FCC 47 CFR PART 15 SUBPART C

RF Test Report

Applicant	:	Kpnetworks Ltd.
Product Type	:	Wireless Lan Access Point
Trade Name	:	Kpnetworks
Model Number	:	KPWL-0300
Applicable Standard	:	FCC 47 CFR PART 15 SUBPART C ANSI C63.10:2013
Receive Date	:	Dec. 06, 2016
Test Period	:	Nov. 29, 2016 ~ Jan. 07, 2017
Issue Date	:	Jan. 09, 2017

Issue by

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Taiwan Accreditation Foundation accreditation number: 1330

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Revision History

Rev.	Issue Date	Revisions	Revised By
00	Jan. 09, 2017	Initial Issue	Snow Wang

Verification of Compliance

Issued Date: Jan. 09, 2017

Applicant	:	Kpnetworks Ltd.
Product Type	:	Wireless Lan Access Point
Trade Name	:	Kpnetworks
Model Number	:	KPWL-0300
FCC ID	:	2AGR9KPWL0300
EUT Rated Voltage	:	DC 48V, 1A
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 5
2 EUT Description 6
3 Test Methodology 7
3.1. Mode of Operation 7
3.2. EUT Exercise Software 13
3.3. Configuration of Test System Details 13
3.4. Test Site Environment 14
4 AC Power Line Conducted Emission Measurement 15
5 Radiated Emission Measurement 23
6 Maximum Conducted Output Power Measurement 129
7 6dB RF Bandwidth Measurement 132
8 Maximum Power Density Measurement 150
9 Out of Band Conducted Emissions Measurement 168
10 Antenna Measurement 217

1 General Information

1.1 Summary of Test Result

Standard 15.247	Item	Result	Remark
15.207	AC Power Conducted Emission	PASS	-----
Standard 15.247	Item	Result	Remark
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	2.7
Radiated Emission	9kHz ~ 30MHz	1.7
	30MHz ~ 1000MHz	5.7
	1000MHz ~ 18000MHz	5.5
	18000MHz ~ 26500MHz	4.8
	26500MHz ~ 40000MHz	4.8
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	Kpnetworks Ltd. 4-5-11-10F Shiba, Minato-ku, Tokyo, 108-0014, Japan			
Manufacturer	Edimax Technology Co., Ltd. No. 3, Wu-Chun 3rd Road., Wuku District, New Taipei City 24891, Taiwan, R.O.C.			
Product Type	Wireless Lan Access Point			
Trade Name	Kpnetworks			
Model Number	KPWL-0300			
FCC ID	2AGR9KPWL0300			
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 (256QAM)	20MHz	Up to 346.8Mbps
IEEE 802.11n 2.4GHz 40MHz	2422 ~ 2452	OFDM (256QAM)	40MHz	Up to 800Mbps
Module use	QUALCOMM_QCA9984 (EW-7955MN)			
Antenna information	Model	Type	Max. Gain (dBi)	Note
	C059-510348-A	External antenna (Reversed-SMA Connector)	4.5	For AP port_4TX
	M6060060P1D43602M	External antenna (Reversed-SMA Connector)	6.0	Quad Patct Antenna
	M6060060P23602NB	External antenna (Reversed-SMA Connector)	6.0	MIMO Patct Antenna
	SAA04-22008A	External antenna (Reversed-SMA Connector)	4.5	Omni Directional Antenna
Antenna Delivery	See section 3.1			

Frequency Band	Max. RF Output Power (W)
IEEE 802.11b	0.210
IEEE 802.11g	0.234
IEEE 802.11n 2.4GHz 20MHz	0.057
IEEE 802.11n 2.4GHz 40MHz	0.049

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.

By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that “X axis” position was the worst, then the final test was executed the worst condition and test data were recorded in this report.

Test Mode	ANT-0	ANT-1	ANT-2	ANT-3	ANT-0+1+2+3
Mode 2: IEEE 802.11b link mode	V	V	V	V	V
Mode 3: IEEE 802.11g link mode	V	V	V	V	V
Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode	V	V	V	V	V
Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode	V	V	V	V	V

Test Mode	Antenna Delivery	Test Channel	Data Rate (Mbps) 800 GI (ns)
Mode 2: IEEE 802.11b link mode	4TX / 4RX (CDD)	1, 6, 11	1
Mode 3: IEEE 802.11g link mode	4TX / 4RX (CDD)	1, 6, 11	6
Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode	4TX / 4RX (MIMO)	1, 6, 11	26
Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode	4TX / 4RX (MIMO)	3, 6, 9	54

Test combinations

Model	Type	Max. Gain (dBi)
C059-510348-A	External antenna (Reversed-SMA Connector)	4.5
M6060060P1D43602M	External antenna (Reversed-SMA Connector)	6.0
M6060060P23602NB	External antenna (Reversed-SMA Connector)	6.0
SAA04-22008A	External antenna (Reversed-SMA Connector)	4.5
CO59-510347-A	External antenna (Reversed-SMA Connector)	N/A (see Note)
AC Power Conducted Emission test combinations		
C059-510348-A+CO59-510347-A		
M6060060P23602NB+CO59-510347-A		
SAA04-22008A+CO59-510347-A		
Transmitter Radiated Emissions test combinations		
C059-510348-A		
M6060060P23602NB		
Simultaneous Transmitting		
C059-510348-A+C059-510347-A		
M6060060P23602NB+C059-510347-A		

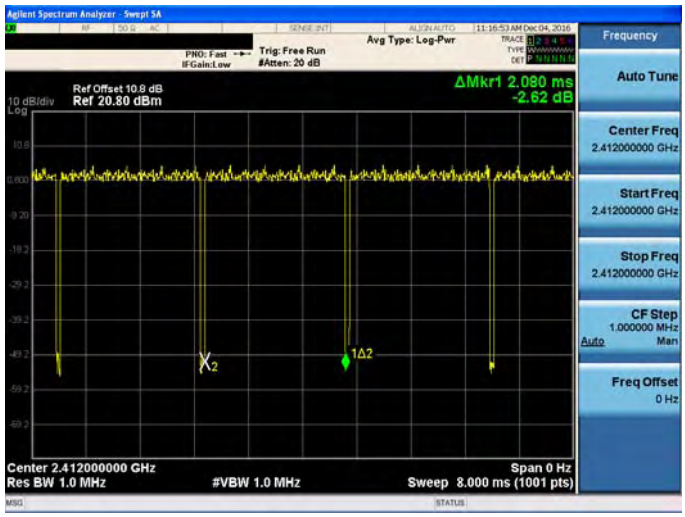
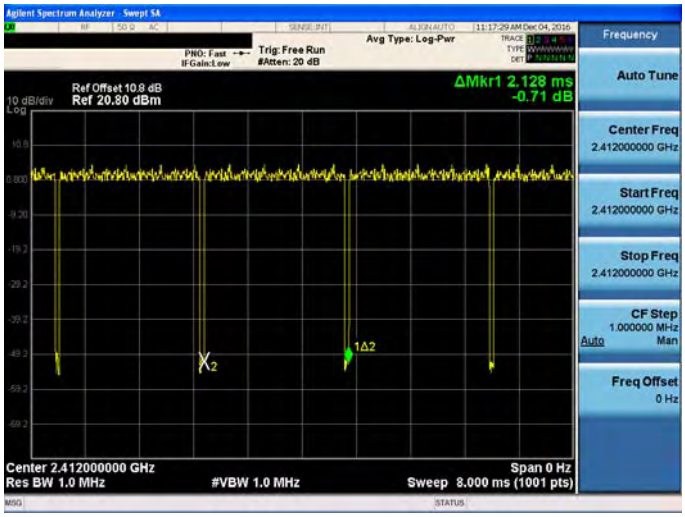
Note: Conduction and Simultaneous Transmission test need to consider antenna C059-510347-A, since this configuration will coexist.

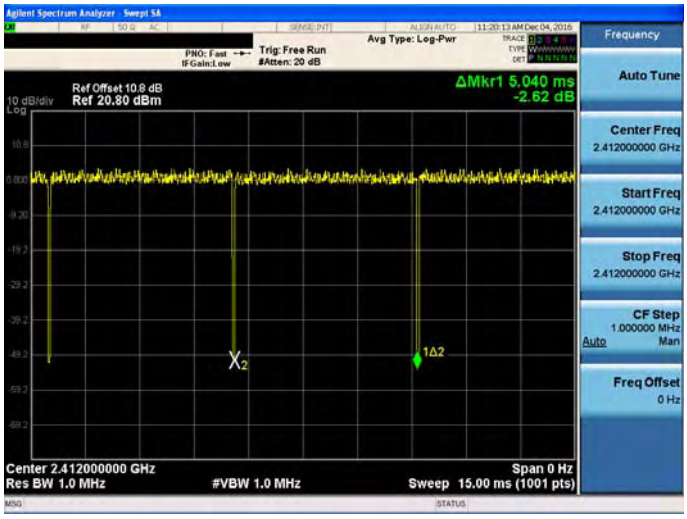
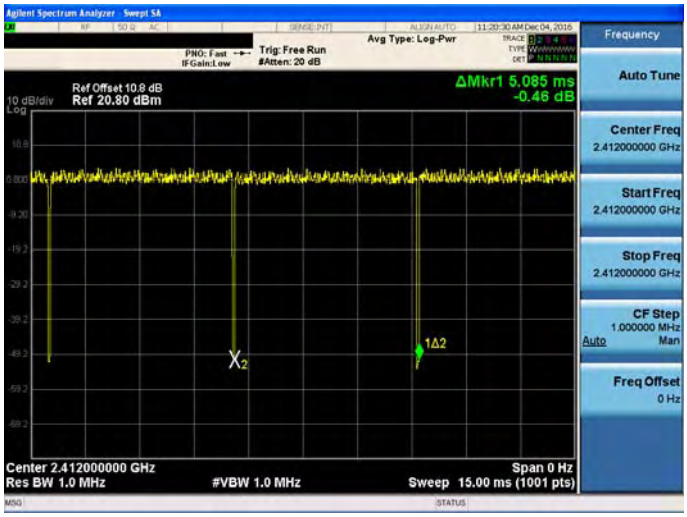
Duty cycle

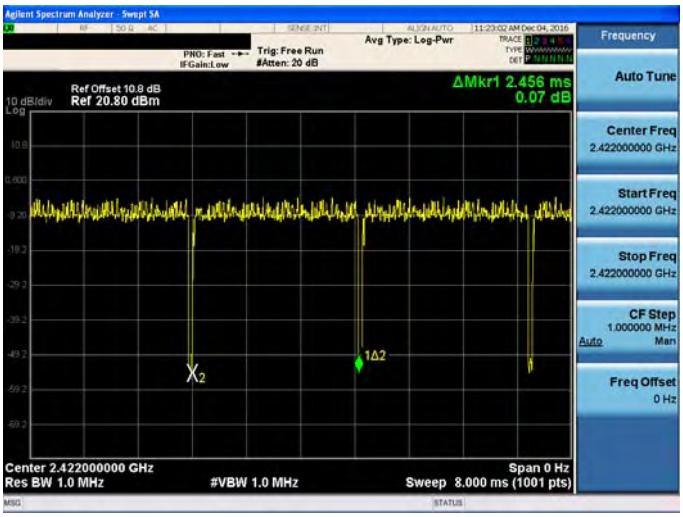
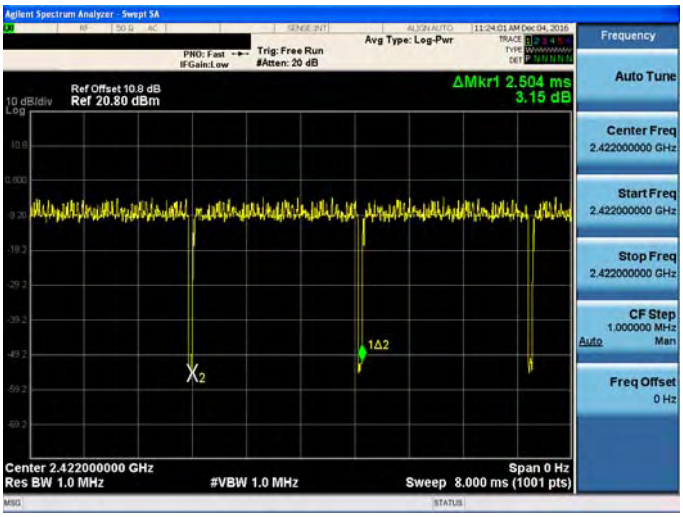
Test Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle	Duty Factor (dB)	1/T Minimum VBW (kHz)
Mode 2: IEEE 802.11b link mode	2412.0	1.000	1.000	1.000	0.000	0.010
Mode 3: IEEE 802.11g link mode	2412.0	2.080	2.128	0.977	0.099	0.481
Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode	2412.0	5.040	5.085	0.991	0.039	0.010
Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode	2422.0	2.456	2.504	0.981	0.084	0.010

Duty Cycle Graphs

Mode 2: IEEE 802.11b link mode	
On 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	

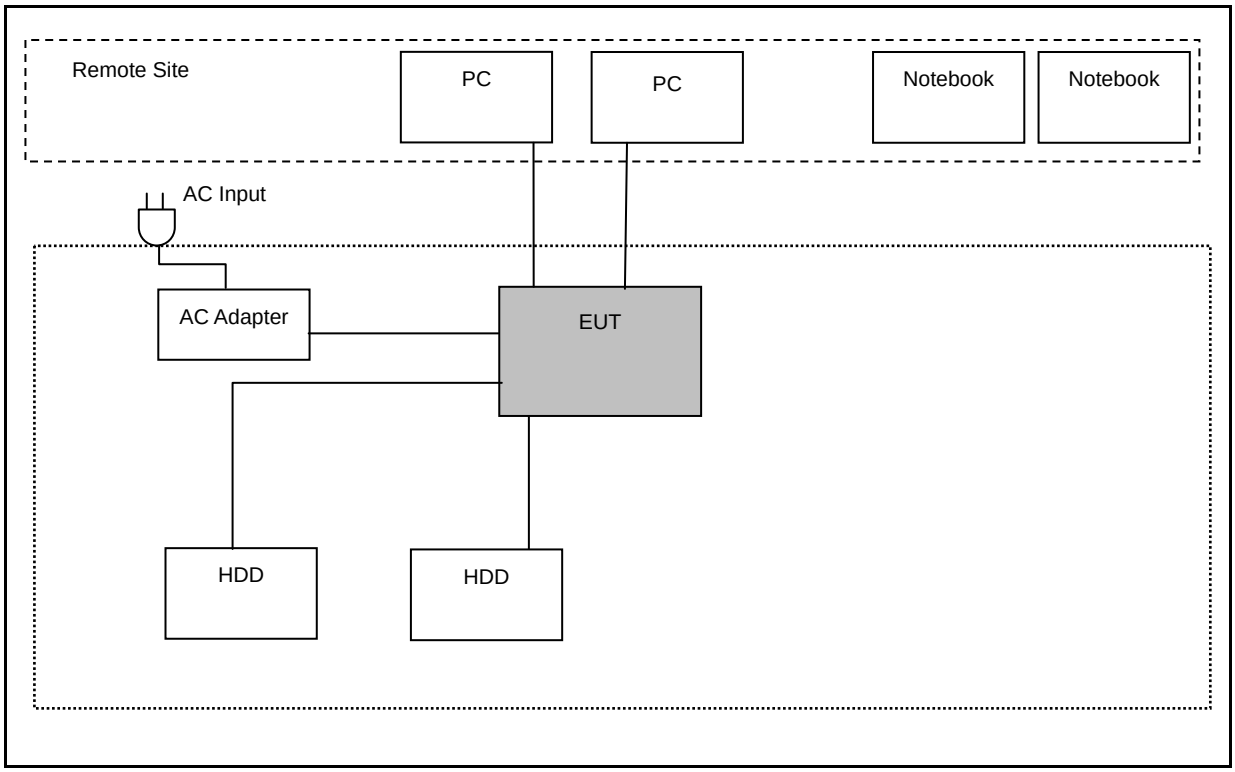
3.2. EUT Exercise Software

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

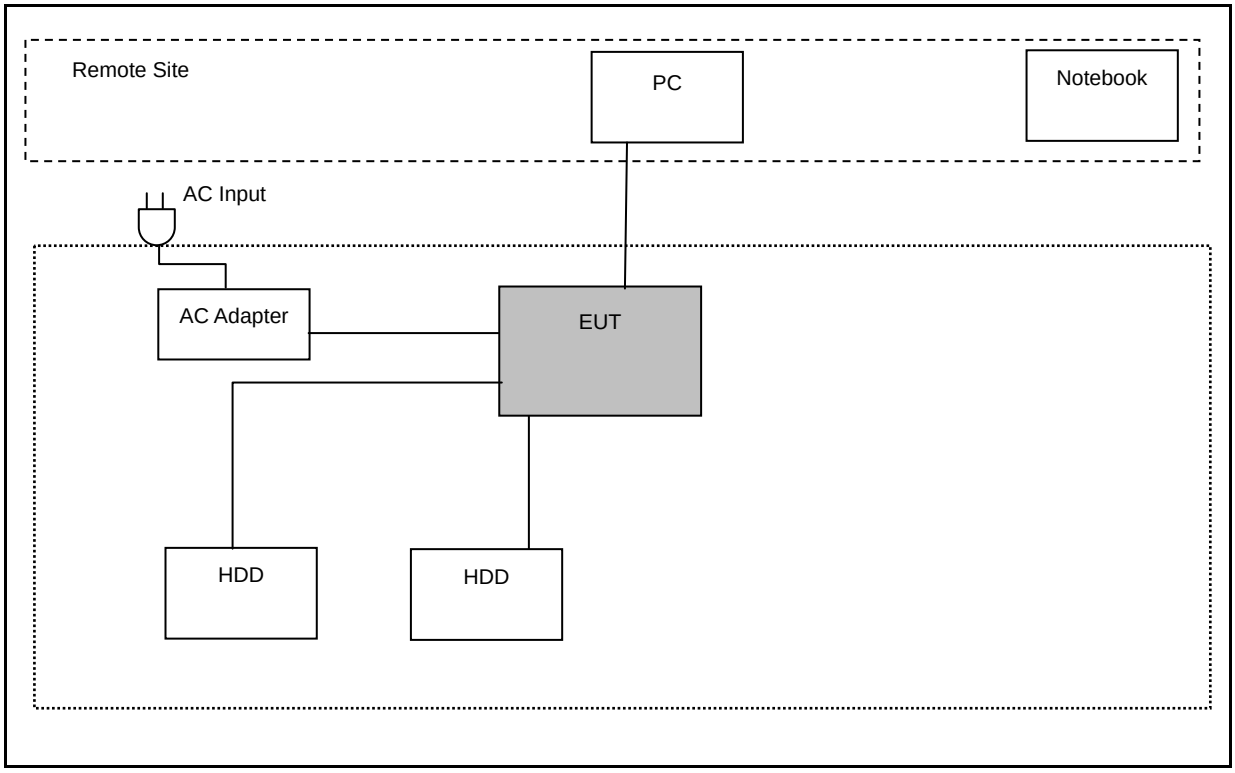
Measurement Software	
1	EZ-EMC Ver. ATL-03A1-1
2	EZ-EMC Ver ATL-ITC-3A1-1

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

■ Limit

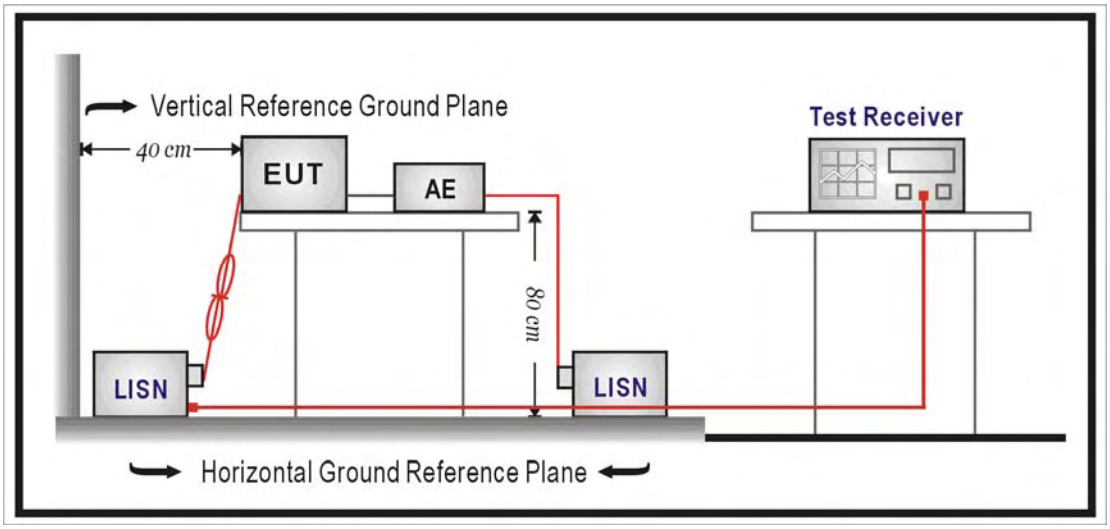
Frequency (MHz)	Quasi-peak	Average
0.15 - 0.5	66 to 56	56 to 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

■ Test Instruments

Describe	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Test Receiver	R&S	ESCI	100367	05/13/2016	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.

■ Test Setup



■ 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.

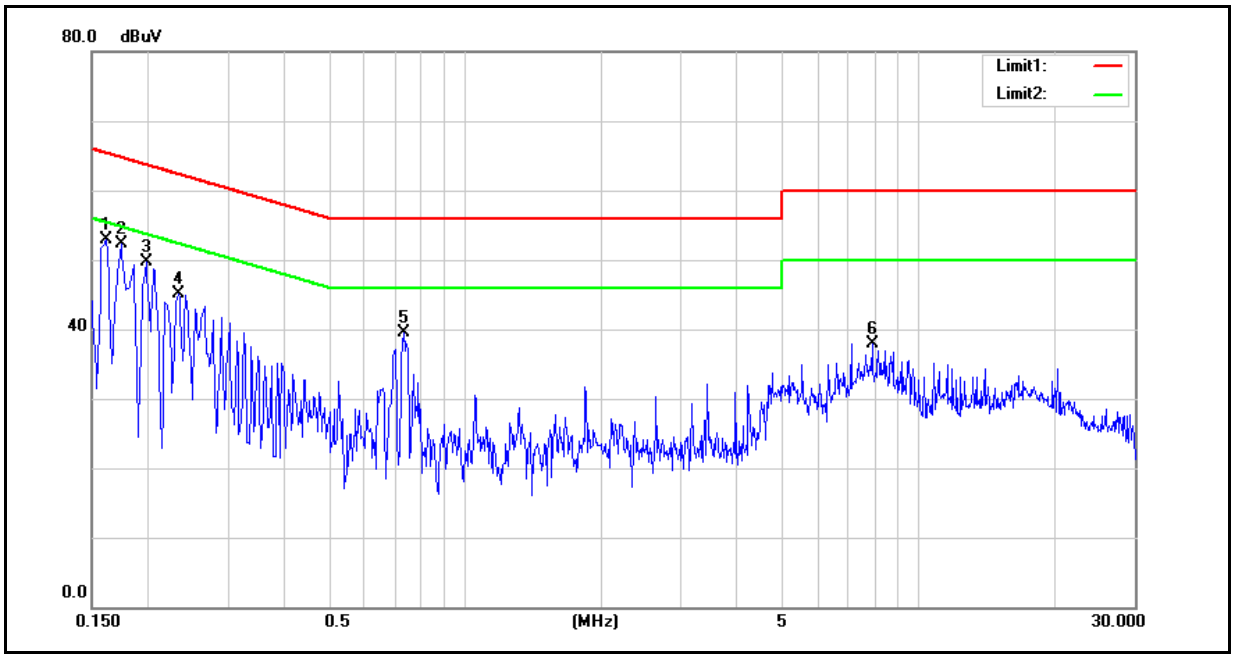
Conducted emissions were investigated over the frequency range from 0.15 MHz to 30 MHz using a resolution bandwidth of 9 kHz. The equipment under test (EUT) shall be meet the limits in section 4.1, as applicable, including the average limit and the quasi-peak limit when using respectively, an average 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.

■ Test Result

Standard:	FCC Part 15.247	Line:	L1
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Test Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
		Date:	12/12/2016
Description:	Antenna:C059-510348-A+CO59-510347-A		

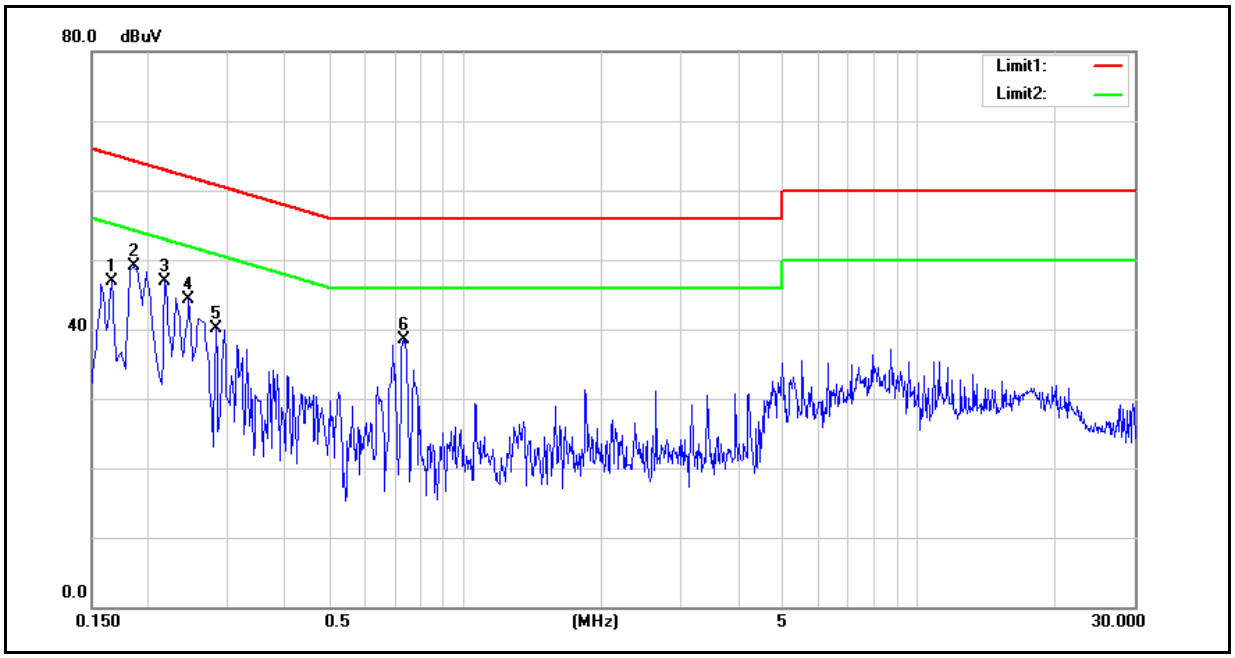


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1620	39.46	22.97	9.60	49.06	32.57	65.36	55.36	-16.30	-22.79	Pass
2	0.1740	35.26	16.93	9.60	44.86	26.53	64.77	54.77	-19.91	-28.24	Pass
3	0.1980	32.61	18.96	9.59	42.20	28.55	63.69	53.69	-21.49	-25.14	Pass
4	0.2340	30.43	14.50	9.59	40.02	24.09	62.31	52.31	-22.29	-28.22	Pass
5	0.7340	28.31	25.90	9.63	37.94	35.53	56.00	46.00	-18.06	-10.47	Pass
6	7.9180	25.59	23.05	9.84	35.43	32.89	60.00	50.00	-24.57	-17.11	Pass

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

Standard:	FCC Part 15.247	Line:	N
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Test Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
		Date:	12/12/2016
Description:	Antenna:C059-510348-A+CO59-510347-A		

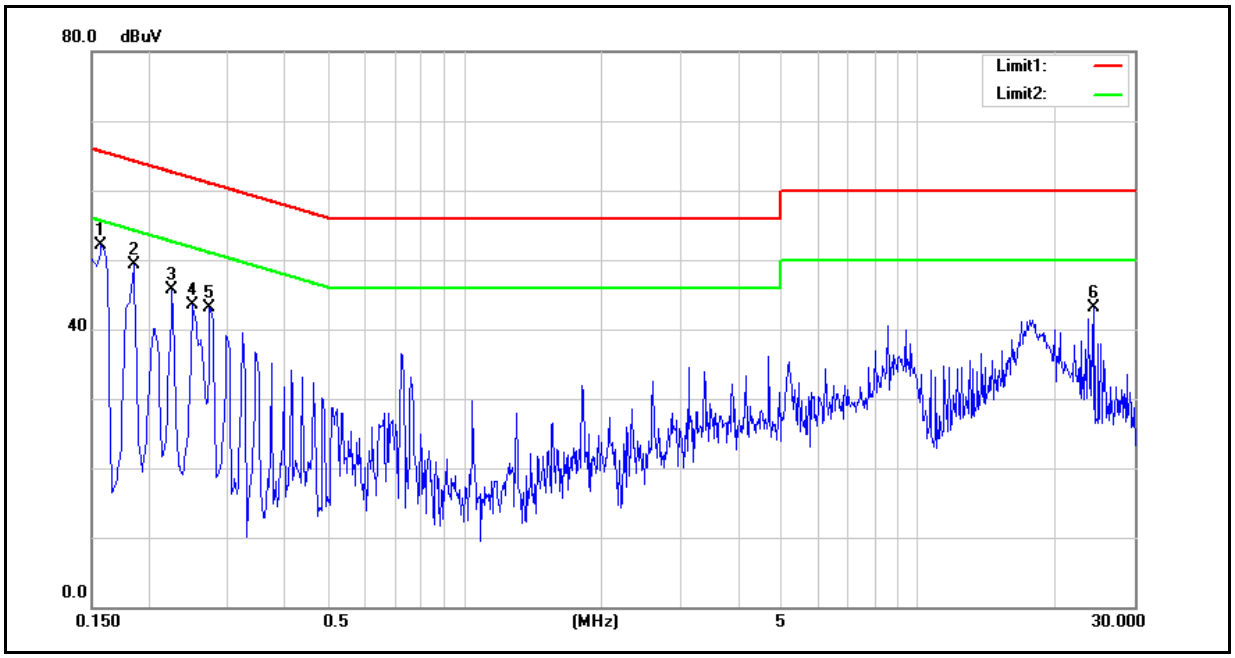


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1660	37.32	19.47	9.59	46.91	29.06	65.16	55.16	-18.25	-26.10	Pass
2	0.1860	34.23	18.88	9.58	43.81	28.46	64.21	54.21	-20.40	-25.75	Pass
3	0.2180	29.82	12.59	9.58	39.40	22.17	62.89	52.89	-23.49	-30.72	Pass
4	0.2460	28.21	13.65	9.58	37.79	23.23	61.89	51.89	-24.10	-28.66	Pass
5	0.2820	23.61	10.49	9.59	33.20	20.08	60.76	50.76	-27.56	-30.68	Pass
6	0.7340	28.09	25.48	9.62	37.71	35.10	56.00	46.00	-18.29	-10.90	Pass

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

Standard:	FCC Part 15.247	Line:	L1
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Test Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
		Date:	12/28/2016
Description:	Antenna:M6060060P23602NB+CO59-510347-A		

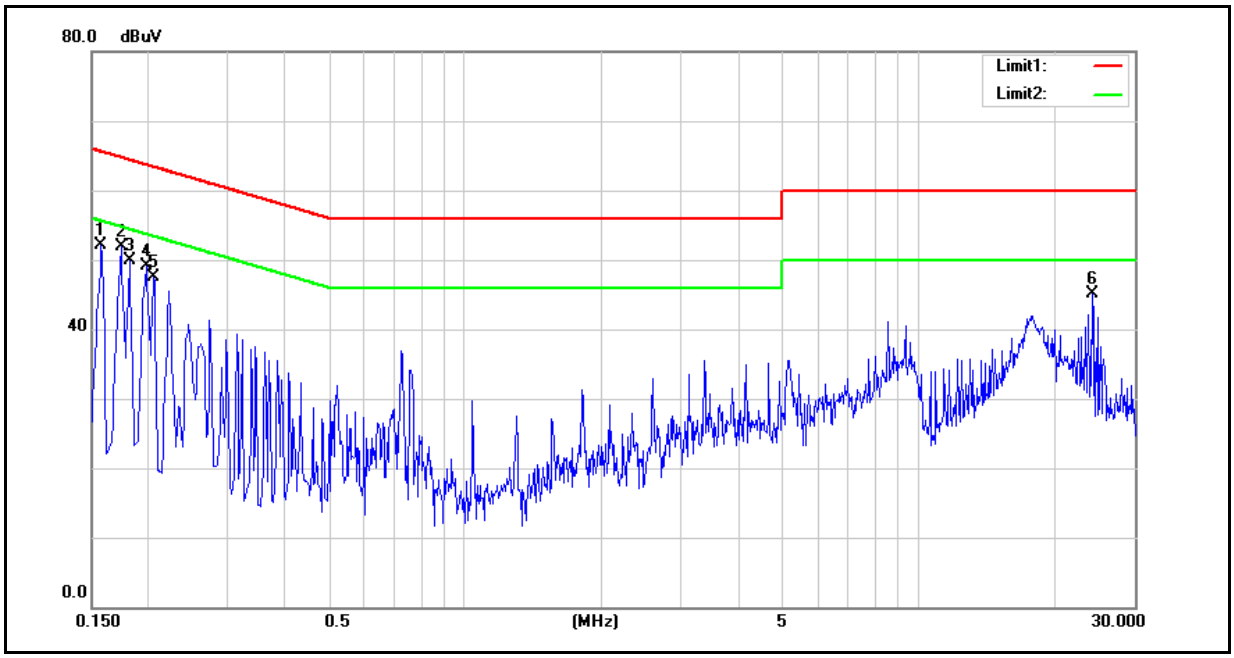


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1580	37.52	22.13	9.60	47.12	31.73	65.57	55.57	-18.45	-23.84	Pass
2	0.1860	34.49	19.39	9.59	44.08	28.98	64.21	54.21	-20.13	-25.23	Pass
3	0.2260	30.23	14.04	9.59	39.82	23.63	62.60	52.60	-22.78	-28.97	Pass
4	0.2500	27.42	10.11	9.60	37.02	19.71	61.76	51.76	-24.74	-32.05	Pass
5	0.2740	25.43	8.08	9.60	35.03	17.68	61.00	51.00	-25.97	-33.32	Pass
6	24.4260	32.35	32.37	9.98	42.33	42.35	60.00	50.00	-17.67	-7.65	Pass

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

Standard:	FCC Part 15.247	Line:	N
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Test Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
		Date:	12/28/2016
Description:	Antenna:M6060060P23602NB+CO59-510347-A		

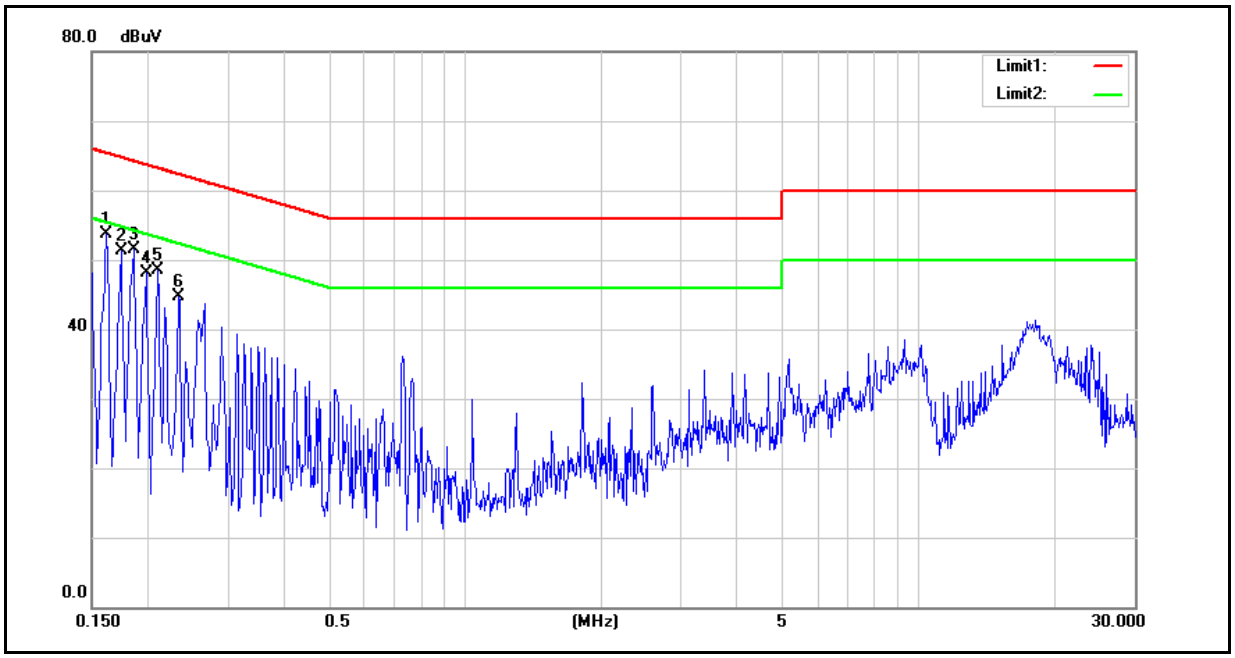


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1580	38.68	22.77	9.59	48.27	32.36	65.57	55.57	-17.30	-23.21	Pass
2	0.1740	36.71	18.10	9.59	46.30	27.69	64.77	54.77	-18.47	-27.08	Pass
3	0.1820	35.05	18.69	9.58	44.63	28.27	64.39	54.39	-19.76	-26.12	Pass
4	0.1980	34.29	15.63	9.58	43.87	25.21	63.69	53.69	-19.82	-28.48	Pass
5	0.2060	31.49	12.29	9.58	41.07	21.87	63.37	53.37	-22.30	-31.50	Pass
6	24.1660	33.89	33.20	10.14	44.03	43.34	60.00	50.00	-15.97	-6.66	Pass

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

Standard:	FCC Part 15.247	Line:	L1
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Test Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
		Date:	12/28/2016
Description:	Antenna:SAA04-22008A+CO59-510347-A		

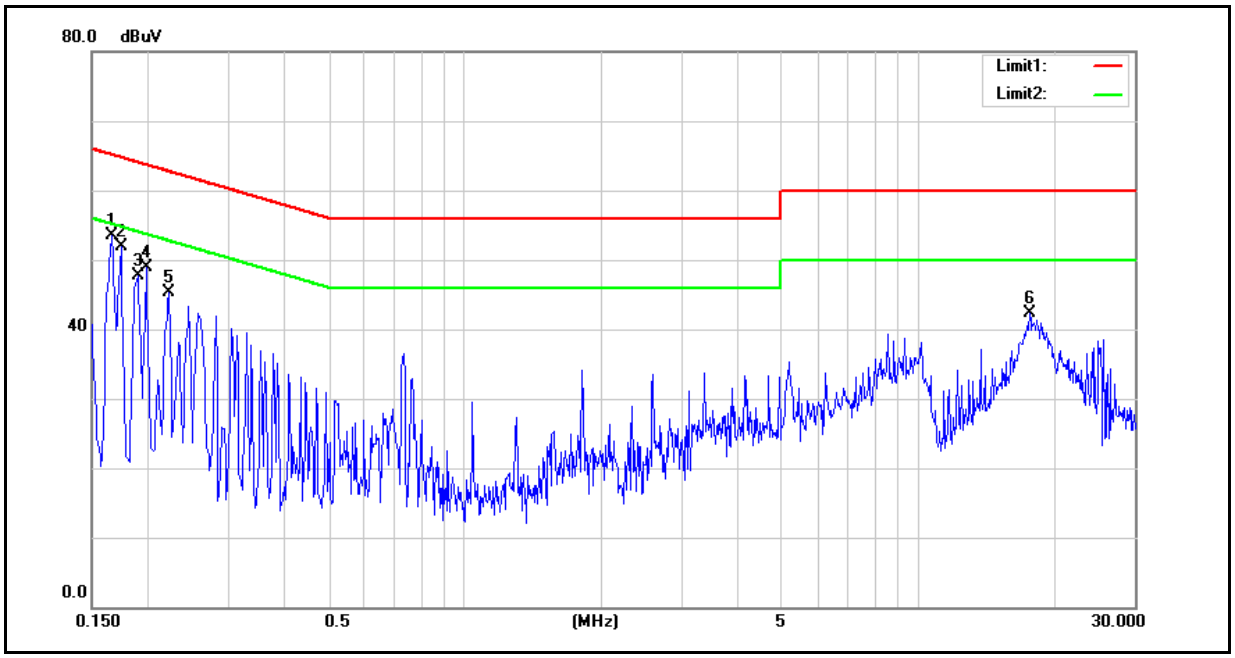


No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1620	38.49	18.74	9.60	48.09	28.34	65.36	55.36	-17.27	-27.02	Pass
2	0.1740	37.05	18.98	9.60	46.65	28.58	64.77	54.77	-18.12	-26.19	Pass
3	0.1860	35.80	20.77	9.59	45.39	30.36	64.21	54.21	-18.82	-23.85	Pass
4	0.1980	34.19	17.30	9.59	43.78	26.89	63.69	53.69	-19.91	-26.80	Pass
5	0.2100	32.81	14.68	9.59	42.40	24.27	63.21	53.21	-20.81	-28.94	Pass
6	0.2340	30.49	15.10	9.59	40.08	24.69	62.31	52.31	-22.23	-27.62	Pass

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

Standard:	FCC Part 15.247	Line:	N
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Test Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
		Date:	12/28/2016
Description:	Antenna:SAA04-22008A+CO59-510347-A		



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	0.1660	36.97	15.83	9.59	46.56	25.42	65.16	55.16	-18.60	-29.74	Pass
2	0.1740	36.87	19.69	9.59	46.46	29.28	64.77	54.77	-18.31	-25.49	Pass
3	0.1900	35.72	19.34	9.58	45.30	28.92	64.04	54.04	-18.74	-25.12	Pass
4	0.1980	34.05	16.57	9.58	43.63	26.15	63.69	53.69	-20.06	-27.54	Pass
5	0.2220	31.41	16.83	9.58	40.99	26.41	62.74	52.74	-21.75	-26.33	Pass
6	17.6580	28.61	23.00	10.07	38.68	33.07	60.00	50.00	-21.32	-16.93	Pass

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

5 Radiated Emission Measurement

■ 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.

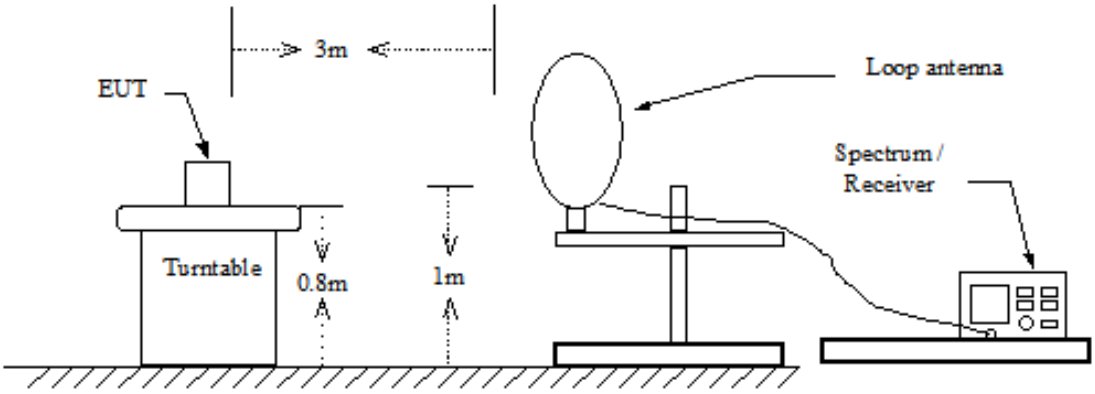
■ Test Instruments

3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
RF Pre-selector	Agilent	N9039A	MY46520256	03/22/2016	1 year
Spectrum Analyzer	Agilent	E4446A	MY46180578	03/22/2016	1 year
Pre Amplifier	Agilent	8449B	3008A02237	10/11/2016	1 year
Pre Amplifier	Agilent	8447D	2944A11119	01/11/2016	1 year
Broadband Antenna	Schwarzbeck	VULB9168	416	10/13/2016	1 year
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/06/2016	1 year
Horn Antenna (18~40GHz)	ETS	3116	86467	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	02/23/2016	1 year
Microwave Cable	EMCI	EMC-104-SM-SM-14000	140202	02/23/2016	1 year
Microwave Cable	EMCI	EMC104-SM-SM-600	140301	02/23/2016	1 year
Test Site	ATL	TE01	888001	08/29/2016	1 year

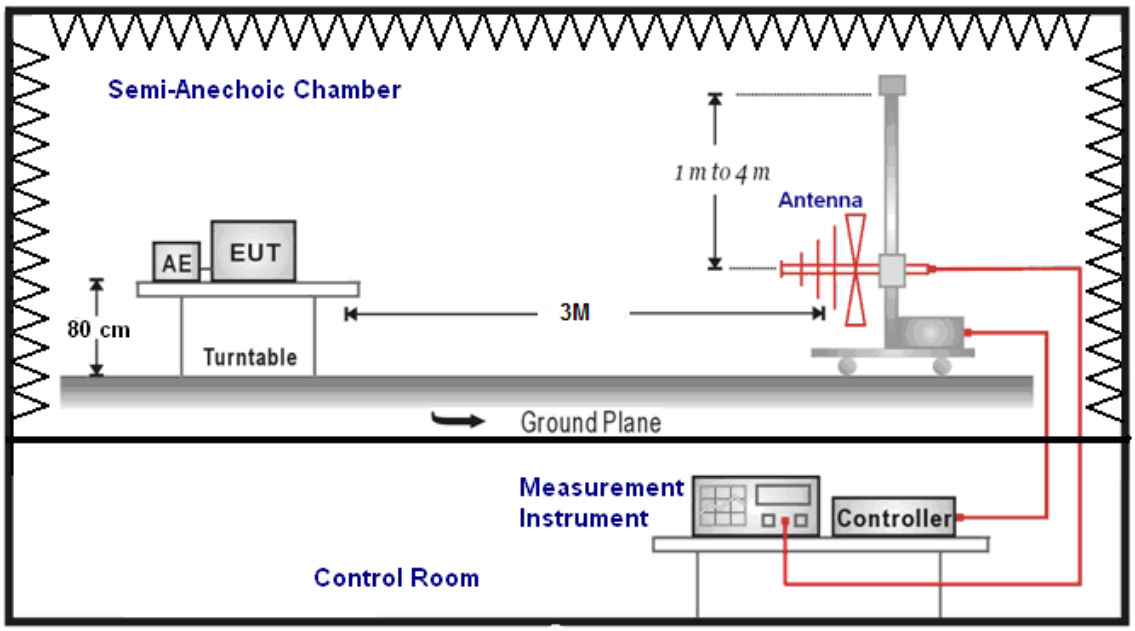
Note: N.C.R. = No Calibration Request.

