



# Test Report

## FCC Part15 Subpart C & RSS-247 Issue 2

Product Name : LED lamp

Model No. : 9290022268

FCC ID : 2AGBW9290022268X

IC : 20812-2268X

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

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

Date of Receipt : Jul. 30, 2019

Test Date : Jul. 31, 2019 ~ Aug. 30, 2019

Issued Date : Sep. 01, 2019

Report No. : 1972175R-RF-US-P06V02

Report Version : V1.0

The test results presented in this report relate only to the object tested.

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The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to calculate the uncertainty associated with the measurement result.

This report is not used for social proof in China (or Mainland China) market.

## Test Report Certification

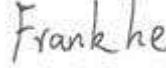
Issued Date: Sep. 01, 2019  
Report No. : 1972175R-RF-US-P06V02



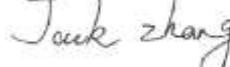
Product Name : LED lamp  
Applicant : Signify (China) Investment Co., Ltd.  
Address : Building no.9, Lane 888, Tianlin Road, Minhang District, Shanghai 200233, China  
Manufacturer : Signify (China) Investment Co., Ltd.  
Address : Building no.9, Lane 888, Tianlin Road, Minhang District, Shanghai 200233, China  
Model No. : 9290022268  
FCC ID : 2AGBW9290022268X  
IC : 20812-2268X  
EUT Voltage : 110-130 Vac, 50-60 Hz, 9.5W  
Test Voltage : AC120V/60Hz  
Brand Name : PHILIPS  
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, Jiangsu, China  
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098  
FCC Designation Number: CN1199;  
ISED CAB identifier: CN0040

Documented By : 

(Project Assistant: Kathy Feng)

Reviewed By : 

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Approved By : 

(Engineer Supervisor: Jack Zhang )

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## History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1972175R-RF-US-P06V02	V1.0	Initial Issued Report	Sep. 01, 2019

## 1. General Information

### 1.1. EUT Description

Product Name	LED lamp					
Model No.	9290022268					
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 all modes is showed in the report with test items power, bandwidth, RSE and bandedge; 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 BT-LE)							
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	0dBi					

#### 1.4. Mode of Operation

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

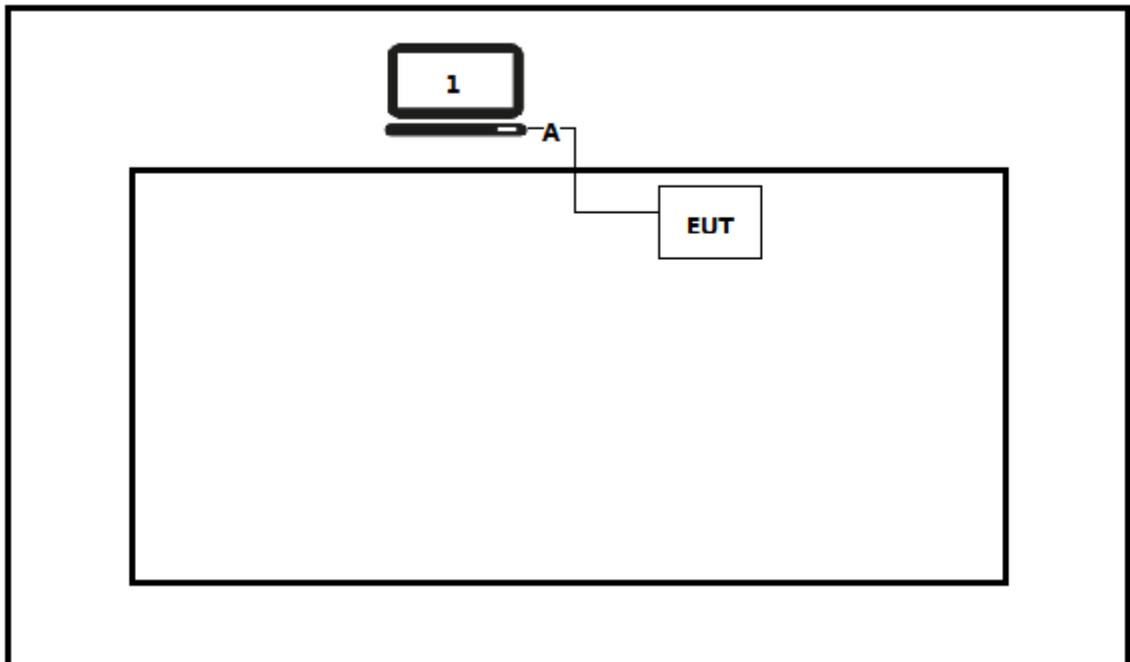
#### 1.5. Tested System Details

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

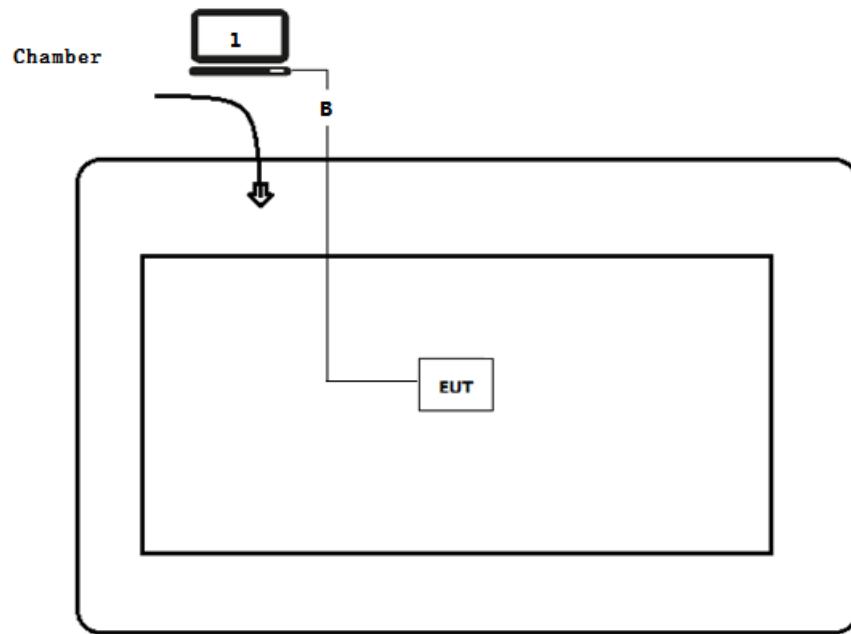
No.	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Think Pad	2526	LV-A3285	Power by adapter
A	Control cable	N/A	N/A	N/A	Shielded,0.5m
B	Control cable	N/A	N/A	N/A	Shielded,10m

## 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 Section 15.207	FCC 15.207	PASS
Emissions in restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C Section 15.209	FCC 15.209	PASS
Emissions in non-restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C Section 15.247(d)	$\geq 20\text{dBc}$	PASS
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C 15.247(d)	FCC 15.209	PASS
Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C Section 15.247(a)(2)	$\geq 500\text{kHz}$	PASS
Fundamental emission output power	FCC CFR Title 47 Part 15 Subpart C Section 15.247(b)(3)	$\leq 30\text{dBm}$	PASS
Power Spectral Density	FCC CFR Title 47 Part 15 Subpart C Section 15.247(e)	$\leq 8\text{dBm}/3\text{kHz}$	PASS
Antenna Requirement	FCC CFR Title 47 Part 15 Subpart C 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 8.10	RSS-Gen	PASS
Emissions in non-restricted frequency bands	RSS-247 Issue 2 Section 5.5	$\geq 20\text{dBc}$	PASS
Radiated Emission Band Edge	RSS-Gen Issue 5 Section 8.10	RSS-Gen	PASS
Occupied Bandwidth	RSS-Gen Issue 5 Section 6.7	$\geq 500\text{kHz}$	PASS
Fundamental emission output power	RSS-247 Issue 2 Section 5.4(d)	$\leq 30\text{dBm}$	PASS
Power Spectral Density	RSS-247 Issue 2 Section 5.2(b)	$\leq 8\text{dBm}/3\text{kHz}$	PASS
Antenna Requirement	RSS-Gen Issue 5 Section 6.8	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

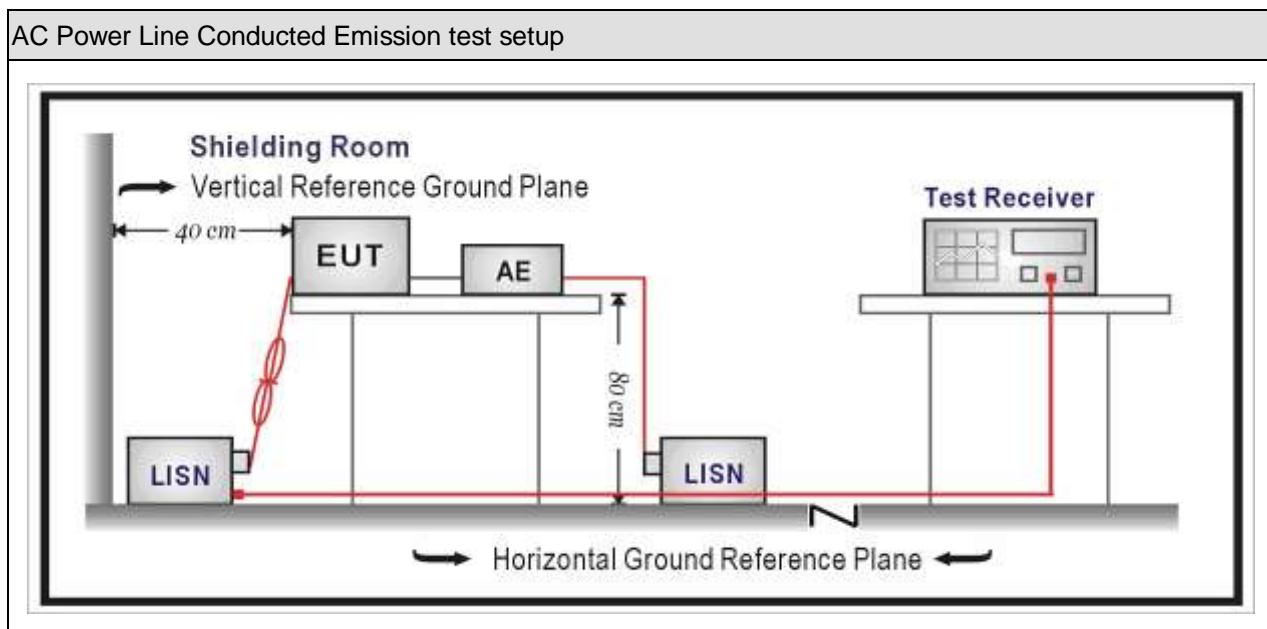
### 3. AC Power Line Conducted Emission

#### 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	2019.07.16	2020.07.15
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 $\mu$ V)	Average(dB $\mu$ 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.

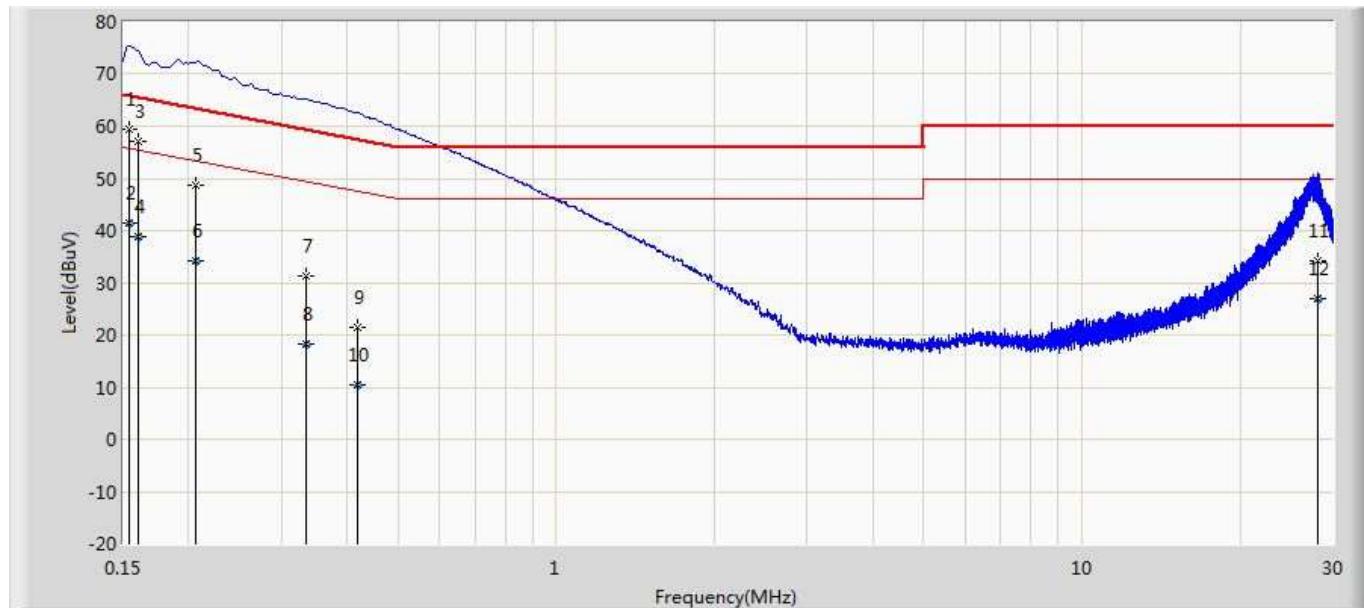
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

### 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

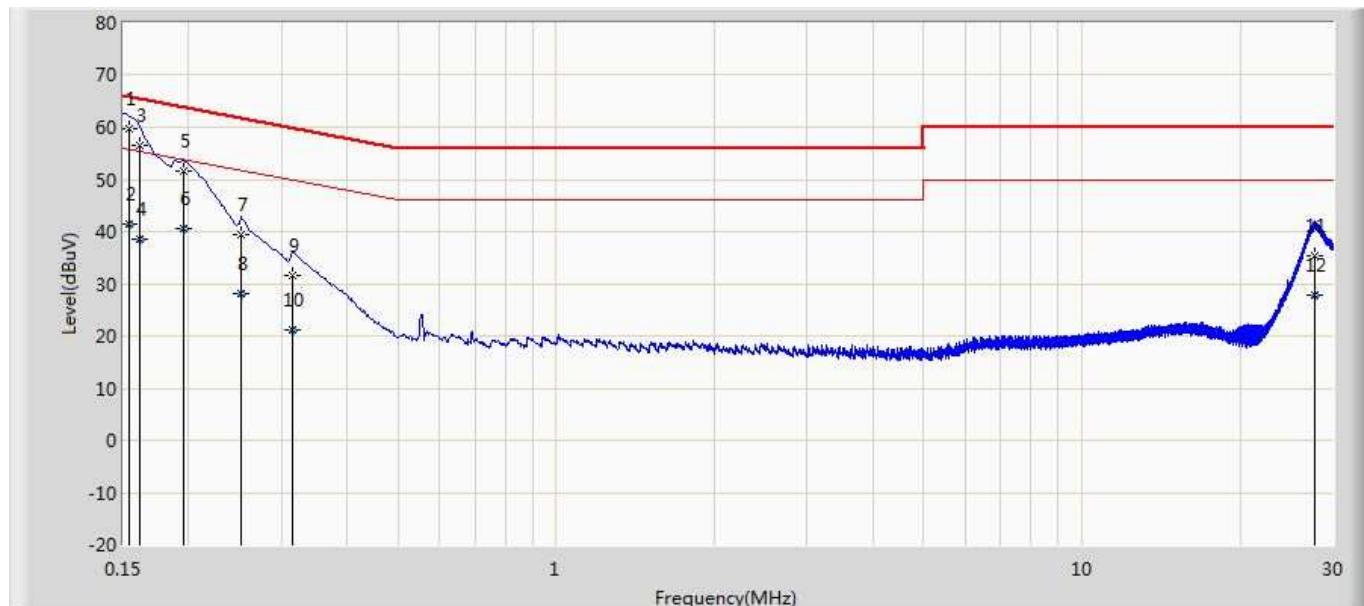
### 3.5. Test Result

Engineer: Xu Jun	
Site: TR1	Time: 2019/08/21 - 00:01
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit by BT5 - murata	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.154	59.501	49.887	-6.253	65.754	9.615	QP
2		0.154	41.365	31.750	-14.390	55.754	9.615	AV
3		0.160	57.235	47.620	-8.214	65.449	9.614	QP
4		0.160	38.904	29.289	-16.545	55.449	9.614	AV
5		0.206	48.608	38.978	-14.747	63.355	9.631	QP
6		0.206	34.209	24.579	-19.146	53.355	9.631	AV
7		0.335	31.171	21.543	-28.167	59.339	9.629	QP
8		0.335	18.214	8.585	-31.125	49.339	9.629	AV
9		0.418	21.471	11.840	-36.022	57.493	9.631	QP
10		0.418	10.400	0.768	-37.093	47.493	9.631	AV
11		28.025	34.164	23.185	-25.836	60.000	10.979	QP
12		28.025	27.033	16.053	-22.967	50.000	10.979	AV

Engineer: Xu Jun	
Site: TR1	Time: 2019/08/21 - 00:04
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit by BT5.0 - murata	

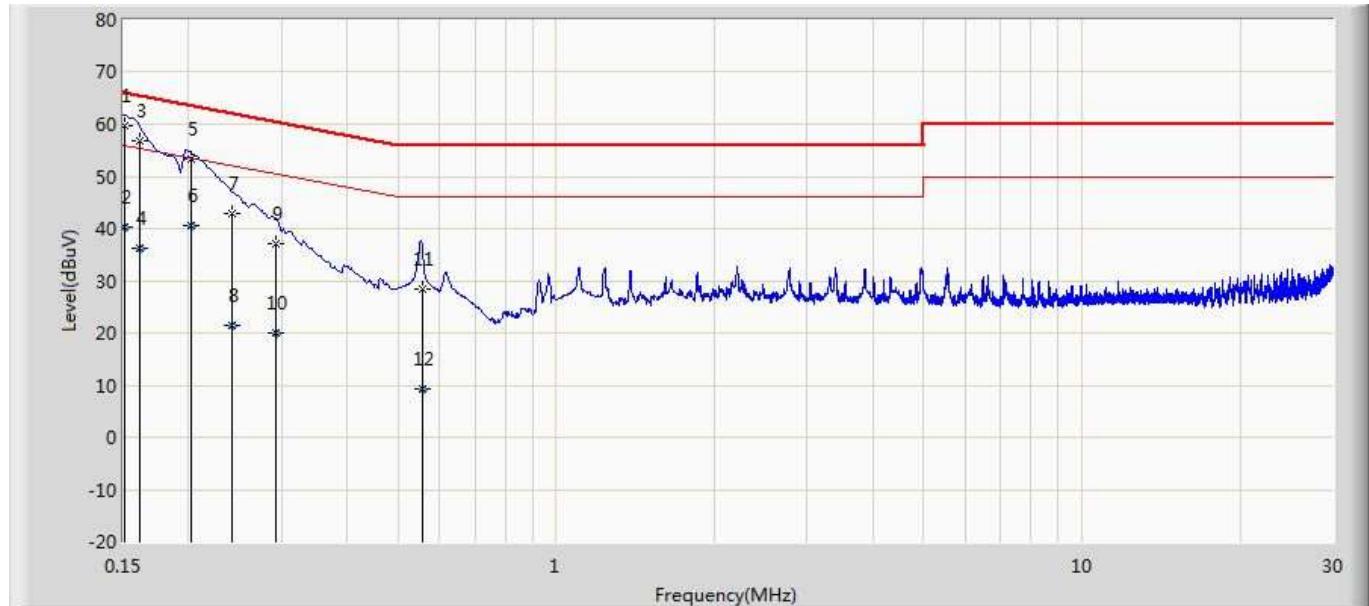


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.154	59.653	50.022	-6.141	65.793	9.631	QP
2		0.154	41.588	31.957	-14.206	55.793	9.631	AV
3		0.161	56.642	47.012	-8.758	65.399	9.631	QP
4		0.161	38.470	28.840	-16.929	55.399	9.631	AV
5		0.195	51.480	41.849	-12.341	63.821	9.631	QP
6		0.195	40.586	30.955	-13.235	53.821	9.631	AV
7		0.251	39.453	29.822	-22.263	61.716	9.631	QP
8		0.251	28.235	18.605	-23.481	51.716	9.631	AV
9		0.314	31.711	22.079	-28.146	59.857	9.632	QP
10		0.314	21.179	11.547	-28.679	49.857	9.632	AV
11		27.753	35.391	24.619	-24.609	60.000	10.772	QP
12		27.753	27.908	17.136	-22.092	50.000	10.772	AV

**Note:**

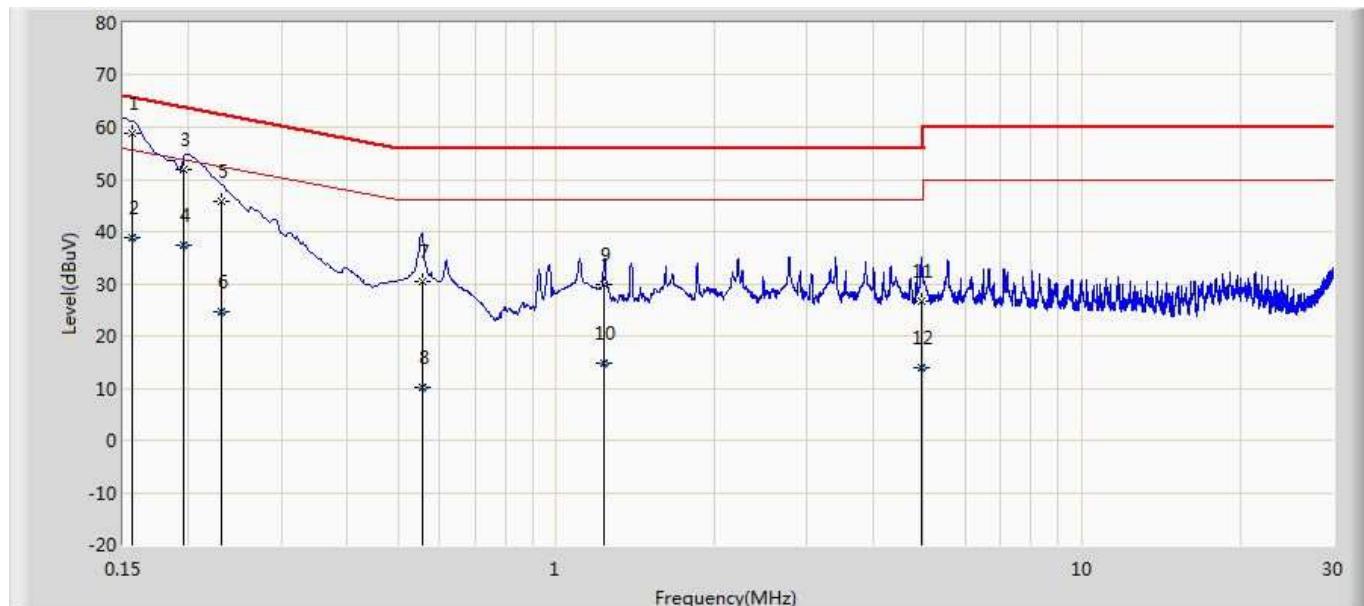
1. " \* ", means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable+Amp).

Engineer: Xu Jun	
Site: TR1	Time: 2019/08/21 - 00:15
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit by BT5 - Diodes	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.151	59.726	50.111	-6.205	65.931	9.615	QP
2		0.151	40.213	30.598	-15.718	55.931	9.615	AV
3		0.161	56.930	47.315	-8.469	65.399	9.615	QP
4		0.161	36.210	26.595	-19.189	55.399	9.615	AV
5		0.202	53.376	43.746	-10.163	63.538	9.629	QP
6		0.202	40.610	30.981	-12.928	53.538	9.629	AV
7		0.242	43.022	33.394	-18.997	62.019	9.627	QP
8		0.242	21.533	11.905	-30.486	52.019	9.627	AV
9		0.292	37.100	27.472	-23.374	60.474	9.629	QP
10		0.292	19.860	10.232	-30.615	50.474	9.629	AV
11		0.555	28.379	18.743	-27.621	56.000	9.637	QP
12		0.555	9.305	-0.332	-36.695	46.000	9.637	AV

Engineer: Xu Jun	
Site: TR1	Time: 2019/08/21 - 00:17
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit by BT5 - Diodes	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.156	58.926	49.296	-6.730	65.656	9.631	QP
2		0.156	38.715	29.084	-16.941	55.656	9.631	AV
3		0.195	51.780	42.149	-12.041	63.821	9.631	QP
4		0.195	37.412	27.781	-16.409	53.821	9.631	AV
5		0.231	45.711	36.081	-16.703	62.414	9.630	QP
6		0.231	24.698	15.068	-27.715	52.414	9.630	AV
7		0.555	30.341	20.695	-25.659	56.000	9.647	QP
8		0.555	10.134	0.488	-35.866	46.000	9.647	AV
9		1.234	29.795	20.116	-26.205	56.000	9.679	QP
10		1.234	14.836	5.157	-31.164	46.000	9.679	AV
11		4.942	26.767	16.966	-29.233	56.000	9.801	QP
12		4.942	13.928	4.127	-32.072	46.000	9.801	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

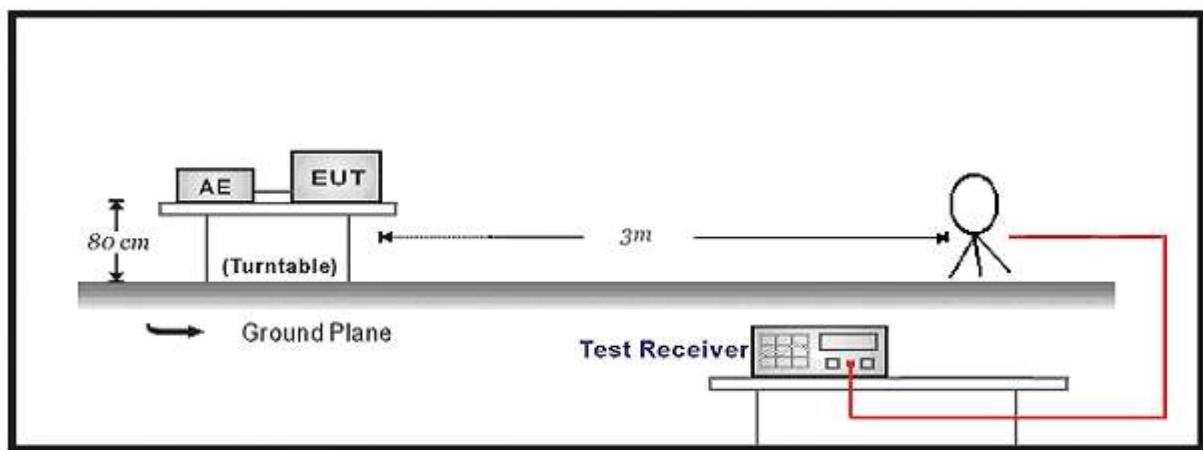
Note: All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

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	2019.05.06	2020.05.05
Preamplifier	QuieTek	AP-040G	CHM-0906001	2019.05.06	2020.05.05
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	2019.06.10	2020.06.09
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

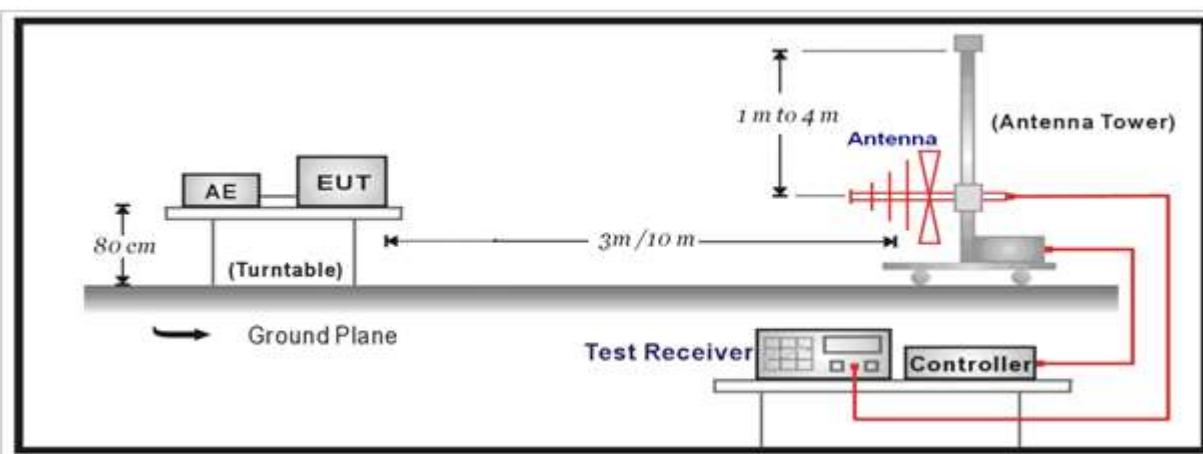
Note: All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

#### 4.2. Test Setup

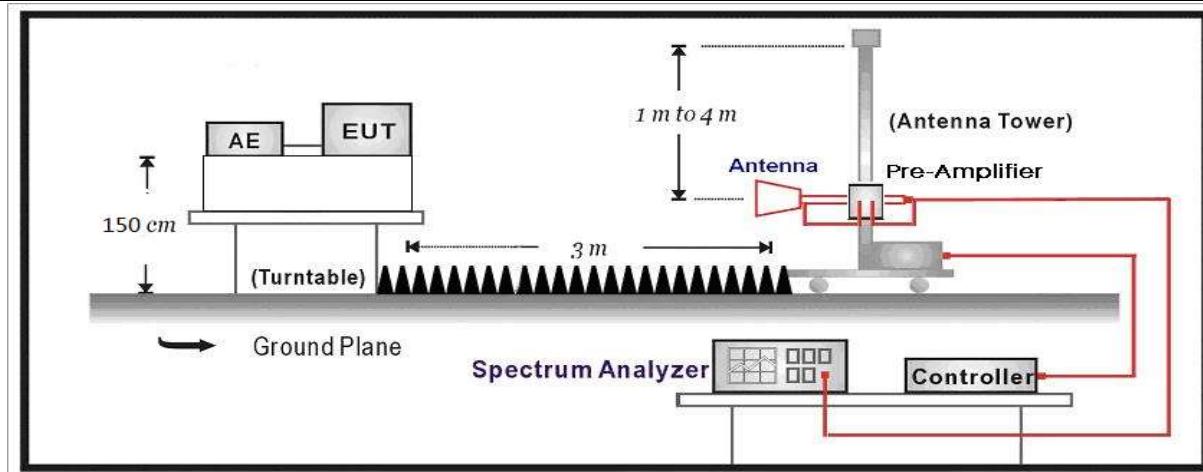
Below 30MHz Test Setup:



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:****Table 7 – Restricted frequency bands\***

<b>MHz</b>	<b>MHz</b>	<b>GHz</b>
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	156.52475 - 156.52525	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.026	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 - 285	15.35 - 16.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
6.215 - 6.218	608 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1645.5 - 1646.5	Above 38.6
8.362 - 8.366	1660 - 1710	
8.37625 - 8.38675	1718.8 - 1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 - 2390	
12.51975 - 12.52025	2483.5 - 2500	
12.57675 - 12.57725	2655 - 2900	
13.36 - 13.41	3260 - 3267	
16.42 - 16.423	3332 - 3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5460	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 - 8500	
108 - 138	--	

\* Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

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

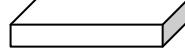
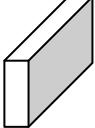
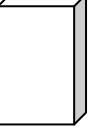
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed 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

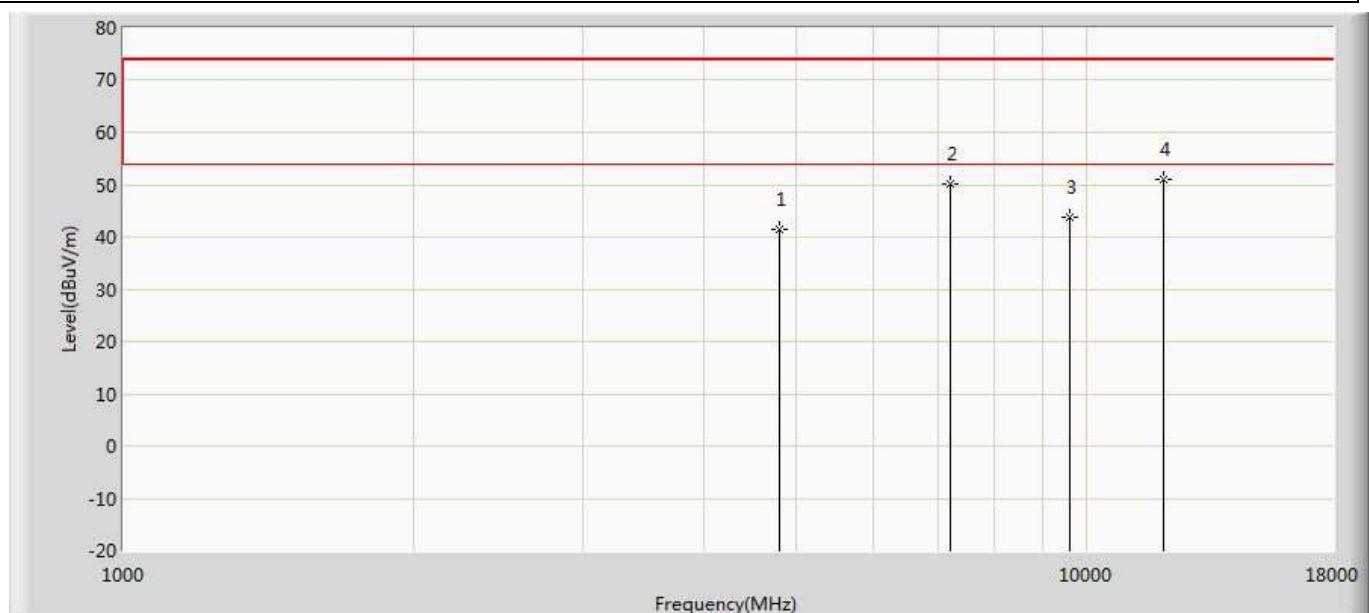
#### 4.5. EUT test Axis definition

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"/>	
	<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

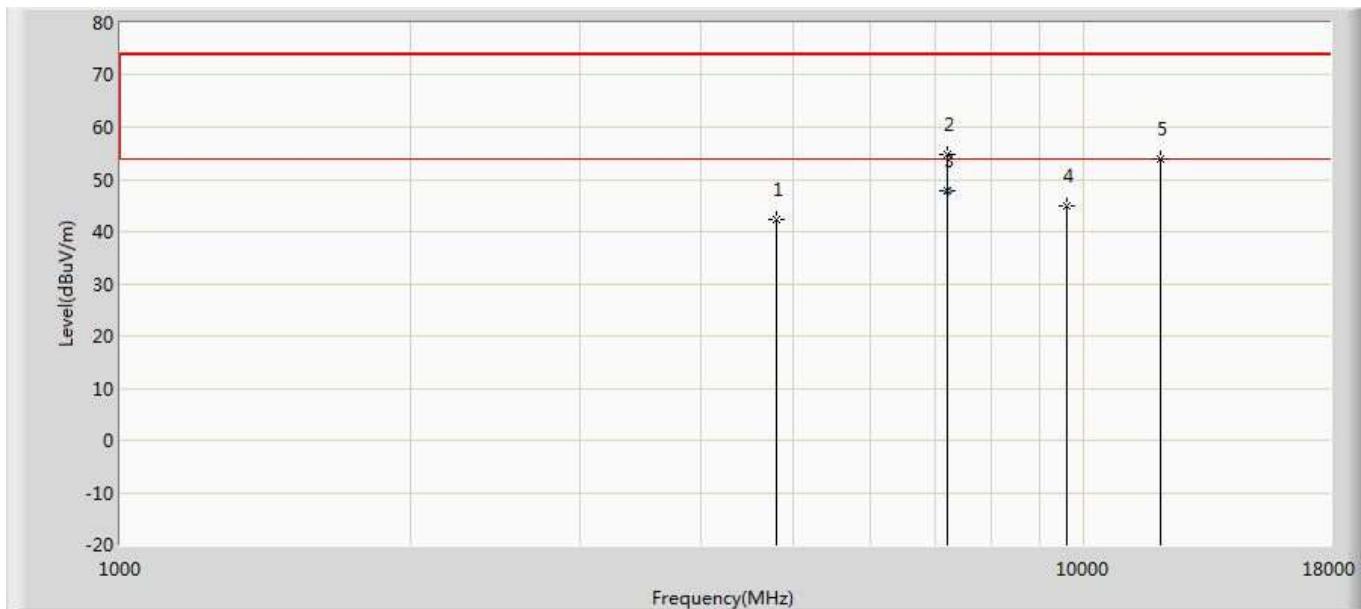
### Murata:

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:55
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 LE_1Mbps	



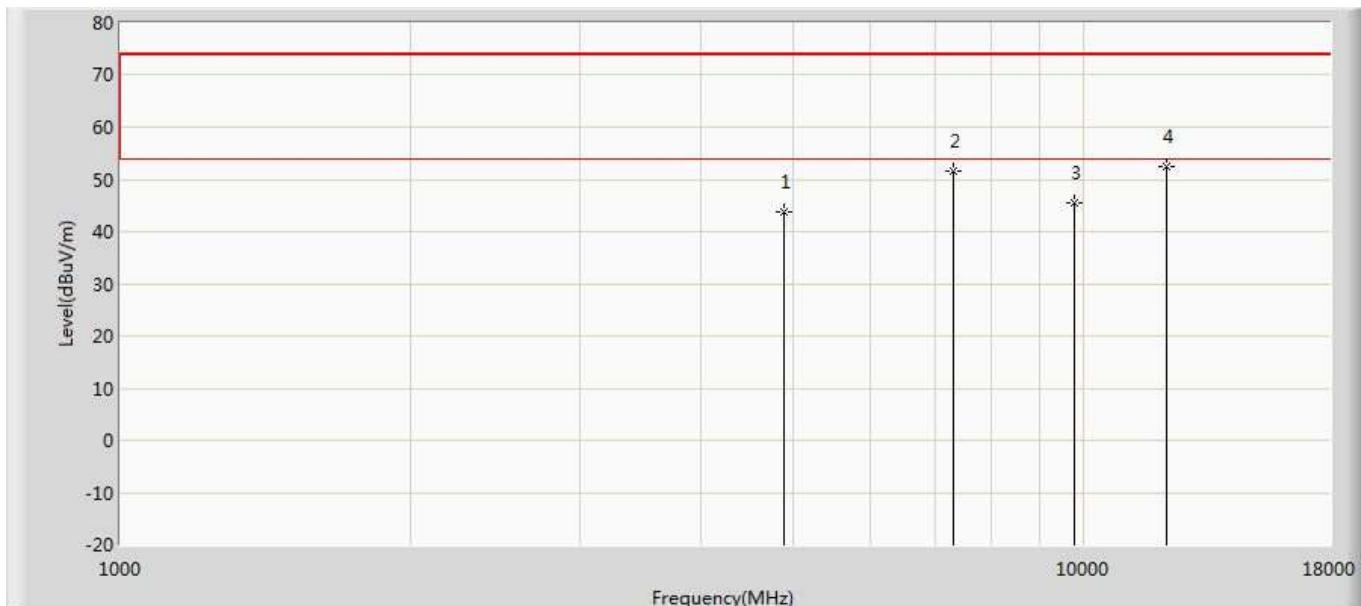
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.333	36.816	-32.667	74.000	4.517	PK
2		7206.000	50.284	42.737	-23.716	74.000	7.547	PK
3		9608.000	43.874	34.692	-30.126	74.000	9.182	PK
4	*	12010.000	51.101	36.548	-22.899	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:55
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 LE_1Mbps	



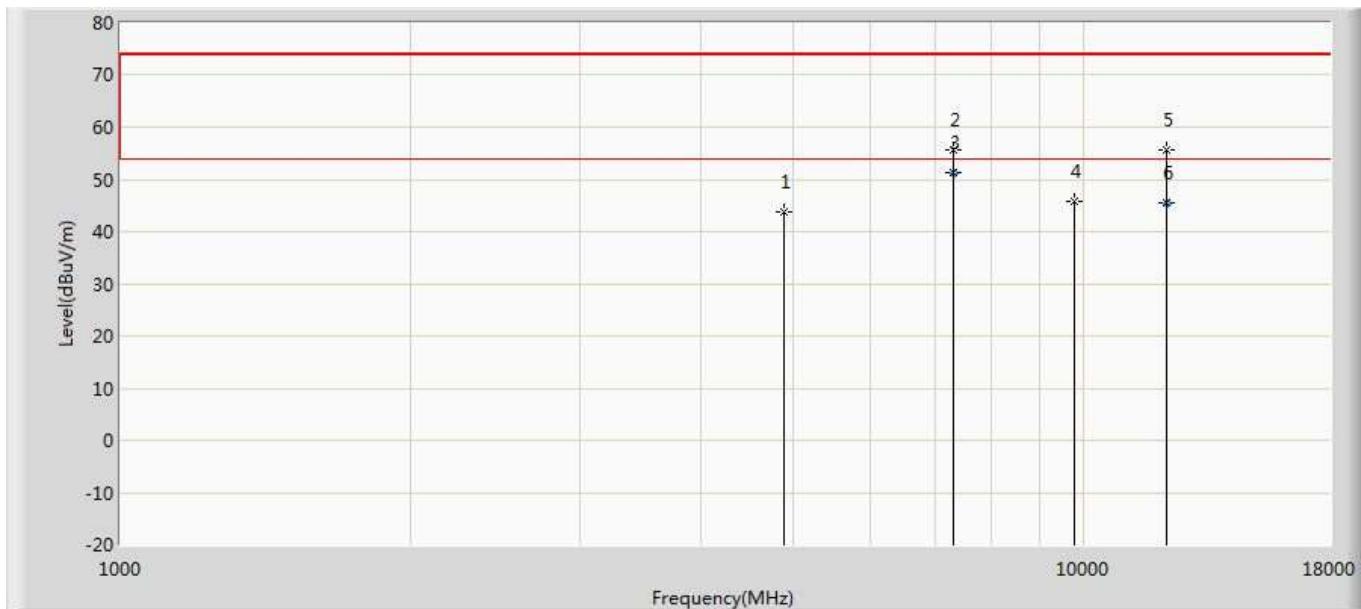
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.451	37.934	-31.549	74.000	4.517	PK
2		7206.000	54.798	47.251	-19.202	74.000	7.547	PK
3	*	7206.000	47.762	40.215	-6.238	54.000	7.547	AV
4		9608.000	45.048	35.866	-28.952	74.000	9.182	PK
5		12010.000	53.787	39.234	-20.213	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:25
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 LE_1Mbps	



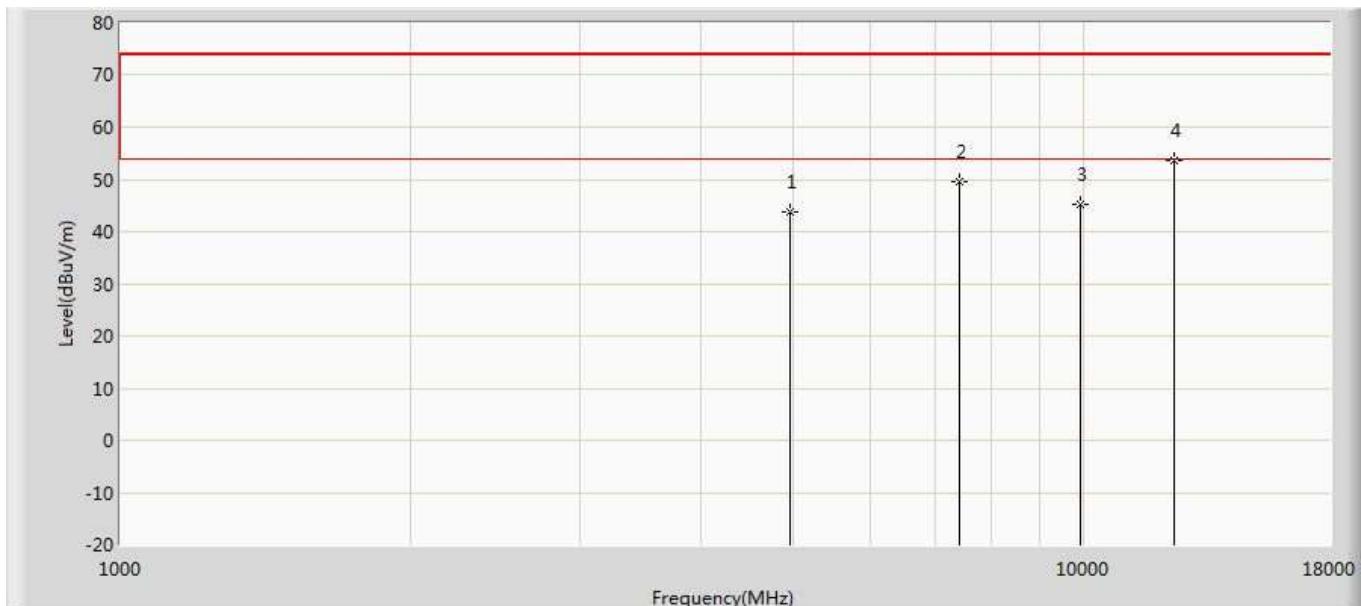
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	43.781	38.995	-30.219	74.000	4.786	PK
2		7320.000	51.644	43.982	-22.356	74.000	7.663	PK
3		9760.000	45.573	35.713	-28.427	74.000	9.860	PK
4	*	12200.000	52.507	37.155	-21.493	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:25
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 LE_1Mbps	



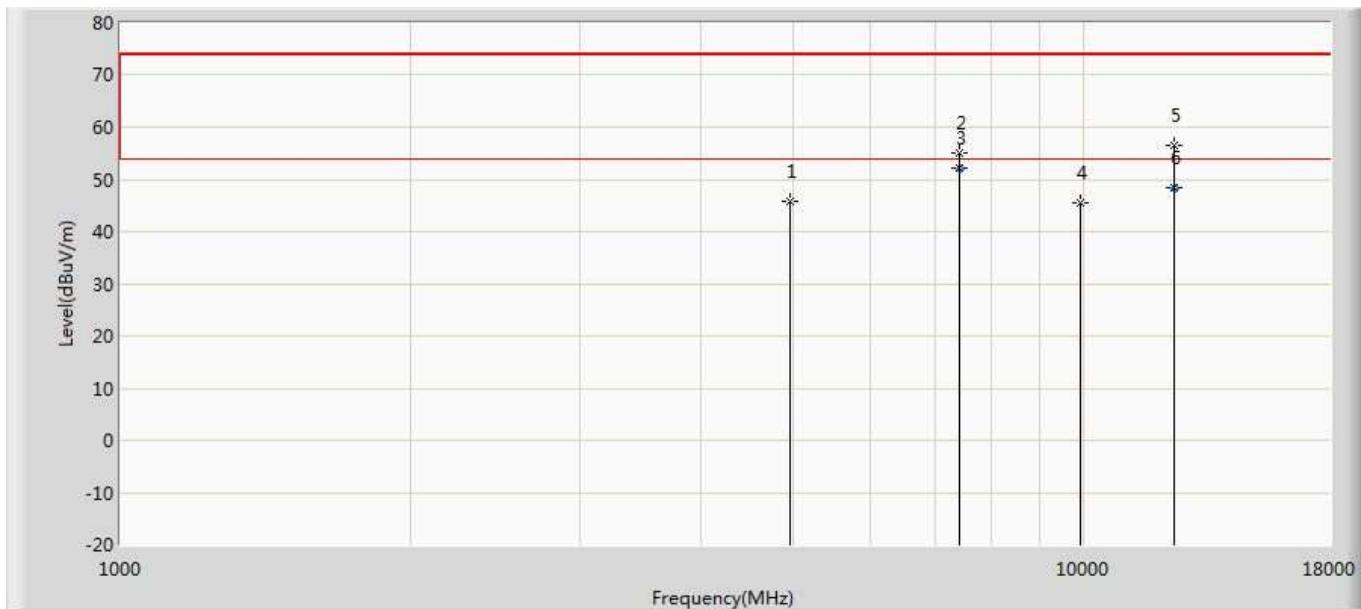
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	43.647	38.861	-30.353	74.000	4.786	PK
2		7320.000	55.731	48.069	-18.269	74.000	7.663	PK
3	*	7320.000	51.311	43.649	-2.689	54.000	7.663	AV
4		9760.000	45.748	35.888	-28.252	74.000	9.860	PK
5		12200.000	55.712	40.360	-18.288	74.000	15.351	PK
6		12200.000	45.640	30.288	-8.360	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:26
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 LE_1Mbps	



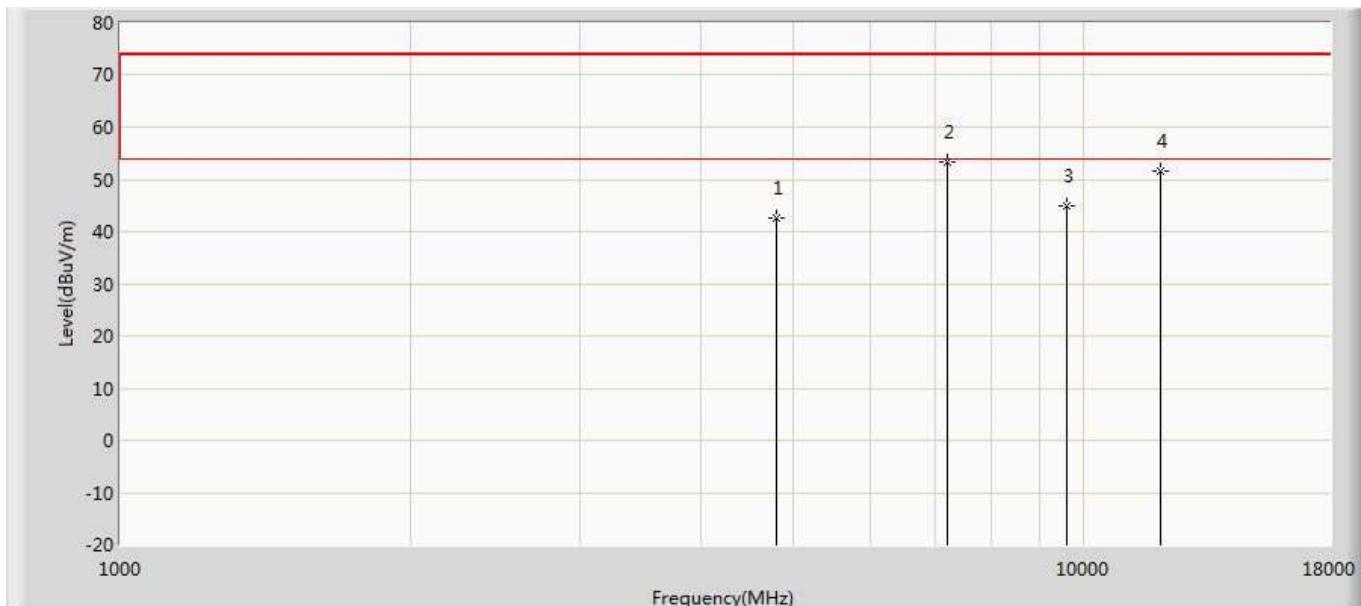
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.855	38.935	-30.145	74.000	4.920	PK
2		7440.000	49.538	41.823	-24.462	74.000	7.715	PK
3		9920.000	45.291	35.344	-28.709	74.000	9.946	PK
4	*	12400.000	53.523	37.524	-20.477	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:26
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 1:Transmit at 2480MHz by LE_1Mbps	



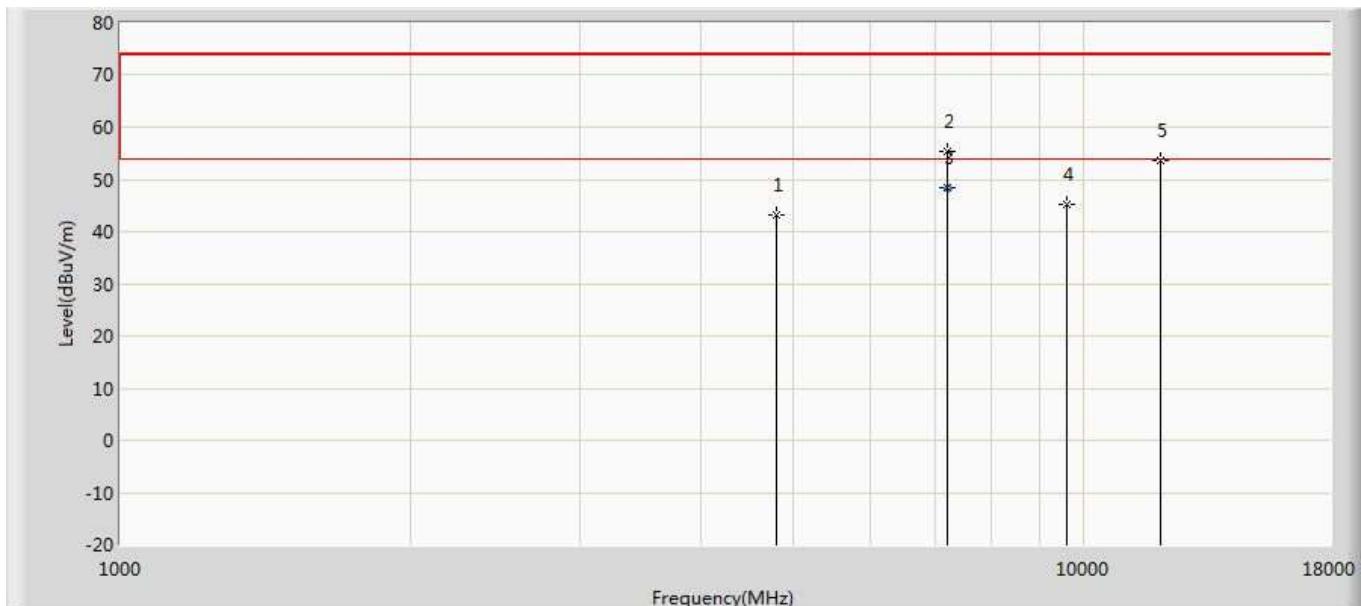
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	45.809	40.889	-28.191	74.000	4.920	PK
2		7440.000	55.013	47.298	-18.987	74.000	7.715	PK
3	*	7440.000	52.238	44.523	-1.762	54.000	7.715	AV
4		9920.000	45.639	35.692	-28.361	74.000	9.946	PK
5		12400.000	56.471	40.472	-17.529	74.000	15.999	PK
6		12400.000	48.290	32.291	-5.710	54.000	15.999	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:24
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 2:Transmit at 2402MHz by LE_2Mbps	



