IPEX	ELECTRIC CONNECTOR	IPEX	ELECTRIC CONNECTOR
Bead for Supply Noise Filter FB602	BLM15EG121SN1D (MURATA)	BLM15PX121SN1D (MURATA)	BLM15EG121SN1D (MURATA)	BLM15PX121SN1D (MURATA)
Regulator IC U801	EMP8130-12VN05NRR (ESMT)	XC6228D122VR-G (TOREX)	EMP8130-12VN05NRR (ESMT)	XC6228D122VR-G (TOREX)
INDUCTOR RF L917	MLG0603Q0N2CT000 SMD(TDK)	MLG0603W0N2CT000 SMD(TDK)	MLG0603Q0N2CT000 SMD(TDK)	MLG0603W0N2CT000 SMD(TDK)

5. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
6. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps 、802.11g is 6Mbps 、802.11n(20M-BW) is 7.2Mbps and 、802.11n(40M-BW) is 15Mbps).
7. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11a/b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.

Test Mode:	Mode 1: Transmit (802.11b 1Mbps)
	Mode 2: Transmit (802.11g 6Mbps)
	Mode 3: Transmit - 802.11a 6Mbps
	Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band)
	Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band)
	Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band)
	Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band)

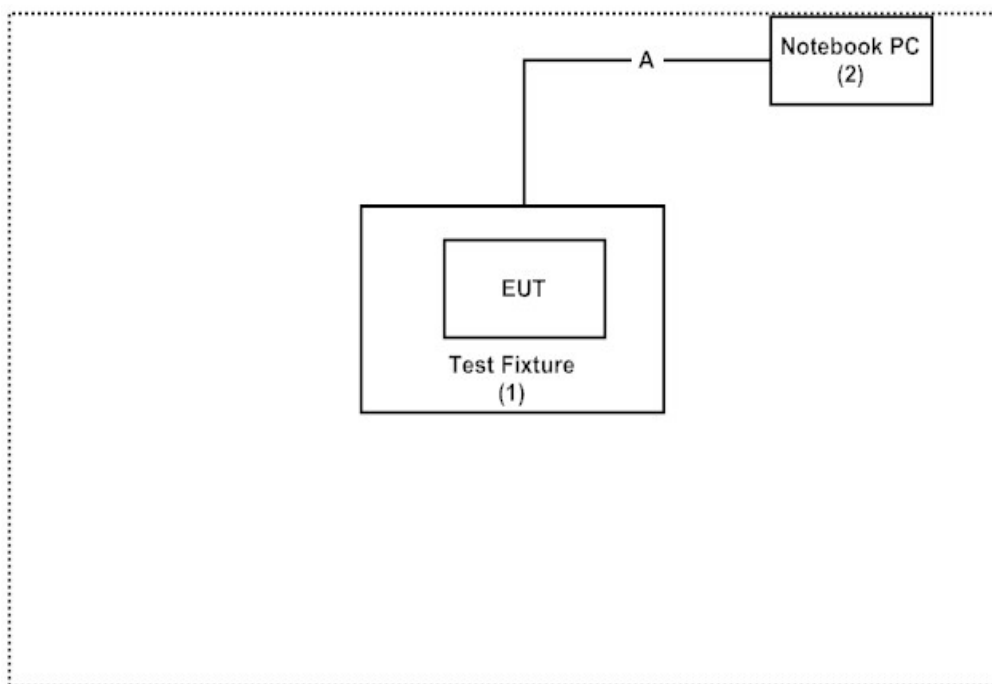
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Test Fixture	Liteon	N/A	N/A
2	Notebook PC	DELL	PPT	N/A
				Non-Shielded, 0.8m

Signal Cable Type	Signal cable Description
A	USB to RS-232 Cable
	Shielded, 1.5m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.4
- (2) Execute “Hyper Terminal v5.1” program on the Notebook PC.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Press “OK” to start the continuous Transmit.
- (5) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from

Quietek Corporation's Web Site: <http://www.quietek.com/tw/ctg/cts/accreditations.htm>

The address and introduction of Quietek Corporation's laboratories can be founded in our Web site:

<http://www.quietek.com/>

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FCC Accreditation Number: TW1014

2. Conducted Emission

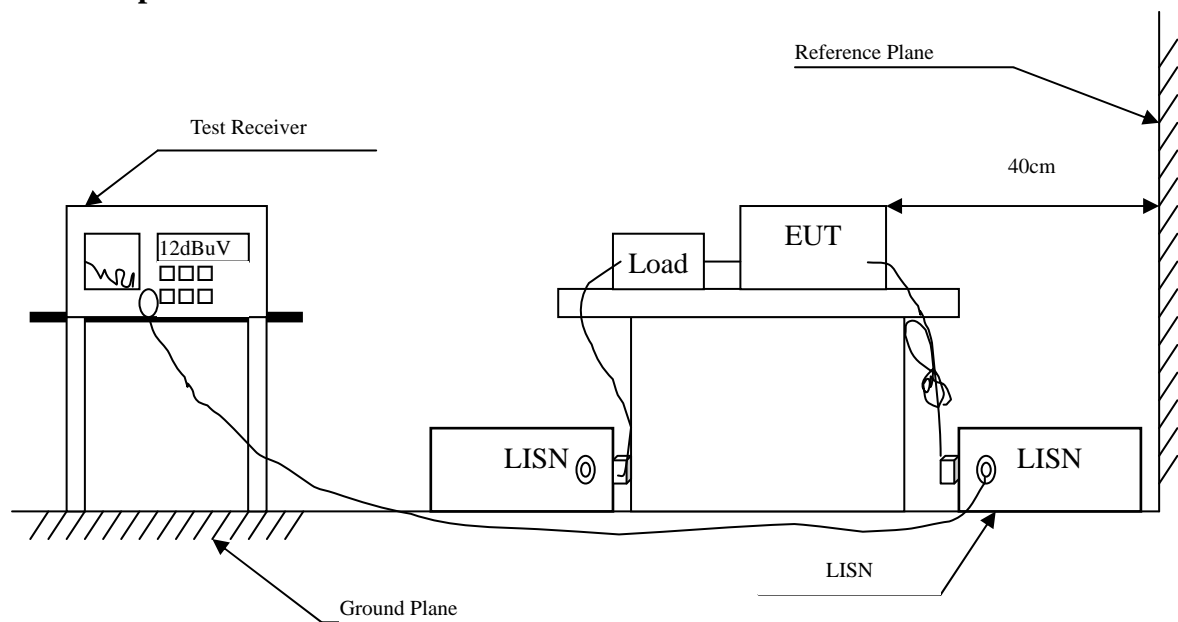
2.1. Test Equipment

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
X	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2014	
X	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2014	Peripherals
X	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2014	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar, 2014	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2014	
	No.1 Shielded Room				

Note:

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

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit		
Frequency MHz	Limits	
	QP	AVG
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2009 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2437MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV	Margin dB	Limit dBμV
Line 1					
Quasi-Peak					
0.158	9.747	40.700	50.447	-15.324	65.771
0.173	9.742	37.330	47.073	-18.270	65.343
0.205	9.739	32.380	42.119	-22.310	64.429
0.470	9.751	23.660	33.411	-23.446	56.857
2.771	9.850	21.910	31.760	-24.240	56.000
16.572	10.000	24.230	34.230	-25.770	60.000
Average					
0.158	9.747	30.880	40.627	-15.144	55.771
0.173	9.742	30.200	39.943	-15.400	55.343
0.205	9.739	23.850	33.589	-20.840	54.429
0.470	9.751	15.210	24.961	-21.896	46.857
2.771	9.850	14.910	24.760	-21.240	46.000
16.572	10.000	18.630	28.630	-21.370	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dBμV
	dB	dBμV	dBμV		
Line 2					
Quasi-Peak					
0.162	9.747	41.100	50.847	-14.810	65.657
0.201	9.749	32.940	42.689	-21.854	64.543
0.255	9.751	26.270	36.021	-26.979	63.000
0.451	9.750	22.980	32.730	-24.670	57.400
2.787	9.850	21.420	31.270	-24.730	56.000
16.736	10.030	23.780	33.810	-26.190	60.000
Average					
0.162	9.747	31.590	41.337	-14.320	55.657
0.201	9.749	22.590	32.339	-22.204	54.543
0.255	9.751	17.320	27.071	-25.929	53.000
0.451	9.750	17.350	27.100	-20.300	47.400
2.787	9.850	13.090	22.940	-23.060	46.000
16.736	10.030	18.390	28.420	-21.580	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5755MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.205	9.651	33.020	42.671	-21.758	64.429
0.236	9.652	31.350	41.002	-22.541	63.543
0.267	9.654	26.670	36.324	-26.333	62.657
0.396	9.661	23.730	33.391	-25.580	58.971
0.818	9.684	20.530	30.214	-25.786	56.000
14.611	10.073	30.110	40.183	-19.817	60.000
Average					
0.205	9.651	12.930	22.581	-31.848	54.429
0.236	9.652	16.580	26.232	-27.311	53.543
0.267	9.654	15.530	25.184	-27.473	52.657
0.396	9.661	12.050	21.711	-27.260	48.971
0.818	9.684	9.110	18.794	-27.206	46.000
14.611	10.073	25.260	35.333	-14.667	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5755MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.154	9.660	40.730	50.390	-15.496	65.886
0.166	9.659	24.240	33.899	-31.644	65.543
0.205	9.661	33.000	42.661	-21.768	64.429
0.259	9.664	28.830	38.494	-24.392	62.886
0.334	9.658	24.680	34.338	-26.405	60.743
14.107	10.088	30.680	40.768	-19.232	60.000
Average					
0.154	9.660	21.900	31.560	-24.326	55.886
0.166	9.659	-2.050	7.609	-47.934	55.543
0.205	9.661	13.320	22.981	-31.448	54.429
0.259	9.664	11.430	21.094	-31.792	52.886
0.334	9.658	12.860	22.518	-28.225	50.743
14.107	10.088	27.280	37.368	-12.632	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3. Peak Power Output

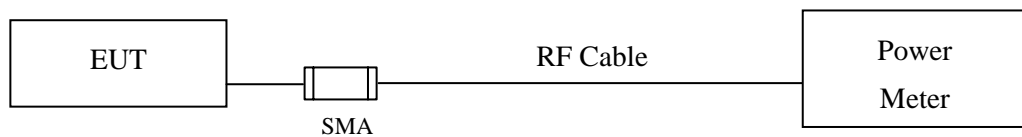
3.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2014
X	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2014

Note:

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

3.2. Test Setup



3.3. Limits

The maximum peak power shall be less 1 Watt.

3.4. Test Procedure

The EUT was tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements. The maximum peak conducted output power using KDB 558074 D01 DTS Meas Guidance v03r02 section 9.1.2 PKPM1 Peak power meter method.

3.5. Uncertainty

± 1.27 dB

3.6. Test Result of Peak Power Output

Product : Network Media Module
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Peak Power	Required Limit	Result
		1	2	5.5	11	1		
		Measurement Level (dBm)						
01	2412	11.14	--	--	--	13.31	<30dBm	Pass
06	2437	17.44	17.35	17.11	17.02	19.34	<30dBm	Pass
11	2462	17.35	--	--	--	19.21	<30dBm	Pass

Note: Peak Power Output Value = Reading value on power meter + cable loss

Product : Network Media Module
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		6	9	12	18	24	36	48	54			
		Measurement Level (dBm)										
01	2412	14.51	--	--	--	--	--	--	--	21.74	<30dBm	Pass
06	2437	14.41	14.28	14.14	14.01	13.87	13.74	13.60	13.47	21.60	<30dBm	Pass
11	2462	13.69	--	--	--	--	--	--	--	21.41	<30dBm	Pass

Note: Peak Power Output Value = Reading value on power meter + cable loss

Product : Network Media Module
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		6	9	12	18	24	36	48	54	6		
		Measurement Level (dBm)										
149	5745	13.27	--	--	--	--	--	--	--	19.91	<30dBm	Pass
157	5785	12.49	12.41	12.33	12.25	12.17	12.09	12.01	11.93	19.72	<30dBm	Pass
165	5825	12.82	--	--	--	--	--	--	--	19.65	<30dBm	Pass

Note: Peak Power Output Value = Reading value on power meter + cable loss

Product : Network Media Module
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		7.2	14.4	21.7	28.9	43.3	57.8	65	72.2	7.2		
		Measurement Level (dBm)										
01	2412	13.38	--	--	--	--	--	--	--	21.13	<30dBm	Pass
06	2437	14.20	14.04	13.89	13.73	13.58	13.42	13.27	13.11	21.68	<30dBm	Pass
11	2462	13.22	--	--	--	--	--	--	--	21.46	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : Network Media Module
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		15	30	45	60	90	120	135	150	15		
		Measurement Level (dBm)										
03	2422	12.76	--	--	--	--	--	--	--	20.80	<30dBm	Pass
06	2437	14.09	13.88	13.74	13.55	13.38	13.20	13.03	12.85	21.20	<30dBm	Pass
09	2452	9.04	--	--	--	--	--	--	--	19.25	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : Network Media Module
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		7.2	14.4	21.7	28.9	43.3	57.8	65	72.2			
		Measurement Level (dBm)										
149	5745	13.23	--	--	--	--	--	--	--	19.99	<30dBm	Pass
157	5785	12.41	12.38	12.35	12.32	12.29	12.26	12.23	12.20	19.54	<30dBm	Pass
165	5825	12.75	--	--	--	--	--	--	--	19.52	<30dBm	Pass

1. Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : Network Media Module
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		15	30	45	60	90	120	135	150	15		
		Measurement Level (dBm)										
151	5755	13.65	13.59	13.53	13.47	13.41	13.35	13.29	13.23	19.94	<30dBm	Pass
159	5795	13.71	--	--	--	--	--	--	--	19.65	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

4. Radiated Emission

4.1. Test Equipment

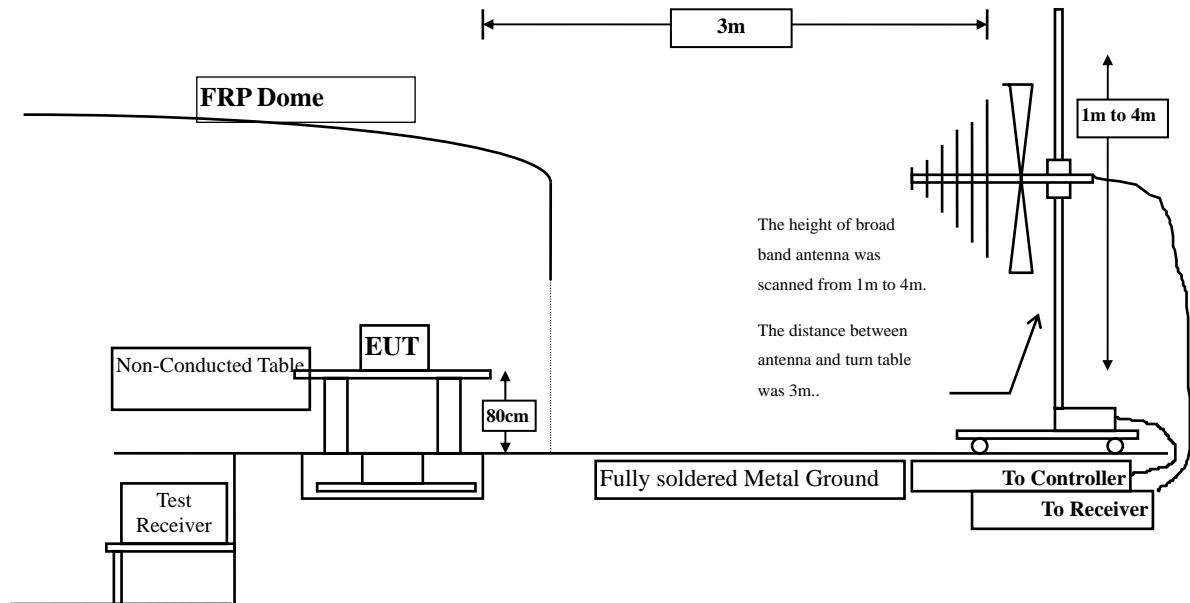
The following test equipment are used during the radiated emission test:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
<input checked="" type="checkbox"/> Site # 3	X	Loop Antenna	Teseq	HLA6120 / 26739	Jul., 2014
	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2014
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2014
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2014
	X	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2014
	X	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2014
	X	Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2014
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2014
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2014
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2014
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

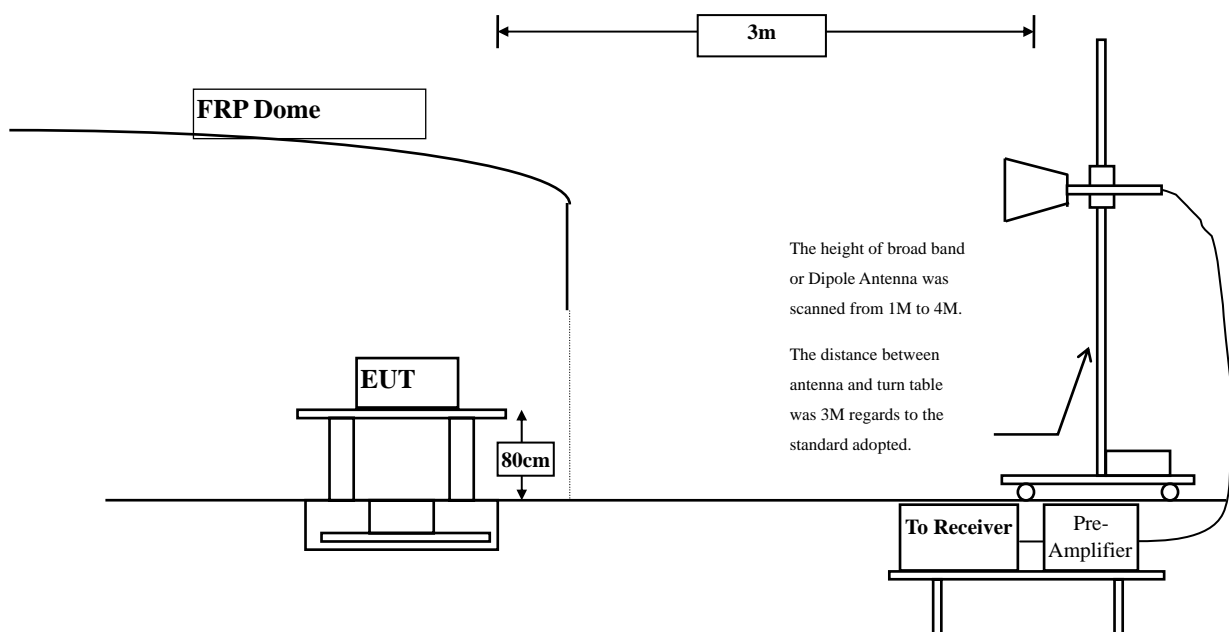
- Note:
1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
 2. The test instruments marked with "X" are used to measure the final test results.

4.2. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.3. Limits

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

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

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

4.4. Test Procedure

The EUT was setup according to ANSI C63.10, 2009 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

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

The antenna is scanned 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 C63.10:2009 on radiated measurement.

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

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

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

4.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

4.6. Test Result of Radiated Emission

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dBμV/m
	dB	dBμV	dBμV/m		

Horizontal

Peak Detector:

4824.000	3.261	35.260	38.521	-35.479	74.000
7236.000	10.650	34.260	44.910	-29.090	74.000
9648.000	13.337	35.230	48.566	-25.434	74.000

Average Detector:

--

Vertical

Peak Detector:

4824.000	6.421	37.560	43.981	-30.019	74.000
7236.000	11.495	35.590	47.085	-26.915	74.000
9648.000	13.807	36.560	50.366	-23.634	74.000

Average Detector:

--

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dB μ V	dB μ V/m	dB	dB μ V/m

Horizontal

Peak Detector:

4874.000	3.038	41.370	44.407	-29.593	74.000
7311.000	11.795	35.950	47.744	-26.256	74.000
9748.000	12.635	37.290	49.925	-24.075	74.000

Average Detector:

--

Vertical

Peak Detector:

4874.000	5.812	46.610	52.421	-21.579	74.000
7311.000	12.630	36.040	48.669	-25.331	74.000
9748.000	13.126	36.970	50.096	-23.904	74.000

Average Detector:

--

Note:

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

Product : Network Media Module
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV/m	dB	dBμV/m

Horizontal

Peak Detector:

4924.000	2.858	40.340	43.197	-30.803	74.000
7386.000	12.127	36.130	48.258	-25.742	74.000
9848.000	12.852	36.500	49.353	-24.647	74.000

Average Detector:

--

Vertical

Peak Detector:

4924.000	5.521	45.300	50.820	-23.180	74.000
7386.000	13.254	36.280	49.534	-24.466	74.000
9848.000	13.367	36.010	49.377	-24.623	74.000

Average Detector:

--

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m

Horizontal

Peak Detector:

4824.000	3.261	38.360	41.621	-32.379	74.000
7236.000	10.650	38.800	49.450	-24.550	74.000
9648.000	13.337	36.090	49.426	-24.574	74.000

Average Detector:

--

Vertical

Peak Detector:

4824.000	6.421	41.690	48.111	-25.889	74.000
7236.000	11.495	36.850	48.345	-25.655	74.000
9648.000	13.807	36.630	50.436	-23.564	74.000

Average Detector:

--

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m

Horizontal

Peak Detector:

4874.000	3.038	37.260	40.297	-33.703	74.000
7311.000	11.795	35.310	47.104	-26.896	74.000
9748.000	12.635	36.910	49.545	-24.455	74.000

Average Detector:

--

Vertical

Peak Detector:

4874.000	5.812	41.230	47.041	-26.959	74.000
7311.000	12.630	35.860	48.489	-25.511	74.000
9748.000	13.126	36.400	49.526	-24.474	74.000

Average Detector:

--

Note:

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

Product : Network Media Module
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV/m	dB	dBμV/m

Horizontal

Peak Detector:

4924.000	2.858	37.750	40.607	-33.393	74.000
7386.000	12.127	34.720	46.848	-27.152	74.000
9848.000	12.852	36.450	49.303	-24.697	74.000

Average Detector:

--

Vertical

Peak Detector:

4924.000	5.521	41.850	47.370	-26.630	74.000
7386.000	13.254	35.290	48.544	-25.456	74.000
9848.000	13.367	36.370	49.737	-24.263	74.000

Average Detector:

--

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5745 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4785.000	3.064	42.370	45.433	-28.567	74.000
11490.000	17.196	35.570	52.767	-21.233	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4785.000	6.495	50.240	56.735	-17.265	74.000
11490.000	18.124	35.350	53.475	-20.525	74.000
Average					
Detector:					
4785.000	6.495	37.410	43.905	-10.095	54.000

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
5305.000	3.860	47.160	51.021	-22.979	74.000
11570.000	16.899	36.660	53.559	-20.441	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
5305.000	5.748	57.620	63.369	-10.631	74.000
11570.000	17.788	35.190	52.978	-21.022	74.000
Average					
Detector:					
5305.000	5.748	45.240	50.989	-3.011	54.000

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5825 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
5345.000	3.732	47.120	50.853	-23.147	74.000
11650.000	16.325	35.030	51.356	-22.644	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
5345.000	5.697	56.920	62.618	-11.382	74.000
11650.000	17.441	34.330	51.772	-22.228	74.000
Average					
Detector:					
5345.000	5.697	44.470	50.168	-3.832	54.000

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2412MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m

Horizontal

Peak Detector:

4824.000	3.261	38.190	41.451	-32.549	74.000
7236.000	10.650	36.480	47.130	-26.870	74.000
9648.000	13.337	35.700	49.036	-24.964	74.000

Average Detector:

--

Vertical

Peak Detector:

4824.000	6.421	39.800	46.221	-27.779	74.000
7236.000	11.495	36.290	47.785	-26.215	74.000
9648.000	13.807	36.290	50.096	-23.904	74.000

Average Detector:

--

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m

Horizontal

Peak Detector:

4874.000	3.038	37.890	40.927	-33.073	74.000
7311.000	11.795	36.360	48.154	-25.846	74.000
9748.000	12.635	37.120	49.755	-24.245	74.000

Average Detector:

--

Vertical

Peak Detector:

4874.000	5.812	41.800	47.611	-26.389	74.000
7311.000	12.630	35.840	48.469	-25.531	74.000
9748.000	13.126	37.060	50.186	-23.814	74.000

Average Detector:

--

Note:

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

Product : Network Media Module
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2462 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV/m	dB	dBμV/m

Horizontal

Peak Detector:

4924.000	2.858	37.540	40.397	-33.603	74.000
7386.000	12.127	35.220	47.348	-26.652	74.000
9848.000	12.852	36.340	49.193	-24.807	74.000

Average Detector:

--

Vertical

Peak Detector:

4924.000	5.521	41.500	47.020	-26.980	74.000
7386.000	13.254	35.090	48.344	-25.656	74.000
9848.000	13.367	36.960	50.327	-23.673	74.000

Average Detector:

--

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2422MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m

Horizontal

Peak Detector:

4844.000	3.171	37.690	40.861	-33.139	74.000
7266.000	11.162	35.990	47.152	-26.848	74.000
9688.000	12.964	36.920	49.885	-24.115	74.000

Average Detector:

--

Vertical

Peak Detector:

4844.000	6.178	37.850	44.028	-29.972	74.000
7266.000	11.982	36.380	48.362	-25.638	74.000
9688.000	13.507	36.890	50.398	-23.602	74.000

Average Detector:

--

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m

Horizontal

Peak Detector:

4874.000	3.038	37.760	40.797	-33.203	74.000
7311.000	11.795	35.640	47.434	-26.566	74.000
9748.000	12.635	37.510	50.145	-23.855	74.000

Average Detector:

--

Vertical

Peak Detector:

4874.000	5.812	37.380	43.191	-30.809	74.000
7311.000	12.630	35.370	47.999	-26.001	74.000
9748.000	13.126	37.380	50.506	-23.494	74.000

Average Detector:

--

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2452 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV/m	dB	dBμV/m

Horizontal

Peak Detector:

4904.000	2.914	37.970	40.885	-33.115	74.000
7356.000	11.995	35.300	47.294	-26.706	74.000
9808.000	12.475	37.060	49.535	-24.465	74.000

Average Detector:

--

Vertical

Peak Detector:

4904.000	5.530	38.100	43.631	-30.369	74.000
7356.000	13.005	35.610	48.614	-25.386	74.000
9808.000	12.901	37.020	49.921	-24.079	74.000

Average Detector:

--

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5745MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4785.000	3.064	41.590	44.653	-29.347	74.000
11490.000	17.196	35.490	52.687	-21.313	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4785.000	6.495	49.620	56.115	-17.885	74.000
11490.000	18.124	35.460	53.585	-20.415	74.000
Average					
Detector:					
4785.000	6.495	37.190	43.685	-10.315	54.000

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5785 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
5305.000	3.860	46.940	50.801	-23.199	74.000
11570.000	16.899	35.490	52.389	-21.611	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
5305.000	5.748	57.100	62.849	-11.151	74.000
11570.000	17.788	35.240	53.028	-20.972	74.000
Average					
Detector:					
5305.000	5.748	44.610	50.359	-3.641	54.000

Note:

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

Product : Network Media Module
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5825 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
5345.000	3.732	46.230	49.963	-24.037	74.000
11650.000	16.325	34.700	51.026	-22.974	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
5345.000	5.697	57.750	63.448	-10.552	74.000
11650.000	17.441	34.340	51.782	-22.218	74.000
Average Detector:					
5345.000	5.697	45.180	50.878	-3.122	54.000

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5755MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4780.000	3.025	40.150	43.175	-30.825	74.000
11510.000	17.196	35.440	52.637	-21.363	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4780.000	6.485	49.240	55.725	-18.275	74.000
11510.000	18.124	35.830	53.955	-20.045	74.000
Average					
Detector:					
4780.000	6.485	36.450	42.935	-11.065	54.000

Note:

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

Product : Network Media Module
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5795 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
5315.000	3.829	44.160	47.988	-26.012	74.000
11590.000	16.791	34.800	51.590	-22.410	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
5315.000	5.736	54.570	60.306	-13.694	74.000
11590.000	17.657	35.260	52.916	-21.084	74.000
Average					
Detector:					
5315.000	5.736	42.930	48.666	-5.334	54.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m
Horizontal					
113.420	-7.449	40.814	33.365	-10.135	43.500
198.780	-9.958	46.381	36.423	-7.077	43.500
301.600	-4.465	39.806	35.341	-10.659	46.000
480.080	1.870	36.724	38.594	-7.406	46.000
689.600	3.642	35.602	39.244	-6.756	46.000
932.100	7.270	30.481	37.751	-8.249	46.000
Vertical					
113.420	-3.709	40.814	37.105	-6.395	43.500
165.800	-4.665	43.874	39.209	-4.291	43.500
301.600	-3.985	40.333	36.348	-9.652	46.000
540.220	2.169	34.846	37.015	-8.985	46.000
829.280	2.376	32.963	35.339	-10.661	46.000
961.200	3.310	33.239	36.549	-17.451	54.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dB μ V	dB μ V/m	dB	dB μ V/m
Horizontal					
165.800	-9.915	43.874	33.959	-9.541	43.500
293.840	-4.940	40.907	35.967	-10.033	46.000
480.080	1.870	36.724	38.594	-7.406	46.000
648.860	1.744	34.614	36.358	-9.642	46.000
864.200	6.329	32.423	38.752	-7.248	46.000
961.200	6.810	33.239	40.049	-13.951	54.000
Vertical					
113.420	-3.709	40.814	37.105	-6.395	43.500
198.780	-5.708	46.381	40.673	-2.827	43.500
383.080	0.195	31.311	31.506	-14.494	46.000
602.300	1.704	35.880	37.584	-8.416	46.000
800.180	2.637	32.657	35.294	-10.706	46.000
961.200	3.310	33.239	36.549	-17.451	54.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
111.480	-7.914	35.226	27.312	-16.188	43.500
350.100	-2.332	33.810	31.478	-14.522	46.000
518.880	1.714	31.115	32.829	-13.171	46.000
600.360	3.977	37.982	41.959	-4.041	46.000
701.240	2.668	35.078	37.746	-8.254	46.000
881.660	6.307	26.235	32.542	-13.458	46.000
Vertical					
111.480	-0.954	35.226	34.272	-9.228	43.500
247.280	-8.042	38.901	30.858	-15.142	46.000
400.540	-5.156	35.636	30.481	-15.519	46.000
549.920	-2.877	40.075	37.198	-8.802	46.000
701.240	0.198	35.078	35.276	-10.724	46.000
881.660	2.557	27.493	30.050	-15.950	46.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
165.800	-9.915	43.874	33.959	-9.541	43.500
288.020	-5.557	42.468	36.911	-9.089	46.000
398.600	0.879	33.792	34.671	-11.329	46.000
480.080	1.870	38.047	39.917	-6.083	46.000
658.560	1.892	37.005	38.897	-7.103	46.000
906.880	6.149	30.902	37.051	-8.949	46.000
Vertical					
107.600	-4.027	38.317	34.290	-9.210	43.500
179.380	-0.824	39.747	38.923	-4.577	43.500
383.080	0.195	31.311	31.506	-14.494	46.000
540.220	2.169	34.846	37.015	-8.985	46.000
687.660	2.292	36.121	38.413	-7.587	46.000
870.020	-0.398	40.422	40.024	-5.976	46.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
113.420	-7.449	40.814	33.365	-10.135	43.500
288.020	-5.557	42.468	36.911	-9.089	46.000
462.620	3.589	34.646	38.235	-7.765	46.000
610.060	3.657	35.054	38.711	-7.289	46.000
827.340	7.361	32.943	40.304	-5.696	46.000
961.200	6.810	33.239	40.049	-13.951	54.000
Vertical					
113.420	-3.709	40.814	37.105	-6.395	43.500
231.760	-6.457	42.263	35.806	-10.194	46.000
375.320	0.388	30.079	30.467	-15.533	46.000
540.220	2.169	34.846	37.015	-8.985	46.000
749.740	2.023	34.176	36.199	-9.801	46.000
961.200	3.310	33.239	36.549	-17.451	54.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5785 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
107.600	-7.058	35.545	28.487	-15.013	43.500
293.840	-3.868	34.401	30.534	-15.466	46.000
474.260	0.024	34.945	34.968	-11.032	46.000
610.060	4.101	33.582	37.683	-8.317	46.000
749.740	3.320	35.075	38.395	-7.605	46.000
881.660	6.307	27.493	33.800	-12.200	46.000
Vertical					
109.540	-0.418	35.614	35.196	-8.304	43.500
247.280	-8.042	38.901	30.858	-15.142	46.000
400.540	-5.156	35.636	30.481	-15.519	46.000
549.920	-2.877	40.075	37.198	-8.802	46.000
701.240	0.198	35.078	35.276	-10.724	46.000
951.500	6.621	27.234	33.855	-12.145	46.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5755MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
107.600	-7.058	35.545	28.487	-15.013	43.500
293.840	-3.868	34.401	30.534	-15.466	46.000
449.040	-2.238	35.745	33.507	-12.493	46.000
610.060	4.101	33.582	37.683	-8.317	46.000
749.740	3.320	35.075	38.395	-7.605	46.000
881.660	6.307	27.493	33.800	-12.200	46.000
Vertical					
109.540	-0.418	35.614	35.196	-8.304	43.500
247.280	-8.042	38.901	30.858	-15.142	46.000
400.540	-5.156	35.636	30.481	-15.519	46.000
600.360	-2.833	37.982	35.149	-10.851	46.000
749.740	2.510	35.075	37.585	-8.415	46.000
951.500	6.621	27.234	33.855	-12.145	46.000

Note:

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

5. RF antenna conducted test

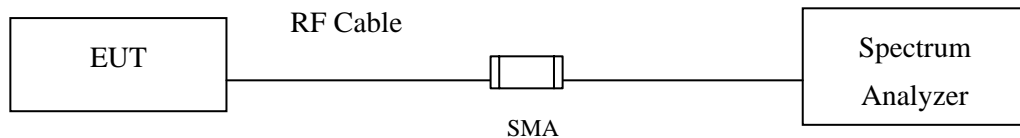
5.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2014
	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

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

5.2. Test Setup

RF antenna Conducted Measurement:



5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.4. Test Procedure

The EUT was tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

5.5. Uncertainty

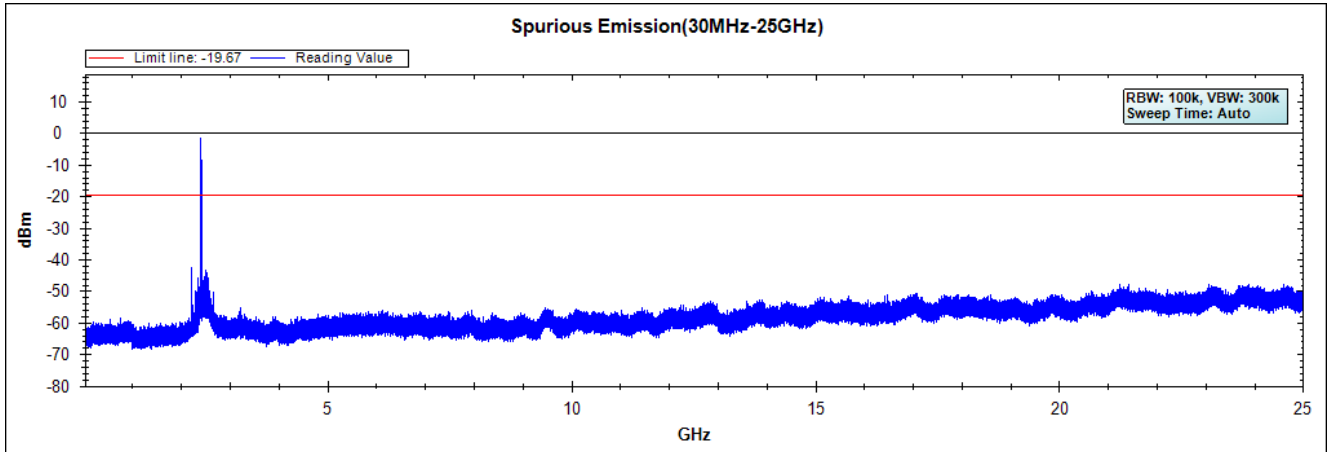
The measurement uncertainty

Conducted is defined as $\pm 1.27\text{dB}$

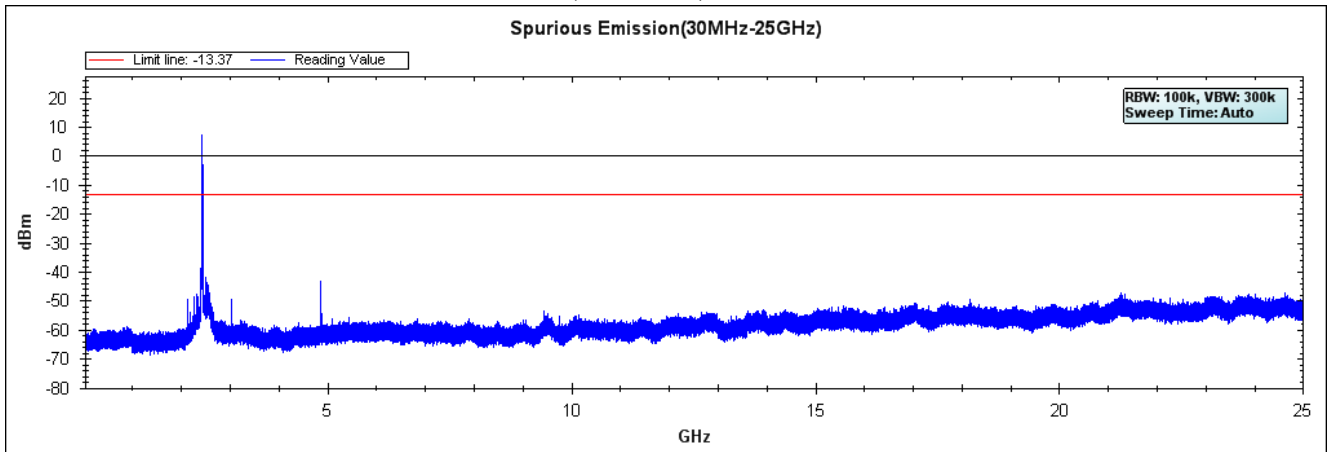
5.6. Test Result of RF antenna conducted test

