



Test Report

FCC Part15 Subpart C & RSS-247 Issue 2

Product Name : LED lamp
Model No. : 9290022275
FCC ID : 2AGBW9290022275X
IC : 20812-2275X

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

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

Date of Receipt : Aug. 08, 2019
Test Date : Aug. 10, 2019 ~ Sept. 12, 2019
Issued Date : Sep. 29, 2019
Report No. : 1982084R-RF-US-P06V01
Report Version : V1.1

This report is based on DEKRA report (report No. 1972175R), the only difference between 9290022275 and 9290022268 is appearance design.

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. 29, 2019
Report No. : 1982084R-RF-US-P06V01



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. : 9290022275
 FCC ID : 2AGBW9290022275X
 IC : 20812-2275X
 EUT Voltage : 110-130 Vac, 50-60 Hz, 7W
 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

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 (Senior Engineer: Frank He)

Approved By : Jack zhang
 (Engineer Supervisor: Jack Zhang)

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1982084R-RF-US-P06V01	V1.0	Initial Issued Report	Sep. 12, 2019
1982084R-RF-US-P06V01	V1.1	Page 157:Added data	Sep. 29, 2019

1. General Information

1.1. EUT Description

Product Name	LED lamp					
Model No.	9290022275					
EUT Voltage	110-130 Vac, 50-60 Hz, 7W					
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-5.0)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2404 MHz	02	2406 MHz	03	2408 MHz
04	2410 MHz	05	2412 MHz	06	2414 MHz	07	2416 MHz
08	2418 MHz	09	2420 MHz	10	2422 MHz	11	2424 MHz
12	2426 MHz	13	2428 MHz	14	2430 MHz	15	2432 MHz
16	2434 MHz	17	2436 MHz	18	2438 MHz	19	2440 MHz
20	2442 MHz	21	2444 MHz	22	2446 MHz	23	2448 MHz
24	2450 MHz	25	2452 MHz	26	2454 MHz	27	2456 MHz
28	2458 MHz	29	2460 MHz	30	2462 MHz	31	2464 MHz
32	2466 MHz	33	2468 MHz	34	2470 MHz	35	2472 MHz
36	2474 MHz	37	2476 MHz	38	2478 MHz	39	2480 MHz

1.3. Antenna information

Antenna manufacturer	N/A					
Antenna Delivery	<input checked="" type="checkbox"/>	1*TX+1*RX	<input type="checkbox"/>	2*TX+2*RX	<input type="checkbox"/>	3*TX+3*RX
Antenna technology	<input checked="" type="checkbox"/>	SISO				
	<input type="checkbox"/>	MIMO	<input type="checkbox"/>	Basic		
			<input type="checkbox"/>	CDD		
			<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"/>	PCB		
			<input type="checkbox"/>	Ceramic Chip Antenna		
			<input type="checkbox"/>	Stamping Antenna		
			<input type="checkbox"/>	Metal plate type F antenna		
			<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)
Mode 5: Normal operation

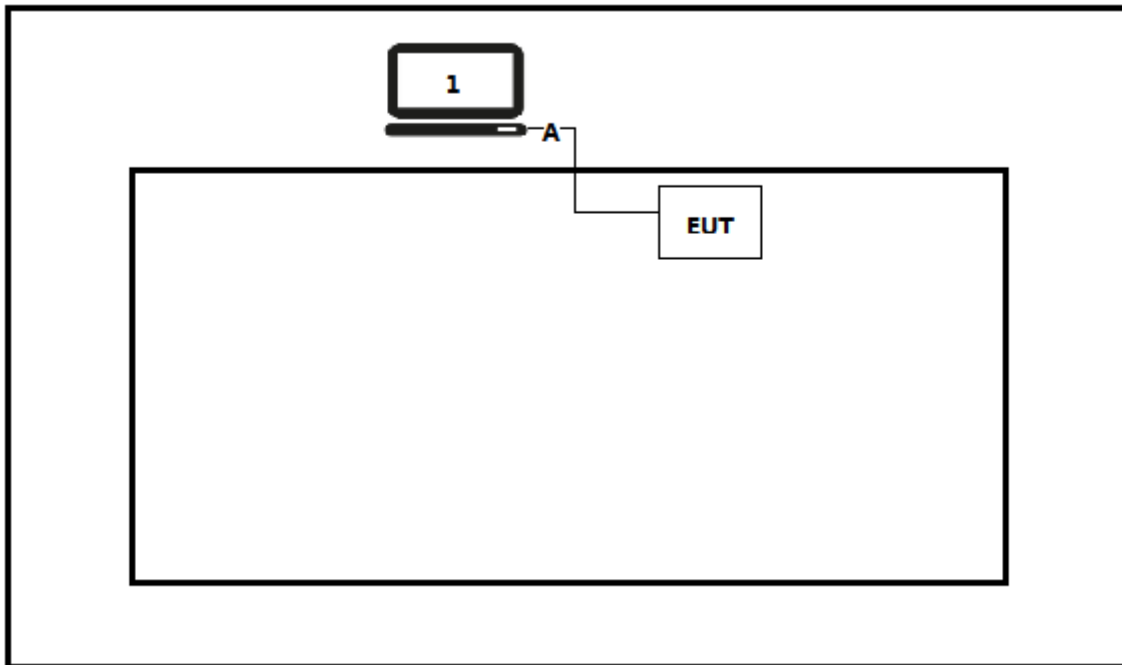
1.5. Tested System Details

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

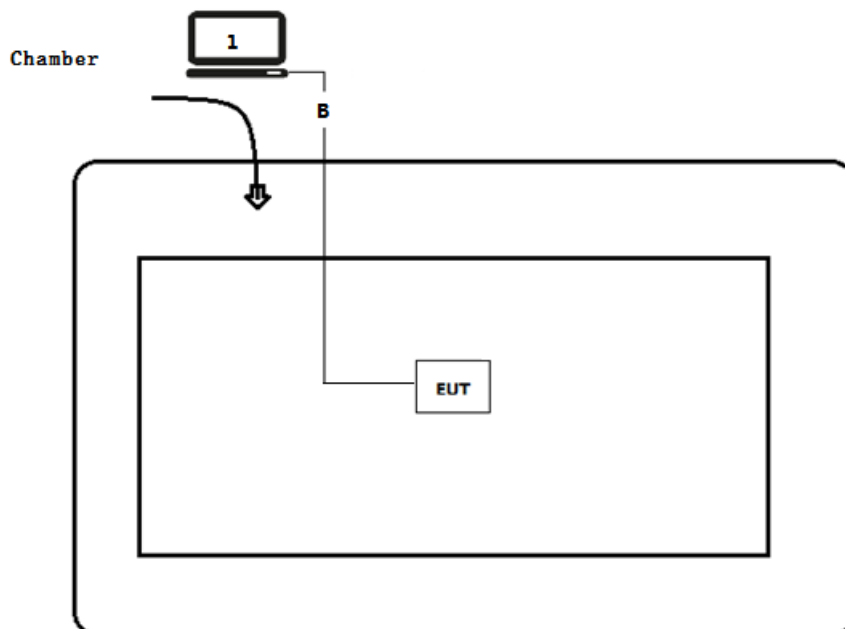
No.	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Think Pad	2526	LV-A3285	Power by adapter
A	Control cable	N/A	N/A	N/A	Shielded,0.5m
B	Control cable	N/A	N/A	N/A	Shielded,10m

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 [HueApprobaton 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	$\pm 2.02\text{dB}$
Radiated Emission	Below 1GHz $\pm 3.8\text{ dB}$
	Above 1GHz $\pm 3.9\text{ dB}$
RF Antenna Port Conducted Emission	$\pm 1.27\text{dB}$
Radiated Emission Band Edge	$\pm 3.9\text{dB}$
Occupied Bandwidth	$\pm 1\text{kHz}$
Power Spectral Density	$\pm 1.27\text{dB}$

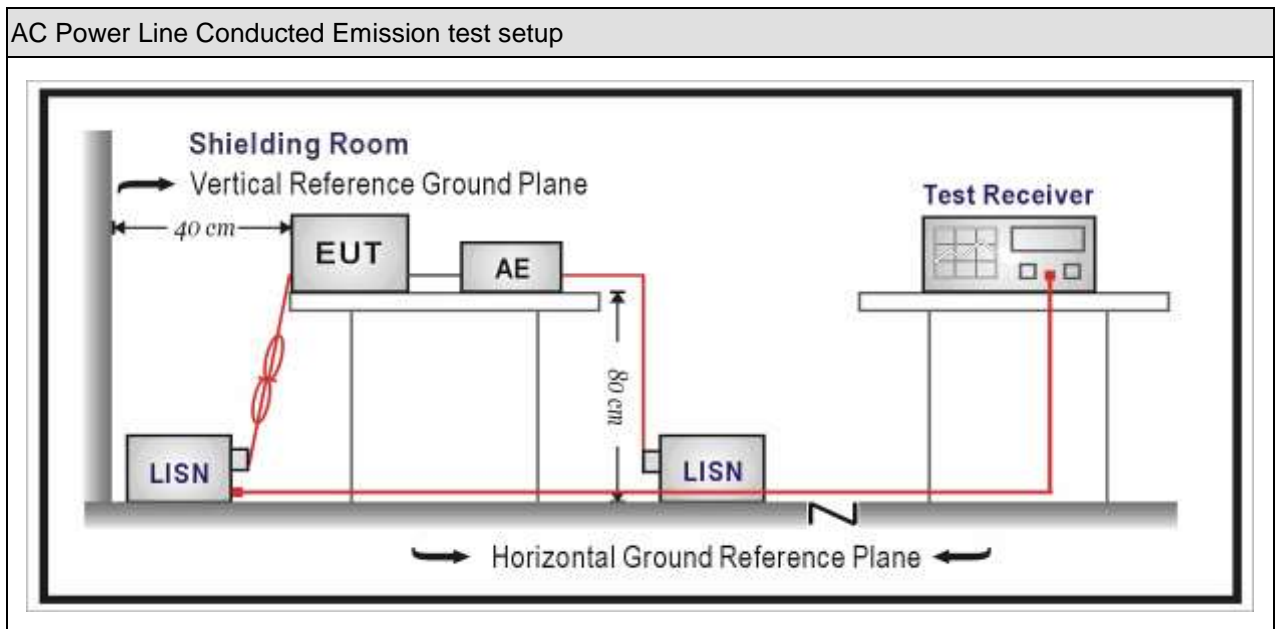
3. AC Power Line Conducted Emission

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 μ V)	Average (dB μ V)
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

Note 1: The lower limit shall apply at the transition frequencies.
 Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

