FCC 47 CFR PART 15 SUBPART C

RF Test Report

Applicant	:	TP-LINK TECHNOLOGIES CO., LTD.
Product Type	:	HD Day/Night Wi-Fi Cloud Camera
Trade Name	:	TP-LINK
Model Number	:	NC260
Applicable Standard	:	FCC 47 CFR PART 15 SUBPART C ANSI C63.10:2013
Receive Date	:	Jul. 09, 2016
Test Period	:	Jul. 19 ~ Oct. 14, 2016
Issue Date	:	Nov. 02, 2016

Issue by

A Test Lab Techno Corp.
No. 140-1, Changan Street, Bade District,
Taoyuan City 33465, Taiwan (R.O.C)
Tel：+886-3-2710188 / Fax：+886-3-2710190

Taiwan Accreditation Foundation accreditation number: 1330

Revision History

Rev.	Issue Date	Revisions	Revised By
00	Aug. 26, 2016	Initial Issue	Janice Huang
01	Sep. 19, 2016	Revised report information.	Joyce Liao
02	Nov. 02, 2016	Revised report information.	Joyce Liao

Verification of Compliance

Issued Date: Nov. 02, 2016

Applicant	:	TP-LINK TECHNOLOGIES CO., LTD.
Product Type	:	HD Day/Night Wi-Fi Cloud Camera
Trade Name	:	TP-LINK
Model Number	:	NC260
FCC ID	:	TE7NC260
EUT Rated Voltage	:	DC 9V, 0.6A
Test Voltage	:	120 Vac / 60 Hz
Applicable Standard	:	FCC 47 CFR PART 15 SUBPART C ANSI C63.10:2013
Test Result	:	Complied
Performing Lab.	:	A Test Lab Techno Corp. No. 140-1, Changan Street, Bade District, Taoyuan City 33465, Taiwan (R.O.C) Tel：+886-3-2710188 / Fax：+886-3-2710190 Taiwan Accreditation Foundation accreditation number: 1330 http://www.atl-lab.com.tw/e-index.htm

A Test Lab Techno Corp. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by A Test Lab Techno Corp. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By	:	Fly Lu	Reviewed By	:	Eric Ou Yang
(Manager)		(Fly Lu)	(Testing Engineer)		(Eric Ou Yang)

TABLE OF CONTENTS

1 General Information

1.1 Summary of Test Result

Standard	Item	Result	Remark
15.247			
15.207	AC Power Conducted Emission	PASS	-----
Standard	Item	Result	Remark
15.247			
15.247(d)	Transmitter Radiated Emissions	PASS	-----
15.247(b)(3)	Max. Output Power	PASS	-----
15.247(a)(2)	6dB RF Bandwidth	PASS	-----
15.247(e)	Power Spectral Density	PASS	-----
15.247(d)	Out of Band Conducted Spurious Emission	PASS	-----
15.203	Antenna Requirement	PASS	-----

The test results of this report relate only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

1.2 Measurement Uncertainty

Test Item	Frequency Range	Uncertainty (dB)
Conducted Emission	9kHz ~ 150KHz	2.7
	150kHz ~ 30MHz	2.8
Radiated Emission	9kHz ~ 30MHz	1.457
	30MHz ~ 1000MHz	6.300
	1000MHz ~ 18000MHz	5.474
	18000MHz ~ 26500MHz	5.630
	26500MHz ~ 40000MHz	5.054
Conducted Output Power	+0.27 dB / -0.28 dB	
RF Bandwidth	4.96%	
Power Spectral Density	+0.71 dB / -0.77 dB	

2 EUT Description

Applicant	TP-LINK TECHNOLOGIES CO., LTD. Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park,Shennan Rd, Nanshan, Shenzhen,China			
Manufacturer	TP-LINK TECHNOLOGIES CO., LTD. Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park,Shennan Rd, Nanshan, Shenzhen,China			
Product Type	HD Day/Night Wi-Fi Cloud Camera			
Trade Name	TP-LINK			
Model Number	NC260			
FCC ID	TE7NC260			
Operate Freq. Band	Frequency Range (MHz)	Modulation	Channel Bandwidth	Data Rate 400 GI (ns)
IEEE 802.11b	2412 ~ 2462	DSSS	20MHz	Up to 11Mbps
IEEE 802.11g	2412 ~ 2462	OFDM (64QAM)	20MHz	Up to 54Mbps
IEEE 802.11n 2.4GHz 20MHz	2412 ~ 2462	OFDM (64QAM)	20MHz	Up to 144.4Mbps
IEEE 802.11n 2.4GHz 40MHz	2422 ~ 2452	OFDM (64QAM)	40MHz	Up to 300Mbps
Antenna information		Type	Max. Gain (dBi)	
	ANT-1	IFA Antenna	2.60dBi	
	ANT-2	IFA Antenna	2.10dBi	
Antenna Delivery	See section 3.1			

Frequency Band	Max. RF Output Power (W)
IEEE 802.11b	0.351
IEEE 802.11g	0.355
IEEE 802.11n 2.4GHz 20MHz	0.331
IEEE 802.11n 2.4GHz 40MHz	0.094

3 Test Methodology

3.1. Mode of Operation

Decision of Test ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Continuous TX mode
Mode 2: IEEE 802.11b link mode
Mode 3: IEEE 802.11g link mode
Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode
Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode

Software used to control the EUT for staying in continuous transmitting mode was programmed.

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode only.

Test Mode	ANT-1	ANT-2	ANT-1+ 2
Mode 2: IEEE 802.11b link mode	V	V	V
Mode 3: IEEE 802.11g link mode	V	V	V
Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode	V	V	V
Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode	V	V	V

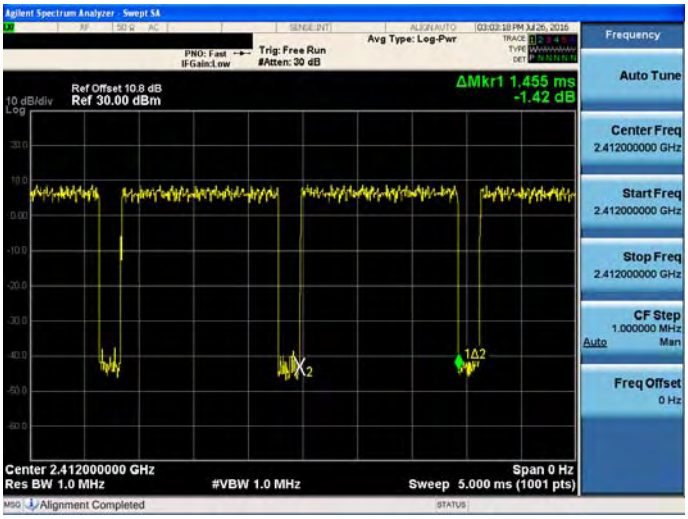
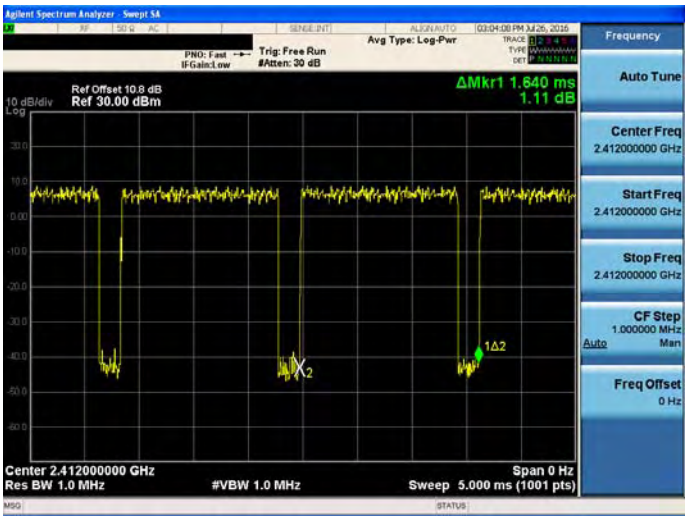
Test Mode	Antenna Delivery	Test Channel	Data Rate 400 GI (ns)
Mode 2: IEEE 802.11b link mode	2TX / 2RX (CDD)	1, 6, 11	11
Mode 3: IEEE 802.11g link mode	2TX / 2RX (CDD)	1, 6, 11	54
Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode	2TX / 2RX (CDD)	1, 6, 11	144.4
Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode	2TX / 2RX (CDD)	3, 6, 9	300

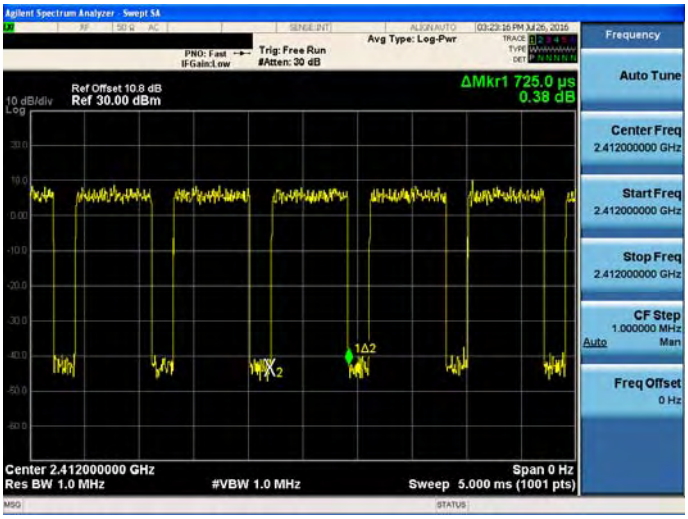
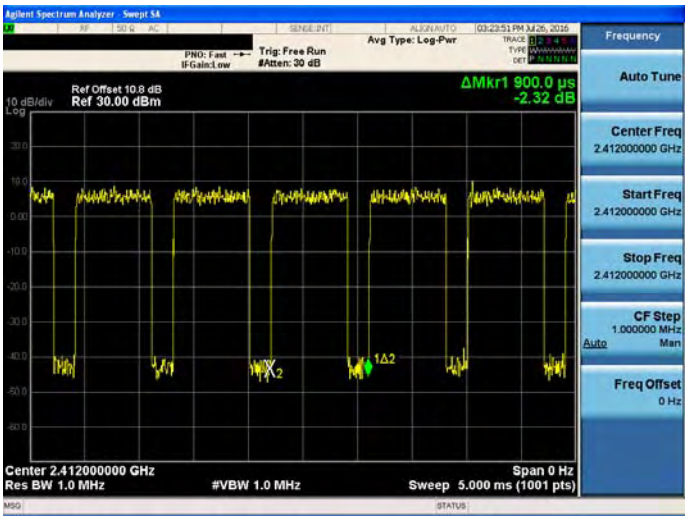
Duty cycle

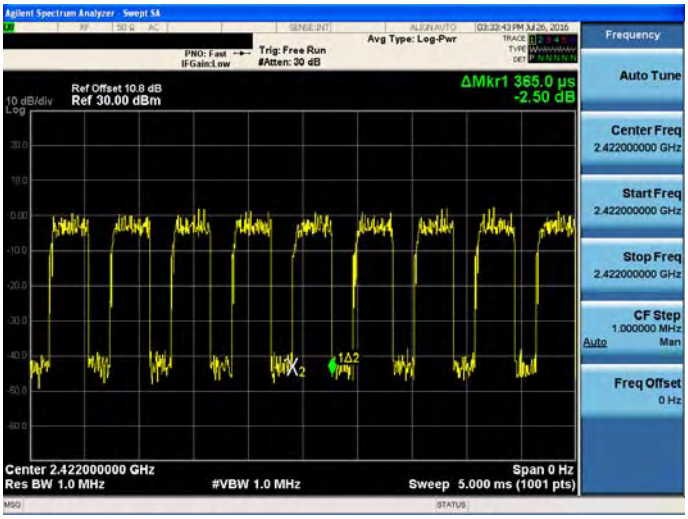
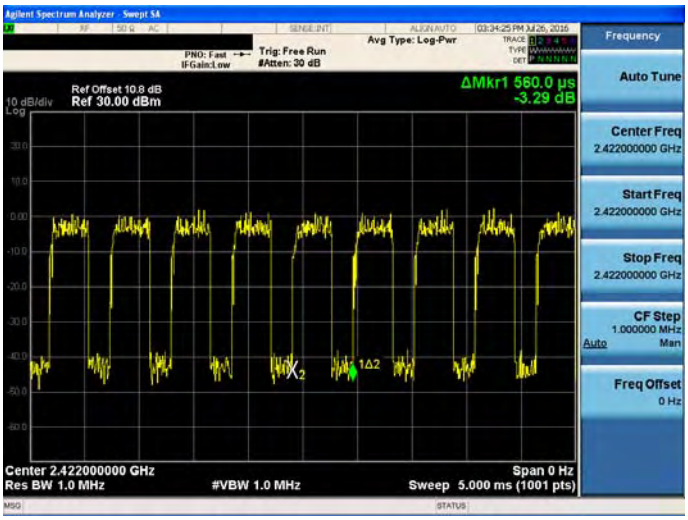
Test Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle	Duty Factor (dB)	1/T Minimum VBW (kHz)
Mode 2: IEEE 802.11b link mode	2412.0	8.720	8.880	0.982	0.079	0.010
Mode 3: IEEE 802.11g link mode	2412.0	1.455	1.640	0.887	0.520	0.687
Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode	2412.0	0.725	0.900	0.806	0.939	1.379
Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode	2422.0	0.365	0.560	0.652	1.859	2.740

Duty Cycle Graphs

Mode 2: IEEE 802.11b link mode	
On time	
On+off time	

Mode 3: IEEE 802.11g Mode	
On time	
On+off time	

Mode 4: IEEE 802.11n 2.4GHz 20MHz Mode	
On time	
On+off time	

Mode 5: IEEE 802.11n 2.4GHz 40MHz Mode	
On time	
On+off time	

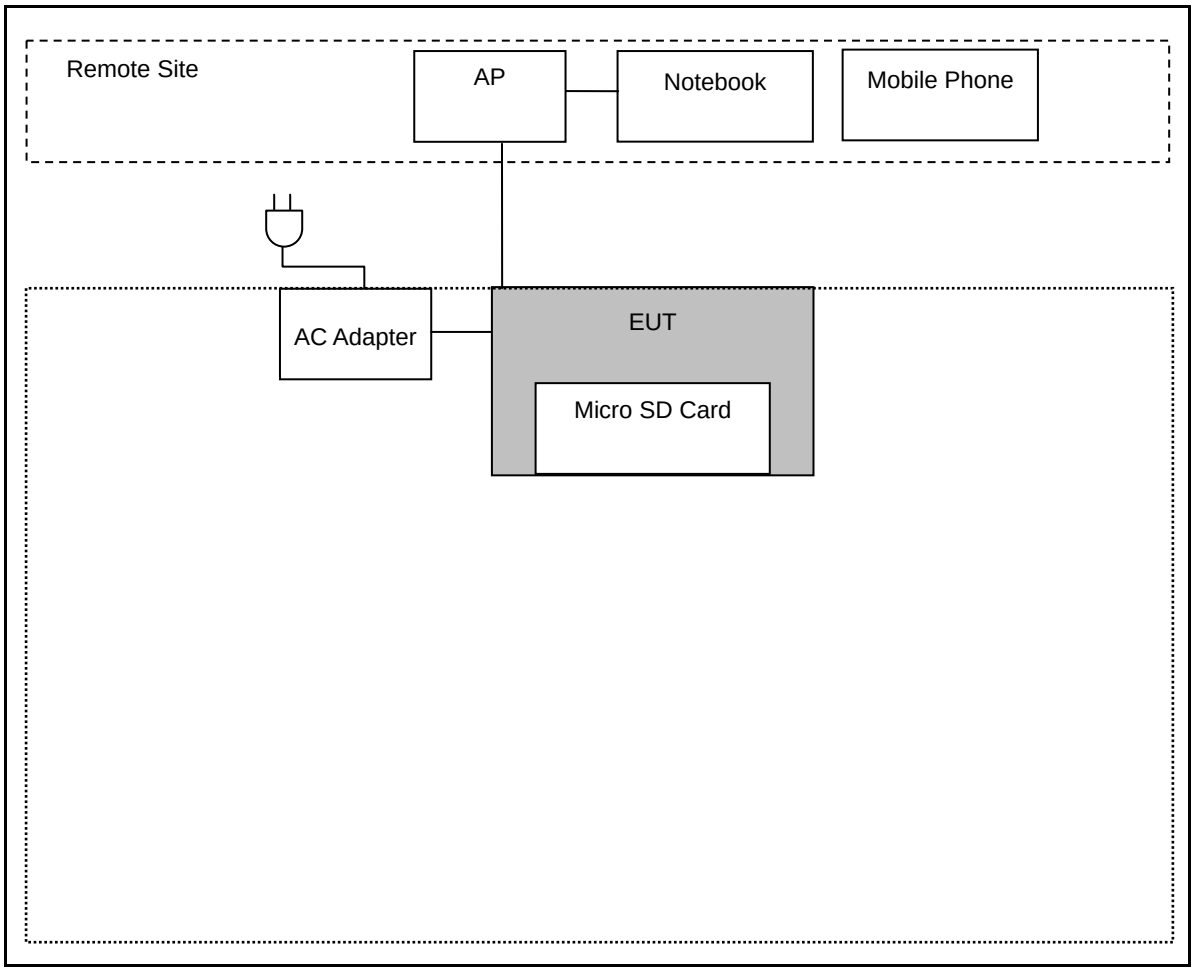
3.2. EUT Exercise Software

1.	Setup the EUT shown on 3.3.
2.	Turn on the power of all equipment.
3.	Turn Wi-Fi function link to AP
4.	EUT run test program.