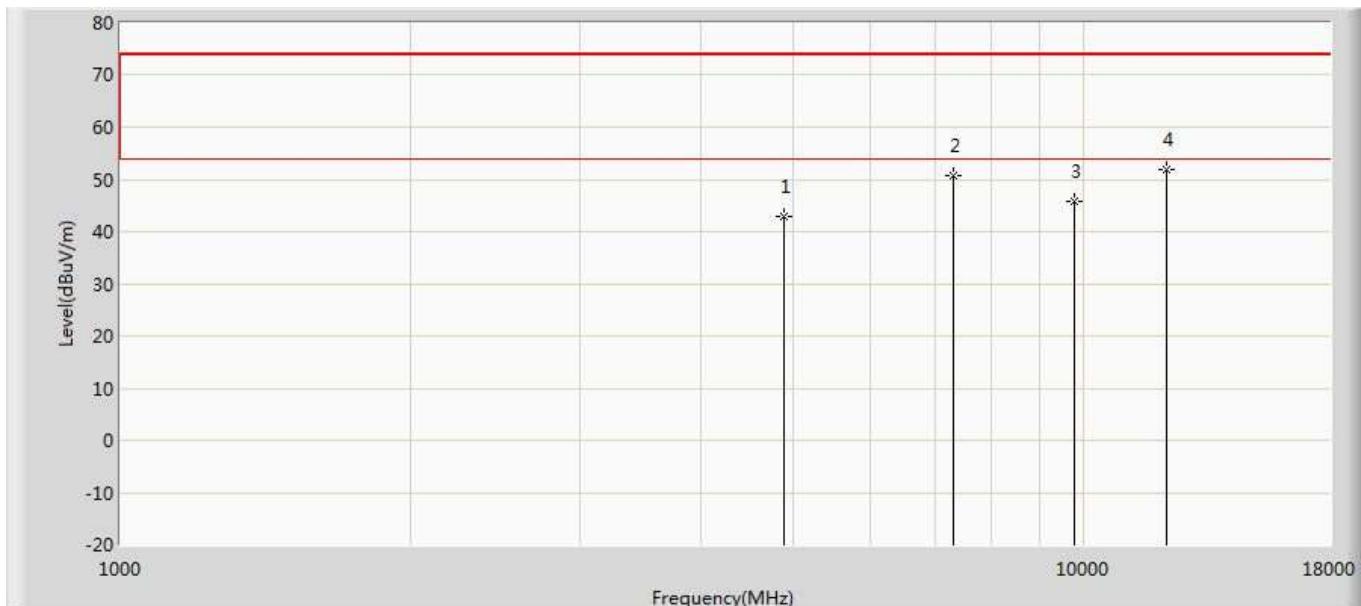
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.729	38.212	-31.271	74.000	4.517	PK
2	*	7206.000	53.395	45.848	-20.605	74.000	7.547	PK
3		9608.000	44.822	35.640	-29.178	74.000	9.182	PK
4		12010.000	51.483	36.930	-22.517	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:24
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 LE_2Mbps	



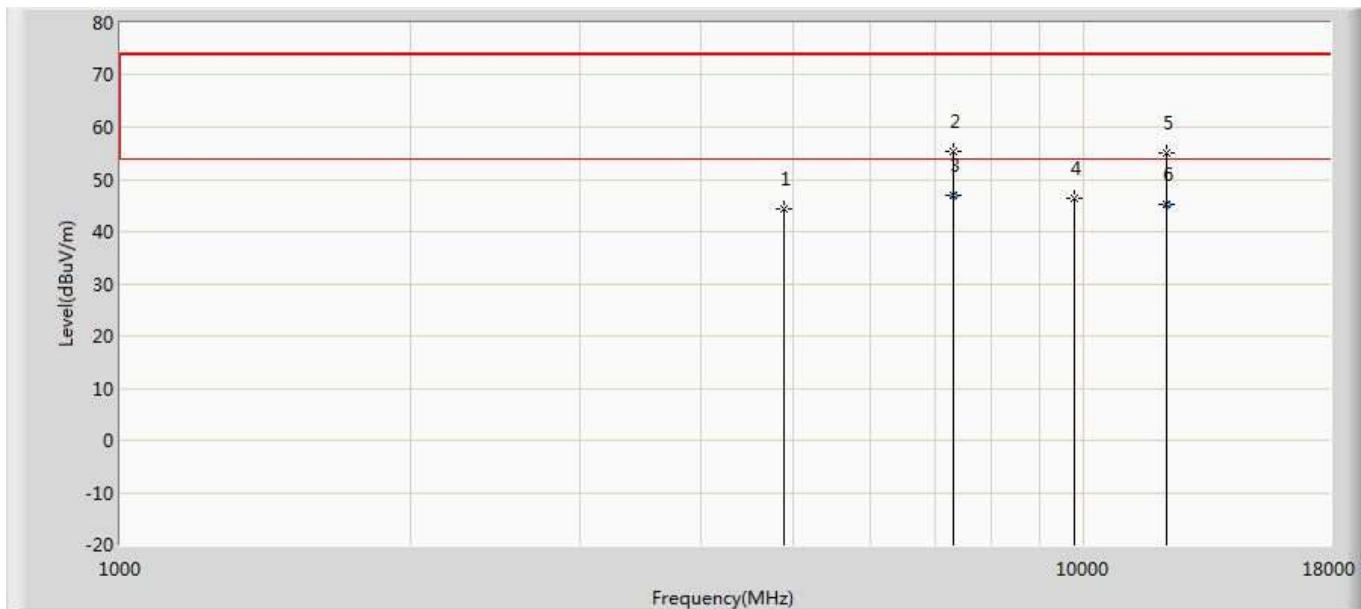
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	43.195	38.678	-30.805	74.000	4.517	PK
2		7206.000	55.283	47.736	-18.717	74.000	7.547	PK
3	*	7206.000	48.517	40.970	-5.483	54.000	7.547	AV
4		9608.000	45.110	35.928	-28.890	74.000	9.182	PK
5		12010.000	53.693	39.140	-20.307	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:25
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 LE_2Mbps	



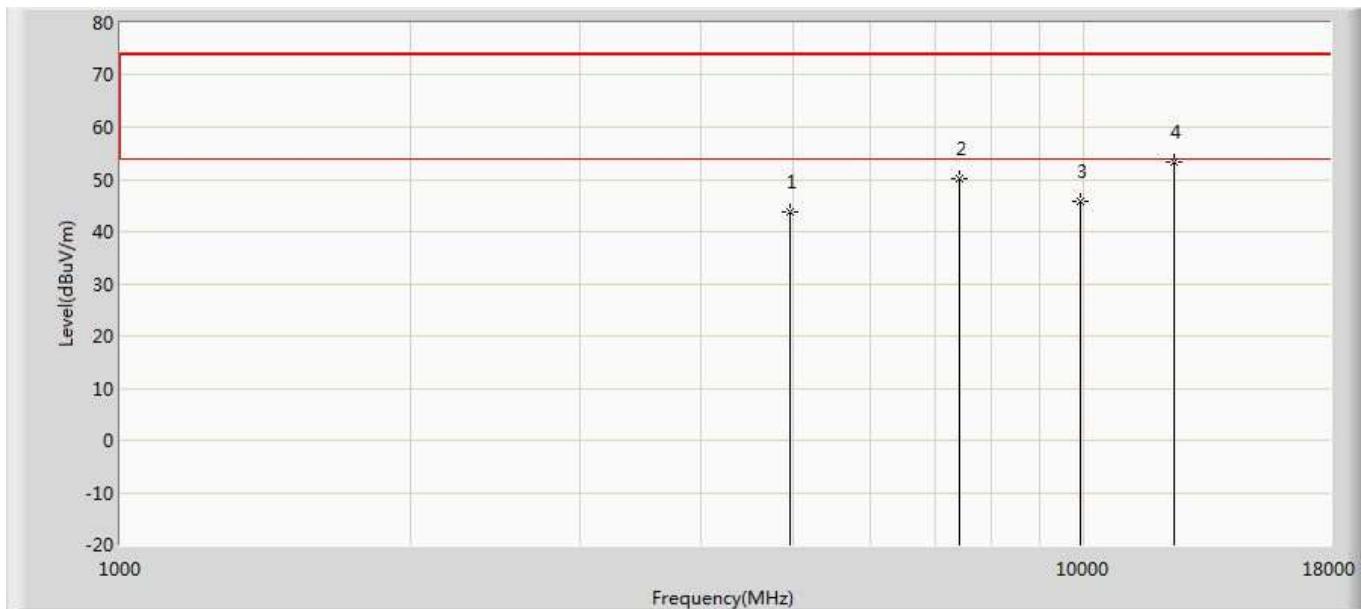
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.864	38.078	-31.136	74.000	4.786	PK
2		7320.000	50.695	43.033	-23.305	74.000	7.663	PK
3		9760.000	45.787	35.927	-28.213	74.000	9.860	PK
4	*	12200.000	52.002	36.650	-21.998	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:25
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 LE_2Mbps	



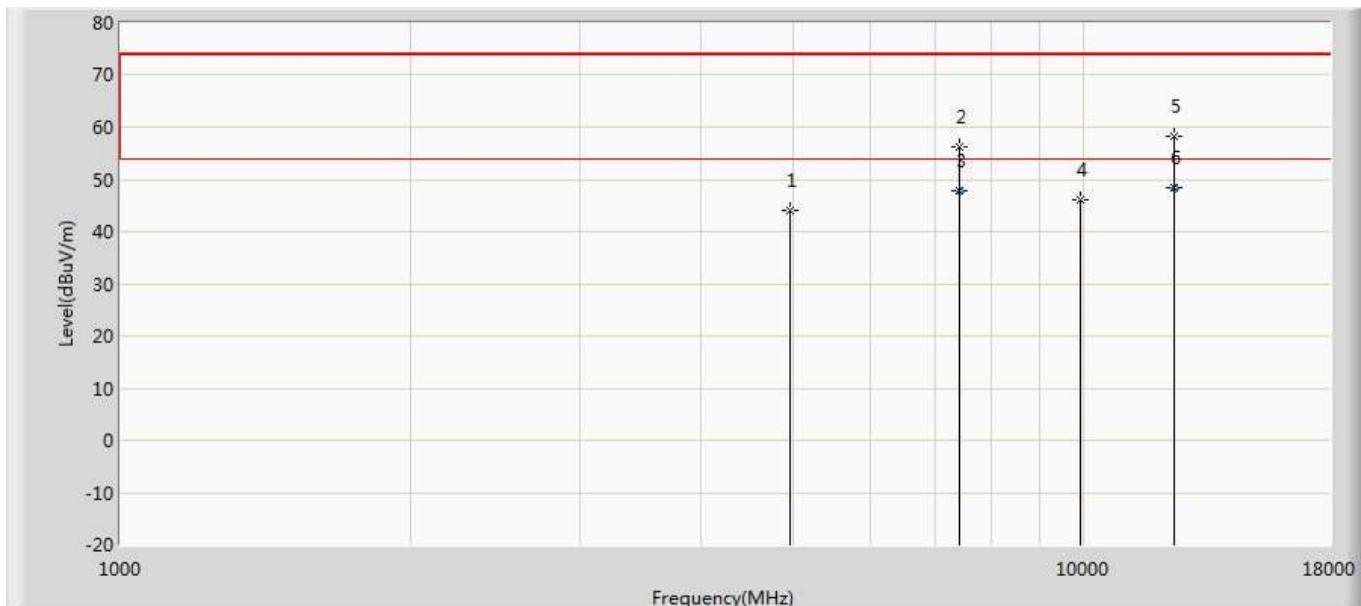
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	44.239	39.453	-29.761	74.000	4.786	PK
2		7320.000	55.245	47.583	-18.755	74.000	7.663	PK
3	*	7320.000	47.014	39.352	-6.986	54.000	7.663	AV
4		9760.000	46.239	36.379	-27.761	74.000	9.860	PK
5		12200.000	54.933	39.581	-19.067	74.000	15.351	PK
6		12200.000	45.209	29.857	-8.791	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:26
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 LE_2Mbps	



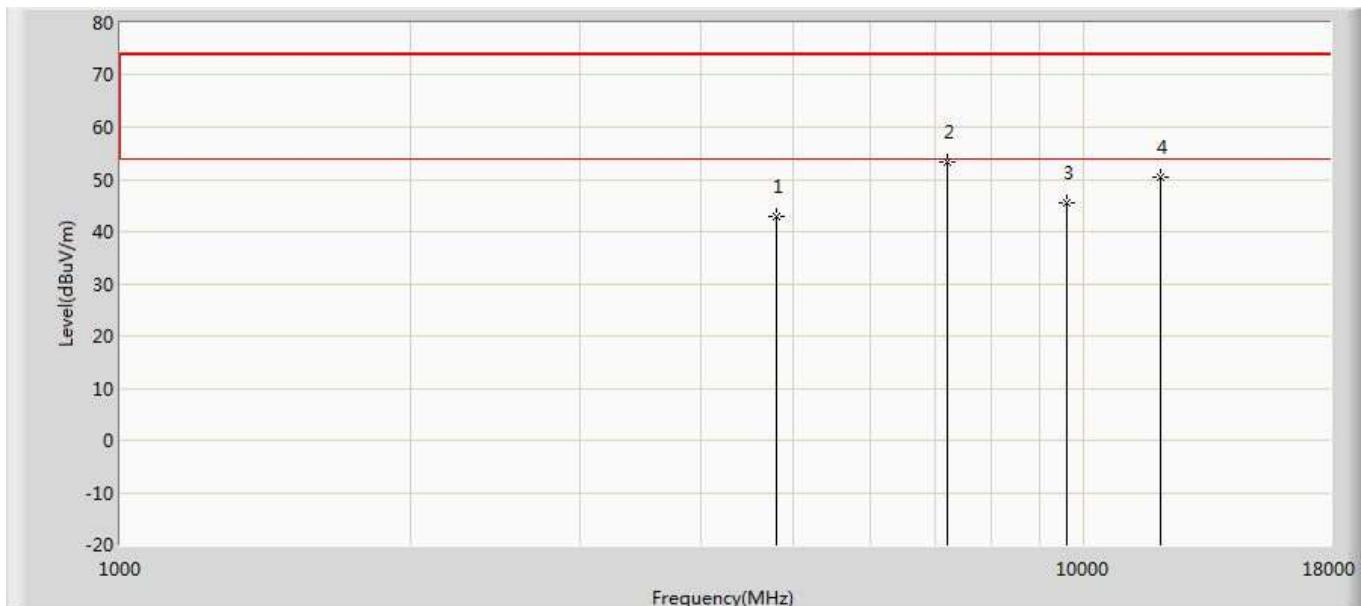
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.634	38.714	-30.366	74.000	4.920	PK
2		7440.000	50.080	42.365	-23.920	74.000	7.715	PK
3		9920.000	45.907	35.960	-28.093	74.000	9.946	PK
4	*	12400.000	53.203	37.204	-20.797	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:26
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 2480MHz by LE_2Mbps	



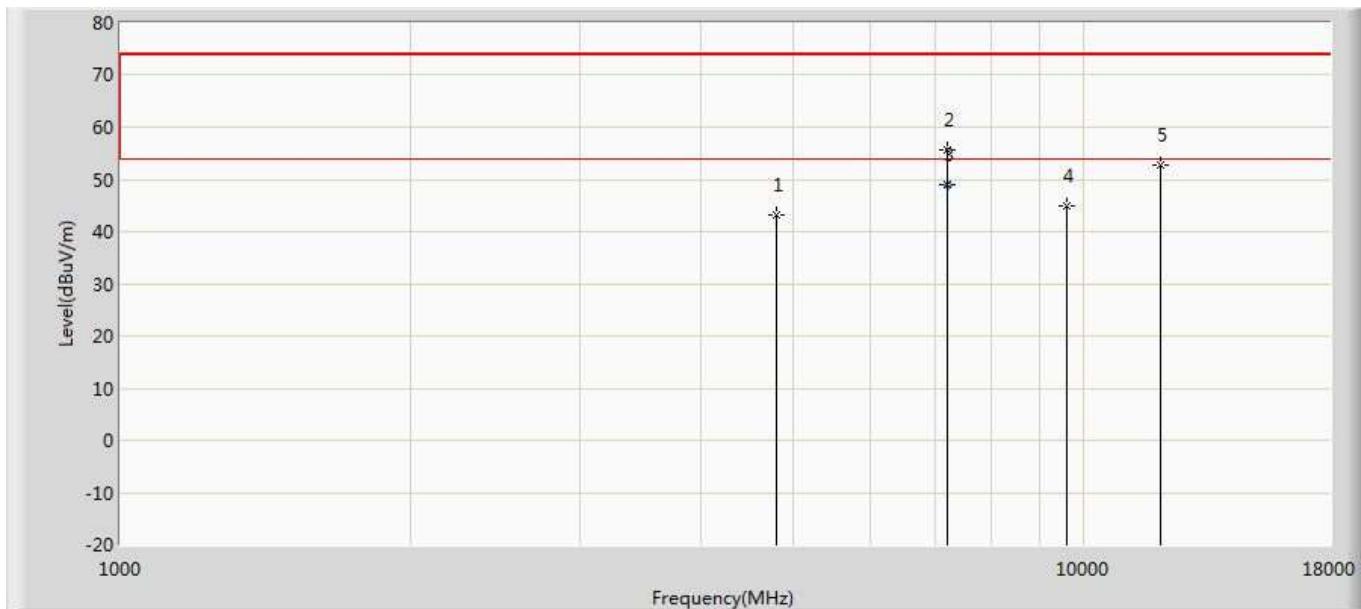
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	44.156	39.236	-29.844	74.000	4.920	PK
2		7440.000	56.137	48.422	-17.863	74.000	7.715	PK
3		7440.000	47.755	40.040	-6.245	54.000	7.715	AV
4		9920.000	46.135	36.188	-27.865	74.000	9.946	PK
5		12400.000	58.293	42.294	-15.707	74.000	15.999	PK
6	*	12400.000	48.348	32.349	-5.652	54.000	15.999	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:25
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 LE_Coded (S=2)	



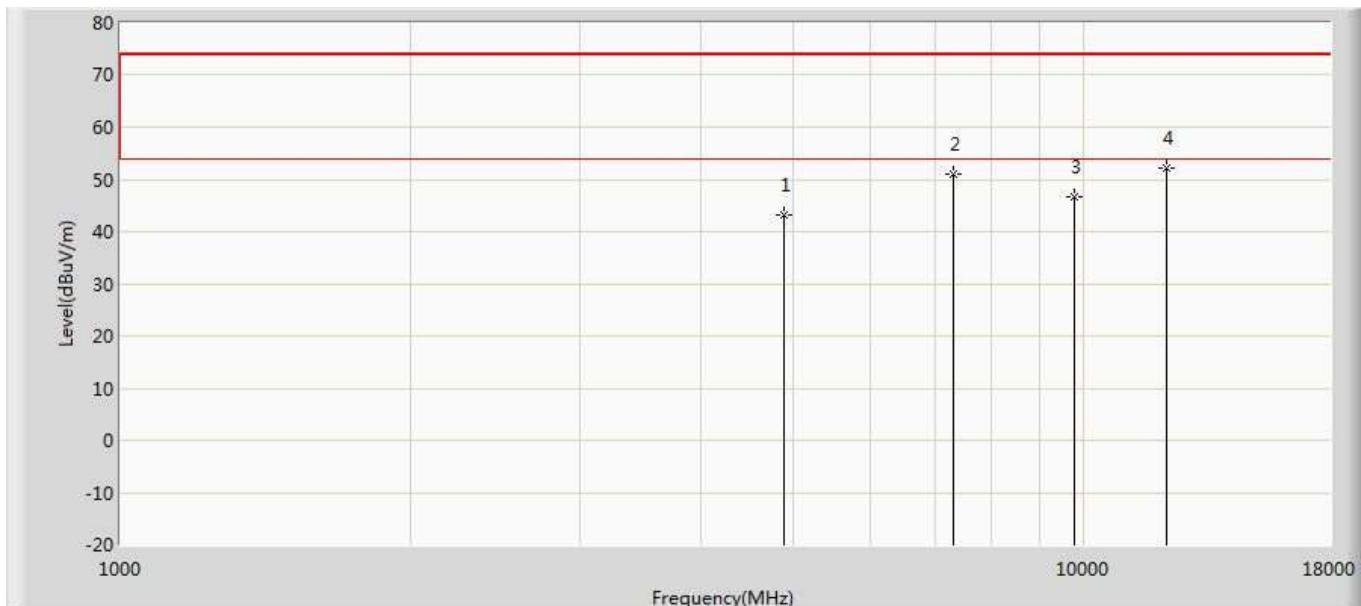
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.870	38.353	-31.130	74.000	4.517	PK
2	*	7206.000	53.270	45.723	-20.730	74.000	7.547	PK
3		9608.000	45.406	36.224	-28.594	74.000	9.182	PK
4		12010.000	50.341	35.788	-23.659	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:25
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 LE_Coded (S=2)	



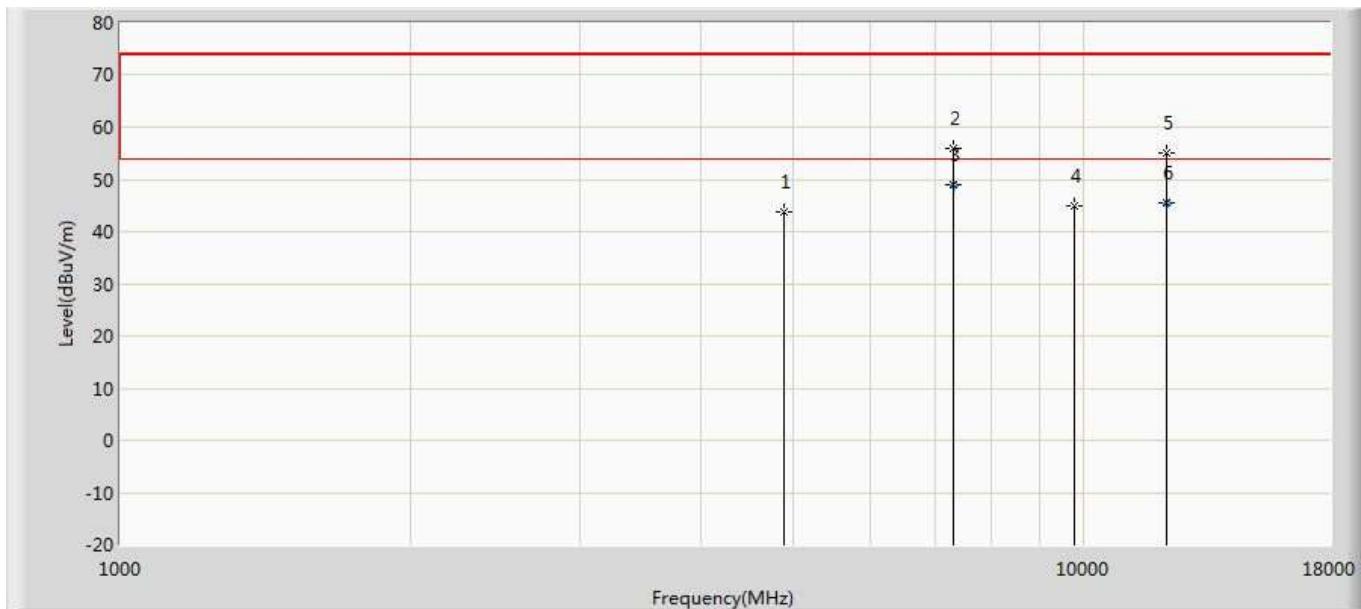
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	43.296	38.779	-30.704	74.000	4.517	PK
2		7206.000	55.607	48.060	-18.393	74.000	7.547	PK
3	*	7206.000	49.081	41.534	-4.919	54.000	7.547	AV
4		9608.000	44.897	35.715	-29.103	74.000	9.182	PK
5		12010.000	52.668	38.115	-21.332	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:26
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 LE_Coded (S=2)	



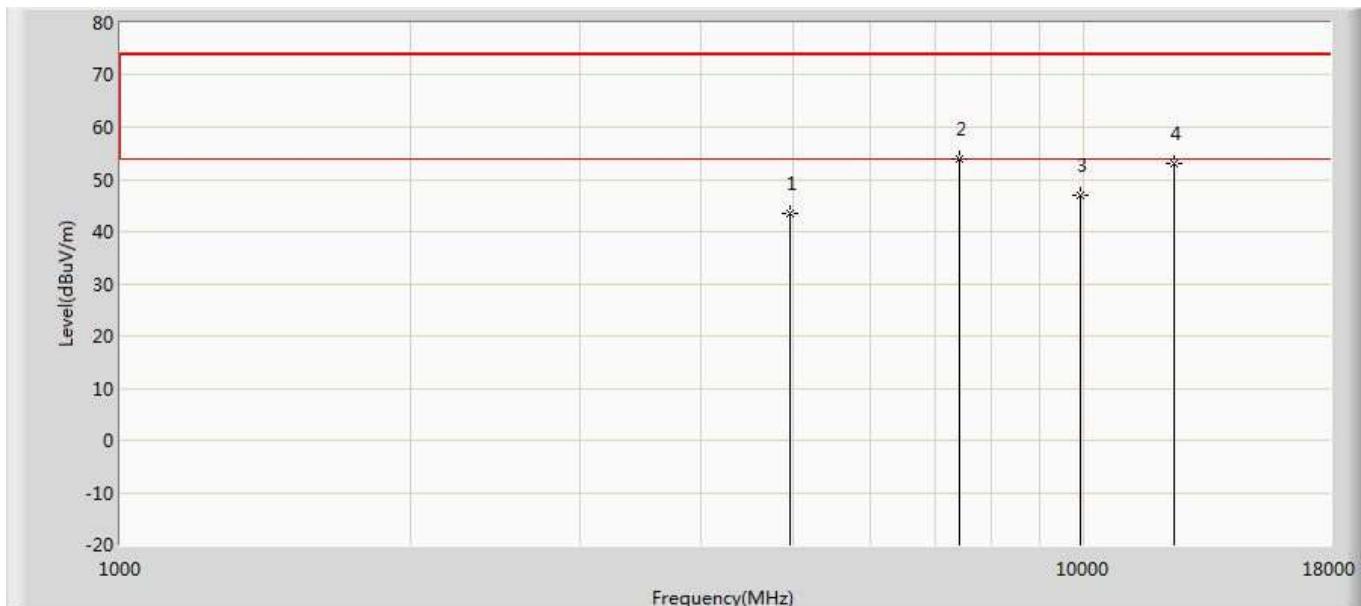
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	43.247	38.461	-30.753	74.000	4.786	PK
2		7320.000	51.069	43.407	-22.931	74.000	7.663	PK
3		9760.000	46.683	36.823	-27.317	74.000	9.860	PK
4	*	12200.000	52.082	36.730	-21.918	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:26
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 3:Transmit at 2440MHz by LE_Coded (S=2)	



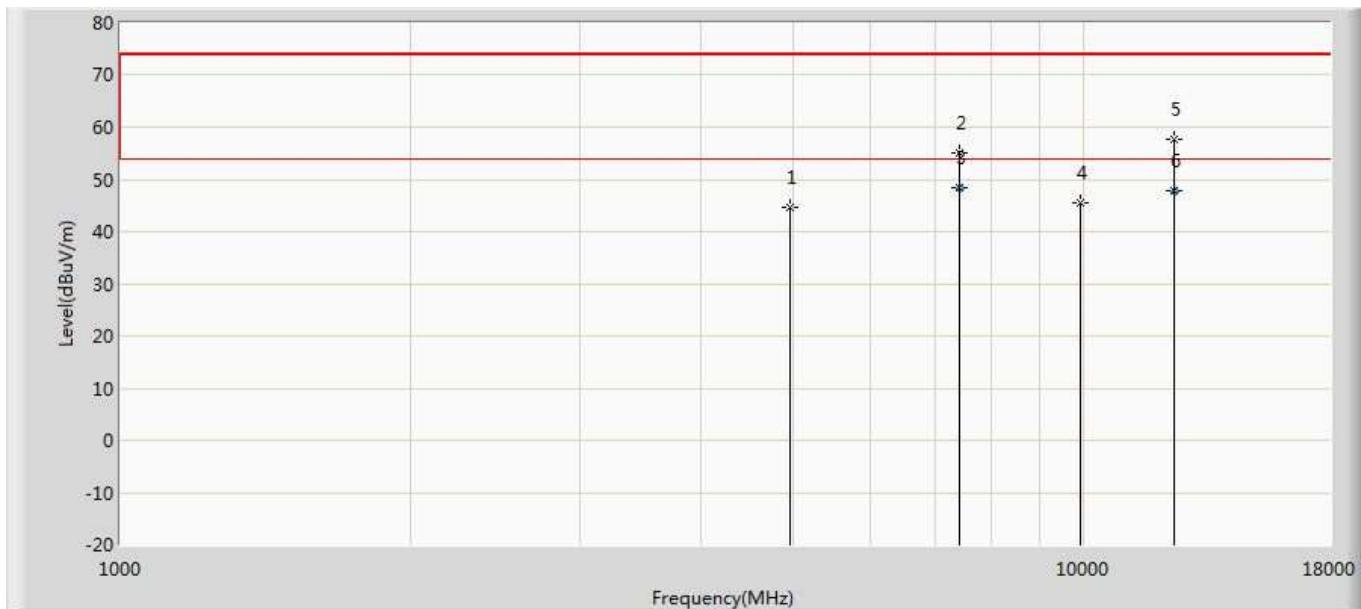
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	43.766	38.980	-30.234	74.000	4.786	PK
2		7320.000	55.801	48.139	-18.199	74.000	7.663	PK
3	*	7320.000	49.042	41.380	-4.958	54.000	7.663	AV
4		9760.000	44.877	35.017	-29.123	74.000	9.860	PK
5		12200.000	55.032	39.680	-18.968	74.000	15.351	PK
6		12200.000	45.606	30.254	-8.394	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:26
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 LE_Coded (S=2)	



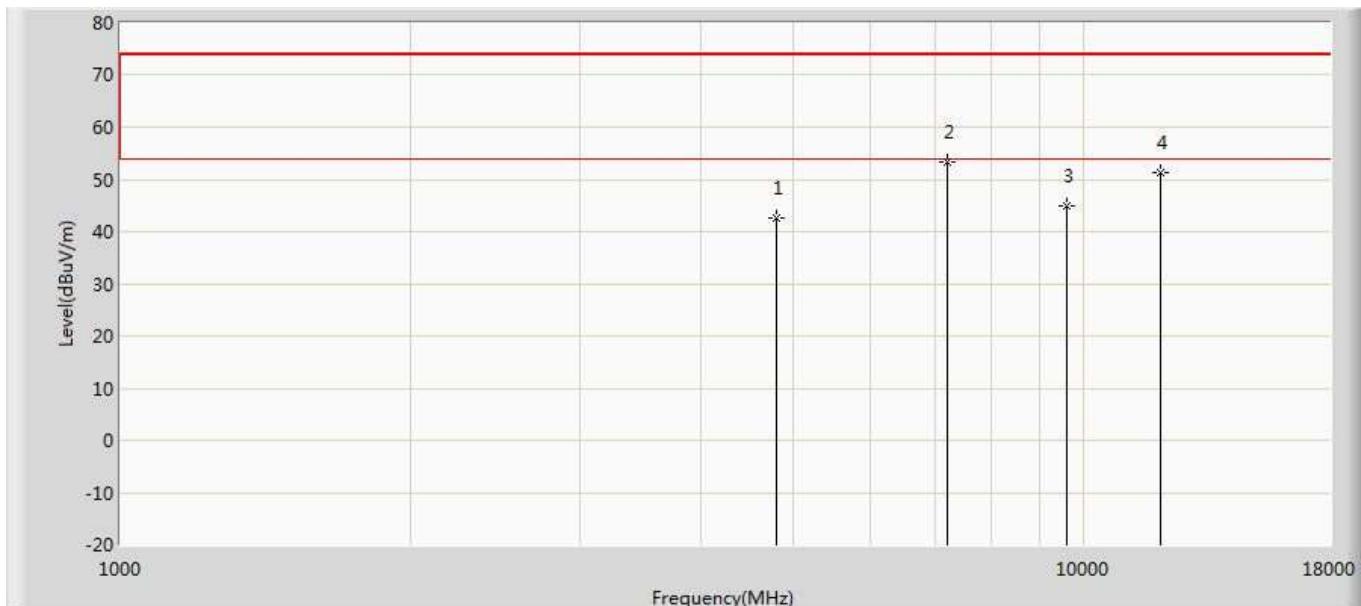
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.463	38.543	-30.537	74.000	4.920	PK
2	*	7440.000	53.776	46.061	-20.224	74.000	7.715	PK
3		9920.000	46.991	37.044	-27.009	74.000	9.946	PK
4		12400.000	53.054	37.055	-20.946	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:26
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 3:Transmit at 2480MHz by LE_Coded (S=2)	



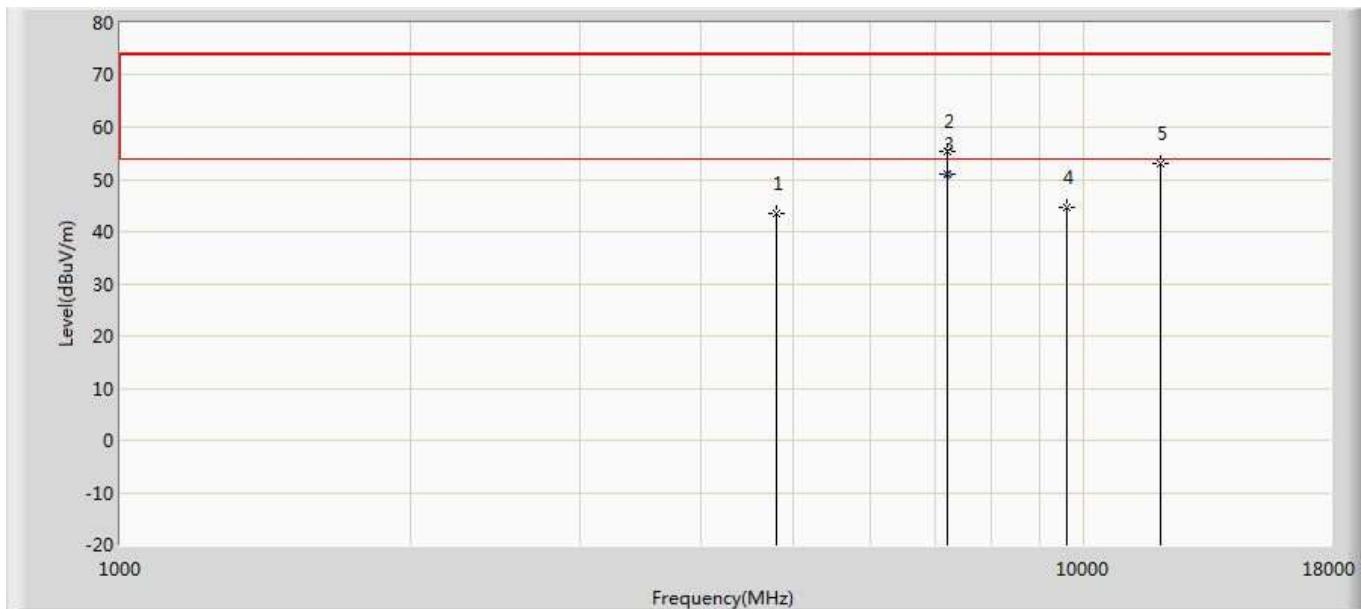
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	44.575	39.655	-29.425	74.000	4.920	PK
2		7440.000	54.987	47.272	-19.013	74.000	7.715	PK
3	*	7440.000	48.403	40.688	-5.597	54.000	7.715	AV
4		9920.000	45.536	35.589	-28.464	74.000	9.946	PK
5		12400.000	57.548	41.549	-16.452	74.000	15.999	PK
6		12400.000	47.930	31.931	-6.070	54.000	15.999	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:25
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 LE_Coded (S=8)	



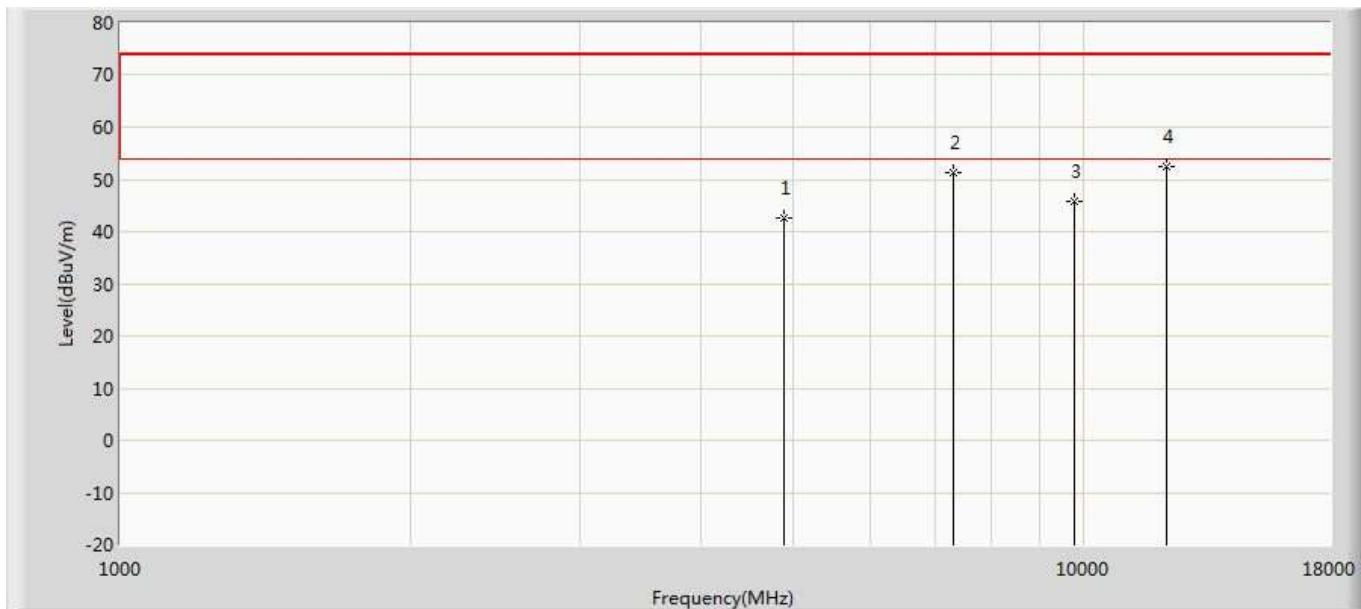
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.730	38.213	-31.270	74.000	4.517	PK
2	*	7206.000	53.266	45.719	-20.734	74.000	7.547	PK
3		9608.000	44.840	35.658	-29.160	74.000	9.182	PK
4		12010.000	51.380	36.827	-22.620	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:25
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 LE_Coded (S=8)	



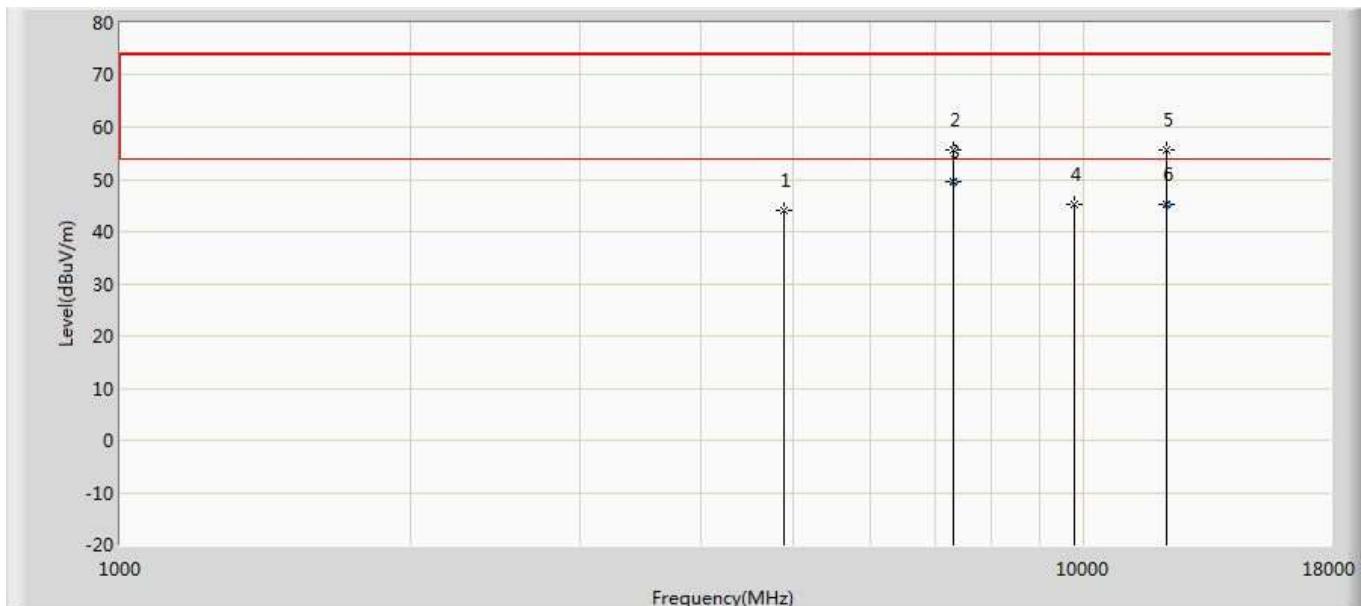
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	43.380	38.863	-30.620	74.000	4.517	PK
2		7206.000	55.370	47.823	-18.630	74.000	7.547	PK
3	*	7206.000	50.913	43.366	-3.087	54.000	7.547	AV
4		9608.000	44.687	35.505	-29.313	74.000	9.182	PK
5		12010.000	52.940	38.387	-21.060	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:26
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 LE_Coded (S=8)	



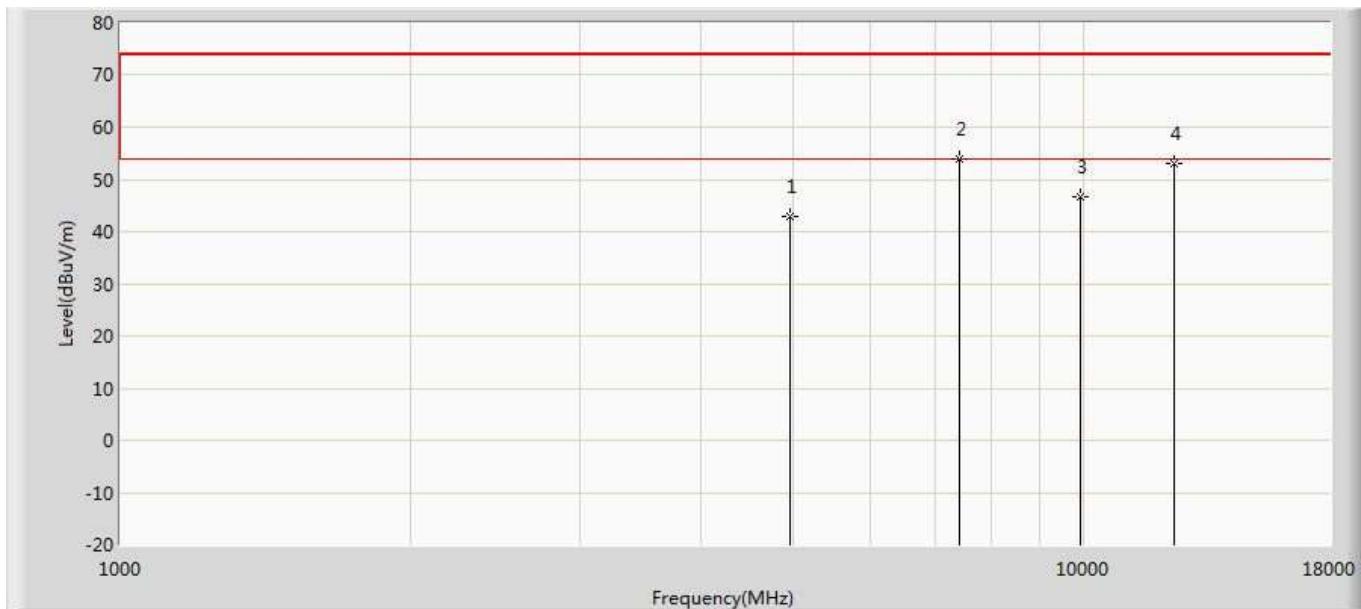
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.619	37.833	-31.381	74.000	4.786	PK
2		7320.000	51.356	43.694	-22.644	74.000	7.663	PK
3		9760.000	45.705	35.845	-28.295	74.000	9.860	PK
4	*	12200.000	52.383	37.031	-21.617	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:26
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 4:Transmit at 2440MHz by LE_Coded (S=8)	



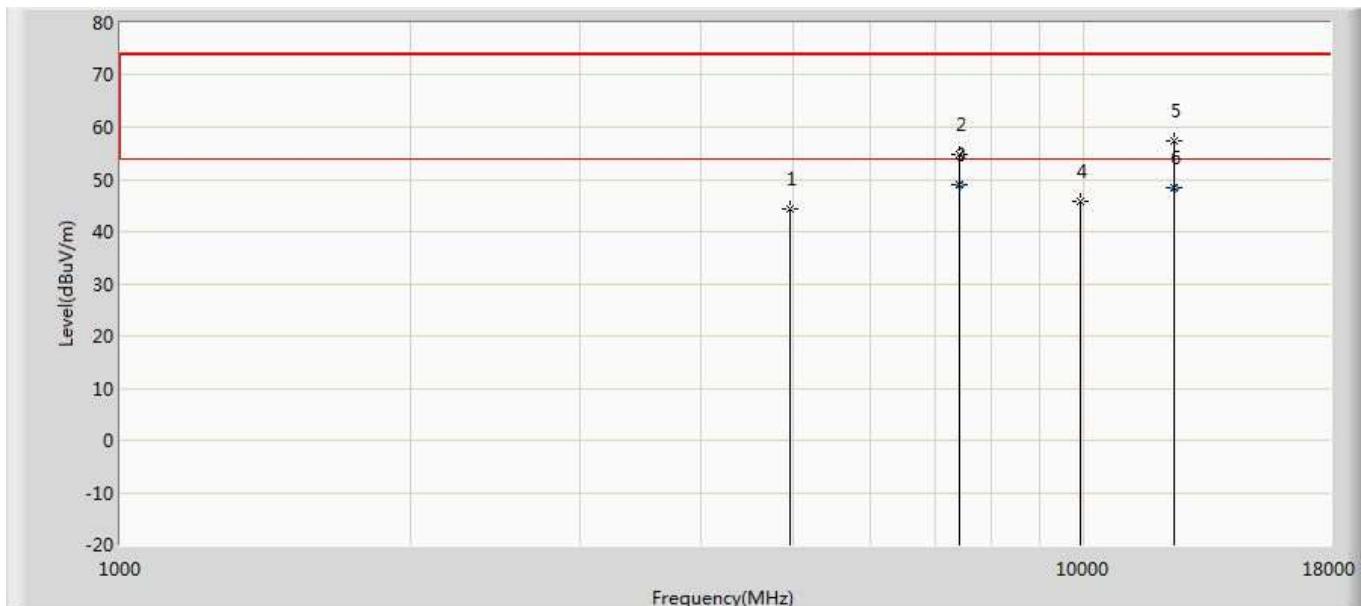
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	44.198	39.412	-29.802	74.000	4.786	PK
2		7320.000	55.645	47.983	-18.355	74.000	7.663	PK
3	*	7320.000	49.667	42.005	-4.333	54.000	7.663	AV
4		9760.000	45.167	35.307	-28.833	74.000	9.860	PK
5		12200.000	55.601	40.249	-18.399	74.000	15.351	PK
6		12200.000	45.234	29.882	-8.766	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:27
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 LE_Coded (S=8)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.805	37.885	-31.195	74.000	4.920	PK
2	*	7440.000	53.858	46.143	-20.142	74.000	7.715	PK
3		9920.000	46.751	36.804	-27.249	74.000	9.946	PK
4		12400.000	53.092	37.093	-20.908	74.000	15.999	PK

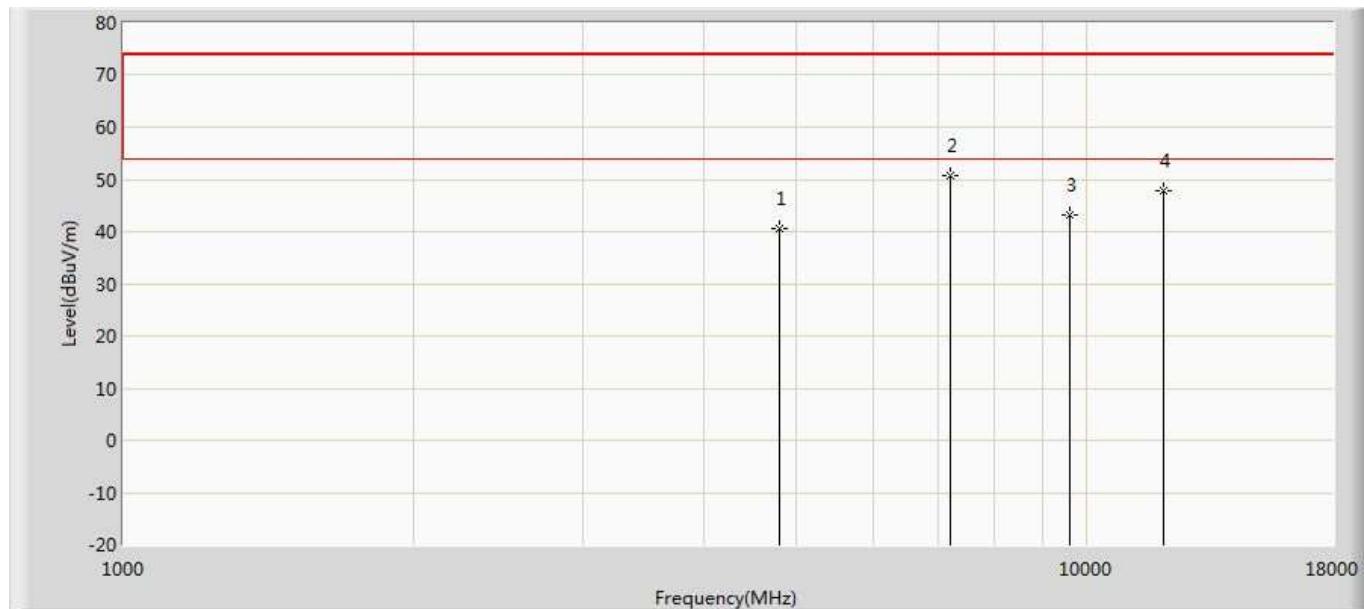
Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded (S=8)	



S	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	44.337	39.417	-29.663	74.000	4.920	PK
2		7440.000	54.754	47.039	-19.246	74.000	7.715	PK
3	*	7440.000	49.042	41.327	-4.958	54.000	7.715	AV
4		9920.000	45.689	35.742	-28.311	74.000	9.946	PK
5		12400.000	57.371	41.372	-16.629	74.000	15.999	PK
6		12400.000	48.489	32.490	-5.511	54.000	15.999	AV

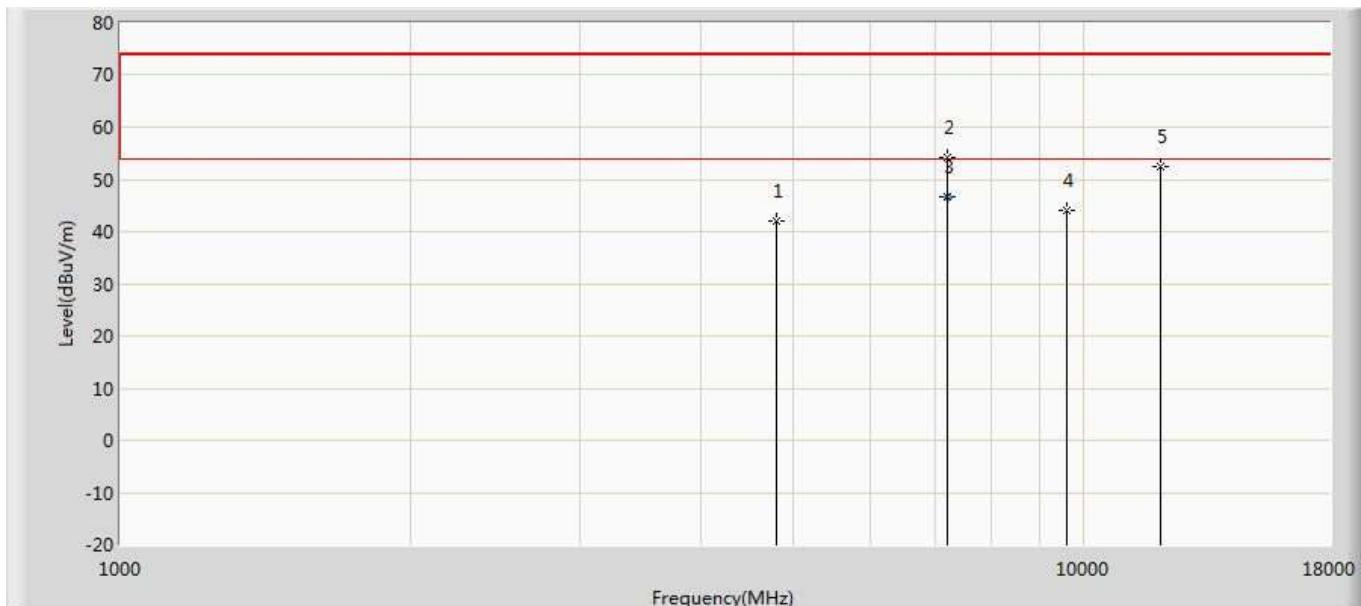
**Diodes:**

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:16
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 1:Transmit at 2402MHz by LE_1Mbps	



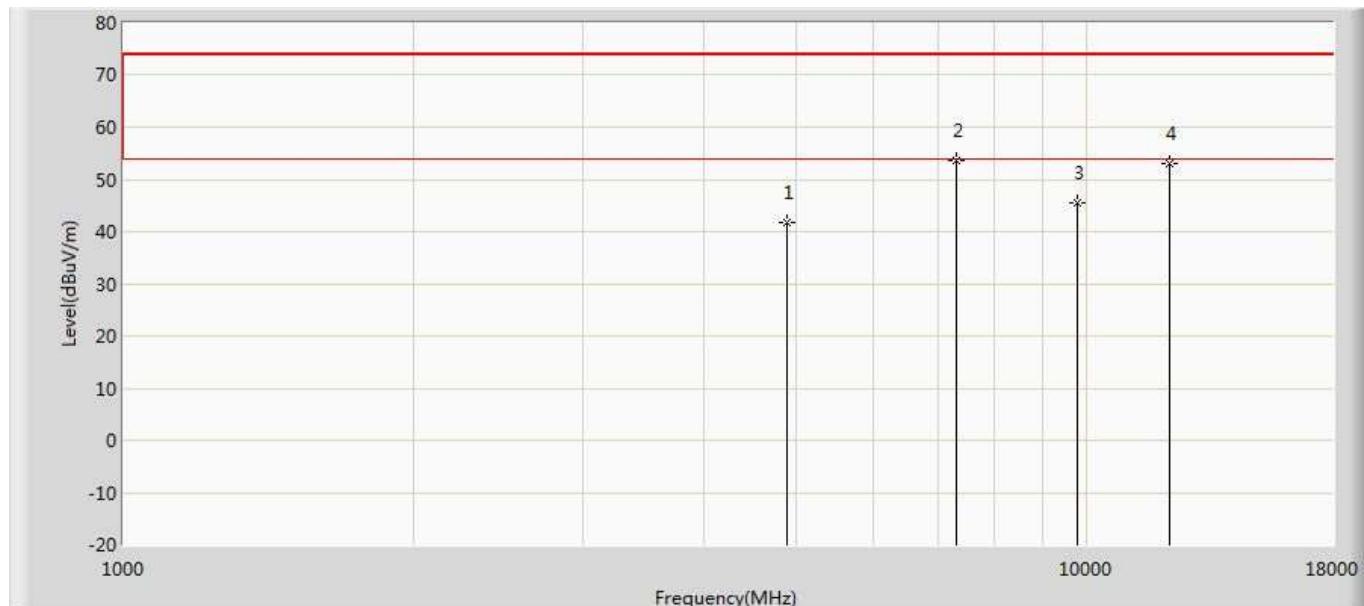
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	40.696	36.179	-33.304	74.000	4.517	PK
2	*	7206.000	50.792	43.245	-23.208	74.000	7.547	PK
3		9608.000	43.241	34.059	-30.759	74.000	9.182	PK
4		12010.000	47.792	33.239	-26.208	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:16
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 LE_1Mbps	