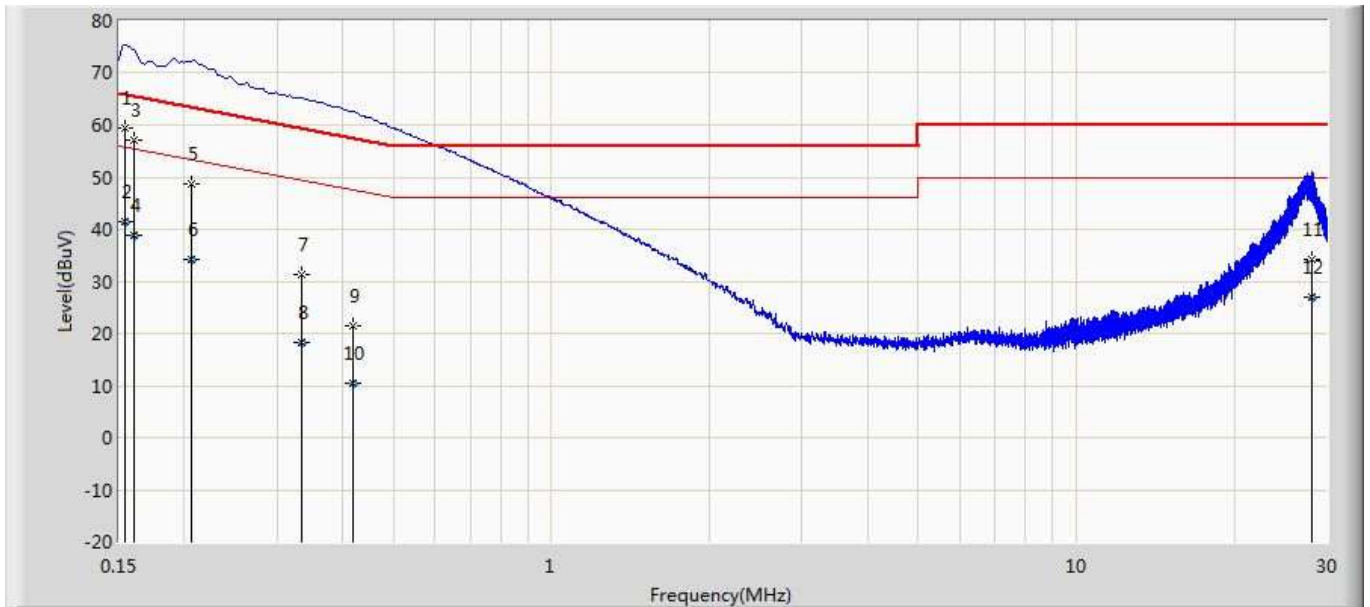
3.4. Test Procedure

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

3.5. Test Result

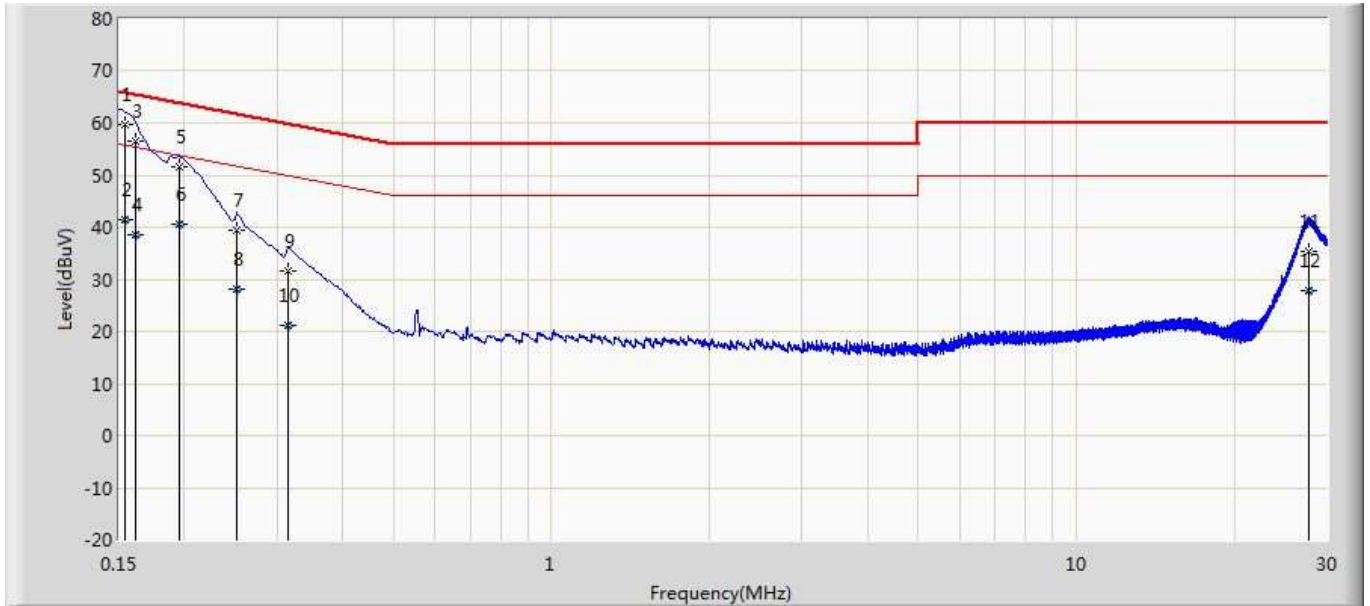
Muruta:

Engineer: Xu Jun	
Site: TR1	Time: 2019/08/21 - 00:01
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 5: Normal operation	



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_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 5: Normal operation	



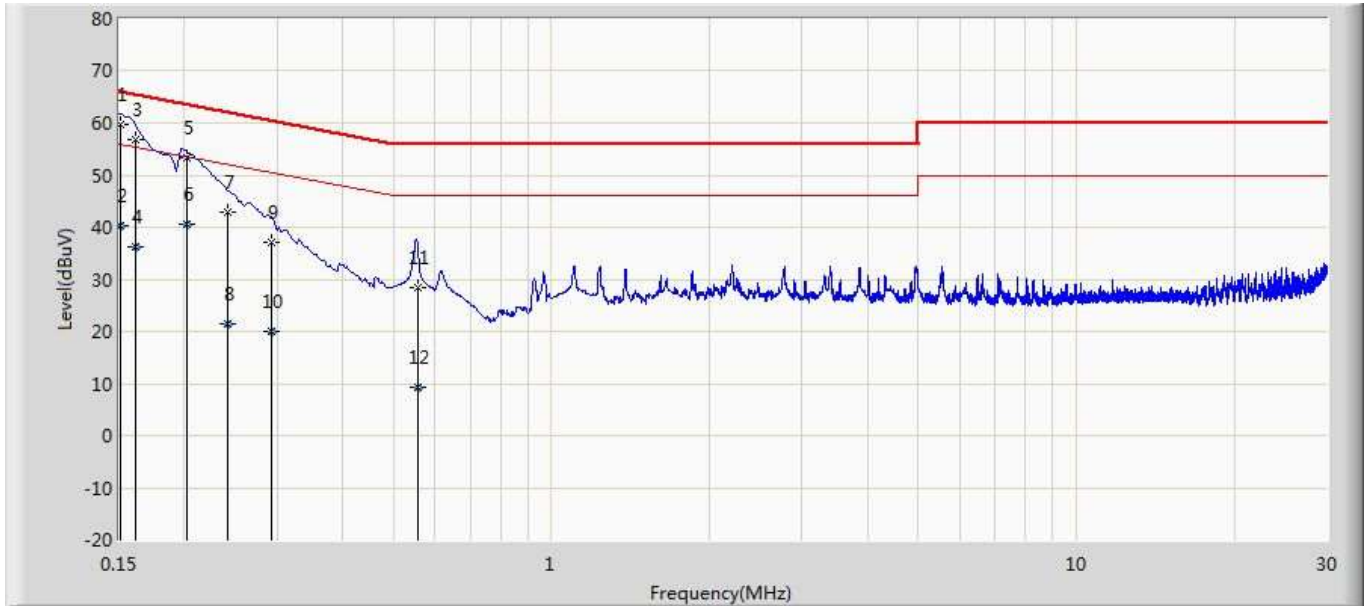
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.154	59.653	50.022	-6.141	65.793	9.631	QP
2		0.154	41.588	31.957	-14.206	55.793	9.631	AV
3		0.161	56.642	47.012	-8.758	65.399	9.631	QP
4		0.161	38.470	28.840	-16.929	55.399	9.631	AV
5		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:

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

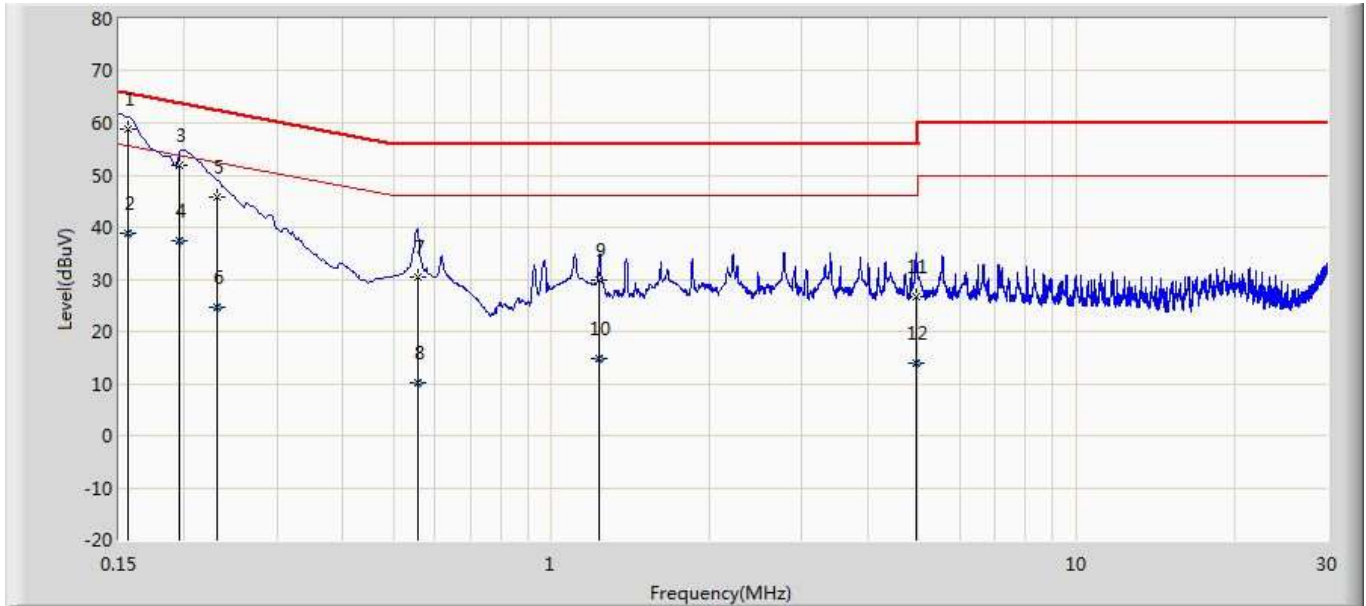
Diodes:

Engineer: Xu Jun	
Site: TR1	Time: 2019/08/21 - 00:15
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 5: Normal operation	



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_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 5: Normal operation	



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

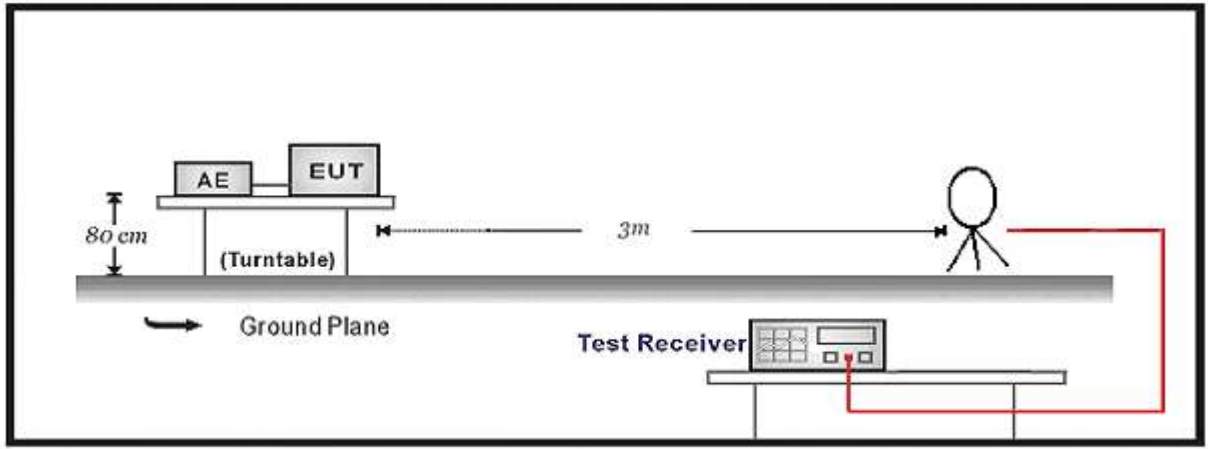
4.1. Test Equipment

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.					