■ Setup

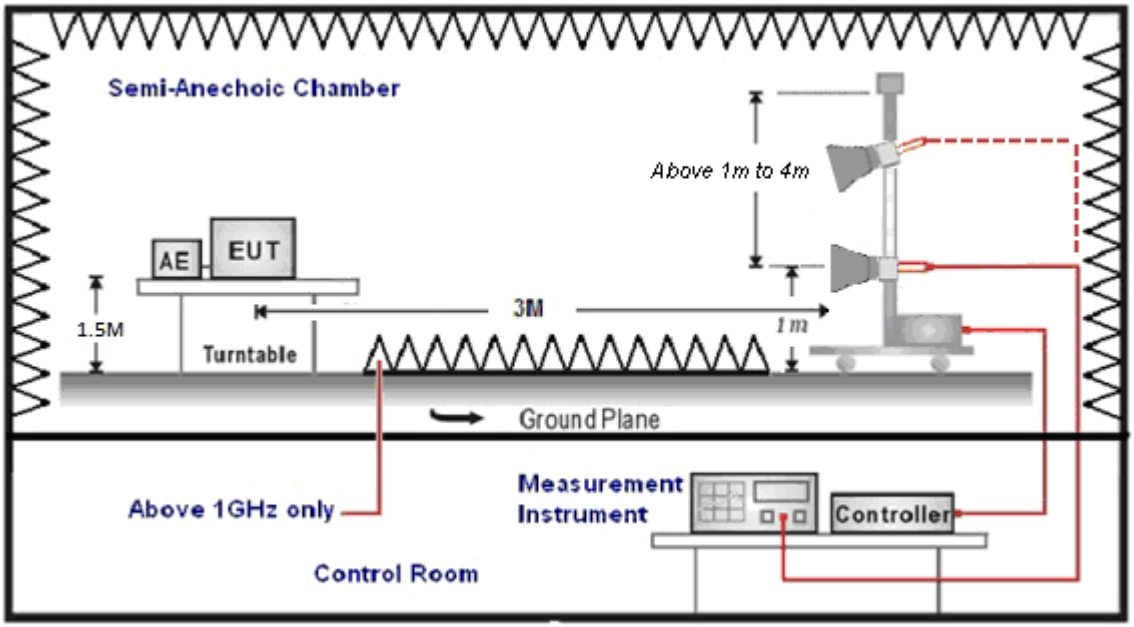
9kHz ~ 30MHz



Below 1GHz



Above 1GHz



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.

■ Test Result

Below 1GHz

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Test Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Description:	Antenna:C059-510348-A	Date:	11/29/2016

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
155.0000	41.63	-5.16	36.47	43.50	-7.03	QP	H
279.5000	36.25	-3.94	32.31	46.00	-13.69	QP	H
399.0000	42.36	-1.72	40.64	46.00	-5.36	QP	H
425.0000	33.89	-0.93	32.96	46.00	-13.04	QP	H
643.0000	28.71	3.76	32.47	46.00	-13.53	QP	H
800.0000	37.61	6.68	44.29	46.00	-1.71	QP	H
212.0000	42.08	-7.61	34.47	43.50	-9.03	QP	V
275.0000	37.07	-4.18	32.89	46.00	-13.11	QP	V
399.0000	40.47	-1.72	38.75	46.00	-7.25	QP	V
595.0000	26.85	2.78	29.63	46.00	-16.37	QP	V
800.0000	34.51	6.68	41.19	46.00	-4.81	QP	V
925.0000	30.05	9.13	39.18	46.00	-6.82	QP	V

Note:1.Result (dBuV/m) = Correct 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).

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Test Mode:	Mode 1	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Description:	Antenna:CM6060060P23602NB	Date:	11/29/2016

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
200.0000	45.12	-7.82	37.30	43.50	-6.20	QP	H
275.0000	40.42	-4.18	36.24	46.00	-9.76	QP	H
375.0000	40.85	-2.18	38.67	46.00	-7.33	QP	H
399.0000	42.99	-1.72	41.27	46.00	-4.73	QP	H
625.0000	33.47	3.41	36.88	46.00	-9.12	QP	H
800.0000	32.61	6.68	39.29	46.00	-6.71	QP	H
175.0000	37.13	-5.81	31.32	43.50	-12.18	QP	V
275.0000	34.70	-4.18	30.52	46.00	-15.48	QP	V
375.0000	41.28	-2.18	39.10	46.00	-6.90	QP	V
500.0000	29.98	0.74	30.72	46.00	-15.28	QP	V
625.0000	31.50	3.41	34.91	46.00	-11.09	QP	V
800.0000	35.90	6.68	42.58	46.00	-3.42	QP	V

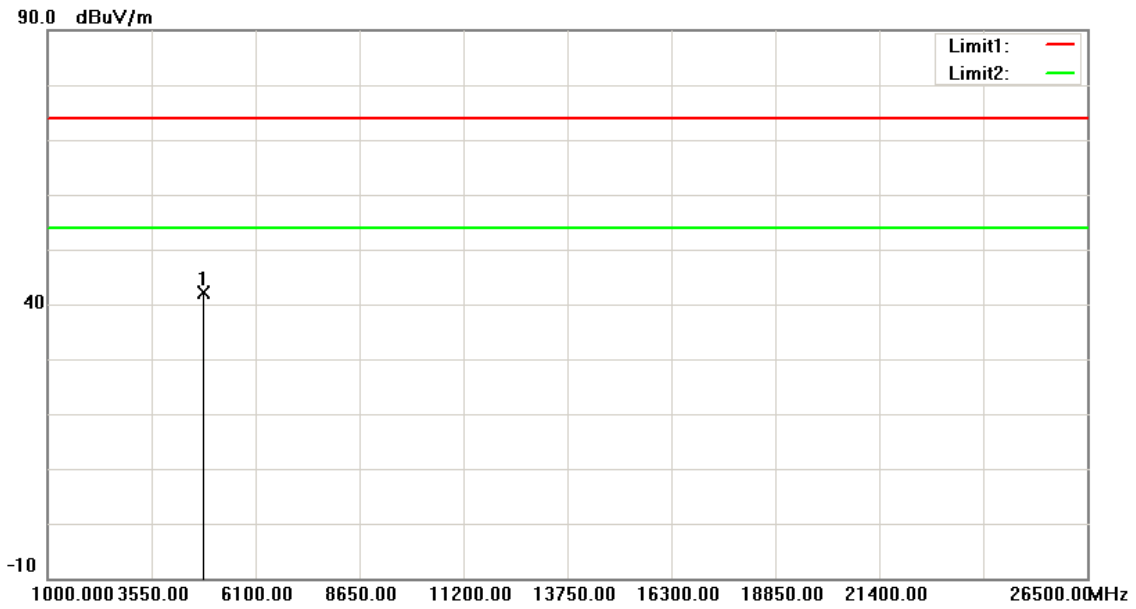
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



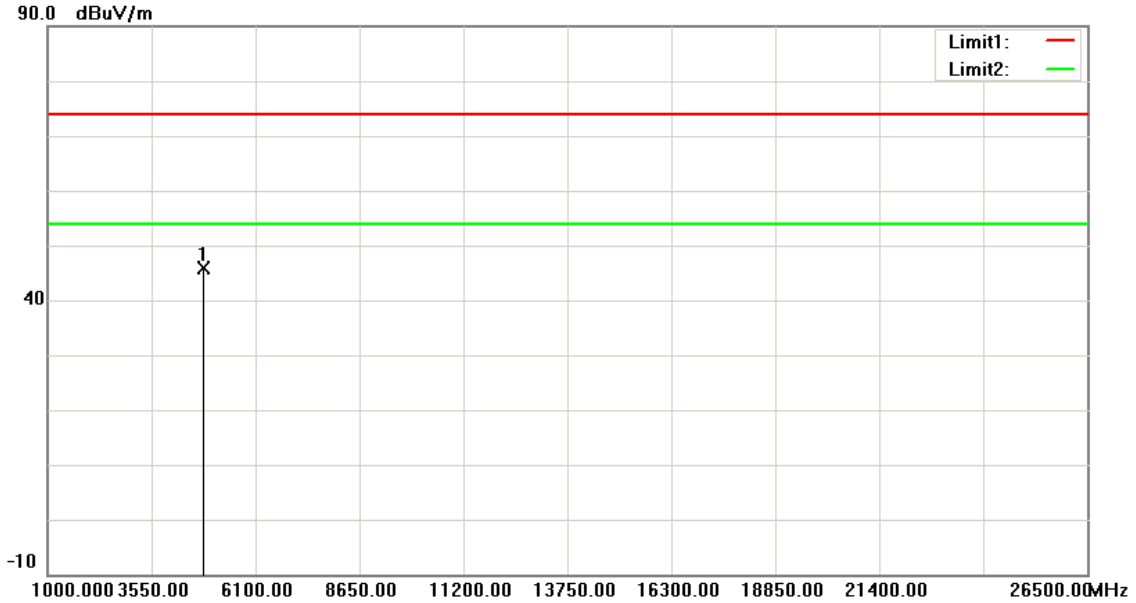
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	50.19	-7.96	42.23	74.00	-31.77	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



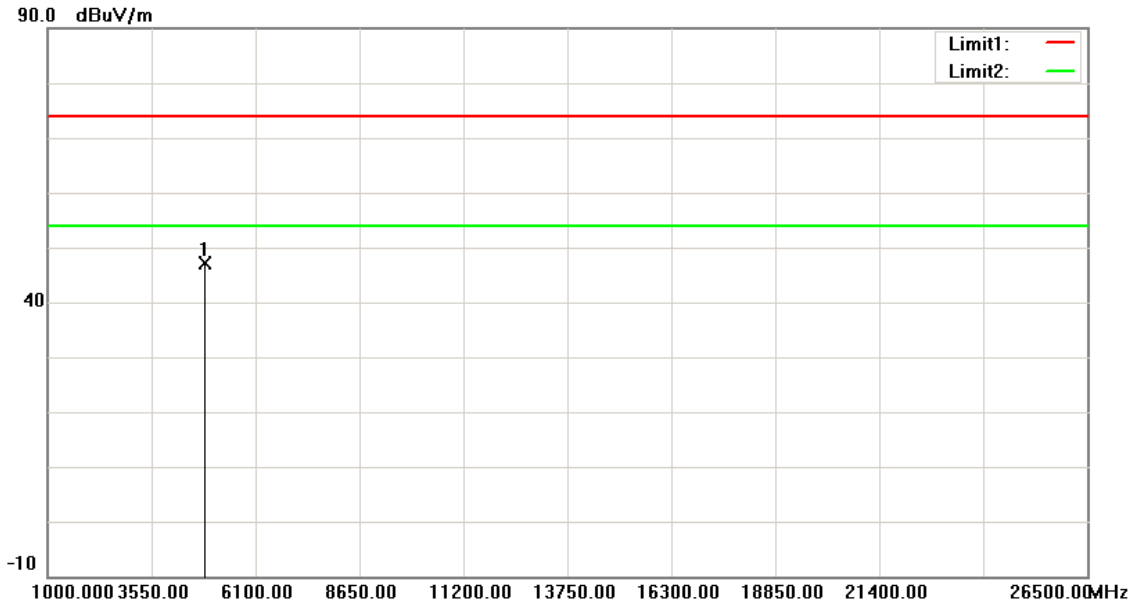
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	53.84	-7.96	45.88	74.00	-28.12	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



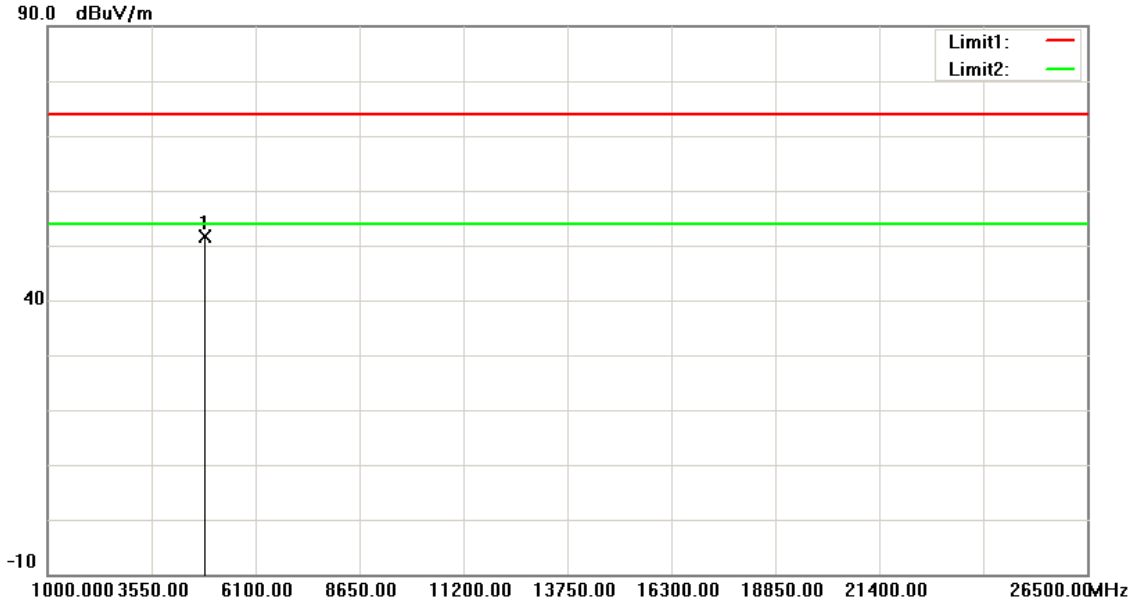
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	54.99	-7.80	47.19	74.00	-26.81	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



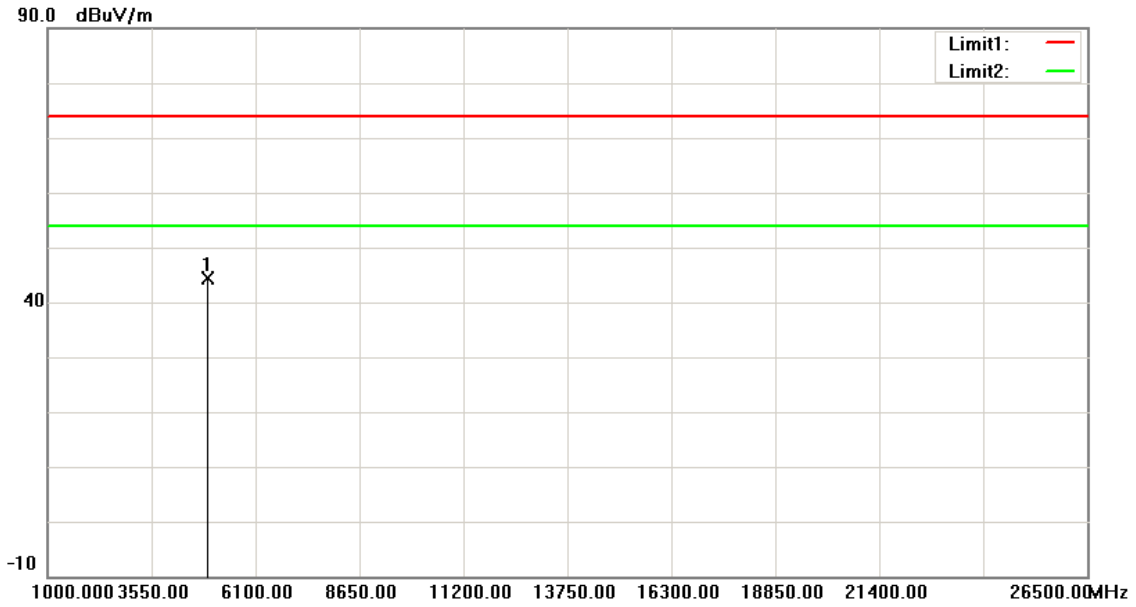
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	59.53	-7.80	51.73	74.00	-22.27	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



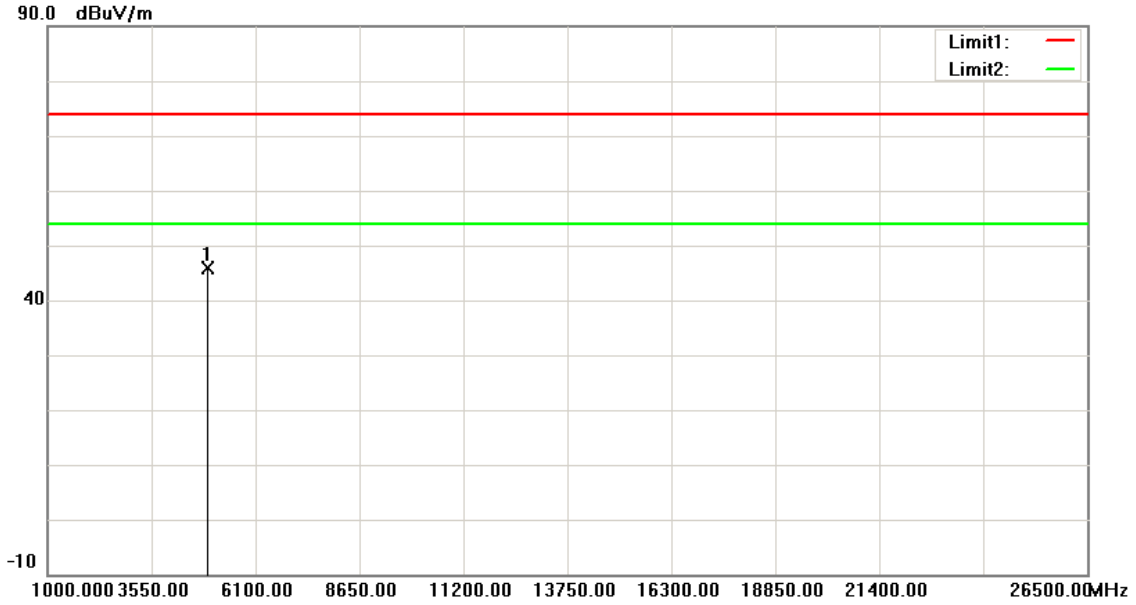
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	52.07	-7.65	44.42	74.00	-29.58	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



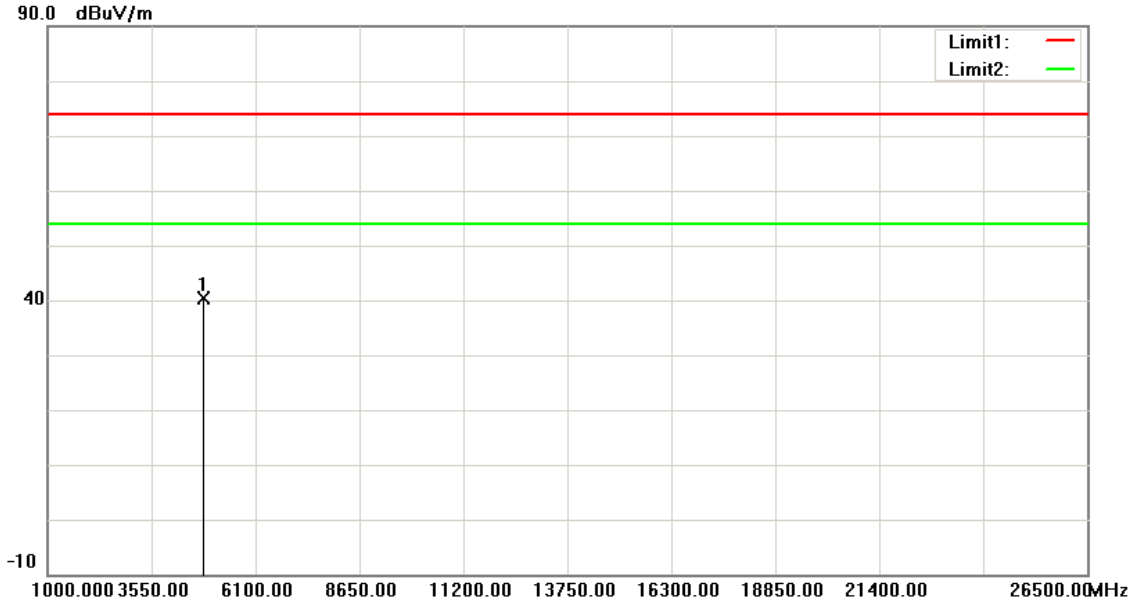
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	53.48	-7.65	45.83	74.00	-28.17	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



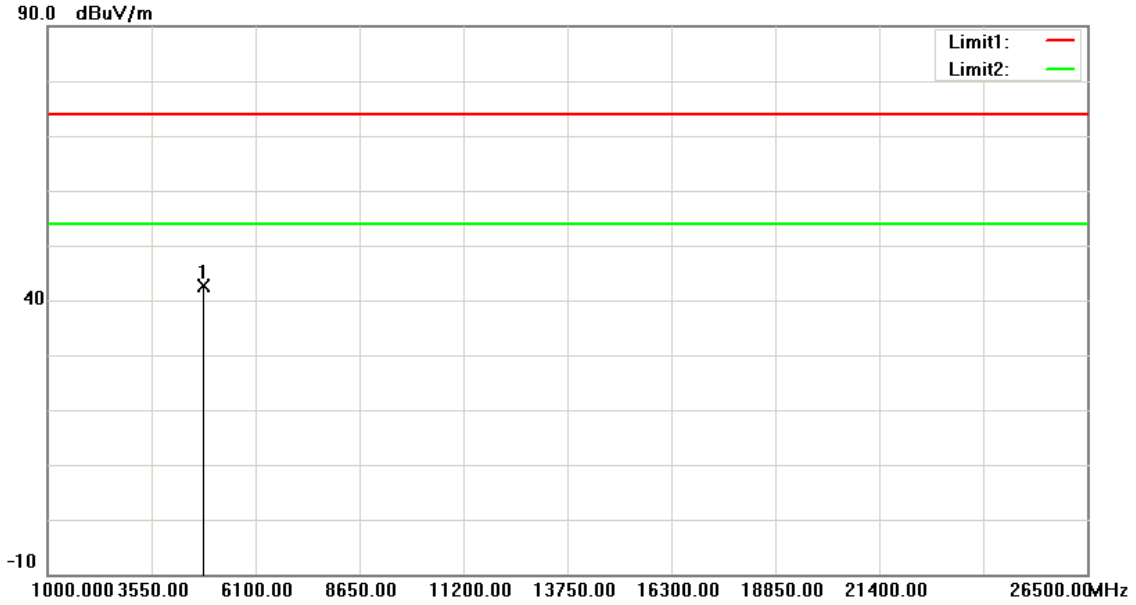
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	48.38	-7.96	40.42	74.00	-33.58	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



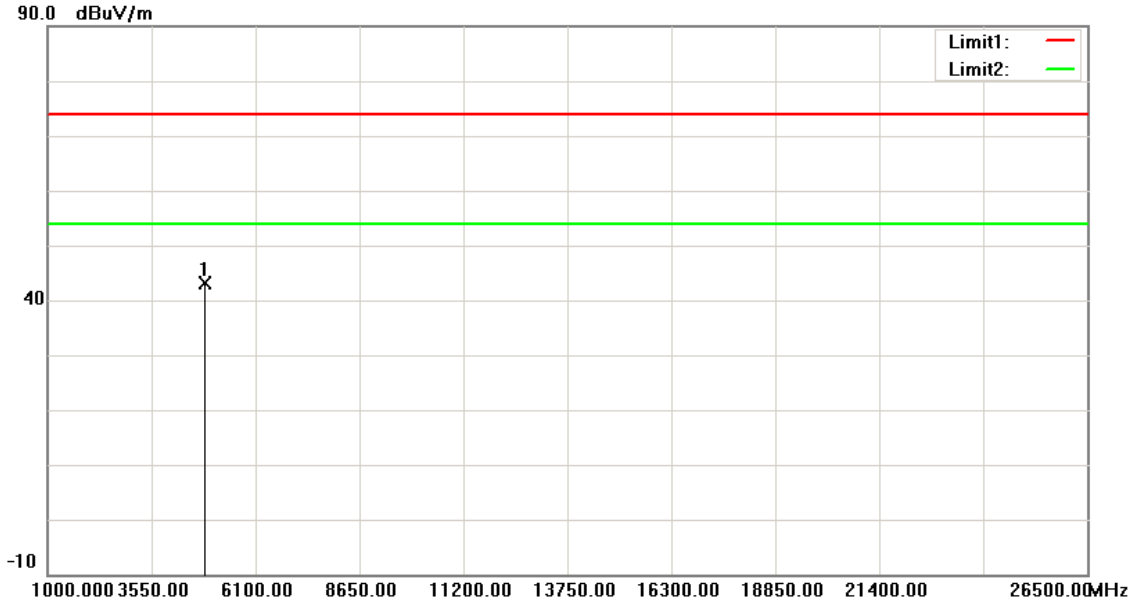
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	50.62	-7.96	42.66	74.00	-31.34	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



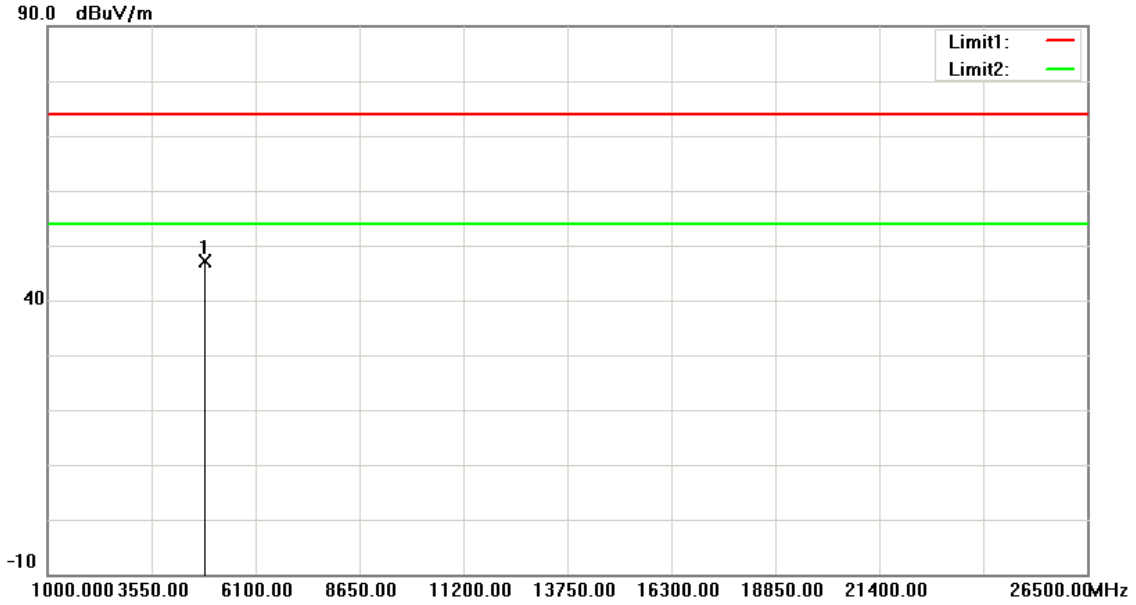
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	50.89	-7.80	43.09	74.00	-30.91	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



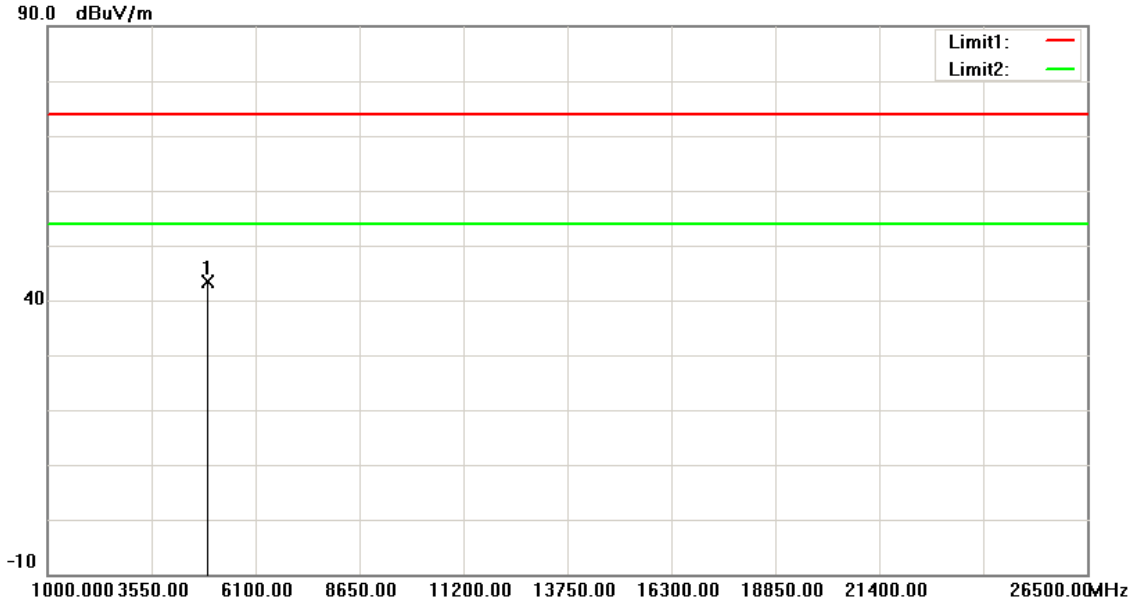
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	54.88	-7.80	47.08	74.00	-26.92	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



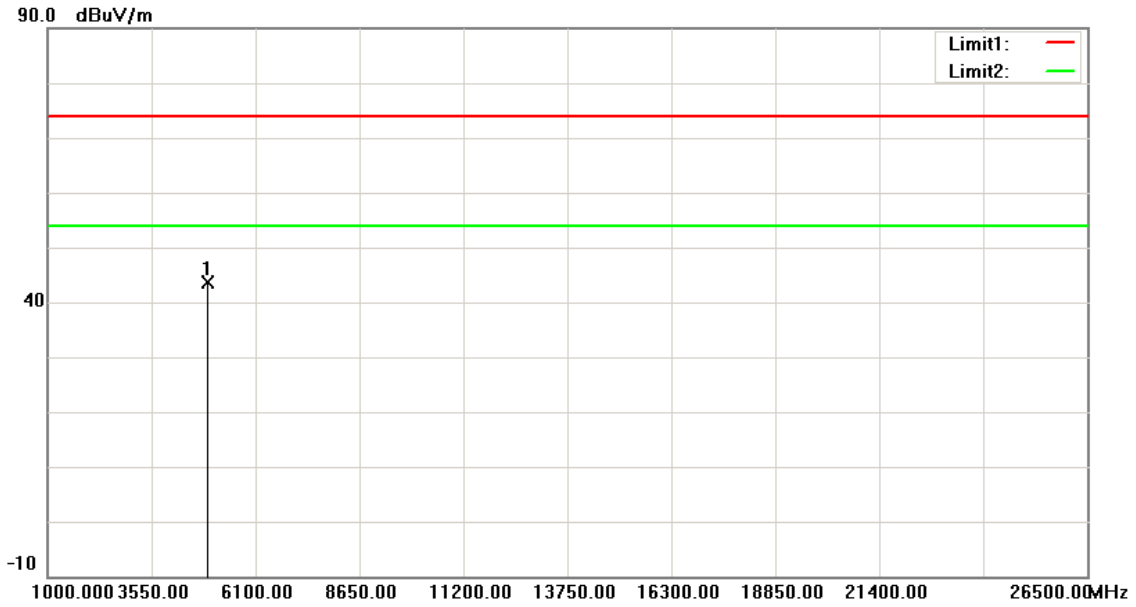
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	50.95	-7.65	43.30	74.00	-30.70	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



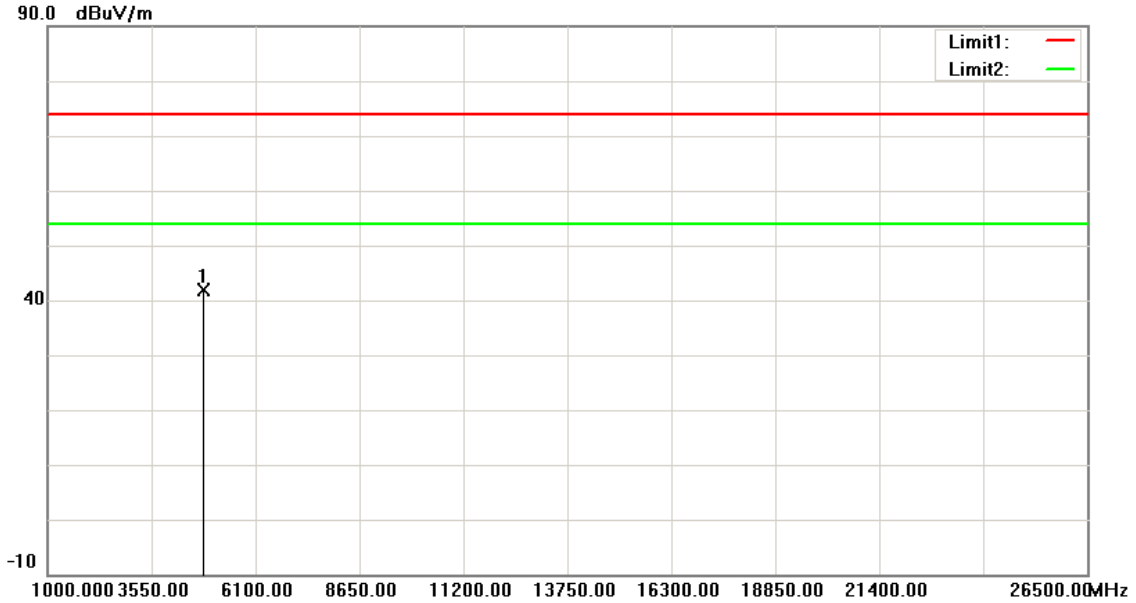
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	51.36	-7.65	43.71	74.00	-30.29	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



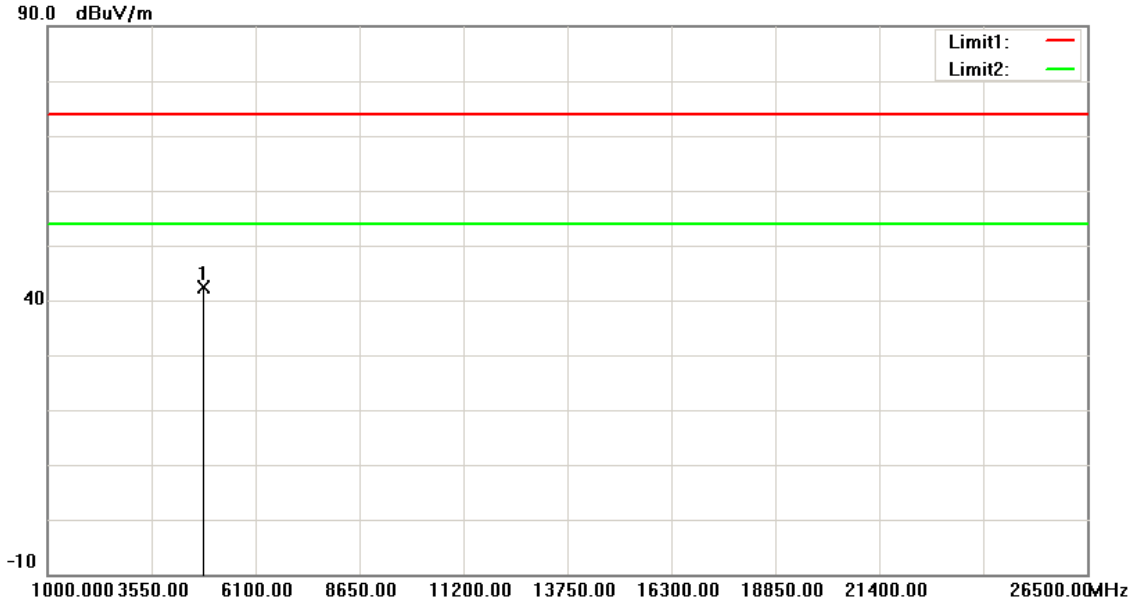
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	49.78	-7.96	41.82	74.00	-32.18	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



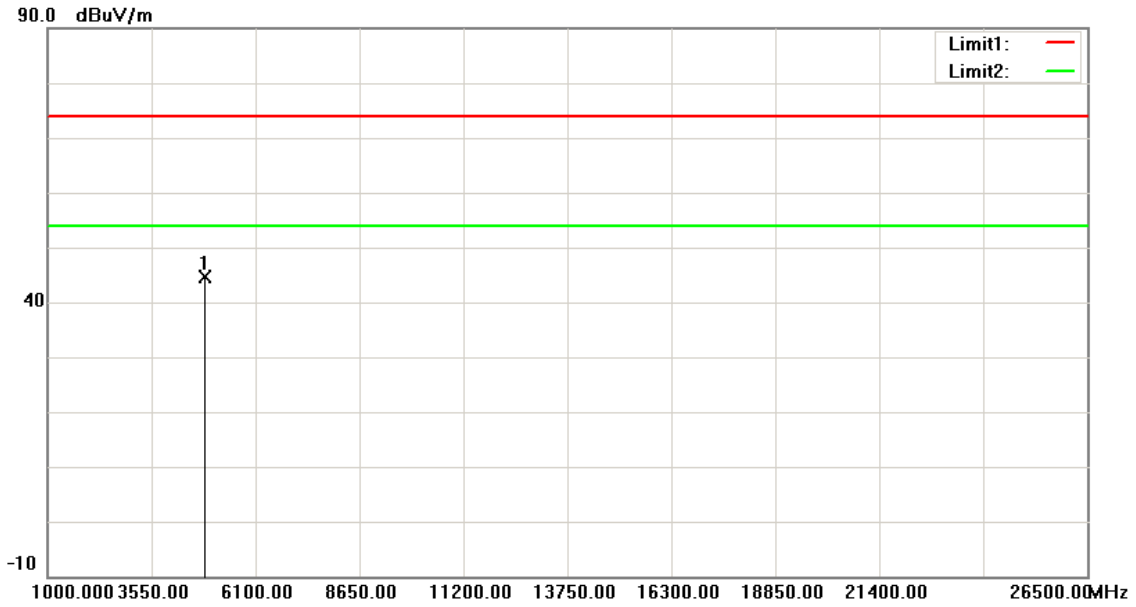
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	50.28	-7.96	42.32	74.00	-31.68	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



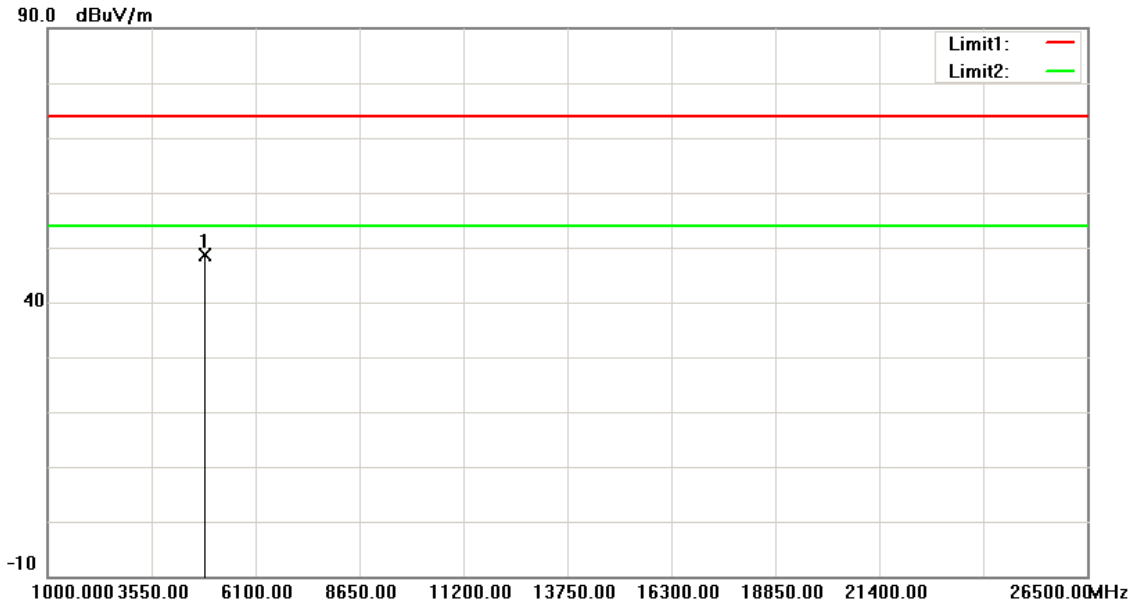
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	52.54	-7.80	44.74	74.00	-29.26	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



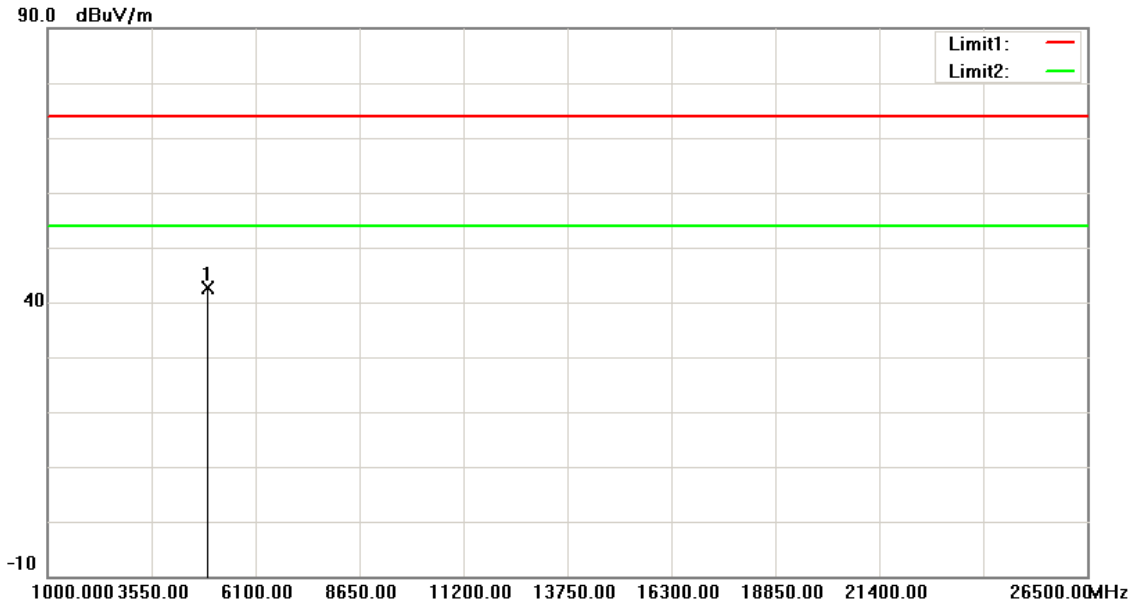
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	56.53	-7.80	48.73	74.00	-25.27	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