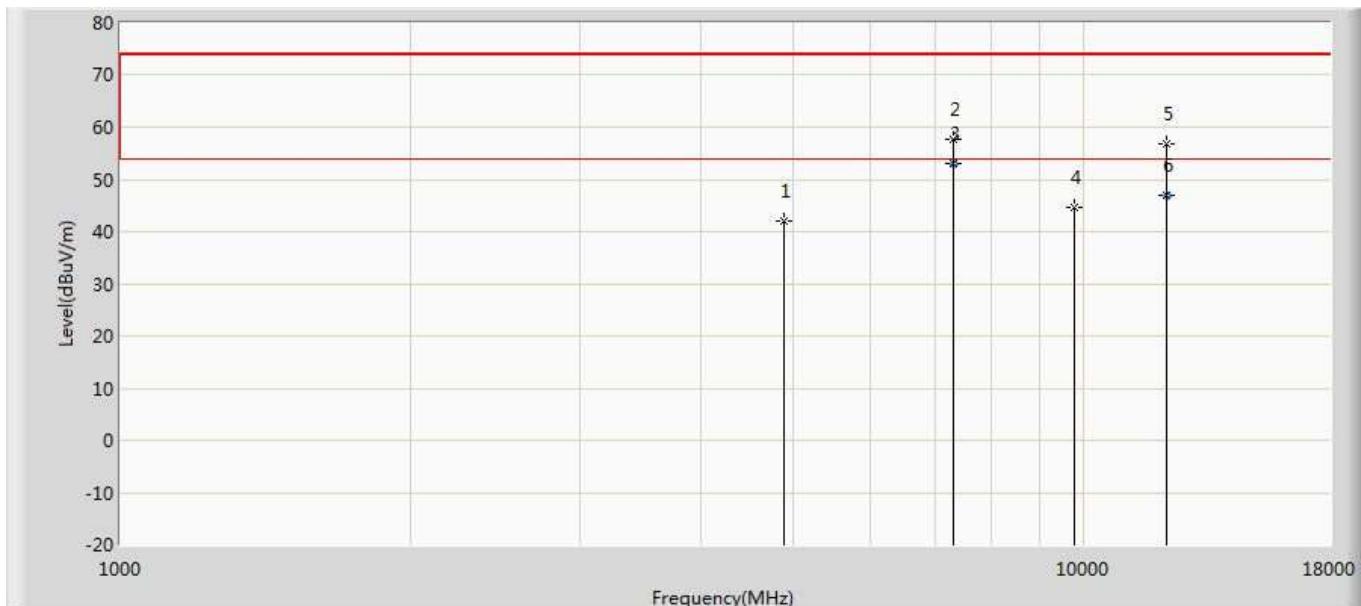
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.957	37.440	-32.043	74.000	4.517	PK
2		7206.000	54.060	46.513	-19.940	74.000	7.547	PK
3	*	7206.000	46.571	39.024	-7.429	54.000	7.547	AV
4		9608.000	44.046	34.864	-29.954	74.000	9.182	PK
5		12010.000	52.526	37.973	-21.474	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:17
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 LE_1Mbps	



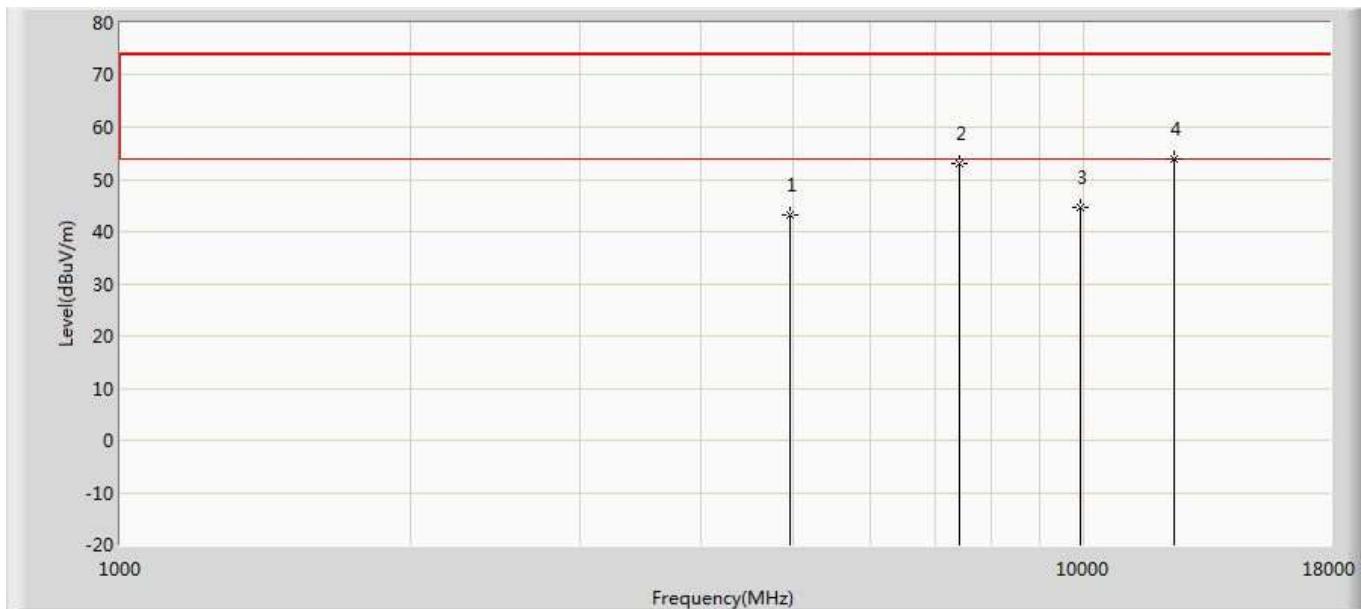
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.884	37.098	-32.116	74.000	4.786	PK
2	*	7320.000	53.685	46.023	-20.315	74.000	7.663	PK
3		9760.000	45.379	35.519	-28.621	74.000	9.860	PK
4		12200.000	53.108	37.756	-20.892	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps	



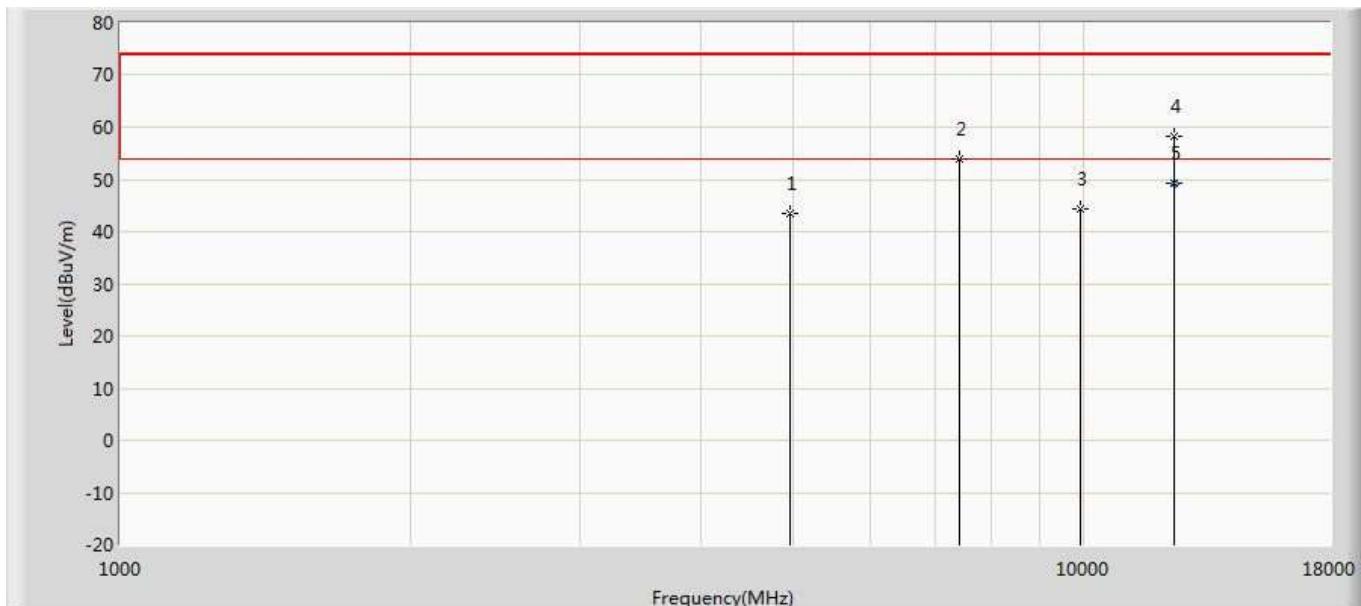
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.091	37.305	-31.909	74.000	4.786	PK
2		7320.000	57.676	50.014	-16.324	74.000	7.663	PK
3	*	7320.000	53.164	45.502	-0.836	54.000	7.663	AV
4		9760.000	44.617	34.757	-29.383	74.000	9.860	PK
5		12200.000	56.717	41.365	-17.283	74.000	15.351	PK
6		12200.000	46.990	31.638	-7.010	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:18
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 LE_1Mbps	



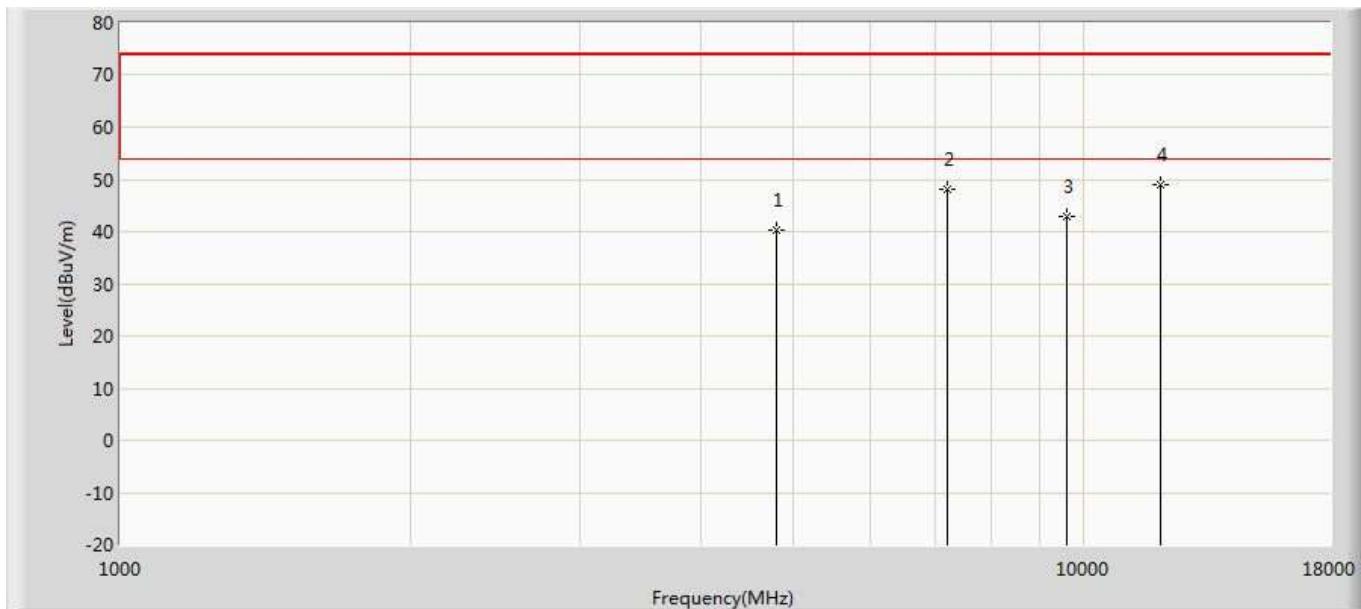
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.278	38.358	-30.722	74.000	4.920	PK
2		7440.000	53.141	45.426	-20.859	74.000	7.715	PK
3		9920.000	44.706	34.759	-29.294	74.000	9.946	PK
4	*	12400.000	53.783	37.784	-20.217	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:18
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 LE_1Mbps	



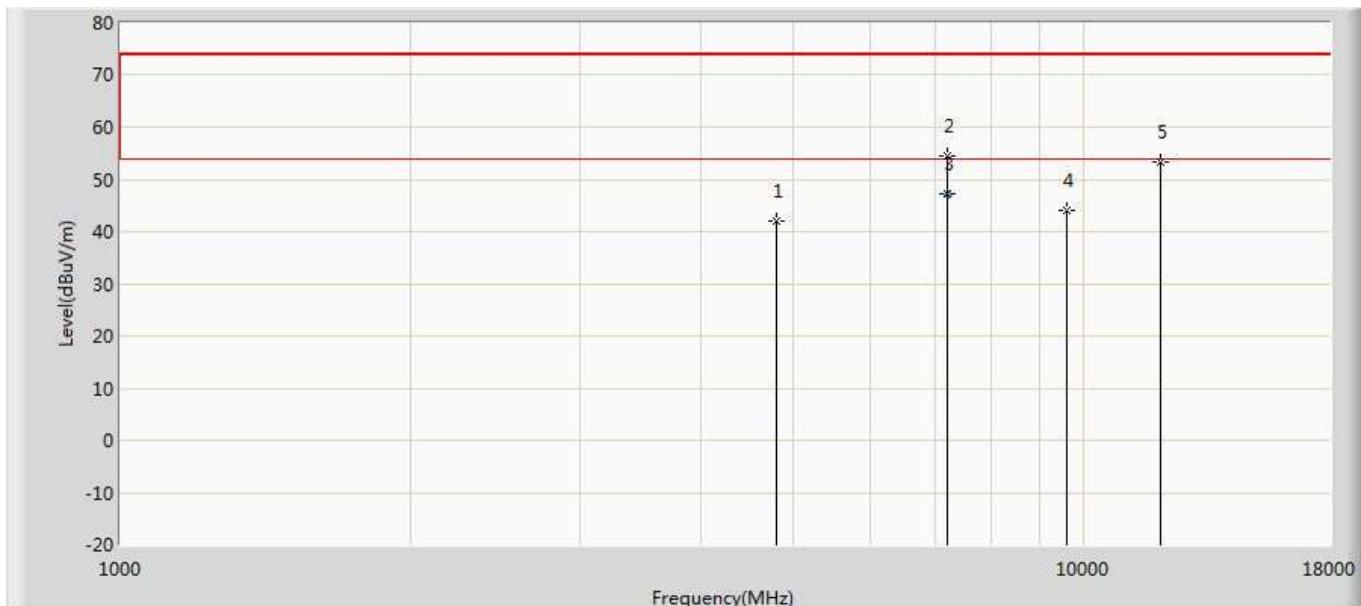
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.526	38.606	-30.474	74.000	4.920	PK
2		7440.000	53.948	46.233	-20.052	74.000	7.715	PK
3		9920.000	44.345	34.398	-29.655	74.000	9.946	PK
4		12400.000	58.164	42.165	-15.836	74.000	15.999	PK
5	*	12400.000	49.221	33.222	-4.779	54.000	15.999	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:16
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 2:Transmit at 2402MHz by LE_2Mbps	



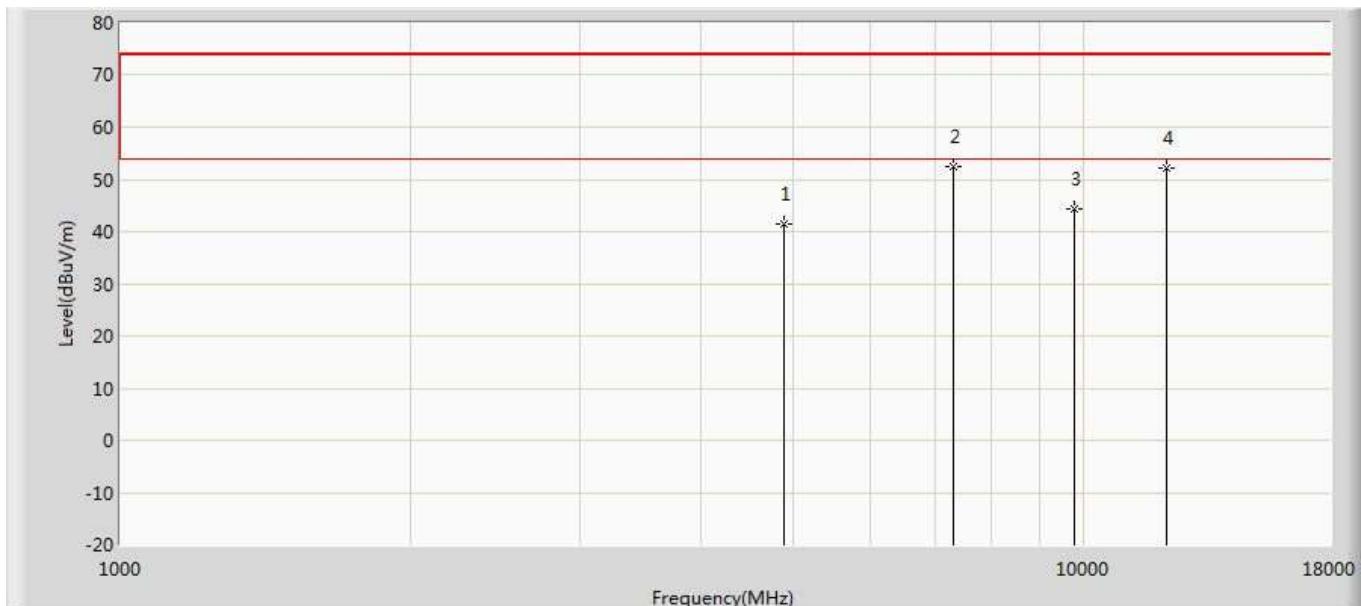
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	40.353	35.836	-33.647	74.000	4.517	PK
2		7206.000	48.153	40.606	-25.847	74.000	7.547	PK
3		9608.000	42.943	33.761	-31.057	74.000	9.182	PK
4	*	12010.000	48.843	34.290	-25.157	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:16
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 LE_2Mbps	



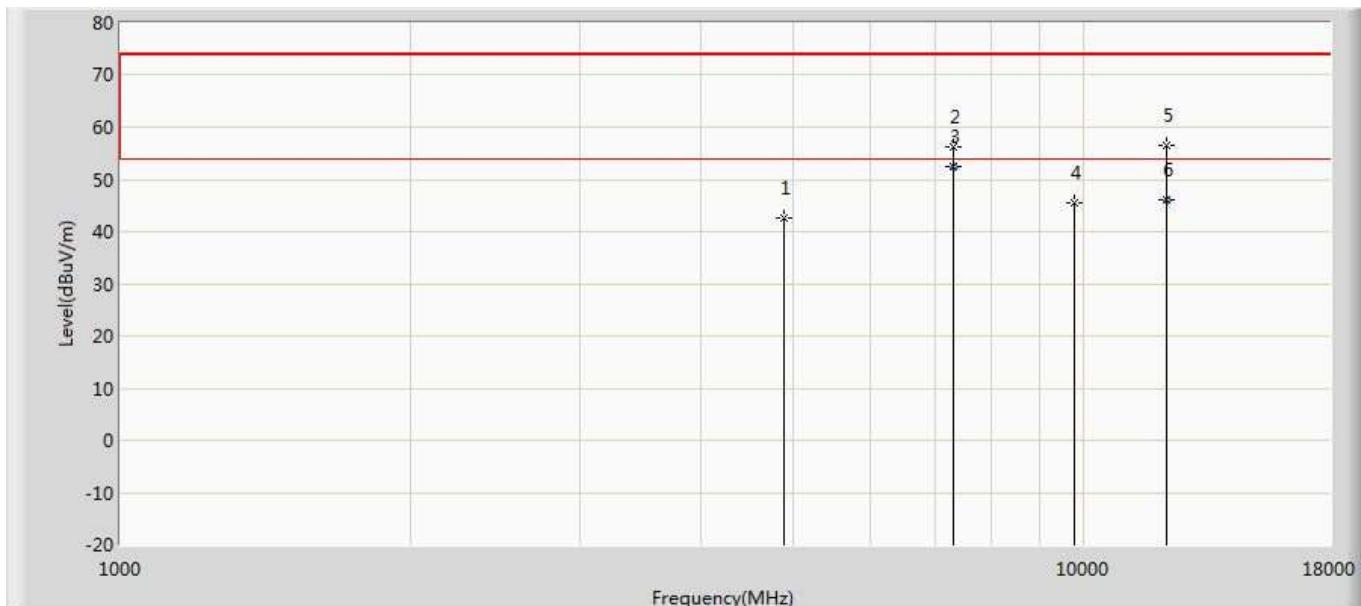
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.131	37.614	-31.869	74.000	4.517	PK
2		7206.000	54.575	47.028	-19.425	74.000	7.547	PK
3	*	7206.000	47.138	39.591	-6.862	54.000	7.547	AV
4		9608.000	44.103	34.921	-29.897	74.000	9.182	PK
5		12010.000	53.257	38.704	-20.743	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:17
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 LE_2Mbps	



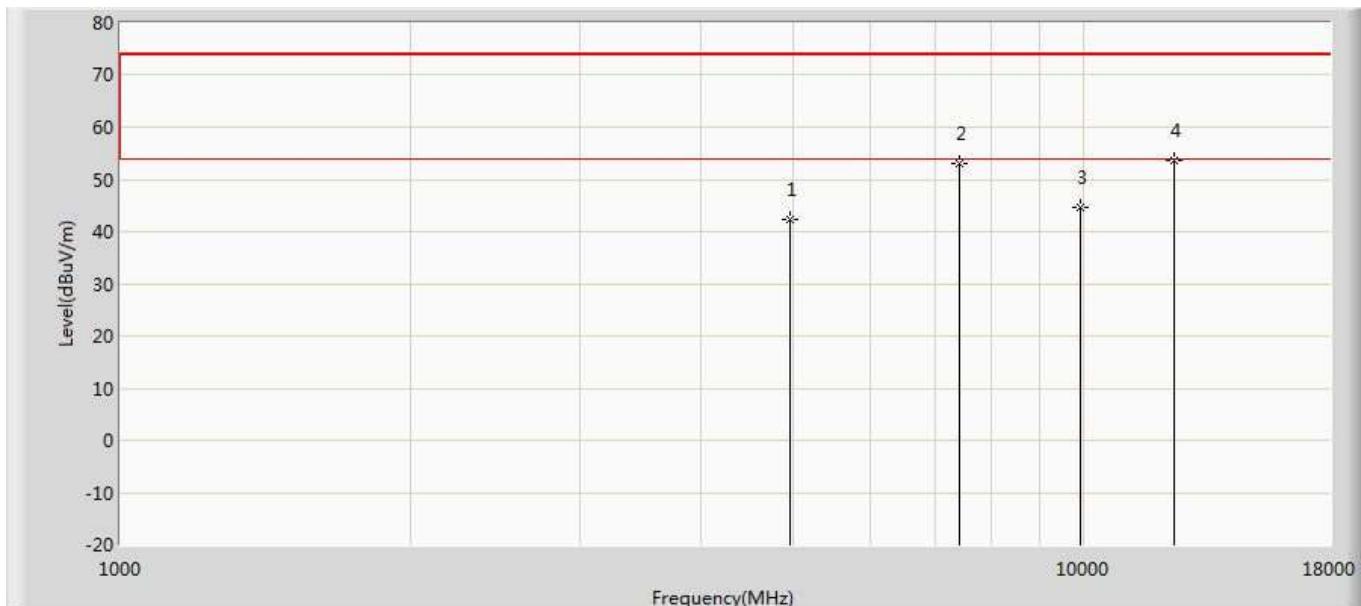
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.542	36.756	-32.458	74.000	4.786	PK
2	*	7320.000	52.587	44.925	-21.413	74.000	7.663	PK
3		9760.000	44.441	34.581	-29.559	74.000	9.860	PK
4		12200.000	52.182	36.830	-21.818	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps	



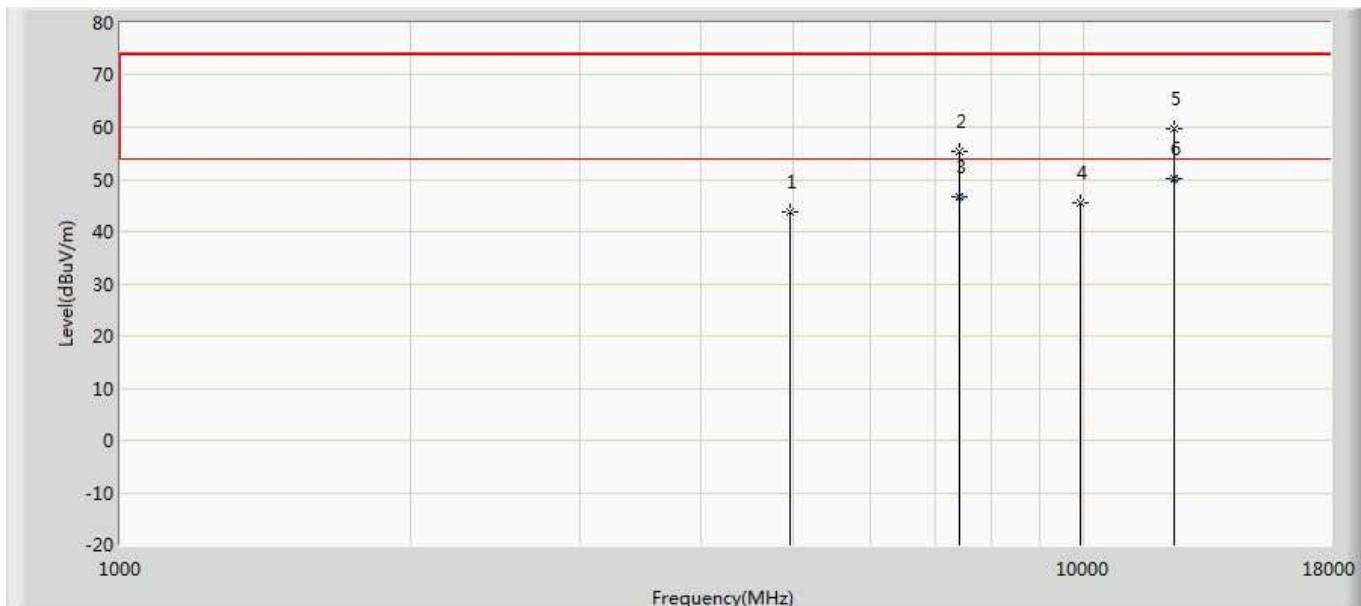
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.638	37.852	-31.362	74.000	4.786	PK
2		7320.000	56.107	48.445	-17.893	74.000	7.663	PK
3	*	7320.000	52.344	44.682	-1.656	54.000	7.663	AV
4		9760.000	45.416	35.556	-28.584	74.000	9.860	PK
5		12200.000	56.533	41.181	-17.467	74.000	15.351	PK
6		12200.000	46.183	30.831	-7.817	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:18
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 2480MHz by LE_2Mbps	



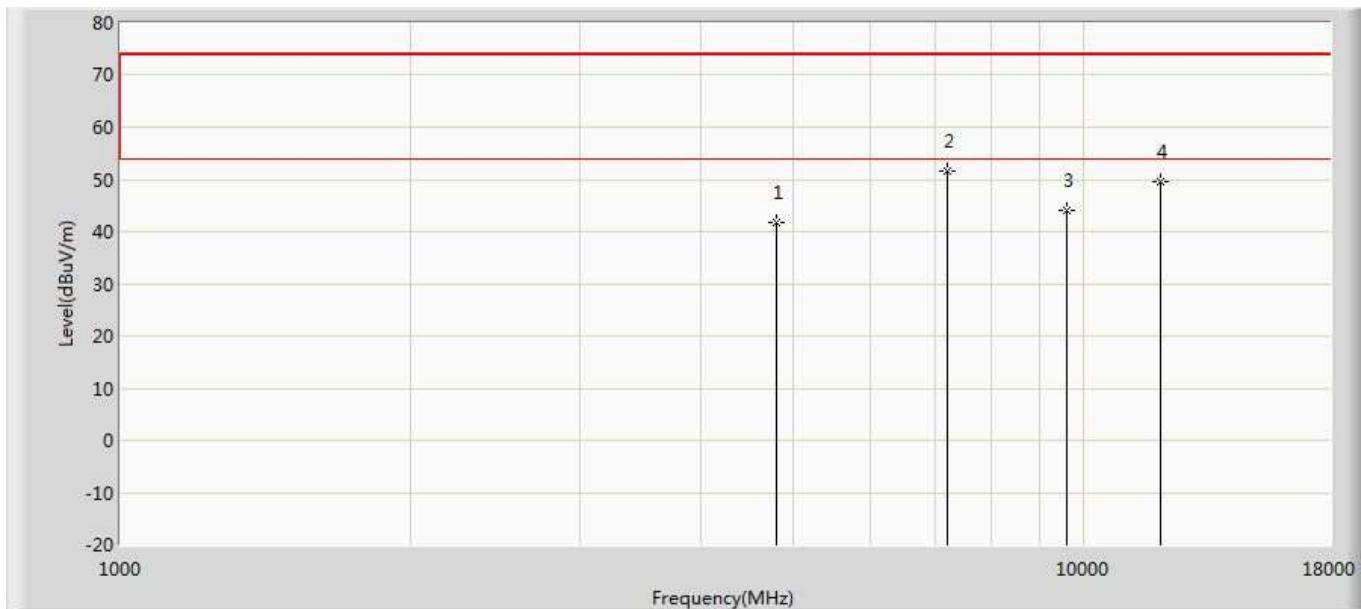
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.182	37.262	-31.818	74.000	4.920	PK
2		7440.000	52.902	45.187	-21.098	74.000	7.715	PK
3		9920.000	44.609	34.662	-29.391	74.000	9.946	PK
4	*	12400.000	53.623	37.624	-20.377	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:18
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 2480MHz by LE_2Mbps	



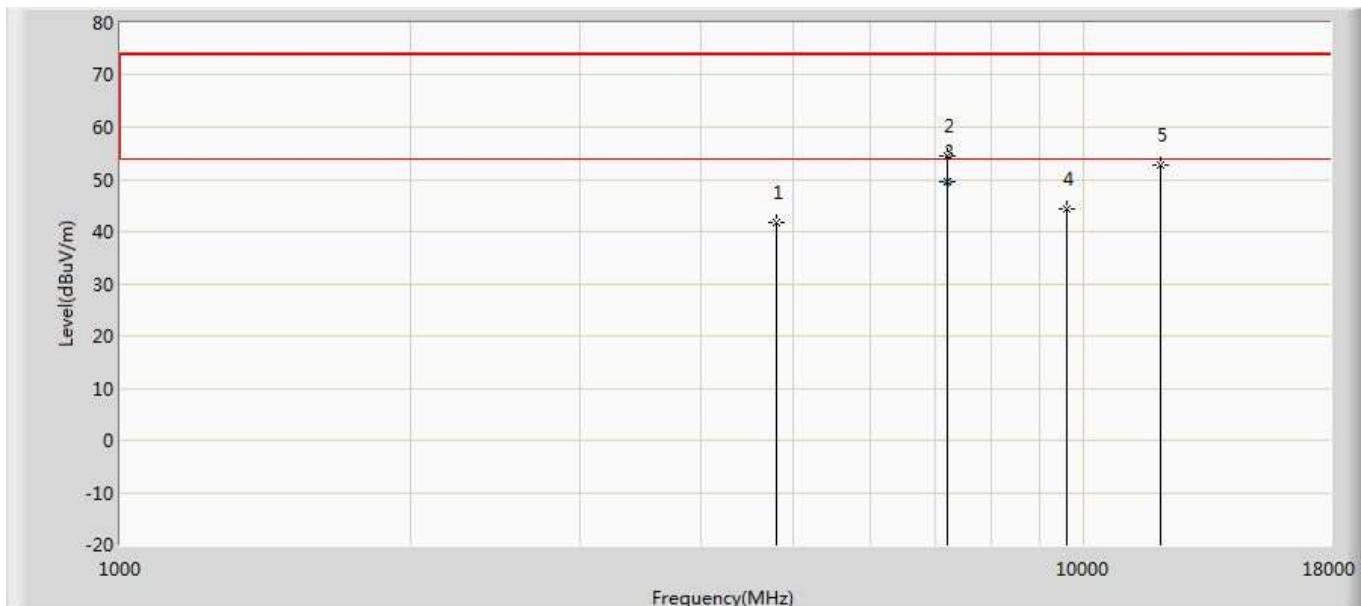
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.747	38.827	-30.253	74.000	4.920	PK
2		7440.000	55.260	47.545	-18.740	74.000	7.715	PK
3		7440.000	46.736	39.021	-7.264	54.000	7.715	AV
4		9920.000	45.364	35.417	-28.636	74.000	9.946	PK
5		12400.000	59.821	43.822	-14.179	74.000	15.999	PK
6	*	12400.000	50.057	34.058	-3.943	54.000	15.999	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:16
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 2402MHz by LE_Coded (S=2)	



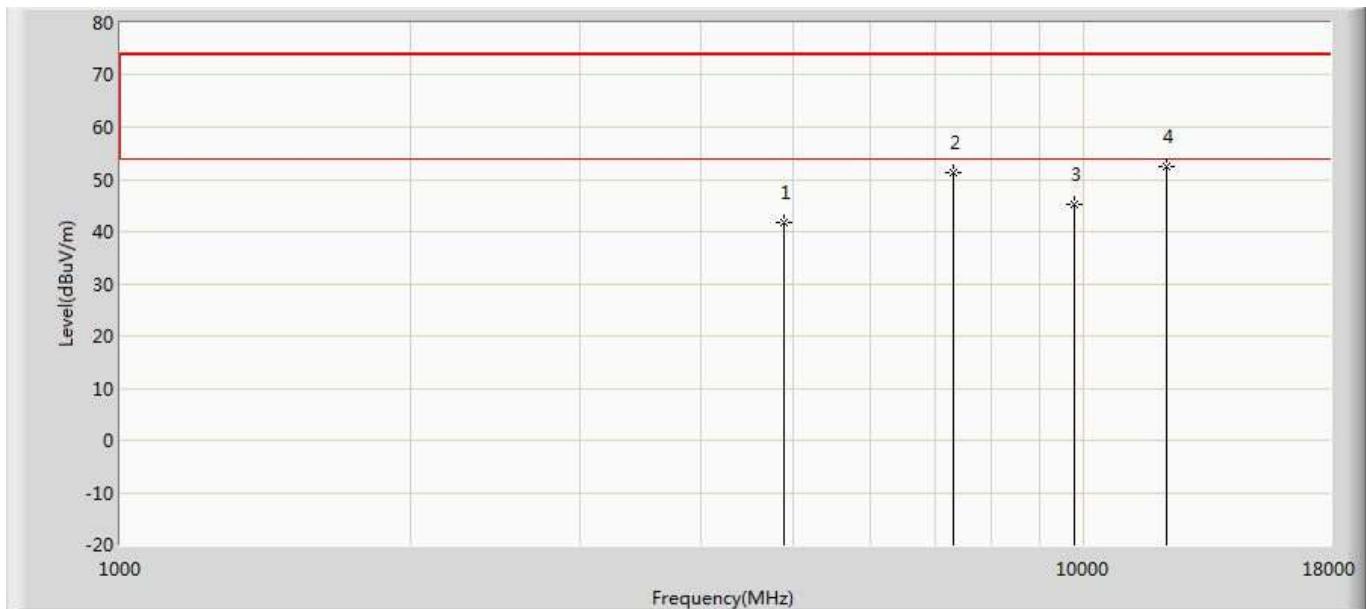
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.875	37.358	-32.125	74.000	4.517	PK
2	*	7206.000	51.664	44.117	-22.336	74.000	7.547	PK
3		9608.000	43.978	34.796	-30.022	74.000	9.182	PK
4		12010.000	49.640	35.087	-24.360	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded (S=2)	



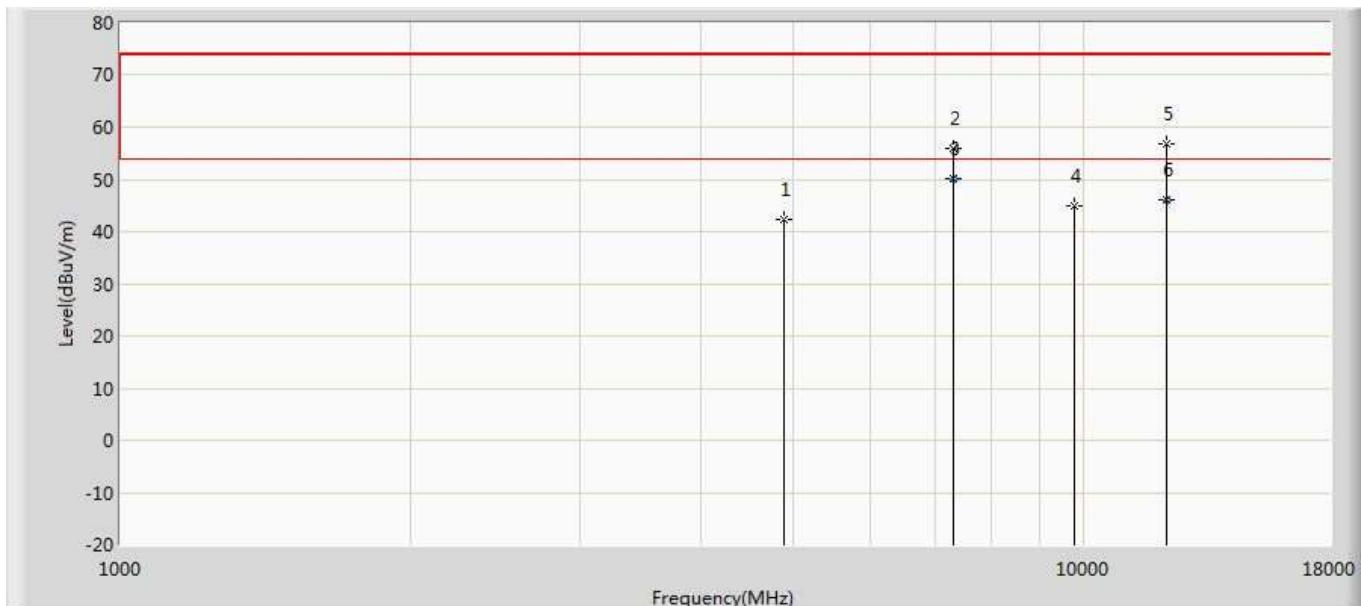
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.673	37.156	-32.327	74.000	4.517	PK
2		7206.000	54.615	47.068	-19.385	74.000	7.547	PK
3	*	7206.000	49.683	42.136	-4.317	54.000	7.547	AV
4		9608.000	44.433	35.251	-29.567	74.000	9.182	PK
5		12010.000	52.841	38.288	-21.159	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:17
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 LE_Coded (S=2)	



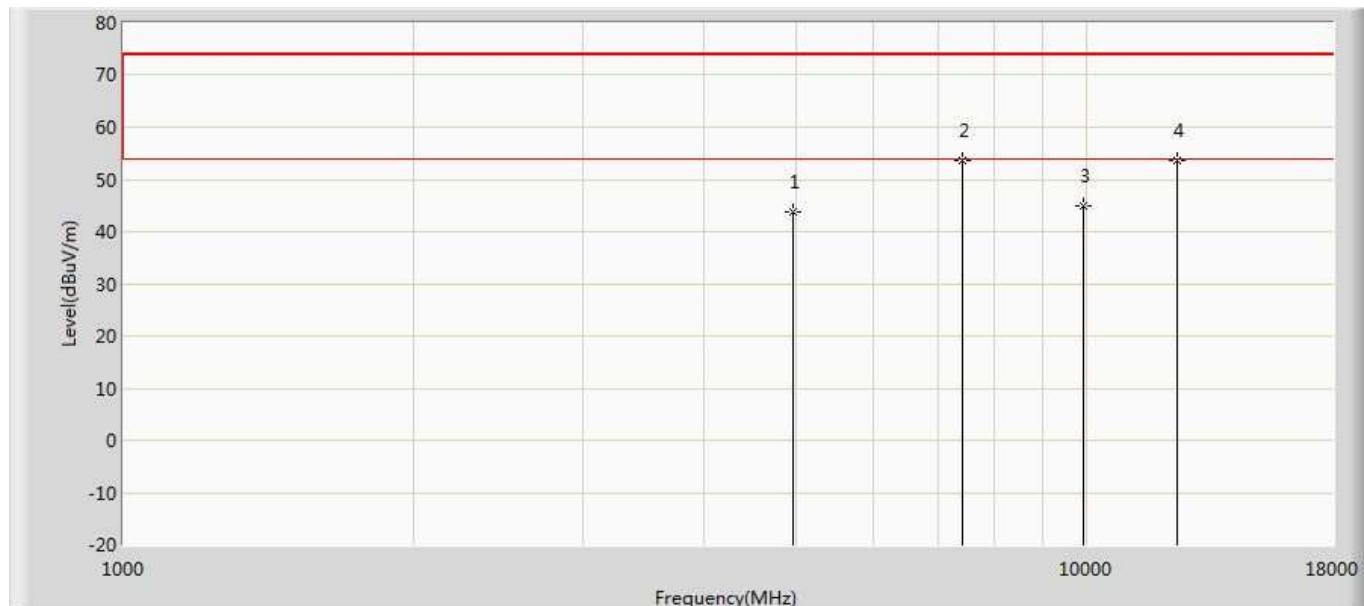
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.796	37.010	-32.204	74.000	4.786	PK
2		7320.000	51.269	43.607	-22.731	74.000	7.663	PK
3		9760.000	45.143	35.283	-28.857	74.000	9.860	PK
4	*	12200.000	52.531	37.179	-21.469	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2440MHz by LE_Coded (S=2)	



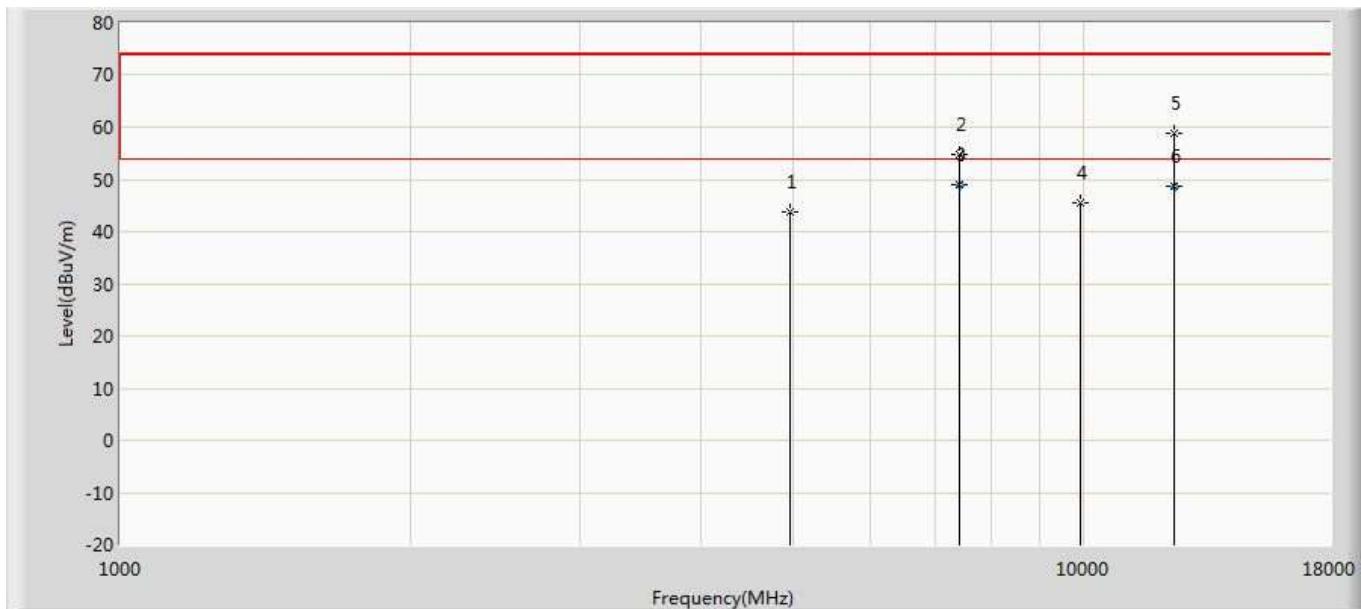
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.190	37.404	-31.810	74.000	4.786	PK
2	*	7320.000	55.970	48.308	-18.030	74.000	7.663	PK
3	*	7320.000	50.016	42.354	-3.984	54.000	7.663	AV
4		9760.000	44.939	35.079	-29.061	74.000	9.860	PK
5		12200.000	56.889	41.537	-17.111	74.000	15.351	PK
6		12200.000	45.970	30.618	-8.030	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:18
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 LE_Coded (S=2)	



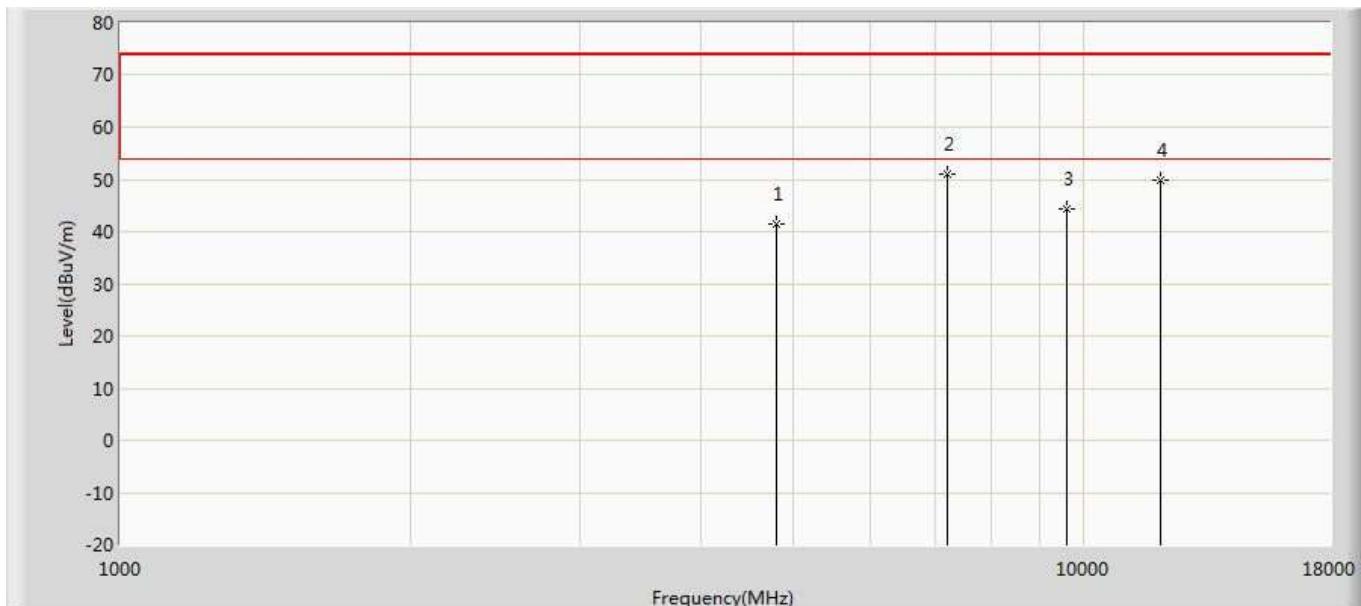
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.745	38.825	-30.255	74.000	4.920	PK
2		7440.000	53.687	45.972	-20.313	74.000	7.715	PK
3		9920.000	44.790	34.843	-29.210	74.000	9.946	PK
4	*	12400.000	53.697	37.698	-20.303	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:18
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 3:Transmit at 2480MHz by LE_Coded (S=2)	



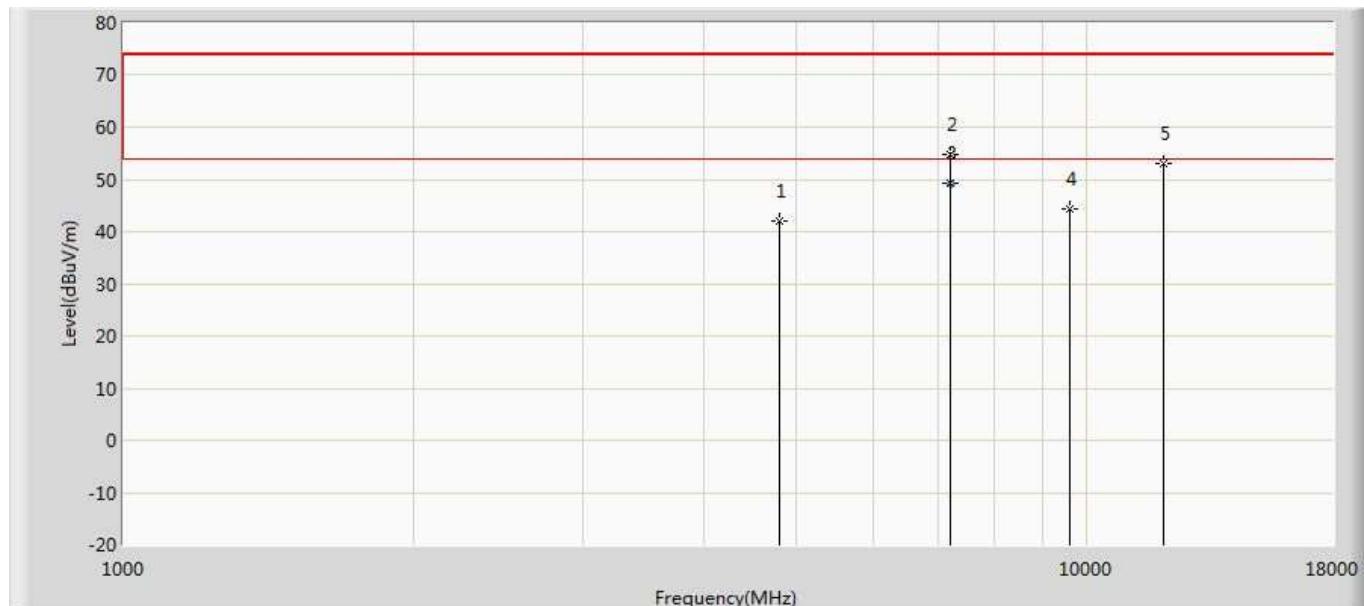
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.882	38.962	-30.118	74.000	4.920	PK
2		7440.000	54.855	47.140	-19.145	74.000	7.715	PK
3	*	7440.000	48.841	41.126	-5.159	54.000	7.715	AV
4		9920.000	45.596	35.649	-28.404	74.000	9.946	PK
5		12400.000	58.917	42.918	-15.083	74.000	15.999	PK
6		12400.000	48.556	32.557	-5.444	54.000	15.999	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:17
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 LE_Coded (S=8)	



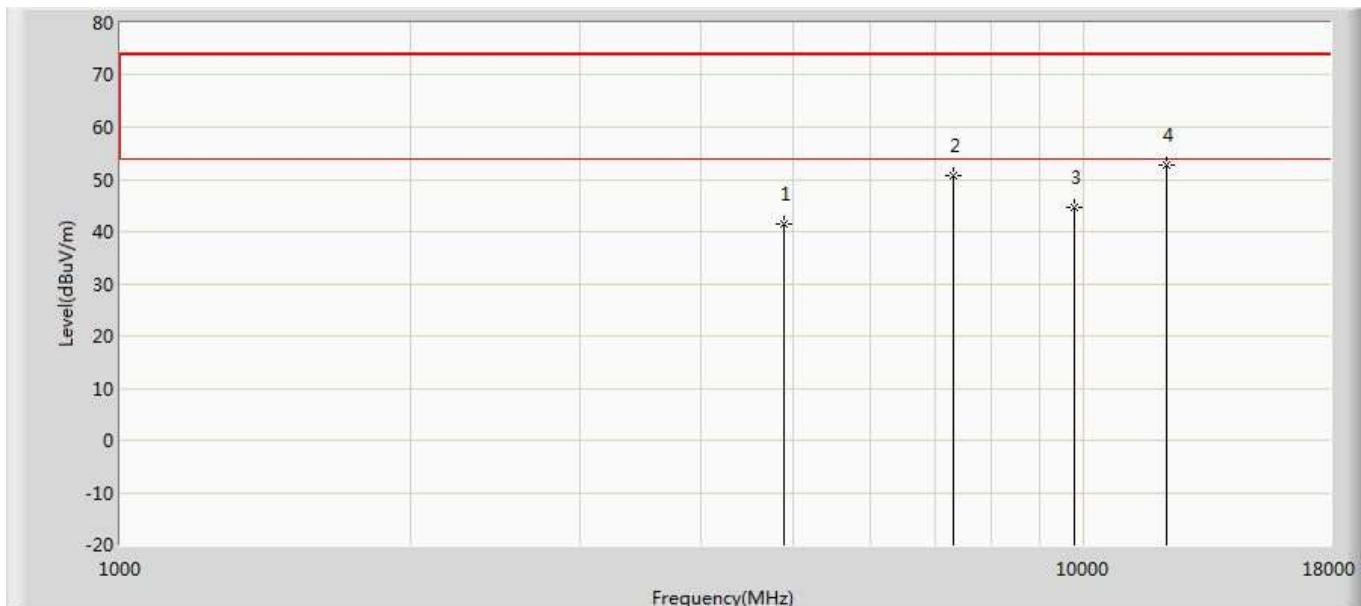
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.554	37.037	-32.446	74.000	4.517	PK
2	*	7206.000	51.084	43.537	-22.916	74.000	7.547	PK
3		9608.000	44.343	35.161	-29.657	74.000	9.182	PK
4		12010.000	49.754	35.201	-24.246	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded (S=8)	



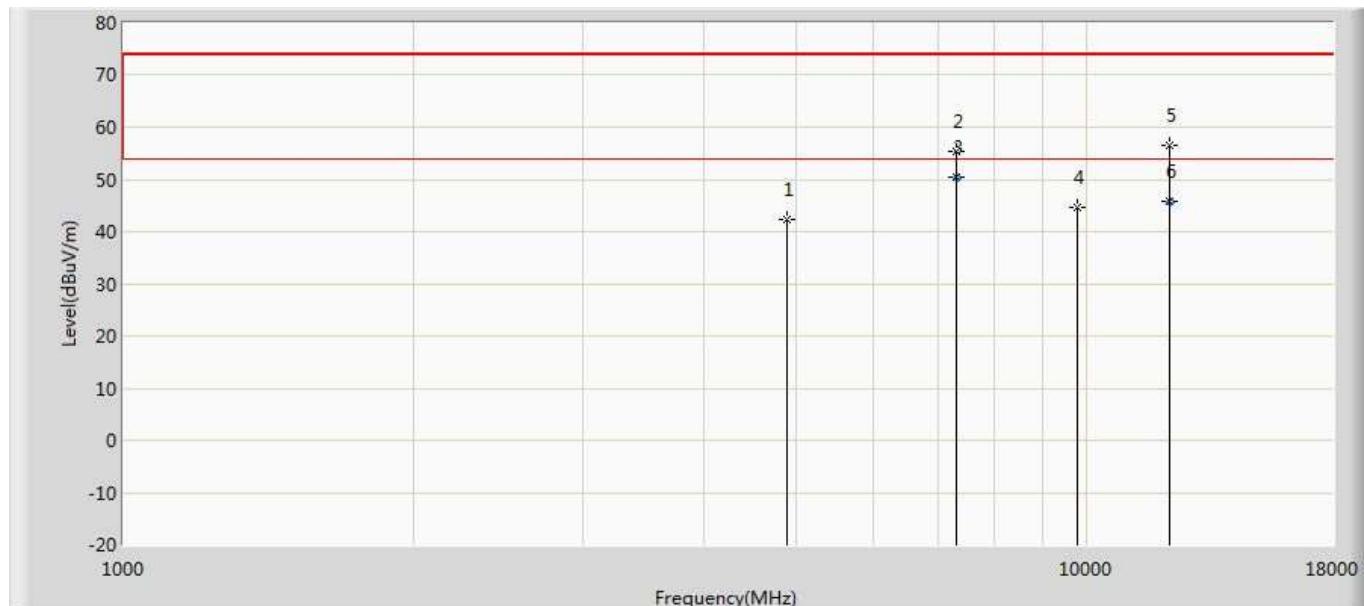
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.906	37.389	-32.094	74.000	4.517	PK
2		7206.000	54.709	47.162	-19.291	74.000	7.547	PK
3	*	7206.000	49.229	41.682	-4.771	54.000	7.547	AV
4		9608.000	44.450	35.268	-29.550	74.000	9.182	PK
5		12010.000	53.072	38.519	-20.928	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:17
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 LE_Coded (S=8)	