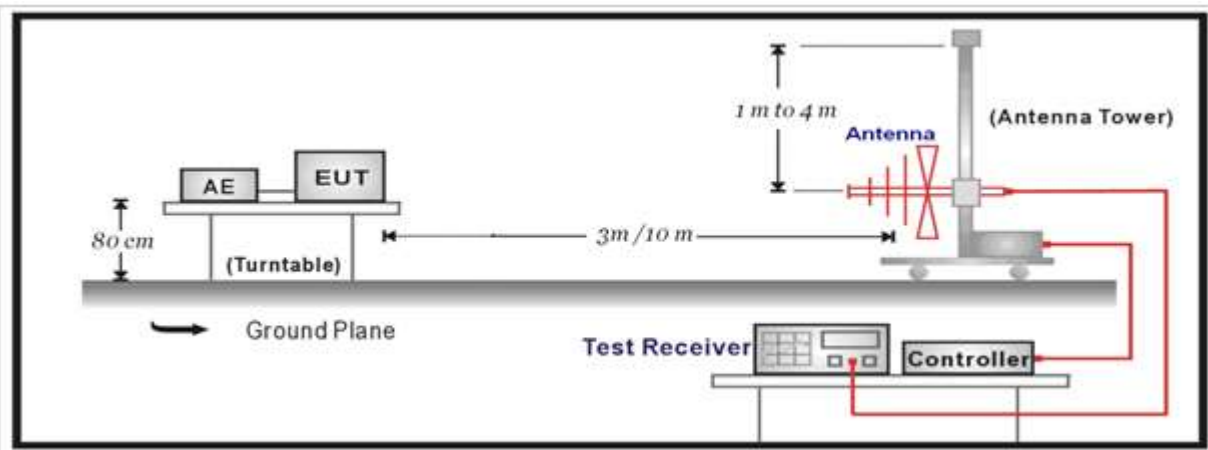
Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2019.01.04	2020.01.03
Preamplifier	Miteq	NSP1800-25	1364185	2019.05.06	2020.05.05
Preamplifier	Quietek	AP-040G	CHM-0906001	2019.05.06	2020.05.05
DRG 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

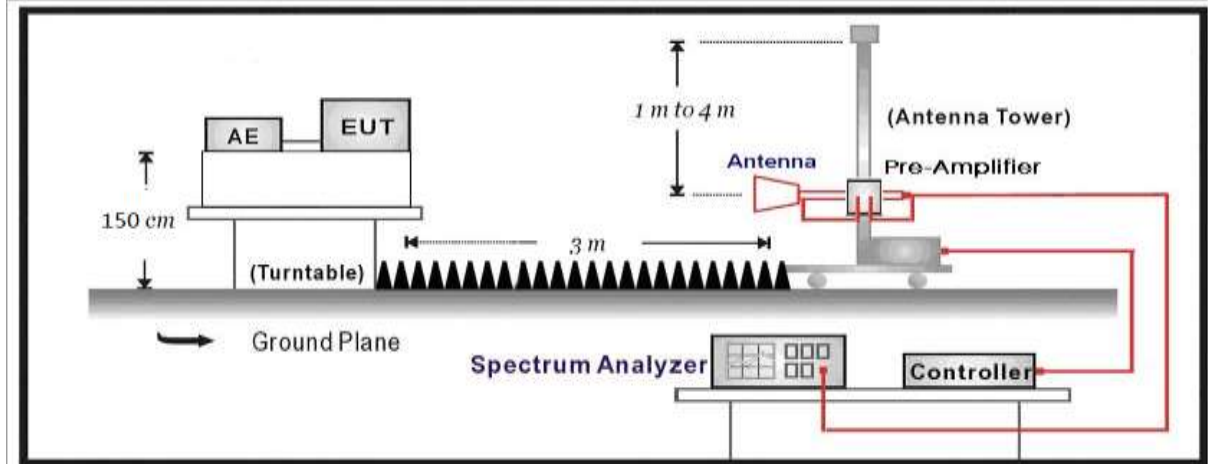
Below 30MHz Test Setup:



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*

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

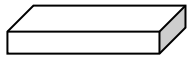
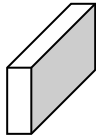
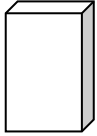

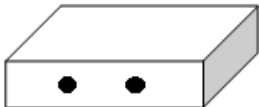

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed 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 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 checked="" type="checkbox"/>	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
<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"/>	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

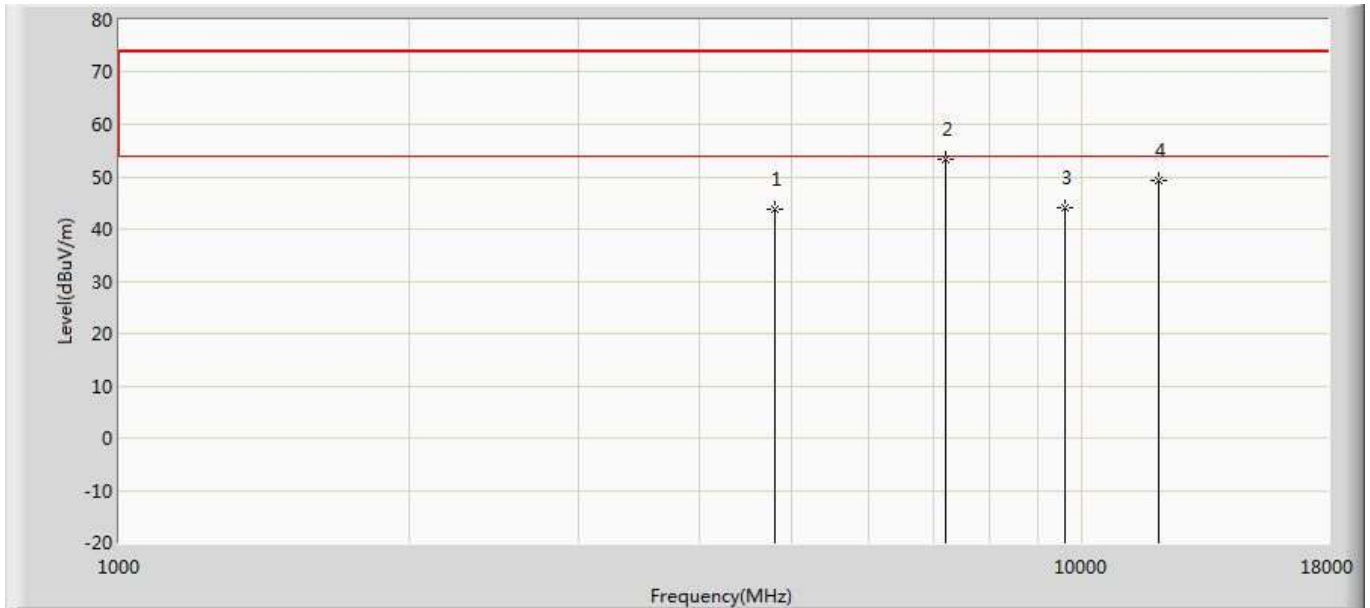
4.5. EUT test Axis definition

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	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
				

4.6. Test Result

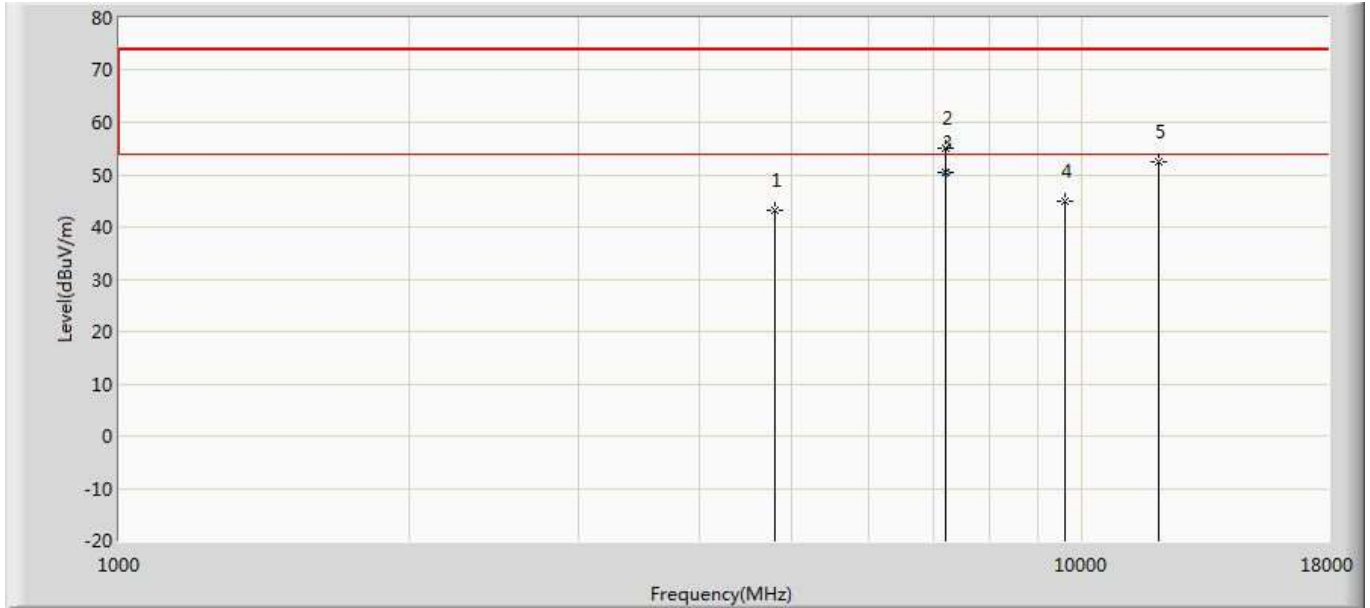
Muruta:

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:41
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	



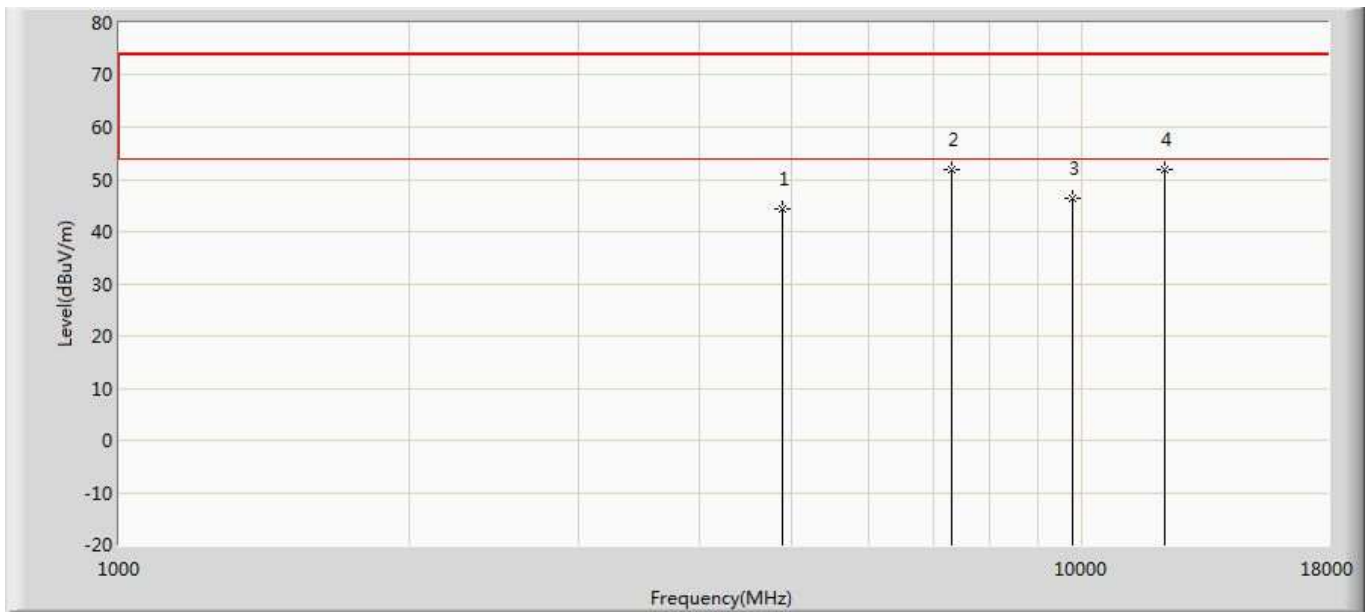
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	43.688	39.171	-30.312	74.000	4.517	PK
2	*	7206.000	53.297	45.750	-20.703	74.000	7.547	PK
3		9608.000	44.180	34.998	-29.820	74.000	9.182	PK
4		12010.000	49.271	34.718	-24.729	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