Product : Network Media Module
 Test Item : RF antenna conducted test
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)

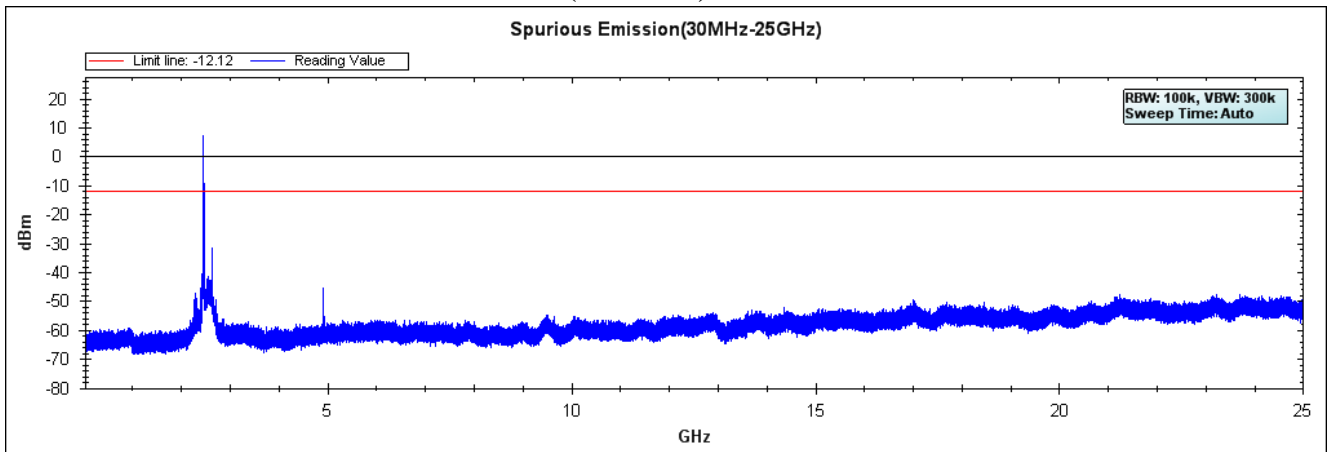
Channel 01 (2412MHz) 30MHz-25GHz



Channel 06 (2437MHz) 30MHz -25GHz



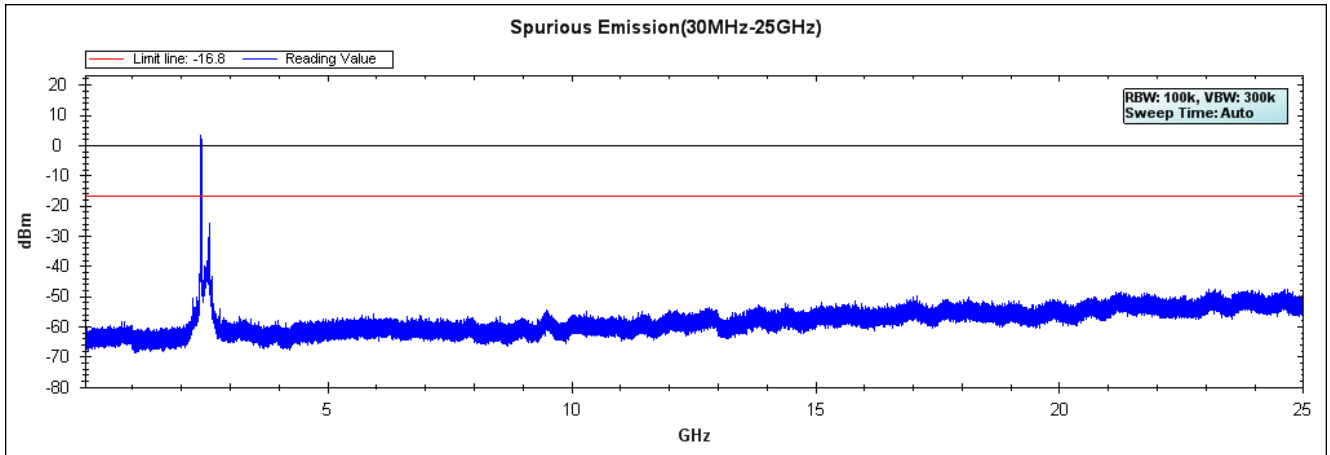
Channel 11 (2462MHz) 30MHz -25GHz



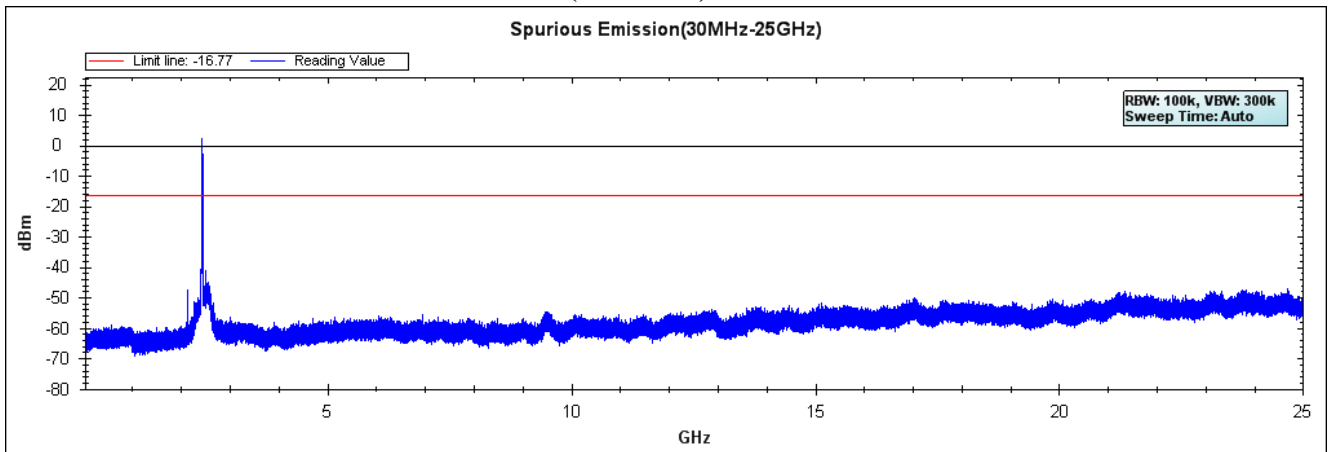
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Network Media Module
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)

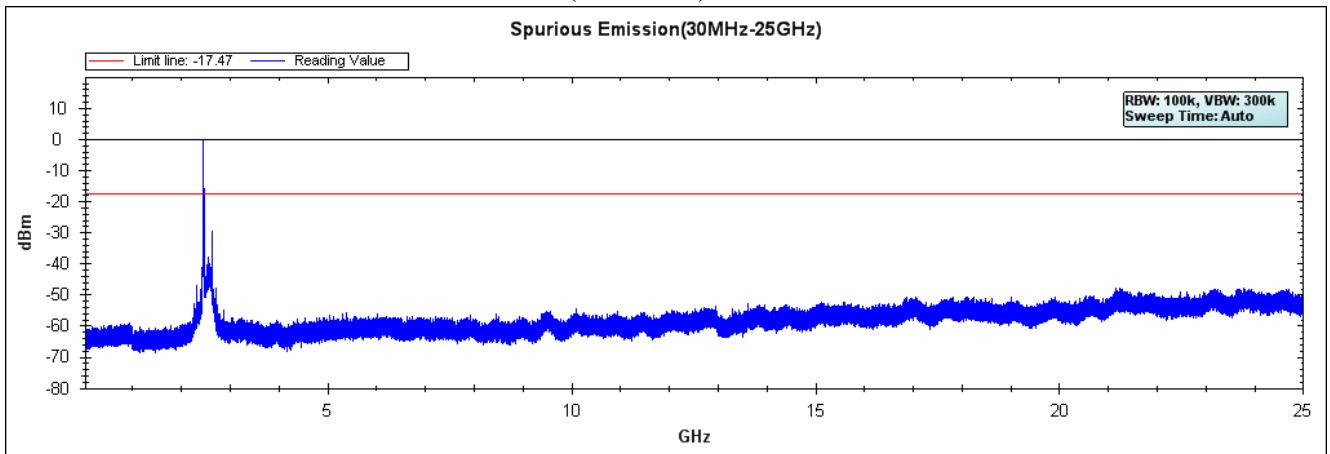
Channel 01 (2412MHz) 30MHz-25GHz



Channel 06 (2437MHz) 30MHz -25GHz



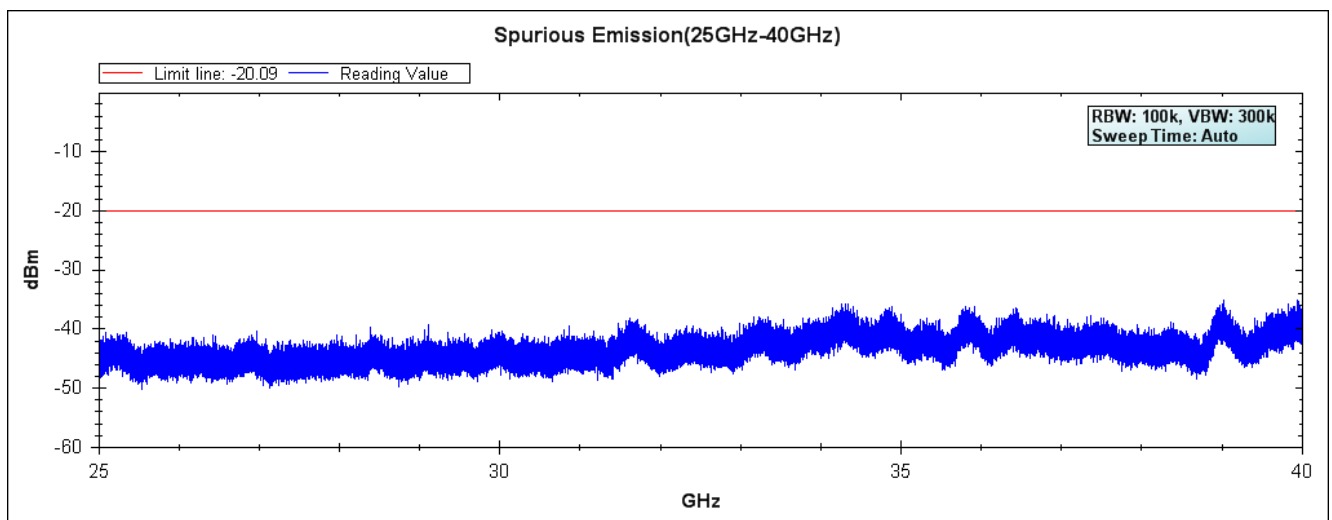
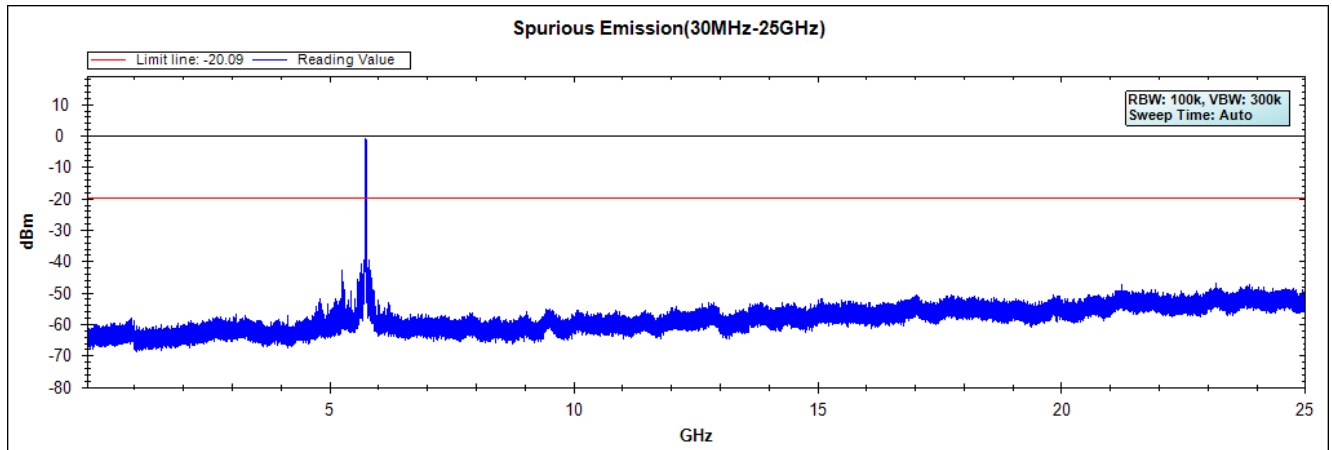
Channel 11 (2462MHz) 30MHz -25GHz



Note: The above test pattern is synthesized by multiple of the frequency range.

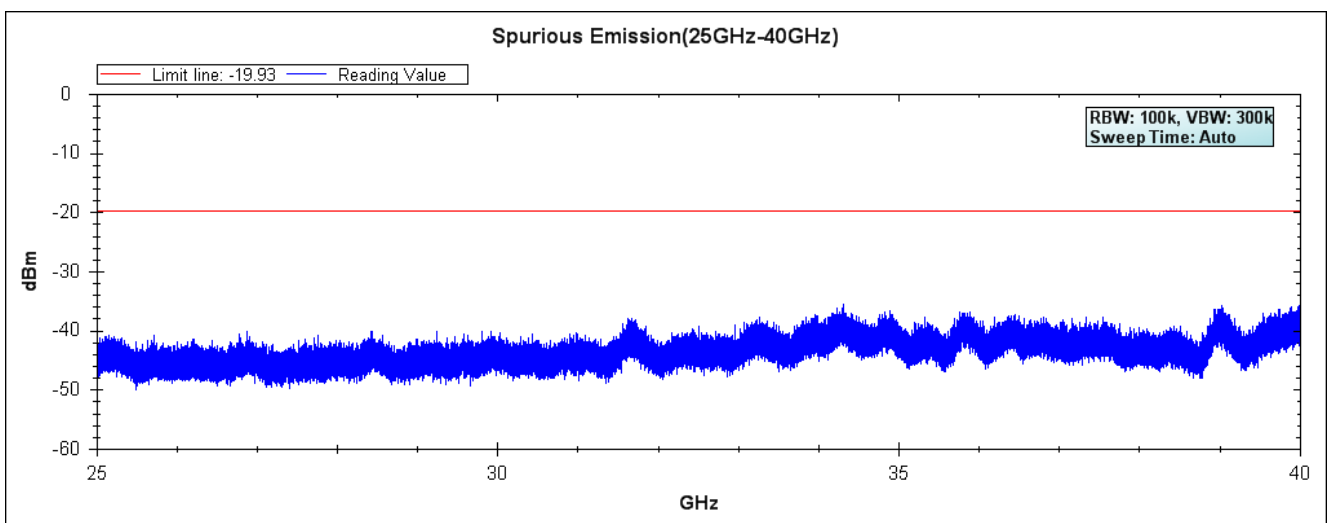
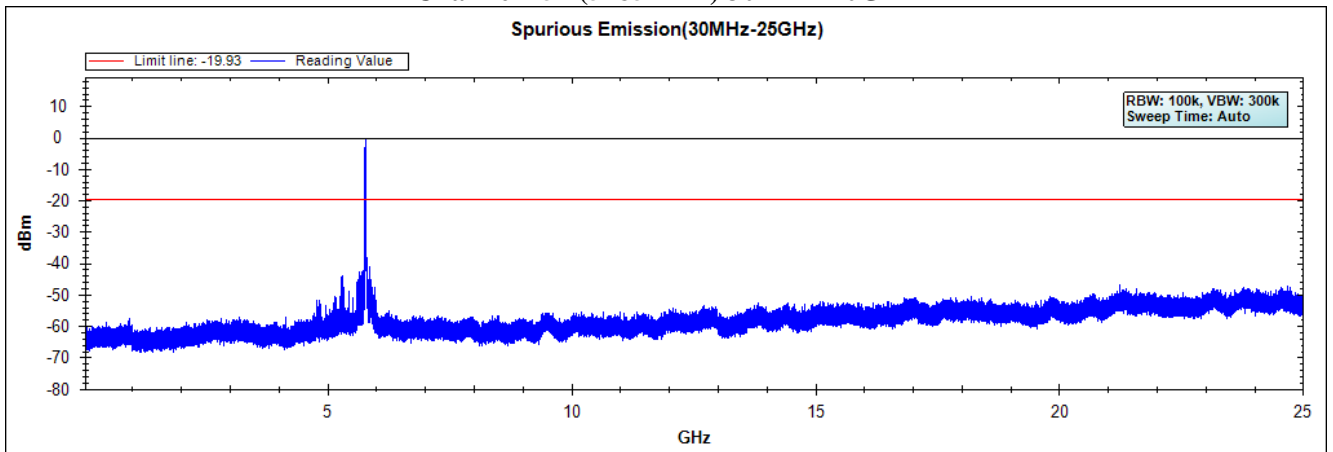
Product : Network Media Module
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps

Channel 149 (5745MHz) 30MHz-40GHz



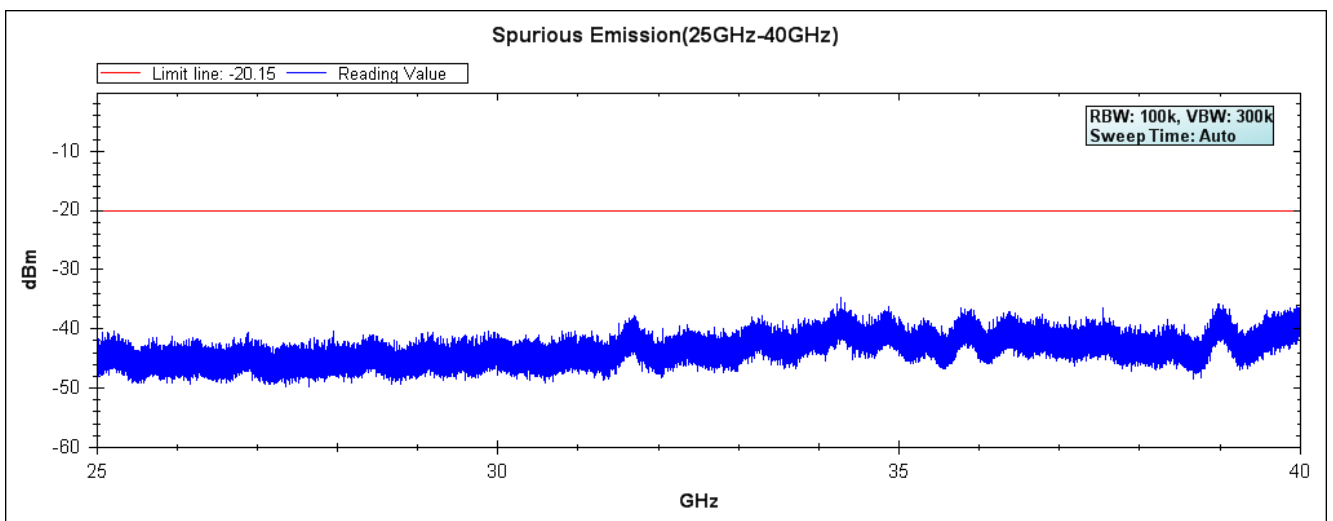
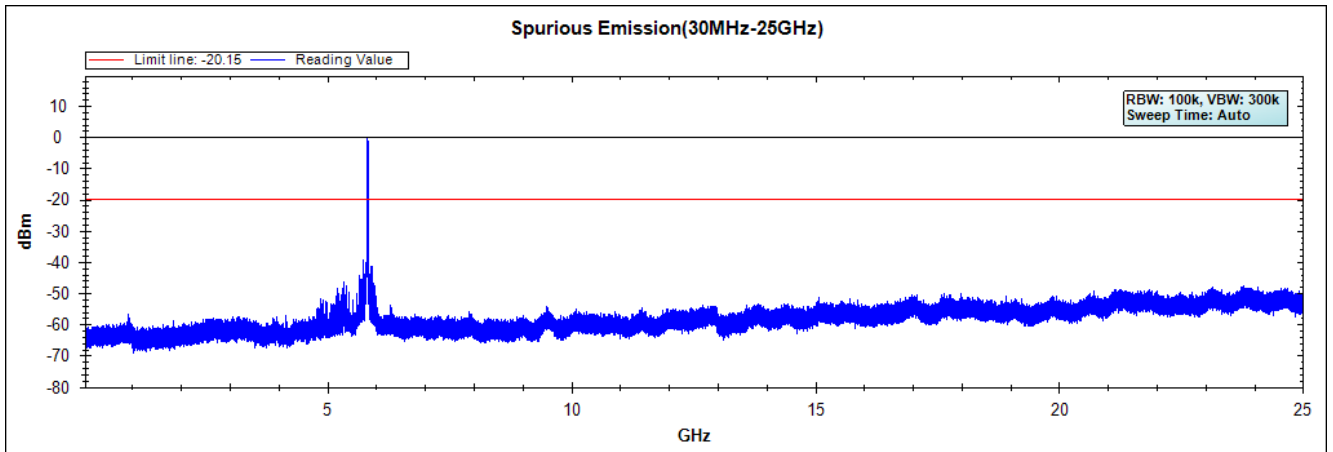
Note: The above test pattern is synthesized by multiple of the frequency range.

Channel 157 (5785MHz) 30MHz-40GHz



Note: The above test pattern is synthesized by multiple of the frequency range.

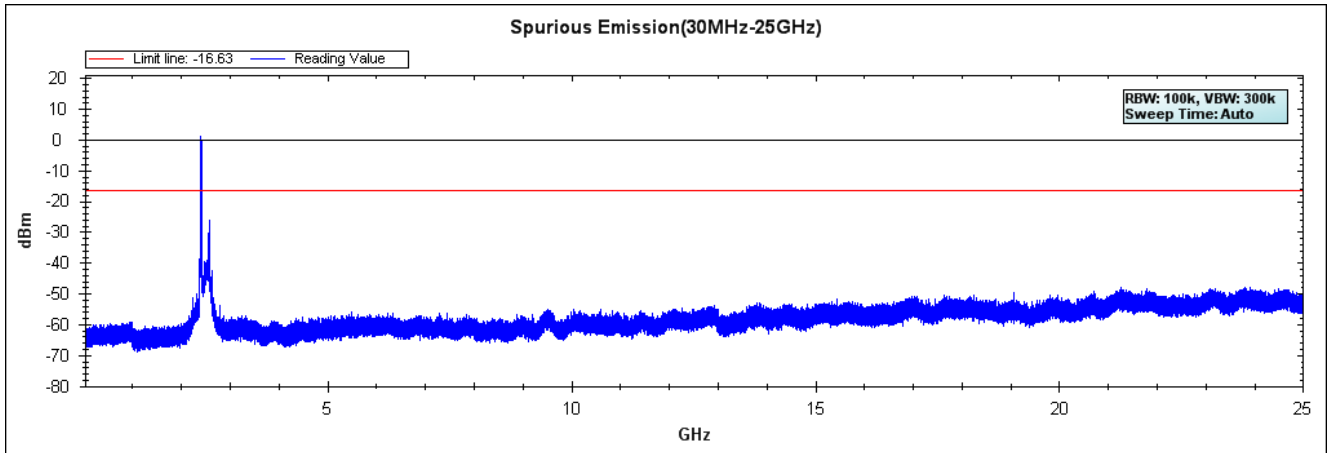
Channel 165 (5825MHz) 30MHz-40GHz



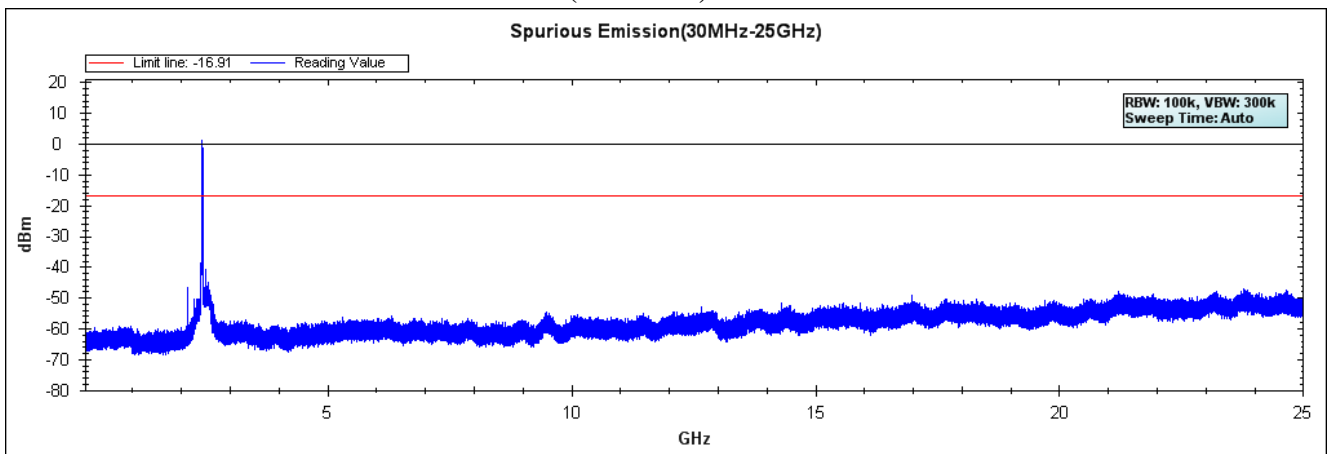
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Network Media Module
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band)

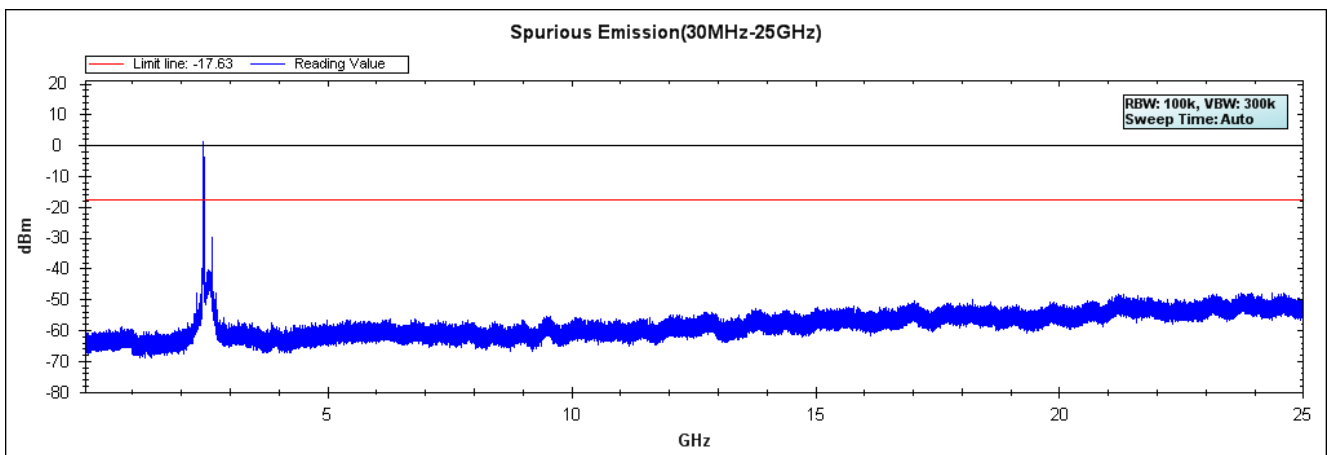
Channel 01 (2412MHz) 30MHz-25GHz



Channel 06 (2437MHz) 30MHz -25GHz



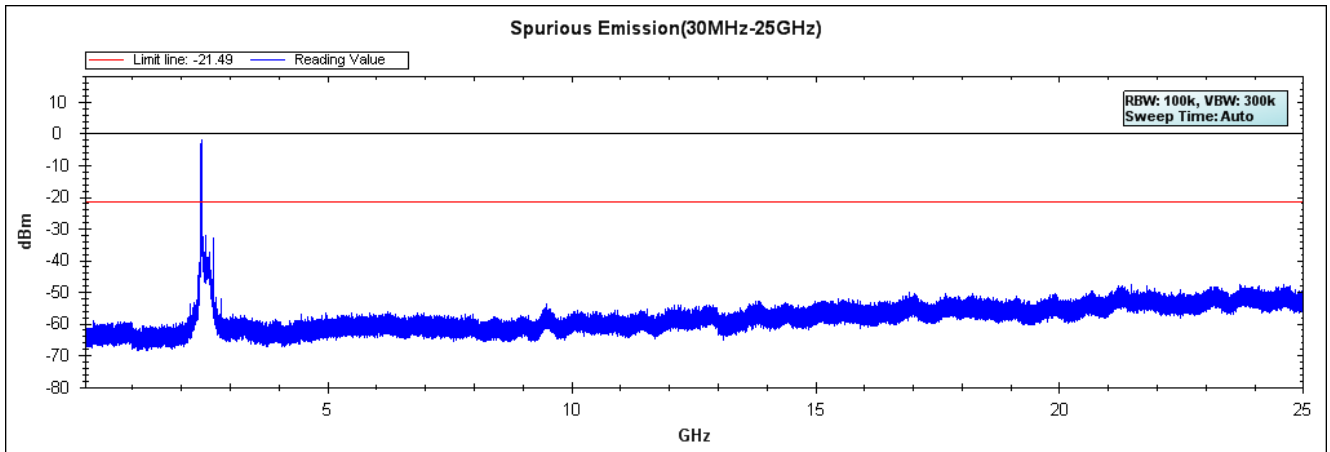
Channel 11 (2462MHz) 30MHz -25GHz



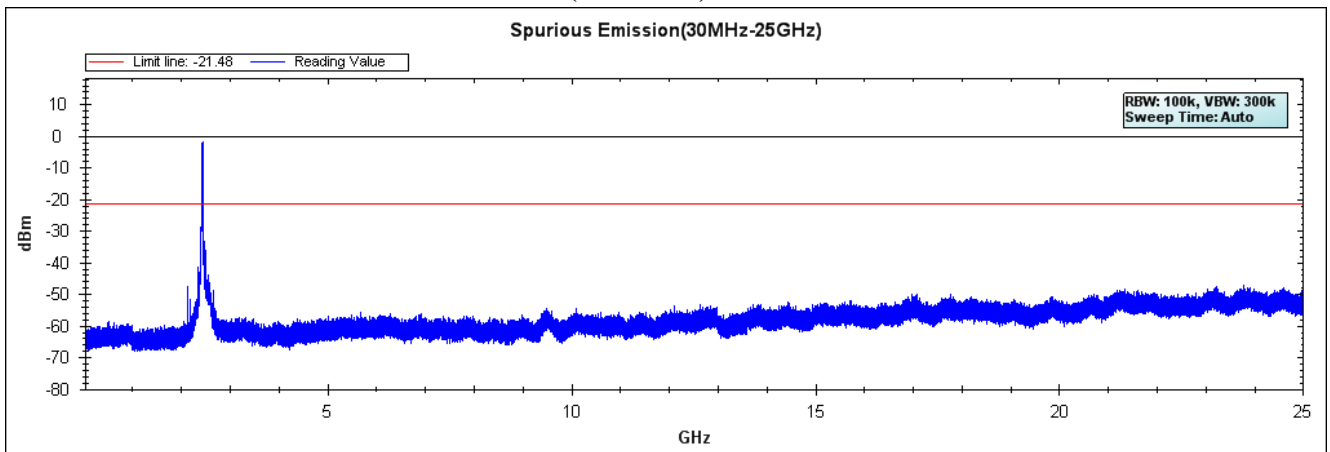
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Network Media Module
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band)

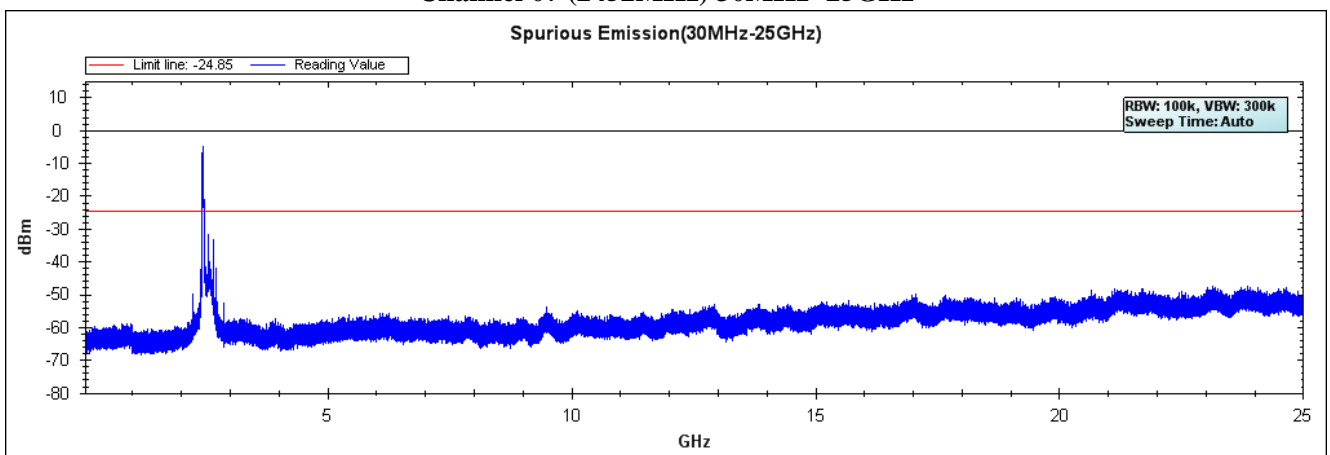
Channel 01 (2422MHz) 30MHz-25GHz



Channel 04 (2437MHz) 30MHz -25GHz



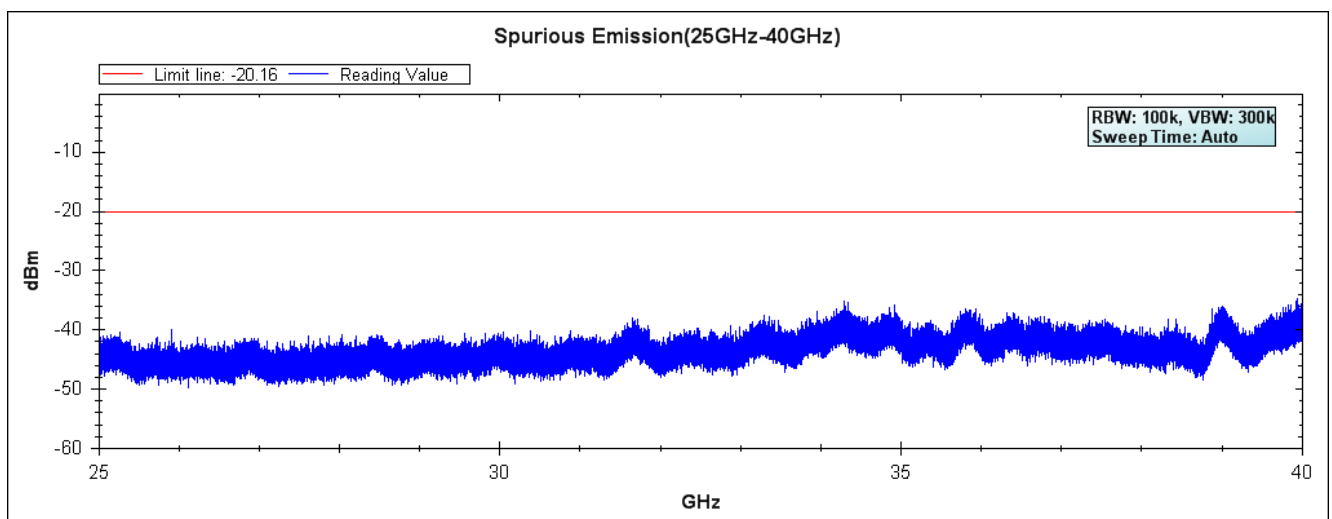
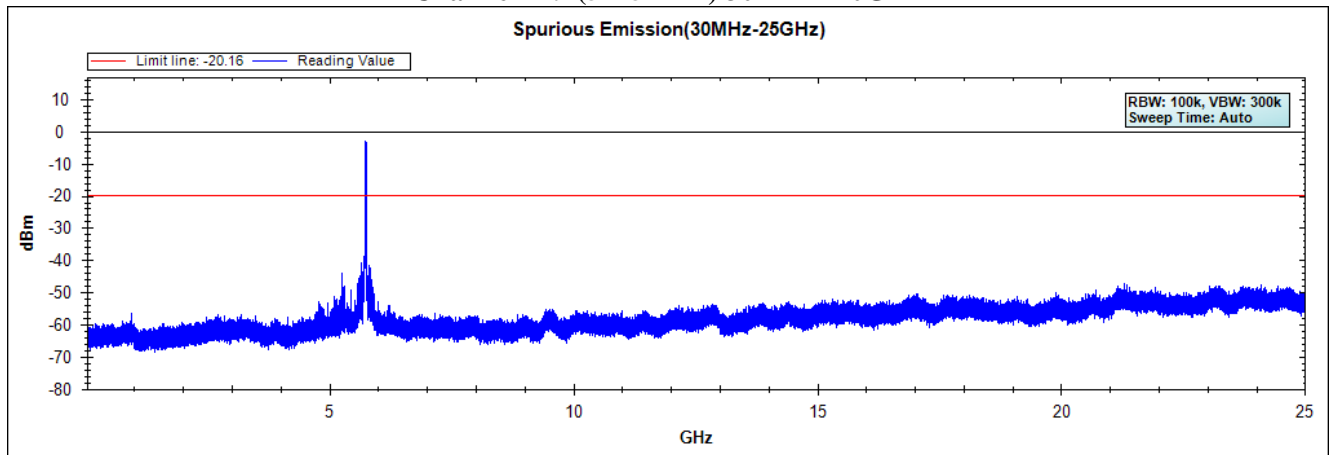
Channel 07 (2452MHz) 30MHz -25GHz



Note: The above test pattern is synthesized by multiple of the frequency range.