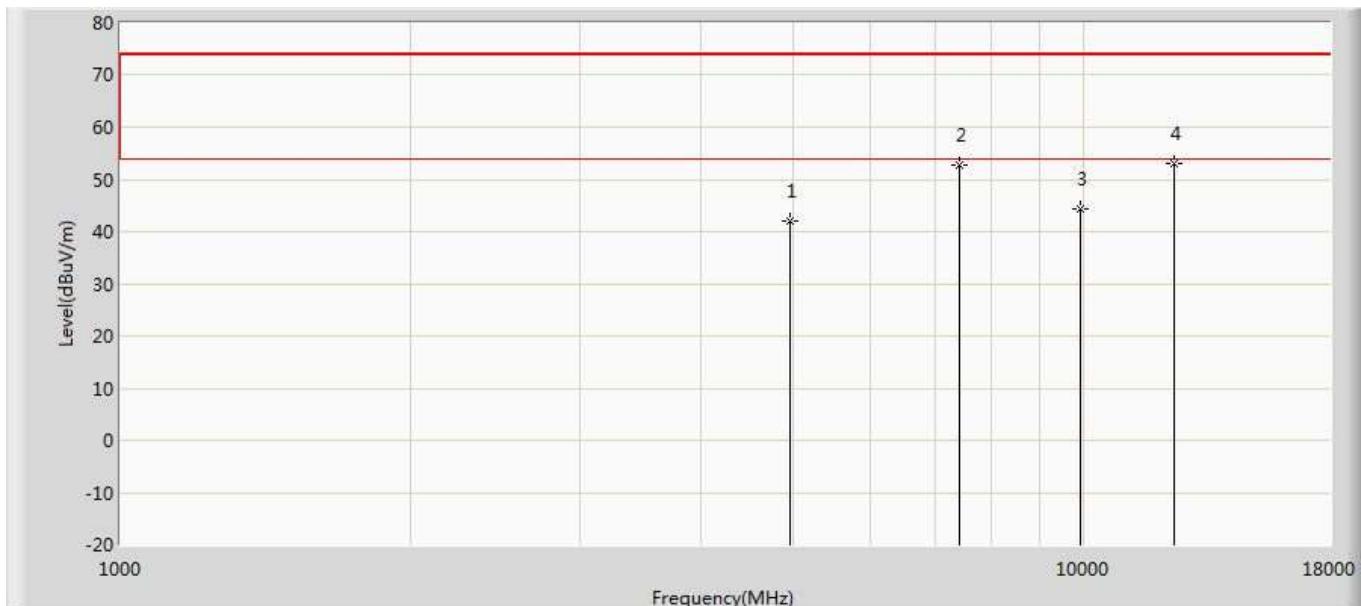
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.441	36.655	-32.559	74.000	4.786	PK
2		7320.000	50.754	43.092	-23.246	74.000	7.663	PK
3		9760.000	44.556	34.696	-29.444	74.000	9.860	PK
4	*	12200.000	52.838	37.486	-21.162	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:18
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 4:Transmit at 2440MHz by LE_Coded (S=8)	



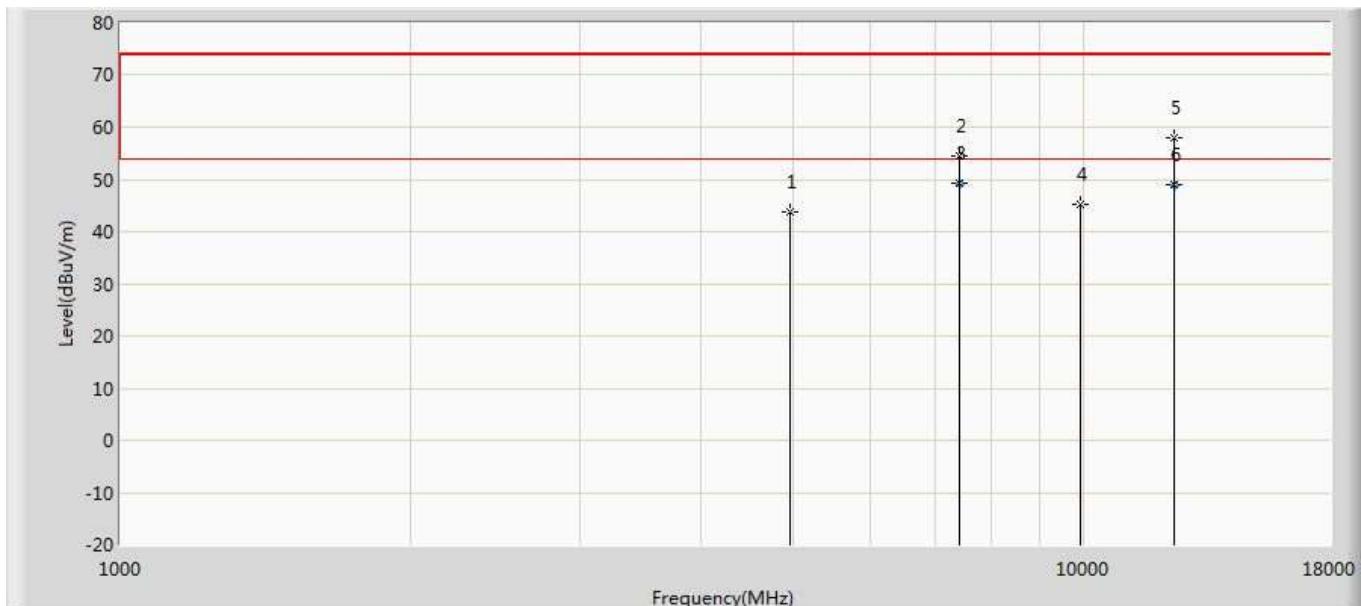
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.432	37.646	-31.568	74.000	4.786	PK
2		7320.000	55.359	47.697	-18.641	74.000	7.663	PK
3	*	7320.000	50.465	42.803	-3.535	54.000	7.663	AV
4		9760.000	44.538	34.678	-29.462	74.000	9.860	PK
5		12200.000	56.386	41.034	-17.614	74.000	15.351	PK
6		12200.000	45.844	30.492	-8.156	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:18
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 4:Transmit at 2480MHz by LE_Coded (S=8)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.009	37.089	-31.991	74.000	4.920	PK
2		7440.000	52.743	45.028	-21.257	74.000	7.715	PK
3		9920.000	44.210	34.263	-29.790	74.000	9.946	PK
4	*	12400.000	53.087	37.088	-20.913	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:18
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 4:Transmit at 2480MHz by LE_Coded (S=8)	



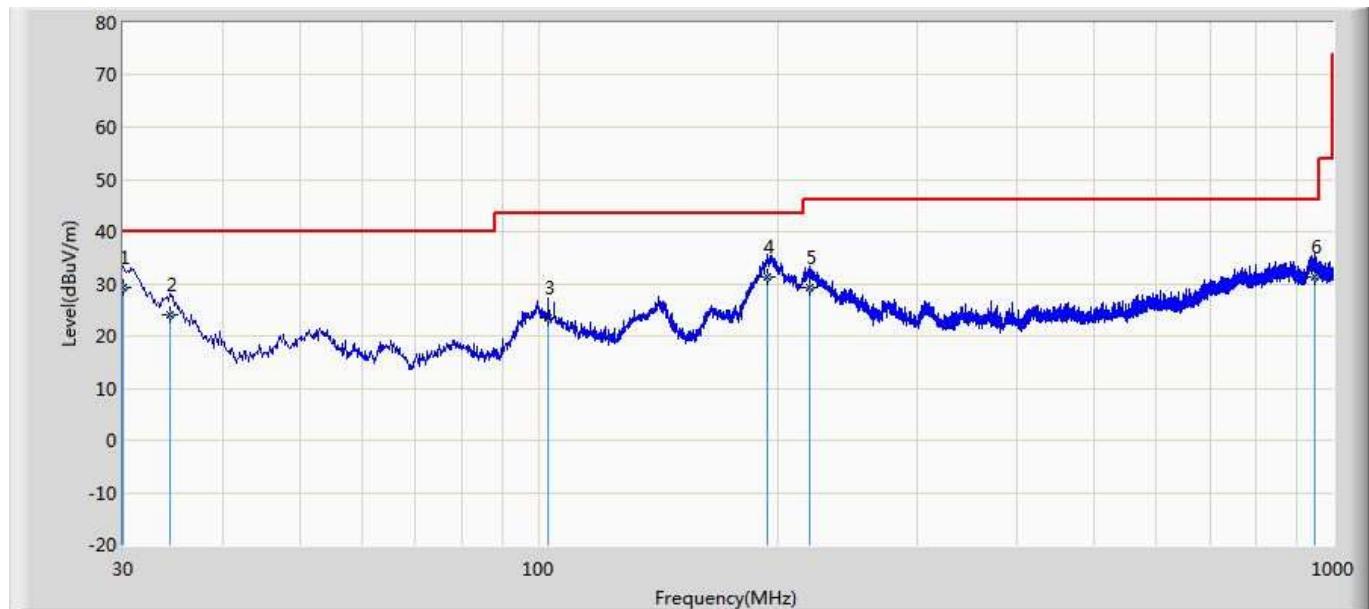
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.868	38.948	-30.132	74.000	4.920	PK
2		7440.000	54.547	46.832	-19.453	74.000	7.715	PK
3	*	7440.000	49.399	41.684	-4.601	54.000	7.715	AV
4		9920.000	45.106	35.159	-28.894	74.000	9.946	PK
5		12400.000	58.048	42.049	-15.952	74.000	15.999	PK
6		12400.000	49.064	33.065	-4.936	54.000	15.999	AV

#### 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:**

Engineer: Simon	
Site: AC3	Time: 2019/08/20 - 21:54
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Vertical
EUT: LED Lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit by BT5.0 - murata	



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	*	30.000	29.243	5.138	-10.757	40.000	24.105	100	234	QP
2		34.365	24.046	1.347	-15.954	40.000	22.699	109	54	QP
3		102.750	23.344	1.268	-20.156	43.500	22.076	103	327	QP
4		194.536	31.401	9.876	-12.099	43.500	21.525	107	38	QP
5		219.514	29.338	6.963	-16.662	46.000	22.374	117	113	QP
6		948.226	31.435	-3.557	-14.565	46.000	34.992	100	286	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).

Engineer: Simon	
Site: AC3	Time: 2019/08/20 - 21:59
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Horizontal
EUT: LED Lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit by BT5.0 - murata	

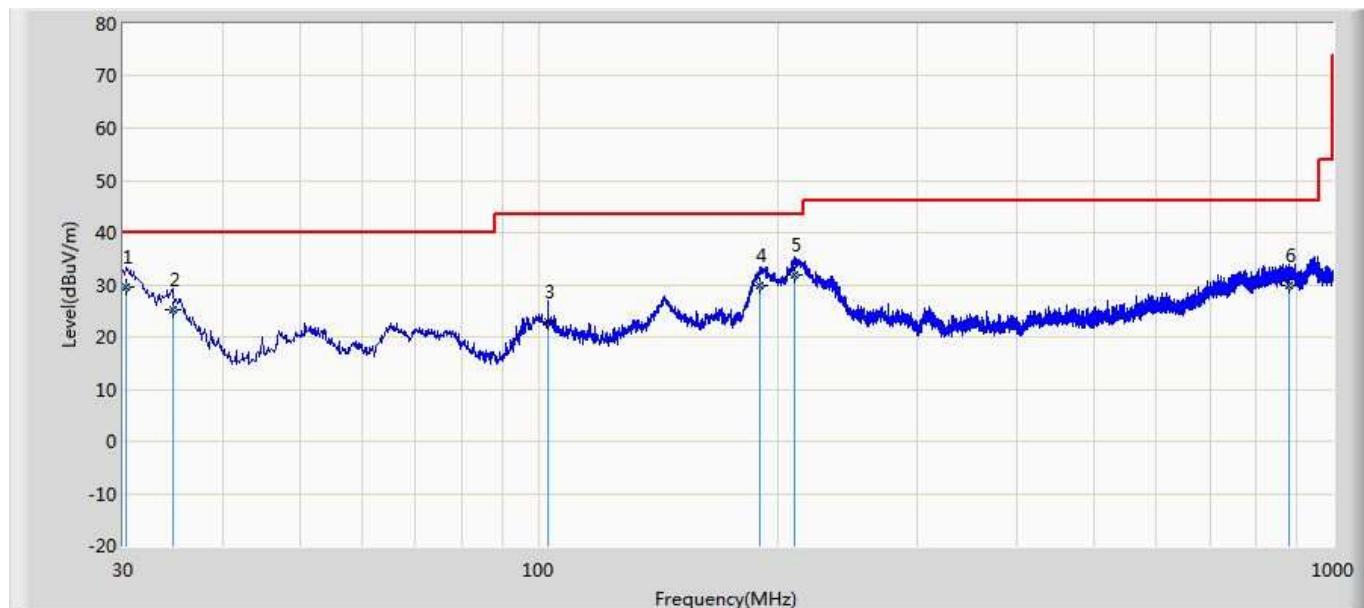


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		30.364	23.301	-4.458	-16.699	40.000	27.759	103	69	QP
2		33.880	21.428	-4.533	-18.572	40.000	25.961	100	147	QP
3	*	187.261	28.125	10.827	-15.375	43.500	17.298	115	307	QP
4		198.295	27.248	9.549	-16.252	43.500	17.699	119	67	QP
5		338.217	25.568	2.565	-20.432	46.000	23.003	101	261	QP
6		925.431	28.484	-3.864	-17.516	46.000	32.348	126	43	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.

Engineer: Simon	
Site: AC3	Time: 2019/08/20 - 22:27
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Vertical
EUT: LED Lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit by BT5.0 - Diodes	

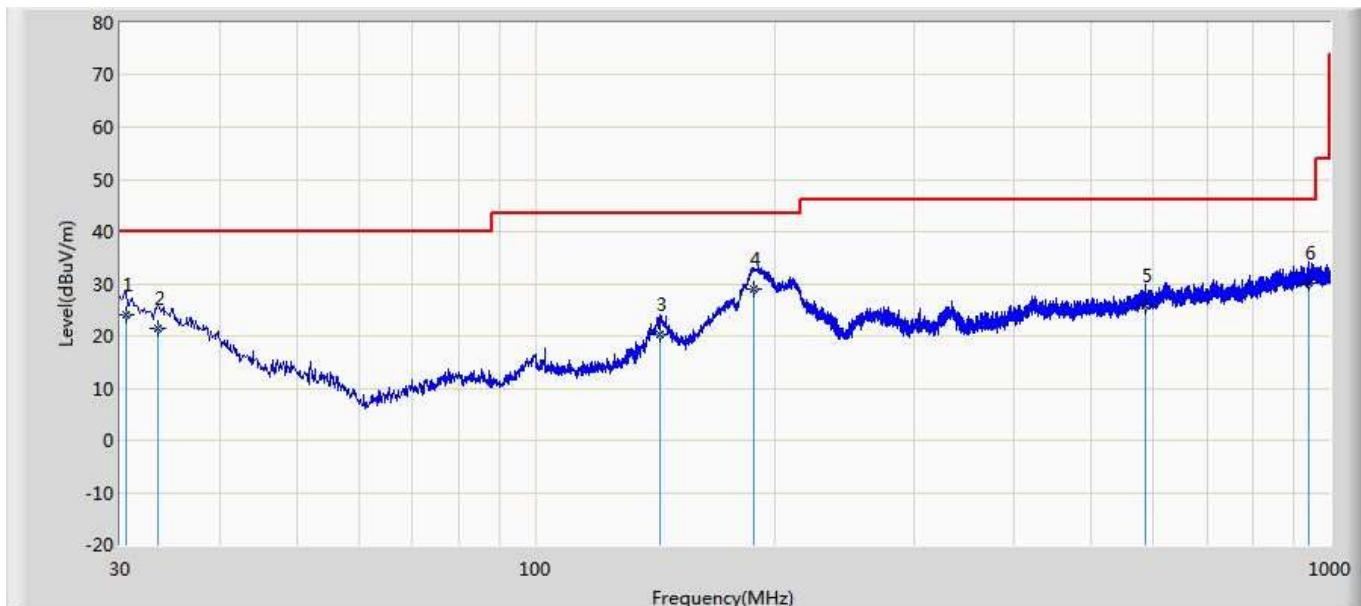


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1	*	30.243	29.651	5.624	-10.349	40.000	24.027	102	36	QP
2		34.607	25.190	2.568	-14.810	40.000	22.622	108	236	QP
3		102.750	22.993	0.917	-20.507	43.500	22.076	106	117	QP
4		190.292	29.875	8.637	-13.625	43.500	21.238	114	51	QP
5		210.056	31.985	8.637	-11.515	43.500	23.348	100	304	QP
6		879.114	29.784	-3.027	-16.216	46.000	32.811	134	27	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).

Engineer: Simon	
Site: AC3	Time: 2019/08/20 - 22:30
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Horizontal
EUT: LED Lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit by BT5.0 - Diodes	



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		30.485	24.045	-3.642	-15.955	40.000	27.687	102	63	QP
2		33.516	21.581	-4.539	-18.419	40.000	26.120	100	218	QP
3		143.611	20.156	2.634	-23.344	43.500	17.522	104	64	QP
4	*	188.110	28.890	11.639	-14.610	43.500	17.251	109	227	QP
5		586.416	25.730	-2.637	-20.270	46.000	28.367	117	302	QP
6		939.860	30.175	-2.049	-15.825	46.000	32.224	107	113	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

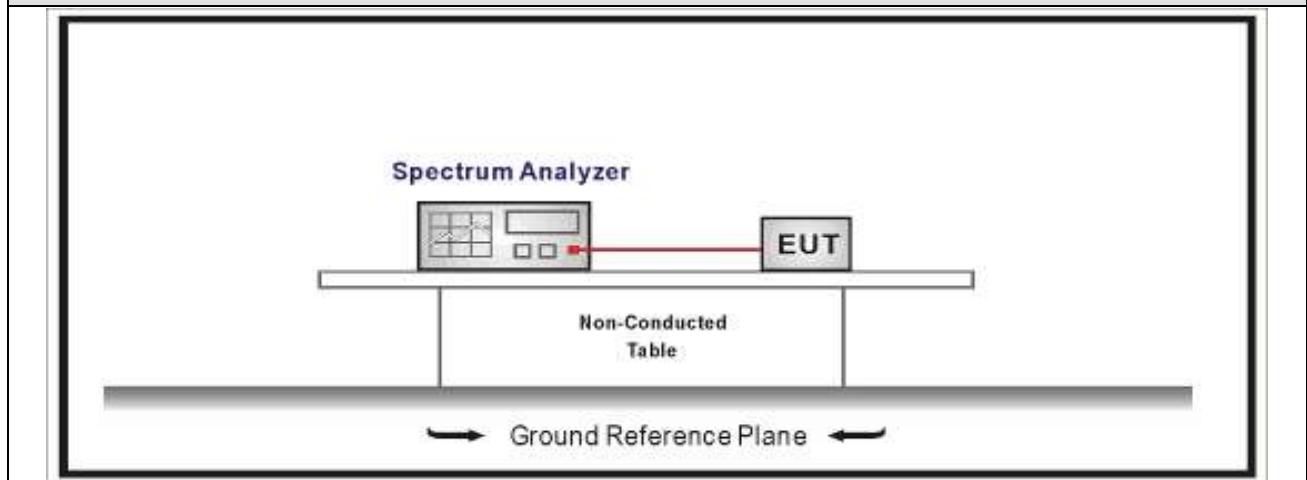
### 5.1. Test Equipment

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	2019.04.09	2020.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2019.04.09	2020.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2019.04.10	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)

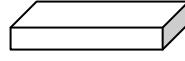
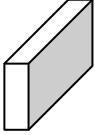
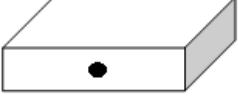
Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).

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).

## 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
				

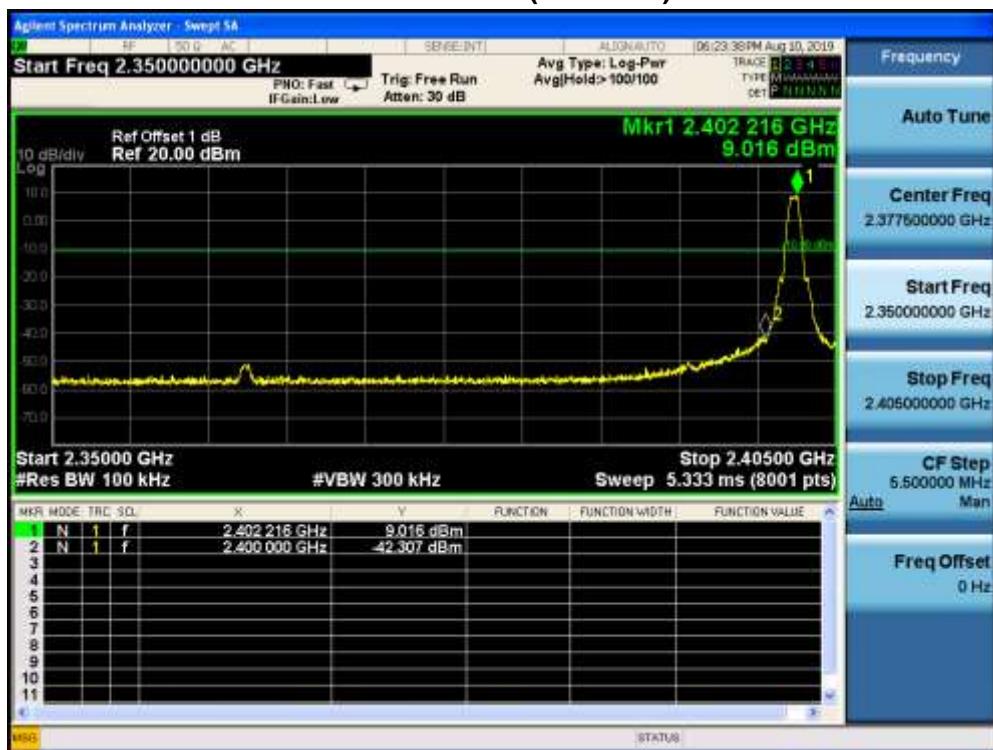
## 5.6. Test Result

Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 1	Test Site	:	TR-8
Test Date	:	2019.08.15	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	9.016	2400.00	-42.307	51.323	>20	Pass
1	39	2480	9.121	2500.00	-54.687	63.808	>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)

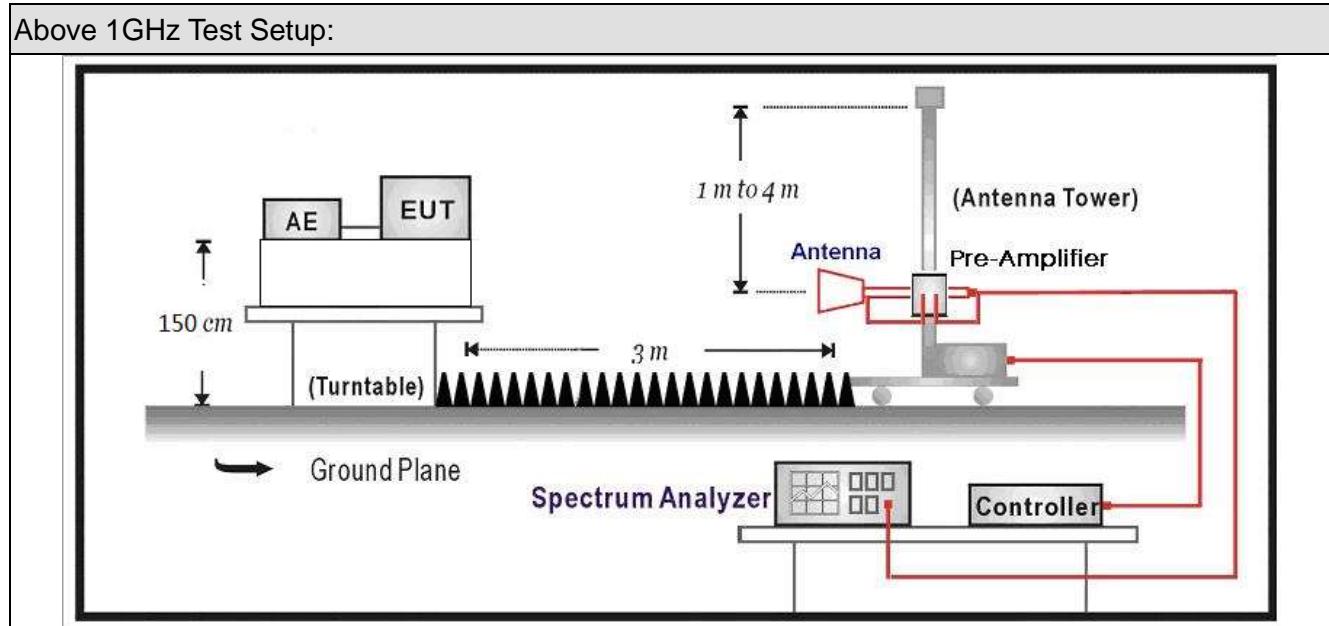


## 6. Radiated Emission Band Edge

### 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	2019.07.16	2020.07.15
Pre-Amplifier	Miteq	NSP1800-25	1364185	2019.05.03	2020.05.02
DRG Horn Antenna	ETS-Lindgren	3117	00167055	2019.07.12	2020.07.11
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

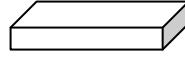
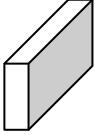
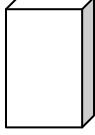
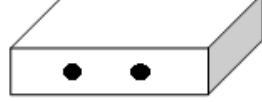
Band edge Limit				
Frequency bands (MHz)	Detector	Limit (dB $\mu$ V/m)	RBW (MHz)	Distance (m)
2310-2390	PK	74	1	3
	AV	54	1	3

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

## 6.4. Test Procedure

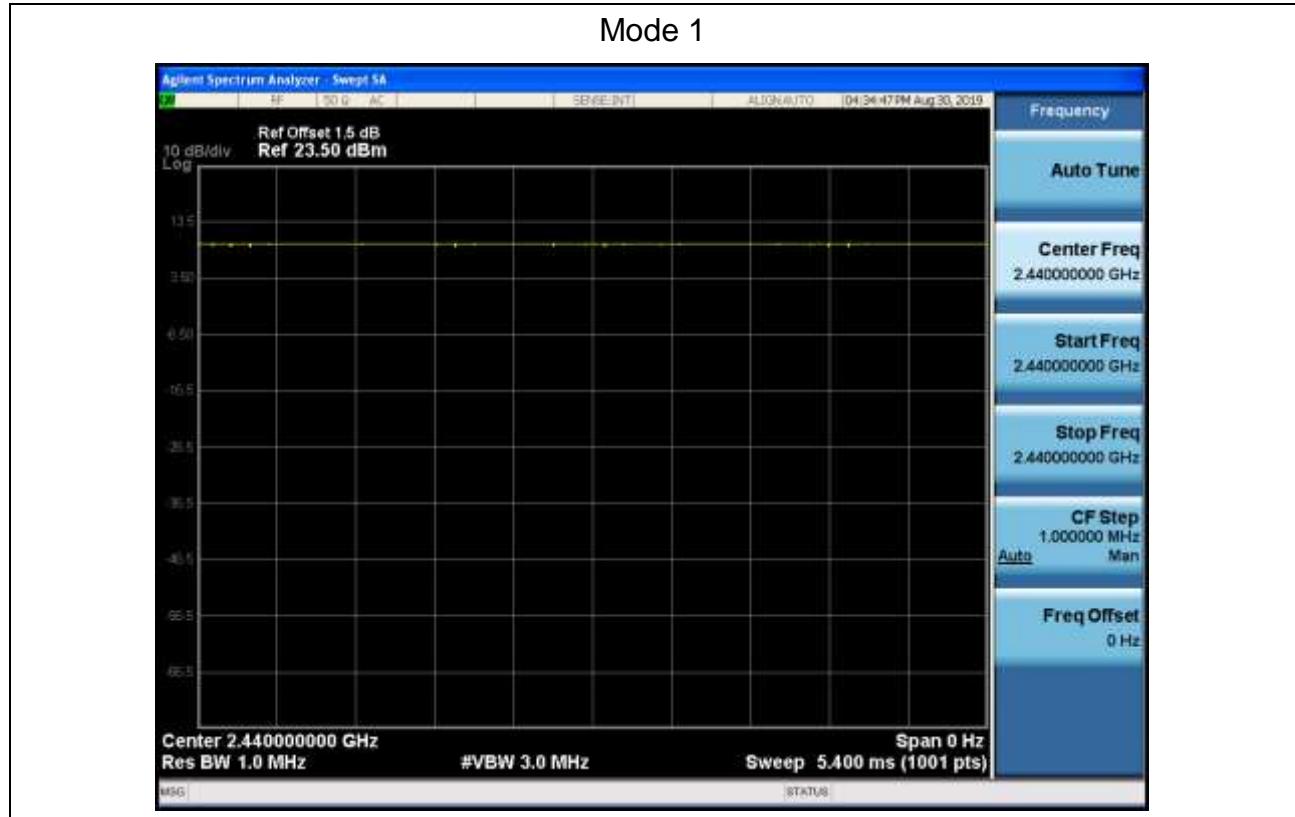
Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	6.10	Band-edge testing
	<input checked="" type="checkbox"/> ANSI C63.10	6.10.5	Restricted-band band-edge measurements
	<input type="checkbox"/> ANSI C63.10	6.10.6	Marker-delta method
<input checked="" 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

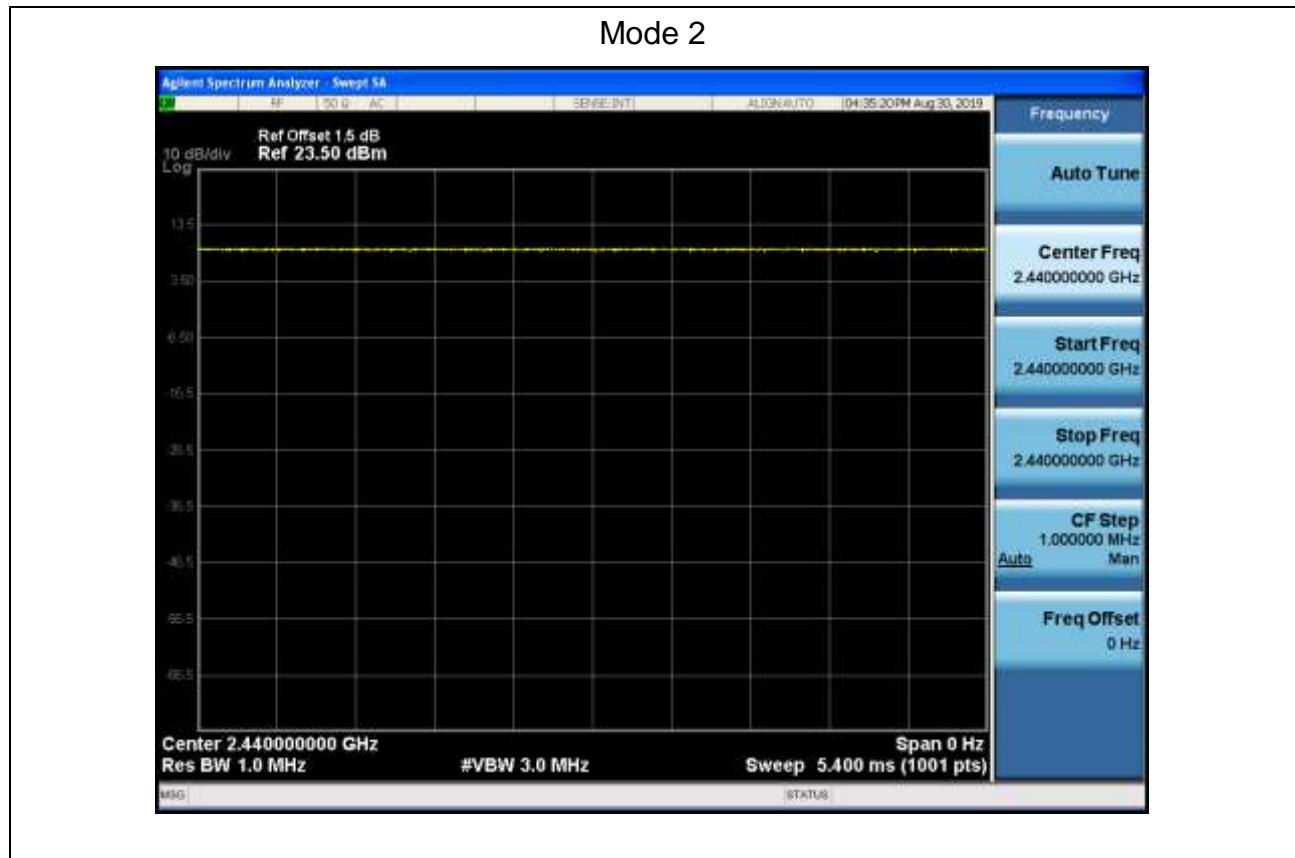
Item	Radiated Emission Band Edge			
Device Category	<input type="checkbox"/>	Fixed point-to-point		
	<input type="checkbox"/>	Emit multiple directional beams, simultaneously or sequentially		
	<input checked="" type="checkbox"/>	Other cases		
Test mode	Mode 1~4			
Test method	<input checked="" type="checkbox"/>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

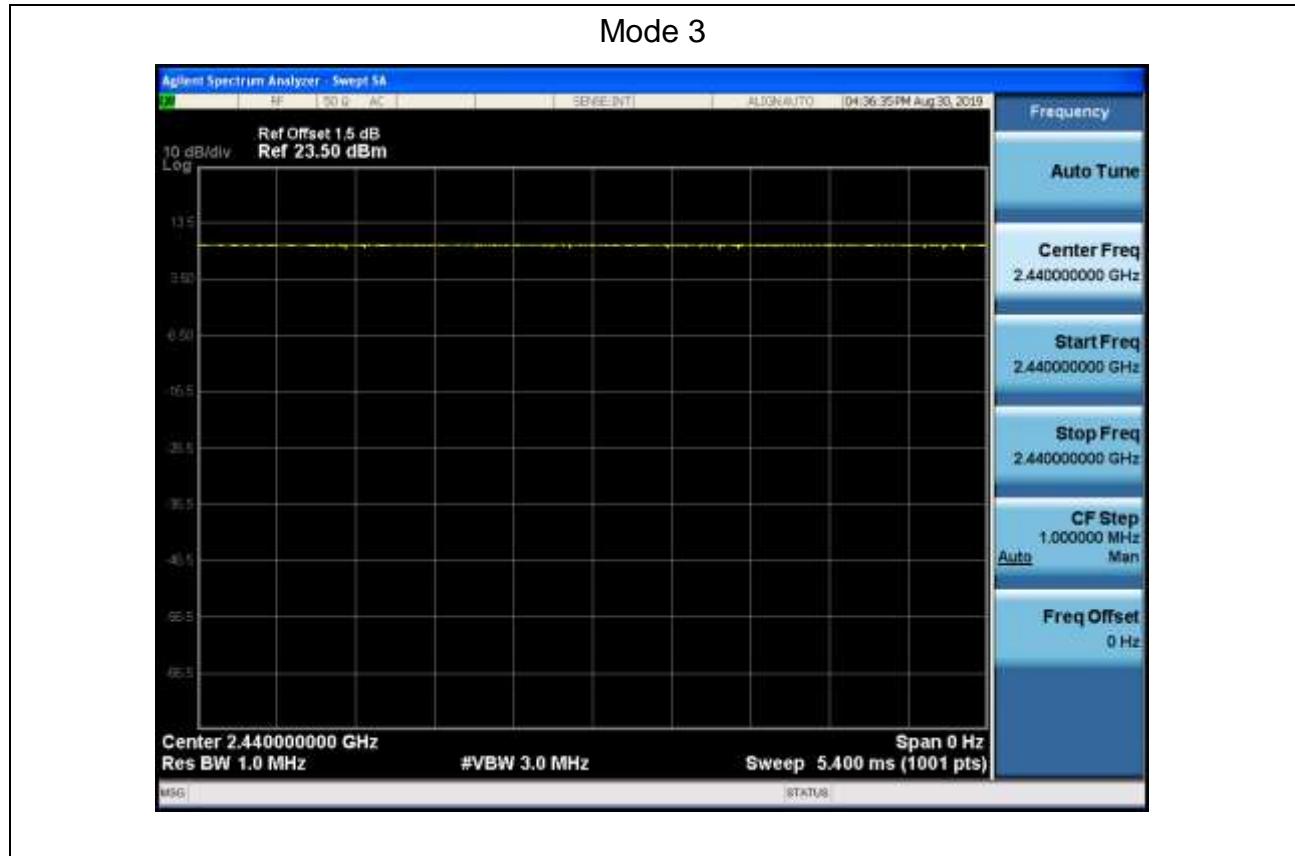
Test Mode	Tx On (ms)	Tx Off (ms)	Reduced VBW (Hz)	Tx On + Tx Off (ms)	Duty Cycle
Mode 1	N/A	N/A	10	N/A	100%



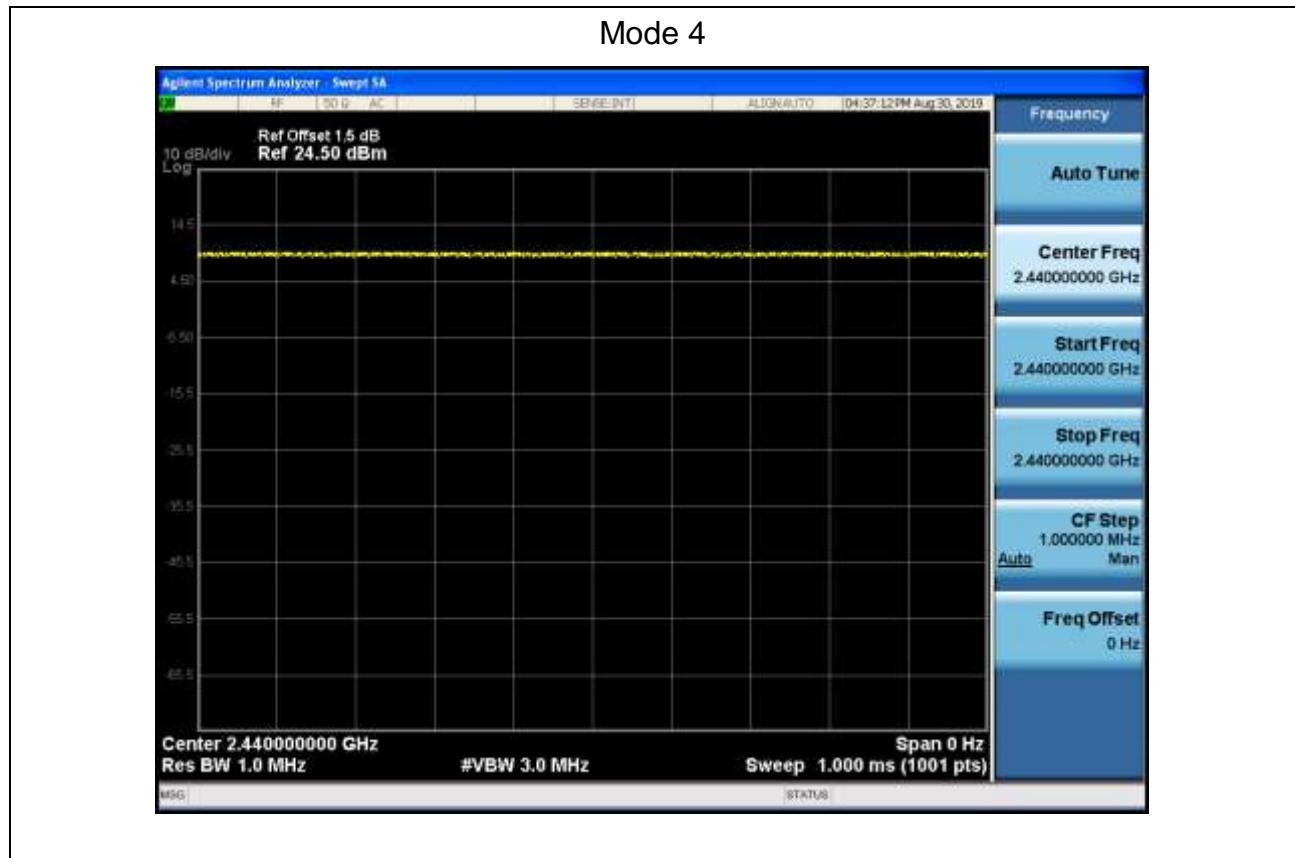
Test Mode	Tx On (ms)	Tx Off (ms)	Reduced VBW (Hz)	Tx On + Tx Off (ms)	Duty Cycle
Mode 2	N/A	N/A	10	N/A	100%



Test Mode	Tx On (ms)	Tx Off (ms)	Reduced VBW (Hz)	Tx On + Tx Off (ms)	Duty Cycle
Mode 3	N/A	N/A	10	N/A	100%



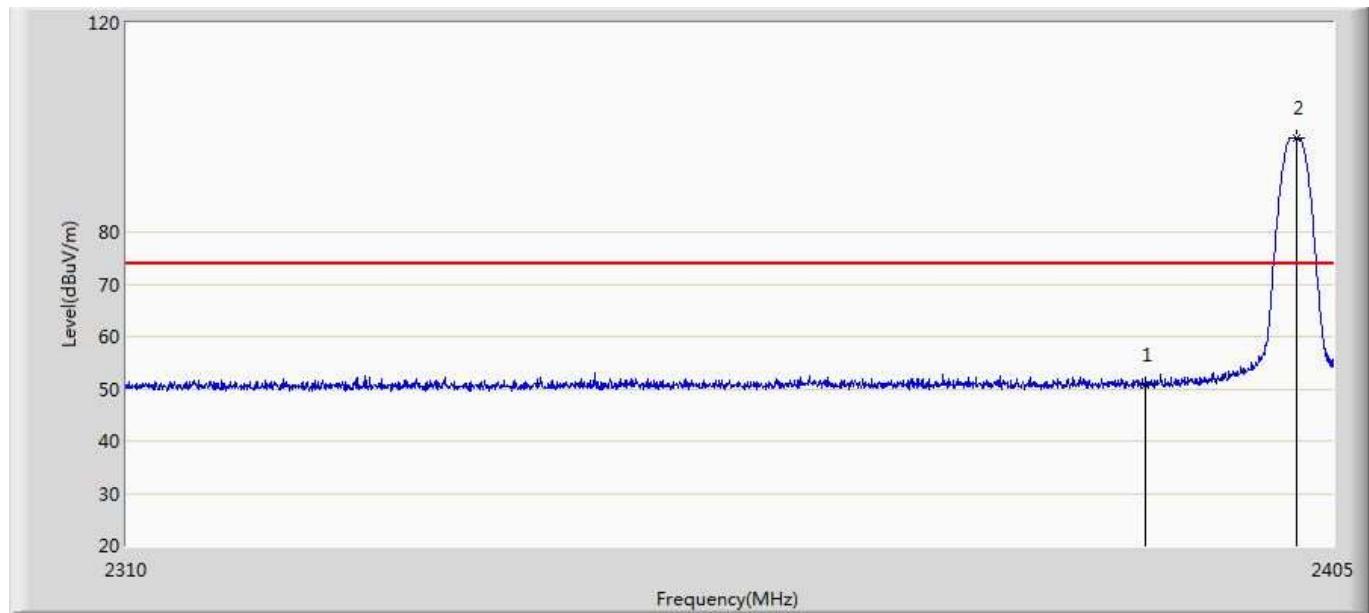
Test Mode	Tx On (ms)	Tx Off (ms)	Reduced VBW (Hz)	Tx On + Tx Off (ms)	Duty Cycle
Mode 4	N/A	N/A	10	N/A	100%



## 6.7. Test Result

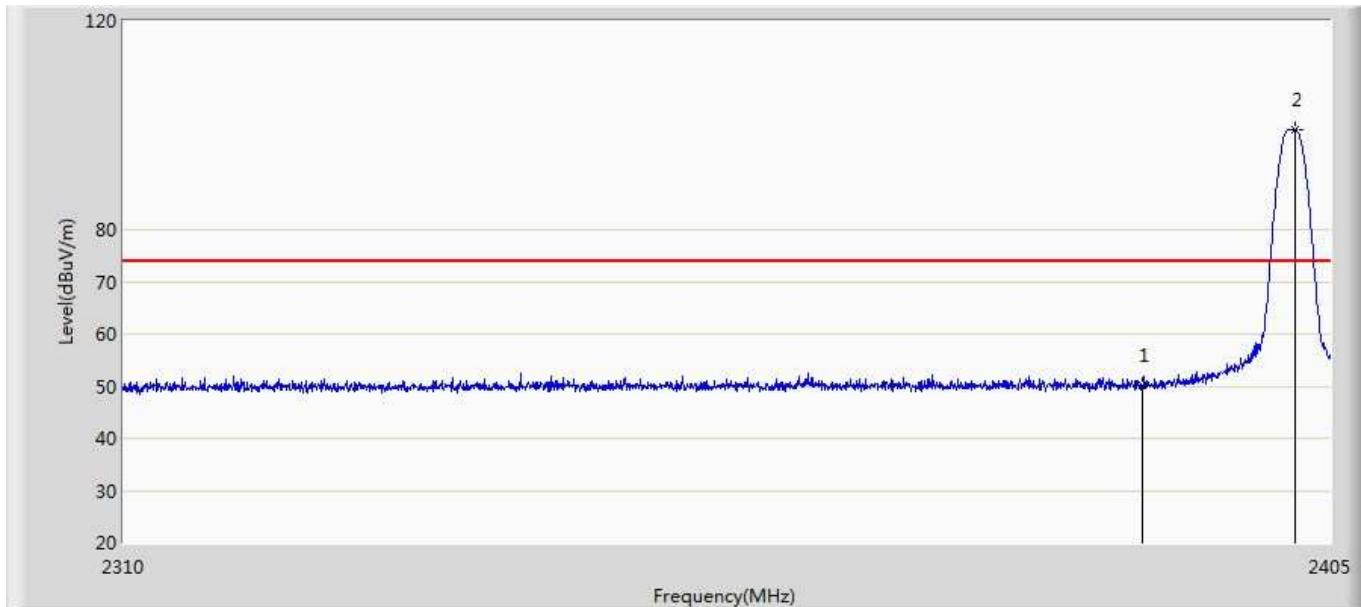
**Muruta:**

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:41
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 1:Transmit at 2402MHz by LE_1Mbps	



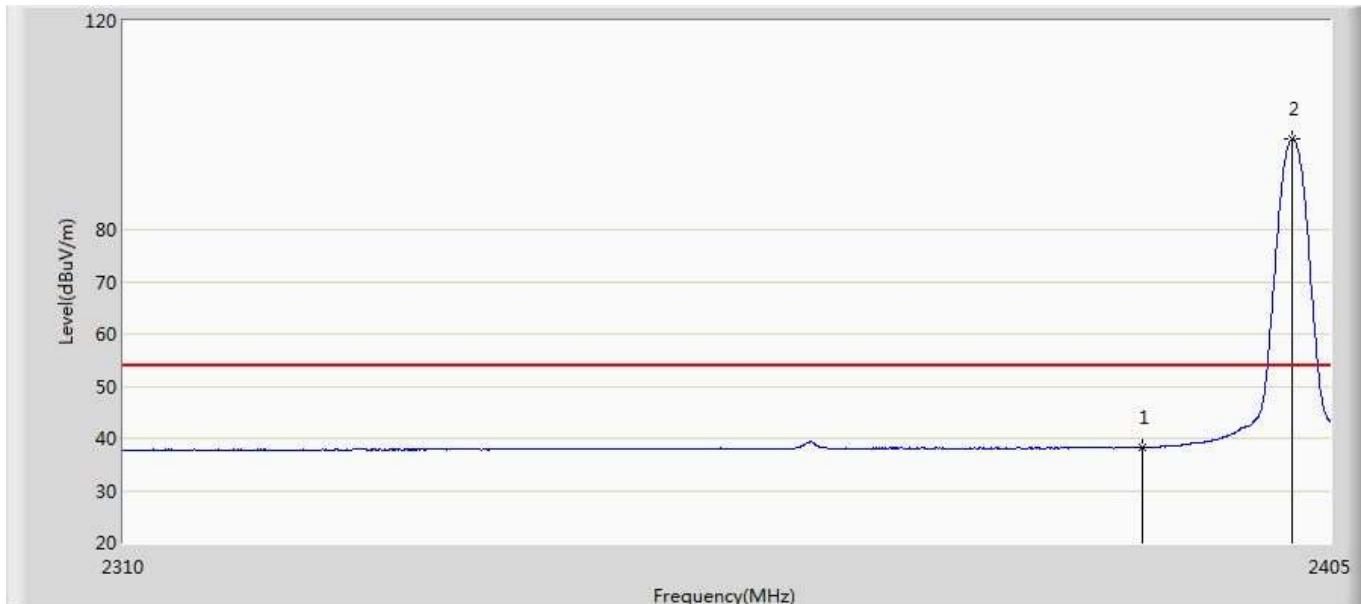
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.689	15.007	-23.311	74.000	35.682	PK
2	*	2402.055	97.932	62.219	23.932	74.000	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:34
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 1:Transmit at 2402MHz by LE_1Mbps	



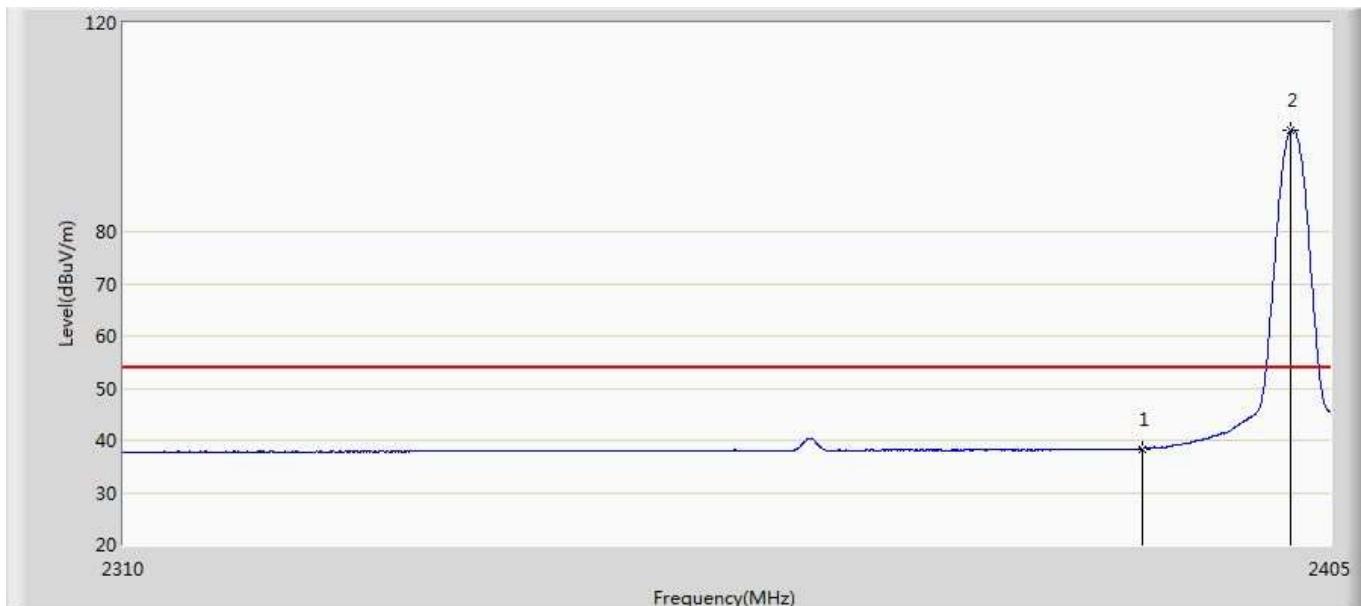
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.052	14.370	-23.948	74.000	35.682	PK
2	*	2402.198	99.197	63.484	25.197	74.000	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:45
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 LE_1Mbps	



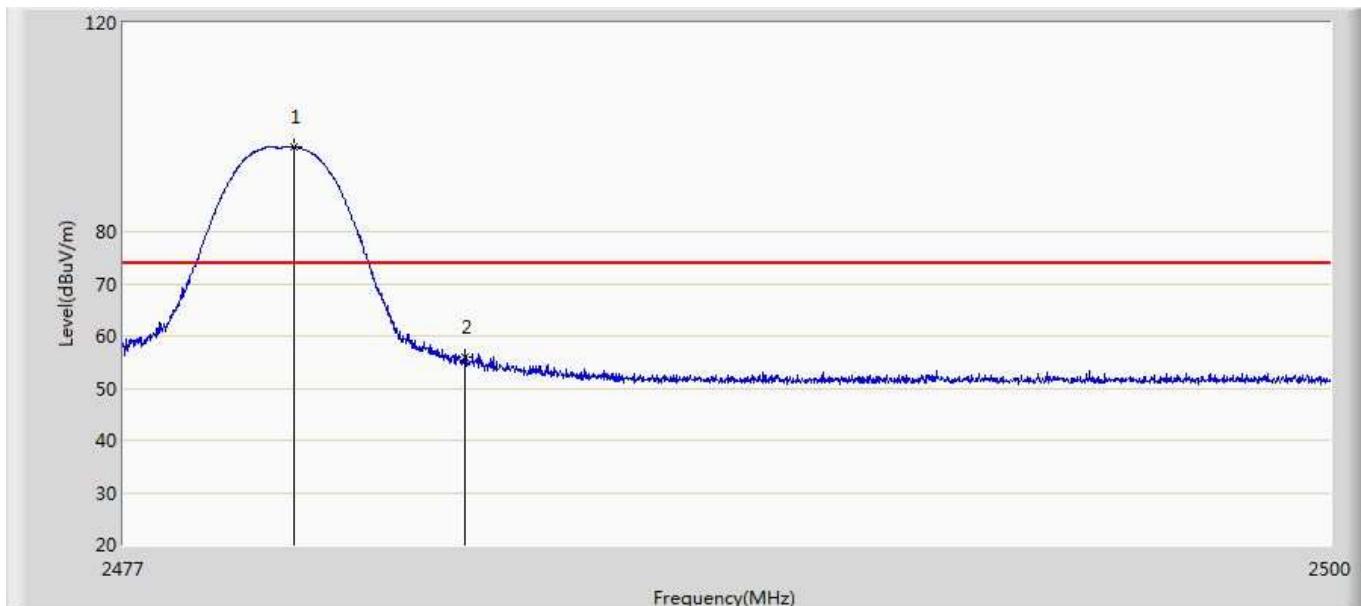
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.263	2.581	-15.737	54.000	35.682	AV
2	*	2401.913	97.287	61.575	43.287	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:43
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 1:Transmit at 2402MHz by LE_1Mbps	



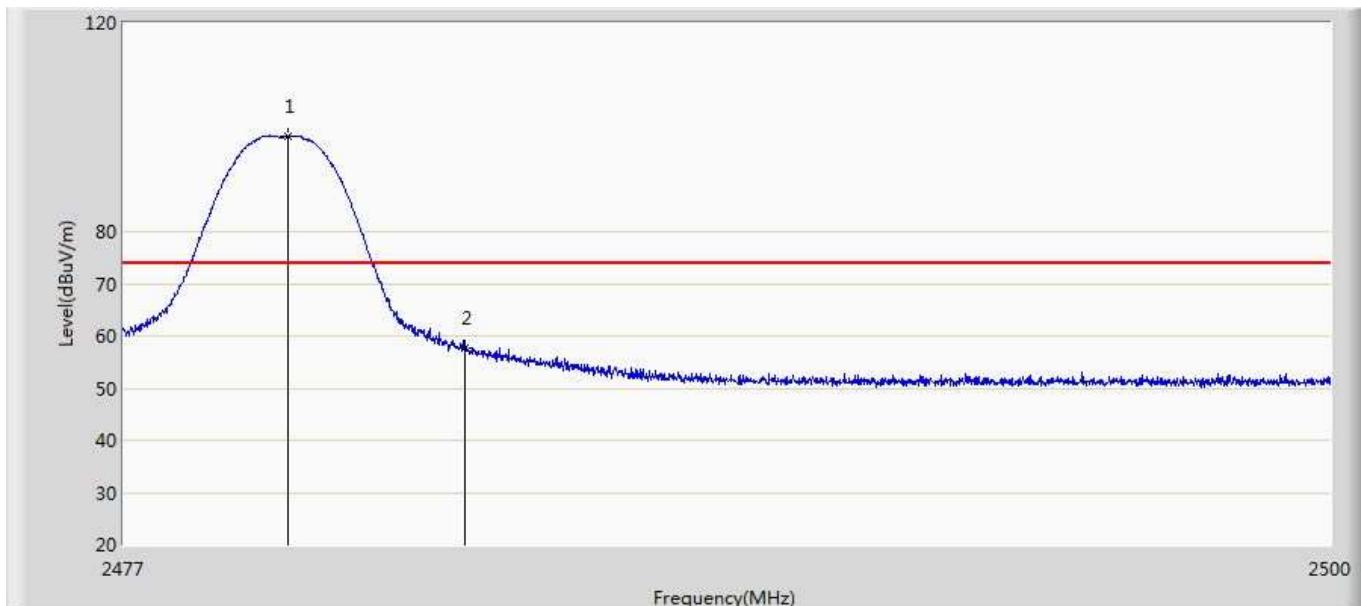
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.364	2.682	-15.636	54.000	35.682	AV
2	*	2401.865	99.377	63.665	45.377	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 15:23
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 LE_1Mbps	