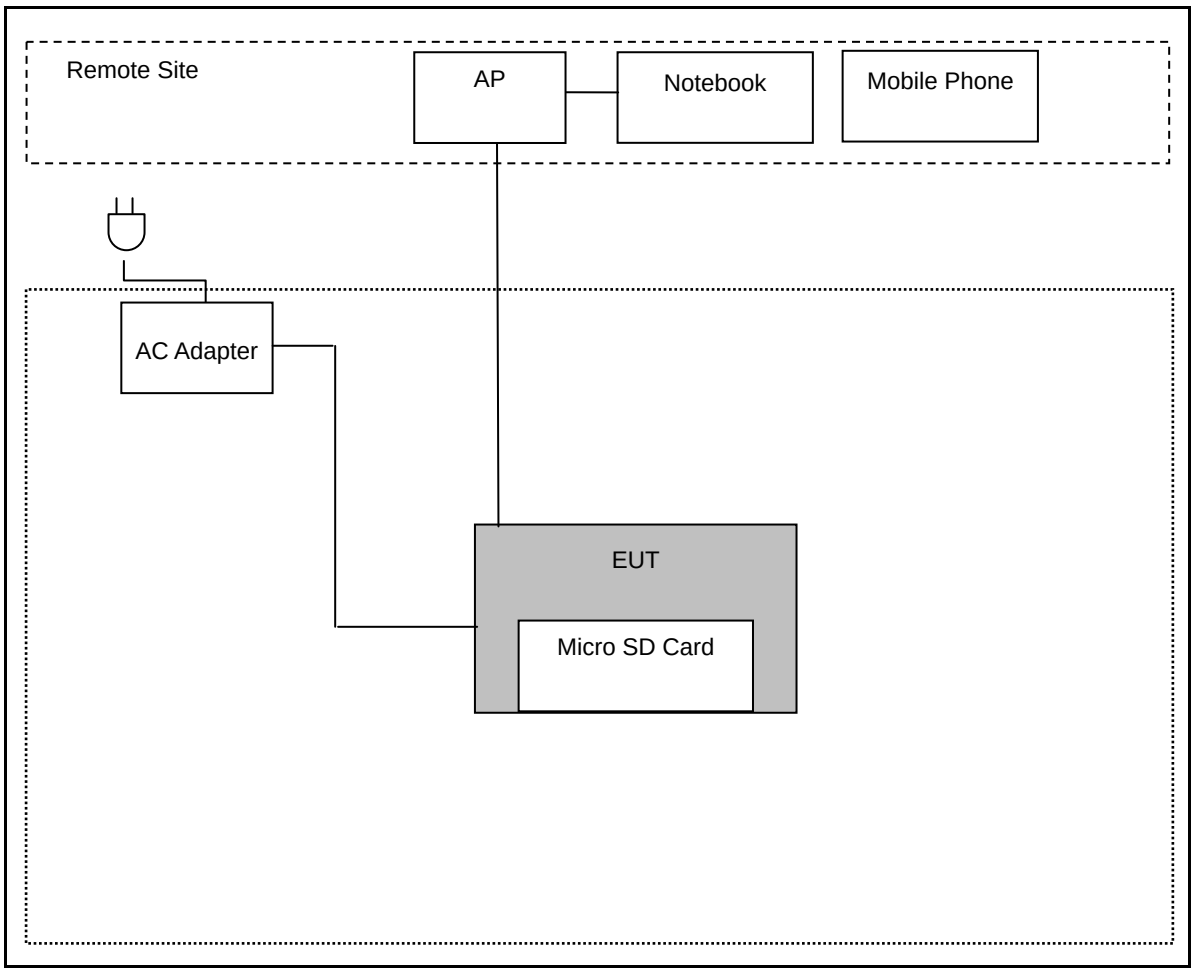
Measurement Software	
1	EZ-EMC Ver. ATL-03A1-1
2	EZ-EMC Ver ATL-ITC-3A1-1

3.3. Configuration of Test System Details

Conducted Emissions



Radiated Emissions



3.4. Test Site Environment

Items	Required (IEC 60068-1)	Actual
Temperature (°C)	15-35	26
Humidity (%RH)	25-75	60
Barometric pressure (mbar)	860-1060	950

4 AC Power Line Conducted Emission Measurement

4.1. Limit

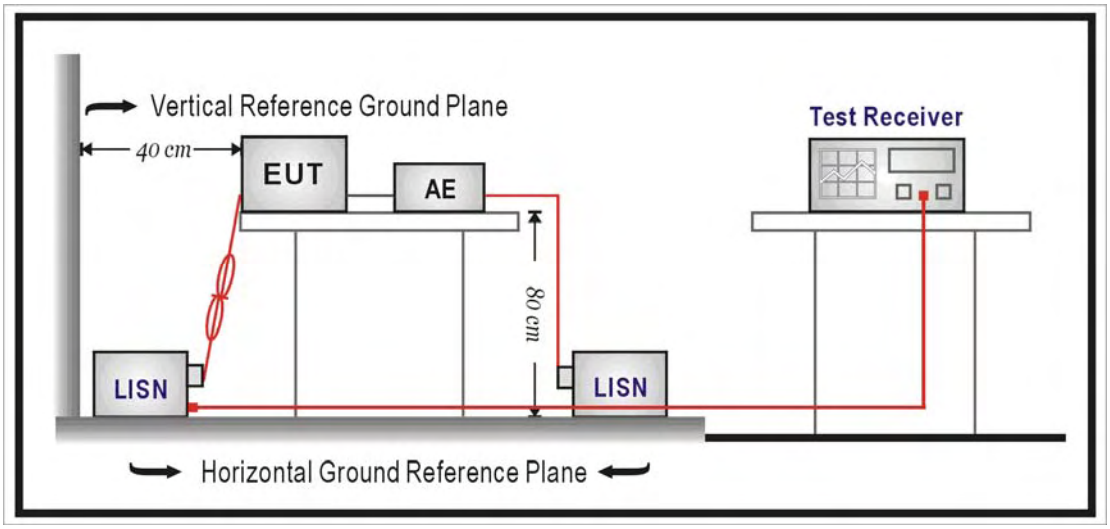
Frequency (MHz)	Quasi-peak	Average
0.15 - 0.5	66 to 56	56 to 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

4.2. Test Instruments

Describe	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Test Receiver	R&S	ESCI	100367	05/31/2016	1 year
LISN	R&S	ENV216	101040	03/15/2016	1 year
LISN	R&S	ENV216	101041	03/07/2016	1 year
RF Cable	Woken	00100D1380194M	TE-02-02	05/31/2016	1 year
Test Site	ATL	TE02	TE02	N.C.R.	-----

Note: N.C.R. = No Calibration Request.

4.3. Test Setup



4.4. 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 50Ω// 50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50Ω// 50uH coupling impedance with 50ohm termination.

Tabletop device shall be placed on a non-conducting platform, of nominal size 1 m by 1.5 m, raised 80 cm above the reference ground plane. The wall of screened room shall be located 40cm to the rear of the EUT. Other surfaces of tabletop or floor standing EUT shall be at least 80cm from any other ground conducting surface including one or more LISNs. For floor-standing device shall be placed under the EUT with a 12mm insulating material.

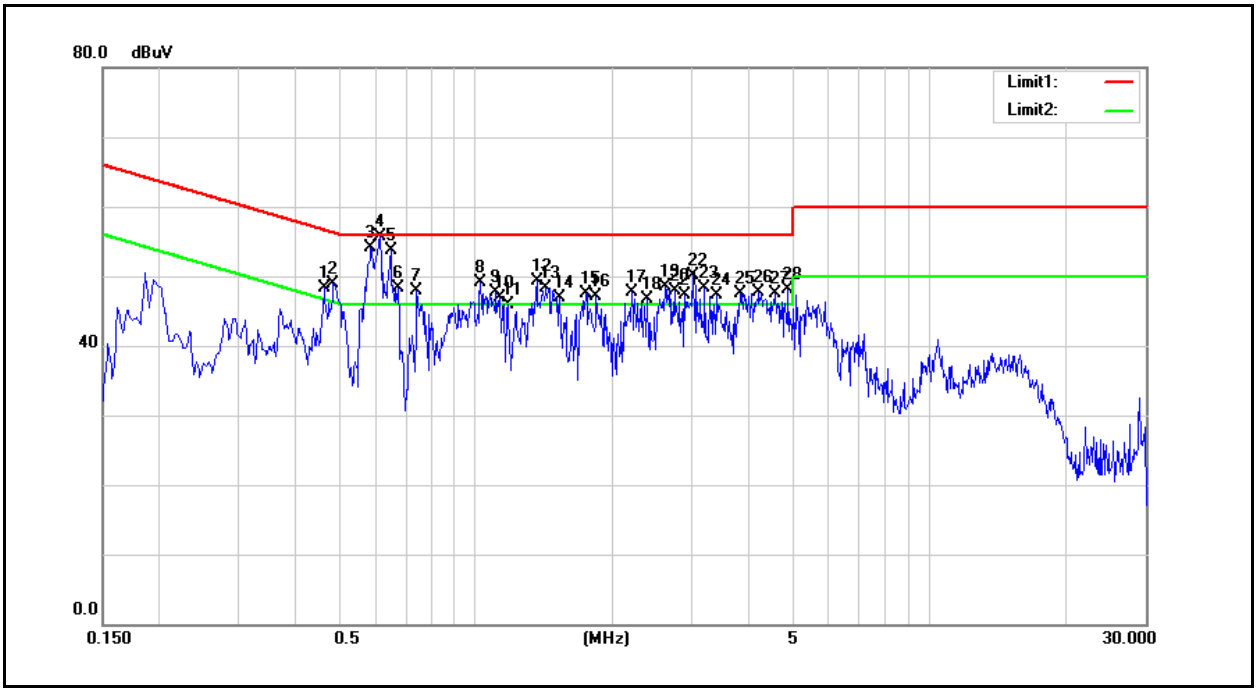
Conducted emissions were investigated over the frequency range from 0.15 MHz to 30 MHz using a resolution bandwidth of 9 kHz. The equipment under test (EUT) shall be meet the limits in section 4.1, as applicable, including the average limit and the quasi-peak limit when using respectively, an average detector and quasi-peak detector measured in accordance with the methods described of related standard. When all of peak value were complied with quasi-peak and average limit from 150kHz to 30MHz then quasi-peak and average measurement was unnecessary.

The AMN shall be placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane for AMNs mounted on top of the ground reference plane. This distance is between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment shall be at least 0,8 m from the AMN. If the mains power cable is longer than 1m then the cable shall be folded back and forth at the centre of the lead to form a bundle no longer than 0.4m. All of interconnecting cables that hang closer than 40cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long. All of EUT and AE shall be separate place more than 0.1m. All 50 Ω ports of the LISN shall be resistively terminated into 50 Ω loads when not connected to the measuring instrument.

If the reading of the measuring receiver shows fluctuations close to the limit, the reading shall be observed for at least 15 s at each measurement frequency; the higher reading shall be recorded with the exception of any brief isolated high reading which shall be ignored.

4.5. Test Result

Standard:	FCC Part 15C	Line:	L1
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1	Date:	07/19/2016
		Test By:	Eric Ou Yang
Description:			



Standard:	FCC Part 15C	Line:	L1
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1	Date:	07/19/2016
		Test By:	Eric Ou Yang
Description:			

No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.4620	35.74	24.69	9.61	45.35	34.30	56.66	46.66	-11.31	-12.36	Pass
2	0.4860	36.45	27.64	9.61	46.06	37.25	56.24	46.24	-10.18	-8.99	Pass
3	0.5860	41.71	31.87	9.61	51.32	41.48	56.00	46.00	-4.68	-4.52	Pass
4	0.6140	43.49	31.58	9.61	53.10	41.19	56.00	46.00	-2.90	-4.81	Pass
5	0.6500	39.94	27.19	9.62	49.56	36.81	56.00	46.00	-6.44	-9.19	Pass
6	0.6740	32.30	21.88	9.62	41.92	31.50	56.00	46.00	-14.08	-14.50	Pass
7	0.7420	35.03	21.70	9.63	44.66	31.33	56.00	46.00	-11.34	-14.67	Pass
8	1.0220	36.19	24.20	9.64	45.83	33.84	56.00	46.00	-10.17	-12.16	Pass
9	1.1100	34.93	22.58	9.64	44.57	32.22	56.00	46.00	-11.43	-13.78	Pass
10	1.1300	34.50	21.62	9.65	44.15	31.27	56.00	46.00	-11.85	-14.73	Pass
11	1.1780	32.62	20.86	9.65	42.27	30.51	56.00	46.00	-13.73	-15.49	Pass
12	1.3620	35.96	24.22	9.65	45.61	33.87	56.00	46.00	-10.39	-12.13	Pass
13	1.4300	35.20	24.77	9.66	44.86	34.43	56.00	46.00	-11.14	-11.57	Pass
14	1.5340	31.60	21.29	9.67	41.27	30.96	56.00	46.00	-14.73	-15.04	Pass
15	1.7500	32.50	23.03	9.68	42.18	32.71	56.00	46.00	-13.82	-13.29	Pass
16	1.8460	32.41	22.87	9.68	42.09	32.55	56.00	46.00	-13.91	-13.45	Pass
17	2.2100	32.45	22.50	9.70	42.15	32.20	56.00	46.00	-13.85	-13.80	Pass
18	2.3900	28.77	18.54	9.70	38.47	28.24	56.00	46.00	-17.53	-17.76	Pass
19	2.6220	34.11	23.08	9.71	43.82	32.79	56.00	46.00	-12.18	-13.21	Pass
20	2.7420	32.80	22.36	9.71	42.51	32.07	56.00	46.00	-13.49	-13.93	Pass
21	2.8940	33.33	22.04	9.72	43.05	31.76	56.00	46.00	-12.95	-14.24	Pass
22	3.0100	35.13	23.78	9.73	44.86	33.51	56.00	46.00	-11.14	-12.49	Pass

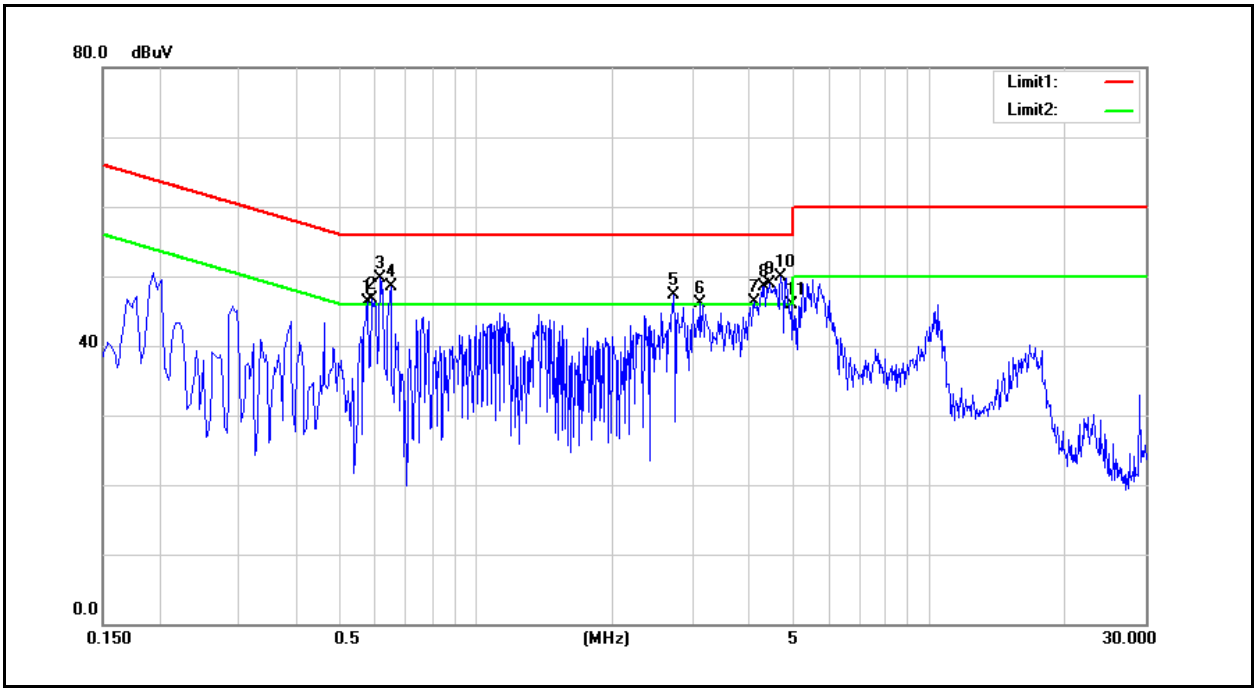
Standard:	FCC Part 15C	Line:	L1
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1	Date:	07/19/2016
		Test By:	Eric Ou Yang
Description:			

No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
23	3.1980	30.28	19.49	9.73	40.01	29.22	56.00	46.00	-15.99	-16.78	Pass
24	3.3940	32.34	21.80	9.74	42.08	31.54	56.00	46.00	-13.92	-14.46	Pass
25	3.8340	32.56	22.35	9.75	42.31	32.10	56.00	46.00	-13.69	-13.90	Pass
26	4.2180	34.22	23.88	9.75	43.97	33.63	56.00	46.00	-12.03	-12.37	Pass
27	4.5740	33.19	22.39	9.76	42.95	32.15	56.00	46.00	-13.05	-13.85	Pass
28	4.8780	30.73	19.23	9.78	40.51	29.01	56.00	46.00	-15.49	-16.99	Pass

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

2. Correction factor (dB) = Cable loss (dB) + L.I.S.N. factor (dB).

Standard:	FCC Part 15C	Line:	N
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1	Date:	07/19/2016
		Test By:	Eric Ou Yang
Description:			



Standard:	FCC Part 15C	Line:	N
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1	Date:	07/19/2016
		Test By:	Eric Ou Yang
Description:			

No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.5780	34.11	22.39	9.60	43.71	31.99	56.00	46.00	-12.29	-14.01	Pass
2	0.5900	36.53	24.37	9.60	46.13	33.97	56.00	46.00	-9.87	-12.03	Pass
3	0.6140	38.07	25.49	9.60	47.67	35.09	56.00	46.00	-8.33	-10.91	Pass
4	0.6500	34.12	21.23	9.61	43.73	30.84	56.00	46.00	-12.27	-15.16	Pass
5	2.7340	31.94	16.93	9.71	41.65	26.64	56.00	46.00	-14.35	-19.36	Pass
6	3.1140	30.25	17.56	9.72	39.97	27.28	56.00	46.00	-16.03	-18.72	Pass
7	4.0980	33.21	18.71	9.75	42.96	28.46	56.00	46.00	-13.04	-17.54	Pass
8	4.3260	33.78	18.94	9.76	43.54	28.70	56.00	46.00	-12.46	-17.30	Pass
9	4.4420	35.04	20.46	9.77	44.81	30.23	56.00	46.00	-11.19	-15.77	Pass
10	4.7100	33.57	18.85	9.77	43.34	28.62	56.00	46.00	-12.66	-17.38	Pass
11	4.9740	31.37	15.92	9.78	41.15	25.70	56.00	46.00	-14.85	-20.30	Pass

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

2. Correction factor (dB) = Cable loss (dB) + L.I.S.N. factor (dB).

5 Radiated Emission Measurement

5.1. Limit

According to §15.209(a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m at meter)	Measurement Distance (meters)
0.009 – 0.490	2400 / F (kHz)	300
0.490 – 1.705	24000 / F (kHz)	30
1.705 – 30.0	30	30
30 - 88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

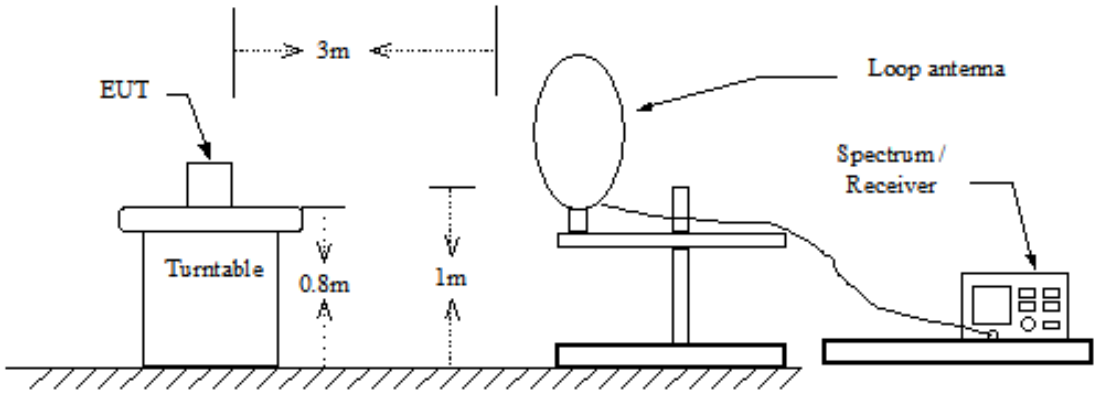
5.2. Test Instruments

3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
RF Pre-selector	Agilent	N9039A	MY46520256	01/08/2016	1 year
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/08/2016	1 year
Pre Amplifier	Agilent	8449B	3008A02237	10/07/2015	1 year
				10/11/2016	1 year
Pre Amplifier	Agilent	8447D	2944A11119	01/11/2016	1 year
Broadband Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	416	09/25/2015	1 year
				10/13/2016	1 year
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	9120D	9120D-550	06/06/2016	1 year
Horn Antenna (18~40GHz)	ETS	3116	86467	09/01/2015	1 year
				09/05/2016	1 year
Loop Antenna	COM-POWER CORPORATION	AL-130	121014	02/01/2016	1 year
Microwave Cable	EMCI	EMC102-KM-KM-14000	151001	10/15/2015	1 year
Microwave Cable	EMCI	EMC-104-SM-SM-14000	140202	10/15/2015	1 year
Microwave Cable	EMCI	EMC104-SM-SM-600	140301	10/15/2015	1 year
Test Site	ATL	TE01	888001	08/27/2015	1 year
				08/29/2016	1 year