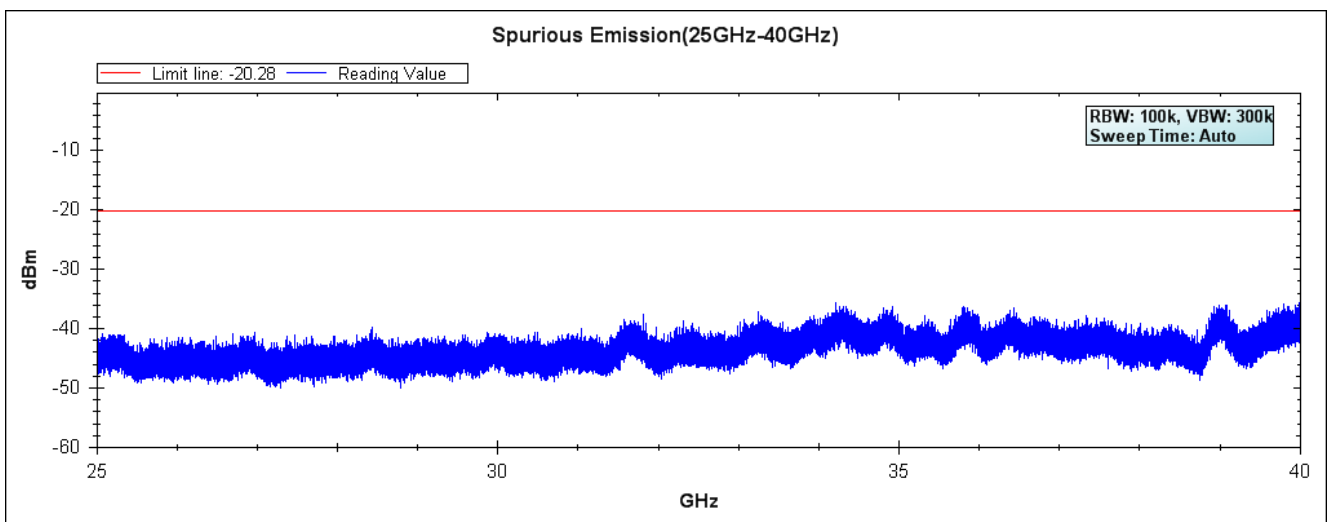
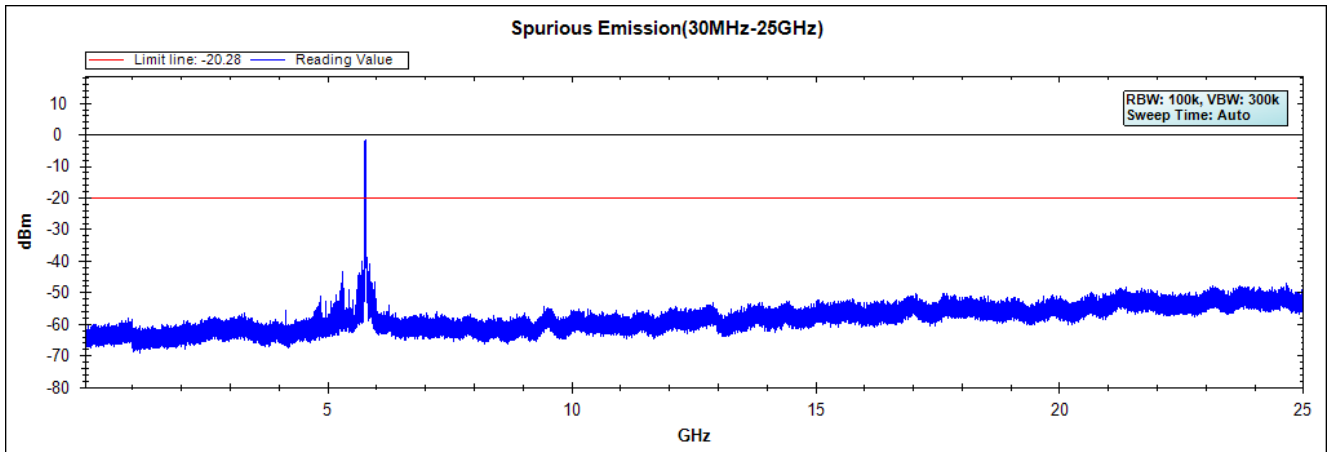
Product : Network Media Module
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band)

Channel 149 (5745MHz) 30MHz -40GHz



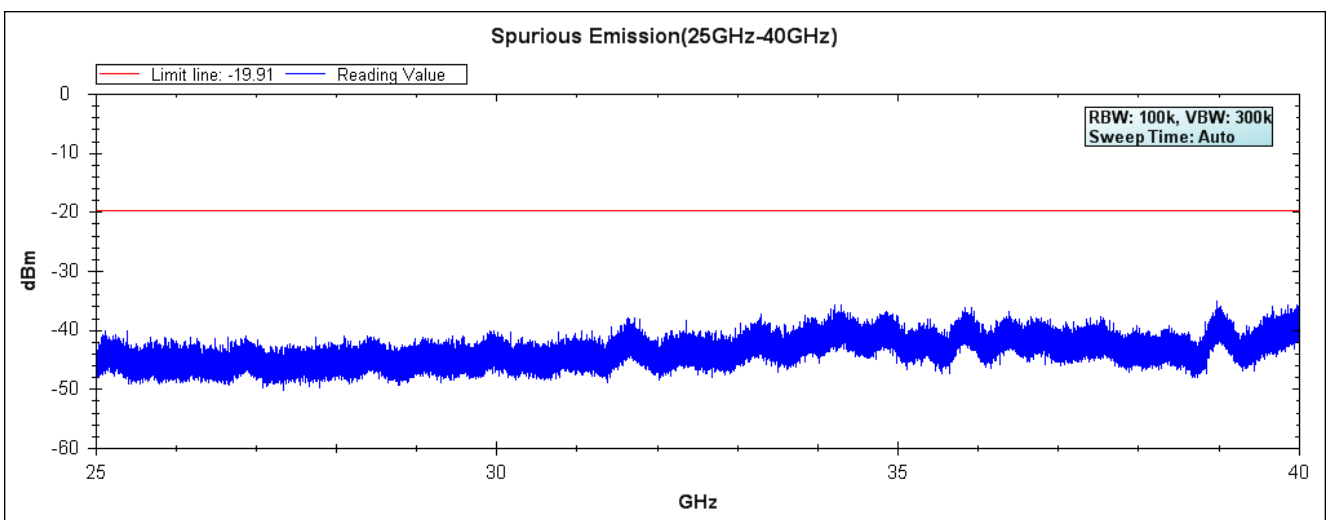
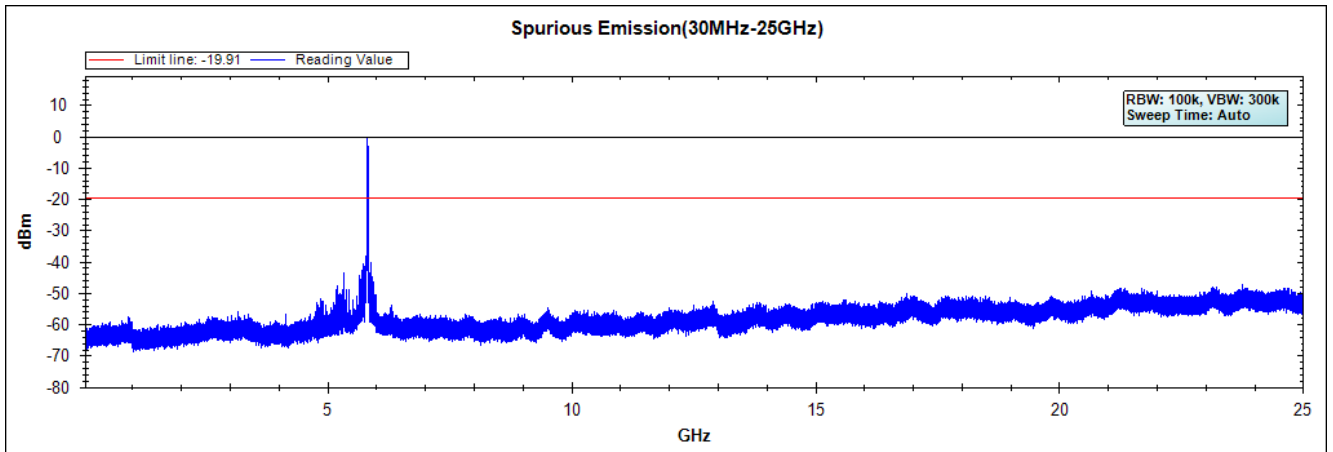
Note: The above test pattern is synthesized by multiple of the frequency range.

Channel 157 (5785MHz) 30MHz -40GHz



Note: The above test pattern is synthesized by multiple of the frequency range.

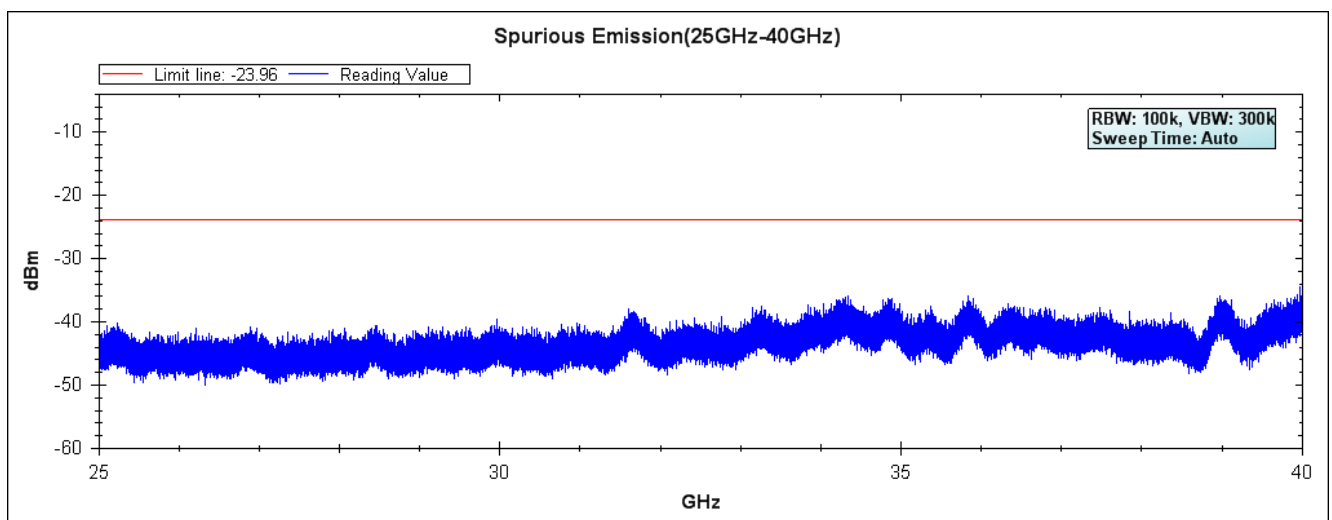
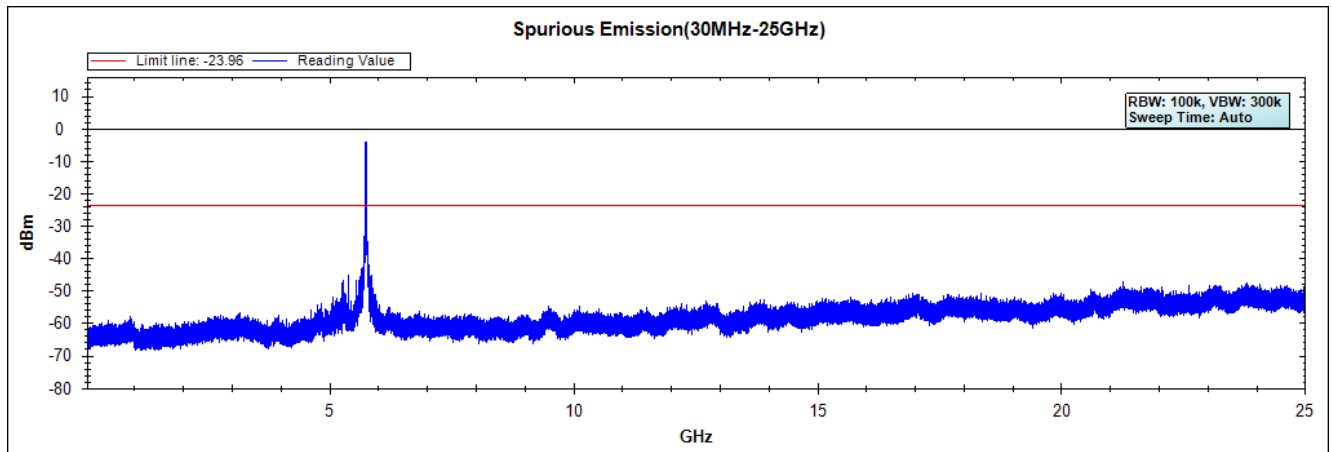
Channel 165 (5825MHz) 30MHz -40GHz



Note: The above test pattern is synthesized by multiple of the frequency range.

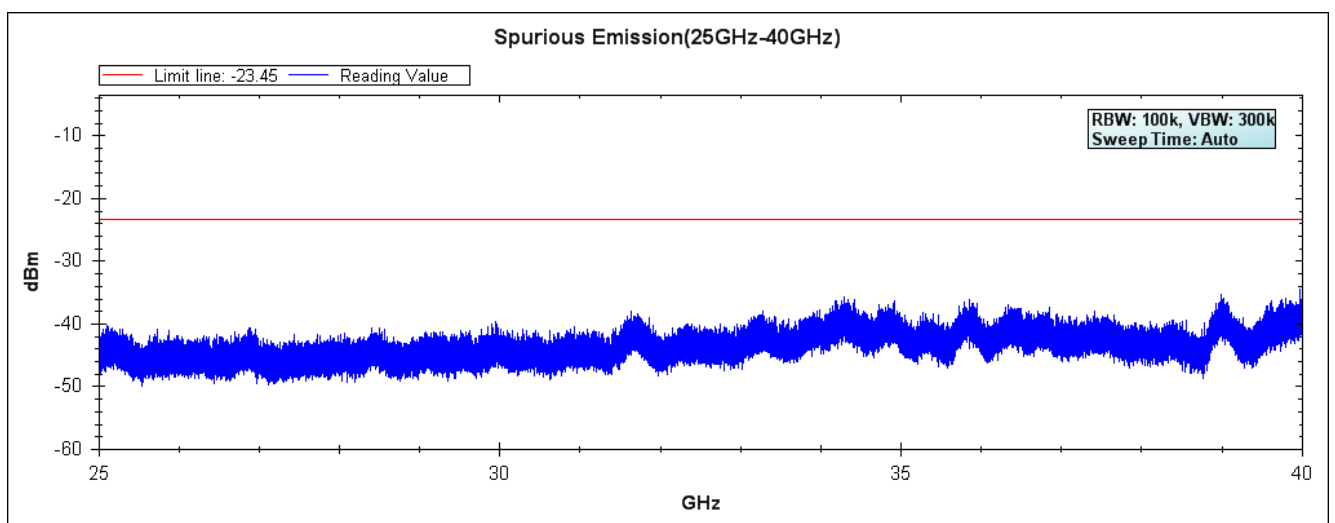
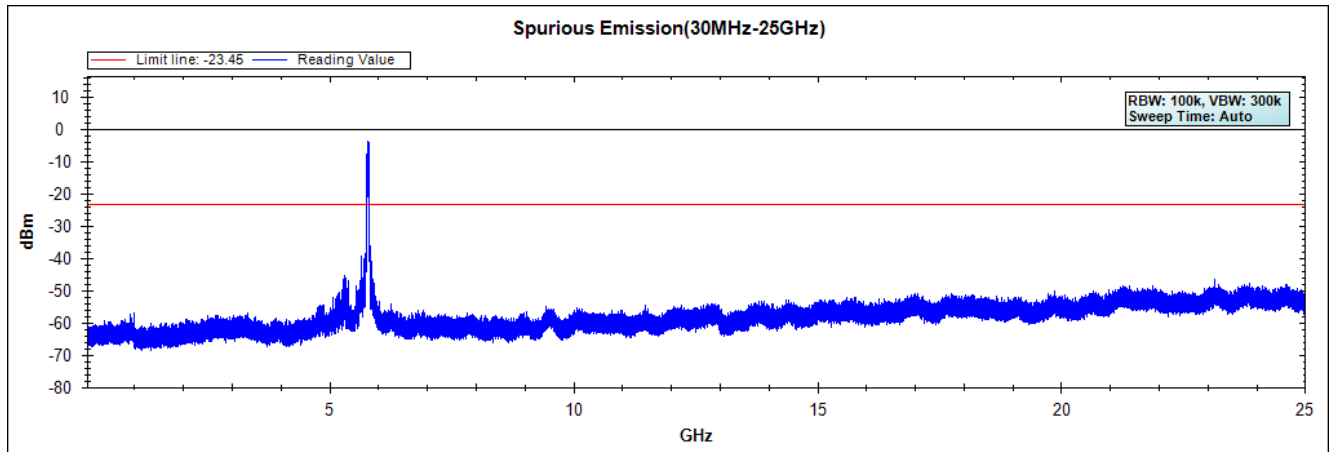
Product : Network Media Module
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band)

Channel 151 (5755MHz) 30MHz -40GHz



Note: The above test pattern is synthesized by multiple of the frequency range.

Channel 159 (5795MHz) 30MHz -40GHz



Note: The above test pattern is synthesized by multiple of the frequency range.

6. Band Edge

6.1. Test Equipment

RF Conducted Measurement

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

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014
X	8-WAY Power Divider	JFW	50PD-647 / 526770 0916	Apr., 2014

Note:

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

RF Radiated Measurement:

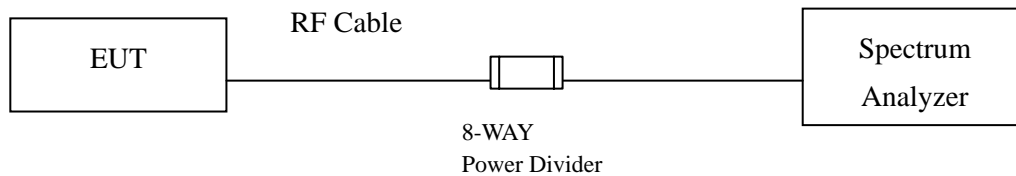
The following test equipments are used during the band edge tests:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 3		Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2014
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2014
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2014
		Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2014
	X	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2014
		Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2014
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2014
		Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2014
	X	Coaxial Cable	Quietek	QTK-CABLE/ CAB5	Feb., 2014
	X	Controller	Quietek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

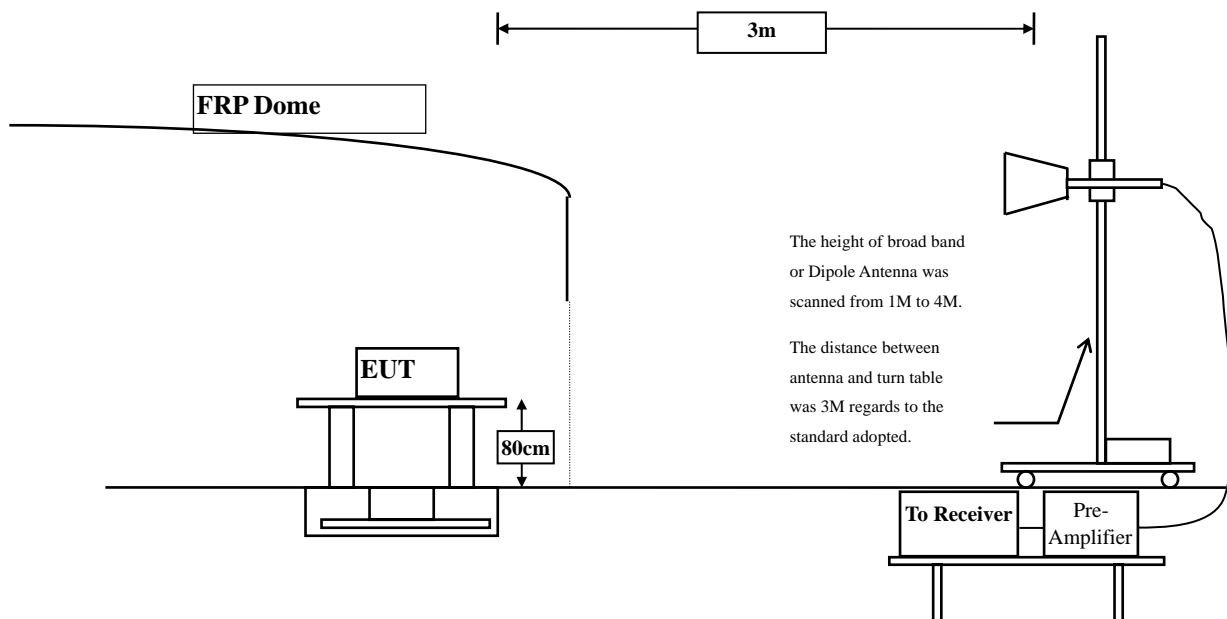
- Note:
1. All instruments are calibrated every one year.
 2. The test instruments marked by "X" are used to measure the final test results.

6.2. Test Setup

RF Conducted Measurement



RF Radiated Measurement:



6.3. Limits

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

6.4. Test Procedure

The EUT was setup according to ANSI C63.10, 2009 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

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

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

6.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

6.6. Test Result of Band Edge

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)

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
01 (Peak)	2375.400	31.453	25.486	56.938	74.00	54.00	Pass
01 (Peak)	2390.000	31.509	24.511	56.020	74.00	54.00	Pass
01 (Peak)	2400.000	31.561	31.064	62.625	--	--	--
01 (Peak)	2413.000	31.646	61.881	93.527	--	--	--
01 (Average)	2370.800	31.435	13.156	44.590	74.00	54.00	Pass
01 (Average)	2390.000	31.509	12.448	43.957	74.00	54.00	Pass
01 (Average)	2400.000	31.561	23.738	55.299	--	--	--
01 (Average)	2412.800	31.645	57.831	89.475	--	--	--

Figure Channel 01: Horizontal (Peak)

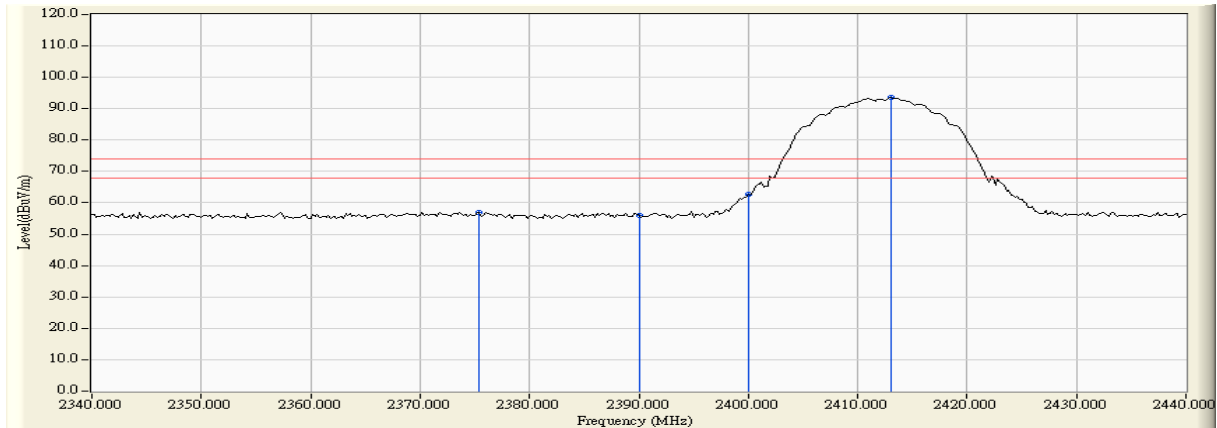
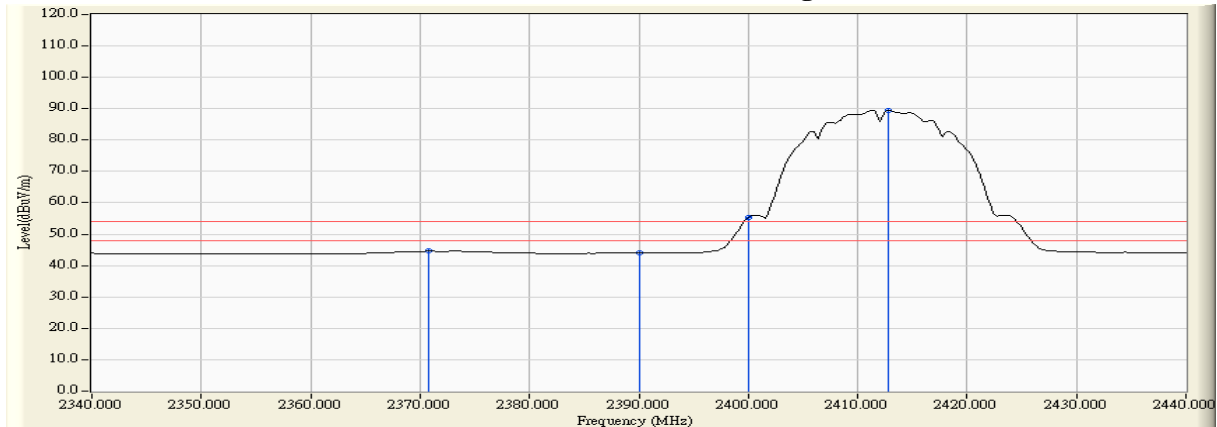


Figure Channel 01: Horizontal (Average)



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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)

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
01 (Peak)	2372.000	30.999	29.113	60.112	74.00	54.00	Pass
01 (Peak)	2390.000	30.915	26.145	57.060	74.00	54.00	Pass
01 (Peak)	2400.000	30.912	37.357	68.269	--	--	--
01 (Peak)	2413.000	30.956	70.322	101.278	--	--	--
01 (Average)	2370.800	31.005	16.516	47.520	74.00	54.00	Pass
01 (Average)	2390.000	30.915	13.905	44.820	74.00	54.00	Pass
01 (Average)	2400.000	30.912	31.642	62.554	--	--	--
01 (Average)	2412.800	30.955	66.296	97.251	--	--	--

Figure Channel 01: Vertical (Peak)

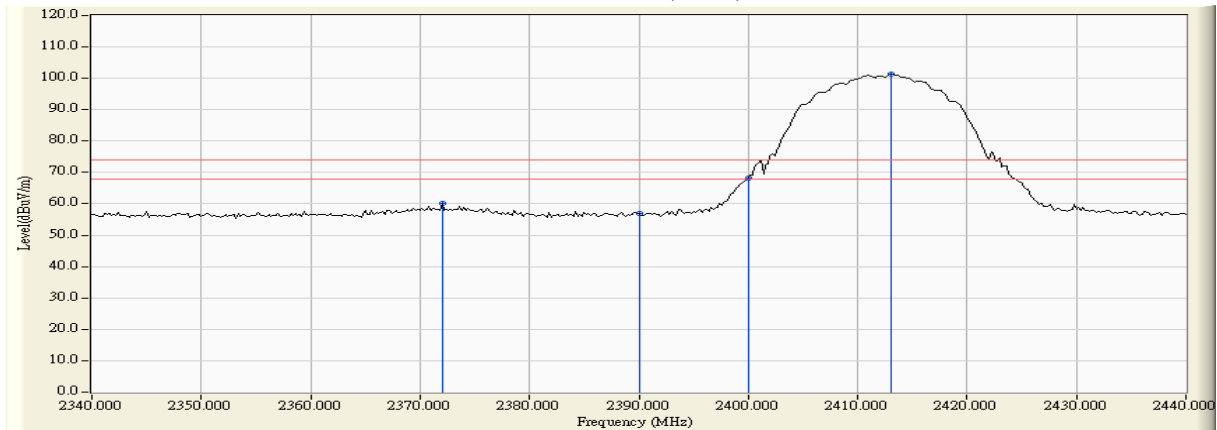
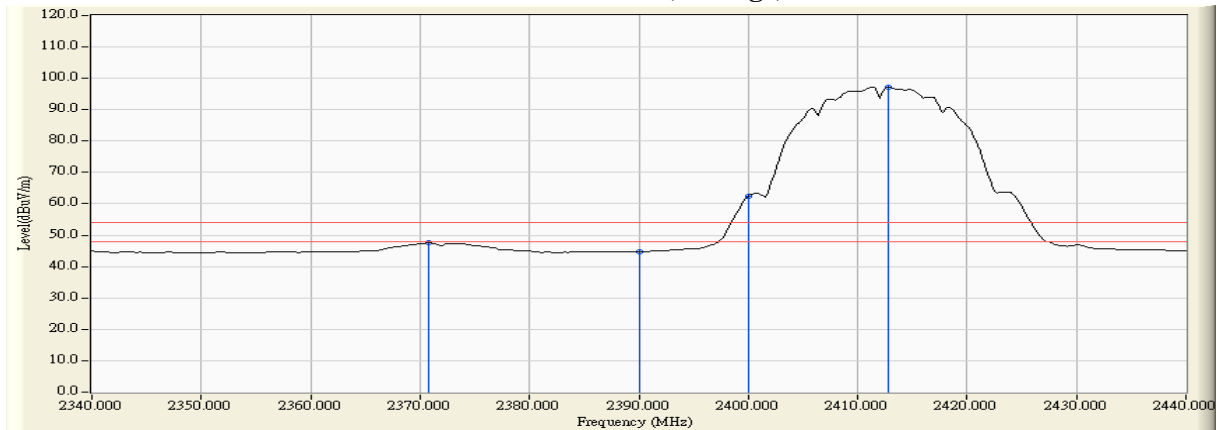


Figure Channel 01: Vertical (Average)



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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)

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
11 (Peak)	2462.900	32.026	66.229	98.255	--	--	--
11 (Peak)	2483.500	32.182	24.364	56.546	74.00	54.00	Pass
11 (Peak)	2490.700	32.237	25.638	57.874	74.00	54.00	Pass
11 (Average)	2461.300	32.014	63.015	95.029	--	--	--
11 (Average)	2483.500	32.182	13.261	45.443	74.00	54.00	Pass
11 (Average)	2502.700	32.265	15.069	47.334	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

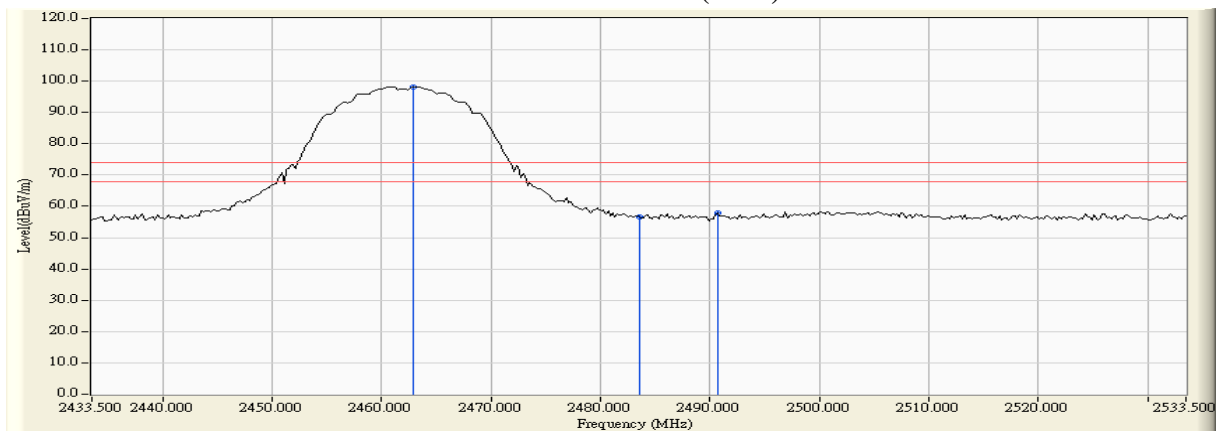
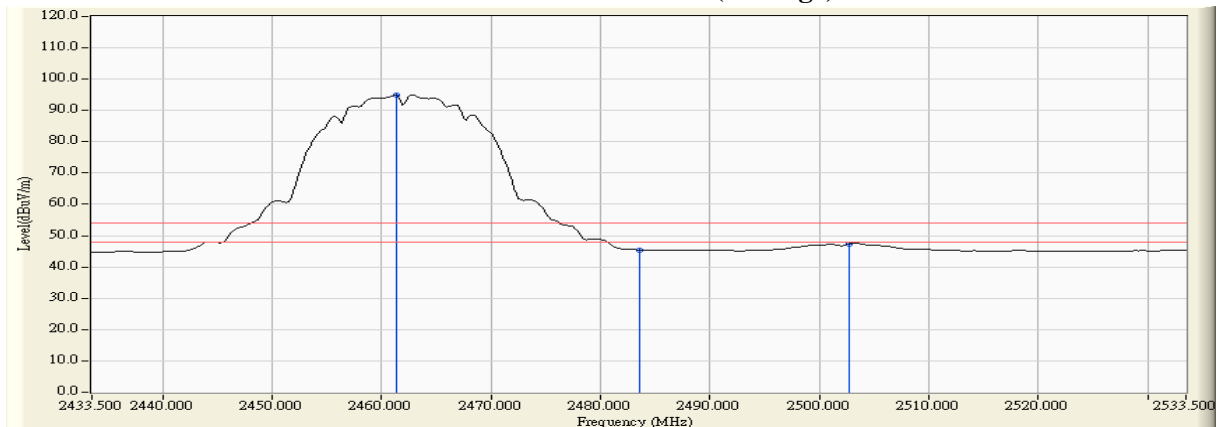


Figure Channel 11: Horizontal (Average)