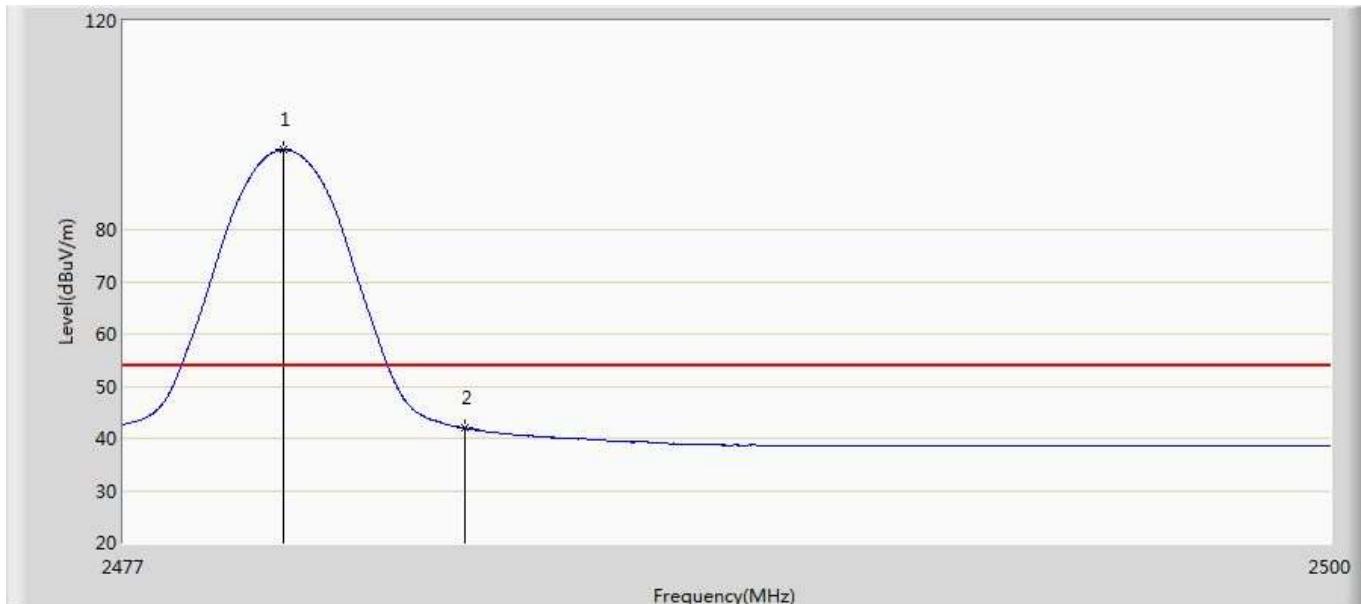
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.254	96.317	60.449	22.317	74.000	35.868	PK
2		2483.500	55.863	19.971	-18.137	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 15:31
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 LE_1Mbps	



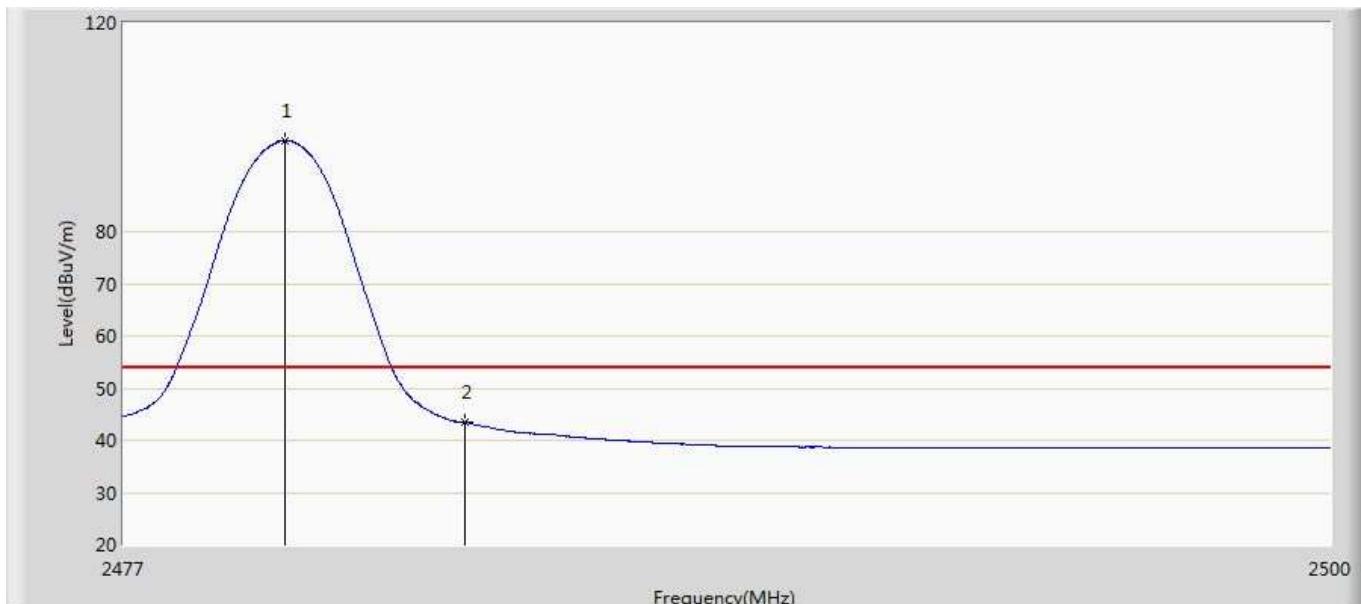
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.139	98.259	62.392	24.259	74.000	35.867	PK
2		2483.500	57.716	21.824	-16.284	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 15:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



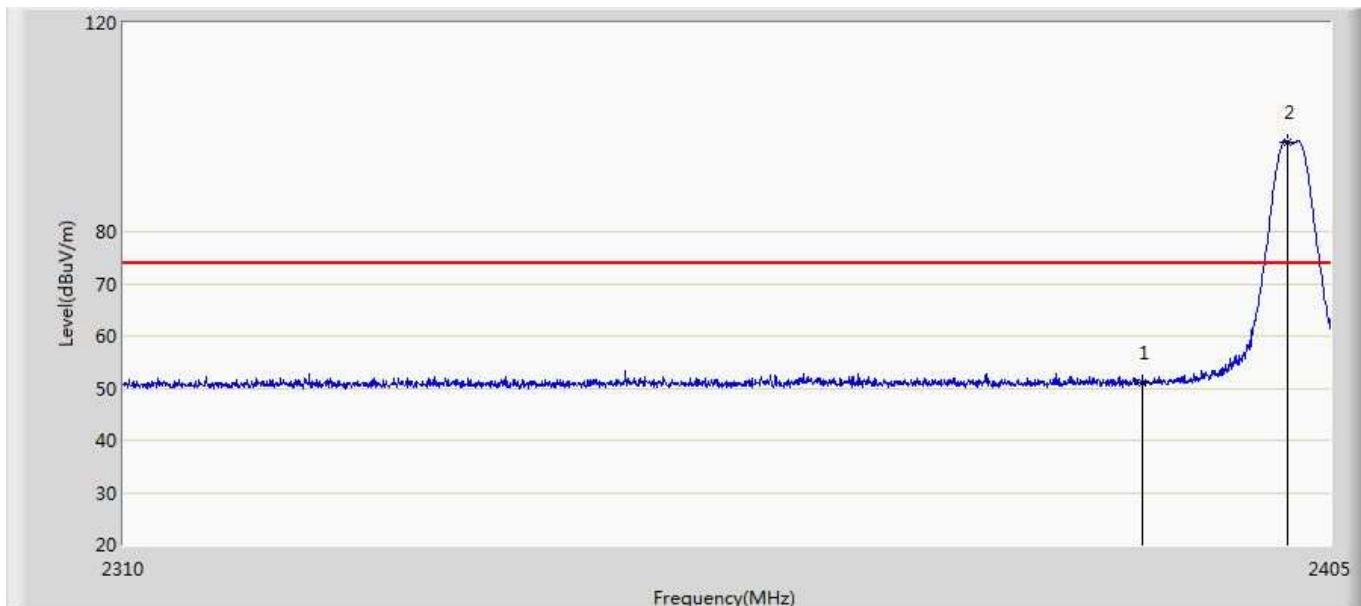
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.048	95.316	59.449	41.316	54.000	35.866	AV
2		2483.500	41.938	6.046	-12.062	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 15:34
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 1:Transmit at 2480MHz by LE_1Mbps	



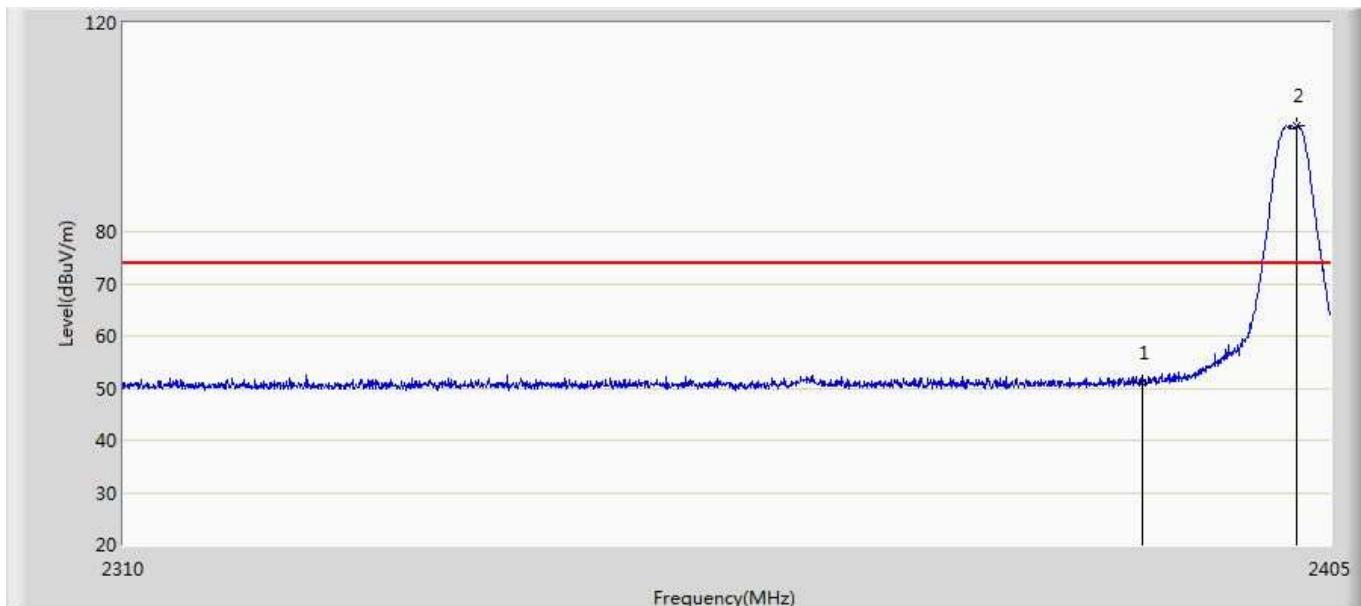
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.071	97.402	61.535	43.402	54.000	35.867	AV
2		2483.500	43.370	7.478	-10.630	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/17 - 18:05
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 2:Transmit at 2402MHz by LE_2Mbps	



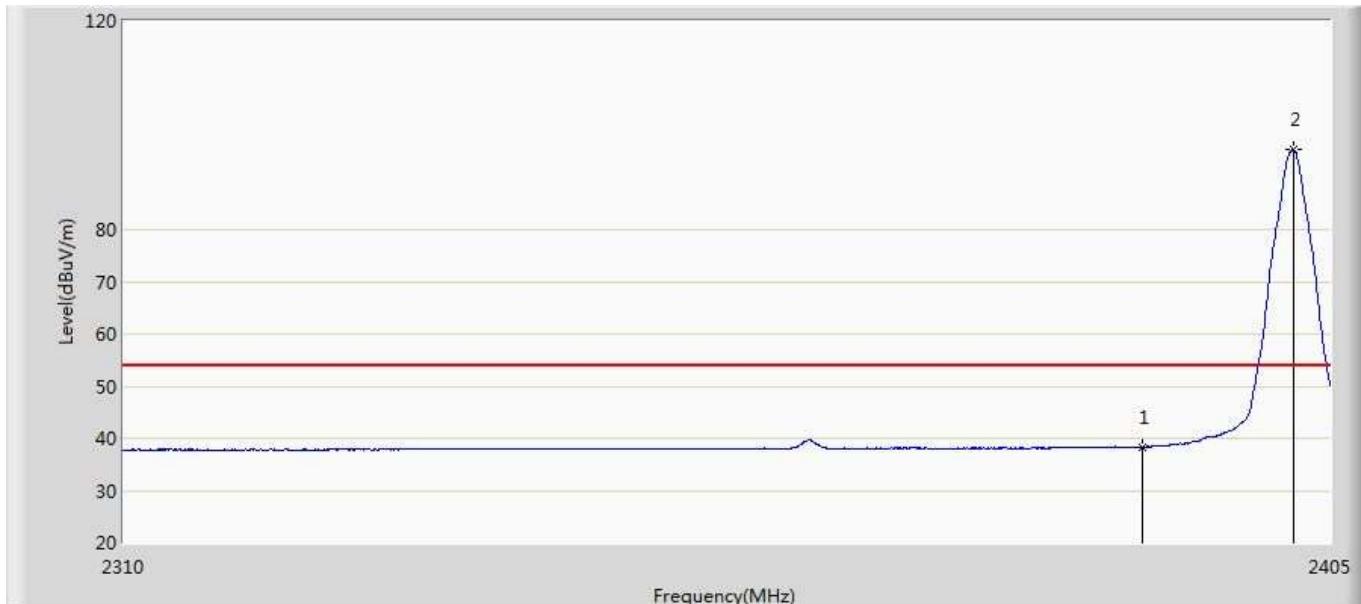
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.051	15.369	-22.949	74.000	35.682	PK
2	*	2401.627	97.085	61.373	23.085	74.000	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 13:51
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 LE_2Mbps	



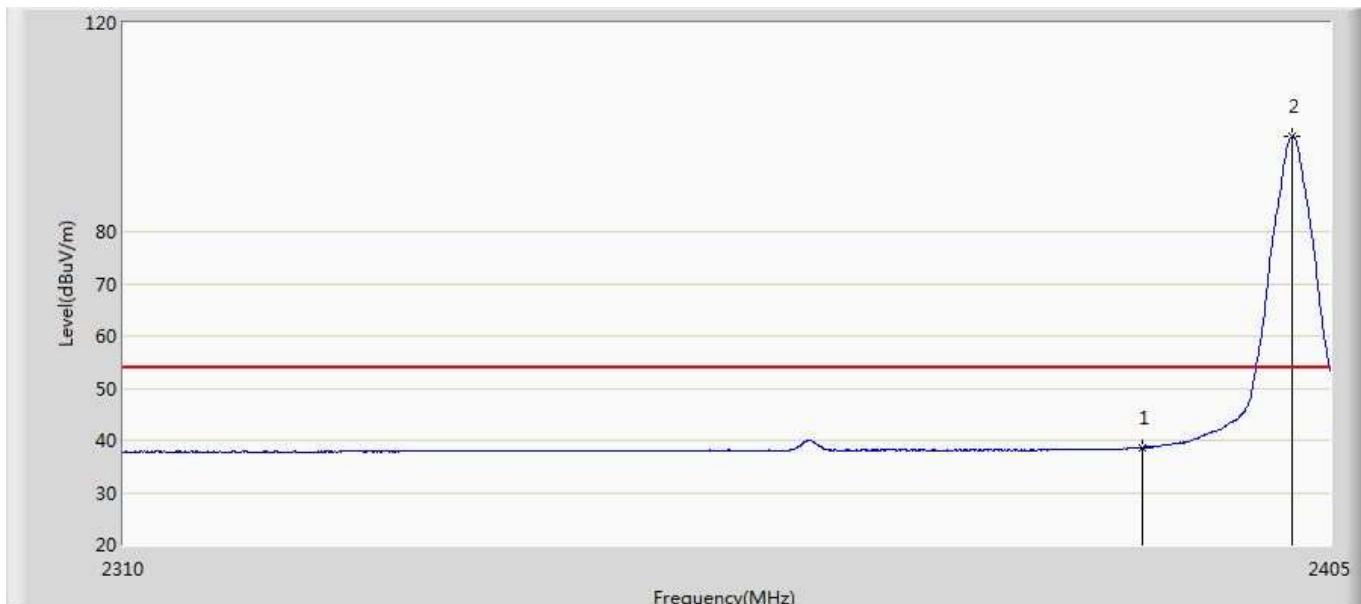
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.041	15.359	-22.959	74.000	35.682	PK
2	*	2402.340	100.312	64.598	26.312	74.000	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 13:57
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 2:Transmit at 2402MHz by LE_2Mbps	



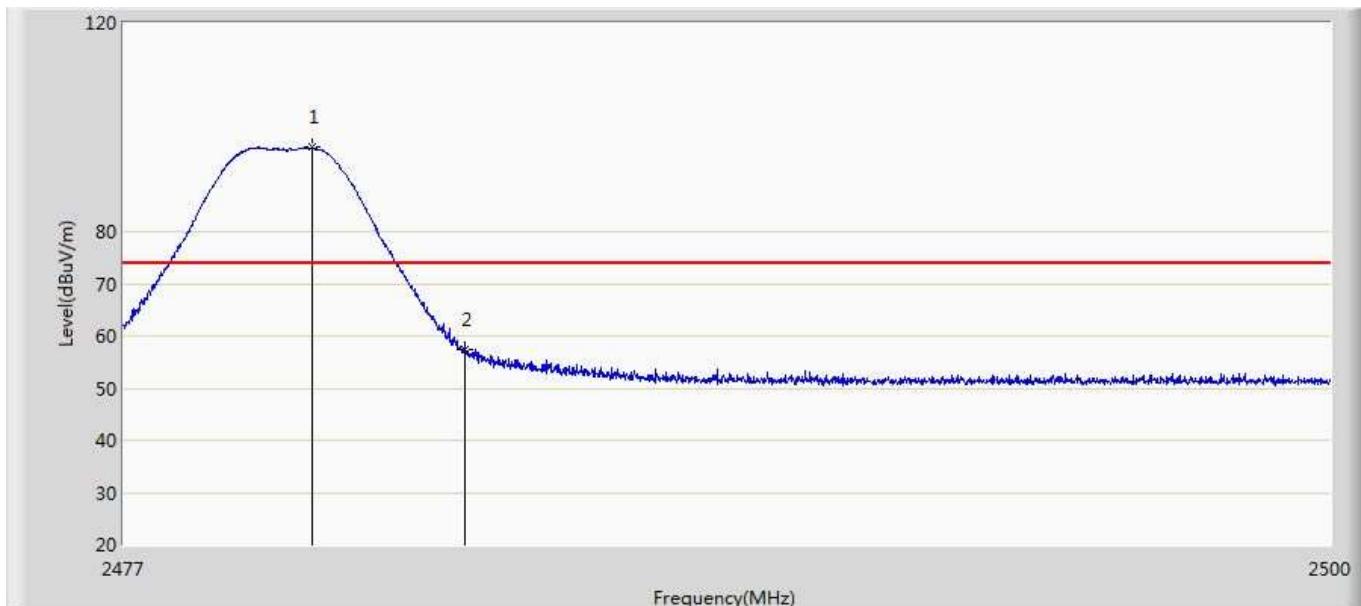
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.311	2.629	-15.689	54.000	35.682	AV
2	*	2402.055	95.288	59.575	41.288	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 13:59
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 LE_2Mbps	



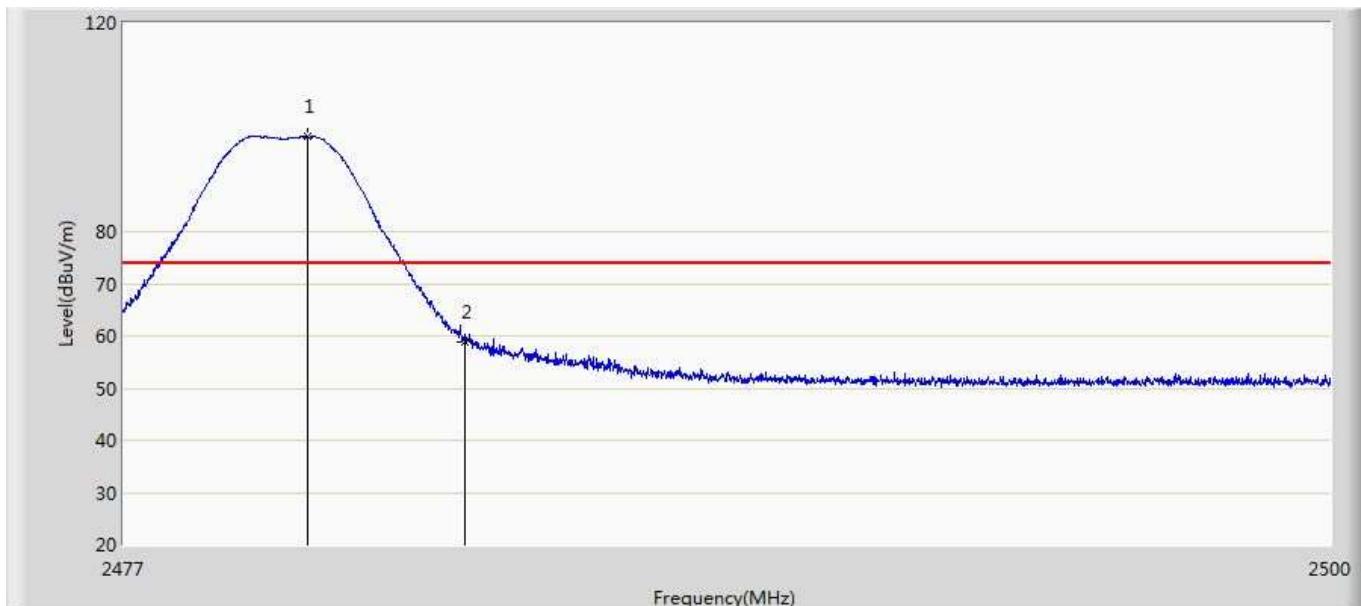
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.598	2.916	-15.402	54.000	35.682	AV
2	*	2401.913	98.183	62.471	44.183	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 15:46
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 LE_2Mbps	



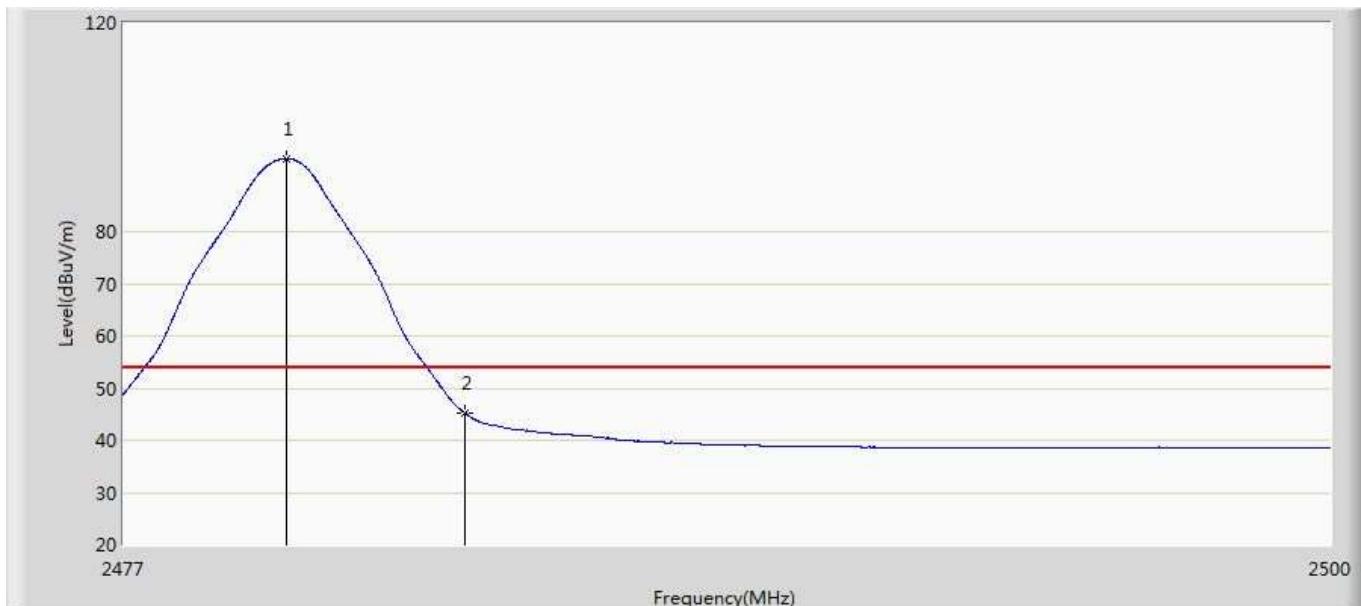
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.576	96.146	60.275	22.146	74.000	35.871	PK
2		2483.500	57.345	21.453	-16.655	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 15:50
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 LE_2Mbps	



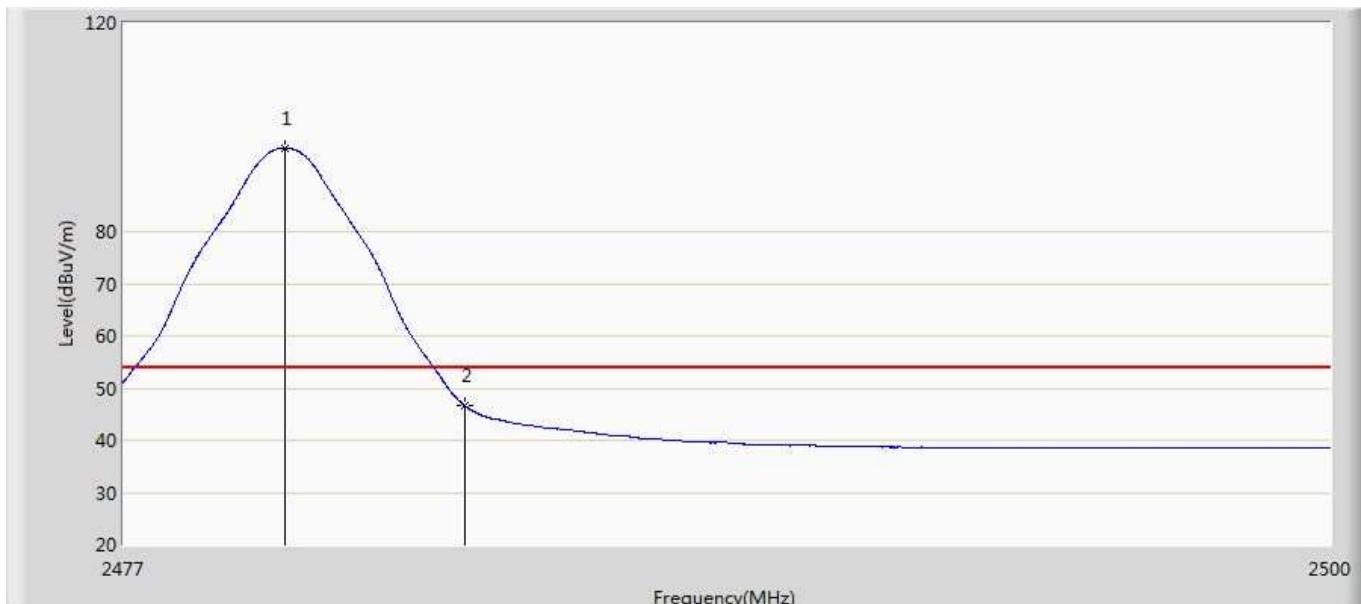
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.496	98.208	62.338	24.208	74.000	35.870	PK
2		2483.500	58.924	23.032	-15.076	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 15:52
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 LE_2Mbps	



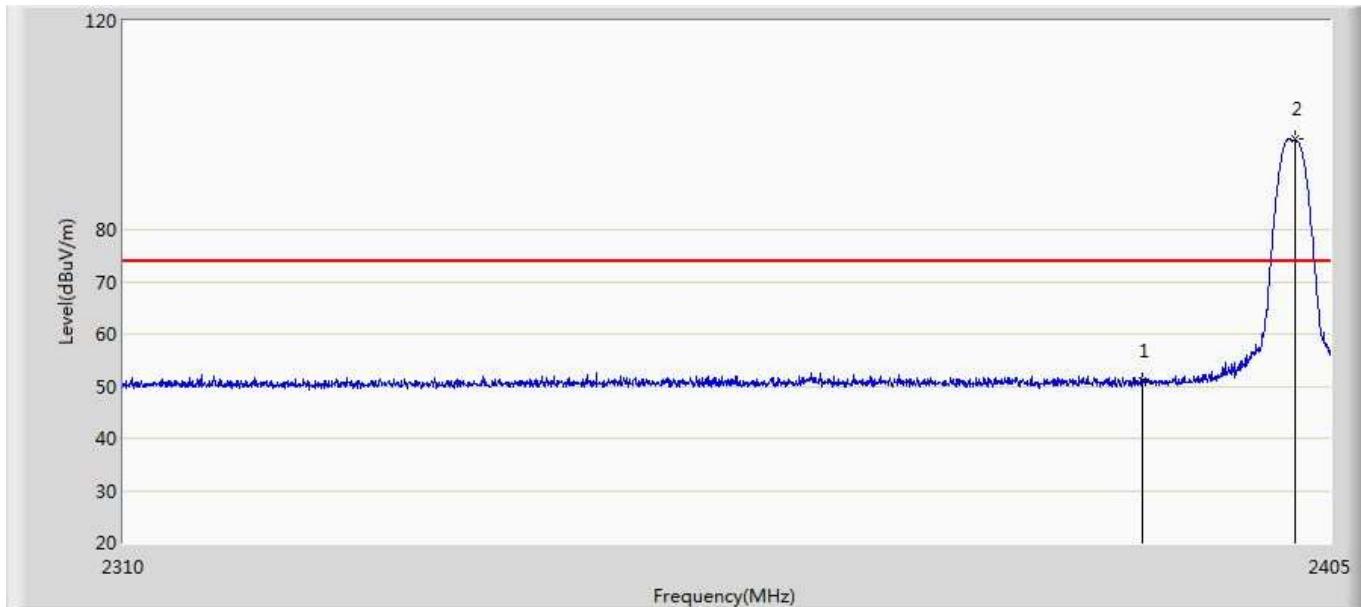
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.105	93.998	58.131	39.998	54.000	35.867	AV
2		2483.500	45.200	9.308	-8.800	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 15:54
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 2:Transmit at 2480MHz by LE_2Mbps	



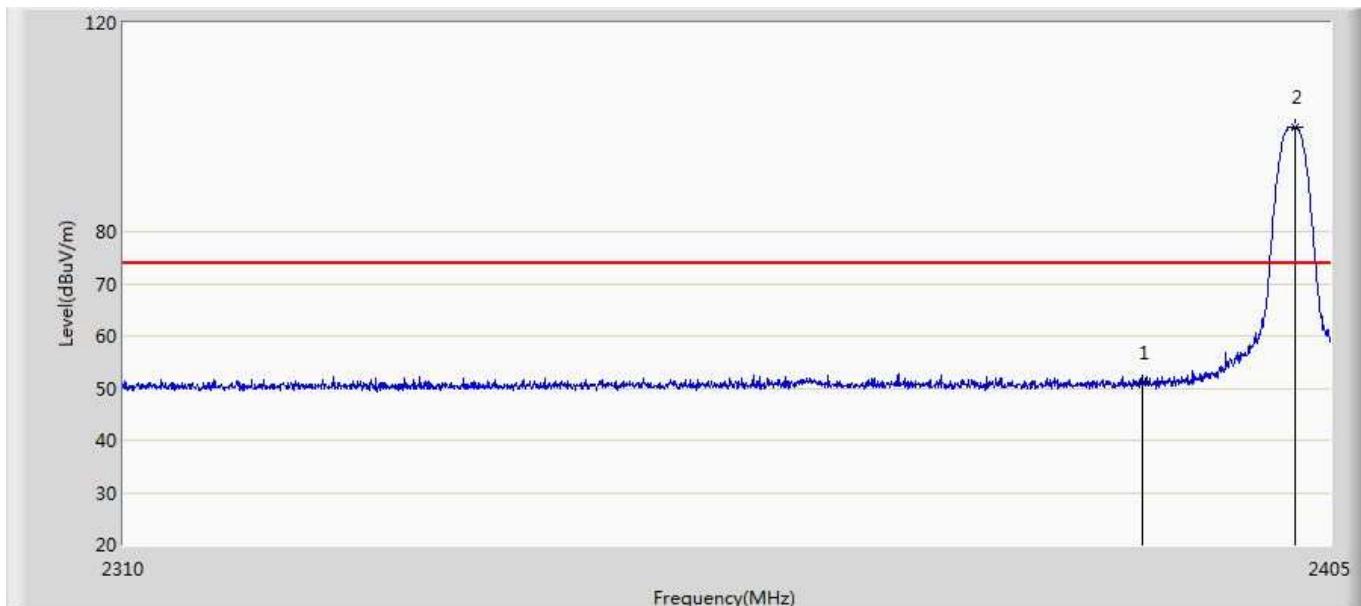
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.071	96.058	60.191	42.058	54.000	35.867	AV
2		2483.500	46.546	10.654	-7.454	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 14:09
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 LE_Coded (S=2)	



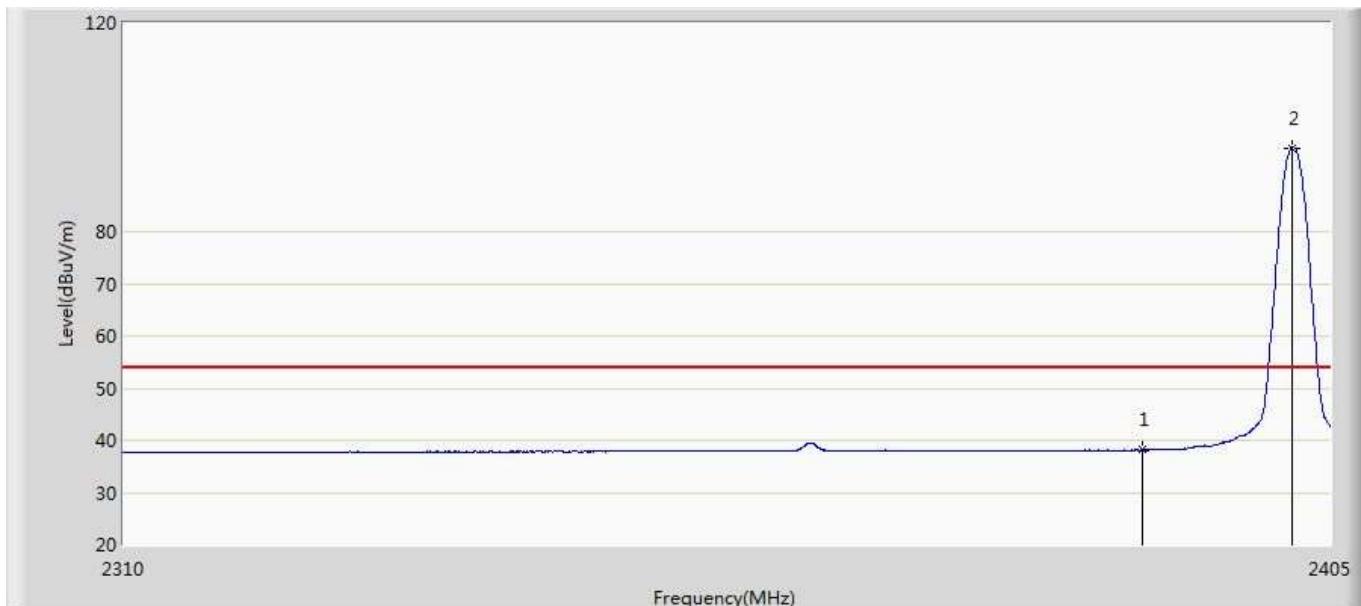
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.104	15.422	-22.896	74.000	35.682	PK
2	*	2402.198	97.264	61.551	23.264	74.000	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 14:11
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 3:Transmit at 2402MHz by LE_Coded (S=2)	



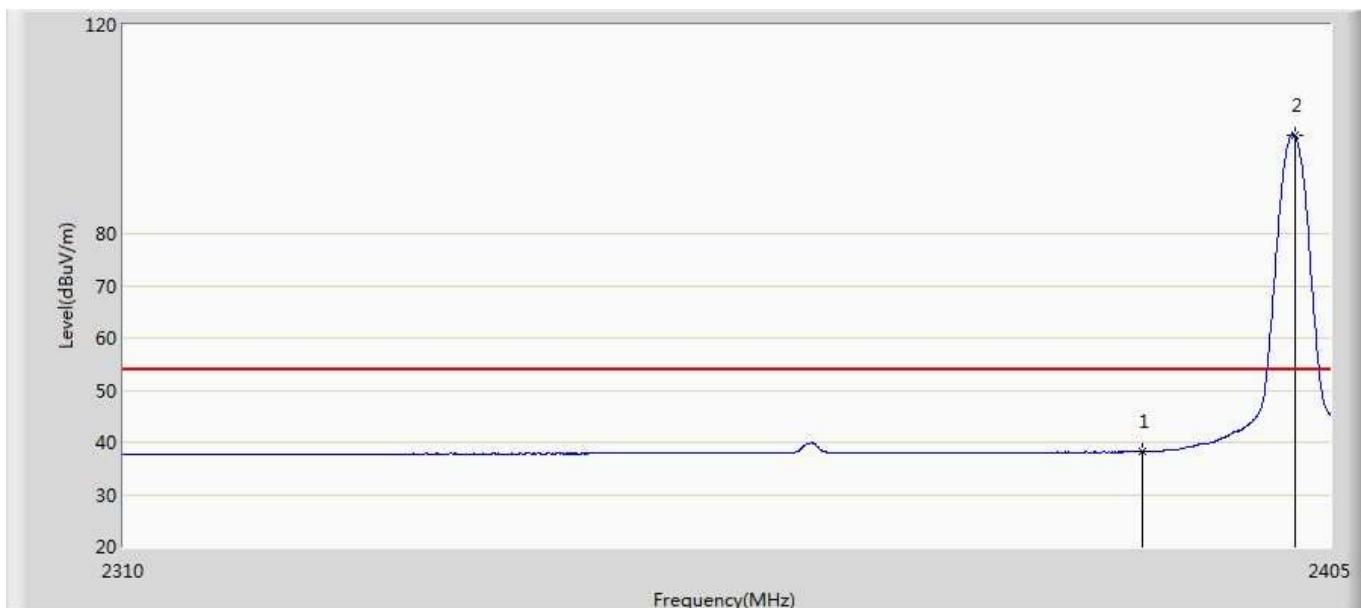
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.089	15.407	-22.911	74.000	35.682	PK
2	*	2402.245	99.983	64.270	25.983	74.000	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 14:13
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 LE_Coded (S=2)	



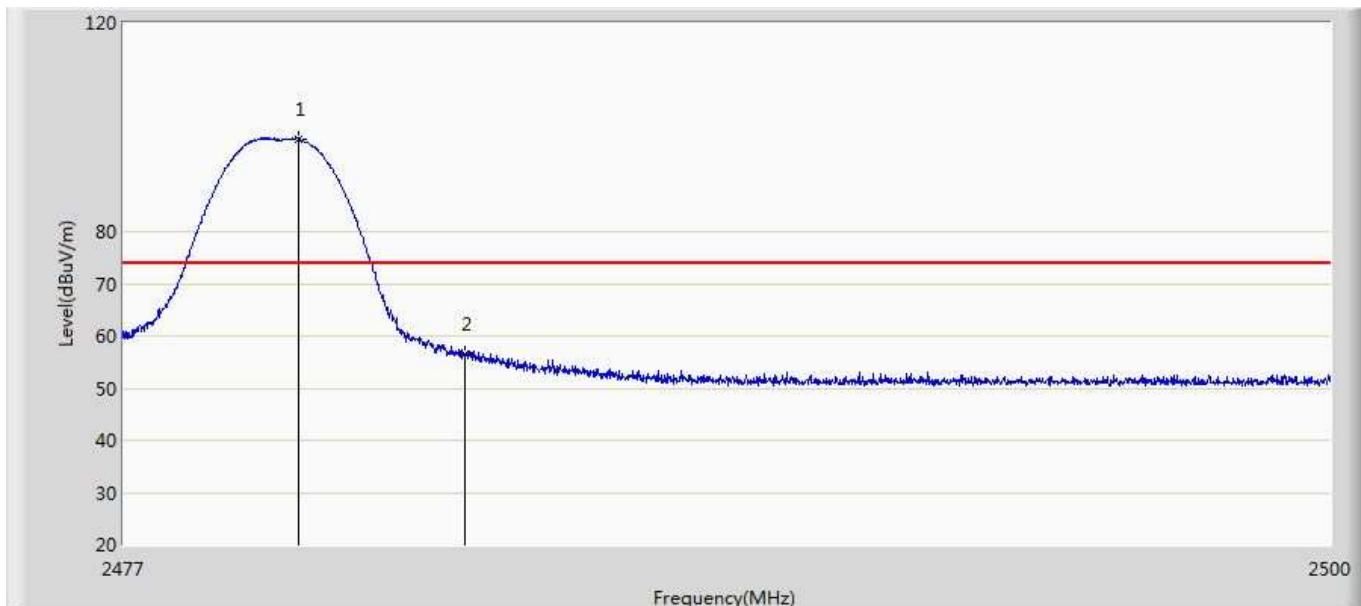
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.131	2.449	-15.869	54.000	35.682	AV
2	*	2401.913	96.012	60.300	42.012	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 14:15
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 LE_Coded (S=2)	



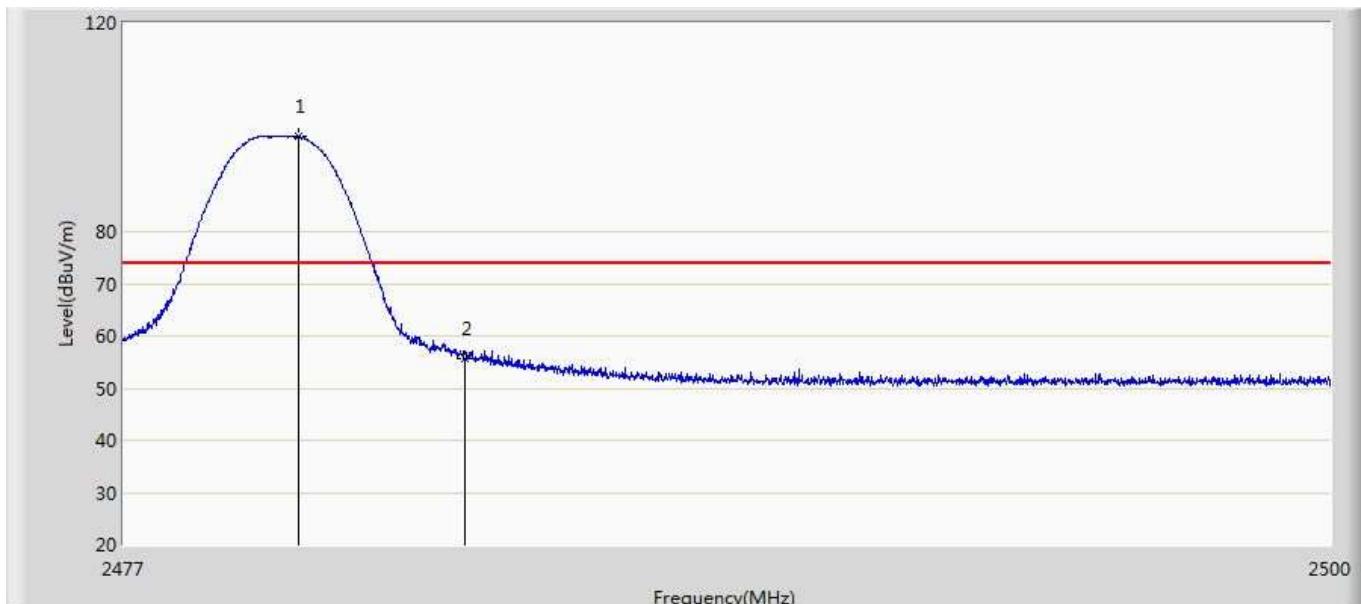
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.179	2.497	-15.821	54.000	35.682	AV
2	*	2402.198	98.773	63.060	44.773	54.000	35.714	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 16:06
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 LE_Coded (S=2)	



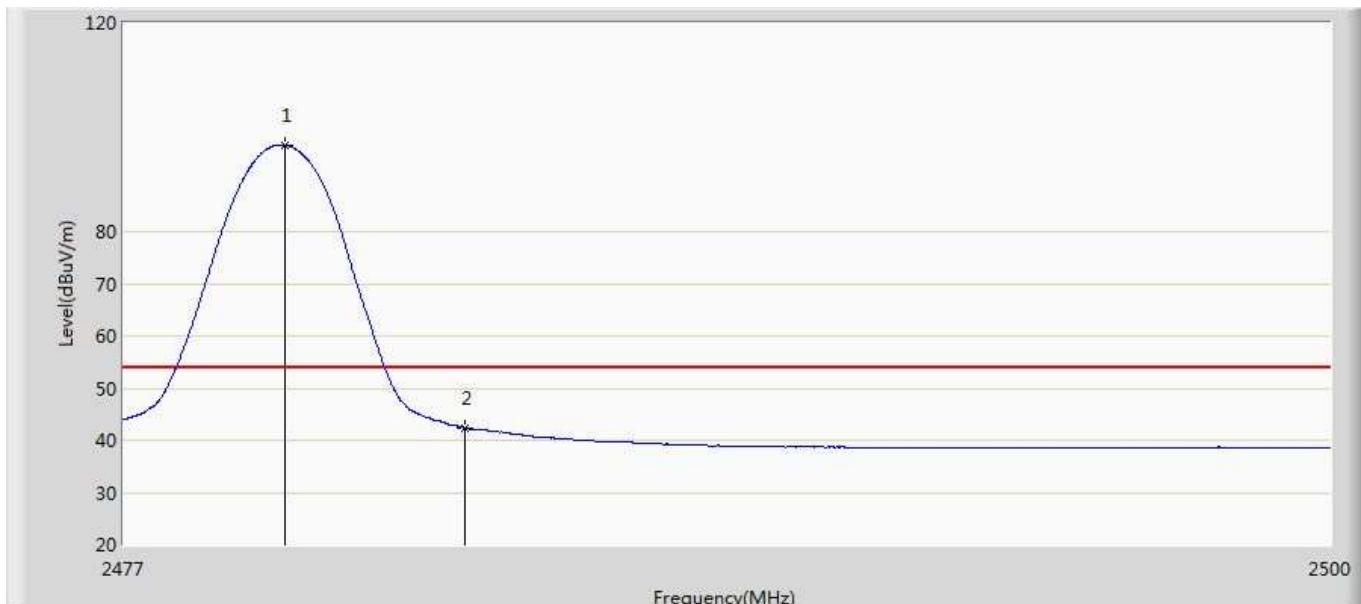
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.323	97.806	61.937	23.806	74.000	35.869	PK
2		2483.500	56.532	20.640	-17.468	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 19:32
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 3:Transmit at 2480MHz by LE_Coded (S=2)	



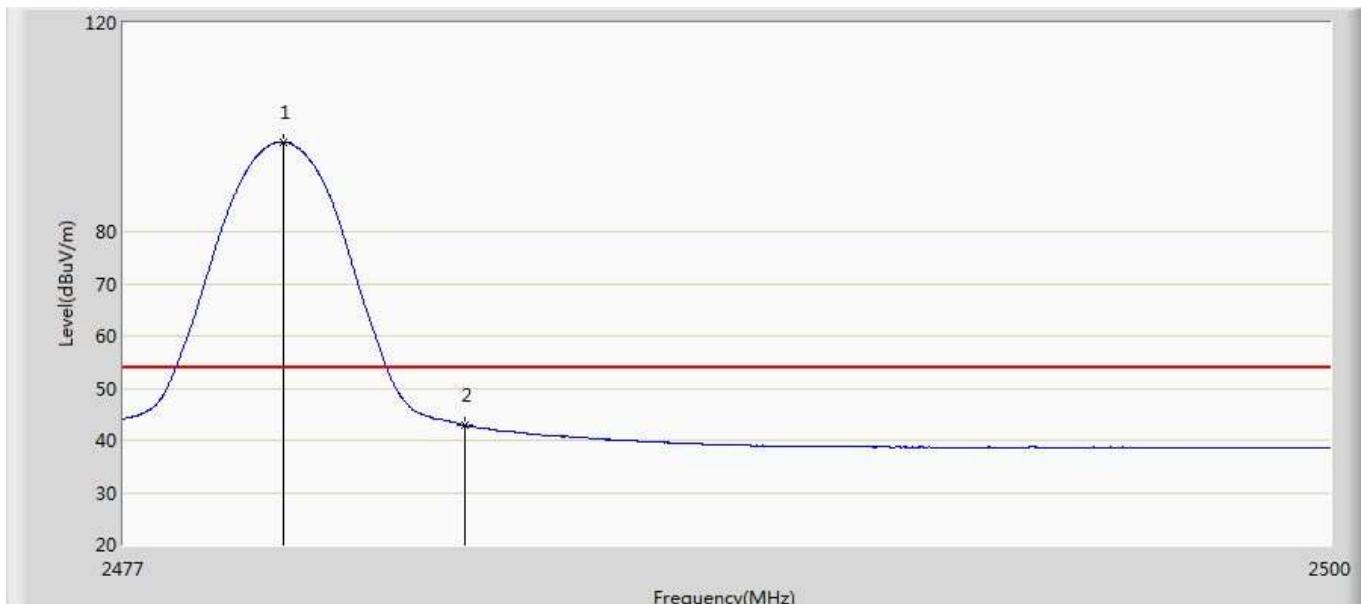
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.323	98.184	62.315	24.184	74.000	35.869	PK
2		2483.500	55.702	19.810	-18.298	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 19:42
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 3:Transmit at 2480MHz by LE_Coded (S=2)	



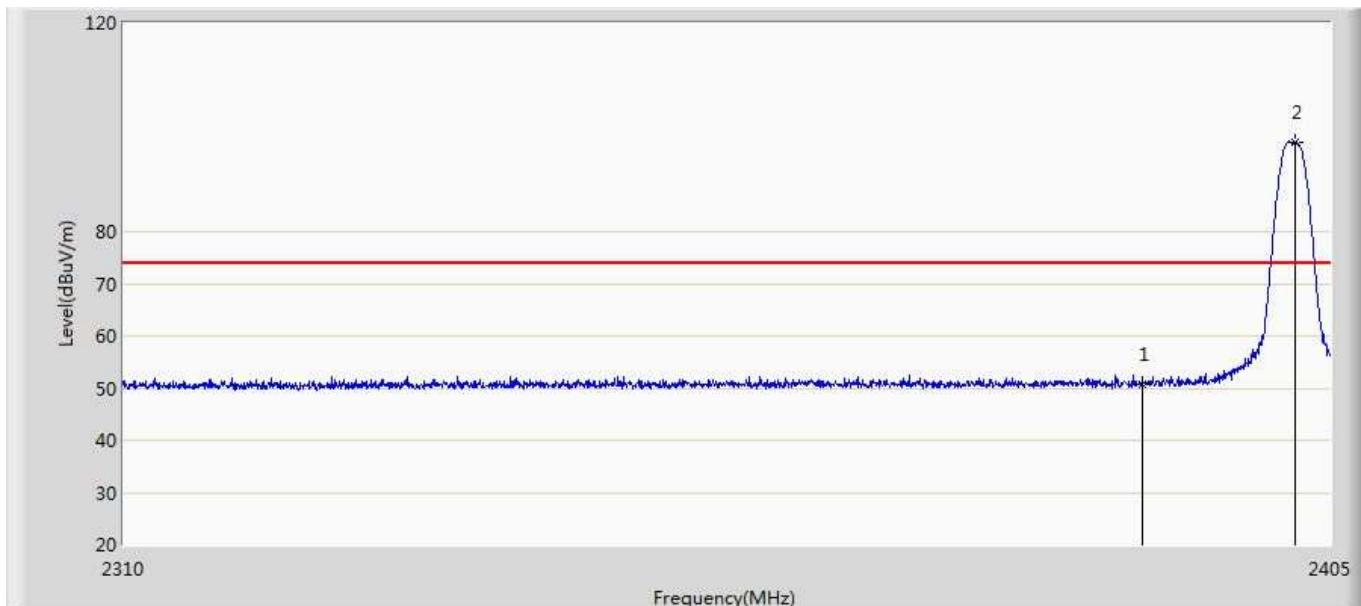
No	Mark	Frequency (MHz)	Measure Level (dB <sub>BuV/m</sub> )	Reading Level (dB <sub>BuV</sub> )	Over Limit (dB)	Limit (dB <sub>BuV/m</sub> )	Factor (dB)	Type
1	*	2480.071	96.601	60.734	42.601	54.000	35.867	AV
2		2483.500	42.359	6.467	-11.641	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 19:44
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 LE_Coded (S=2)	



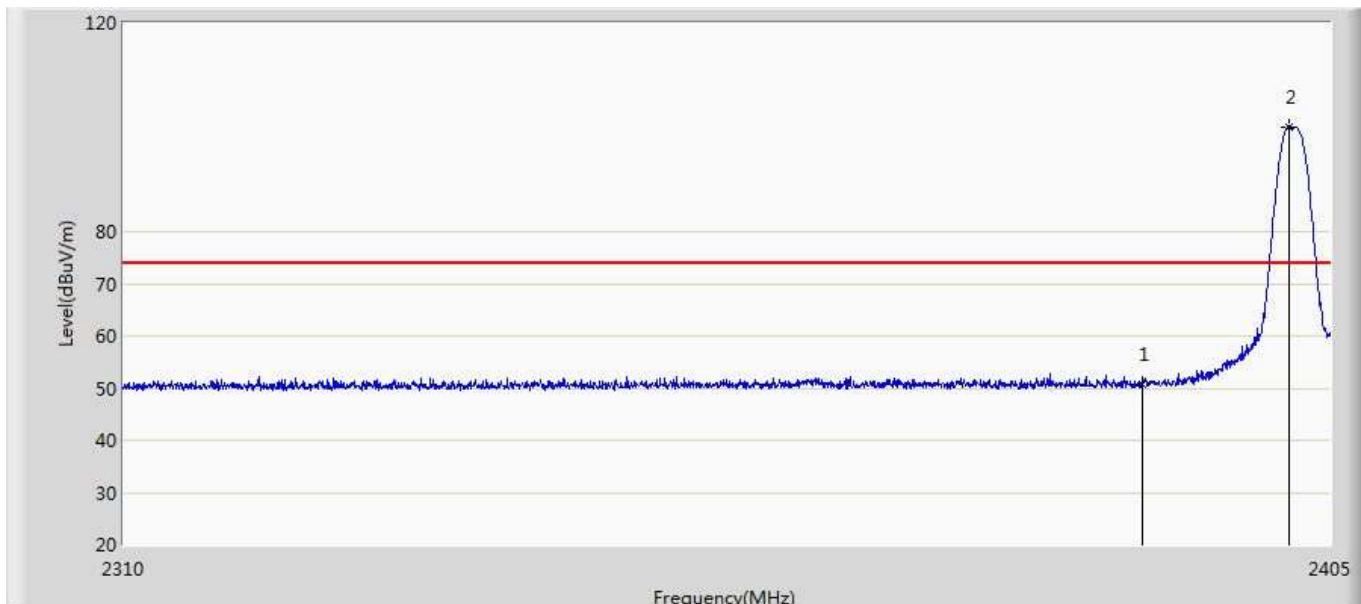
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.036	97.175	61.308	43.175	54.000	35.866	AV
2		2483.500	42.891	6.999	-11.109	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 14:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded (S=8)	