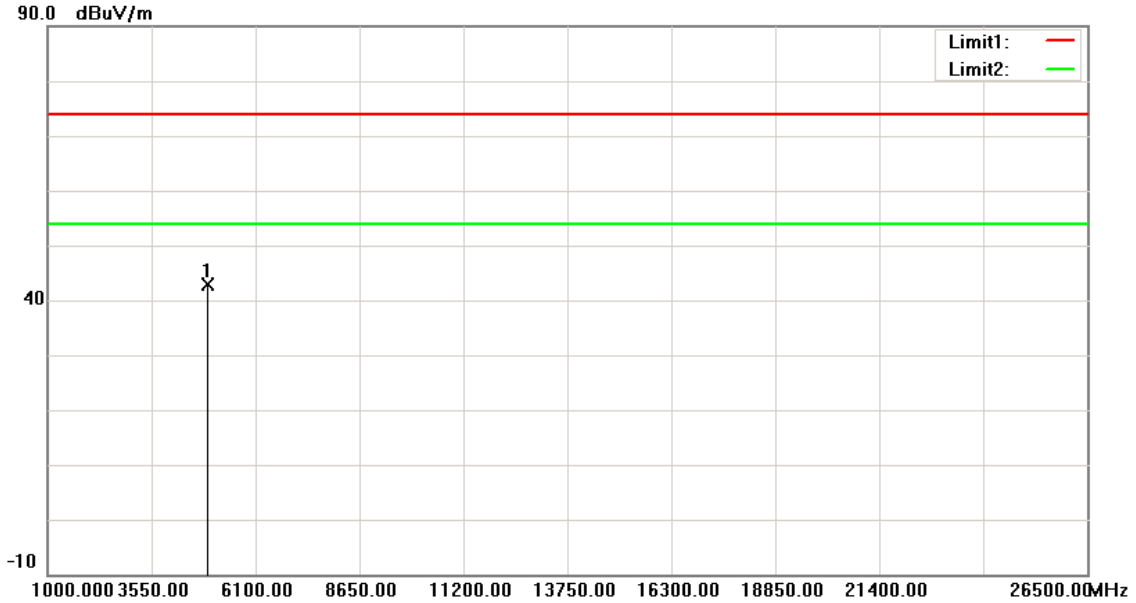
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	50.24	-7.65	42.59	74.00	-31.41	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



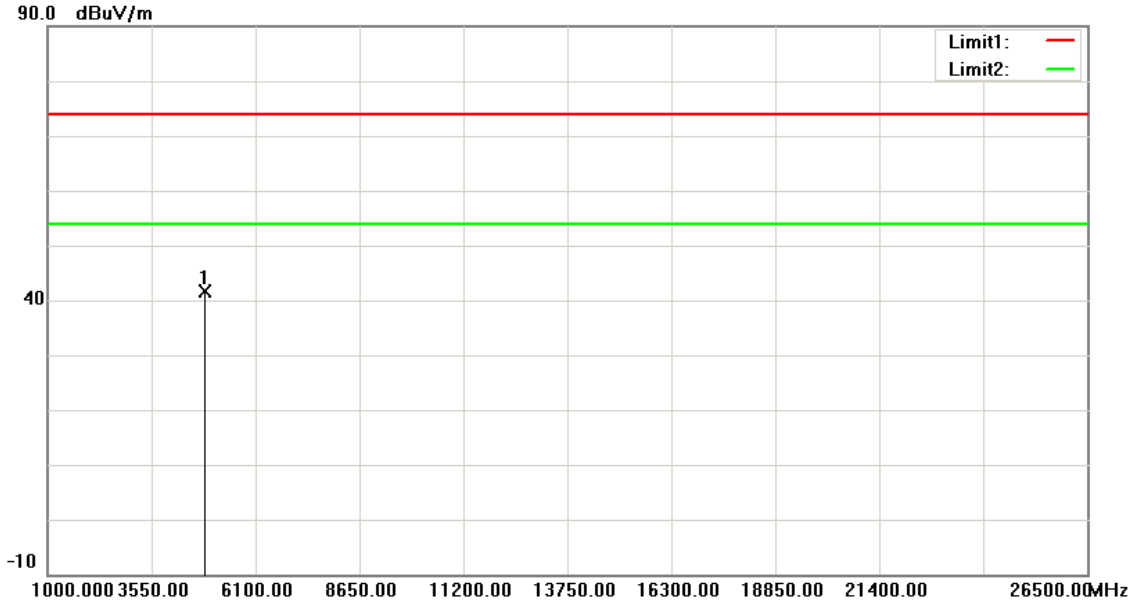
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	50.64	-7.65	42.99	74.00	-31.01	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2422MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



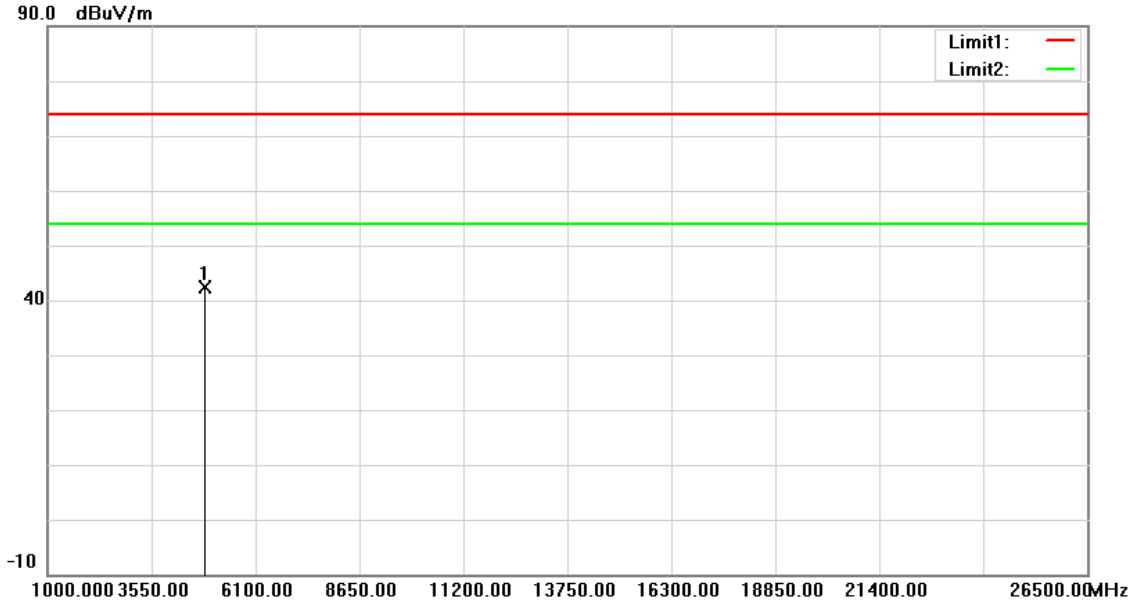
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4844.000	49.63	-7.88	41.75	74.00	-32.25	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2422MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



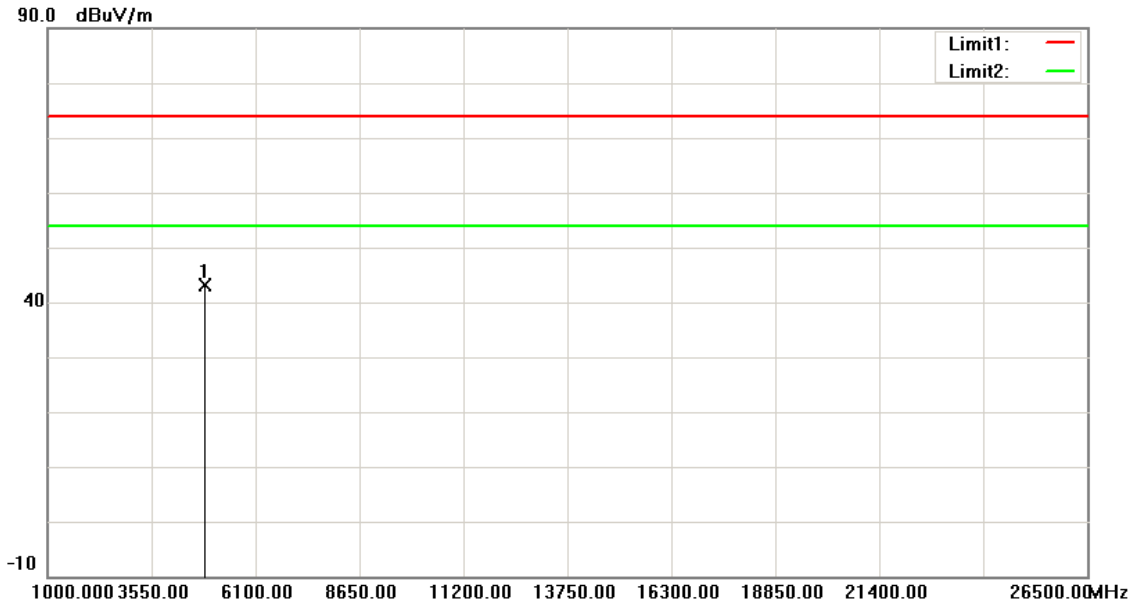
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4844.000	50.21	-7.88	42.33	74.00	-31.67	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



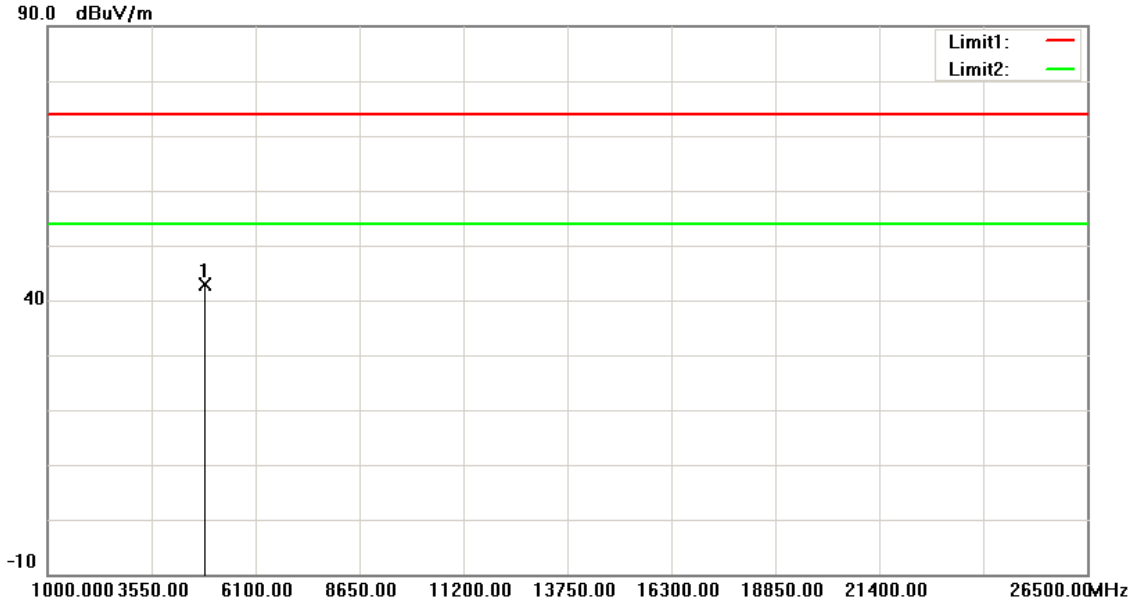
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	50.95	-7.80	43.15	74.00	-30.85	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



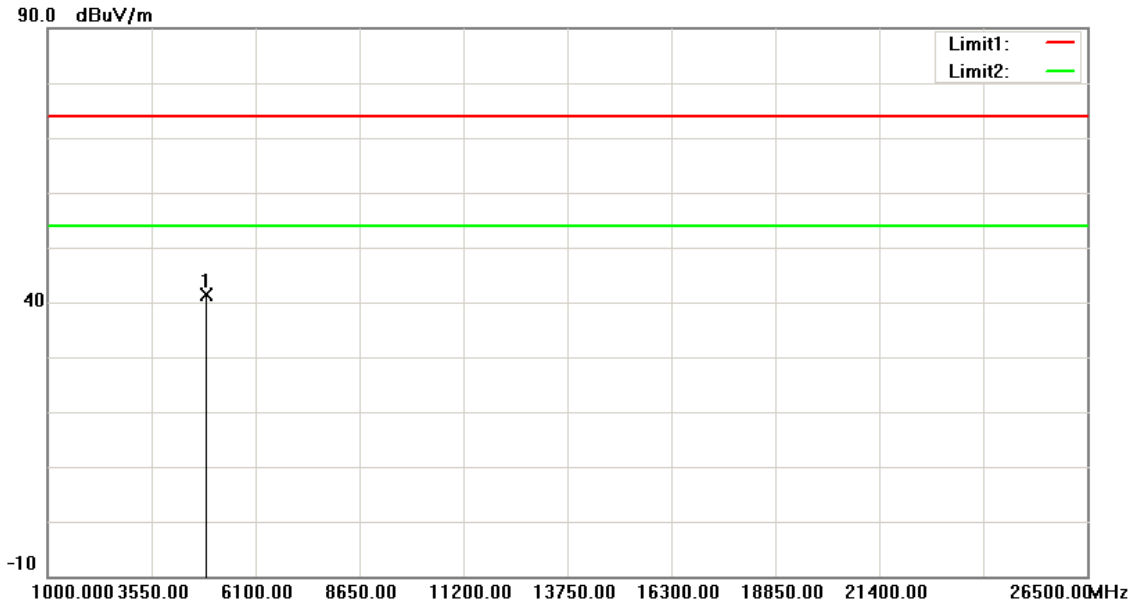
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	50.79	-7.80	42.99	74.00	-31.01	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2452MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



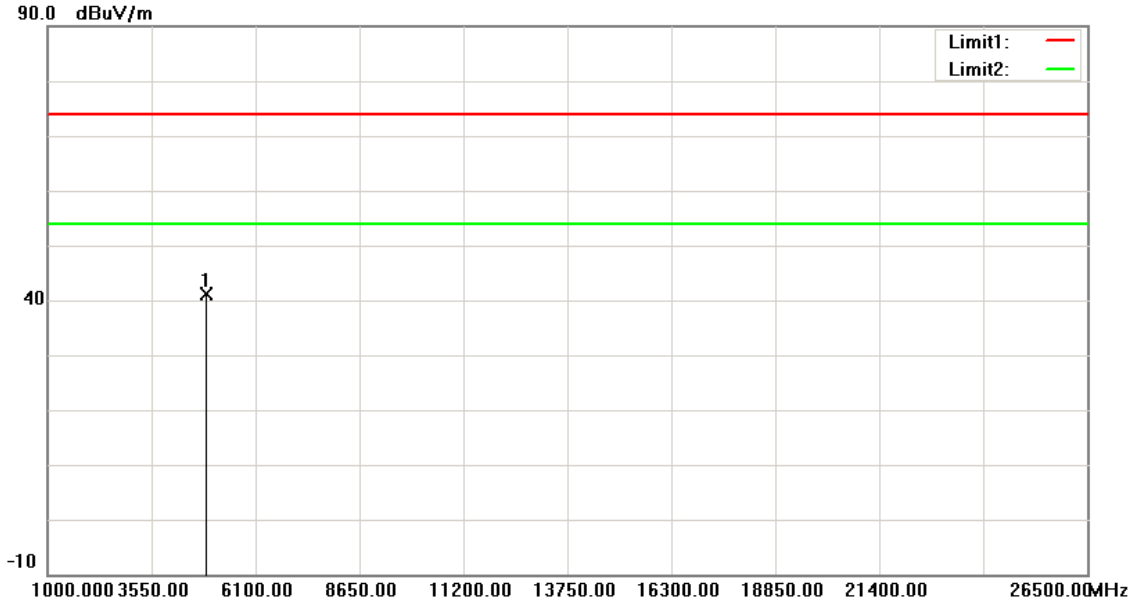
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4904.000	48.99	-7.70	41.29	74.00	-32.71	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2452MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



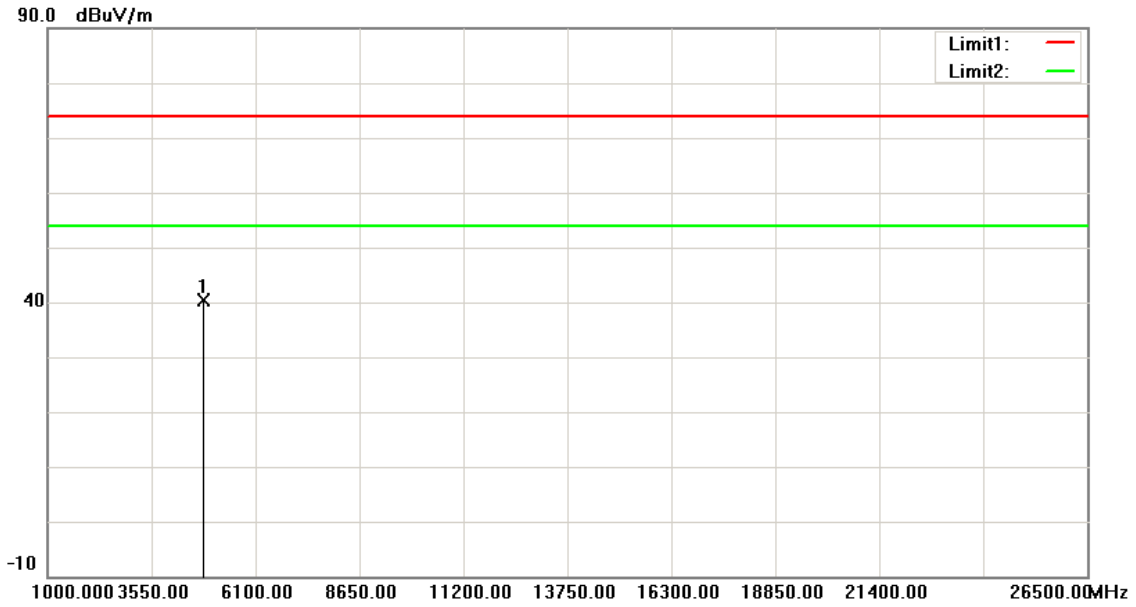
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4904.000	48.82	-7.70	41.12	74.00	-32.88	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



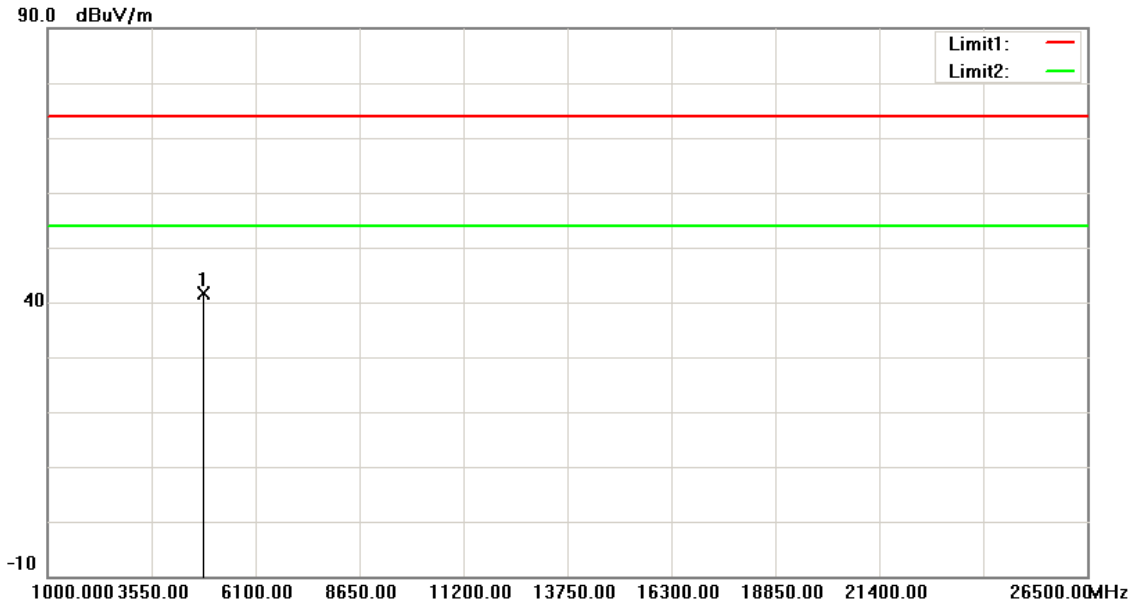
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	48.30	-7.96	40.34	74.00	-33.66	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



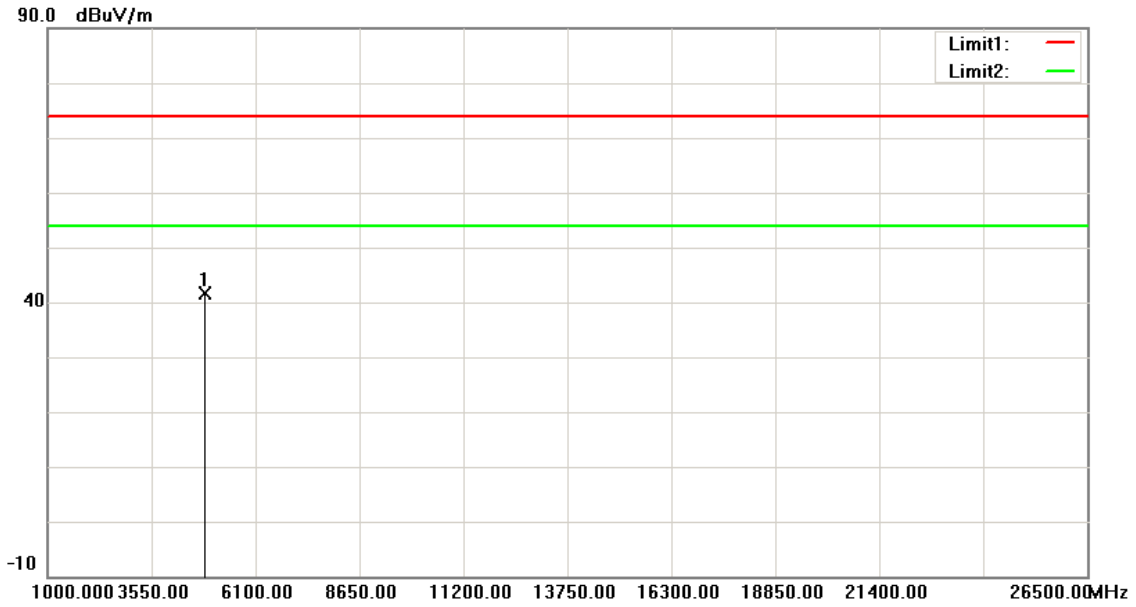
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	49.59	-7.96	41.63	74.00	-32.37	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



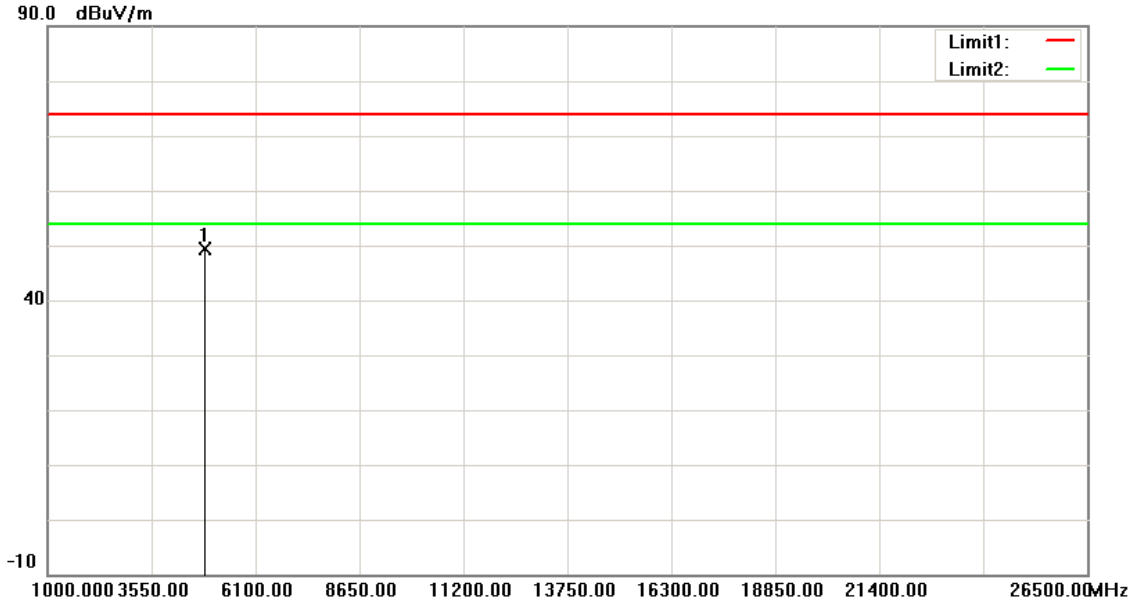
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	49.36	-7.80	41.56	74.00	-32.44	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



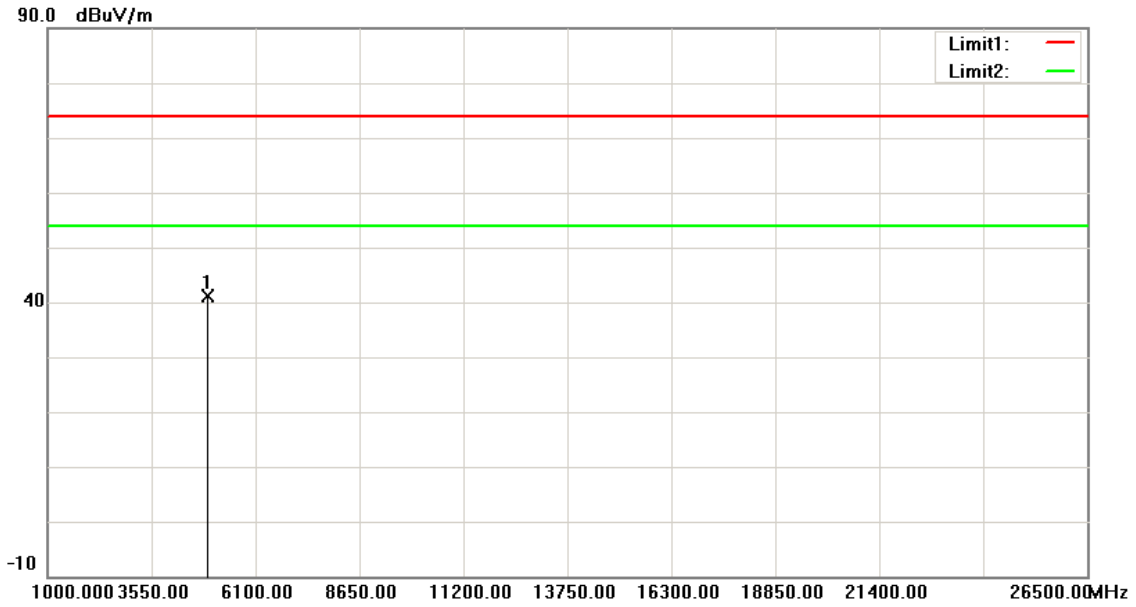
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	57.07	-7.80	49.27	74.00	-24.73	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



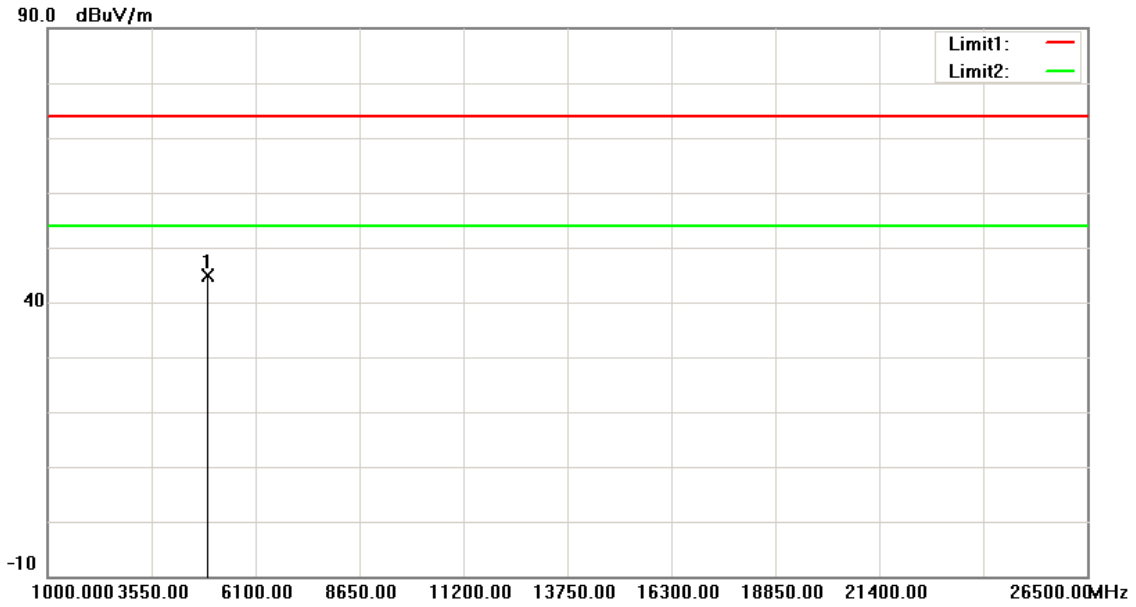
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	48.81	-7.65	41.16	74.00	-32.84	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



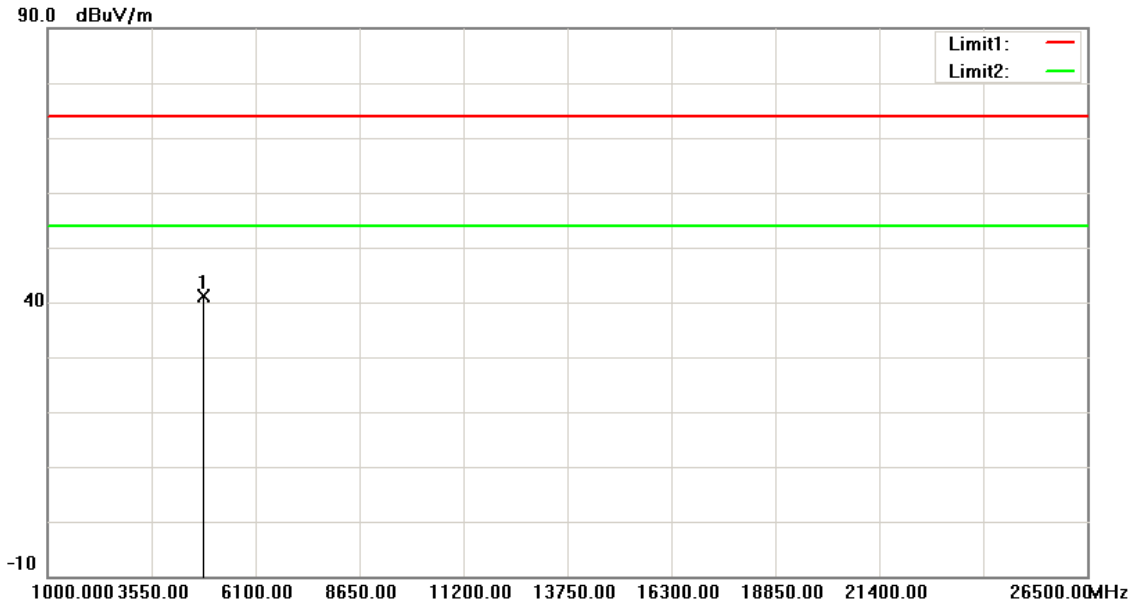
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	52.56	-7.65	44.91	74.00	-29.09	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



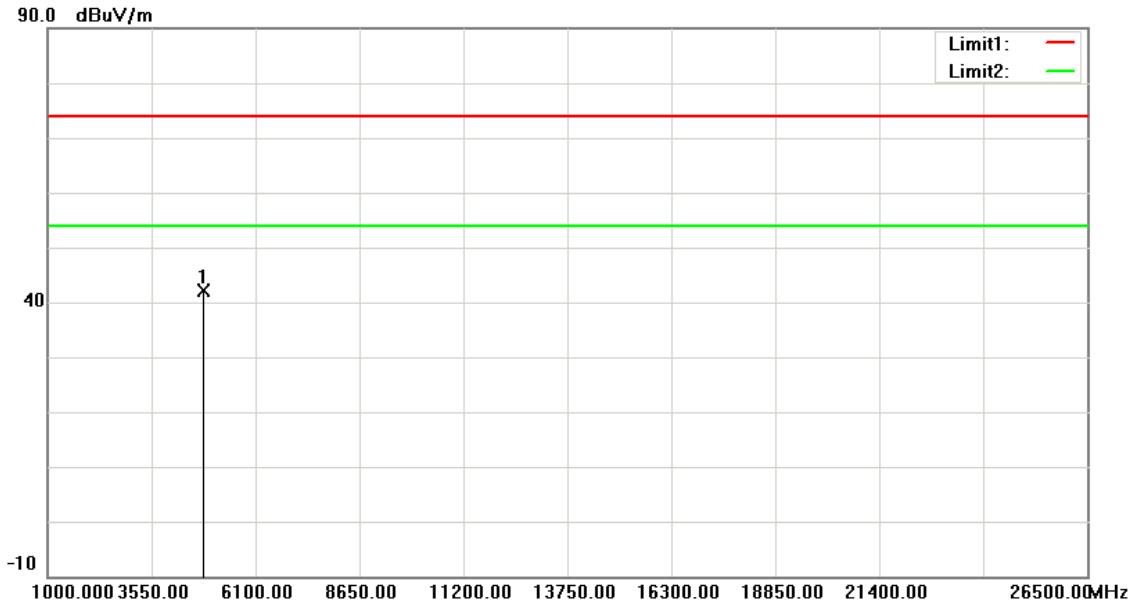
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	49.10	-7.96	41.14	74.00	-32.86	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



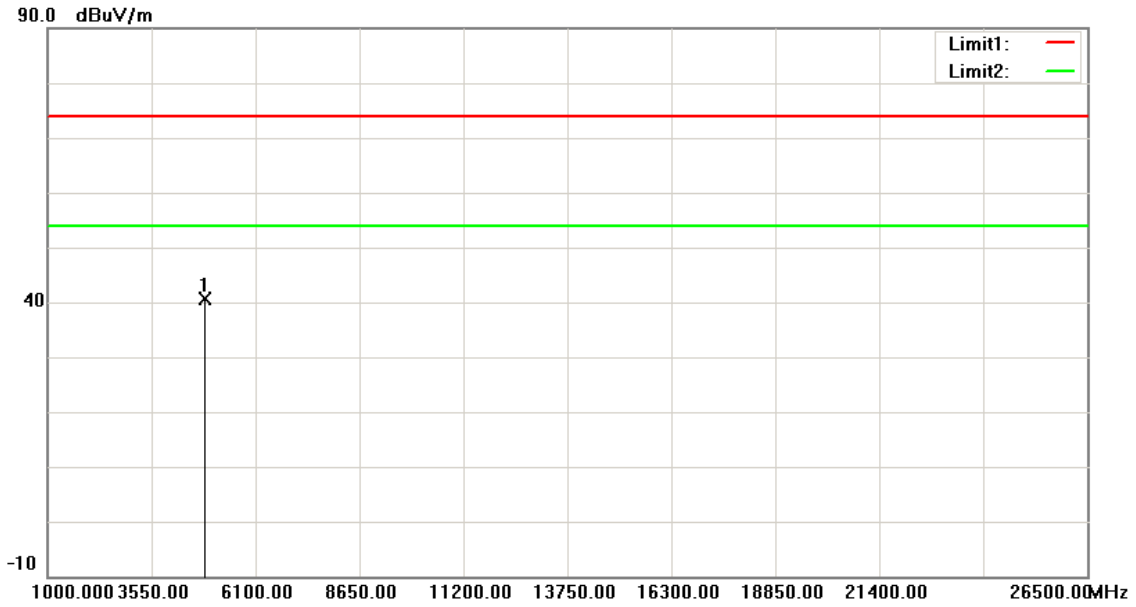
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	50.05	-7.96	42.09	74.00	-31.91	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



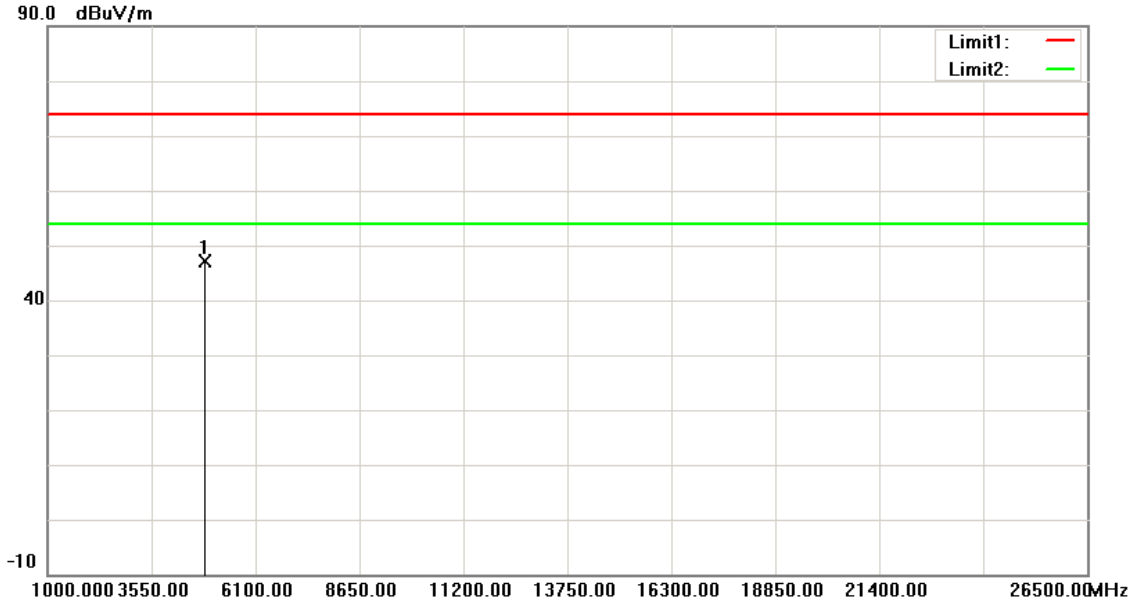
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	48.50	-7.80	40.70	74.00	-33.30	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



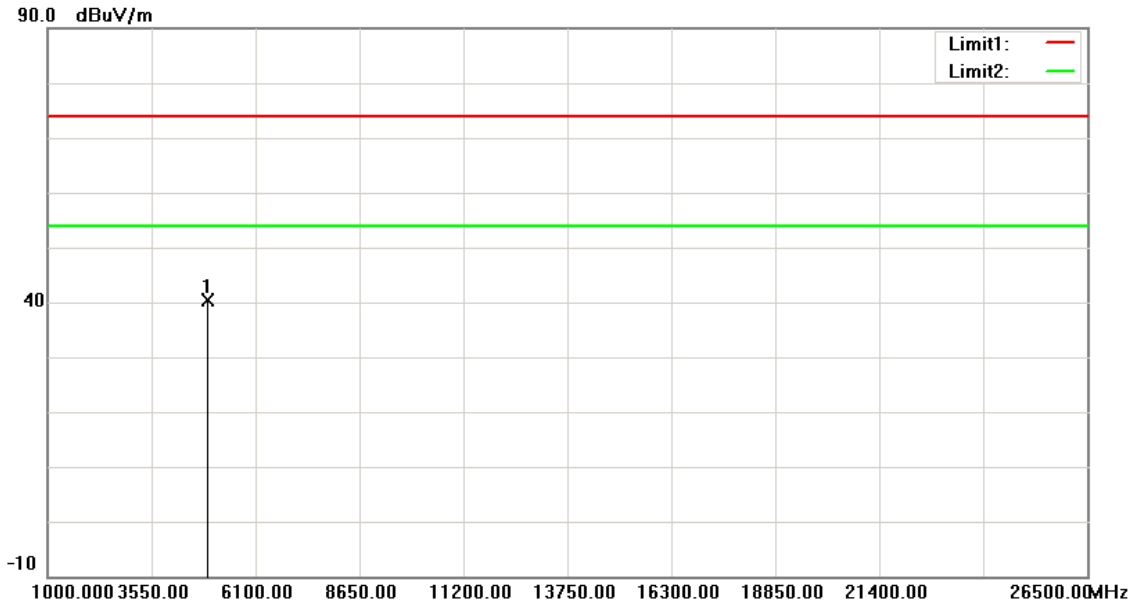
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	55.05	-7.80	47.25	74.00	-26.75	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



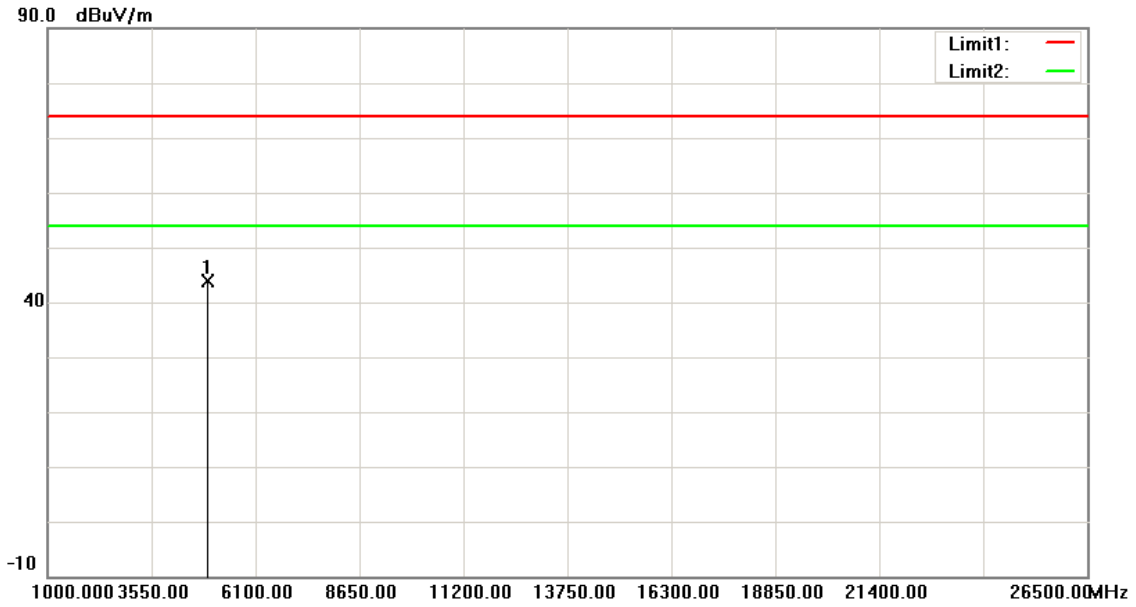
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	47.96	-7.65	40.31	74.00	-33.69	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



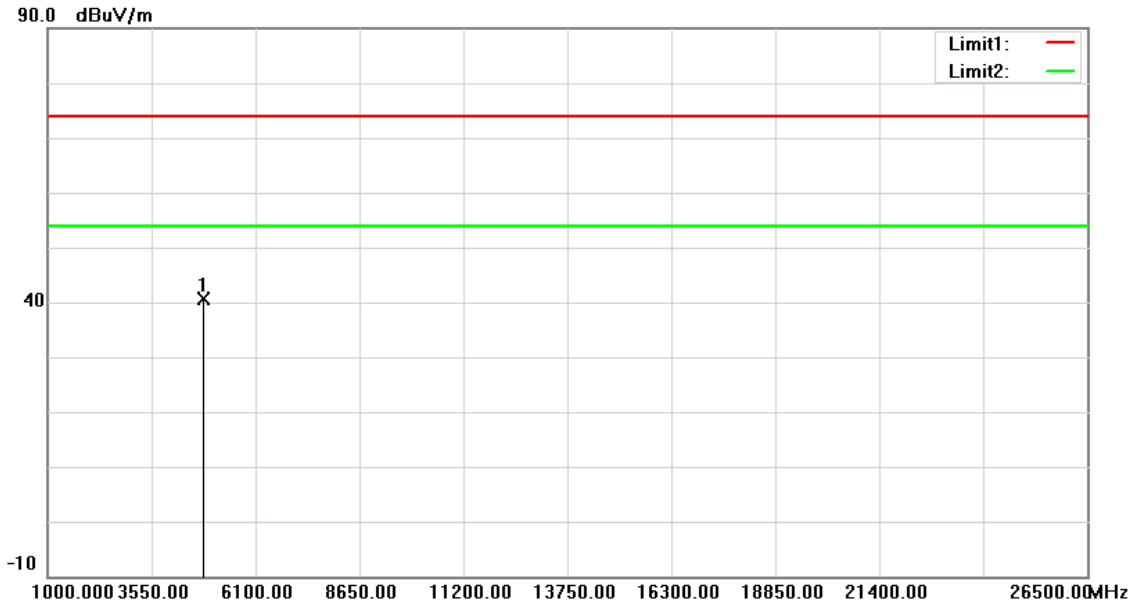
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	51.48	-7.65	43.83	74.00	-30.17	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