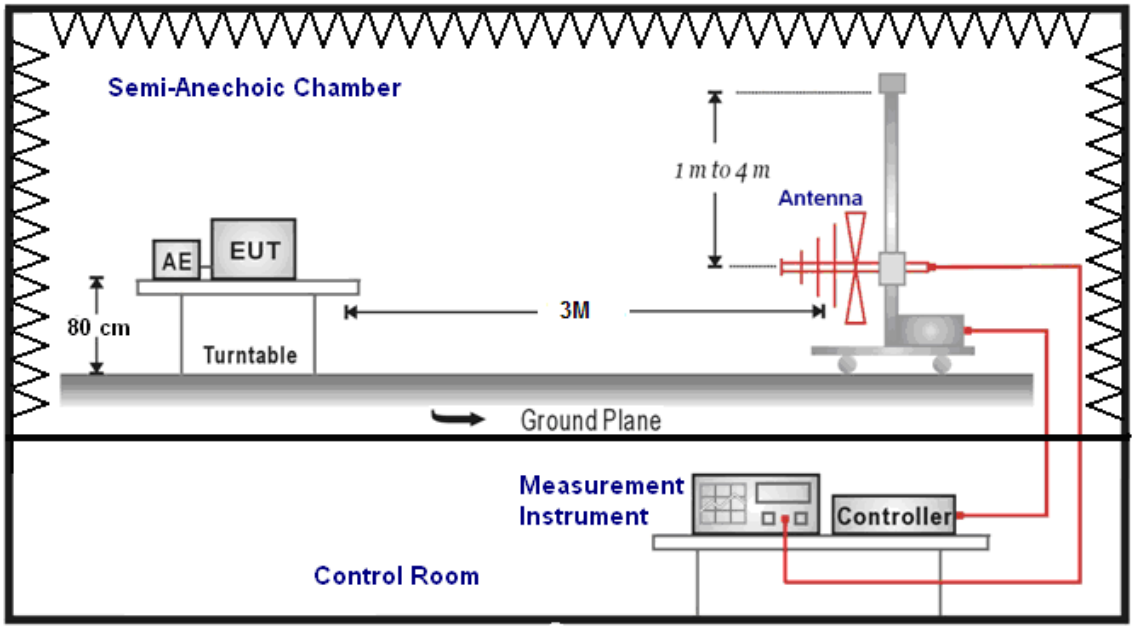
Note: N.C.R. = No Calibration Request

5.3. Setup

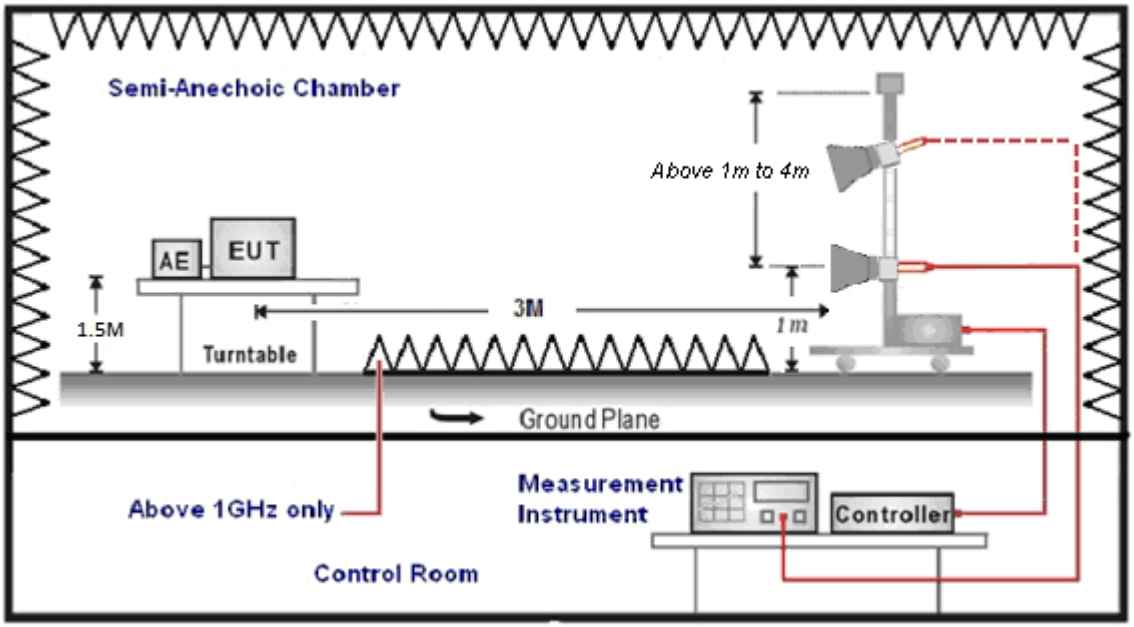
9kHz ~ 30MHz



Below 1GHz



Above 1GHz


Semi-Anechoic Chamber
Above 1m to 4m
AE
EUT
1.5M
3M
1m
Turntable
Ground Plane
Above 1GHz only
Measurement
Instrument
Controller
Control Room

5.4. Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 or 1.5 meters height(below 1GHz use 0.8m turntable / above 1GHz use 1.5m turntable), top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 9 kHz to 26.5 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements when Duty cycle >0.98 / 1/T for average measurements when Duty cycle <0.98. A nonconductive material surrounded the EUT to supporting the EUT for standing on tree orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Biconilog Antenna at 3 Meter and the SCHWARZBECK Double Ridged Guide Antenna was used in frequencies 1 –26.5 GHz at a distance of 3 meter. The antenna at an angle toward the source of the emission. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade).

For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts pre meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro colts per meter (dBuV/m).

The actual field is intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

(1) Amplitude (dBuV/m) = FI (dBuV) +AF (dBuV) +CL (dBuV)-Gain (dB)
FI= Reading of the field intensity.
AF= Antenna factor.
CL= Cable loss.
P.S Amplitude is auto calculate in spectrum analyzer.

(2) Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)
The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:
(a) For fundamental frequency : Transmitter Output < +30dBm
(b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

Data of measurement within this frequency range without mark in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

5.5. Test Result

Below 1GHz

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 1	Date:	07/21/2016
		Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
176.0000	32.77	-6.32	26.45	43.50	-17.05	QP	H
321.0000	31.72	-3.57	28.15	46.00	-17.85	QP	H
463.5000	27.85	-0.34	27.51	46.00	-18.49	QP	H
628.5000	25.47	3.07	28.54	46.00	-17.46	QP	H
708.0000	25.52	4.57	30.09	46.00	-15.91	QP	H
892.5000	22.95	8.21	31.16	46.00	-14.84	QP	H
166.0000	37.15	-5.67	31.48	43.50	-12.02	QP	V
249.5000	34.61	-5.96	28.65	46.00	-17.35	QP	V
342.5000	32.43	-3.21	29.22	46.00	-16.78	QP	V
516.0000	30.16	0.61	30.77	46.00	-15.23	QP	V
582.5000	29.23	2.04	31.27	46.00	-14.73	QP	V
900.0000	27.16	8.38	35.54	46.00	-10.46	QP	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.No emission found between lowest internal used/generated frequencies to 30MHz (9 kHz~30MHz).

Above 1GHz

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	07/20/2016
Frequency:	2412MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
4824.000	51.77	0.00	51.77	74.00	-22.23	peak	H
7236.000	52.46	-1.01	51.45	74.00	-22.55	peak	H
4824.000	64.25	-7.86	56.39	74.00	-17.61	peak	V
4824.000	61.52	-7.86	53.66	54.00	-0.34	AVG	V
7236.000	55.93	-1.01	54.92	74.00	-19.08	peak	V
7236.000	50.23	-1.01	49.22	54.00	-4.78	AVG	V

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	07/20/2016
Frequency:	2437MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
4874.000	61.02	-7.70	53.32	74.00	-20.68	peak	H
4874.000	59.02	-7.70	51.32	54.00	-2.68	AVG	H
4874.000	64.51	-7.70	56.81	74.00	-17.19	peak	V
4874.000	61.49	-7.70	53.79	54.00	-0.21	AVG	V
7311.000	52.30	-0.69	51.61	74.00	-22.39	peak	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	07/20/2016
Frequency:	2462MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
4924.000	57.74	-7.55	50.19	74.00	-23.81	peak	H
7386.000	51.89	-0.37	51.52	74.00	-22.48	peak	H
4924.000	64.36	-7.55	56.81	74.00	-17.19	peak	V
4924.000	61.44	-7.55	53.89	54.00	-0.11	AVG	V
7386.000	53.47	-0.37	53.10	74.00	-20.90	peak	V
7386.000	47.98	-0.37	47.61	54.00	-6.39	AVG	V

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	07/21/2016
Frequency:	2412MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
4824.000	48.64	-7.86	40.78	74.00	-33.22	peak	H
4824.000	48.99	-7.86	41.13	74.00	-32.87	peak	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	07/21/2016
Frequency:	2437MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
4874.000	52.09	-7.70	44.39	74.00	-29.61	peak	H
4874.000	55.95	-7.70	48.25	74.00	-25.75	peak	V
7311.000	53.73	-0.69	53.04	74.00	-20.96	peak	V
7311.000	44.38	-0.69	43.69	54.00	-10.31	AVG	V

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	07/21/2016
Frequency:	2462MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
4924.000	49.32	-7.55	41.77	74.00	-32.23	peak	H
4924.000	49.73	-7.55	42.18	74.00	-31.82	peak	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	07/21/2016
Frequency:	2412MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
4824.000	48.79	-7.86	40.93	74.00	-33.07	peak	H
4824.000	49.05	-7.86	41.19	74.00	-32.81	peak	V

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	07/21/2016
Frequency:	2437MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
4874.000	48.88	-7.70	41.18	74.00	-32.82	peak	H
4874.000	53.35	-7.70	45.65	74.00	-28.35	peak	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	07/21/2016
Frequency:	2462MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
4924.000	48.52	-7.55	40.97	74.00	-33.03	peak	H
4924.000	48.90	-7.55	41.35	74.00	-32.65	peak	V

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	07/21/2016
Frequency:	2422MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
4844.000	48.59	-7.78	40.81	74.00	-33.19	peak	H
4844.000	48.25	-7.78	40.47	74.00	-33.53	peak	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	07/21/2016
Frequency:	2437MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
4874.000	47.29	-7.70	39.59	74.00	-34.41	peak	H
4874.000	50.19	-7.70	42.49	74.00	-31.51	peak	V

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	07/21/2016
Frequency:	2452MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
4904.000	47.60	-7.60	40.00	74.00	-34.00	peak	H
4904.000	49.67	-7.60	42.07	74.00	-31.93	peak	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Band Edge

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	07/21/2016
Frequency:	2412 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2387.990	66.72	-0.22	66.50	74.00	-7.50	peak	H
2387.990	45.13	-0.22	44.91	54.00	-9.09	AVG	H
2390.000	64.67	-0.22	64.45	74.00	-9.55	peak	H
2390.000	46.07	-0.22	45.85	54.00	-8.15	AVG	H
2387.110	72.20	-0.22	71.98	74.00	-2.02	peak	V
2387.110	48.84	-0.22	48.62	54.00	-5.38	AVG	V
2390.000	59.74	-0.22	59.52	74.00	-14.48	peak	V
2390.000	49.79	-0.22	49.57	54.00	-4.43	AVG	V

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	09/09/2016
Frequency:	2417 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2389.090	64.75	-0.34	64.41	74.00	-9.59	peak	H
2389.090	44.13	-0.34	43.79	54.00	-10.21	AVG	H
2390.000	61.70	-0.34	61.36	74.00	-12.64	peak	H
2390.000	44.27	-0.34	43.93	54.00	-10.07	AVG	H
2386.780	68.79	-0.35	68.44	74.00	-5.56	peak	V
2386.780	44.44	-0.35	44.09	54.00	-9.91	AVG	V
2390.000	70.03	-0.34	69.69	74.00	-4.31	peak	V
2390.000	44.59	-0.34	44.25	54.00	-9.75	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	07/21/2016
Frequency:	2437 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2384.290	59.52	-0.24	59.28	74.00	-14.72	peak	H
2384.290	43.55	-0.24	43.31	54.00	-10.69	AVG	H
2390.000	57.05	-0.22	56.83	74.00	-17.17	peak	H
2390.000	43.41	-0.22	43.19	54.00	-10.81	AVG	H
2483.500	49.11	0.14	49.25	74.00	-24.75	peak	H
2488.600	58.22	0.16	58.38	74.00	-15.62	peak	H
2488.600	43.28	0.16	43.44	54.00	-10.56	AVG	H
2388.280	63.84	-0.22	63.62	74.00	-10.38	peak	V
2388.280	43.51	-0.22	43.29	54.00	-10.71	AVG	V
2390.000	61.56	-0.22	61.34	74.00	-12.66	peak	V
2390.000	43.60	-0.22	43.38	54.00	-10.62	AVG	V
2483.500	52.31	0.14	52.45	74.00	-21.55	peak	V
2483.500	43.12	0.14	43.26	54.00	-10.74	AVG	V
2484.610	63.71	0.14	63.85	74.00	-10.15	peak	V
2484.610	43.57	0.14	43.71	54.00	-10.29	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	09/09/2016
Frequency:	2457 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2483.500	59.58	0.03	59.61	74.00	-14.39	peak	H
2483.500	43.66	0.03	43.69	54.00	-10.31	AVG	H
2486.885	66.96	0.04	67.00	74.00	-7.00	peak	H
2486.885	43.40	0.04	43.44	54.00	-10.56	AVG	H
2483.500	55.46	0.03	55.49	74.00	-18.51	peak	V
2483.500	47.06	0.03	47.09	54.00	-6.91	AVG	V
2484.692	69.51	0.04	69.55	74.00	-4.45	peak	V
2484.692	44.02	0.04	44.06	54.00	-9.94	AVG	V

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	07/21/2016
Frequency:	2462 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2483.500	52.06	0.14	52.20	74.00	-21.80	peak	H
2483.500	43.52	0.14	43.66	54.00	-10.34	AVG	H
2485.080	65.45	0.14	65.59	74.00	-8.41	peak	H
2485.080	43.37	0.14	43.51	54.00	-10.49	AVG	H
2483.500	57.77	0.14	57.91	74.00	-16.09	peak	V
2483.500	50.14	0.14	50.28	54.00	-3.72	AVG	V
2484.680	70.69	0.14	70.83	74.00	-3.17	peak	V
2484.680	48.72	0.14	48.86	54.00	-5.14	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	07/21/2016
Frequency:	2412 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2389.420	67.25	-0.22	67.03	74.00	-6.97	peak	H
2389.420	50.13	-0.22	49.91	54.00	-4.09	AVG	H
2390.000	64.76	-0.22	64.54	74.00	-9.46	peak	H
2390.000	50.30	-0.22	50.08	54.00	-3.92	AVG	H
2389.640	72.36	-0.22	72.14	74.00	-1.86	peak	V
2389.640	53.67	-0.22	53.45	54.00	-0.55	AVG	V
2390.000	71.91	-0.22	71.69	74.00	-2.31	peak	V
2390.000	53.88	-0.22	53.66	54.00	-0.34	AVG	V

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	09/09/2016
Frequency:	2417 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2335.520	51.06	-0.56	50.50	74.00	-23.50	peak	H
2390.000	50.01	-0.34	49.67	74.00	-24.33	peak	H
2389.090	56.09	-0.34	55.75	74.00	-18.25	peak	V
2389.090	44.51	-0.34	44.17	54.00	-9.83	AVG	V
2390.000	53.62	-0.34	53.28	74.00	-20.72	peak	V
2390.000	44.60	-0.34	44.26	54.00	-9.74	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	07/21/2016
Frequency:	2437 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2388.470	62.39	-0.22	62.17	74.00	-11.83	peak	H
2388.470	44.71	-0.22	44.49	54.00	-9.51	AVG	H
2390.000	58.32	-0.22	58.10	74.00	-15.90	peak	H
2390.000	45.73	-0.22	45.51	54.00	-8.49	AVG	H
2483.500	54.18	0.14	54.32	74.00	-19.68	peak	H
2483.500	45.05	0.14	45.19	54.00	-8.81	AVG	H
2484.990	61.27	0.14	61.41	74.00	-12.59	peak	H
2484.990	44.14	0.14	44.28	54.00	-9.72	AVG	H
2387.900	62.89	-0.22	62.67	74.00	-11.33	peak	V
2387.900	51.46	-0.22	51.24	54.00	-2.76	AVG	V
2390.000	62.21	-0.22	61.99	74.00	-12.01	peak	V
2390.000	53.93	-0.22	53.71	54.00	-0.29	AVG	V
2483.500	61.33	0.14	61.47	74.00	-12.53	peak	V
2483.500	53.00	0.14	53.14	54.00	-0.86	AVG	V
2485.750	64.84	0.14	64.98	74.00	-9.02	peak	V
2485.750	50.80	0.14	50.94	54.00	-3.06	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	09/09/2016
Frequency:	2457 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2483.500	49.93	0.03	49.96	74.00	-24.04	peak	H
2483.746	51.45	0.03	51.48	74.00	-22.52	peak	H
2483.500	51.27	0.03	51.30	74.00	-22.70	peak	V
2488.304	54.57	0.06	54.63	74.00	-19.37	peak	V
2488.304	43.53	0.06	43.59	54.00	-10.41	AVG	V

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	07/21/2016
Frequency:	2462 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2483.500	60.88	0.14	61.02	74.00	-12.98	peak	H
2483.500	47.95	0.14	48.09	54.00	-5.91	AVG	H
2484.040	64.03	0.14	64.17	74.00	-9.83	peak	H
2484.040	46.28	0.14	46.42	54.00	-7.58	AVG	H
2483.500	66.81	0.14	66.95	74.00	-7.05	peak	V
2483.500	53.43	0.14	53.57	54.00	-0.43	AVG	V
2484.200	71.46	0.14	71.60	74.00	-2.40	peak	V
2484.200	52.78	0.14	52.92	54.00	-1.08	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	07/21/2016
Frequency:	2412 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2388.430	66.06	-0.22	65.84	74.00	-8.16	peak	H
2388.430	49.49	-0.22	49.27	54.00	-4.73	AVG	H
2390.000	64.25	-0.22	64.03	74.00	-9.97	peak	H
2390.000	50.27	-0.22	50.05	54.00	-3.95	AVG	H
2388.210	69.41	-0.22	69.19	74.00	-4.81	peak	V
2388.210	51.34	-0.22	51.12	54.00	-2.88	AVG	V
2390.000	67.23	-0.22	67.01	74.00	-6.99	peak	V
2390.000	53.95	-0.22	53.73	54.00	-0.27	AVG	V