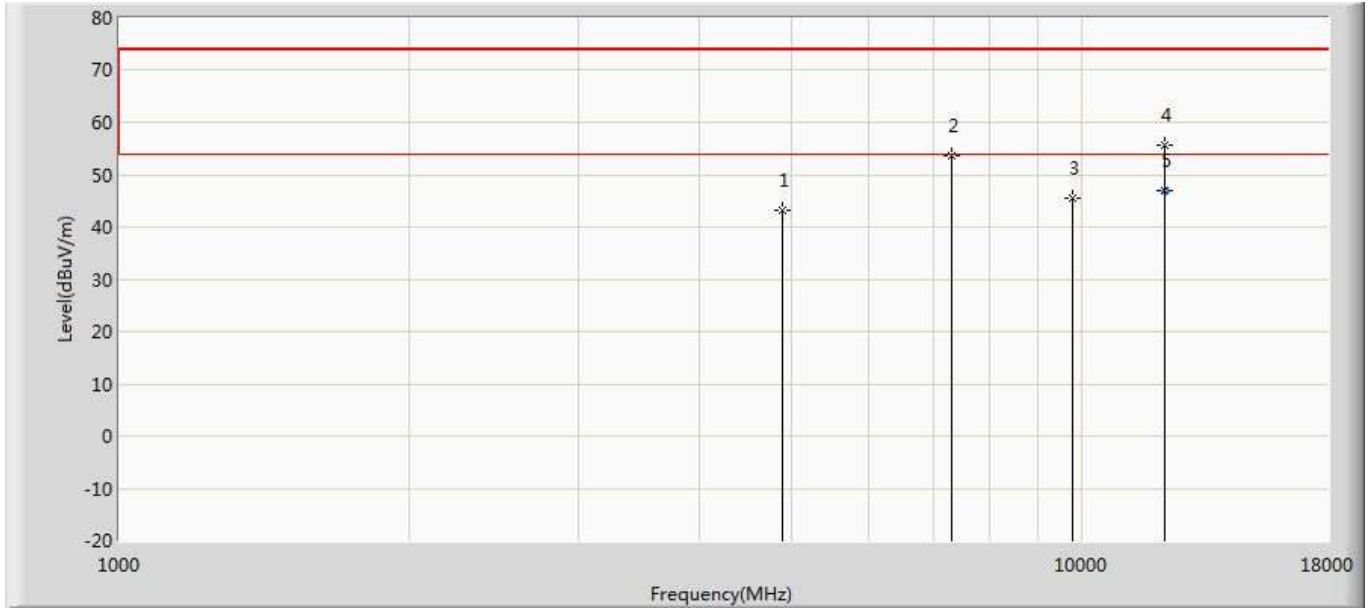
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	43.146	38.629	-30.854	74.000	4.517	PK
2		7206.000	55.170	47.623	-18.830	74.000	7.547	PK
3	*	7206.000	50.382	42.835	-3.618	54.000	7.547	AV
4		9608.000	44.885	35.703	-29.115	74.000	9.182	PK
5		12010.000	52.545	37.992	-21.455	74.000	14.553	PK

Profile: 1982084R	Page No.: 85
Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:42
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 1:Transmit at 2440MHz by LE_1Mbps	



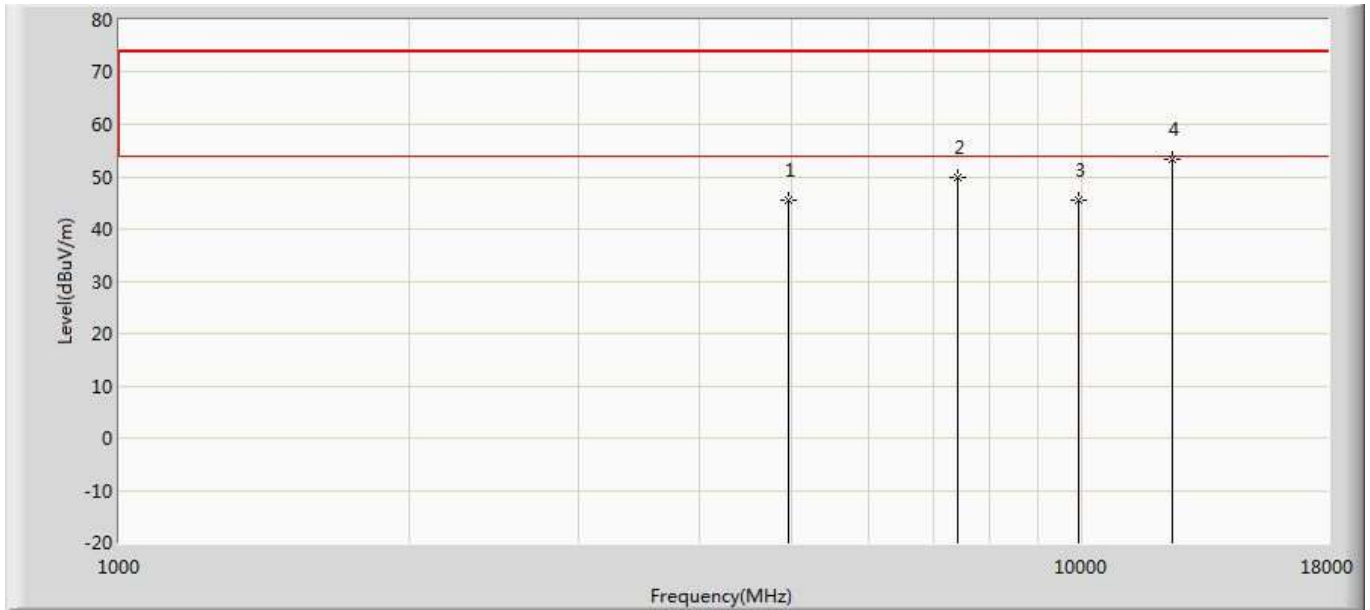
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	44.382	39.596	-29.618	74.000	4.786	PK
2	*	7320.000	51.976	44.314	-22.024	74.000	7.663	PK
3		9760.000	46.305	36.445	-27.695	74.000	9.860	PK
4		12200.000	51.815	36.463	-22.185	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 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 1:Transmit at 2440MHz by LE_1Mbps	



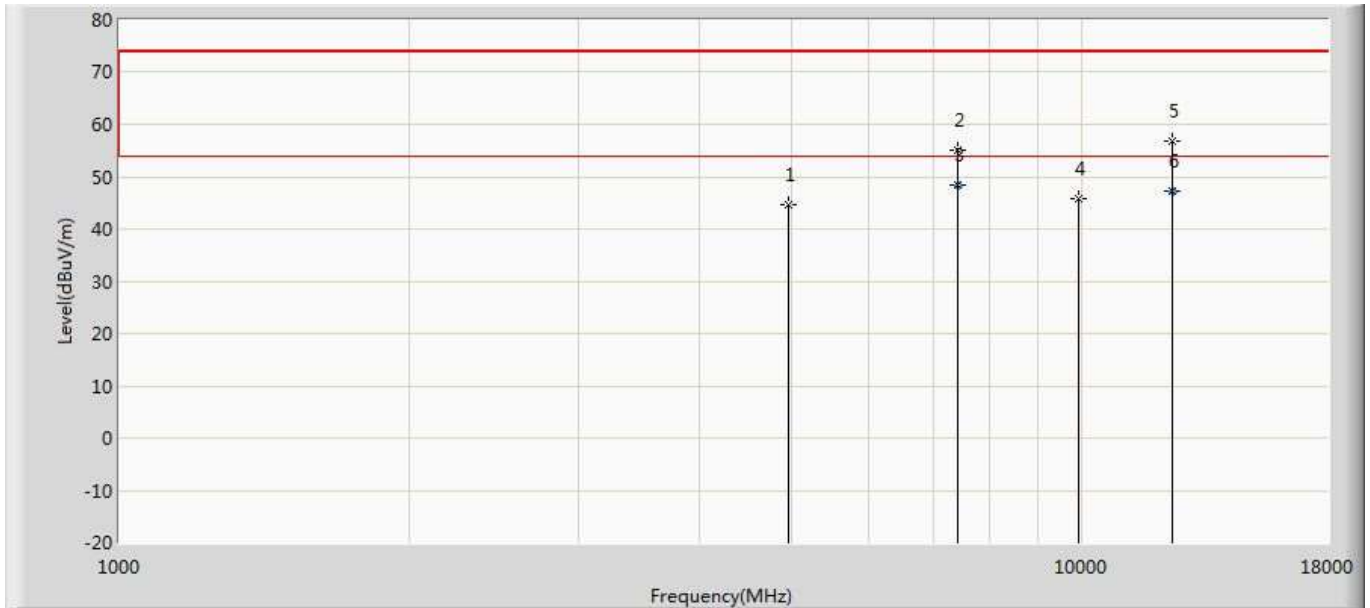
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	43.091	38.305	-30.909	74.000	4.786	PK
2		7320.000	53.501	45.839	-20.499	74.000	7.663	PK
3		9760.000	45.601	35.741	-28.399	74.000	9.860	PK
4		12200.000	55.581	40.229	-18.419	74.000	15.351	PK
5	*	12200.000	46.923	31.571	-7.077	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



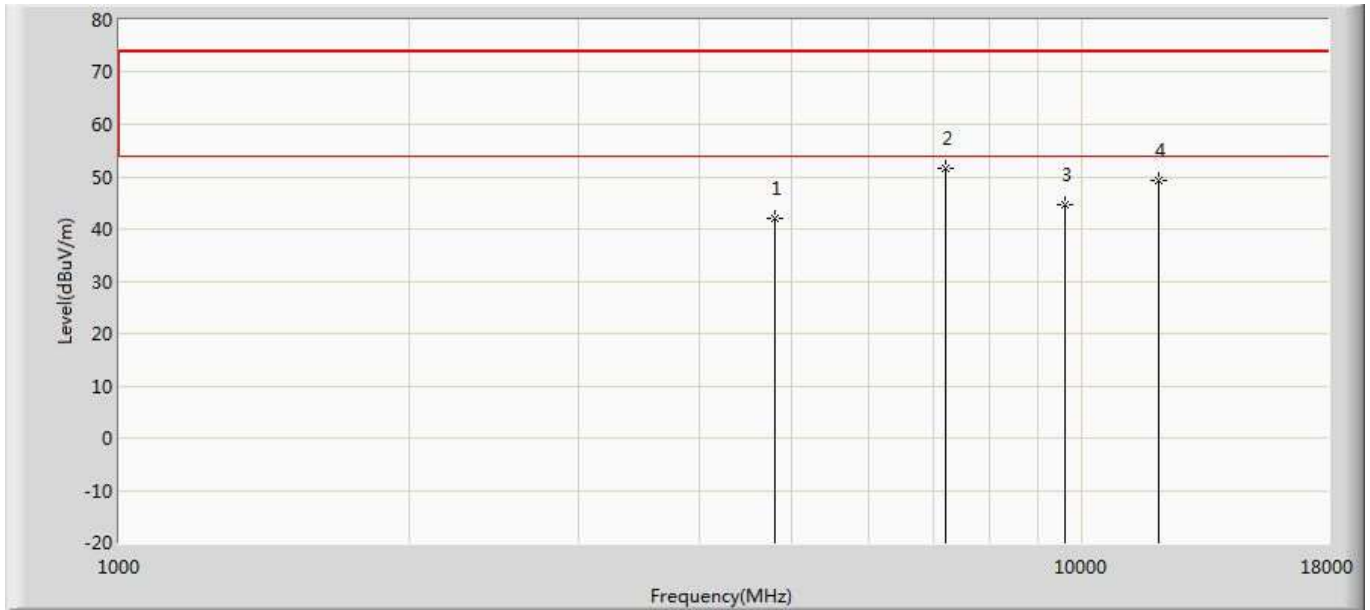
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	45.497	40.577	-28.503	74.000	4.920	PK
2		7440.000	49.804	42.089	-24.196	74.000	7.715	PK
3		9920.000	45.508	35.561	-28.492	74.000	9.946	PK
4	*	12400.000	53.461	37.462	-20.539	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:43
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 2480MHz by LE_1Mbps	