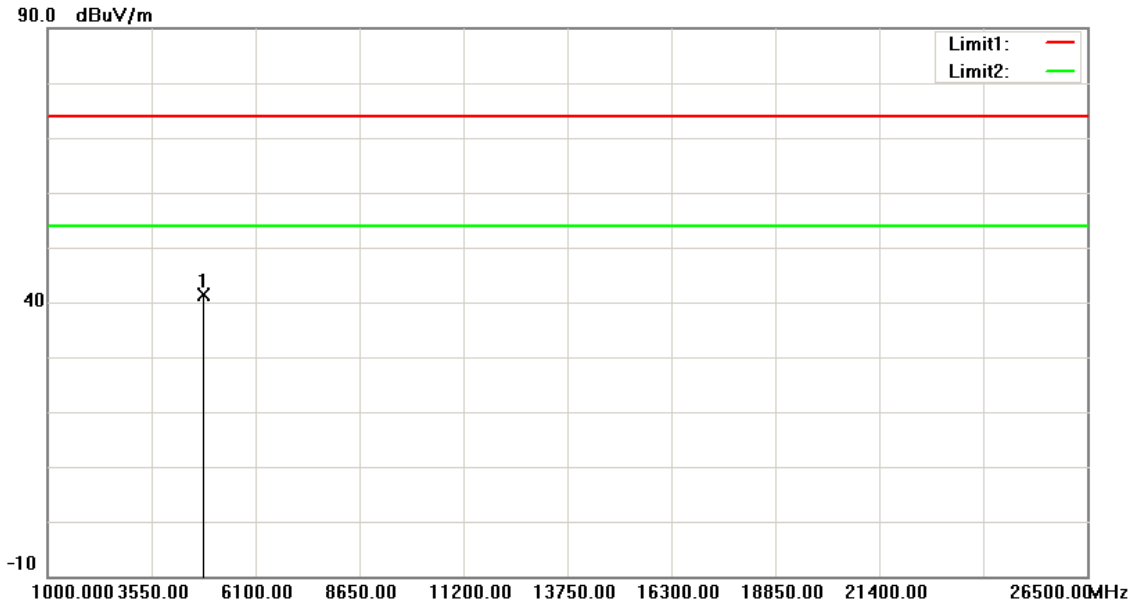
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	48.48	-7.96	40.52	74.00	-33.48	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



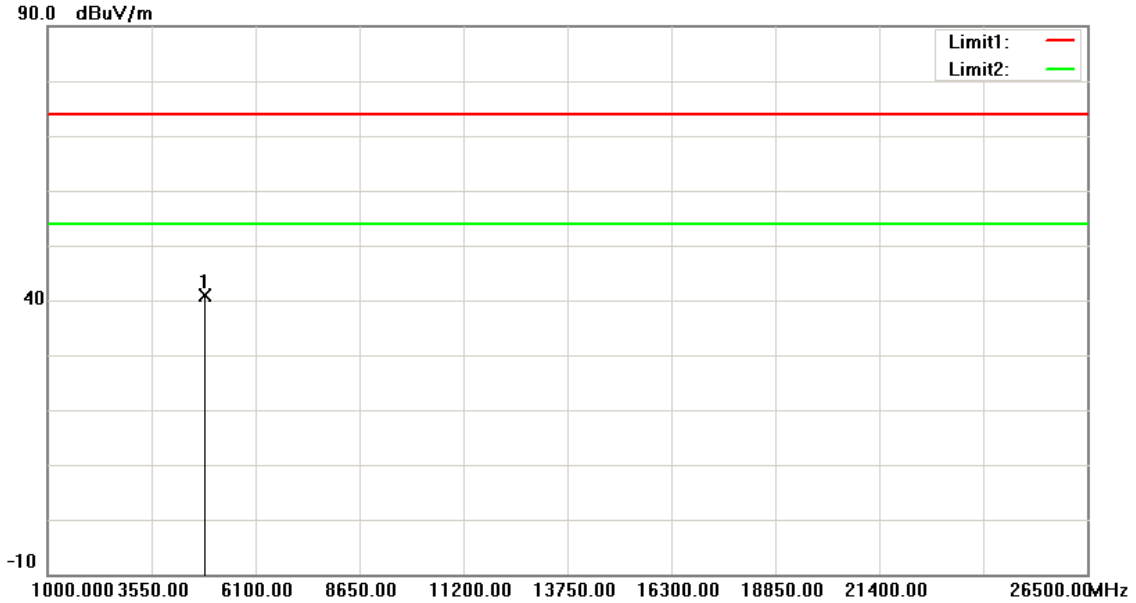
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	49.46	-7.96	41.50	74.00	-32.50	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



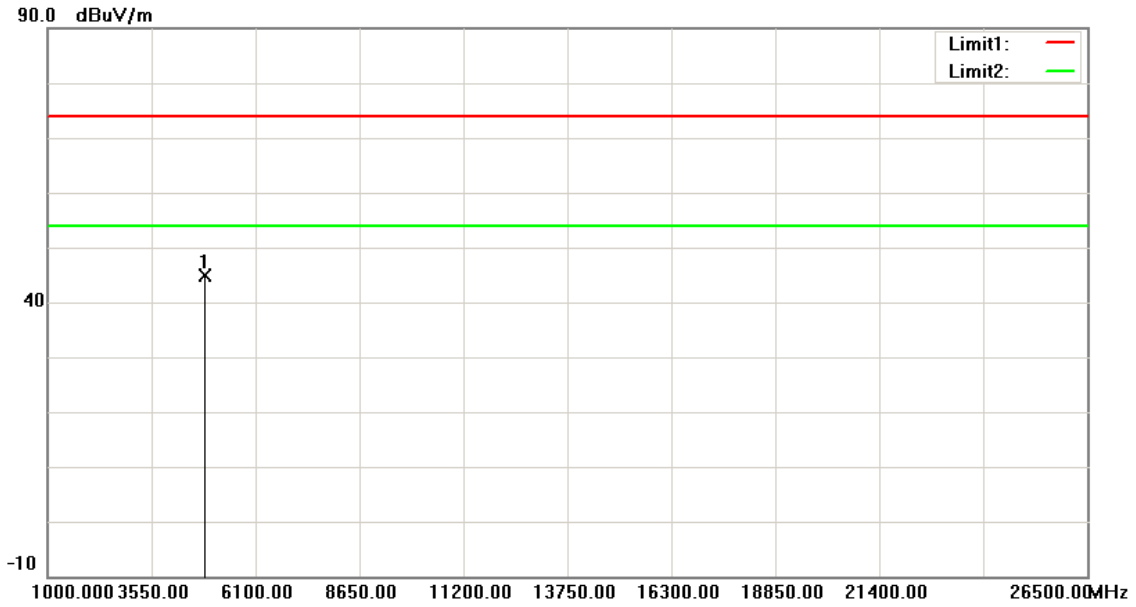
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	48.75	-7.80	40.95	74.00	-33.05	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



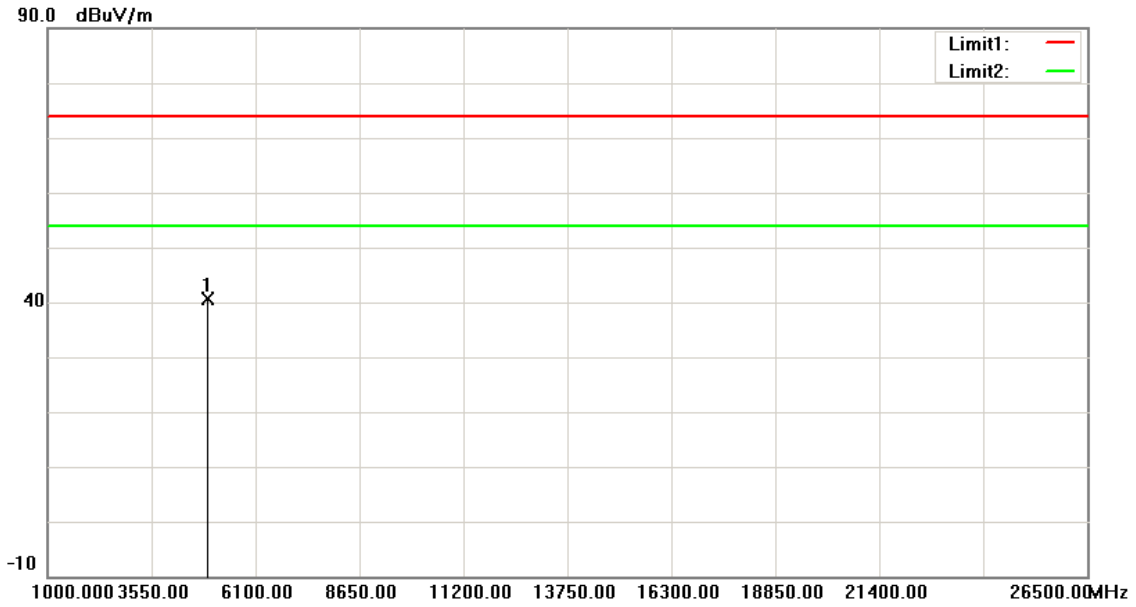
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	52.70	-7.80	44.90	74.00	-29.10	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



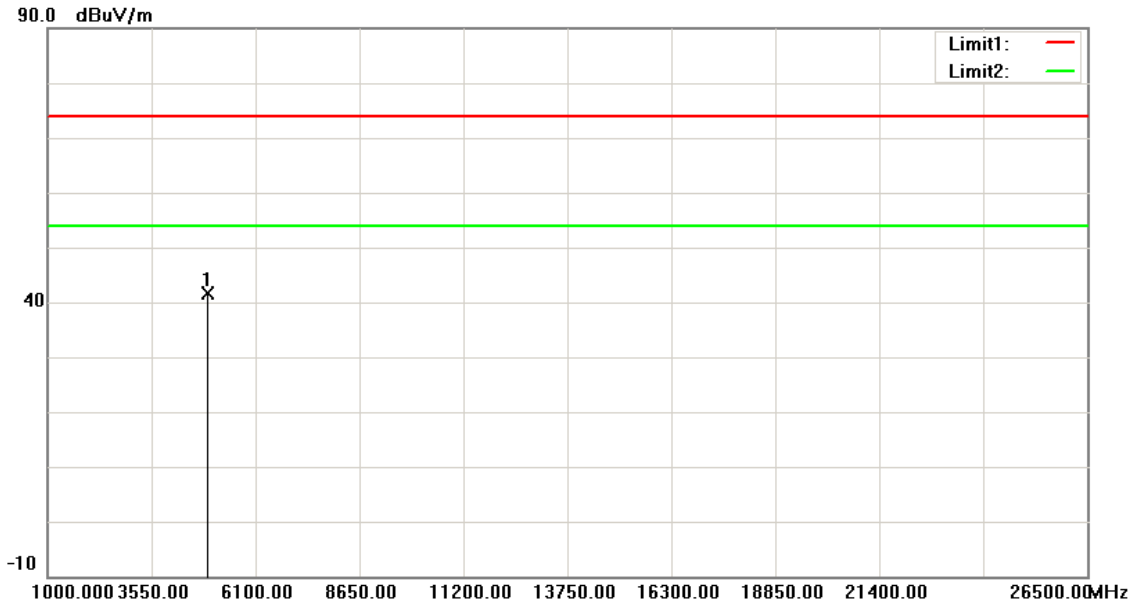
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	48.22	-7.65	40.57	74.00	-33.43	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



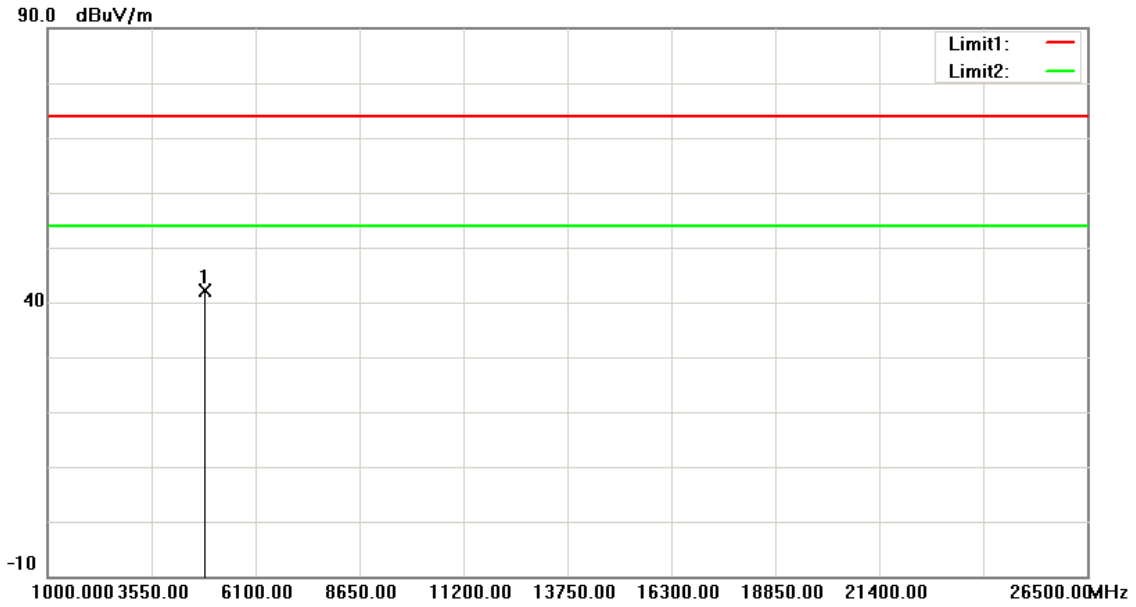
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	49.22	-7.65	41.57	74.00	-32.43	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2422MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



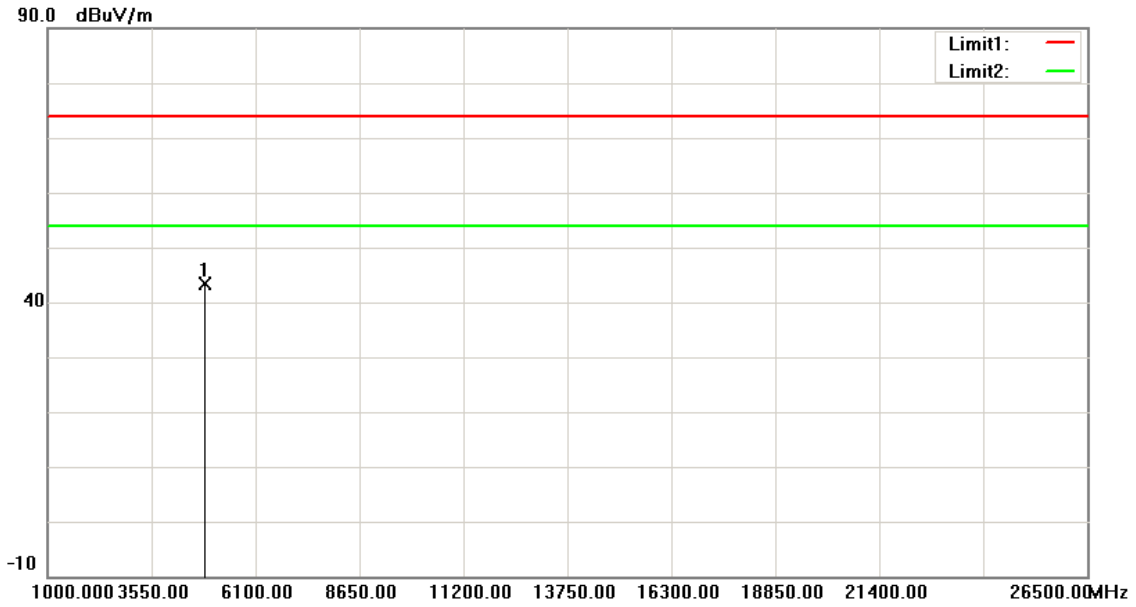
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4844.000	49.95	-7.88	42.07	74.00	-31.93	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2422MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



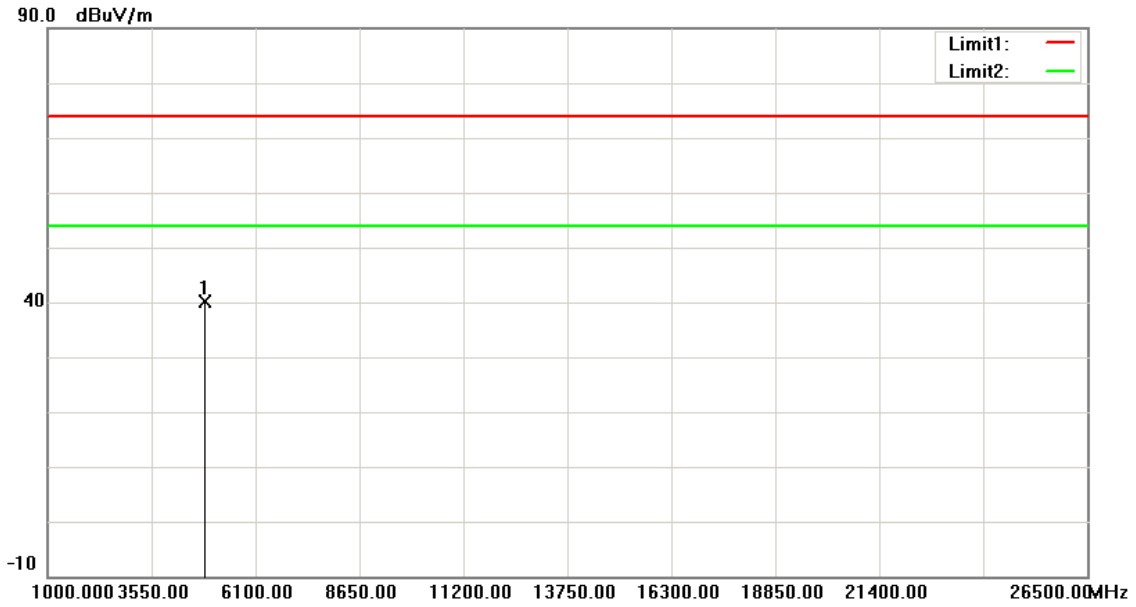
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4844.000	51.22	-7.88	43.34	74.00	-30.66	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



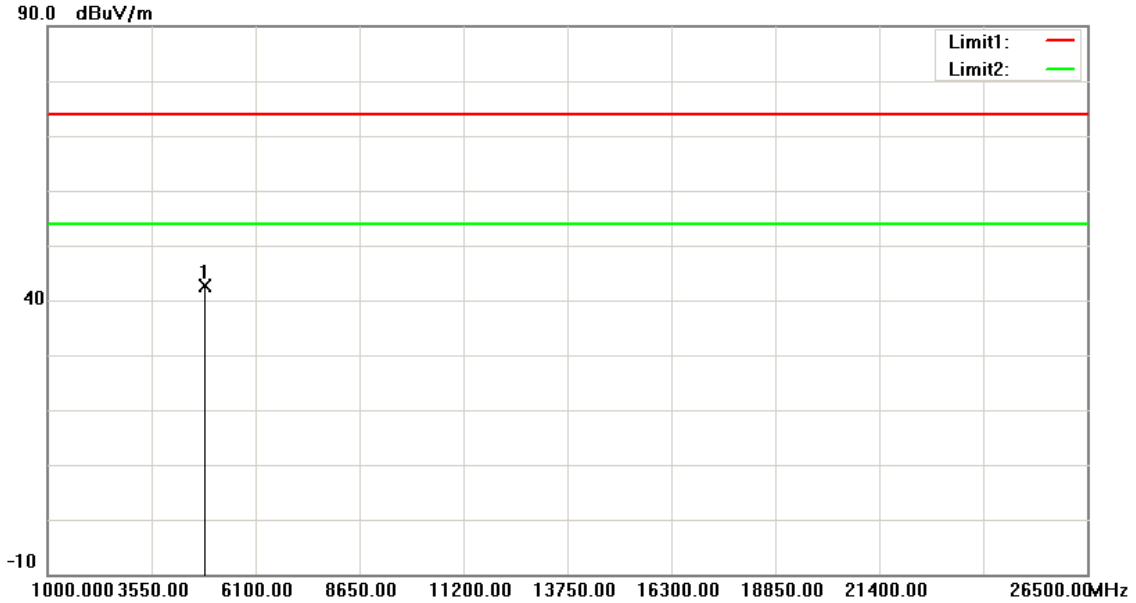
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	47.89	-7.80	40.09	74.00	-33.91	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



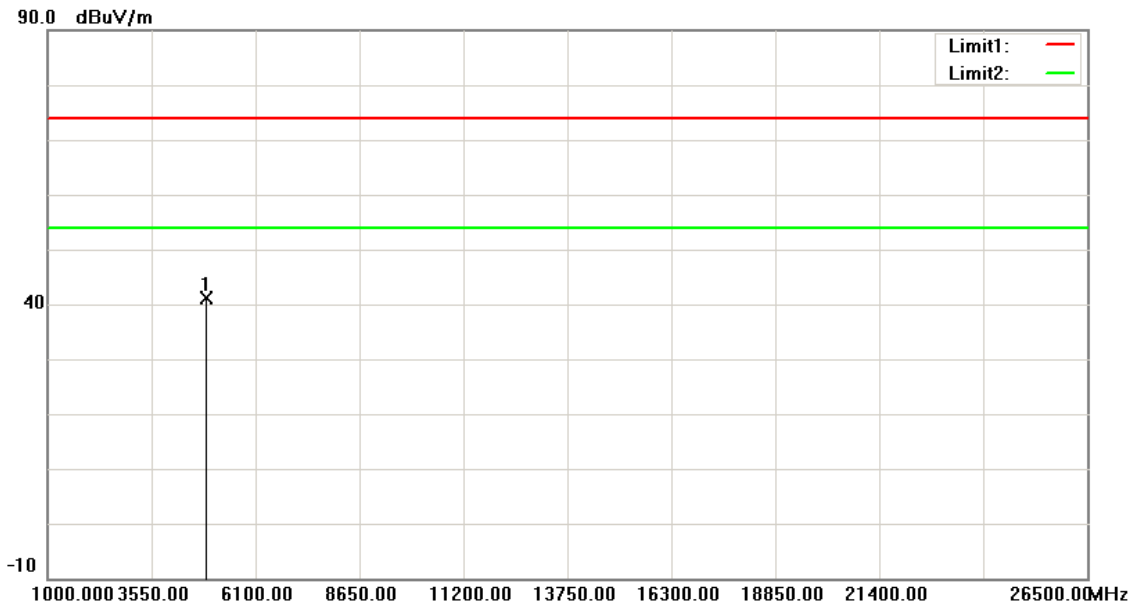
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	50.54	-7.80	42.74	74.00	-31.26	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2452MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



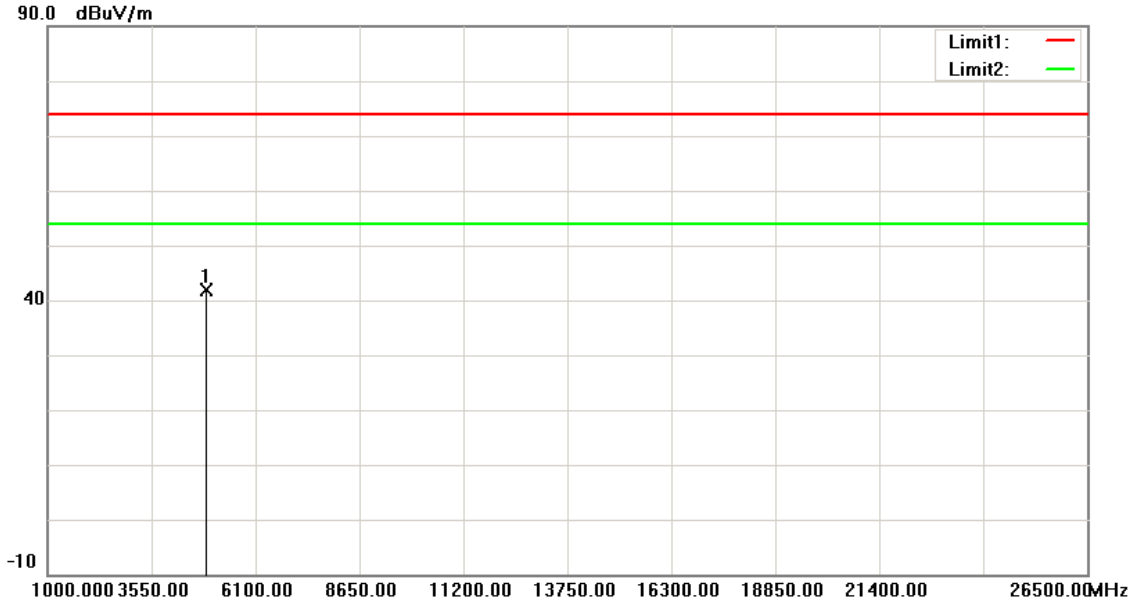
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4904.000	48.72	-7.70	41.02	74.00	-32.98	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	2452MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



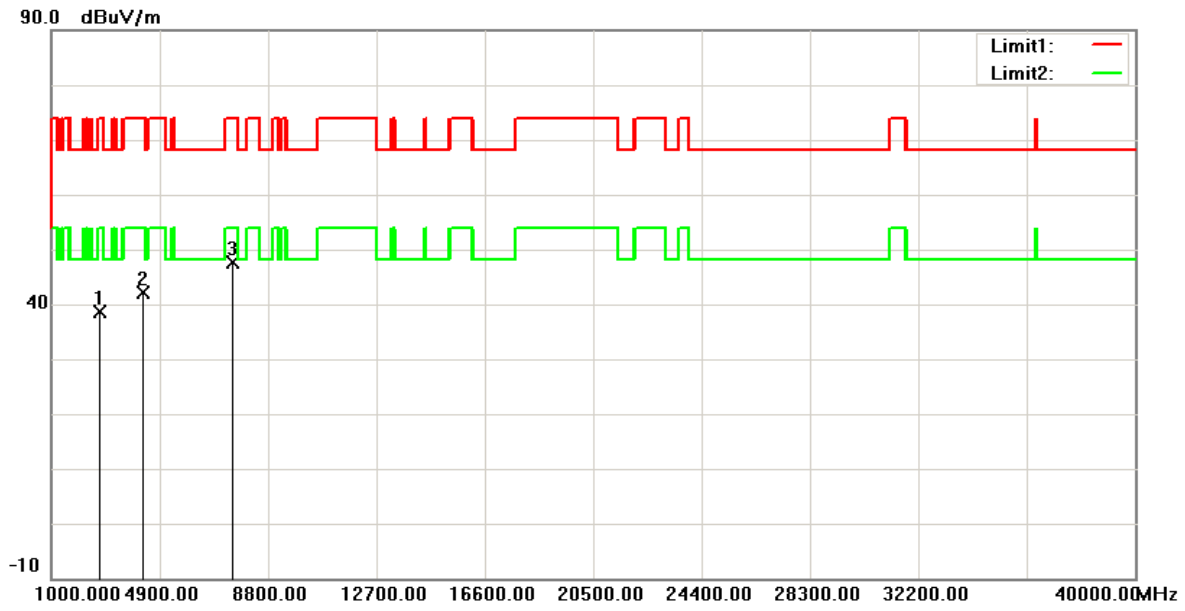
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4904.000	49.69	-7.70	41.99	74.00	-32.01	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	(DTS+NII)	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Simultaneous Transmitting	Date:	01/07/2017
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A+C059-510347-A		



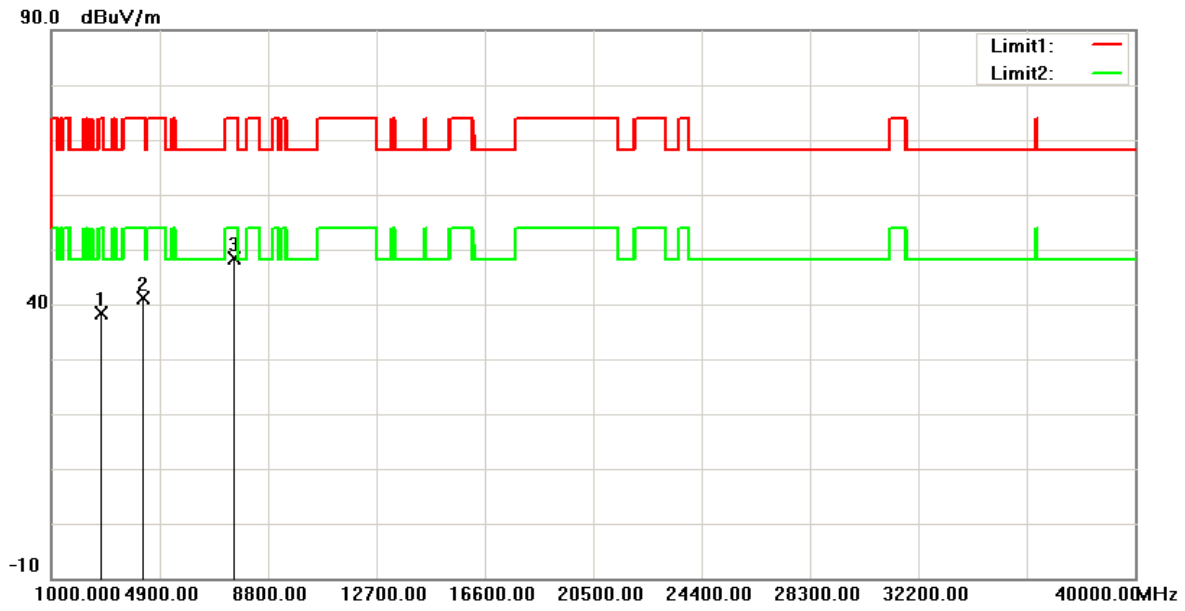
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2734.000	52.39	-13.72	38.67	74.00	-35.33	peak
2	4247.000	51.75	-9.59	42.16	74.00	-31.84	peak
3	7511.000	47.75	-0.06	47.69	74.00	-26.31	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	(DTS+NII)	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Simultaneous Transmitting	Date:	01/07/2017
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A+C059-510347-A		



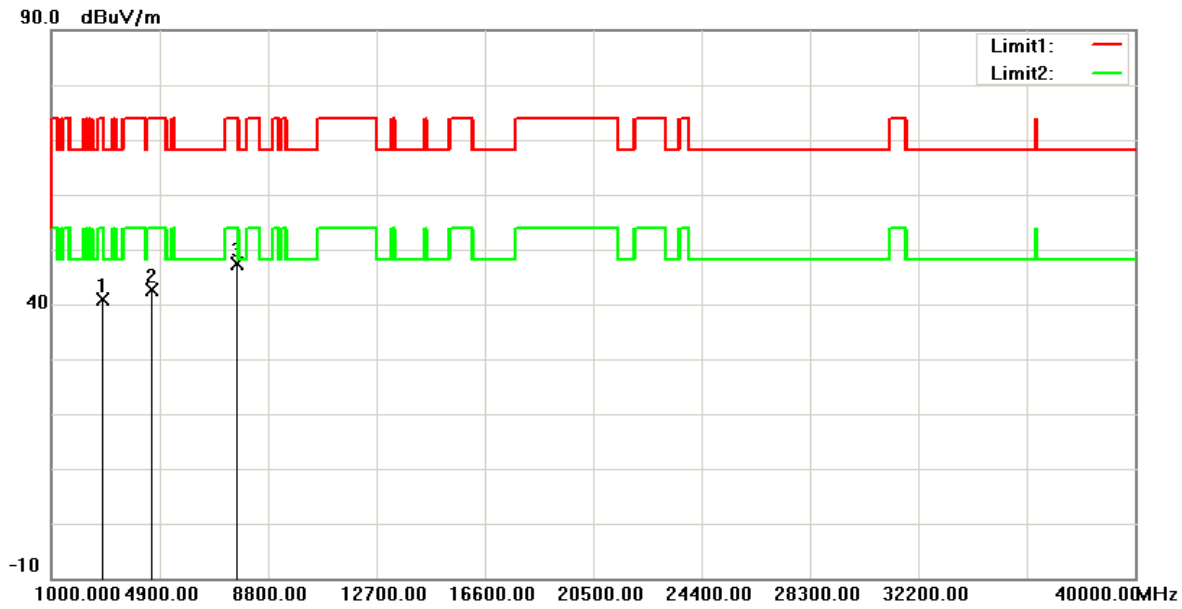
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2785.000	52.04	-13.60	38.44	74.00	-35.56	peak
2	4298.000	50.47	-9.46	41.01	74.00	-32.99	peak
3	7579.000	48.31	0.13	48.44	74.00	-25.56	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	(DTS+NII)	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Simultaneous Transmitting	Date:	01/07/2017
Ant.Polar.:	Horizontal		
Description:	Antenna:M6060060P23602NB+C059-510347-A		



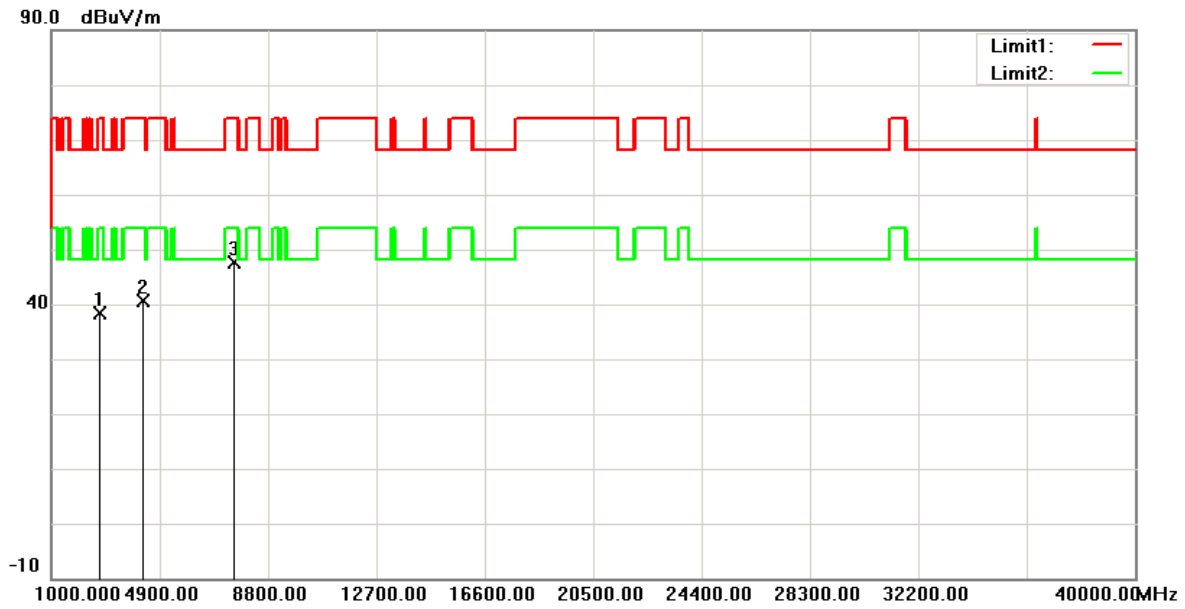
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2802.000	54.41	-13.57	40.84	74.00	-33.16	peak
2	4587.000	51.33	-8.70	42.63	74.00	-31.37	peak
3	7647.000	47.05	0.34	47.39	74.00	-26.61	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	(DTS+NII)	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Simultaneous Transmitting	Date:	01/07/2017
Ant.Polar.:	Vertical		
Description:	Antenna:M6060060P23602NB+C059-510347-A		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2751.000	52.08	-13.69	38.39	74.00	-35.61	peak
2	4281.000	50.03	-9.50	40.53	74.00	-33.47	peak
3	7579.000	47.44	0.13	47.57	74.00	-26.43	peak

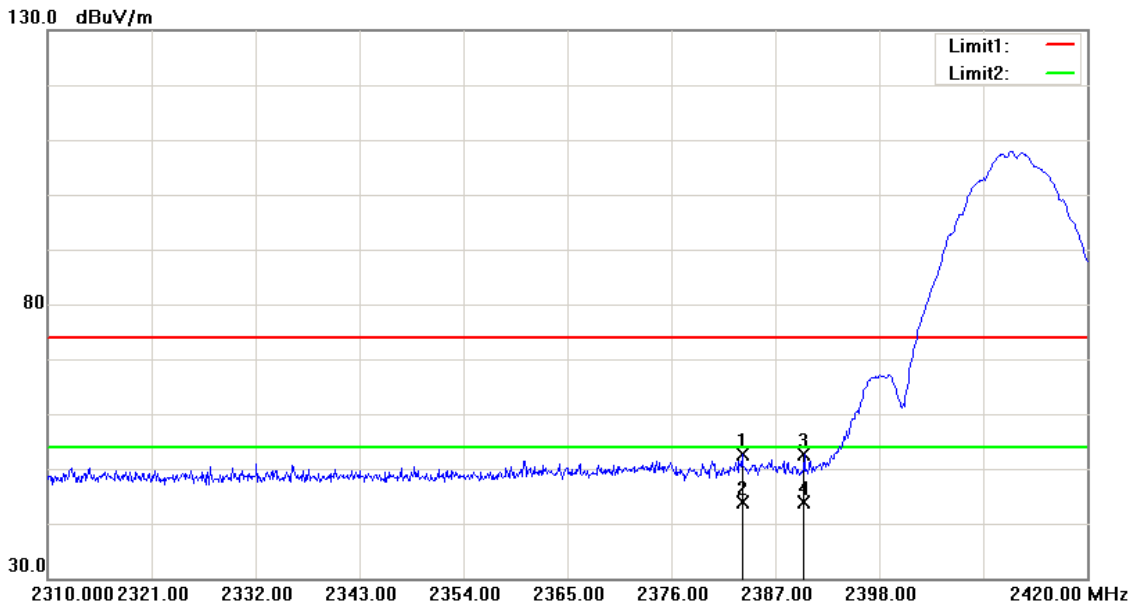
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Band Edge

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/28/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



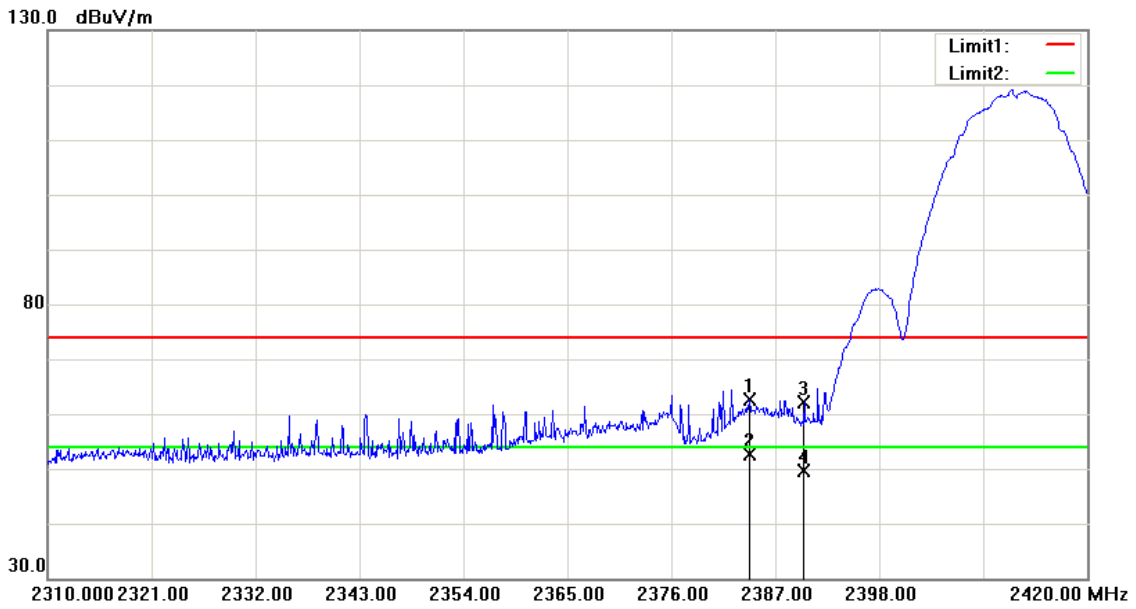
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2383.480	52.87	-0.29	52.58	74.00	-21.42	peak
2	2383.480	44.19	-0.29	43.90	54.00	-10.10	AVG
3	2390.000	52.86	-0.26	52.60	74.00	-21.40	peak
4	2390.000	44.23	-0.26	43.97	54.00	-10.03	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/28/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



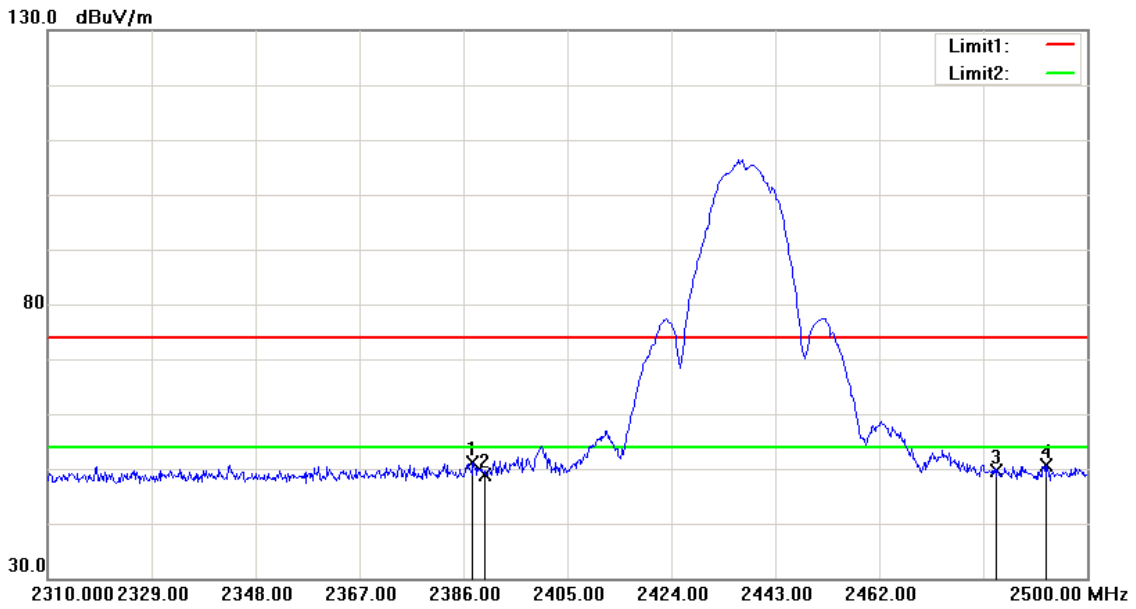
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2384.250	62.94	-0.28	62.66	74.00	-11.34	peak
2	2384.250	52.80	-0.28	52.52	54.00	-1.48	AVG
3	2390.000	62.40	-0.26	62.14	74.00	-11.86	peak
4	2390.000	50.01	-0.26	49.75	54.00	-4.25	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/28/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



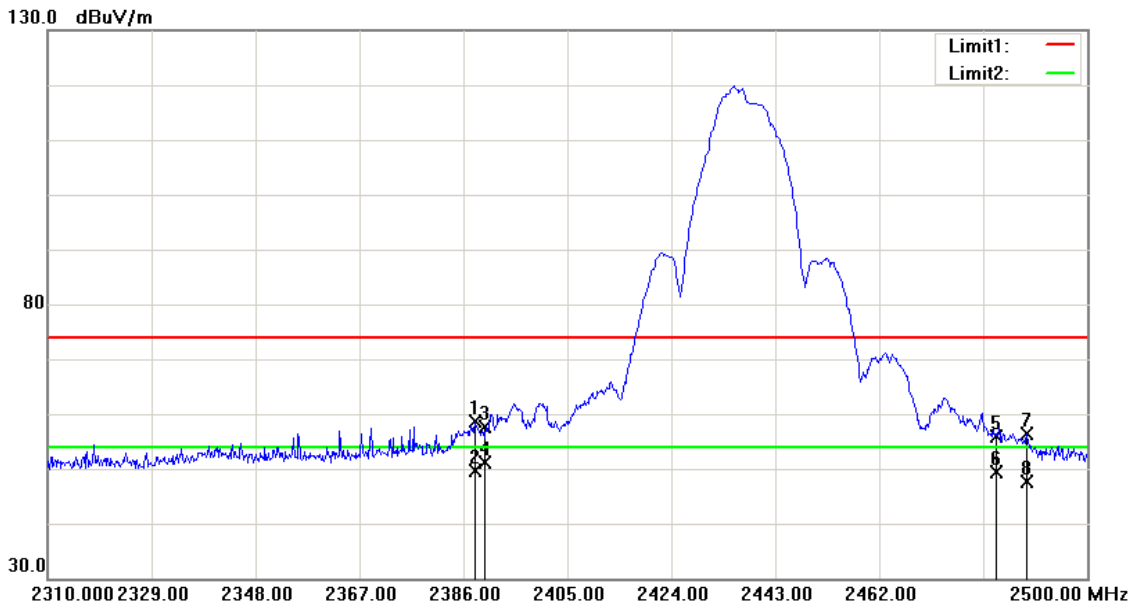
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2387.710	51.35	-0.26	51.09	74.00	-22.91	peak
2	2390.000	49.13	-0.26	48.87	74.00	-25.13	peak
3	2483.500	49.56	0.11	49.67	74.00	-24.33	peak
4	2492.590	50.50	0.15	50.65	74.00	-23.35	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/28/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