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	09/09/2016
Frequency:	2417 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2380.730	50.93	-0.37	50.56	74.00	-23.44	peak	H
2390.000	49.46	-0.34	49.12	74.00	-24.88	peak	H
2389.200	58.66	-0.34	58.32	74.00	-15.68	peak	V
2389.200	44.35	-0.34	44.01	54.00	-9.99	AVG	V
2390.000	55.66	-0.34	55.32	74.00	-18.68	peak	V
2390.000	44.49	-0.34	44.15	54.00	-9.85	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	10/14/2016
Frequency:	2422 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2389.080	66.15	-1.88	64.27	74.00	-9.73	peak	H
2389.080	48.96	-1.88	47.08	54.00	-6.92	AVG	H
2390.000	65.28	-1.88	63.40	74.00	-10.60	peak	H
2390.000	49.52	-1.88	47.64	54.00	-6.36	AVG	H
2389.200	74.62	-1.88	72.74	74.00	-1.26	peak	V
2389.200	54.98	-1.88	53.10	54.00	-0.90	AVG	V
2390.000	74.94	-1.88	73.06	74.00	-0.94	peak	V
2390.000	55.25	-1.88	53.37	54.00	-0.63	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	07/21/2016
Frequency:	2437 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2384.860	59.87	-0.24	59.63	74.00	-14.37	peak	H
2384.860	45.44	-0.24	45.20	54.00	-8.80	AVG	H
2390.000	57.70	-0.22	57.48	74.00	-16.52	peak	H
2390.000	46.28	-0.22	46.06	54.00	-7.94	AVG	H
2483.500	52.31	0.14	52.45	74.00	-21.55	peak	H
2483.500	46.25	0.14	46.39	54.00	-7.61	AVG	H
2488.030	56.18	0.15	56.33	74.00	-17.67	peak	H
2488.030	44.37	0.15	44.52	54.00	-9.48	AVG	H
2386.190	61.52	-0.24	61.28	74.00	-12.72	peak	V
2386.190	49.95	-0.24	49.71	54.00	-4.29	AVG	V
2390.000	61.82	-0.22	61.60	74.00	-12.40	peak	V
2390.000	52.77	-0.22	52.55	54.00	-1.45	AVG	V
2483.500	59.48	0.14	59.62	74.00	-14.38	peak	V
2483.500	53.54	0.14	53.68	54.00	-0.32	AVG	V
2487.840	64.26	0.15	64.41	74.00	-9.59	peak	V
2487.840	51.64	0.15	51.79	54.00	-2.21	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	10/02/2016
Frequency:	2452 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2483.500	66.58	-1.51	65.07	74.00	-8.93	peak	H
2483.500	50.92	-1.51	49.41	54.00	-4.59	AVG	H
2483.650	72.61	-1.51	71.10	74.00	-2.90	peak	H
2483.650	50.64	-1.51	49.13	54.00	-4.87	AVG	H
2483.500	72.60	-1.51	71.09	74.00	-2.91	peak	V
2483.500	52.62	-1.51	51.11	54.00	-2.89	AVG	V
2484.450	74.83	-1.50	73.33	74.00	-0.67	peak	V
2484.450	52.04	-1.50	50.54	54.00	-3.46	AVG	V

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	09/09/2016
Frequency:	2457 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2483.500	49.04	0.03	49.07	74.00	-24.93	peak	H
2489.250	51.33	0.06	51.39	74.00	-22.61	peak	H
2483.500	53.91	0.03	53.94	74.00	-20.06	peak	V
2483.500	44.60	0.03	44.63	54.00	-9.37	AVG	V
2484.821	56.80	0.04	56.84	74.00	-17.16	peak	V
2484.821	44.48	0.04	44.52	54.00	-9.48	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	07/21/2016
Frequency:	2462 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2483.500	61.55	0.14	61.69	74.00	-12.31	peak	H
2483.500	48.22	0.14	48.36	54.00	-5.64	AVG	H
2485.040	63.42	0.14	63.56	74.00	-10.44	peak	H
2485.040	46.29	0.14	46.43	54.00	-7.57	AVG	H
2483.500	67.95	0.14	68.09	74.00	-5.91	peak	V
2483.500	53.55	0.14	53.69	54.00	-0.31	AVG	V
2485.280	70.03	0.14	70.17	74.00	-3.83	peak	V
2485.280	50.30	0.14	50.44	54.00	-3.56	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	07/21/2016
Frequency:	2422 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2386.800	67.22	-0.22	67.00	74.00	-7.00	peak	H
2386.800	49.14	-0.22	48.92	54.00	-5.08	AVG	H
2390.000	64.87	-0.22	64.65	74.00	-9.35	peak	H
2390.000	50.71	-0.22	50.49	54.00	-3.51	AVG	H
2388.120	73.26	-0.22	73.04	74.00	-0.96	peak	V
2388.120	51.83	-0.22	51.61	54.00	-2.39	AVG	V
2390.000	72.17	-0.22	71.95	74.00	-2.05	peak	V
2390.000	54.02	-0.22	53.80	54.00	-0.20	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	07/21/2016
Frequency:	2437 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2389.420	63.49	-0.22	63.27	74.00	-10.73	peak	H
2389.420	50.08	-0.22	49.86	54.00	-4.14	AVG	H
2390.000	64.47	-0.22	64.25	74.00	-9.75	peak	H
2390.000	50.41	-0.22	50.19	54.00	-3.81	AVG	H
2483.500	58.37	0.14	58.51	74.00	-15.49	peak	H
2483.500	45.73	0.14	45.87	54.00	-8.13	AVG	H
2485.370	59.38	0.14	59.52	74.00	-14.48	peak	H
2485.370	44.59	0.14	44.73	54.00	-9.27	AVG	H
2387.520	66.72	-0.22	66.50	74.00	-7.50	peak	V
2387.520	51.51	-0.22	51.29	54.00	-2.71	AVG	V
2390.000	67.42	-0.22	67.20	74.00	-6.80	peak	V
2390.000	54.00	-0.22	53.78	54.00	-0.22	AVG	V
2483.500	62.62	0.14	62.76	74.00	-11.24	peak	V
2483.500	50.92	0.14	51.06	54.00	-2.94	AVG	V
2484.230	65.72	0.14	65.86	74.00	-8.14	peak	V
2484.230	50.02	0.14	50.16	54.00	-3.84	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

Standard:	FCC Part 15C	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	NC260	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	07/21/2016
Frequency:	2452 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2483.500	56.87	0.14	57.01	74.00	-16.99	peak	H
2483.500	44.99	0.14	45.13	54.00	-8.87	AVG	H
2489.600	60.82	0.16	60.98	74.00	-13.02	peak	H
2489.600	44.61	0.16	44.77	54.00	-9.23	AVG	H
2483.500	62.70	0.14	62.84	74.00	-11.16	peak	V
2483.500	53.54	0.14	53.68	54.00	-0.32	AVG	V
2484.350	67.66	0.14	67.80	74.00	-6.20	peak	V
2484.350	52.13	0.14	52.27	54.00	-1.73	AVG	V

Note:1.Result (dBuV/m) = Correction factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

6 Maximum Conducted Output Power Measurement

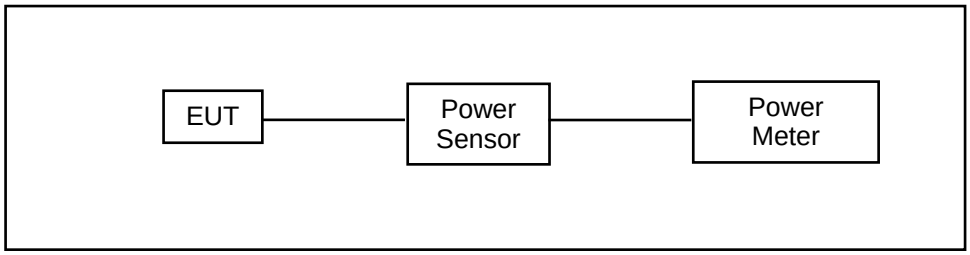
6.1. Limit

For systems using digital modulation in the 2400-2483.5MHz, the limit for maximum output power is 30dBm.

And According to 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

* CDD mode：Directional Gain = 10*log{[10^(G1/10)+10^(G2/10)+…+10^(Gn/10)]/NANT}
* CDD mode：Directional Gain = 10*log{[10^(G1/10)+10^(G2/10)+…+10^(Gn/10)]/NANT} = 2.36 dBi < 6dBi
* CDD mode power limit shall be reduced = 30 dBm.

6.2. Test Setup



6.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Power Sensor	Anritsu	MA2411B	1126022	08/24/2015	1 year
				08/29/2016	1 year
Power Meter	Anritsu	ML2495A	1135009	08/24/2015	1 year
				08/29/2016	1 year
Microwave Cable	EMCI	EMC104-SM-SM-1500	140303	02/23/2016	1 year
Test Site	ATL	TE05	TE05	N.C.R.	-----

Note: N.C.R. = No calibration request.

6.4. Test Procedure

The tests below are run with the EUT's transmitter set at high power in TX mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuously. Remove the Subjective device's antenna and connect the RF output port to power sensor.

6.5. Test Result

Model Number	NC260							
Test Item	Maximum Conducted Output Power							
Date of Test	07/21/2016, 09/09/2016, 10/12/2016							
ANT-1								
Test Mode	Frequency (MHz)	Data Rate	Average Output Power						Limit
			Measurement Results						
			ANT-1		ANT-2		ANT-1+2		
			(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)
Mode 2	2412	1M	21.01	0.126	20.66	0.116	23.85	0.243	< 30
	2417		22.85	0.193	22.00	0.158	**25.46**	**0.351**	< 30
	2437		22.01	0.159	21.06	0.128	24.57	0.286	< 30
	2457		21.15	0.130	20.38	0.109	23.79	0.239	< 30
	2462		21.44	0.139	20.57	0.114	24.04	0.253	< 30
	2437	2M	21.93	0.156	21.01	0.126	24.50	0.282	< 30
	2437	5.5M	21.64	0.146	20.57	0.114	24.15	0.260	< 30
	2437	11M	21.33	0.136	20.55	0.114	23.97	0.249	< 30
Mode 3	2412	6M	16.55	0.045	15.14	0.033	18.91	0.078	< 30
	2417		18.42	0.070	17.13	0.052	20.83	0.121	< 30
	2437		22.74	0.188	22.23	0.167	**25.50**	**0.355**	< 30
	2457		18.24	0.067	16.93	0.049	20.64	0.116	< 30
	2462		16.32	0.043	14.76	0.030	18.62	0.073	< 30
	2437	9M	22.73	0.187	22.22	0.167	25.49	0.354	< 30
	2437	12M	22.54	0.179	22.17	0.165	25.37	0.344	< 30
	2437	18M	22.48	0.177	22.03	0.160	25.27	0.337	< 30
	2437	24M	22.28	0.169	21.82	0.152	25.07	0.321	< 30
	2437	36M	22.20	0.166	21.67	0.147	24.95	0.313	< 30
	2437	48M	22.01	0.159	21.64	0.146	24.84	0.305	< 30
	2437	54M	21.92	0.156	21.45	0.140	24.70	0.295	< 30

Note: The relevant measured result has the offset with cable loss already.

Model Number	NC260								
Test Item	Maximum Conducted Output Power								
Date of Test	07/21/2016, 09/09/2016, 10/12/2016								
Test Mode	Frequency (MHz)	Data Rate	Average Output Power						
			Measurement Results						Limit
			ANT-1		ANT-2		ANT-1+2		
			(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	dBm
Mode 4	2412	13M	15.82	0.038	14.56	0.029	18.25	0.067	< 30
	2417		18.32	0.068	16.83	0.048	20.65	0.116	< 30
	2422		19.93	0.098	18.80	0.076	22.41	0.174	< 30
	2437		22.47	0.177	21.88	0.154	**25.20**	**0.331**	< 30
	2452		20.25	0.106	19.42	0.087	22.87	0.193	< 30
	2457		18.03	0.064	16.70	0.047	20.43	0.110	< 30
	2462		15.61	0.036	14.34	0.027	18.03	0.064	< 30
	2437	26M	22.33	0.171	21.82	0.152	25.09	0.323	< 30
	2437	39M	22.22	0.167	21.72	0.149	24.99	0.315	< 30
	2437	52M	22.09	0.162	21.52	0.142	24.82	0.304	< 30
	2437	78M	22.05	0.160	21.51	0.142	24.80	0.302	< 30
	2437	104M	22.00	0.158	21.51	0.142	24.77	0.300	< 30
	2437	117M	21.88	0.154	21.47	0.140	24.69	0.294	< 30
	2437	130M	21.87	0.154	21.43	0.139	24.67	0.293	< 30
Mode 5	2422	27M	13.71	0.023	12.52	0.018	16.17	0.041	< 30
	2437		17.25	0.053	16.14	0.041	**19.74**	**0.094**	< 30
	2452		13.51	0.022	12.02	0.016	15.84	0.038	< 30
	2437	54M	16.93	0.049	15.87	0.039	19.44	0.088	< 30
	2437	81M	16.82	0.048	15.81	0.038	19.35	0.086	< 30
	2437	108M	16.43	0.044	15.41	0.035	18.96	0.079	< 30
	2437	162M	16.02	0.040	15.37	0.034	18.72	0.074	< 30
	2437	216M	15.93	0.039	14.79	0.030	18.41	0.069	< 30
	2437	243M	14.63	0.029	13.94	0.025	17.31	0.054	< 30
	2437	270M	14.37	0.027	13.48	0.022	16.96	0.050	< 30

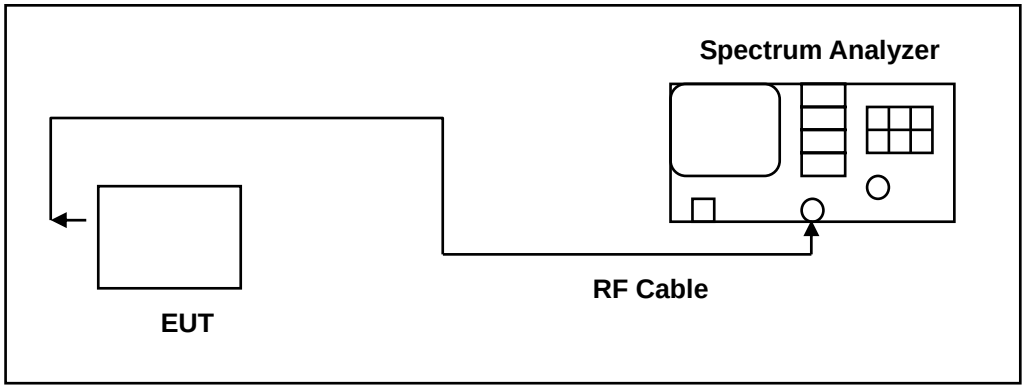
Note: The relevant measured result has the offset with cable loss already.

7 6dB RF Bandwidth Measurement

7.1. Limit

6dB RF Bandwidth: Systems using digital modulation techniques may operate in the 2400–2483.5 MHz bands. The minimum 6 dB band-width shall be at least 500 kHz.

7.2. Test Setup



7.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/15/2015	1 year
Microwave Cable	EMCI	EMC104-SM-SM-1500	140303	02/23/2016	1 year
Test Site	ATL	TE05	TE05	N.C.R.	-----

Note: N.C.R. = No Calibration Request.

7.4. Test Procedure

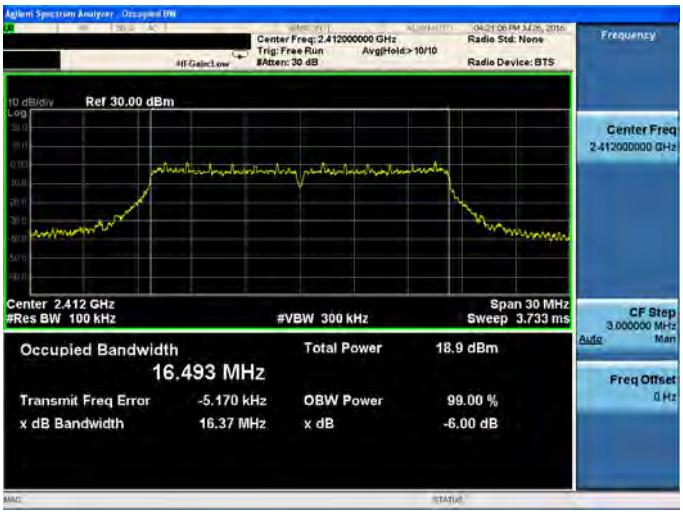
The EUT tested to DTS test procedure of KDB558074D01 for compliance to FCC 47CFR 15.247 requirements.
6dB RF Bandwidth: The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RBW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A peak output reading was taken, a DISPLAY line was drawn 6 dB lower than peak level. The 6 dB bandwidth was determined from where the channel output spectrum intersected the display line.
The test was performed at 3 channels (Channel low, middle, high)

7.5. Test Result

Model Number	NC260			
Test Item	6dB RF Bandwidth			
Date of Test	07/26/2016			
Test Mode	Frequency (MHz)	Measurement (kHz)		Limit (kHz)
		ANT-1	ANT-2	
Mode 2	2412	10090	10080	> 500
	2437	10090	10080	> 500
	2462	10080	10070	> 500
Mode 3	2412	16370	16350	> 500
	2437	16380	16380	> 500
	2462	16360	16360	> 500
Mode 4	2412	17530	17550	> 500
	2437	17570	17570	> 500
	2462	17540	17550	> 500
Mode 5	2422	36310	36350	> 500
	2437	36310	36350	> 500
	2452	36330	36360	> 500

7.6. Test Graphs

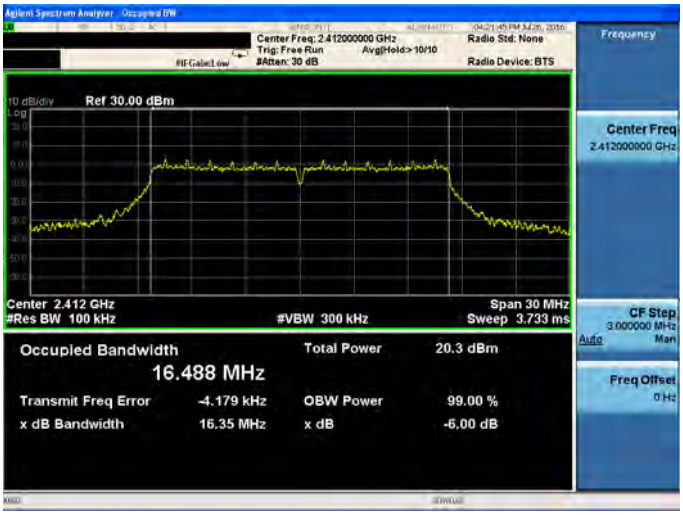
Mode 2: IEEE 802.11b link mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

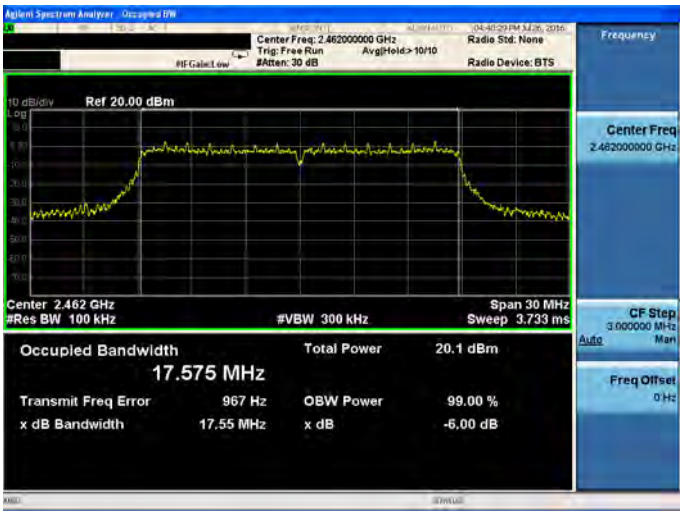
Mode 3: IEEE 802.11g link mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode_ANT-1	
2422 MHz	
2437 MHz	
2452 MHz	

Mode 2: IEEE 802.11b link mode_ANT-2	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 3: IEEE 802.11g link mode_ANT-2	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode_ANT-2	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode_ANT-2	
2422 MHz	
2437 MHz	
2452 MHz	

8 Maximum Power Density Measurement

8.1. Limit

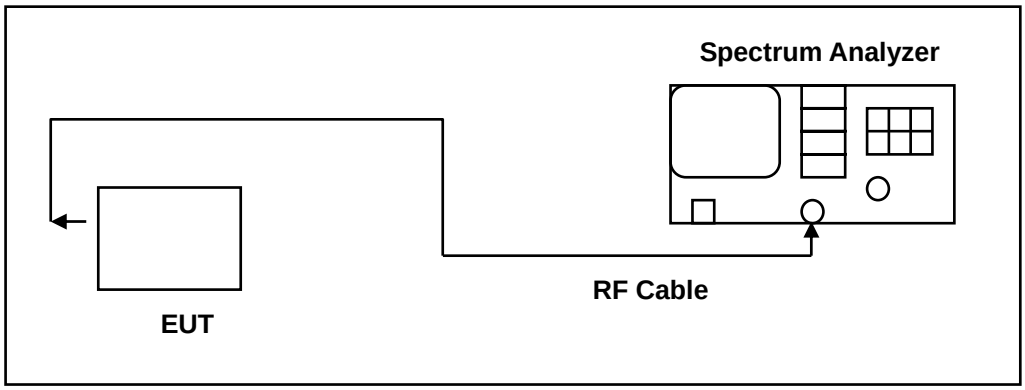
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

∗ CDD mode：Directional Gain = 10*log{[10^(G1/20)+10^(G2/20)+…+10^(Gn/20)]^2/NANT} = 5.36 dBi

∗ CCD mode：Directional Gain = 10*log{[10^(G1/20)+10^(G2/20)+…+10^(Gn/20)]^2/NANT} = 5.36 dBi < 6dBi

∗ CCD mode power limit shall be reduced = 8 dBm.