Note:

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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)

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
11 (Peak)	2462.900	31.296	74.125	105.421	--	--	--
11 (Peak)	2483.500	31.435	28.982	60.417	74.00	54.00	Pass
11 (Peak)	2498.500	31.524	31.011	62.535	74.00	54.00	Pass
11 (Average)	2461.300	31.286	70.246	101.532	--	--	--
11 (Average)	2483.500	31.435	17.658	49.093	74.00	54.00	Pass
11 (Average)	2499.300	31.527	20.607	52.133	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

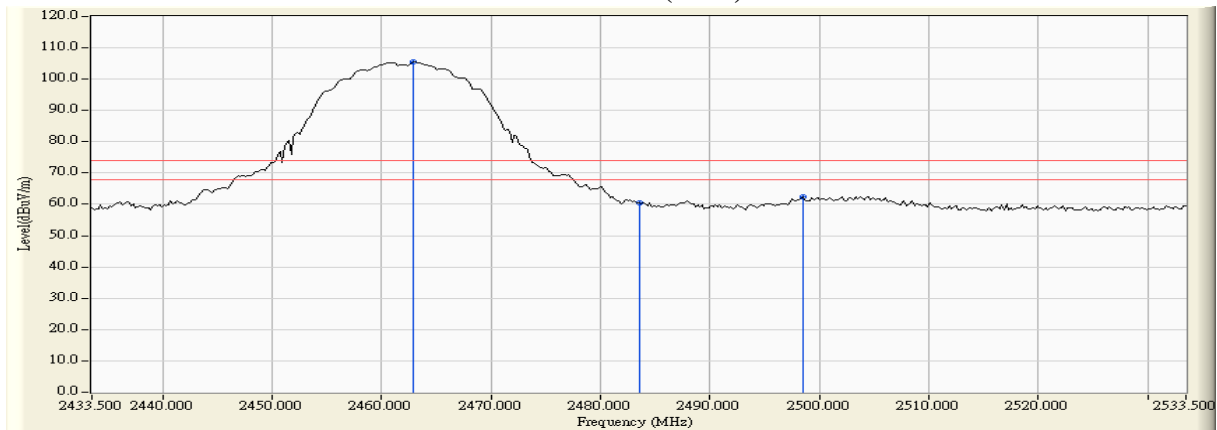
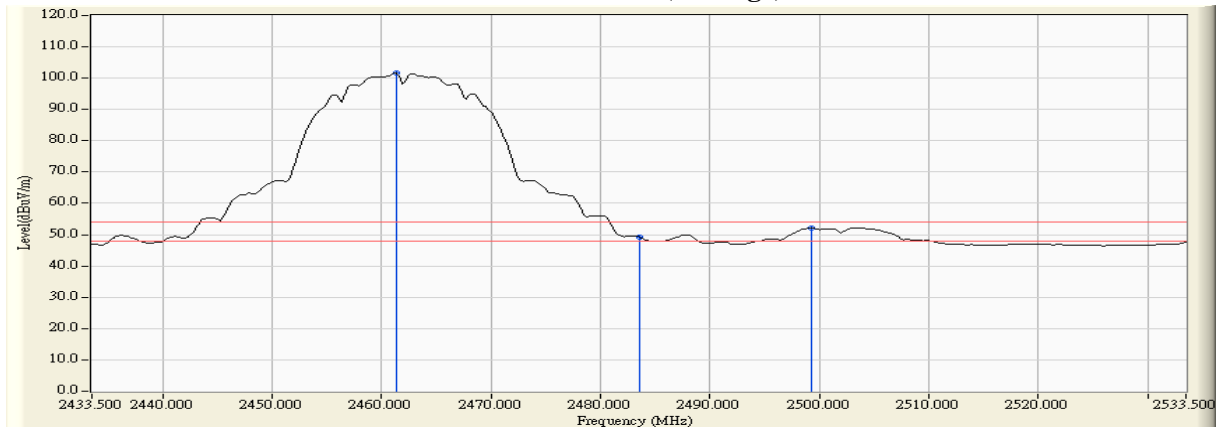


Figure Channel 11: Vertical (Average)



Note:

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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)

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
01 (Peak)	2390.000	31.509	33.632	65.141	74.00	54.00	Pass
01 (Peak)	2400.000	31.561	45.980	77.541	--	--	--
01 (Peak)	2415.000	31.661	69.433	101.094	--	--	--
01 (Average)	2390.000	31.509	14.795	46.304	74.00	54.00	Pass
01 (Average)	2400.000	31.561	22.062	53.623	--	--	--
01 (Average)	2413.600	31.650	57.688	89.338	--	--	--

Figure Channel 01: Horizontal (Peak)

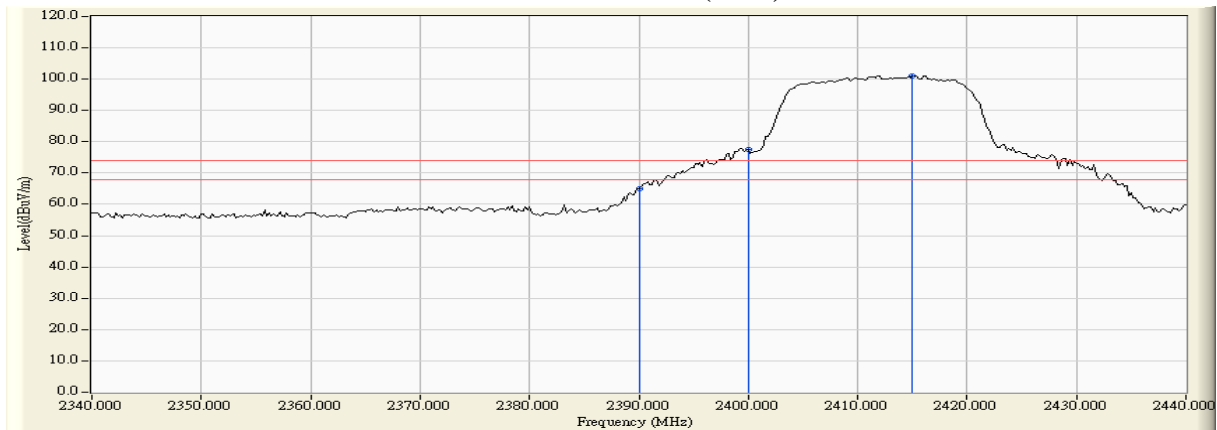
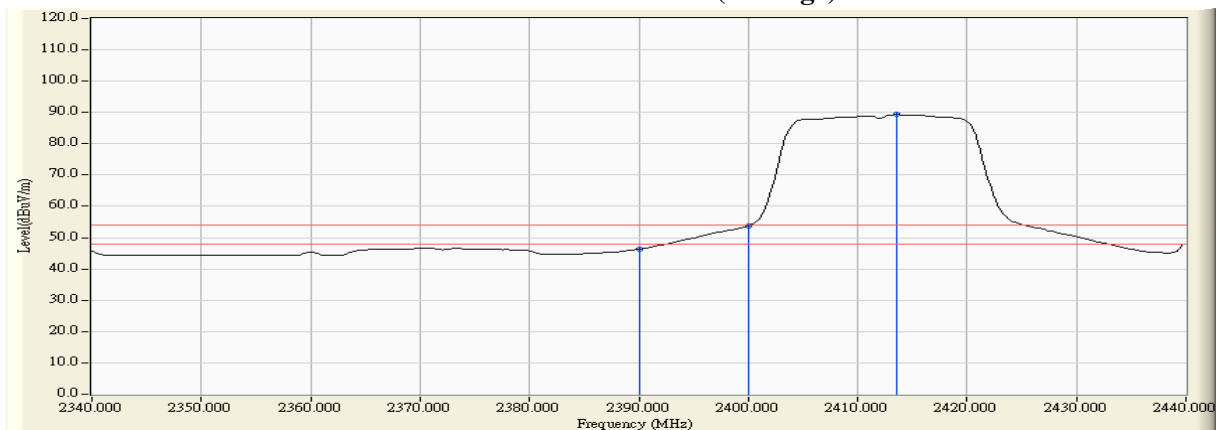


Figure Channel 01: Horizontal (Average)



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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)

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
01 (Peak)	2390.000	30.915	42.774	73.689	74.00	54.00	Pass
01 (Peak)	2400.000	30.912	54.077	84.989	--	--	--
01 (Peak)	2415.200	30.971	77.048	108.019	--	--	--
01 (Average)	2390.000	30.915	21.228	52.143	74.00	54.00	Pass
01 (Average)	2400.000	30.912	32.250	63.162	--	--	--
01 (Average)	2413.400	30.959	64.754	95.713	--	--	--

Figure Channel 01: Vertical (Peak)

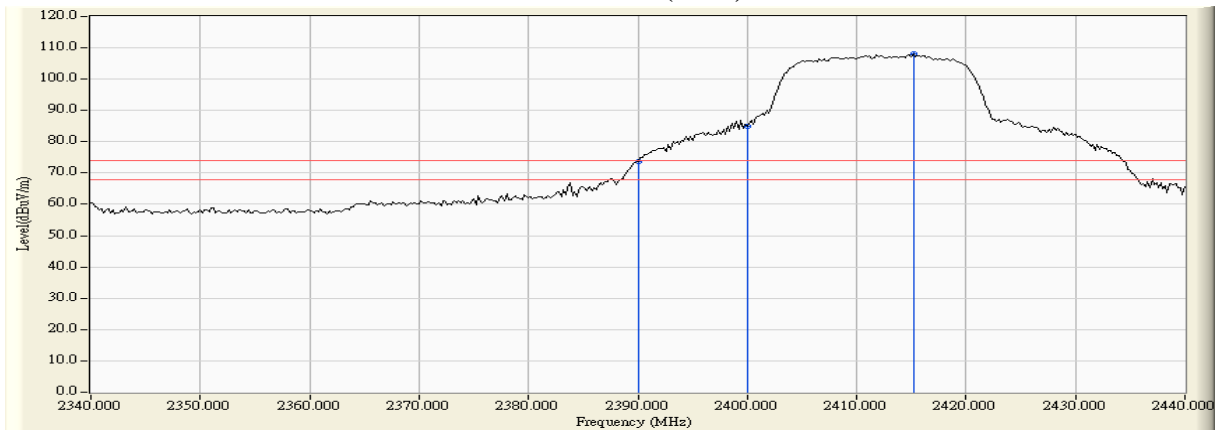
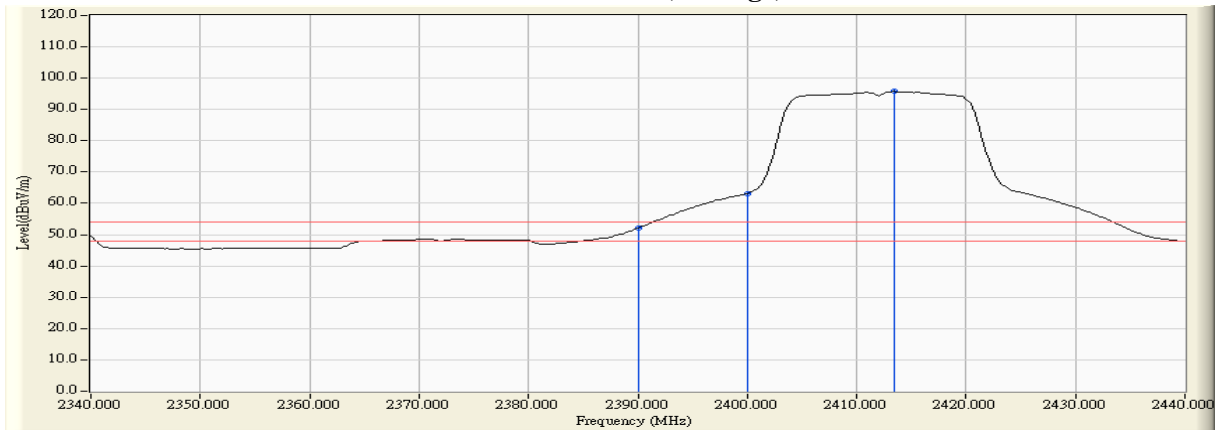


Figure Channel 01: Vertical (Average)



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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)

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
11 (Peak)	2461.900	32.018	66.426	98.445	--	--	--
11 (Peak)	2483.500	32.182	30.560	62.742	74.00	54.00	Pass
11 (Average)	2460.700	32.010	54.407	86.417	--	--	--
11 (Average)	2483.500	32.182	13.889	46.071	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

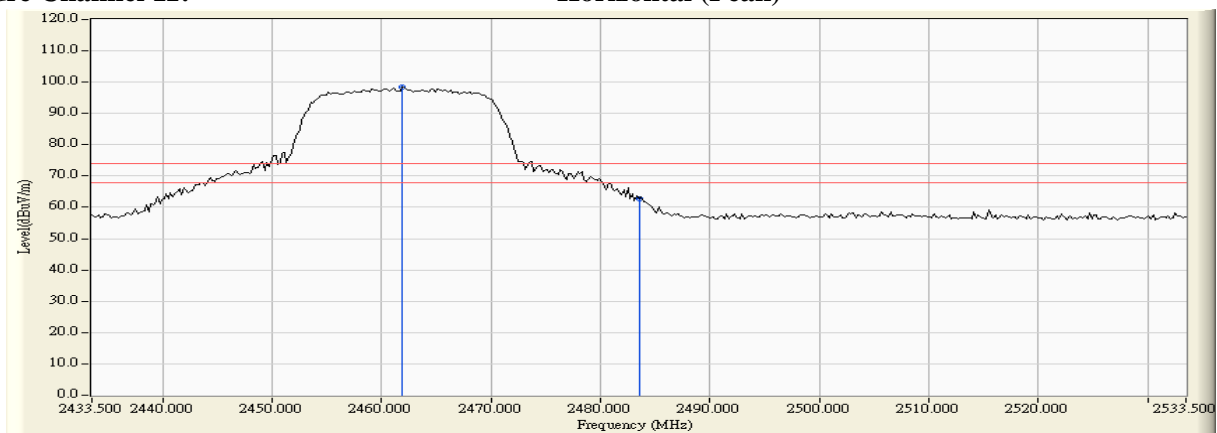
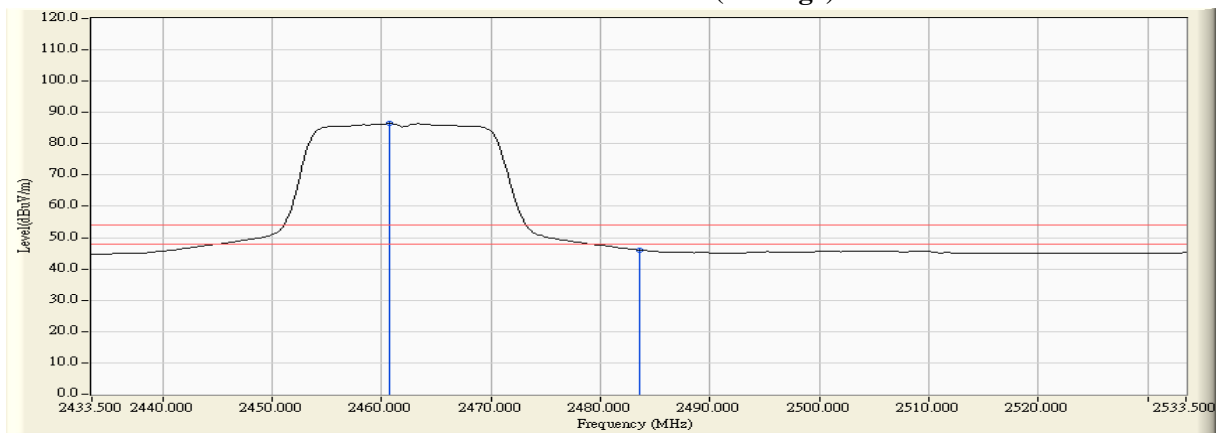


Figure Channel 11: Horizontal (Average)



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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)

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
11 (Peak)	2465.100	31.312	73.778	105.089	--	--	--
11 (Peak)	2483.500	31.435	39.166	70.601	74.00	54.00	Pass
11 (Average)	2460.700	31.281	61.556	92.837	--	--	--
11 (Average)	2483.500	31.435	19.039	50.474	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

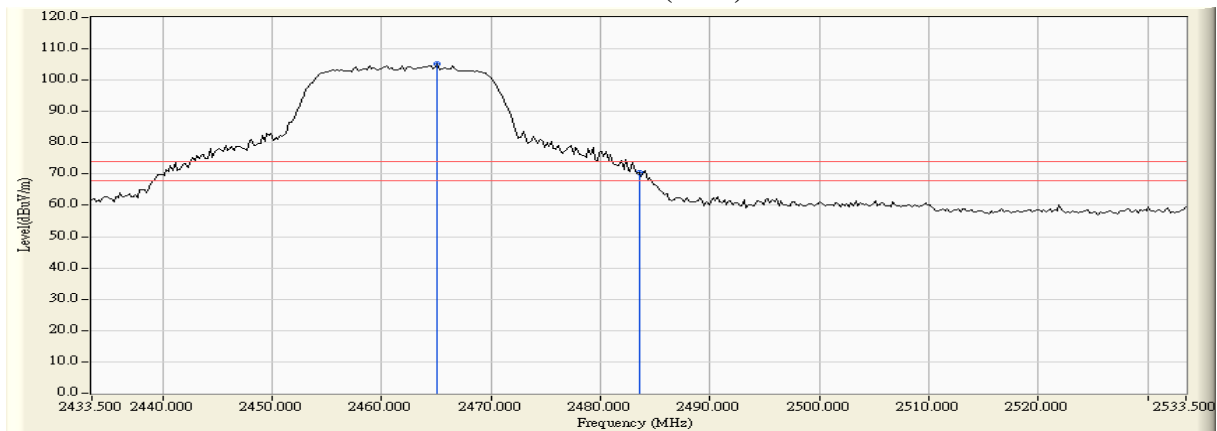
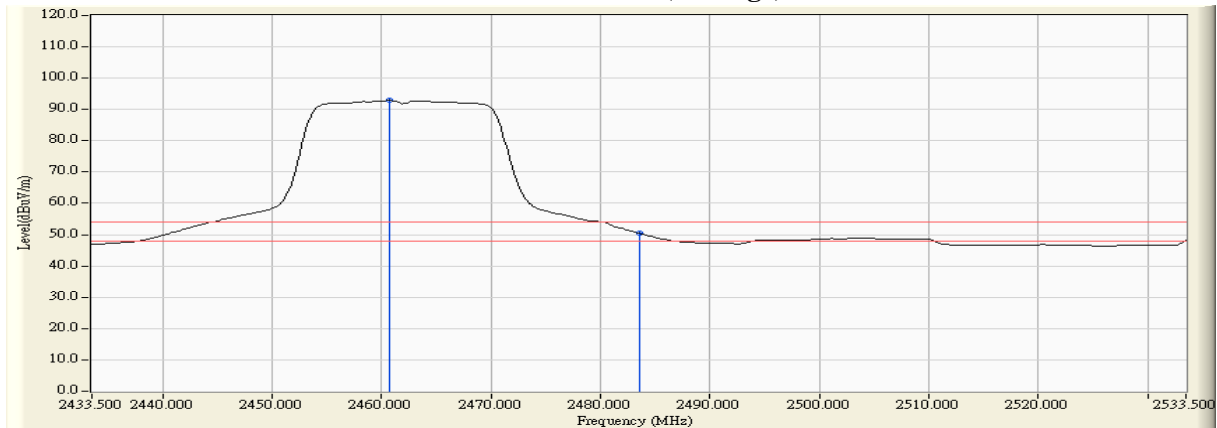


Figure Channel 11: Vertical (Average)



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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band)

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
01 (Peak)	2390.000	31.509	29.233	60.742	74.00	54.00	Pass
01 (Peak)	2400.000	31.561	44.233	75.794	--	--	--
01 (Peak)	2415.000	31.661	68.463	100.124	--	--	--
01 (Average)	2374.400	31.448	14.410	45.858	74.00	54.00	Pass
01 (Average)	2390.000	31.509	13.672	45.181	74.00	54.00	Pass
01 (Average)	2400.000	31.561	18.989	50.550	--	--	--
01 (Average)	2413.800	31.651	56.571	88.223	--	--	--

Figure Channel 01: Horizontal (Peak)

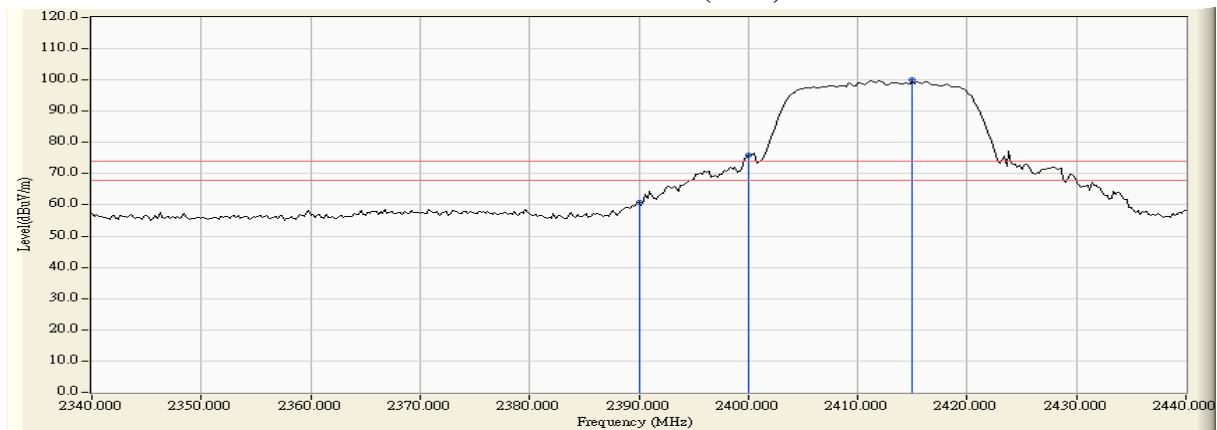
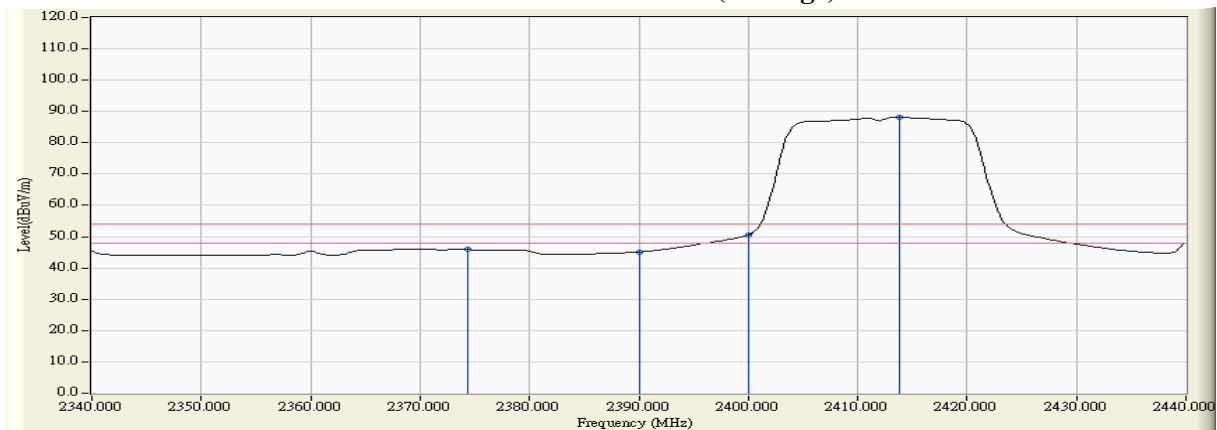


Figure Channel 01: Horizontal (Average)



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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band)

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
01 (Peak)	2390.000	30.915	41.960	72.875	74.00	54.00	Pass
01 (Peak)	2400.000	30.912	53.238	84.150	--	--	--
01 (Peak)	2414.000	30.963	76.092	107.055	--	--	--
01 (Average)	2390.000	30.915	19.279	50.194	74.00	54.00	Pass
01 (Average)	2400.000	30.912	28.459	59.371	--	--	--
01 (Average)	2413.600	30.960	63.420	94.380	--	--	--

Figure Channel 01: Vertical (Peak)

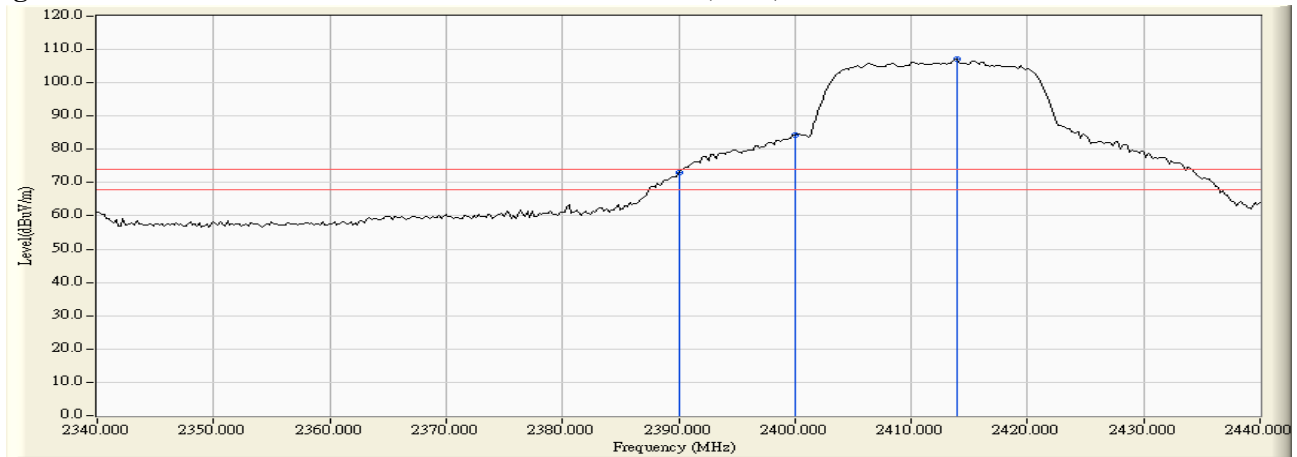
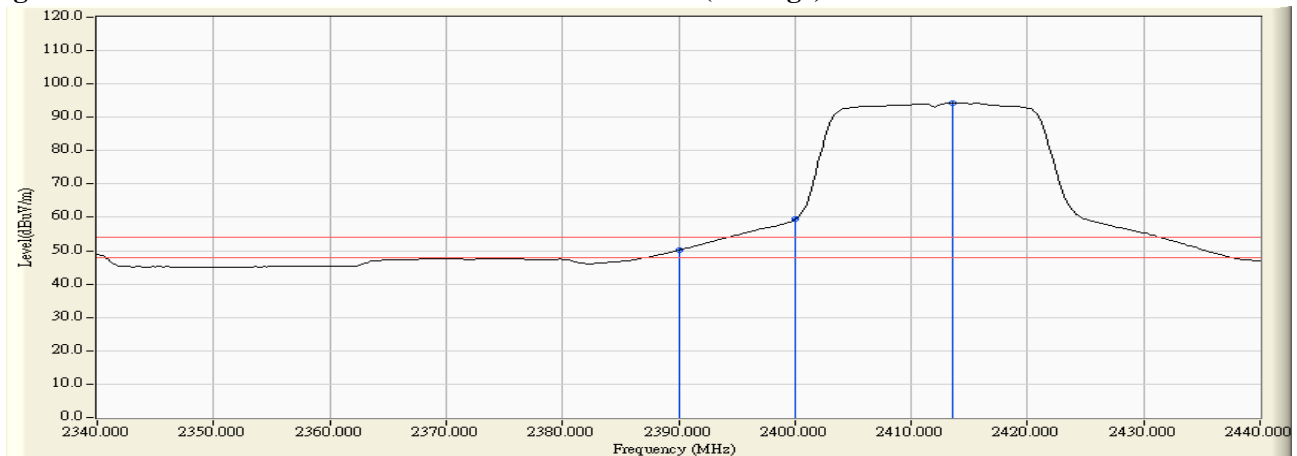


Figure Channel 01: Vertical (Average)



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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band)

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
11 (Peak)	2461.900	32.018	66.036	98.055	--	--	--
11 (Peak)	2483.500	32.182	30.465	62.647	74.00	54.00	Pass
11 (Average)	2460.700	32.010	53.971	85.981	--	--	--
11 (Average)	2483.500	32.182	13.584	45.766	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

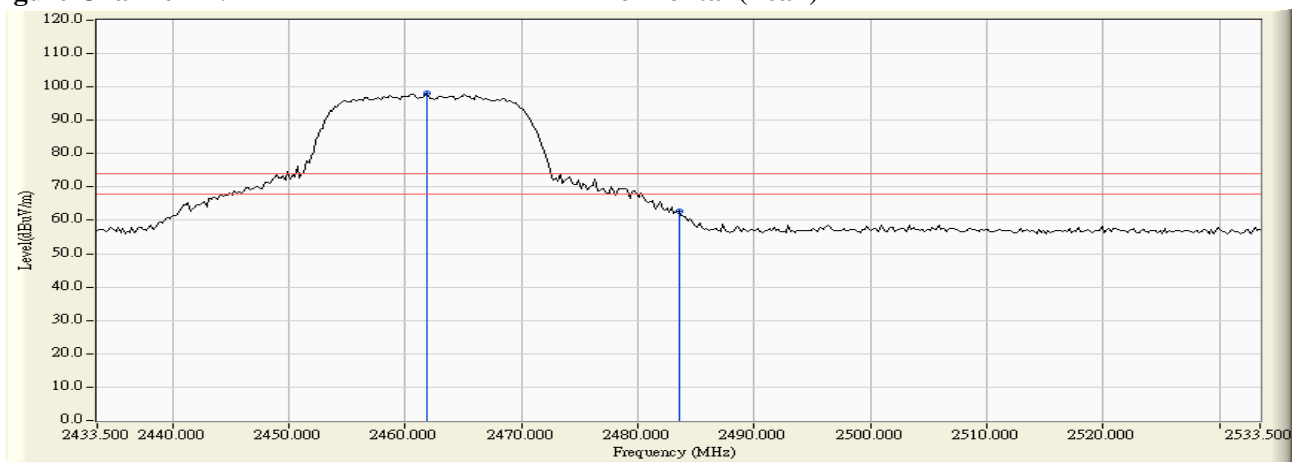
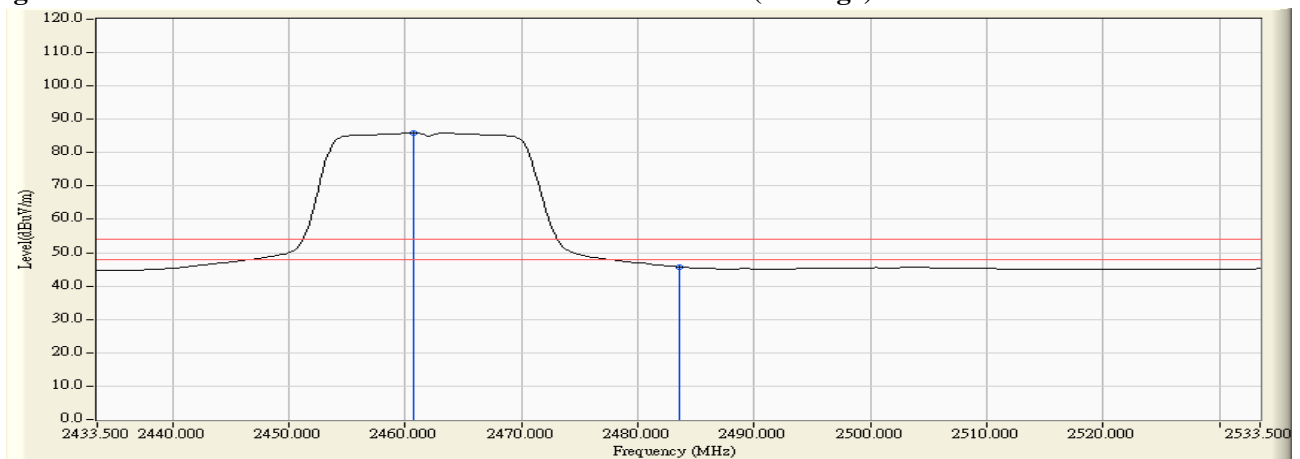


Figure Channel 11: Horizontal (Average)



Note:

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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band)

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
11 (Peak)	2463.700	31.302	73.667	104.969	--	--	--
11 (Peak)	2483.500	31.435	41.120	72.555	74.00	54.00	Pass
11 (Average)	2463.300	31.299	61.168	92.467	--	--	--
11 (Average)	2483.500	31.435	19.146	50.581	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

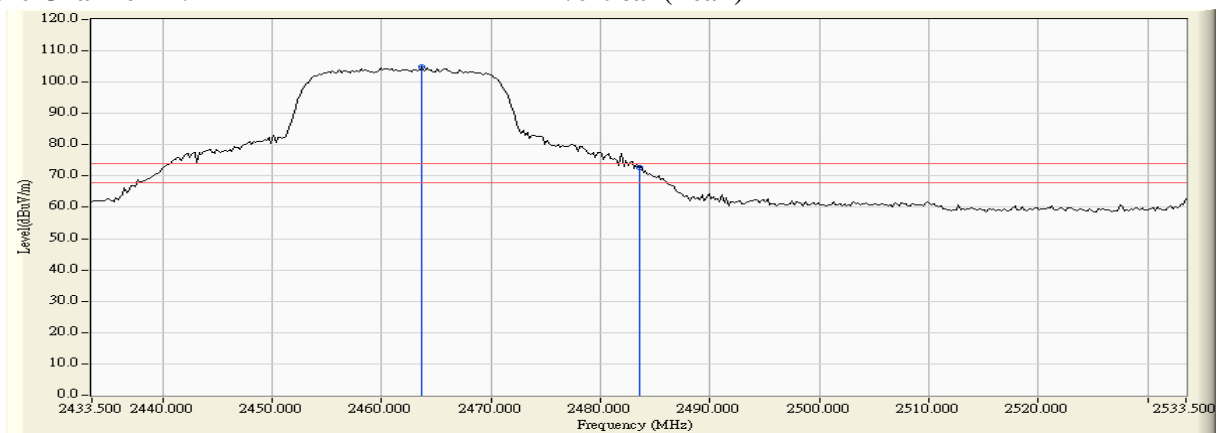
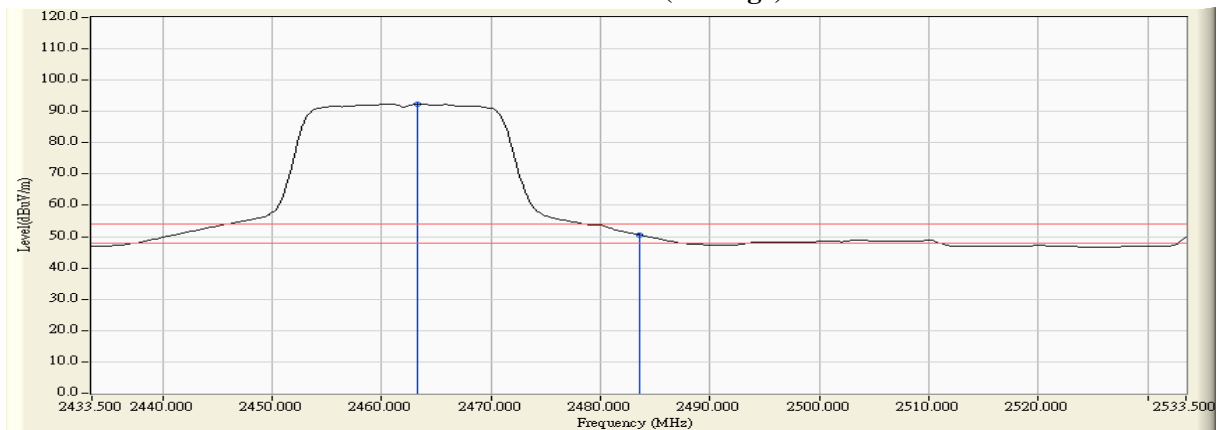


Figure Channel 11: Vertical (Average)



Note:

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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band)

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
03 (Peak)	2384.800	31.489	35.744	67.233	74.00	54.00	Pass
03 (Peak)	2390.000	31.509	32.352	63.861	74.00	54.00	Pass
03 (Peak)	2400.000	31.561	36.906	68.467	--	--	--
03 (Peak)	2415.200	31.662	64.515	96.178	--	--	--
03 (Average)	2360.200	31.392	17.504	48.896	74.00	54.00	Pass
03 (Average)	2390.000	31.509	17.218	48.727	74.00	54.00	Pass
03 (Average)	2400.000	31.561	20.746	52.307	--	--	--
03 (Average)	2424.600	31.735	51.298	83.033	--	--	--

