



Test Report

FCC Part15 Subpart C & RSS-247 Issue 2

Product Name : LED lamp

Model No. : 9290022166

FCC ID : 2AGBW9290022166X

IC : 20812-2166X

Applicant : Signify (China) Investment Co., Ltd.

Address : Building no.9, Lane 888, Tianlin Road,
Minhang District, Shanghai 200233, China

Date of Receipt : Feb. 25, 2019

Test Date : Feb. 26, 2019~ Jun. 30, 2019

Issued Date : Jul. 01, 2019

Report No. : 1922075R-RF-US-P06V02

Report Version : V1.1

The test results relate only to the samples tested.

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

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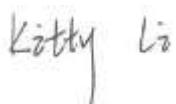
Test Report Certification

Issued Date: Jul. 01, 2019
Report No. : 1922075R-RF-US-P06V02



Product Name : LED lamp
Applicant : Signify (China) Investment Co., Ltd.
Address : Building no.9, Lane 888, Tianlin Road, Minhang District, Shanghai 200233, China
Manufacturer : Signify (China) Investment Co., Ltd.
Address : Building no.9, Lane 888, Tianlin Road, Minhang District, Shanghai 200233, China
Model No. : 9290022166
FCC ID : 2AGBW9290022166X
IC : 20812-2166X
Brand Name : PHILIPS
EUT Voltage : 110-130 Vac, 50-60 Hz, 9.5W
Test Voltage : AC120V/60Hz
Applicable Standard : FCC CFR Title 47 Part 15 Subpart C;
ANSI C63.10:2013;
KDB 558074 D01v05r02;
RSS-Gen Issue 5 / RSS-247 Issue 2
Test Result : Complied
Performed Location : DEKRA Testing & Certification (Suzhou) Co., Ltd.
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006,
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FCC Designation Number: CN1199; ISED Lab Code: 4075B

Documented By :



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Reviewed By :



(Senior Project Manager: Frank He)

Approved By :



(Engineering Supervisor: Jack Zhang)

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1922075R-RF-US-P06V02	V1.0	Initial Issued Report	Apr. 19, 2019
1922075R-RF-US-P06V02	V1.1	P154-P169, added the 99% OB data.	Jul. 01, 2019

1. General Information

1.1. EUT Description

Product Name	LED lamp					
Model No.	9290022166					
EUT Voltage	110-130 Vac, 50-60 Hz, 9.5W					
Test Voltage	AC 120V/60Hz					
Bluetooth Specification	V5.0					
Frequency Range	2402- 2480 MHz					
Channel Number	V5.0: 40					
Channel Separation	V5.0: 2MHz					
Type of Modulation	V5.0: GFSK					
PHYs	<input checked="" type="checkbox"/>	LE 1M	<input checked="" type="checkbox"/>	LE 2M	<input checked="" type="checkbox"/>	LE Coded S=2/8
Data Rate	<input checked="" type="checkbox"/>	1Mbit/s	<input checked="" type="checkbox"/>	2Mbit/s	<input checked="" type="checkbox"/>	500/125 Kbit/s
Antenna Type	Reference to Antenna List					
Peak Antenna Gain	Reference to Antenna List					

Note 1: We have evaluated both modes of LE 1M, LE 2M and LE coded, the power of LE 1M mode is higher than other mode, the test data of both modes is showed in the report with test items power and bandwidth; the test data of worse mode is showed with other test items.

Note 2: LED lamp supports two kinds of Crystal oscillator (murata/ Diodes), there is not any change in RF design, circuitry or construction for this device, including RF parameters (antenna, software, firmware and hardware versions, power, frequency ranges, etc.), so only power, spurious emission and band-edge were tested for different crystal oscillator, the test data of worse mode is showed with other test items.

1.2. Working Frequency of Each Channel:

Bluetooth Working Frequency of Each Channel: (For V5.0)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2404 MHz	02	2406 MHz	03	2408 MHz
04	2410 MHz	05	2412 MHz	06	2414 MHz	07	2416 MHz
08	2418 MHz	09	2420 MHz	10	2422 MHz	11	2424 MHz
12	2426 MHz	13	2428 MHz	14	2430 MHz	15	2432 MHz
16	2434 MHz	17	2436 MHz	18	2438 MHz	19	2440 MHz
20	2442 MHz	21	2444 MHz	22	2446 MHz	23	2448 MHz
24	2450 MHz	25	2452 MHz	26	2454 MHz	27	2456 MHz
28	2458 MHz	29	2460 MHz	30	2462 MHz	31	2464 MHz
32	2466 MHz	33	2468 MHz	34	2470 MHz	35	2472 MHz
36	2474 MHz	37	2476 MHz	38	2478 MHz	39	2480 MHz

1.3. Antenna information

Antenna manufacturer	N/A					
Antenna Delivery	<input checked="" type="checkbox"/>	1*TX+1*RX	<input type="checkbox"/>	2*TX+2*RX	<input type="checkbox"/>	3*TX+3*RX
Antenna technology	<input checked="" type="checkbox"/>	SISO				
	<input type="checkbox"/>	MIMO	<input type="checkbox"/>	Basic		
	<input type="checkbox"/>		<input type="checkbox"/>	CDD		
	<input type="checkbox"/>		<input type="checkbox"/>	Beam-forming		
Antenna Type	<input type="checkbox"/>	External	<input type="checkbox"/>	Dipole		
	<input checked="" type="checkbox"/>	Internal	<input type="checkbox"/>	PIFA		
	<input checked="" type="checkbox"/>		<input type="checkbox"/>	PCB		
	<input type="checkbox"/>		<input type="checkbox"/>	Ceramic Chip Antenna		
	<input type="checkbox"/>		<input type="checkbox"/>	Stamping Antenna		
	<input type="checkbox"/>		<input type="checkbox"/>	Metal plate type F antenna		
	<input type="checkbox"/>		<input type="checkbox"/>	Monopole antenna		
Antenna Gain	-1.22dBi					

1.4. Mode of Operation

Test Mode
Mode 1: Transmit-1Mbps(GFSK_LE 1M)
Mode 2: Transmit-2Mbps(GFSK_LE 2M)
Mode 3: Transmit-125Kbps(GFSK_LE Coded)
Mode 4: Transmit-500Kbps(GFSK_LE Coded)

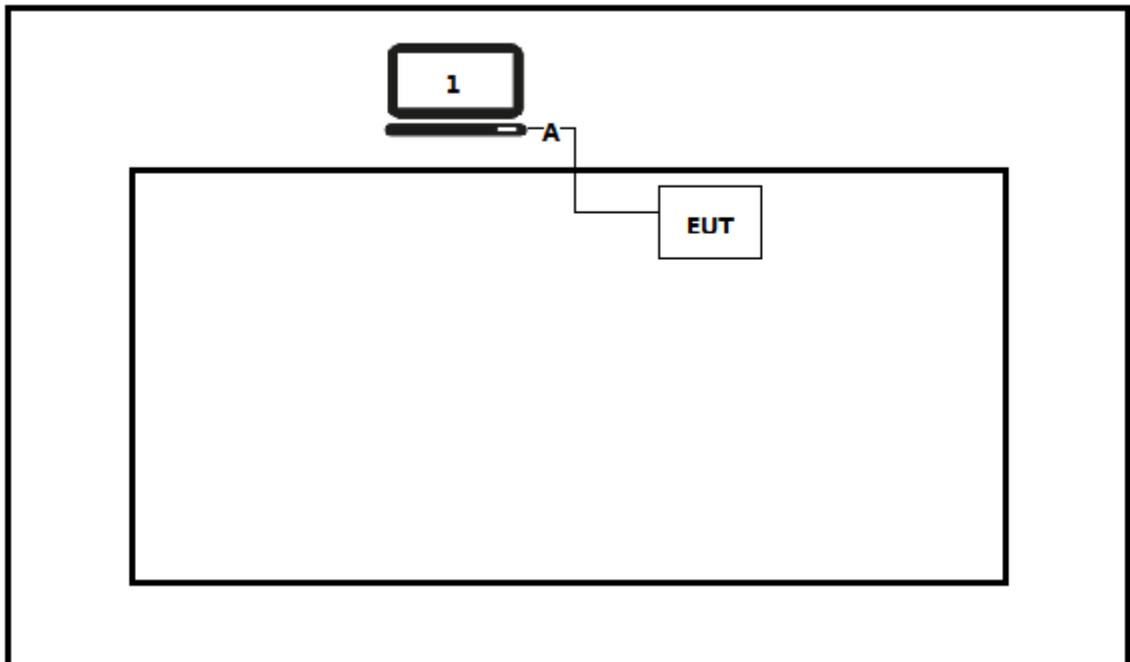
1.5. Tested System Details

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

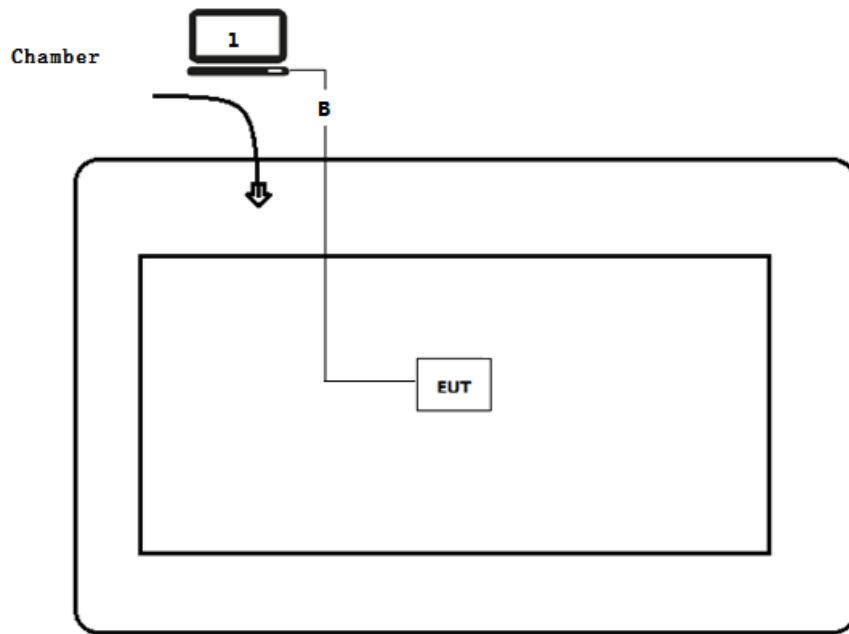
No.	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Think Pad	2526	LV-A3285	Power by adapter
A	Control cable	N/A	N/A	N/A	Shielded,0.5m
B	Control cable	N/A	N/A	N/A	Shielded,10m

1.6. Configuration of Tested System

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Radiated Emission



1.7. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of all equipment.
3	Run RF software [HueApprobation Tool], and set the test mode and channel, then press OK to start to continue transmit.

2. Technical Test

2.1. Summary of Test Result

For FCC

Performed Test Item	Normative References	Limit	Result
AC Power Line Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.207	FCC 15.207	PASS
Emissions in restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.209	FCC 15.209	PASS
Emissions in non-restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(d)	$\geq 20\text{dBc}$	PASS
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 2015 15.247(d)	FCC 15.209	PASS
Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(2)	$\geq 500\text{kHz}$	PASS
Fundamental emission output power	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(b)(3)	$\leq 30\text{dBm}$	PASS
Power Spectral Density	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(e)	$\leq 8\text{dBm}/3\text{kHz}$	PASS
Antenna Requirement	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.203	FCC 15.203	PASS

For ISED

Performed Test Item	Normative References	Limit	Result
AC Power Line Conducted Emission	RSS-Gen Issue 5 Section 8.8	RSS-Gen	PASS
Emissions in restricted frequency bands	RSS-Gen Issue 5 Section 8.9	RSS-Gen	PASS
Emissions in non-restricted frequency bands	RSS-247 Issue 2 Section A5.5	$\geq 20\text{dBc}$	PASS
Radiated Emission Band Edge	RSS-247 Issue 2 Section A5.5	RSS-247	PASS
Occupied Bandwidth	RSS-Gen Issue 5 Section 6.6 RSS-247 Issue 2 Section A5.2(1)	$\geq 500\text{kHz}$	PASS
Fundamental emission output power	RSS-247 Issue 2 Section A5.4(4)	$\leq 30\text{dBm}$	PASS
Power Spectral Density	RSS-247 Issue 2 Section A5.2(2)	$\leq 8\text{dBm}/3\text{kHz}$	PASS
Antenna Requirement	RSS-Gen Issue 5 Section 8.3	RSS-Gen Issue 5	PASS

2.2. Test Frequency configuration:

Modulation Mode	Channel	Frequency	Channel	Frequency	Channel	Frequency
Mode1~4	00	2402 MHz	19	2440 MHz	39	2480MHz

2.3. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

2.4. Measurement Uncertainty

Test Items	Uncertainty
AC Power Line Conducted Emission	±2.02dB
Radiated Emission	Below 1GHz ±3.8 dB
	Above 1GHz ±3.9 dB
RF Antenna Port Conducted Emission	±1.27dB
Radiated Emission Band Edge	±3.9dB
Occupied Bandwidth	±1kHz
Power Spectral Density	±1.27dB

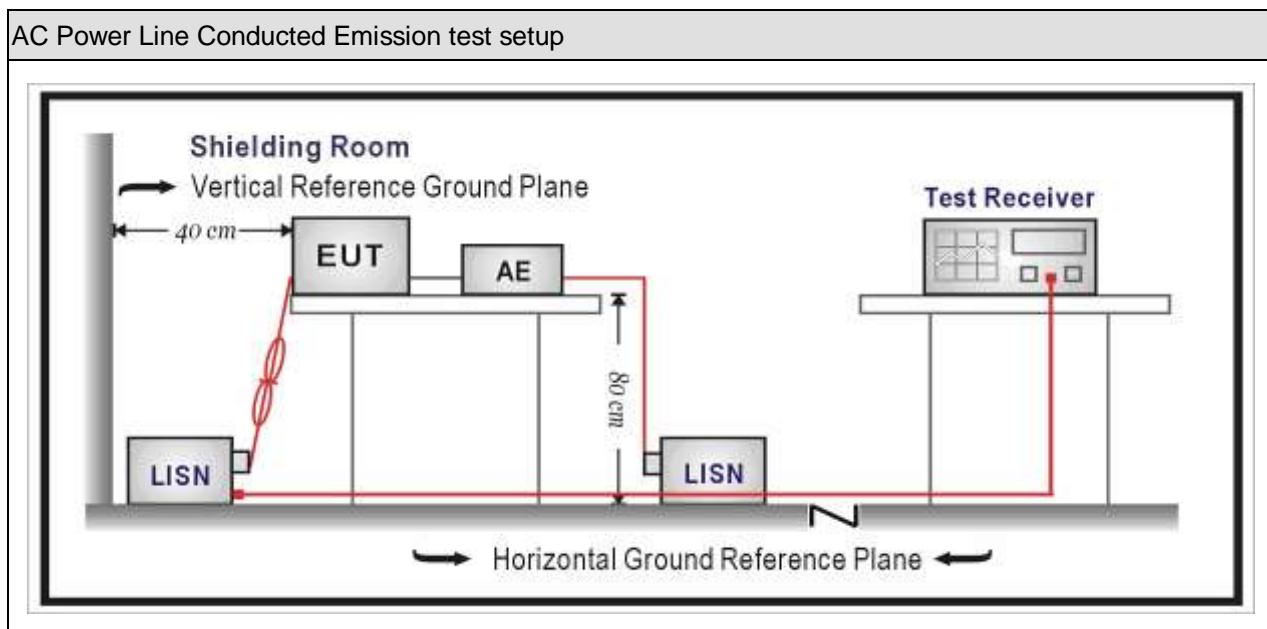
3. AC Power Line Conducted Emission

3.1. Test Equipment

AC Power Line Conducted Emission / TR-1					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100906	2019.03.05	2020.03.04
Two-Line V-Network	R&S	ENV 216	101189	2018.07.16	2019.07.15
Two-Line V-Network	R&S	ENV 216	101044	2018.09.16	2019.09.15
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	N/A	N/A
50ohm Termination	SHX	TF2	07081402	2018.09.16	2019.09.15
Temperature/Humidity Meter	Zhichen	ZC1-2	TR1-TH	2019.01.04	2020.01.03
Quietek EMI V3(test software)	Quietek	N/A	N/A	N/A	N/A

Note: All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

3.2. Test Setup



3.3. Limit

Frequency of Emission (MHz)	Conducted Limit	
	Quasi-peak (dB μ V)	Average(dB μ V)
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

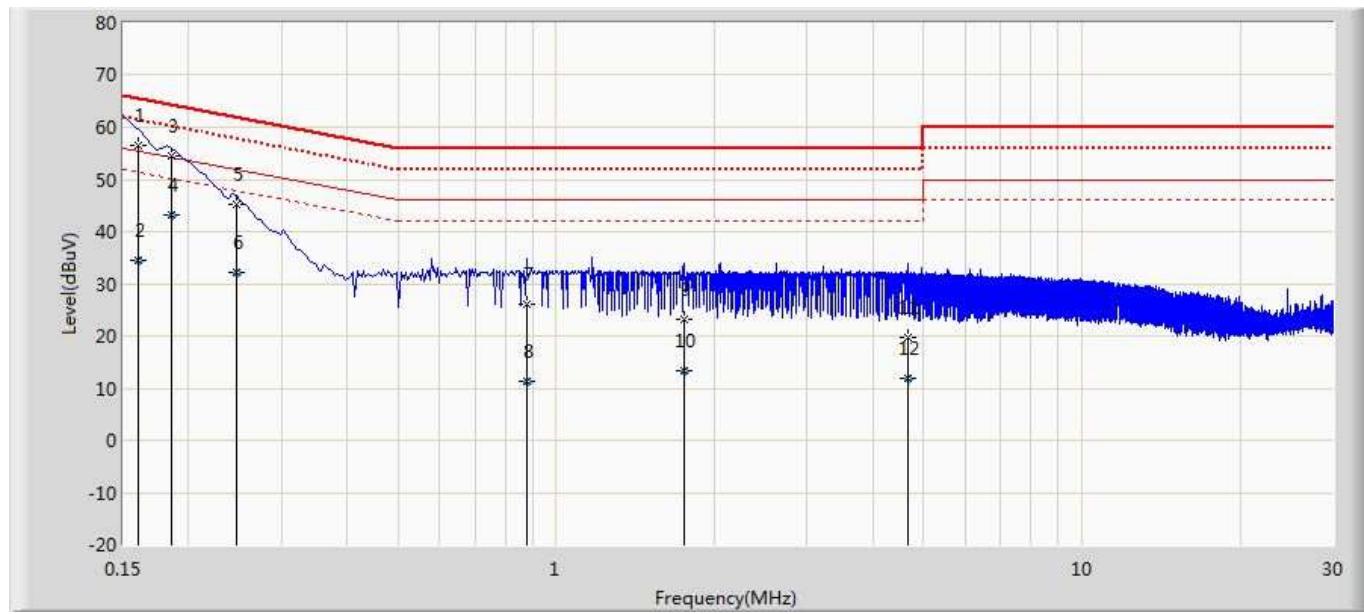
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

3.4. Test Procedure

Test Method			
	References Rule	Chapter	Item
<input checked="" type="checkbox"/>	ANSI C63.10-2013	6.2	Standard test method for ac power-line conducted emissions from unlicensed wireless devices

3.5. Test Result

Site: TR1	Time: 2019/04/13 - 11:10
Limit: FCC_Part15.207_CE_AC Power	Margin: 4
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1	

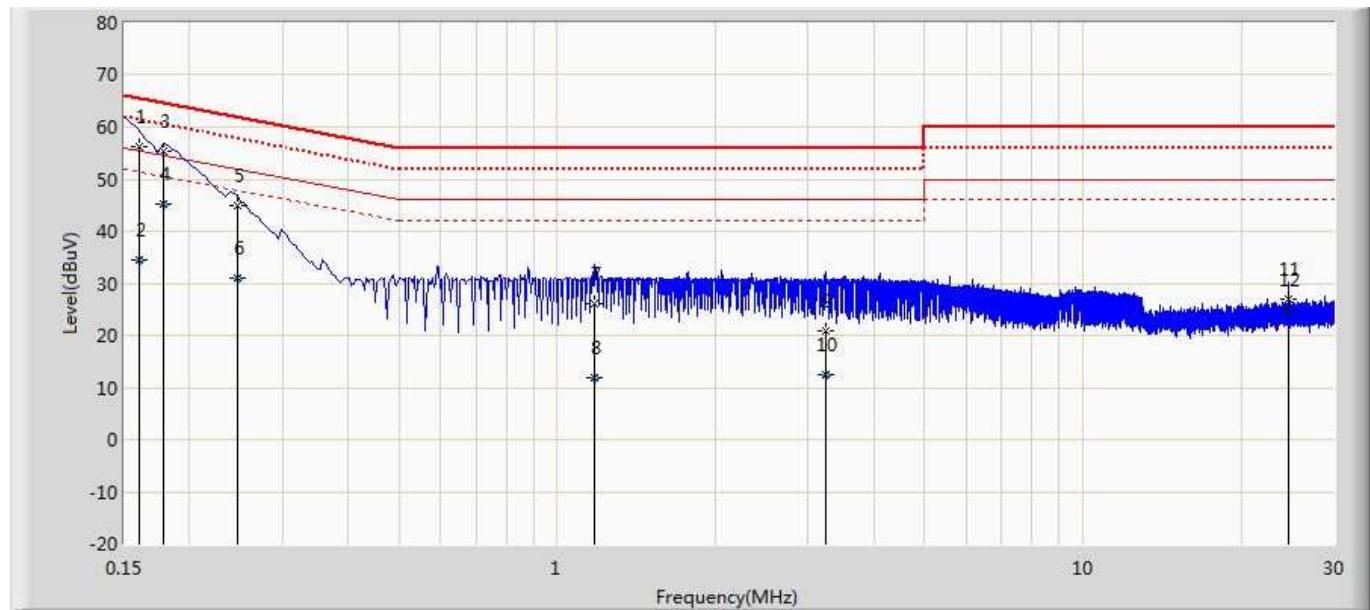


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.160	56.463	46.848	-8.986	65.449	9.614	QP
2		0.160	34.480	24.865	-20.969	55.449	9.614	AV
3		0.186	54.433	44.808	-9.781	64.213	9.624	QP
4		0.186	43.301	33.677	-10.913	54.213	9.624	AV
5		0.246	45.085	35.457	-16.806	61.891	9.628	QP
6		0.246	32.300	22.672	-19.591	51.891	9.628	AV
7		0.878	26.079	16.435	-29.921	56.000	9.644	QP
8		0.878	11.444	1.799	-34.556	46.000	9.644	AV
9		1.746	23.319	13.631	-32.681	56.000	9.689	QP
10		1.746	13.433	3.744	-32.567	46.000	9.689	AV
11		4.674	19.631	9.843	-36.369	56.000	9.788	QP
12		4.674	11.857	2.070	-34.143	46.000	9.788	AV

Note:

1. " * ", means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Site: TR1	Time: 2019/04/13 - 13:50
Limit: FCC_Part15.207_CE_AC Power	Margin: 4
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.160	56.223	46.593	-9.226	65.449	9.630	QP
2		0.160	34.575	24.945	-20.874	55.449	9.630	AV
3	*	0.178	55.366	45.737	-9.213	64.578	9.629	QP
4		0.178	45.268	35.639	-9.311	54.578	9.629	AV
5		0.246	44.856	35.226	-17.035	61.891	9.630	QP
6		0.246	31.011	21.381	-20.880	51.891	9.630	AV
7		1.174	26.079	16.403	-29.921	56.000	9.676	QP
8		1.174	11.818	2.141	-34.182	46.000	9.676	AV
9		3.238	20.802	11.059	-35.198	56.000	9.743	QP
10		3.238	12.352	2.609	-33.648	46.000	9.743	AV
11		24.578	26.849	16.075	-33.151	60.000	10.774	QP
12		24.578	24.893	14.119	-25.107	50.000	10.774	AV

Note:

1. "*" means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable+Amp).

4. Emissions in restricted frequency bands

4.1. Test Equipment

Radiated Emission(Below 1GHz) / AC-2					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2019.03.29	2020.03.28
Loop Antenna	R&S	HFH2-Z2	833799/003	2018.11.16	2019.11.15
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2018.10.16	2019.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2019.03.02	2020.03.01
Temperature/Humidity Meter	Zhichen	ZC1-2	AC2-TH	2019.01.03	2020.01.02
Quietek EMI V3(test software)	Quietek	N/A	N/A	N/A	N/A

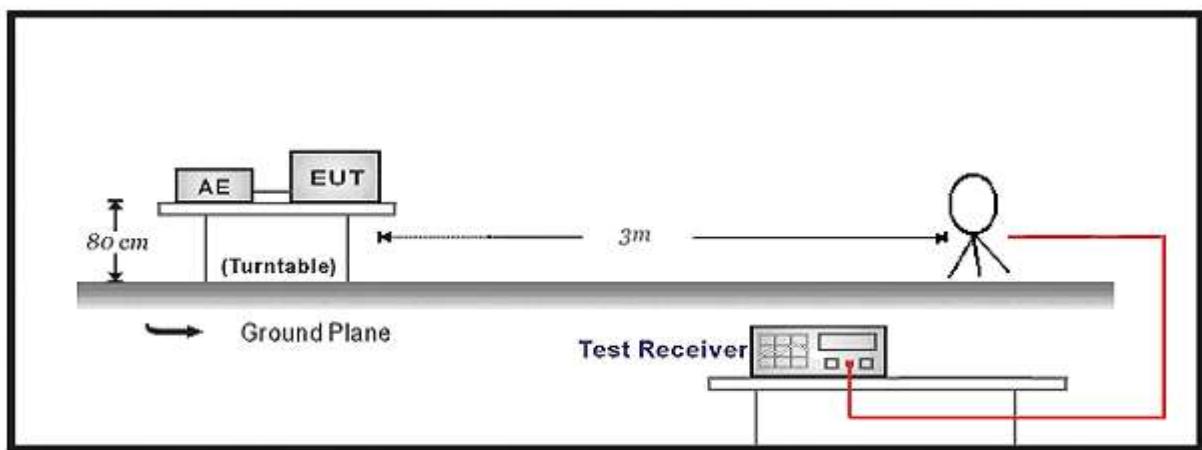
Note: All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2019.01.04	2020.01.03
Preamplifier	Miteq	NSP1800-25	1364185	2018.05.06	2019.05.05
Preamplifier	QuieTek	AP-040G	CHM-0906001	2018.05.06	2019.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2019.01.22	2020.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2018.11.25	2019.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2019.03.02	2020.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2019.03.02	2020.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2019.03.02	2020.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2018.06.10	2019.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2019.01.04	2020.01.03
Quietek EMI V3(test software)	Quietek	N/A	N/A	N/A	N/A

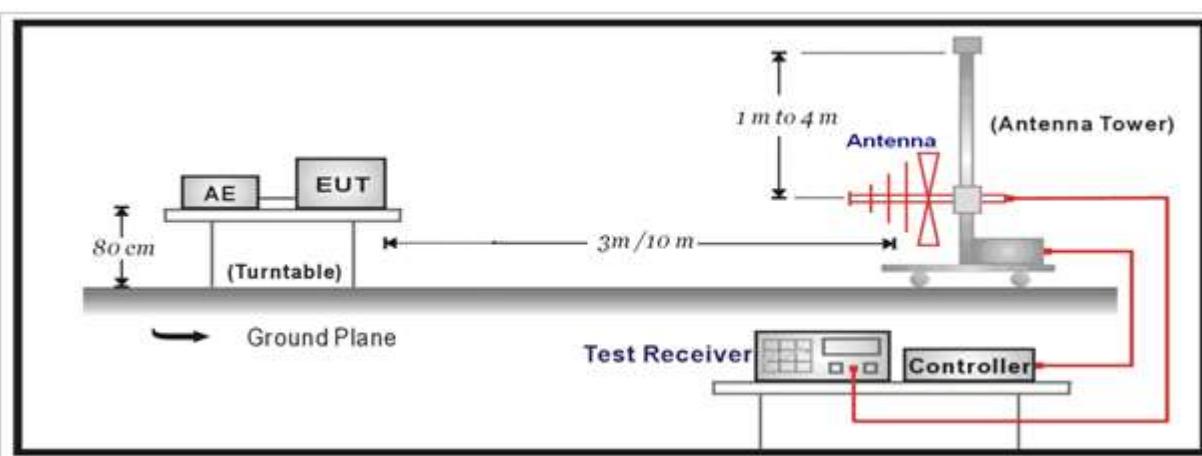
Note: All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

4.2. Test Setup

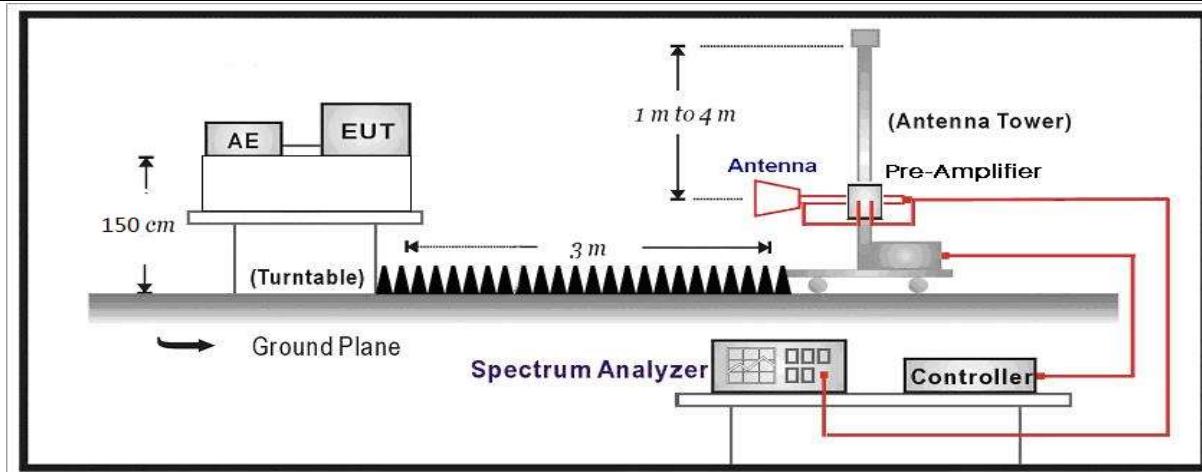
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

For FCC

Restricted Bands of operation			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.69475 – 16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 – 8.81475	162.0125 – 167.17	3260 – 3267	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3332 – 3339	31.2 – 31.8
12.51975 – 12.52025	240 – 285	3345.8 – 3358	36.43 – 36.5
12.57675 – 12.57725	322 – 335.4	3600 – 4400	
13.36 – 13.41			

For ISED:

Restricted Bands of operation			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090-0.110	13.36-13.41	1645.5-1646.5	9.0-9.2
2.1735-2.1905	16.42-16.423	1660-1710	9.3-9.5
3.020-3.026	16.69475-16.69525	1718.8-1722.2	10.6-12.7
4.125-4.128	16.80425-16.80475	2200-2300	13.25-13.4
4.17725-4.17775	25.5-25.67	2310-2390	14.47-14.5
4.20725-4.20775	37.5-38.25	2655-2900	15.35-16.2
5.677-5.683	73-74.6	3260-3267	17.7-21.4
6.215-6.218	74.8-75.2	3332-3339	22.01-23.12
6.26775-6.26825	108-138	3345.8-3358	23.6-24.0
6.31175-6.31225	156.52475-156.52525	3500-4400	31.2-31.8
8.291-8.294	156.7-156.9	4500-5150	36.43-36.5
8.362-8.366	240-285	5350-5460	Above 38.6
8.37625-8.38675	322-335.4	7250-7750	
8.41425-8.41475	399.9-410	8025-8500	
12.29-12.293	608-614		
12.51975-12.52025	960-1427		
12.57675-12.57725	1435-1626.5		

Restricted Band Emissions Limit			
Frequency (MHz)	Field strength (μ V/m)	Field strength (dB μ V/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300 <small>(Note 1)</small>
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 <small>(Note 1)</small>
1.705 - 30	30	29.5	30 <small>(Note 1)</small>
30 - 88	100	40	3 <small>(Note 2)</small>
88 - 216	150	43.5	3 <small>(Note 2)</small>
216 - 960	200	46	3 <small>(Note 2)</small>
Above 960	500	54	3 <small>(Note 2)</small>

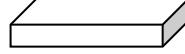
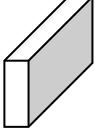
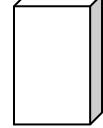
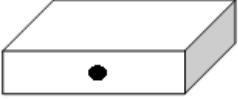
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input type="checkbox"/>	ANSI C63.10	11.11	Emissions in non-restricted frequency bands
<input type="checkbox"/>	<input type="checkbox"/> ANSI C63.10	11.11.2	Reference level measurement
	<input type="checkbox"/> ANSI C63.10	11.11.3	Emission level measurement
<input checked="" type="checkbox"/>	ANSI C63.10	11.12	Emissions in restricted frequency bands
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> ANSI C63.10	11.12.1	Radiated emission measurements
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.7	Radiated spurious emission test
	<input checked="" type="checkbox"/> ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
	<input checked="" type="checkbox"/> ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
	<input type="checkbox"/> ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.4	Peak power measurement procedure
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.5	Average power measurement procedures
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
<input type="checkbox"/>	<input type="checkbox"/> ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

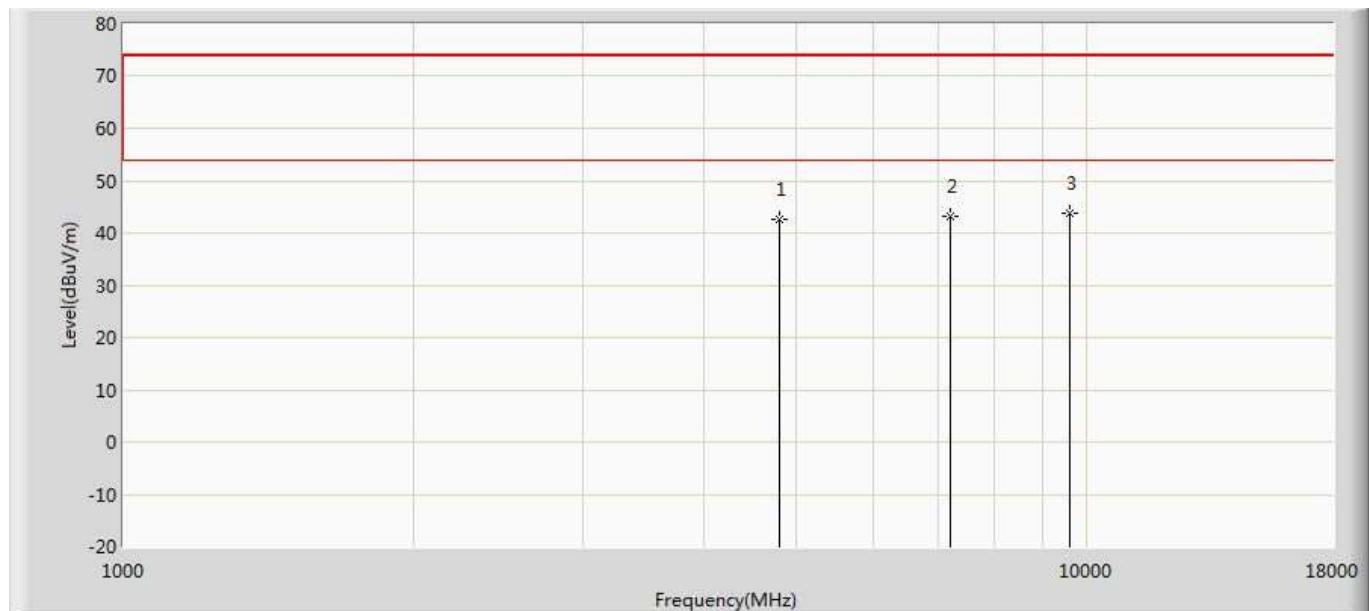
4.5. EUT test Axis definition

Item	Emissions in restricted frequency bands		
Device Category	<input type="checkbox"/>	Fixed point-to-point	
	<input type="checkbox"/>	Emit multiple directional beams, simultaneously or sequentially	
	<input checked="" type="checkbox"/>	Other cases	
Test mode	Mode 1~4		
Test method	<input checked="" type="checkbox"/>	Radiated	
		X Axis	Y Axis
			
			
		Worst Axis <input checked="" type="checkbox"/>	Worst Axis <input type="checkbox"/>
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>
	<input type="checkbox"/>	Conducted	
	<input type="checkbox"/>	Chain 1	
			
	<input type="checkbox"/>	Chain 1	Chain 2
			
	<input type="checkbox"/>	Chain 1	Chain 2
			Chain 3

4.6. Test Result

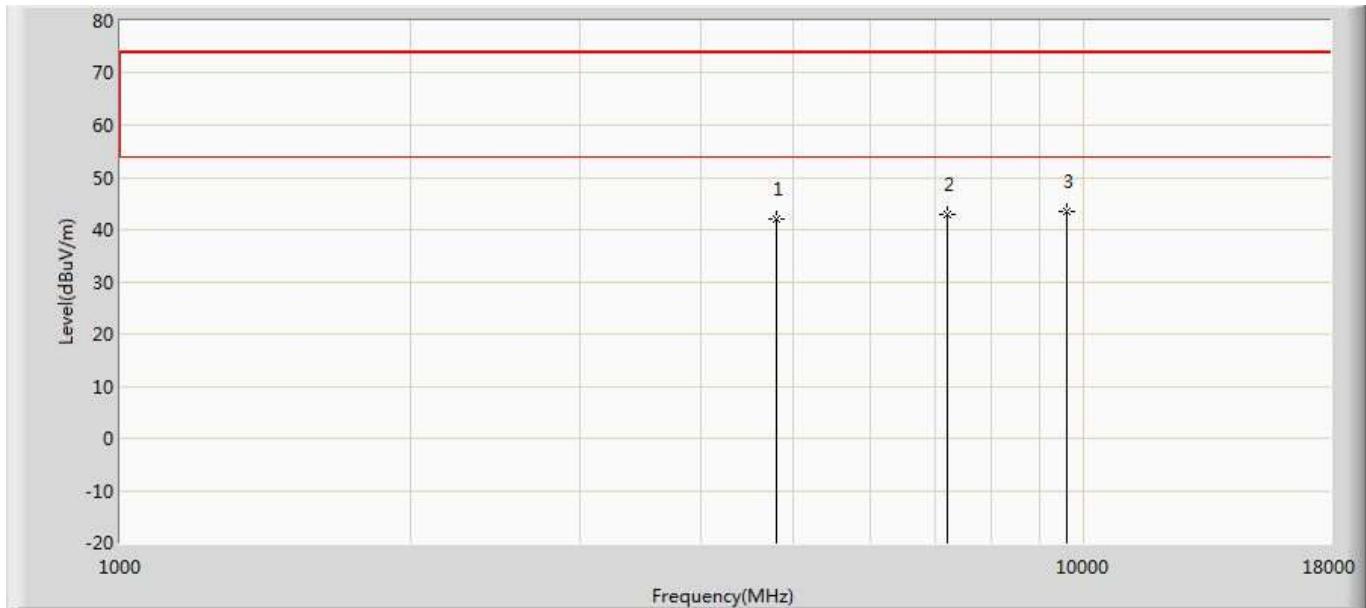
Murata:

Site: AC5	Time: 2019/04/15 - 10:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by BLE	



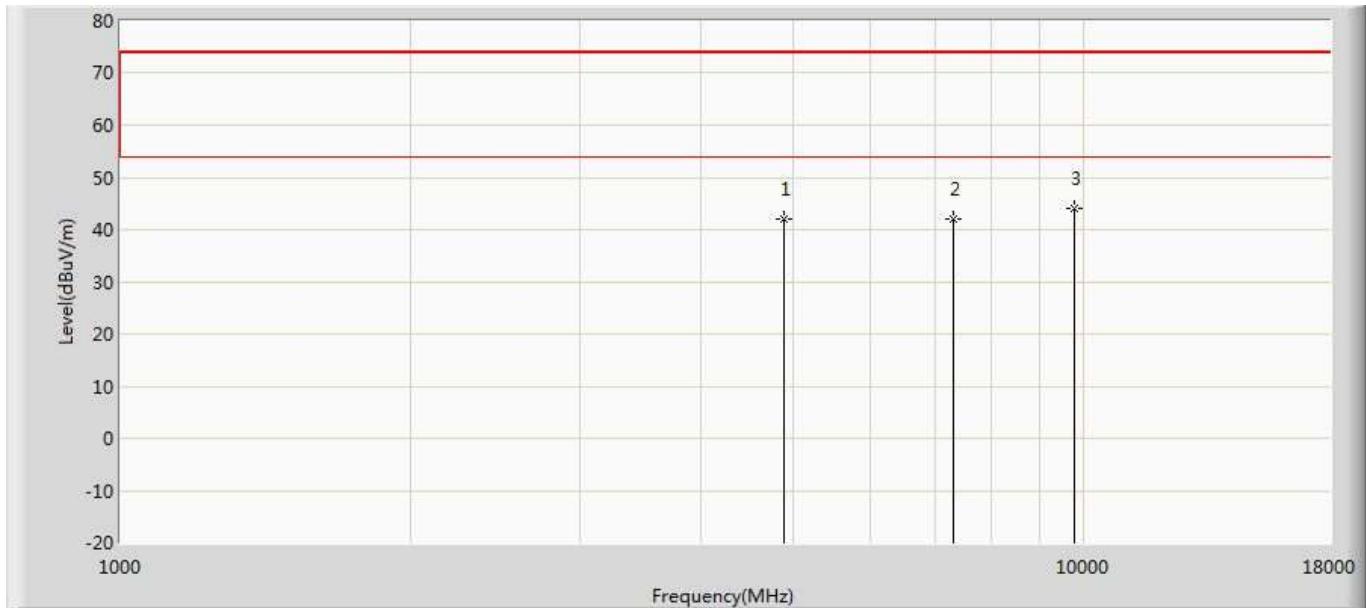
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.719	44.442	-31.281	74.000	-1.723	PK
2		7206.000	43.199	41.280	-30.801	74.000	1.919	PK
3	*	9608.000	43.744	38.845	-30.256	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by BLE	



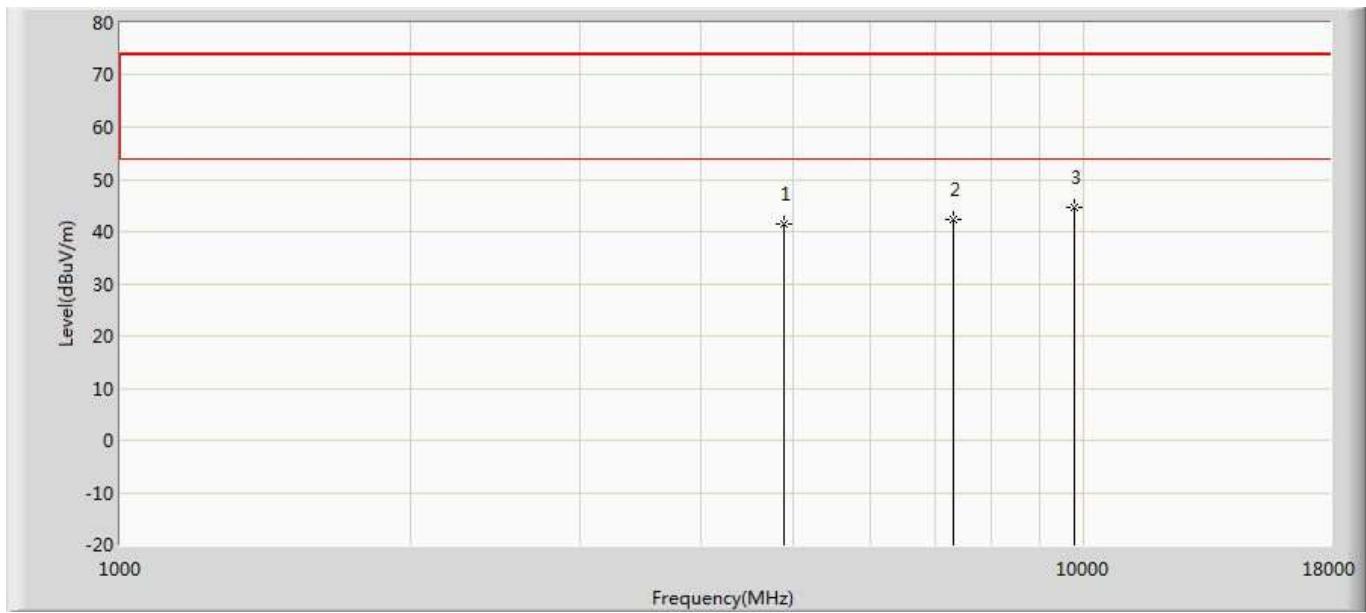
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.931	43.654	-32.069	74.000	-1.723	PK
2		7206.000	42.847	40.928	-31.153	74.000	1.919	PK
3	*	9608.000	43.369	38.470	-30.631	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by BLE	



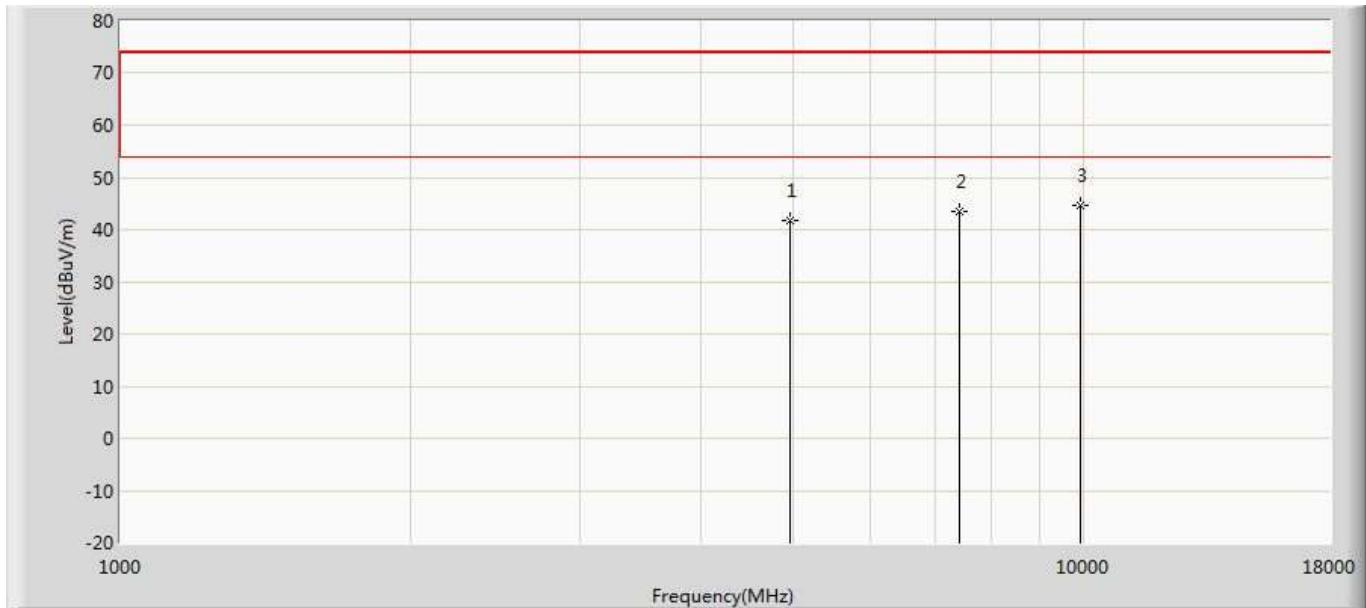
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.946	43.230	-32.054	74.000	-1.284	PK
2		7320.000	42.168	40.285	-31.832	74.000	1.884	PK
3	*	9760.000	43.951	38.139	-30.049	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by BLE	



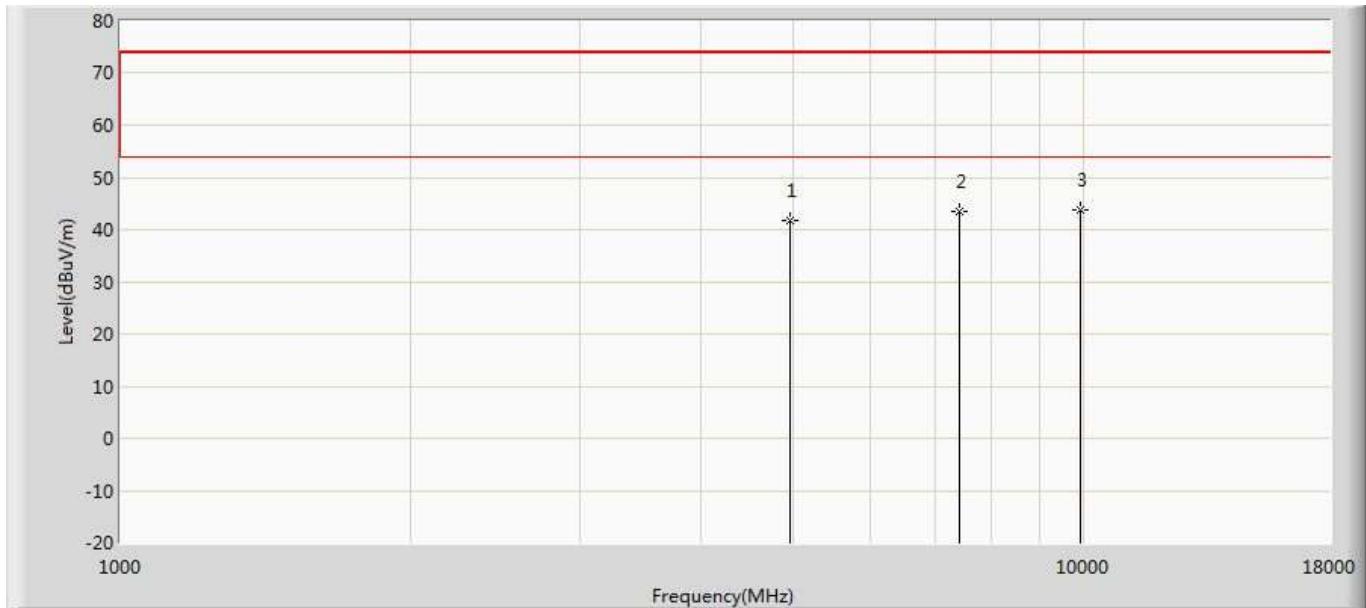
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.577	42.861	-32.423	74.000	-1.284	PK
2		7320.000	42.212	40.329	-31.788	74.000	1.884	PK
3	*	9760.000	44.619	38.807	-29.381	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by BLE	