8.2. Test Setup



8.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/15/2015	1 year
Microwave Cable	EMCI	EMC104-SM-SM-1500	140303	02/23/2016	1 year
Test Site	ATL	TE05	TE05	N.C.R.	-----

Note: N.C.R. = No Calibration Request.

8.4. Test Procedure

The EUT tested to DTS test procedure of KDB558074D01 for compliance to FCC 47CFR 15.247 requirements.

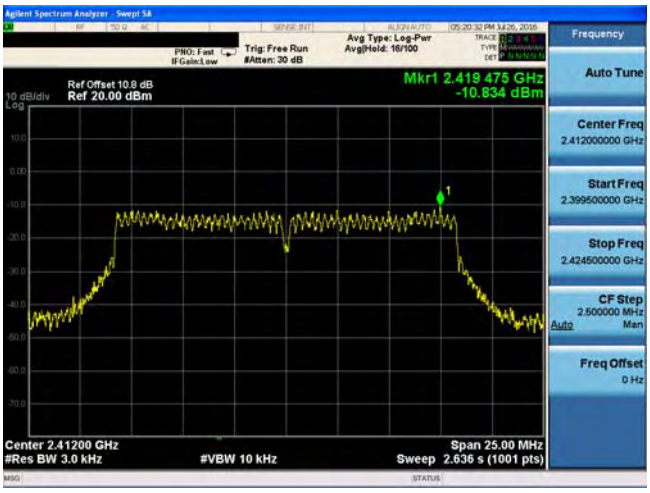
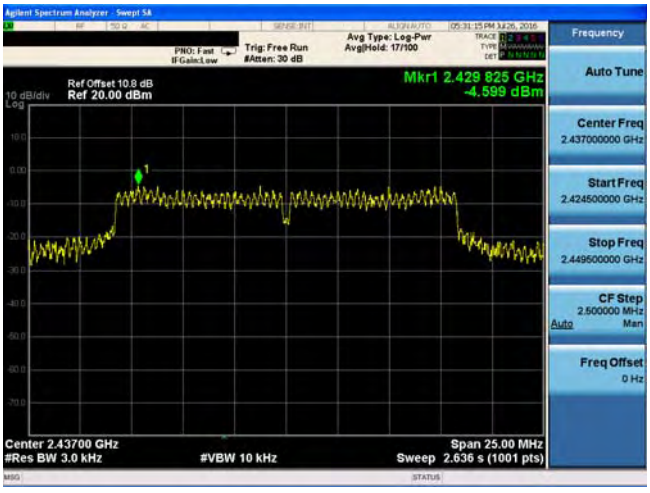
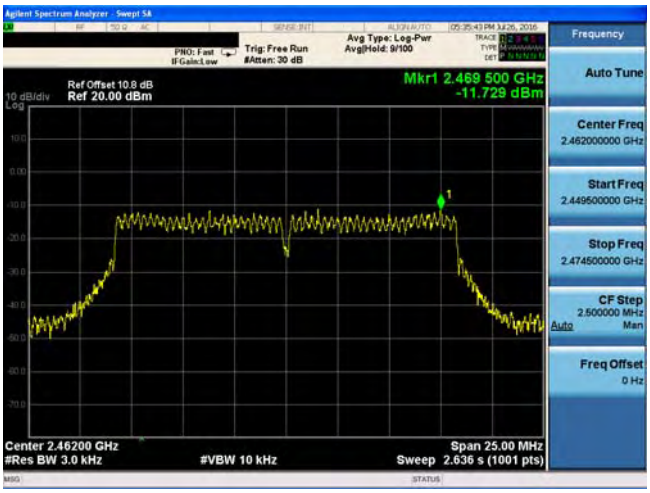
1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
4. Set the VBW ≥ 3 × RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

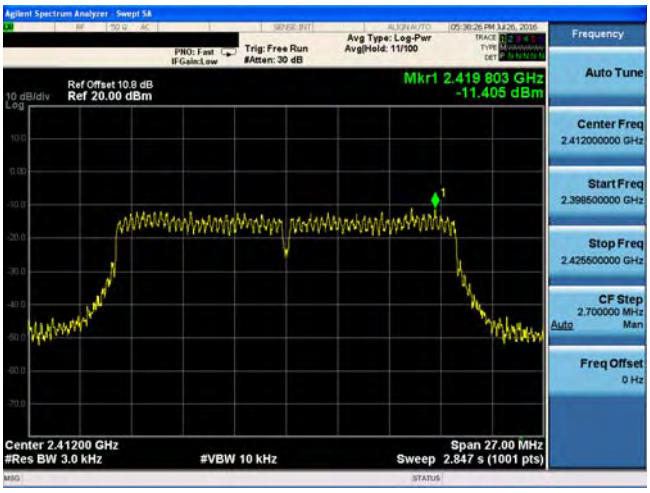
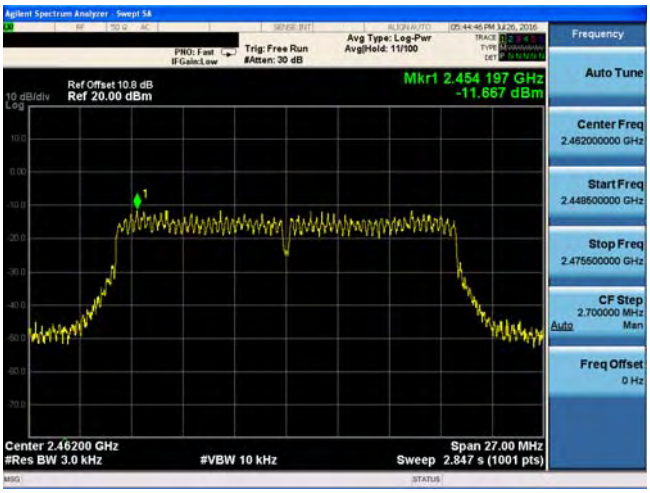
8.5. Test Result

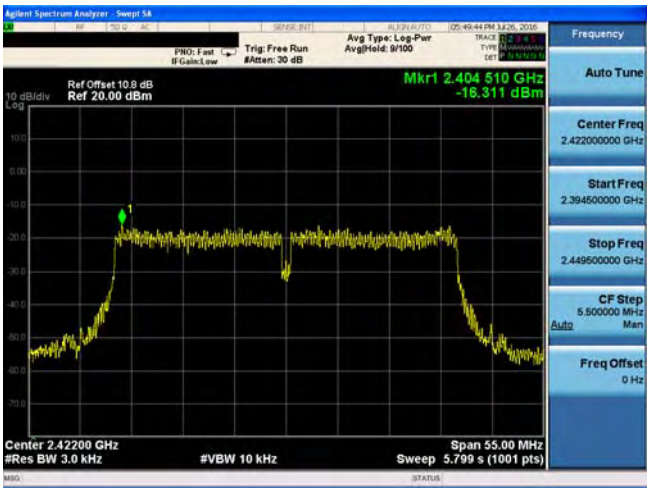
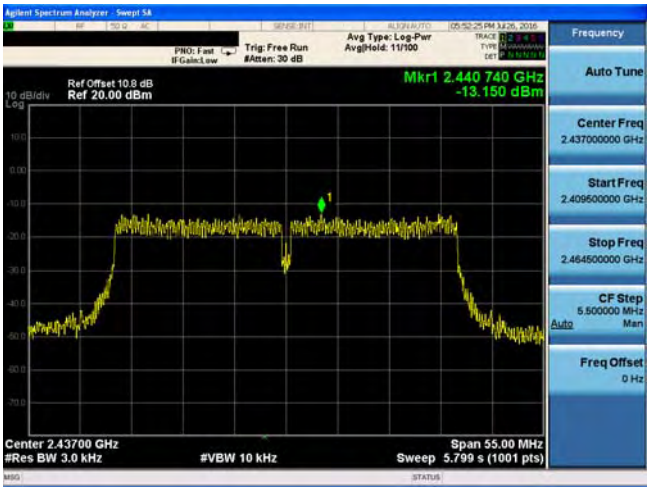
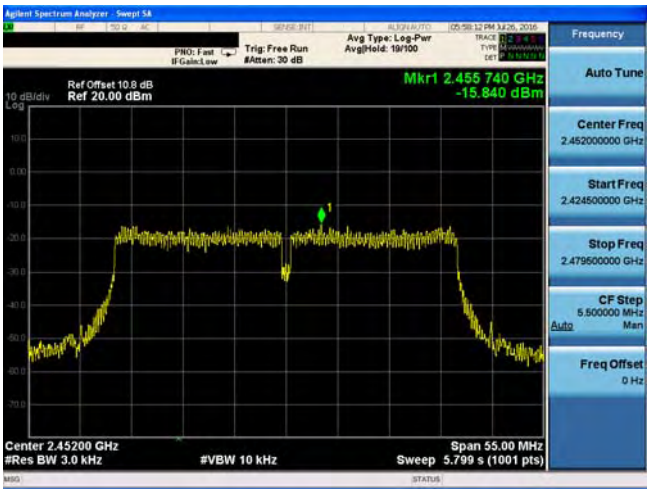
Model Number	NC260				
Test Item	Maximum Power Density				
Date of Test	07/26/2016				
Test Mode	Frequency (MHz)	Measurement (dBm/3KHz)			Limit (dBm/3KHz)
		ANT-1	ANT-2	ANT-1+2	
Mode 2	2412	-5.022	-5.036	-2.019	< 8
	2437	-5.977	-5.981	-2.969	< 8
	2462	-4.934	-5.956	-2.405	< 8
Mode 3	2412	-10.834	-12.411	-8.541	< 8
	2437	-4.599	-6.314	-2.362	< 8
	2462	-11.729	-12.708	-9.181	< 8
Mode 4	2412	-11.405	-11.539	-8.461	< 8
	2437	-4.629	-4.115	-1.354	< 8
	2462	-11.667	-11.745	-8.696	< 8
Mode 5	2422	-16.311	-16.596	-13.441	< 8
	2437	-13.150	-13.725	-10.418	< 8
	2452	-15.840	-17.366	-13.526	< 8

8.6. Test Graphs

Mode 2: IEEE 802.11b link mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

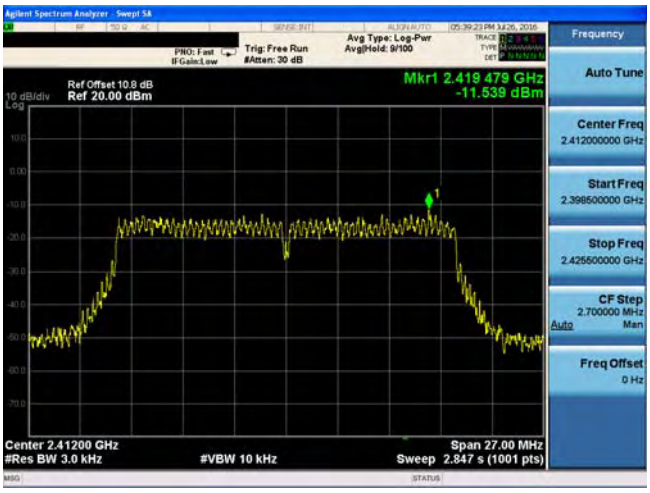
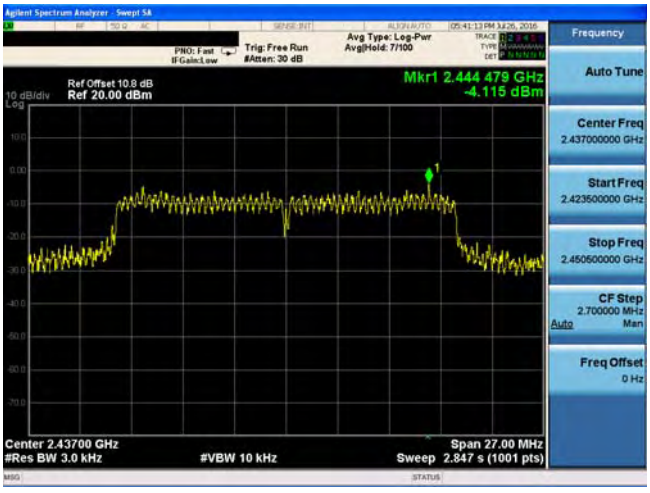
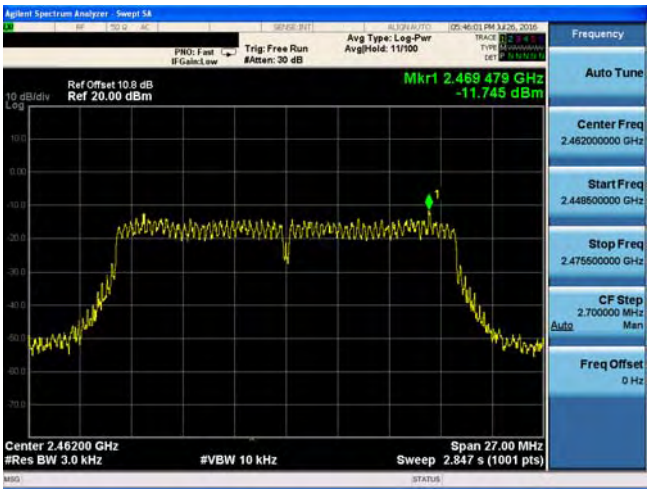
Mode 3: IEEE 802.11g link mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

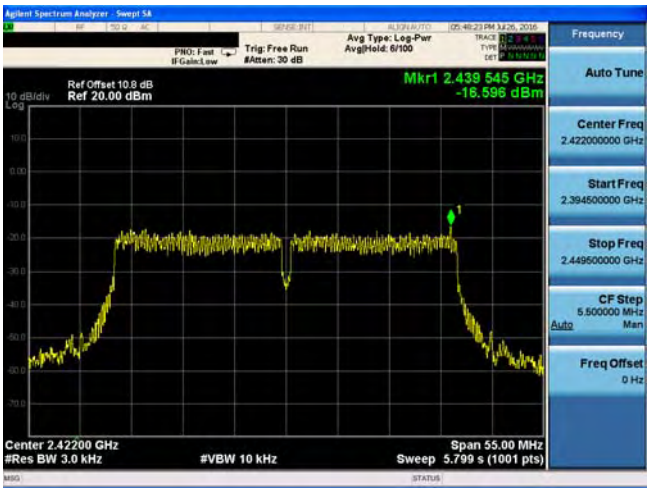
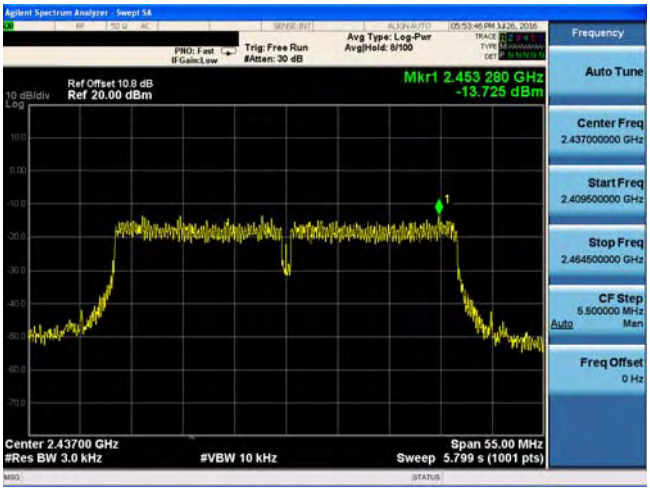
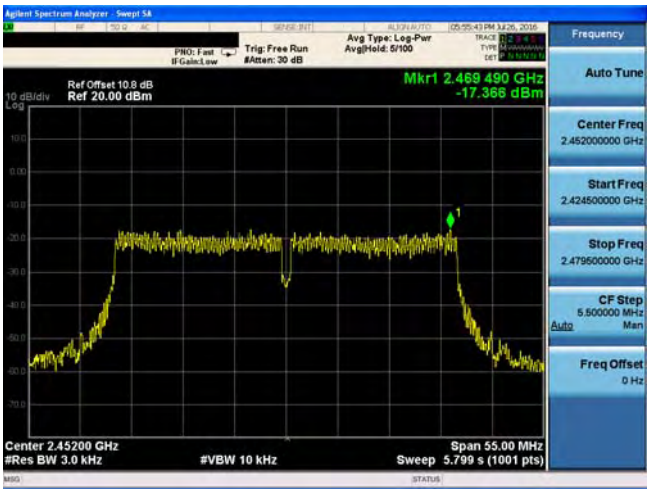
Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode_ANT-1	
2422 MHz	
2437 MHz	
2452 MHz	

Mode 2: IEEE 802.11b link mode_ANT-2	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 3: IEEE 802.11g link mode_ANT-2	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode_ANT-2	
2412 MHz	
2437 MHz	
2462 MHz	

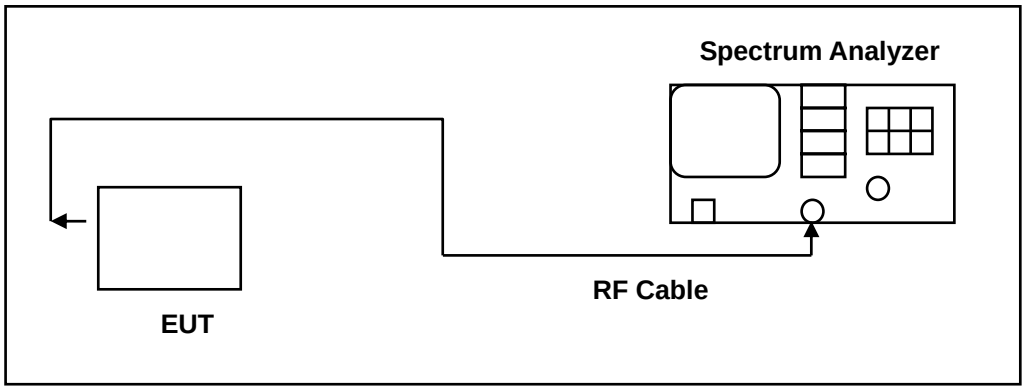
Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode_ANT-2	
2422 MHz	
2437 MHz	
2452 MHz	

9 Out of Band Conducted Emissions Measurement

9.1. Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

9.2. Test Setup



9.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/15/2015	1 year
Spectrum Analyzer	Agilent	E4408B	MY45107753	07/29/2016	1 year
Microwave Cable	EMCI	EMC104-SM-SM-1500	140303	02/23/2016	1 year
Test Site	ATL	TE05	TE05	N.C.R.	-----

Note: N.C.R. = No Calibration Request.