Figure Channel 03: Horizontal (Peak)

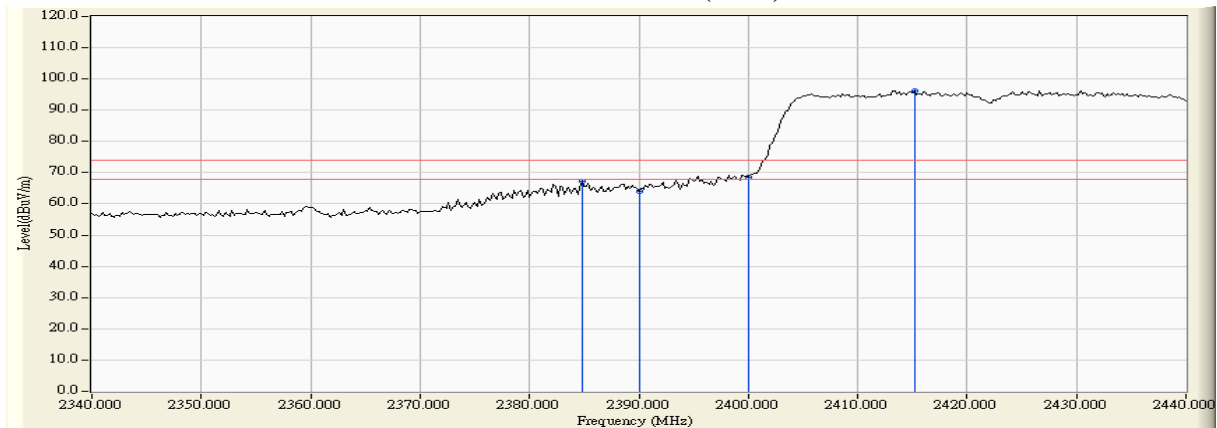
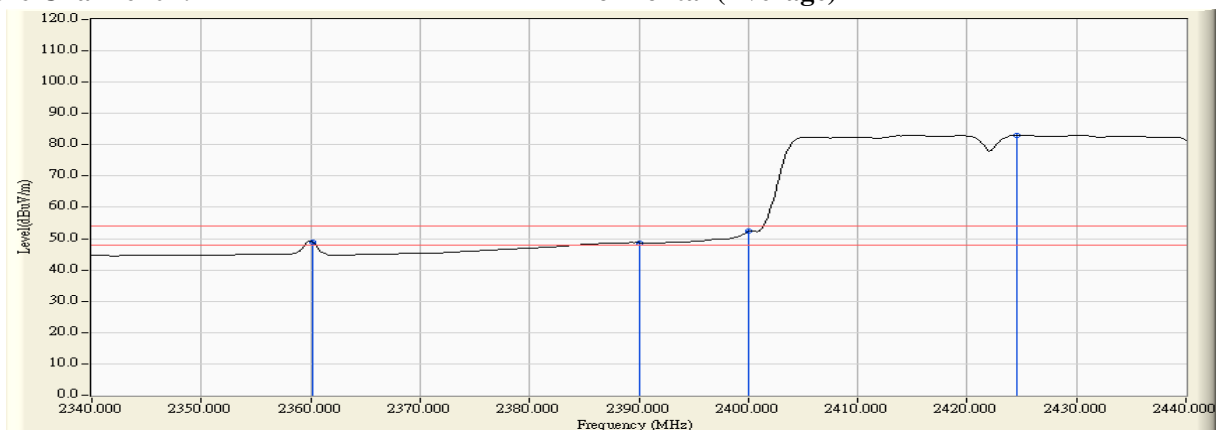


Figure Channel 01: Horizontal (Average)



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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band)

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
03 (Peak)	2384.800	30.939	41.715	72.654	74.00	54.00	Pass
03 (Peak)	2390.000	30.915	40.907	71.822	74.00	54.00	Pass
03 (Peak)	2400.000	30.912	45.271	76.183	--	--	--
03 (Peak)	2426.800	31.049	71.584	102.634	--	--	--
03 (Average)	2390.000	30.915	22.787	53.702	74.00	54.00	Pass
03 (Average)	2400.000	30.912	26.958	57.870	--	--	--
03 (Average)	2429.800	31.070	57.696	88.766	--	--	--

Figure Channel 01: Vertical (Peak)

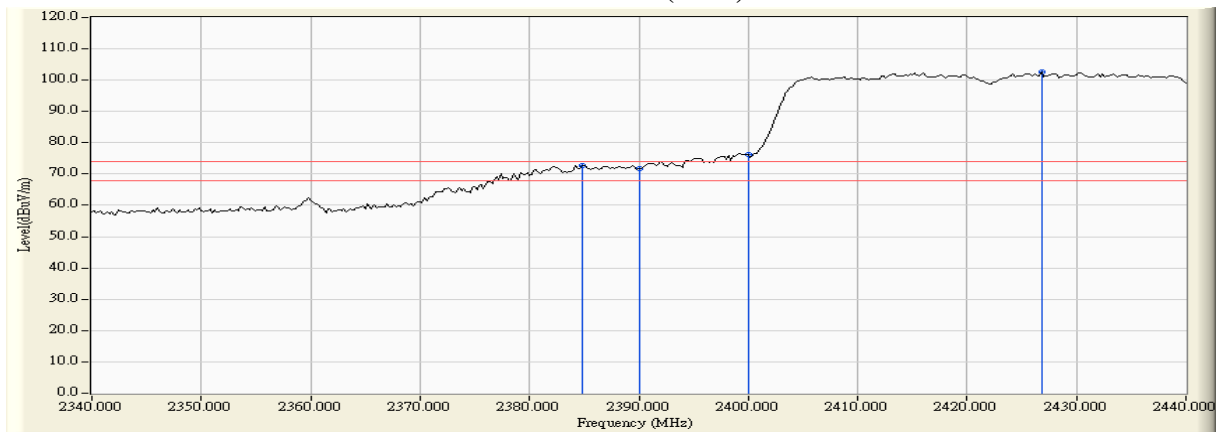
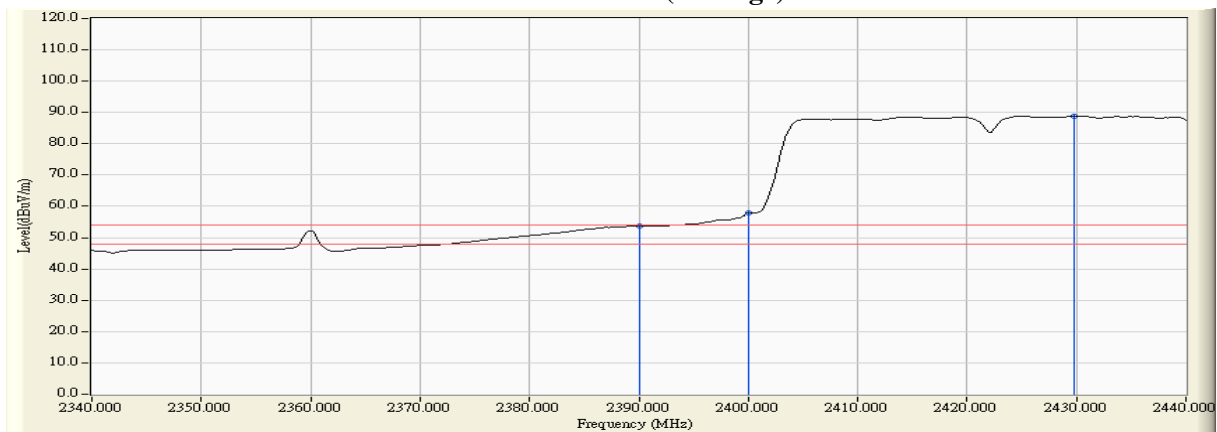


Figure Channel 01: Vertical (Average)



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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band)

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
09 (Peak)	2443.100	31.876	58.636	90.512	--	--	--
09 (Peak)	2483.500	32.182	24.919	57.101	74.00	54.00	Pass
09 (Average)	2443.500	31.878	46.172	78.051	--	--	--
09 (Average)	2483.500	32.182	13.801	45.983	74.00	54.00	Pass

Figure Channel 09: Horizontal (Peak)

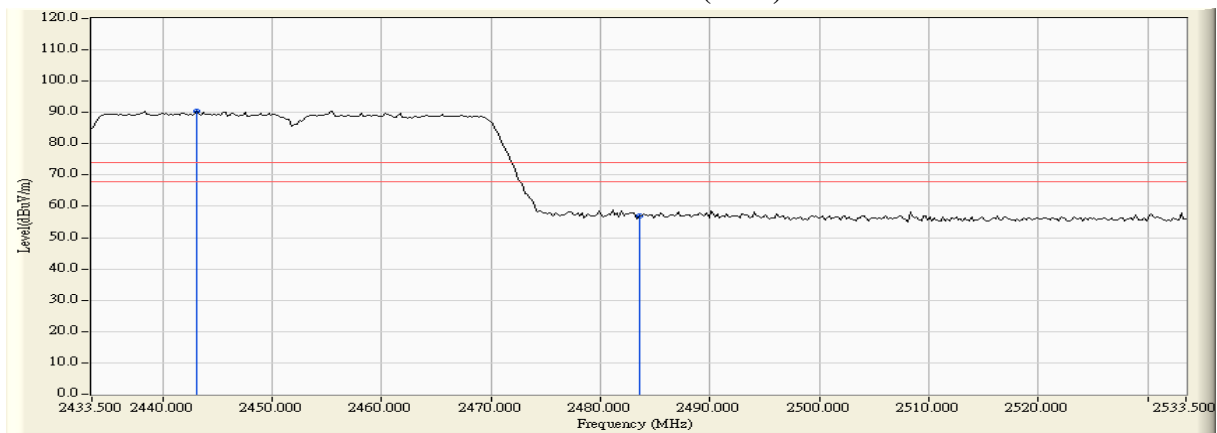
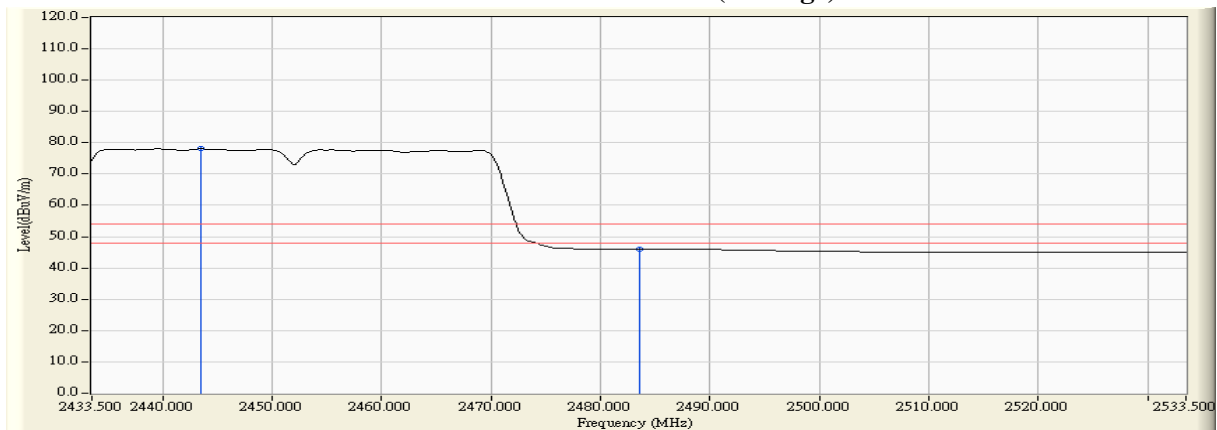


Figure Channel 09: Horizontal (Average)



Note:

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

Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band)

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
09 (Peak)	2443.100	31.160	66.615	97.775	--	--	--
09 (Peak)	2483.500	31.435	32.276	63.711	74.00	54.00	Pass
09 (Peak)	2491.700	31.491	33.669	65.160	74.00	54.00	Pass
09 (Average)	2443.700	31.165	53.184	84.348	--	--	--
09 (Average)	2483.500	31.435	18.057	49.492	74.00	54.00	Pass

Figure Channel 09: Vertical (Peak)

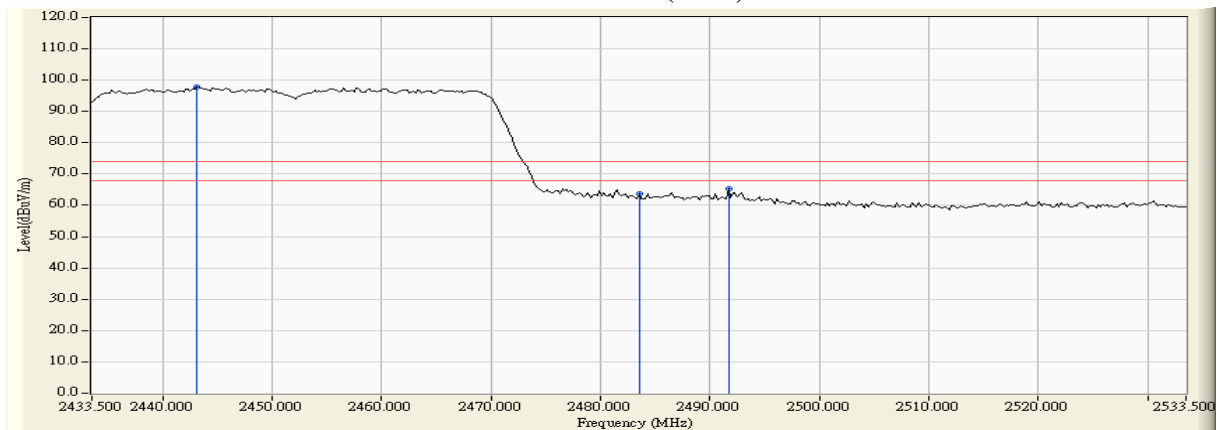
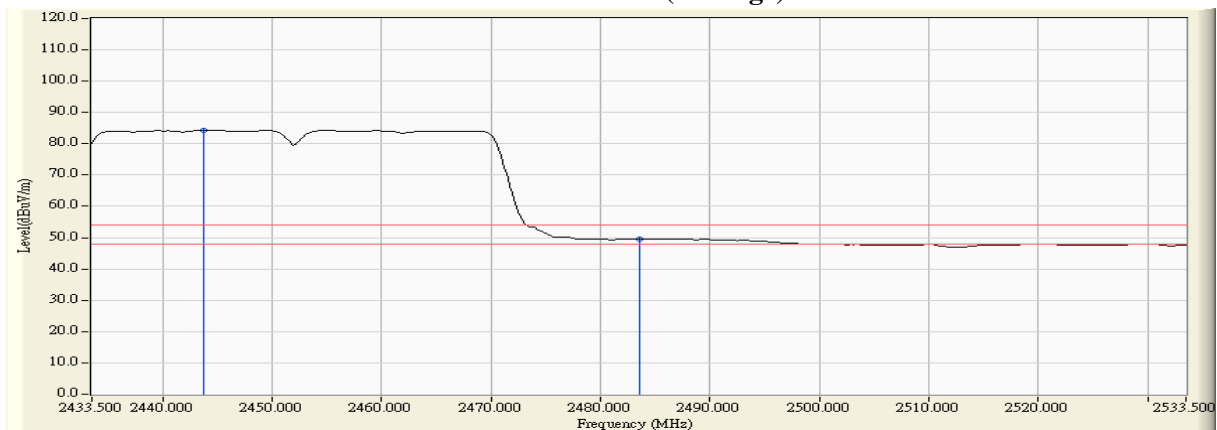


Figure Channel 09: Vertical (Average)

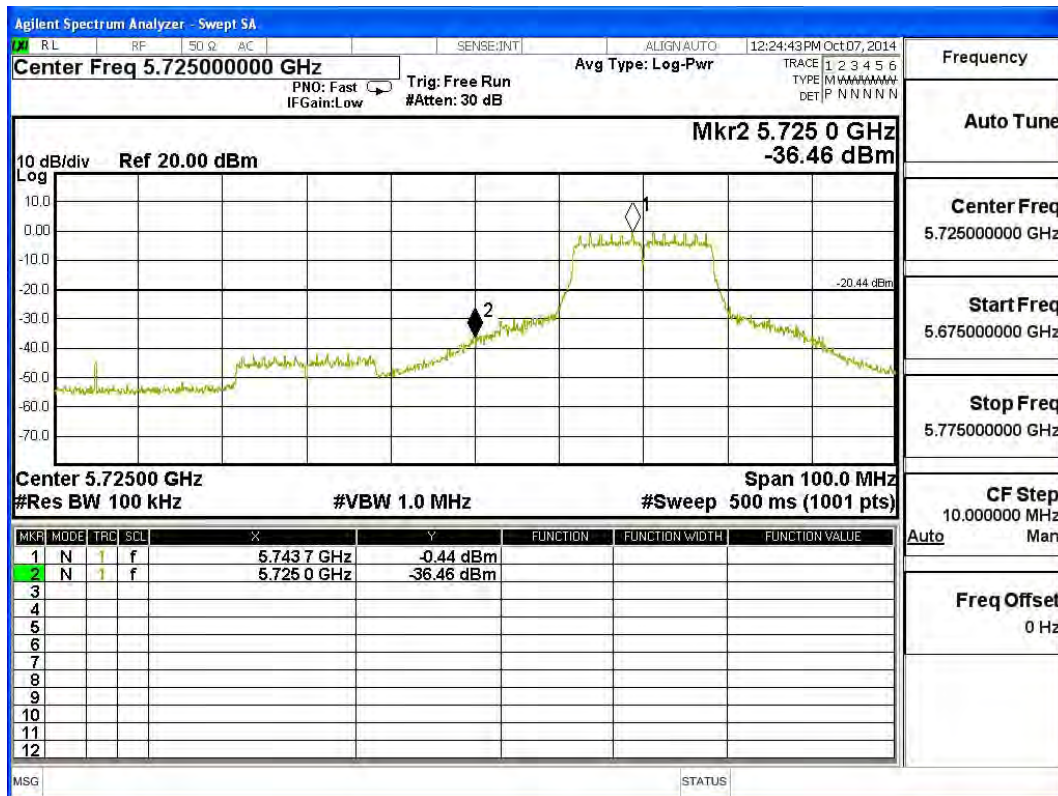


Note:

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

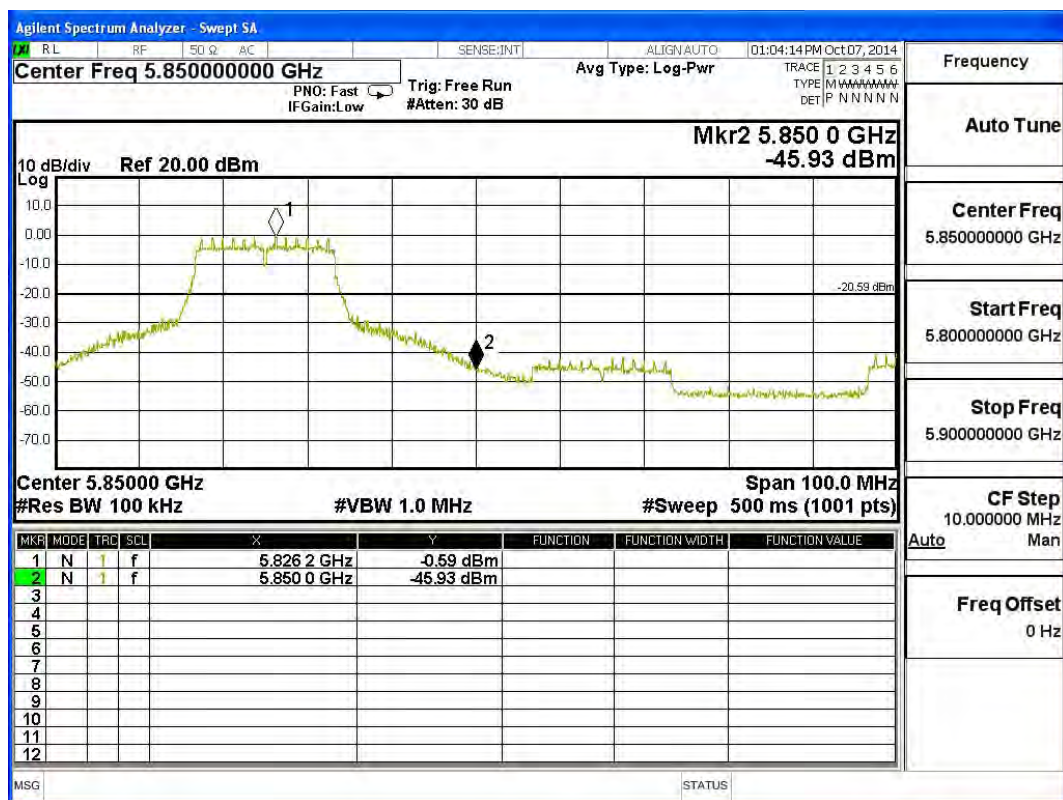
Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	36.02	>20	PASS



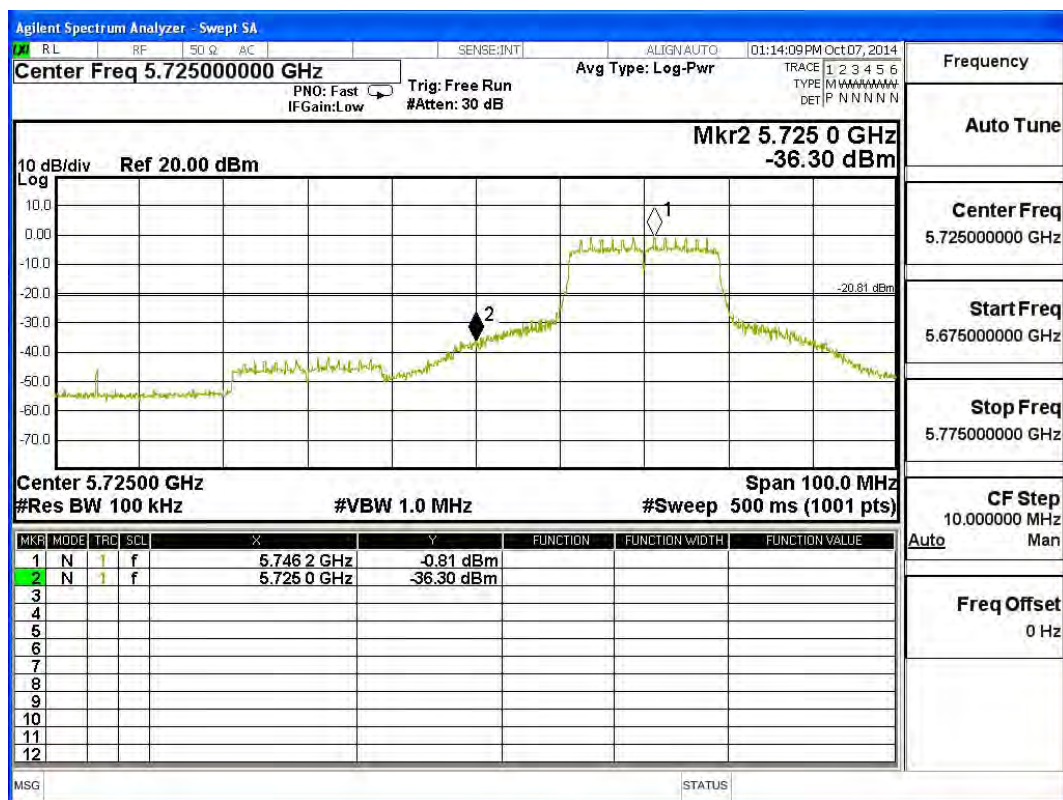
Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	45.34	>20	PASS



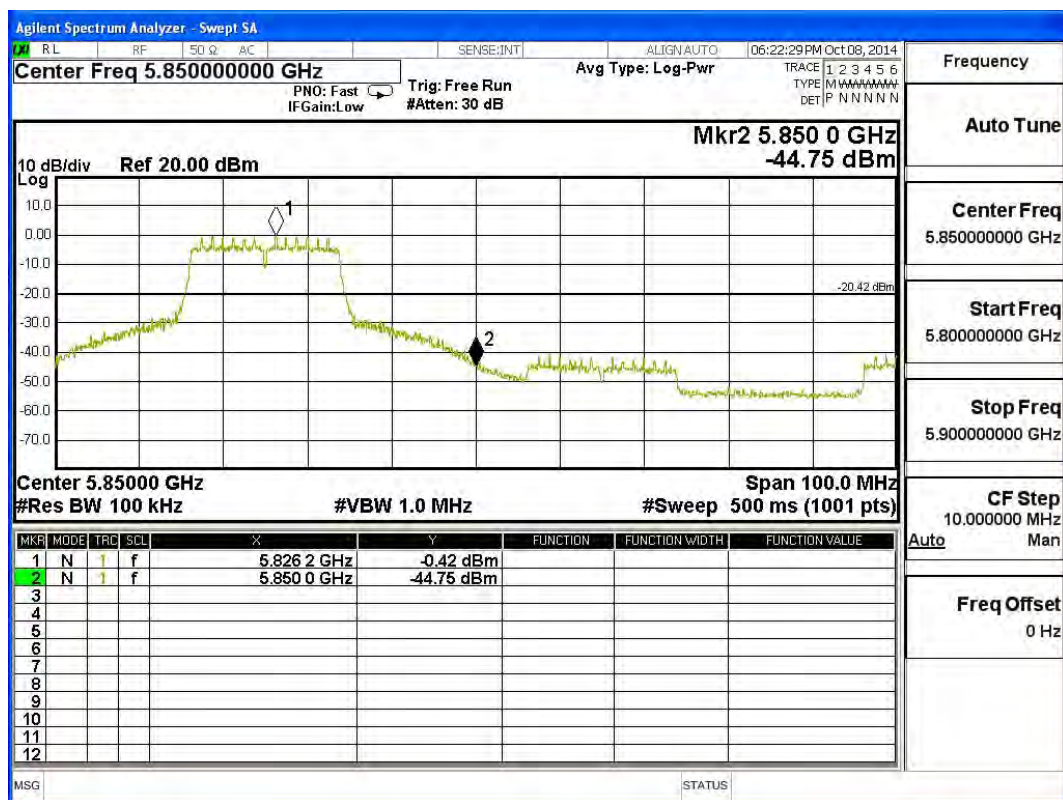
Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band)

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	35.49	>20	PASS



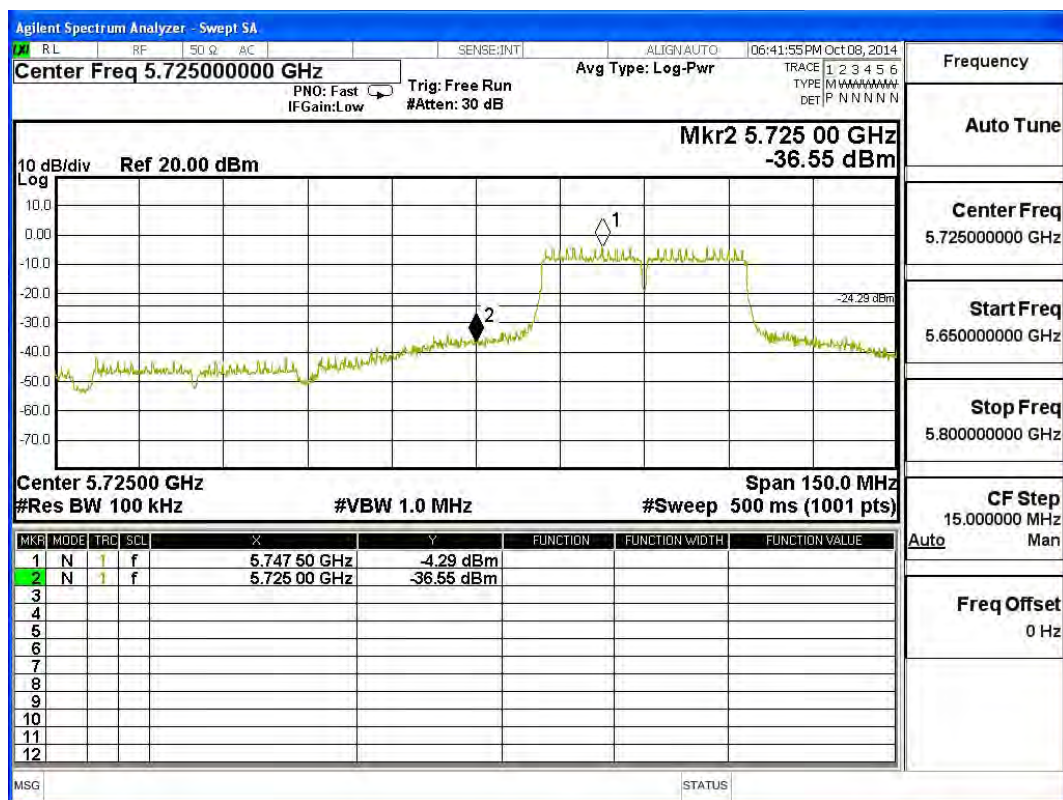
Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band)

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	44.33	>20	PASS



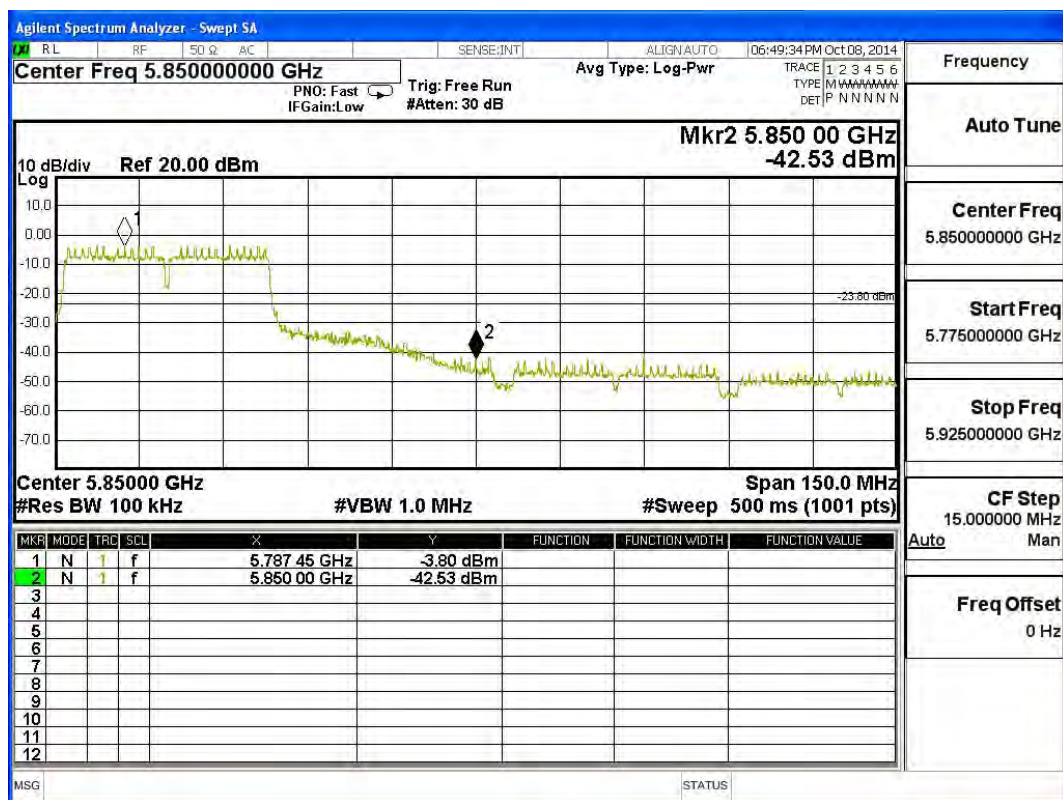
Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band)

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5755	32.26	>20	PASS



Product : Network Media Module
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band)

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5795	38.73	>20	PASS



7. Occupied Bandwidth

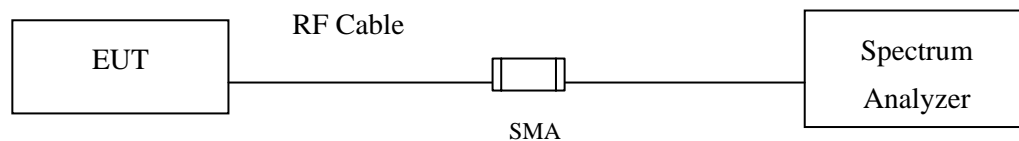
7.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

Note:

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

7.2. Test Setup



7.3. Limits

The minimum bandwidth shall be at least 500 kHz.