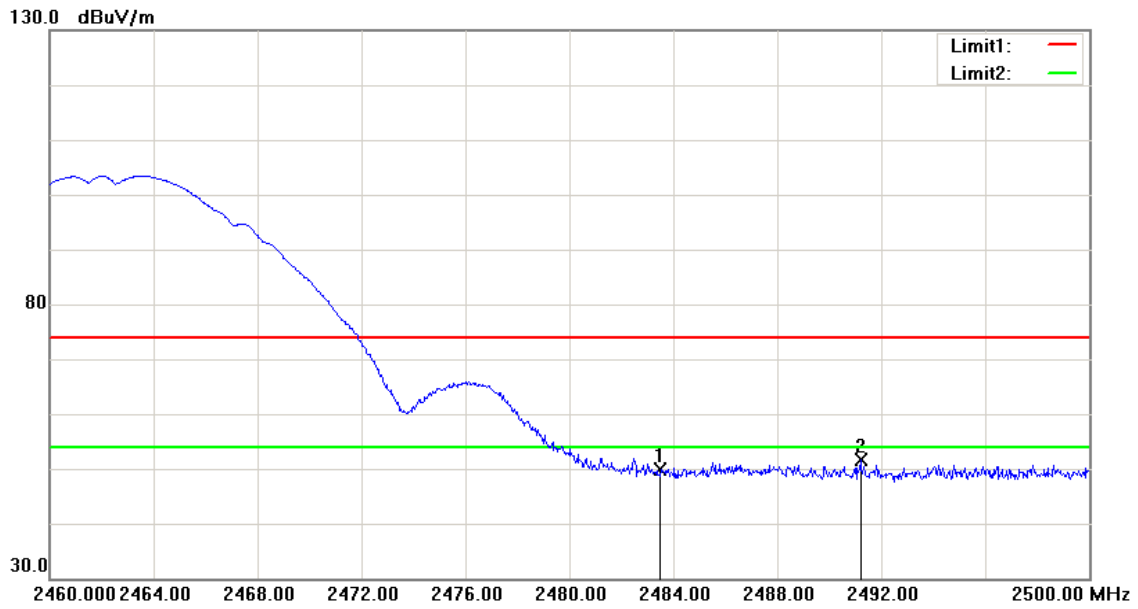
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.090	58.99	-0.26	58.73	74.00	-15.27	peak
2	2388.090	49.78	-0.26	49.52	54.00	-4.48	AVG
3	2390.000	57.98	-0.26	57.72	74.00	-16.28	peak
4	2390.000	51.45	-0.26	51.19	54.00	-2.81	AVG
5	2483.500	55.83	0.11	55.94	74.00	-18.06	peak
6	2483.500	49.30	0.11	49.41	54.00	-4.59	AVG
7	2488.980	56.35	0.14	56.49	74.00	-17.51	peak
8	2488.980	47.57	0.14	47.71	54.00	-6.29	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/28/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



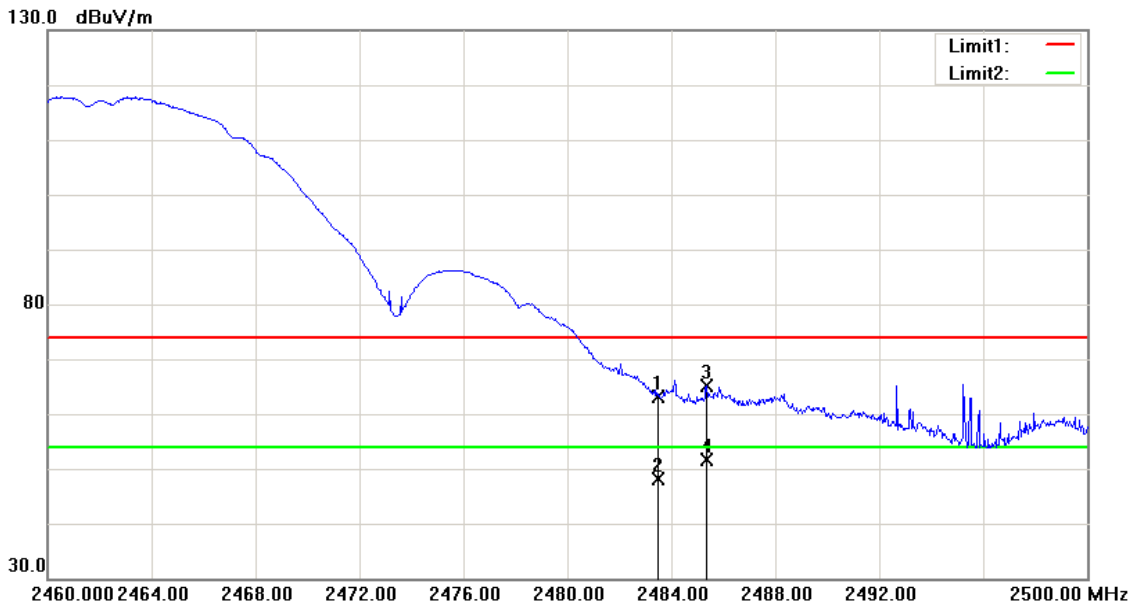
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	49.81	0.11	49.92	74.00	-24.08	peak
2	2491.200	51.36	0.15	51.51	74.00	-22.49	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/28/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



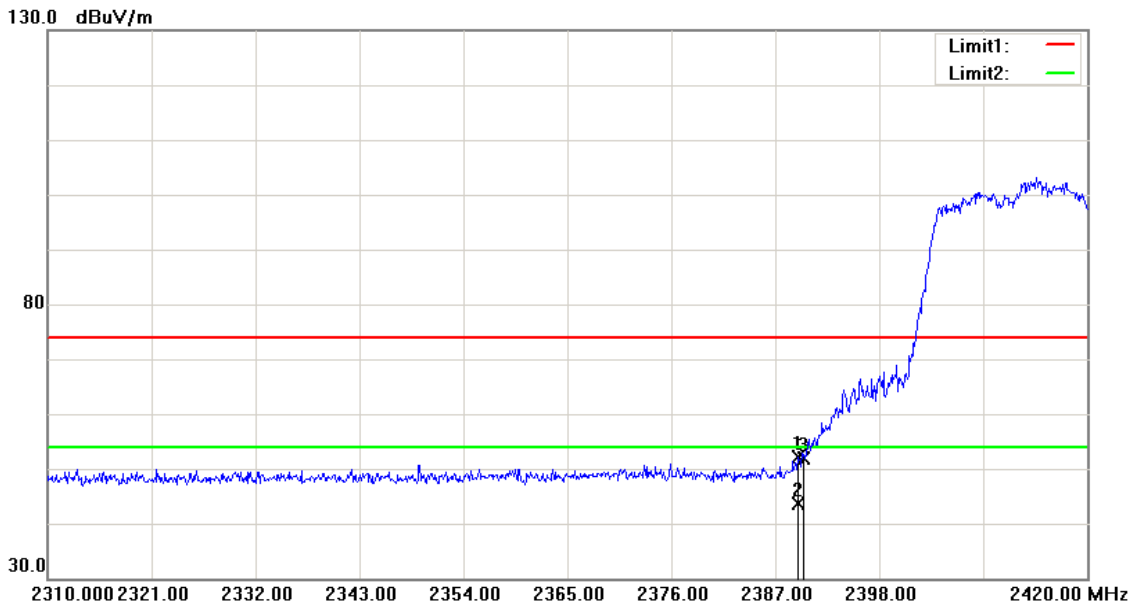
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	63.04	0.11	63.15	74.00	-10.85	peak
2	2483.500	48.06	0.11	48.17	54.00	-5.83	AVG
3	2485.360	64.91	0.12	65.03	74.00	-8.97	peak
4	2485.360	51.47	0.12	51.59	54.00	-2.41	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/28/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



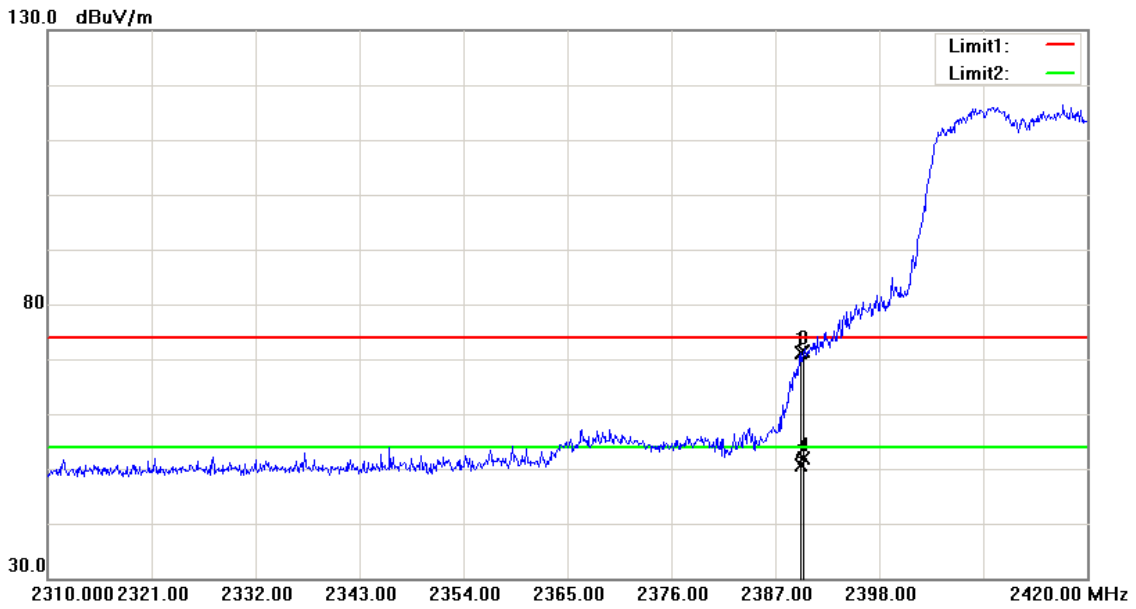
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.420	52.45	-0.26	52.19	74.00	-21.81	peak
2	2389.420	43.89	-0.26	43.63	54.00	-10.37	AVG
3	2390.000	52.04	-0.26	51.78	74.00	-22.22	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/28/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



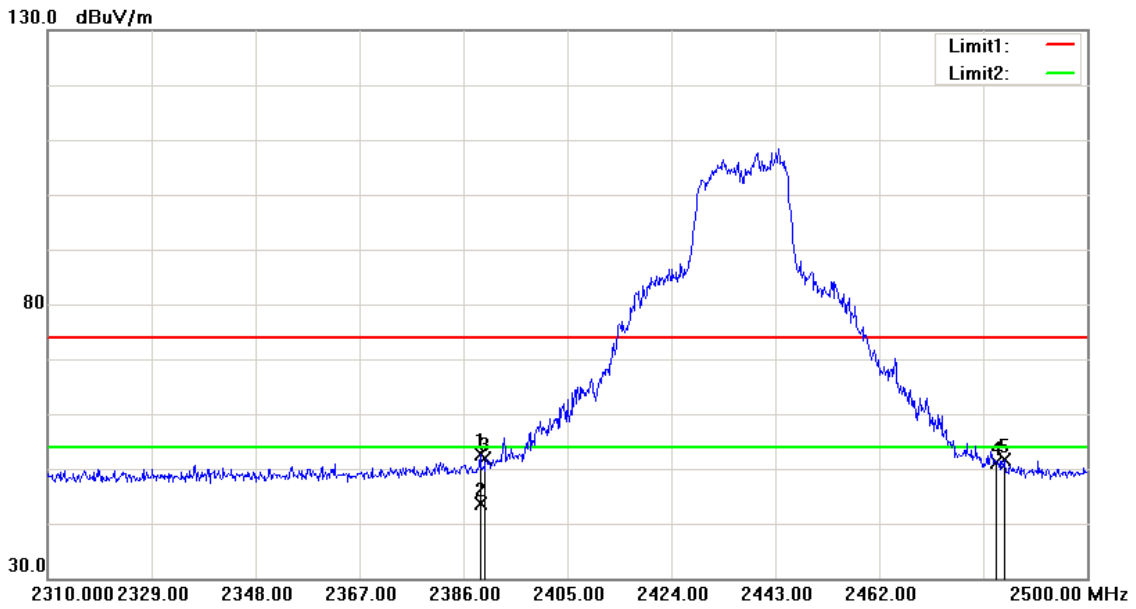
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.640	71.38	-0.26	71.12	74.00	-2.88	peak
2	2389.640	50.96	-0.26	50.70	54.00	-3.30	AVG
3	2390.000	71.61	-0.26	71.35	74.00	-2.65	peak
4	2390.000	52.04	-0.26	51.78	54.00	-2.22	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/28/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



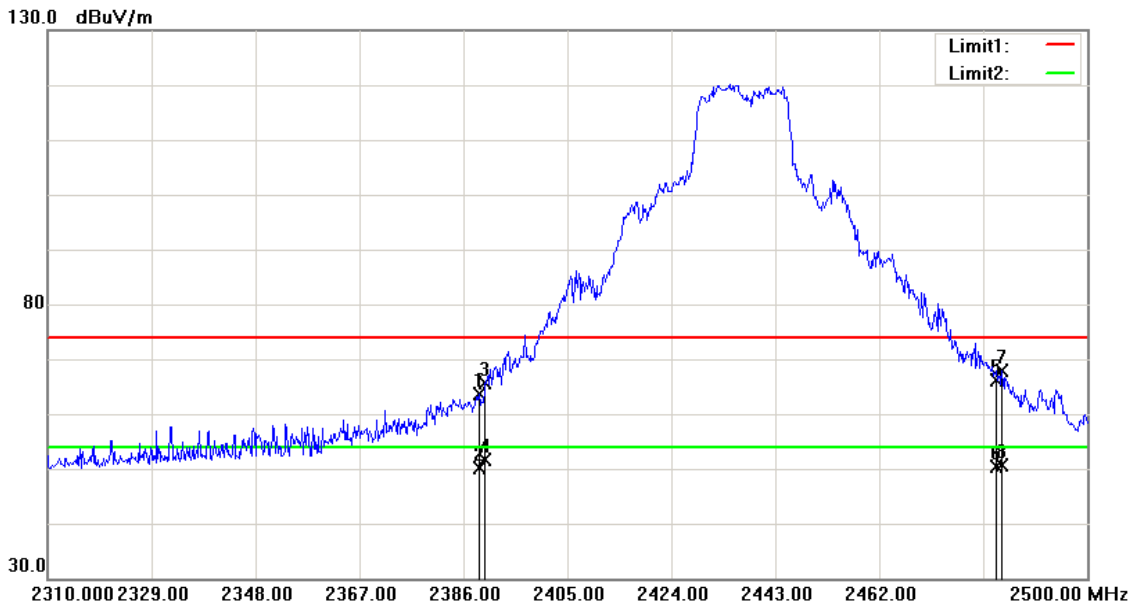
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.040	52.78	-0.26	52.52	74.00	-21.48	peak
2	2389.040	43.85	-0.26	43.59	54.00	-10.41	AVG
3	2390.000	52.09	-0.26	51.83	74.00	-22.17	peak
4	2483.500	51.00	0.11	51.11	74.00	-22.89	peak
5	2484.800	51.44	0.12	51.56	74.00	-22.44	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/28/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



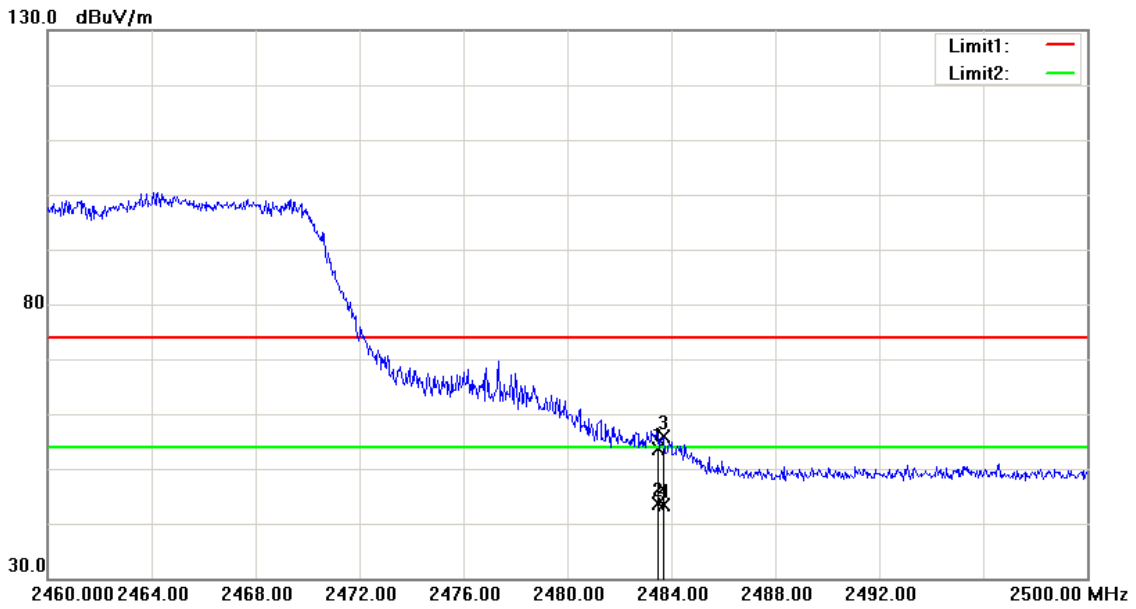
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.850	63.96	-0.26	63.70	74.00	-10.30	peak
2	2388.850	50.49	-0.26	50.23	54.00	-3.77	AVG
3	2390.000	65.89	-0.26	65.63	74.00	-8.37	peak
4	2390.000	51.88	-0.26	51.62	54.00	-2.38	AVG
5	2483.500	65.98	0.11	66.09	74.00	-7.91	peak
6	2483.500	50.29	0.11	50.40	54.00	-3.60	AVG
7	2484.420	67.77	0.12	67.89	74.00	-6.11	peak
8	2484.420	50.48	0.12	50.60	54.00	-3.40	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/28/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



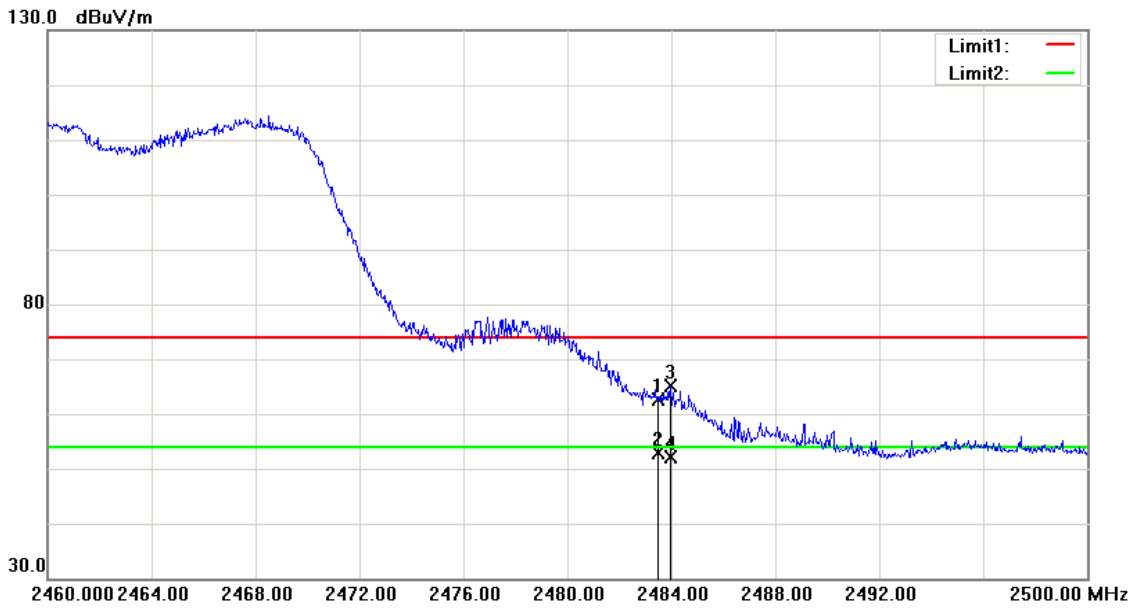
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	53.59	0.11	53.70	74.00	-20.30	peak
2	2483.500	43.55	0.11	43.66	54.00	-10.34	AVG
3	2483.680	55.74	0.11	55.85	74.00	-18.15	peak
4	2483.680	43.39	0.11	43.50	54.00	-10.50	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/28/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



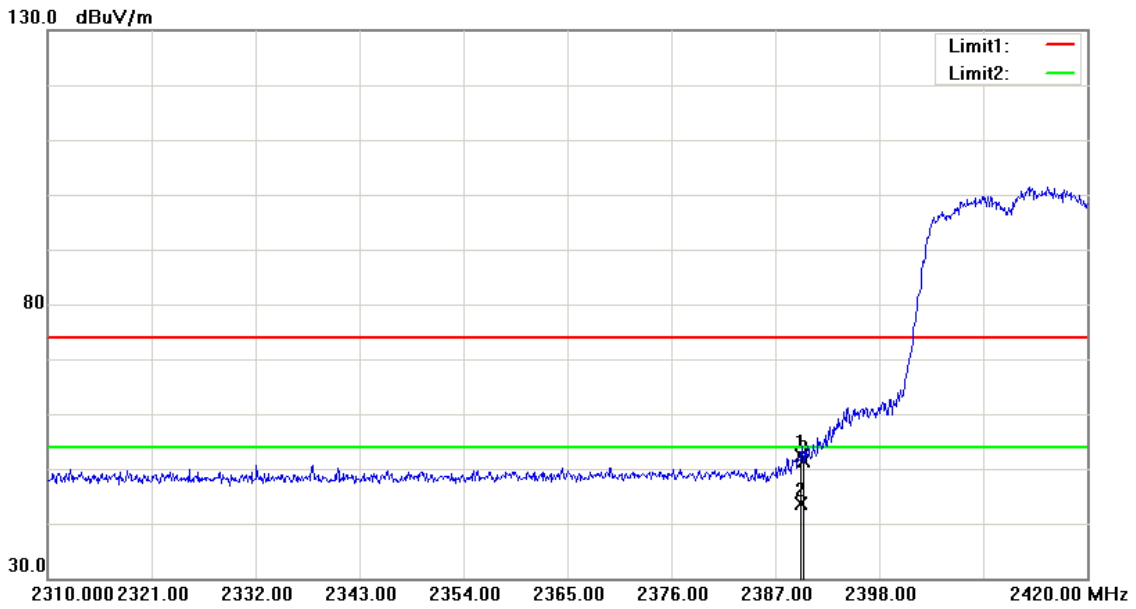
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	62.49	0.11	62.60	74.00	-11.40	peak
2	2483.500	52.79	0.11	52.90	54.00	-1.10	AVG
3	2483.960	64.98	0.12	65.10	74.00	-8.90	peak
4	2483.960	51.94	0.12	52.06	54.00	-1.94	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/28/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



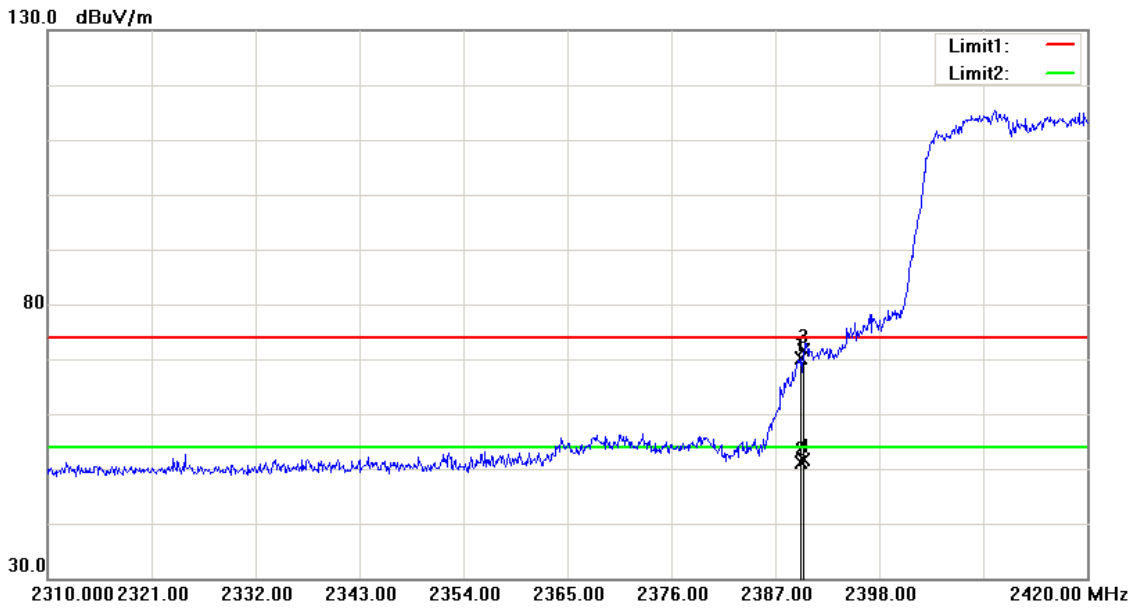
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.750	52.70	-0.26	52.44	74.00	-21.56	peak
2	2389.750	43.93	-0.26	43.67	54.00	-10.33	AVG
3	2390.000	51.70	-0.26	51.44	74.00	-22.56	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/28/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



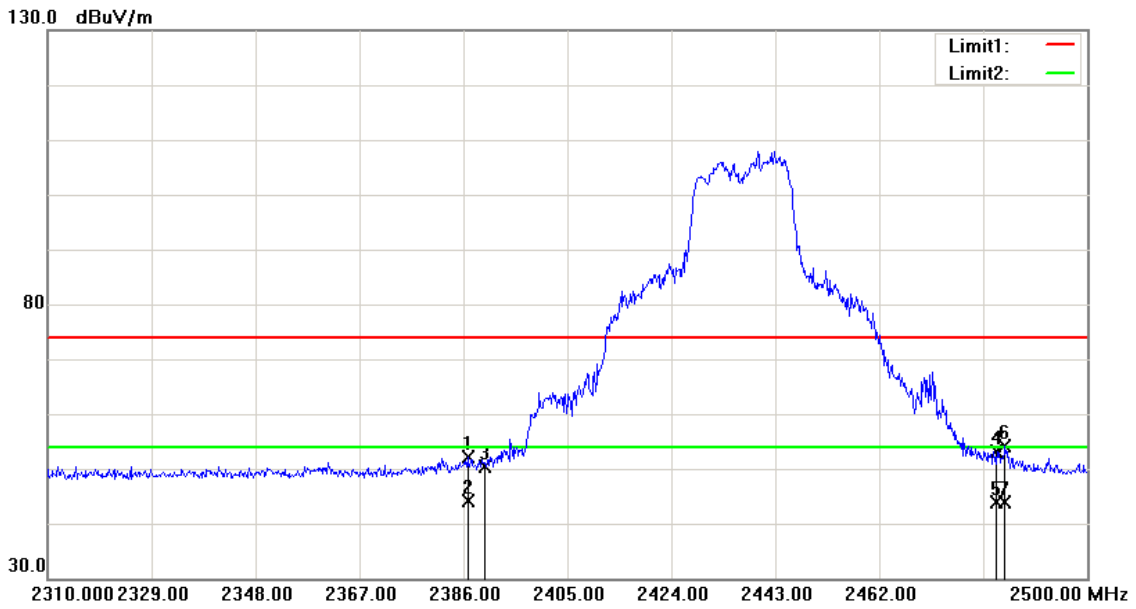
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.750	70.34	-0.26	70.08	74.00	-3.92	peak
2	2389.750	51.27	-0.26	51.01	54.00	-2.99	AVG
3	2390.000	71.82	-0.26	71.56	74.00	-2.44	peak
4	2390.000	51.90	-0.26	51.64	54.00	-2.36	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



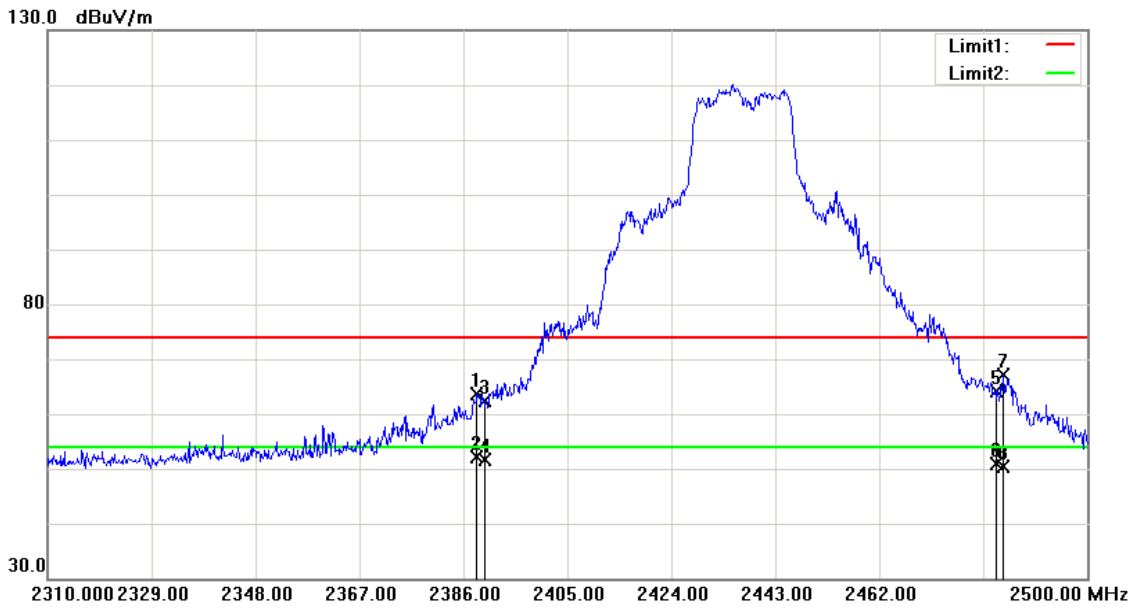
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.760	52.33	-0.27	52.06	74.00	-21.94	peak
2	2386.760	44.29	-0.27	44.02	54.00	-9.98	AVG
3	2390.000	50.59	-0.26	50.33	74.00	-23.67	peak
4	2483.500	53.07	0.11	53.18	74.00	-20.82	peak
5	2483.500	43.80	0.11	43.91	54.00	-10.09	AVG
6	2484.990	53.99	0.12	54.11	74.00	-19.89	peak
7	2484.990	43.65	0.12	43.77	54.00	-10.23	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



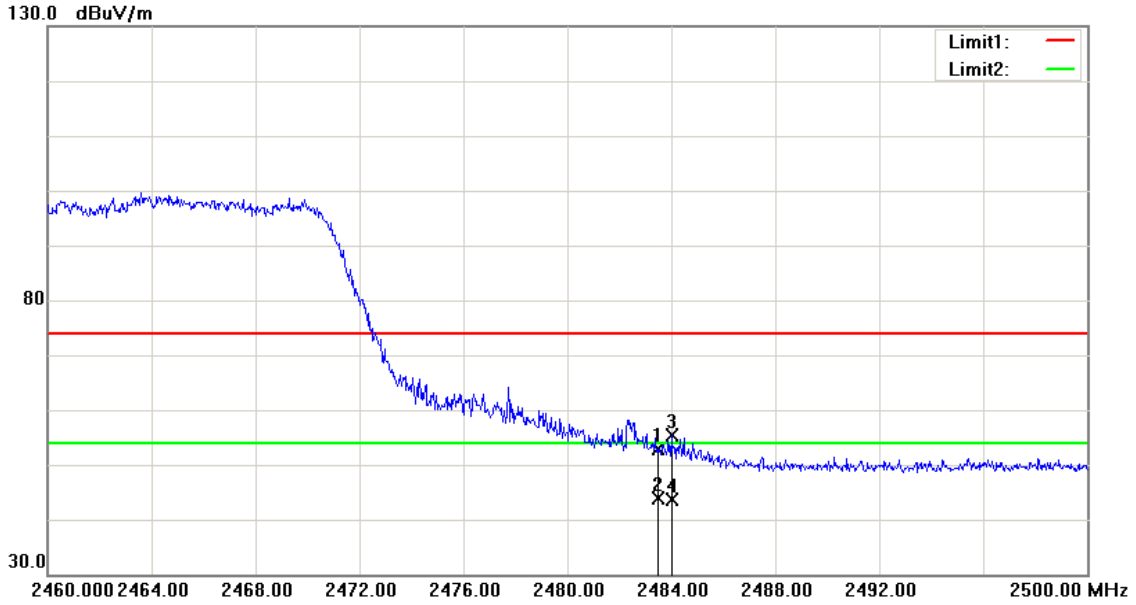
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.470	63.83	-0.26	63.57	74.00	-10.43	peak
2	2388.470	52.29	-0.26	52.03	54.00	-1.97	AVG
3	2390.000	62.53	-0.26	62.27	74.00	-11.73	peak
4	2390.000	51.99	-0.26	51.73	54.00	-2.27	AVG
5	2483.500	63.97	0.11	64.08	74.00	-9.92	peak
6	2483.500	50.74	0.11	50.85	54.00	-3.15	AVG
7	2484.610	66.90	0.12	67.02	74.00	-6.98	peak
8	2484.610	50.29	0.12	50.41	54.00	-3.59	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



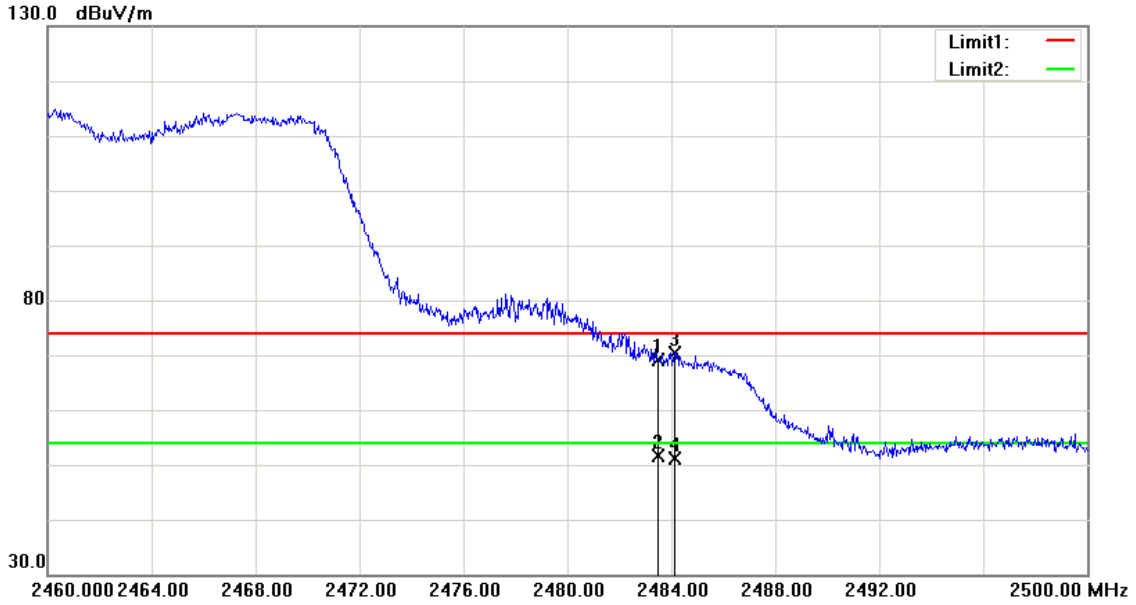
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	52.65	0.11	52.76	74.00	-21.24	peak
2	2483.500	43.67	0.11	43.78	54.00	-10.22	AVG
3	2484.000	55.23	0.12	55.35	74.00	-18.65	peak
4	2484.000	43.53	0.12	43.65	54.00	-10.35	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



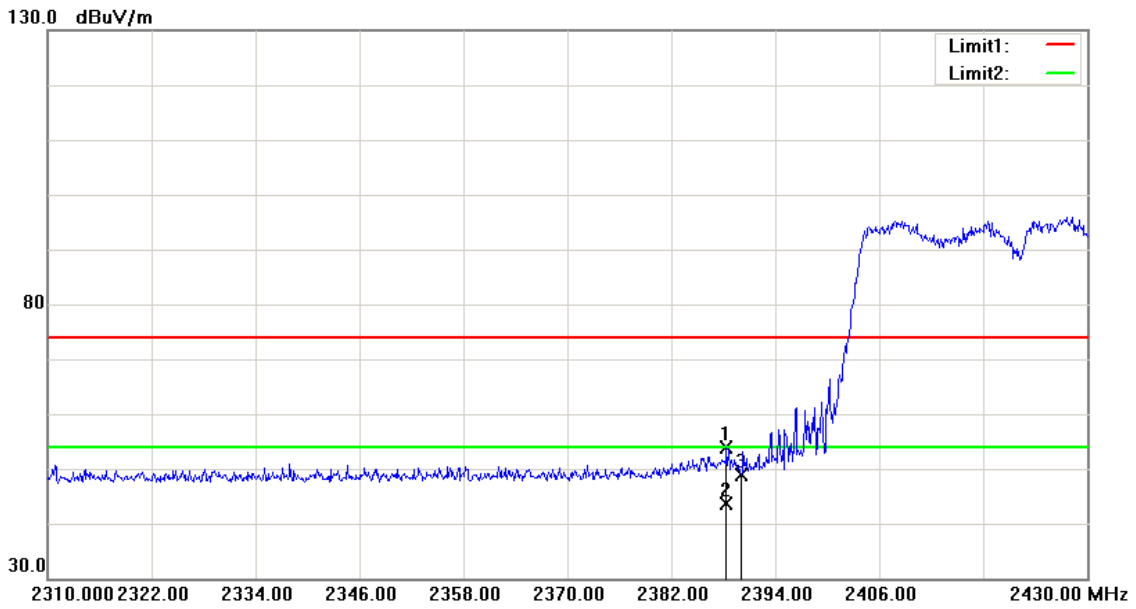
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	68.98	0.11	69.09	74.00	-4.91	peak
2	2483.500	51.51	0.11	51.62	54.00	-2.38	AVG
3	2484.120	70.32	0.12	70.44	74.00	-3.56	peak
4	2484.120	51.13	0.12	51.25	54.00	-2.75	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2422MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



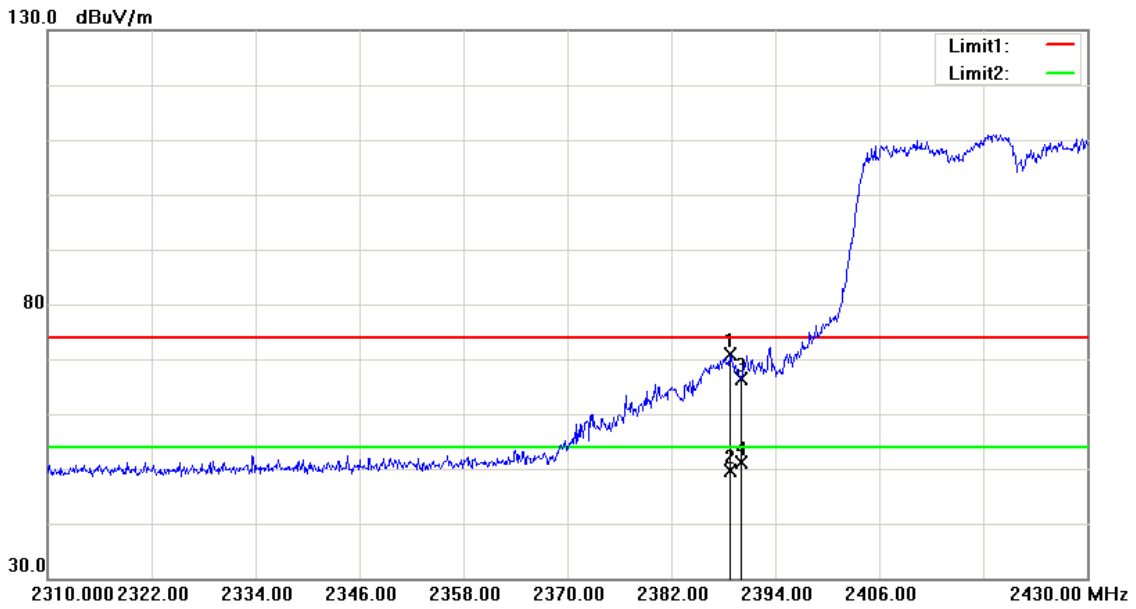
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.360	54.17	-0.26	53.91	74.00	-20.09	peak
2	2388.360	43.89	-0.26	43.63	54.00	-10.37	AVG
3	2390.000	49.17	-0.26	48.91	74.00	-25.09	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2422MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



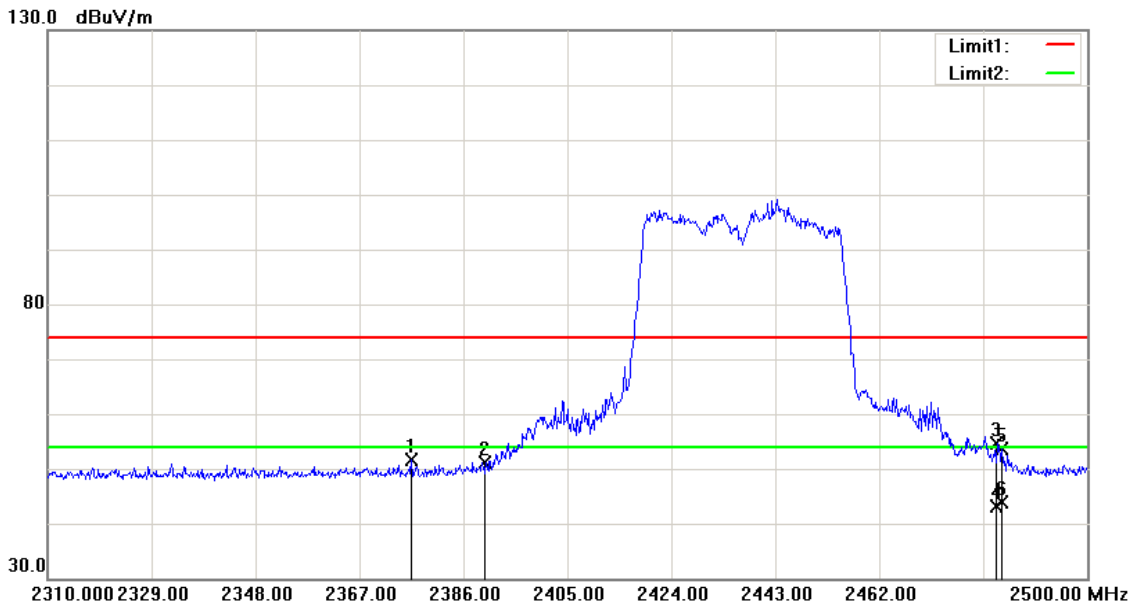
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.840	71.06	-0.26	70.80	74.00	-3.20	peak
2	2388.840	49.79	-0.26	49.53	54.00	-4.47	AVG
3	2390.000	66.76	-0.26	66.50	74.00	-7.50	peak
4	2390.000	51.49	-0.26	51.23	54.00	-2.77	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



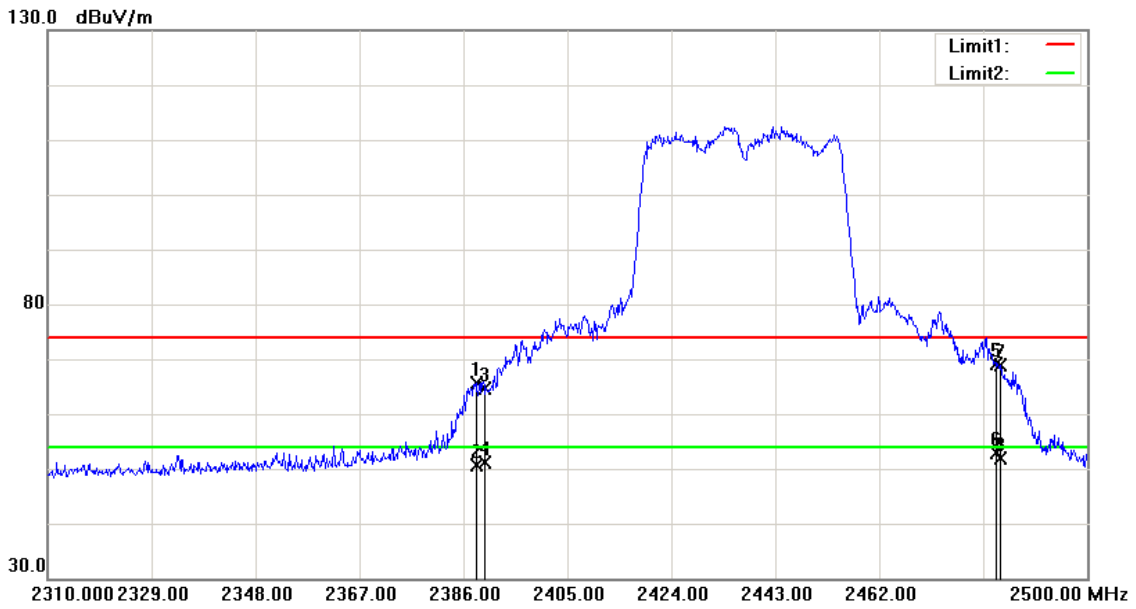
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2376.500	51.91	-0.32	51.59	74.00	-22.41	peak
2	2390.000	51.49	-0.26	51.23	74.00	-22.77	peak
3	2483.500	54.40	0.11	54.51	74.00	-19.49	peak
4	2483.500	43.01	0.11	43.12	54.00	-10.88	AVG
5	2484.420	53.47	0.12	53.59	74.00	-20.41	peak
6	2484.420	43.77	0.12	43.89	54.00	-10.11	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