9.4. Test Procedure

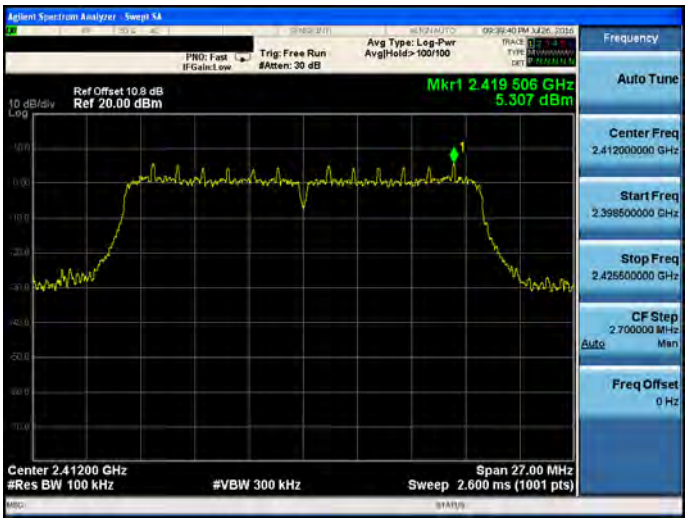
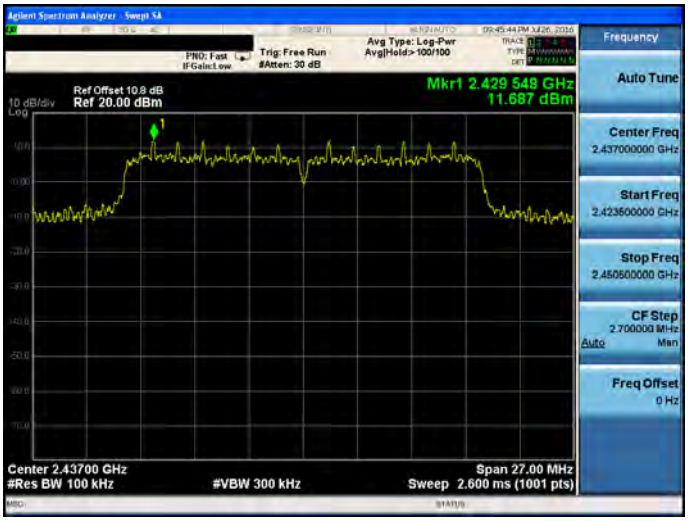
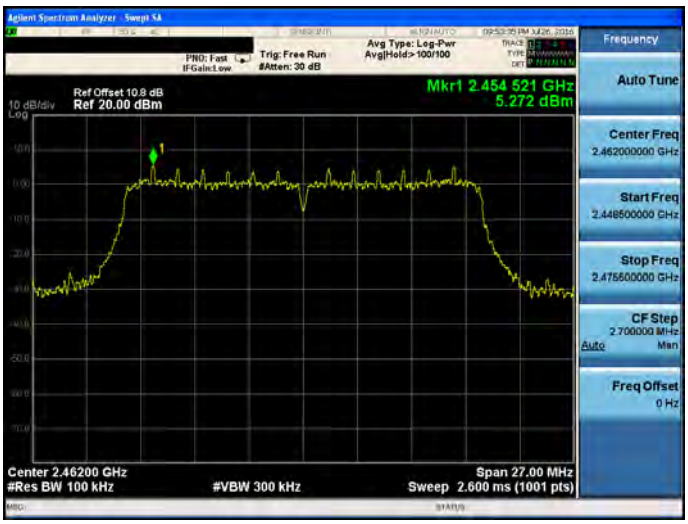
In any 100 kHz bandwidth outside the EUT pass band, the RF power produced by the modulation products of the spreading sequence, the information sequence, and the carrier frequency shall be at least 30 dB below that of the maximum in-band 100 kHz emission, antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function.
All other types of emissions from the EUT shall meet the general limits for radiated frequencies outside the pass band.
The test was performed at 3 channels.

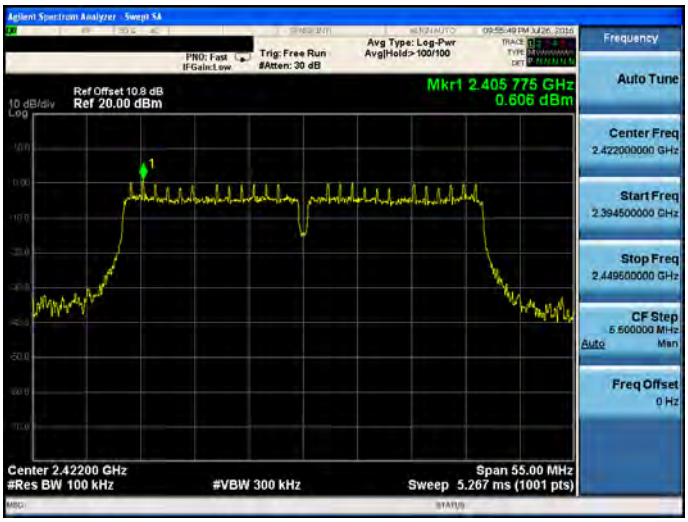
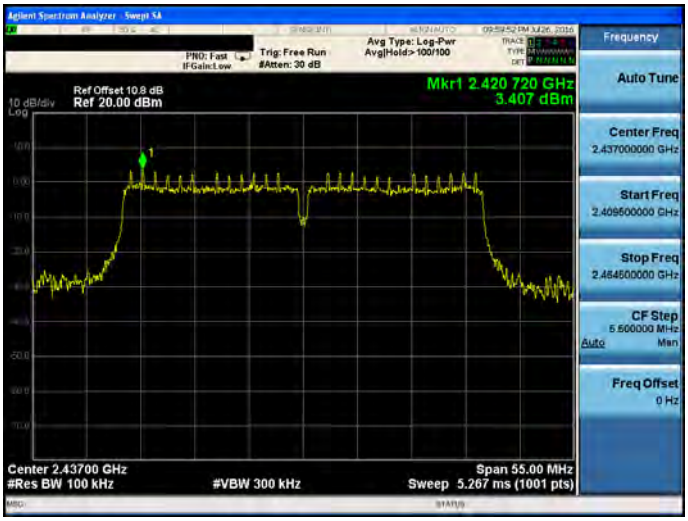
9.5. Test Graphs

Reference level

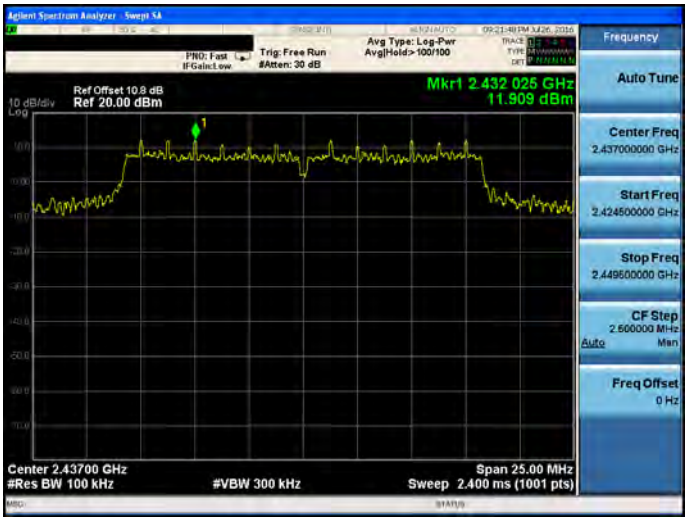
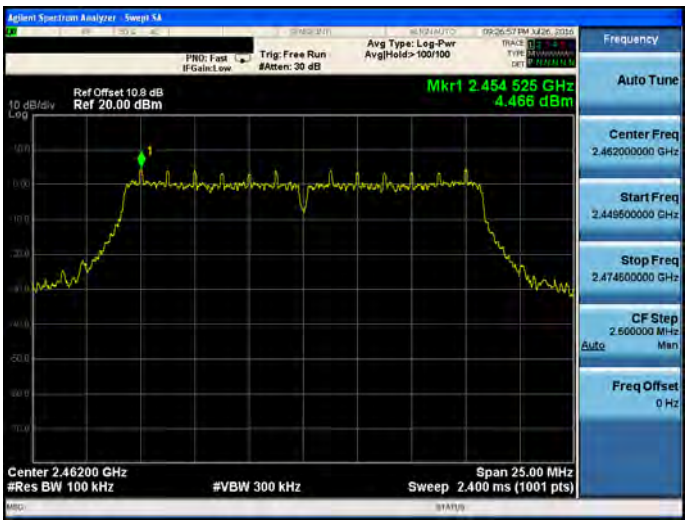
Mode 2: IEEE 802.11b link mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

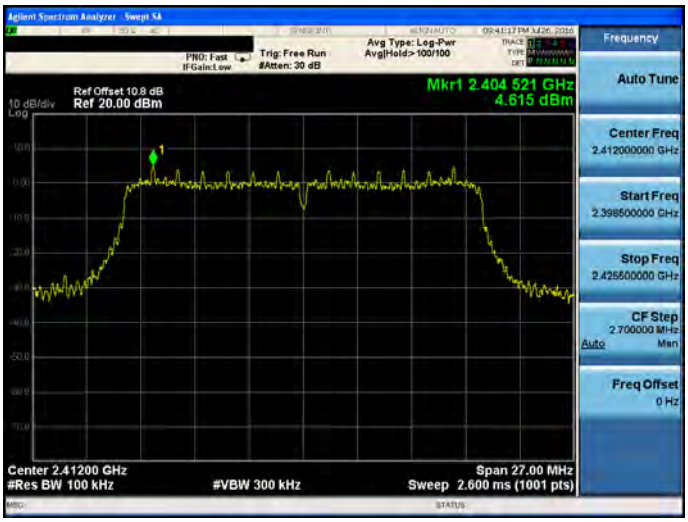
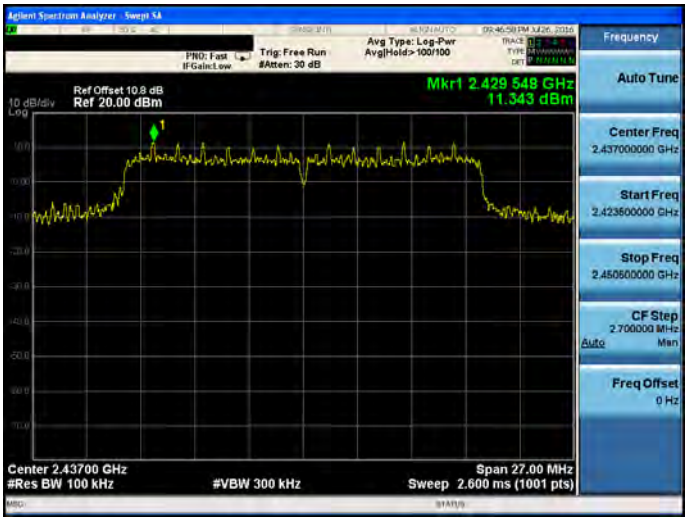
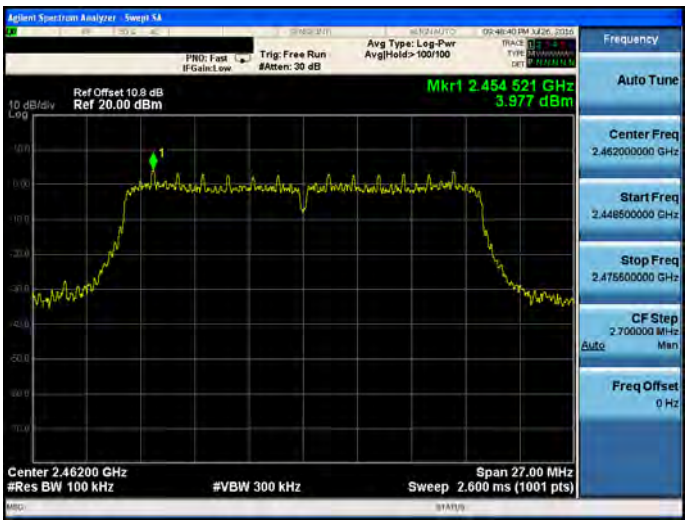
Mode 3: IEEE 802.11g link mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

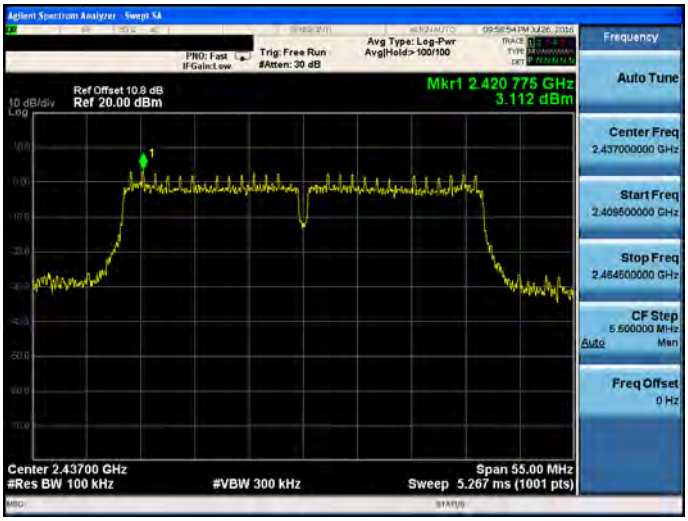
Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode_ANT-1	
2422 MHz	
2437 MHz	
2452 MHz	

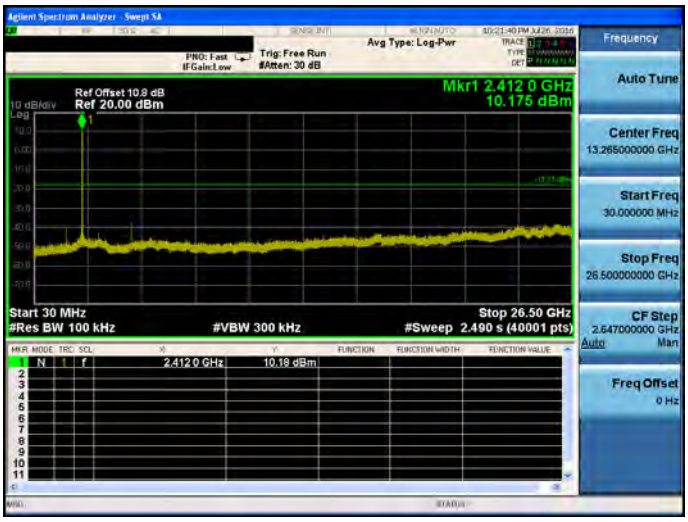
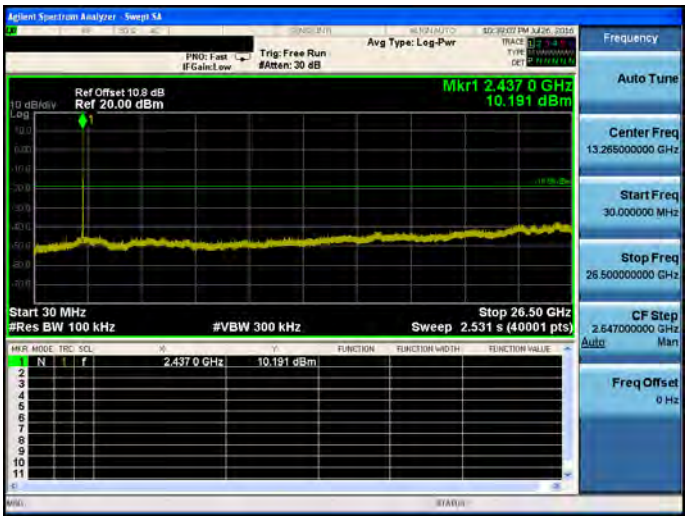
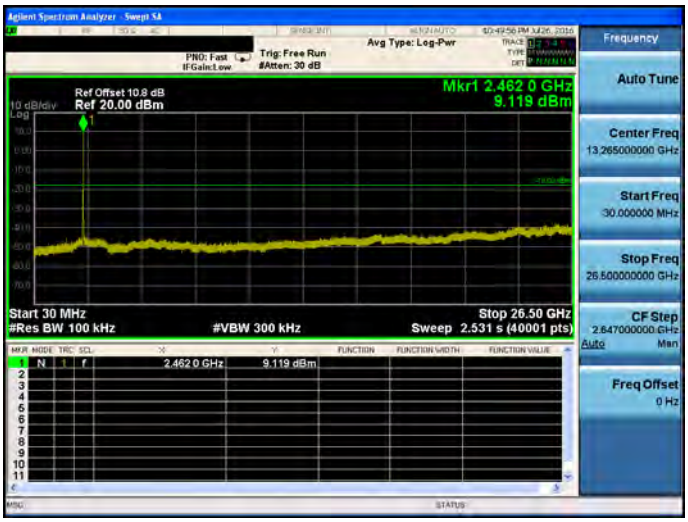
Mode 2: IEEE 802.11b link mode_ANT-2	
2412 MHz	
2437 MHz	
2462 MHz	

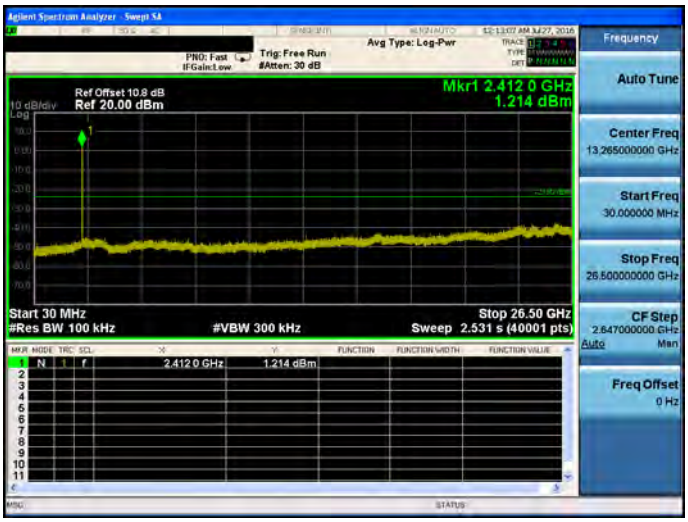
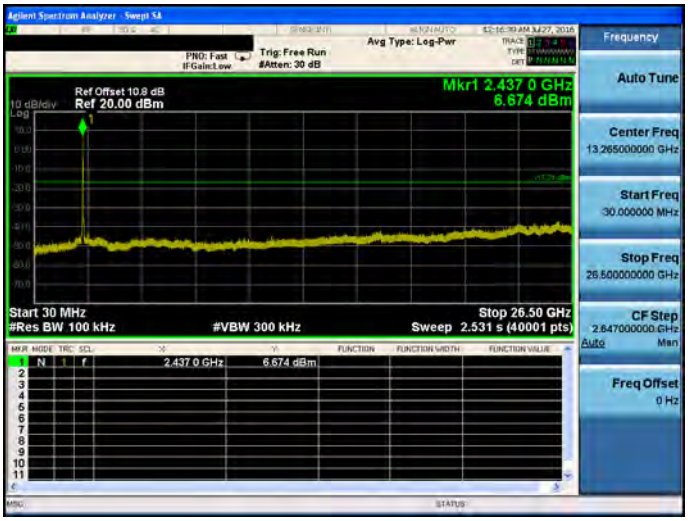
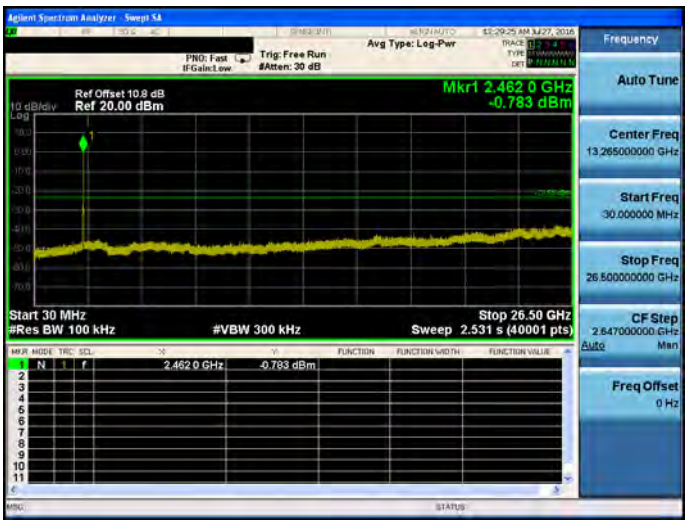
Mode 3: IEEE 802.11g link mode_ANT-2	
2412 MHz	
2437 MHz	
2462 MHz	