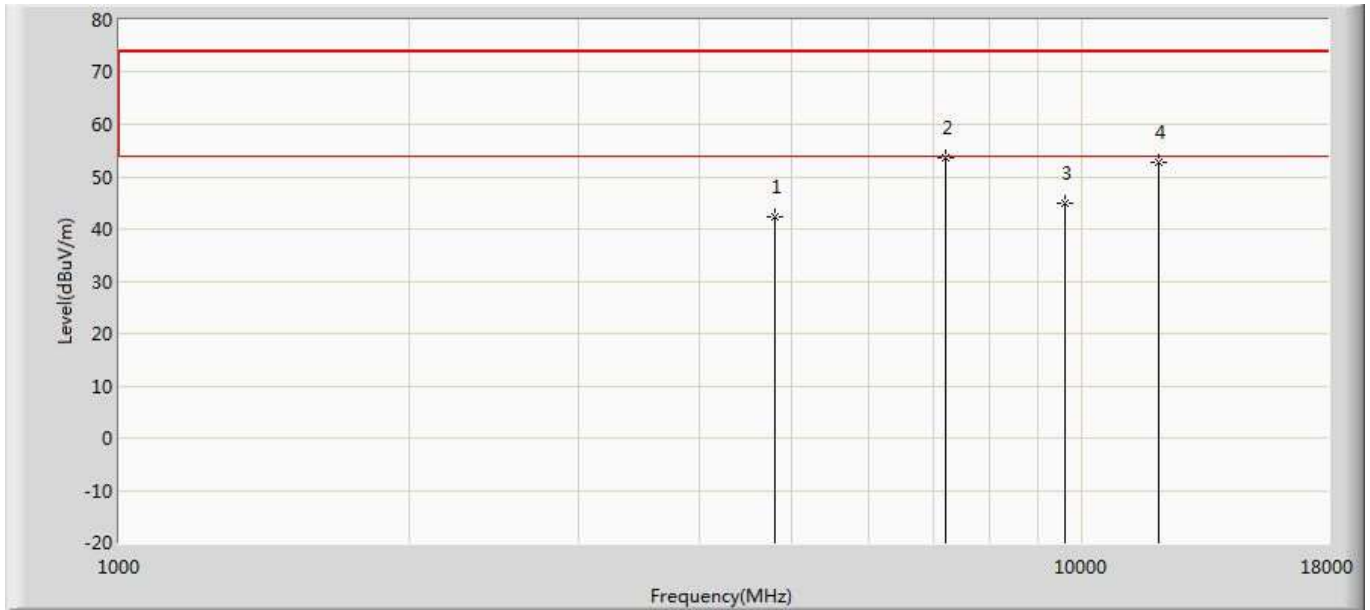
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	44.493	39.573	-29.507	74.000	4.920	PK
2		7440.000	54.979	47.264	-19.021	74.000	7.715	PK
3	*	7440.000	48.538	40.823	-5.462	54.000	7.715	AV
4		9920.000	45.661	35.714	-28.339	74.000	9.946	PK
5		12400.000	56.927	40.928	-17.073	74.000	15.999	PK
6		12400.000	47.248	31.249	-6.752	54.000	15.999	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



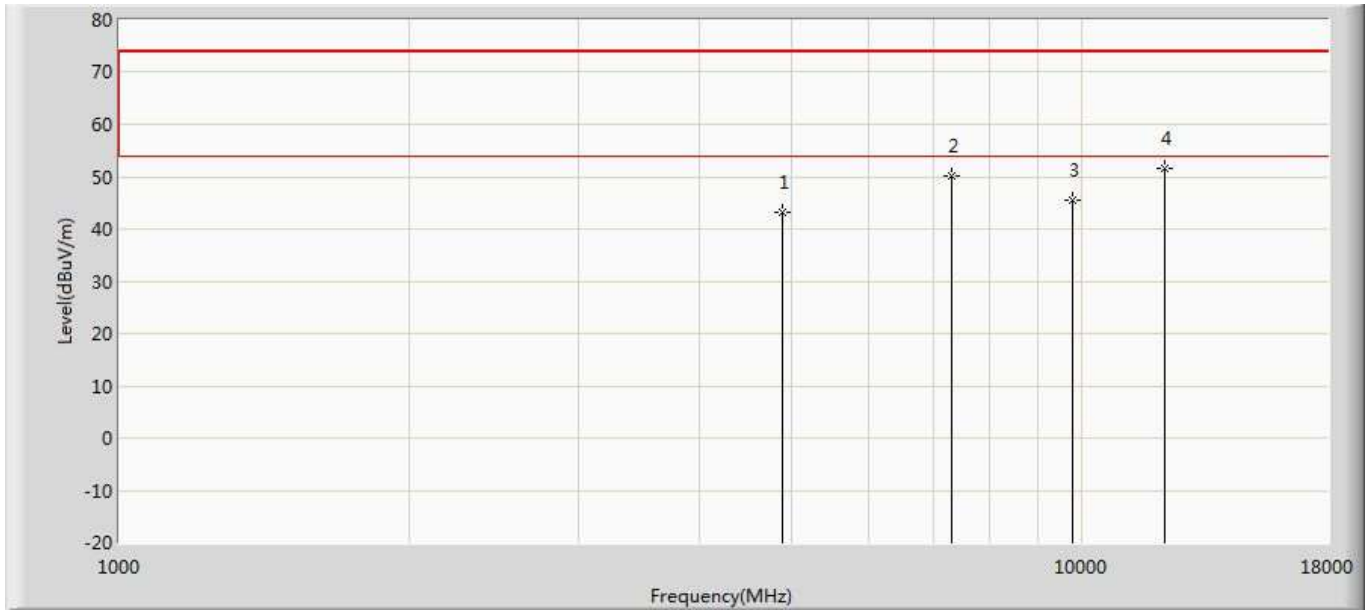
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.957	37.440	-32.043	74.000	4.517	PK
2	*	7206.000	51.648	44.101	-22.352	74.000	7.547	PK
3		9608.000	44.775	35.593	-29.225	74.000	9.182	PK
4		12010.000	49.306	34.753	-24.694	74.000	14.553	PK

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



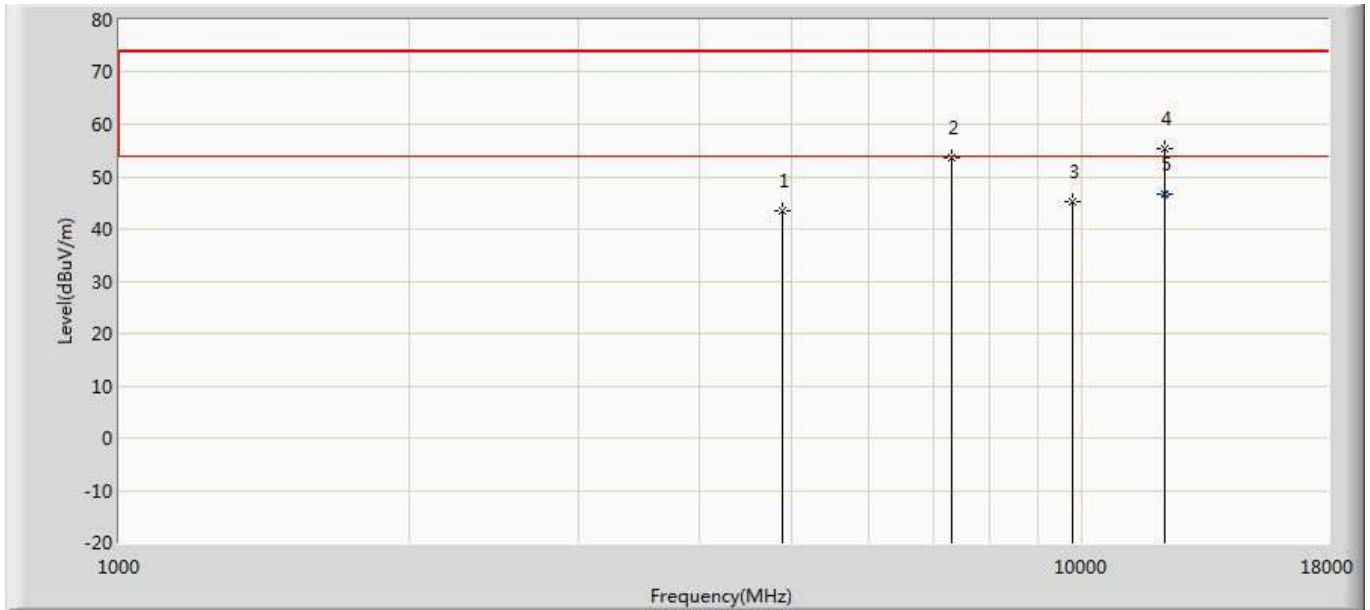
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.192	37.675	-31.808	74.000	4.517	PK
2	*	7206.000	53.635	46.088	-20.365	74.000	7.547	PK
3		9608.000	44.867	35.685	-29.133	74.000	9.182	PK
4		12010.000	52.838	38.285	-21.162	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:42
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 2:Transmit at 2440MHz by LE_2Mbps	



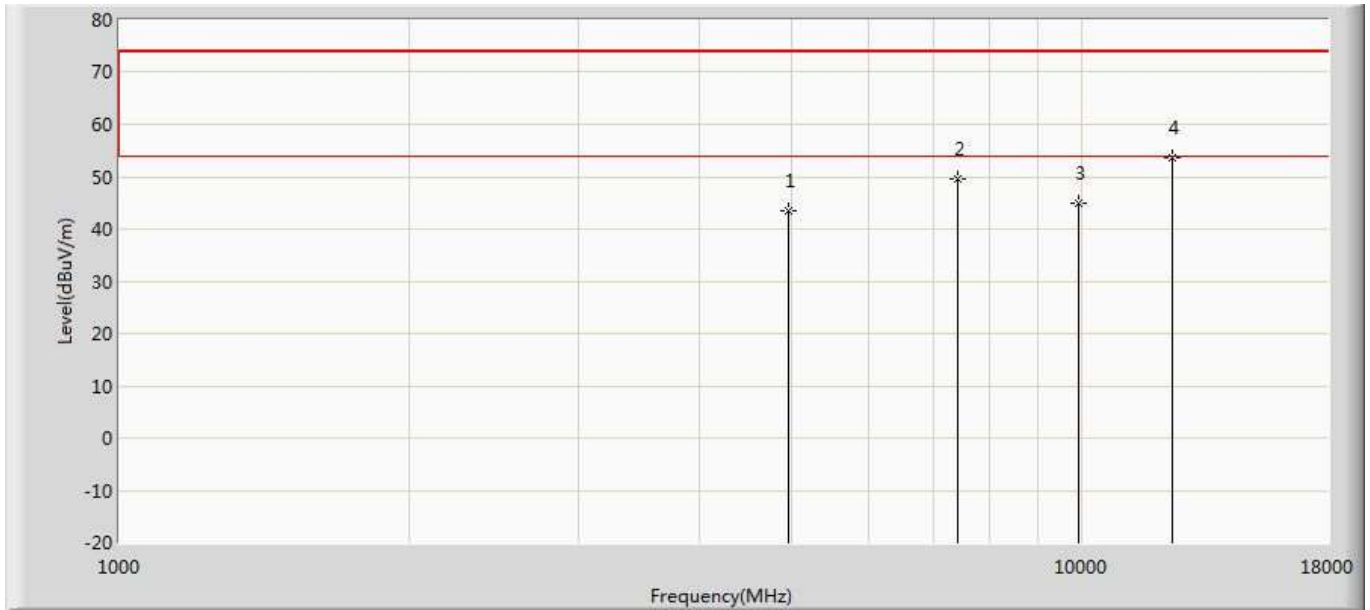
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	43.175	38.389	-30.825	74.000	4.786	PK
2		7320.000	50.121	42.459	-23.879	74.000	7.663	PK
3		9760.000	45.414	35.554	-28.586	74.000	9.860	PK
4	*	12200.000	51.665	36.313	-22.335	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 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 2440MHz by LE_2Mbps	