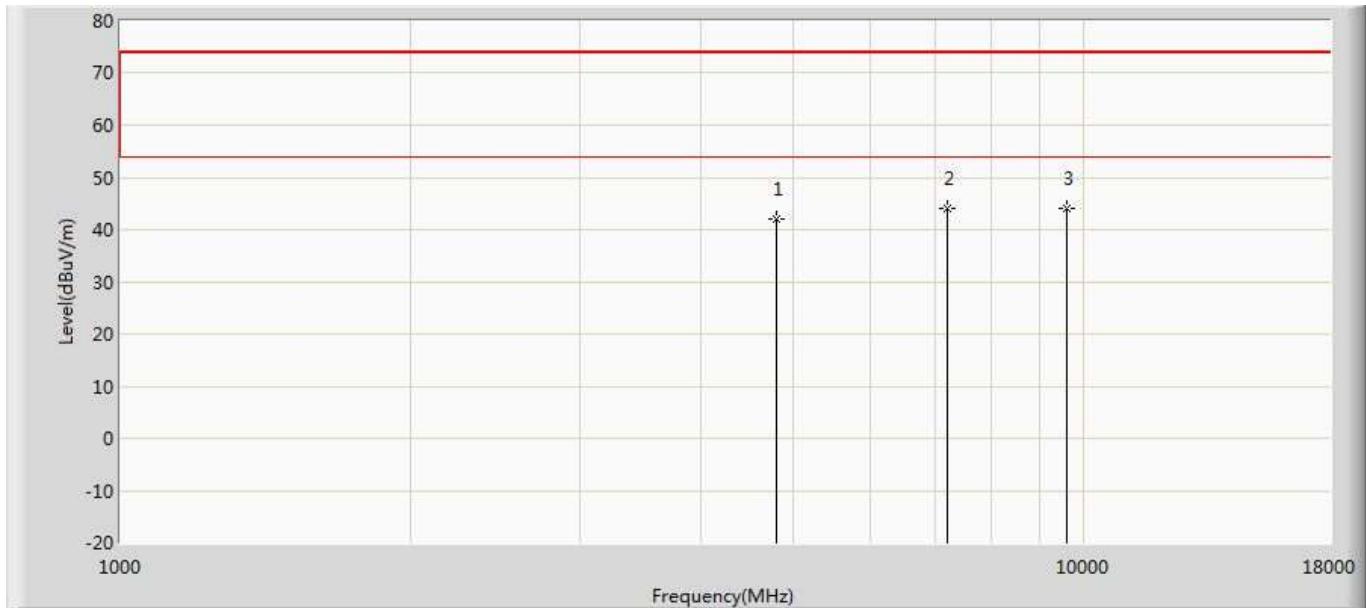
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.642	42.790	-32.358	74.000	-1.148	PK
2		7440.000	43.436	41.010	-30.564	74.000	2.426	PK
3	*	9920.000	44.526	39.272	-29.474	74.000	5.253	PK

Site: AC5	Time: 2019/04/15 - 10:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by BLE	



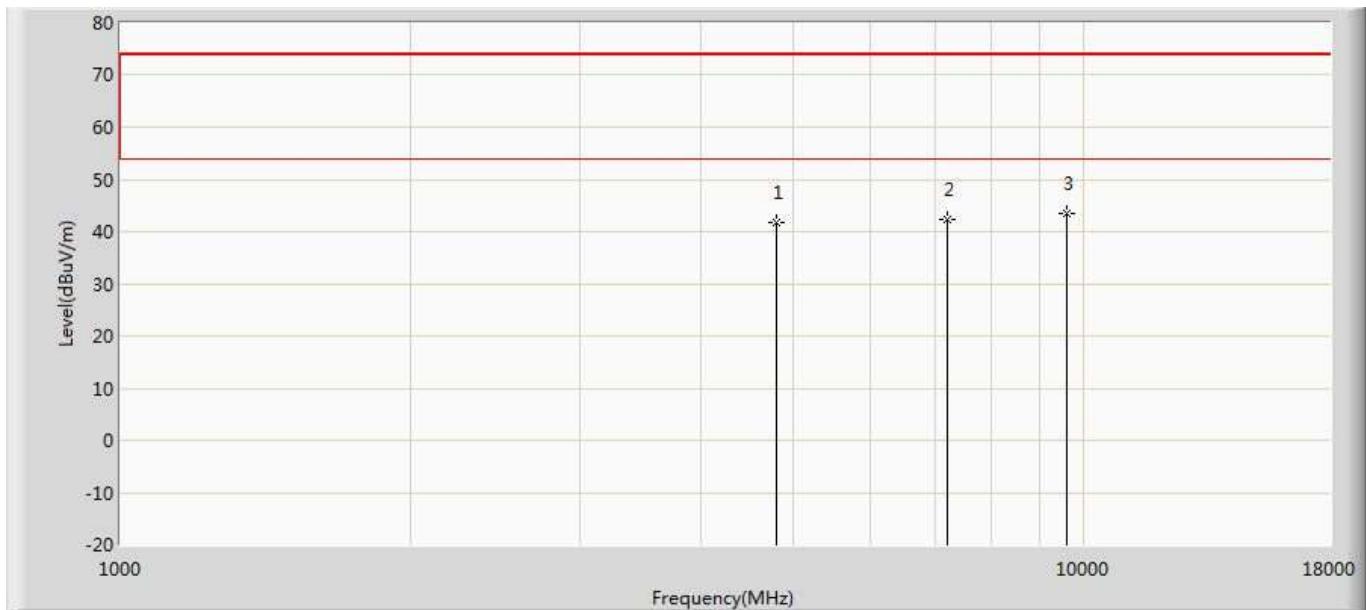
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.698	42.846	-32.302	74.000	-1.148	PK
2		7440.000	43.488	41.062	-30.512	74.000	2.426	PK
3	*	9920.000	43.869	38.615	-30.131	74.000	5.253	PK

Site: AC5	Time: 2019/04/15 - 10:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



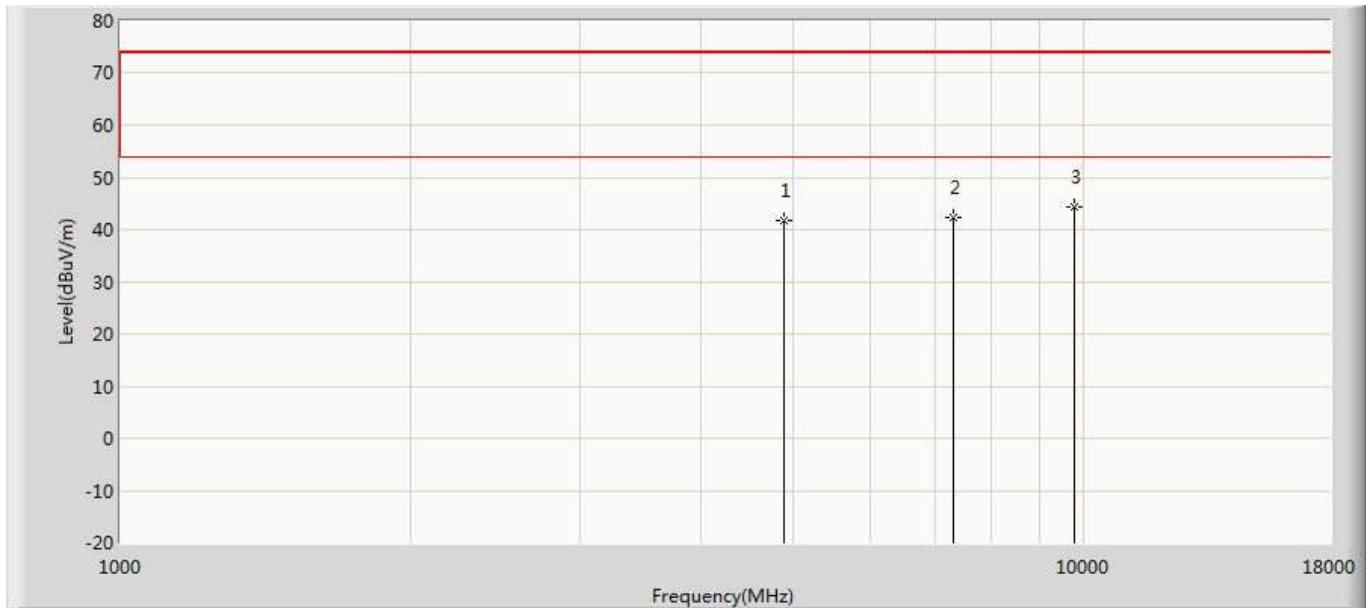
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.153	43.876	-31.847	74.000	-1.723	PK
2		7206.000	44.018	42.099	-29.982	74.000	1.919	PK
3	*	9608.000	44.197	39.298	-29.803	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



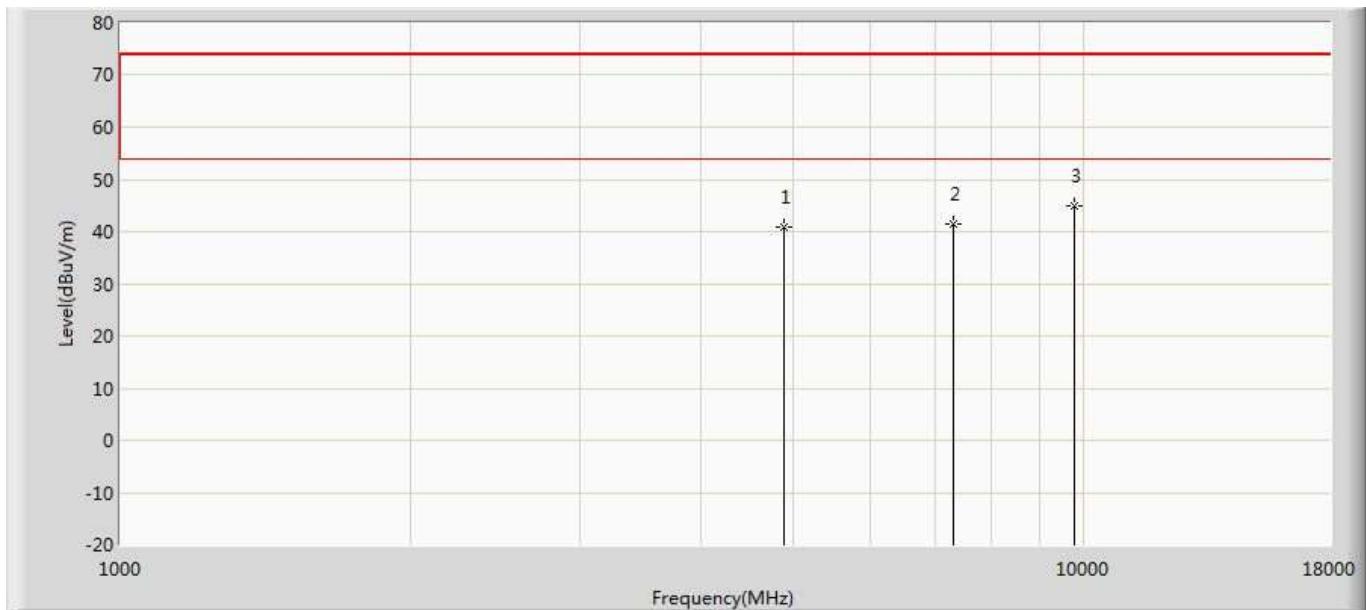
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.809	43.532	-32.191	74.000	-1.723	PK
2		7206.000	42.434	40.515	-31.566	74.000	1.919	PK
3	*	9608.000	43.582	38.683	-30.418	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by 2LE	



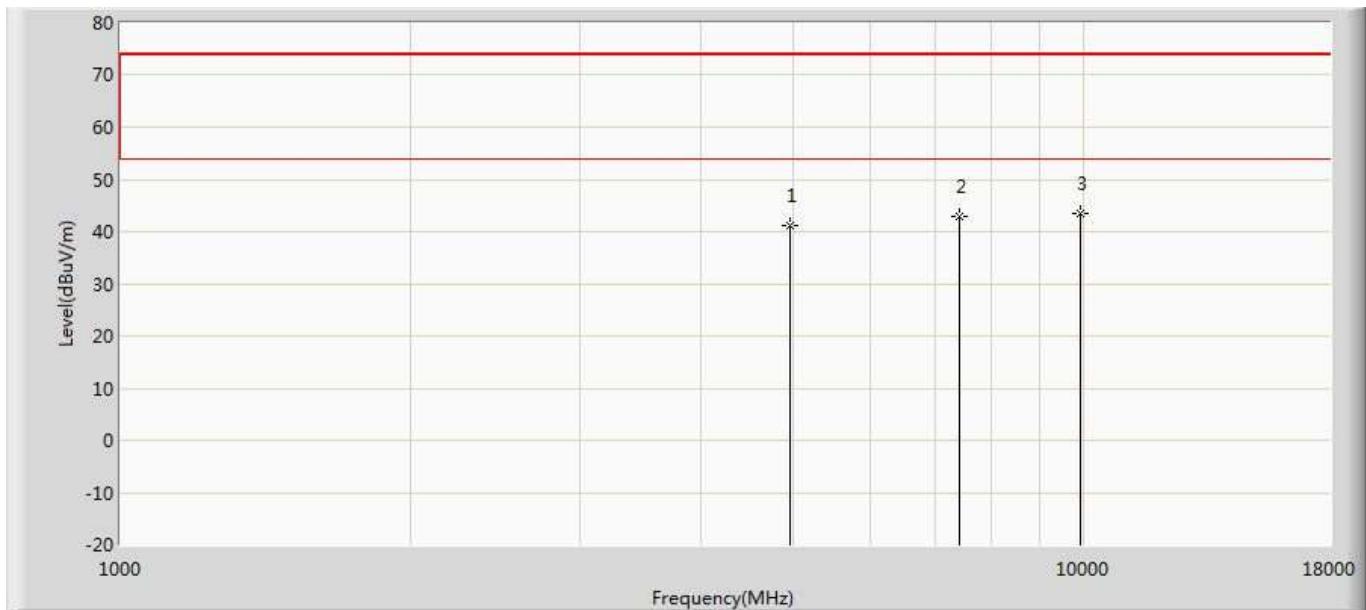
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.623	42.907	-32.377	74.000	-1.284	PK
2		7320.000	42.429	40.546	-31.571	74.000	1.884	PK
3	*	9760.000	44.252	38.440	-29.748	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by 2LE	



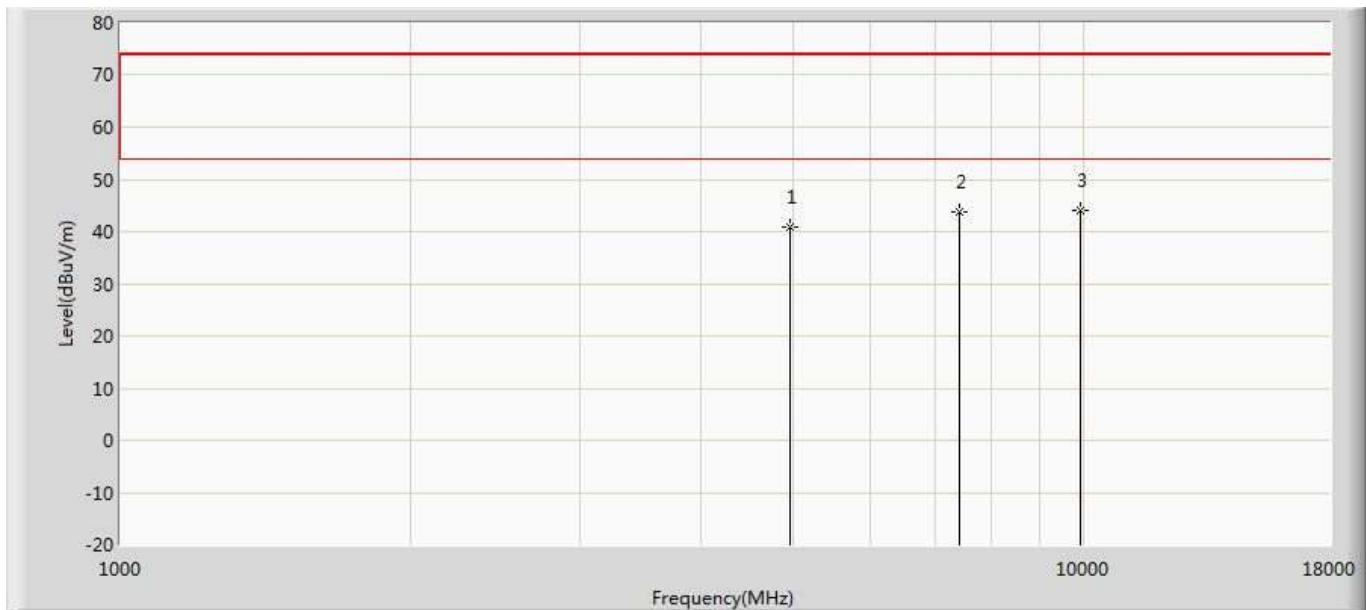
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	40.882	42.166	-33.118	74.000	-1.284	PK
2		7320.000	41.510	39.627	-32.490	74.000	1.884	PK
3	*	9760.000	44.863	39.051	-29.137	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



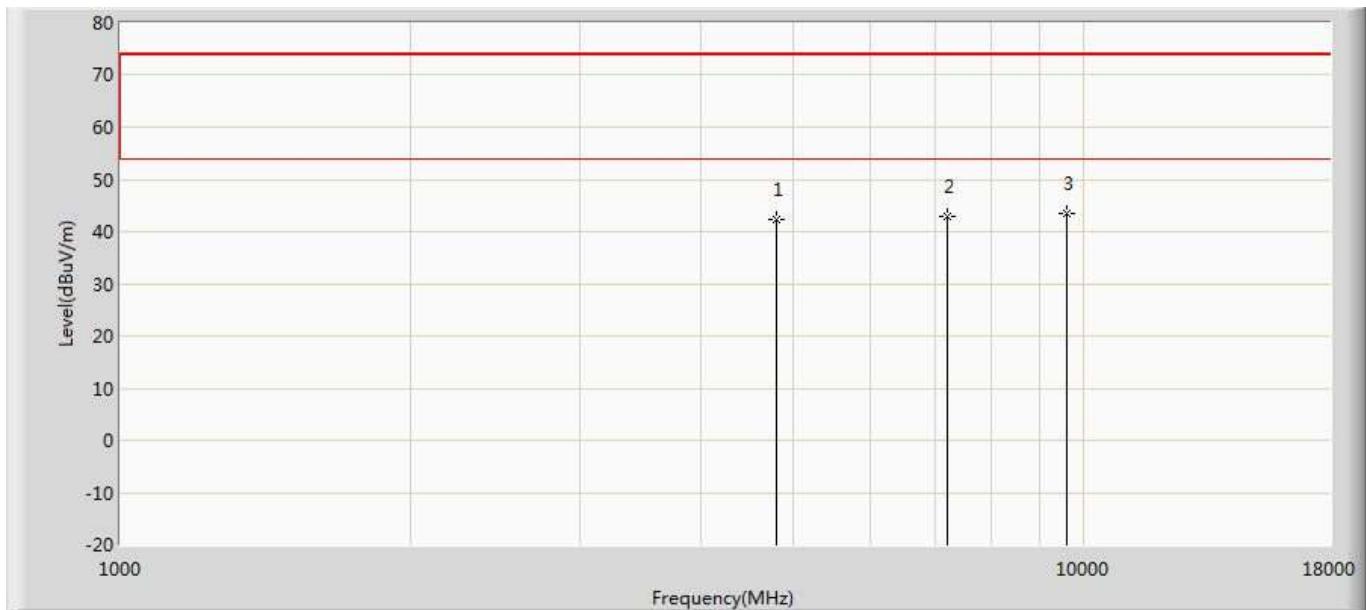
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.017	42.165	-32.983	74.000	-1.148	PK
2		7440.000	42.931	40.505	-31.069	74.000	2.426	PK
3	*	9920.000	43.458	38.204	-30.542	74.000	5.253	PK

Site: AC5	Time: 2019/04/15 - 10:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



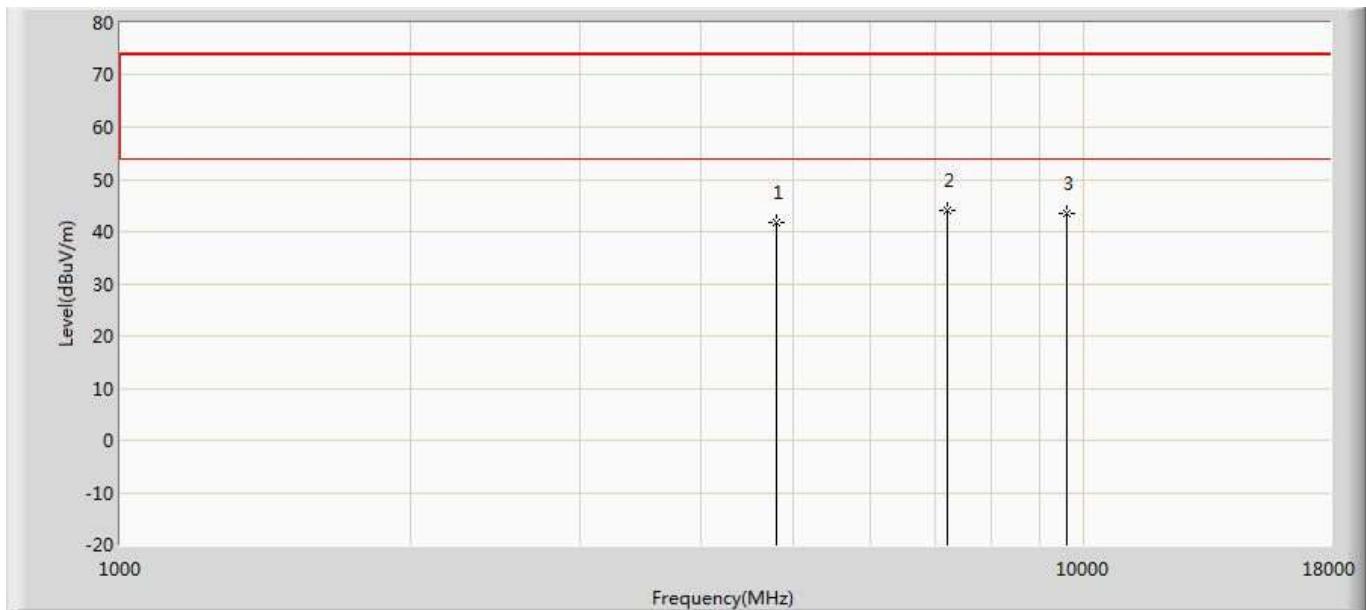
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	40.936	42.084	-33.064	74.000	-1.148	PK
2		7440.000	43.656	41.230	-30.344	74.000	2.426	PK
3	*	9920.000	44.088	38.834	-29.912	74.000	5.253	PK

Site: AC5	Time: 2019/04/15 - 10:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by Coded125	



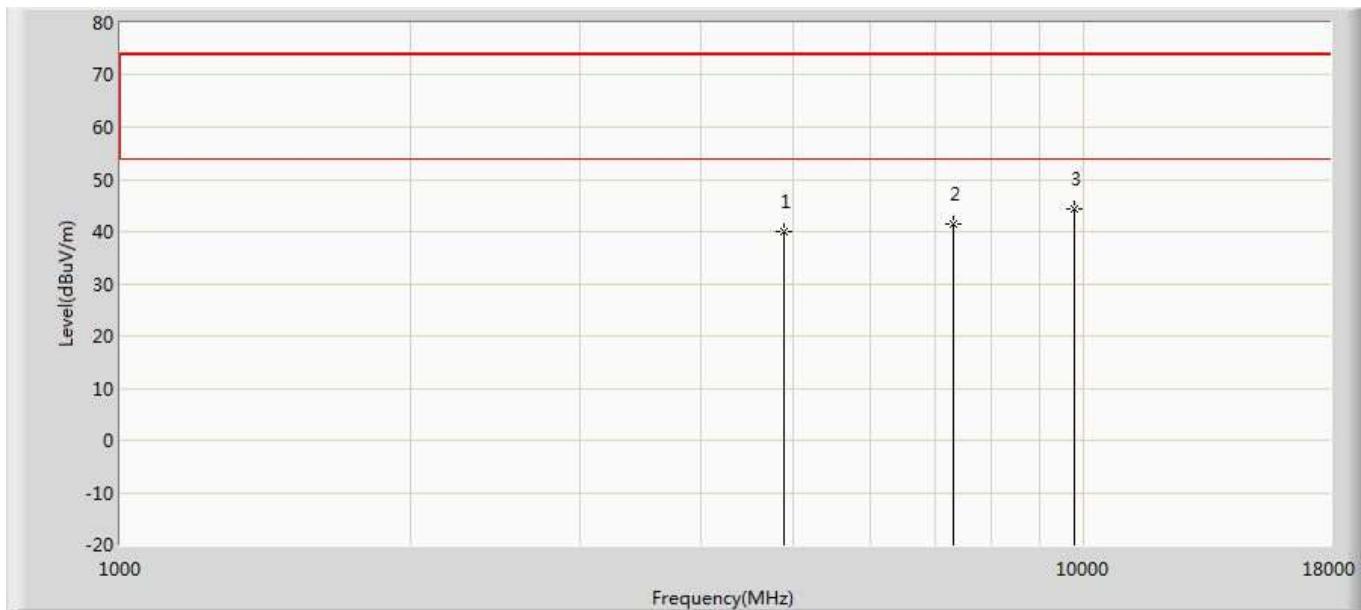
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.218	43.941	-31.782	74.000	-1.723	PK
2		7206.000	42.882	40.963	-31.118	74.000	1.919	PK
3	*	9608.000	43.465	38.566	-30.535	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by Coded125	



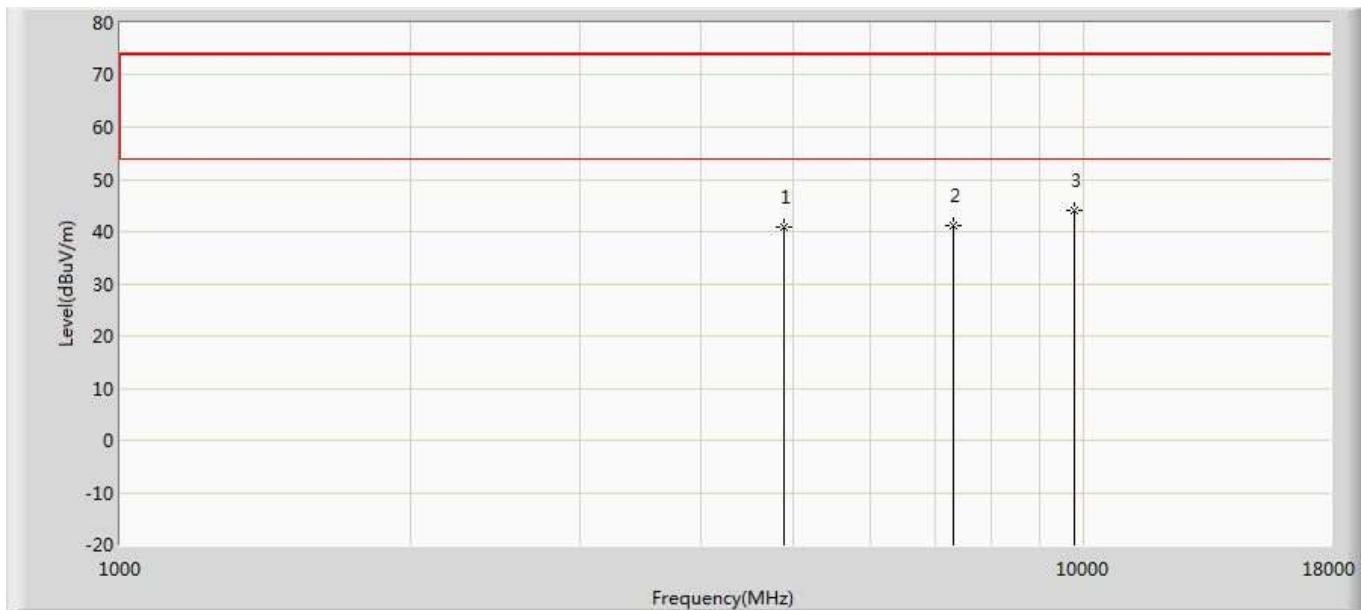
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.810	43.533	-32.190	74.000	-1.723	PK
2	*	7206.000	44.046	42.127	-29.954	74.000	1.919	PK
3		9608.000	43.427	38.528	-30.573	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2440MHz by Coded125	



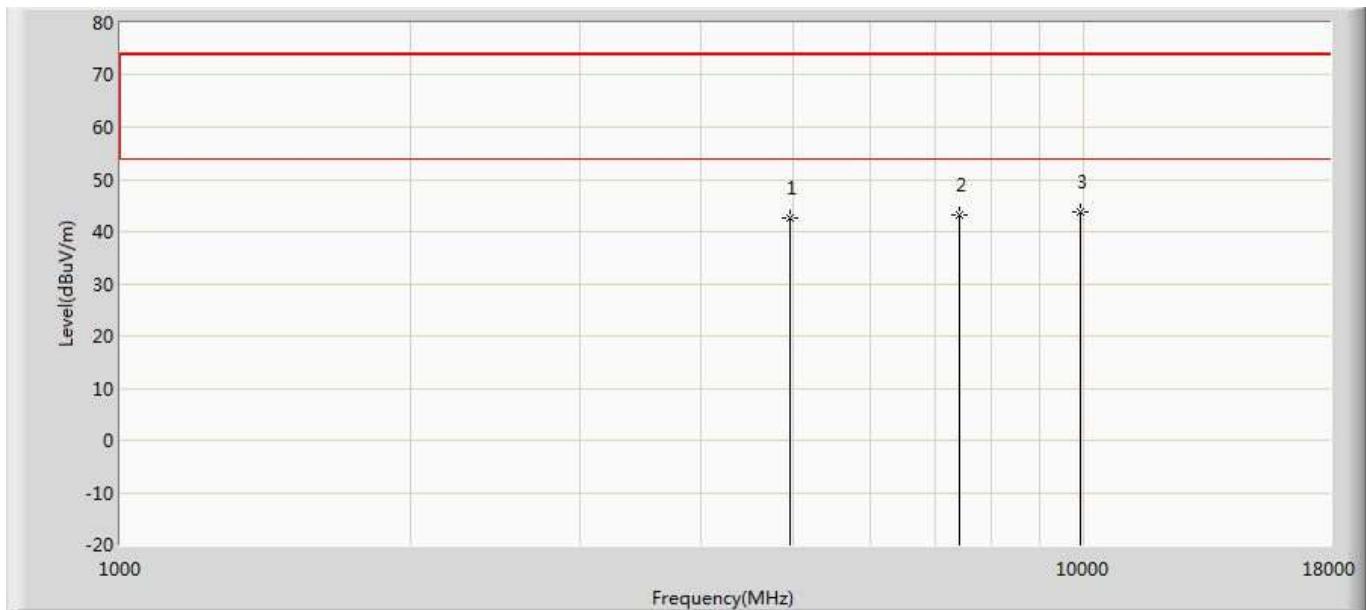
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	39.873	41.157	-34.127	74.000	-1.284	PK
2		7320.000	41.394	39.511	-32.606	74.000	1.884	PK
3	*	9760.000	44.287	38.475	-29.713	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2440MHz by Coded125	



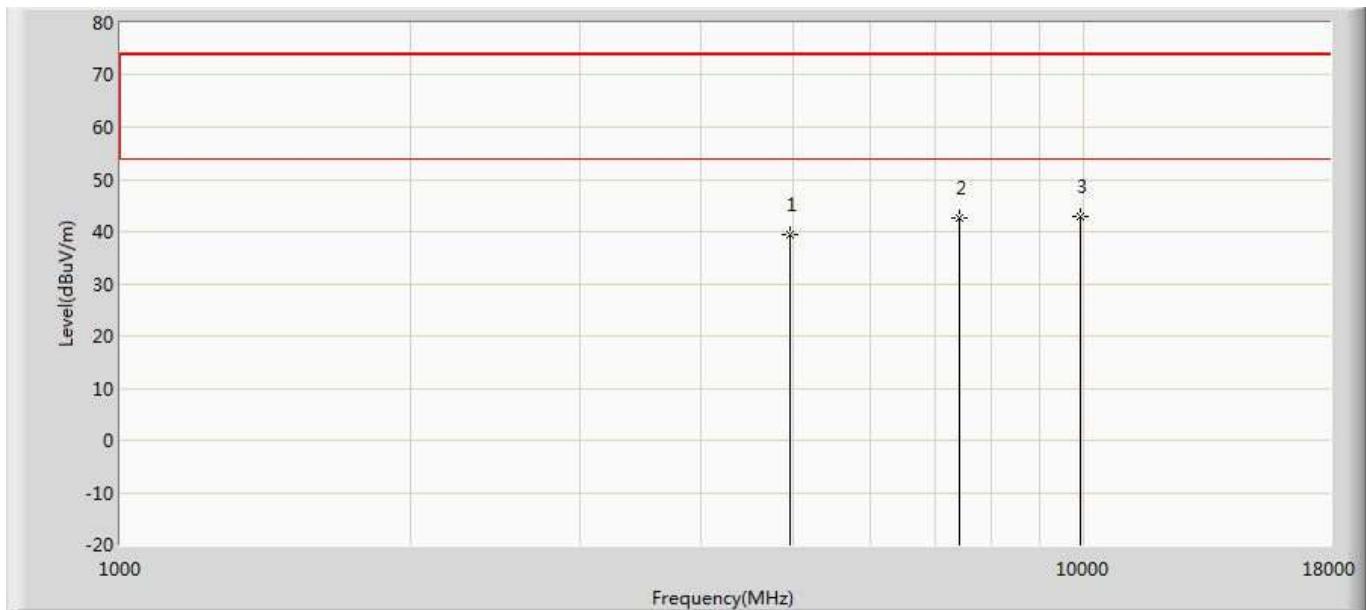
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	40.966	42.250	-33.034	74.000	-1.284	PK
2		7320.000	41.112	39.229	-32.888	74.000	1.884	PK
3	*	9760.000	44.192	38.380	-29.808	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by Coded125	



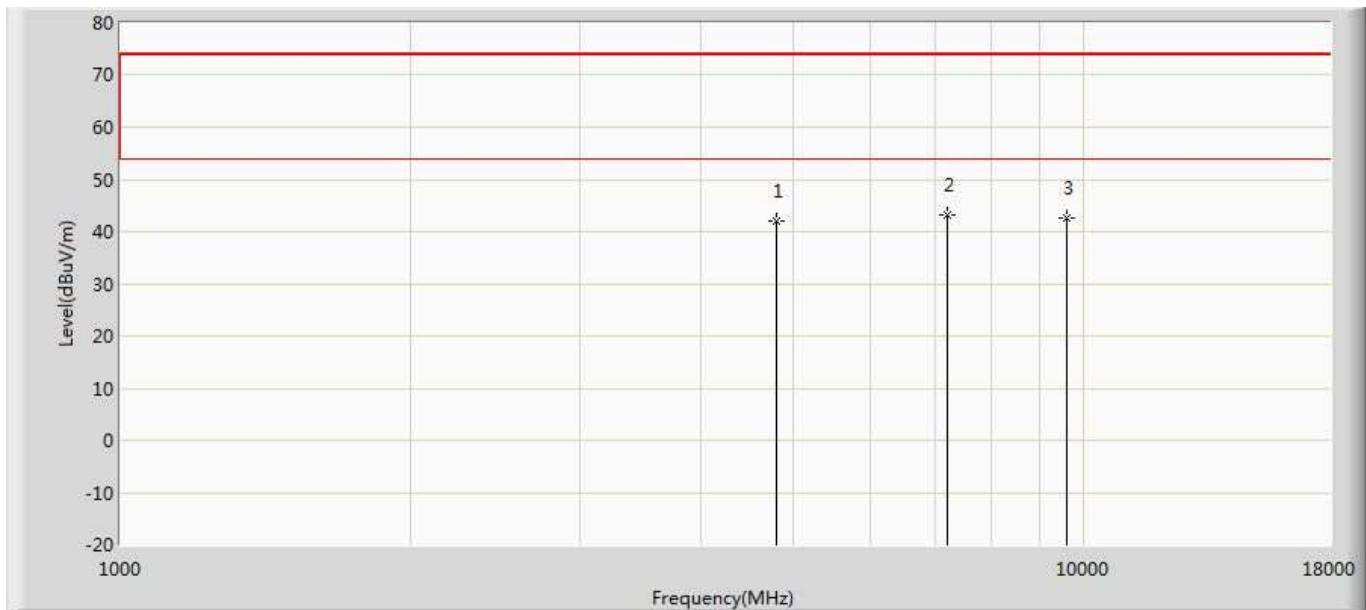
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.507	43.655	-31.493	74.000	-1.148	PK
2		7440.000	43.205	40.779	-30.795	74.000	2.426	PK
3	*	9920.000	43.713	38.459	-30.287	74.000	5.253	PK

Site: AC5	Time: 2019/04/15 - 10:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by Coded125	



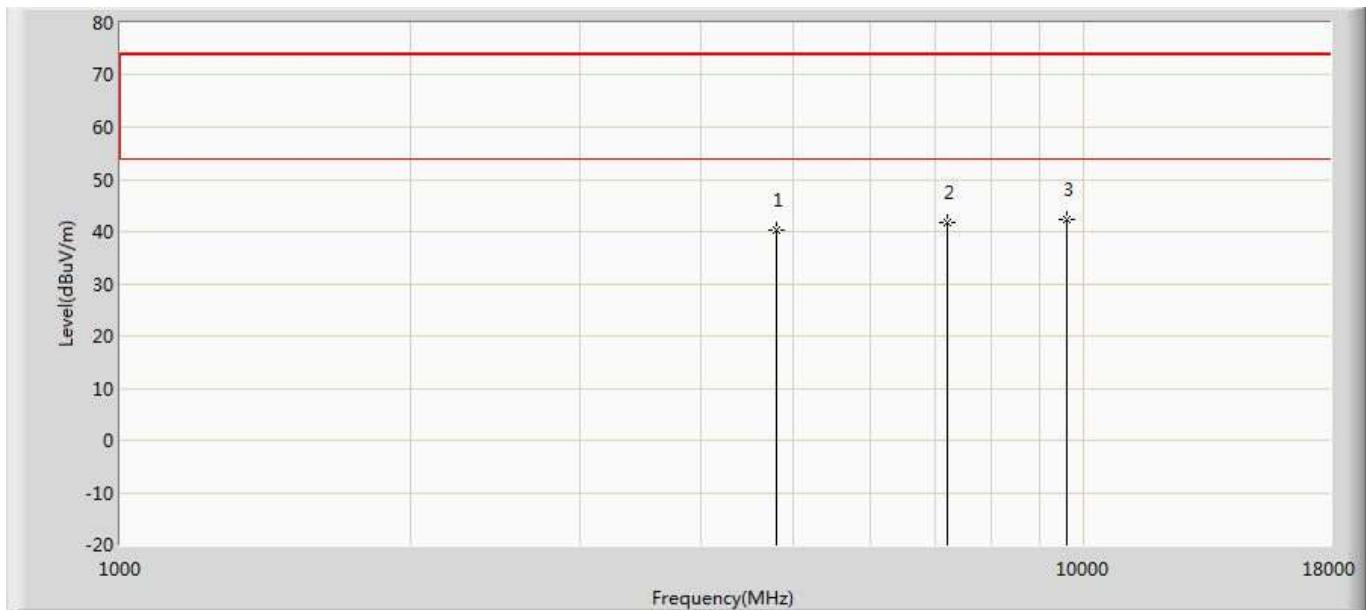
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.558	40.706	-34.442	74.000	-1.148	PK
2		7440.000	42.470	40.044	-31.530	74.000	2.426	PK
3	*	9920.000	42.920	37.666	-31.080	74.000	5.253	PK

Site: AC5	Time: 2019/04/15 - 10:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by Coded500	



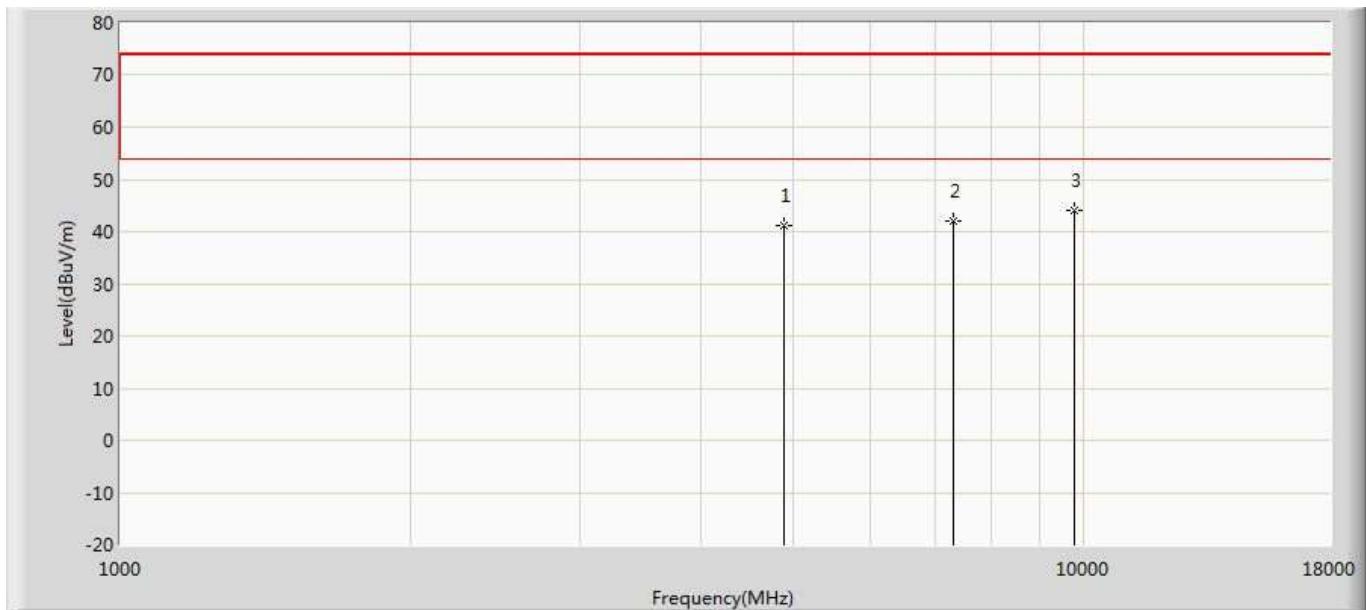
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.952	43.675	-32.048	74.000	-1.723	PK
2	*	7206.000	43.160	41.241	-30.840	74.000	1.919	PK
3		9608.000	42.725	37.826	-31.275	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by Coded500	



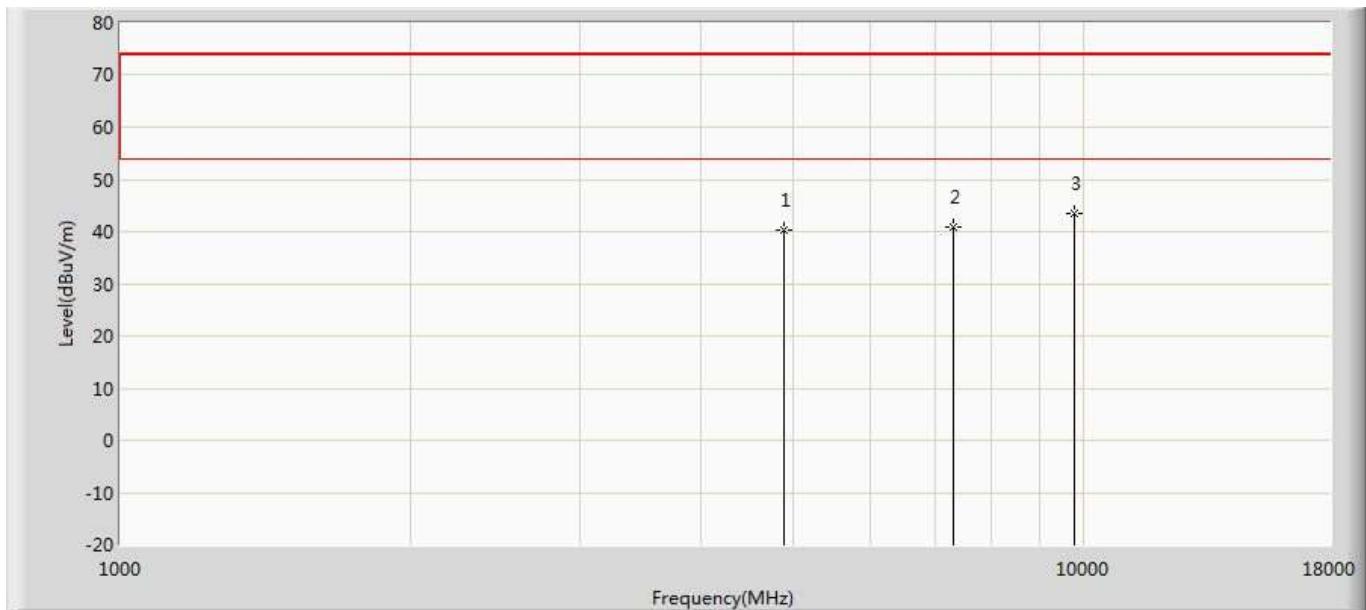
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	40.180	41.903	-33.820	74.000	-1.723	PK
2		7206.000	41.627	39.708	-32.373	74.000	1.919	PK
3	*	9608.000	42.378	37.479	-31.622	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2440MHz by Coded500	



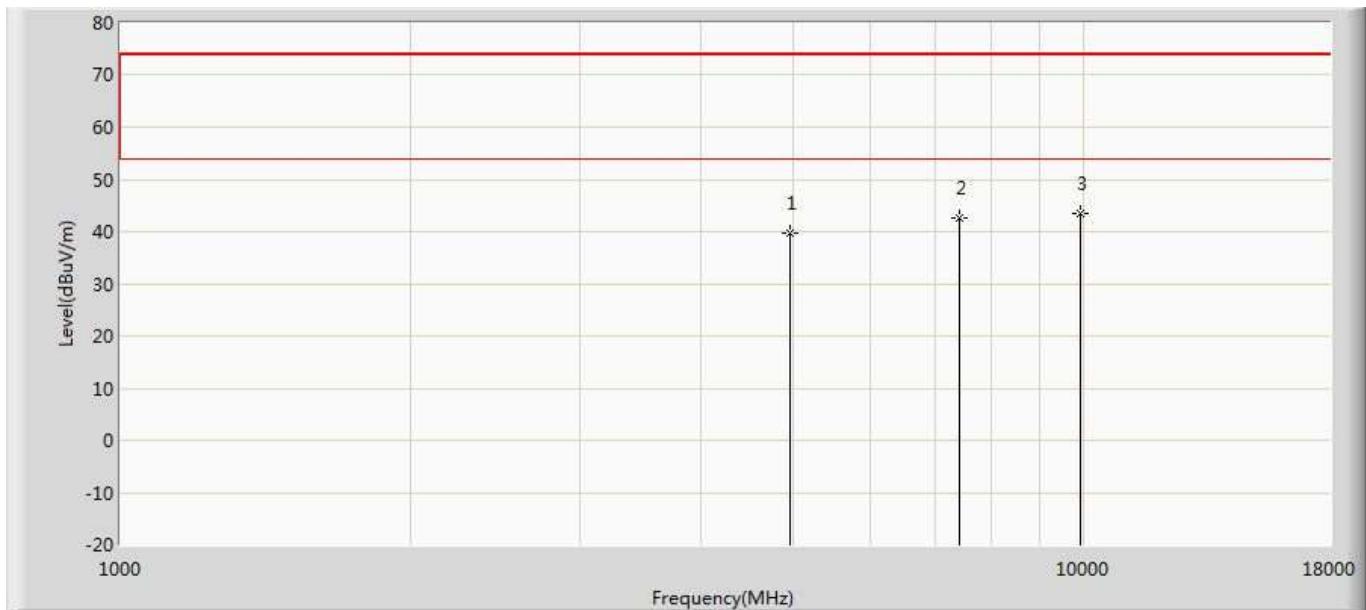
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.303	42.587	-32.697	74.000	-1.284	PK
2		7320.000	41.976	40.093	-32.024	74.000	1.884	PK
3	*	9760.000	44.058	38.246	-29.942	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2440MHz by Coded500	



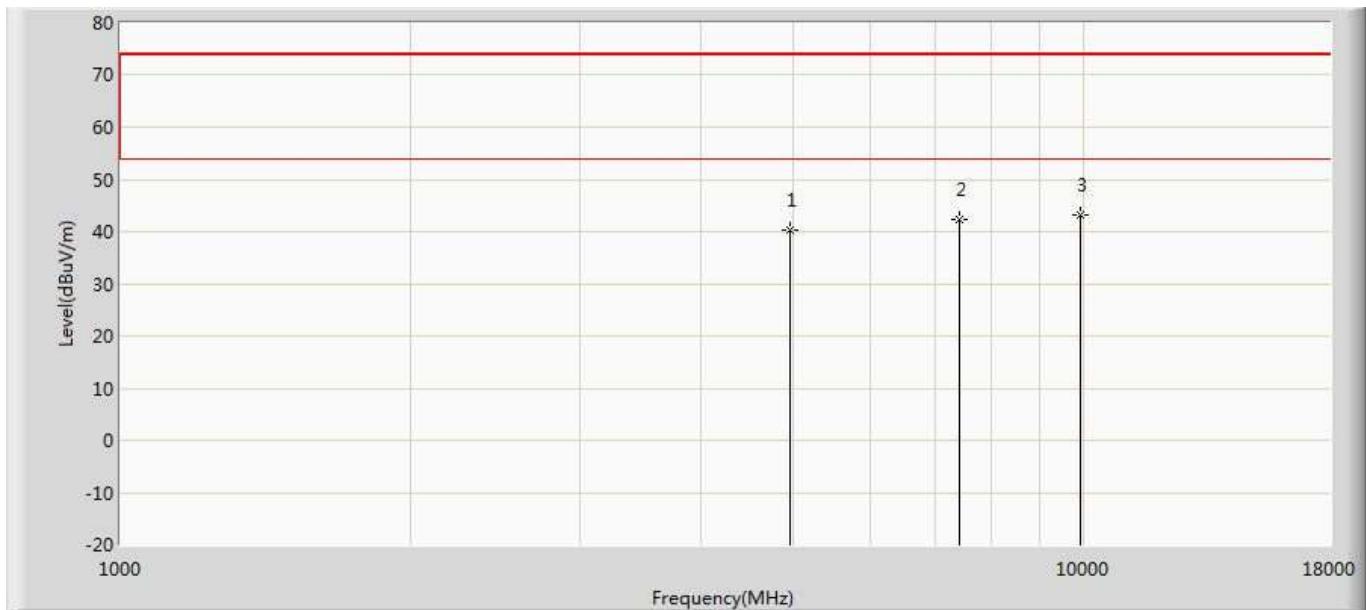
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	40.419	41.703	-33.581	74.000	-1.284	PK
2		7320.000	40.812	38.929	-33.188	74.000	1.884	PK
3	*	9760.000	43.522	37.710	-30.478	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by Coded500	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.708	40.856	-34.292	74.000	-1.148	PK
2		7440.000	42.598	40.172	-31.402	74.000	2.426	PK
3	*	9920.000	43.341	38.087	-30.659	74.000	5.253	PK