7.4. Test Procedure

The EUT was setup according to ANSI C63.10, 2009; tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

7.5. Uncertainty

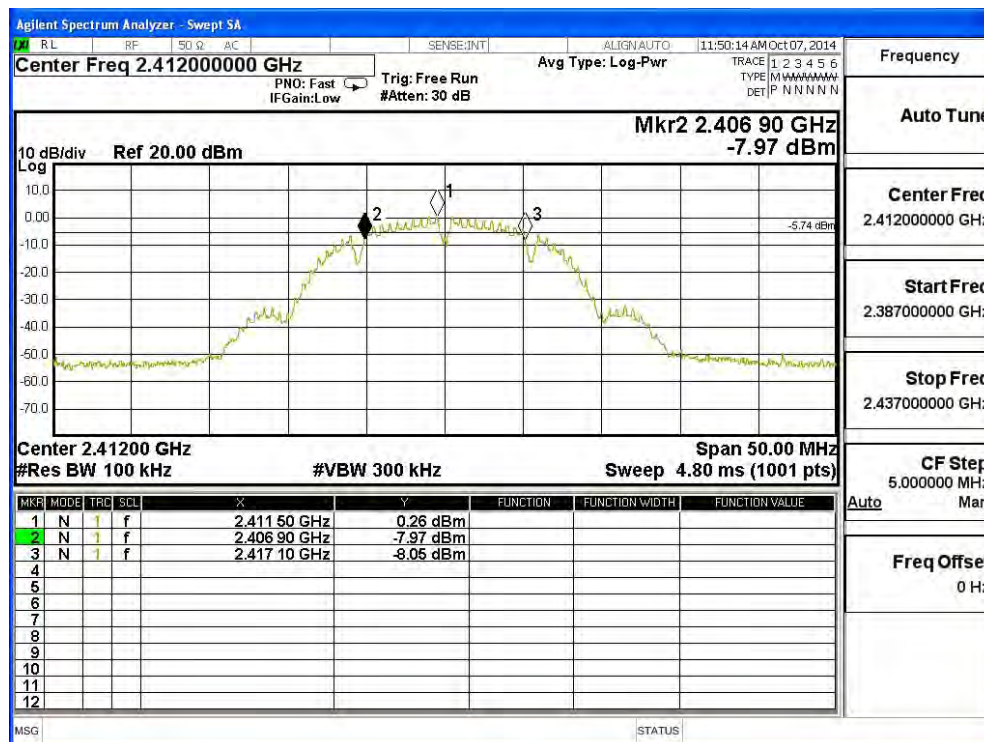
$\pm 150\text{Hz}$

7.6. Test Result of Occupied Bandwidth

Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412	10200	>500	Pass

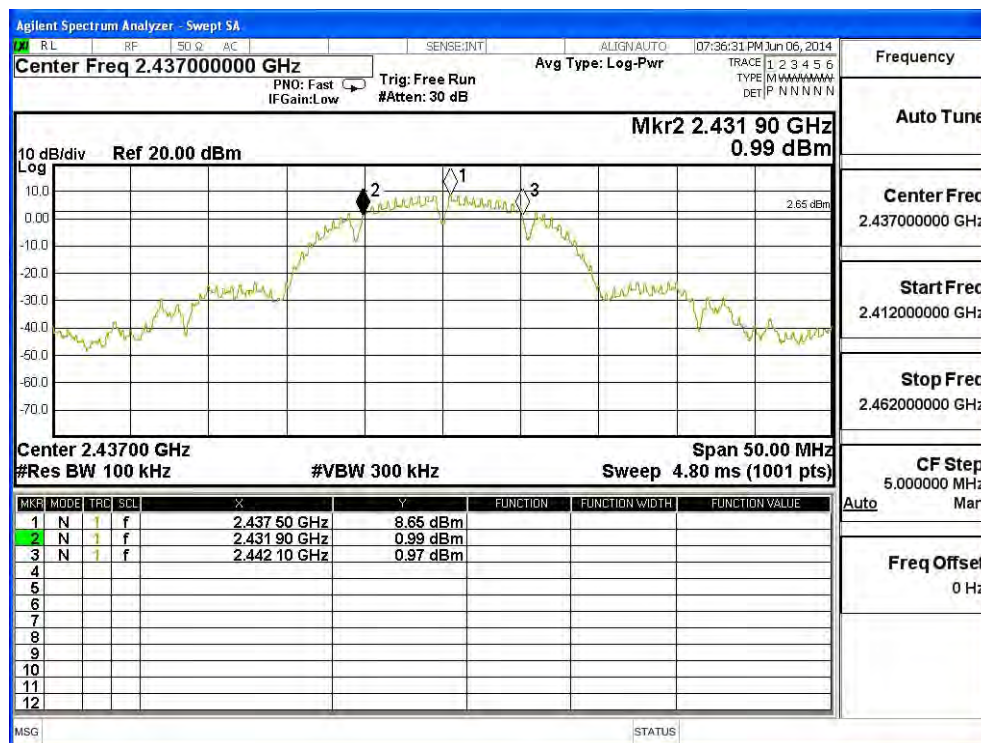
Figure Channel 1:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437	10200	>500	Pass

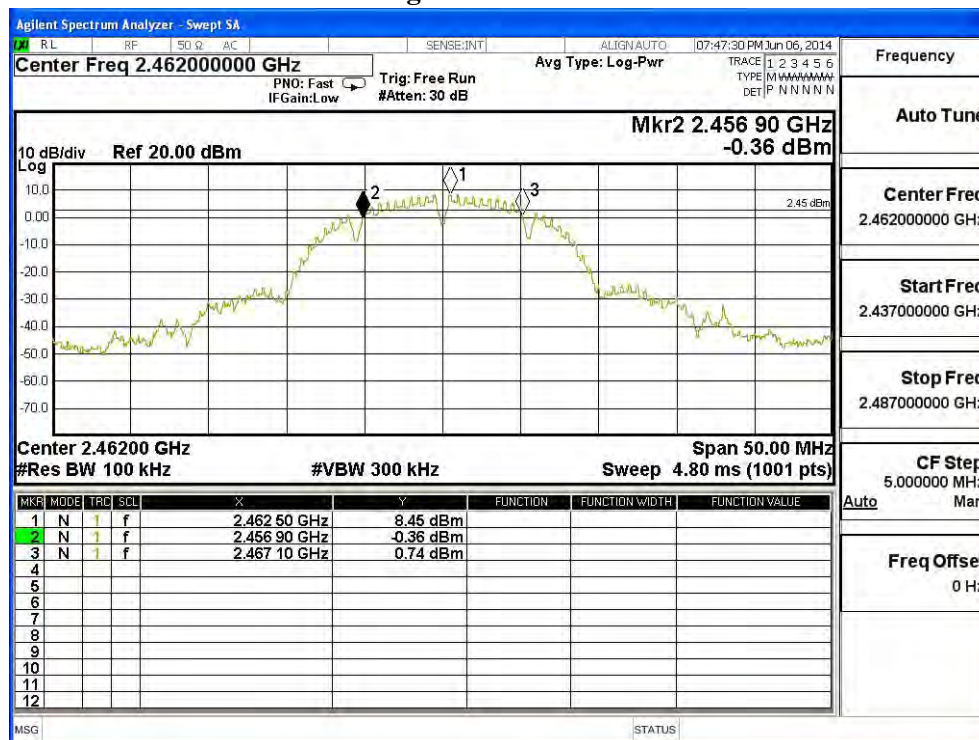
Figure Channel 6:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462	10200	>500	Pass

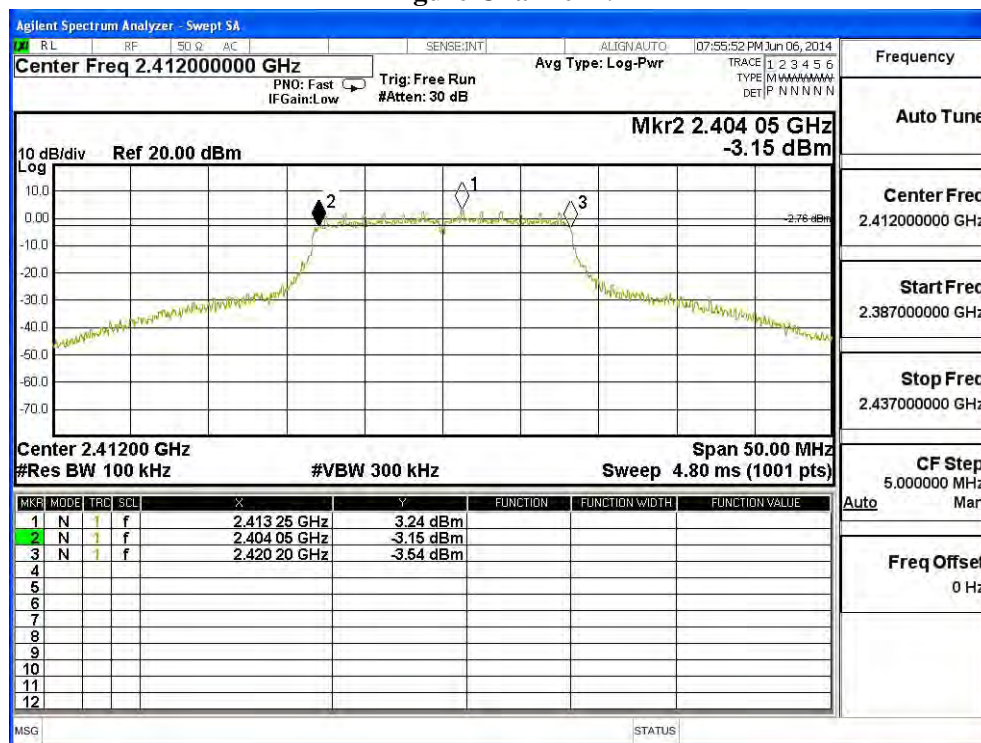
Figure Channel 11:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412	16150	>500	Pass

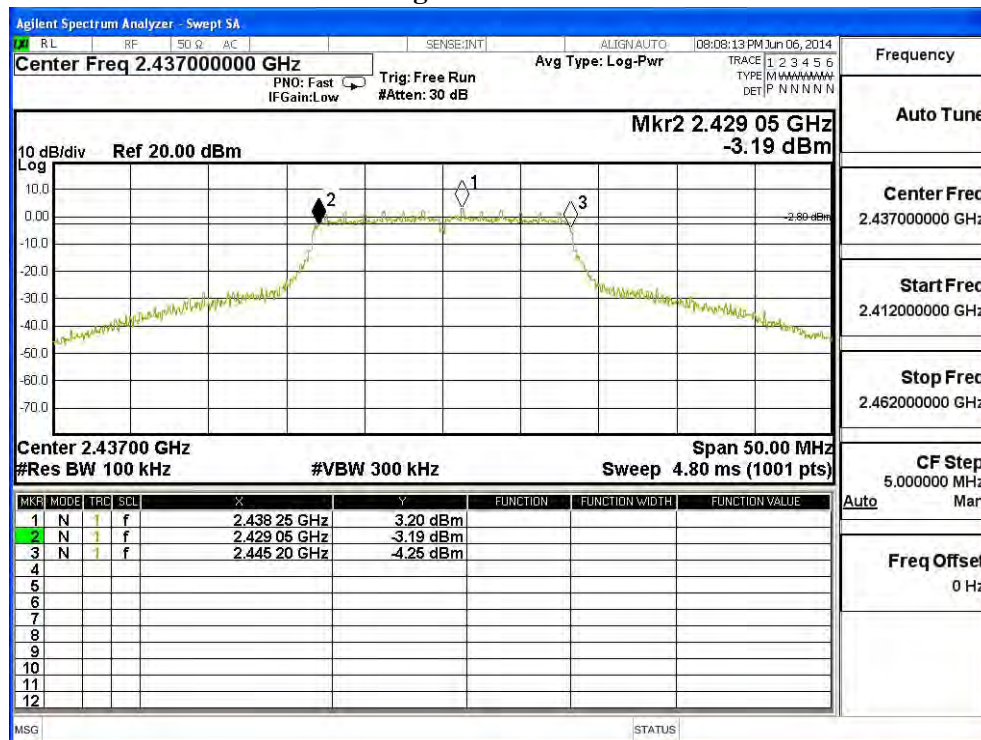
Figure Channel 1:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437	16150	>500	Pass

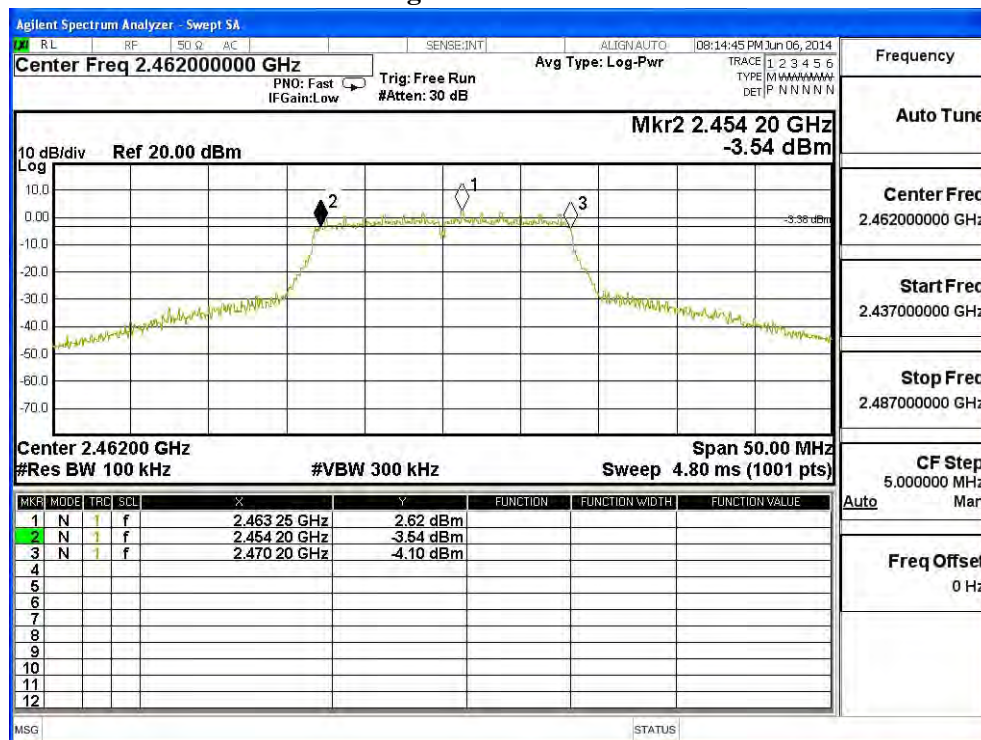
Figure Channel 6:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462	16000	>500	Pass

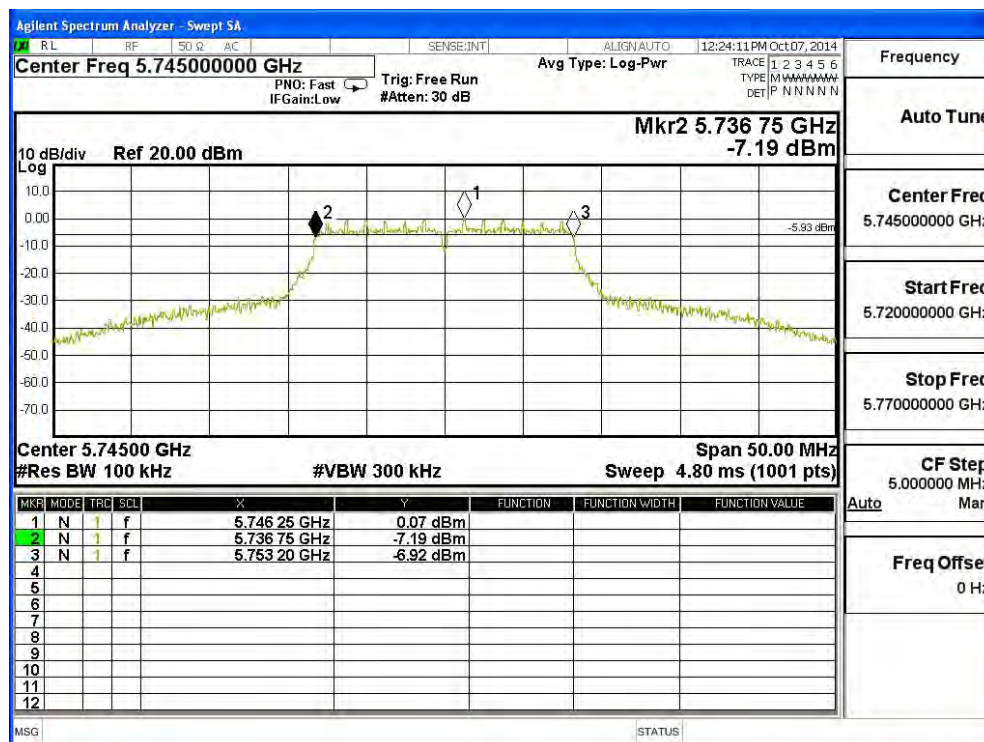
Figure Channel 11:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5745MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	16450	>500	Pass

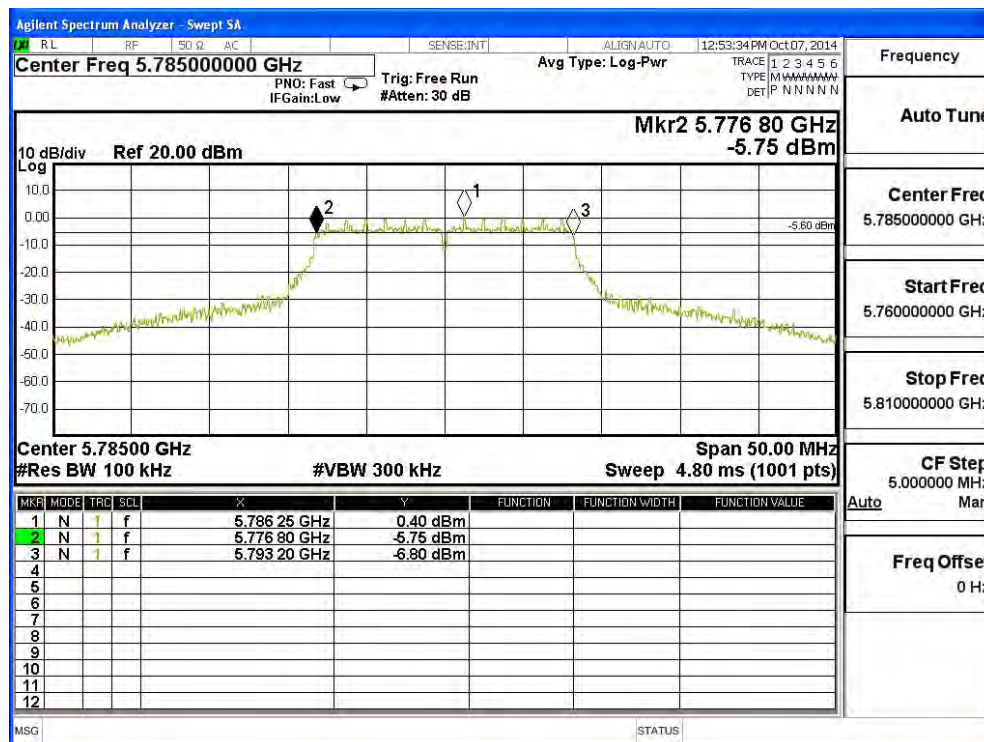
Figure Channel 149:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785MHz)

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

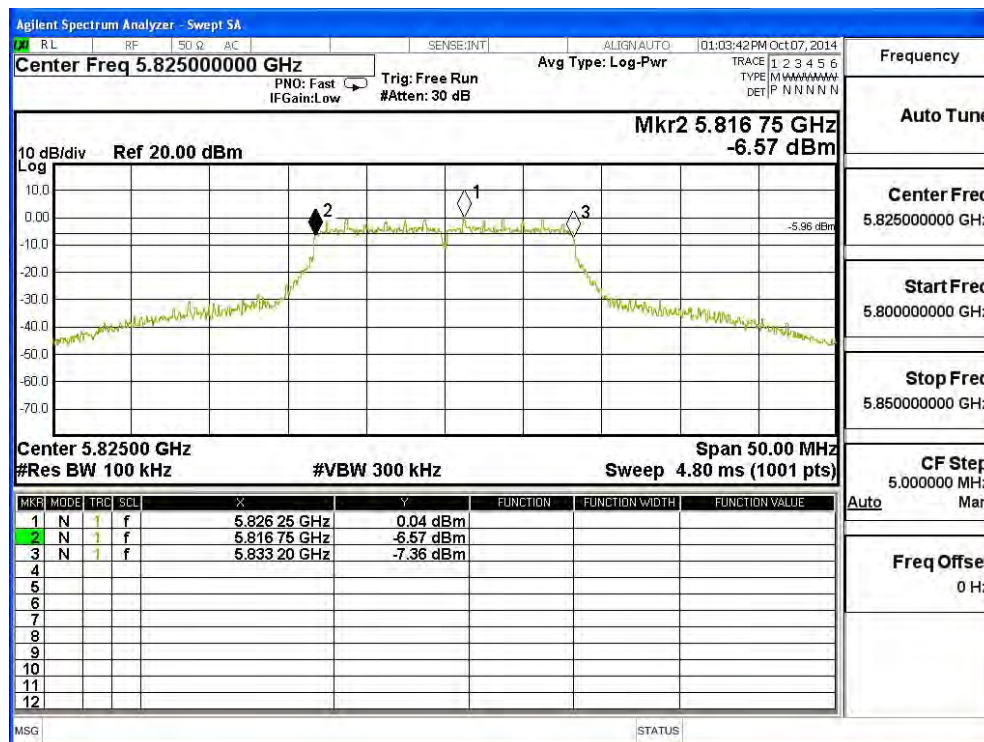
Figure Channel 157:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5825MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	16450	>500	Pass

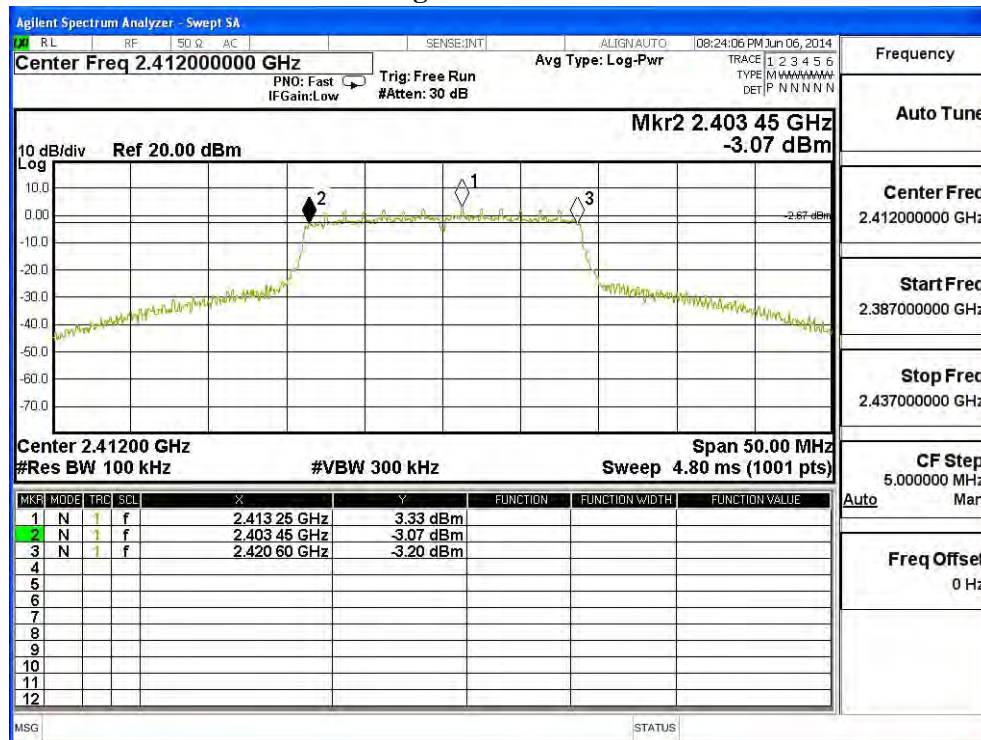
Figure Channel 165:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412	17150	>500	Pass

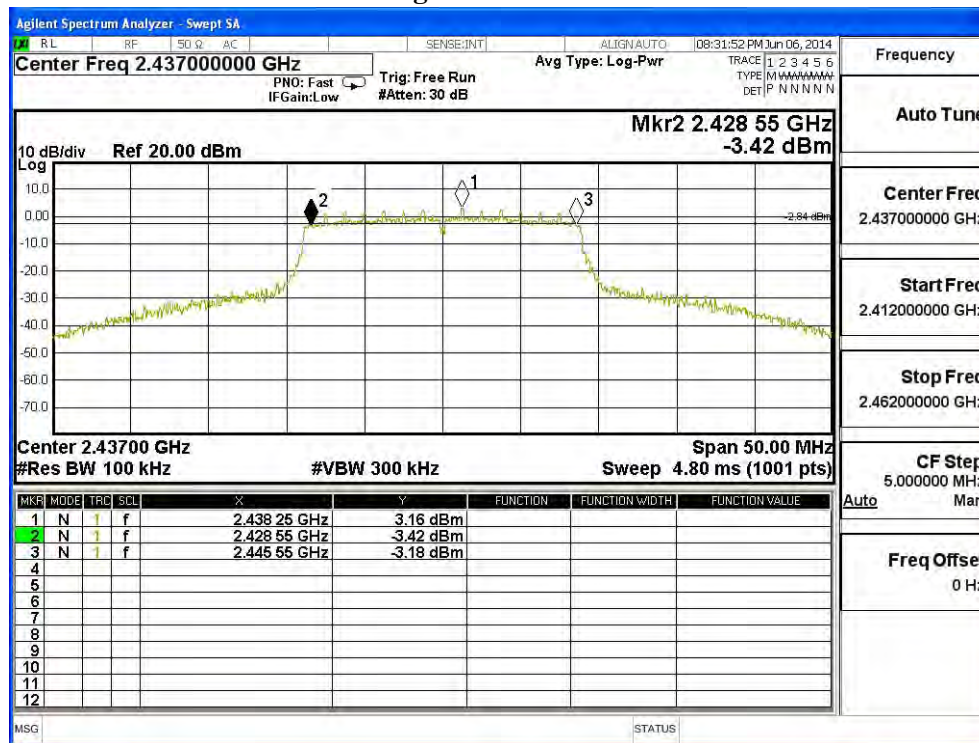
Figure Channel 1:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437	17000	>500	Pass

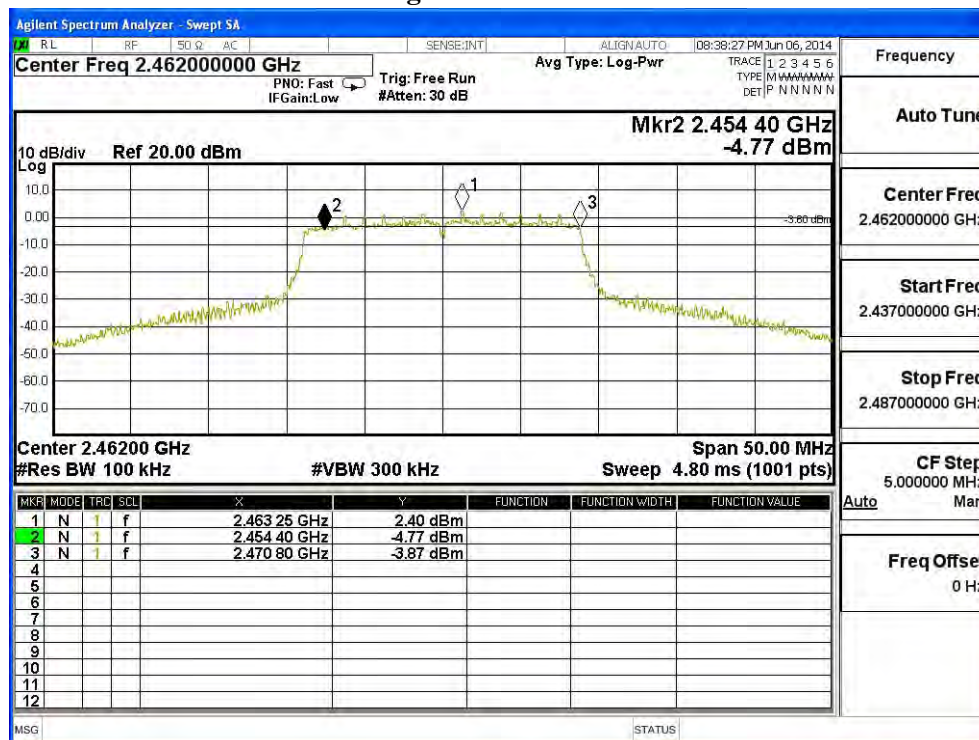
Figure Channel 6:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462	16400	>500	Pass

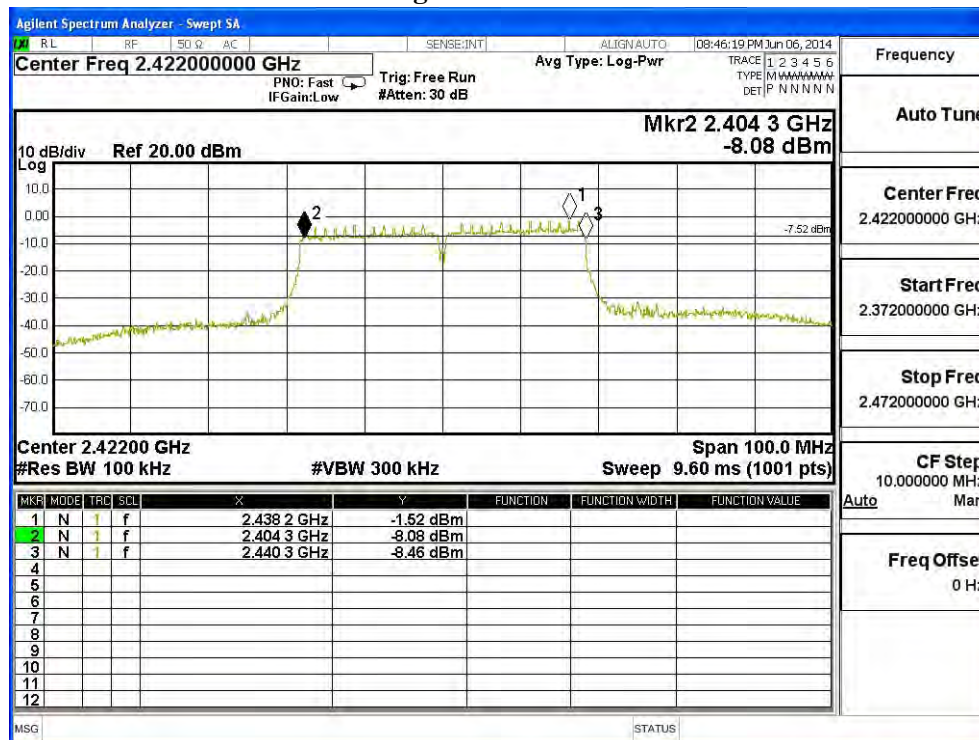
Figure Channel 11:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2422MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
3	2422	36000	>500	Pass

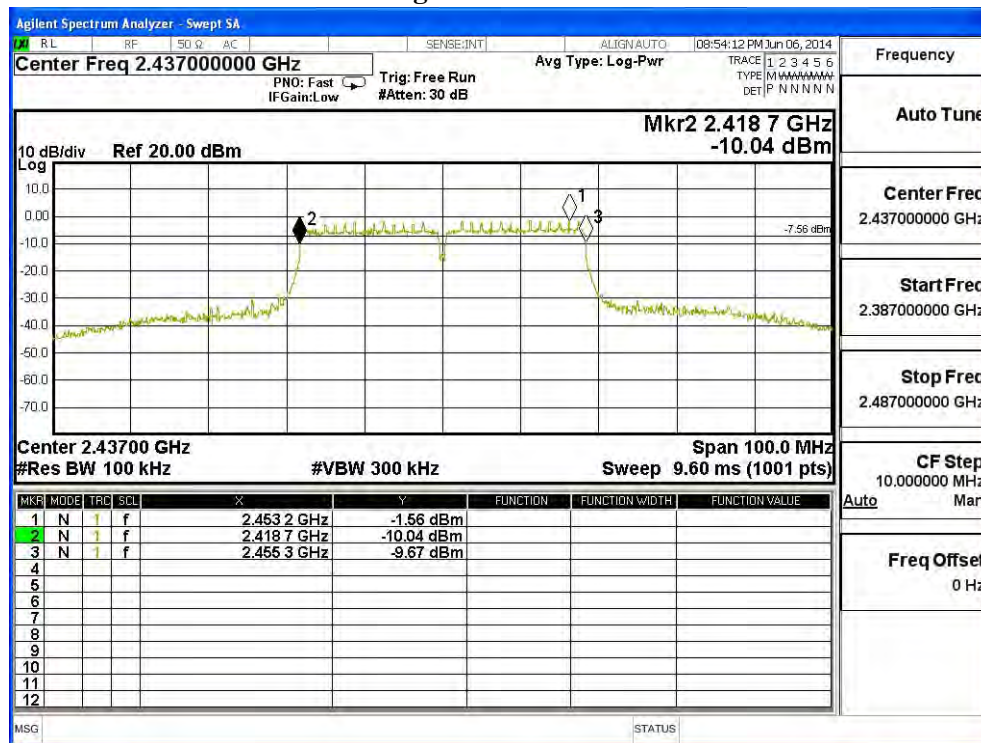
Figure Channel 1:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437	36600	>500	Pass

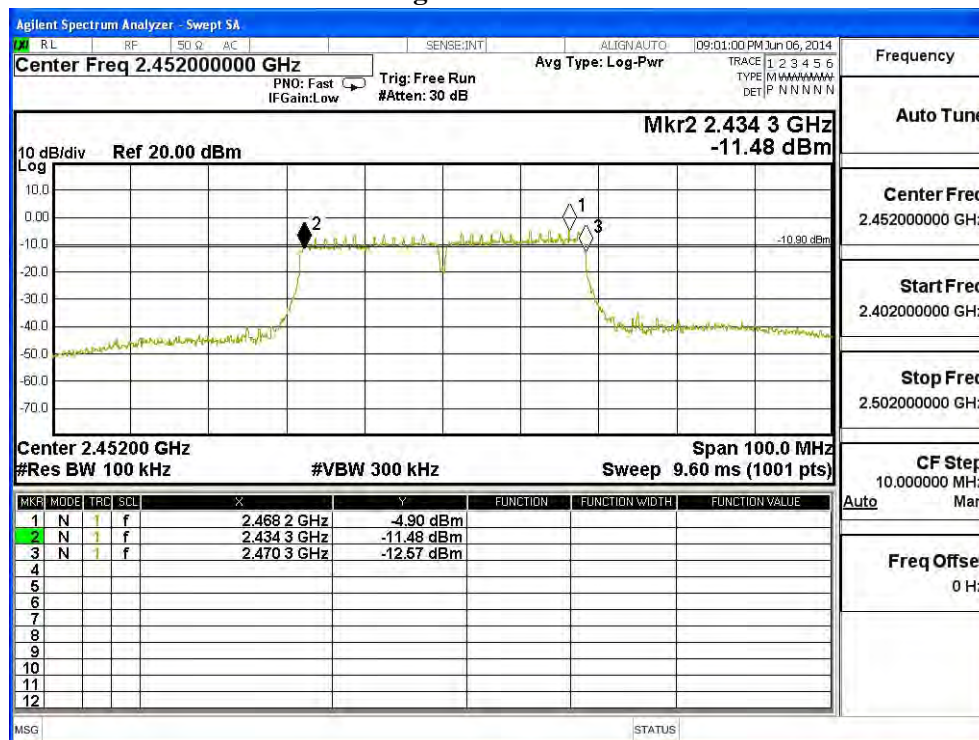
Figure Channel 4:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2452MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
9	2452	36000	>500	Pass

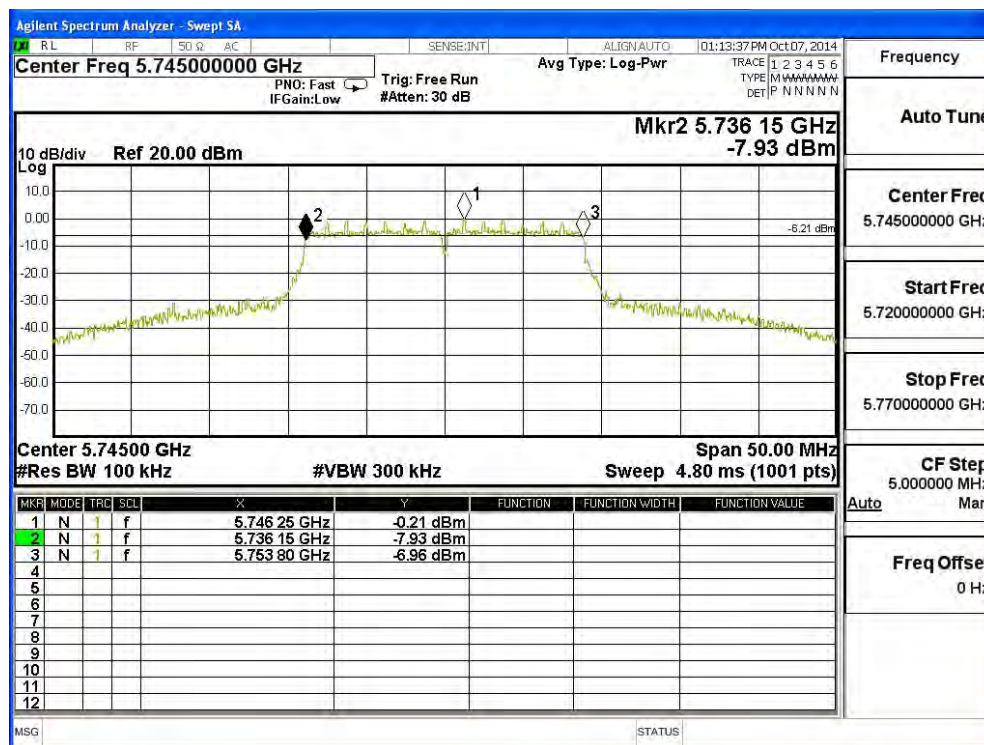
Figure Channel 7:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5745MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	17650	>500	Pass

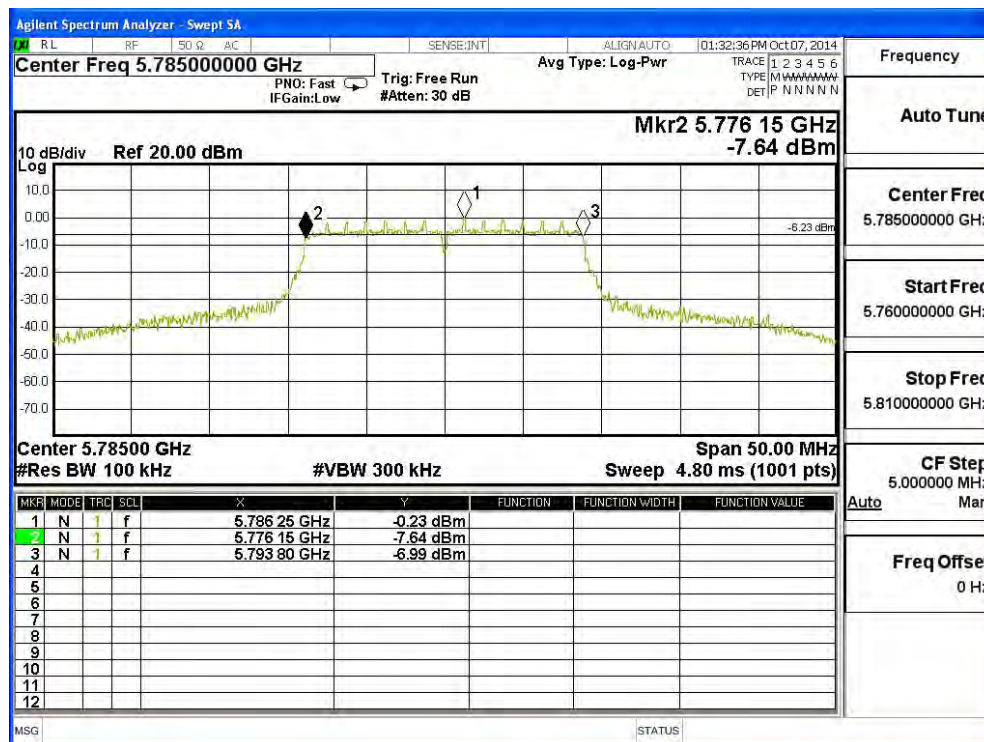
Figure Channel 149:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5785MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	17650	>500	Pass