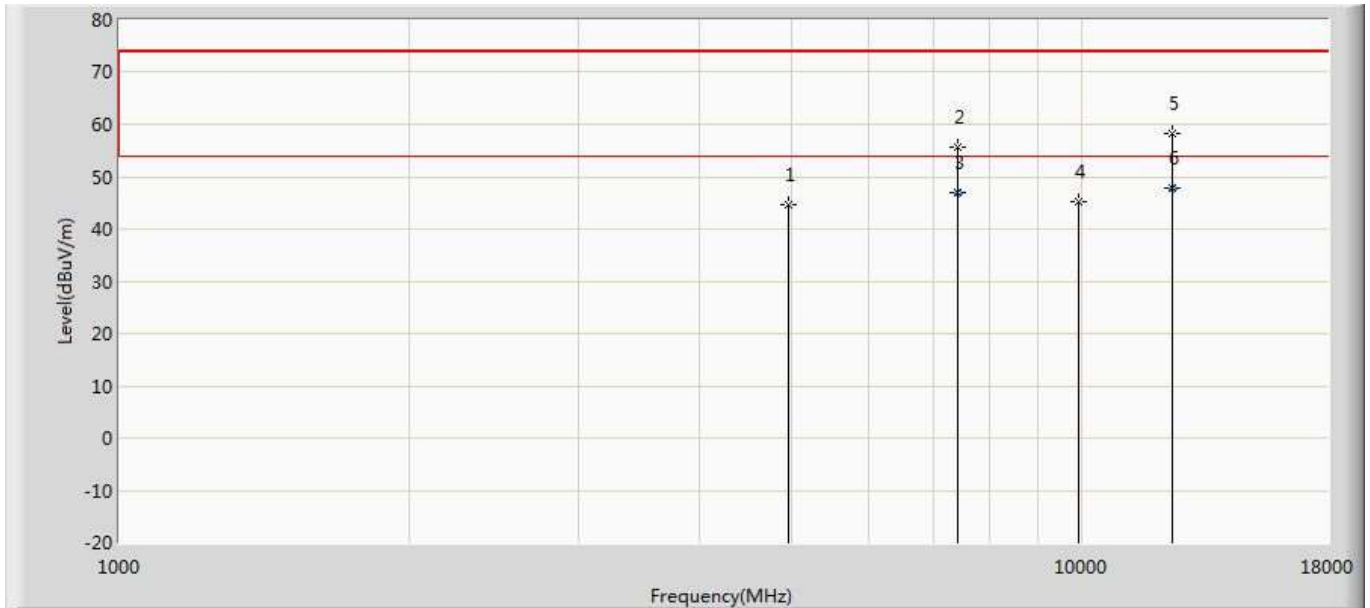
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	43.354	38.568	-30.646	74.000	4.786	PK
2		7320.000	53.579	45.917	-20.421	74.000	7.663	PK
3		9760.000	45.264	35.404	-28.736	74.000	9.860	PK
4		12200.000	55.406	40.054	-18.594	74.000	15.351	PK
5	*	12200.000	46.754	31.402	-7.246	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps	



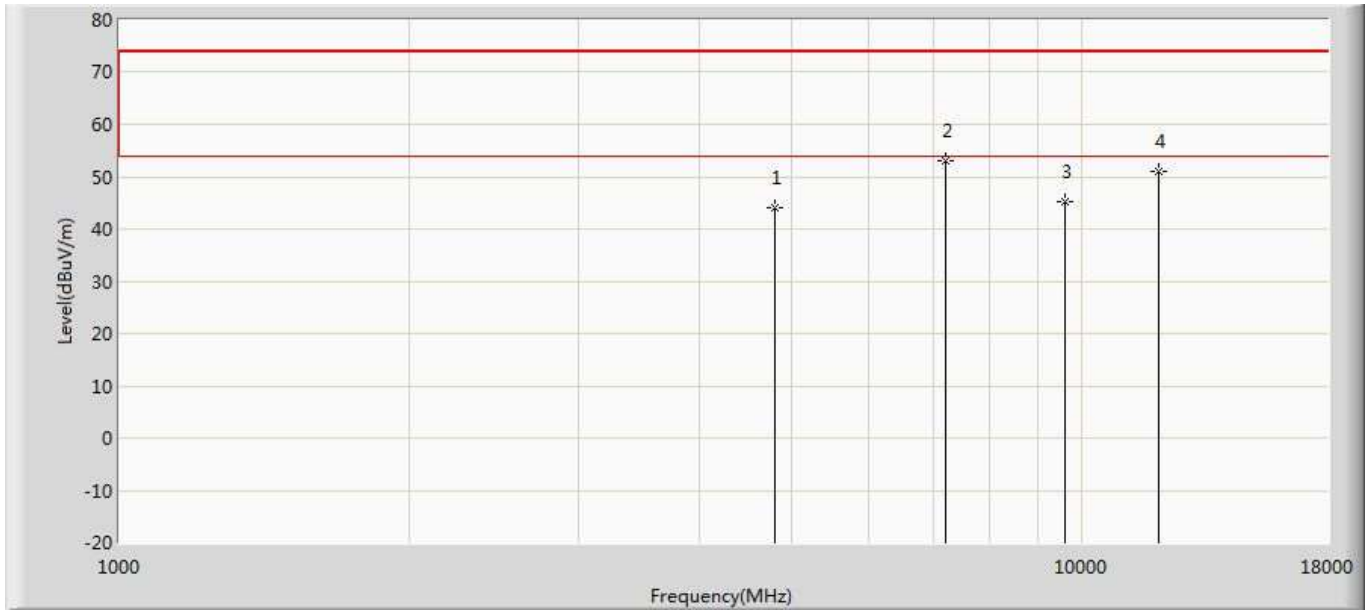
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.469	38.549	-30.531	74.000	4.920	PK
2		7440.000	49.530	41.815	-24.470	74.000	7.715	PK
3		9920.000	45.053	35.106	-28.947	74.000	9.946	PK
4	*	12400.000	53.736	37.737	-20.264	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:43
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 2:Transmit at 2480MHz by LE_2Mbps	



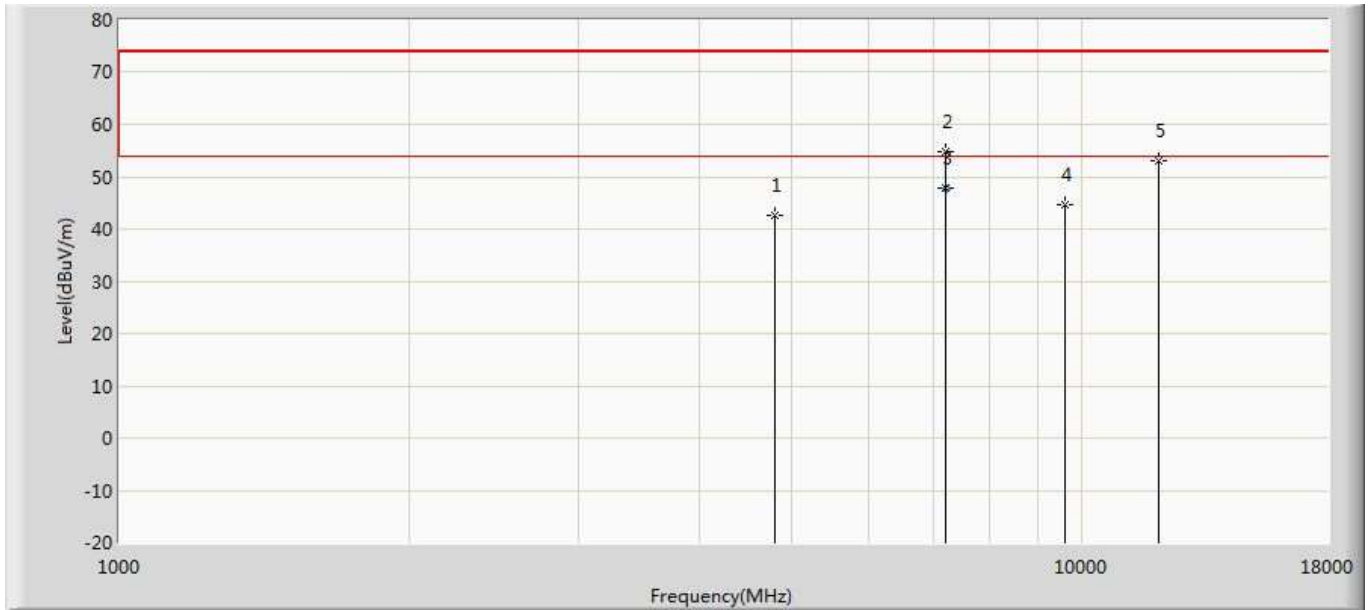
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	44.650	39.730	-29.350	74.000	4.920	PK
2		7440.000	55.707	47.992	-18.293	74.000	7.715	PK
3		7440.000	47.044	39.329	-6.956	54.000	7.715	AV
4		9920.000	45.344	35.397	-28.656	74.000	9.946	PK
5		12400.000	58.368	42.369	-15.632	74.000	15.999	PK
6	*	12400.000	47.902	31.903	-6.098	54.000	15.999	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:42
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 2402MHz by LE_Coded (S=2)	



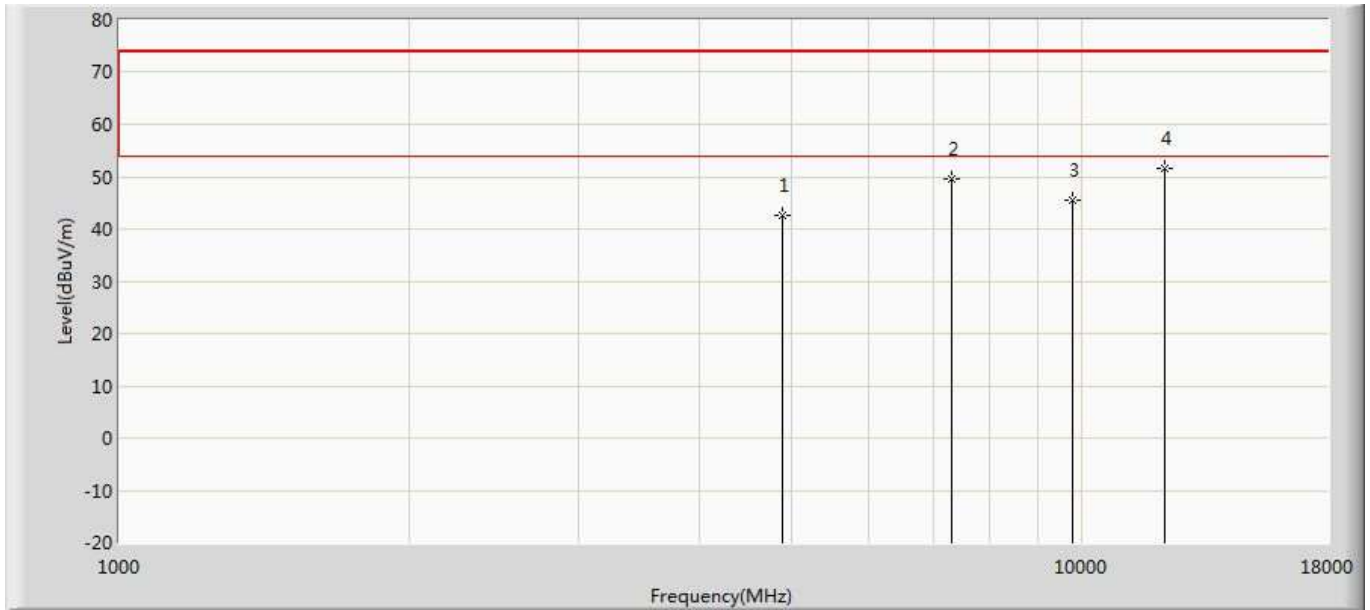
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	43.997	39.480	-30.003	74.000	4.517	PK
2	*	7206.000	53.047	45.500	-20.953	74.000	7.547	PK
3		9608.000	45.279	36.097	-28.721	74.000	9.182	PK
4		12010.000	51.072	36.519	-22.928	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 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 3:Transmit at 2402MHz by LE_Coded (S=2)	