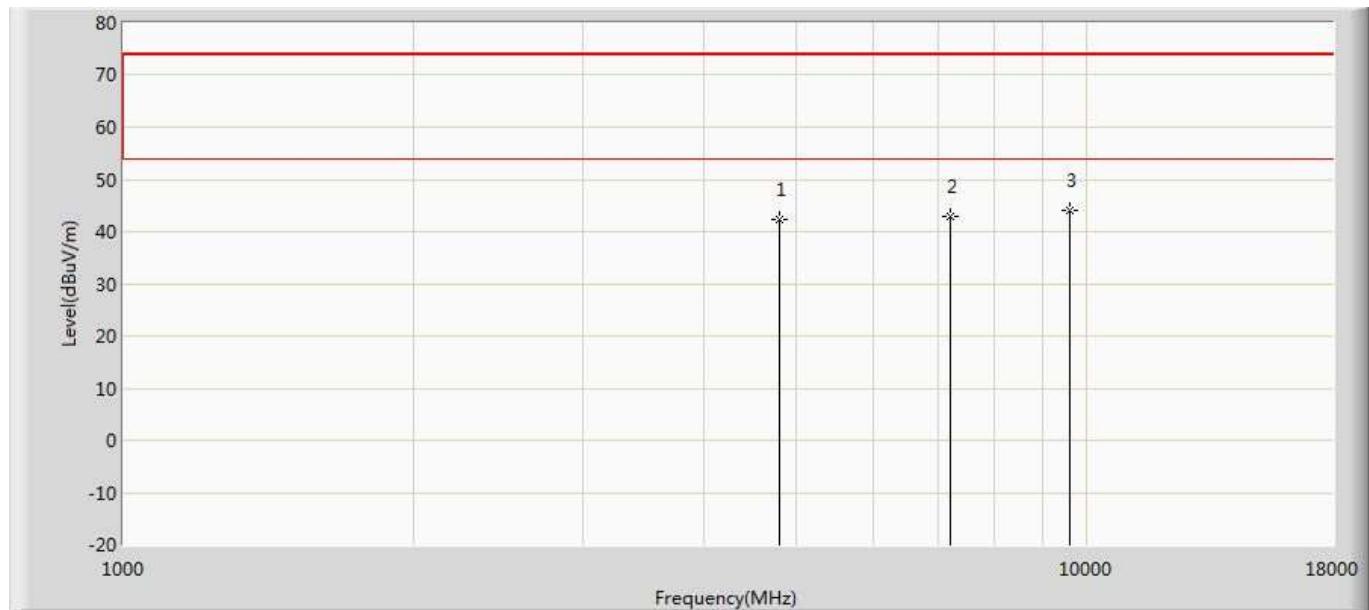
Site: AC5	Time: 2019/04/15 - 10:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by Coded500	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	40.212	41.360	-33.788	74.000	-1.148	PK
2		7440.000	42.339	39.913	-31.661	74.000	2.426	PK
3	*	9920.000	43.290	38.036	-30.710	74.000	5.253	PK

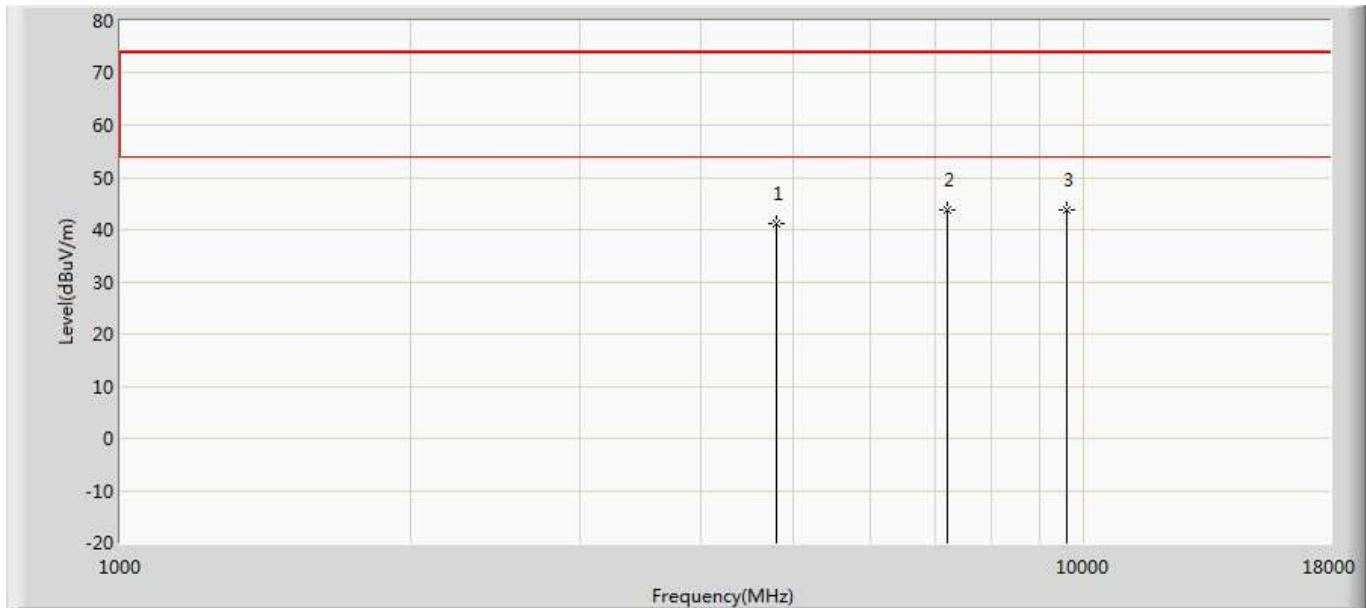
Diodes:

Site: AC5	Time: 2019/04/15 - 10:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by BLE	



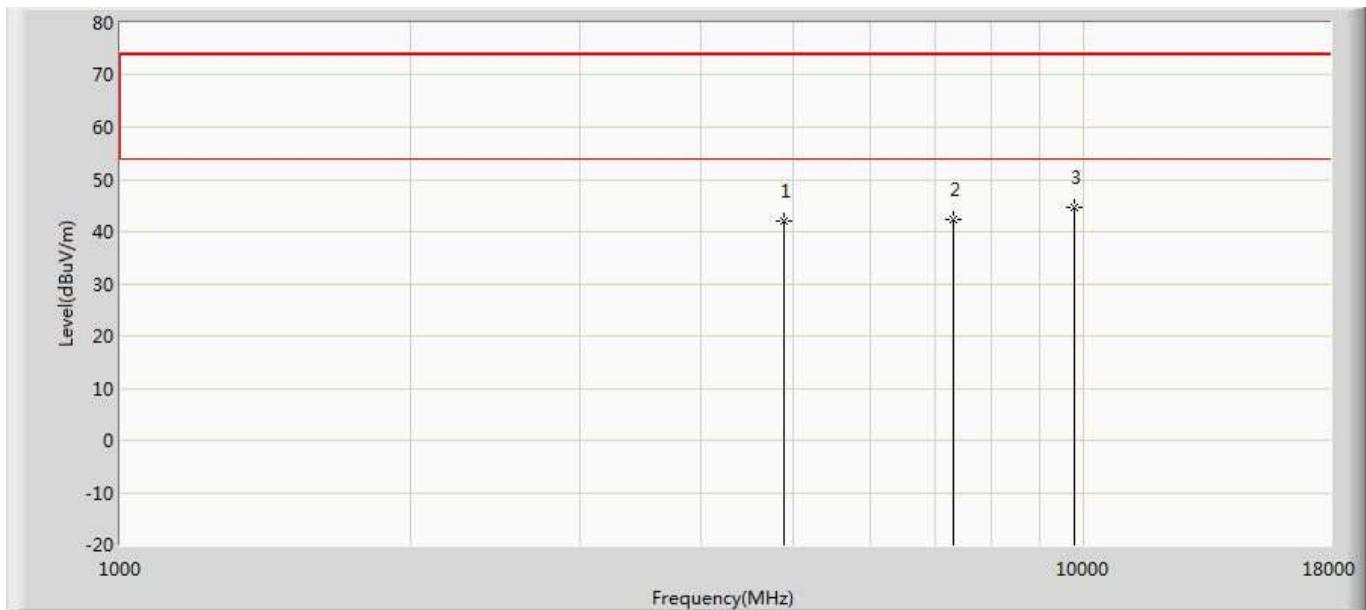
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.349	44.072	-31.651	74.000	-1.723	PK
2		7206.000	43.021	41.102	-30.979	74.000	1.919	PK
3	*	9608.000	43.952	39.053	-30.048	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by BLE	



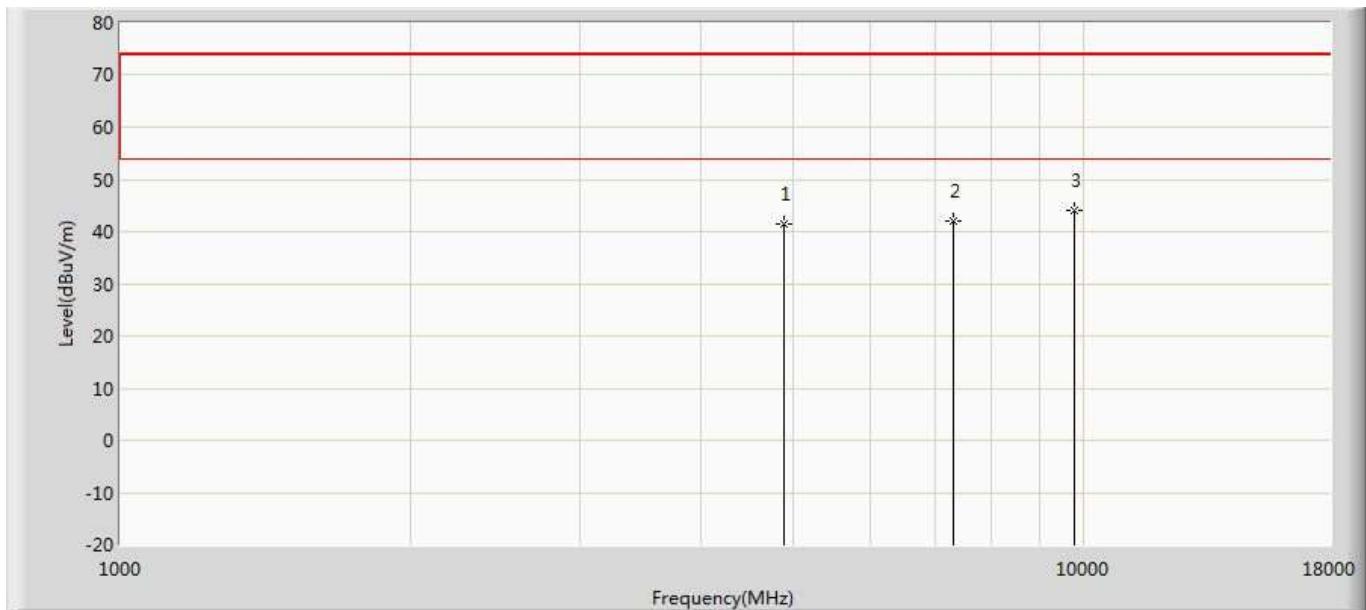
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.065	42.788	-32.935	74.000	-1.723	PK
2		7206.000	43.699	41.780	-30.301	74.000	1.919	PK
3	*	9608.000	43.708	38.809	-30.292	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by BLE	



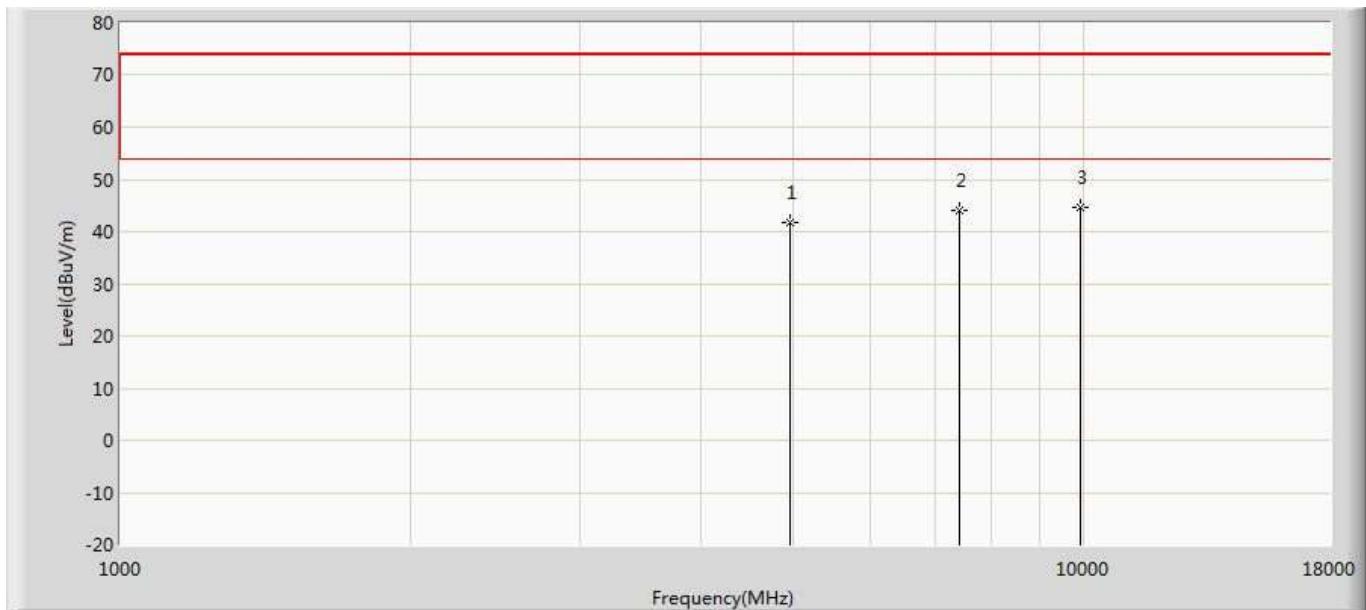
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.943	43.227	-32.057	74.000	-1.284	PK
2		7320.000	42.177	40.294	-31.823	74.000	1.884	PK
3	*	9760.000	44.636	38.824	-29.364	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by BLE	



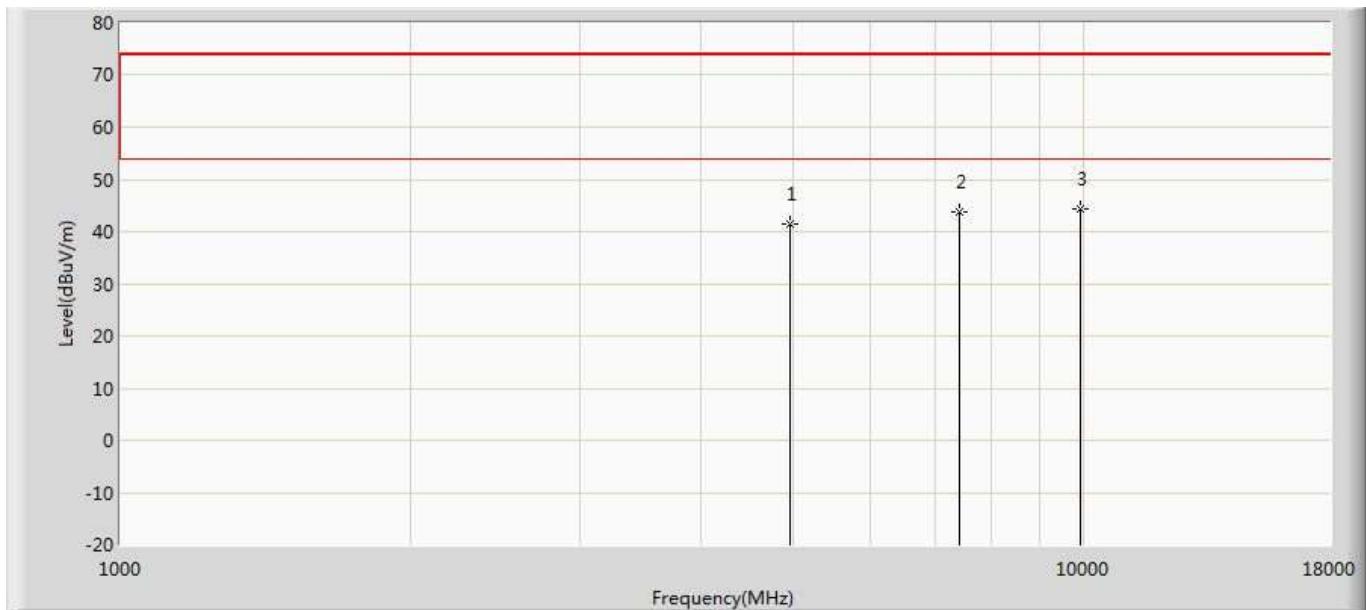
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.590	42.874	-32.410	74.000	-1.284	PK
2		7320.000	42.027	40.144	-31.973	74.000	1.884	PK
3	*	9760.000	44.091	38.279	-29.909	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by BLE	



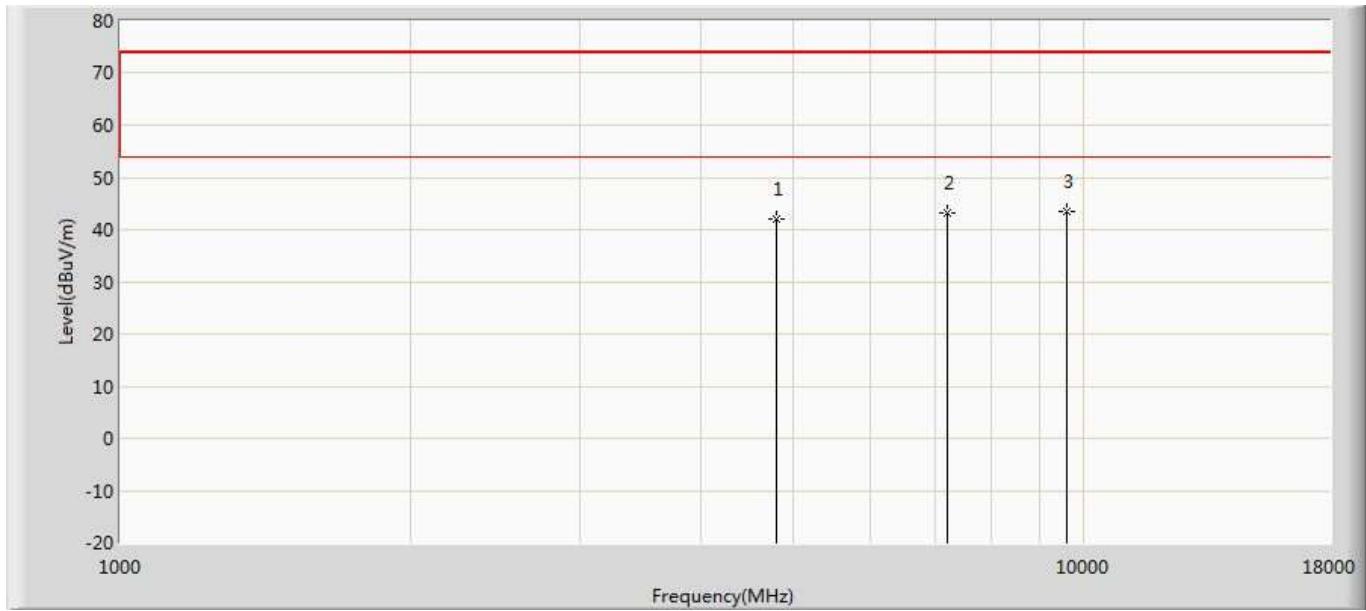
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.632	42.780	-32.368	74.000	-1.148	PK
2		7440.000	44.175	41.749	-29.825	74.000	2.426	PK
3	*	9920.000	44.604	39.350	-29.396	74.000	5.253	PK

Site: AC5	Time: 2019/04/15 - 10:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by BLE	



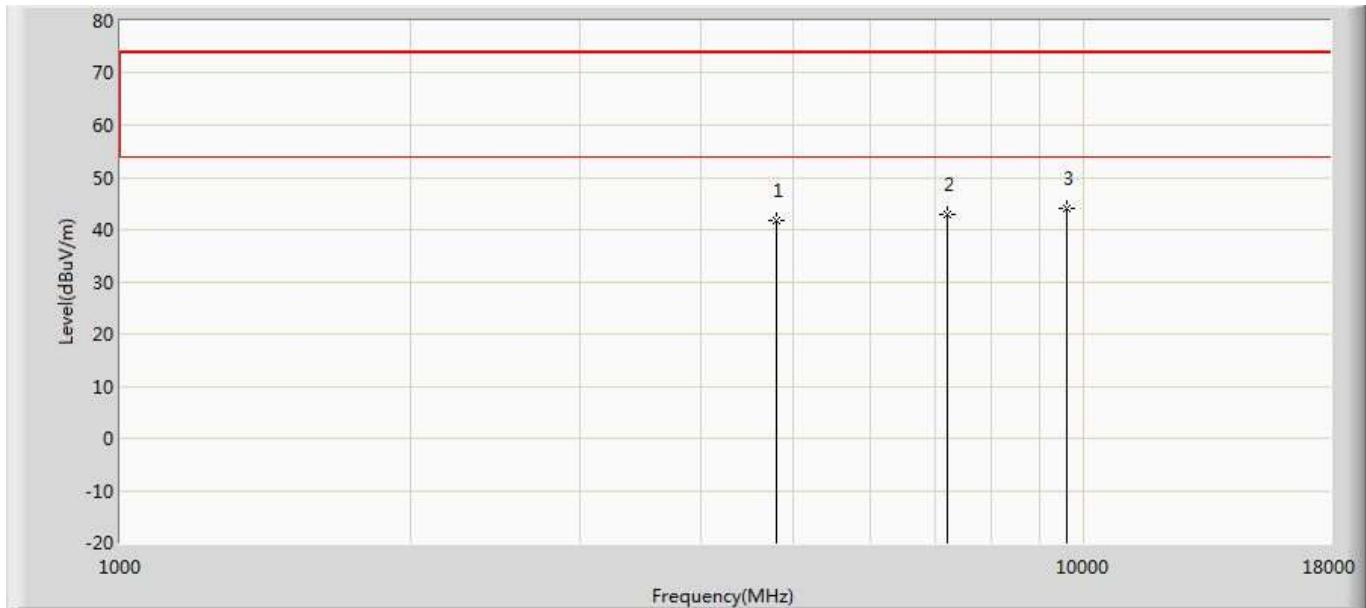
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.421	42.569	-32.579	74.000	-1.148	PK
2		7440.000	43.708	41.282	-30.292	74.000	2.426	PK
3	*	9920.000	44.257	39.003	-29.743	74.000	5.253	PK

Site: AC5	Time: 2019/04/15 - 10:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



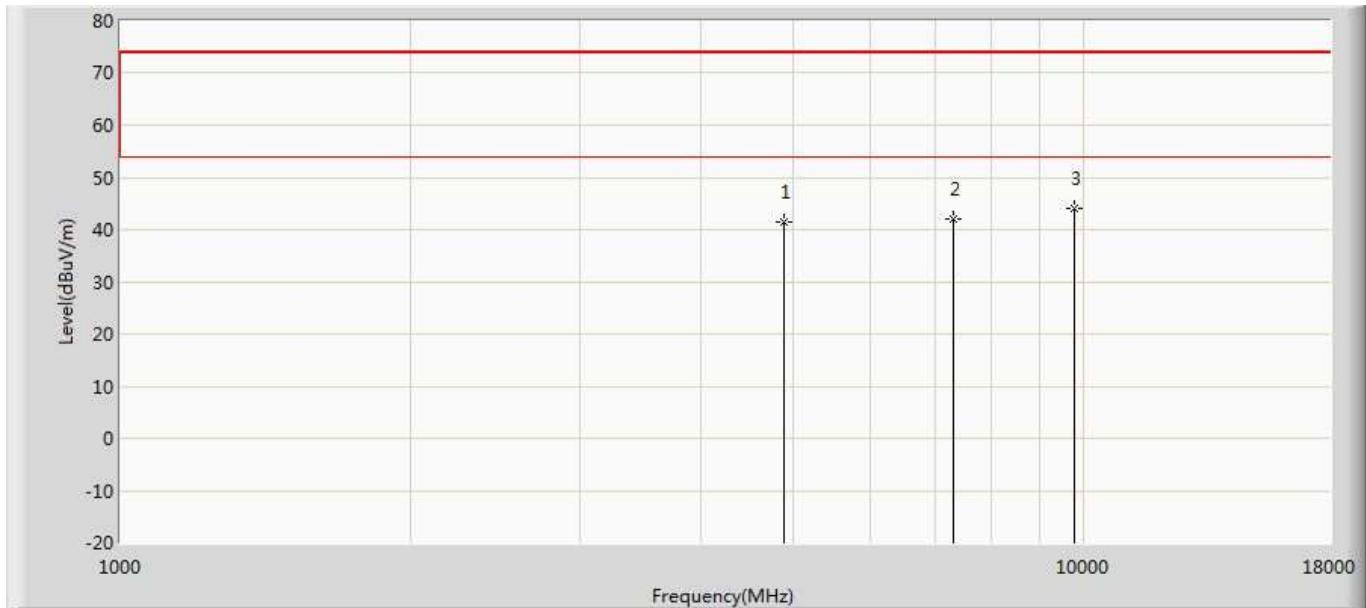
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.917	43.640	-32.083	74.000	-1.723	PK
2		7206.000	43.070	41.151	-30.930	74.000	1.919	PK
3	*	9608.000	43.428	38.529	-30.572	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



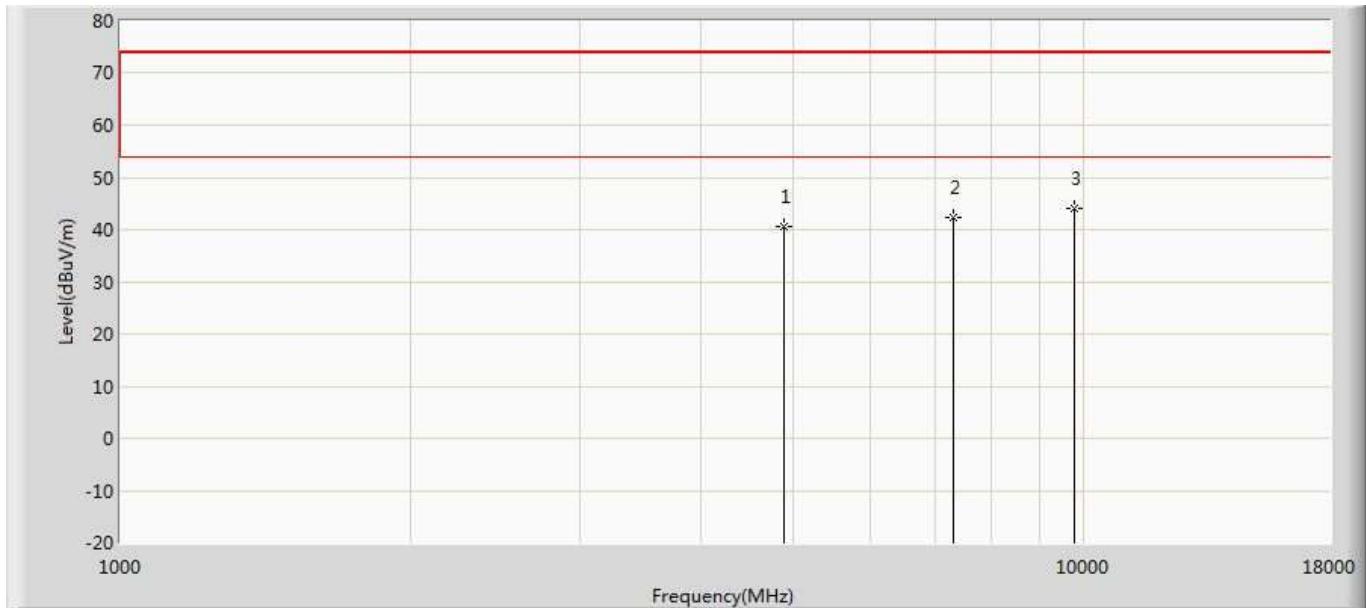
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.832	43.555	-32.168	74.000	-1.723	PK
2		7206.000	42.763	40.844	-31.237	74.000	1.919	PK
3	*	9608.000	43.957	39.058	-30.043	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by 2LE	



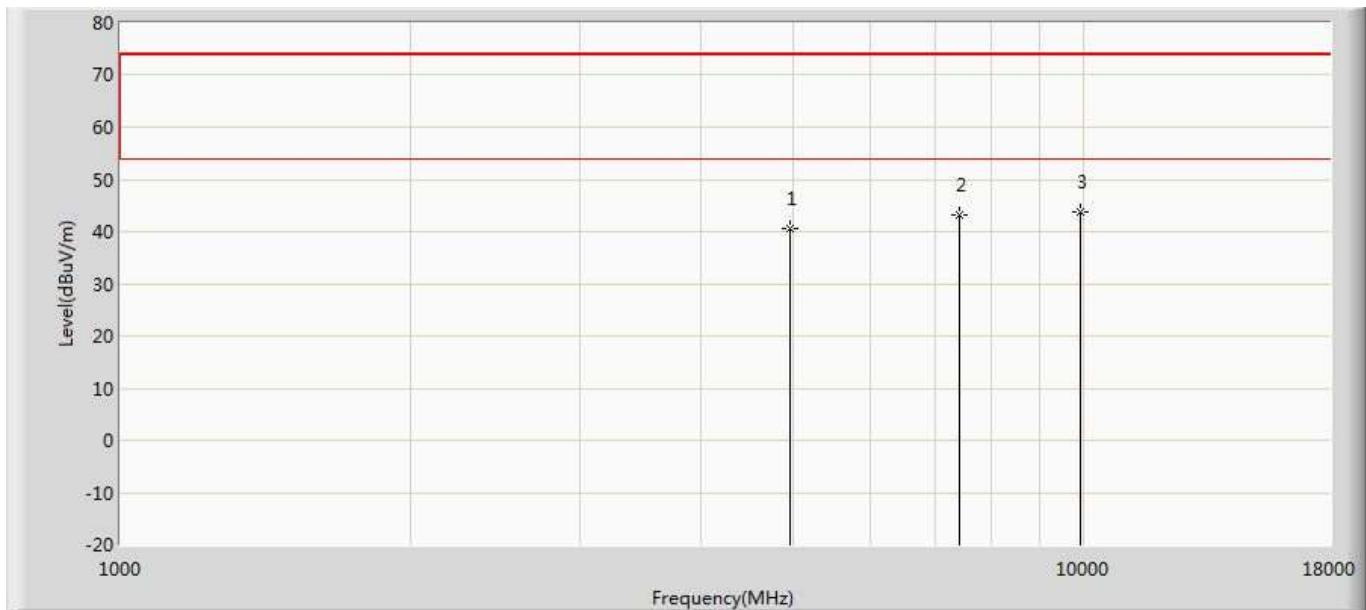
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.457	42.741	-32.543	74.000	-1.284	PK
2		7320.000	42.136	40.253	-31.864	74.000	1.884	PK
3	*	9760.000	44.002	38.190	-29.998	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by 2LE	



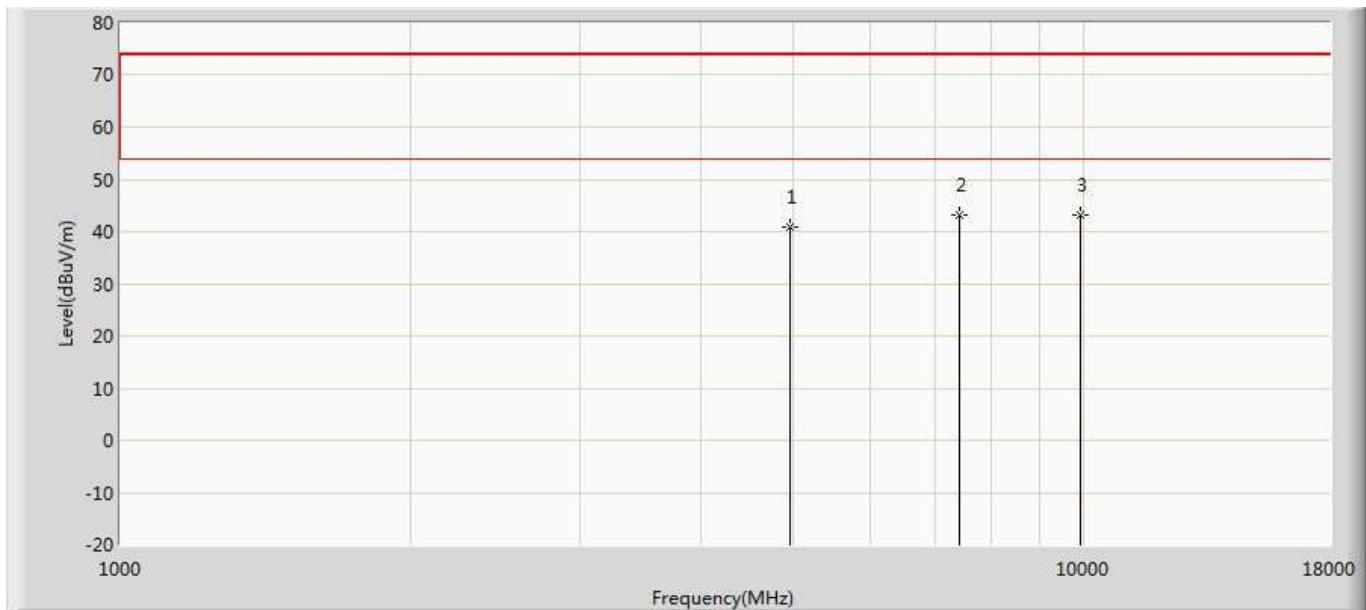
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	40.680	41.964	-33.320	74.000	-1.284	PK
2		7320.000	42.315	40.432	-31.685	74.000	1.884	PK
3	*	9760.000	44.021	38.209	-29.979	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



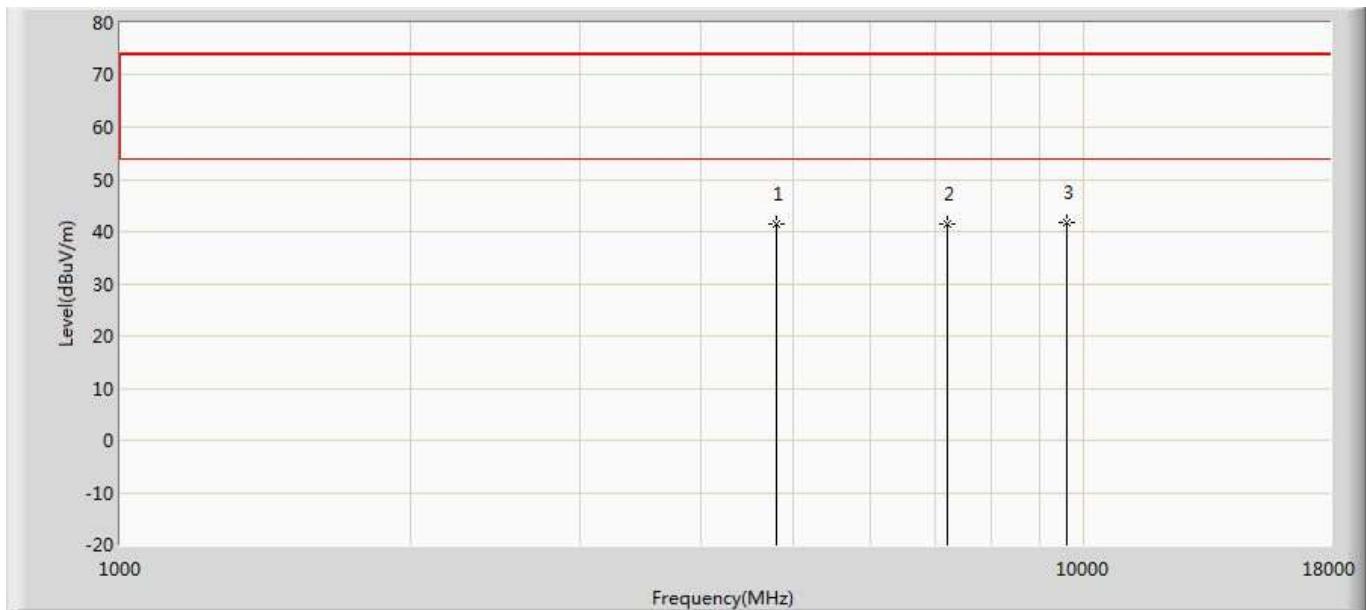
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	40.574	41.722	-33.426	74.000	-1.148	PK
2		7440.000	43.163	40.737	-30.837	74.000	2.426	PK
3	*	9920.000	43.745	38.491	-30.255	74.000	5.253	PK

Site: AC5	Time: 2019/04/15 - 10:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



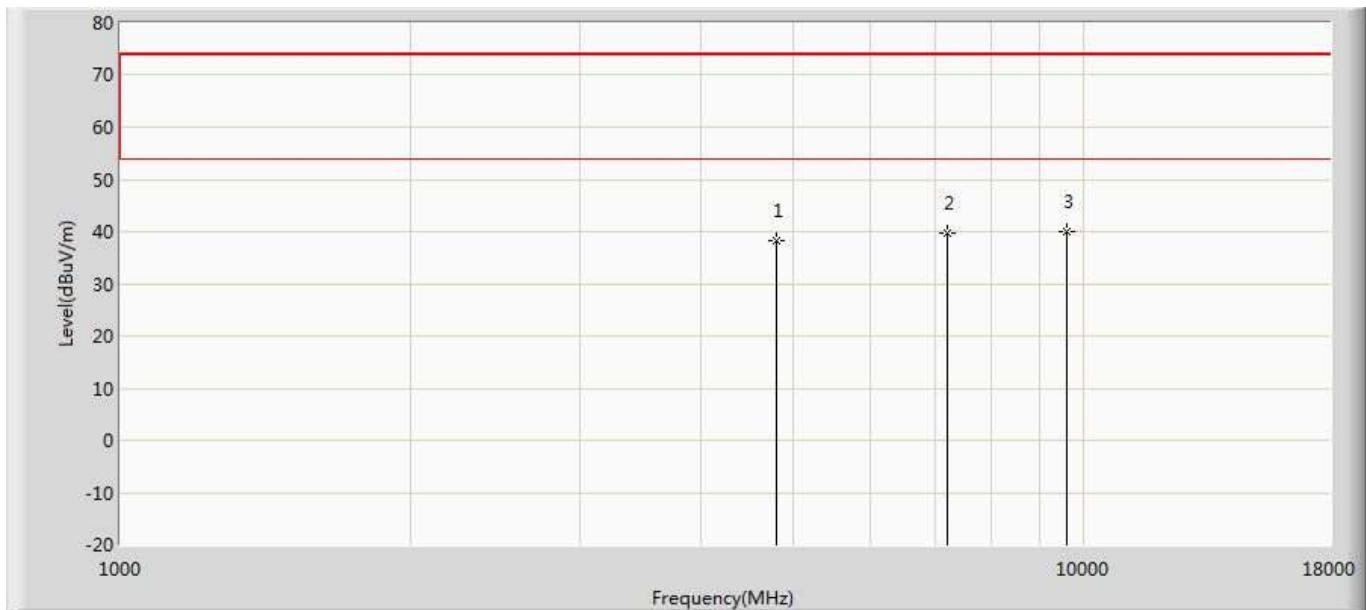
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	40.831	41.979	-33.169	74.000	-1.148	PK
2		7440.000	43.278	40.852	-30.722	74.000	2.426	PK
3	*	9920.000	43.298	38.044	-30.702	74.000	5.253	PK

Site: AC5	Time: 2019/04/15 - 10:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by Coded125	



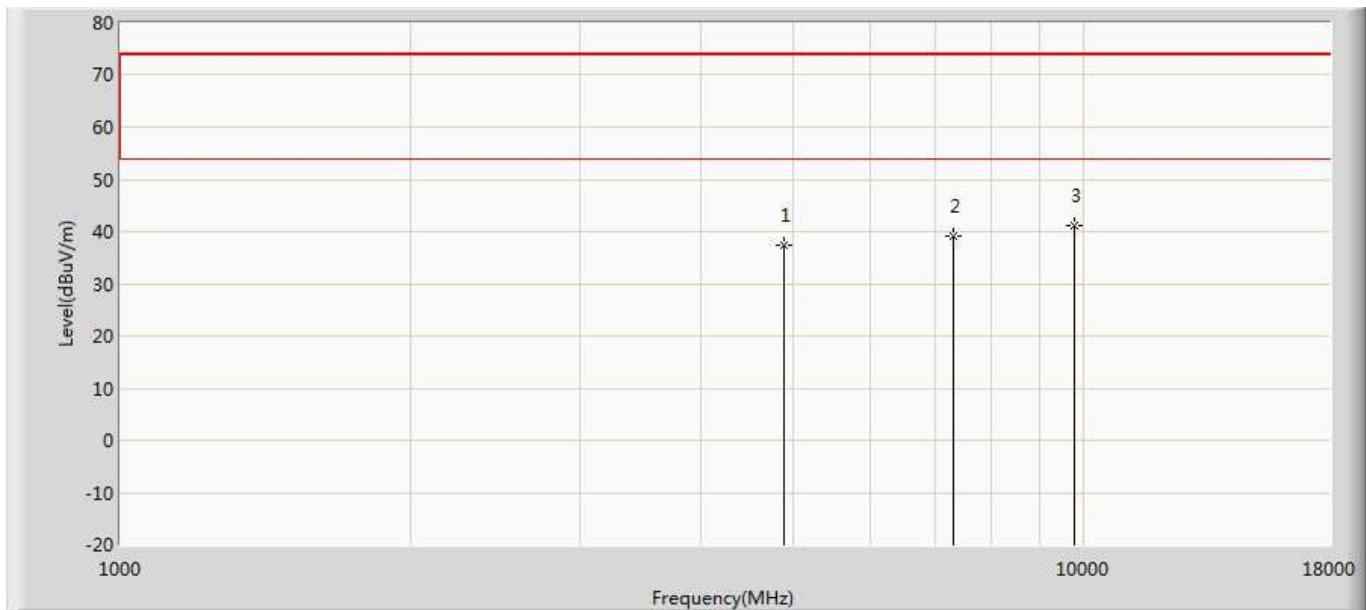
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.356	43.079	-32.644	74.000	-1.723	PK
2		7206.000	41.409	39.490	-32.591	74.000	1.919	PK
3	*	9608.000	41.749	36.850	-32.251	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by Coded125	



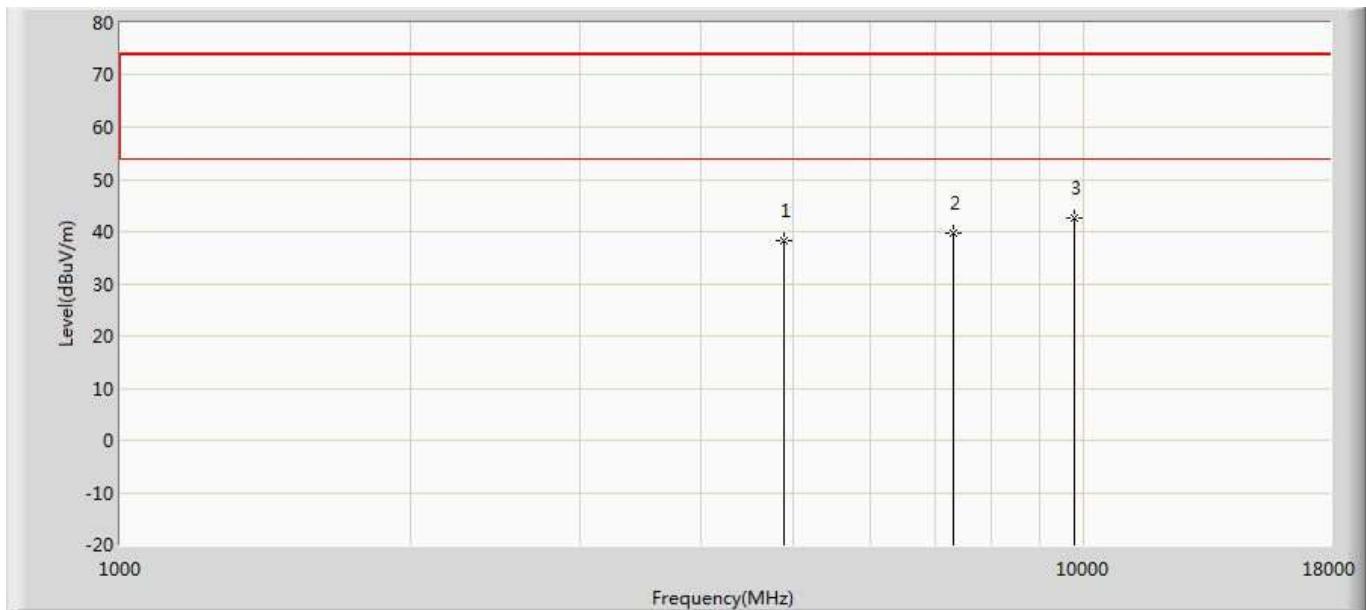
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	38.248	39.971	-35.752	74.000	-1.723	PK
2		7206.000	39.757	37.838	-34.243	74.000	1.919	PK
3	*	9608.000	40.112	35.213	-33.888	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2440MHz by Coded125	



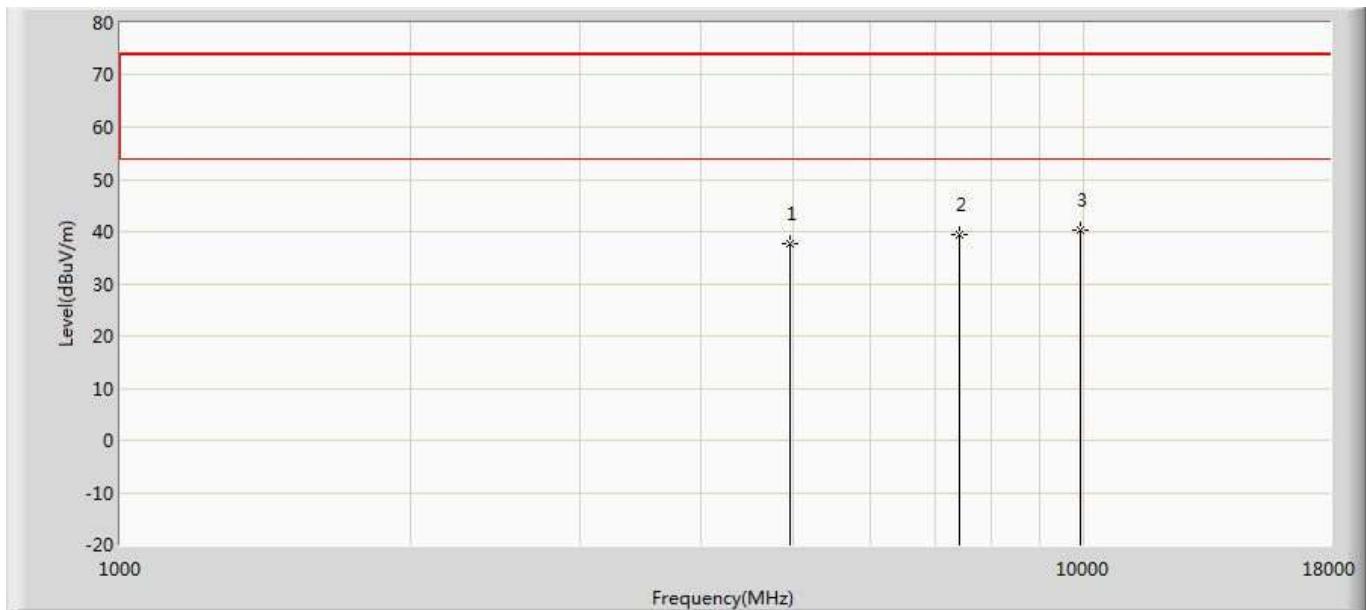
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	37.487	38.771	-36.513	74.000	-1.284	PK
2		7320.000	39.033	37.150	-34.967	74.000	1.884	PK
3	*	9760.000	41.045	35.233	-32.955	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2440MHz by Coded125	



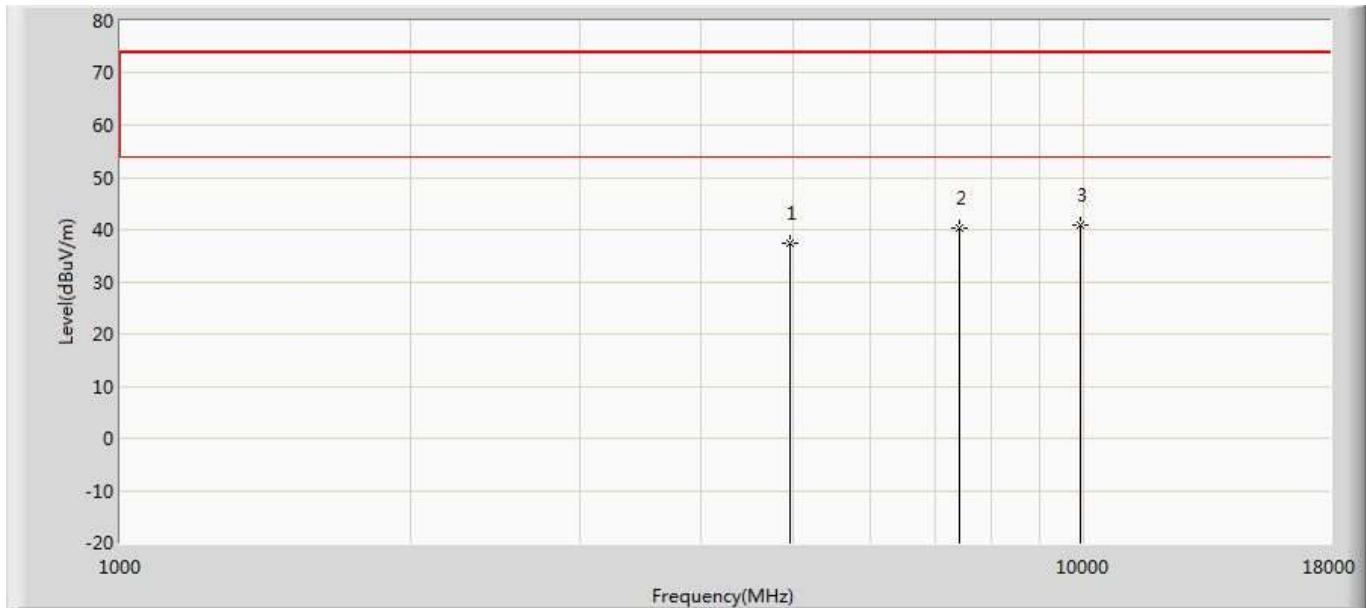
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	38.163	39.447	-35.837	74.000	-1.284	PK
2		7320.000	39.574	37.691	-34.426	74.000	1.884	PK
3	*	9760.000	42.679	36.867	-31.321	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by Coded125	