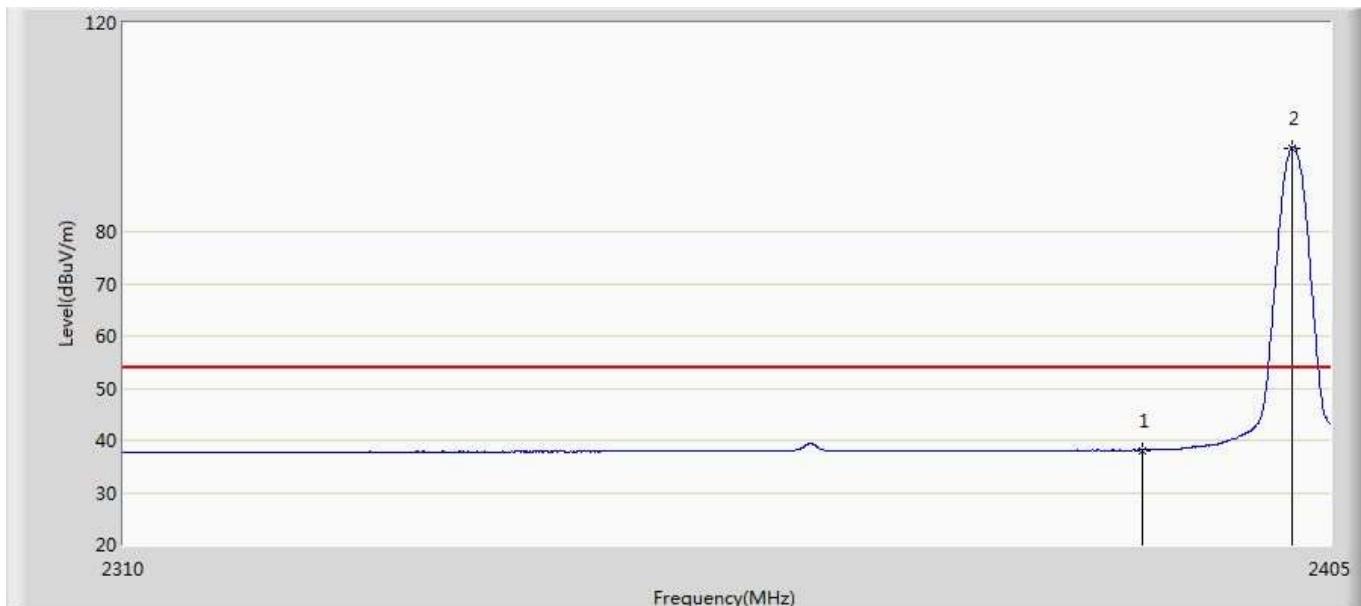
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.616	14.934	-23.384	74.000	35.682	PK
2	*	2402.245	97.219	61.506	23.219	74.000	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 14:26
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 4:Transmit at 2402MHz by LE_Coded (S=8)	



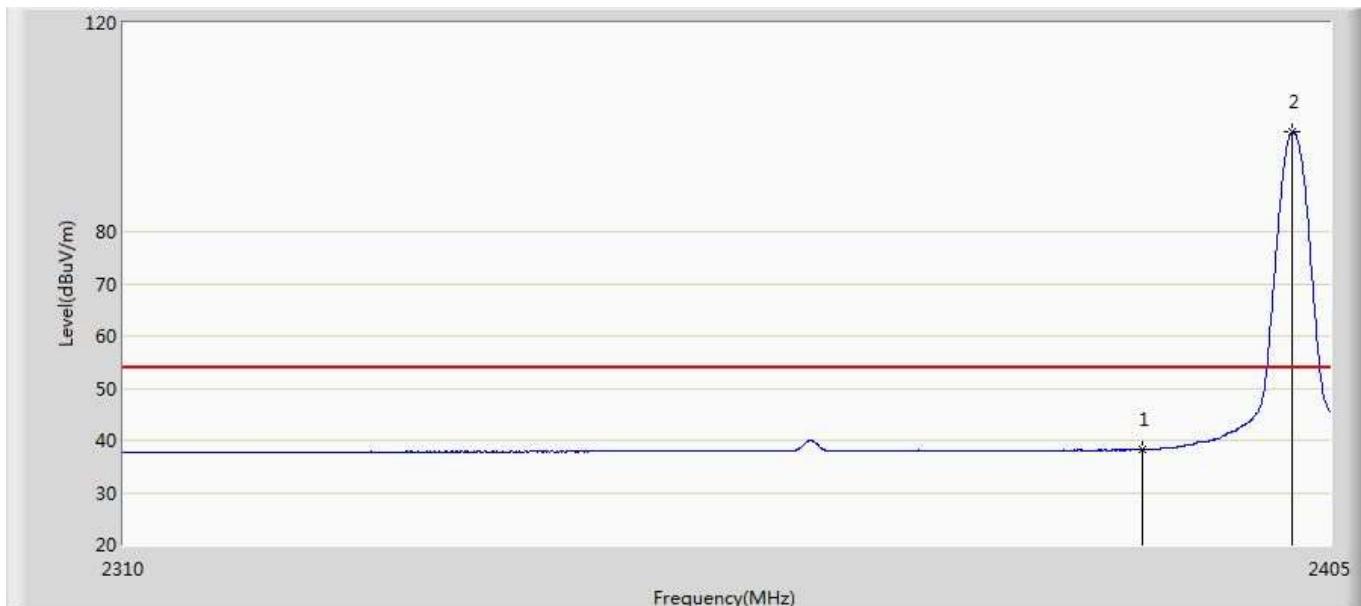
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.787	15.105	-23.213	74.000	35.682	PK
2	*	2401.770	100.043	64.331	26.043	74.000	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 14:28
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 4:Transmit at 2402MHz by LE_Coded (S=8)	



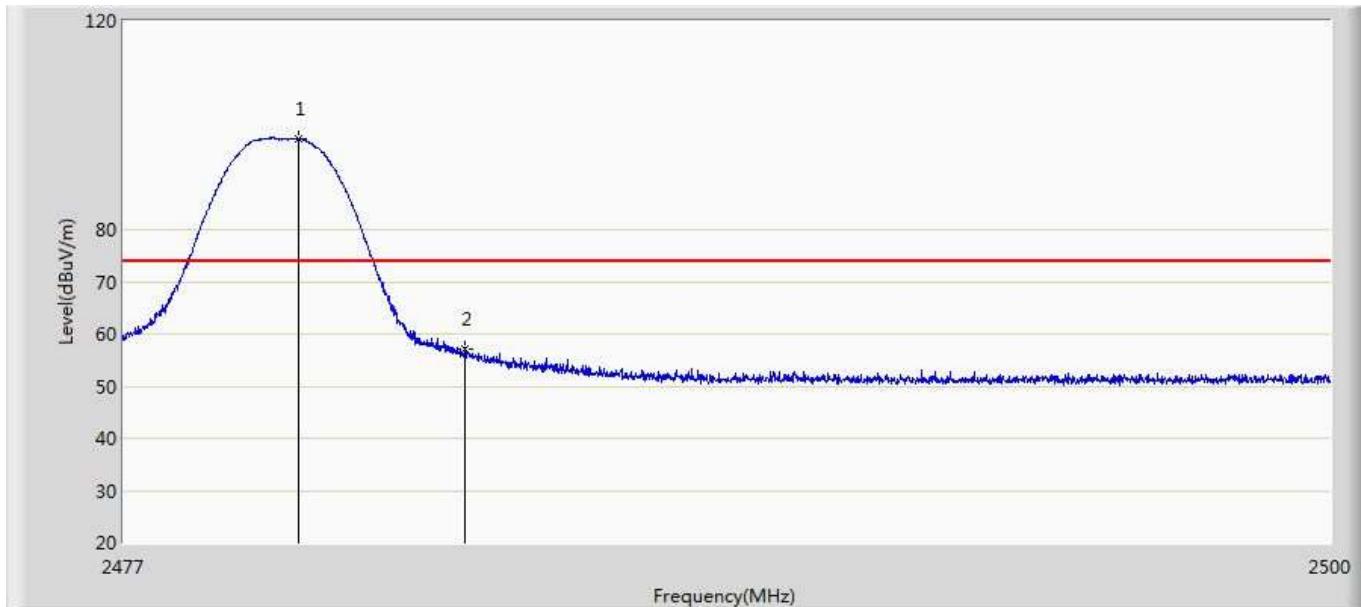
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.086	2.404	-15.914	54.000	35.682	AV
2	*	2401.913	96.025	60.313	42.025	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/19 - 14:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded (S=8)	



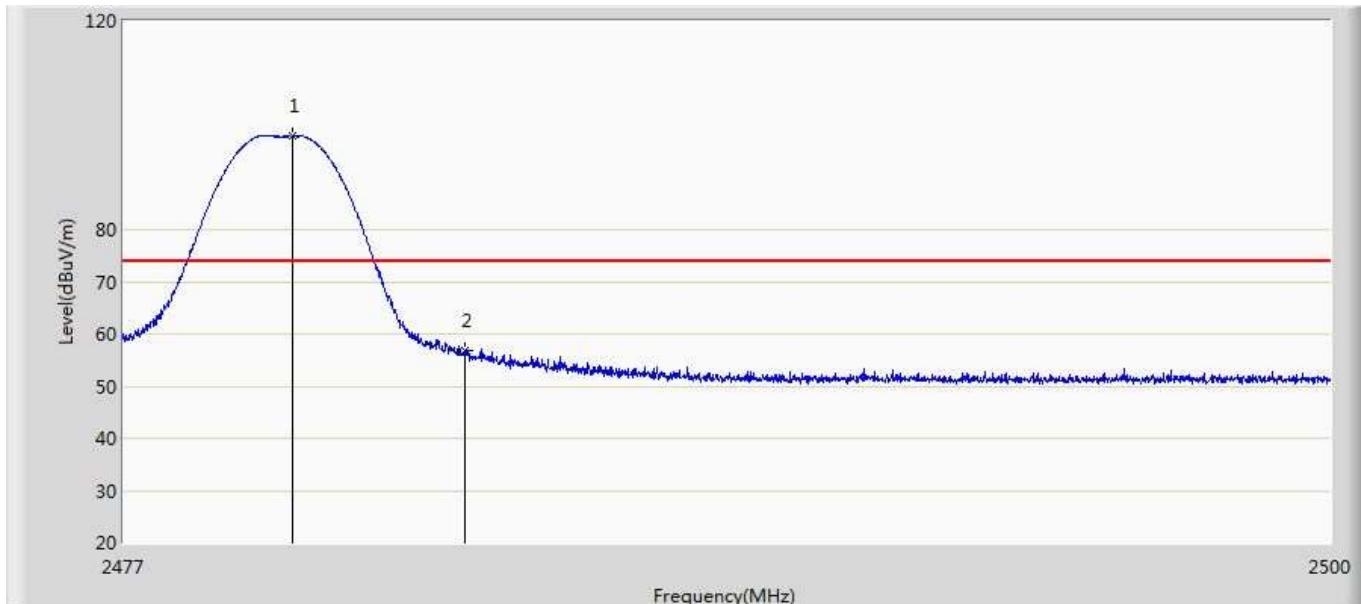
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.210	2.528	-15.790	54.000	35.682	AV
2	*	2401.960	99.152	63.439	45.152	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 19:54
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 LE_Coded (S=8)	



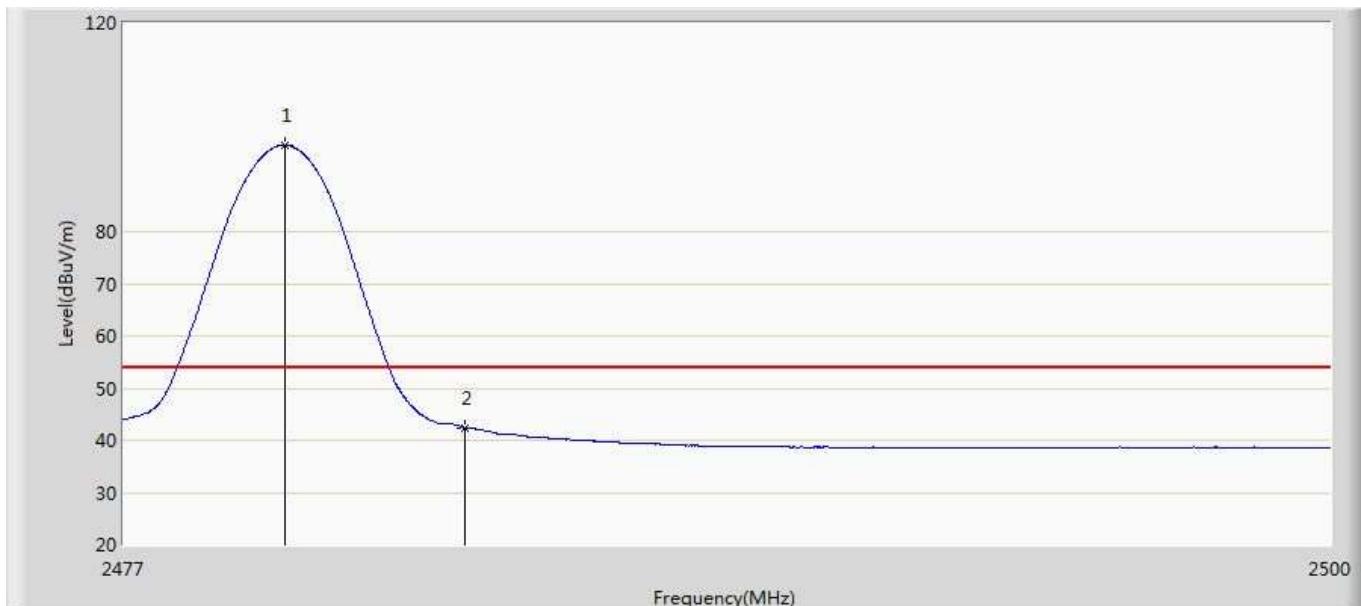
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.323	97.504	61.635	23.504	74.000	35.869	PK
2		2483.500	57.032	21.140	-16.968	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 19:57
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 LE_Coded (S=8)	



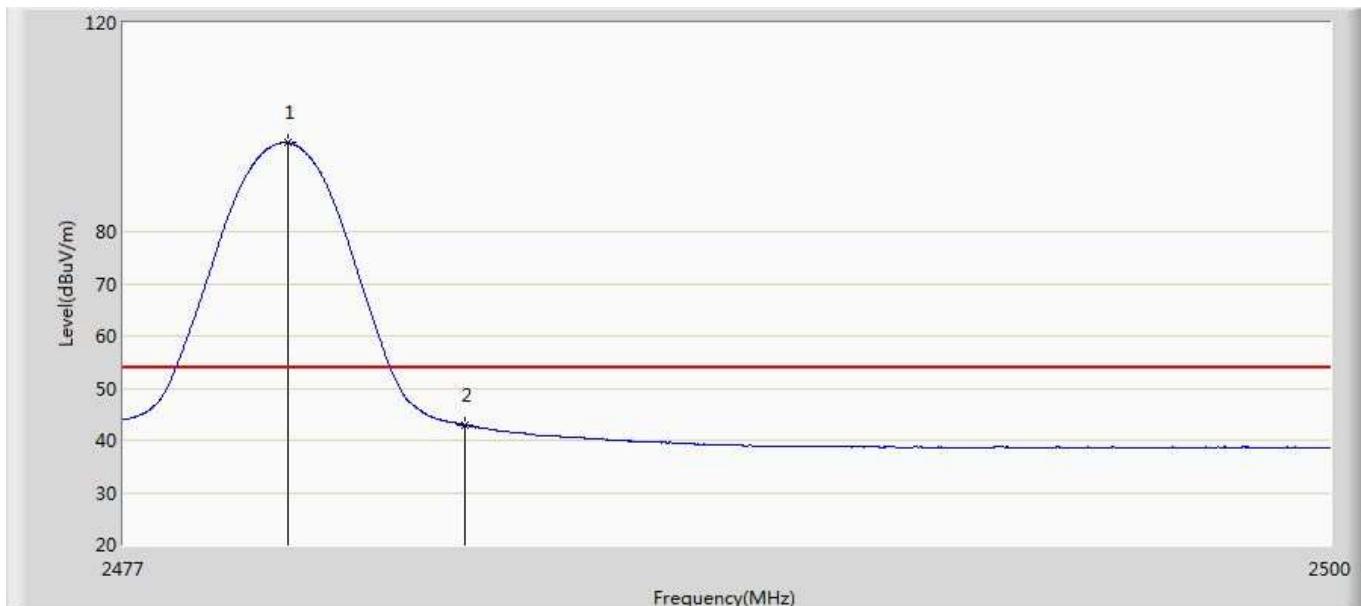
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.220	97.877	62.009	23.877	74.000	35.868	PK
2		2483.500	56.702	20.810	-17.298	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 19:59
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 LE_Coded (S=8)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.071	96.568	60.701	42.568	54.000	35.867	AV
2		2483.500	42.315	6.423	-11.685	54.000	35.891	AV

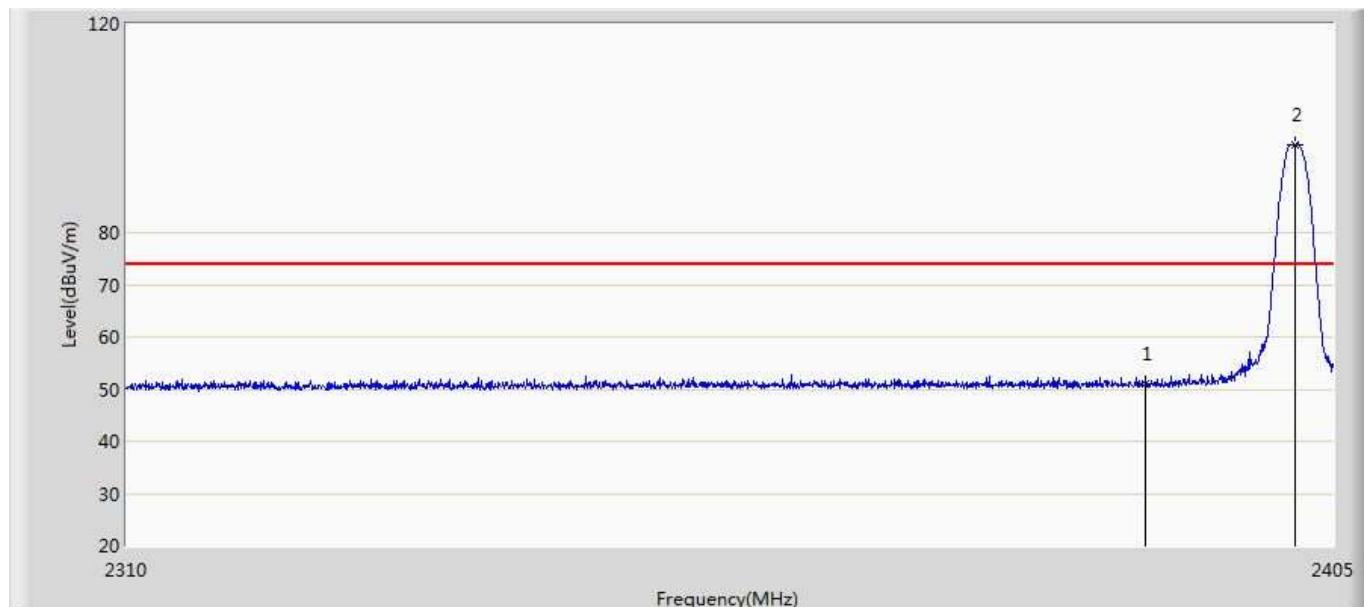
Engineer: Tongben	
Site: AC5	Time: 2019/08/20 - 20:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded (S=8)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.139	97.006	61.139	43.006	54.000	35.867	AV
2		2483.500	42.826	6.934	-11.174	54.000	35.891	AV

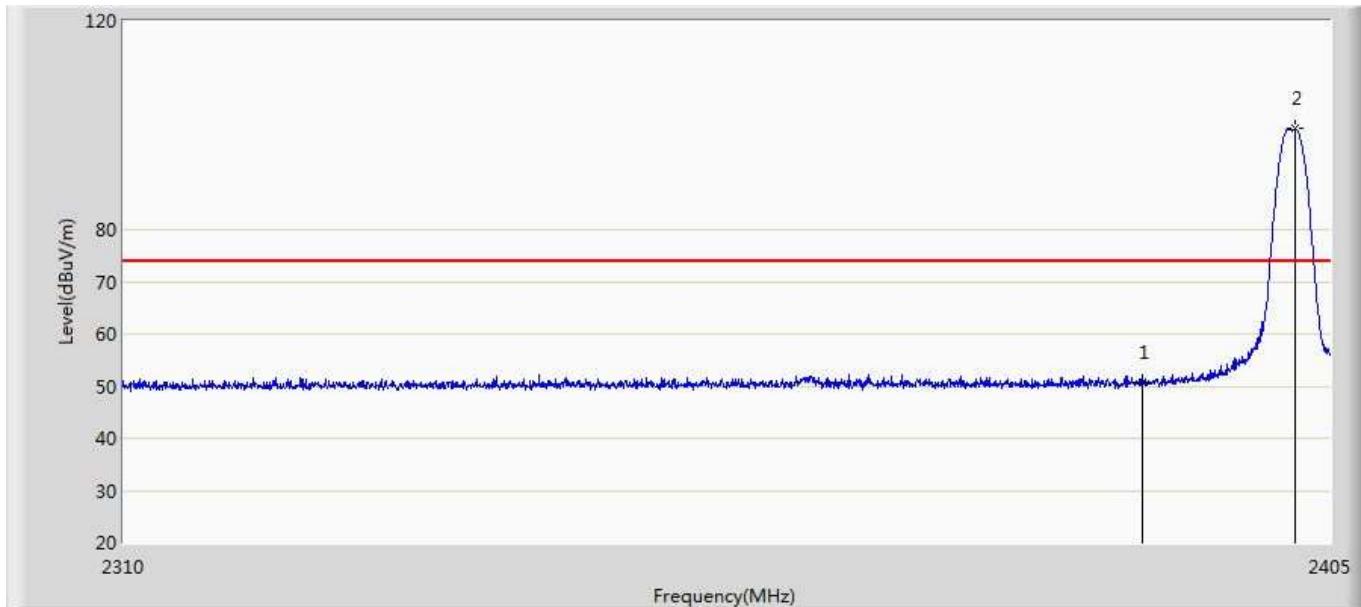
**Diodes:**

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 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 1:Transmit at 2402MHz by LE_1Mbps	



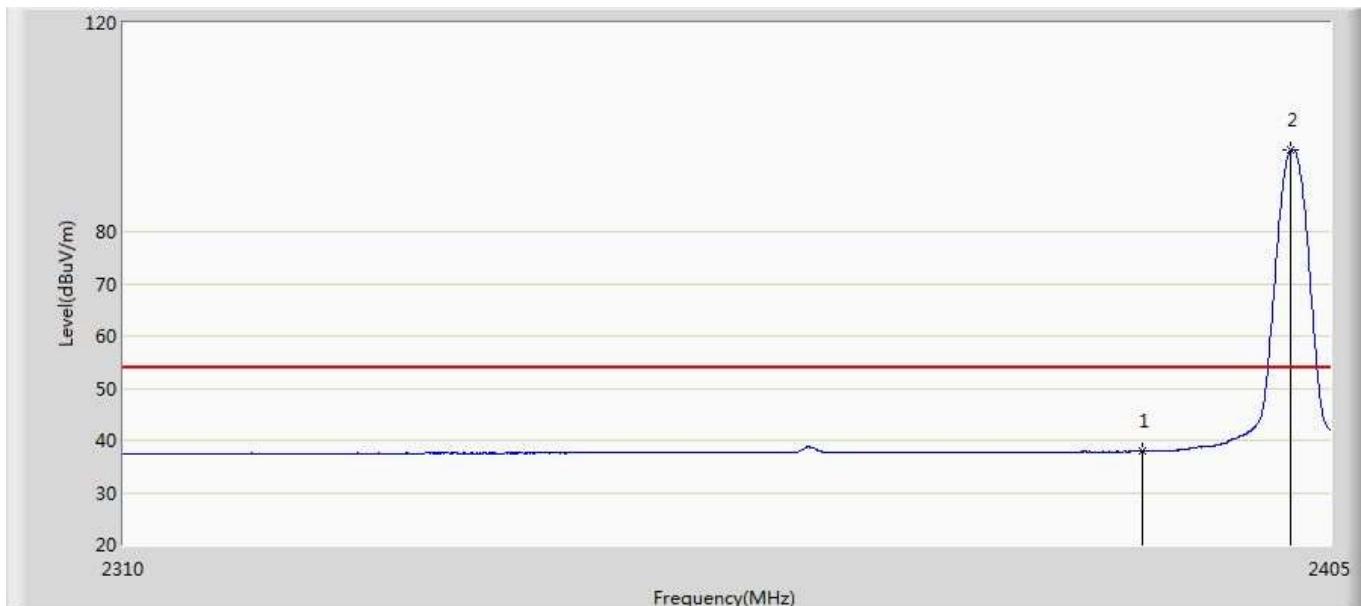
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.968	15.286	-23.032	74.000	35.682	PK
2	*	2401.913	96.889	61.177	22.889	74.000	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 17:48
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 LE_1Mbps	



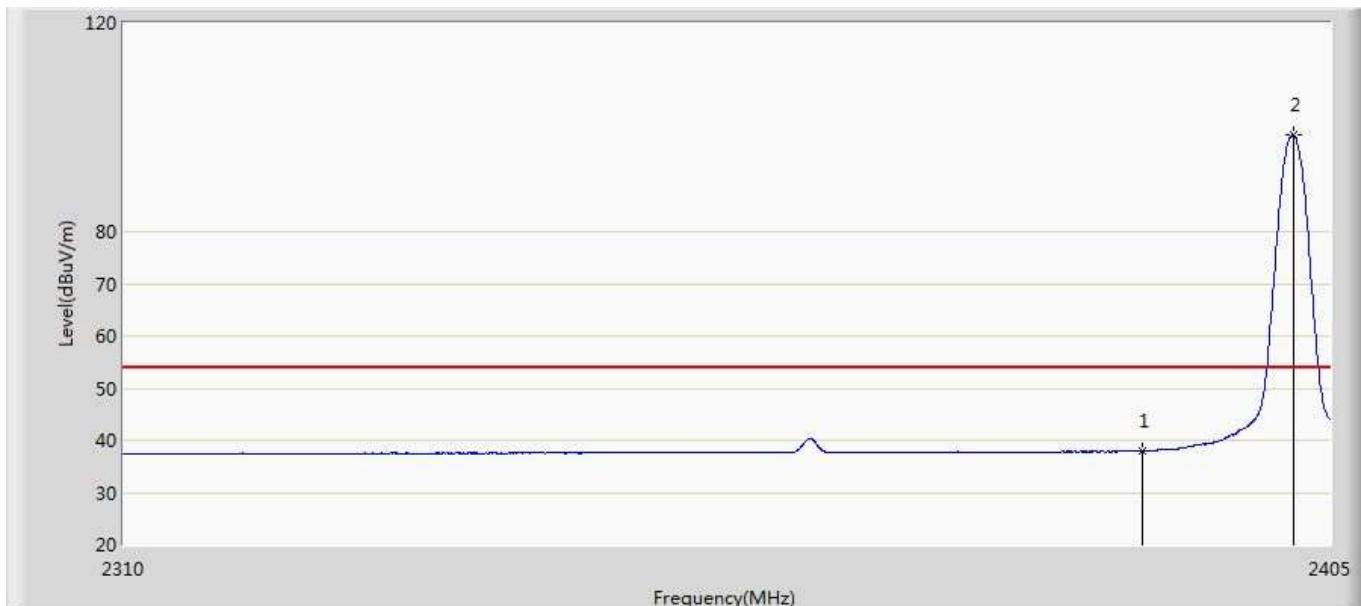
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.719	15.037	-23.281	74.000	35.682	PK
2	*	2402.198	99.356	63.643	25.356	74.000	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 17:50
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 1:Transmit at 2402MHz by LE_1Mbps	



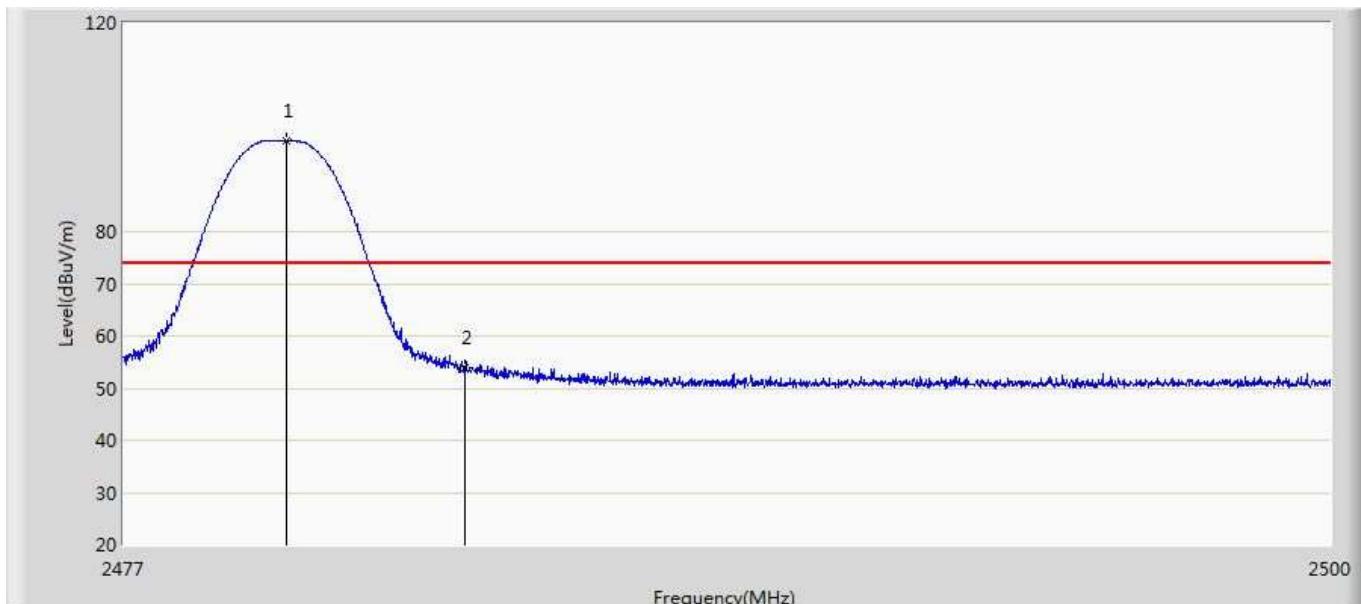
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	37.937	2.255	-16.063	54.000	35.682	AV
2	*	2401.865	95.625	59.913	41.625	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 17:52
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 1:Transmit at 2402MHz by LE_1Mbps	



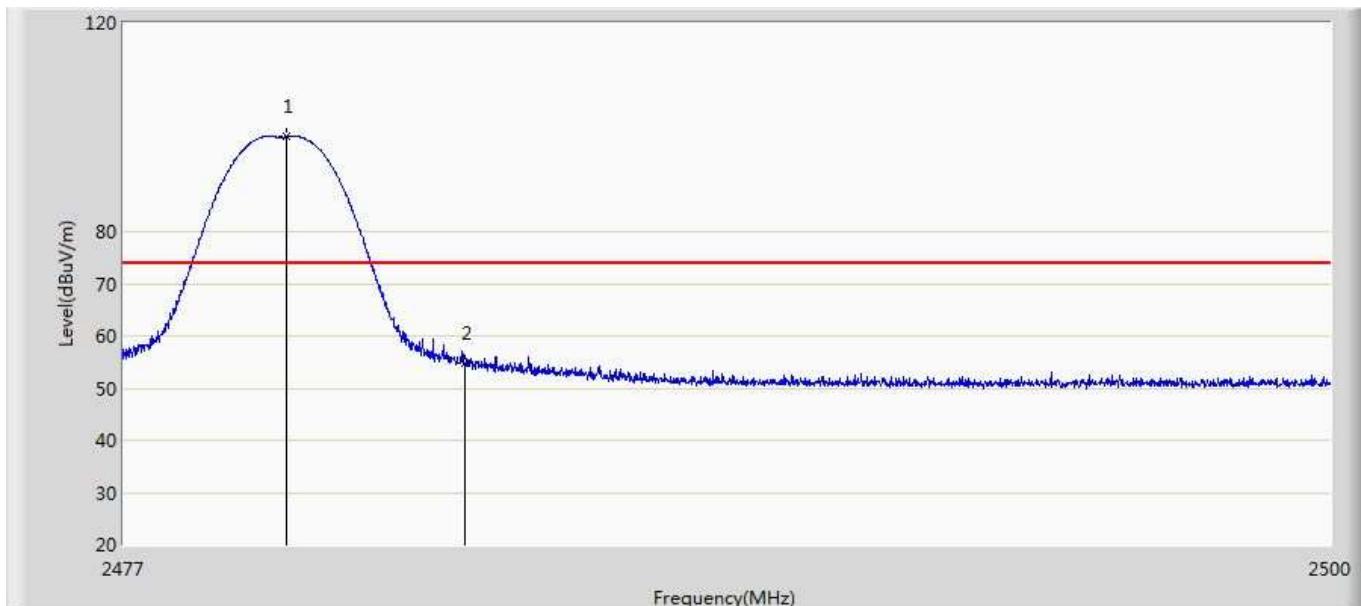
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.001	2.319	-15.999	54.000	35.682	AV
2	*	2402.055	98.540	62.827	44.540	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 21:08
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 1:Transmit at 2480MHz by LE_1Mbps	



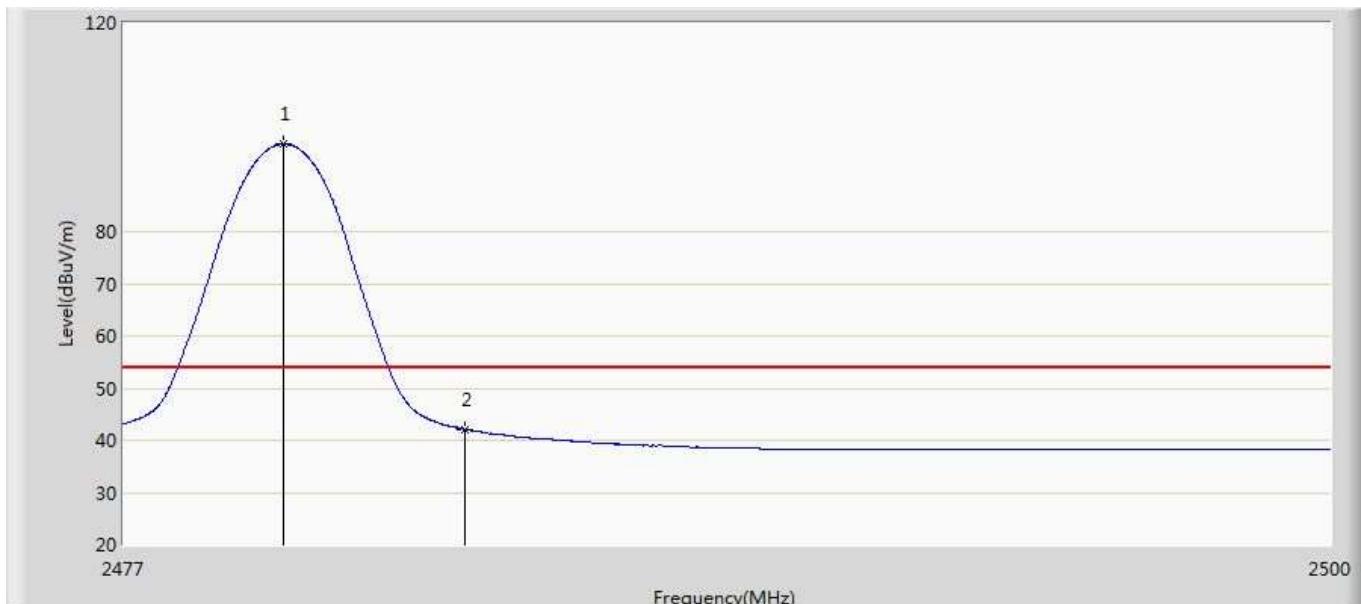
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.094	97.499	61.632	23.499	74.000	35.867	PK
2		2483.500	53.818	17.926	-20.182	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 21:13
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 LE_1Mbps	



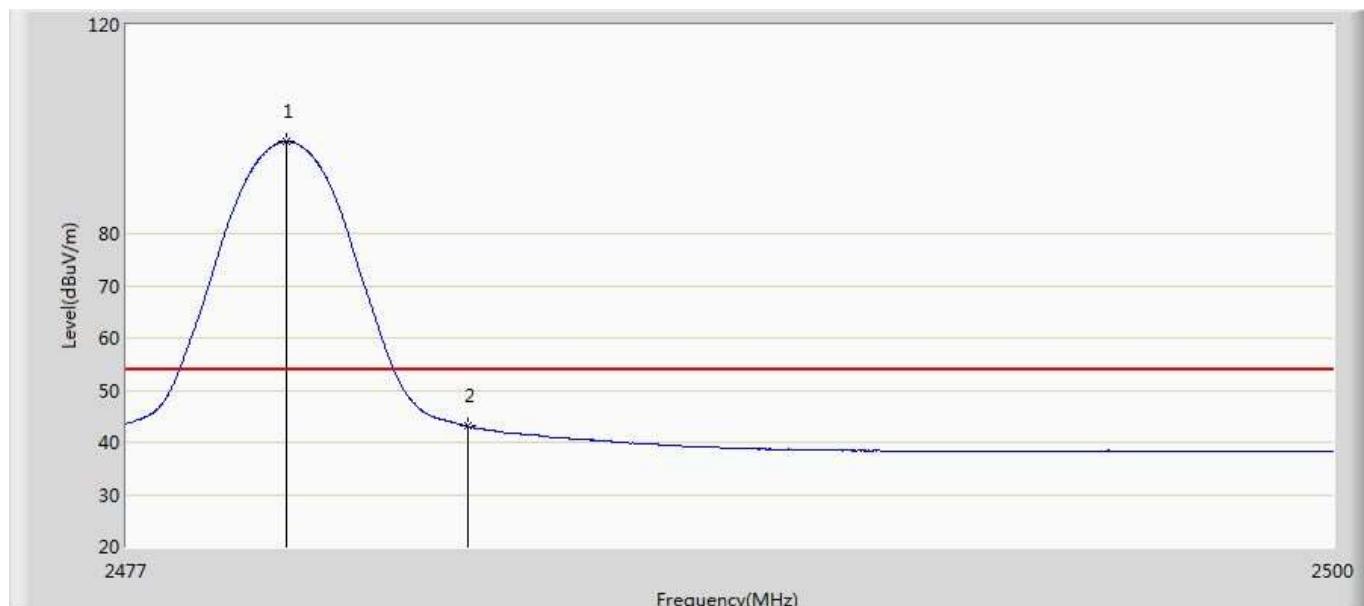
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.105	98.237	62.370	24.237	74.000	35.867	PK
2		2483.500	54.748	18.856	-19.252	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 21:14
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 1:Transmit at 2480MHz by LE_1Mbps	



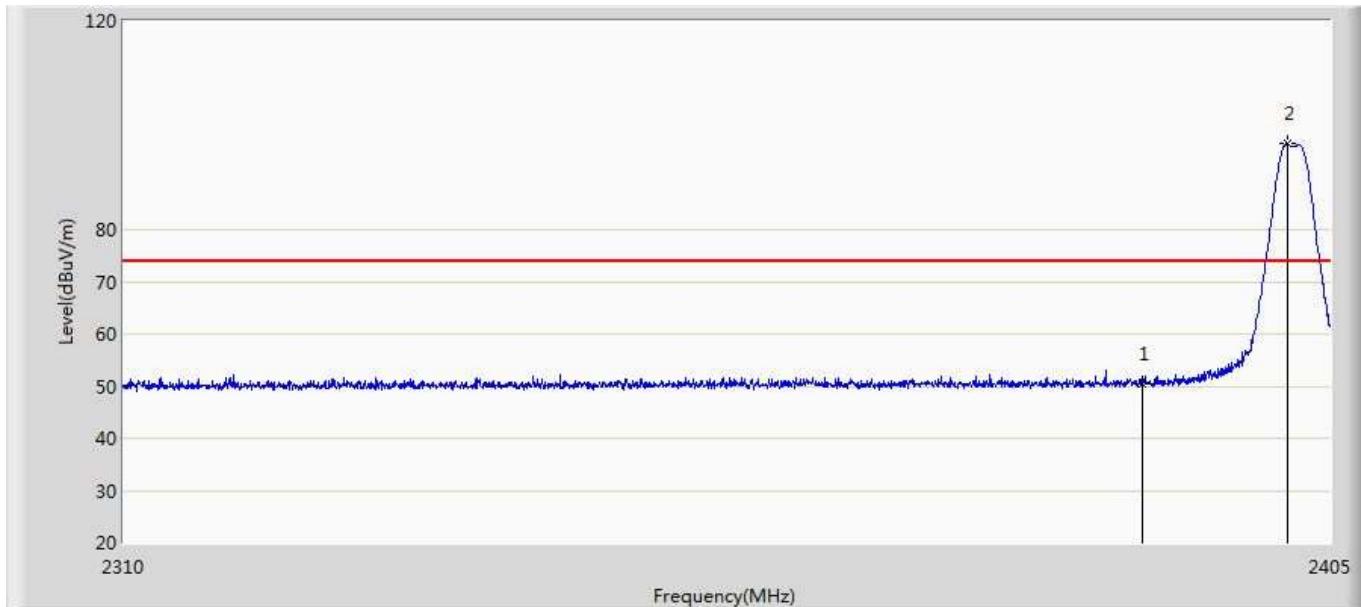
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.036	96.736	60.869	42.736	54.000	35.866	AV
2		2483.500	42.052	6.160	-11.948	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 21:16
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 LE_1Mbps	



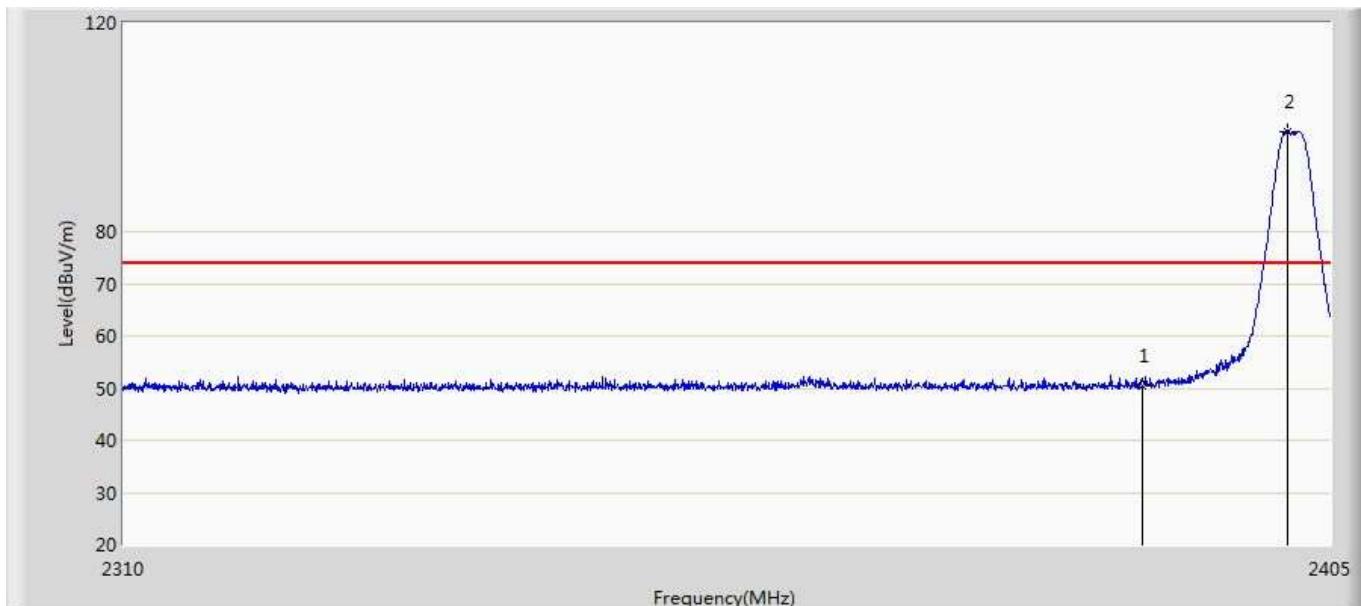
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.036	97.596	61.729	43.596	54.000	35.866	AV
2		2483.500	43.045	7.153	-10.955	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 18:40
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 2:Transmit at 2402MHz by LE_2Mbps	



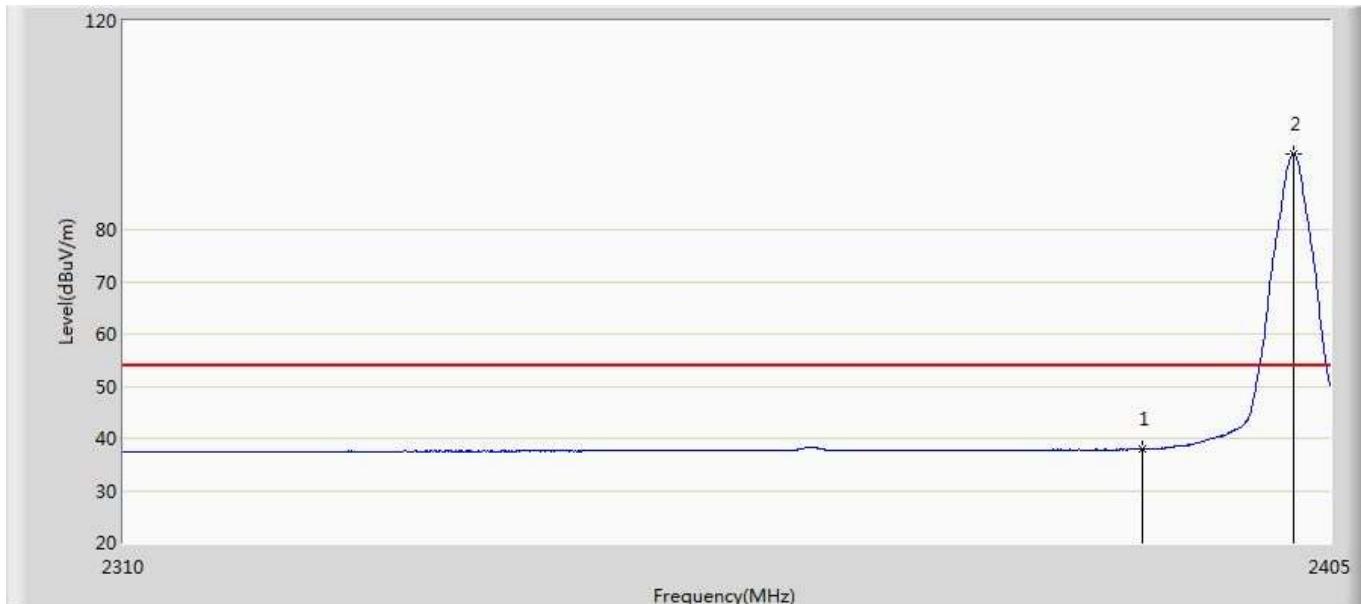
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.573	14.891	-23.427	74.000	35.682	PK
2	*	2401.627	96.395	60.683	22.395	74.000	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 18:42
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 LE_2Mbps	



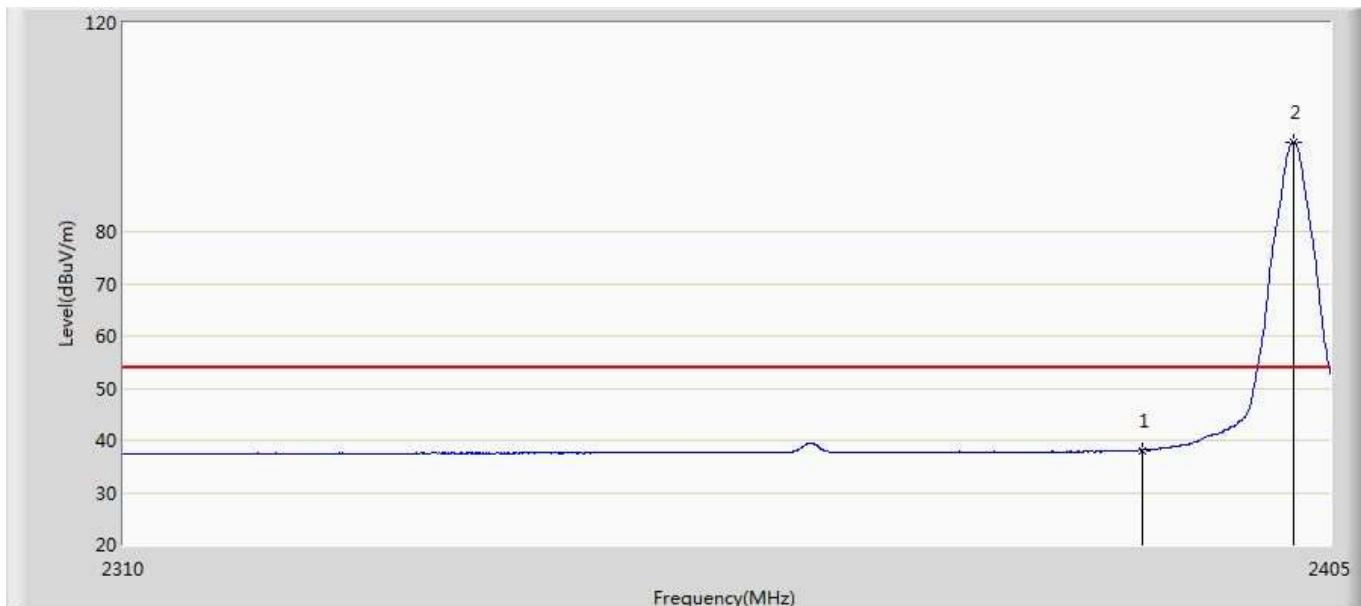
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.336	14.654	-23.664	74.000	35.682	PK
2	*	2401.627	99.246	63.534	25.246	74.000	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 18:44
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 2:Transmit at 2402MHz by LE_2Mbps	



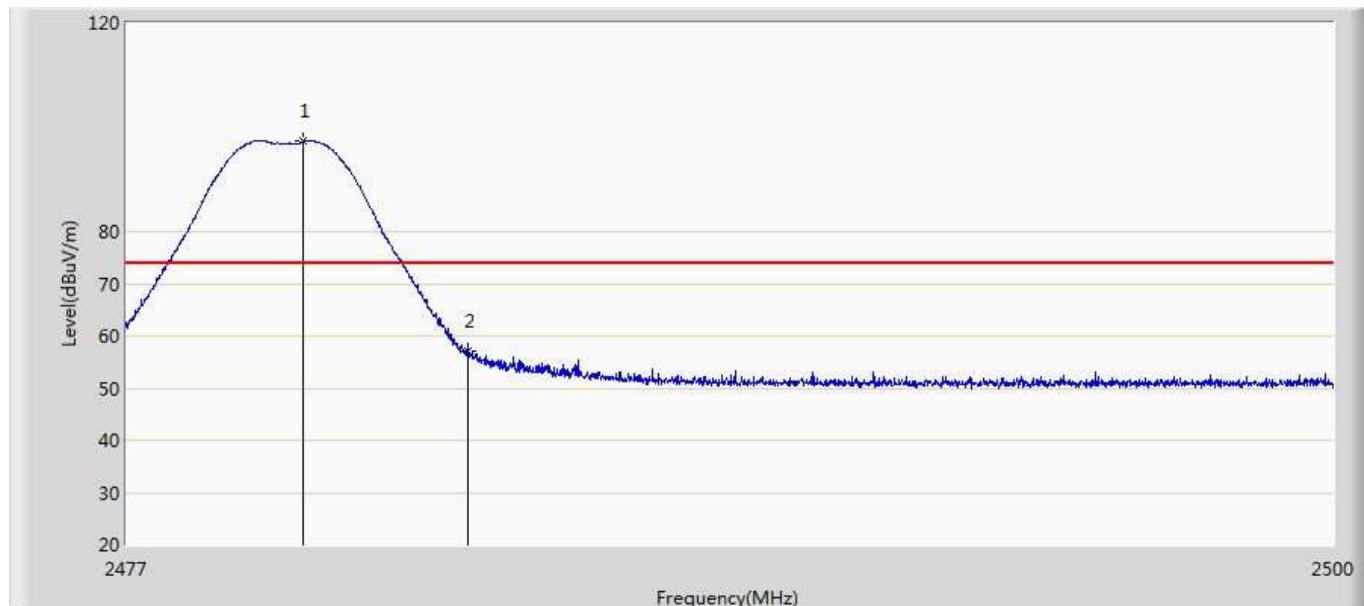
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.026	2.344	-15.974	54.000	35.682	AV
2	*	2402.055	94.407	58.694	40.407	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 18:46
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 2402MHz by LE_2Mbps	



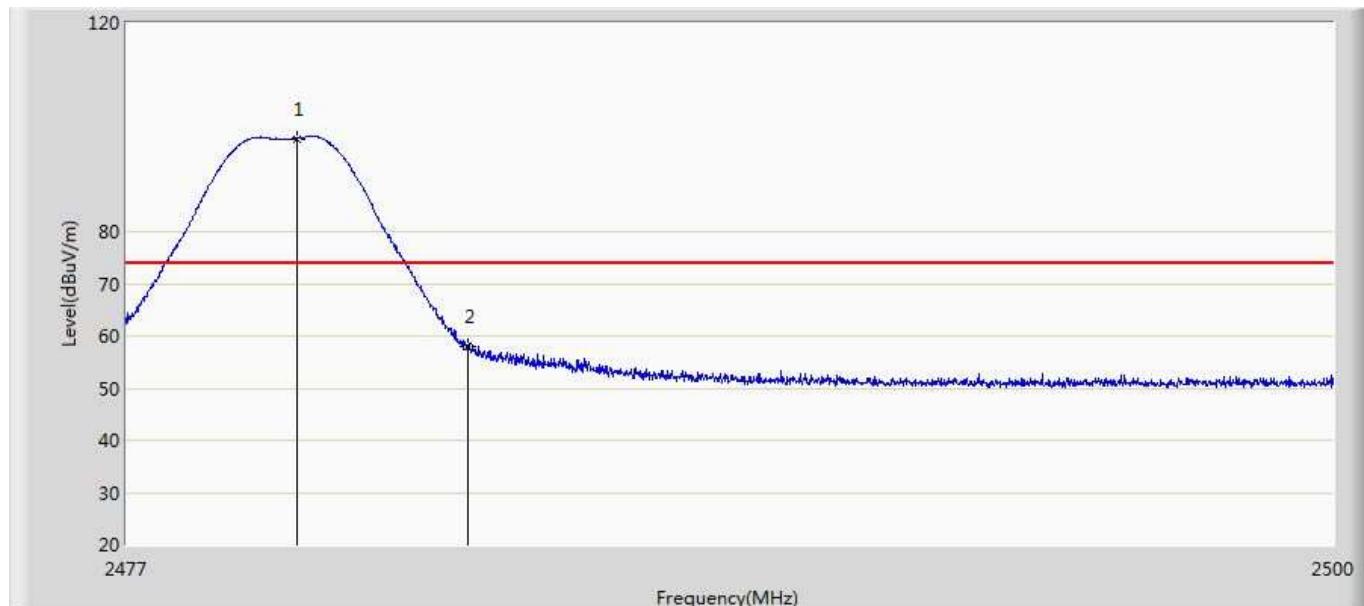
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.096	2.414	-15.904	54.000	35.682	AV
2	*	2402.055	97.188	61.475	43.188	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 21:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps	