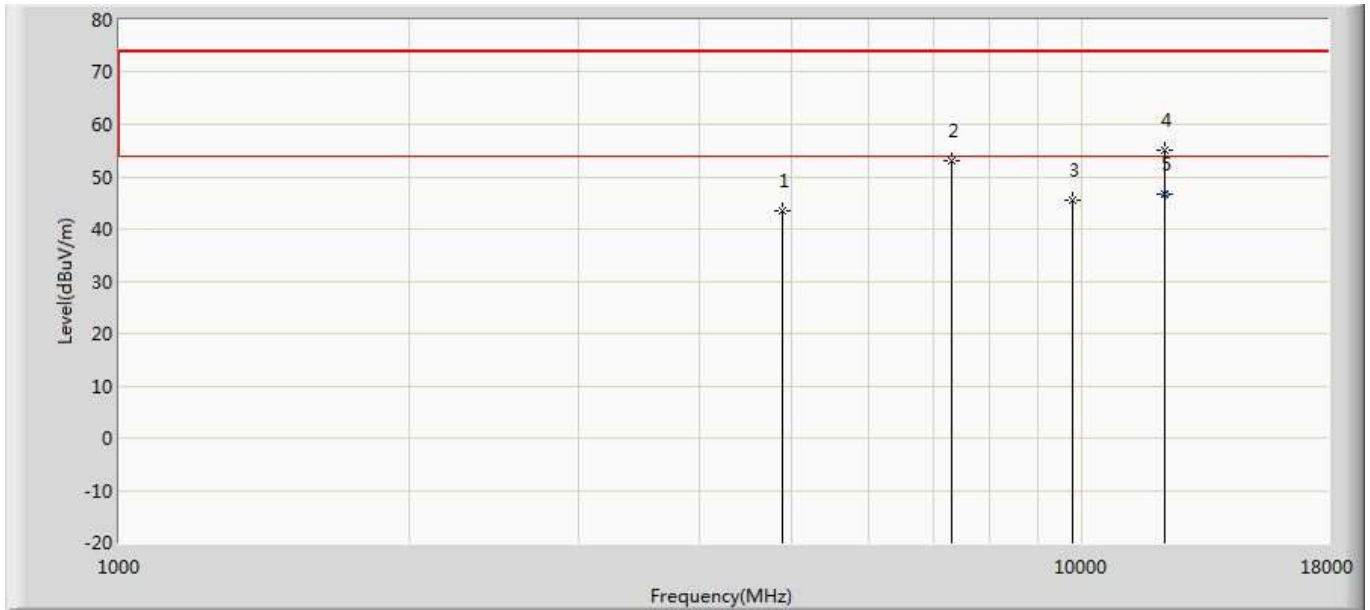
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.620	38.103	-31.380	74.000	4.517	PK
2		7206.000	54.837	47.290	-19.163	74.000	7.547	PK
3	*	7206.000	47.952	40.405	-6.048	54.000	7.547	AV
4		9608.000	44.542	35.360	-29.458	74.000	9.182	PK
5		12010.000	53.103	38.550	-20.897	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:42
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 2440MHz by LE_Coded (S=2)	



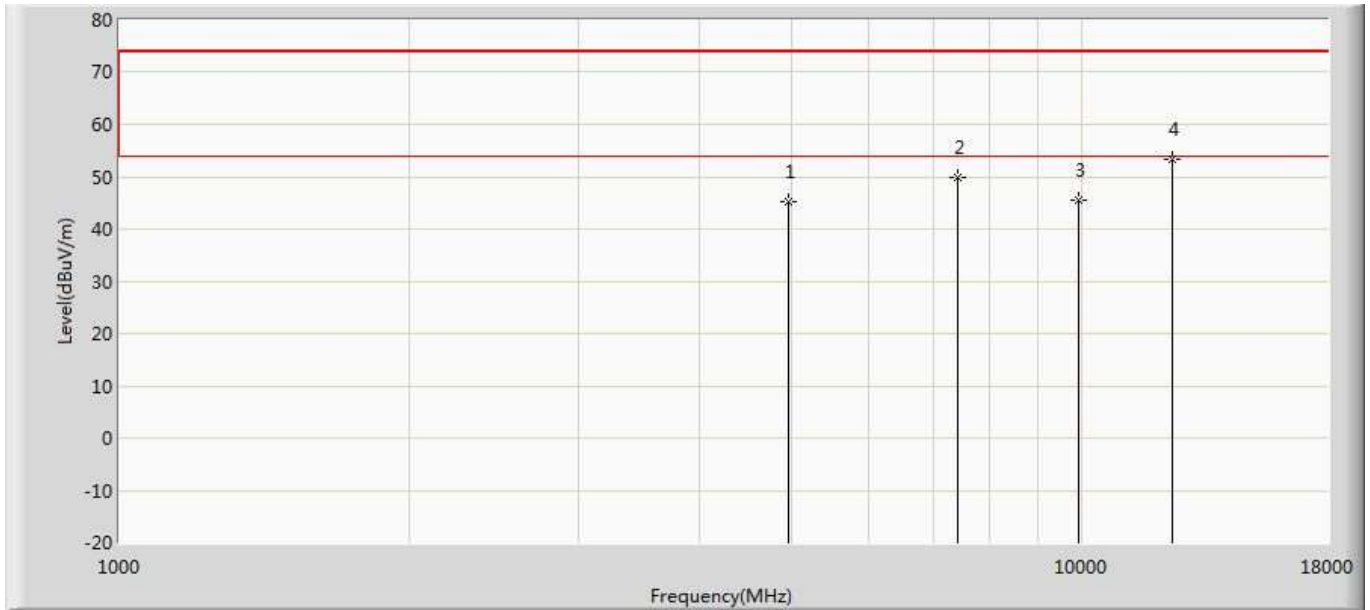
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.676	37.890	-31.324	74.000	4.786	PK
2		7320.000	49.603	41.941	-24.397	74.000	7.663	PK
3		9760.000	45.534	35.674	-28.466	74.000	9.860	PK
4	*	12200.000	51.641	36.289	-22.359	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 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 3:Transmit at 2440MHz by LE_Coded (S=2)	



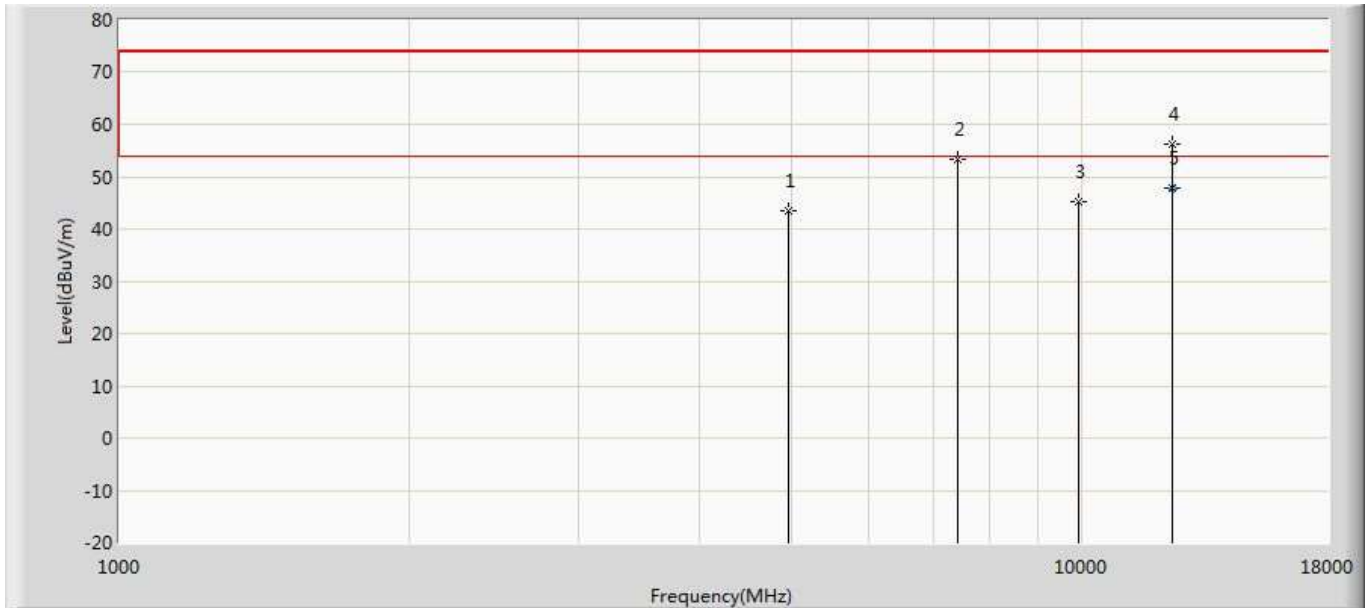
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	43.573	38.787	-30.427	74.000	4.786	PK
2		7320.000	53.087	45.425	-20.913	74.000	7.663	PK
3		9760.000	45.480	35.620	-28.520	74.000	9.860	PK
4		12200.000	55.189	39.837	-18.811	74.000	15.351	PK
5	*	12200.000	46.631	31.279	-7.369	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded (S=2)	



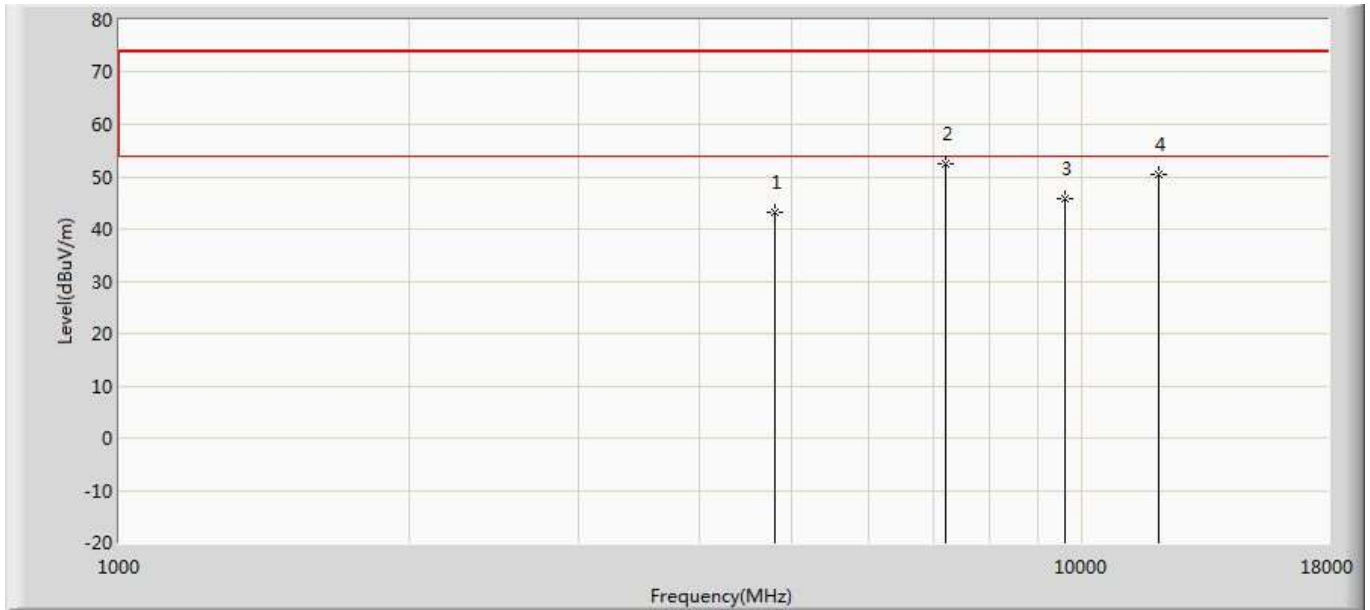
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	45.197	40.277	-28.803	74.000	4.920	PK
2		7440.000	49.838	42.123	-24.162	74.000	7.715	PK
3		9920.000	45.428	35.481	-28.572	74.000	9.946	PK
4	*	12400.000	53.247	37.248	-20.753	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded (S=2)	