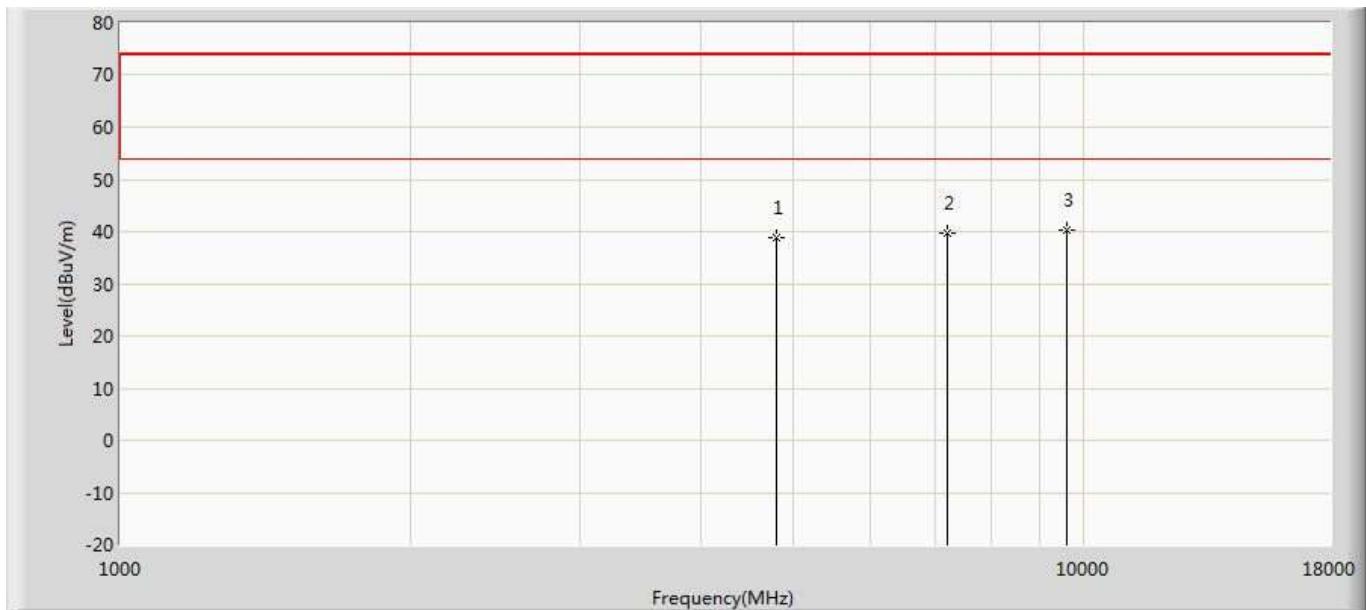
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	37.726	38.874	-36.274	74.000	-1.148	PK
2		7440.000	39.276	36.850	-34.724	74.000	2.426	PK
3	*	9920.000	40.307	35.053	-33.693	74.000	5.253	PK

Site: AC5	Time: 2019/04/15 - 10:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by Coded125	



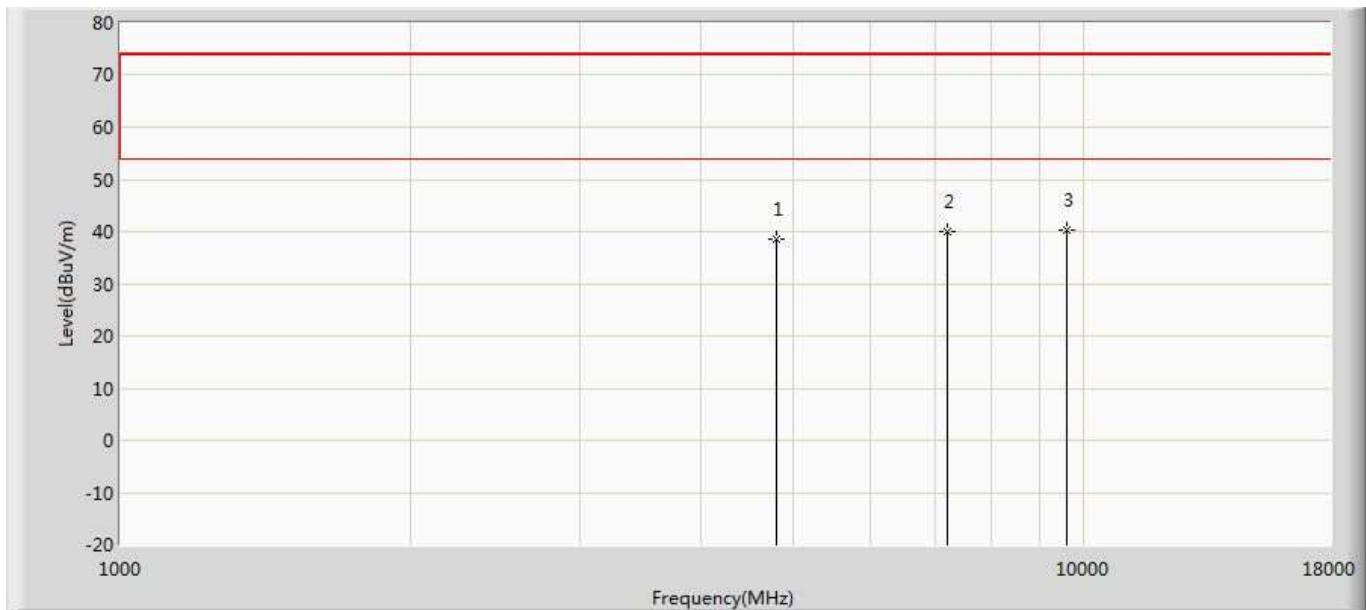
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	37.331	38.479	-36.669	74.000	-1.148	PK
2		7440.000	40.297	37.871	-33.703	74.000	2.426	PK
3	*	9920.000	40.866	35.612	-33.134	74.000	5.253	PK

Site: AC5	Time: 2019/04/15 - 10:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by Coded500	



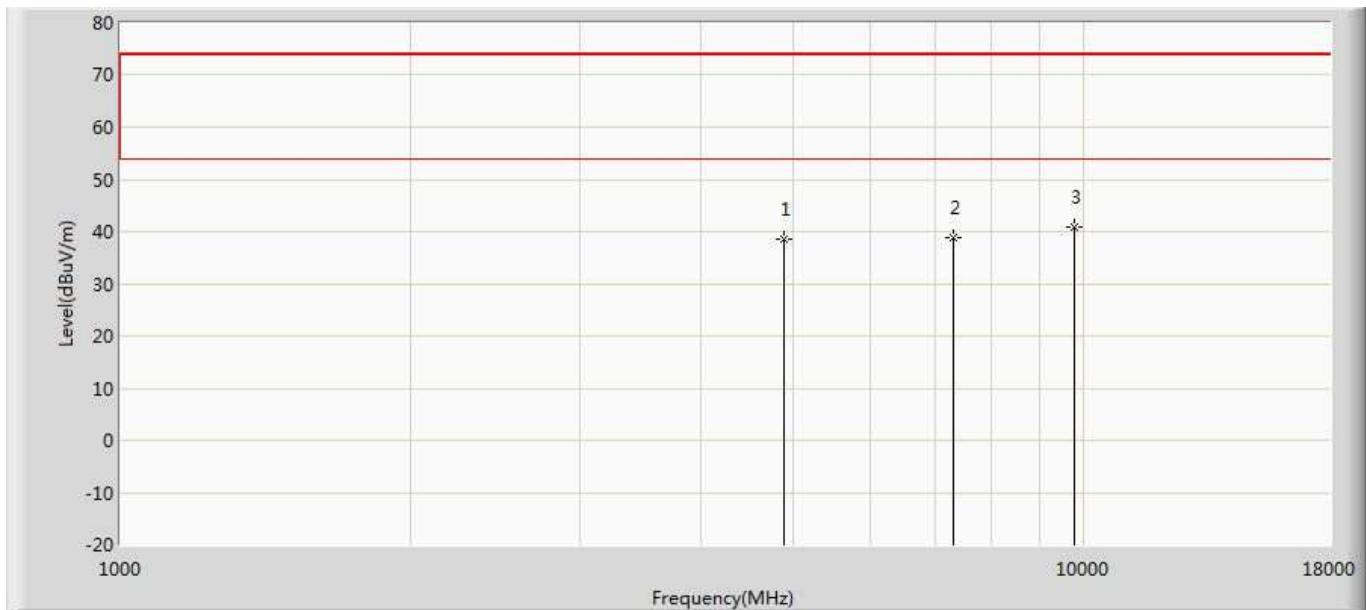
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	38.762	40.485	-35.238	74.000	-1.723	PK
2		7206.000	39.775	37.856	-34.225	74.000	1.919	PK
3	*	9608.000	40.205	35.306	-33.795	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by Coded500	



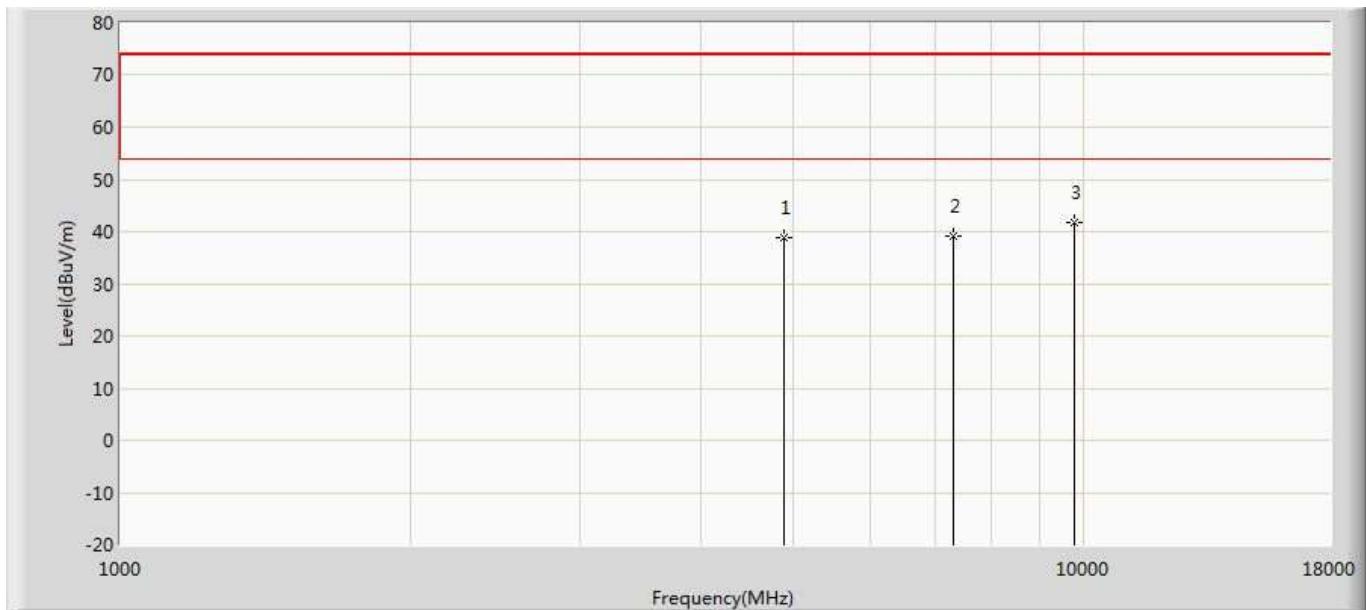
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	38.420	40.143	-35.580	74.000	-1.723	PK
2		7206.000	40.011	38.092	-33.989	74.000	1.919	PK
3	*	9608.000	40.386	35.487	-33.614	74.000	4.899	PK

Site: AC5	Time: 2019/04/15 - 10:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2440MHz by Coded500	



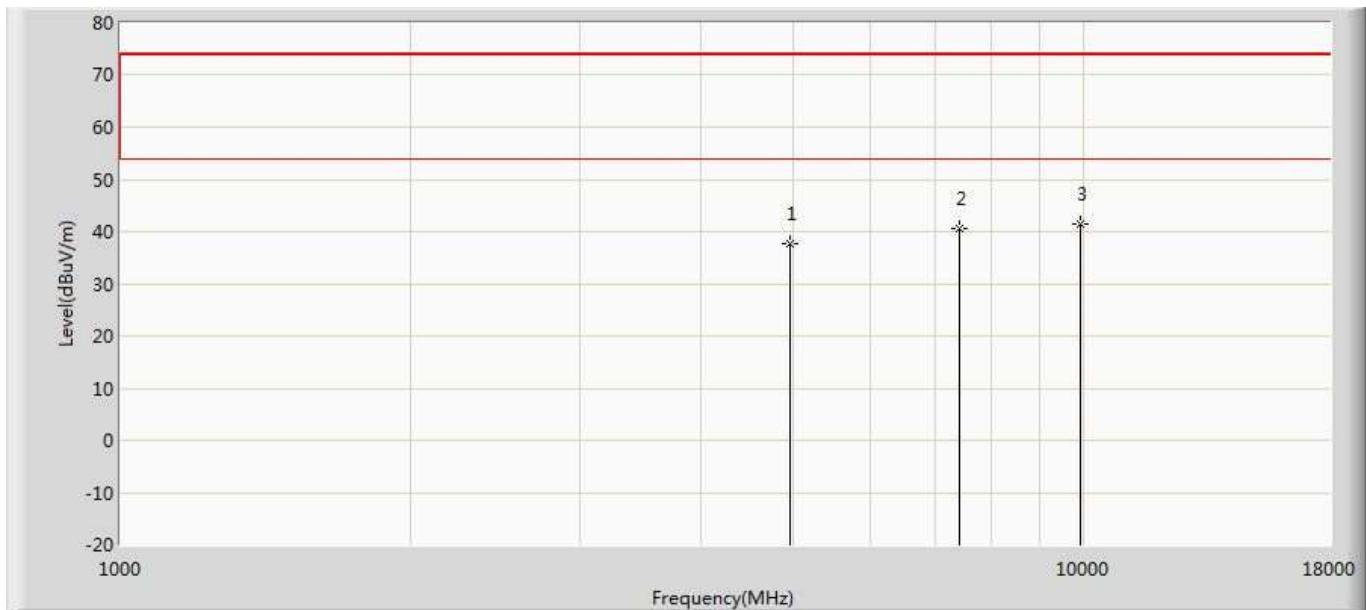
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	38.503	39.787	-35.497	74.000	-1.284	PK
2		7320.000	38.948	37.065	-35.052	74.000	1.884	PK
3	*	9760.000	40.913	35.101	-33.087	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2440MHz by Coded500	



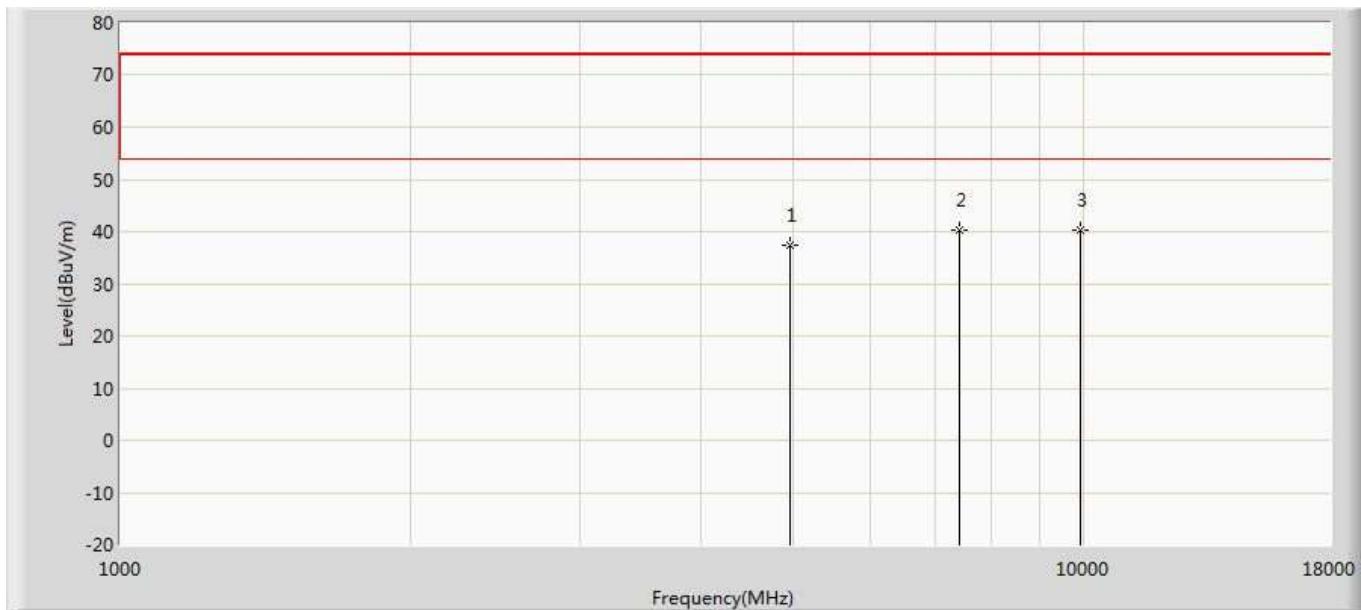
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	38.909	40.193	-35.091	74.000	-1.284	PK
2		7320.000	39.132	37.249	-34.868	74.000	1.884	PK
3	*	9760.000	41.664	35.852	-32.336	74.000	5.812	PK

Site: AC5	Time: 2019/04/15 - 10:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by Coded500	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	37.597	38.745	-36.403	74.000	-1.148	PK
2		7440.000	40.533	38.107	-33.467	74.000	2.426	PK
3	*	9920.000	41.403	36.149	-32.597	74.000	5.253	PK

Site: AC5	Time: 2019/04/15 - 10:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by Coded500	



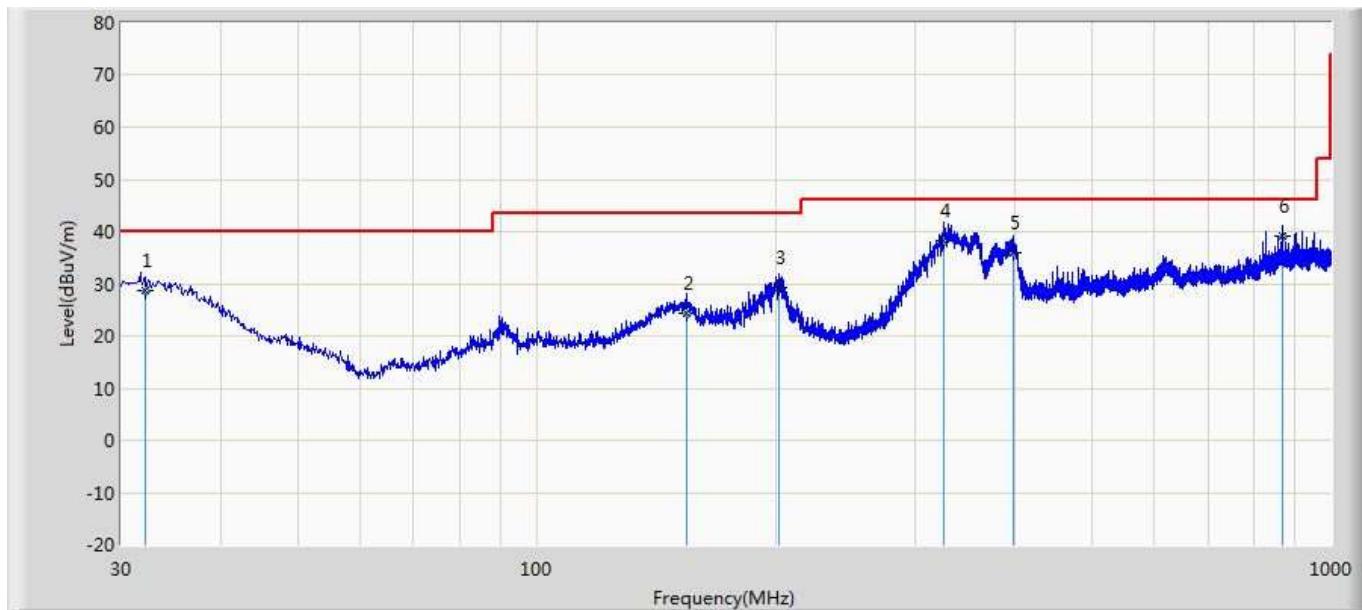
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	37.291	38.439	-36.709	74.000	-1.148	PK
2	*	7440.000	40.412	37.986	-33.588	74.000	2.426	PK
3		9920.000	40.407	35.153	-33.593	74.000	5.253	PK

Note:

1. Measured Level = Reading Level + Factor.
2. The test frequency range, 9kHz~30MHz, 18GHz~26GHz, both of the worst case are at least 20dB below the limits, therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
4. As the radiated emission was performed, so conducted emission was not tested.
5. We have evaluated each mode, shown in the report is BLE mode which is worst data.

The worst case of Radiated Emission below 1GHz:

Site: AC2	Time: 2019/04/03 - 15:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC2_3M(30-1000M)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1	

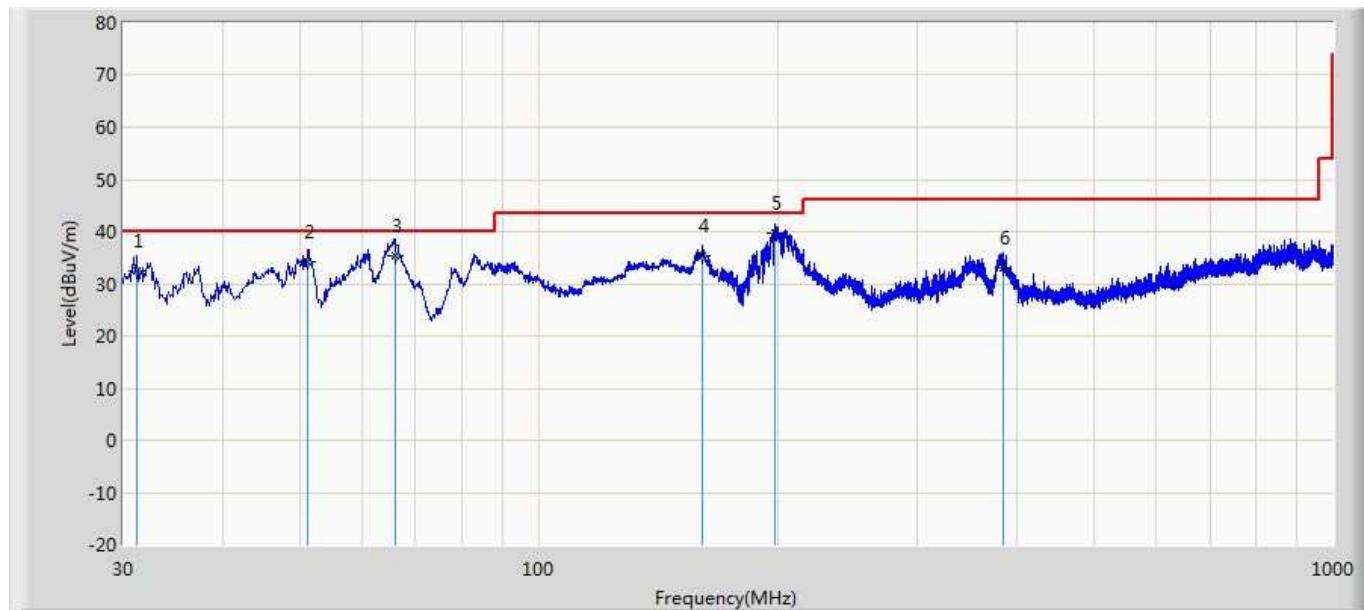


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		32.182	28.612	1.230	-11.388	40.000	27.381	199	134	QP
2		154.524	24.454	7.364	-19.046	43.500	17.089	136	144	QP
3		201.932	29.236	11.409	-14.264	43.500	17.827	172	158	QP
4		325.122	38.166	16.354	-7.834	46.000	21.812	172	139	QP
5		397.994	36.025	11.065	-9.975	46.000	24.961	194	246	QP
6	*	870.505	39.235	6.243	-6.765	46.000	32.992	136	188	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable+Amp).

Site: AC2	Time: 2019/04/03 - 20:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC2_3M(30-1000M)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		31.212	32.494	8.569	-7.506	40.000	23.925	136	188	QP
2		51.219	34.113	14.961	-5.887	40.000	19.153	147	346	QP
3		66.011	35.344	19.466	-4.656	40.000	15.878	170	290	QP
4		160.950	35.361	16.423	-8.139	43.500	18.938	149	340	QP
5	*	198.295	39.604	16.438	-3.896	43.500	23.166	196	220	QP
6		383.929	32.900	9.469	-13.100	46.000	23.432	143	169	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable+Amp).

5. Emissions in non-restricted frequency bands

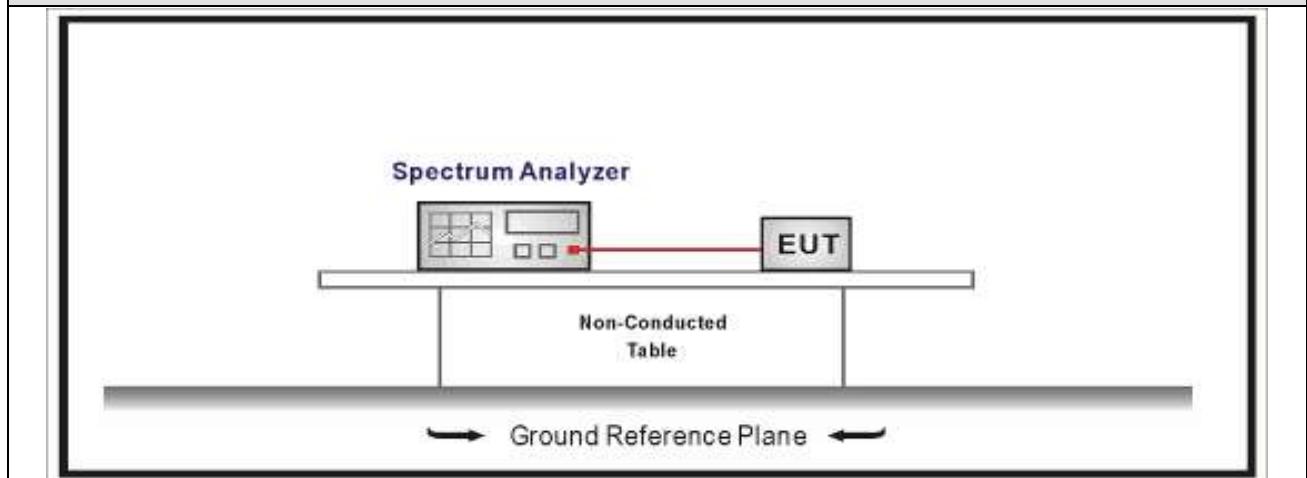
5.1. Test Equipment

Emissions in non-restricted frequency bands / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2019.02.04	2020.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2018.04.09	2020.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2018.04.09	2020.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2018.04.10	2020.04.09

Note: All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

5.2. Test Setup

Emissions in non-restricted frequency bands test setup:



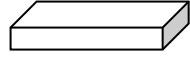
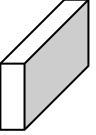
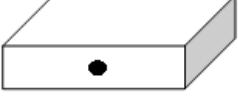
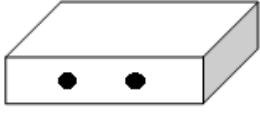
5.3. Limit

Un-Restricted Band Emissions Limit	
RF Output power (Detection methods)	Limit(dB)
RF Output power(Average detector)	30c(Note1)
RF Output power(PK detector)	20c(Note2)
<p>Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).</p> <p>Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).</p>	

5.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.11	Emissions in non-restricted frequency bands
	<input checked="" type="checkbox"/> ANSI C63.10	11.11.2	Reference level measurement
	<input checked="" type="checkbox"/> ANSI C63.10	11.11.3	Emission level measurement
<input type="checkbox"/>	ANSI C63.10	11.12	Emissions in restricted frequency bands
	<input type="checkbox"/> ANSI C63.10	11.12.1	Radiated emission measurements
	<input type="checkbox"/> ANSI C63.10	11.12.2.7	Radiated spurious emission test
<input type="checkbox"/>	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
<input type="checkbox"/>	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
<input type="checkbox"/>	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
	<input type="checkbox"/> ANSI C63.10	11.12.2	Antenna-port conducted measurements
	<input type="checkbox"/> ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure
	<input type="checkbox"/> ANSI C63.10	11.12.2.4	Peak power measurement procedure
	<input type="checkbox"/> ANSI C63.10	11.12.2.5	Average power measurement procedures
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
		11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
		11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

5.5. EUT test Axis definition

Item	Emissions in non-restricted frequency bands			
Device Category	<input type="checkbox"/>	Fixed point-to-point		
	<input type="checkbox"/>	Emit multiple directional beams, simultaneously or sequentially		
	<input checked="" type="checkbox"/>	Other cases		
Test mode	Mode 1-4			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	
	<input checked="" type="checkbox"/>	Conducted		
	<input checked="" type="checkbox"/>	Chain 1		
				
	<input type="checkbox"/>	Chain 1	Chain 2	
				
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3
				

5.6. Test Result

Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 1	Test Site	:	TR-8
Test Date	:	2019.03.22	Test Engineer	:	Simon

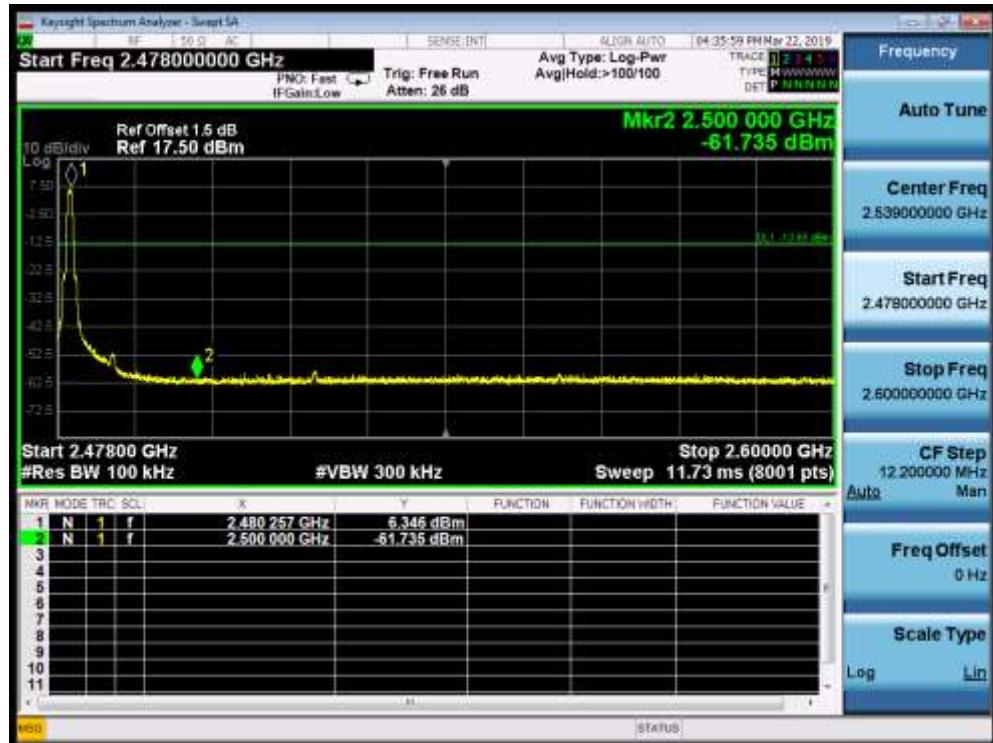
Mode	Channel	Test Frequency (MHz)	In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	00	2402	7.406	2400.00	-44.869	52.275	>20	Pass
1	39	2480	6.346	2500.00	-61.735	68.081	>20	Pass

Note: We have evaluated each mode ,shown in the report is BLE mode which is the worst data.

Mode 1 CH00 (2402MHz)



Mode 1 CH39 (2480MHz)

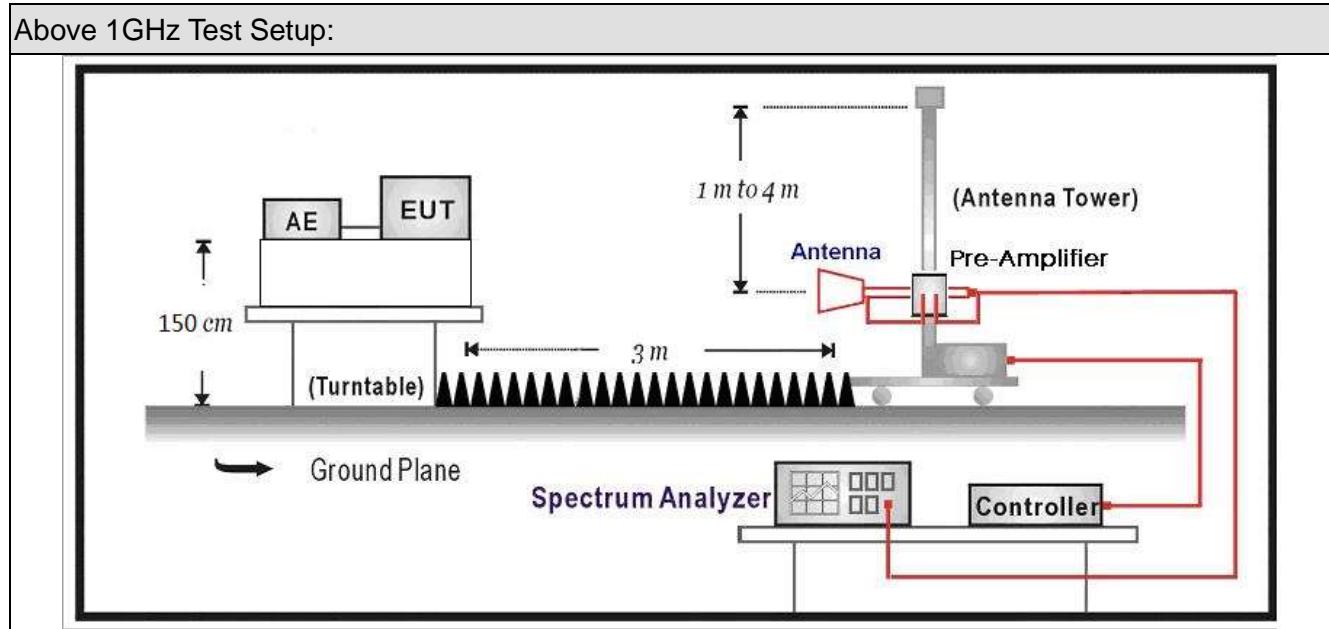


6. Radiated Emission Band Edge

6.1. Test Equipment

Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Receiver	Agilent	N9038A	MY51210196	2018.07.16	2019.07.15
Pre-Amplifier	Miteq	NSP1800-25	1364185	2018.05.03	2019.05.02
DRG Horn Antenna	ETS-Lindgren	3117	00167055	2018.07.12	2019.07.11
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2018.09.18	2019.09.17
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2019.02.28	2020.02.27
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2019.02.28	2020.02.27
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2019.01.05	2020.01.04

6.2. Test Setup



6.3. Limit

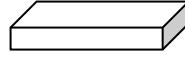
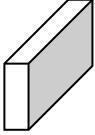
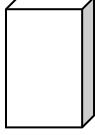
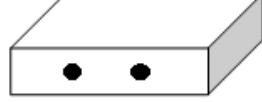
Band edge Limit				
Frequency bands (MHz)	Detector	Limit (dB μ V/m)	RBW (MHz)	Distance (m)
2310-2390	PK	74	1	3
	AV	54	1	3

Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.

6.4. Test Procedure

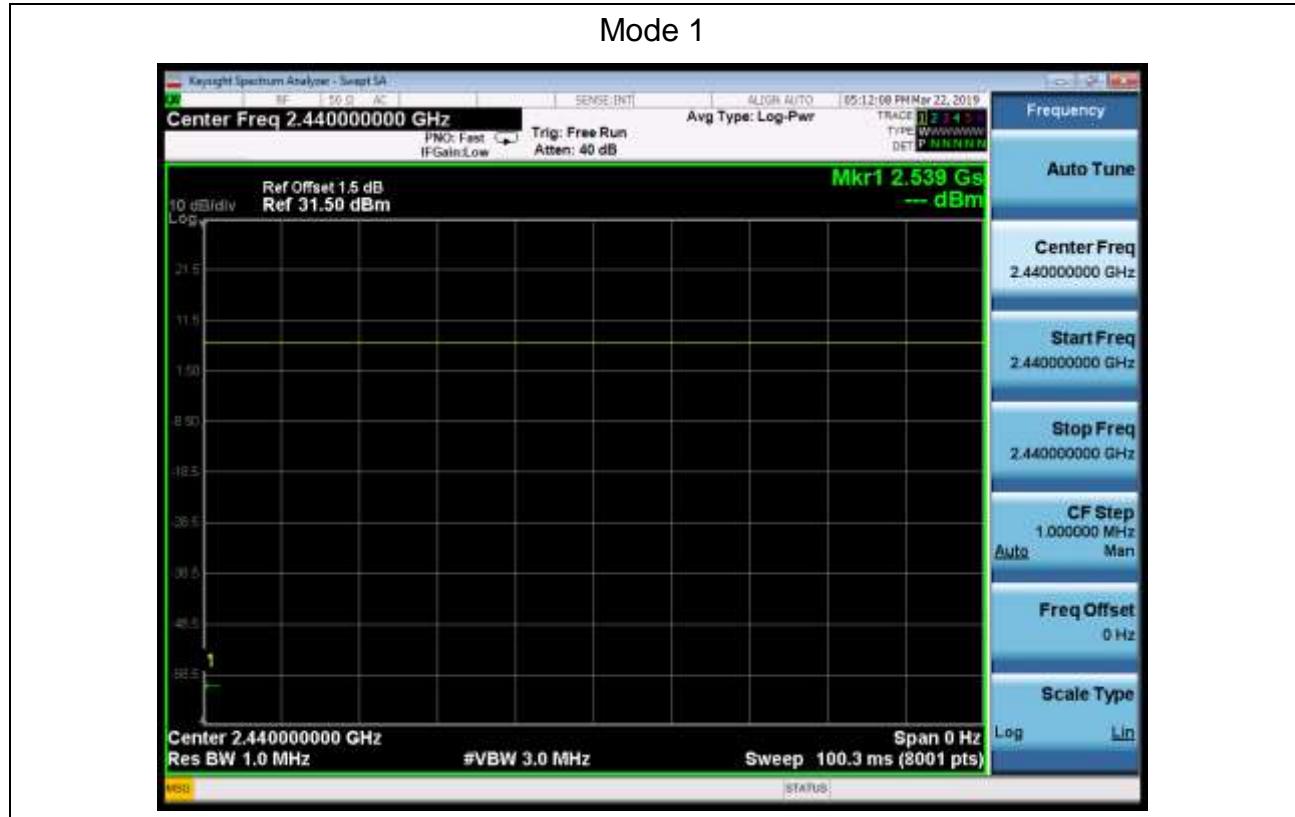
Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	6.10	Band-edge testing
	<input checked="" type="checkbox"/> ANSI C63.10	6.10.5	Restricted-band band-edge measurements
	<input type="checkbox"/> ANSI C63.10	6.10.6	Marker-delta method
<input checked="" type="checkbox"/>	ANSI C63.10	11.12	Emissions in restricted frequency bands
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.1	Radiated emission measurements
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.7	Radiated spurious emission test
<input type="checkbox"/>	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
<input type="checkbox"/>	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
<input checked="" type="checkbox"/>	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
	<input type="checkbox"/> ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.4	Peak power measurement procedure
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.5	Average power measurement procedures
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

6.5. EUT test definition

Item	Radiated Emission Band Edge			
Device Category	<input type="checkbox"/>	Fixed point-to-point		
	<input type="checkbox"/>	Emit multiple directional beams, simultaneously or sequentially		
	<input checked="" type="checkbox"/>	Other cases		
Test mode	Mode 1~4			
Test method	<input checked="" type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input checked="" type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>
	<input type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 1		
				
	<input type="checkbox"/>	Chain 1	Chain 2	
				
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3
				

6.6. Duty Cycle

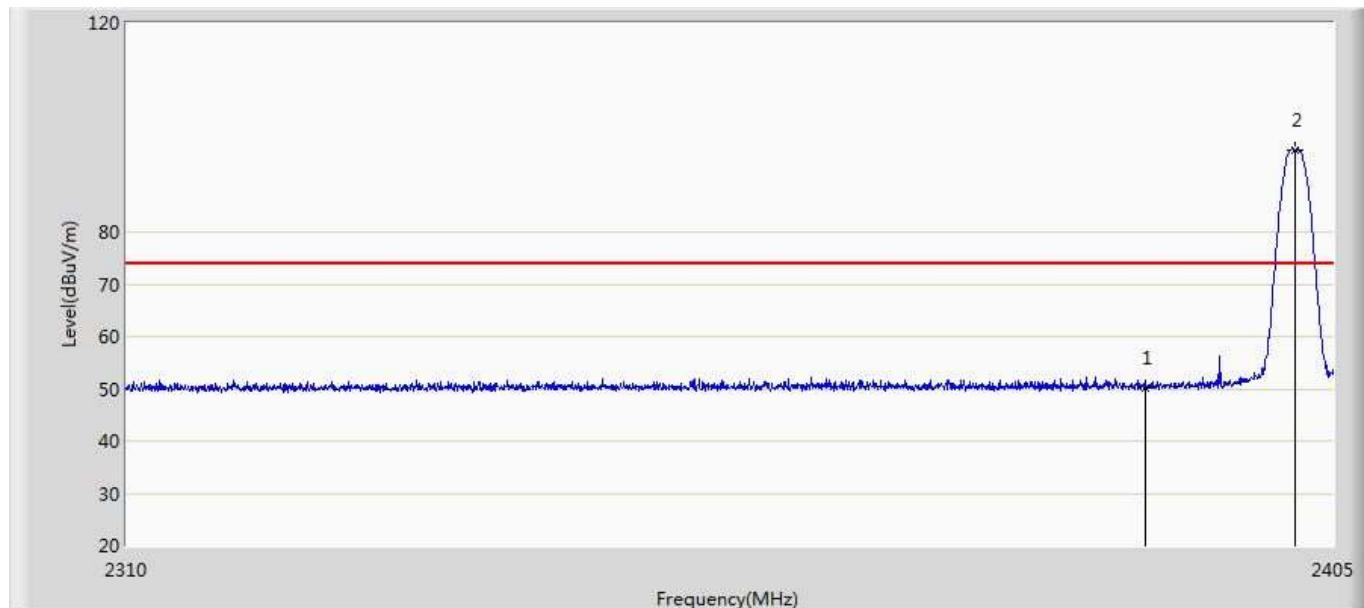
Test Mode	Tx On (ms)	Tx Off (ms)	Reduced VBW (Hz)	Tx On + Tx Off (ms)	Duty Cycle
Mode 1	N/A	N/A	10	N/A	100%



6.7. Test Result

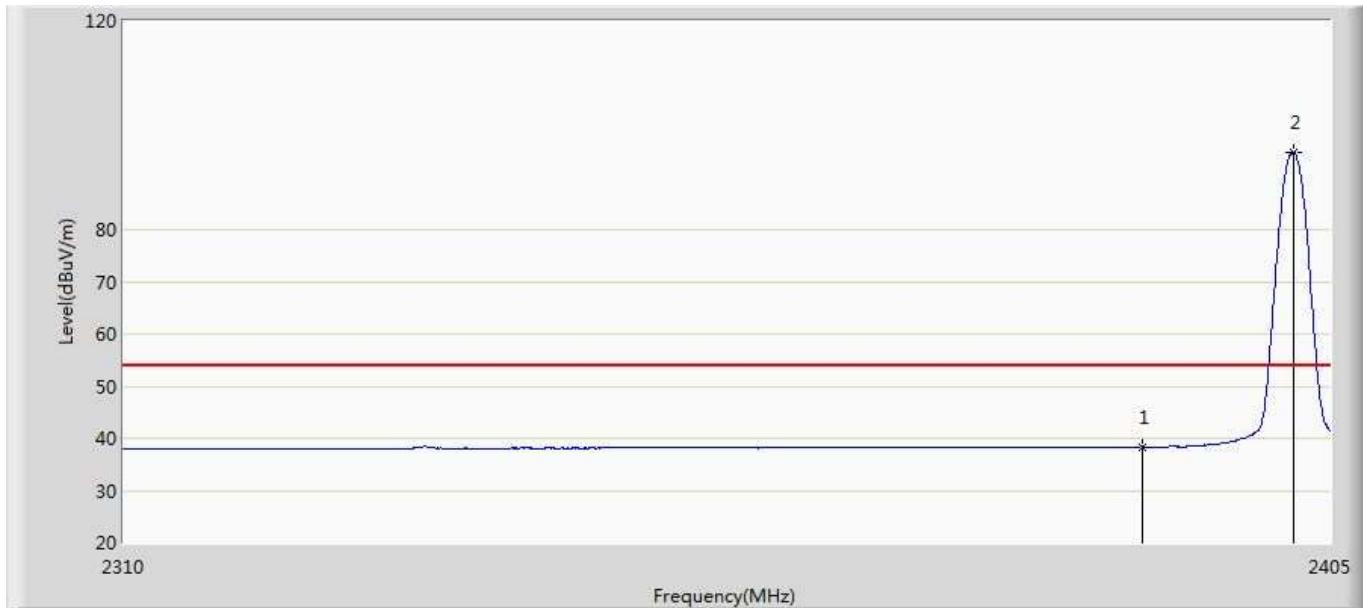
Muruta:

Site: AC5	Time: 2019/03/08 - 15:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2402Mhz by BLE	



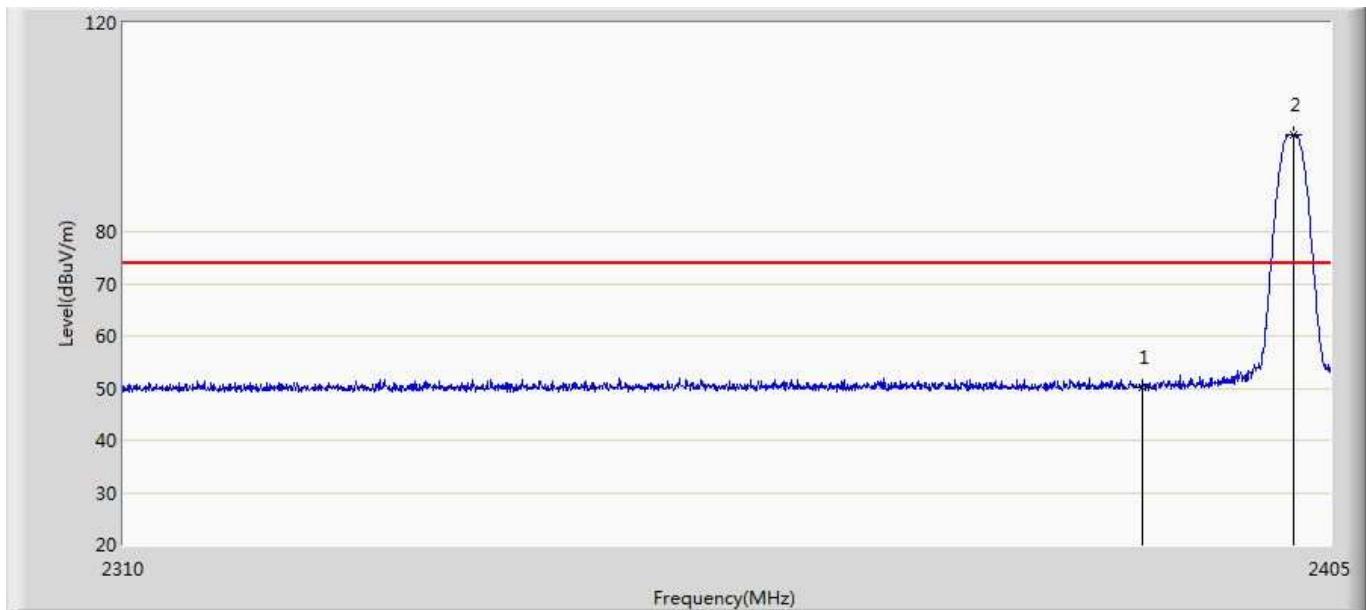
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.150	14.468	-23.850	74.000	35.682	PK
2	*	2401.913	95.692	59.980	21.692	74.000	35.712	PK

Site: AC5	Time: 2019/04/04 - 16:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2402Mhz by BLE	



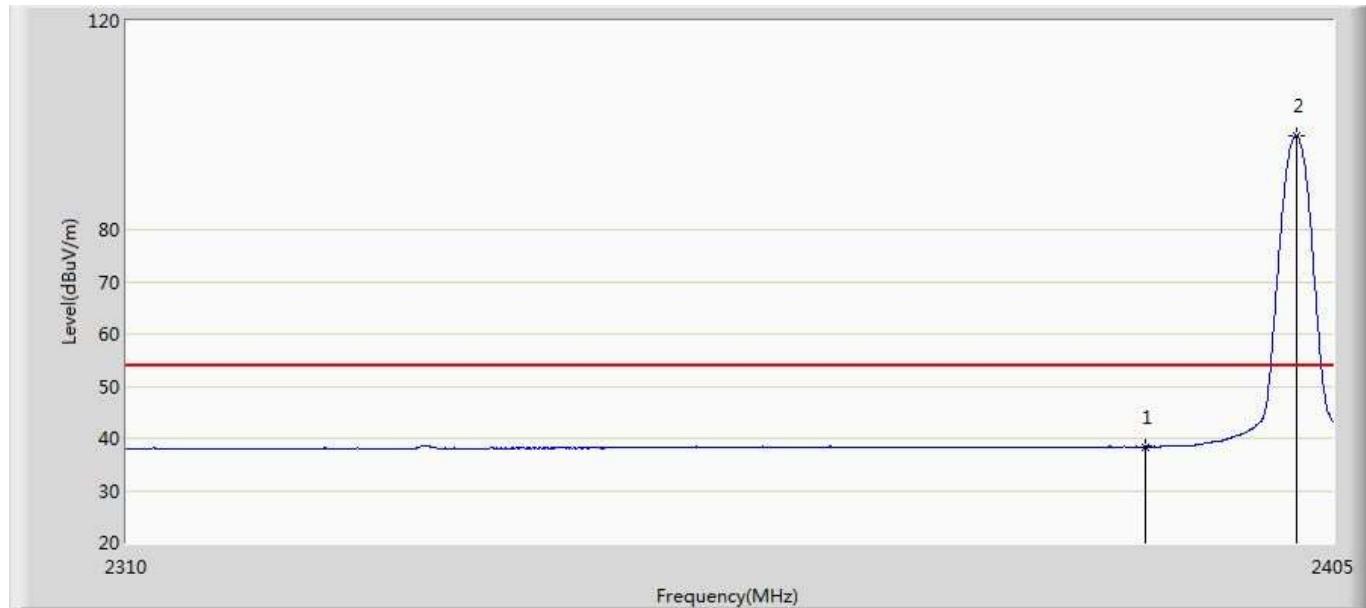
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.337	2.655	-15.663	54.000	35.682	AV
2	*	2402.055	94.910	59.197	40.910	54.000	35.712	AV