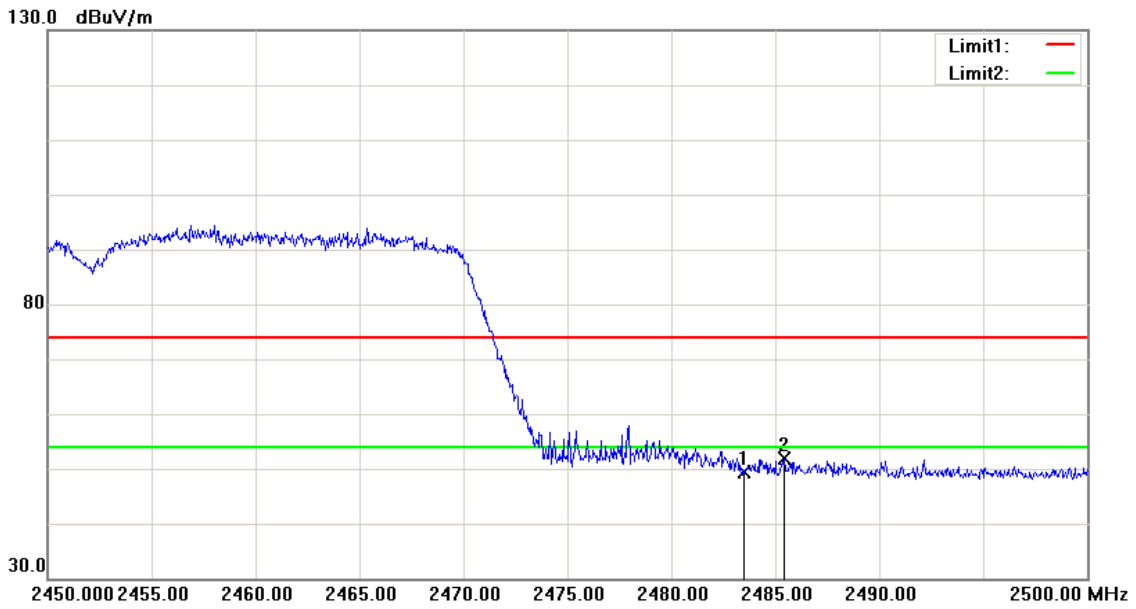
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.280	65.92	-0.26	65.66	74.00	-8.34	peak
2	2388.280	50.85	-0.26	50.59	54.00	-3.41	AVG
3	2390.000	64.88	-0.26	64.62	74.00	-9.38	peak
4	2390.000	51.36	-0.26	51.10	54.00	-2.90	AVG
5	2483.500	68.92	0.11	69.03	74.00	-4.97	peak
6	2483.500	52.81	0.11	52.92	54.00	-1.08	AVG
7	2484.230	68.79	0.12	68.91	74.00	-5.09	peak
8	2484.230	51.87	0.12	51.99	54.00	-2.01	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2452MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:C059-510348-A		



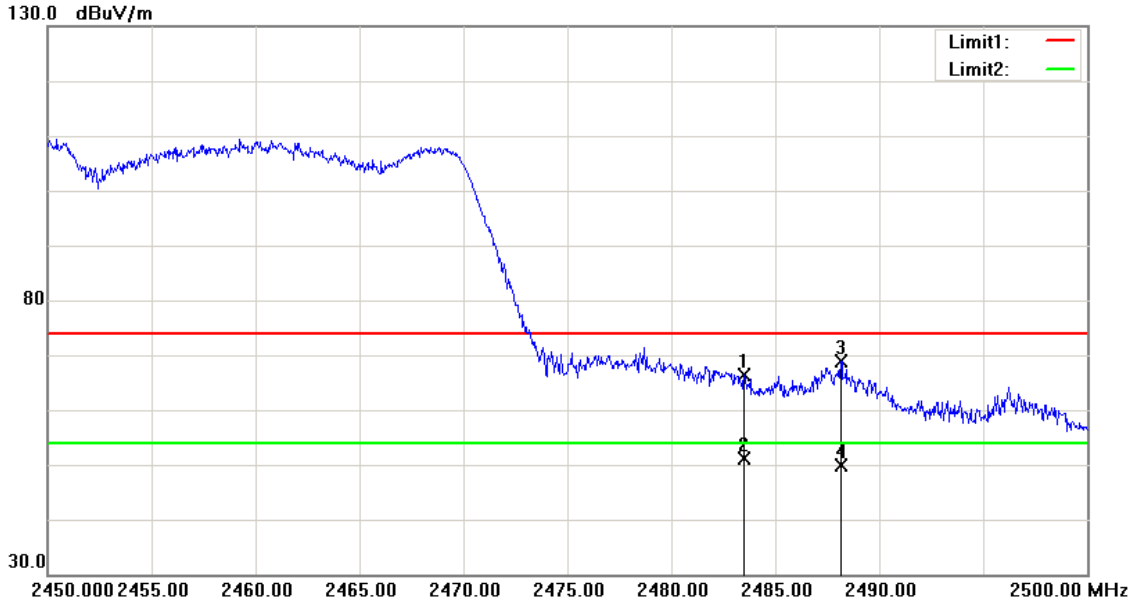
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	49.25	0.11	49.36	74.00	-24.64	peak
2	2485.400	51.70	0.12	51.82	74.00	-22.18	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2452MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:C059-510348-A		



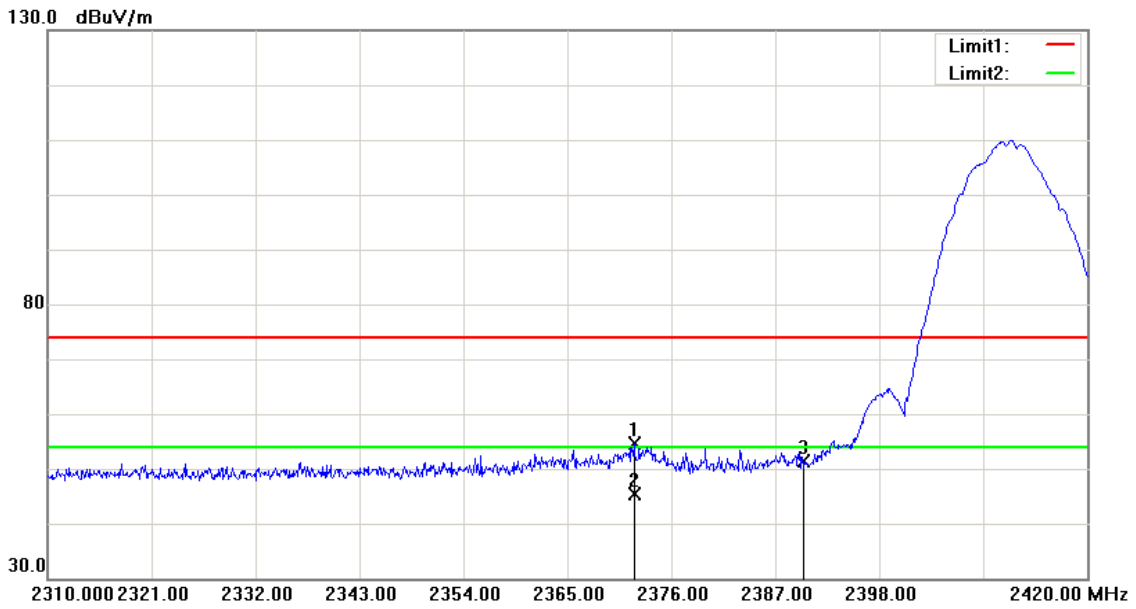
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	66.39	0.11	66.50	74.00	-7.50	peak
2	2483.500	50.99	0.11	51.10	54.00	-2.90	AVG
3	2488.150	68.83	0.13	68.96	74.00	-5.04	peak
4	2488.150	49.68	0.13	49.81	54.00	-4.19	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



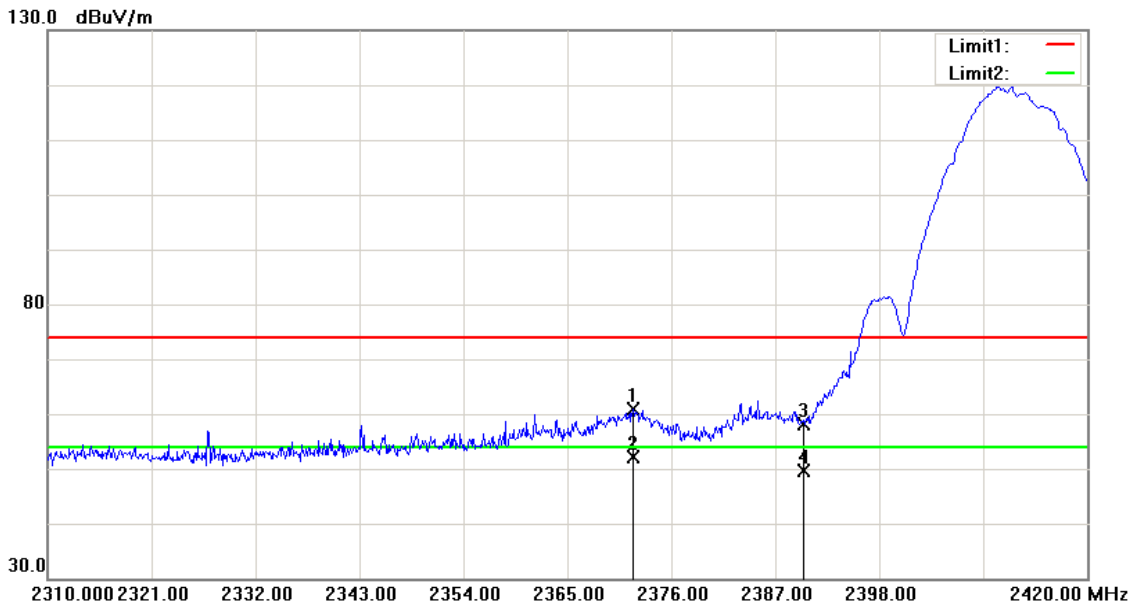
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2372.040	54.98	-0.33	54.65	74.00	-19.35	peak
2	2372.040	45.74	-0.33	45.41	54.00	-8.59	AVG
3	2390.000	51.73	-0.26	51.47	74.00	-22.53	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



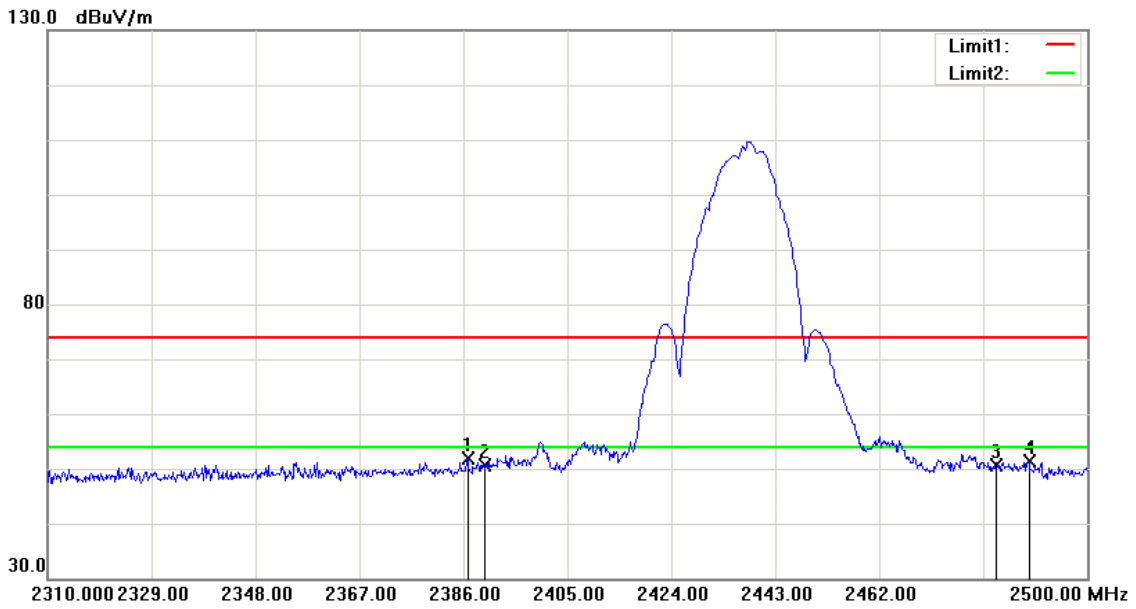
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2371.930	61.26	-0.33	60.93	74.00	-13.07	peak
2	2371.930	52.51	-0.33	52.18	54.00	-1.82	AVG
3	2390.000	58.42	-0.26	58.16	74.00	-15.84	peak
4	2390.000	49.91	-0.26	49.65	54.00	-4.35	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



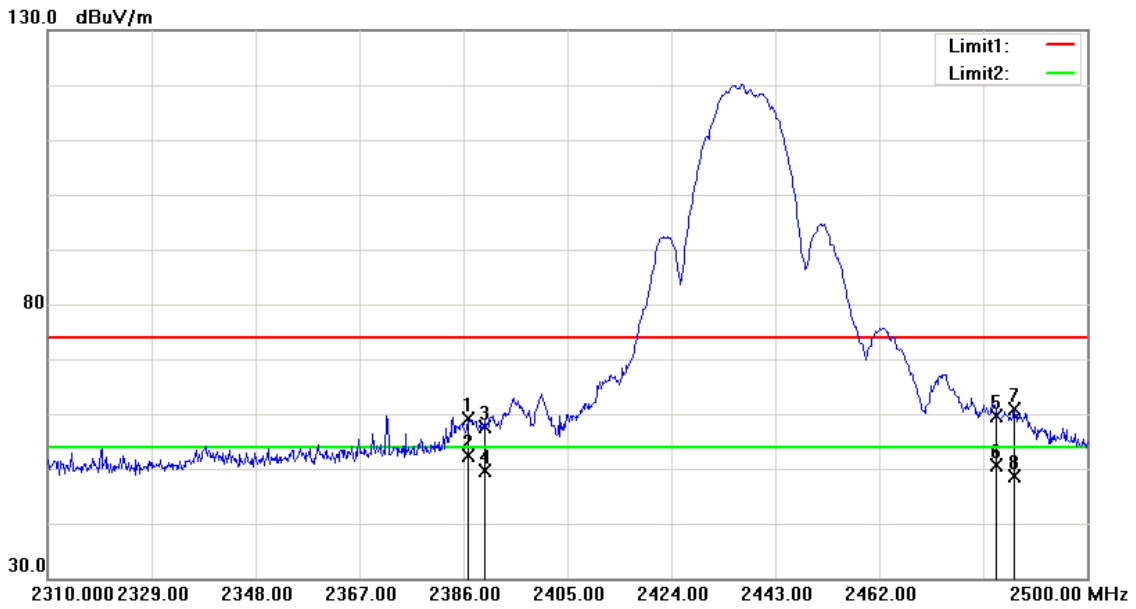
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.760	52.17	-0.27	51.90	74.00	-22.10	peak
2	2390.000	50.82	-0.26	50.56	74.00	-23.44	peak
3	2483.500	50.52	0.11	50.63	74.00	-23.37	peak
4	2489.360	51.34	0.14	51.48	74.00	-22.52	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



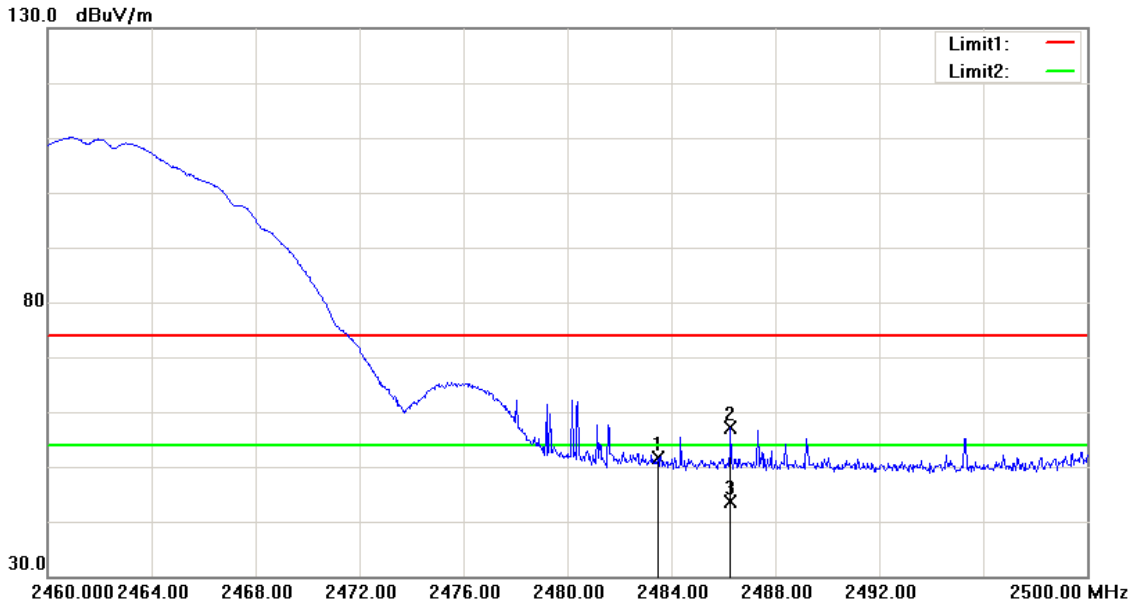
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.760	59.30	-0.27	59.03	74.00	-14.97	peak
2	2386.760	52.61	-0.27	52.34	54.00	-1.66	AVG
3	2390.000	57.82	-0.26	57.56	74.00	-16.44	peak
4	2390.000	49.78	-0.26	49.52	54.00	-4.48	AVG
5	2483.500	59.50	0.11	59.61	74.00	-14.39	peak
6	2483.500	50.63	0.11	50.74	54.00	-3.26	AVG
7	2486.700	60.80	0.12	60.92	74.00	-13.08	peak
8	2486.700	48.40	0.12	48.52	54.00	-5.48	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



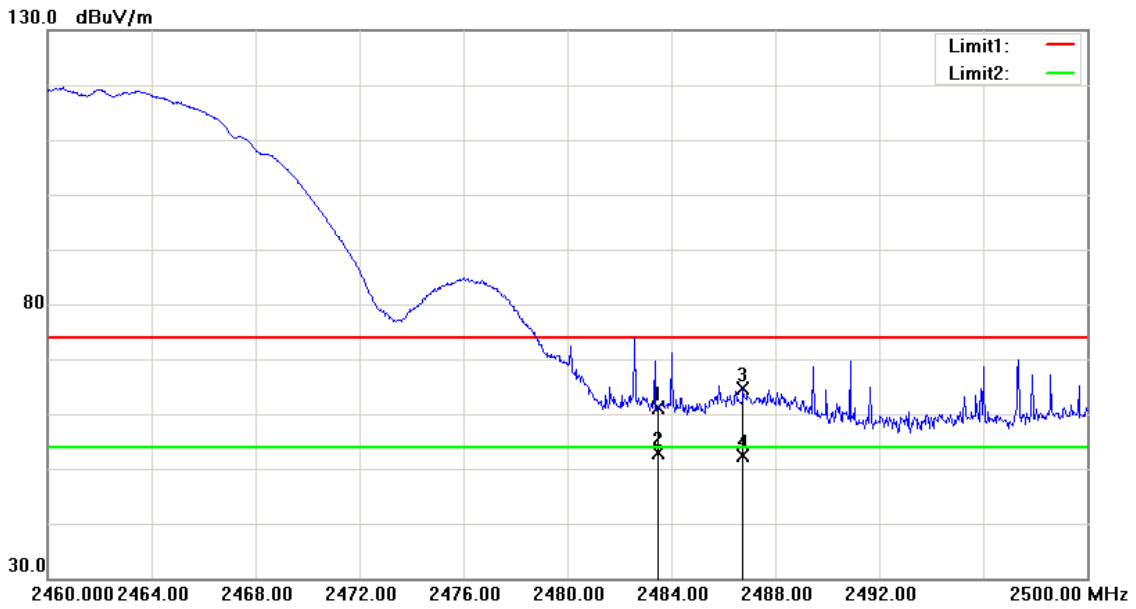
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	51.52	0.11	51.63	74.00	-22.37	peak
2	2486.280	57.01	0.12	57.13	74.00	-16.87	peak
3	2486.280	43.59	0.12	43.71	54.00	-10.29	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 2	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



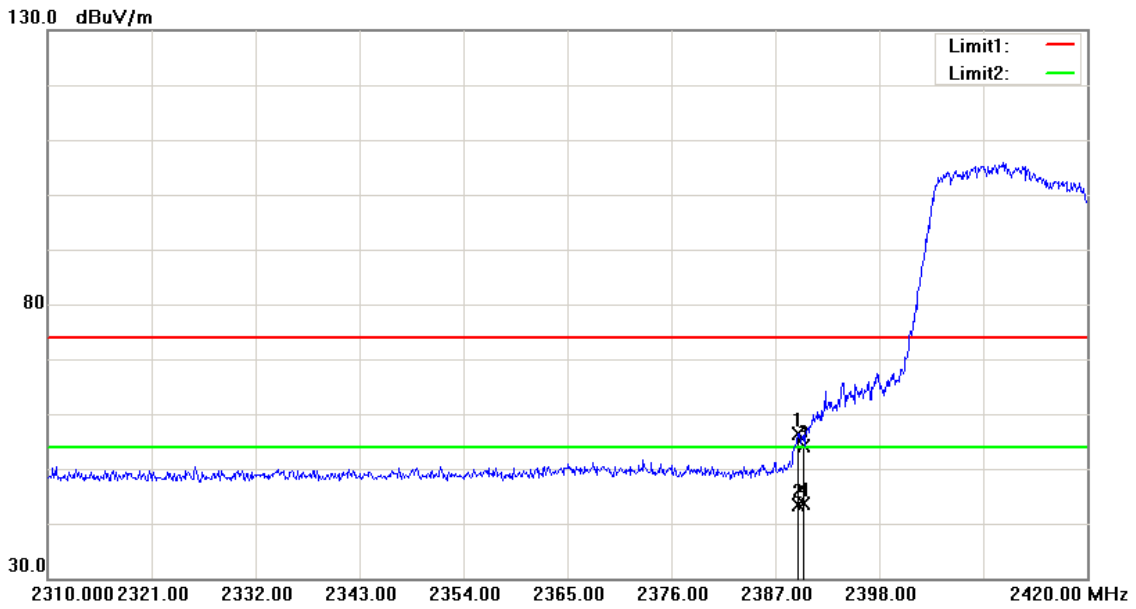
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	61.04	0.11	61.15	74.00	-12.85	peak
2	2483.500	52.68	0.11	52.79	54.00	-1.21	AVG
3	2486.760	64.51	0.12	64.63	74.00	-9.37	peak
4	2486.760	52.16	0.12	52.28	54.00	-1.72	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



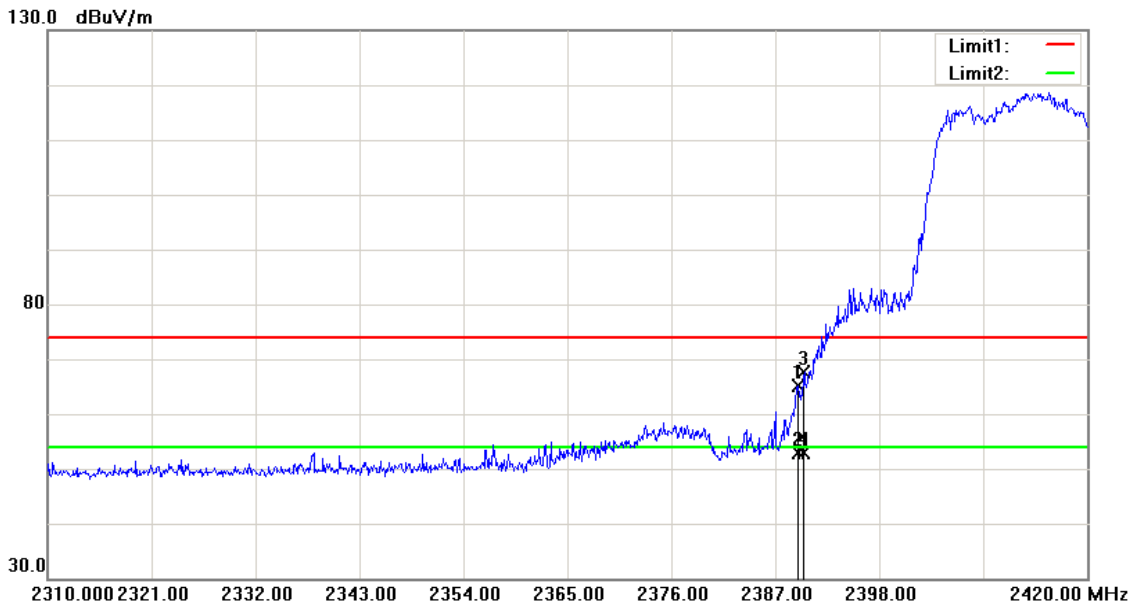
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.420	56.65	-0.26	56.39	74.00	-17.61	peak
2	2389.420	43.66	-0.26	43.40	54.00	-10.60	AVG
3	2390.000	54.27	-0.26	54.01	74.00	-19.99	peak
4	2390.000	43.94	-0.26	43.68	54.00	-10.32	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



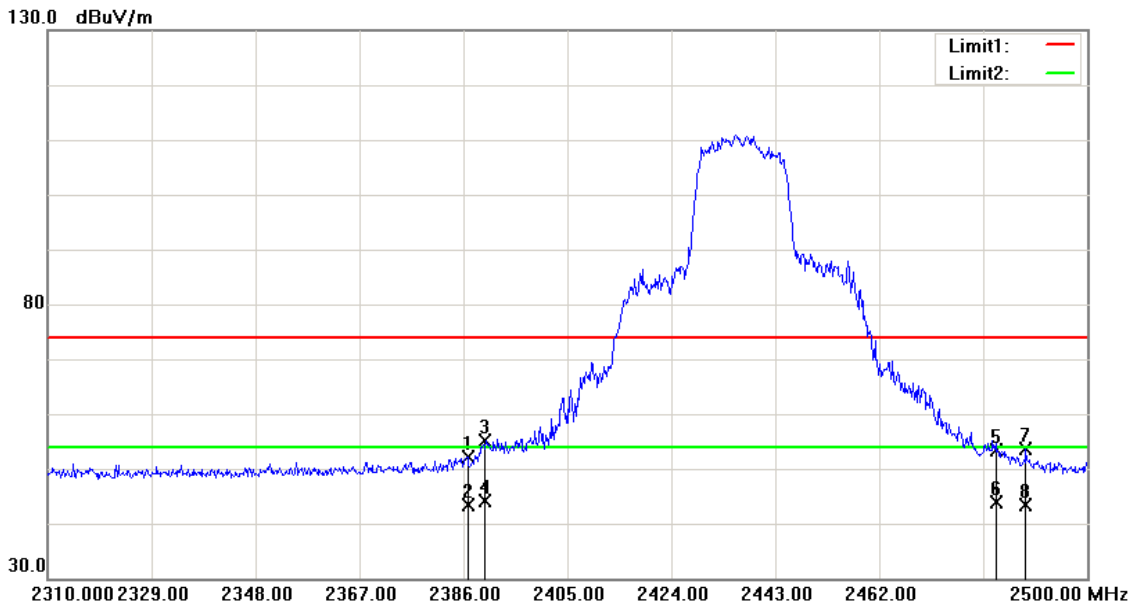
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.420	65.46	-0.26	65.20	74.00	-8.80	peak
2	2389.420	53.03	-0.26	52.77	54.00	-1.23	AVG
3	2390.000	67.93	-0.26	67.67	74.00	-6.33	peak
4	2390.000	53.20	-0.26	52.94	54.00	-1.06	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



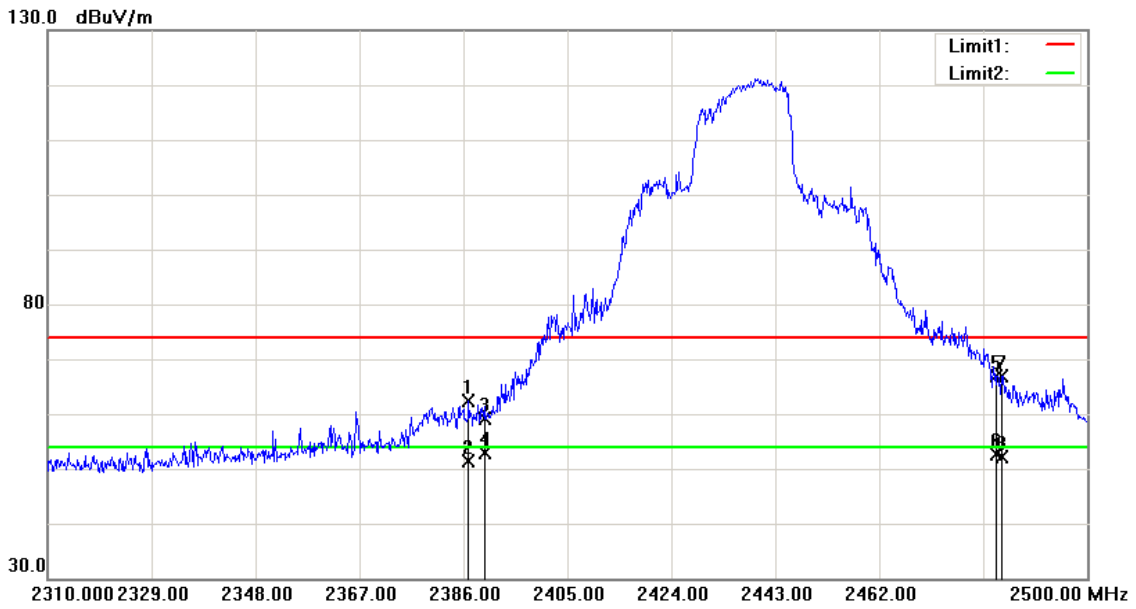
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.760	52.32	-0.27	52.05	74.00	-21.95	peak
2	2386.760	43.66	-0.27	43.39	54.00	-10.61	AVG
3	2390.000	55.37	-0.26	55.11	74.00	-18.89	peak
4	2390.000	44.38	-0.26	44.12	54.00	-9.88	AVG
5	2483.500	53.23	0.11	53.34	74.00	-20.66	peak
6	2483.500	43.72	0.11	43.83	54.00	-10.17	AVG
7	2488.790	53.61	0.14	53.75	74.00	-20.25	peak
8	2488.790	43.30	0.14	43.44	54.00	-10.56	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



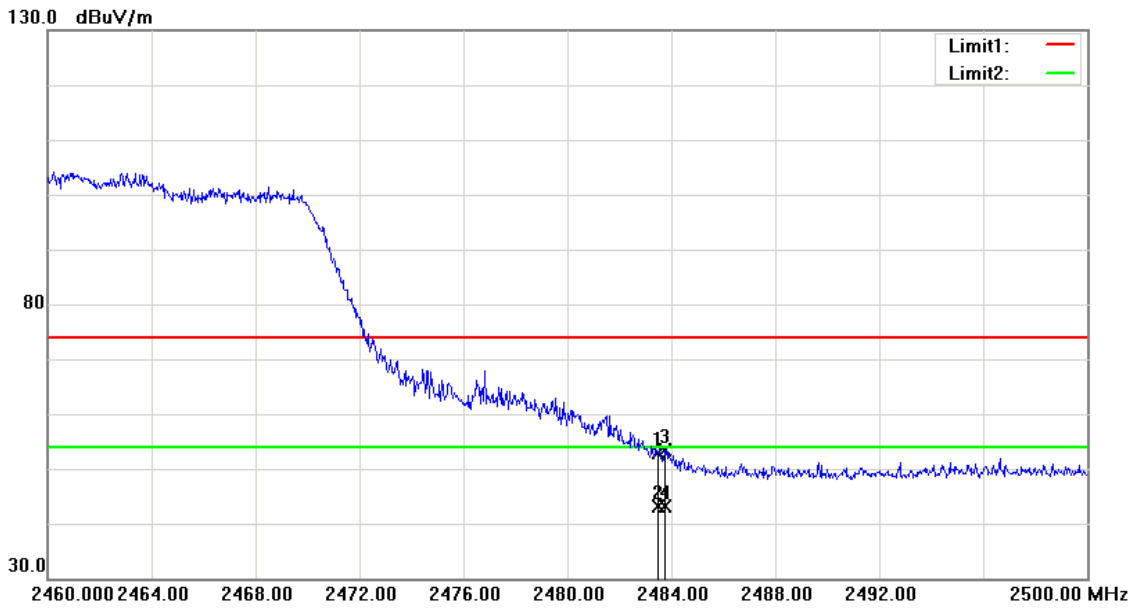
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.950	62.76	-0.27	62.49	74.00	-11.51	peak
2	2386.950	51.63	-0.27	51.36	54.00	-2.64	AVG
3	2390.000	59.30	-0.26	59.04	74.00	-14.96	peak
4	2390.000	53.13	-0.26	52.87	54.00	-1.13	AVG
5	2483.500	66.68	0.11	66.79	74.00	-7.21	peak
6	2483.500	52.60	0.11	52.71	54.00	-1.29	AVG
7	2484.420	66.86	0.12	66.98	74.00	-7.02	peak
8	2484.420	52.10	0.12	52.22	54.00	-1.78	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



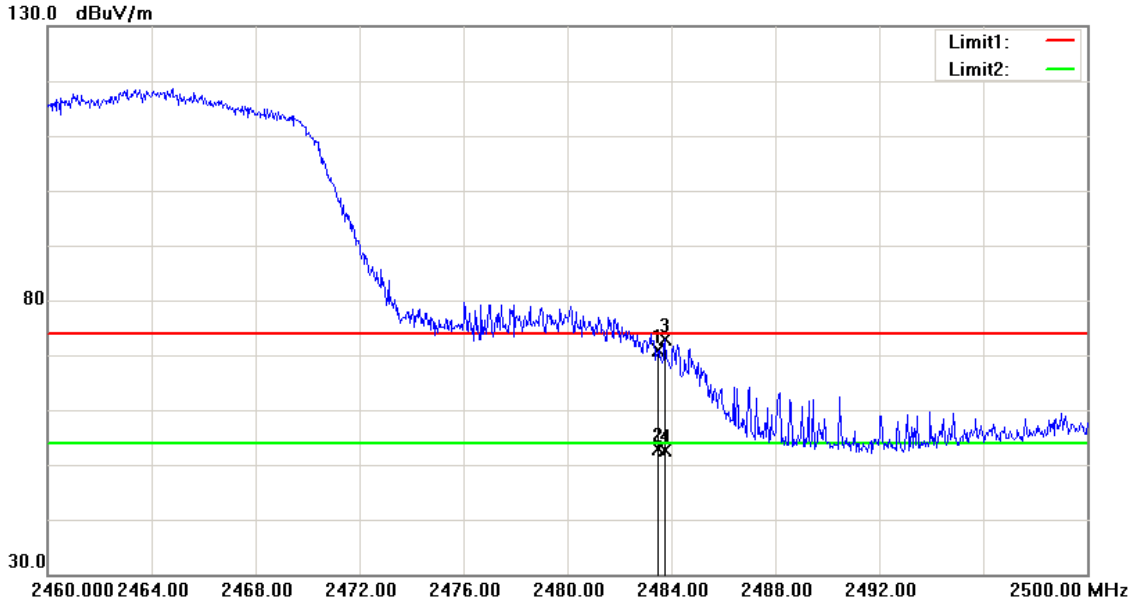
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	52.74	0.11	52.85	74.00	-21.15	peak
2	2483.500	43.14	0.11	43.25	54.00	-10.75	AVG
3	2483.760	53.24	0.11	53.35	74.00	-20.65	peak
4	2483.760	43.09	0.11	43.20	54.00	-10.80	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 3	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



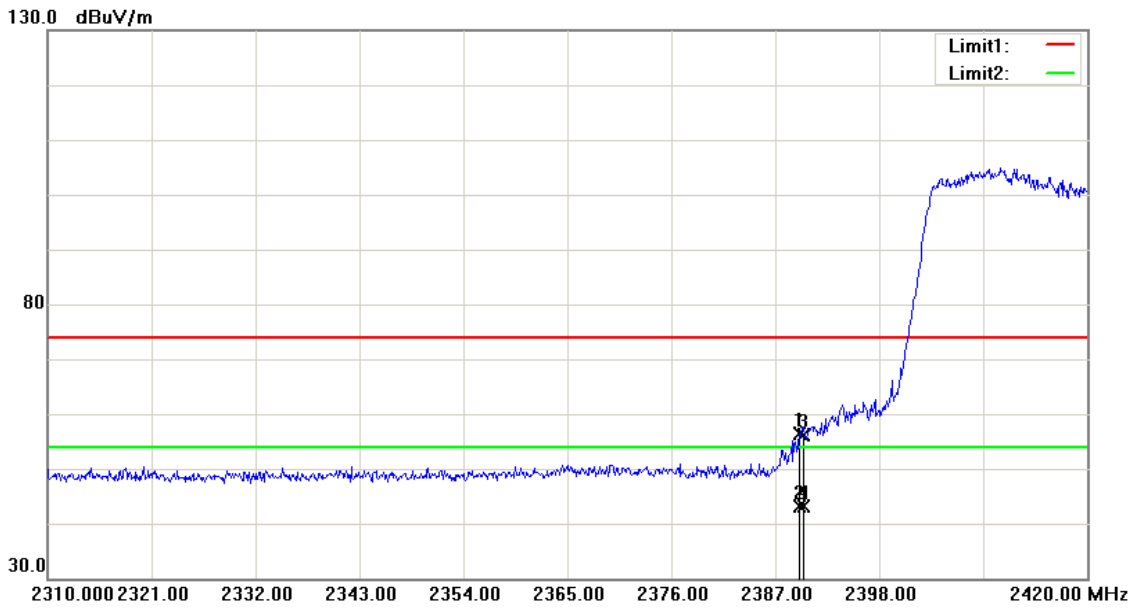
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	70.67	0.11	70.78	74.00	-3.22	peak
2	2483.500	52.80	0.11	52.91	54.00	-1.09	AVG
3	2483.760	72.71	0.11	72.82	74.00	-1.18	peak
4	2483.760	52.64	0.11	52.75	54.00	-1.25	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



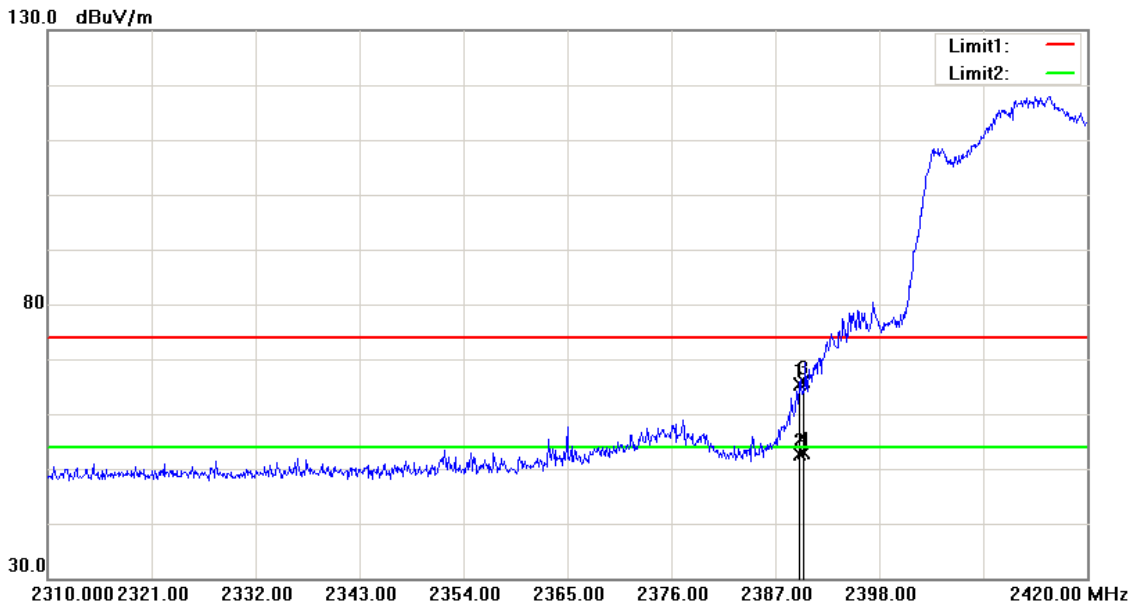
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.530	56.71	-0.26	56.45	74.00	-17.55	peak
2	2389.530	43.41	-0.26	43.15	54.00	-10.85	AVG
3	2390.000	56.44	-0.26	56.18	74.00	-17.82	peak
4	2390.000	43.46	-0.26	43.20	54.00	-10.80	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2412MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



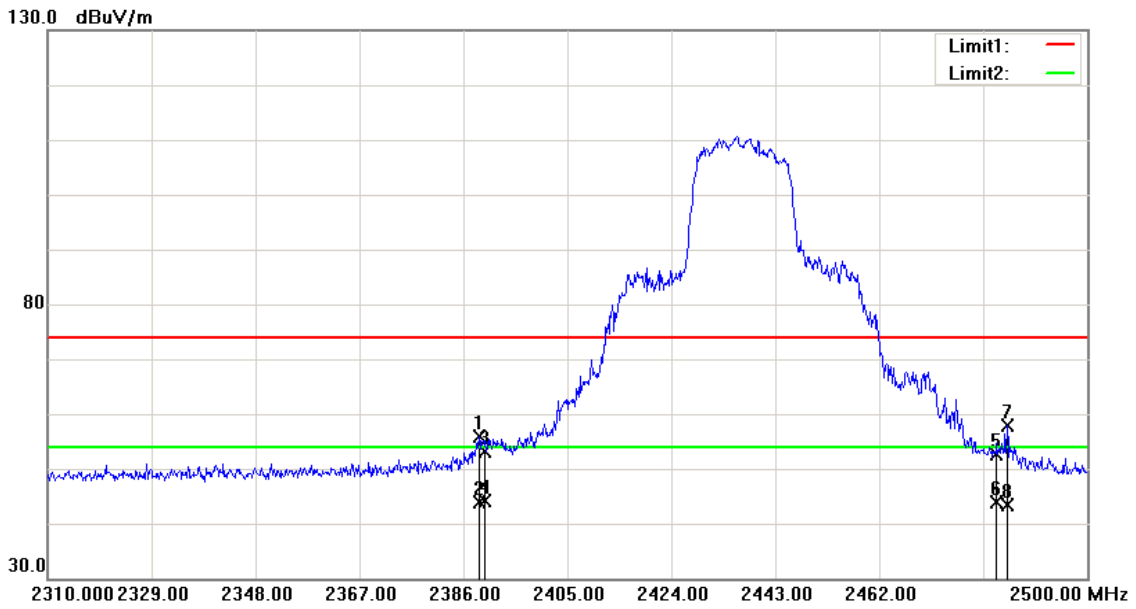
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.530	65.58	-0.26	65.32	74.00	-8.68	peak
2	2389.530	52.81	-0.26	52.55	54.00	-1.45	AVG
3	2390.000	66.11	-0.26	65.85	74.00	-8.15	peak
4	2390.000	53.19	-0.26	52.93	54.00	-1.07	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



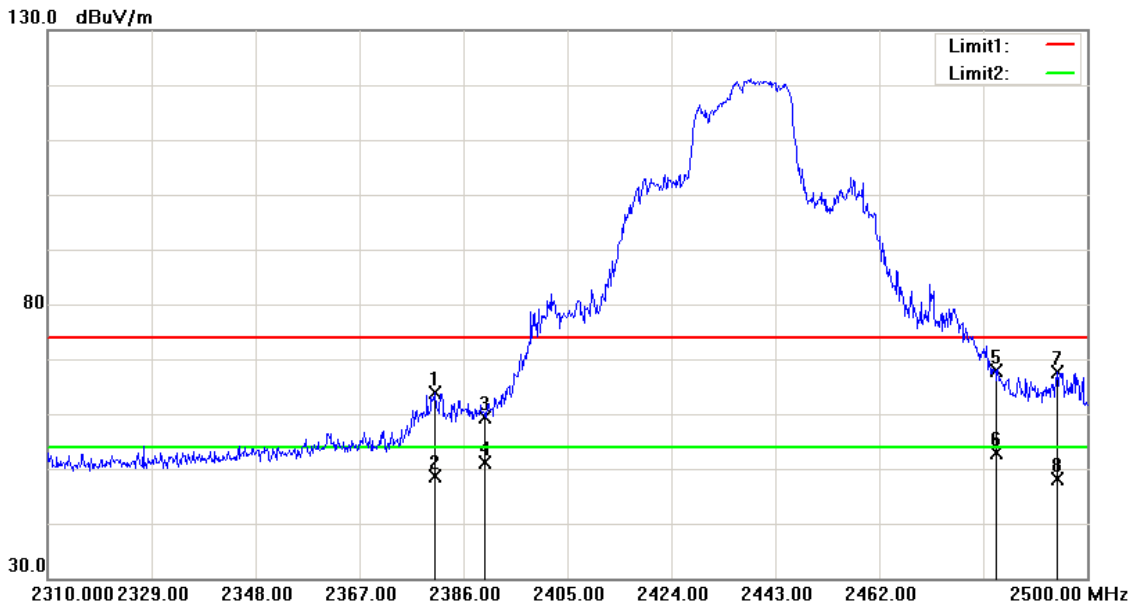
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.850	56.08	-0.26	55.82	74.00	-18.18	peak
2	2388.850	44.23	-0.26	43.97	54.00	-10.03	AVG
3	2390.000	53.41	-0.26	53.15	74.00	-20.85	peak
4	2390.000	44.36	-0.26	44.10	54.00	-9.90	AVG
5	2483.500	52.42	0.11	52.53	74.00	-21.47	peak
6	2483.500	43.65	0.11	43.76	54.00	-10.24	AVG
7	2485.370	57.71	0.12	57.83	74.00	-16.17	peak
8	2485.370	43.14	0.12	43.26	54.00	-10.74	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