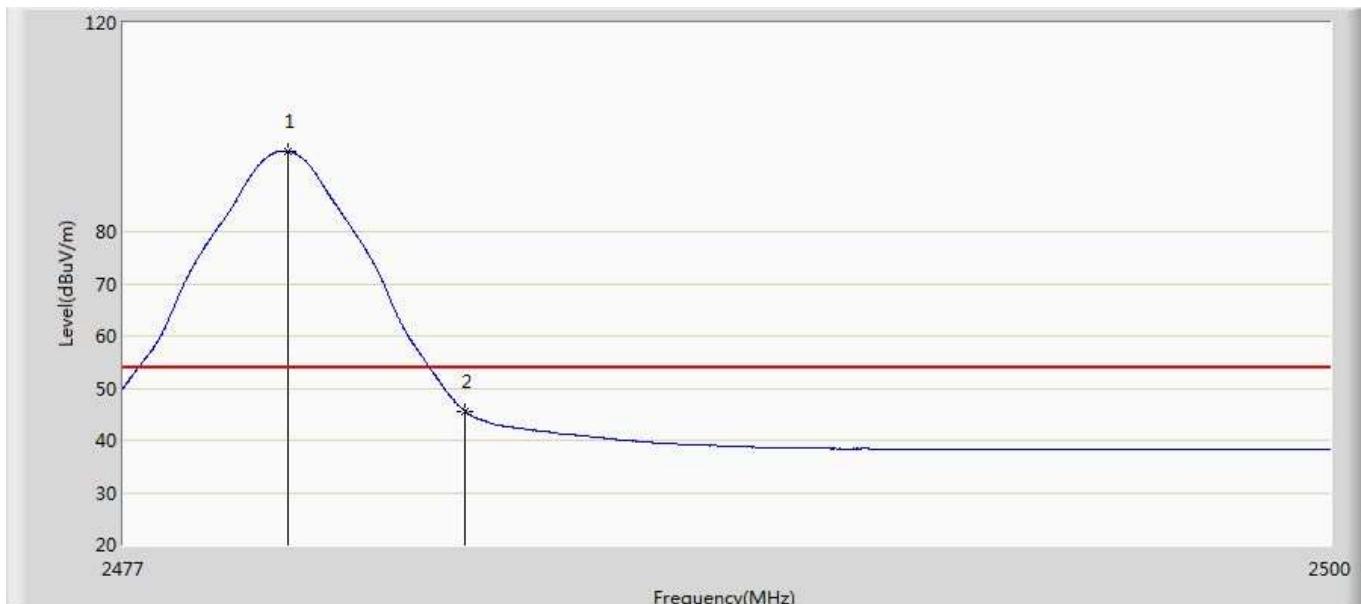
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.358	97.249	61.380	23.249	74.000	35.869	PK
2		2483.500	57.123	21.231	-16.877	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 21:36
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 LE_2Mbps	



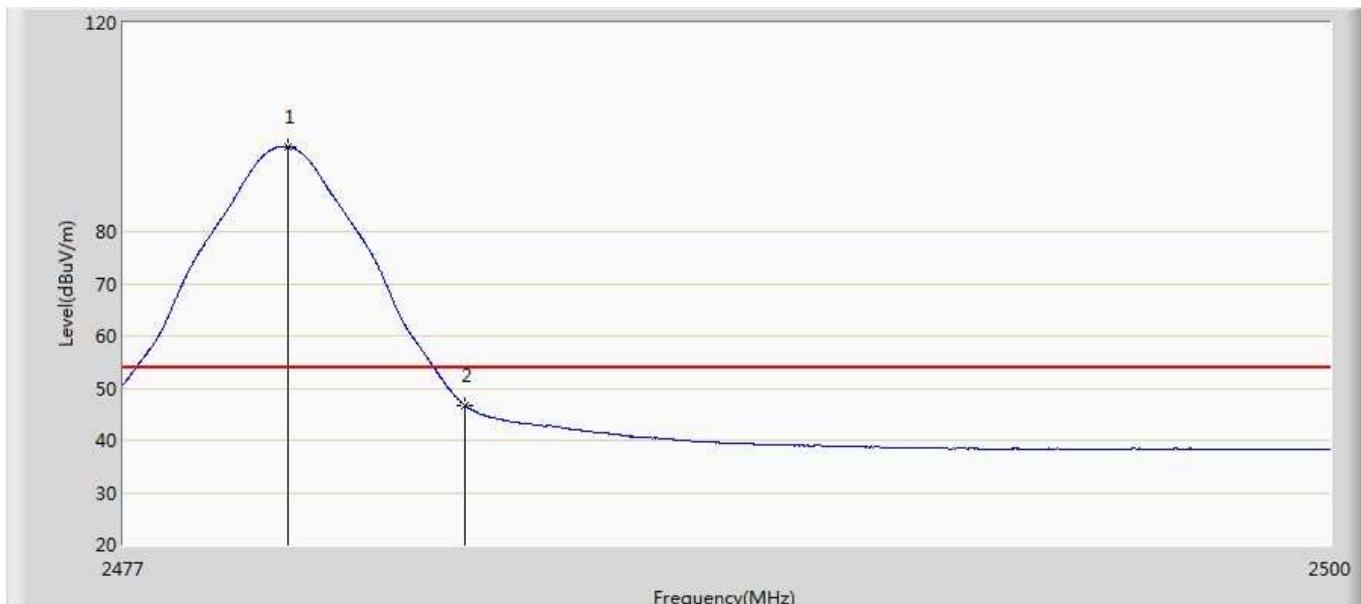
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.254	97.811	61.943	23.811	74.000	35.868	PK
2		2483.500	58.074	22.182	-15.926	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 21:38
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 LE_2Mbps	



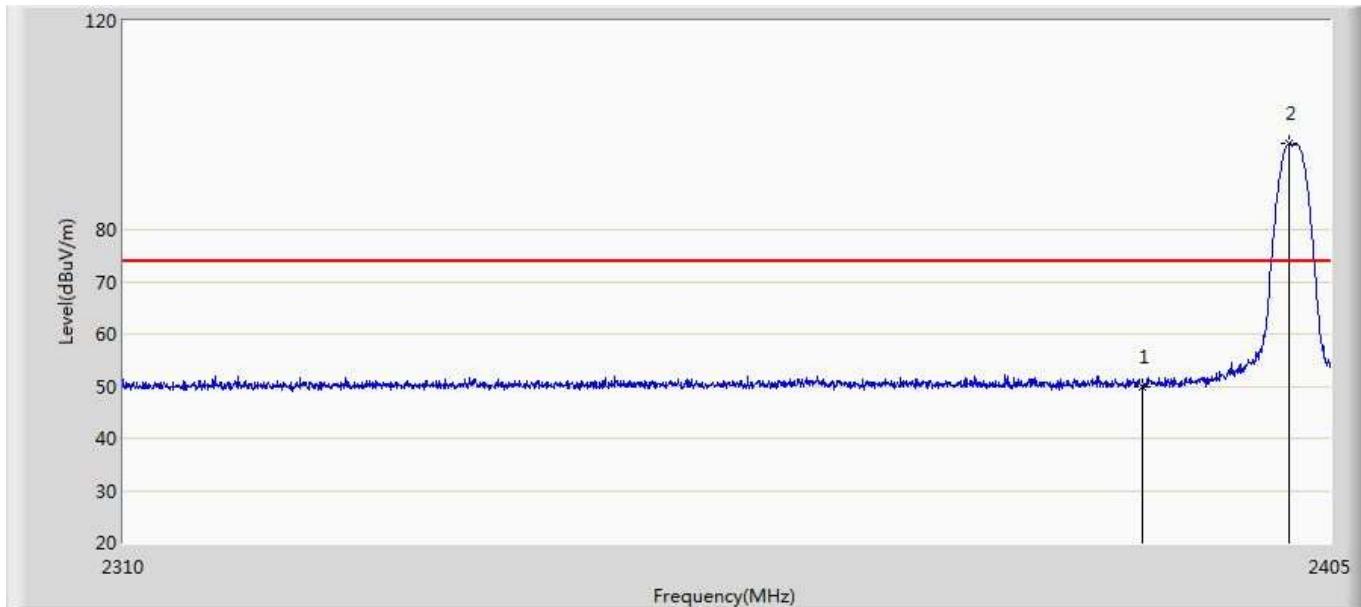
No	Mark	Frequency (MHz)	Measure Level (dB <sub>B</sub> uV/m)	Reading Level (dB <sub>B</sub> uV)	Over Limit (dB)	Limit (dB <sub>B</sub> uV/m)	Factor (dB)	Type
1	*	2480.139	95.383	59.516	41.383	54.000	35.867	AV
2		2483.500	45.617	9.725	-8.383	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 21:40
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 2480MHz by LE_2Mbps	



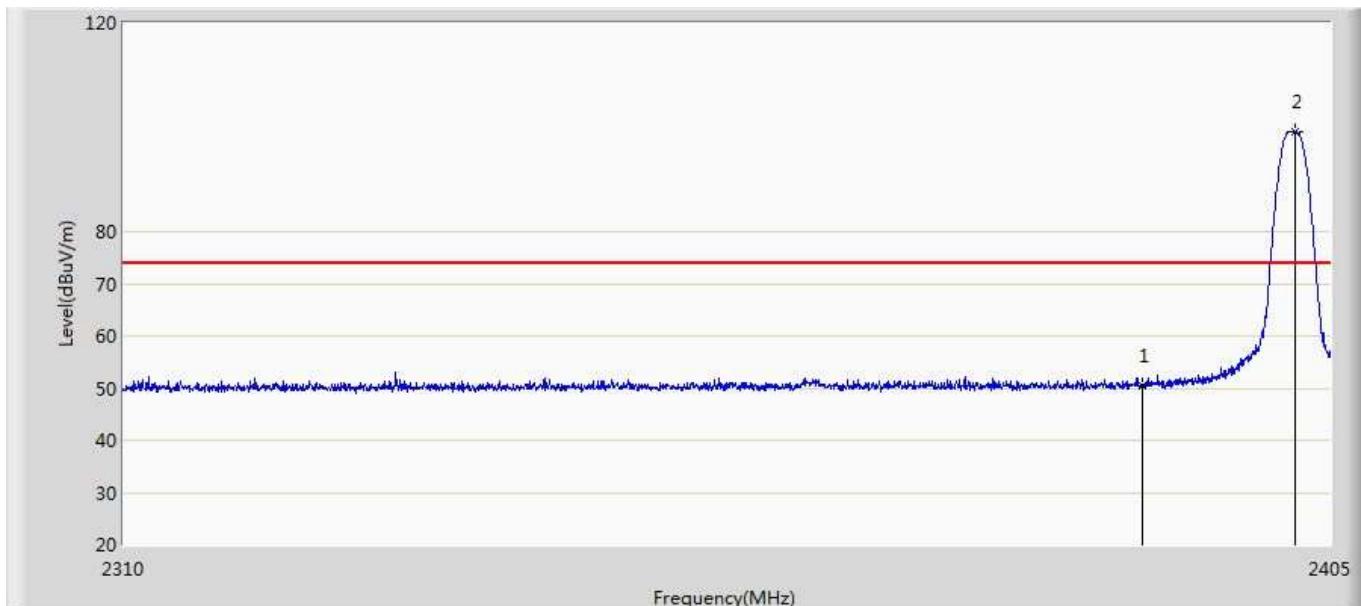
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.139	96.276	60.409	42.276	54.000	35.867	AV
2		2483.500	46.694	10.802	-7.306	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 18:48
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 LE_Coded (S=2)	



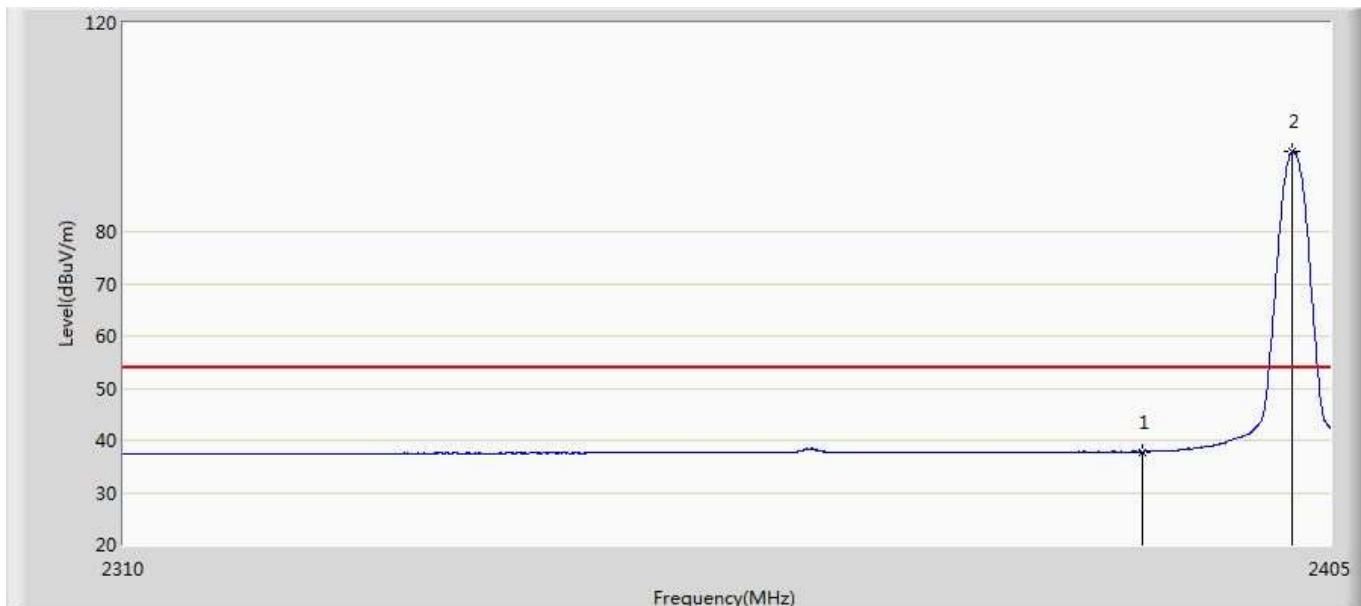
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.000	14.318	-24.000	74.000	35.682	PK
2	*	2401.770	96.523	60.811	22.523	74.000	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 18:50
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 3:Transmit at 2402MHz by LE_Coded (S=2)	



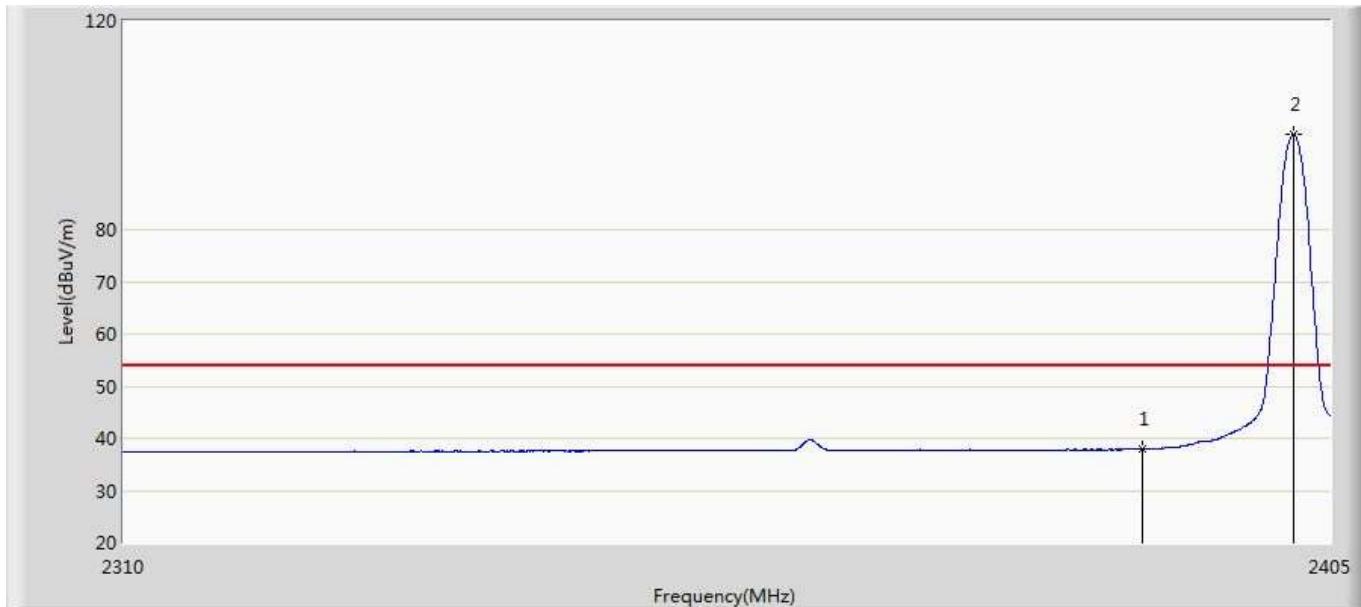
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.483	14.801	-23.517	74.000	35.682	PK
2	*	2402.150	99.181	63.468	25.181	74.000	35.713	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 18:52
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 3:Transmit at 2402MHz by LE_Coded (S=2)	



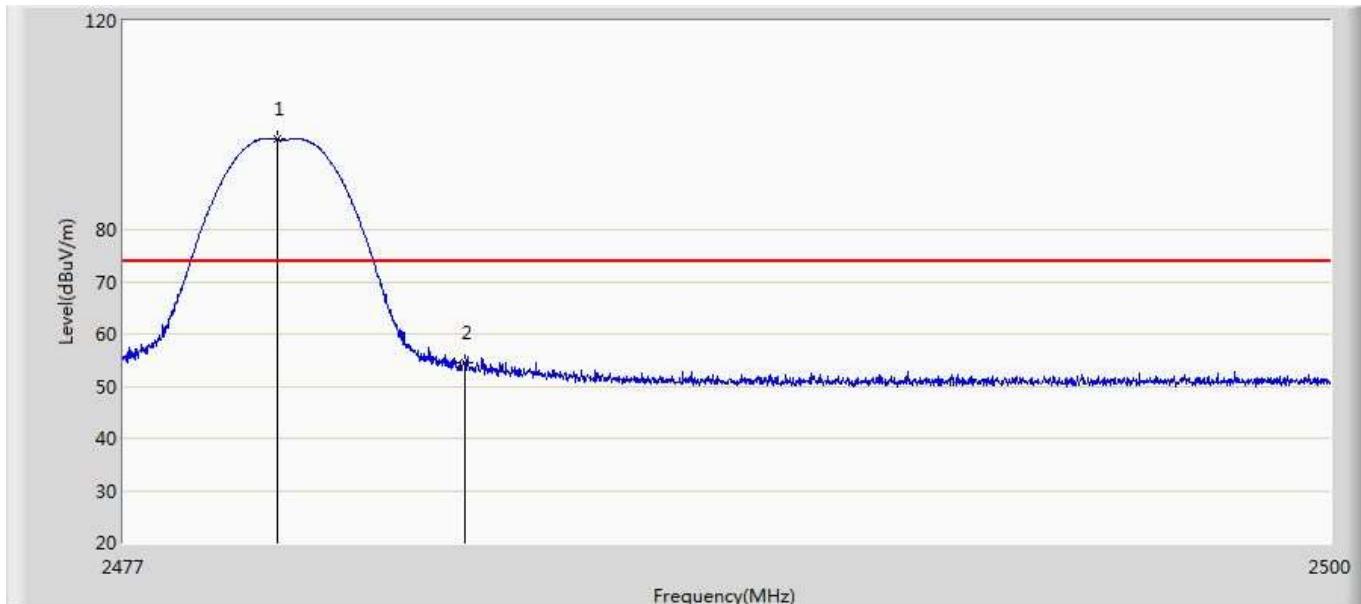
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	37.781	2.099	-16.219	54.000	35.682	AV
2	*	2402.008	95.359	59.646	41.359	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 18:53
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 LE_Coded (S=2)	



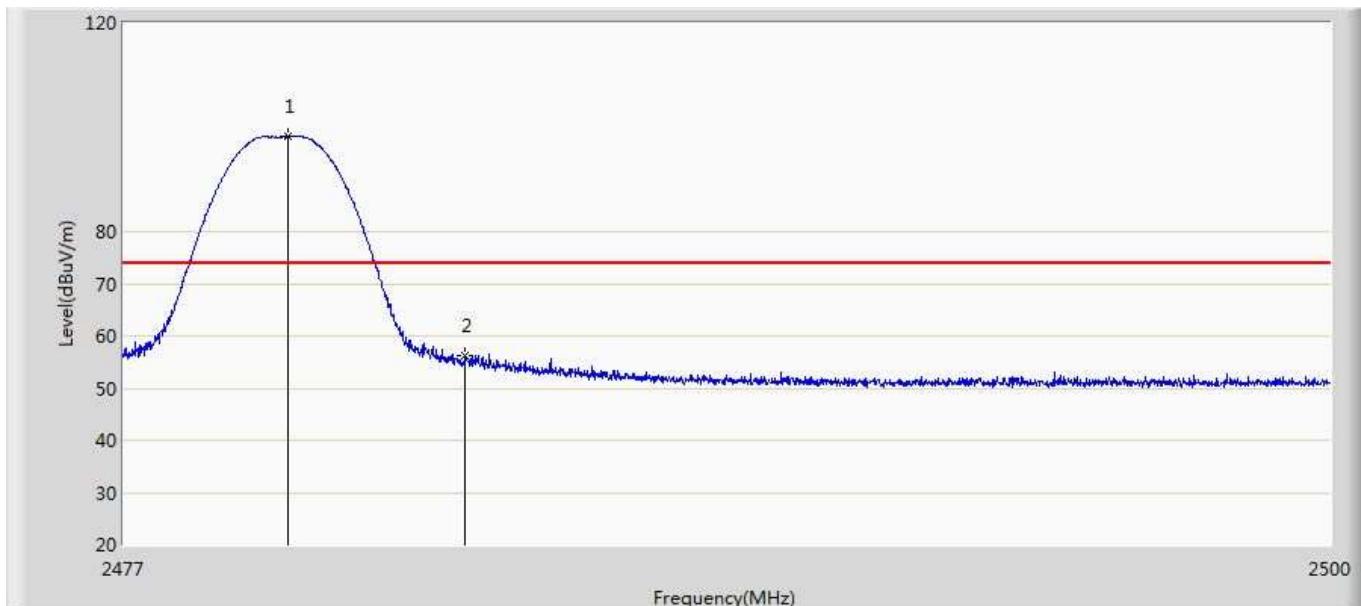
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	37.963	2.281	-16.037	54.000	35.682	AV
2	*	2402.055	98.197	62.484	44.197	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 21:41
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 3:Transmit at 2480MHz by LE_Coded (S=2)	



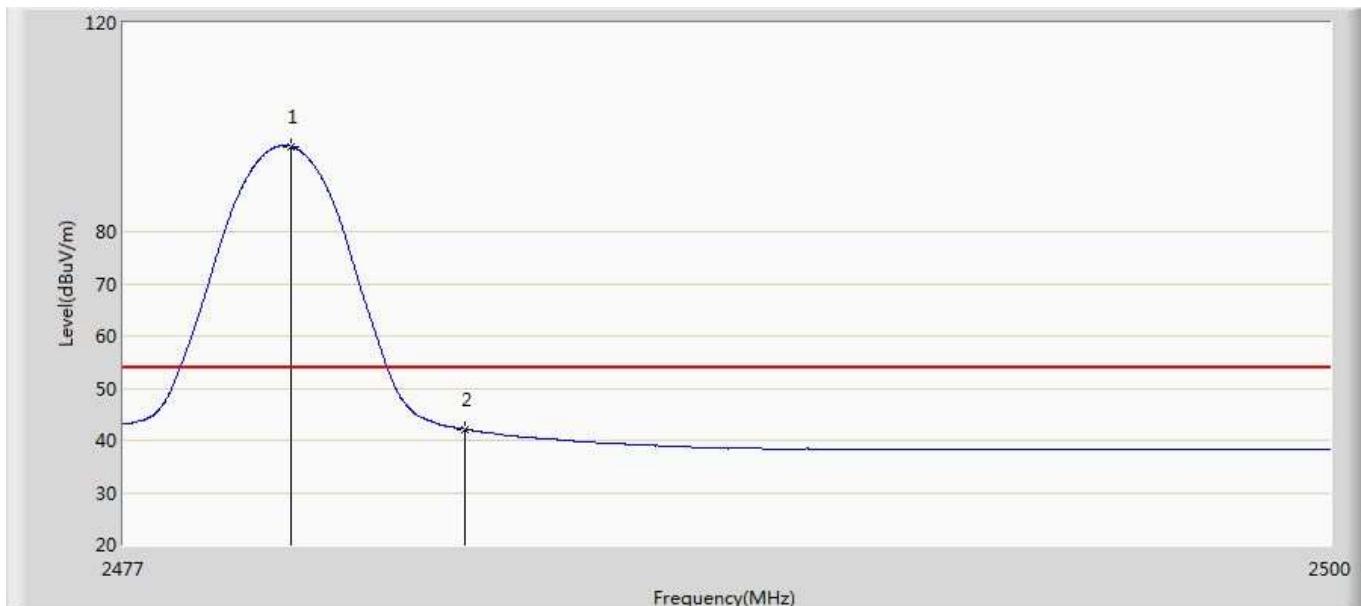
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.933	97.281	61.415	23.281	74.000	35.866	PK
2		2483.500	54.419	18.527	-19.581	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 21:44
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 LE_Coded (S=2)	



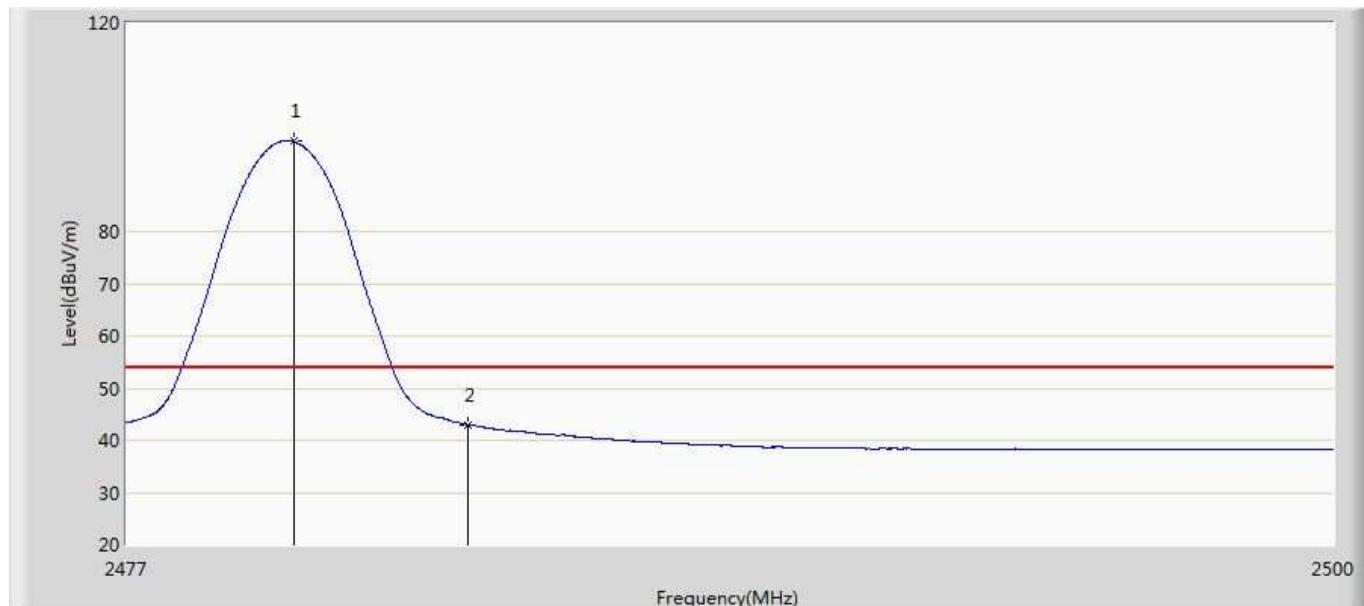
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.139	98.179	62.312	24.179	74.000	35.867	PK
2		2483.500	56.214	20.322	-17.786	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 21:46
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 LE_Coded (S=2)	



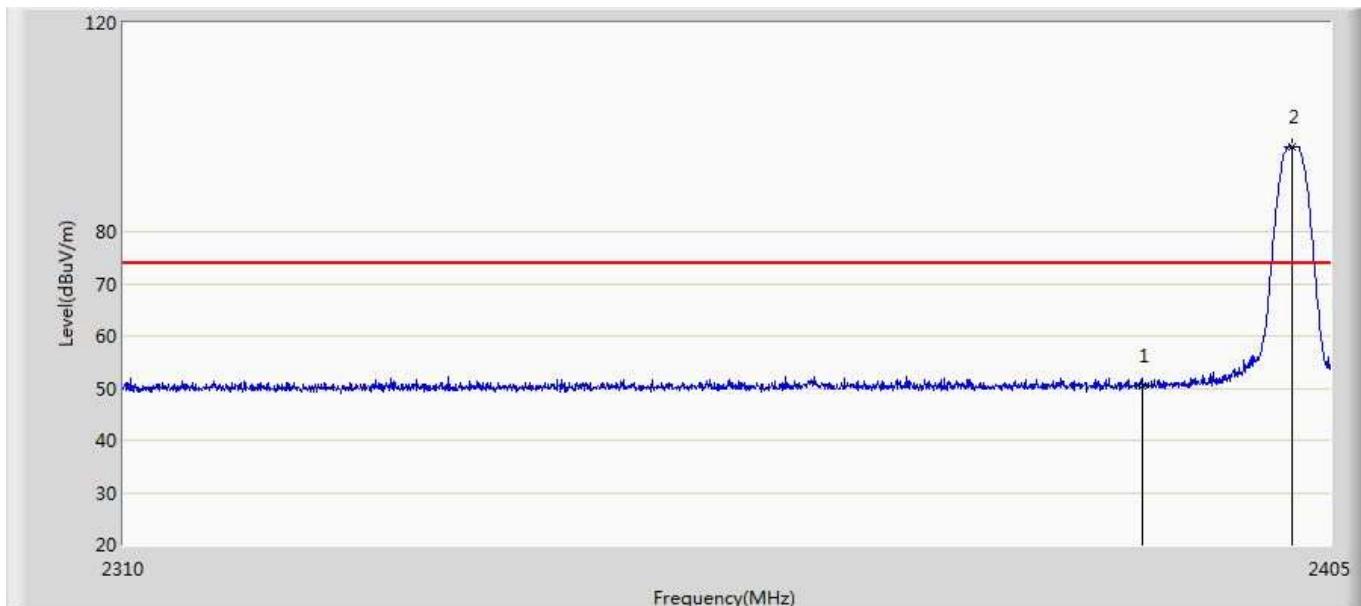
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.174	96.365	60.497	42.365	54.000	35.867	AV
2		2483.500	42.127	6.235	-11.873	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 21:48
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 LE_Coded (S=2)	



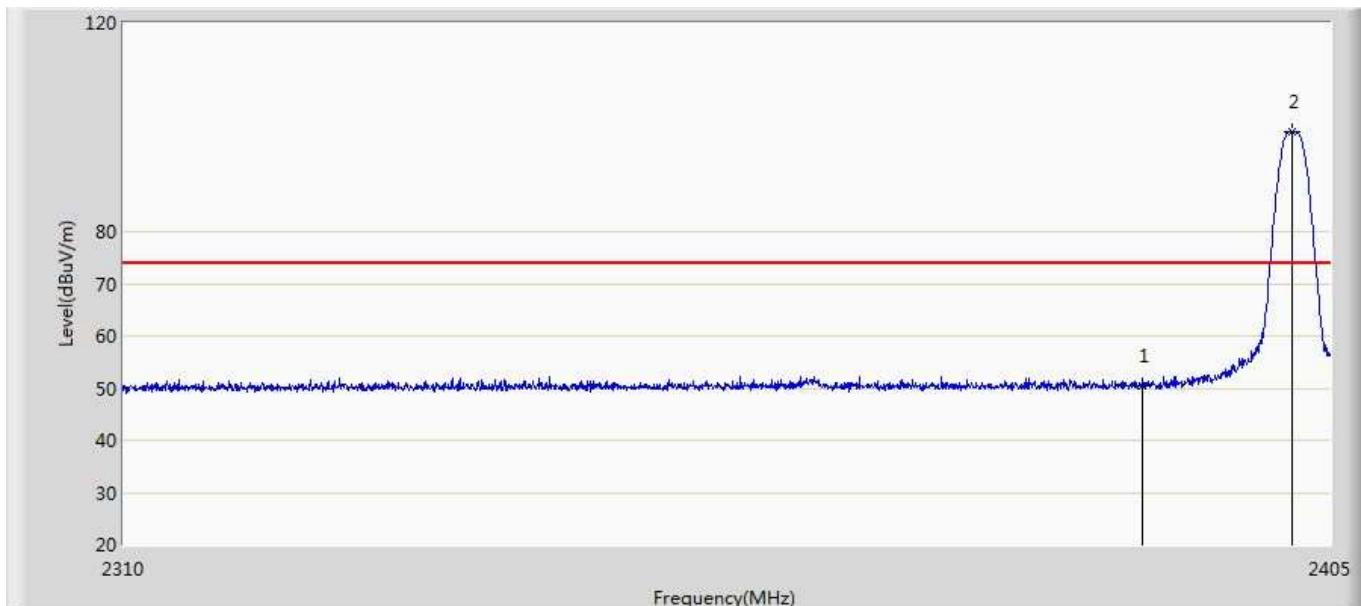
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.174	97.273	61.405	43.273	54.000	35.867	AV
2		2483.500	42.990	7.098	-11.010	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 19:06
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 LE_Coded (S=8)	



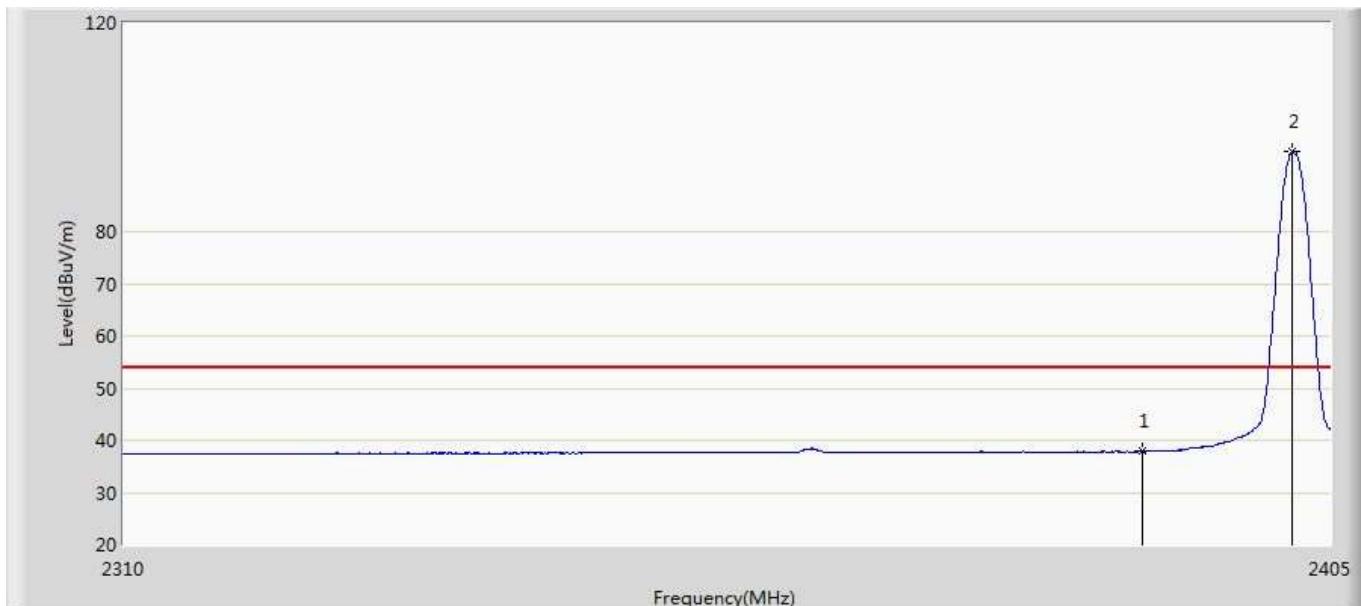
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.441	14.759	-23.559	74.000	35.682	PK
2	*	2401.913	96.305	60.593	22.305	74.000	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 19:08
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 LE_Coded (S=8)	



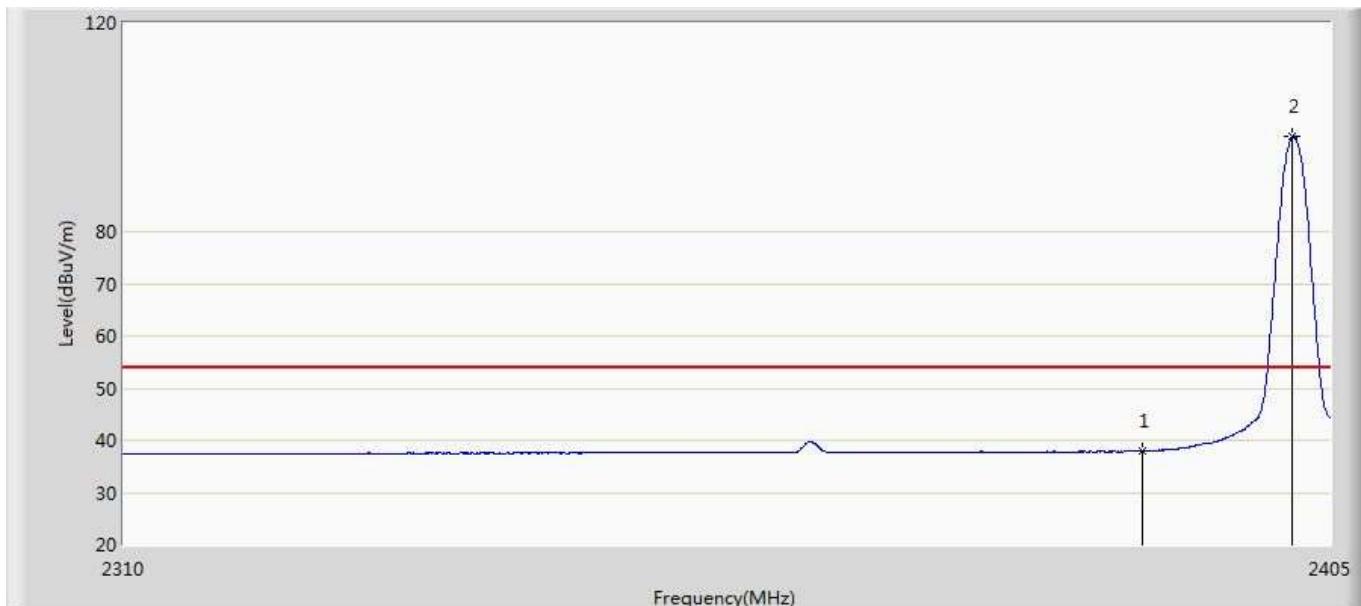
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.329	14.647	-23.671	74.000	35.682	PK
2	*	2401.960	99.042	63.329	25.042	74.000	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 19:10
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 LE_Coded (S=8)	



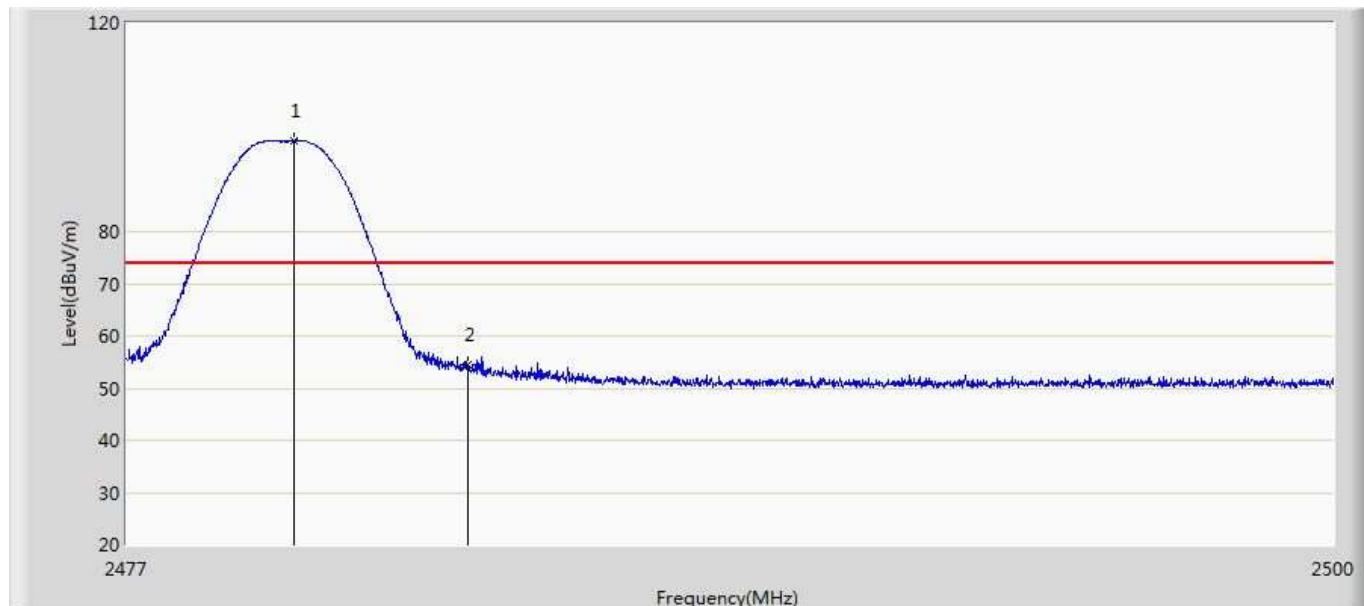
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	37.916	2.234	-16.084	54.000	35.682	AV
2	*	2402.008	95.406	59.693	41.406	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 19:13
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 LE_Coded (S=8)	



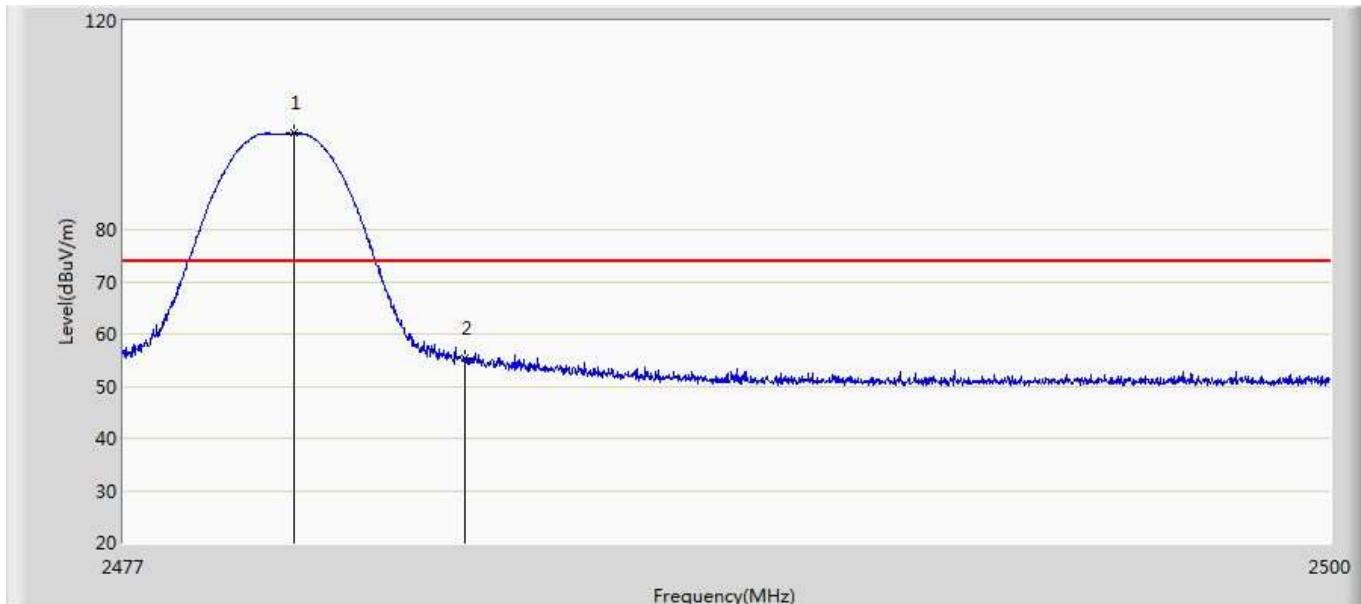
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.047	2.365	-15.953	54.000	35.682	AV
2	*	2402.008	98.189	62.476	44.189	54.000	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:04
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 LE_Coded (S=8)	



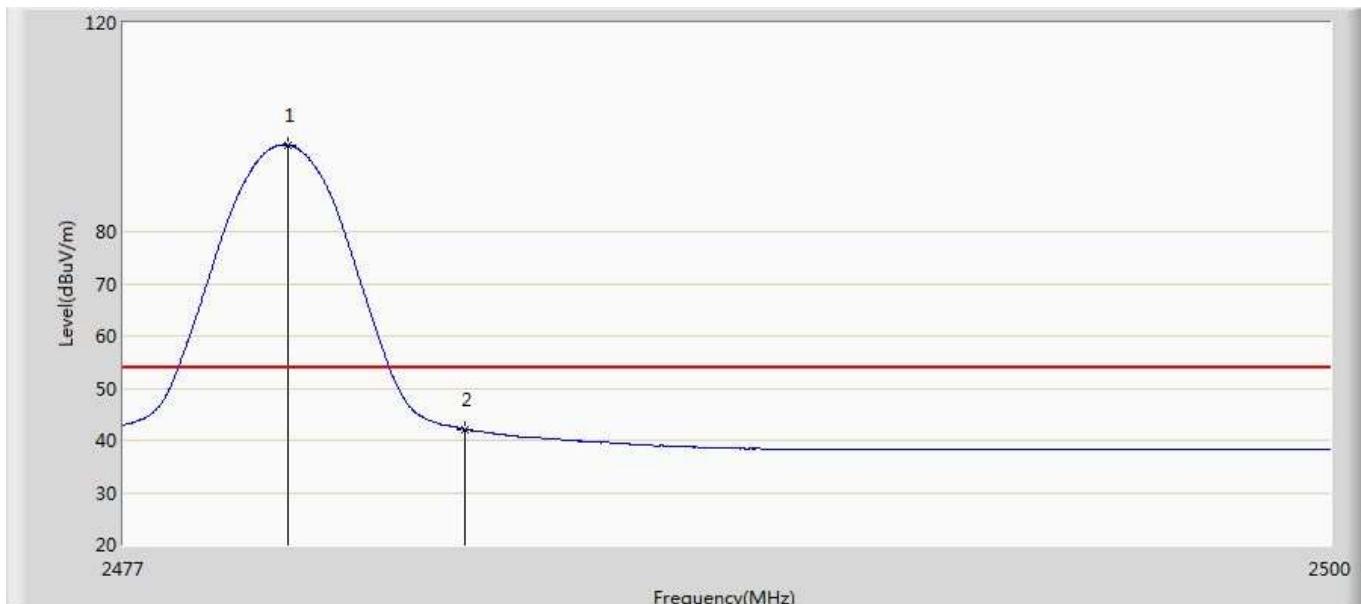
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.174	97.489	61.621	23.489	74.000	35.867	PK
2		2483.500	54.502	18.610	-19.498	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:07
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 LE_Coded (S=8)	



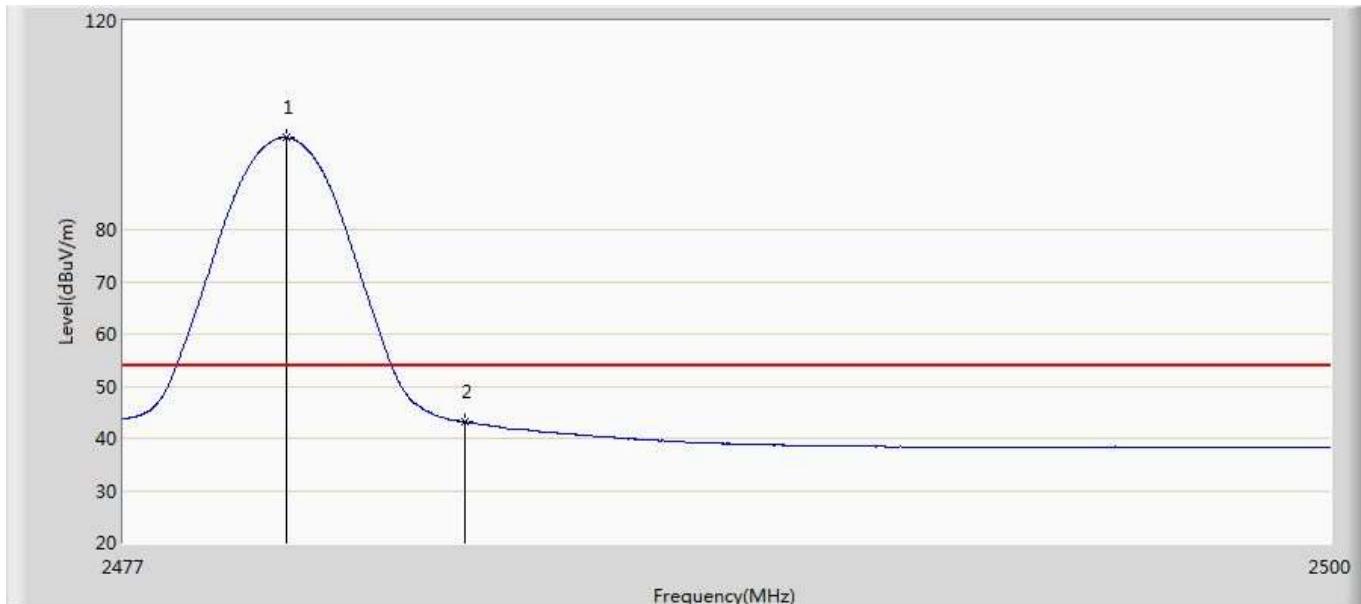
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.254	98.437	62.569	24.437	74.000	35.868	PK
2		2483.500	55.227	19.335	-18.773	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:10
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 LE_Coded (S=8)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.139	96.610	60.743	42.610	54.000	35.867	AV
2		2483.500	42.084	6.192	-11.916	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/21 - 22:12
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 4:Transmit at 2480MHz by LE_Coded (S=8)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.105	97.593	61.726	43.593	54.000	35.867	AV
2		2483.500	43.079	7.187	-10.921	54.000	35.891	AV

## 7. Occupied Bandwidth

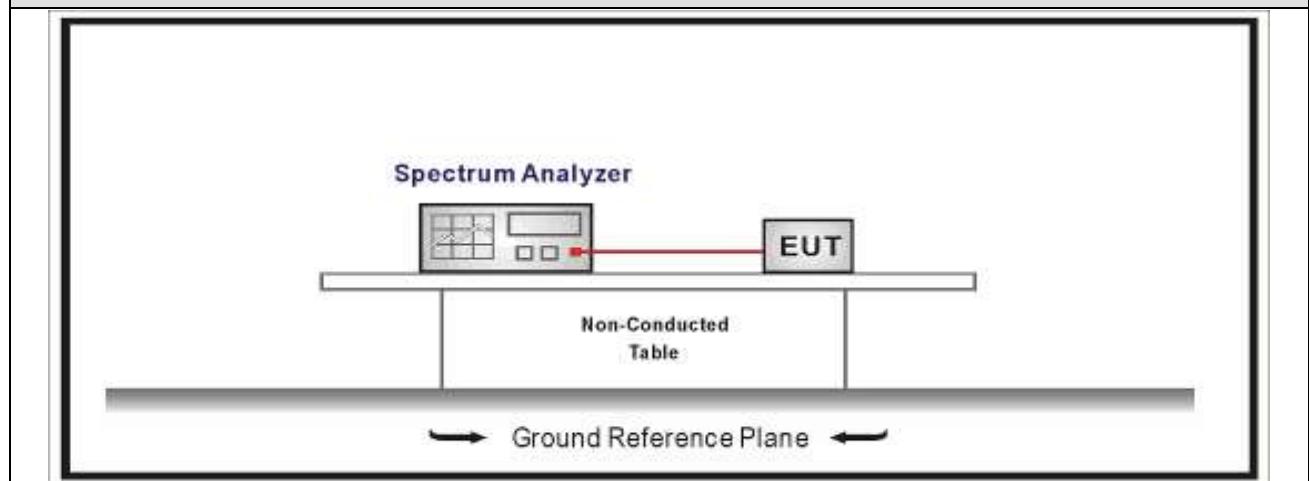
### 7.1. Test Equipment

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	2019.04.09	2020.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2019.04.09	2020.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2019.04.10	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

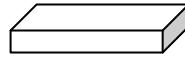
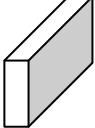
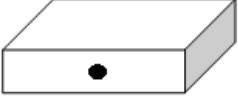
#### Occupied Bandwidth

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	
				
		<input type="checkbox"/>	<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
				

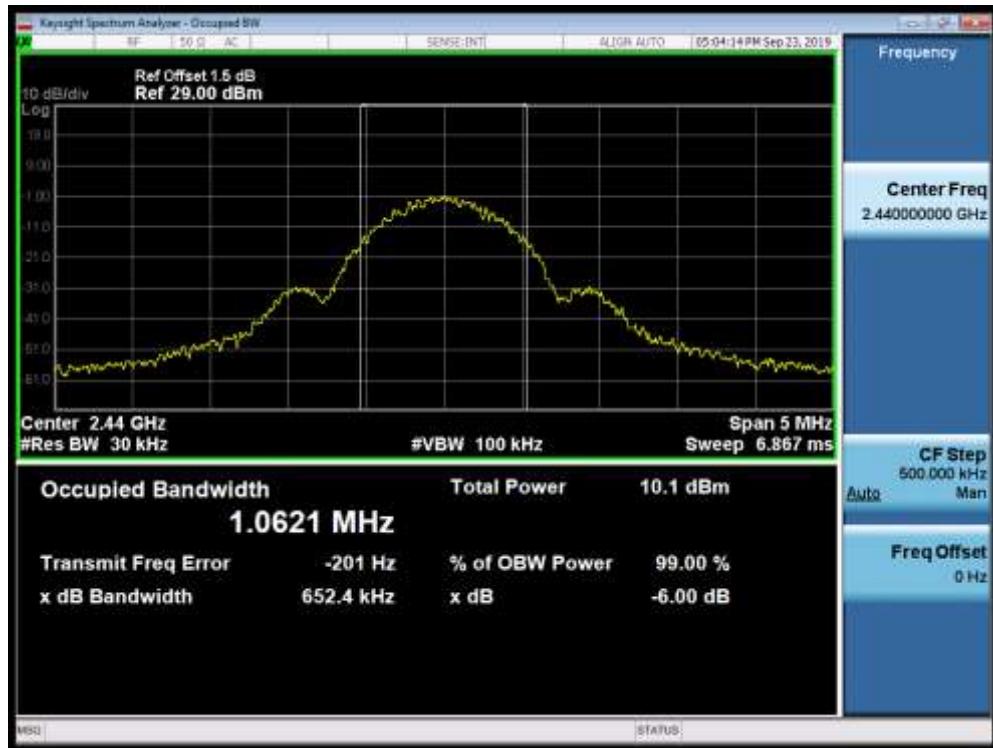
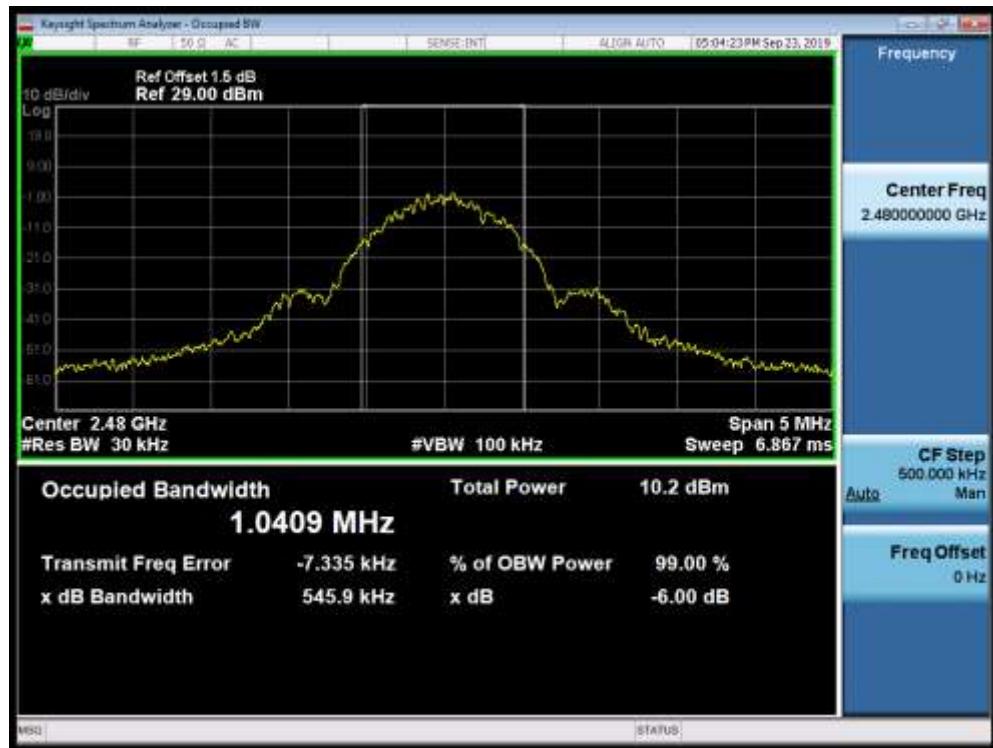
## 7.6. Test Result

Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 1	Test Site	:	TR-8
Test Date	:	2019.08.10	Test Engineer	:	Simon

Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (kHz)	Limit (kHz)	Result
1	00	2402	1075.0	>500	Pass
1	19	2440	1062.1	>500	Pass
1	39	2480	1040.9	>500	Pass

Mode 1 CH00 (2402MHz)



**Mode 1 CH18 (2440MHz)****Mode 1 CH39 (2480MHz)**

Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
1	00	2402	696.0	>500	Pass
1	19	2440	688.5	>500	Pass
1	39	2480	682.7	>500	Pass

**Mode 1 CH00 (2402MHz)**


## Mode 1 CH19 (2440MHz)



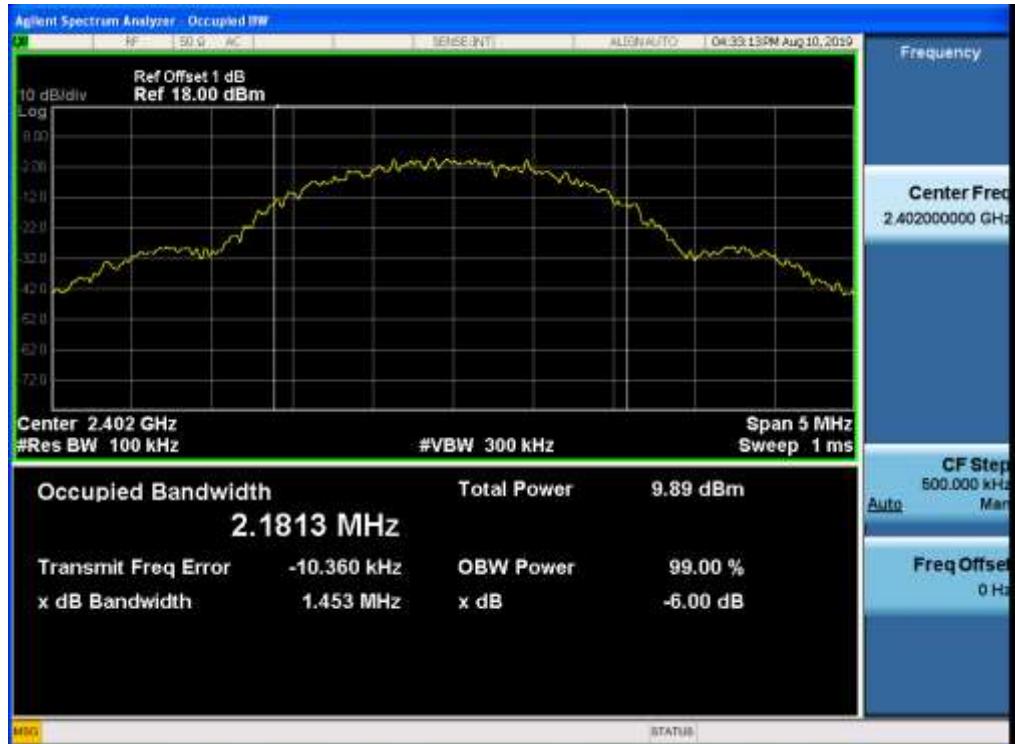
## Mode 1 CH39 (2480MHz)



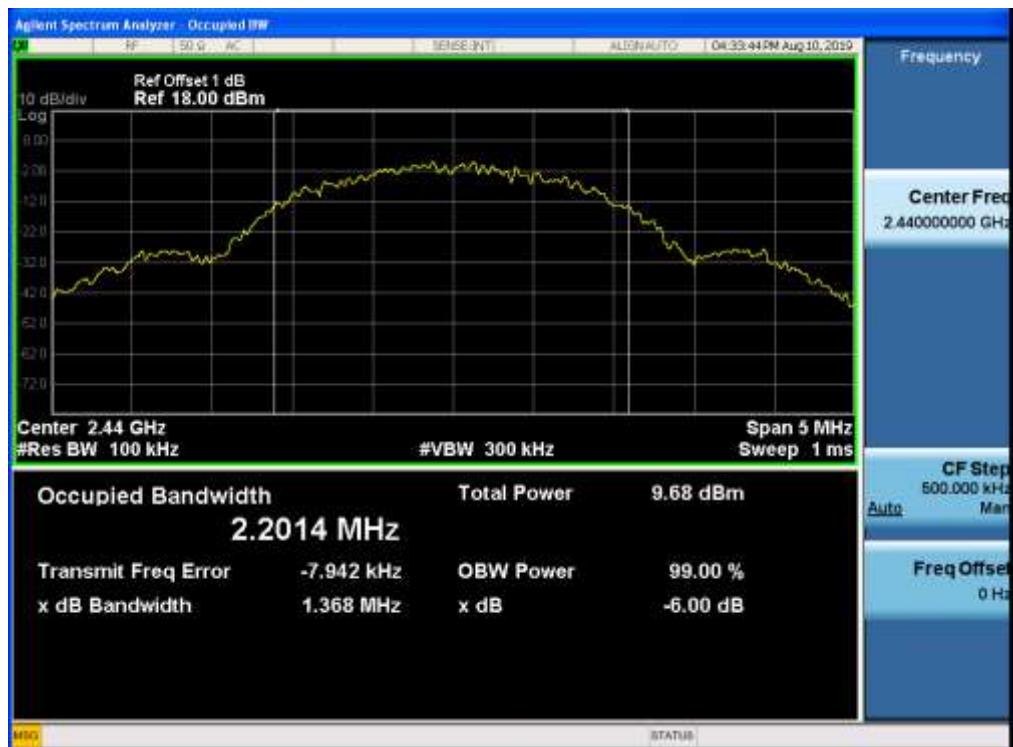
Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 2	Test Site	:	TR-8
Test Date	:	2019.08.19	Test Engineer	:	Simon

Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (kHz)	Limit (kHz)	Result
2	00	2402	2181.3	>500	Pass
2	19	2440	2201.4	>500	Pass
2	39	2480	2191.4	>500	Pass

### Mode 2 CH00 (2402MHz)



## Mode 2 CH19 (2440MHz)



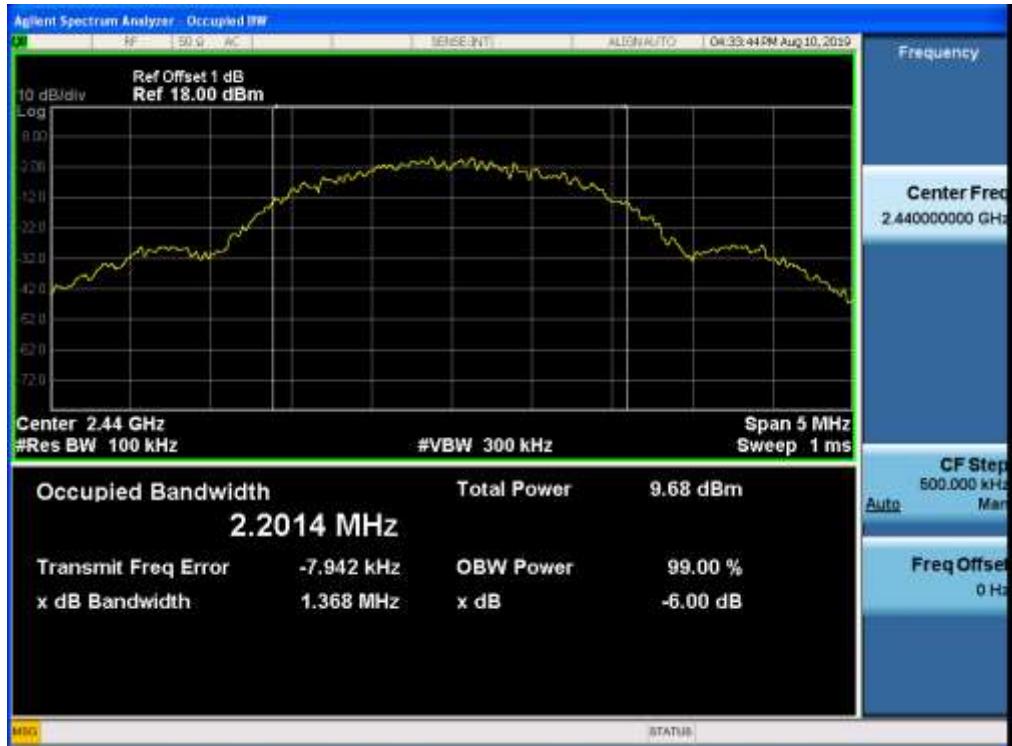
## Mode 2 CH39 (2480MHz)



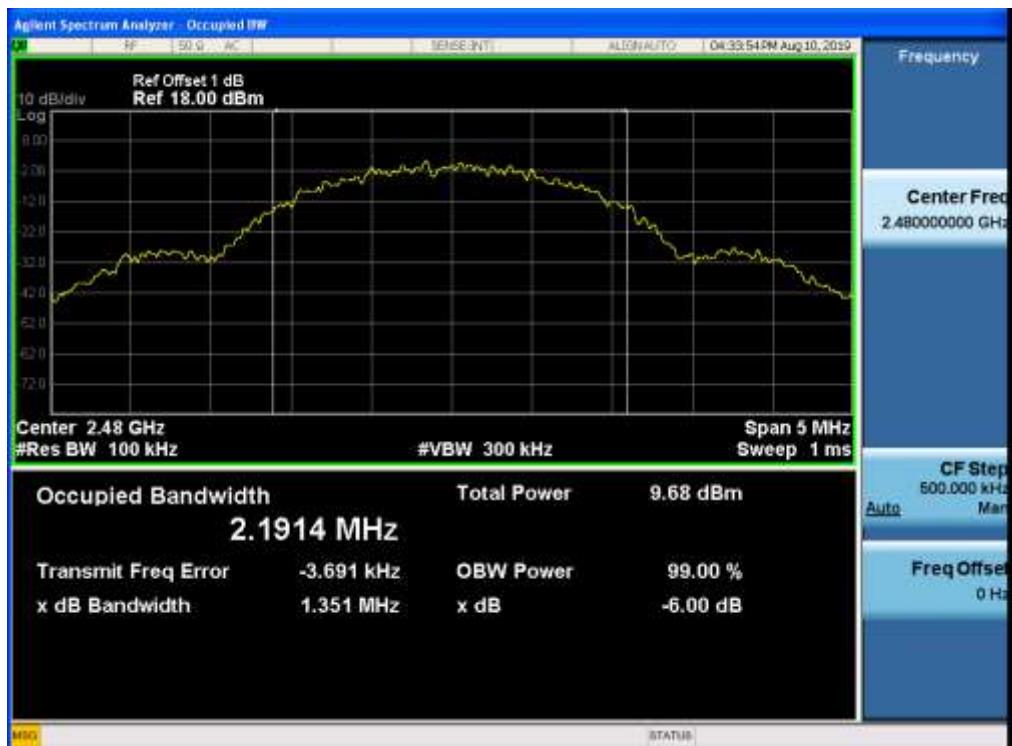
Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
2	00	2402	1453	>500	Pass
2	19	2440	1368	>500	Pass
2	39	2480	1351	>500	Pass

**Mode 2 CH00 (2402MHz)**


## Mode 2 CH19 (2440MHz)



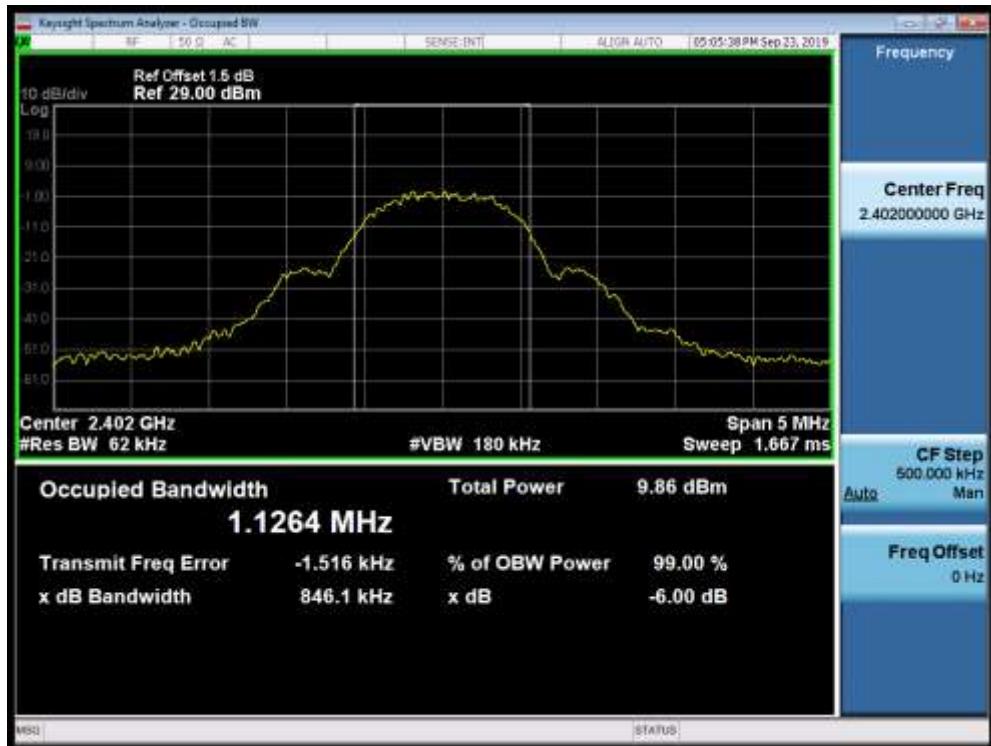
## Mode 2 CH39 (2480MHz)



Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 3	Test Site	:	TR-8
Test Date	:	2019.08.19	Test Engineer	:	Simon

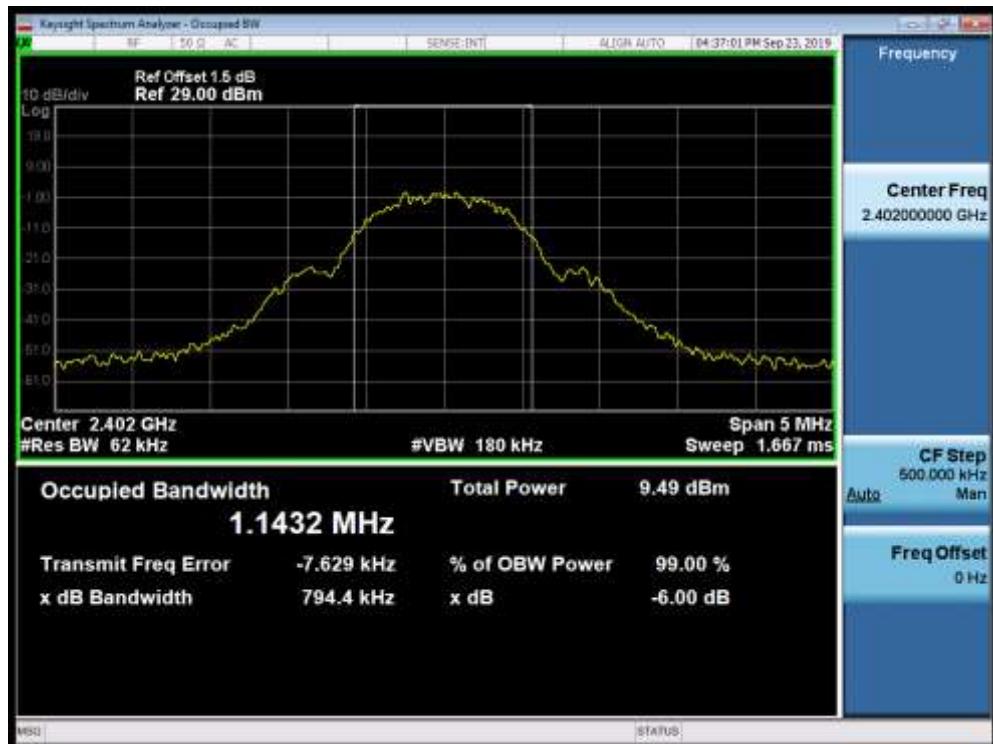
Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (kHz)	Limit (kHz)	Result
3	00	2402	1126.4	>500	Pass
3	19	2440	1155.1	>500	Pass
3	39	2480	1139.2	>500	Pass

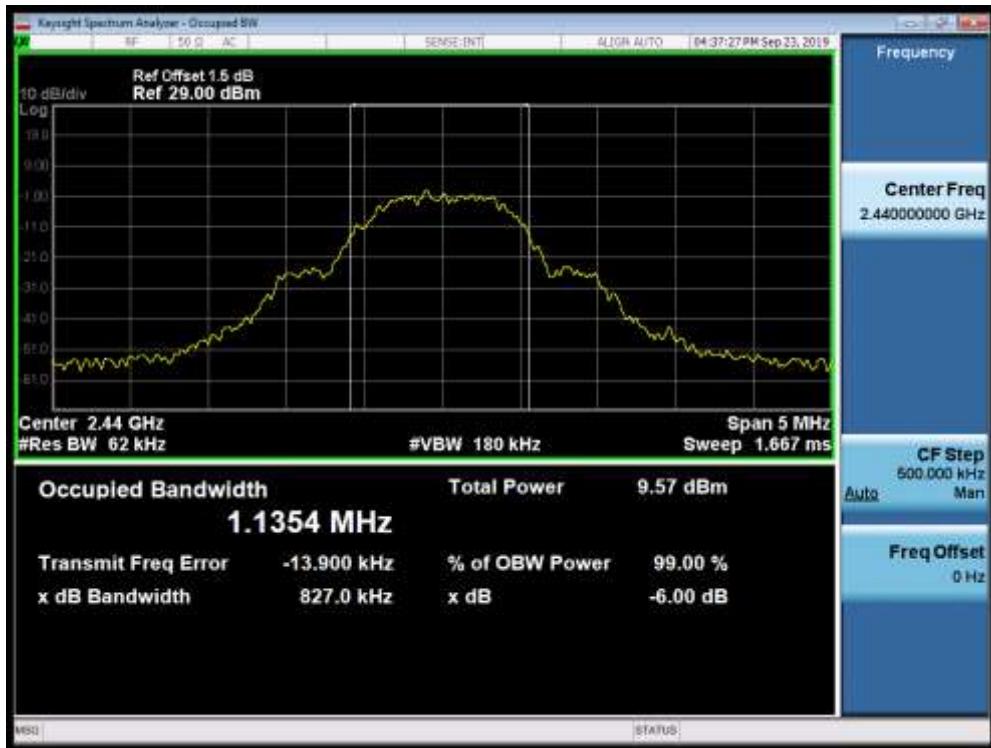
### Mode 3 CH00 (2402MHz)



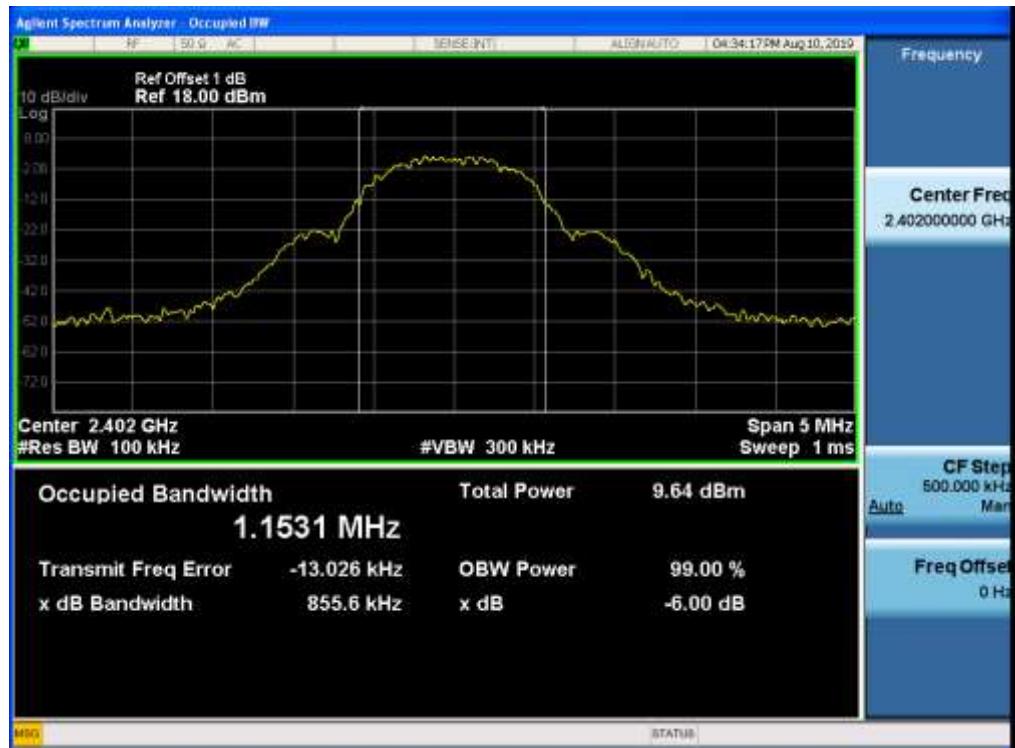
**Mode 3 CH19 (2440MHz)****Mode 3 CH39 (2480MHz)**

Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
3	00	2402	794.4	>500	Pass
3	19	2440	827.0	>500	Pass
3	39	2480	736.6	>500	Pass

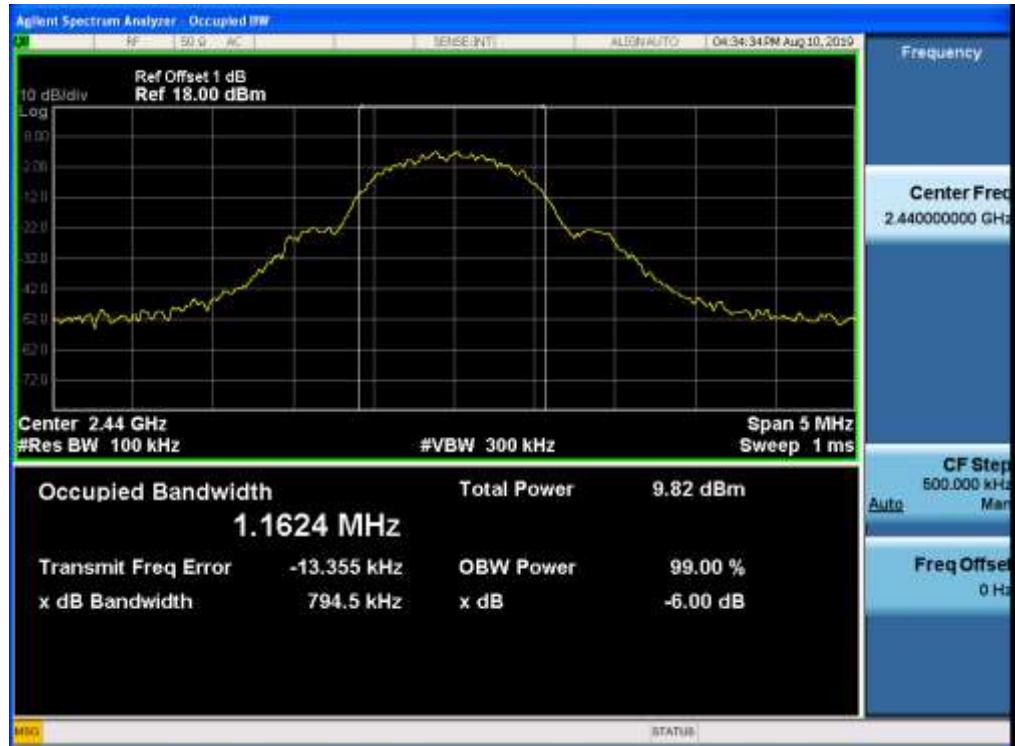
**Mode 3 CH00 (2402MHz)**


**Mode 3 CH19 (2440MHz)****Mode 3 CH39 (2480MHz)**

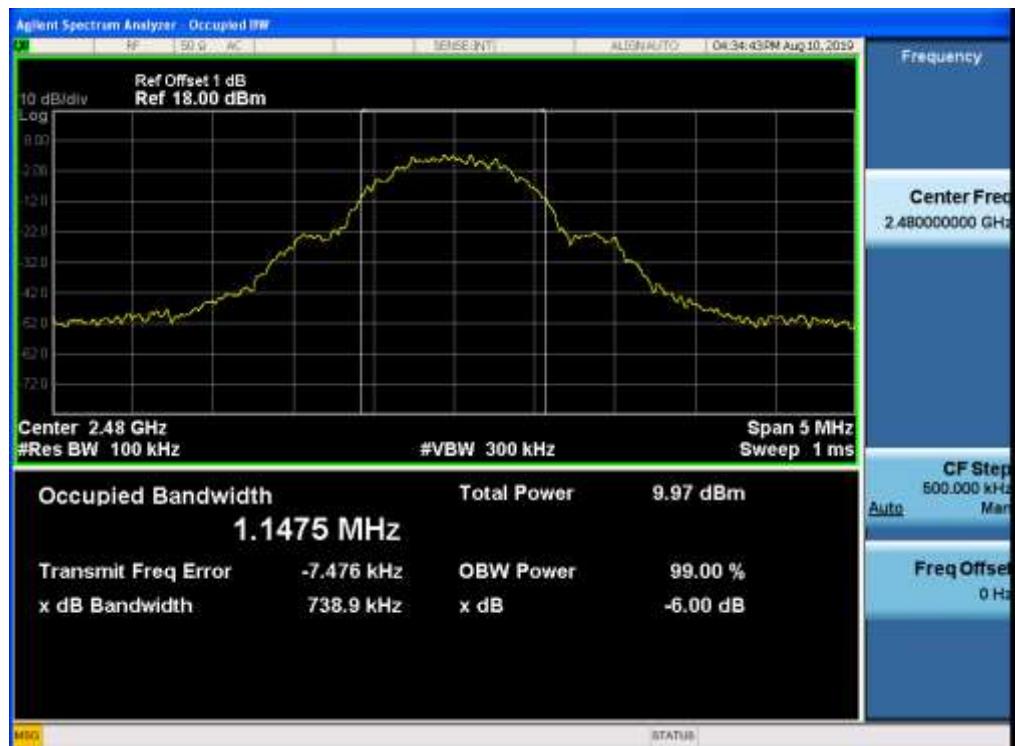
## Mode 3 CH00 (2402MHz)



## Mode 3 CH19 (2440MHz)



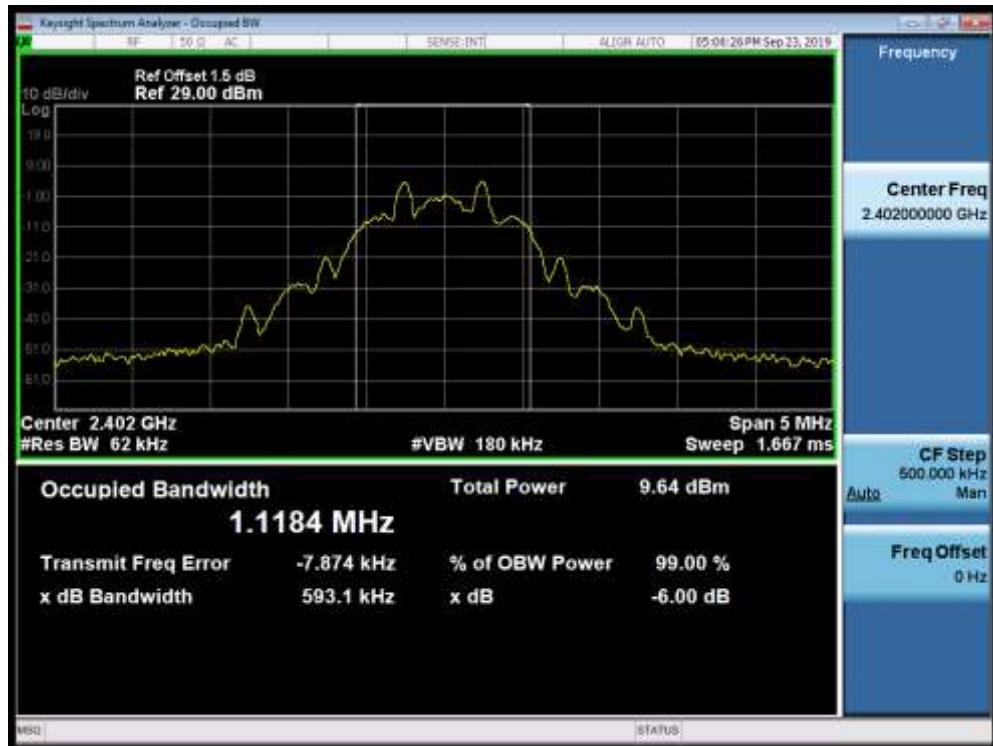
## Mode 3 CH39 (2480MHz)

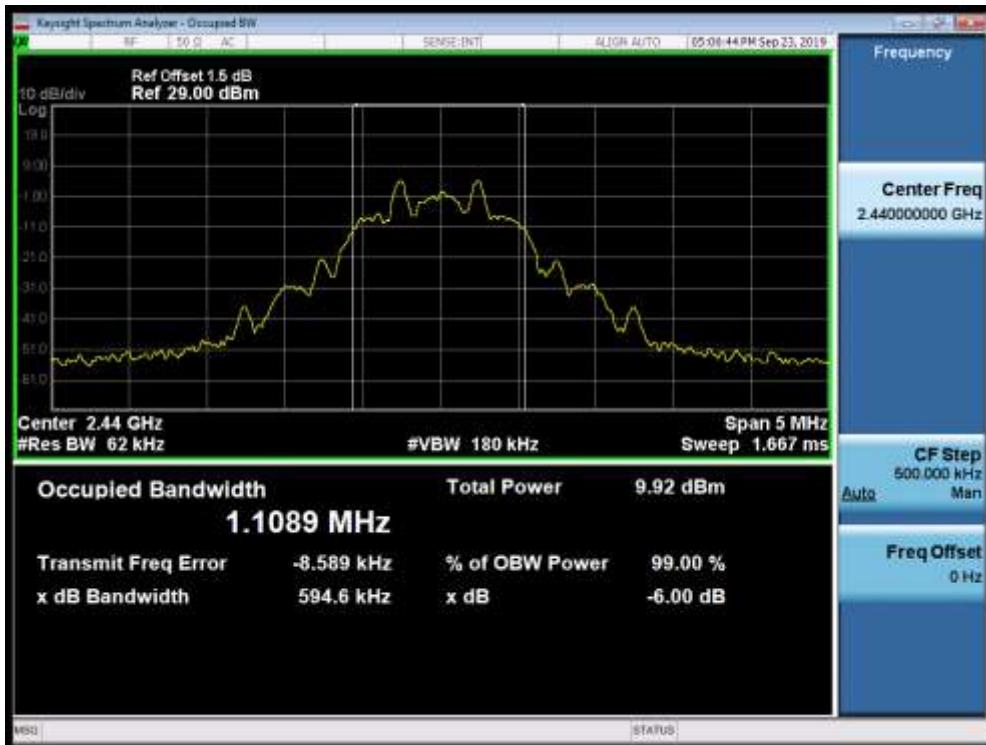


Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 4	Test Site	:	TR-8
Test Date	:	2019.08.19	Test Engineer	:	Simon

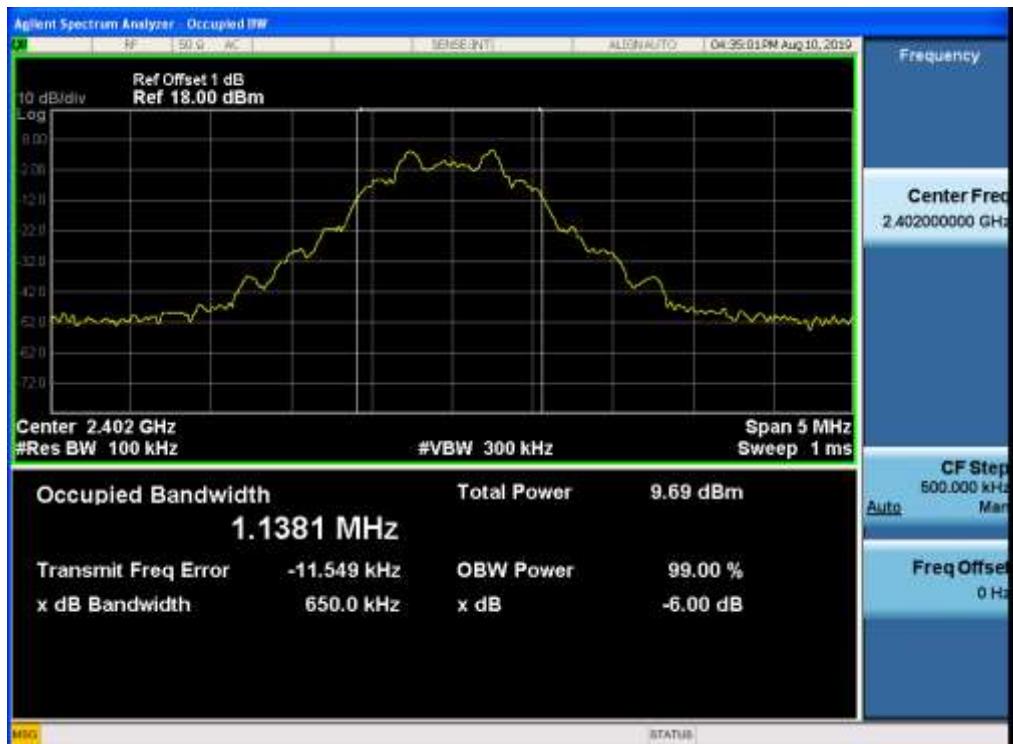
Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (kHz)	Limit (kHz)	Result
4	00	2402	1118.4	>500	Pass
4	19	2440	1108.9	>500	Pass
4	39	2480	1112.0	>500	Pass

### Mode 4 CH00 (2402MHz)

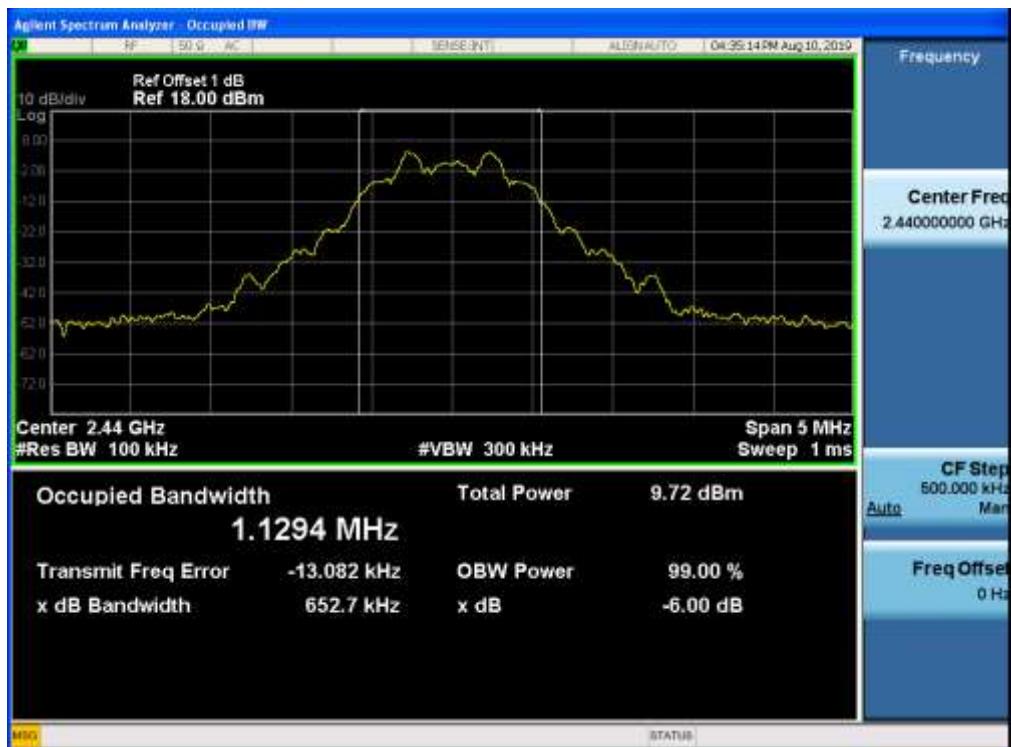


**Mode 4 CH19 (2440MHz)****Mode 4 CH39 (2480MHz)**

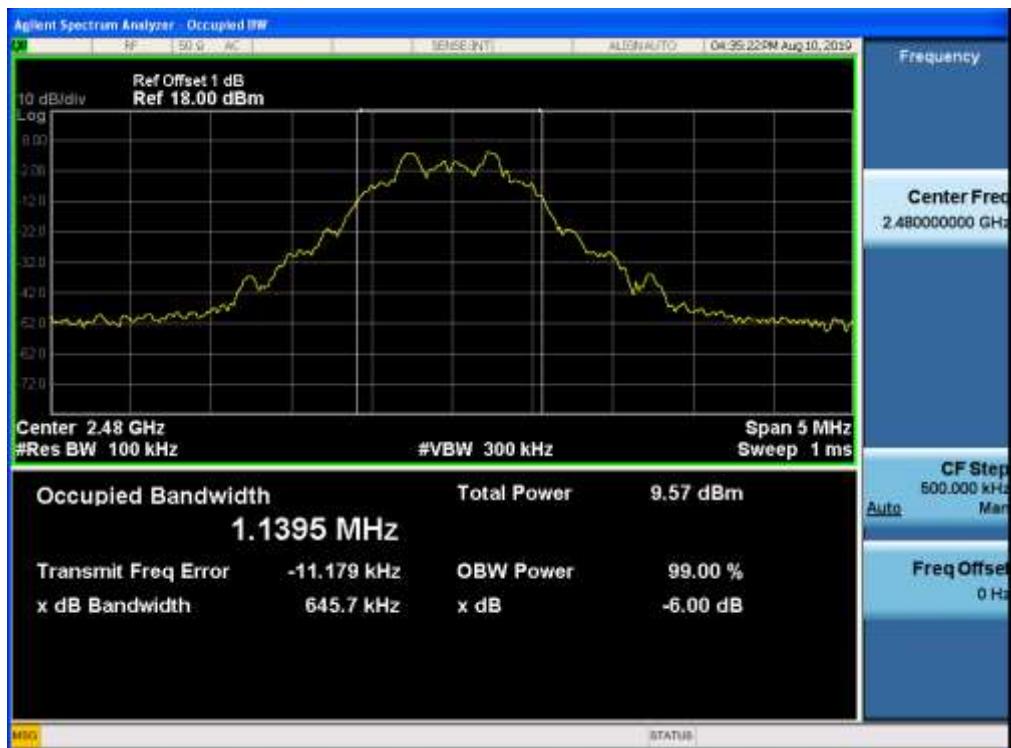
Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
4	00	2402	650.0	>500	Pass
4	19	2440	652.7	>500	Pass
4	39	2480	645.7	>500	Pass

**Mode 4 CH00 (2402MHz)**


## Mode 4 CH19 (2440MHz)



## Mode 4 CH39 (2480MHz)



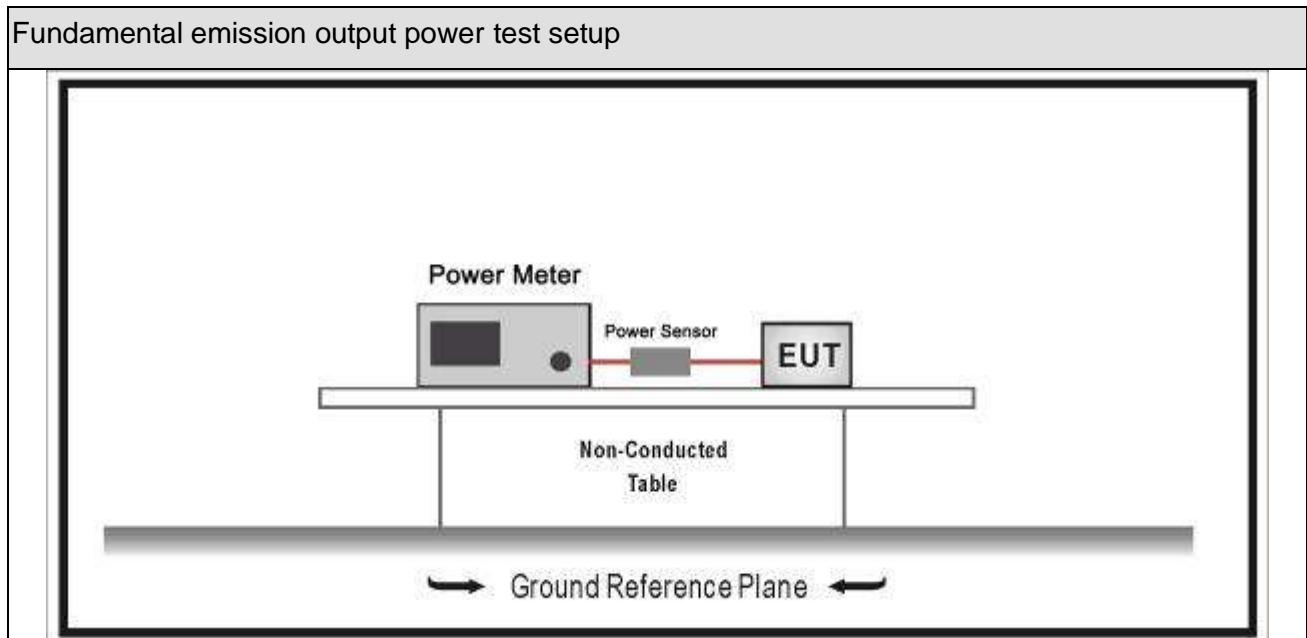
## 8. Fundamental emission output power

### 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	2019.04.10	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



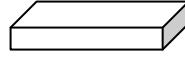
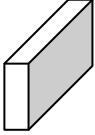
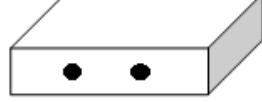
### 8.3. Limit

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	: 2019.08.16	Test Engineer	: Simon

Mode	Channel	Test Frequency (MHz)	Measurement Power Output (dBm)	Limit (dBm)	Result
Mode 1	00	2402	9.29	30	Pass
	19	2440	9.34	30	Pass
	39	2480	8.85	30	Pass
Mode 2	00	2402	9.32	30	Pass
	19	2440	9.39	30	Pass
	39	2480	8.92	30	Pass
Mode 3	00	2402	9.20	30	Pass
	19	2440	9.24	30	Pass
	39	2480	8.75	30	Pass
Mode 4	00	2402	9.14	30	Pass
	19	2440	9.20	30	Pass
	39	2480	8.72	30	Pass

**Diodes:**

Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 1-4	Test Site	:	TR-8
Test Date	:	2019.08.16	Test Engineer	:	Simon

Mode	Channel	Test Frequency (MHz)	Measurement Power Output (dBm)	Limit (dBm)	Result
Mode 1	00	2402	9.27	30	Pass
	19	2440	9.31	30	Pass
	39	2480	9.24	30	Pass
Mode 2	00	2402	9.23	30	Pass
	19	2440	9.28	30	Pass
	39	2480	9.21	30	Pass
Mode 3	00	2402	9.21	30	Pass
	19	2440	9.24	30	Pass
	39	2480	9.19	30	Pass
Mode 4	00	2402	9.20	30	Pass
	19	2440	9.23	30	Pass
	39	2480	9.15	30	Pass

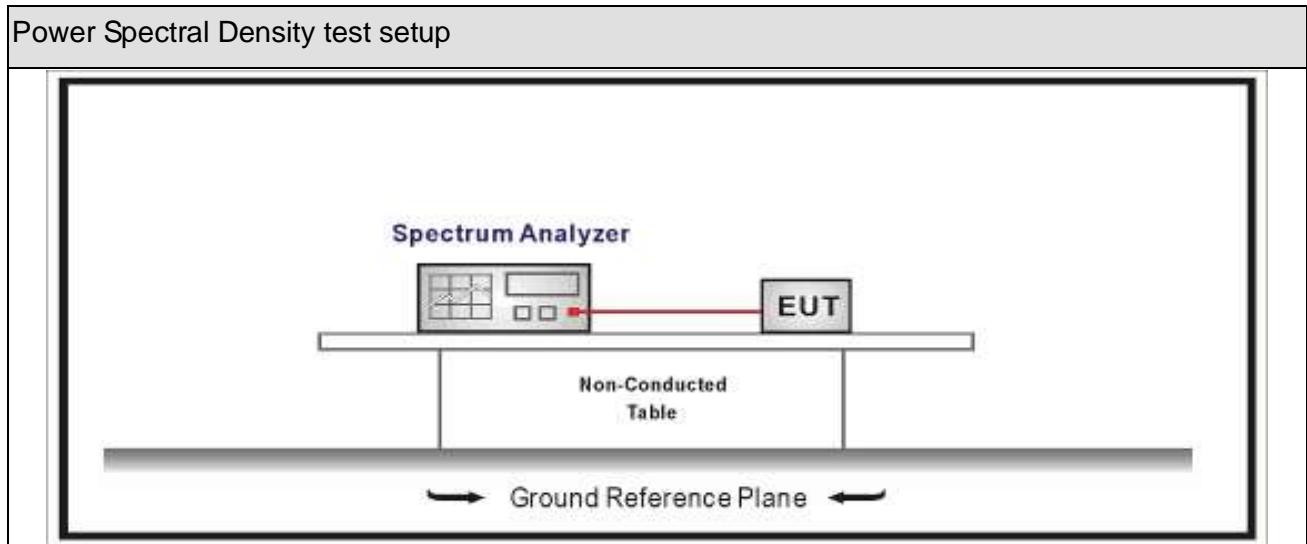
## 9. Power Spectral Density

### 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	2019.04.09	2020.04.08
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2019.04.09	2020.04.08
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2019.04.10	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

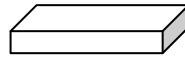
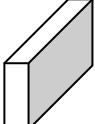
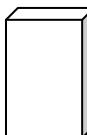
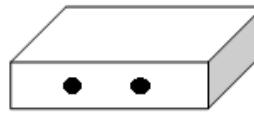
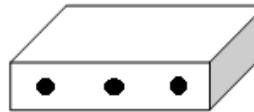
Power Spectral Density Limit
------------------------------

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			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input type="checkbox"/>	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
				

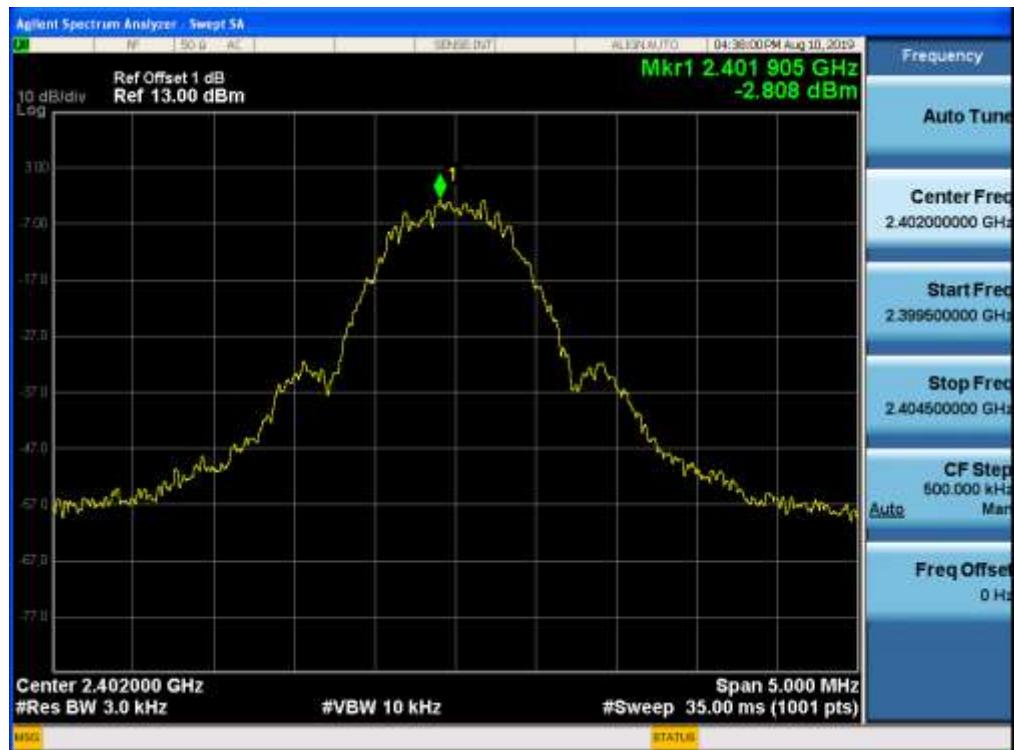
## 9.6. Test Result

Product Name	:	LED lamp	Test Voltage	:	AC 120V/60Hz
Test Mode	:	Mode 1	Test Site	:	TR-8
Test Date	:	2019.08.10	Test Engineer	:	Simon

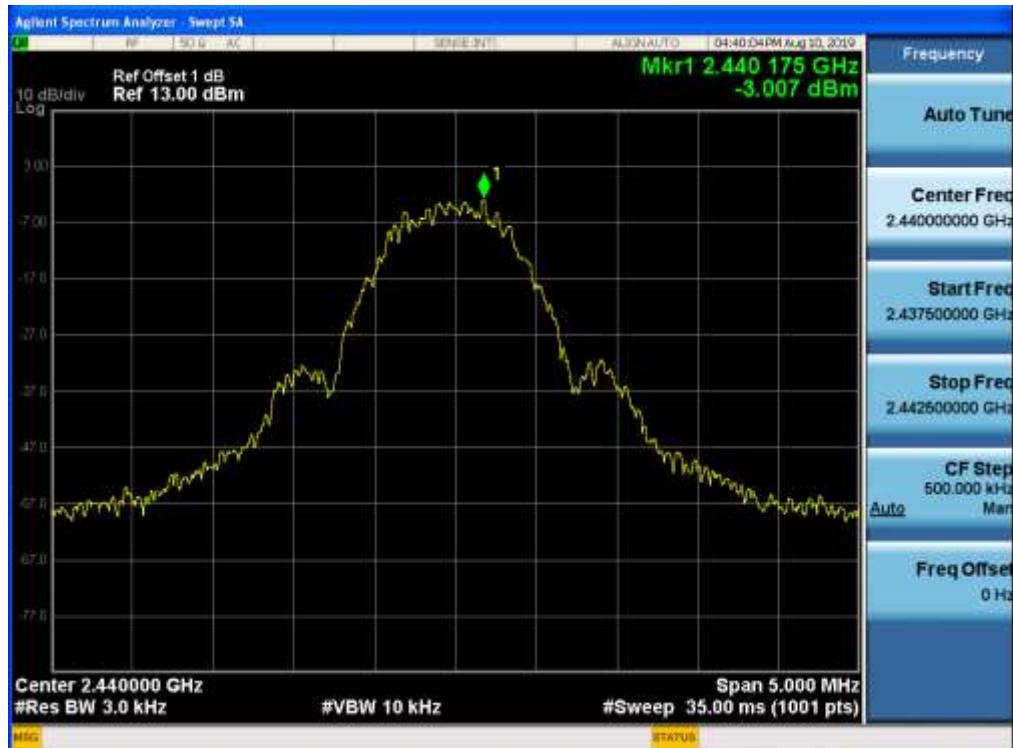
Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
1	00	2402	-2.808	-2.808	8	Pass
1	19	2440	-3.007	-3.007	8	Pass
1	39	2480	-2.906	-2.906	8	Pass

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

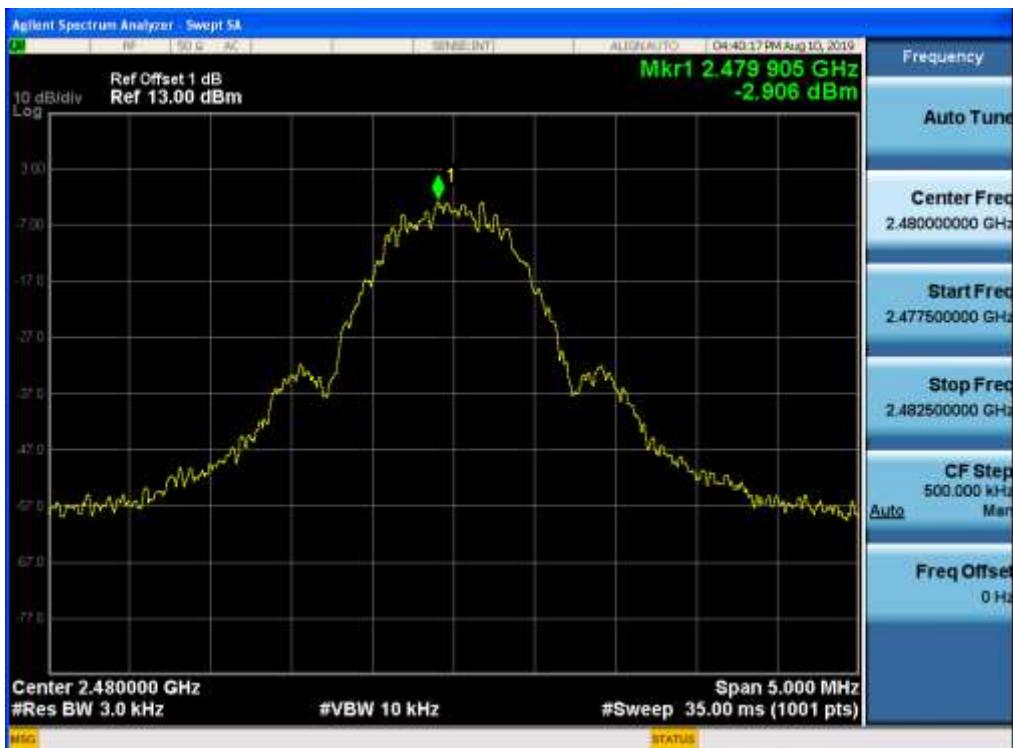
Mode 1 CH00(2402MHz)



## 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