Site: AC5	Time: 2019/04/04 - 16:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2402Mhz by BLE	



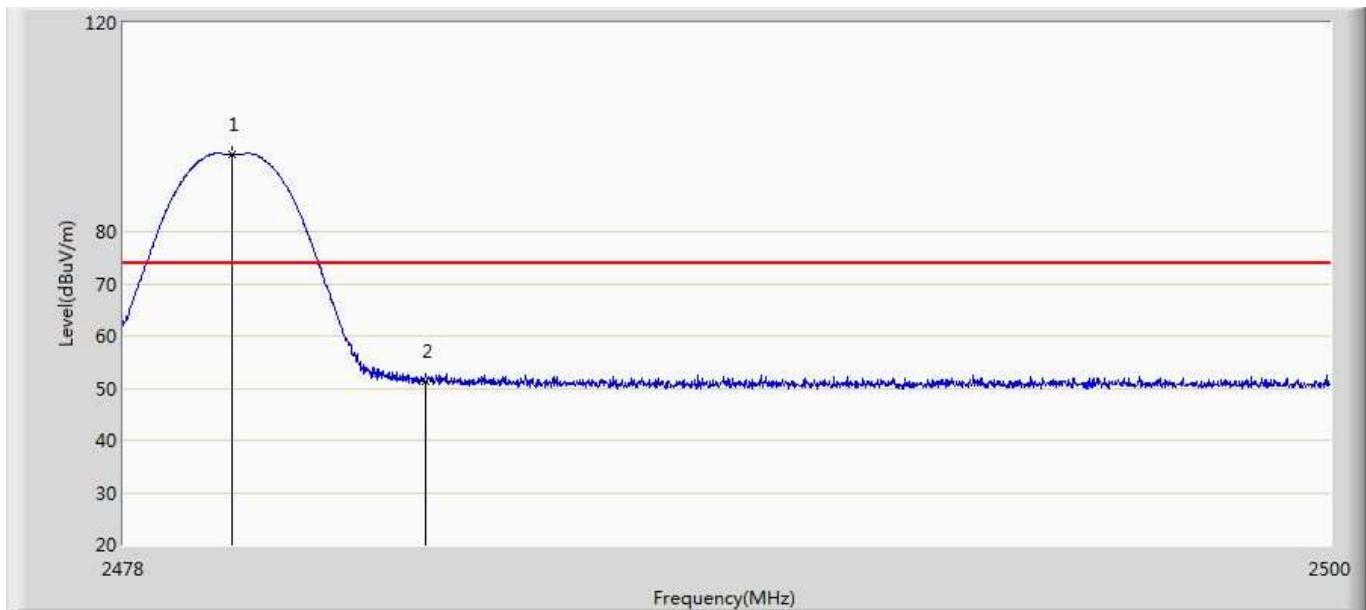
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.170	14.488	-23.830	74.000	35.682	PK
2	*	2402.103	98.468	62.755	24.468	74.000	35.713	PK

Site: AC5	Time: 2019/04/04 - 16:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2402Mhz by BLE	



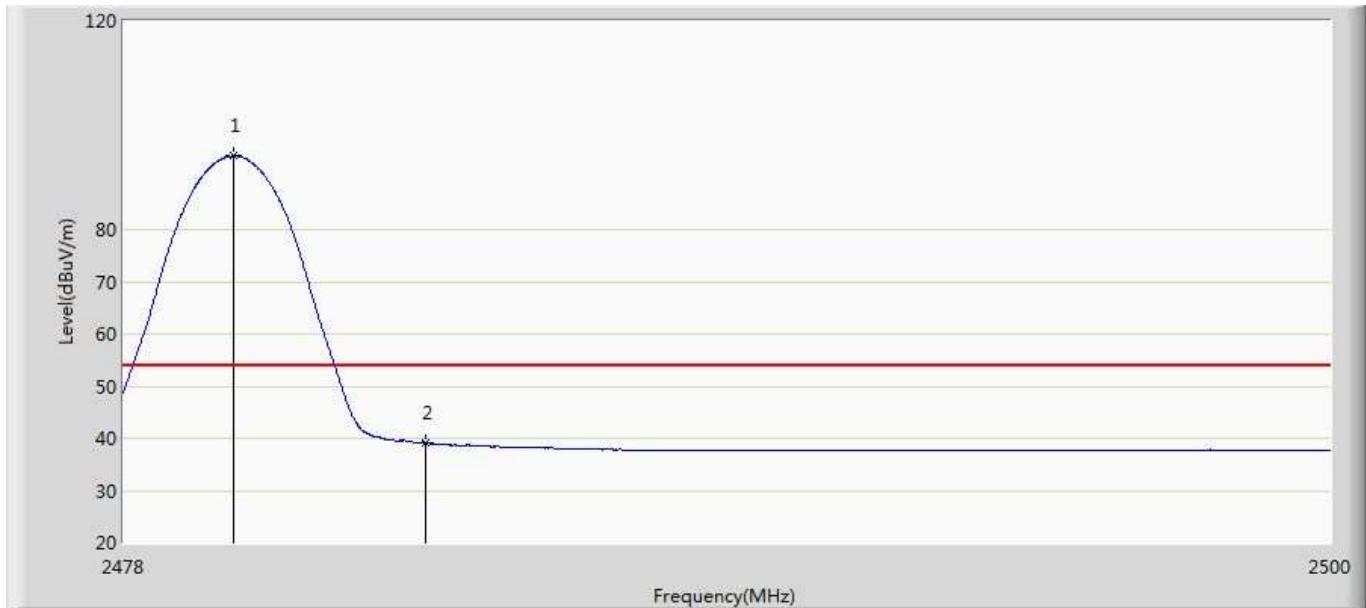
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.379	2.697	-15.621	54.000	35.682	AV
2	*	2402.055	97.996	62.283	43.996	54.000	35.712	AV

Site: AC5	Time: 2019/04/04 - 16:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2480Mhz by BLE	



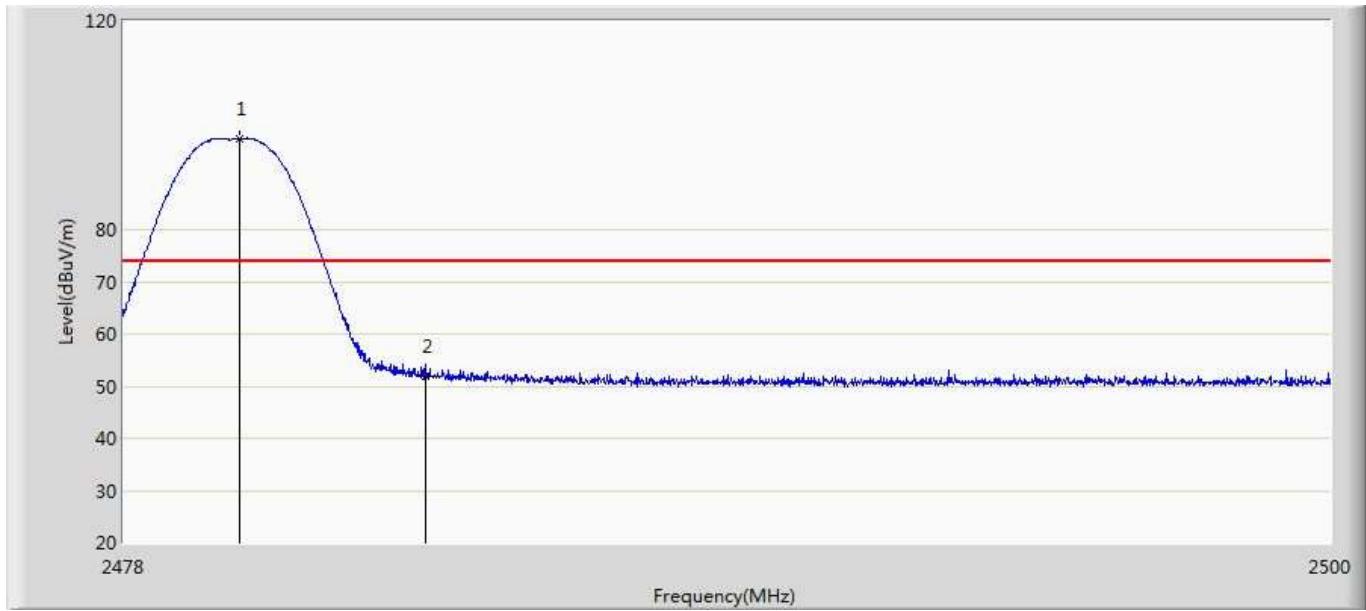
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.980	94.853	58.987	20.853	74.000	35.866	PK
2		2483.500	51.426	15.534	-22.574	74.000	35.891	PK

Site: AC5	Time: 2019/04/04 - 16:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2480Mhz by BLE	



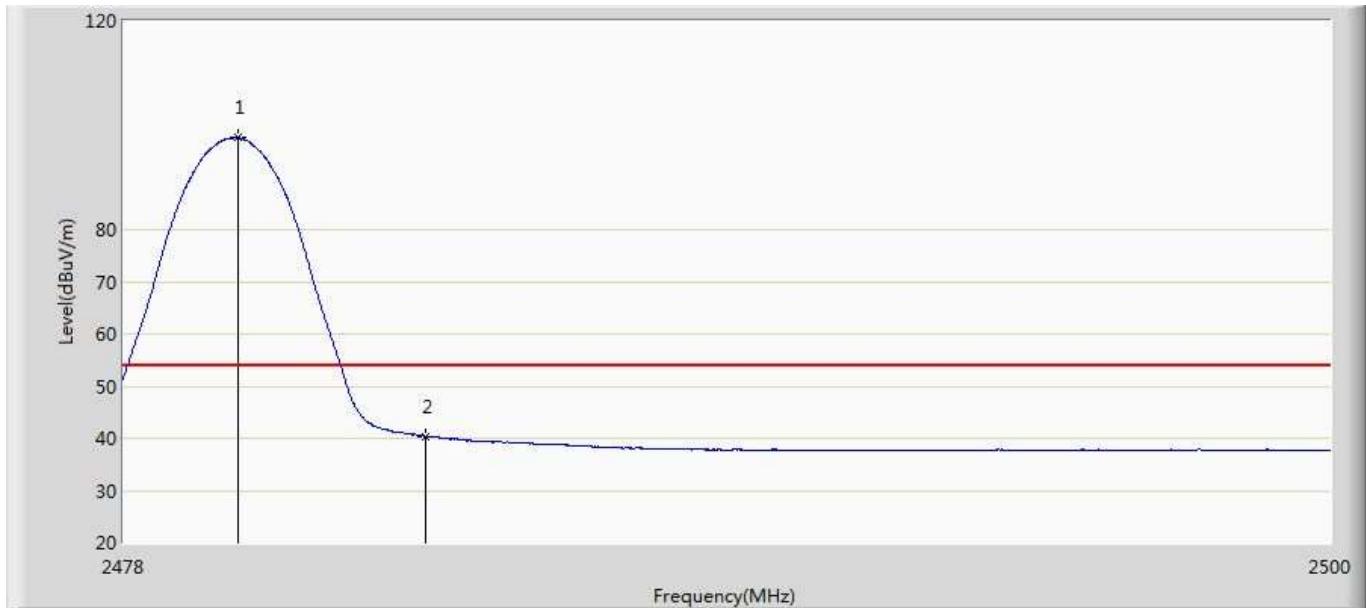
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.013	94.105	58.239	40.105	54.000	35.866	AV
2		2483.500	39.186	3.294	-14.814	54.000	35.891	AV

Site: AC5	Time: 2019/04/04 - 16:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2480Mhz by BLE	



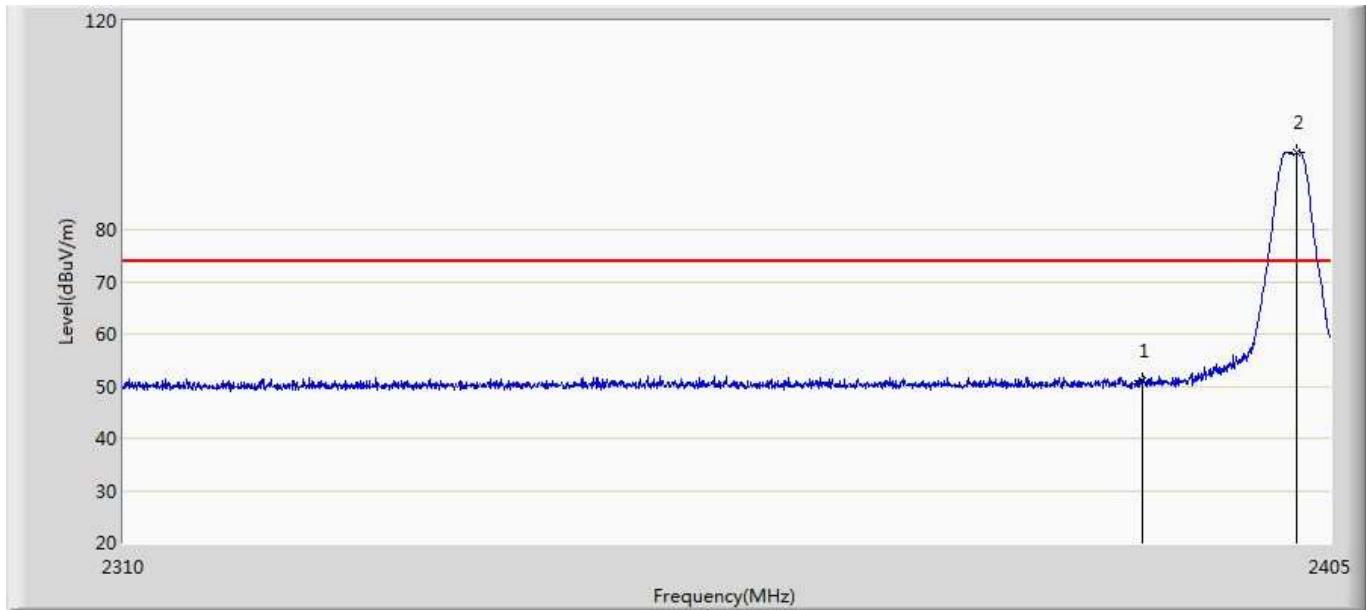
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.112	97.508	61.641	23.508	74.000	35.867	PK
2		2483.500	51.814	15.922	-22.186	74.000	35.891	PK

Site: AC5	Time: 2019/04/04 - 16:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2480Mhz by BLE	



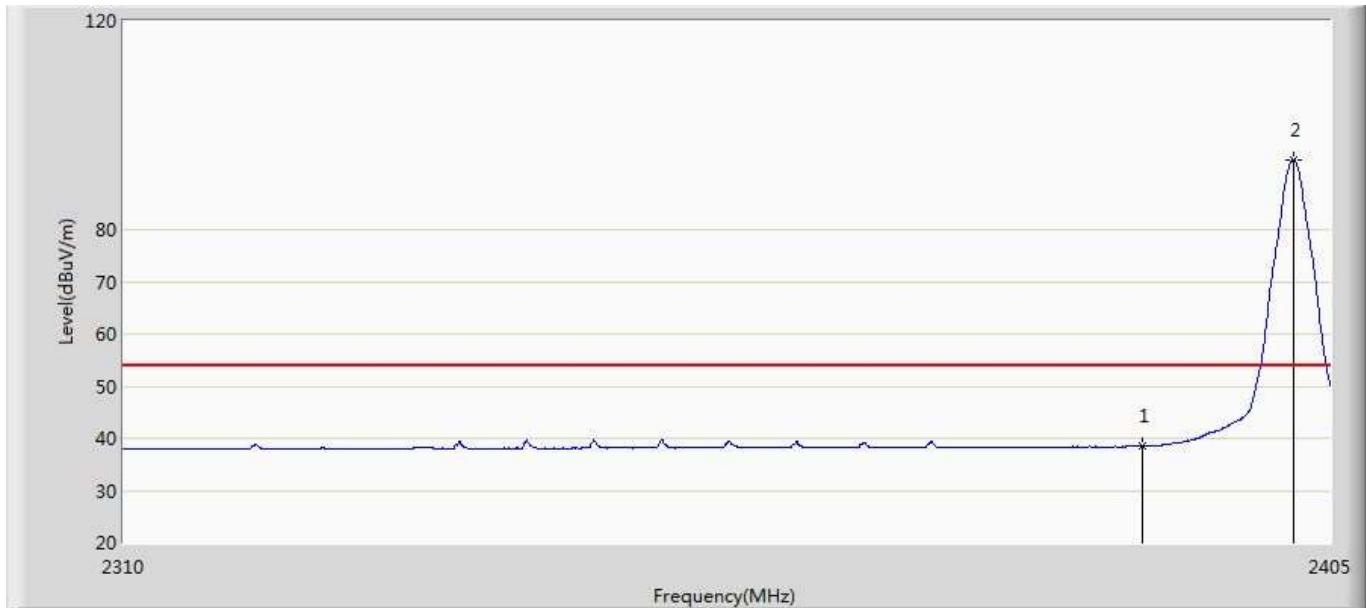
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.079	97.569	61.702	43.569	54.000	35.867	AV
2		2483.500	40.422	4.530	-13.578	54.000	35.891	AV

Site: AC5	Time: 2019/04/04 - 16:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402Mhz by 2LE	



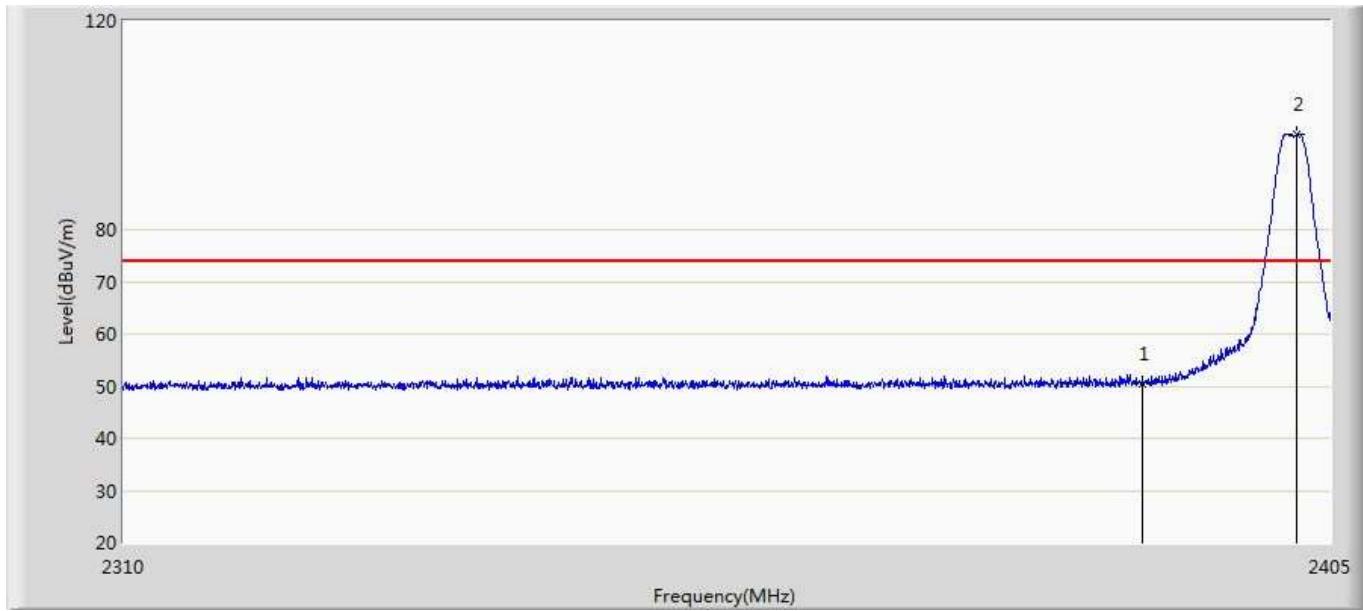
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.046	15.364	-22.954	74.000	35.682	PK
2	*	2402.340	94.734	59.020	20.734	74.000	35.714	PK

Site: AC5	Time: 2019/04/04 - 16:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402Mhz by 2LE	



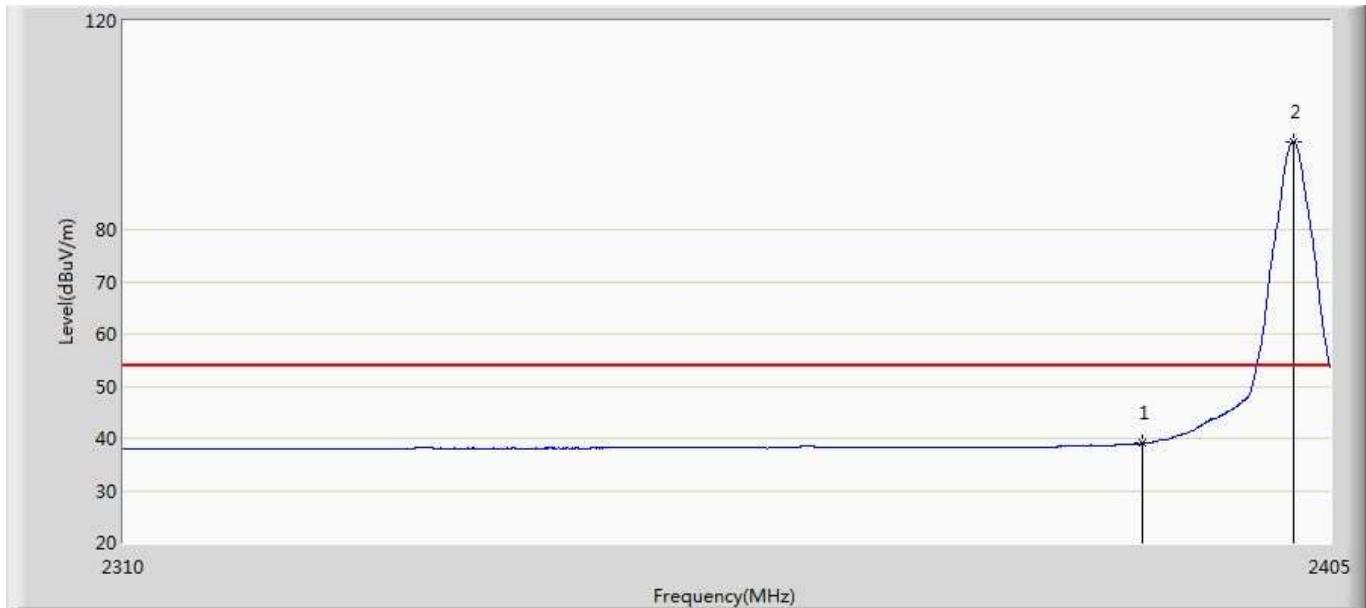
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.542	2.860	-15.458	54.000	35.682	AV
2	*	2402.055	93.333	57.620	39.333	54.000	35.712	AV

Site: AC5	Time: 2019/04/04 - 16:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402Mhz by 2LE	



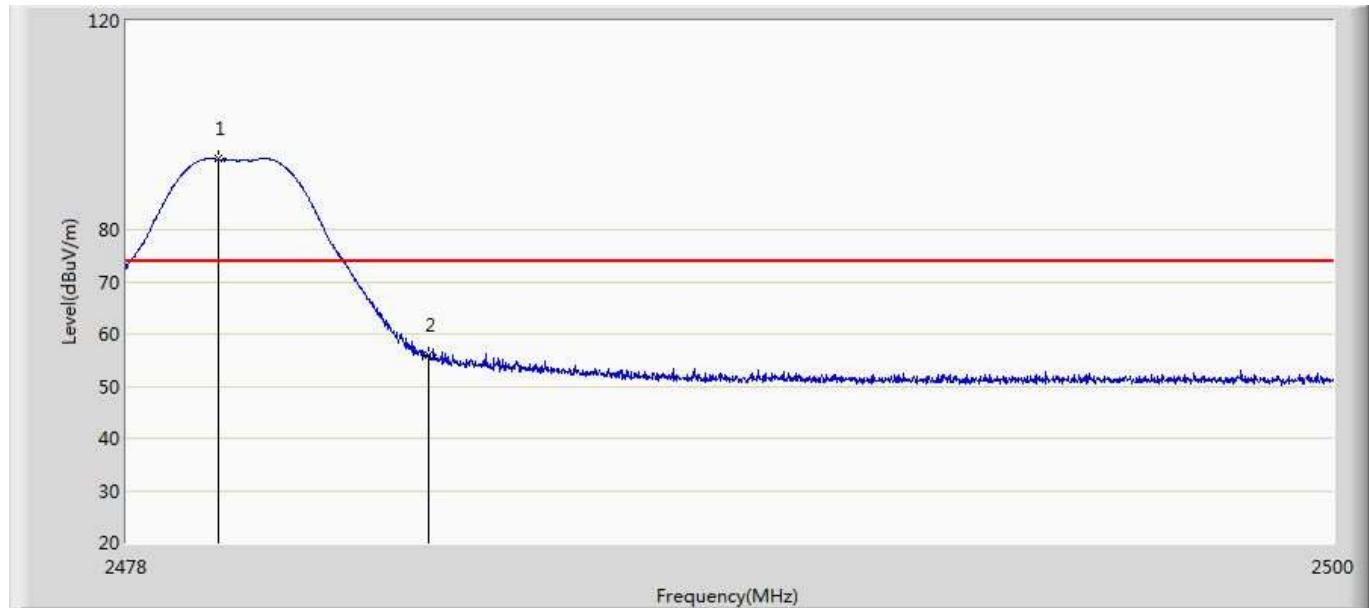
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.369	14.687	-23.631	74.000	35.682	PK
2	*	2402.387	98.243	62.529	24.243	74.000	35.714	PK

Site: AC5	Time: 2019/04/04 - 16:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402Mhz by 2LE	



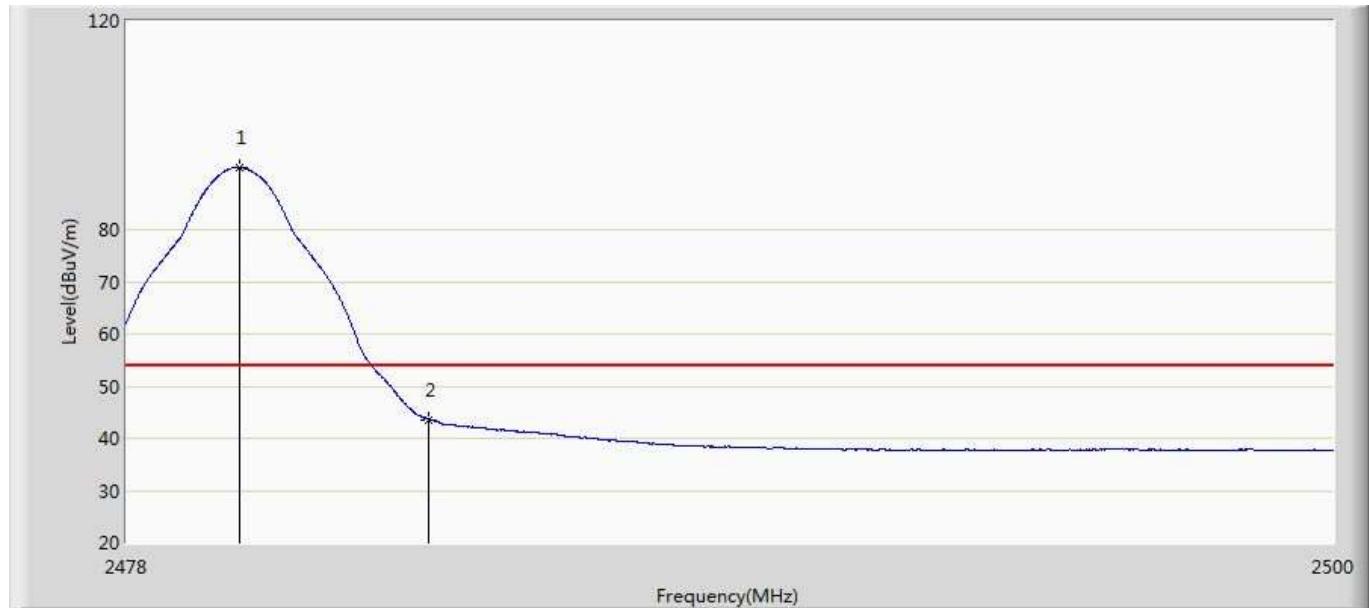
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	39.045	3.363	-14.955	54.000	35.682	AV
2	*	2402.055	96.807	61.094	42.807	54.000	35.712	AV

Site: AC5	Time: 2019/04/04 - 16:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480Mhz by 2LE	



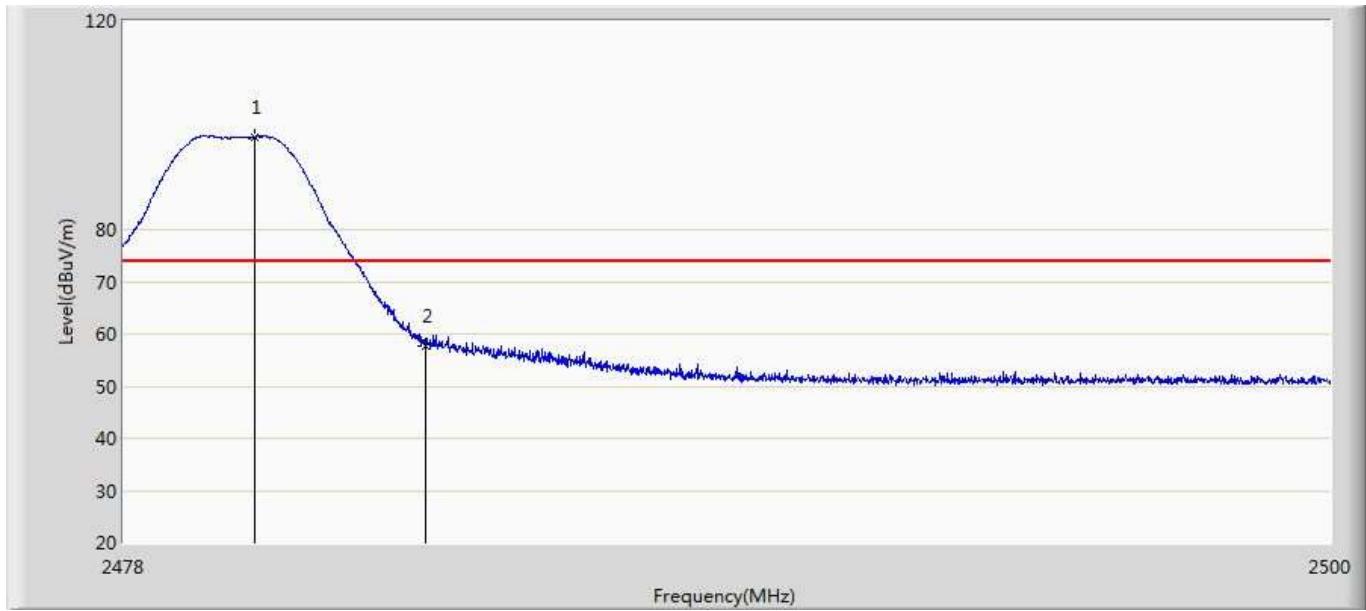
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.672	93.489	57.625	19.489	74.000	35.864	PK
2		2483.500	56.033	20.141	-17.967	74.000	35.891	PK

Site: AC5	Time: 2019/04/04 - 16:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480Mhz by 2LE	



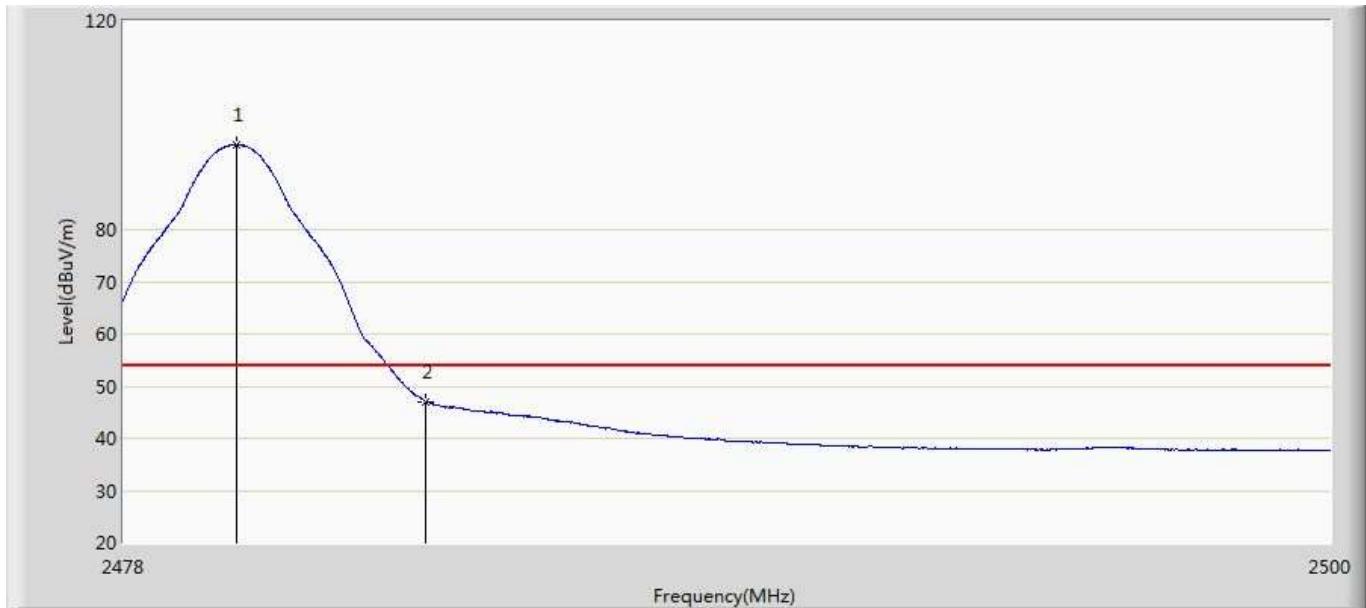
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.046	91.848	55.981	37.848	54.000	35.866	AV
2		2483.500	43.598	7.706	-10.402	54.000	35.891	AV

Site: AC5	Time: 2019/04/04 - 16:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480Mhz by 2LE	



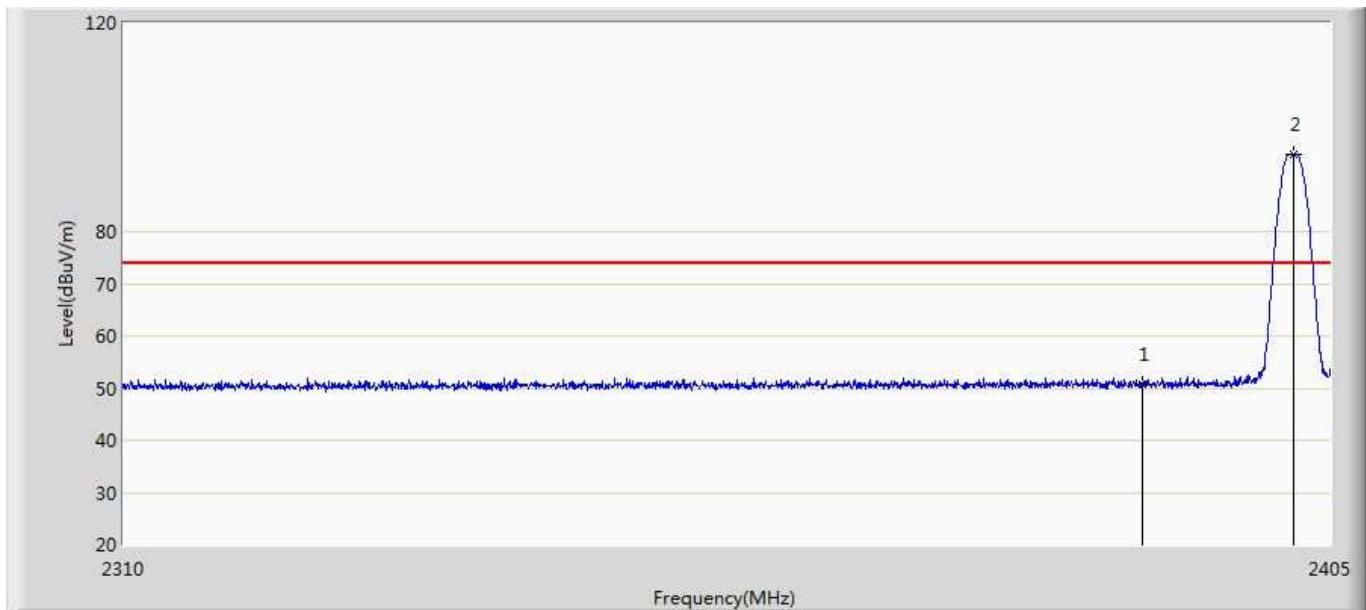
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.376	97.796	61.927	23.796	74.000	35.869	PK
2		2483.500	57.626	21.734	-16.374	74.000	35.891	PK

Site: AC5	Time: 2019/04/04 - 16:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480Mhz by 2LE	



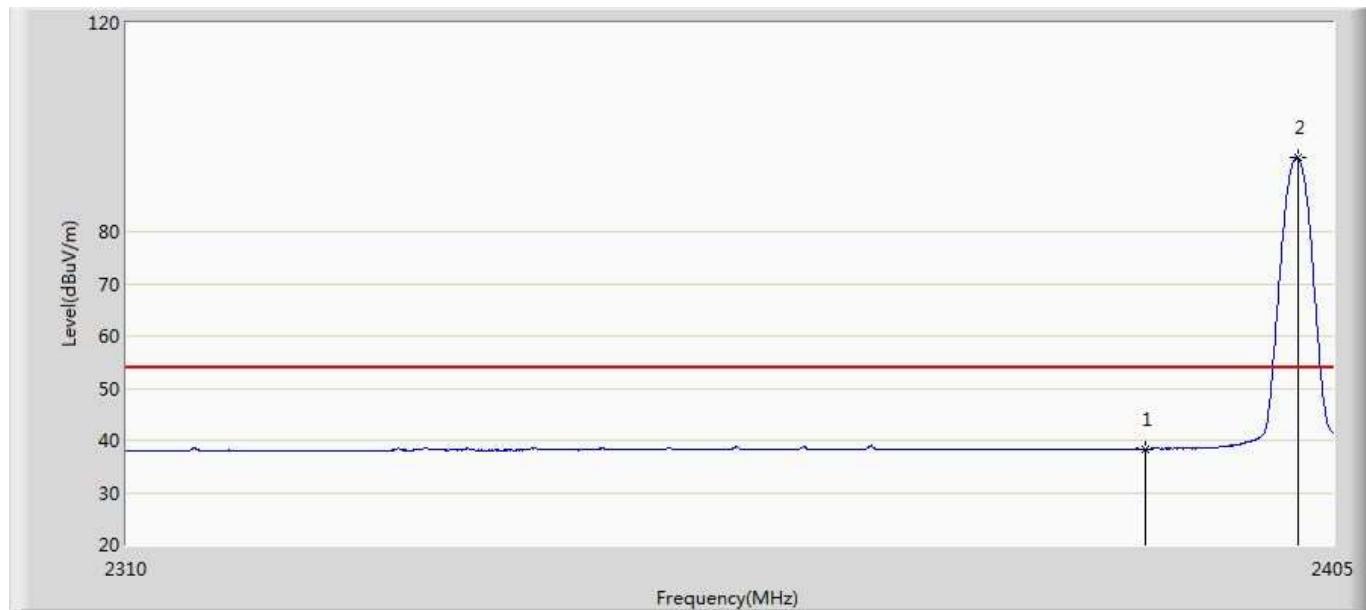
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.046	96.277	60.410	42.277	54.000	35.866	AV
2		2483.500	46.991	11.099	-7.009	54.000	35.891	AV

Site: AC5	Time: 2019/04/04 - 17:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402Mhz by Coded125	



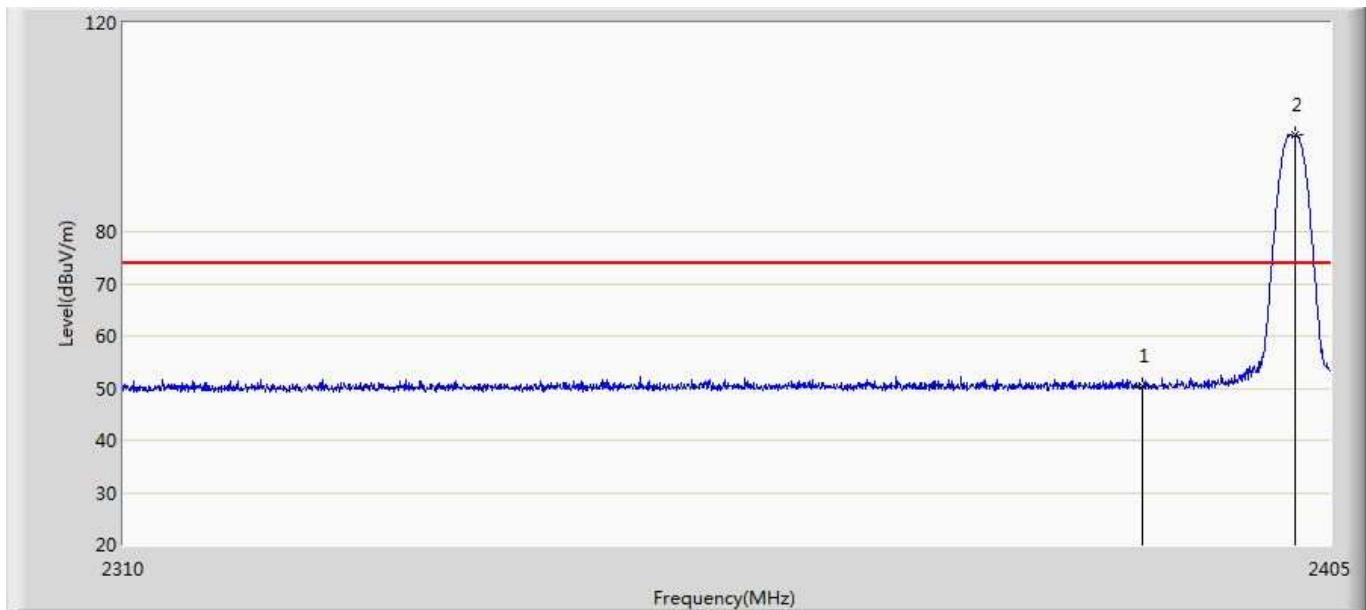
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.786	15.104	-23.214	74.000	35.682	PK
2	*	2402.055	94.761	59.048	20.761	74.000	35.712	PK

Site: AC5	Time: 2019/04/04 - 17:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402Mhz by Coded125	



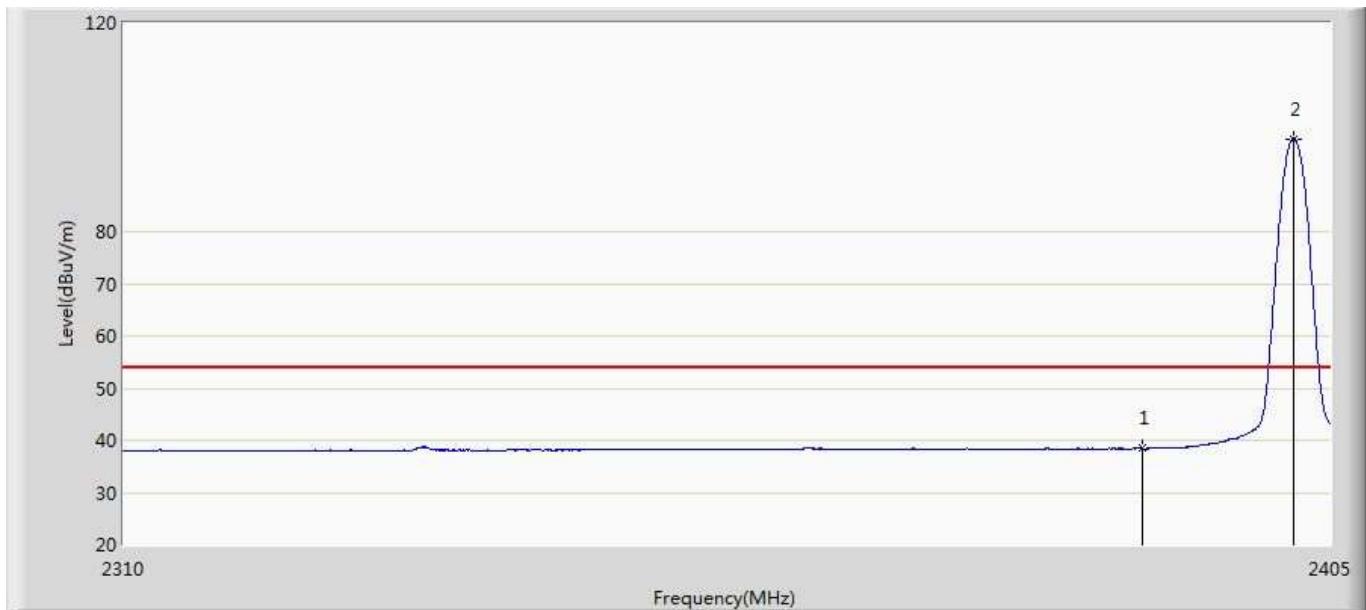
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.364	2.682	-15.636	54.000	35.682	AV
2	*	2402.198	94.249	58.536	40.249	54.000	35.714	AV

Site: AC5	Time: 2019/04/04 - 17:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402Mhz by Coded125	



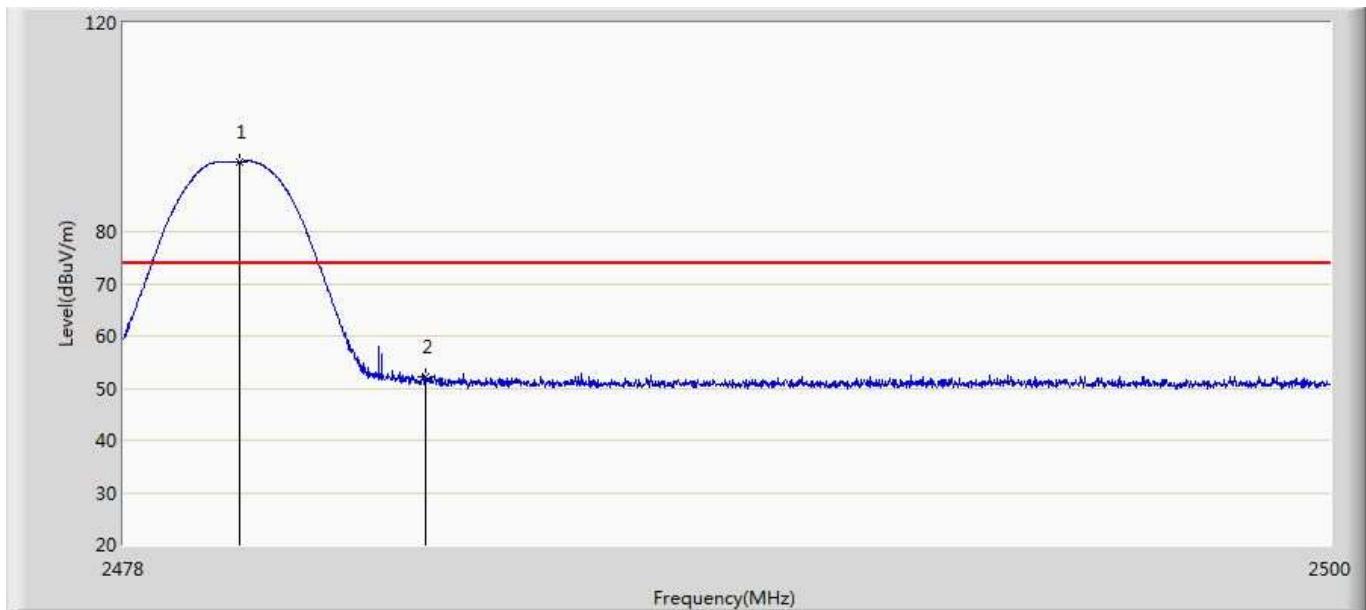
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.466	14.784	-23.534	74.000	35.682	PK
2	*	2402.198	98.464	62.751	24.464	74.000	35.714	PK

Site: AC5	Time: 2019/04/04 - 17:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402Mhz by Coded125	



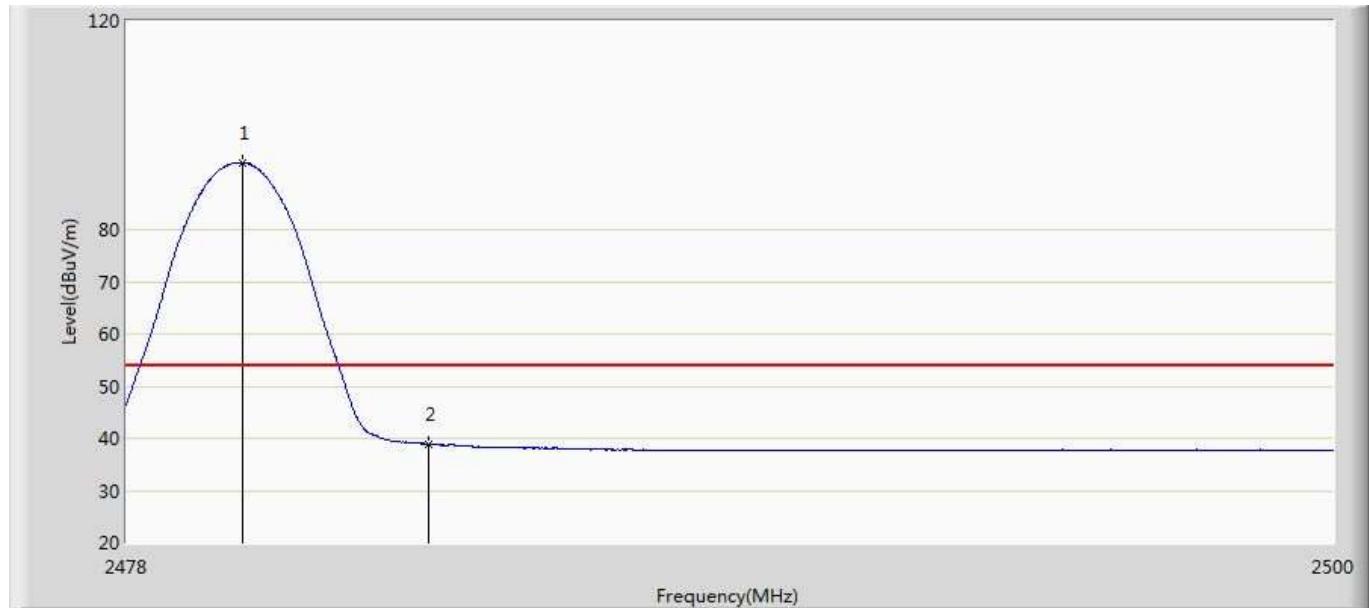
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.418	2.736	-15.582	54.000	35.682	AV
2	*	2402.055	97.810	62.097	43.810	54.000	35.712	AV