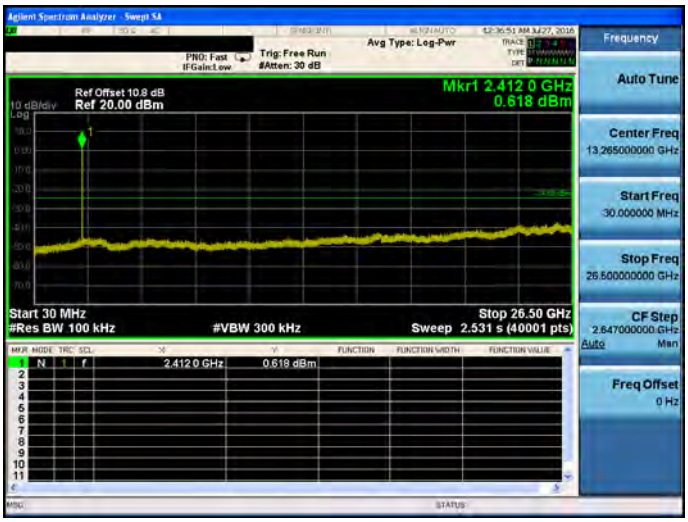
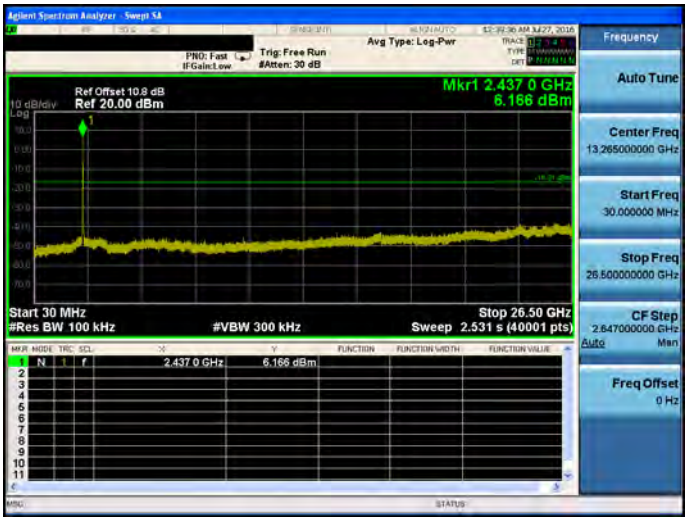
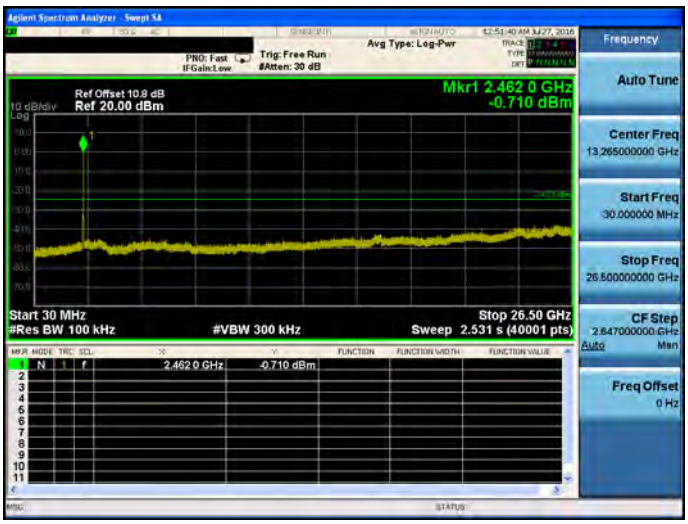
Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode_ANT-2	
2412 MHz	
2437 MHz	
2462 MHz	

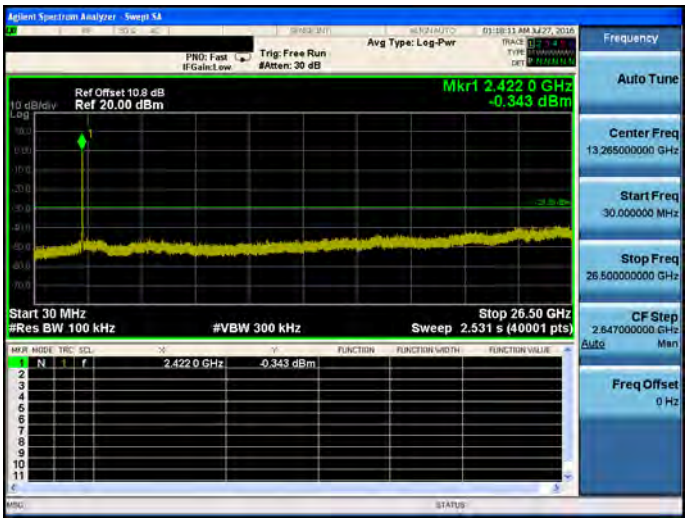
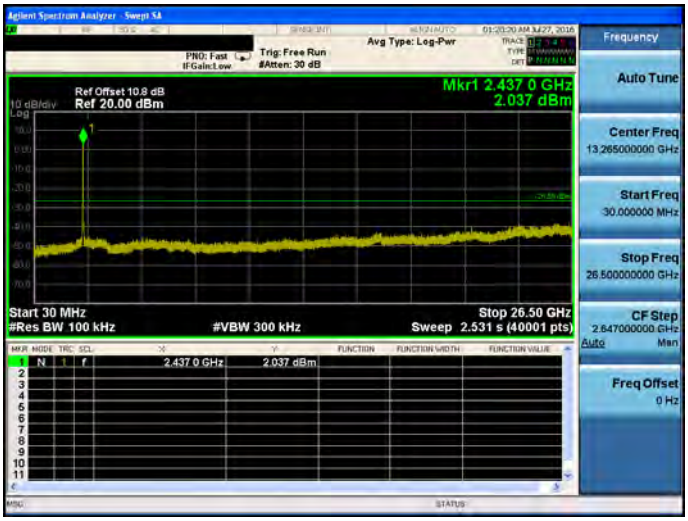
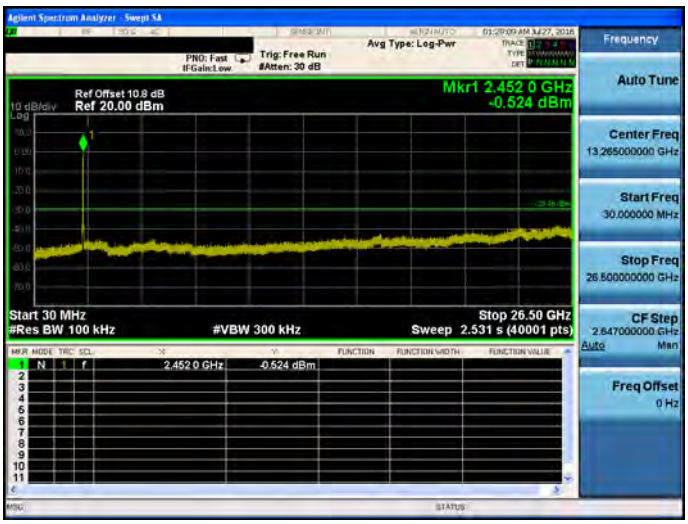
Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode_ANT-2	
2422 MHz	
2437 MHz	
2452 MHz	

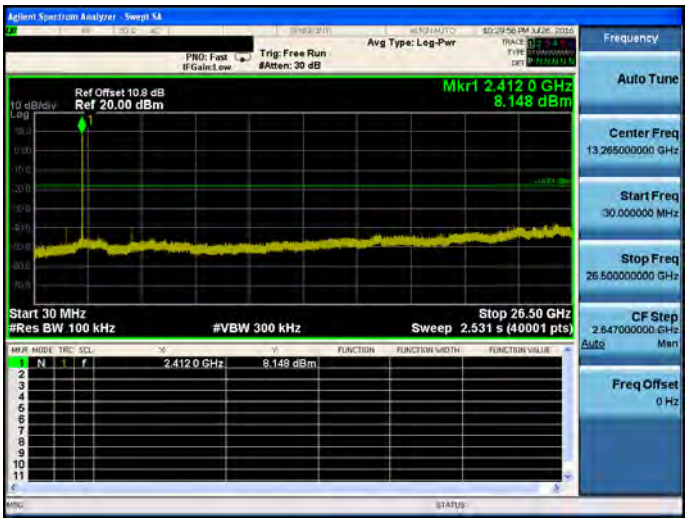
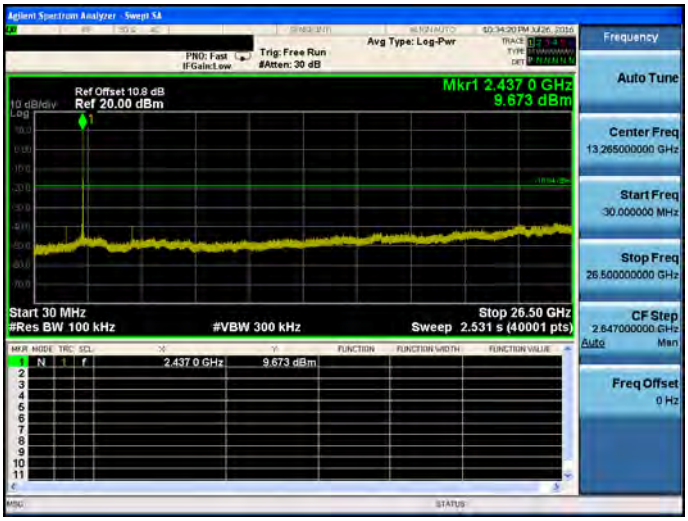
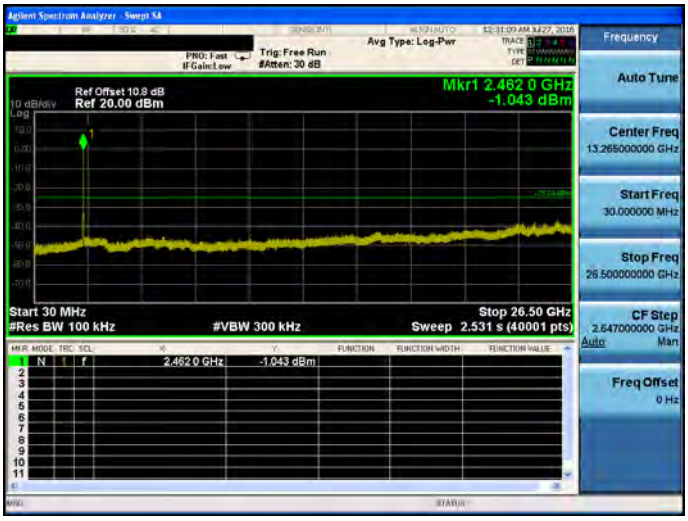
Out of Band Conducted Emissions

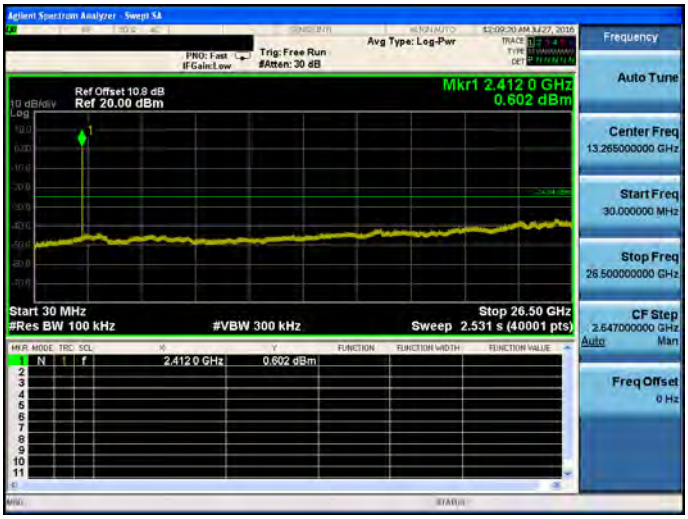
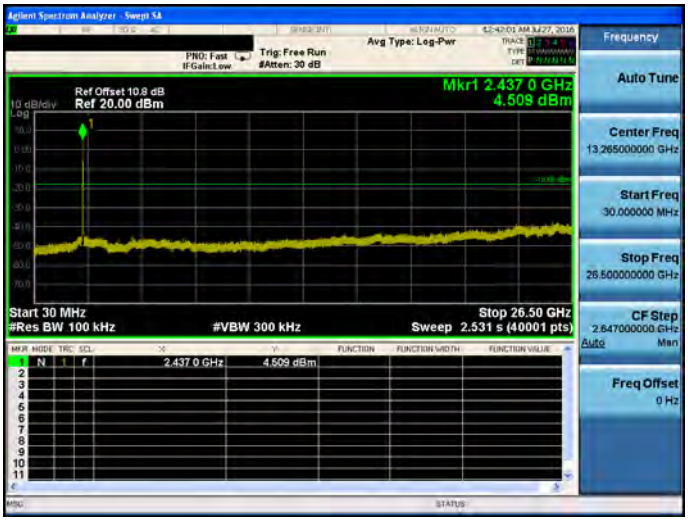
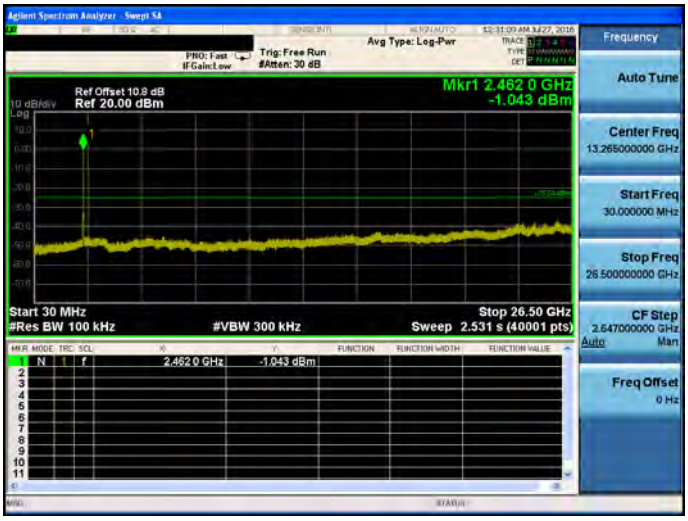
Mode 2: IEEE 802.11b link mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

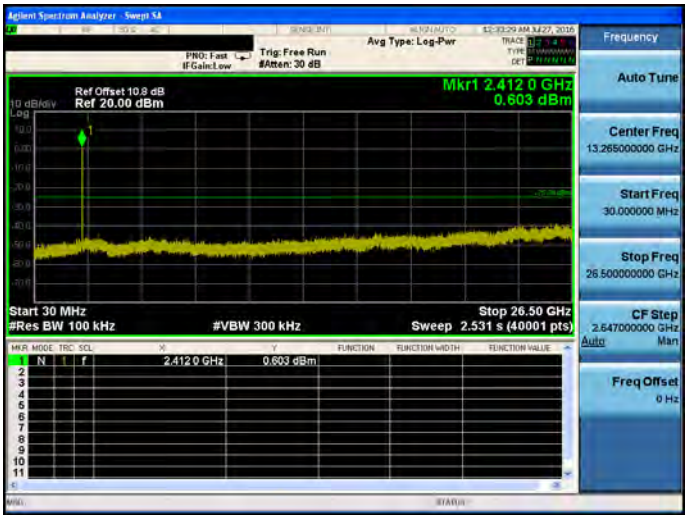
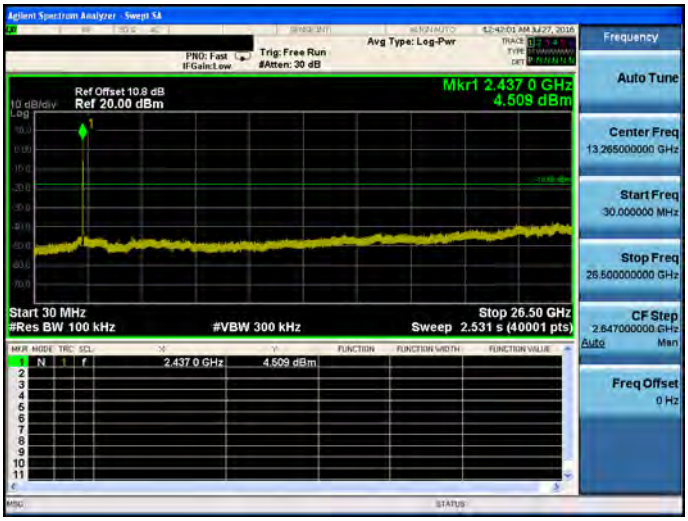
Mode 3: IEEE 802.11g link mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

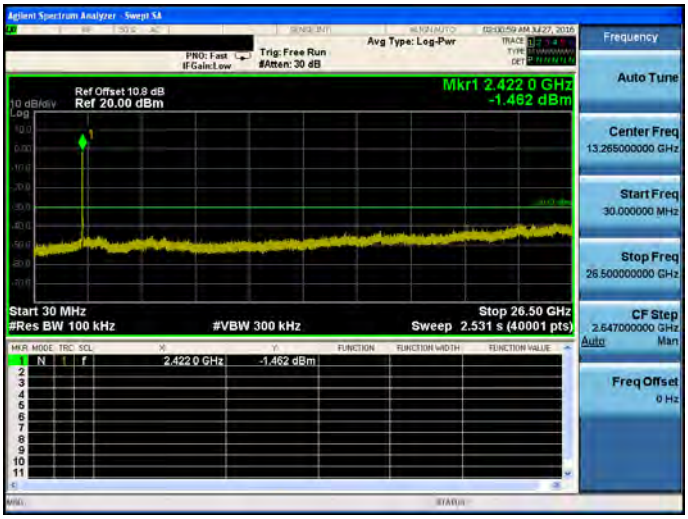
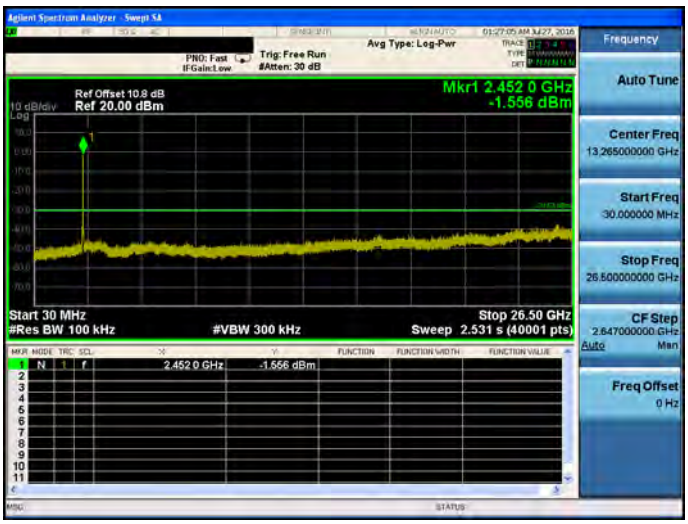
Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode_ANT-1	
2412 MHz	
2437 MHz	
2462 MHz	

Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode_ANT-1	
2422 MHz	
2437 MHz	
2452 MHz	