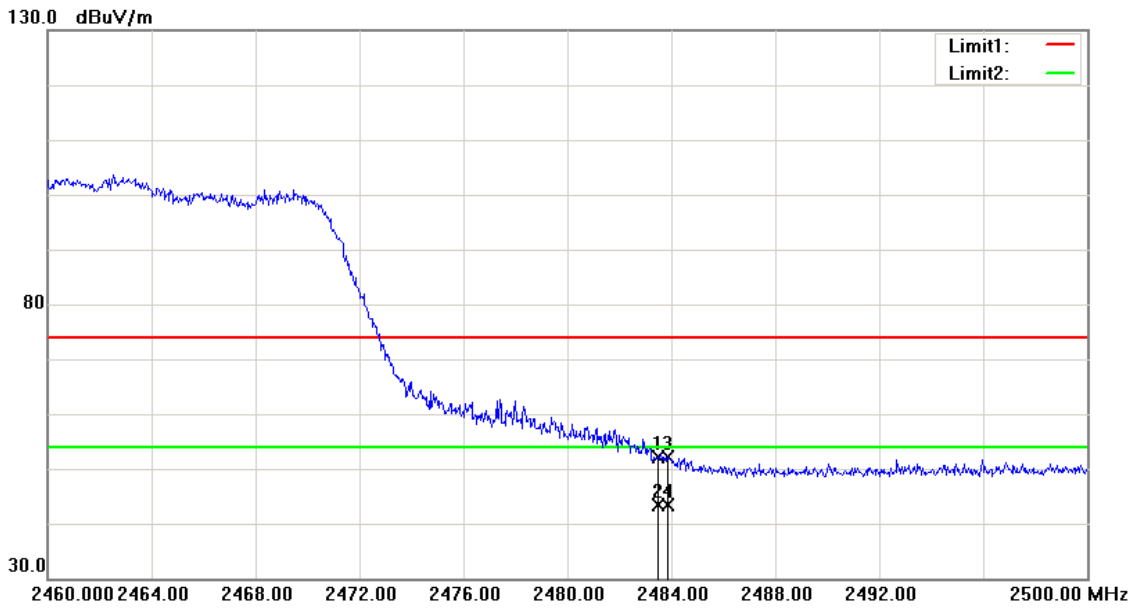
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2380.870	64.27	-0.29	63.98	74.00	-10.02	peak
2	2380.870	48.99	-0.29	48.70	54.00	-5.30	AVG
3	2390.000	59.74	-0.26	59.48	74.00	-14.52	peak
4	2390.000	51.45	-0.26	51.19	54.00	-2.81	AVG
5	2483.500	67.89	0.11	68.00	74.00	-6.00	peak
6	2483.500	52.87	0.11	52.98	54.00	-1.02	AVG
7	2494.490	67.45	0.15	67.60	74.00	-6.40	peak
8	2494.490	48.00	0.15	48.15	54.00	-5.85	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



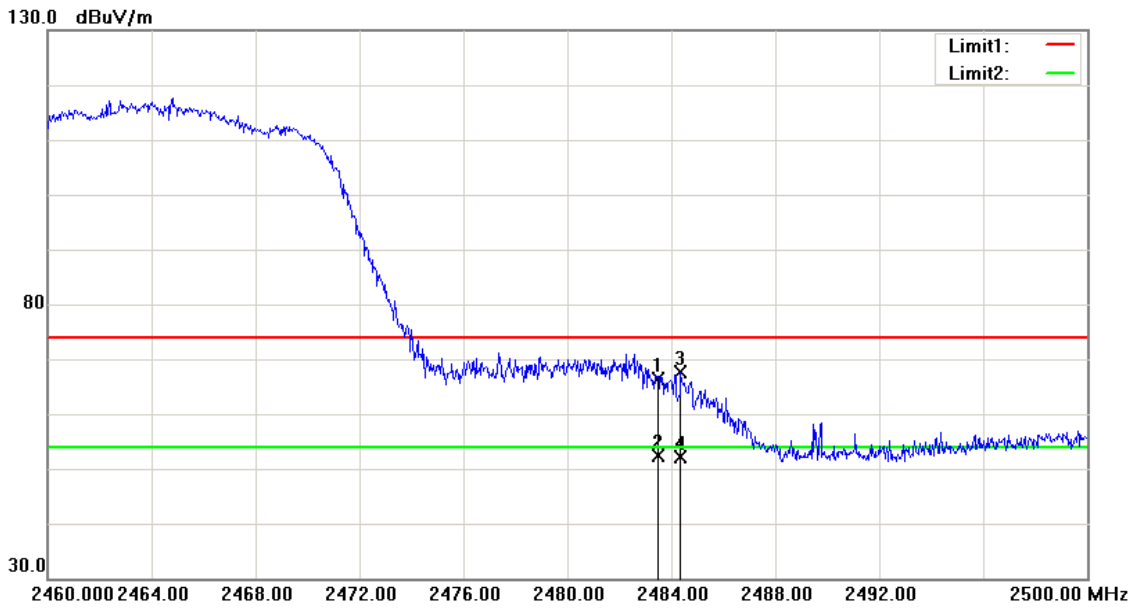
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	52.14	0.11	52.25	74.00	-21.75	peak
2	2483.500	43.32	0.11	43.43	54.00	-10.57	AVG
3	2483.880	52.14	0.11	52.25	74.00	-21.75	peak
4	2483.880	43.24	0.11	43.35	54.00	-10.65	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2462MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 4	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



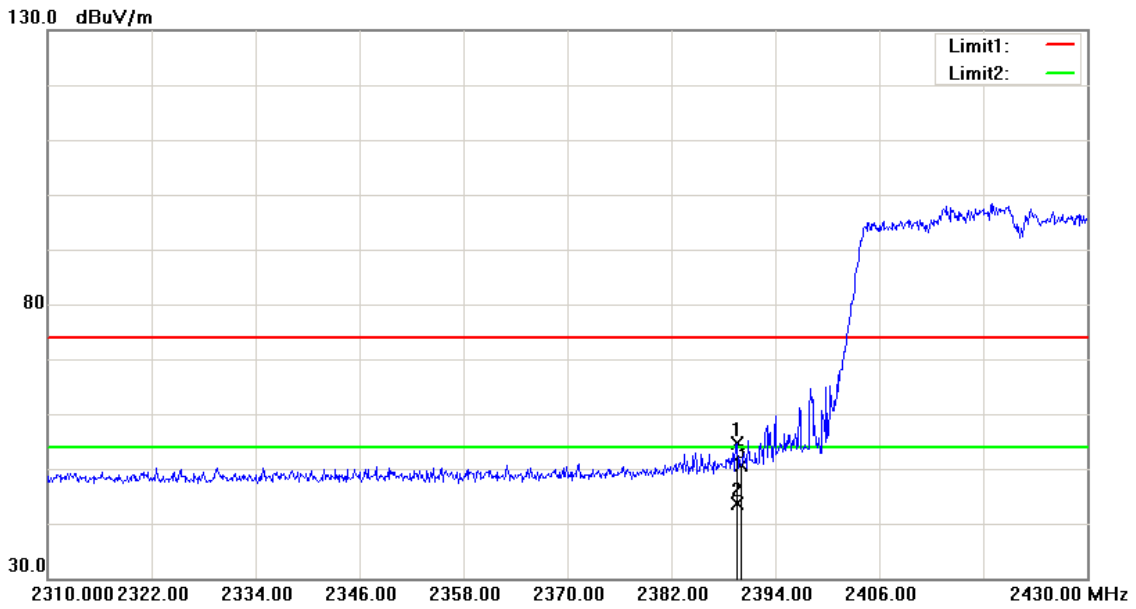
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	66.18	0.11	66.29	74.00	-7.71	peak
2	2483.500	52.29	0.11	52.40	54.00	-1.60	AVG
3	2484.360	67.48	0.12	67.60	74.00	-6.40	peak
4	2484.360	52.09	0.12	52.21	54.00	-1.79	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2422MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



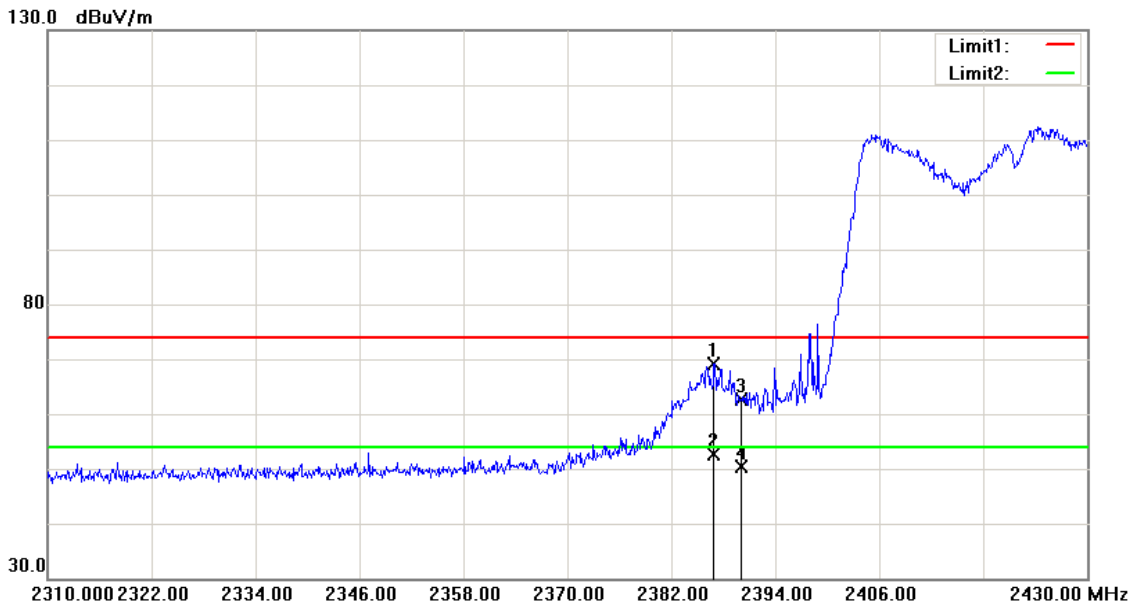
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.560	54.85	-0.26	54.59	74.00	-19.41	peak
2	2389.560	43.78	-0.26	43.52	54.00	-10.48	AVG
3	2390.000	50.93	-0.26	50.67	74.00	-23.33	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2422MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/29/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



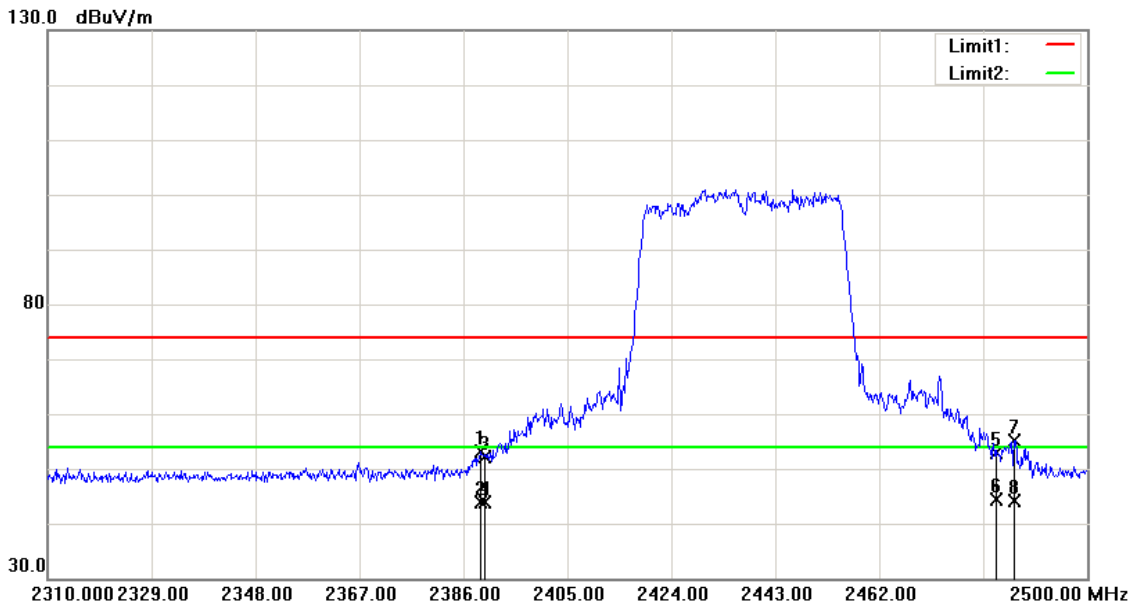
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.920	69.38	-0.27	69.11	74.00	-4.89	peak
2	2386.920	52.78	-0.27	52.51	54.00	-1.49	AVG
3	2390.000	62.90	-0.26	62.64	74.00	-11.36	peak
4	2390.000	50.56	-0.26	50.30	54.00	-3.70	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



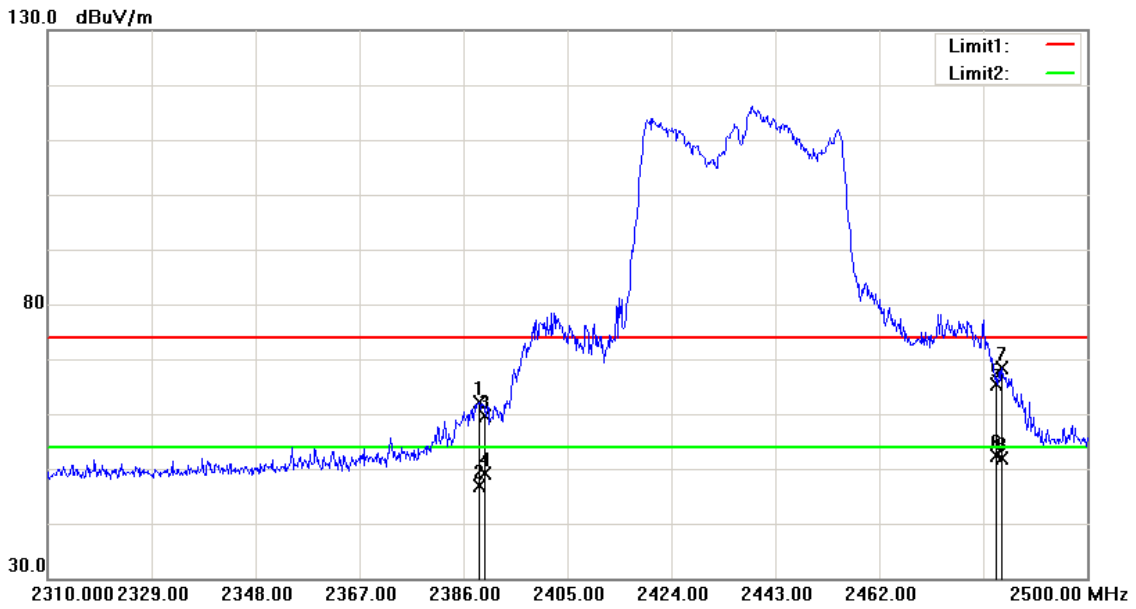
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.040	53.45	-0.26	53.19	74.00	-20.81	peak
2	2389.040	44.05	-0.26	43.79	54.00	-10.21	AVG
3	2390.000	52.36	-0.26	52.10	74.00	-21.90	peak
4	2390.000	44.12	-0.26	43.86	54.00	-10.14	AVG
5	2483.500	52.77	0.11	52.88	74.00	-21.12	peak
6	2483.500	44.15	0.11	44.26	54.00	-9.74	AVG
7	2486.700	54.99	0.12	55.11	74.00	-18.89	peak
8	2486.700	44.08	0.12	44.20	54.00	-9.80	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2437MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



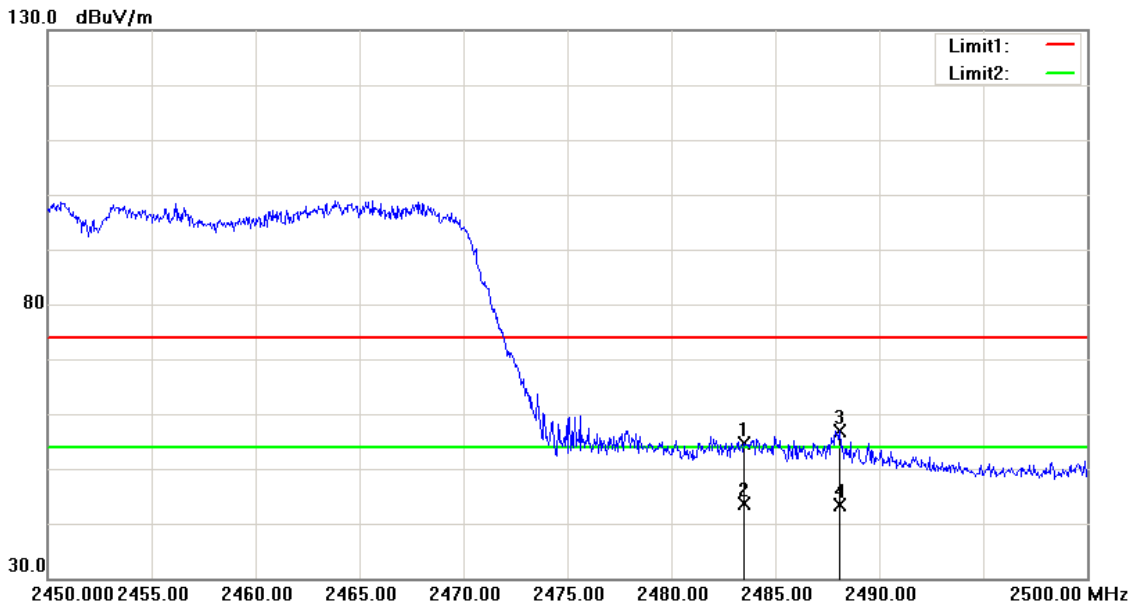
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.850	62.42	-0.26	62.16	74.00	-11.84	peak
2	2388.850	47.22	-0.26	46.96	54.00	-7.04	AVG
3	2390.000	59.95	-0.26	59.69	74.00	-14.31	peak
4	2390.000	49.48	-0.26	49.22	54.00	-4.78	AVG
5	2483.500	65.25	0.11	65.36	74.00	-8.64	peak
6	2483.500	52.39	0.11	52.50	54.00	-1.50	AVG
7	2484.420	68.27	0.12	68.39	74.00	-5.61	peak
8	2484.420	51.74	0.12	51.86	54.00	-2.14	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2452MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/30/2016
Ant.Polar.:	Horizontal		
Description:	Antenna:CM6060060P23602NB		



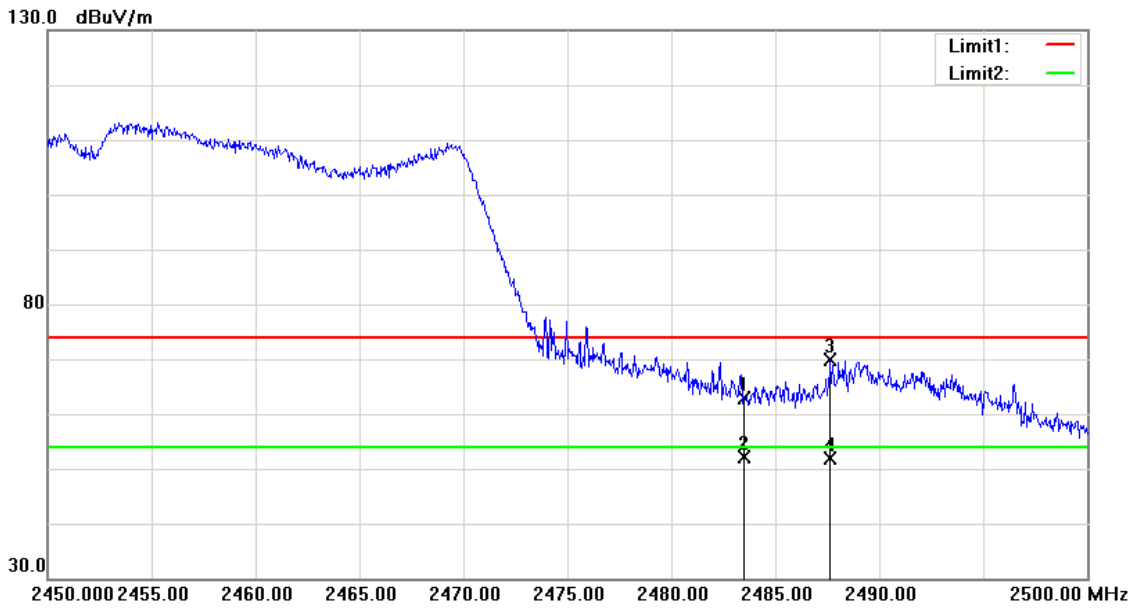
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	54.61	0.11	54.72	74.00	-19.28	peak
2	2483.500	43.46	0.11	43.57	54.00	-10.43	AVG
3	2488.100	56.81	0.13	56.94	74.00	-17.06	peak
4	2488.100	43.27	0.13	43.40	54.00	-10.60	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.247	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	2452MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Mode:	Mode 5	Date:	11/30/2016
Ant.Polar.:	Vertical		
Description:	Antenna:CM6060060P23602NB		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	62.68	0.11	62.79	74.00	-11.21	peak
2	2483.500	52.05	0.11	52.16	54.00	-1.84	AVG
3	2487.650	69.71	0.13	69.84	74.00	-4.16	peak
4	2487.650	51.65	0.13	51.78	54.00	-2.22	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

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

3. When the peak results are less than average limit, so not need to evaluate the average.

6 Maximum Conducted Output Power Measurement

■ Limit

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

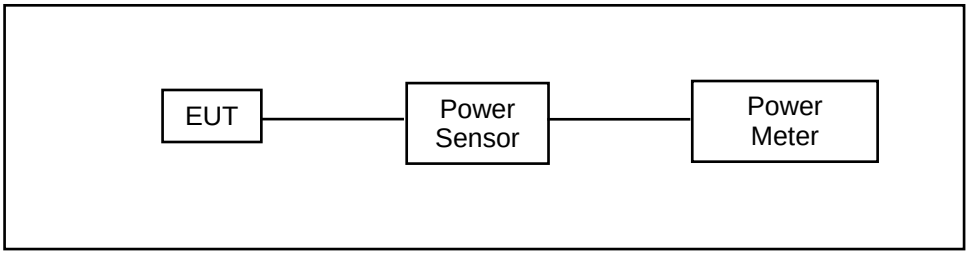
And According to 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

∗ CDD mode：Max. Gain = 6dBi

∗ MIMO mode：Directional Gain = 10*log{[10^(G1/20)+10^(G2/20)+…+10^(Gn/20)]^2/NANT} = 12.02 dBi > 6dBi

∗ MIMO mode power limit shall be reduced = 30 - 6.02 = 23.98 dBm.

■ Test Setup



■ Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Power Sensor	Anritsu	MA2411B	1126022	08/29/2016	1 year
Power Meter	Anritsu	ML2495A	1135009	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.

■ 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.

■ Test Result

Test Mode	Frequency (MHz)	Data Rate	Average Output Power										Limit (dBm)
			ANT-0		ANT-1		ANT-2		ANT-3		ANT-0+1+2+3		
			(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
Mode 2	2412	1M	16.69	0.047	16.96	0.050	18.11	0.065	16.88	0.049	**23.22**	**0.210**	< 30
	2437		16.38	0.043	17.01	0.050	17.74	0.059	17.00	0.050	23.08	0.203	< 30
	2462		16.05	0.040	16.38	0.043	17.07	0.051	16.22	0.042	22.47	0.177	< 30
	2437	2M	15.99	0.040	16.49	0.045	16.75	0.047	16.16	0.041	22.38	0.173	< 30
	2437	5.5M	16.19	0.042	16.95	0.050	17.48	0.056	16.81	0.048	22.90	0.195	< 30
	2437	11M	16.04	0.040	16.60	0.046	16.82	0.048	16.55	0.045	22.53	0.179	< 30
Mode 3	2412	6M	10.56	0.011	11.08	0.013	11.91	0.016	11.01	0.013	17.19	0.052	< 30
	2437		17.19	0.052	17.75	0.060	18.32	0.068	17.31	0.054	**23.69**	**0.234**	< 30
	2462		10.82	0.012	11.24	0.013	11.54	0.014	10.96	0.012	17.17	0.052	< 30
	2437	9M	16.49	0.045	17.47	0.056	18.22	0.066	16.98	0.050	23.36	0.217	< 30
	2437	12M	16.99	0.050	17.63	0.058	18.29	0.067	17.13	0.052	23.56	0.227	< 30
	2437	18M	17.13	0.052	17.75	0.060	18.32	0.068	17.31	0.054	23.67	0.233	< 30
	2437	24M	16.39	0.044	17.26	0.053	18.05	0.064	16.85	0.048	23.20	0.209	< 30
	2437	36M	16.25	0.042	17.10	0.051	17.87	0.061	16.81	0.048	23.07	0.203	< 30
	2437	48M	16.65	0.046	17.33	0.054	18.19	0.066	16.90	0.049	23.33	0.215	< 30
	2437	54M	16.22	0.042	17.07	0.051	17.82	0.061	16.79	0.048	23.03	0.201	< 30

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

Test Mode	Frequency (MHz)	Data Rate	Average Output Power										Limit (dBm)
			ANT-0		ANT-1		ANT-2		ANT-3		ANT-0+1+2+3		
			(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
Mode 4	2412	26M	9.70	0.009	10.19	0.010	11.12	0.013	10.04	0.010	16.32	0.043	< 23.98
	2437		10.98	0.013	11.44	0.014	12.30	0.017	11.18	0.013	**17.53**	**0.057**	< 23.98
	2462		9.82	0.010	10.18	0.010	10.56	0.011	9.91	0.010	16.15	0.041	< 23.98
	2437	57.6M	10.55	0.011	10.98	0.013	11.95	0.016	10.74	0.012	17.11	0.051	< 23.98
	2437	86.8M	10.35	0.011	10.73	0.012	11.86	0.015	10.54	0.011	16.93	0.049	< 23.98
	2437	115.6M	10.31	0.011	10.60	0.011	11.70	0.015	10.31	0.011	16.79	0.048	< 23.98
	2437	173.2M	10.81	0.012	11.29	0.013	12.21	0.017	11.01	0.013	17.38	0.055	< 23.98
	2437	231.2M	10.43	0.011	10.81	0.012	11.90	0.015	10.66	0.012	17.01	0.050	< 23.98
	2437	260M	10.71	0.012	11.22	0.013	12.16	0.016	10.92	0.012	17.31	0.054	< 23.98
	2437	288.8M	10.34	0.011	10.67	0.012	11.73	0.015	10.44	0.011	16.85	0.048	< 23.98
	2437	346.8M	10.64	0.012	11.20	0.013	12.07	0.016	10.85	0.012	17.25	0.053	< 23.98
Mode 5	2422	54M	7.07	0.005	7.54	0.006	8.28	0.007	7.45	0.006	13.63	0.023	< 23.98
	2437		10.58	0.011	10.89	0.012	11.31	0.014	10.53	0.011	**16.86**	**0.049**	< 23.98
	2452		7.56	0.006	7.82	0.006	8.31	0.007	7.39	0.005	13.80	0.024	< 23.98
	2437	120M	9.75	0.009	10.73	0.012	11.05	0.013	10.38	0.011	16.52	0.045	< 23.98
	2437	180M	9.56	0.009	9.94	0.010	10.62	0.012	9.59	0.009	15.97	0.040	< 23.98
	2437	240M	9.69	0.009	10.53	0.011	10.96	0.012	10.04	0.010	16.35	0.043	< 23.98
	2437	360M	9.66	0.009	10.20	0.010	10.79	0.012	9.82	0.010	16.16	0.041	< 23.98
	2437	480M	10.40	0.011	10.85	0.012	11.28	0.013	10.49	0.011	16.79	0.048	< 23.98
	2437	540M	9.66	0.009	10.11	0.010	10.71	0.012	9.78	0.010	16.11	0.041	< 23.98
	2437	600M	9.97	0.010	10.84	0.012	11.20	0.013	10.39	0.011	16.65	0.046	< 23.98
	2437	720M	9.67	0.009	10.45	0.011	10.91	0.012	9.84	0.010	16.27	0.042	< 23.98
	2437	800M	9.58	0.009	10.00	0.010	10.69	0.012	9.60	0.009	16.01	0.040	< 23.98

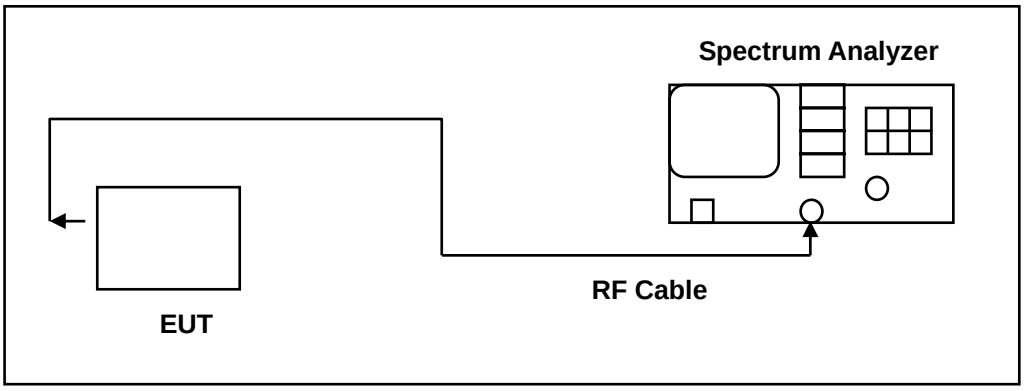
Note: The relevant measured result has the offset with cable loss already.

7 6dB RF Bandwidth Measurement

■ 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.

■ Test Setup



■ 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.

■ 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)

■ **Test Result**

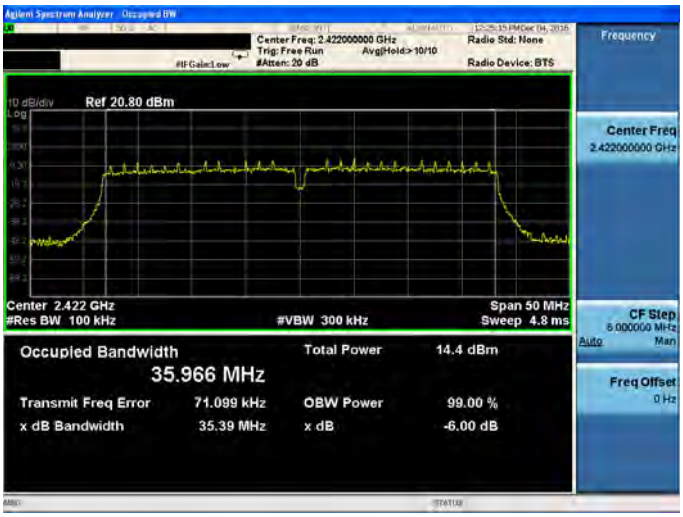
Test Mode	Frequency (MHz)	6dB RF Bandwidth (kHz)				Limit (kHz)
		ANT-0	ANT-1	ANT-2	ANT-3	
Mode 2	2412	8581	8089	8116	8096	> 500
	2437	9076	8111	10080	8582	> 500
	2462	8108	8083	9065	8116	> 500
Mode 3	2412	16310	15970	16330	16350	> 500
	2437	15450	16010	15160	15940	> 500
	2462	16060	16310	15740	16350	> 500
Mode 4	2412	16680	16450	16320	17550	> 500
	2437	16550	16710	15740	17570	> 500
	2462	17170	16910	15750	17350	> 500
Mode 5	2422	35390	35760	35780	35230	> 500
	2437	35220	35120	35750	35220	> 500
	2452	35470	35230	35770	35750	> 500

■ Test Graphs

Test Mode:	Mode 2: IEEE 802.11b link mode
Antenna:	ANT-0
2412 MHz	
2437 MHz	
2462 MHz	

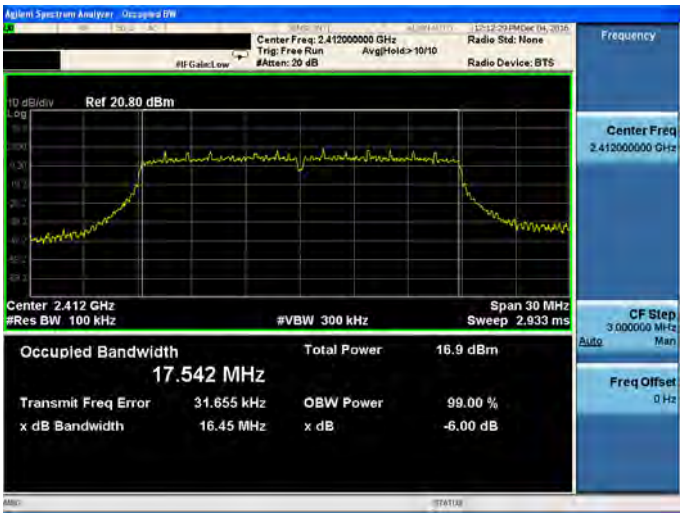
Test Mode:	Mode 3: IEEE 802.11g link mode
Antenna:	ANT-0
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode
Antenna:	ANT-0
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode
Antenna:	ANT-0
2422 MHz	
2437 MHz	
2452 MHz	

Test Mode:	Mode 2: IEEE 802.11b link mode
Antenna:	ANT-1
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 3: IEEE 802.11g link mode
Antenna:	ANT-1
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode
Antenna:	ANT-1
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode
Antenna:	ANT-1
2422 MHz	
2437 MHz	
2452 MHz	

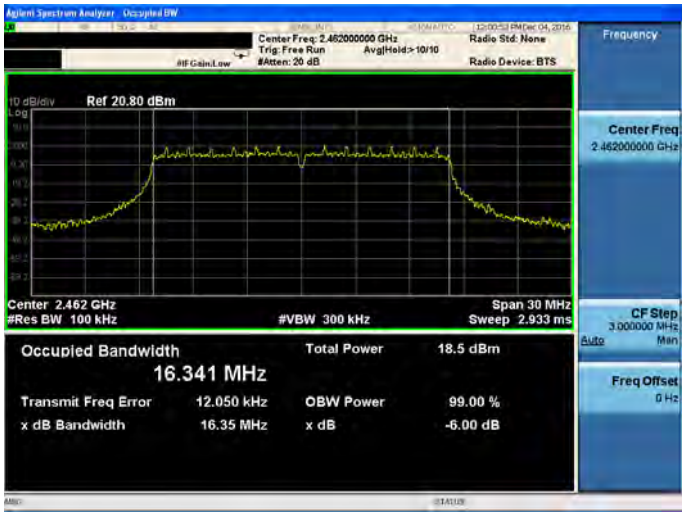
Test Mode:	Mode 2: IEEE 802.11b link mode
Antenna:	ANT-2
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 3: IEEE 802.11g link mode
Antenna:	ANT-2
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode
Antenna:	ANT-2
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode
Antenna:	ANT-2
2422 MHz	
2437 MHz	
2452 MHz	

Test Mode:	Mode 2: IEEE 802.11b link mode
Antenna:	ANT-3
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 3: IEEE 802.11g link mode
Antenna:	ANT-3
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode
Antenna:	ANT-3
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode
Antenna:	ANT-3
2422 MHz	
2437 MHz	
2452 MHz	

8 Maximum Power Density Measurement

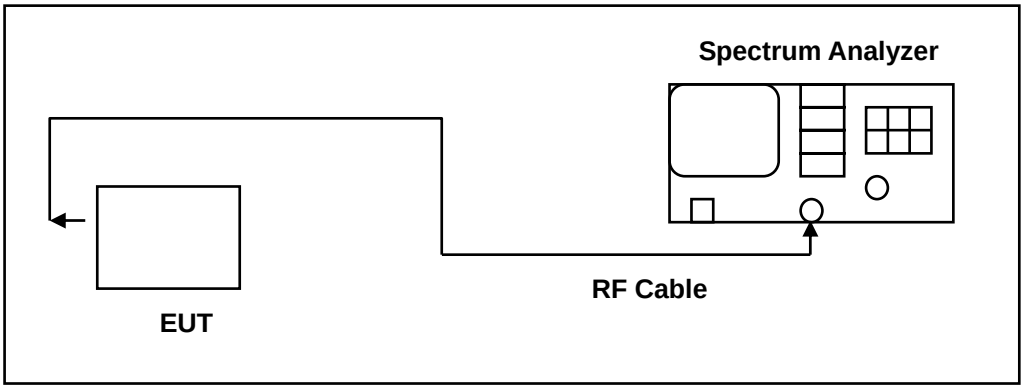
■ Limit

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.

∗ MIMO/CDD mode：Directional Gain = 10*log{[10^(G1/20)+10^(G2/20)+…+10^(Gn/20)]^2/NANT}
= 12.02 dBi > 6dBi

∗ MIMO/CDD mode Maximum Power Density limit shall be reduced = 8 - 6.02 = 1.98 dBm/3KHz

■ Test Setup



■ 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.

■ Test Procedure

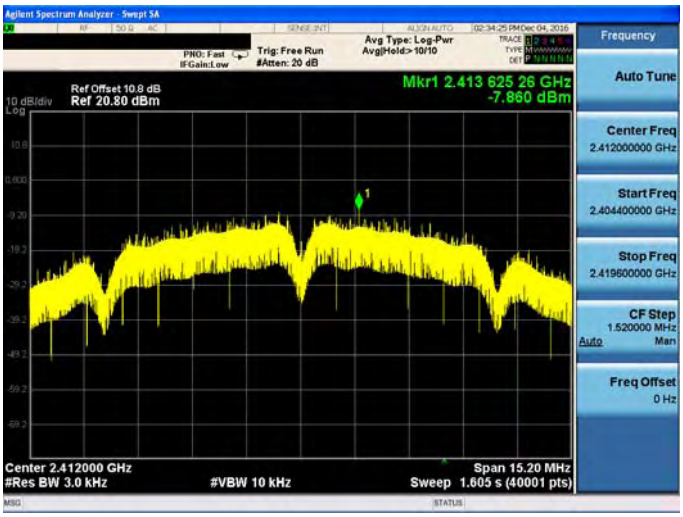
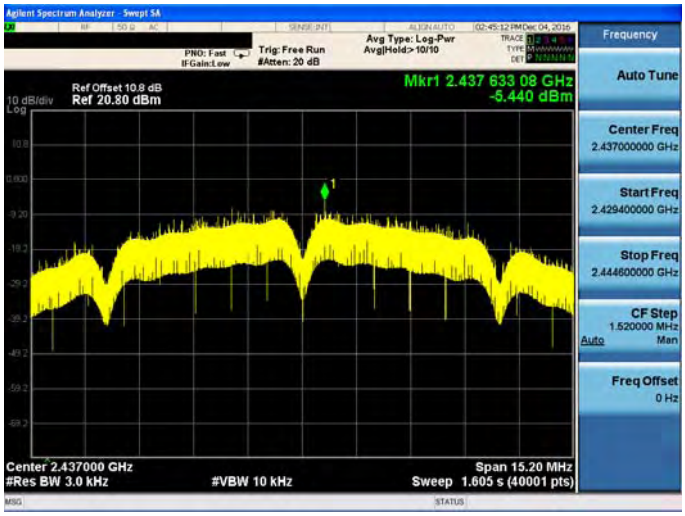
The EUT tested to DTS test procedure of KDB558074D01 for compliance to FCC 47CFR 15.247 requirements.

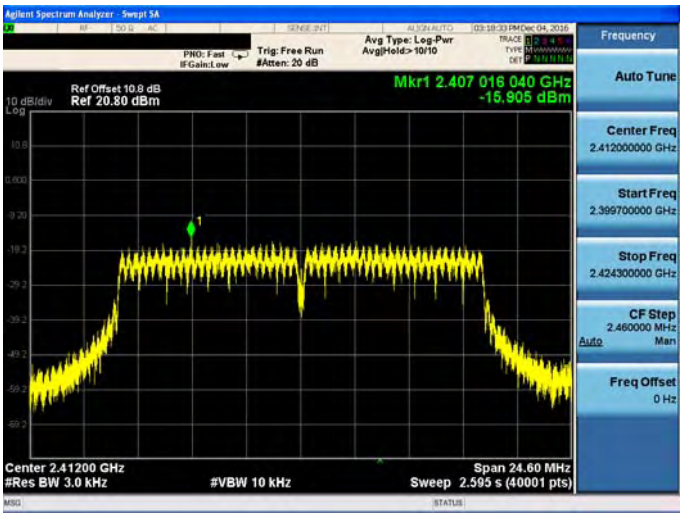
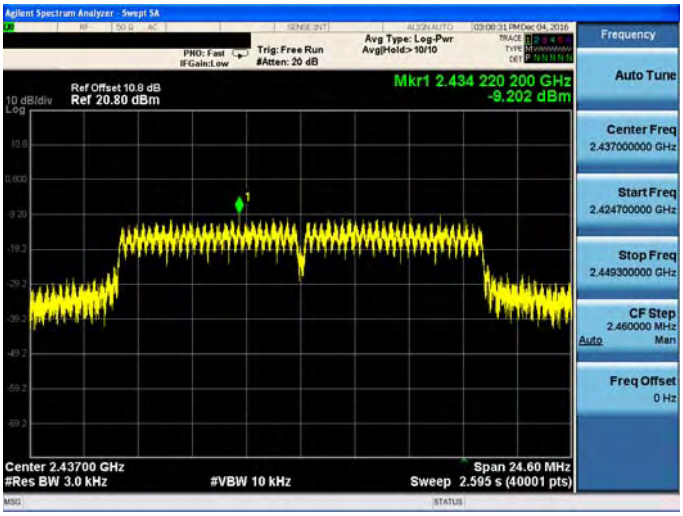
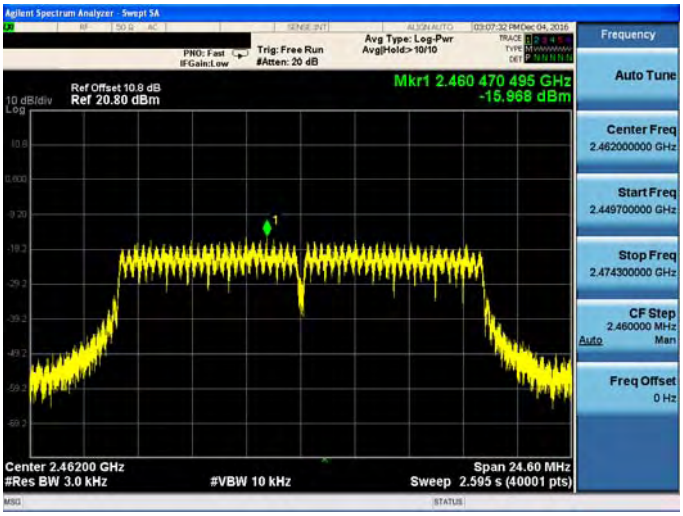
1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
4. Set the VBW ≥ 3 × RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the 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.