Site: AC5	Time: 2019/04/04 - 17:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480Mhz by Coded125	



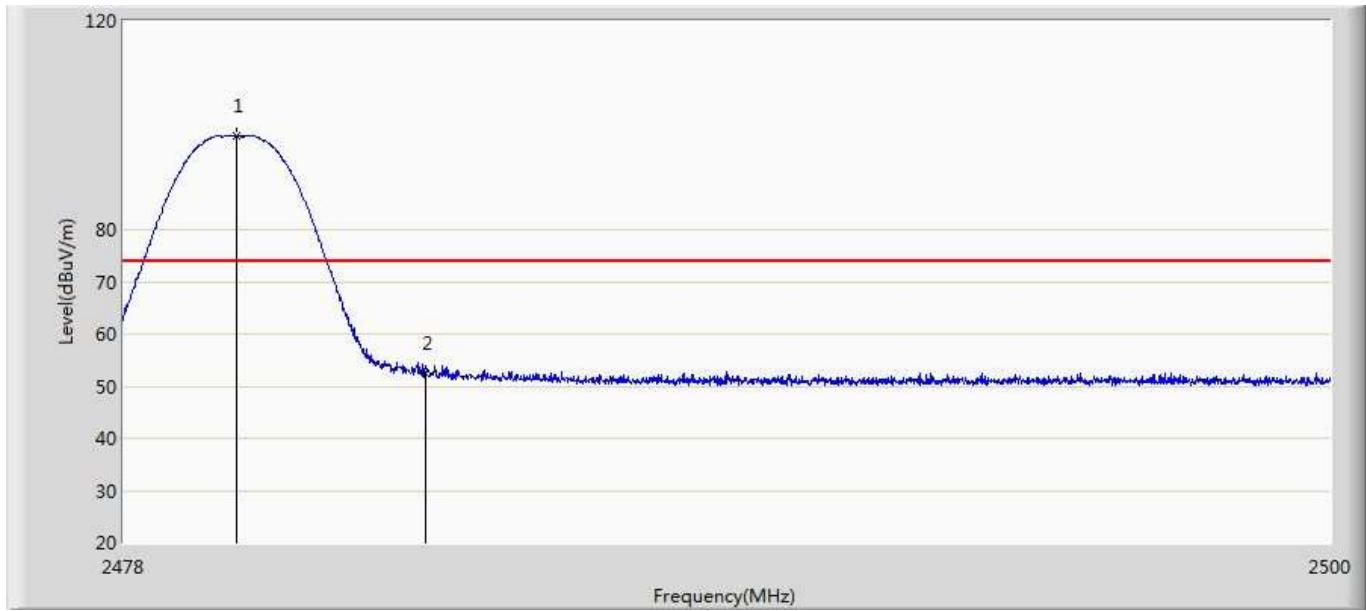
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.123	93.458	57.591	19.458	74.000	35.867	PK
2		2483.500	52.040	16.148	-21.960	74.000	35.891	PK

Site: AC5	Time: 2019/04/04 - 17:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480Mhz by Coded125	



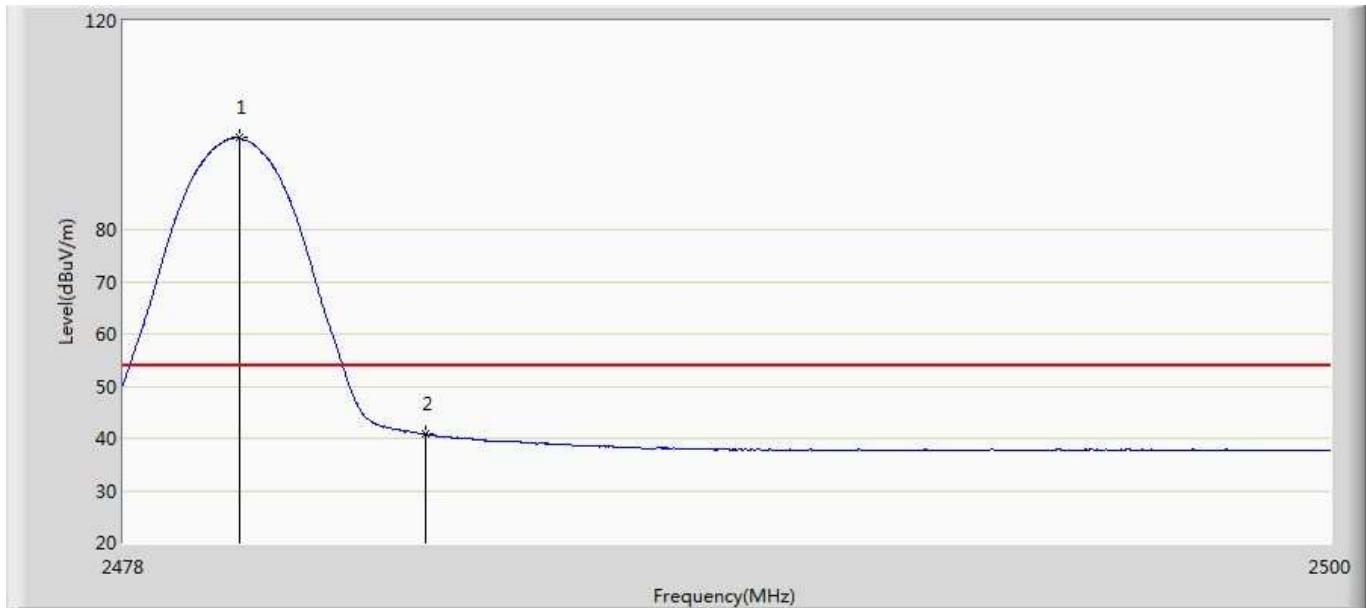
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.112	92.772	56.905	38.772	54.000	35.867	AV
2		2483.500	38.891	2.999	-15.109	54.000	35.891	AV

Site: AC5	Time: 2019/04/04 - 17:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480Mhz by Coded125	



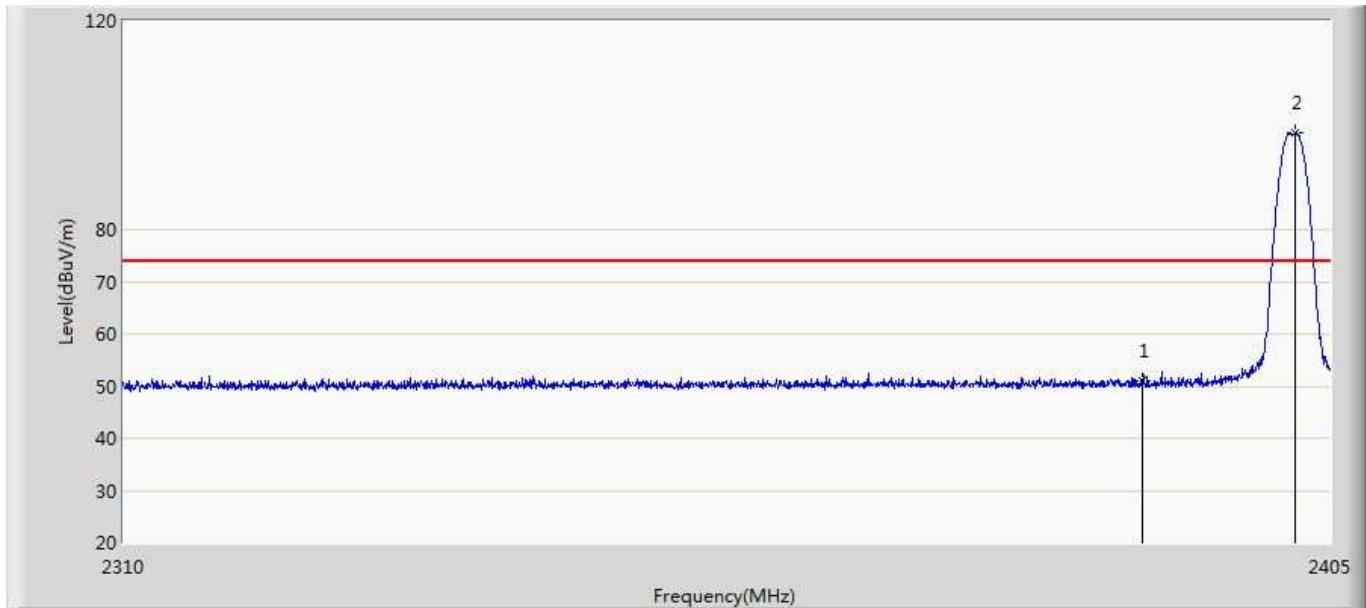
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.046	97.956	62.089	23.956	74.000	35.866	PK
2		2483.500	52.491	16.599	-21.509	74.000	35.891	PK

Site: AC5	Time: 2019/04/04 - 17:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480Mhz by Coded125	



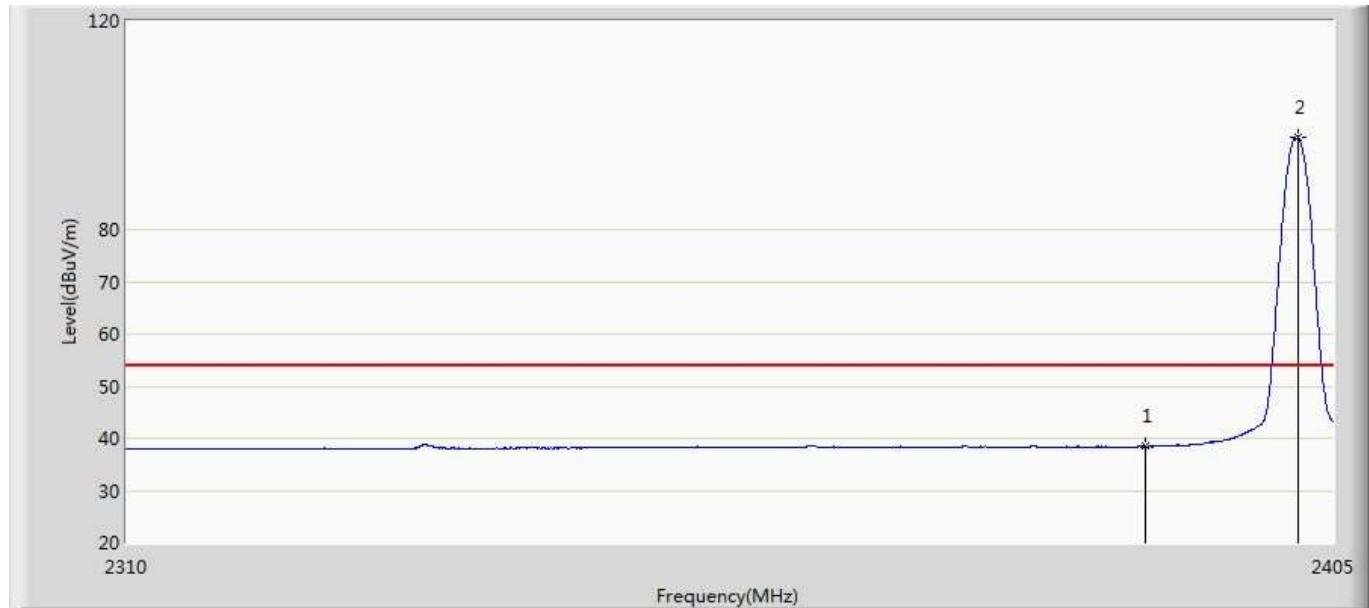
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.112	97.549	61.682	43.549	54.000	35.867	AV
2		2483.500	40.792	4.900	-13.208	54.000	35.891	AV

Site: AC5	Time: 2019/04/04 - 17:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402Mhz by Coded500	



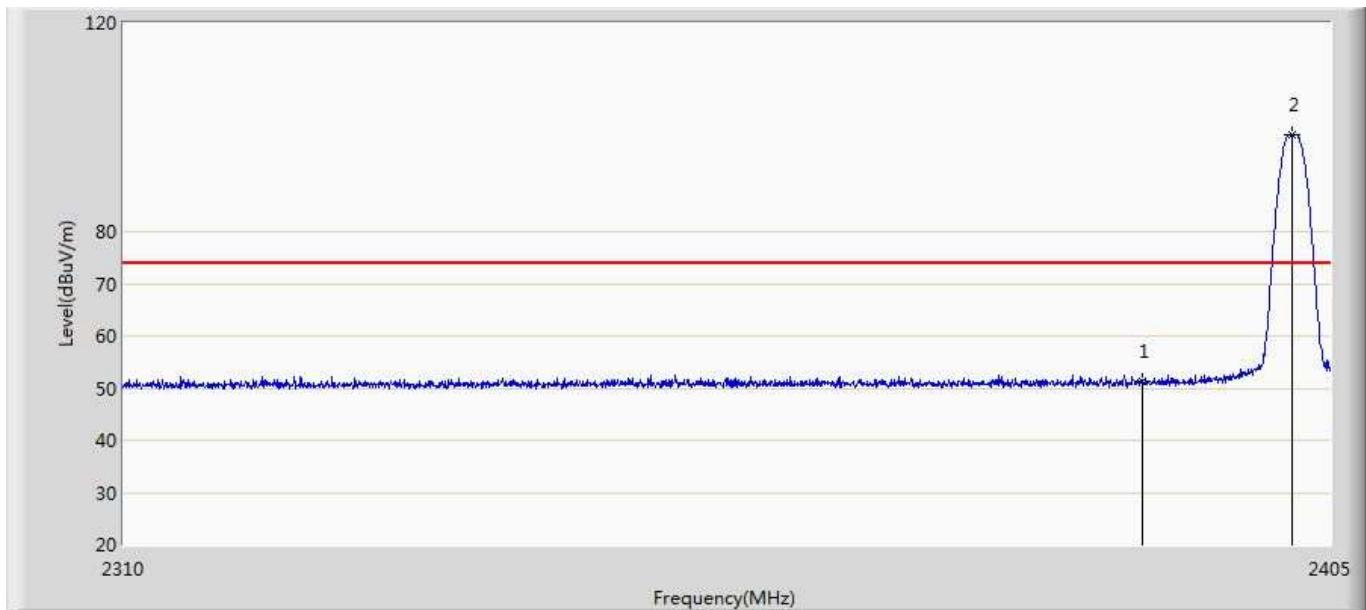
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.902	15.220	-23.098	74.000	35.682	PK
2	*	2402.245	98.440	62.727	24.440	74.000	35.714	PK

Site: AC5	Time: 2019/04/04 - 17:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402Mhz by Coded500	



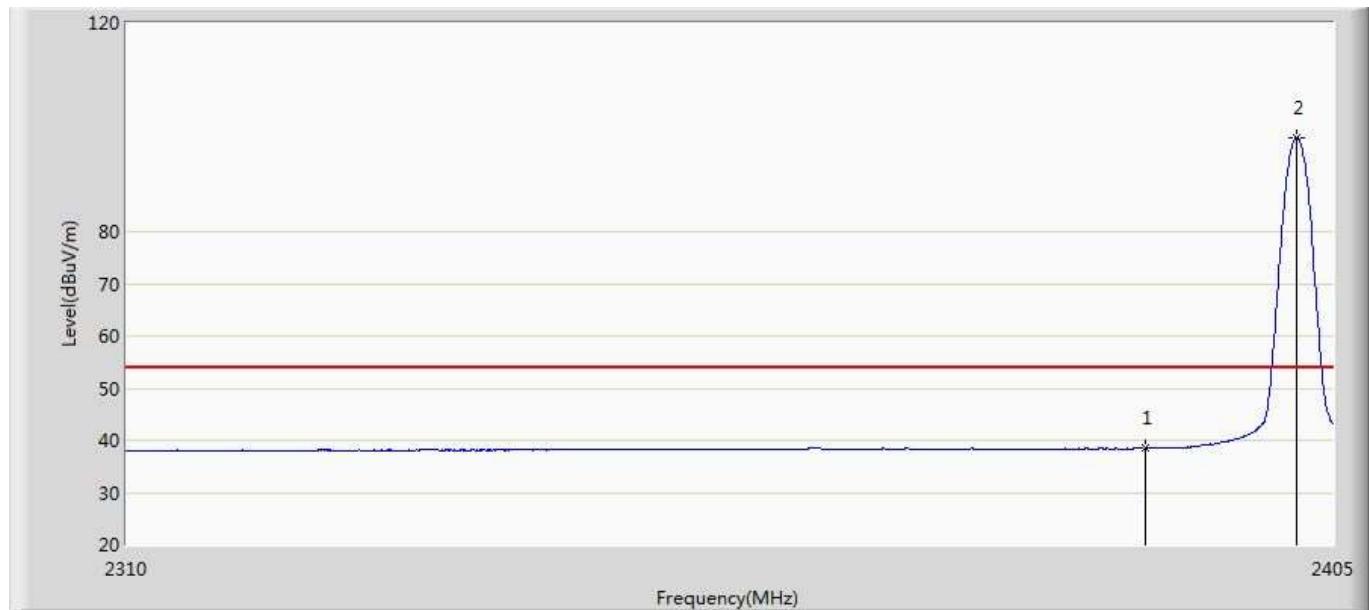
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.457	2.775	-15.543	54.000	35.682	AV
2	*	2402.198	97.820	62.107	43.820	54.000	35.714	AV

Site: AC5	Time: 2019/04/04 - 17:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402Mhz by Coded500	



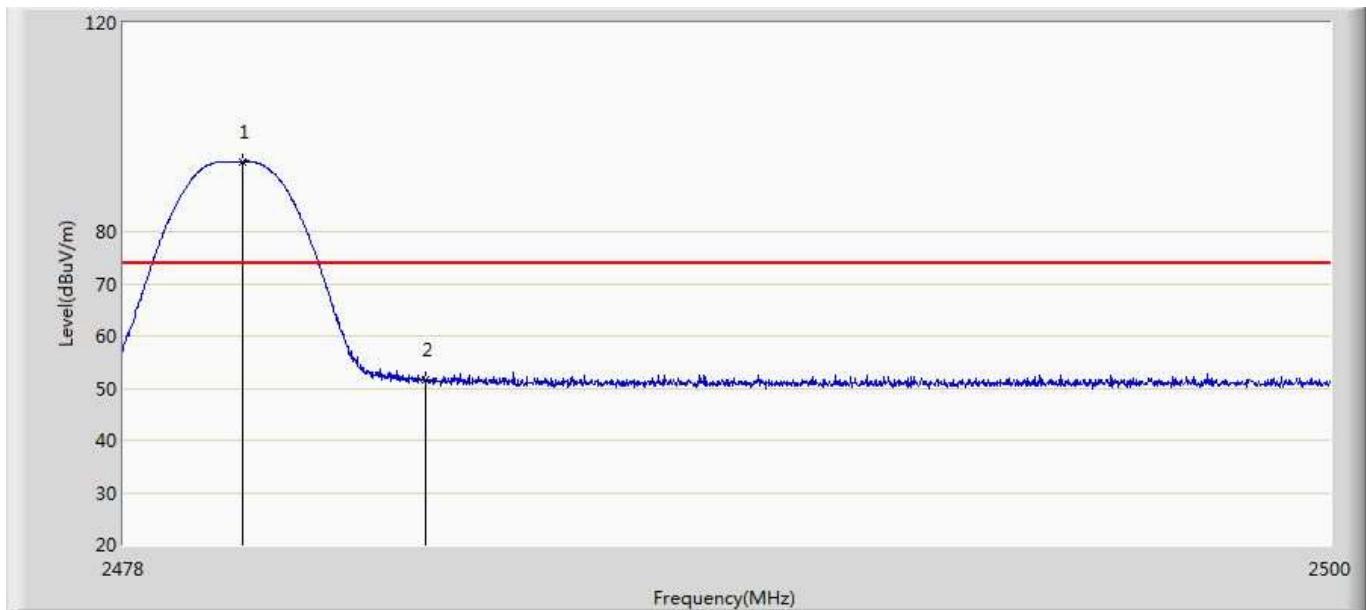
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.440	15.758	-22.560	74.000	35.682	PK
2	*	2401.913	98.500	62.788	24.500	74.000	35.712	PK

Site: AC5	Time: 2019/04/04 - 17:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402Mhz by Coded500	



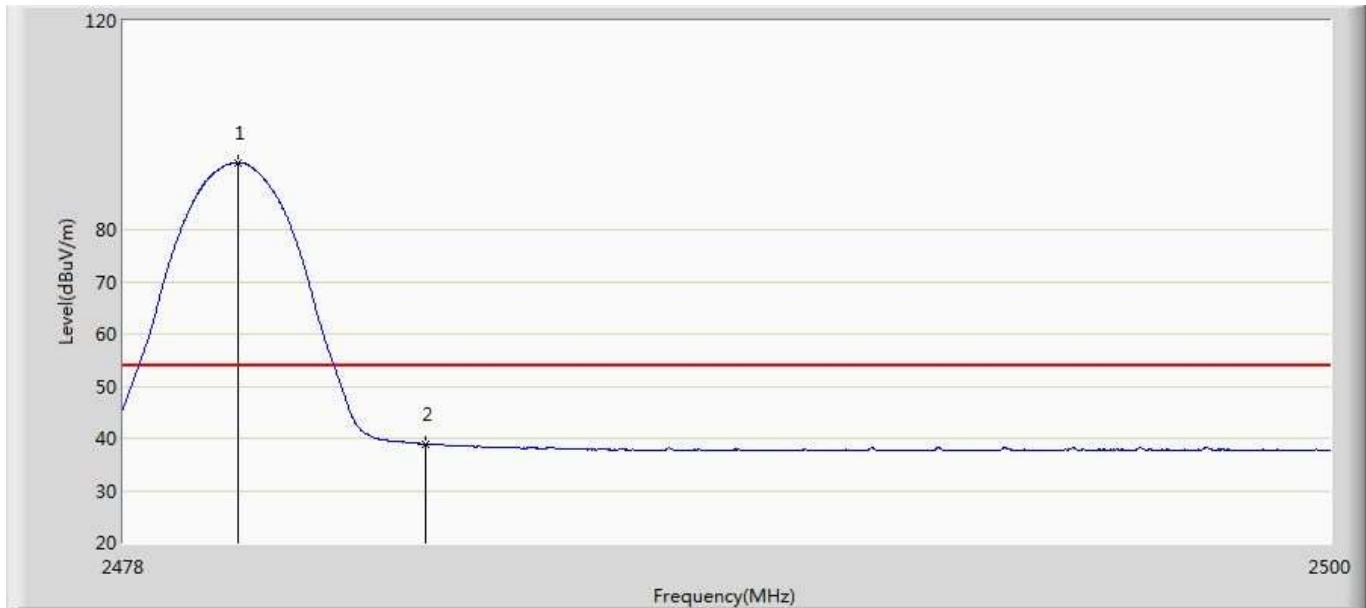
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.460	2.778	-15.540	54.000	35.682	AV
2	*	2402.055	97.927	62.214	43.927	54.000	35.712	AV

Site: AC5	Time: 2019/04/04 - 17:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480Mhz by Coded500	



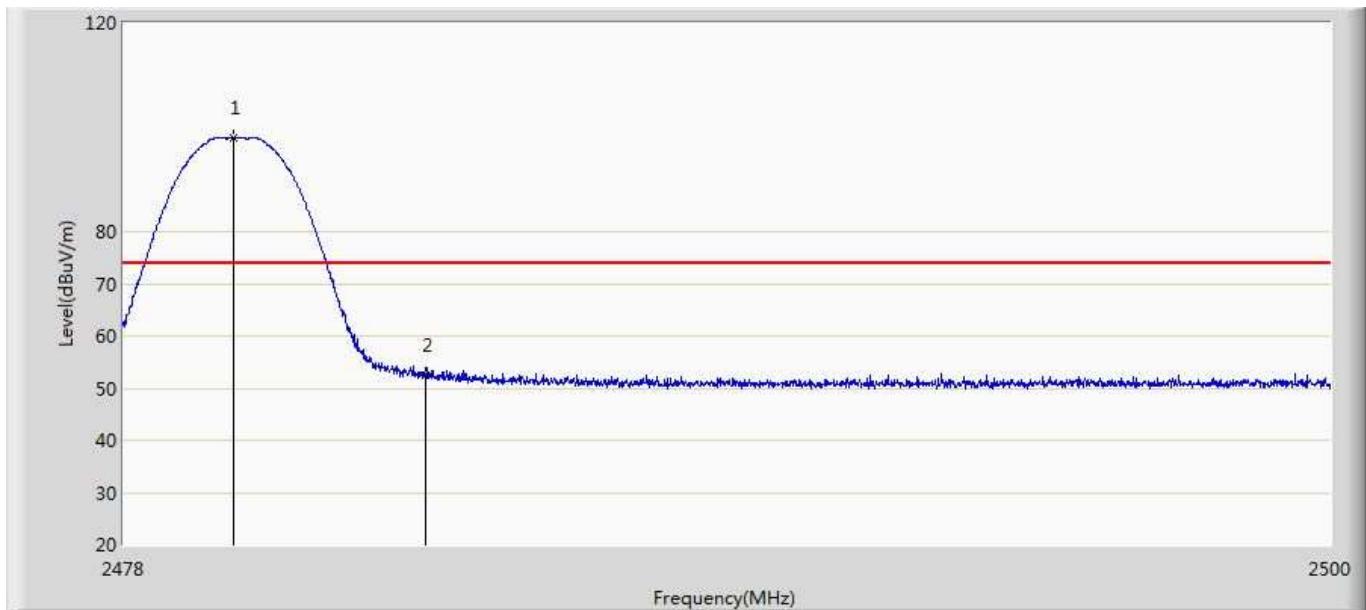
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.156	93.448	57.581	19.448	74.000	35.867	PK
2		2483.500	51.654	15.762	-22.346	74.000	35.891	PK

Site: AC5	Time: 2019/04/04 - 17:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480Mhz by Coded500	



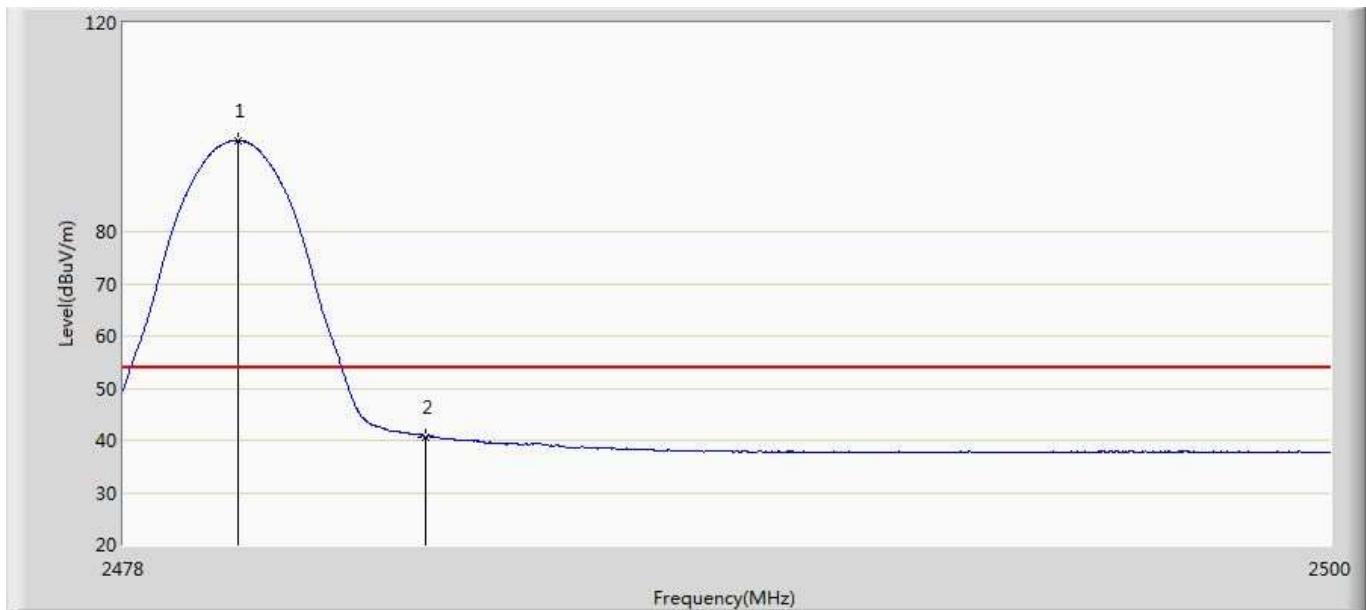
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.079	92.855	56.988	38.855	54.000	35.867	AV
2		2483.500	38.907	3.015	-15.093	54.000	35.891	AV

Site: AC5	Time: 2019/04/04 - 17:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480Mhz by Coded500	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.013	97.850	61.984	23.850	74.000	35.866	PK
2		2483.500	52.365	16.473	-21.635	74.000	35.891	PK

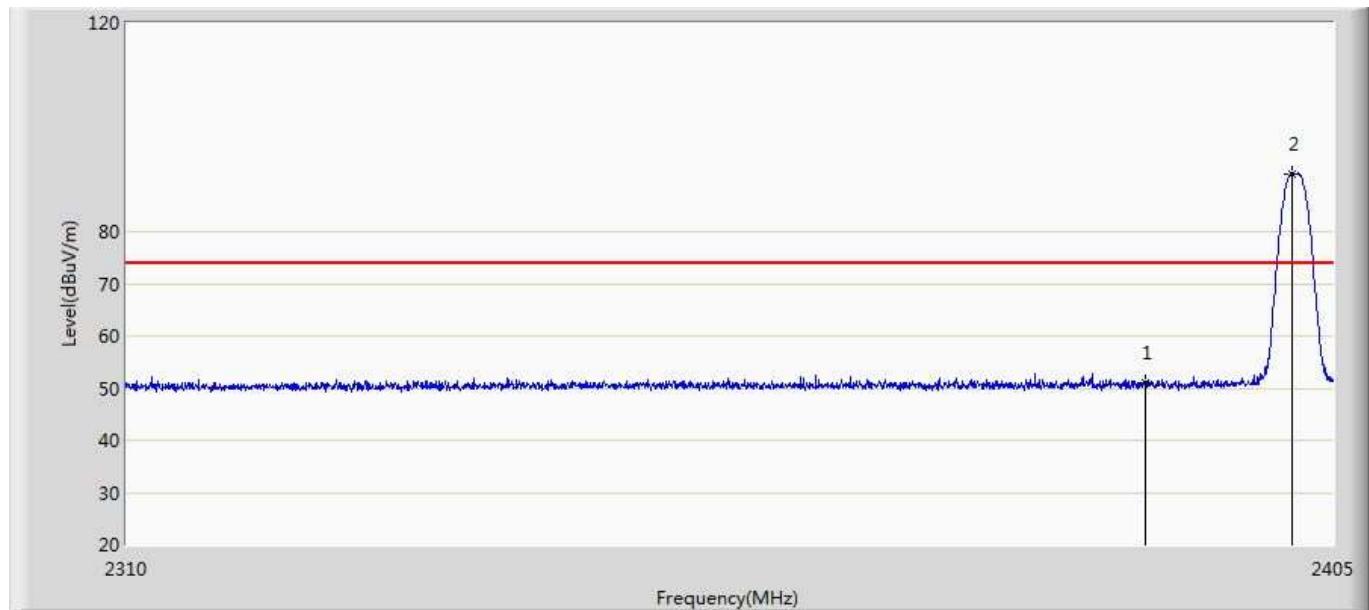
Site: AC5	Time: 2019/04/04 - 17:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480Mhz by Coded500	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.079	97.446	61.579	43.446	54.000	35.867	AV
2		2483.500	40.670	4.778	-13.330	54.000	35.891	AV

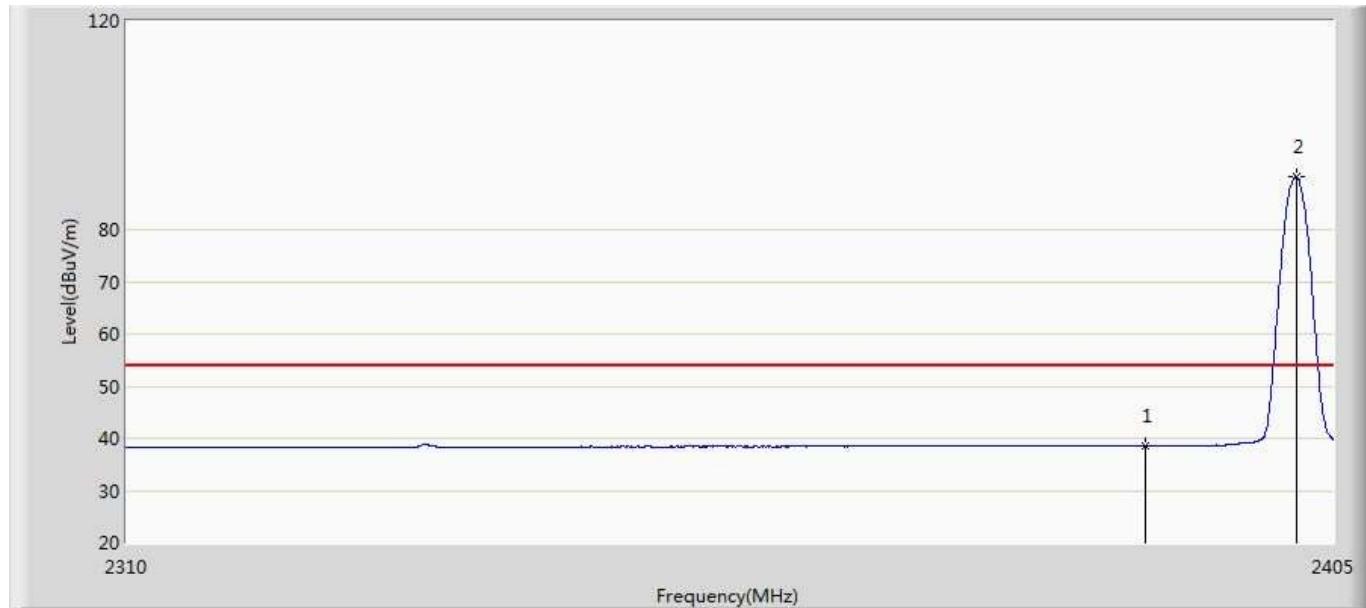
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Site: AC5	Time: 2019/03/08 - 15:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2402MHz by BLE	



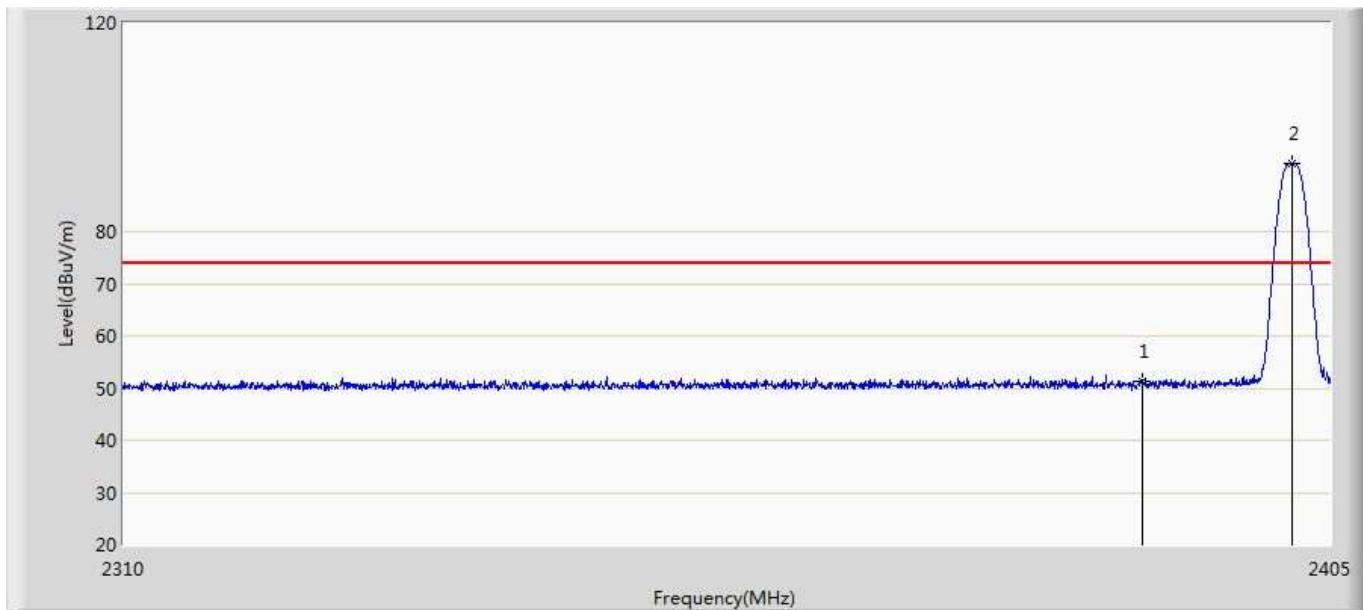
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.018	15.336	-22.982	74.000	35.682	PK
2	*	2401.770	91.136	55.424	17.136	74.000	35.712	PK

Site: AC5	Time: 2019/04/08 - 16:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2402MHz by BLE	



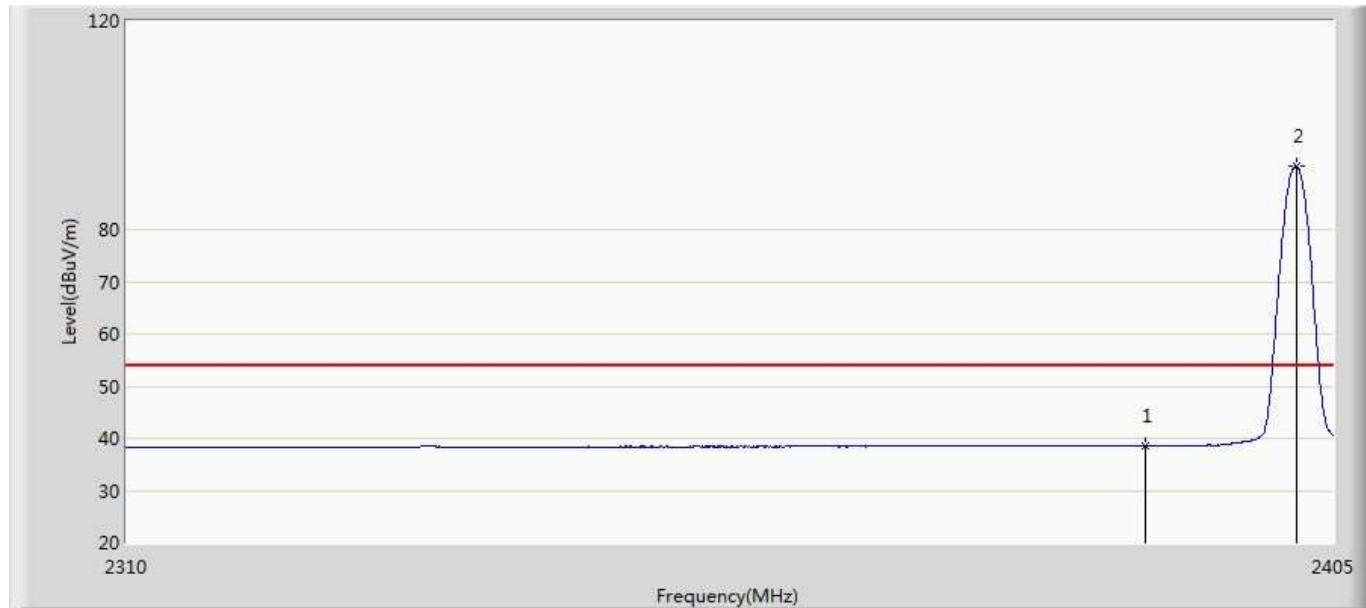
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.544	2.862	-15.456	54.000	35.682	AV
2	*	2402.055	90.028	54.315	36.028	54.000	35.712	AV

Site: AC5	Time: 2019/04/08 - 16:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2402MHz by BLE	



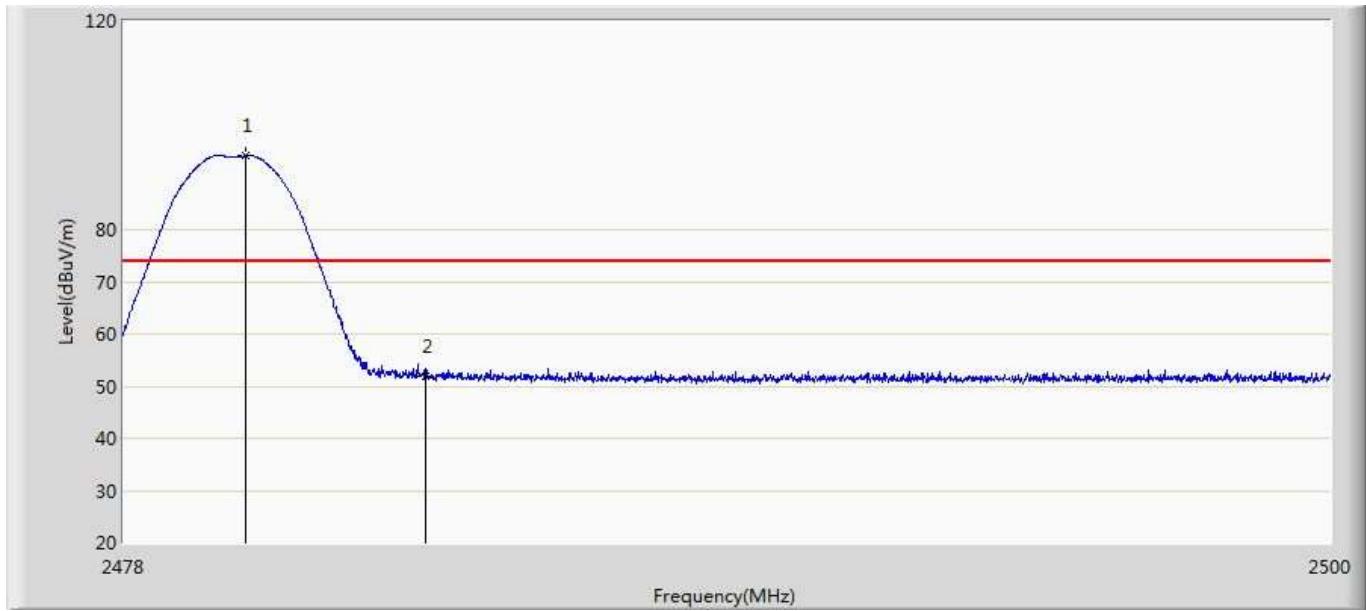
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.410	15.728	-22.590	74.000	35.682	PK
2	*	2401.913	92.952	57.240	18.952	74.000	35.712	PK

Site: AC5	Time: 2019/04/08 - 16:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2402MHz by BLE	



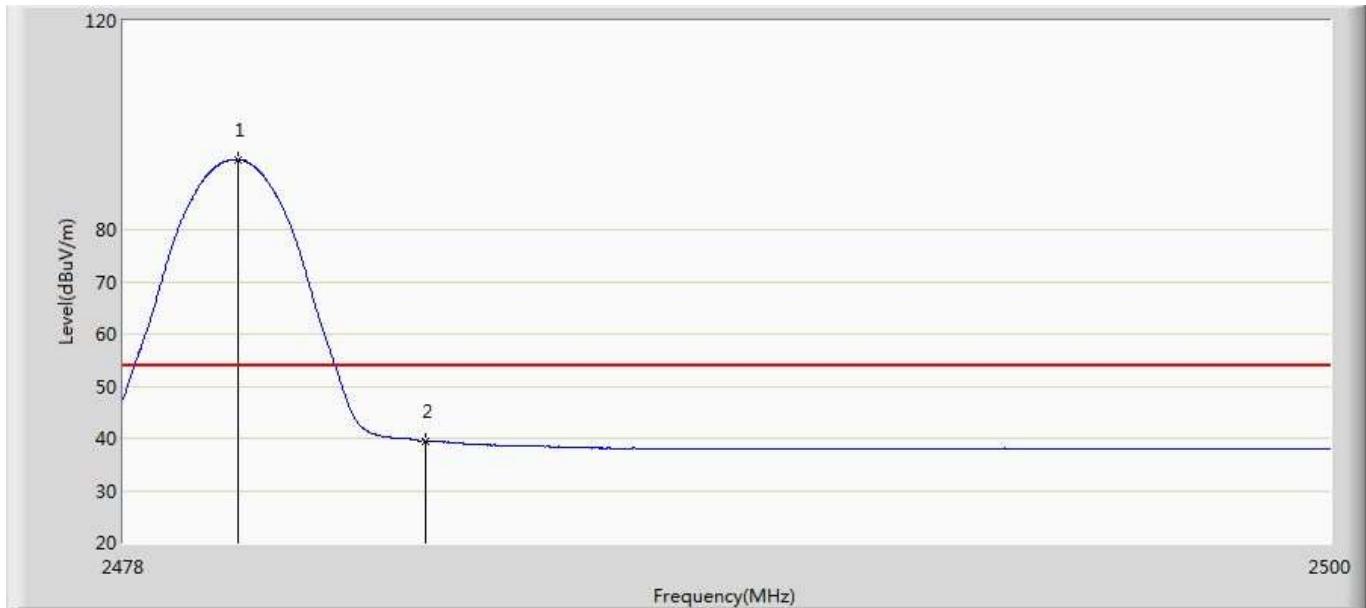
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.548	2.866	-15.452	54.000	35.682	AV
2	*	2402.055	92.138	56.425	38.138	54.000	35.712	AV

Site: AC5	Time: 2019/04/09 - 09:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2480MHz by BLE	



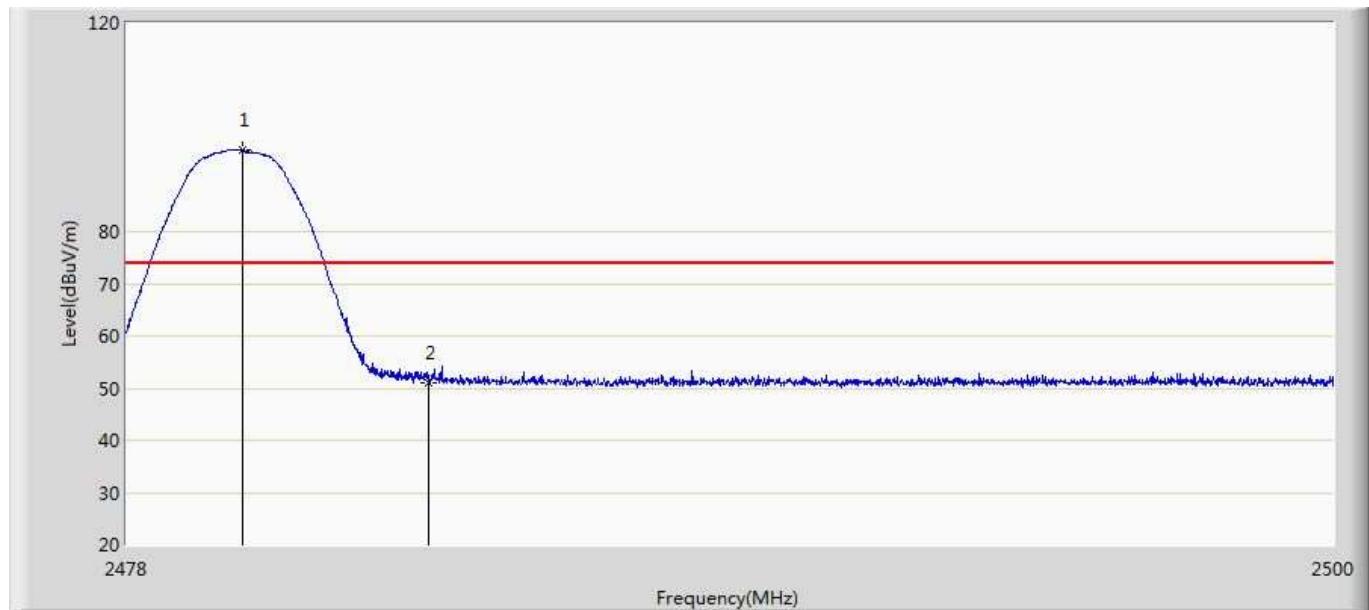
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.233	94.120	58.252	20.120	74.000	35.868	PK
2		2483.500	51.941	16.049	-22.059	74.000	35.891	PK

Site: AC5	Time: 2019/04/09 - 10:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2480MHz by BLE	



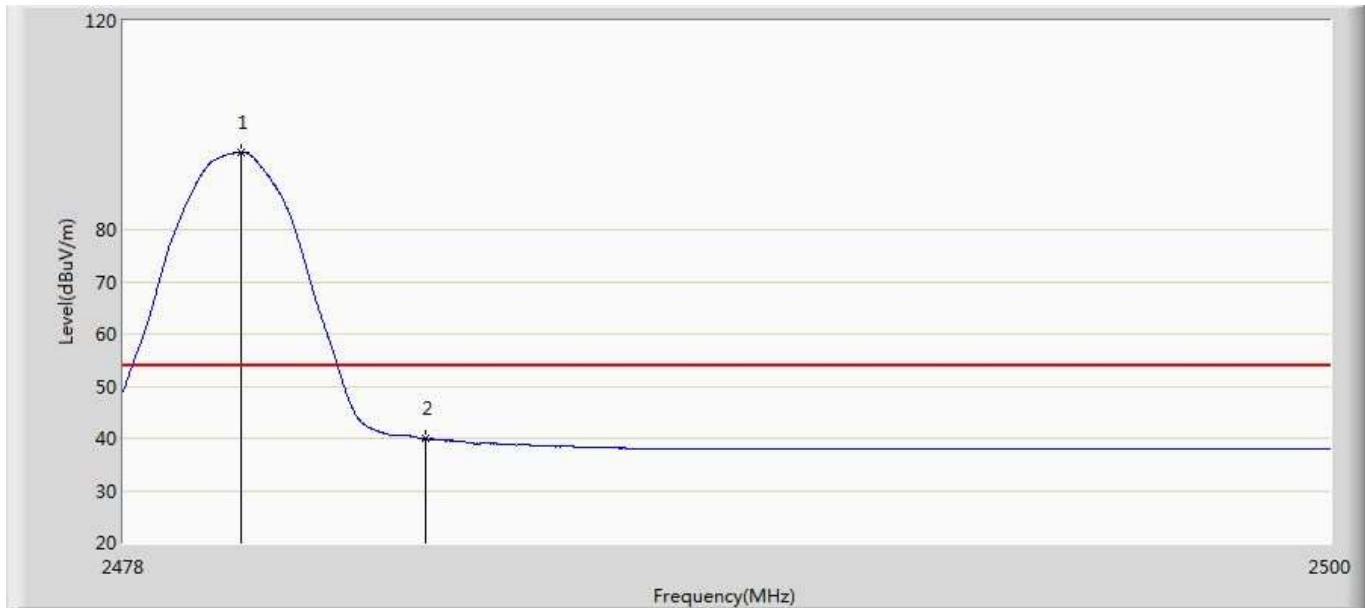
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.079	93.378	57.511	39.378	54.000	35.867	AV
2		2483.500	39.506	3.614	-14.494	54.000	35.891	AV