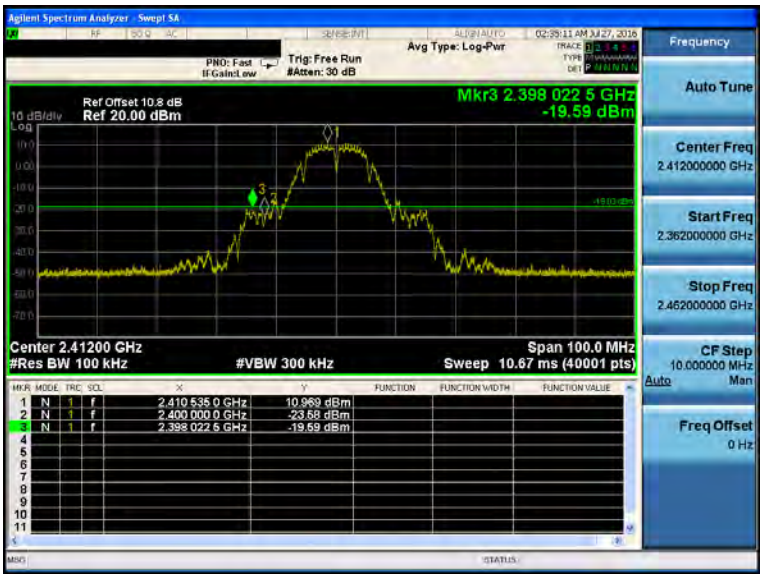
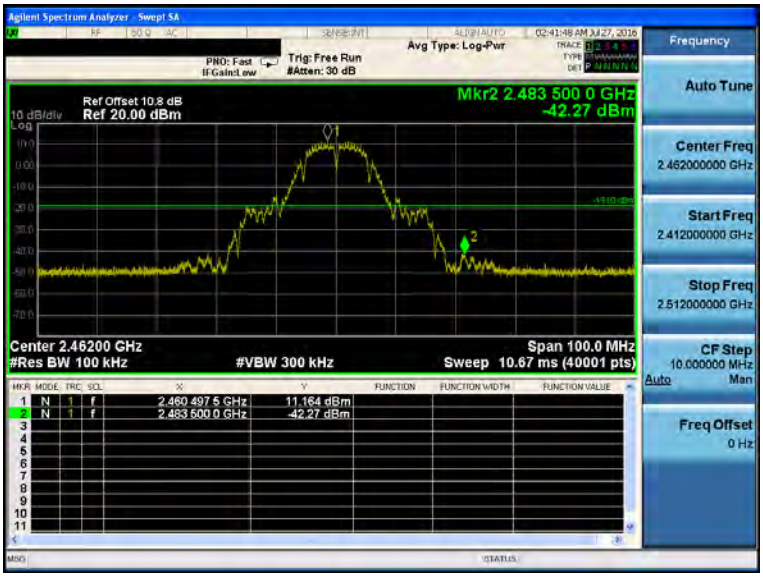
Mode 2: IEEE 802.11b link mode_ANT-2	
2412 MHz	
2437 MHz	
2462 MHz	

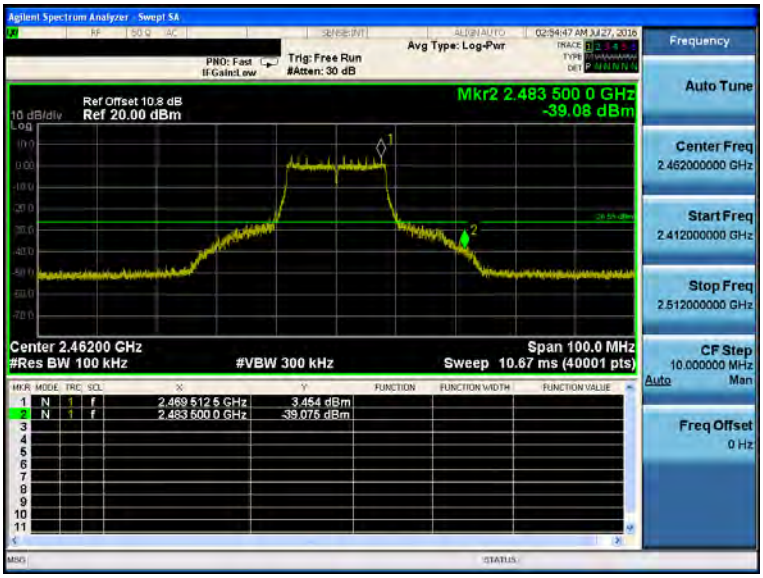
Mode 3: IEEE 802.11g link mode_ANT-2	
2412 MHz	
2437 MHz	
2462 MHz	

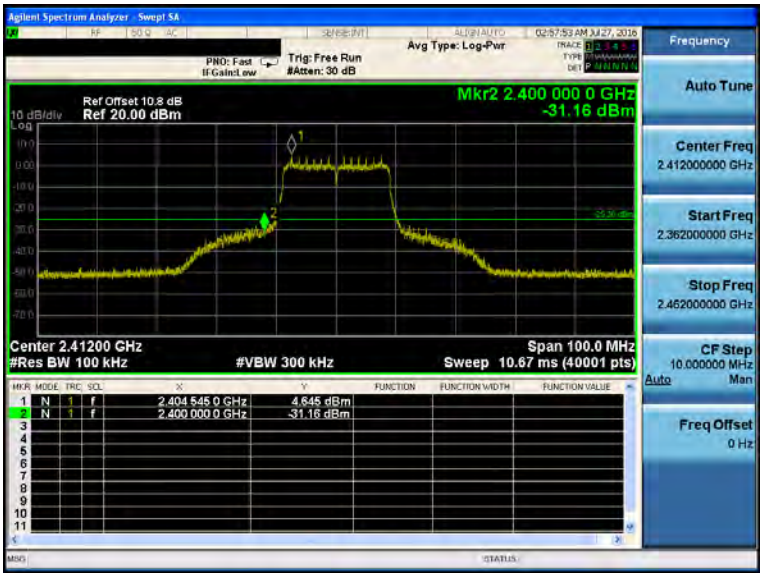
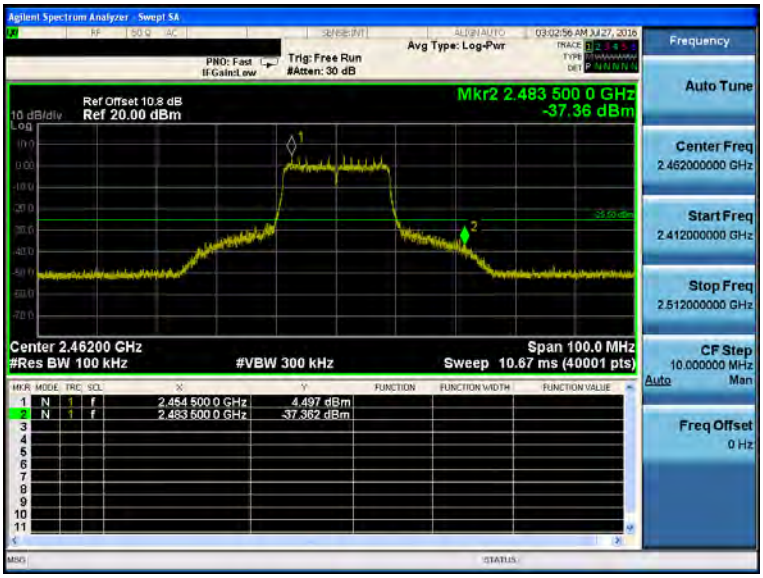
Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode_ANT-2	
2412 MHz	
2437 MHz	
2462 MHz	

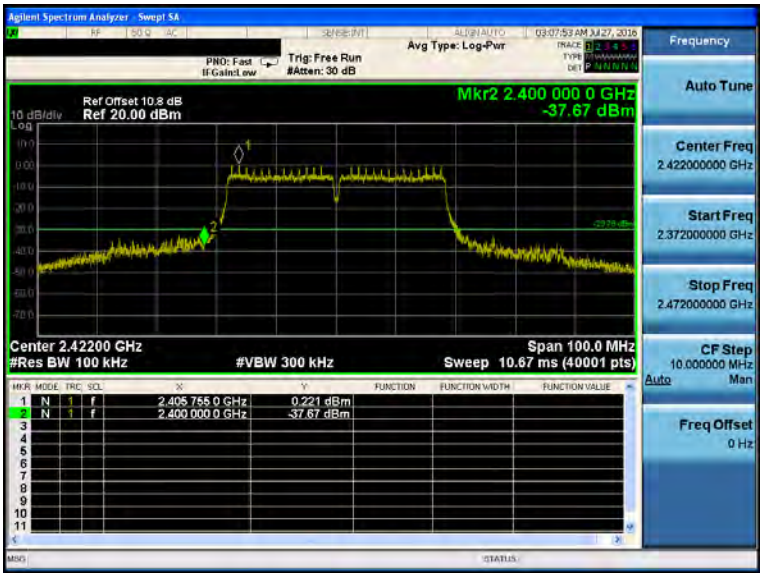
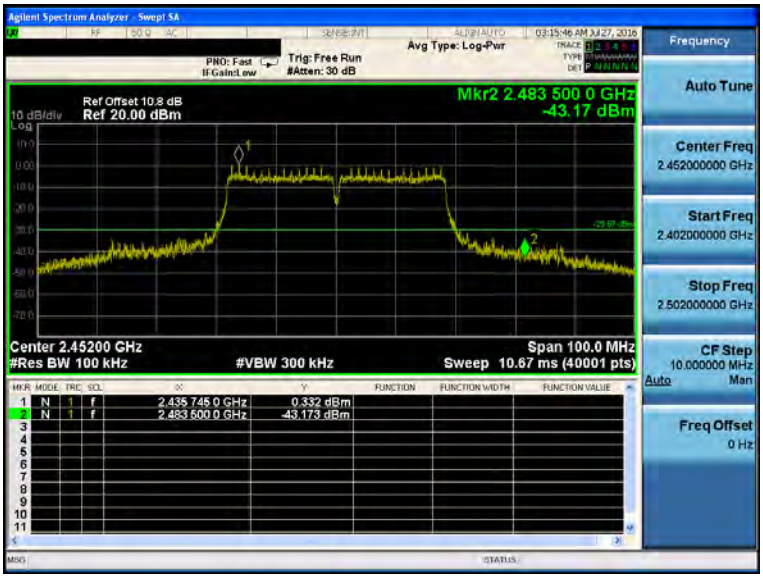
Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode_ANT-2	
2422 MHz	
2437 MHz	
2452 MHz	

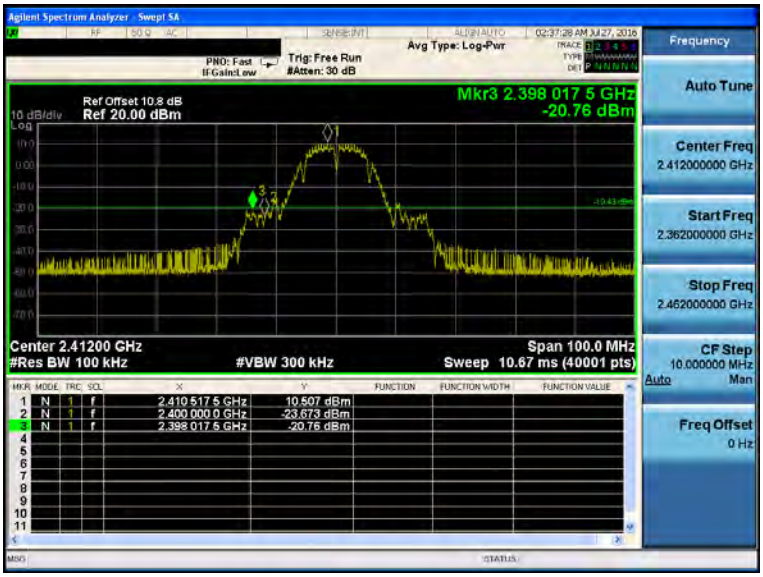
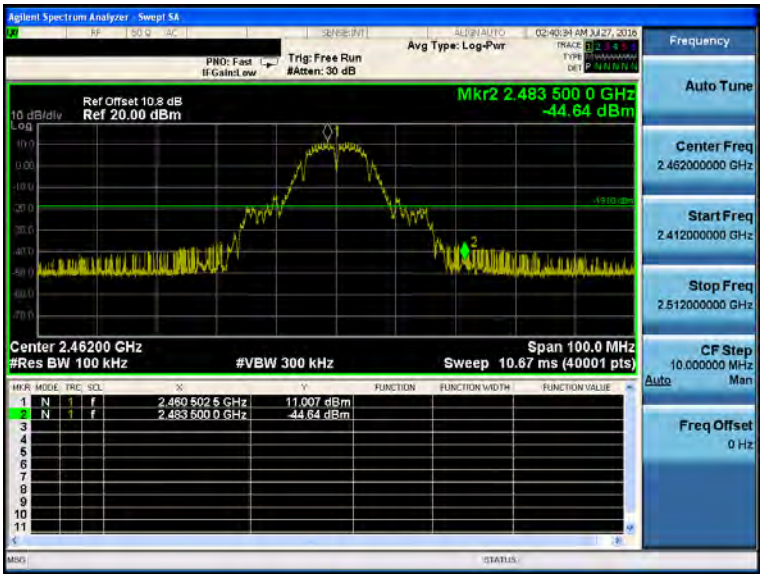
Conducted Band Edge

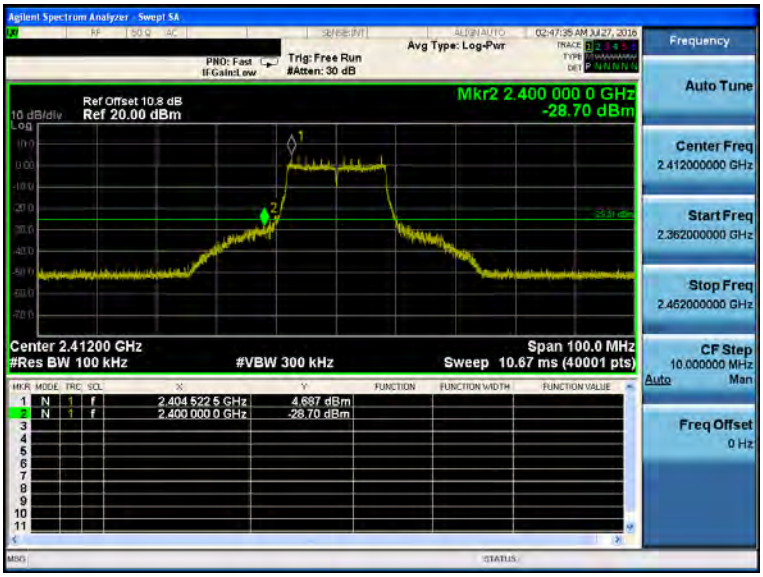
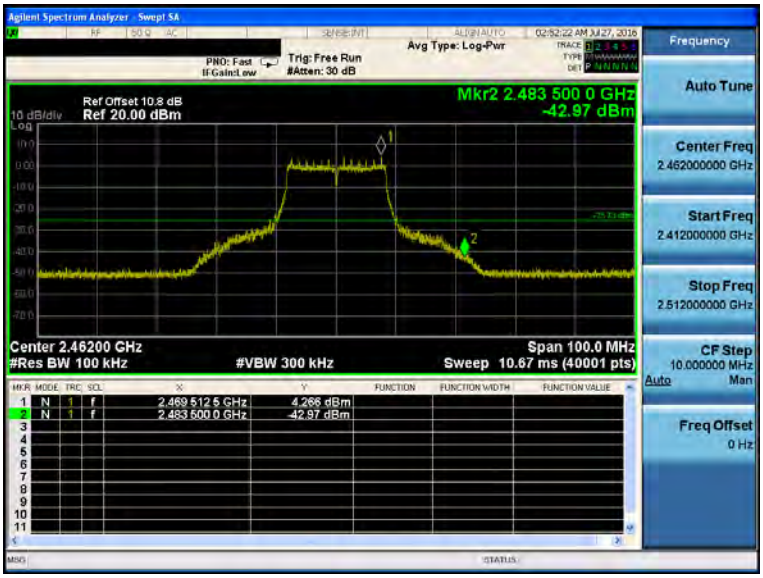
Mode 2: IEEE 802.11b link mode_ANT-1	
2412 MHz	
2462 MHz	

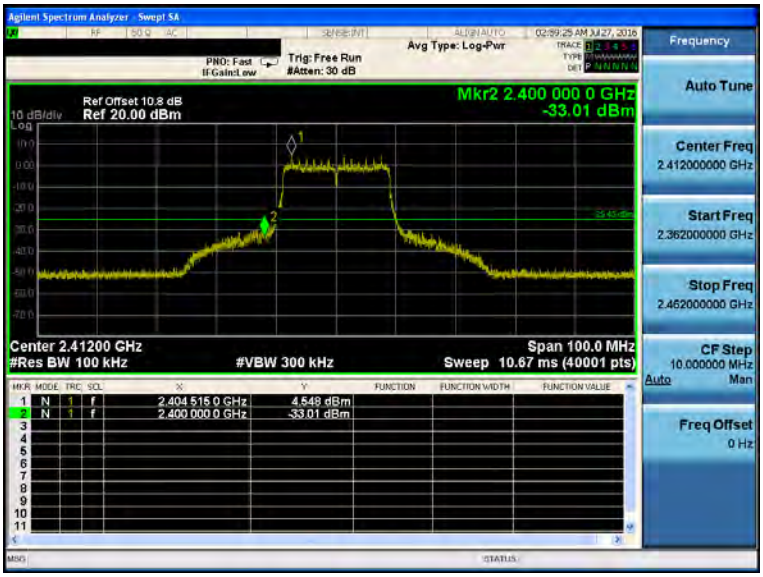
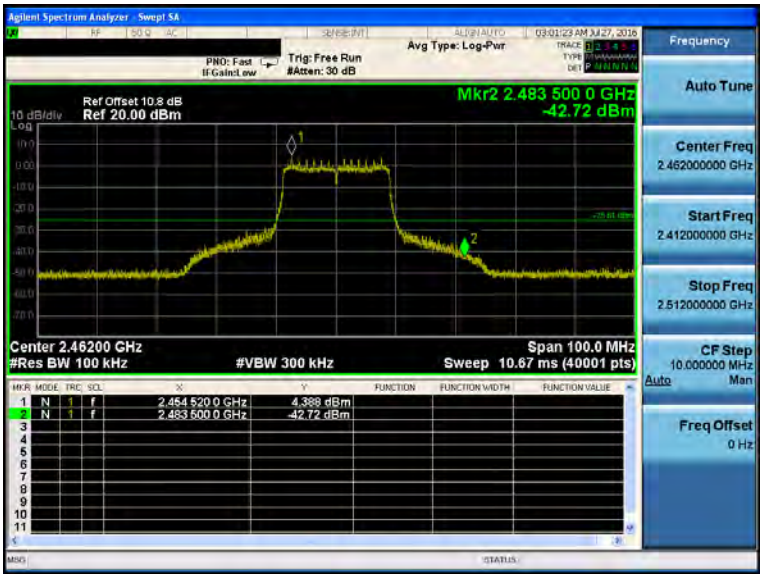
Mode 3: IEEE 802.11g link mode_ANT-1	
2412 MHz	
2462 MHz	

Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode_ANT-1	
2412 MHz	
2462 MHz	

Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode_ANT-1	
2422 MHz	
2452 MHz	

Mode 2: IEEE 802.11b link mode_ANT-2	
2412 MHz	
2462 MHz	

Mode 3: IEEE 802.11g link mode_ANT-2	
2412 MHz	
2462 MHz	

Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode_ANT-2	
2412 MHz	
2462 MHz	

Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode_ANT-2	
2422 MHz	
2452 MHz	

10 Antenna Measurement

10.1. Limit

For intentional device, according to 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And According to 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

10.2. Antenna Description

See section 2 – antenna information.

10.3. Directional Gain Calculated

For CDD mode Maximum Conducted Output Power

Directional Gain = 10*log{[10^(G1/10)+10^(G2/10)+…+10^(Gn/10)]/NANT}

Operate Freq. Band	Directional Gain (dBi)
IEEE 802.11b link mode	2.36
IEEE 802.11g link mode	2.36
IEEE 802.11n 2.4GHz 20MHz	2.36
IEEE 802.11n 2.4GHz 40MHz	2.36

For CDD mode Maximum Power Density

Directional Gain = 10*log{[10^(G1/20)+10^(G2/20)+…+10^(Gn/20)]^2/NANT}

Operate Freq. Band	Directional Gain (dBi)
IEEE 802.11b link mode	5.36
IEEE 802.11g link mode	5.36
IEEE 802.11n 2.4GHz 20MHz	5.36
IEEE 802.11n 2.4GHz 40MHz	5.36