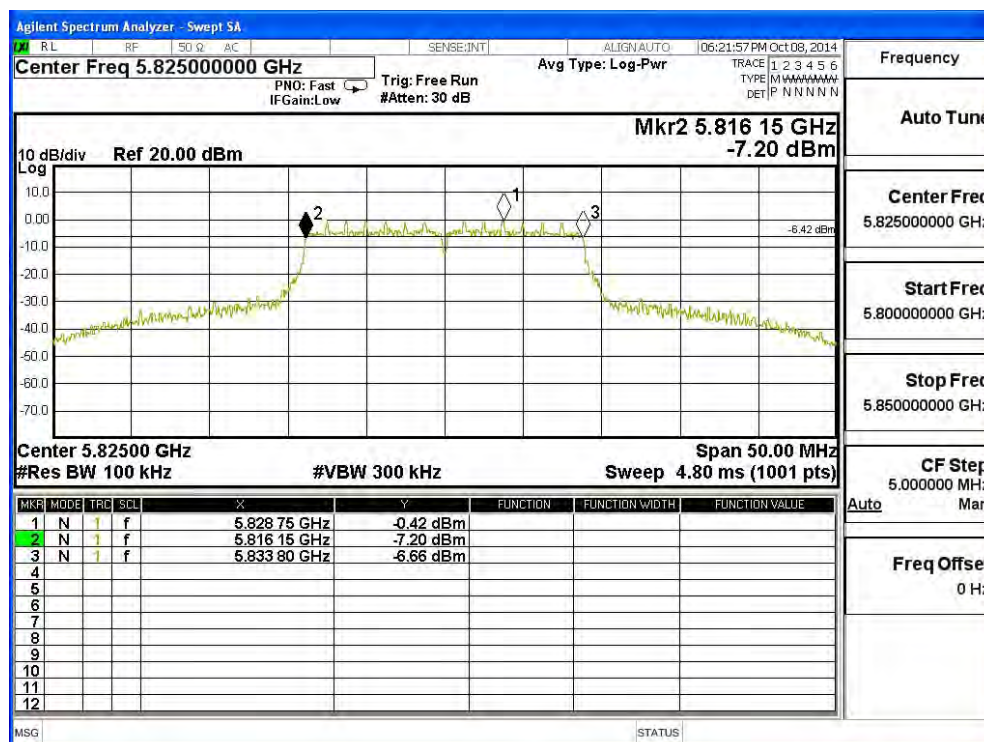
Figure Channel 157:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5825MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	17650	>500	Pass

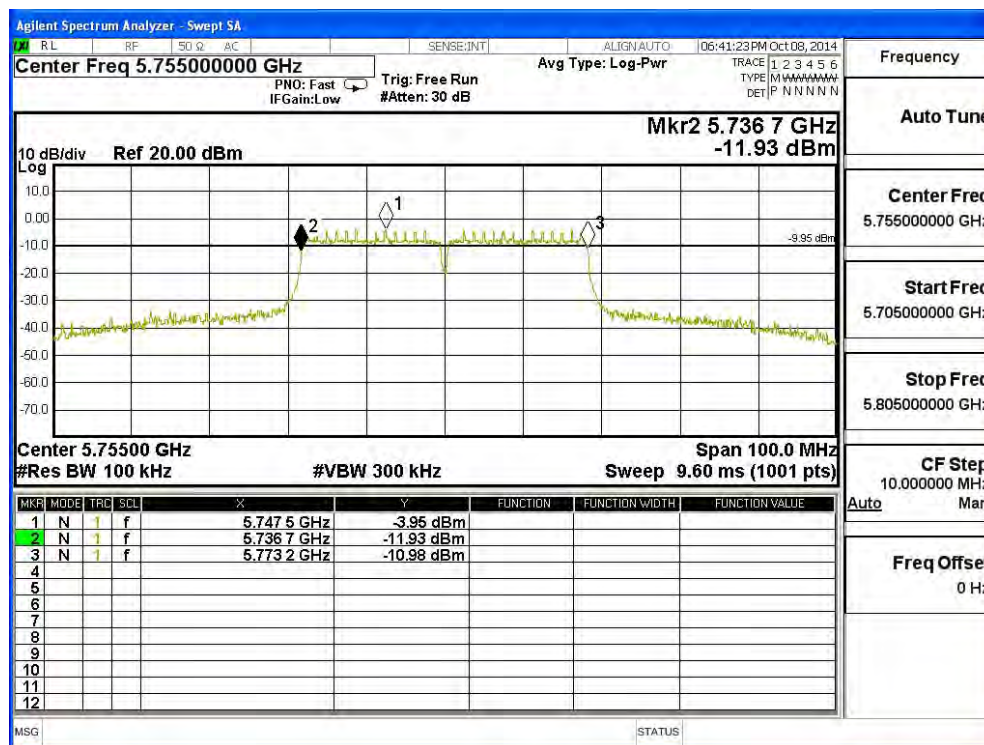
Figure Channel 165:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5755MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755.00	36500	>500	Pass

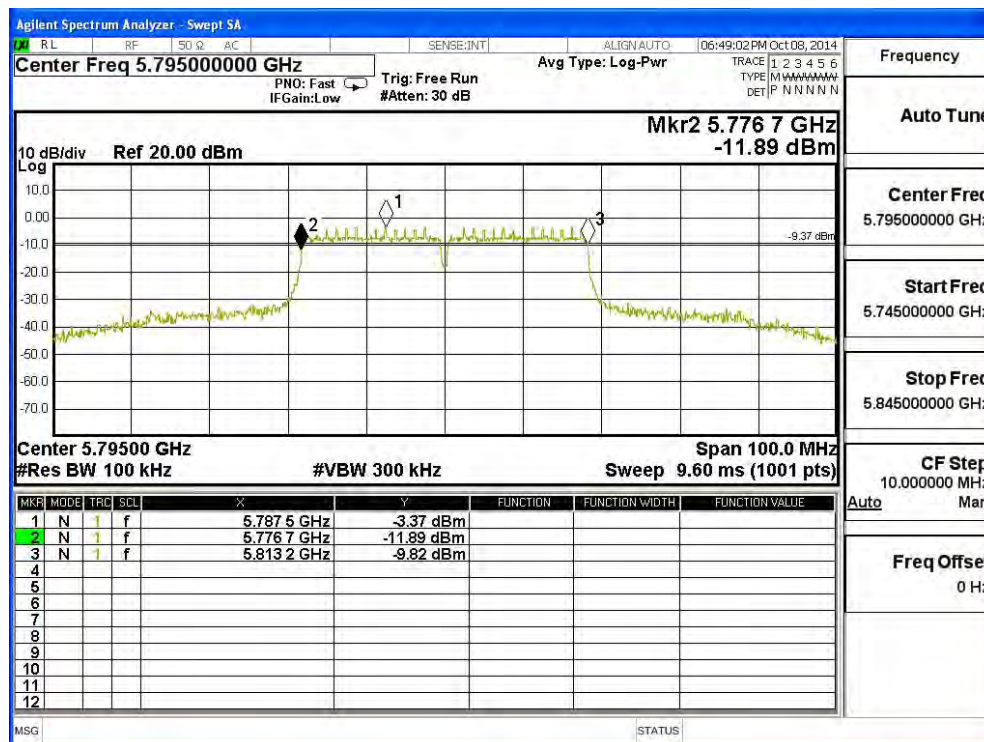
Figure Channel 151:



Product : Network Media Module
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5795MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
159	5795.00	36500	>500	Pass

Figure Channel 159:



8. Power Density

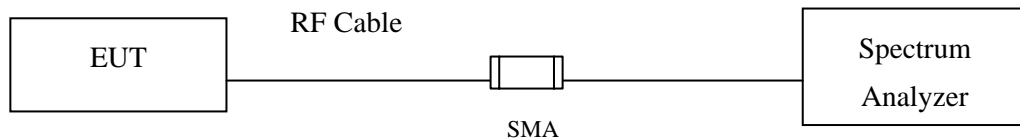
8.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

Note:

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

8.2. Test Setup



8.3. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

8.4. Test Procedure

The EUT was setup according to ANSI C63.10, 2009; tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

The maximum power spectral density using KDB 558074 section 10.2 PKPSD (peak PSD) method.

8.5. Uncertainty

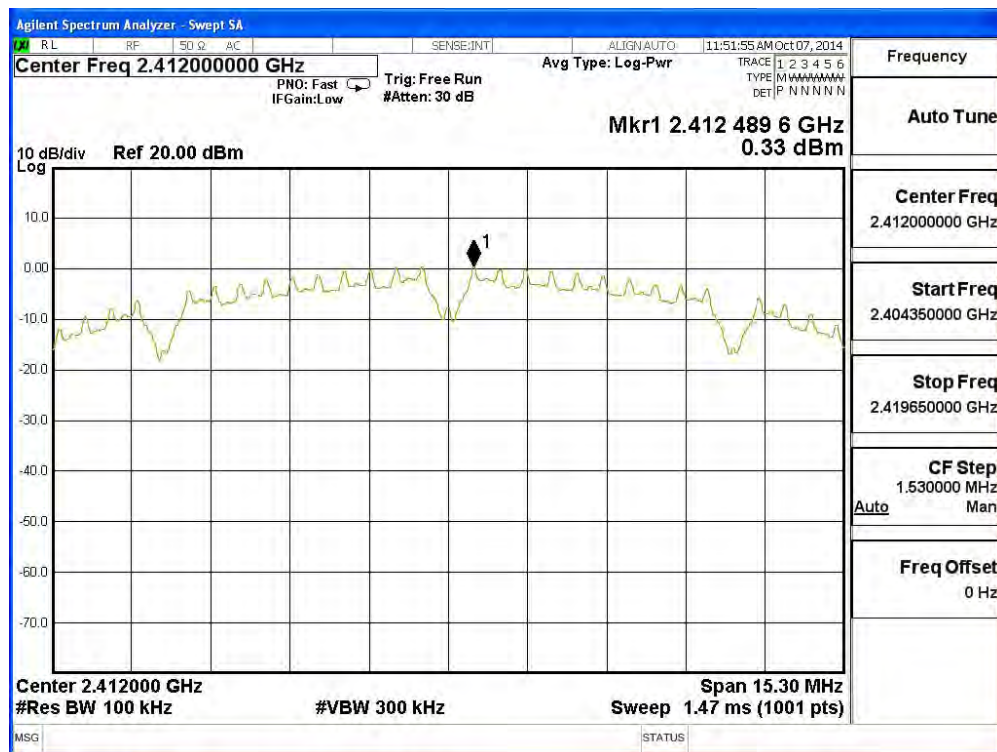
± 1.27 dB

8.6. Test Result of Power Density

Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	0.330	< 8dBm	Pass

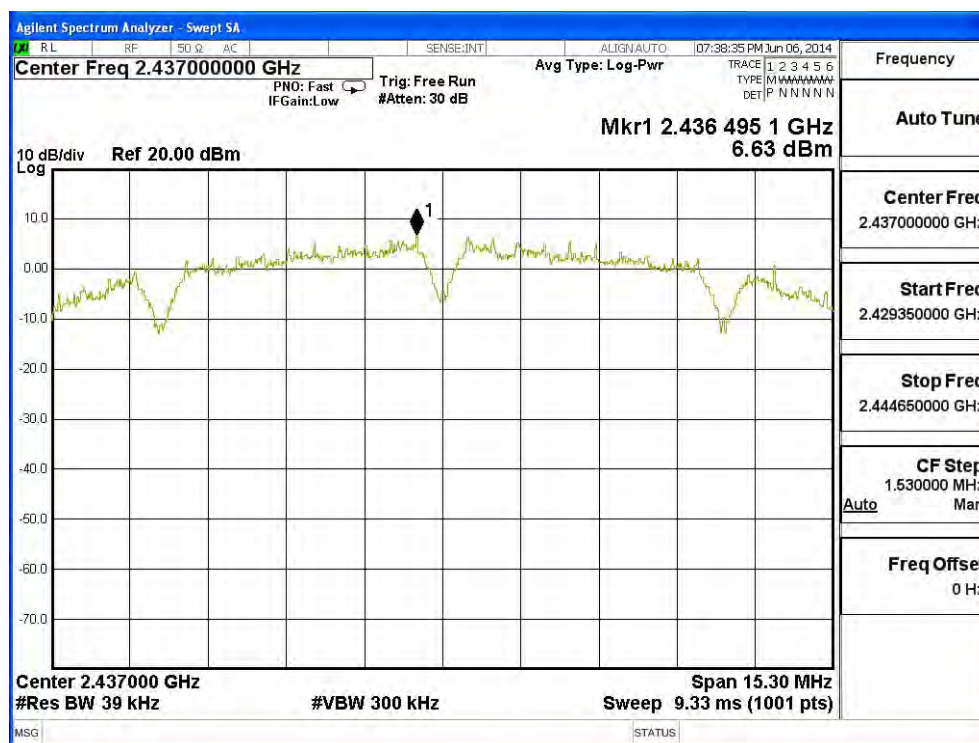
Figure Channel 1:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6	2437	6.630	< 8dBm	Pass

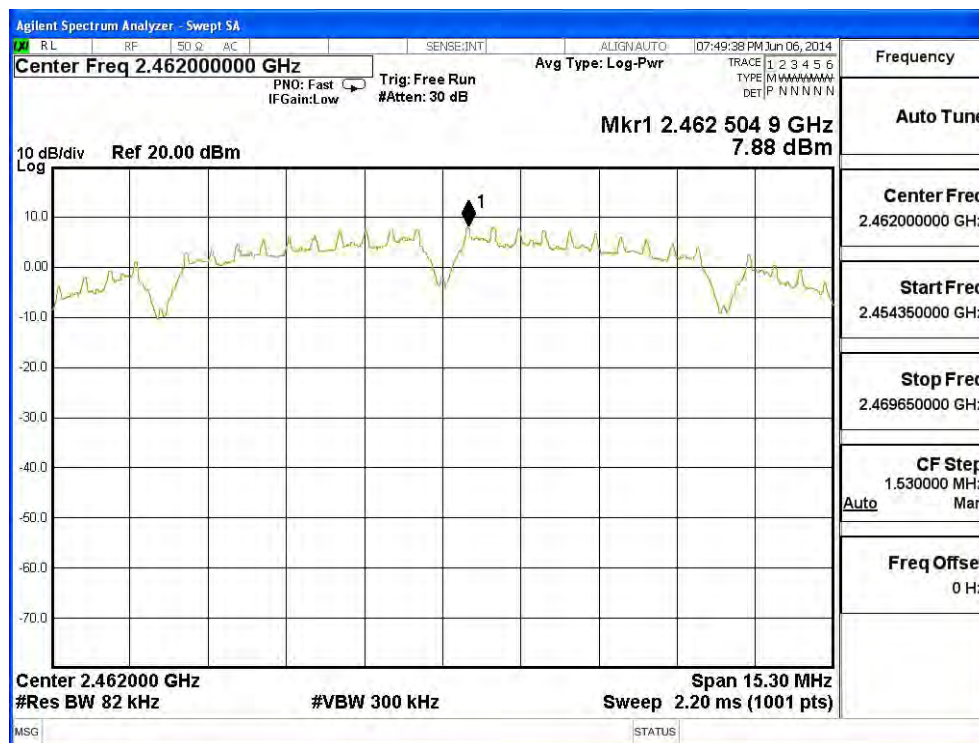
Figure Channel 6:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11	2462	7.880	< 8dBm	Pass

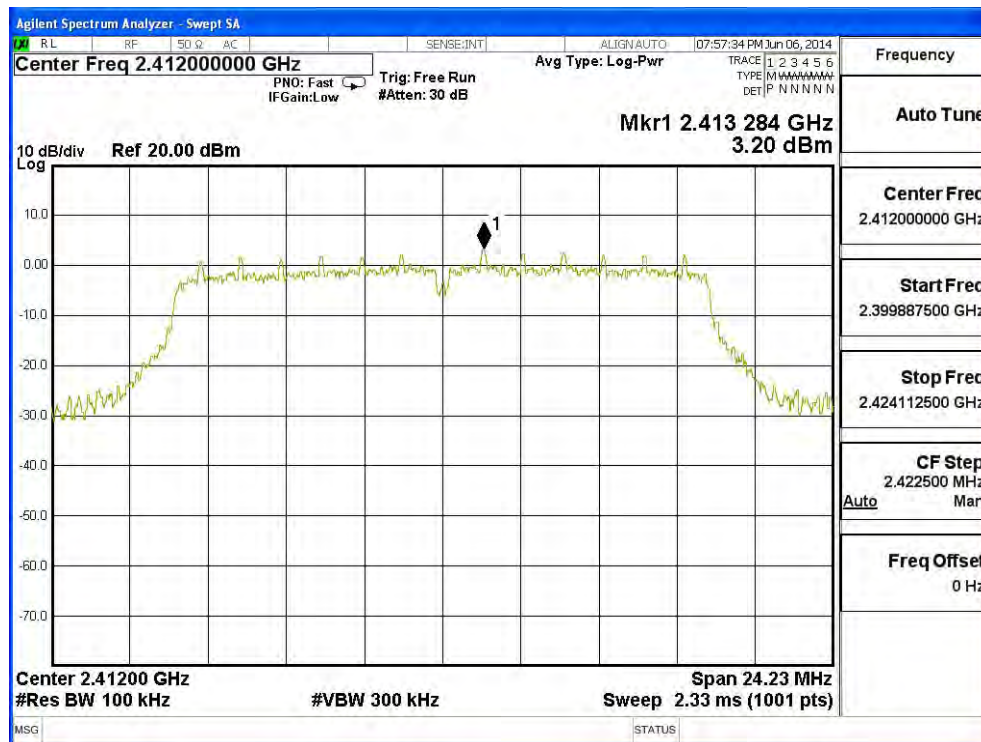
Figure Channel 11:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	3.200	< 8dBm	Pass

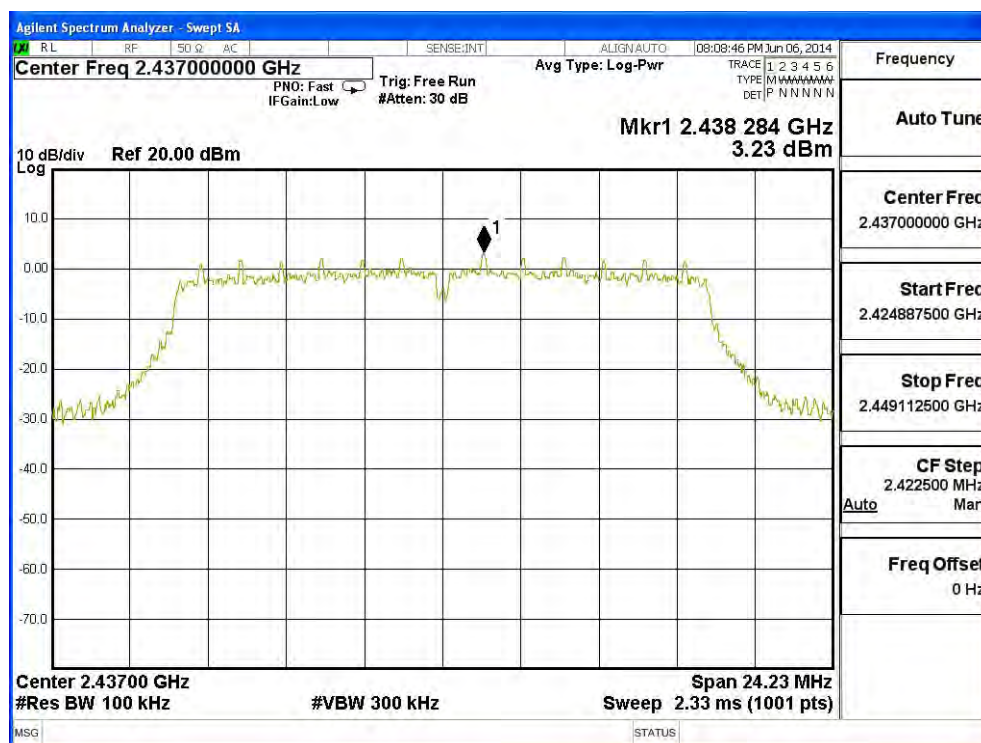
Figure Channel 1:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6	2437	3.230	< 8dBm	Pass

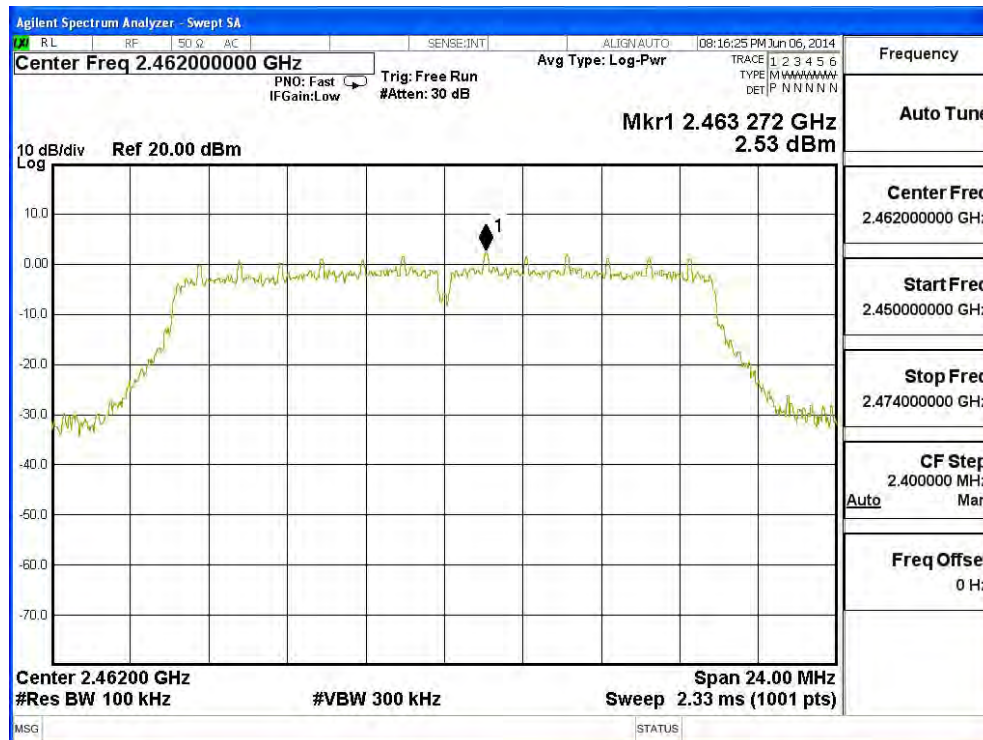
Figure Channel 6:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11	2462	2.530	< 8dBm	Pass

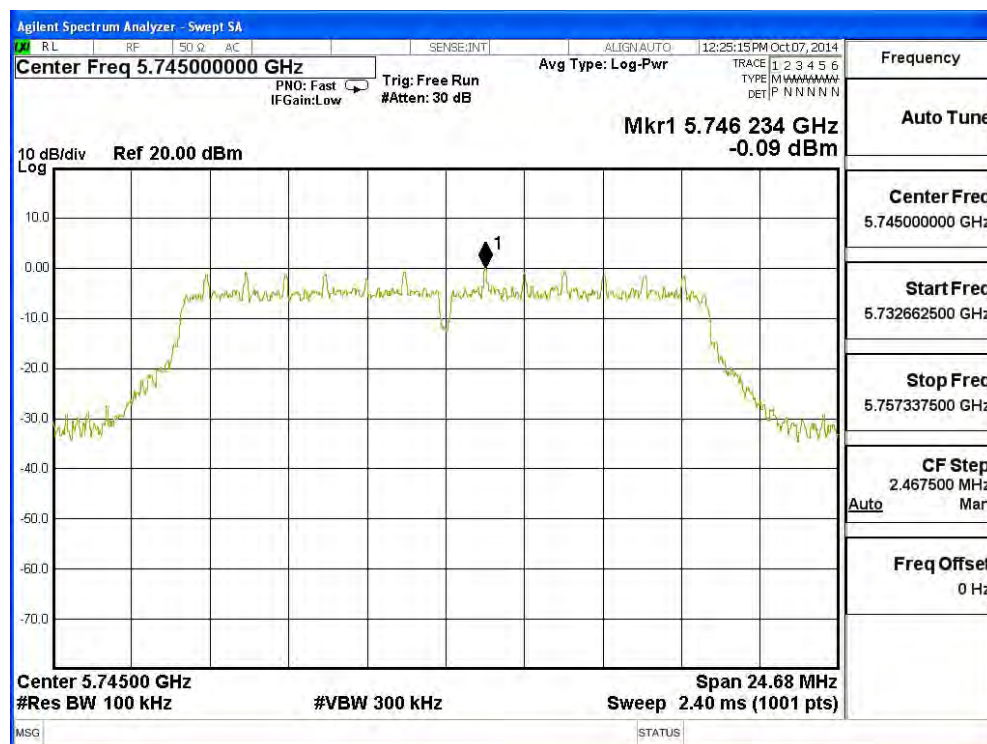
Figure Channel 11:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5745MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
149	5745.000	-0.090	< 8dBm	Pass

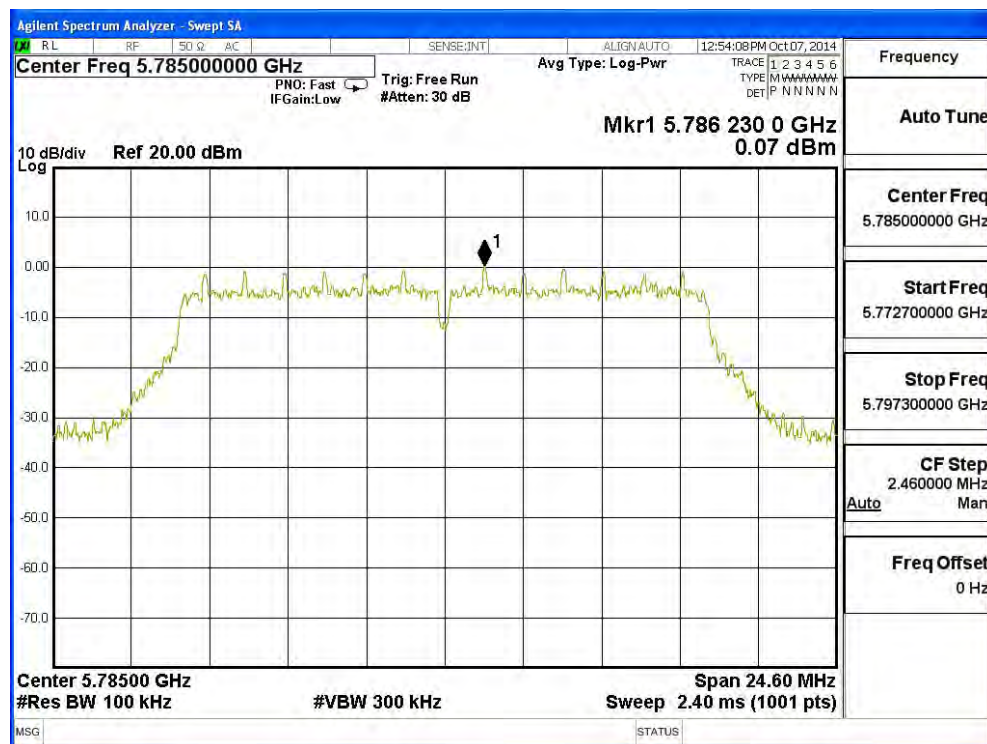
Figure Channel 149:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
157	5785.000	0.070	< 8dBm	Pass

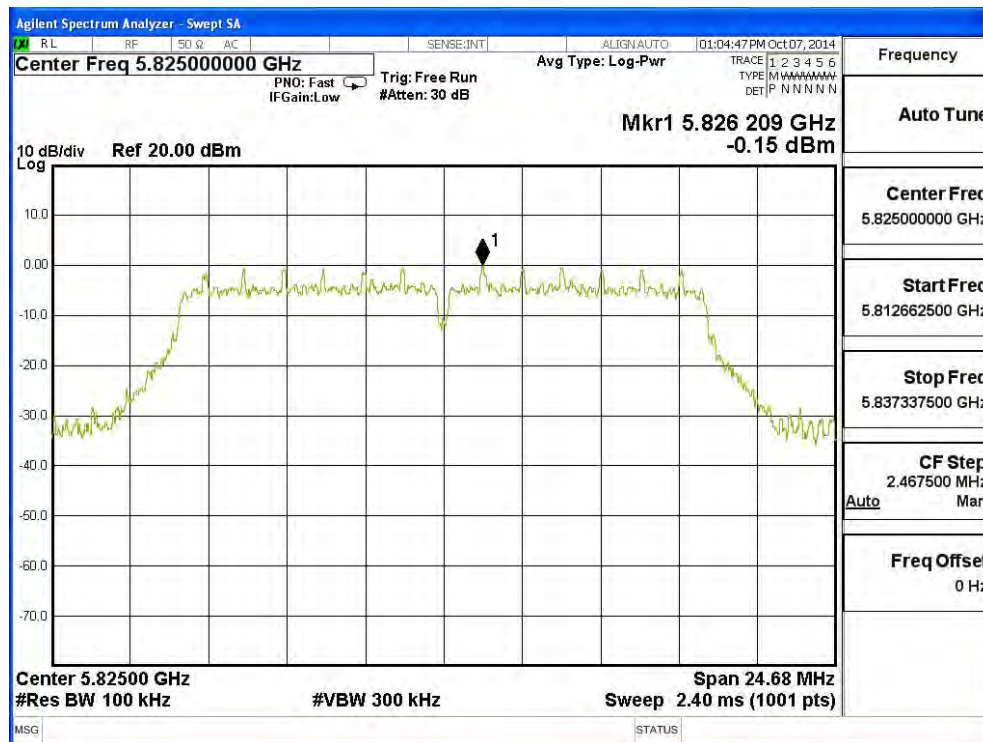
Figure Channel 157:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5825MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
165	5825.000	-0.150	< 8dBm	Pass

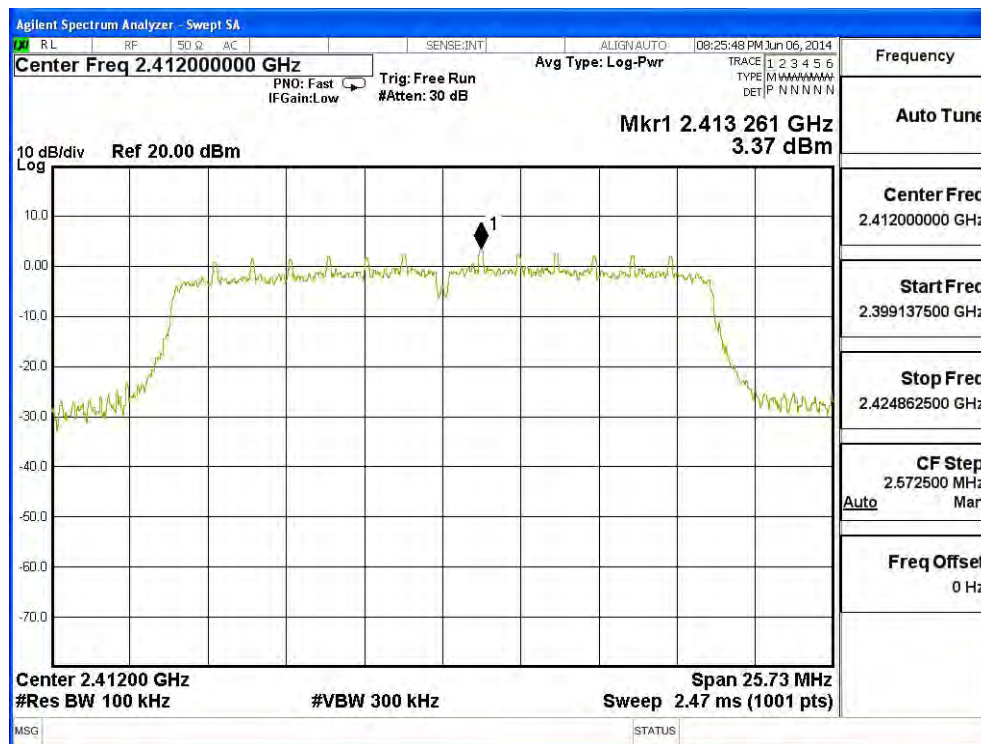
Figure Channel 165:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	3.370	< 8dBm	Pass

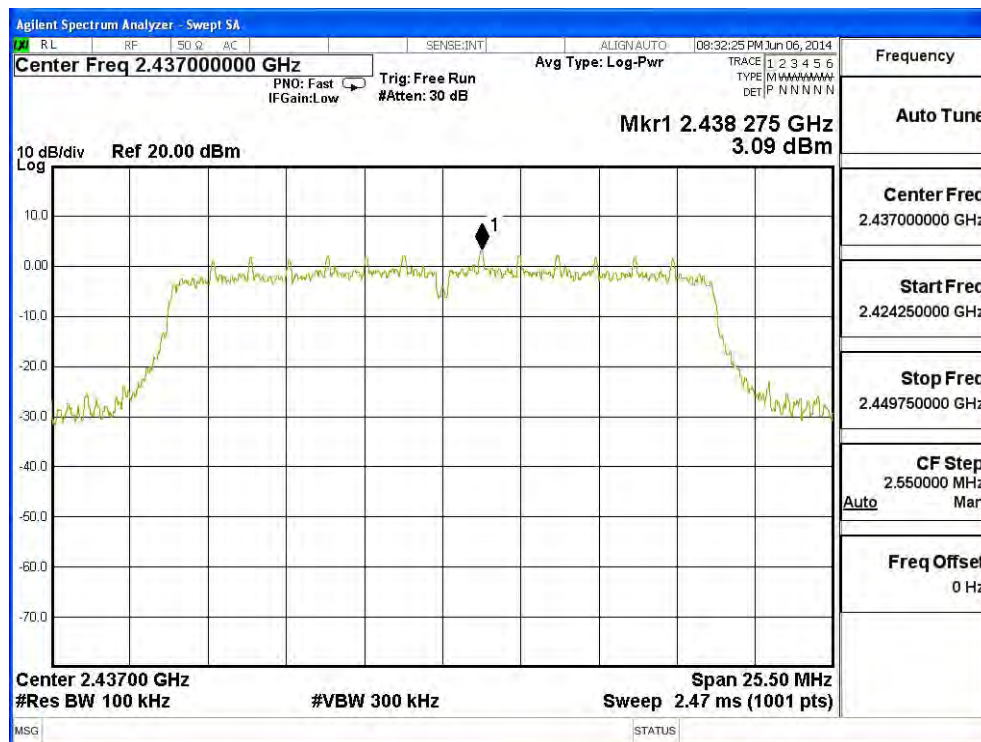
Figure Channel 1:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6	2437	3.090	< 8dBm	Pass

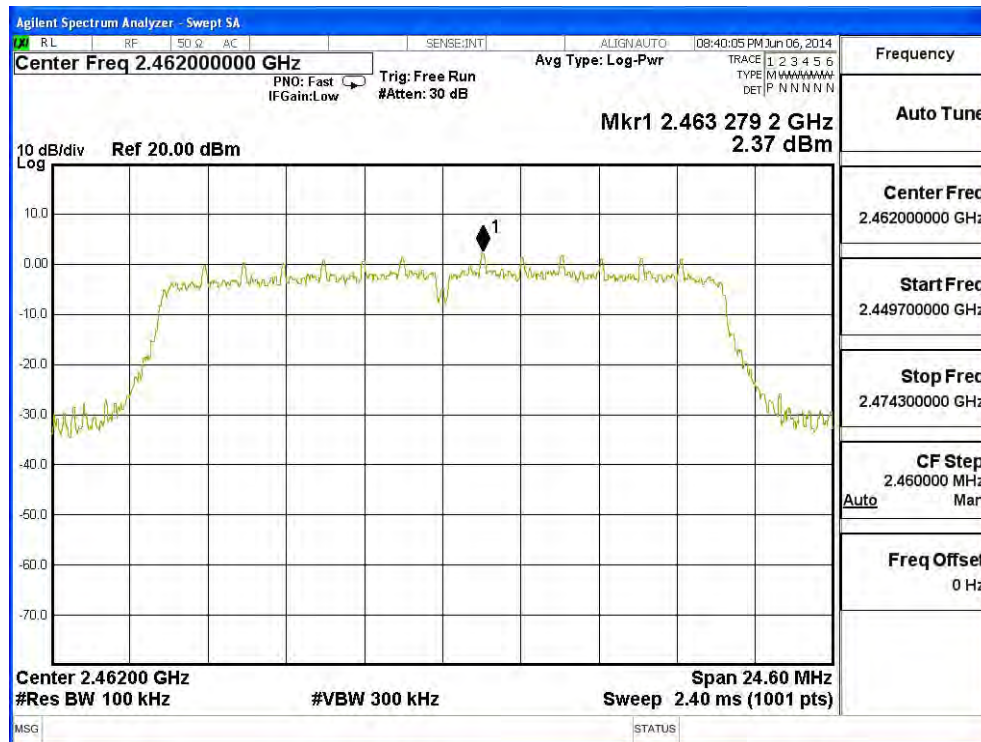
Figure Channel 6:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11	2462	2.370	< 8dBm	Pass