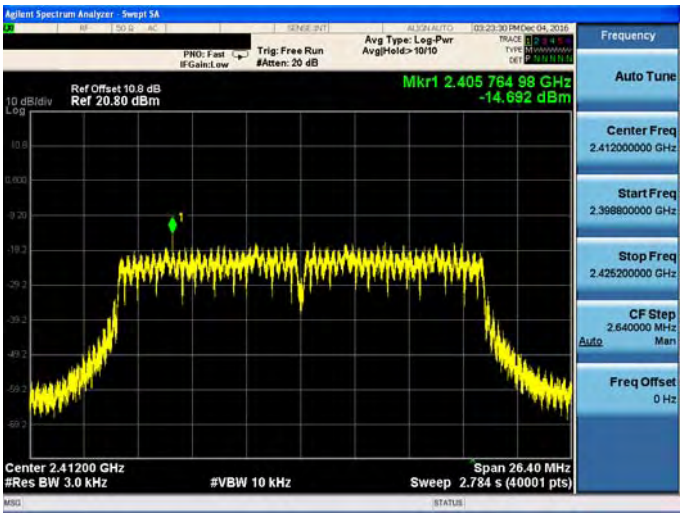
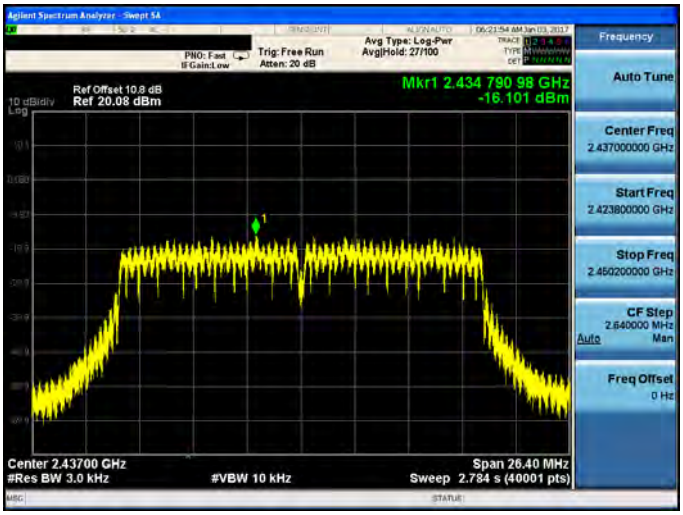
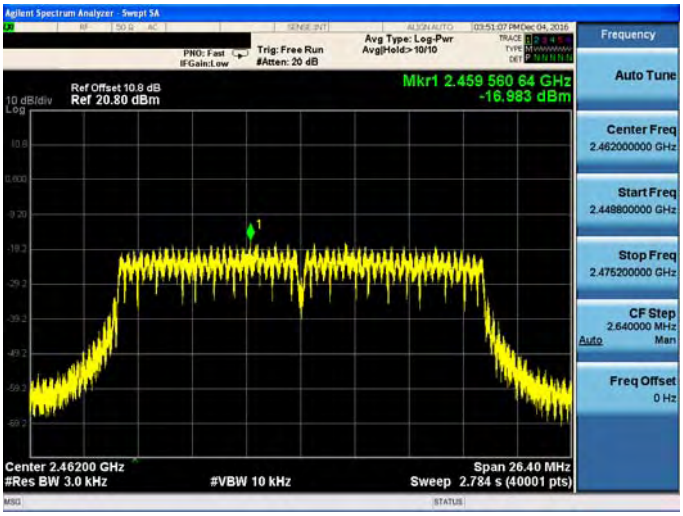
■ **Test Result**

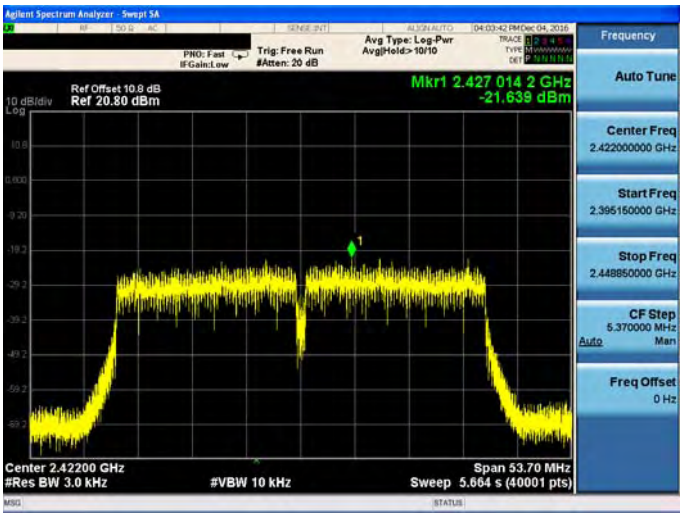
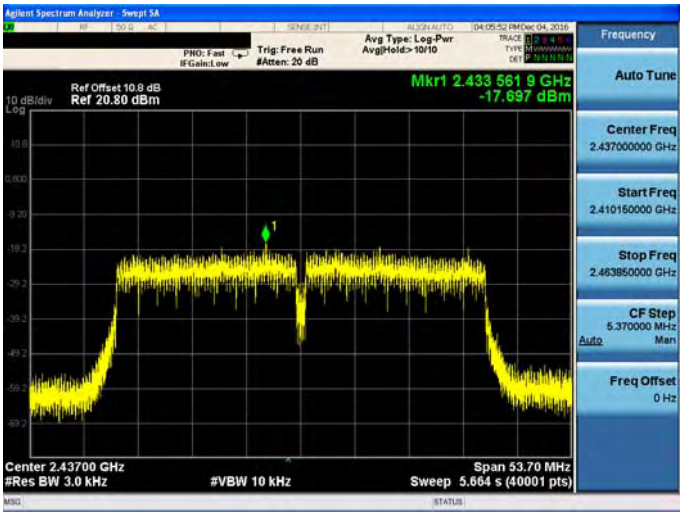
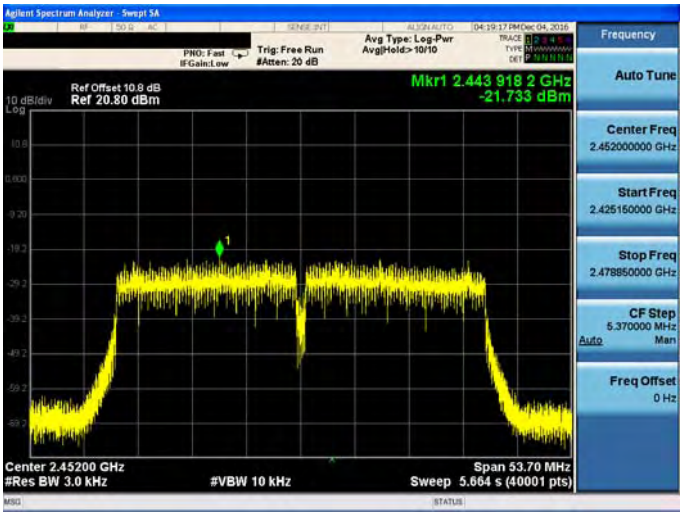
Test Mode	Frequency (MHz)	Maximum Power Density (dBm/3KHz)					Limit (dBm/3KHz)
		ANT-0	ANT-1	ANT-2	ANT-3	ANT-0+1+2+3	
Mode 2	2412	-7.860	-7.345	-7.056	-5.651	-0.877	< 1.98
	2437	-5.440	-5.872	-4.358	-5.740	0.711	< 1.98
	2462	-8.917	-8.073	-7.608	-8.620	-2.255	< 1.98
Mode 3	2412	-15.905	-15.253	-15.012	-16.297	-9.566	< 1.98
	2437	-9.202	-9.202	-7.359	-8.598	-2.502	< 1.98
	2462	-15.968	-14.650	-14.248	-14.788	-8.848	< 1.98
Mode 4	2412	-14.692	-14.892	-15.736	-17.093	-9.485	< 1.98
	2437	-16.101	-15.668	-15.269	-15.870	-9.696	< 1.98
	2462	-16.983	-16.520	-16.094	-16.907	-10.591	< 1.98
Mode 5	2422	-21.639	-21.404	-20.350	-21.317	-15.128	< 1.98
	2437	-17.697	-17.724	-17.182	-18.457	-11.721	< 1.98
	2452	-21.733	-21.100	-20.712	-21.041	-15.110	< 1.98

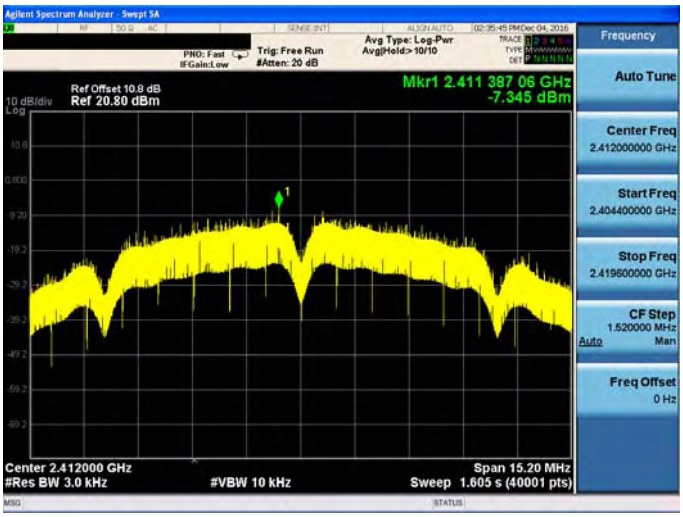
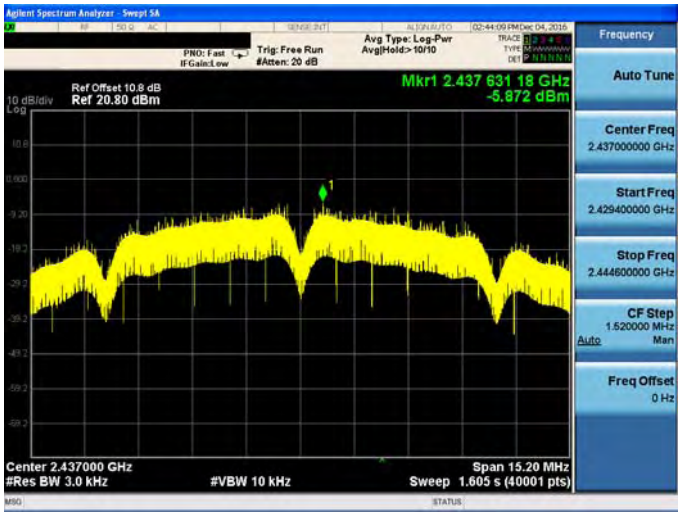
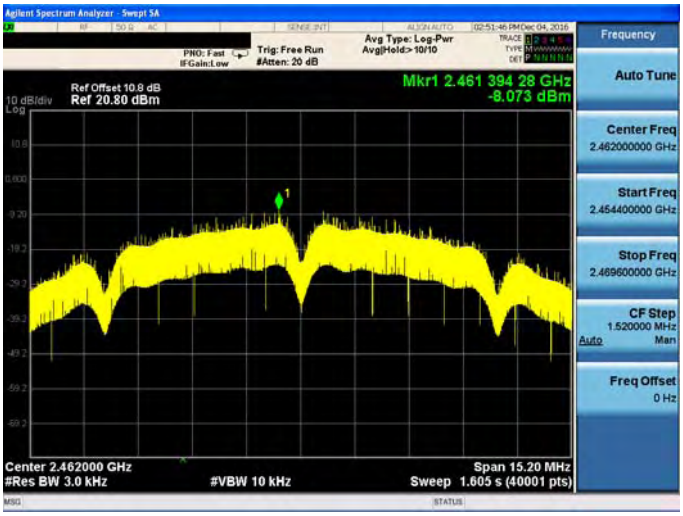
■ Test Graphs

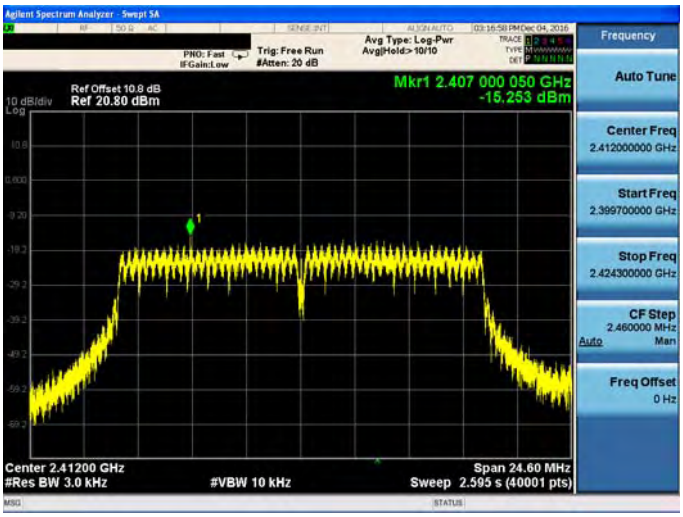
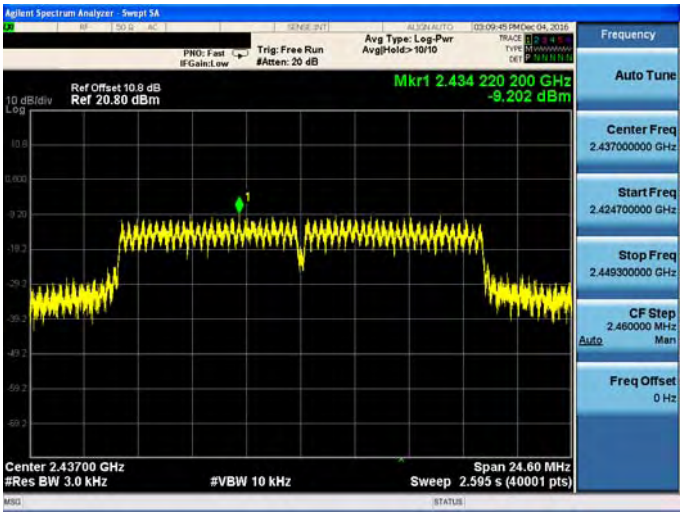
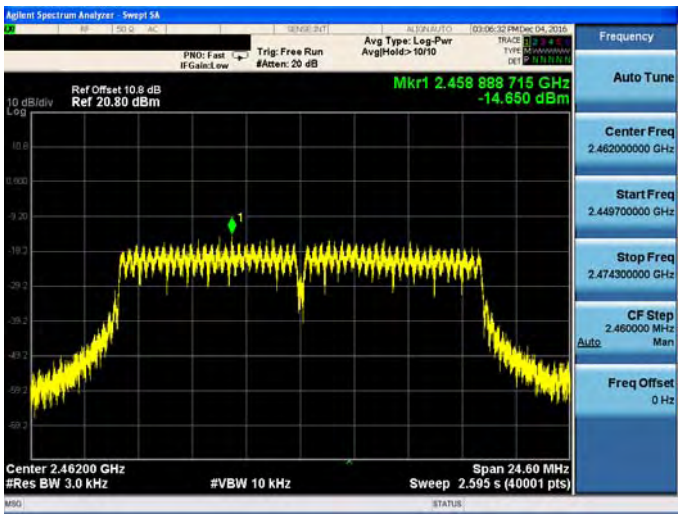
Test Mode:	Mode 2: IEEE 802.11b link mode
Antenna:	ANT-0
2412 MHz	
2437 MHz	
2462 MHz	

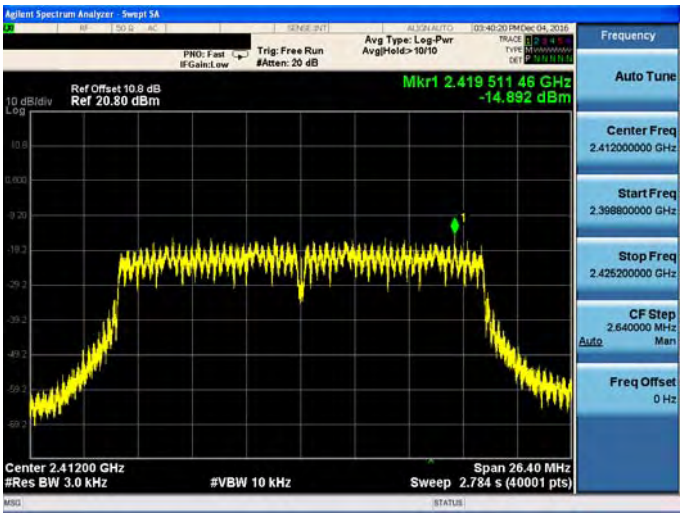
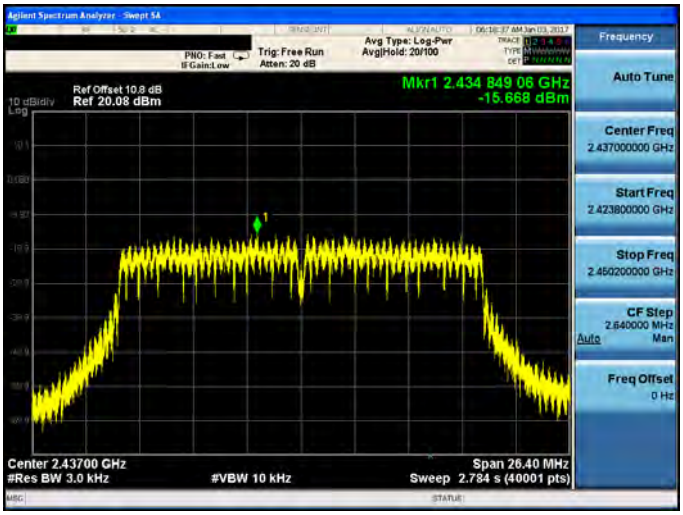
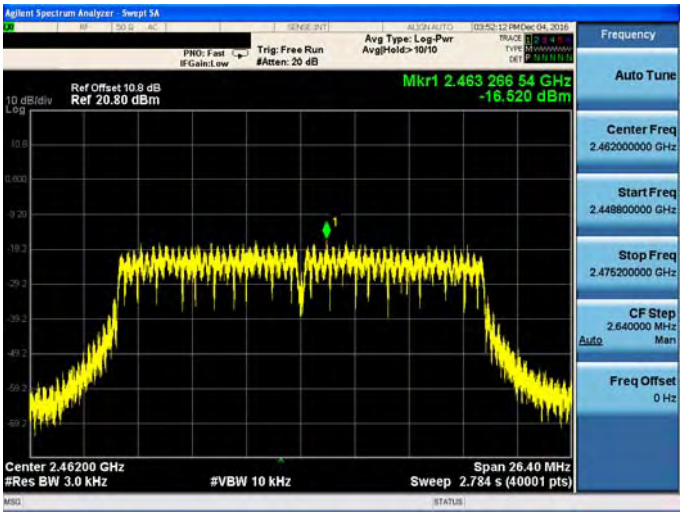
Test Mode:	Mode 3: IEEE 802.11g link mode
Antenna:	ANT-0
2412 MHz	
2437 MHz	
2462 MHz	

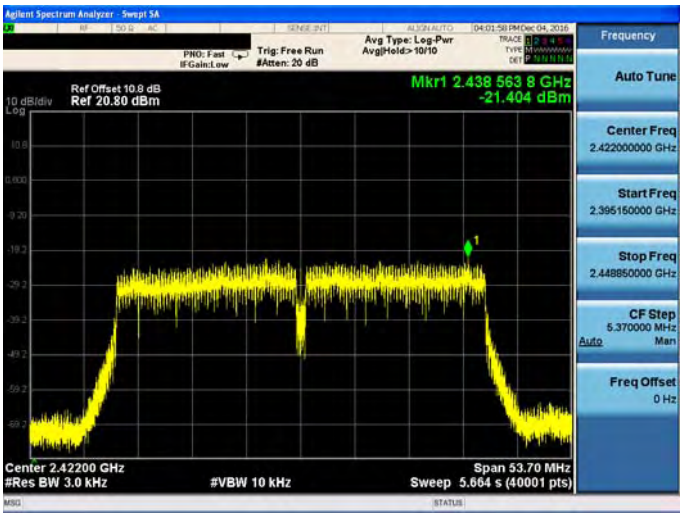
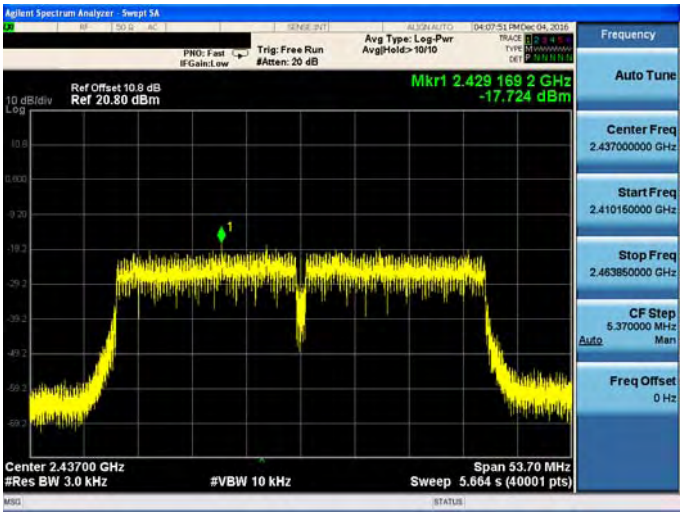
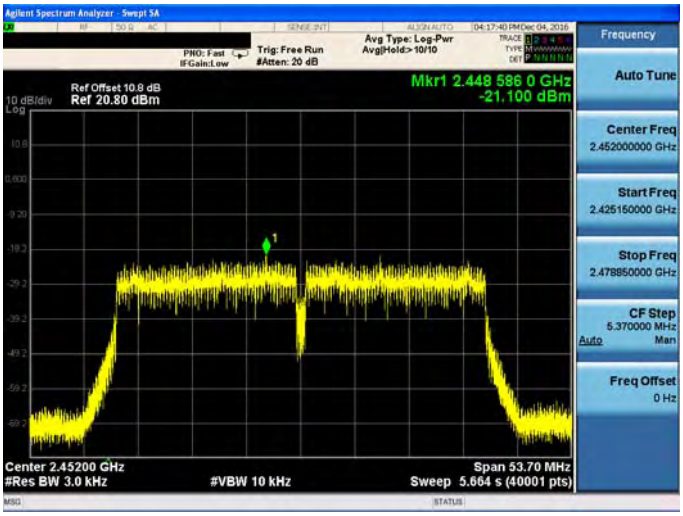
Test Mode:	Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode
Antenna:	ANT-0
2412 MHz	
2437 MHz	
2462 MHz	

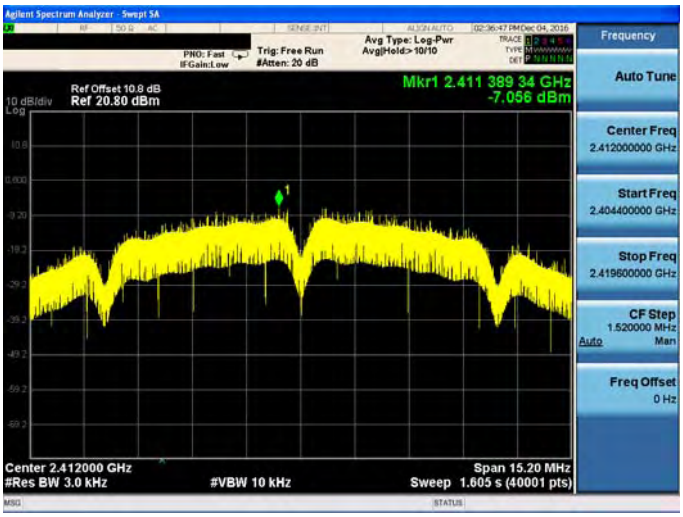
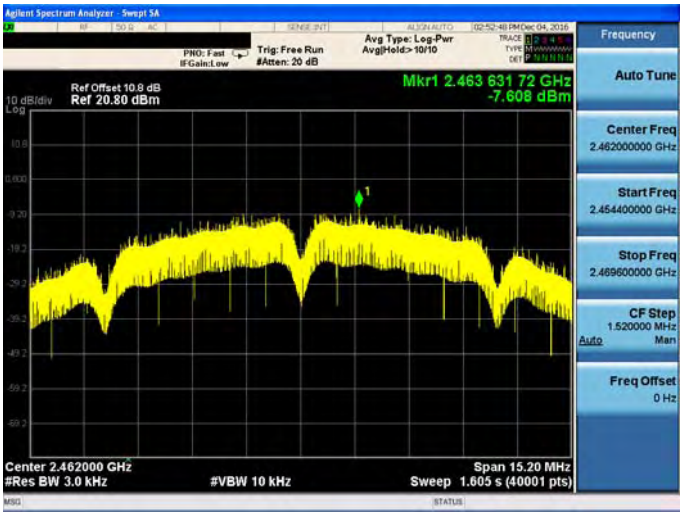
Test Mode:	Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode
Antenna:	ANT-0
2422 MHz	
2437 MHz	
2452 MHz	

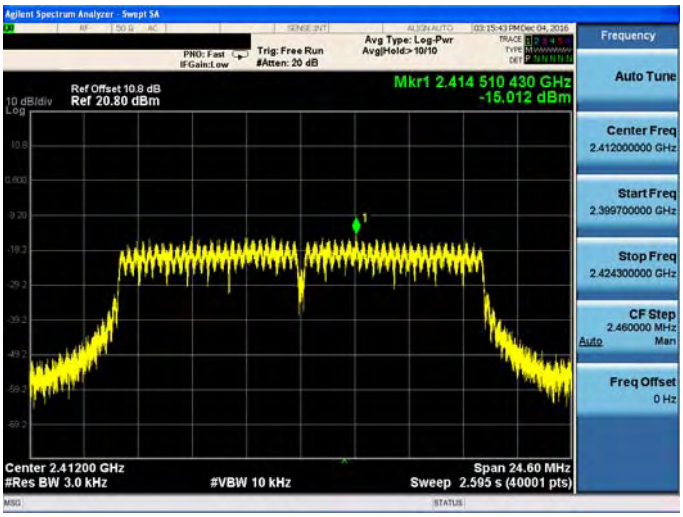
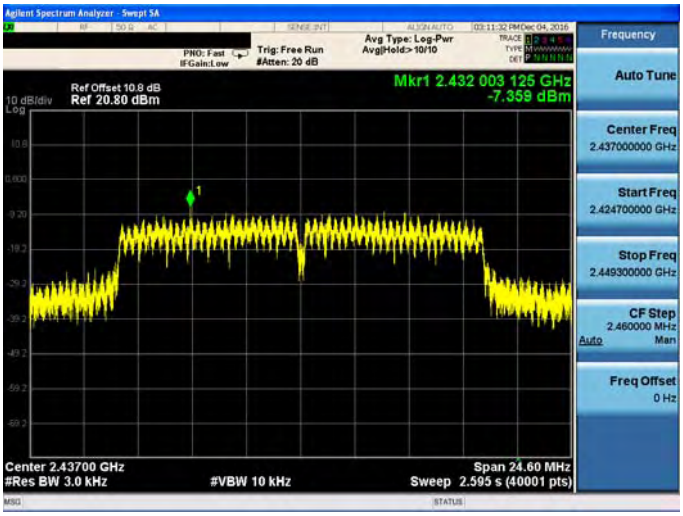
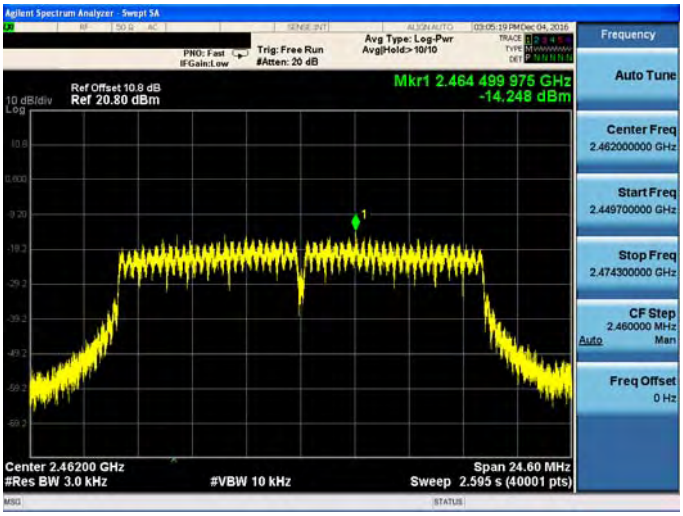
Test Mode:	Mode 2: IEEE 802.11b link mode
Antenna:	ANT-1
2412 MHz	
2437 MHz	
2462 MHz	

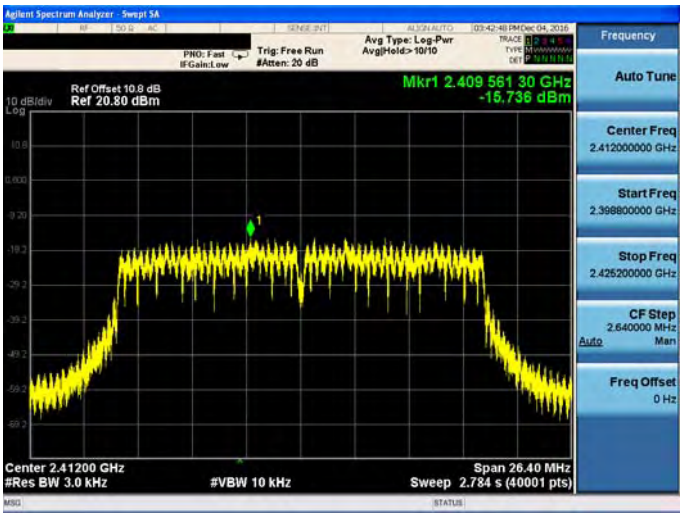
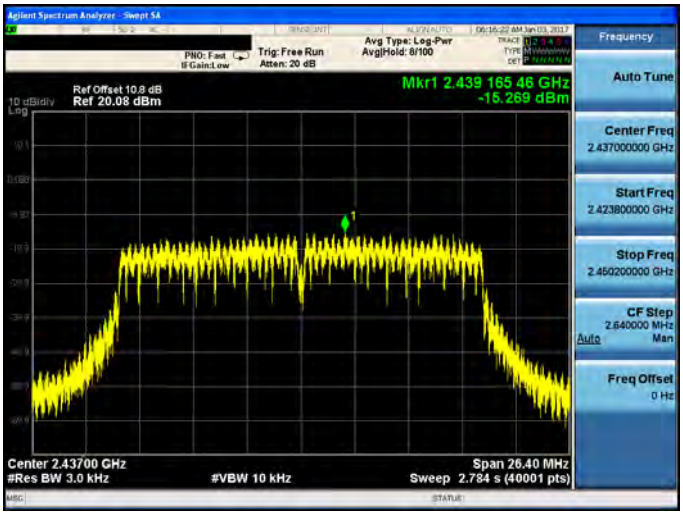
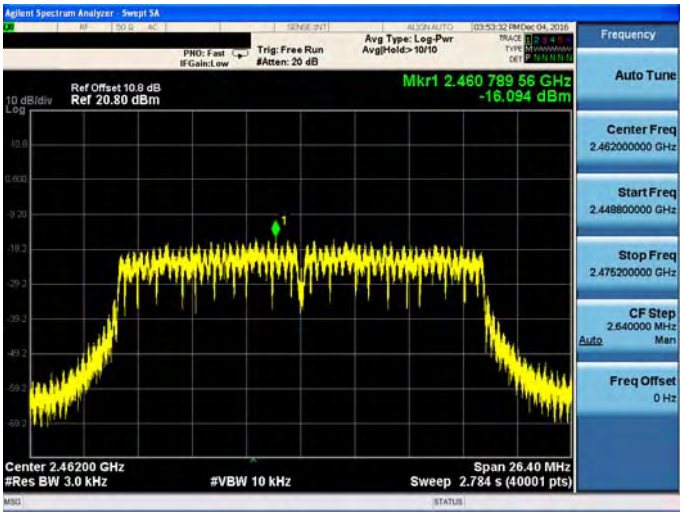
Test Mode:	Mode 3: IEEE 802.11g link mode
Antenna:	ANT-1
2412 MHz	
2437 MHz	
2462 MHz	

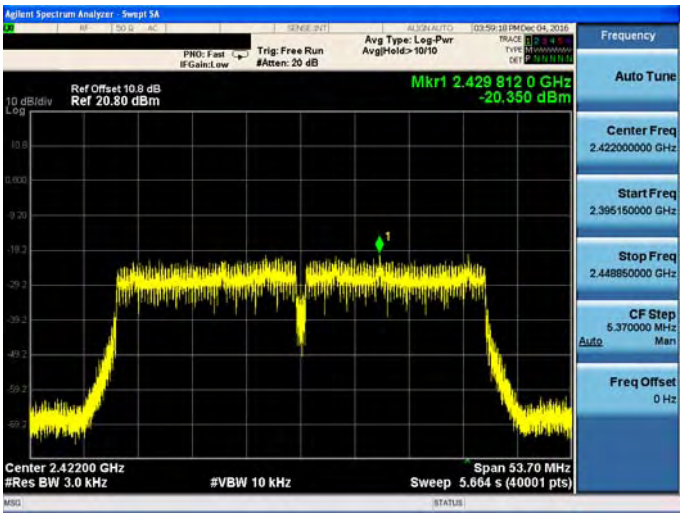
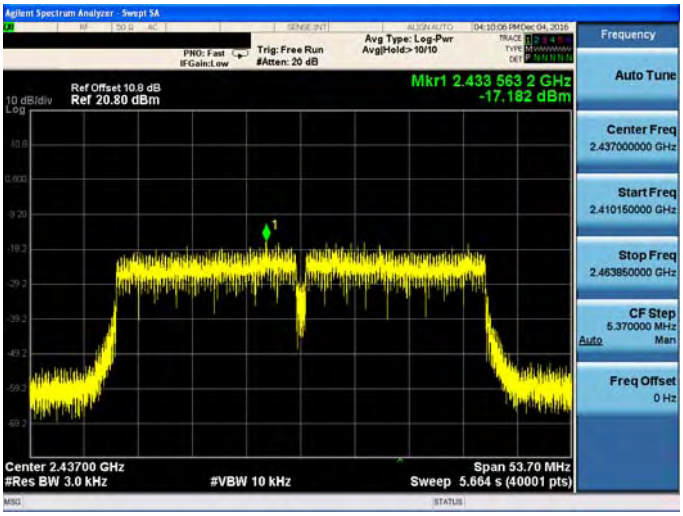
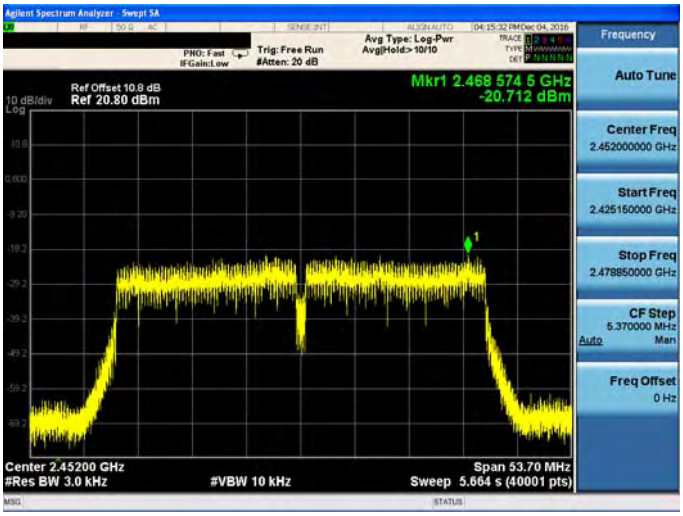
Test Mode:	Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode
Antenna:	ANT-1
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode
Antenna:	ANT-1
2422 MHz	
2437 MHz	
2452 MHz	

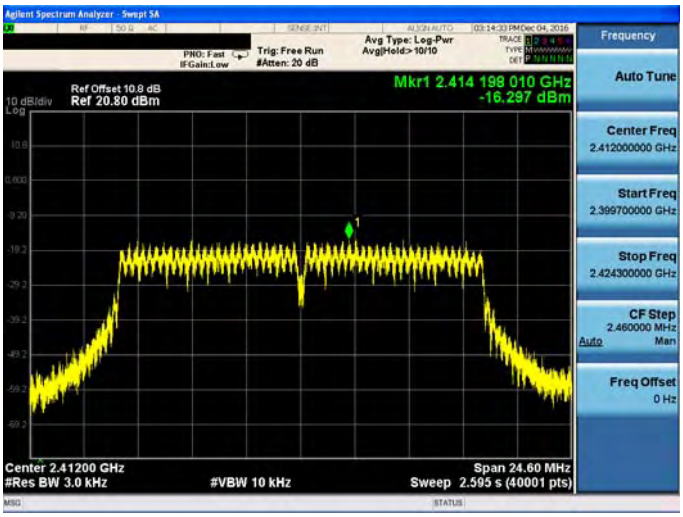
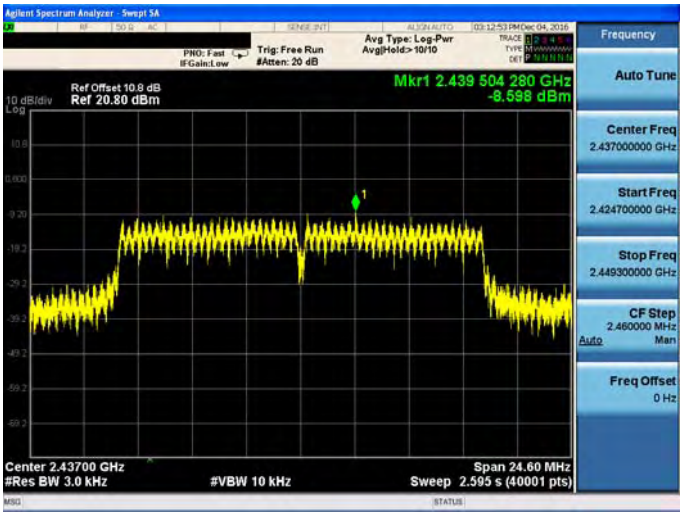
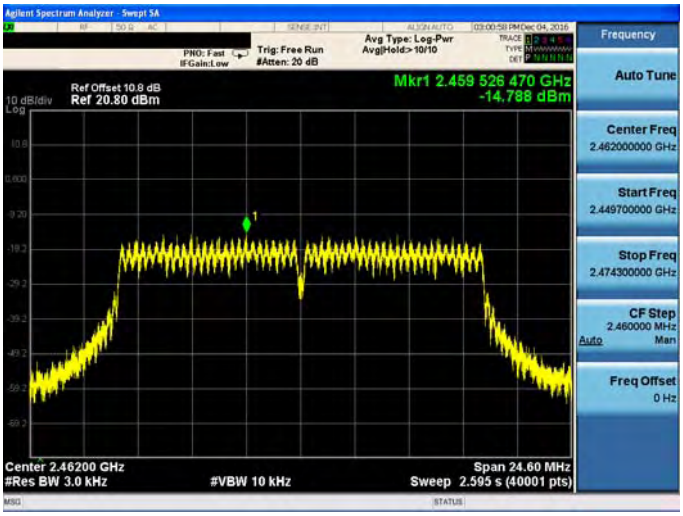
Test Mode:	Mode 2: IEEE 802.11b link mode
Antenna:	ANT-2
2412 MHz	
2437 MHz	
2462 MHz	

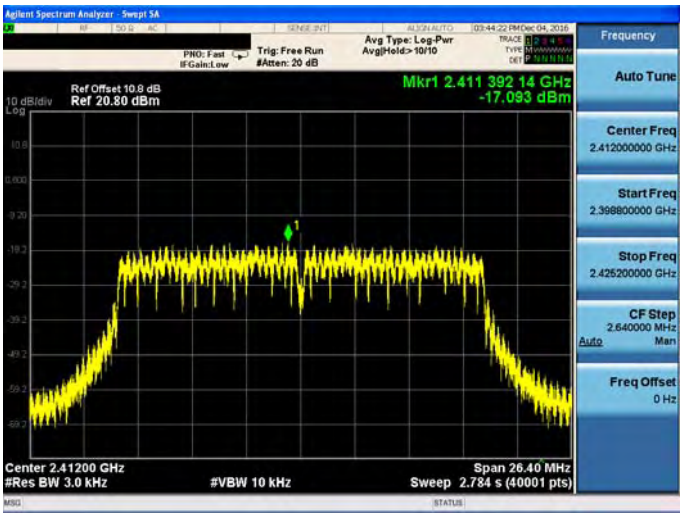
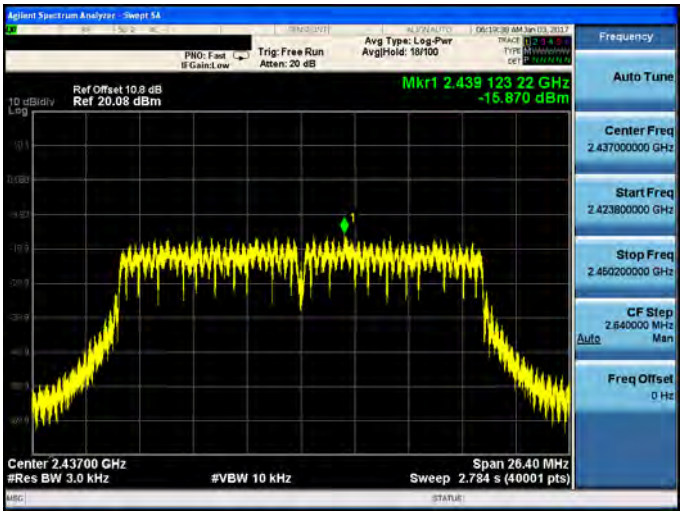
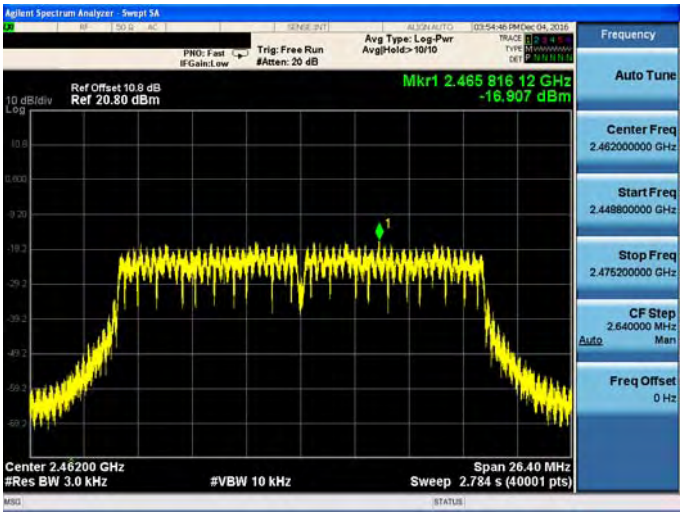
Test Mode:	Mode 3: IEEE 802.11g link mode
Antenna:	ANT-2
2412 MHz	
2437 MHz	
2462 MHz	

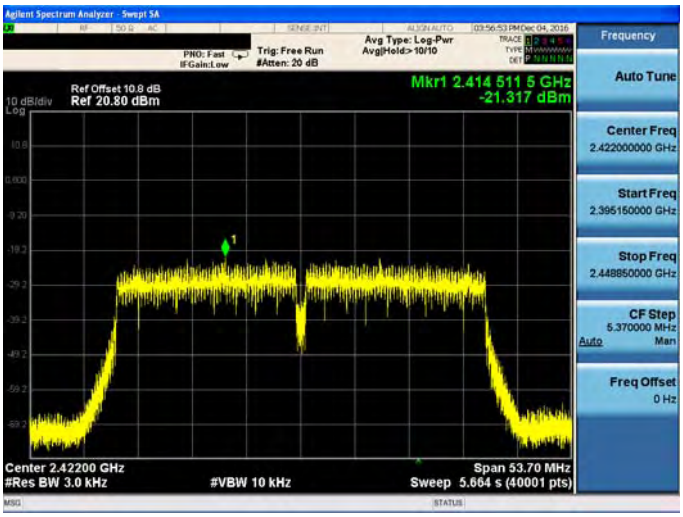
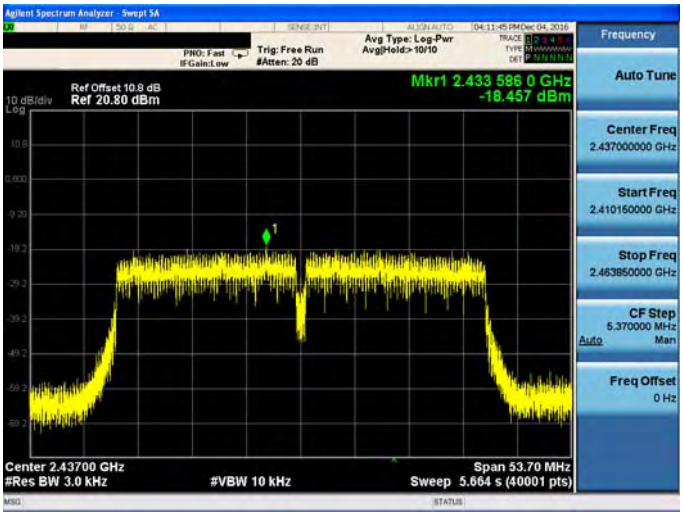
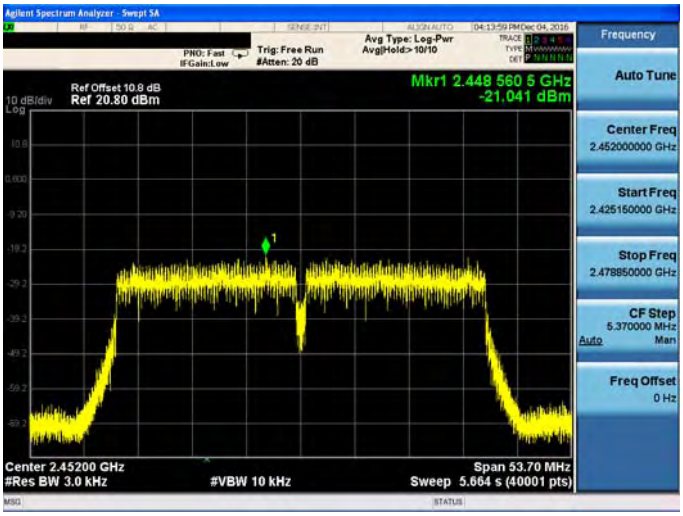
Test Mode:	Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode
Antenna:	ANT-2
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode
Antenna:	ANT-2
2422 MHz	
2437 MHz	
2452 MHz	

Test Mode:	Mode 2: IEEE 802.11b link mode
Antenna:	ANT-3
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 3: IEEE 802.11g link mode
Antenna:	ANT-3
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 4: IEEE 802.11n 2.4GHz 20MHz link mode
Antenna:	ANT-3
2412 MHz	
2437 MHz	
2462 MHz	

Test Mode:	Mode 5: IEEE 802.11n 2.4GHz 40MHz link mode
Antenna:	ANT-3
2422 MHz	
2437 MHz	
2452 MHz