Site: AC5	Time: 2019/04/09 - 10:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2480MHz by BLE	



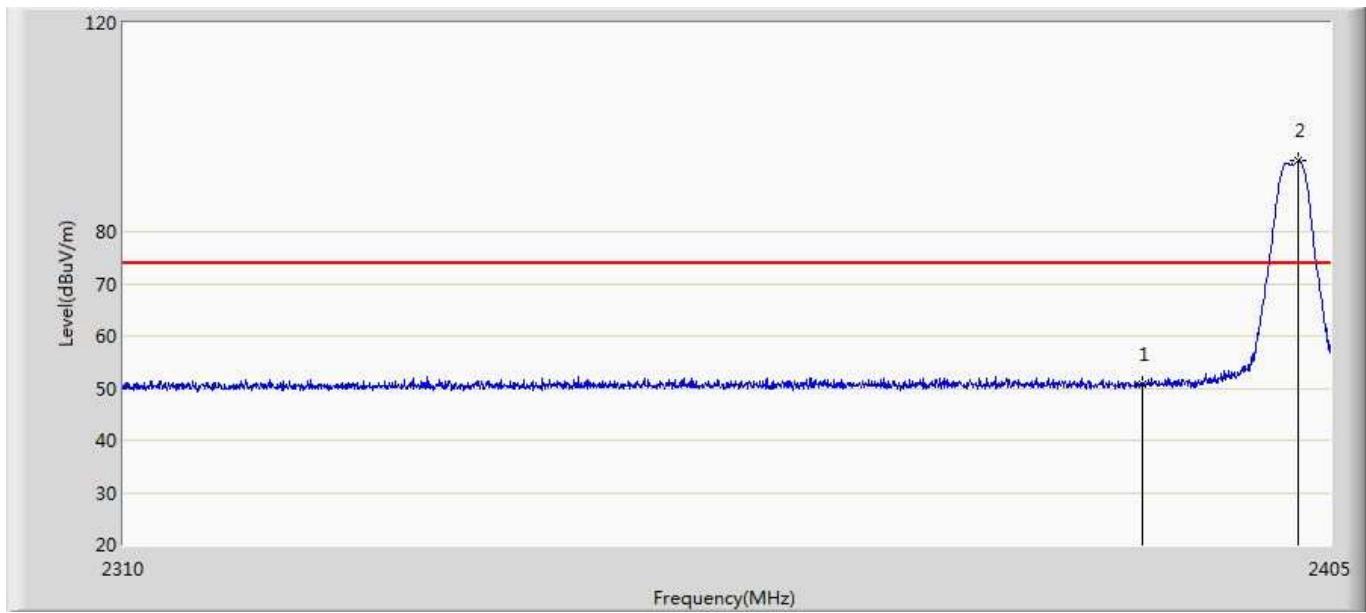
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.112	95.666	59.799	21.666	74.000	35.867	PK
2		2483.500	51.109	15.217	-22.891	74.000	35.891	PK

Site: AC5	Time: 2019/04/09 - 10:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1:Transmit at 2480MHz by BLE	



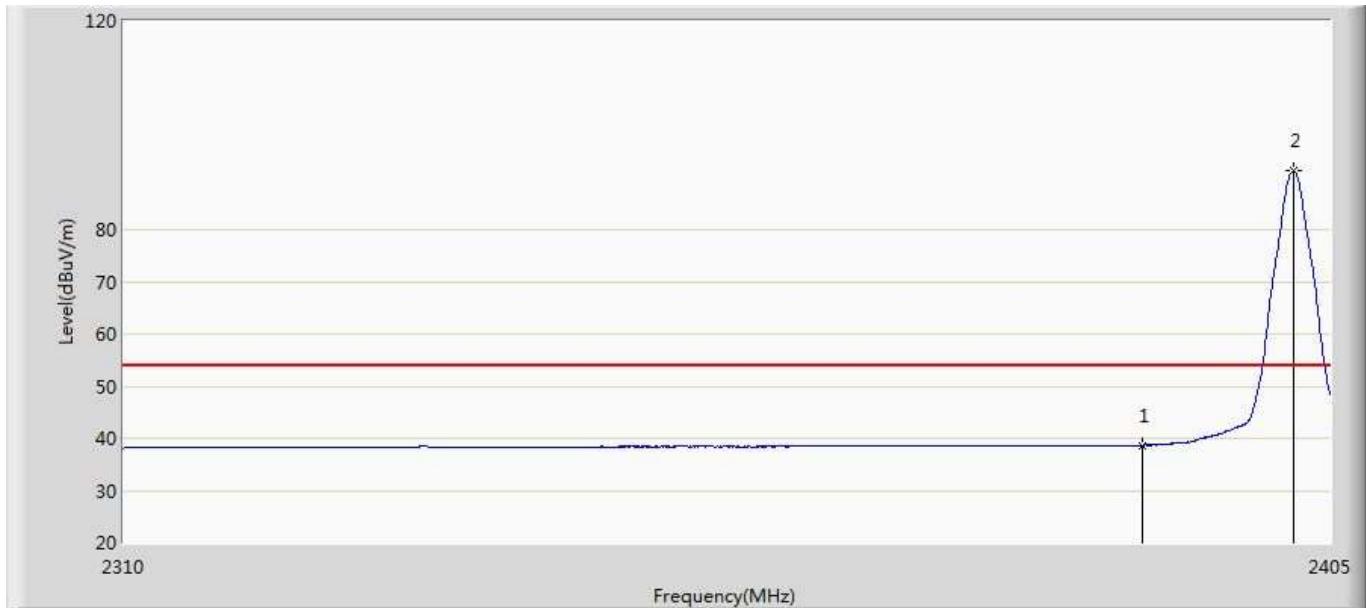
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.145	94.905	59.038	40.905	54.000	35.867	AV
2		2483.500	39.862	3.970	-14.138	54.000	35.891	AV

Site: AC5	Time: 2019/04/09 - 10:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



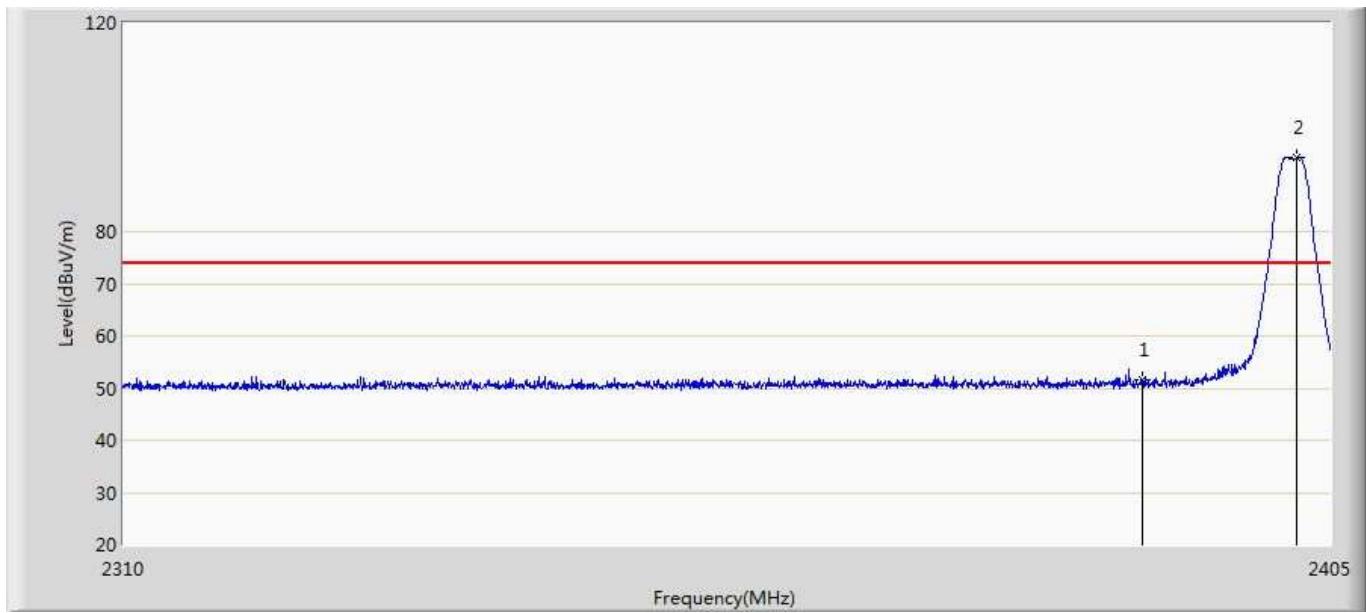
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.602	14.920	-23.398	74.000	35.682	PK
2	*	2402.435	93.540	57.826	19.540	74.000	35.714	PK

Site: AC5	Time: 2019/04/09 - 10:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



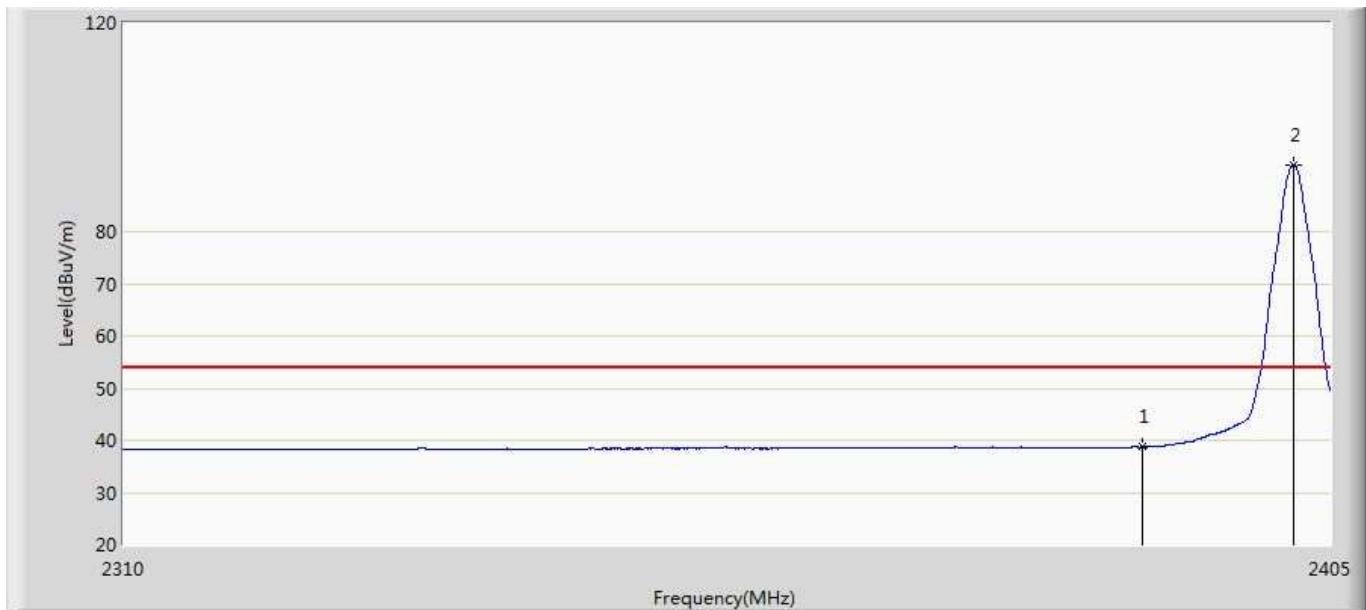
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.616	2.934	-15.384	54.000	35.682	AV
2	*	2402.055	91.172	55.459	37.172	54.000	35.712	AV

Site: AC5	Time: 2019/04/09 - 10:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



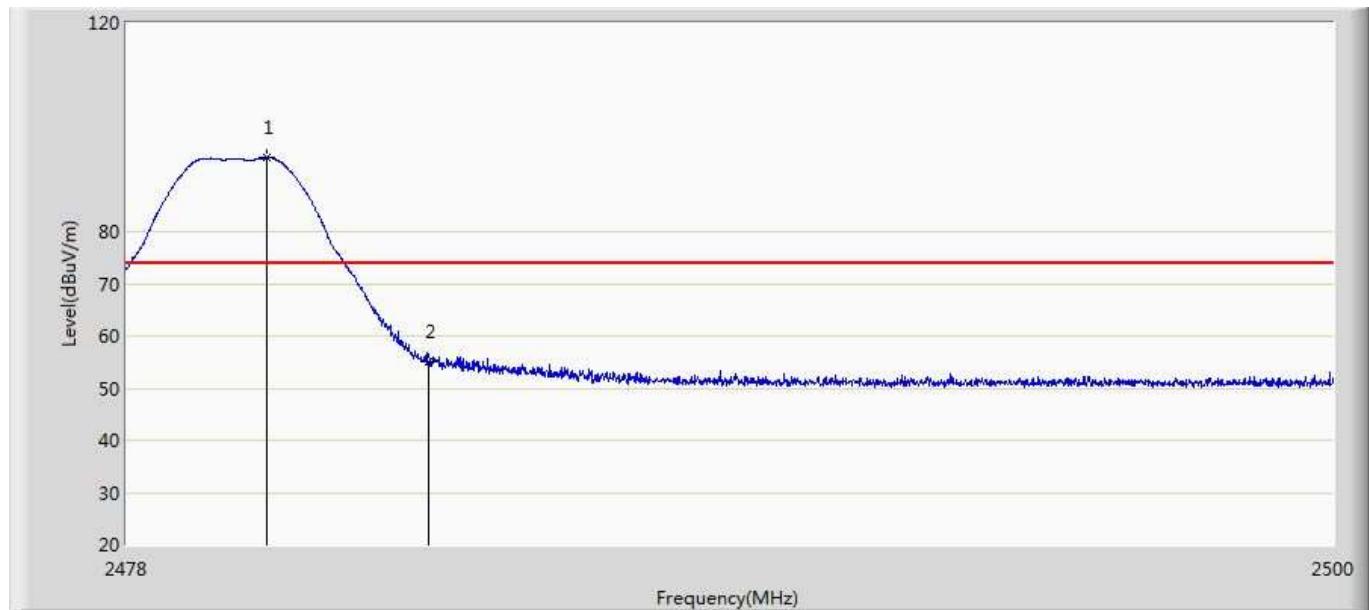
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.478	15.796	-22.522	74.000	35.682	PK
2	*	2402.387	94.103	58.389	20.103	74.000	35.714	PK

Site: AC5	Time: 2019/04/09 - 10:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



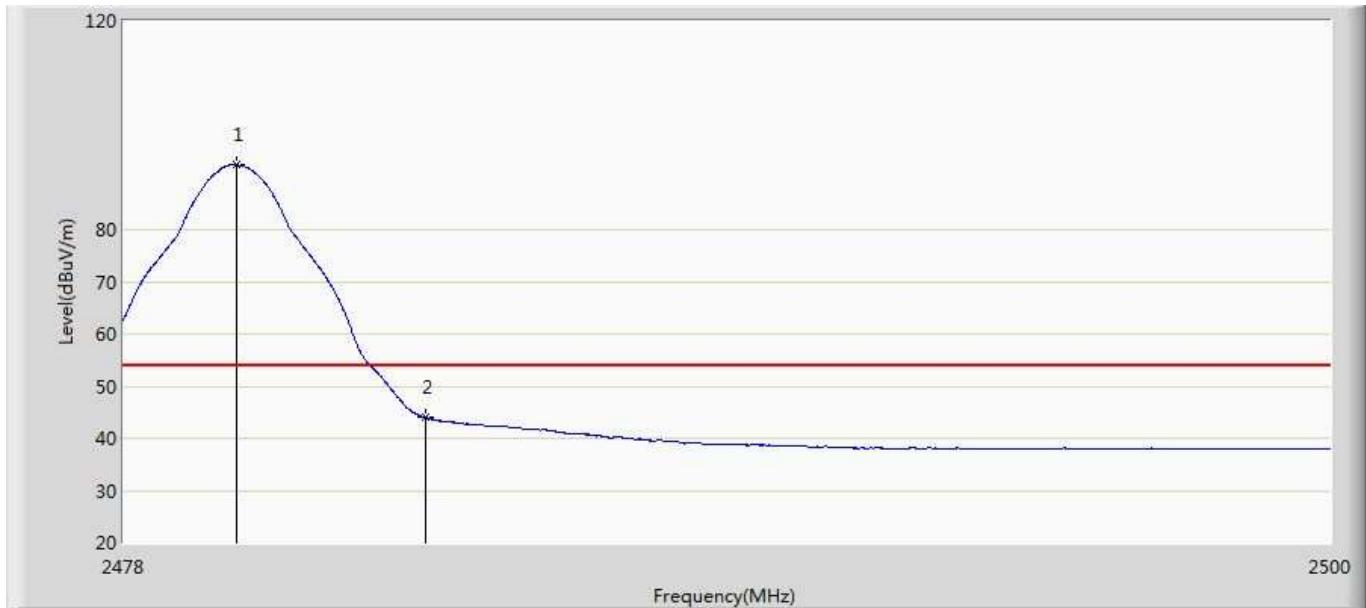
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.749	3.067	-15.251	54.000	35.682	AV
2	*	2402.055	92.848	57.135	38.848	54.000	35.712	AV

Site: AC5	Time: 2019/04/09 - 10:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



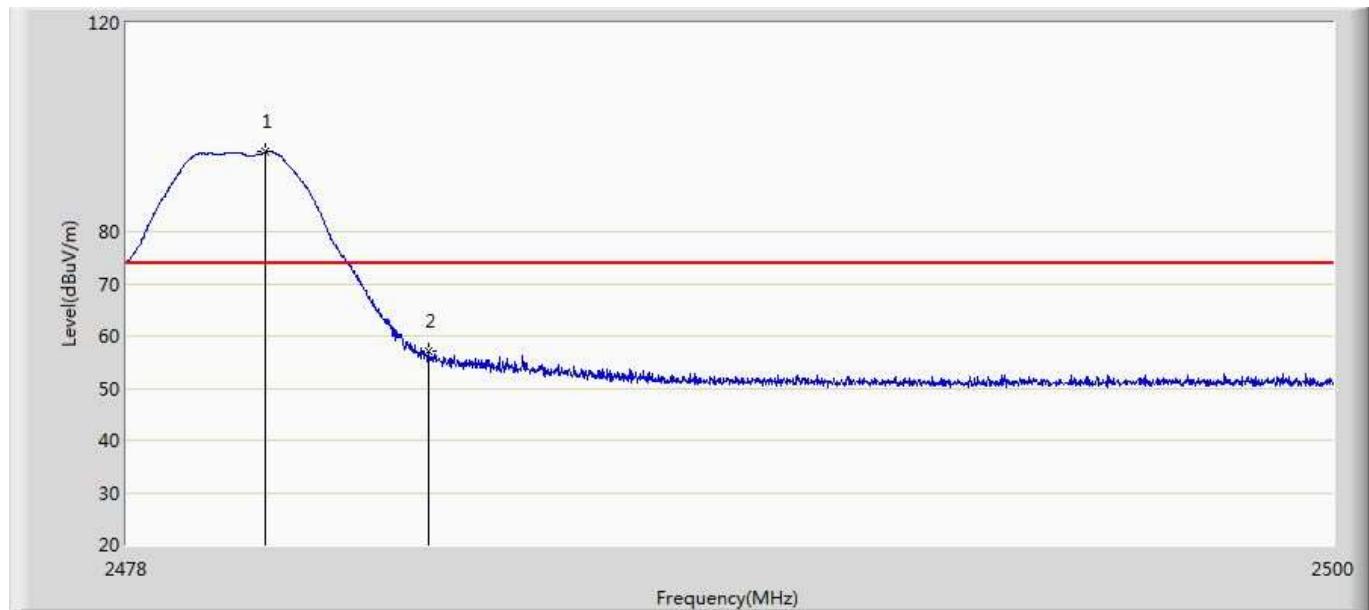
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.552	94.170	58.300	20.170	74.000	35.871	PK
2		2483.500	54.938	19.046	-19.062	74.000	35.891	PK

Site: AC5	Time: 2019/04/09 - 10:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



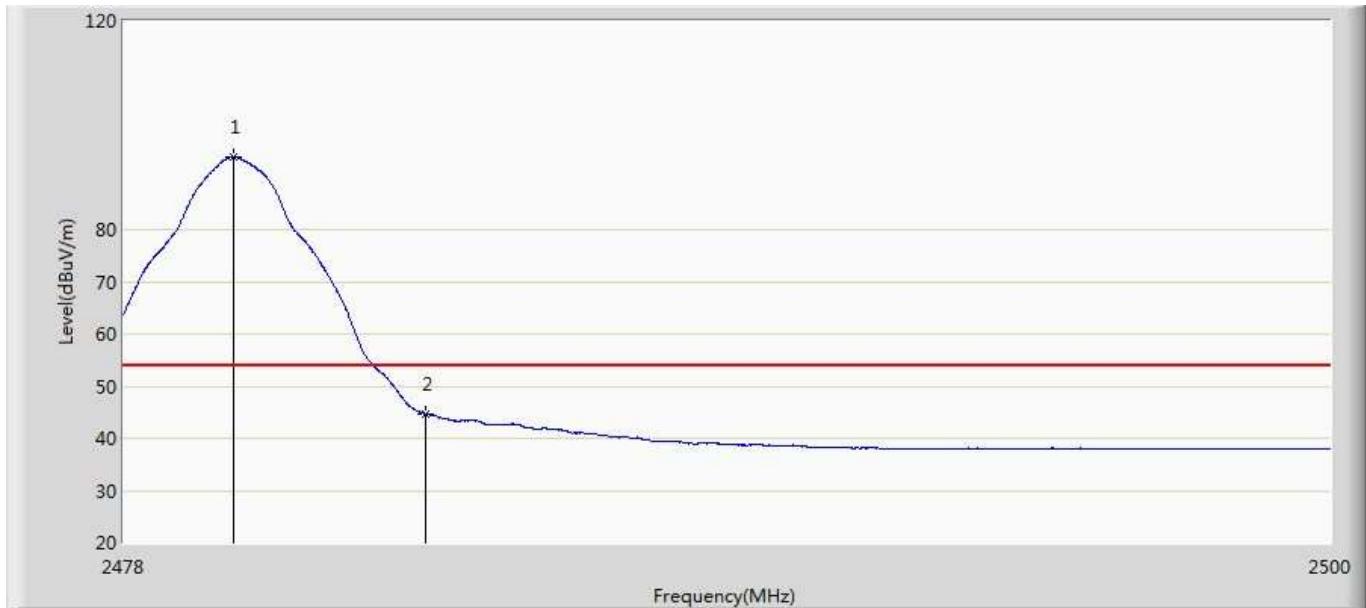
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.046	92.339	56.472	38.339	54.000	35.866	AV
2		2483.500	44.015	8.123	-9.985	54.000	35.891	AV

Site: AC5	Time: 2019/04/09 - 10:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



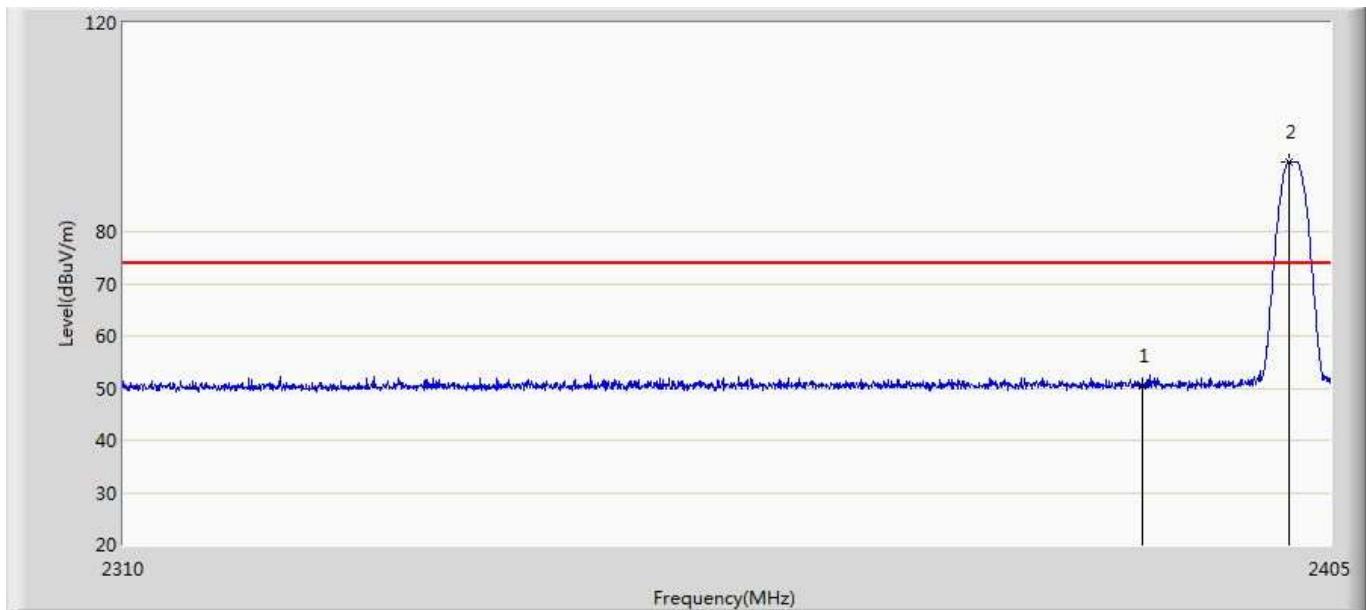
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.530	95.371	59.501	21.371	74.000	35.870	PK
2		2483.500	57.185	21.293	-16.815	74.000	35.891	PK

Site: AC5	Time: 2019/04/09 - 10:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



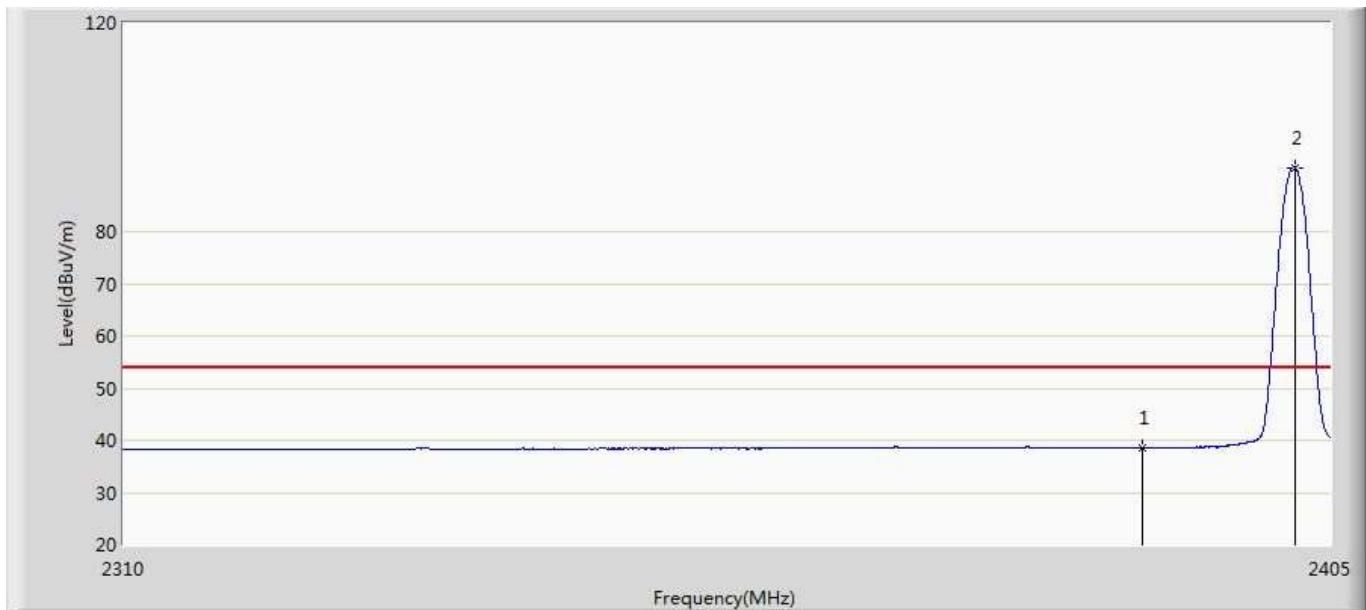
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.013	93.907	58.041	39.907	54.000	35.866	AV
2		2483.500	44.644	8.752	-9.356	54.000	35.891	AV

Site: AC5	Time: 2019/04/09 - 10:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by Coded125	



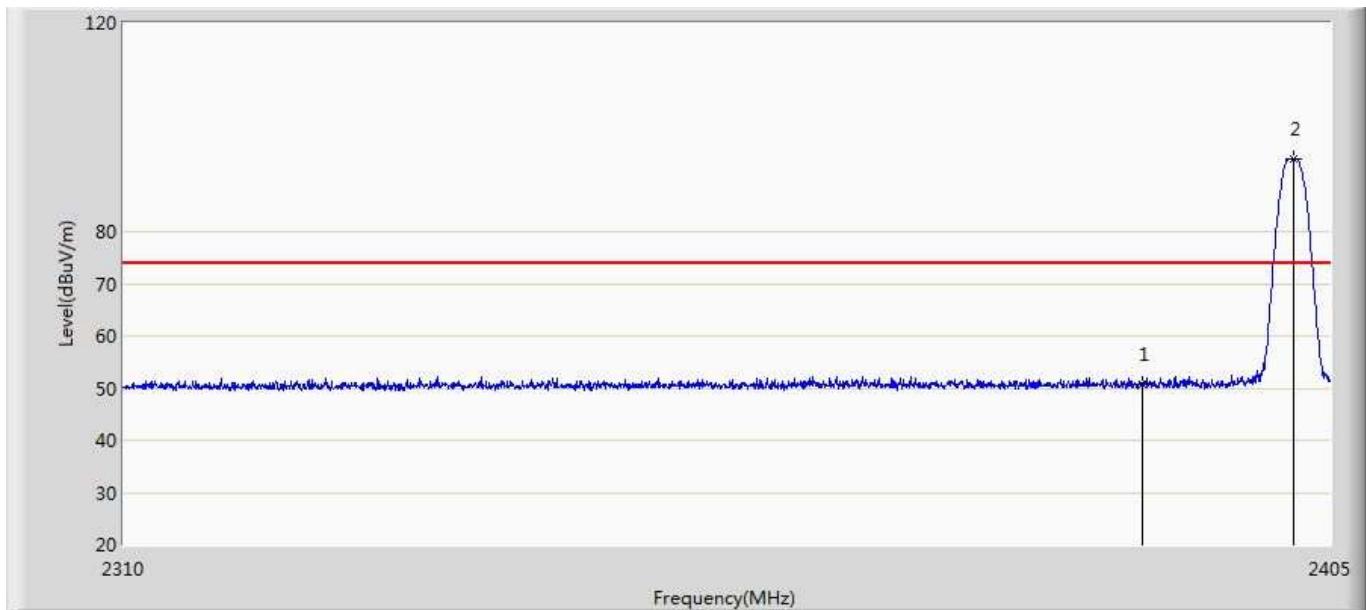
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.547	14.865	-23.453	74.000	35.682	PK
2	*	2401.770	93.449	57.737	19.449	74.000	35.712	PK

Site: AC5	Time: 2019/04/09 - 10:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by Coded125	



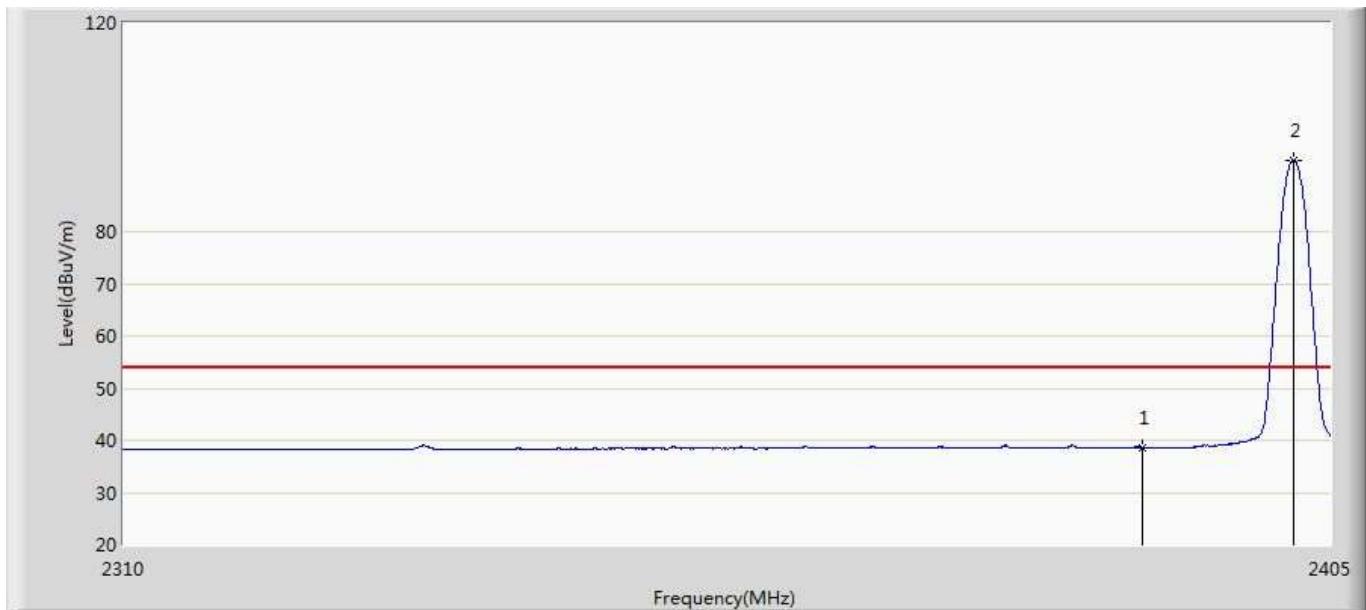
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.575	2.893	-15.425	54.000	35.682	AV
2	*	2402.198	92.280	56.567	38.280	54.000	35.714	AV

Site: AC5	Time: 2019/04/09 - 10:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by Coded125	



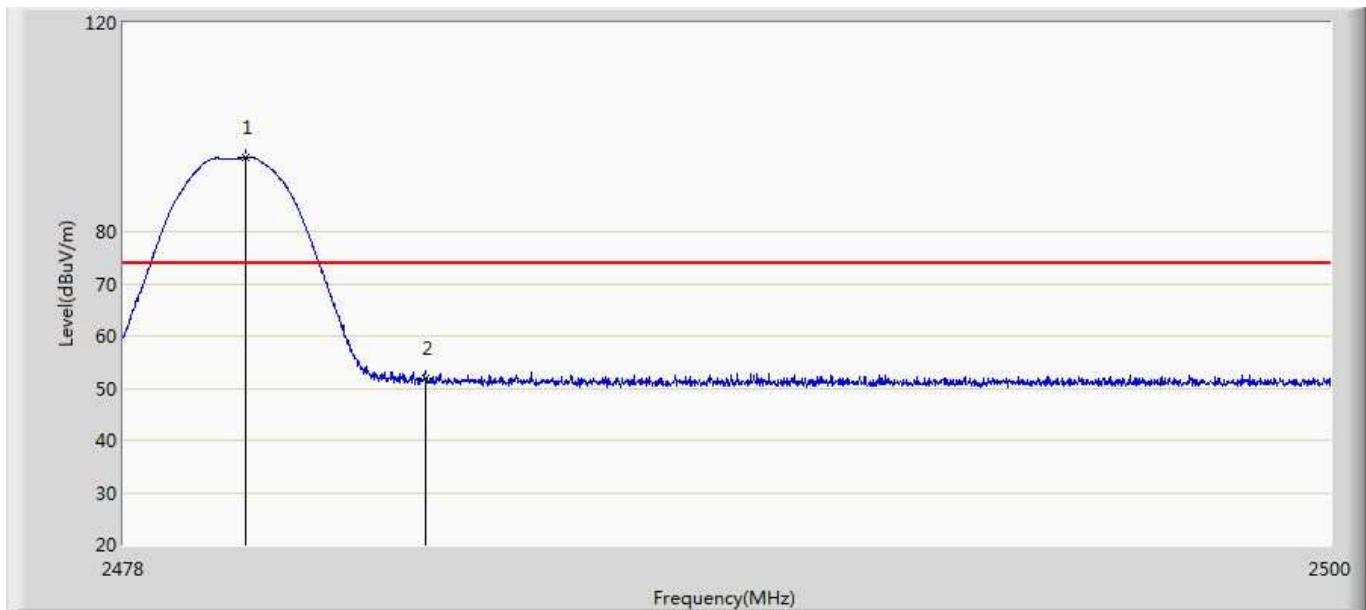
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.654	14.972	-23.346	74.000	35.682	PK
2	*	2402.055	93.880	58.167	19.880	74.000	35.712	PK

Site: AC5	Time: 2019/04/09 - 10:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by Coded125	



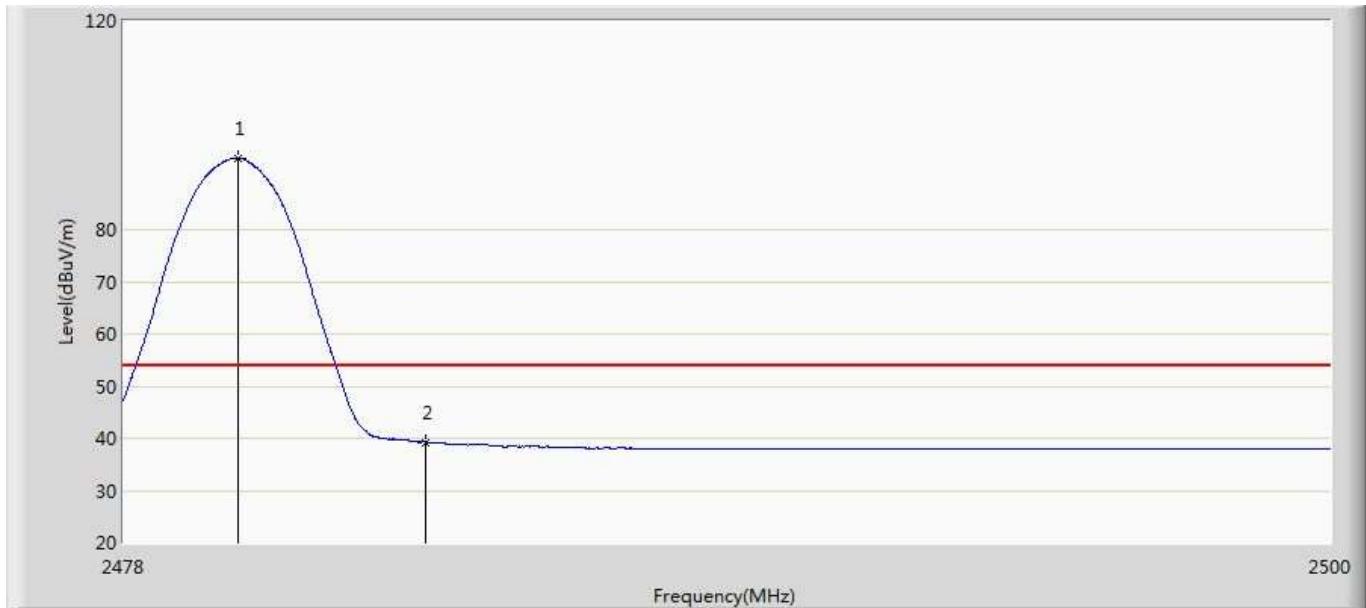
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.579	2.897	-15.421	54.000	35.682	AV
2	*	2402.055	93.725	58.012	39.725	54.000	35.712	AV

Site: AC5	Time: 2019/04/09 - 10:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by Coded125	



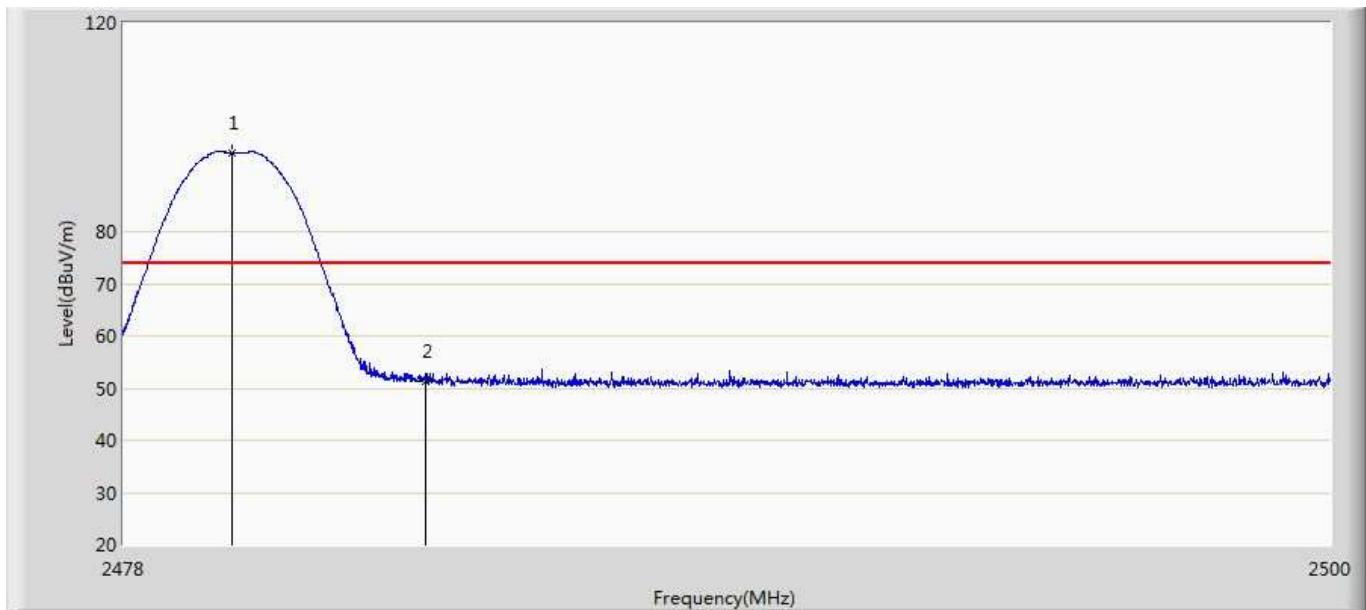
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.222	94.164	58.296	20.164	74.000	35.868	PK
2		2483.500	51.748	15.856	-22.252	74.000	35.891	PK

Site: AC5	Time: 2019/04/09 - 10:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by Coded125	



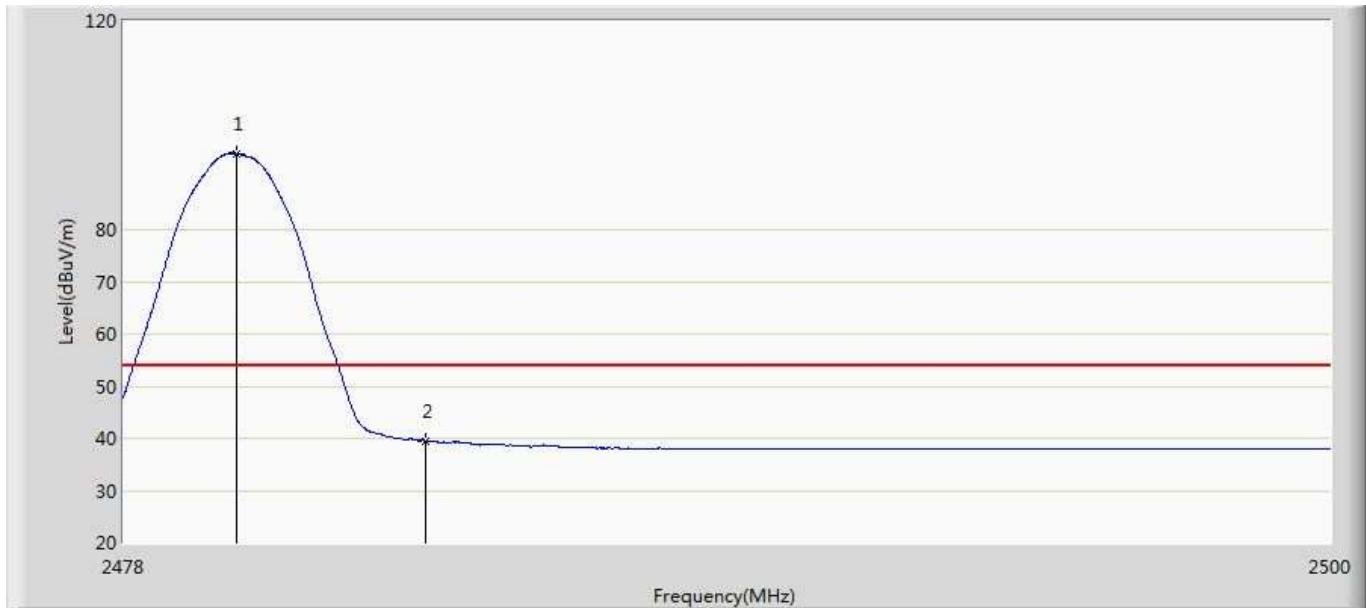
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.079	93.687	57.820	39.687	54.000	35.867	AV
2		2483.500	39.271	3.379	-14.729	54.000	35.891	AV

Site: AC5	Time: 2019/04/09 - 10:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by Coded125	



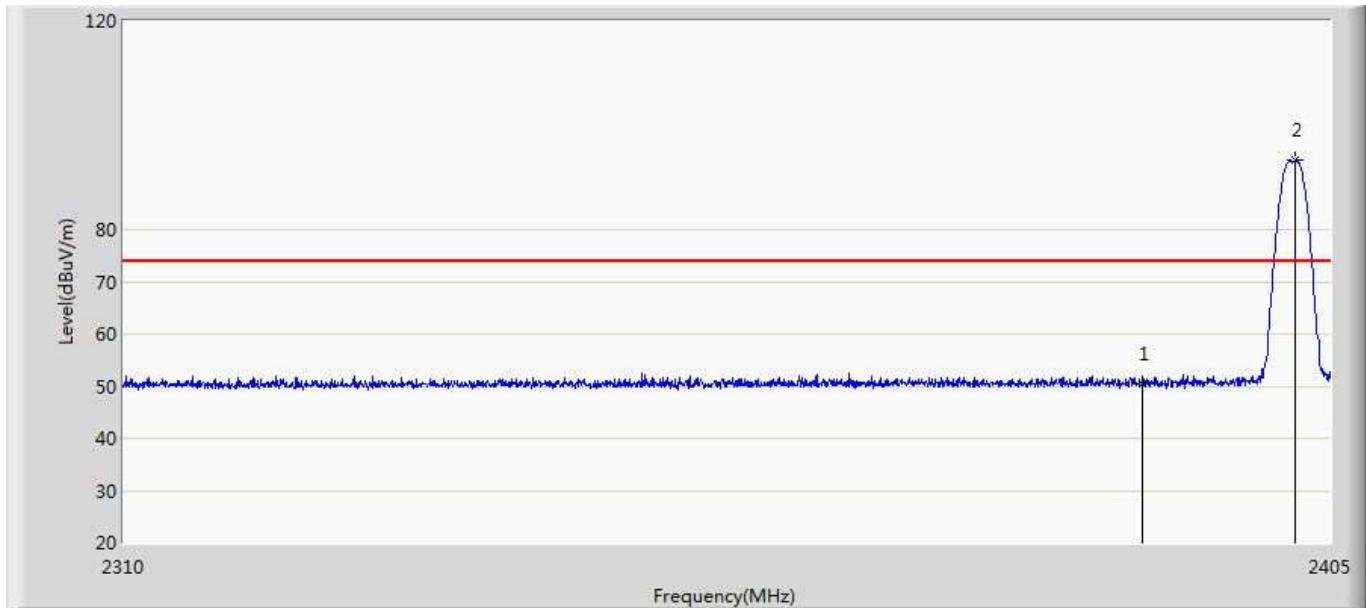
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.980	95.100	59.234	21.100	74.000	35.866	PK
2		2483.500	51.343	15.451	-22.657	74.000	35.891	PK

Site: AC5	Time: 2019/04/09 - 10:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by Coded125	



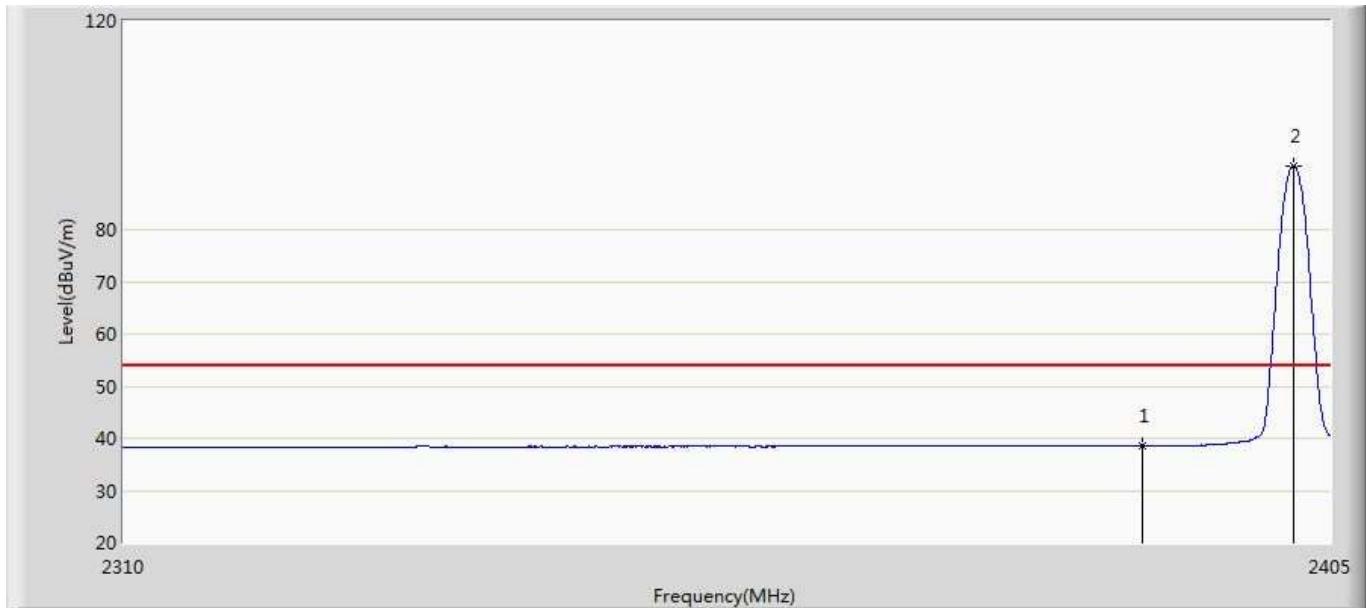
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.046	94.533	58.666	40.533	54.000	35.866	AV
2		2483.500	39.543	3.651	-14.457	54.000	35.891	AV