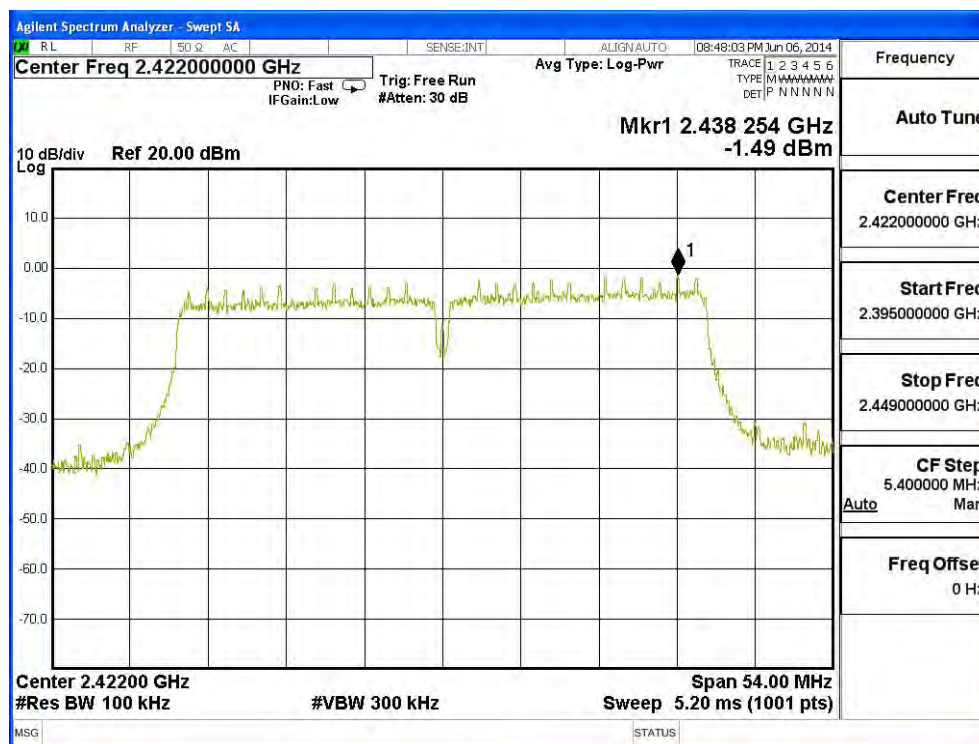
Figure Channel 11:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2422MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
3	2422	-1.490	< 8dBm	Pass

Figure Channel 1:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6	2437	-1.480	< 8dBm	Pass

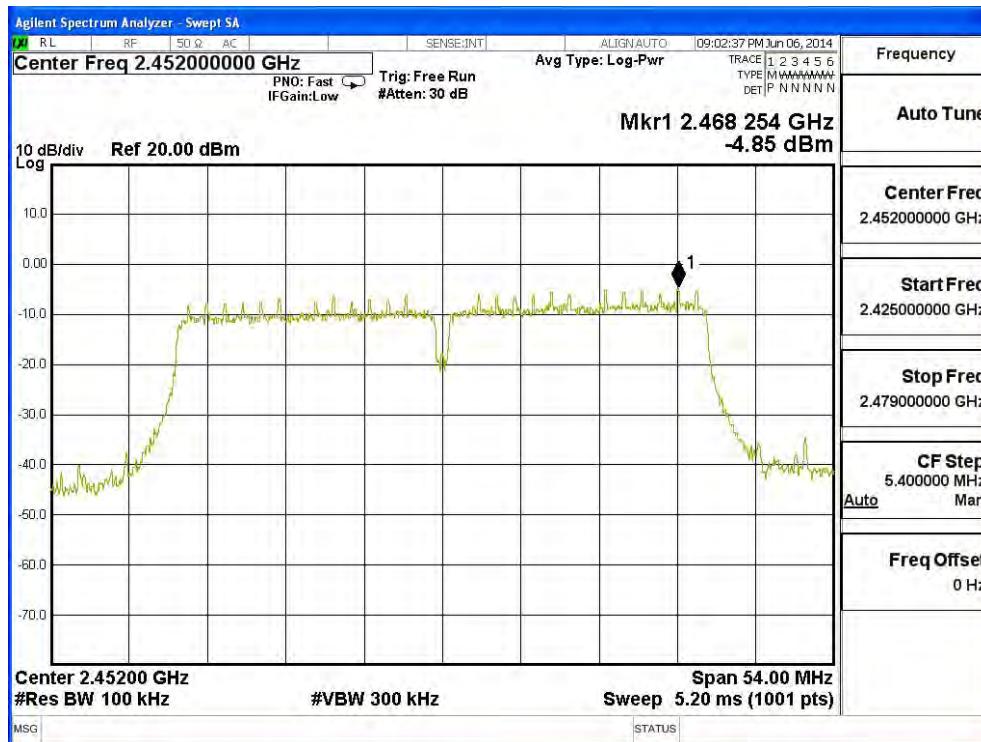
Figure Channel 4:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2452MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
9	2452	-4.850	< 8dBm	Pass

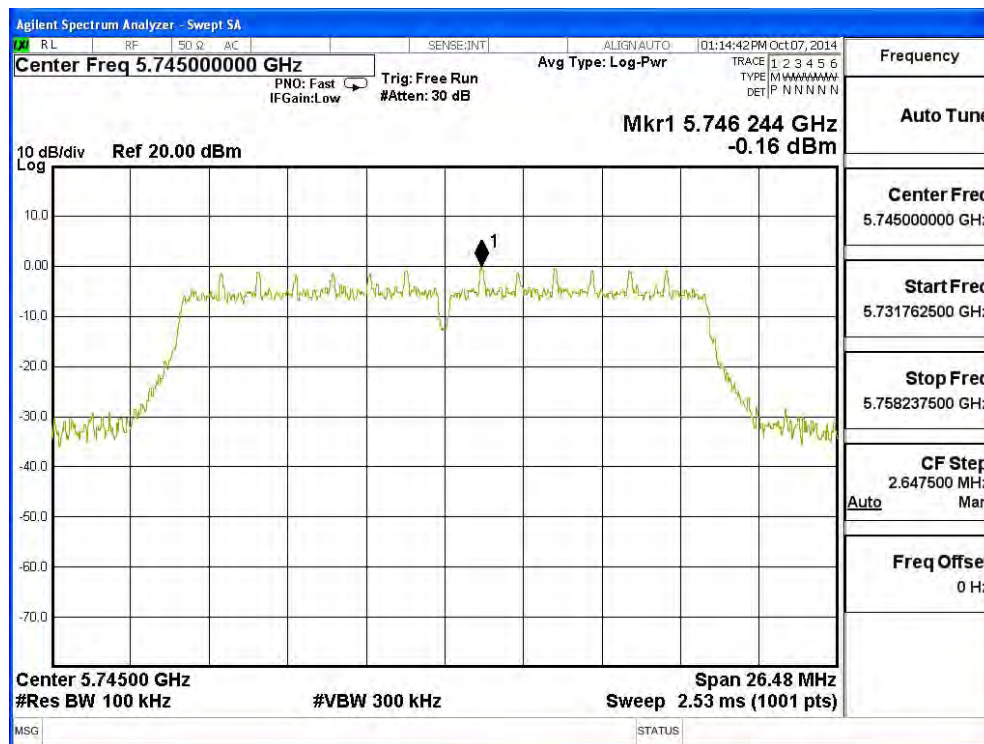
Figure Channel 7:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5745MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
149	5745.00	-0.160	< 8dBm	Pass

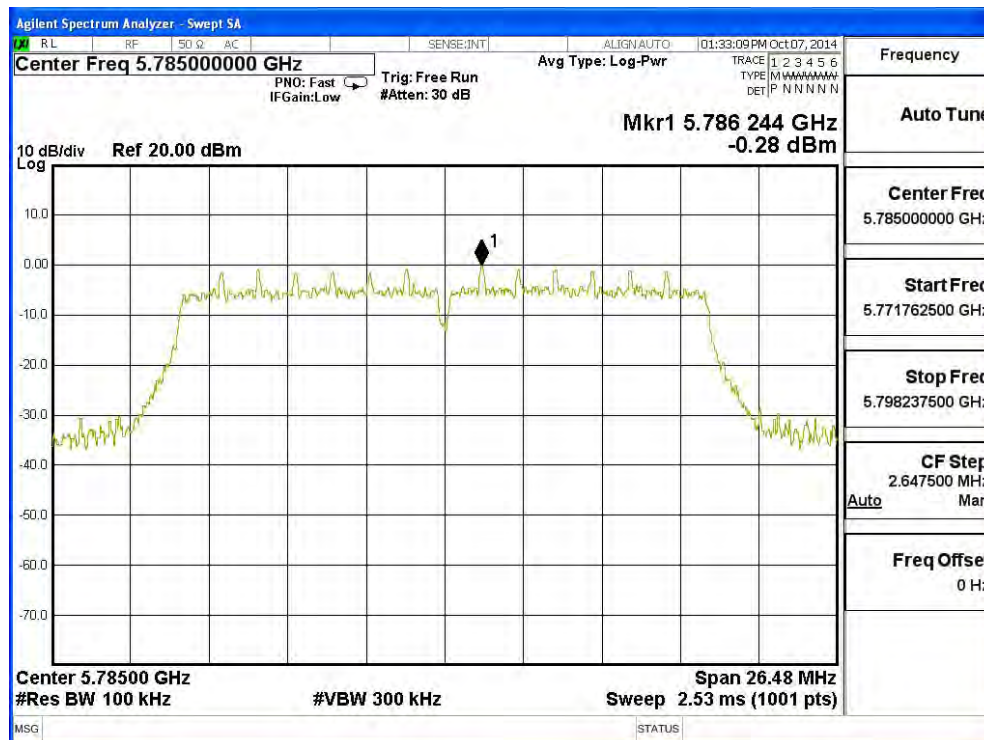
Figure Channel 149:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5785MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
157	5785.000	-0.280	< 8dBm	Pass

Figure Channel 157:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5825MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
165	5825.00	0.090	< 8dBm	Pass

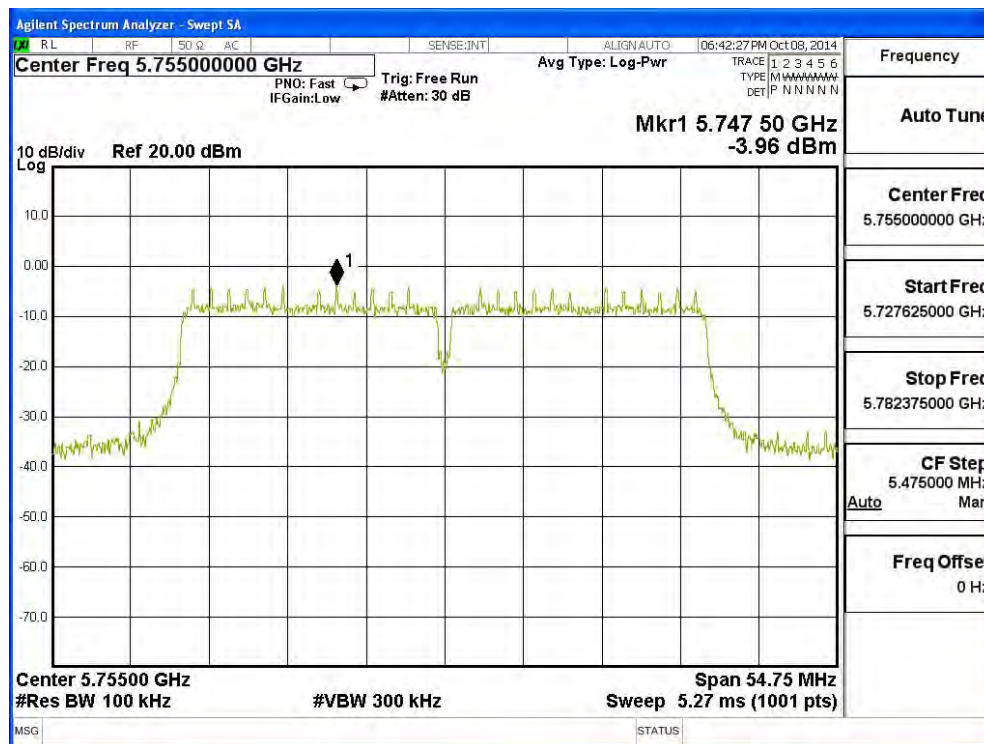
Figure Channel 165:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5755MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
151	5755.00	-3.960	< 8dBm	Pass

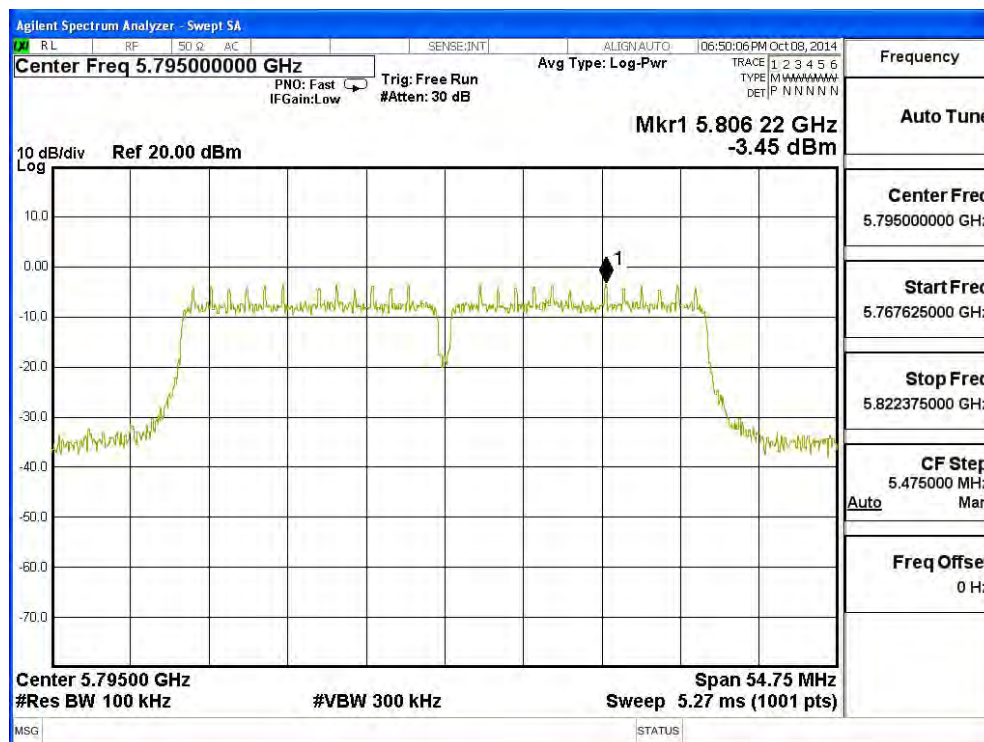
Figure Channel 151:



Product : Network Media Module
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5795MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
159	5795.000	-3.450	< 8dBm	Pass

Figure Channel 159:



9. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs

Attachment 3: Pretest Data

Attachment 3 : Pretest Data

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)
 for M/N: CY920-C (Main Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV	dB	dBμV
Line 1					
Quasi-Peak					
0.158	9.747	40.700	50.447	-15.324	65.771
0.173	9.742	37.330	47.073	-18.270	65.343
0.205	9.739	32.380	42.119	-22.310	64.429
0.470	9.751	23.660	33.411	-23.446	56.857
2.771	9.850	21.910	31.760	-24.240	56.000
16.572	10.000	24.230	34.230	-25.770	60.000
Average					
0.158	9.747	30.880	40.627	-15.144	55.771
0.173	9.742	30.200	39.943	-15.400	55.343
0.205	9.739	23.850	33.589	-20.840	54.429
0.470	9.751	15.210	24.961	-21.896	46.857
2.771	9.850	14.910	24.760	-21.240	46.000
16.572	10.000	18.630	28.630	-21.370	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)
 for M/N: CY920-C (Main Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	dBμV	dB	dBμV
Line 2					
Quasi-Peak					
0.162	9.747	41.100	50.847	-14.810	65.657
0.201	9.749	32.940	42.689	-21.854	64.543
0.255	9.751	26.270	36.021	-26.979	63.000
0.451	9.750	22.980	32.730	-24.670	57.400
2.787	9.850	21.420	31.270	-24.730	56.000
16.736	10.030	23.780	33.810	-26.190	60.000
Average					
0.162	9.747	31.590	41.337	-14.320	55.657
0.201	9.749	22.590	32.339	-22.204	54.543
0.255	9.751	17.320	27.071	-25.929	53.000
0.451	9.750	17.350	27.100	-20.300	47.400
2.787	9.850	13.090	22.940	-23.060	46.000
16.736	10.030	18.390	28.420	-21.580	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)
 for M/N: CY920-C (2nd Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	dBμV	dB	dBμV
Line 1					
Quasi-Peak					
0.170	9.743	34.220	43.964	-21.465	65.429
0.216	9.739	30.030	39.769	-24.345	64.114
0.334	9.745	27.380	37.125	-23.618	60.743
0.490	9.752	32.180	41.932	-14.354	56.286
0.779	9.765	28.600	38.365	-17.635	56.000
7.920	9.910	27.320	37.230	-22.770	60.000
Average					
0.170	9.743	18.800	28.544	-26.885	55.429
0.216	9.739	22.700	32.439	-21.675	54.114
0.334	9.745	24.340	34.085	-16.658	50.743
0.490	9.752	20.580	30.332	-15.954	46.286
0.779	9.765	20.320	30.085	-15.915	46.000
7.920	9.910	21.530	31.440	-18.560	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)
 for M/N: CY920-C (2nd Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	dBμV	dB	dBμV
Line 2					
Quasi-Peak					
0.173	9.747	31.650	41.397	-23.946	65.343
0.509	9.753	31.100	40.853	-15.147	56.000
0.771	9.775	28.660	38.435	-17.565	56.000
1.974	9.839	19.840	29.679	-26.321	56.000
6.685	9.900	23.990	33.890	-26.110	60.000
20.920	10.100	24.460	34.560	-25.440	60.000
Average					
0.173	9.747	12.100	21.847	-33.496	55.343
0.509	9.753	21.120	30.873	-15.127	46.000
0.771	9.775	18.660	28.435	-17.565	46.000
1.974	9.839	6.030	15.869	-30.131	46.000
6.685	9.900	16.290	26.190	-23.810	50.000
20.920	10.100	19.050	29.150	-20.850	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)
 for M/N: CY920-A (Main Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV	dB	dBμV
Line 1					
Quasi-Peak					
0.173	9.742	29.870	39.613	-25.730	65.343
0.318	9.744	26.710	36.454	-24.746	61.200
0.498	9.752	30.950	40.702	-15.355	56.057
0.724	9.763	28.560	38.323	-17.677	56.000
1.209	9.785	26.640	36.425	-19.575	56.000
21.252	10.066	25.610	35.676	-24.324	60.000
Average					
0.173	9.742	5.460	15.203	-40.140	55.343
0.318	9.744	20.320	30.064	-21.136	51.200
0.498	9.752	21.120	30.872	-15.185	46.057
0.724	9.763	18.890	28.653	-17.347	46.000
1.209	9.785	17.330	27.115	-18.885	46.000
21.252	10.066	22.360	32.426	-17.574	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)
 for M/N: CY920-A (Main Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	dBμV	dB	dBμV
Line 2					
Quasi-Peak					
0.170	9.747	30.210	39.957	-25.472	65.429
0.541	9.754	30.990	40.744	-15.256	56.000
1.216	9.795	26.660	36.455	-19.545	56.000
2.212	9.850	24.110	33.960	-22.040	56.000
8.052	9.920	27.490	37.410	-22.590	60.000
21.060	10.103	25.330	35.433	-24.567	60.000
Average					
0.170	9.747	26.430	36.177	-19.252	55.429
0.541	9.754	20.420	30.174	-15.826	46.000
1.216	9.795	20.850	30.645	-15.355	46.000
2.212	9.850	16.950	26.800	-19.200	46.000
8.052	9.920	22.370	32.290	-17.710	50.000
21.060	10.103	20.500	30.603	-19.397	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)
 for M/N: CY920-A (2nd Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	dBμV	dB	dBμV
Line 1					
Quasi-Peak					
0.162	9.746	35.090	44.836	-20.821	65.657
0.533	9.754	35.680	44.434	-15.566	56.000
0.654	9.759	26.660	36.419	-19.581	56.000
1.584	9.812	25.160	34.972	-21.028	56.000
7.877	9.910	27.220	37.130	-22.870	60.000
21.177	10.065	24.930	34.995	-25.005	60.000
Average					
0.162	9.746	31.660	41.406	-14.251	55.657
0.533	9.754	20.720	30.474	-15.526	46.000
0.654	9.759	21.240	30.999	-15.001	46.000
1.584	9.812	15.380	25.192	-20.808	46.000
7.877	9.910	20.160	30.070	-19.930	50.000
21.177	10.065	20.310	30.375	-19.625	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)
 for M/N: CY920-A (2nd Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBμV	dBμV	dB	dBμV
Line 2					
Quasi-Peak					
0.154	9.749	34.670	44.418	-21.468	65.886
0.236	9.750	17.800	27.550	-35.993	63.543
0.361	9.746	27.600	37.346	-22.625	59.971
0.517	9.753	31.180	40.933	-15.067	56.000
0.693	9.761	24.870	34.631	-21.369	56.000
7.326	9.910	25.240	35.150	-24.850	60.000
Average					
0.154	9.749	24.360	34.108	-21.778	55.886
0.236	9.750	-2.540	7.210	-46.333	53.543
0.361	9.746	24.470	34.216	-15.755	49.971
0.517	9.753	20.910	30.663	-15.337	46.000
0.693	9.761	17.910	27.671	-18.329	46.000
7.326	9.910	18.300	28.210	-21.790	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Transmit (5GHz) for M/N: CY920-C (Main Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dBμV
	dB	dBμV	dBμV		
Line 1					
Quasi-Peak					
0.193	9.650	38.130	47.780	-16.991	64.771
0.279	9.655	24.690	34.345	-27.969	62.314
0.388	9.661	19.690	29.351	-29.849	59.200
0.654	9.675	33.740	43.415	-12.585	56.000
0.931	9.690	27.090	36.780	-19.220	56.000
1.755	9.747	24.960	34.708	-21.292	56.000
Average					
0.193	9.650	28.210	37.860	-16.911	54.771
0.279	9.655	9.910	19.565	-32.749	52.314
0.388	9.661	10.480	20.141	-29.059	49.200
0.654	9.675	25.630	35.305	-10.695	46.000
0.931	9.690	16.560	26.250	-19.750	46.000
1.755	9.747	14.430	24.178	-21.822	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Transmit (5GHz) for M/N: CY920-C (Main Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dB μ V
	dB	dB μ V	dB μ V		
Line 2					
Quasi-Peak					
0.189	9.660	36.310	45.970	-18.916	64.886
0.306	9.657	25.240	34.897	-26.646	61.543
0.400	9.661	23.630	33.291	-25.566	58.857
0.611	9.673	33.820	43.493	-12.507	56.000
0.806	9.693	29.950	39.643	-16.357	56.000
1.349	9.723	27.860	37.583	-18.417	56.000
Average					
0.189	9.660	27.470	37.130	-17.756	54.886
0.306	9.657	17.960	27.617	-23.926	51.543
0.400	9.661	15.770	25.431	-23.426	48.857
0.611	9.673	24.770	34.443	-11.557	46.000
0.806	9.693	19.780	29.473	-16.527	46.000
1.349	9.723	16.550	26.273	-19.727	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Transmit (5GHz) for M/N: CY920-C (2nd Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dB μ V
	dB	dB μ V	dB μ V		
Line 1					
Quasi-Peak					
0.193	9.650	37.680	47.330	-17.441	64.771
0.295	9.656	25.030	34.686	-27.171	61.857
0.404	9.662	19.500	29.162	-29.581	58.743
0.623	9.673	32.820	42.493	-13.507	56.000
0.802	9.683	26.660	36.343	-19.657	56.000
1.334	9.722	26.120	35.842	-20.158	56.000
Average					
0.193	9.650	27.860	37.510	-17.261	54.771
0.295	9.656	13.210	22.866	-28.991	51.857
0.404	9.662	11.100	20.762	-27.981	48.743
0.623	9.673	23.210	32.883	-13.117	46.000
0.802	9.683	17.320	27.003	-18.997	46.000
1.334	9.722	15.970	25.692	-20.308	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Transmit (5GHz) for M/N: CY920-C (2nd Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dB μ V
	dB	dB μ V	dB μ V		
Line 2					
Quasi-Peak					
0.201	9.660	35.100	44.760	-19.783	64.543
0.302	9.658	24.760	34.418	-27.239	61.657
0.408	9.662	23.670	33.332	-25.297	58.629
0.658	9.675	33.880	43.555	-12.445	56.000
0.826	9.695	29.630	39.325	-16.675	56.000
1.337	9.722	27.740	37.462	-18.538	56.000
Average					
0.201	9.660	28.040	37.700	-16.843	54.543
0.302	9.658	17.910	27.568	-24.089	51.657
0.408	9.662	16.170	25.832	-22.797	48.629
0.658	9.675	26.530	36.205	-9.795	46.000
0.826	9.695	19.470	29.165	-16.835	46.000
1.337	9.722	17.930	27.652	-18.348	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Transmit (5GHz) for M/N: CY920-A (Main Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dB μ V
	dB	dB μ V	dB μ V		
Line 1					
Quasi-Peak					
0.201	9.650	37.990	47.640	-16.903	64.543
0.650	9.675	32.410	42.085	-13.915	56.000
1.025	9.695	26.620	36.315	-19.685	56.000
1.345	9.723	27.420	37.143	-18.857	56.000
1.873	9.762	22.760	32.522	-23.478	56.000
2.994	9.803	20.580	30.383	-25.617	56.000
Average					
0.201	9.650	28.260	37.910	-16.633	54.543
0.650	9.675	24.180	33.855	-12.145	46.000
1.025	9.695	16.440	26.135	-19.865	46.000
1.345	9.723	15.860	25.583	-20.417	46.000
1.873	9.762	12.440	22.202	-23.798	46.000
2.994	9.803	11.650	21.453	-24.547	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Transmit (5GHz) for M/N: CY920-A (Main Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dB μ V
	dB	dB μ V	dB μ V		
Line 2					
Quasi-Peak					
0.201	9.660	35.390	45.050	-19.493	64.543
0.279	9.665	24.350	34.015	-28.299	62.314
0.408	9.662	24.350	34.012	-24.617	58.629
0.611	9.673	33.820	43.493	-12.507	56.000
0.931	9.700	29.250	38.950	-17.050	56.000
1.962	9.767	25.580	35.347	-20.653	56.000
Average					
0.201	9.660	28.300	37.960	-16.583	54.543
0.279	9.665	13.910	23.575	-28.739	52.314
0.408	9.662	16.680	26.342	-22.287	48.629
0.611	9.673	24.680	34.353	-11.647	46.000
0.931	9.700	19.100	28.800	-17.200	46.000
1.962	9.767	16.470	26.237	-19.763	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Transmit (5GHz) for M/N: CY920-A (2nd Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV	dB	dBμV
Line 1					
Quasi-Peak					
0.185	9.651	37.140	46.791	-18.209	65.000
0.298	9.656	24.730	34.386	-27.385	61.771
0.505	9.667	25.210	34.877	-21.123	56.000
0.650	9.675	32.330	42.005	-13.995	56.000
0.935	9.691	25.150	34.841	-21.159	56.000
1.787	9.757	23.660	33.417	-22.583	56.000
Average					
0.185	9.651	25.620	35.271	-19.729	55.000
0.298	9.656	13.680	23.336	-28.435	51.771
0.505	9.667	16.450	26.117	-19.883	46.000
0.650	9.675	24.130	33.805	-12.195	46.000
0.935	9.691	14.710	24.401	-21.599	46.000
1.787	9.757	11.730	21.487	-24.513	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Transmit (5GHz) for M/N: CY920-A (2nd Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dB μ V
	dB	dB μ V	dB μ V		
Line 2					
Quasi-Peak					
0.209	9.661	32.320	41.981	-22.333	64.314
0.408	9.662	23.770	33.432	-25.197	58.629
0.654	9.675	34.210	43.885	-12.115	56.000
1.017	9.705	27.500	37.205	-18.795	56.000
1.962	9.767	24.680	34.447	-21.553	56.000
17.201	10.156	16.540	26.696	-33.304	60.000
Average					
0.209	9.661	23.720	33.381	-20.933	54.314
0.408	9.662	16.170	25.832	-22.797	48.629
0.654	9.675	26.050	35.725	-10.275	46.000
1.017	9.705	16.200	25.905	-20.095	46.000
1.962	9.767	15.950	25.717	-20.283	46.000
17.201	10.156	9.540	19.696	-30.304	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Transmit (802.11n MCS0 15Mbps 40M-BW) (2437 MHz)
 for M/N: CY920-C (Main Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m
Horizontal					
113.420	-7.449	40.814	33.365	-10.135	43.500
288.020	-5.557	42.468	36.911	-9.089	46.000
462.620	3.589	34.646	38.235	-7.765	46.000
610.060	3.657	35.054	38.711	-7.289	46.000
827.340	7.361	32.943	40.304	-5.696	46.000
961.200	6.810	33.239	40.049	-13.951	54.000
Vertical					
113.420	-3.709	40.814	37.105	-6.395	43.500
231.760	-6.457	42.263	35.806	-10.194	46.000
375.320	0.388	30.079	30.467	-15.533	46.000
540.220	2.169	34.846	37.015	-8.985	46.000
749.740	2.023	34.176	36.199	-9.801	46.000
961.200	3.310	33.239	36.549	-17.451	54.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Transmit (802.11n MCS0 15Mbps 40M-BW) (2437 MHz)
 for M/N: CY920-C (2nd Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m
Horizontal					
124.090	-9.923	42.467	32.543	-10.957	43.500
293.840	-3.868	40.894	37.027	-8.973	46.000
432.550	-2.036	38.987	36.951	-9.049	46.000
527.610	1.832	35.825	37.657	-8.343	46.000
689.600	3.628	32.550	36.178	-9.822	46.000
854.500	6.626	31.281	37.907	-8.093	46.000
Vertical					
97.900	-1.400	35.278	33.877	-9.623	43.500
288.020	-8.189	44.442	36.253	-9.747	46.000
472.320	-4.613	42.026	37.413	-8.587	46.000
558.650	-5.227	40.010	34.783	-11.217	46.000
690.570	2.519	32.678	35.197	-10.803	46.000
897.180	2.332	33.116	35.448	-10.552	46.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Transmit (802.11n MCS0 15Mbps 40M-BW) (2437 MHz)
 for M/N: CY920-A (Main Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V/m	dB	dB μ V/m
Horizontal					
167.740	-10.799	42.709	31.910	-11.590	43.500
375.320	-1.209	38.045	36.836	-9.164	46.000
512.090	1.529	34.588	36.117	-9.883	46.000
675.050	2.909	33.759	36.668	-9.332	46.000
851.590	6.162	31.146	37.308	-8.692	46.000
961.200	6.450	31.002	37.452	-16.548	54.000
Vertical					
147.370	-6.246	42.241	35.995	-7.505	43.500
288.020	-8.189	44.442	36.253	-9.747	46.000
472.320	-4.613	42.026	37.413	-8.587	46.000
585.810	-5.867	43.358	37.491	-8.509	46.000
690.570	2.519	32.678	35.197	-10.803	46.000
827.340	3.162	31.070	34.232	-11.768	46.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Transmit (802.11n MCS0 15Mbps 40M-BW) (2437 MHz)
 for M/N: CY920-A (2nd Source)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal					
180.350	-12.012	47.417	35.406	-8.094	43.500
323.910	-4.468	40.939	36.471	-9.529	46.000
485.900	-0.804	40.301	39.497	-6.503	46.000
649.830	2.151	36.940	39.091	-6.909	46.000
800.180	5.141	34.040	39.181	-6.819	46.000
931.130	7.079	30.515	37.594	-8.406	46.000
Vertical					
113.420	-1.849	36.783	34.934	-8.566	43.500
202.660	-7.739	44.920	37.181	-6.319	43.500
364.650	-2.151	42.009	39.858	-6.142	46.000
549.920	-2.877	36.252	33.375	-12.625	46.000
685.720	2.319	31.496	33.814	-12.186	46.000
868.080	0.641	36.630	37.271	-8.729	46.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Transmit (5GHz) for M/N: CY920-C (Main Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dBμV/m
	dB	dBμV	dBμV/m		
Horizontal					
107.600	-7.597	34.490	26.893	-16.607	43.500
225.940	-9.647	44.883	35.236	-10.764	46.000
365.620	0.382	33.763	34.145	-11.855	46.000
600.360	3.472	26.384	29.856	-16.144	46.000
800.180	6.417	24.940	31.357	-14.643	46.000
951.500	6.993	24.981	31.974	-14.026	46.000
Vertical					
43.580	-10.919	41.976	31.057	-8.943	40.000
262.800	-4.944	33.778	28.834	-17.166	46.000
511.120	0.783	23.826	24.609	-21.391	46.000
689.600	2.302	22.662	24.964	-21.036	46.000
817.640	2.966	23.702	26.668	-19.332	46.000
920.460	3.272	23.924	27.196	-18.804	46.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Transmit (5GHz) for M/N: CY920-C (2nd Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dBμV/m
	dB	dBμV	dBμV/m		
Horizontal					
159.980	-10.030	39.087	29.056	-14.444	43.500
264.740	-5.501	34.376	28.876	-17.124	46.000
433.520	0.841	26.825	27.666	-18.334	46.000
633.340	1.530	28.323	29.853	-16.147	46.000
800.180	6.417	26.726	33.143	-12.857	46.000
930.160	7.530	23.045	30.575	-15.425	46.000
Vertical					
43.580	-10.919	42.493	31.574	-8.426	40.000
192.960	-5.655	31.358	25.703	-17.797	43.500
379.200	0.881	24.831	25.712	-20.288	46.000
596.480	0.907	23.416	24.323	-21.677	46.000
757.500	2.487	23.961	26.448	-19.552	46.000
901.060	1.858	22.760	24.618	-21.382	46.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Transmit (5GHz) for M/N: CY920-A (Main Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dBμV/m
	dB	dBμV	dBμV/m		
Horizontal					
107.600	-7.597	33.823	26.226	-17.274	43.500
225.940	-9.647	42.540	32.893	-13.107	46.000
373.380	0.873	30.741	31.614	-14.386	46.000
575.140	3.025	25.616	28.641	-17.359	46.000
701.240	2.759	28.049	30.808	-15.192	46.000
897.180	5.487	23.367	28.854	-17.146	46.000
Vertical					
43.580	-10.919	41.447	30.528	-9.472	40.000
175.500	-1.842	28.100	26.258	-17.242	43.500
363.680	0.079	24.772	24.851	-21.149	46.000
536.340	1.609	25.519	27.128	-18.872	46.000
771.080	2.766	24.031	26.798	-19.202	46.000
930.160	3.830	23.422	27.252	-18.748	46.000

Note:

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

Product : Network Media Module
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Transmit (5GHz) for M/N: CY920-A (2nd Source)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dBμV/m
	dB	dBμV	dBμV/m		
Horizontal					
119.240	-7.291	35.094	27.804	-15.696	43.500
225.940	-9.647	42.339	32.692	-13.308	46.000
365.620	0.382	34.781	35.163	-10.837	46.000
526.640	3.112	26.350	29.462	-16.538	46.000
701.240	2.759	27.530	30.289	-15.711	46.000
879.720	6.618	23.824	30.442	-15.558	46.000
Vertical					
43.580	-10.919	42.949	32.030	-7.970	40.000
177.440	-1.248	28.006	26.758	-16.742	43.500
373.380	0.043	25.261	25.304	-20.696	46.000
538.280	1.996	24.180	26.176	-19.824	46.000
782.720	2.757	26.346	29.103	-16.897	46.000
930.160	3.830	23.777	27.607	-18.393	46.000

Note:

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