Site: AC5	Time: 2019/04/09 - 11:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by Coded500	



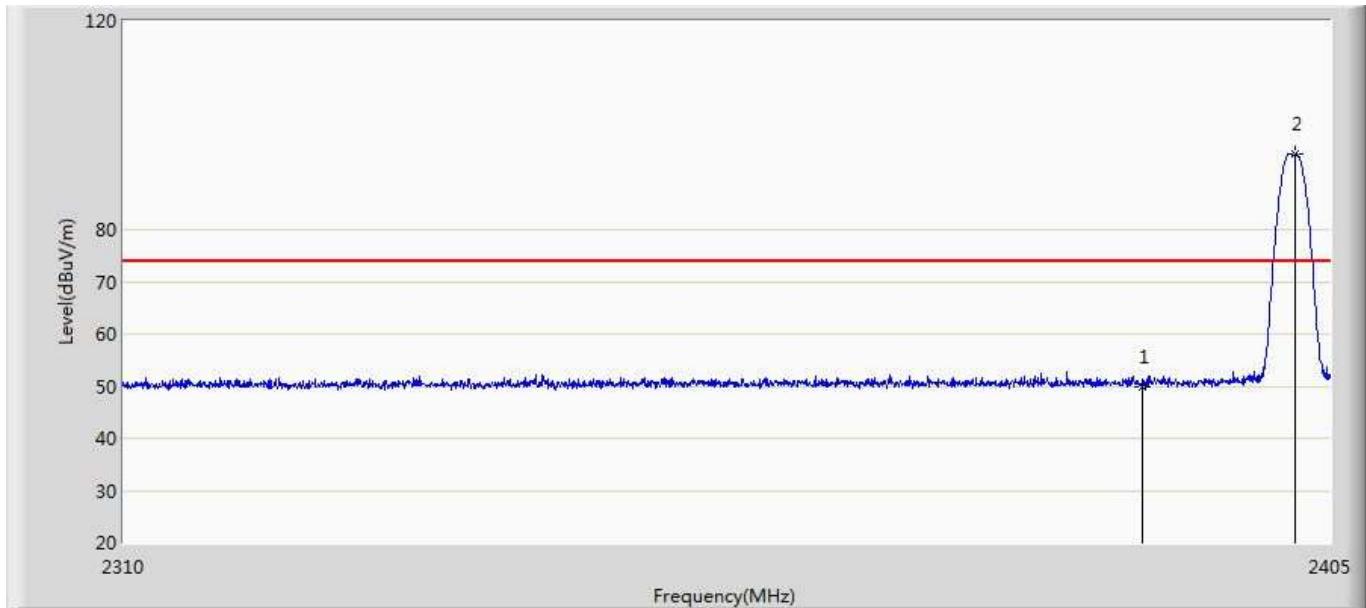
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.407	14.725	-23.593	74.000	35.682	PK
2	*	2402.245	93.467	57.754	19.467	74.000	35.714	PK

Site: AC5	Time: 2019/04/09 - 11:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by Coded500	



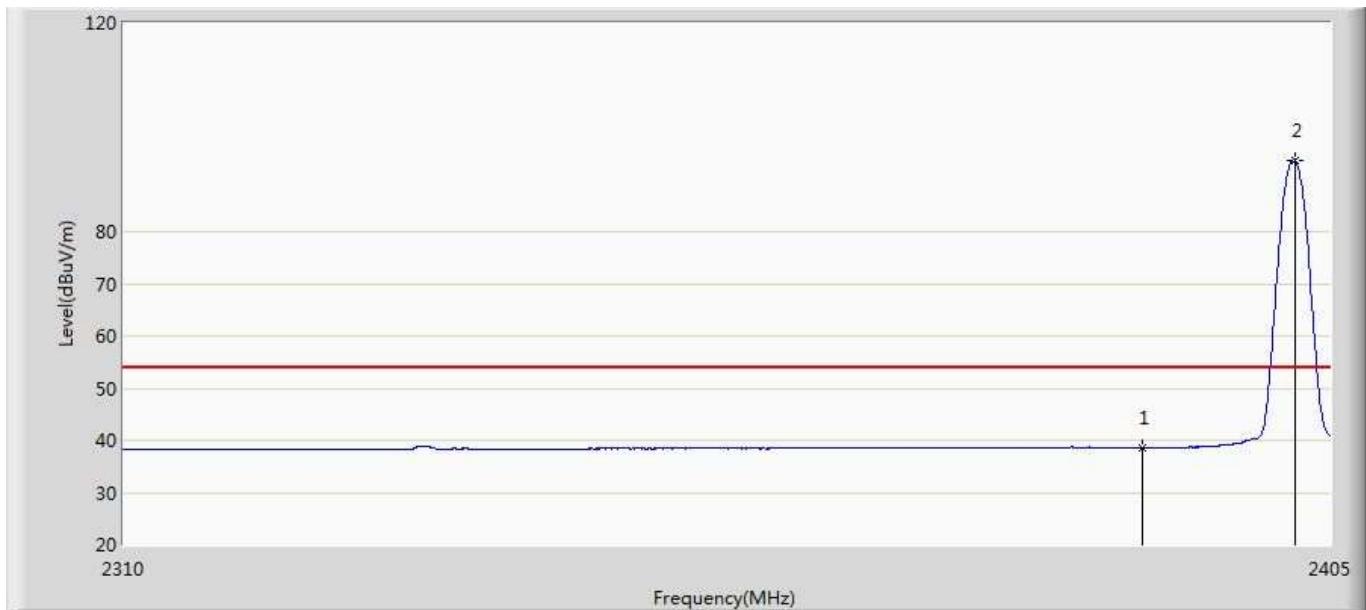
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.671	2.989	-15.329	54.000	35.682	AV
2	*	2402.055	92.270	56.557	38.270	54.000	35.712	AV

Site: AC5	Time: 2019/04/09 - 11:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by Coded500	



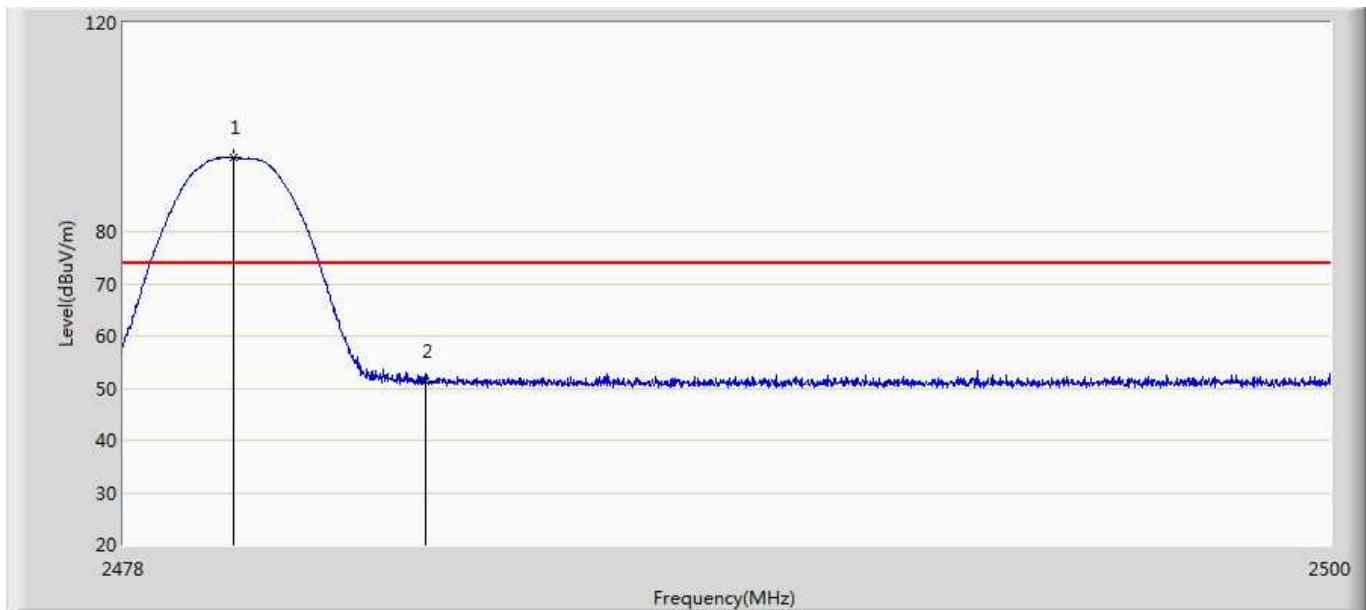
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	49.725	14.043	-24.275	74.000	35.682	PK
2	*	2402.198	94.419	58.706	20.419	74.000	35.714	PK

Site: AC5	Time: 2019/04/09 - 11:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by Coded500	



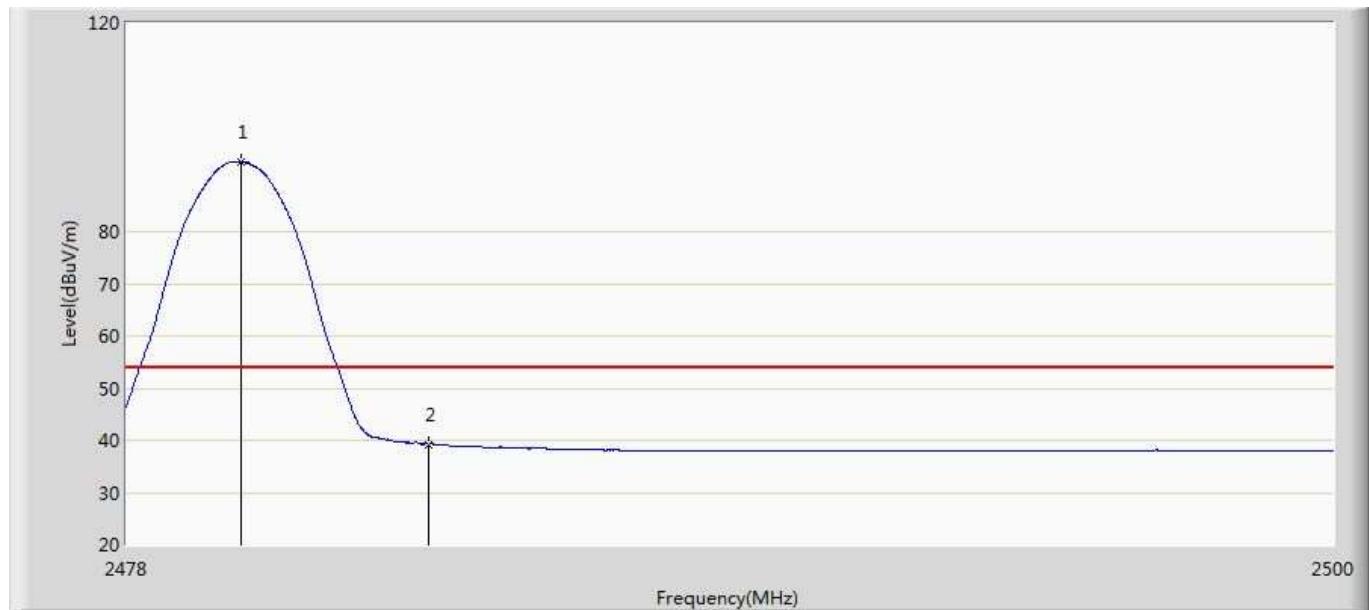
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.605	2.923	-15.395	54.000	35.682	AV
2	*	2402.198	93.707	57.994	39.707	54.000	35.714	AV

Site: AC5	Time: 2019/04/09 - 11:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by Coded500	



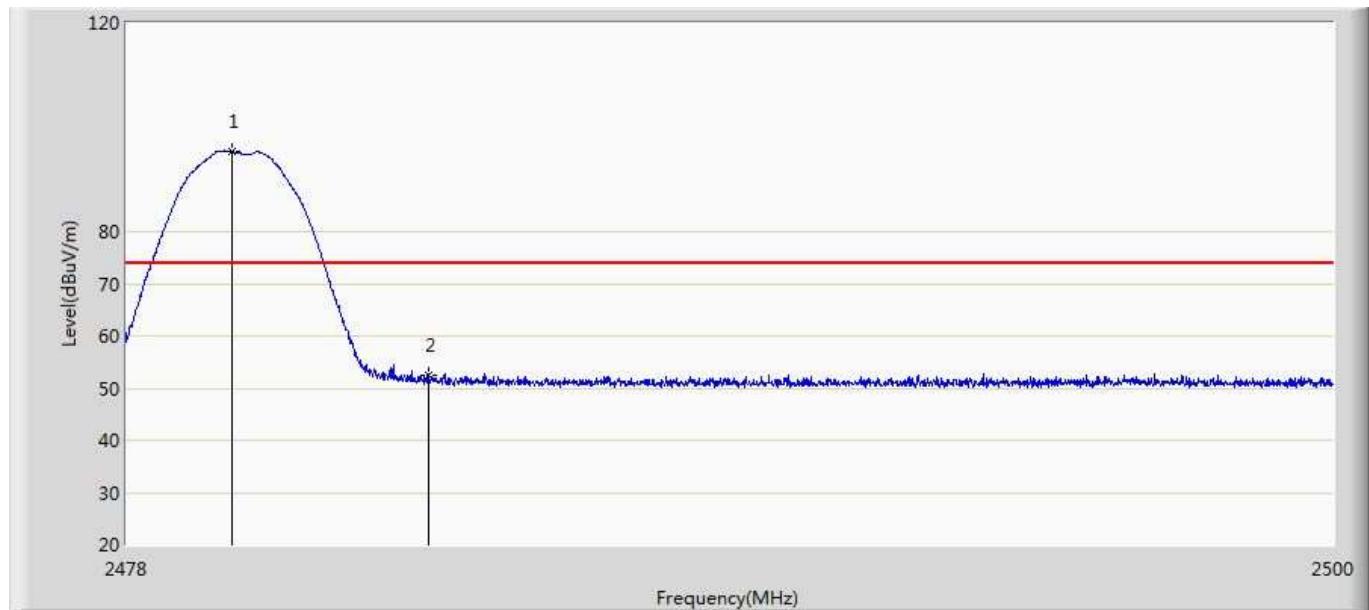
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.013	94.164	58.298	20.164	74.000	35.866	PK
2		2483.500	51.294	15.402	-22.706	74.000	35.891	PK

Site: AC5	Time: 2019/04/09 - 11:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by Coded500	



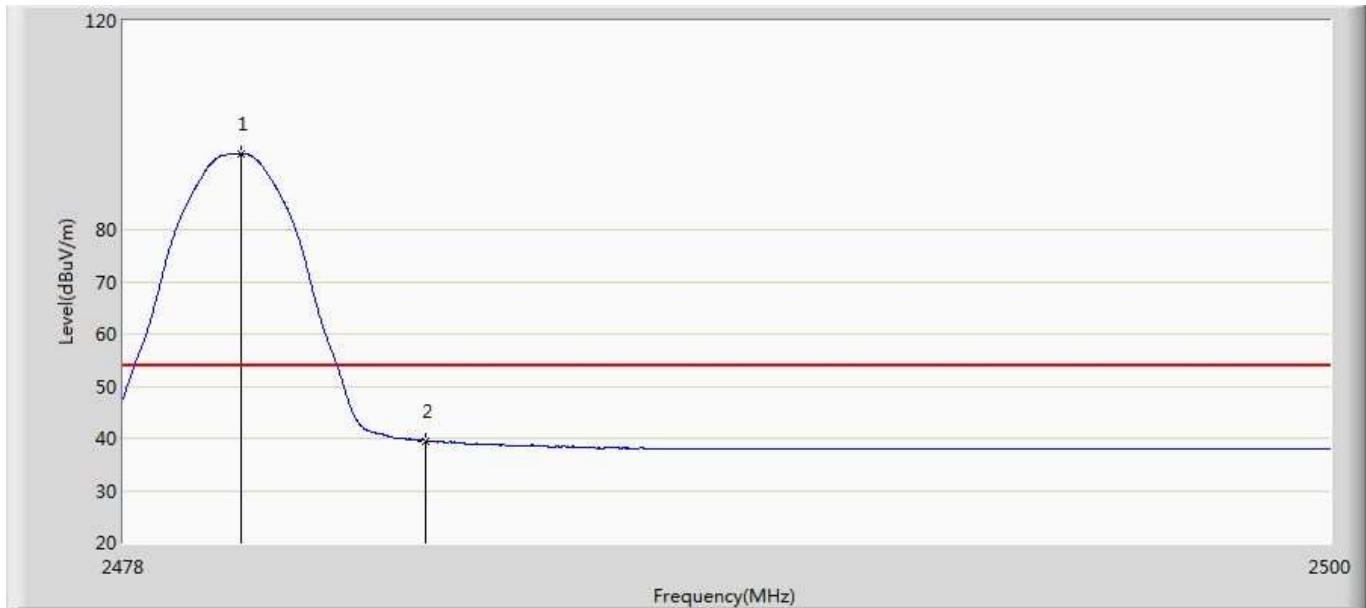
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.079	93.362	57.495	39.362	54.000	35.867	AV
2		2483.500	39.266	3.374	-14.734	54.000	35.891	AV

Site: AC5	Time: 2019/04/09 - 11:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by Coded500	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.914	95.397	59.531	21.397	74.000	35.866	PK
2		2483.500	52.418	16.526	-21.582	74.000	35.891	PK

Site: AC5	Time: 2019/04/09 - 11:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by Coded500	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.145	94.490	58.623	40.490	54.000	35.867	AV
2		2483.500	39.525	3.633	-14.475	54.000	35.891	AV

7. Occupied Bandwidth

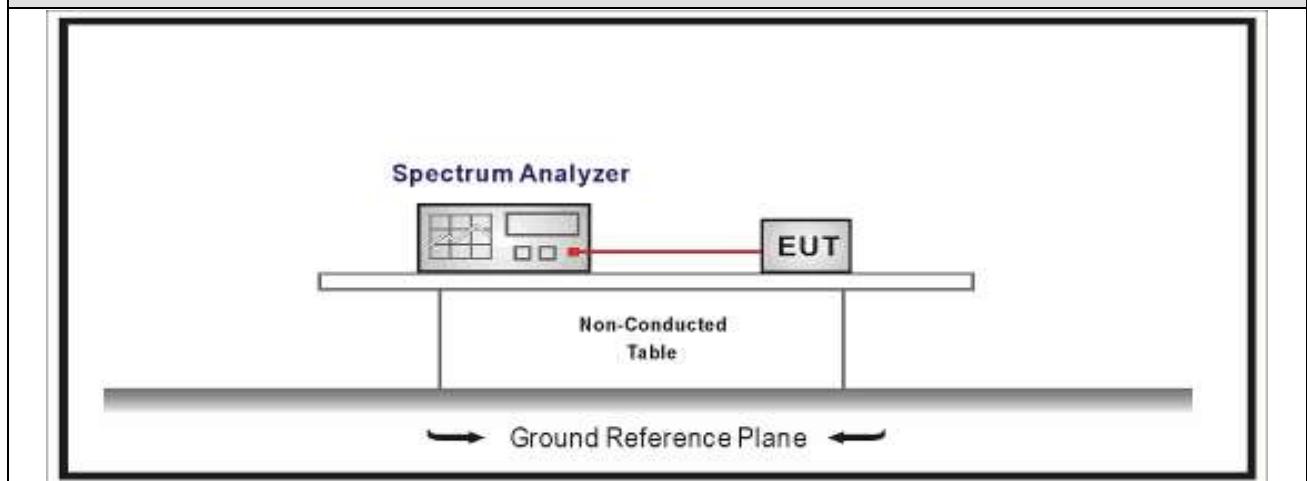
7.1. Test Equipment

Occupied Bandwidth / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2019.02.04	2020.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2018.04.09	2020.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2018.04.09	2020.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2018.04.10	2020.04.09

Note: All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

7.2. Test Setup

Occupied Bandwidth test setup:



7.3. Limit

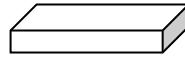
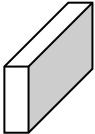
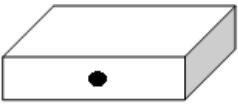
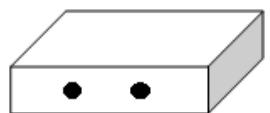
Occupied Bandwidth

Systems using digital modulation techniques operate in the 2400-2483.5 MHz. The minimum 6 dB bandwidth shall be at least 500 kHz

7.4. Test Procedure

Test Method			
	Reference Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.8	DTS bandwidth
<input type="checkbox"/>	<input type="checkbox"/> ANSI C63.10	11.8.1	Option 1
	<input checked="" type="checkbox"/> ANSI C63.10	11.8.2	Option 2

7.5. EUT test definition

Item	Occupied Bandwidth			
Device Category	<input type="checkbox"/>	Fixed point-to-point		
	<input type="checkbox"/>	Emit multiple directional beams, simultaneously or sequentially		
	<input checked="" type="checkbox"/>	Other cases		
Test mode	Mode 1-4			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	
	<input checked="" type="checkbox"/>	Conducted		
	<input checked="" type="checkbox"/>	Chain 1		
				
	<input type="checkbox"/>	Chain 1	Chain 2	
				
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3
				

7.6. Test Result

Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 1	Test Site	:	TR-8
Test Date	:	2019.06.26	Test Engineer	:	Simon

Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (kHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
1	00	2402	1040.1	725.3	>500	Pass
1	19	2440	1035.1	719.9	>500	Pass
1	39	2480	1034.2	717.4	>500	Pass

Mode 1 CH00 (2402MHz)



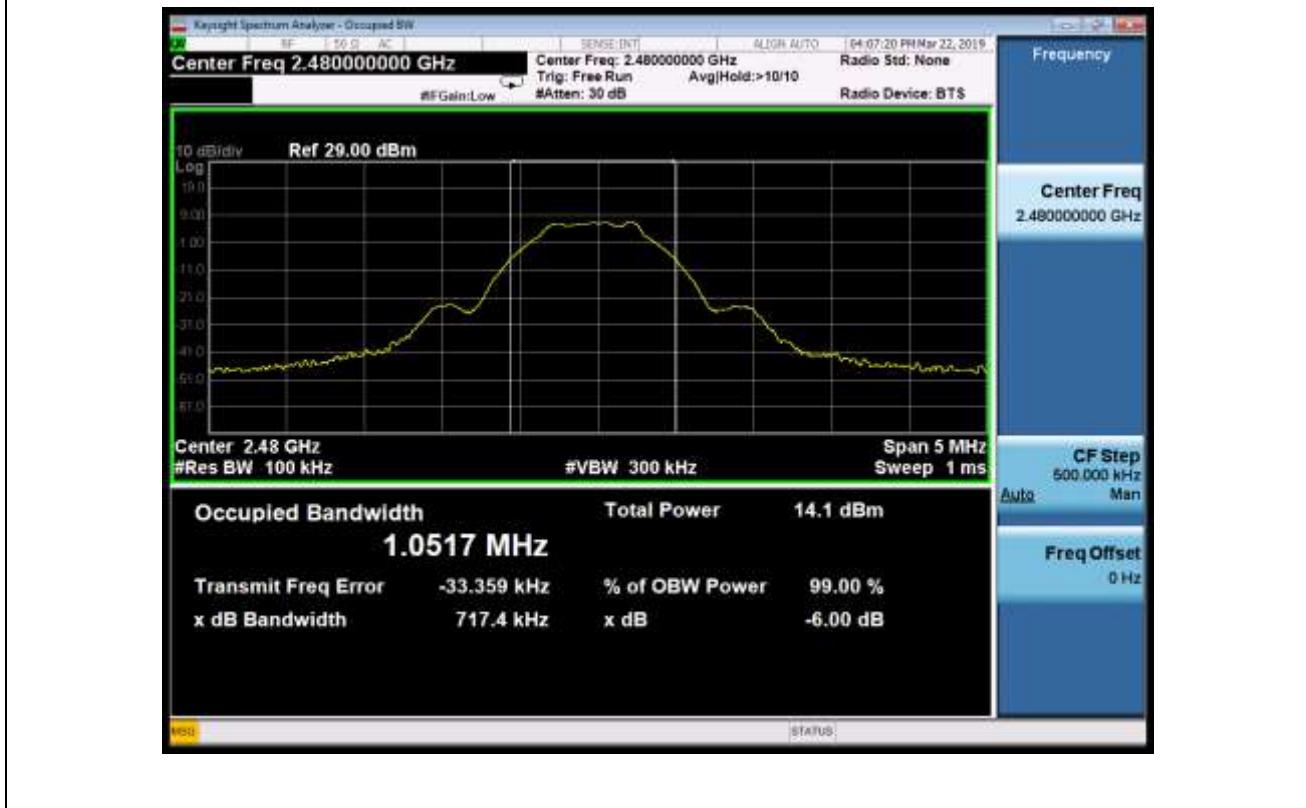


Mode 1 CH19 (2440MHz)





Mode 1 CH39 (2480MHz)

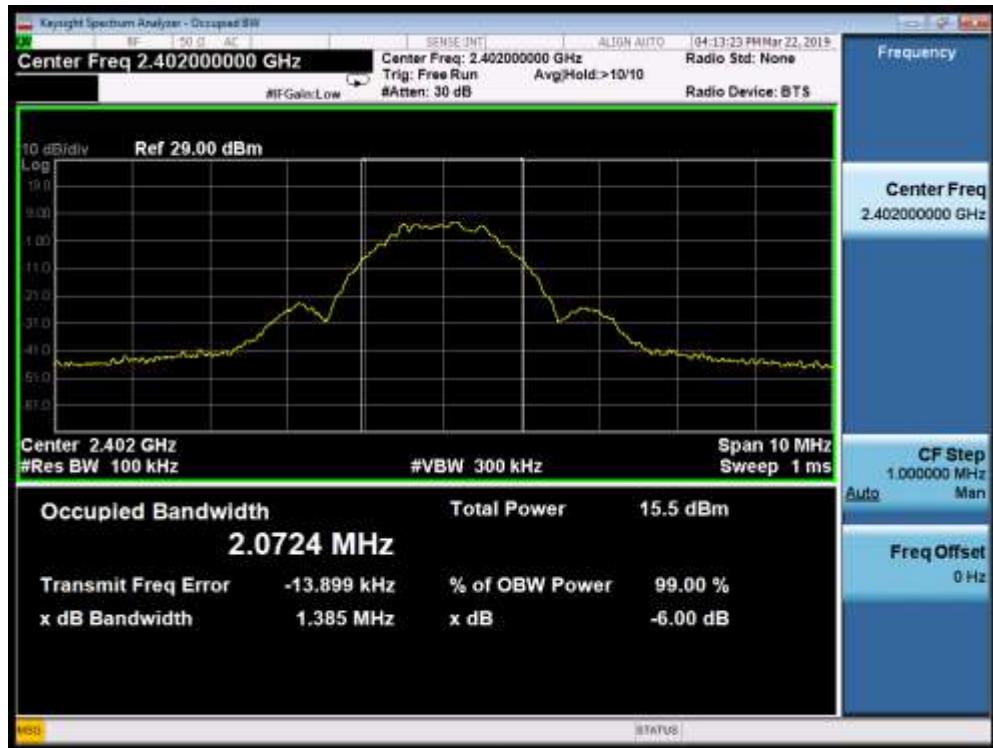




Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 2	Test Site	:	TR-8
Test Date	:	2019.06.26	Test Engineer	:	Simon

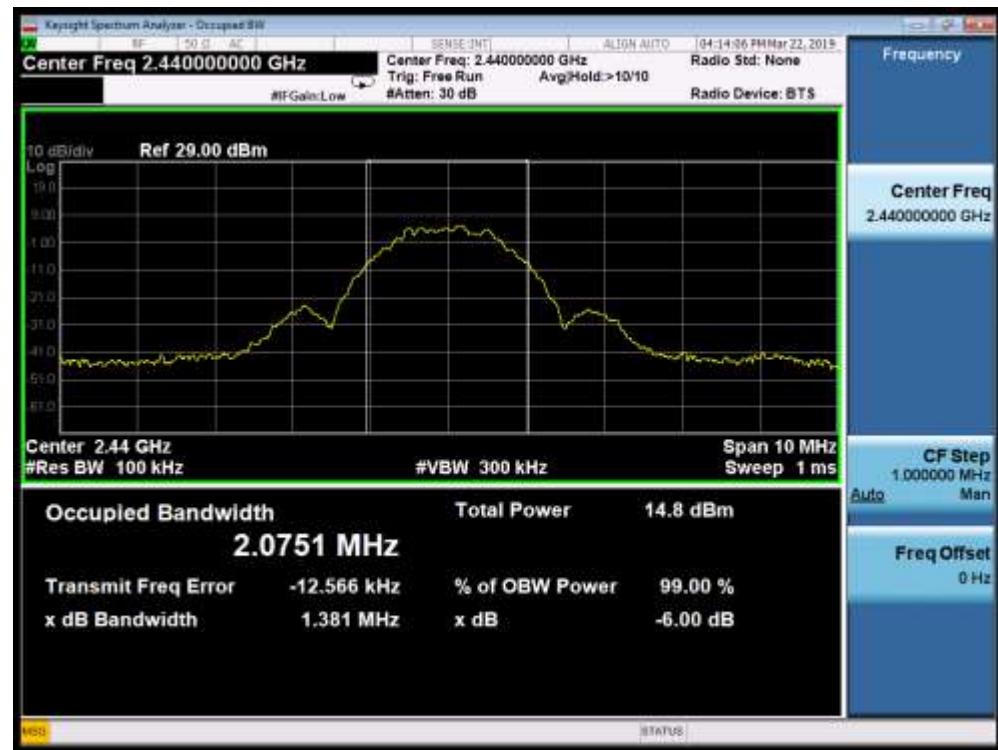
Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (kHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
2	00	2402	2079.6	1385	>500	Pass
2	19	2440	2068.9	1381	>500	Pass
2	39	2480	2075.5	1382	>500	Pass

Mode 2 CH00 (2402MHz)





Mode 2 CH19 (2440MHz)





Mode 2 CH39 (2480MHz)





Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 3	Test Site	:	TR-8
Test Date	:	2019.06.26	Test Engineer	:	Simon

Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (kHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
3	00	2402	1045.1	726.0	>500	Pass
3	19	2440	1050.3	719.2	>500	Pass
3	39	2480	1043.7	717.3	>500	Pass

Mode 3 CH00 (2402MHz)





Mode 3 CH19 (2440MHz)





Mode 3 CH39 (2480MHz)



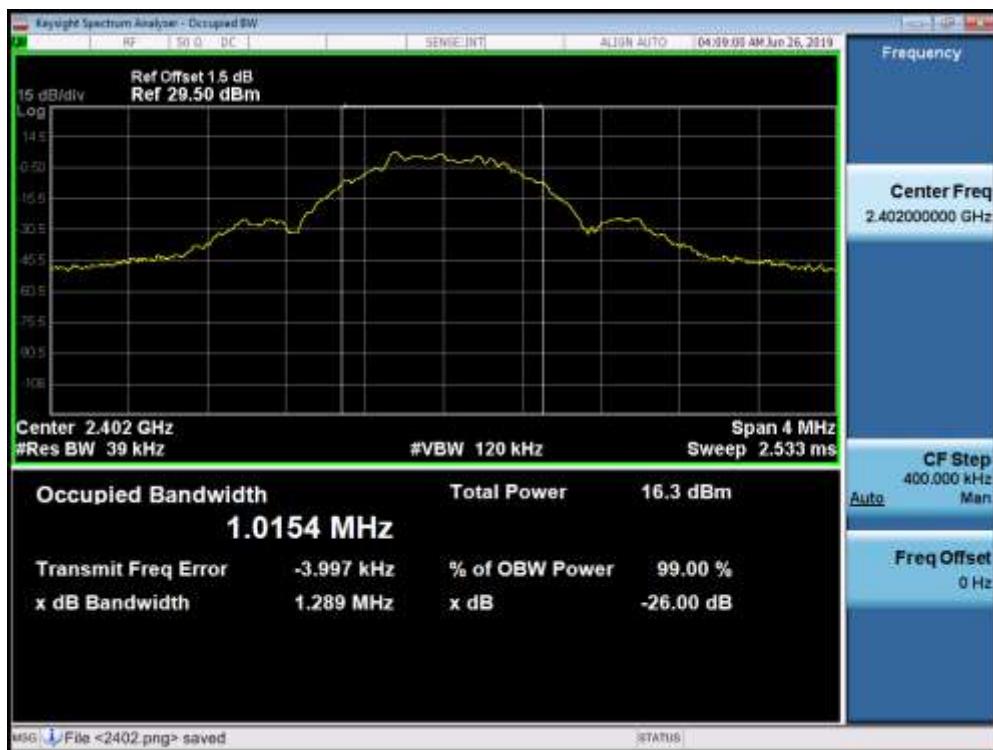


Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 4	Test Site	:	TR-8
Test Date	:	2019.06.26	Test Engineer	:	Simon

Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (kHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
4	00	2402	1015.4	706.4	>500	Pass
4	19	2440	1013.9	699.1	>500	Pass
4	39	2480	1015.8	681.9	>500	Pass

Mode 4 CH00 (2402MHz)





Mode 4 CH19 (2440MHz)





Mode 4 CH39 (2480MHz)





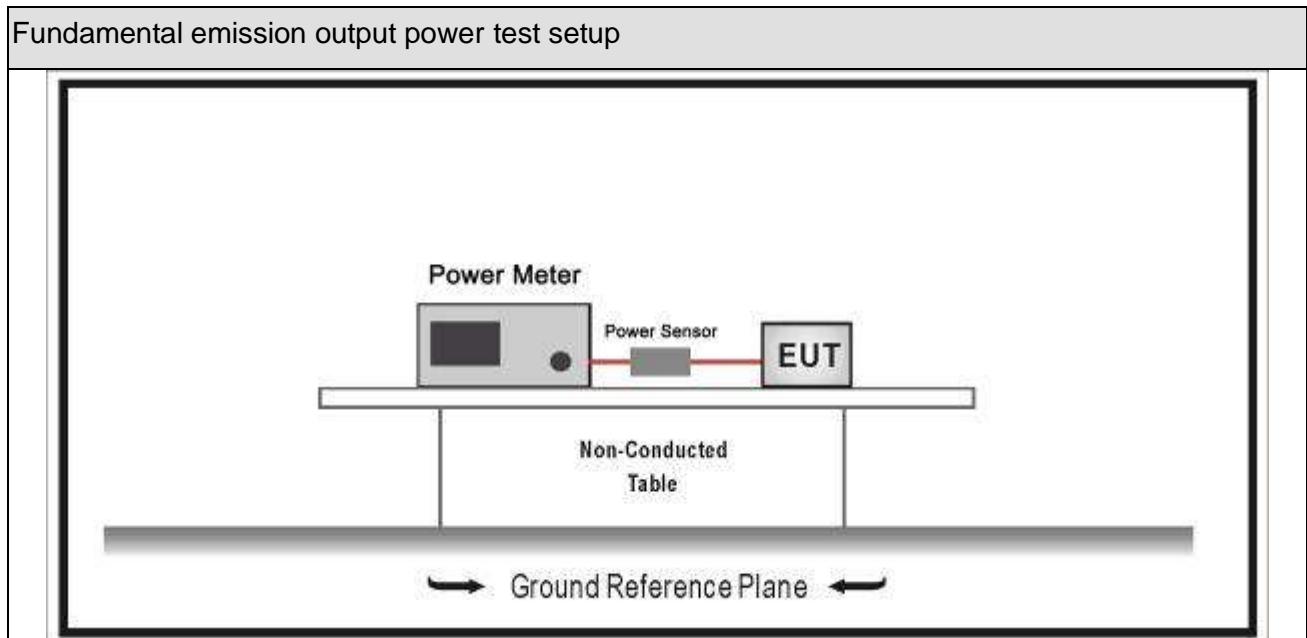
8. Fundamental emission output power

8.1. Test Equipment

Fundamental emission output power/ TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2019.01.04	2020.01.03
Spectrum Analyzer	Agilent	N9010A	MY48030494	2019.01.04	2020.01.03
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2018.10.14	2019.10.13
Power Sensor	Anritsu	MA2411B	0846014	2018.10.14	2019.10.13
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2018.04.10	2020.04.09

Note: All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

8.2. Test Setup



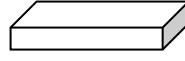
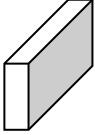
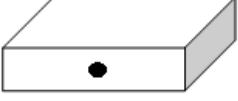
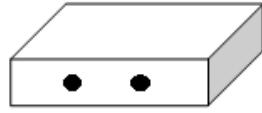
8.3. Limit

Fundamental emission output power Limit		
<input checked="" type="checkbox"/>	$G_{TX} < 6\text{dBi}$	$P_{out} \leq 30\text{dBm}$
<input type="checkbox"/>	$G_{TX} > 6\text{dBi}$	
	<input type="checkbox"/>	$P_{out} \leq 30 - (G_{TX} - 6)$
	<input type="checkbox"/>	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
	<input type="checkbox"/>	$P_{out} \leq 30 - (G_{TX} - 6)$
	<input type="checkbox"/>	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
	<input type="checkbox"/>	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
	<input type="checkbox"/>	$P_{out} \leq 30 - [(G_{TX} - 6)]/3 + 8\text{dB}$
Note 1 : G_{TX} directional gain of transmitting antennas.		
Note 2 : P_{out} is maximum peak conducted output power .		

8.4. Test Procedure

Fundamental emission output power Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.9	Fundamental emission output power
	<input checked="" type="checkbox"/> ANSI C63.10	11.9.1	Maximum peak conducted output power
	<input type="checkbox"/> ANSI C63.10	11.9.1.1	RBW \geq DTS bandwidth
	<input type="checkbox"/> ANSI C63.10	11.9.1.2	Integrated band power method
	<input checked="" type="checkbox"/> ANSI C63.10	11.9.1.3	PKPM1 Peak power meter method
	<input type="checkbox"/> ANSI C63.10	11.9.2	Maximum conducted (average) output power
	<input type="checkbox"/> ANSI C63.10	11.9.2.2	Measurement using a spectrum analyzer (SA)
	<input type="checkbox"/> ANSI C63.10	11.9.2.2.2	Method AVGSA-1(Duty cycle $\geq 98\%$)
	<input type="checkbox"/> ANSI C63.10	11.9.2.2.3	Method AVGSA-1A(Duty cycle $\geq 98\%$)
	<input type="checkbox"/> ANSI C63.10	11.9.2.2.4	Method AVGSA-2(Duty cycle $\leq 98\%$)
	<input type="checkbox"/> ANSI C63.10	11.9.2.2.5	Method AVGSA-2A(Duty cycle $\leq 98\%$)
	<input type="checkbox"/> ANSI C63.10	11.9.2.2.4	Method AVGSA-3
	<input type="checkbox"/> ANSI C63.10	11.9.2.2.5	Method AVGSA-3A
	<input type="checkbox"/> ANSI C63.10	11.9.2.3	Measurement using a power meter (PM)
	<input type="checkbox"/> ANSI C63.10	11.9.2.3.1	Method AVGPM
	<input type="checkbox"/> ANSI C63.10	11.9.2.3.2	Method AVGPM-G

8.5. EUT test definition

Item	Fundamental emission output power			
Device Category	<input type="checkbox"/>	Fixed point-to-point		
	<input type="checkbox"/>	Emit multiple directional beams, simultaneously or sequentially		
	<input checked="" type="checkbox"/>	Other cases		
Test mode	Mode 1~4			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	
	<input checked="" type="checkbox"/>	Conducted		
	<input checked="" type="checkbox"/>	Chain 1		
				
	<input type="checkbox"/>	Chain 1	Chain 2	
				
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3
				

8.6. Test Result

Murata:

Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 1-4	Test Site	:	TR-8
Test Date	:	2019.03.11	Test Engineer	:	Simon

Mode	Channel	Test Frequency (MHz)	Measurement Power Output (dBm)	Limit (dBm)	Result
Mode 1	00	2402	8.94	30	Pass
	19	2440	8.64	30	Pass
	39	2480	8.05	30	Pass
Mode 2	00	2402	8.76	30	Pass
	19	2440	8.52	30	Pass
	39	2480	7.87	30	Pass
Mode 3	00	2402	8.72	30	Pass
	19	2440	8.06	30	Pass
	39	2480	7.63	30	Pass
Mode 4	00	2402	8.63	30	Pass
	19	2440	8.01	30	Pass
	39	2480	7.57	30	Pass

Diodes:

Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 1-4	Test Site	:	TR-8
Test Date	:	2019.03.11	Test Engineer	:	Simon

Mode	Channel	Test Frequency (MHz)	Measurement Power Output (dBm)	Limit (dBm)	Result
Mode 1	00	2402	10.05	30	Pass
	19	2440	9.61	30	Pass
	39	2480	9.31	30	Pass
Mode 2	00	2402	9.86	30	Pass
	19	2440	9.28	30	Pass
	39	2480	8.92	30	Pass
Mode 3	00	2402	9.12	30	Pass
	19	2440	8.61	30	Pass
	39	2480	8.29	30	Pass
Mode 4	00	2402	8.98	30	Pass
	19	2440	8.54	30	Pass
	39	2480	8.19	30	Pass

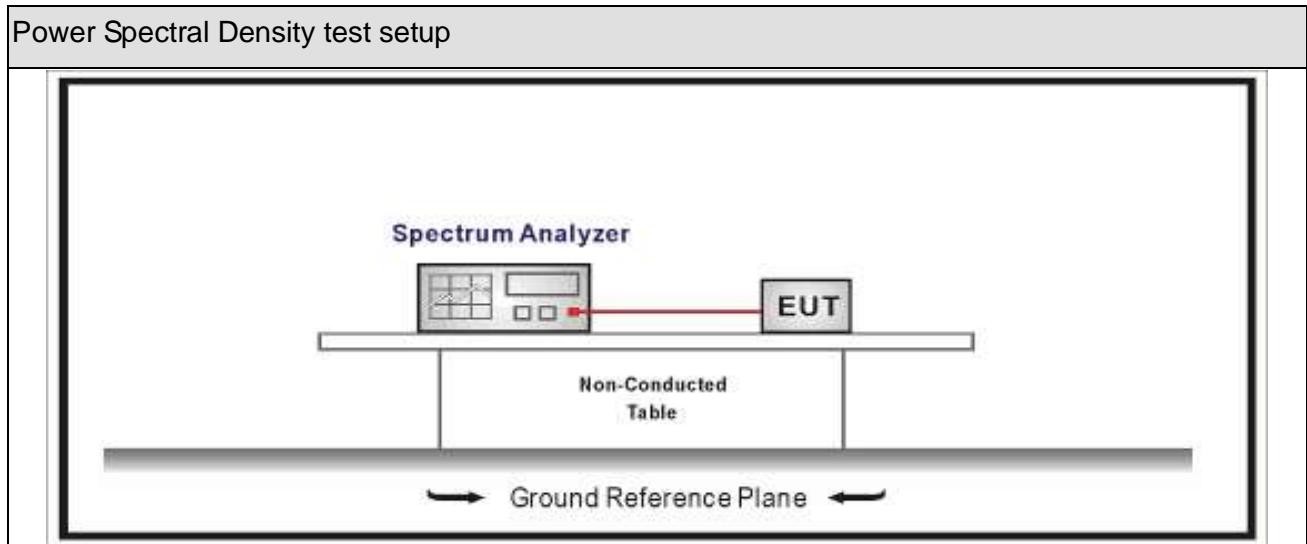
9. Power Spectral Density

9.1. Test Equipment

Power Spectral Density / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2019.02.04	2020.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2018.04.09	2020.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2018.04.09	2020.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2018.04.10	2020.04.09

Note: All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

9.2. Test Setup



9.3. Limit

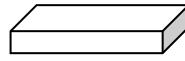
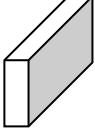
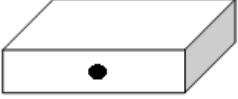
Power Spectral Density Limit

Power Spectral Density $\leq 8\text{dBm}/3\text{kHz}$

9.4. Test Procedure

Power Spectral Density Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.10	Maximum power spectral density level in the fundamental emission
	<input checked="" type="checkbox"/> ANSI C63.10	11.10.2	Method PKPSD (peak PSD)
	<input type="checkbox"/> ANSI C63.10	11.10.3	Method AVGPSD-1(Duty cycle $\geq 98\%$)
	<input type="checkbox"/> ANSI C63.10	11.10.4	Method AVGPSD-1A(Duty cycle $\geq 98\%$)
	<input type="checkbox"/> ANSI C63.10	11.10.5	Method AVGPSD-2(Duty cycle $< 98\%$)
	<input type="checkbox"/> ANSI C63.10	11.10.6	Method AVGPSD-2A(Duty cycle $< 98\%$)
	<input type="checkbox"/> ANSI C63.10	11.10.7	Method AVGPSD-3
	<input type="checkbox"/> ANSI C63.10	11.10.8	Method AVGPSD-3A

9.5. EUT test definition

Item	Power Spectral Density Test Method			
Device Category	<input type="checkbox"/>	Fixed point-to-point		
	<input type="checkbox"/>	Emit multiple directional beams, simultaneously or sequentially		
	<input checked="" type="checkbox"/>	Other cases		
Test mode	Mode 1-4			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	
	<input checked="" type="checkbox"/>	Conducted		
	<input checked="" type="checkbox"/>	Chain 1		
				
	<input type="checkbox"/>	Chain 1	Chain 2	
				
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3
				

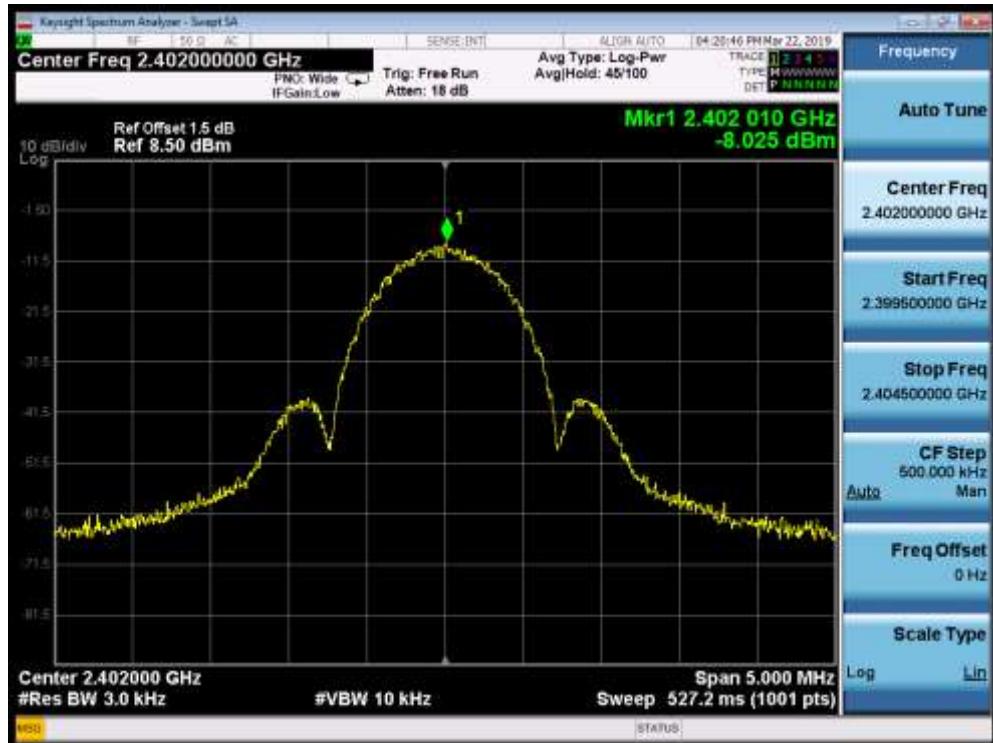
9.6. Test Result

Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 1	Test Site	:	TR-8
Test Date	:	2019.03.22	Test Engineer	:	Simon

Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
1	00	2402	-8.025	-8.025	8	Pass
1	19	2440	-8.838	-8.838	8	Pass
1	39	2480	-9.072	-9.072	8	Pass

Note: We have evaluated each mode, shown in the report is BLE mode which is the worst data.

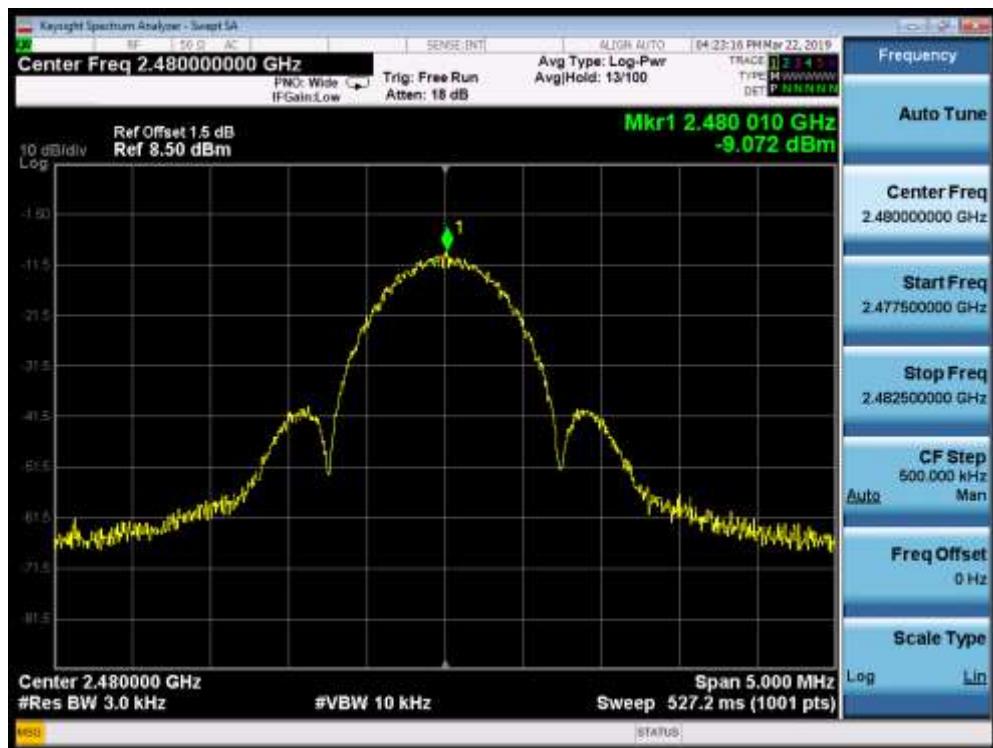
Mode 1 CH00(2402MHz)



Mode 1 CH19(2440MHz)



Mode 1 CH39(2480MHz)



10. Antenna Requirement

10.1. Limit

Antenna Requirement Limit

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

10.2. Antenna Connector Construction

Antenna Connector Construction

- | | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | The use of a permanently attached antenna |
| <input type="checkbox"/> | The antenna use of a unique coupling to the intentional radiator |
| <input type="checkbox"/> | The use of a nonstandard antenna jack or electrical connector |

Please refer to the attached document "Internal Photograph" to show the antenna connector.

The End