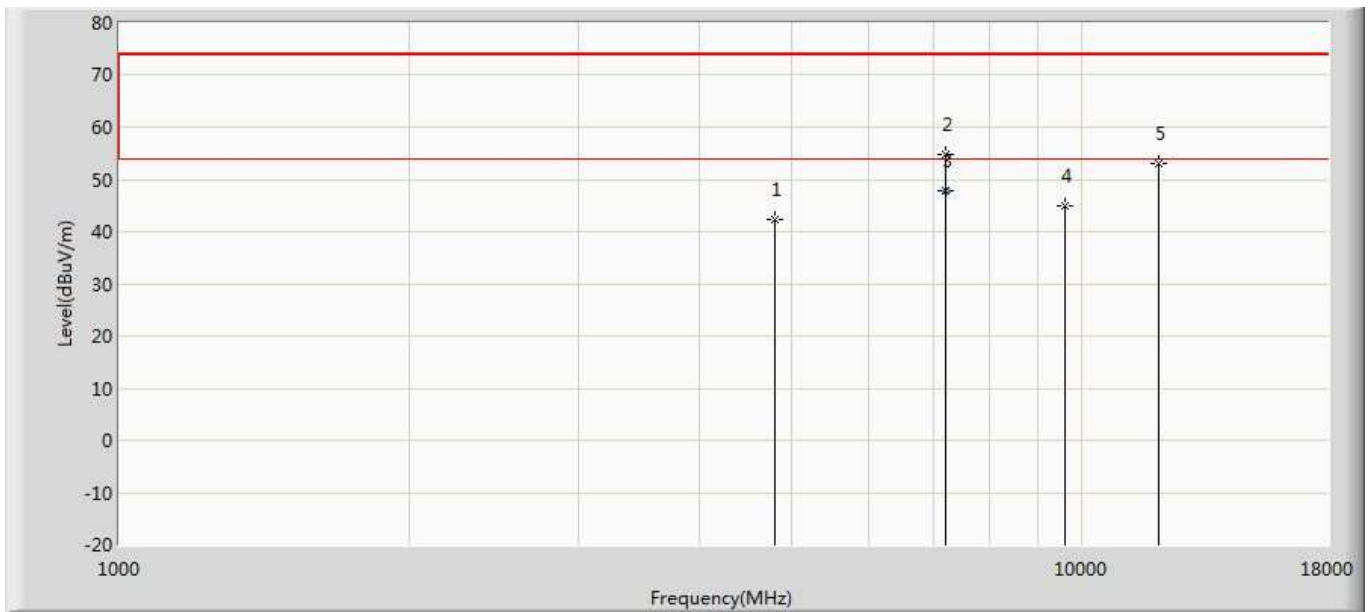
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.621	38.701	-30.379	74.000	4.920	PK
2		7440.000	53.274	45.559	-20.726	74.000	7.715	PK
3		9920.000	45.332	35.385	-28.668	74.000	9.946	PK
4		12400.000	56.264	40.265	-17.736	74.000	15.999	PK
5	*	12400.000	47.956	31.957	-6.044	54.000	15.999	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded (S=8)	



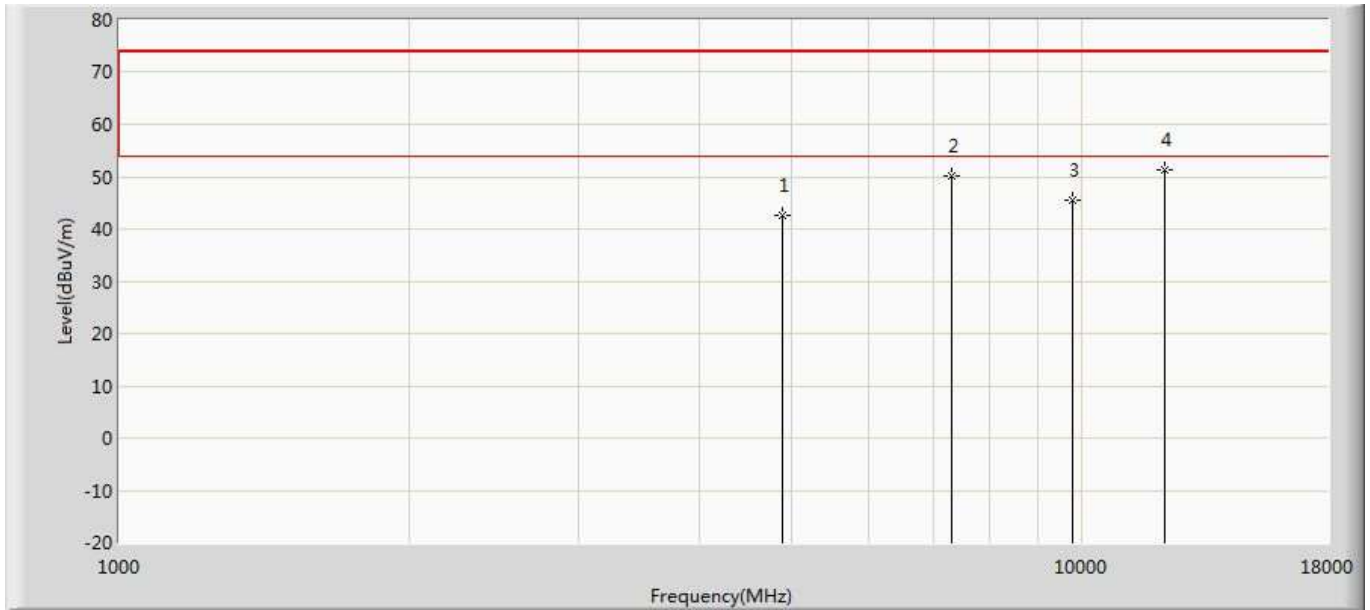
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	43.107	38.590	-30.893	74.000	4.517	PK
2	*	7206.000	52.382	44.835	-21.618	74.000	7.547	PK
3		9608.000	45.874	36.692	-28.126	74.000	9.182	PK
4		12010.000	50.366	35.813	-23.634	74.000	14.553	PK

Profile: 1982084R	Page No.: 84
Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 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 4:Transmit at 2402MHz by LE_Coded (S=8)	



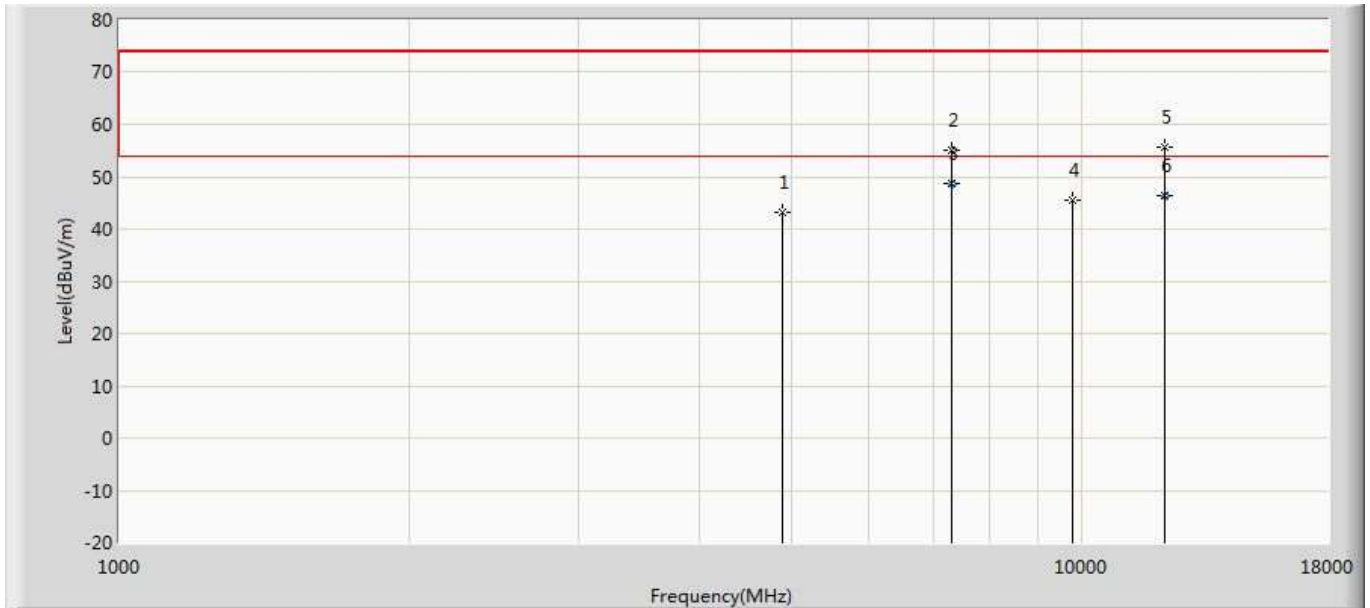
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.409	37.892	-31.591	74.000	4.517	PK
2		7206.000	54.833	47.286	-19.167	74.000	7.547	PK
3	*	7206.000	47.904	40.357	-6.096	54.000	7.547	AV
4		9608.000	44.909	35.727	-29.091	74.000	9.182	PK
5		12010.000	53.077	38.524	-20.923	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2440MHz by LE_Coded (S=8)	



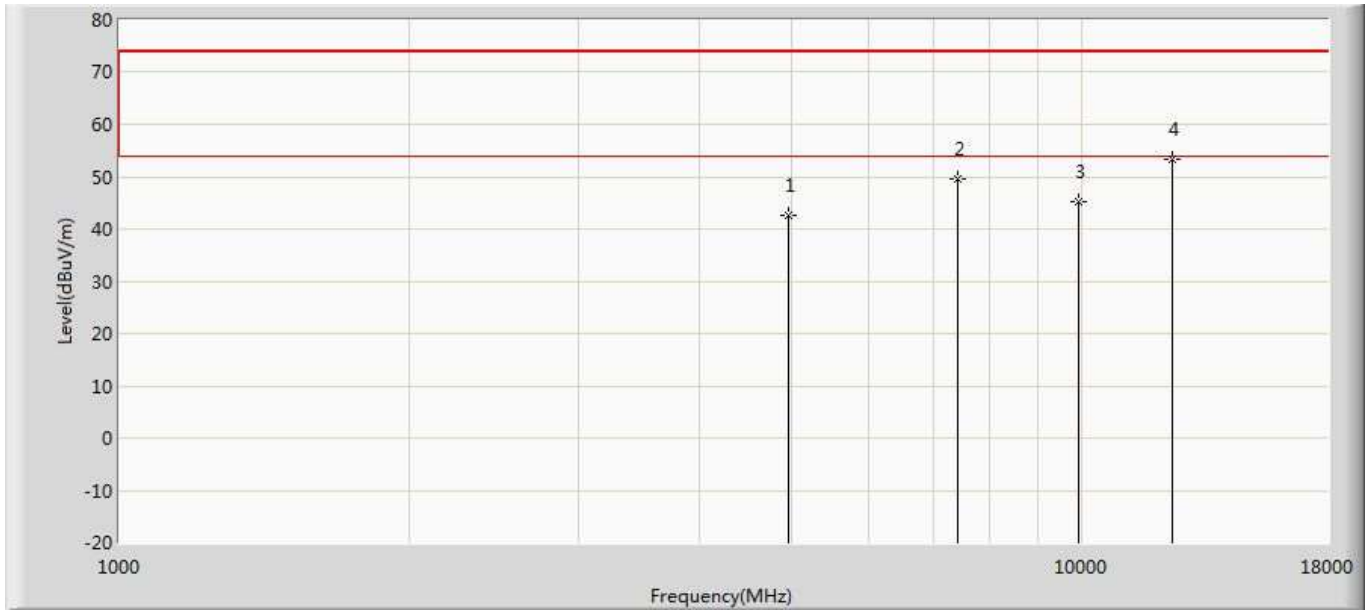
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.494	37.708	-31.506	74.000	4.786	PK
2		7320.000	50.128	42.466	-23.872	74.000	7.663	PK
3		9760.000	45.619	35.759	-28.381	74.000	9.860	PK
4	*	12200.000	51.443	36.091	-22.557	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:43
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 4:Transmit at 2440MHz by LE_Coded (S=8)	



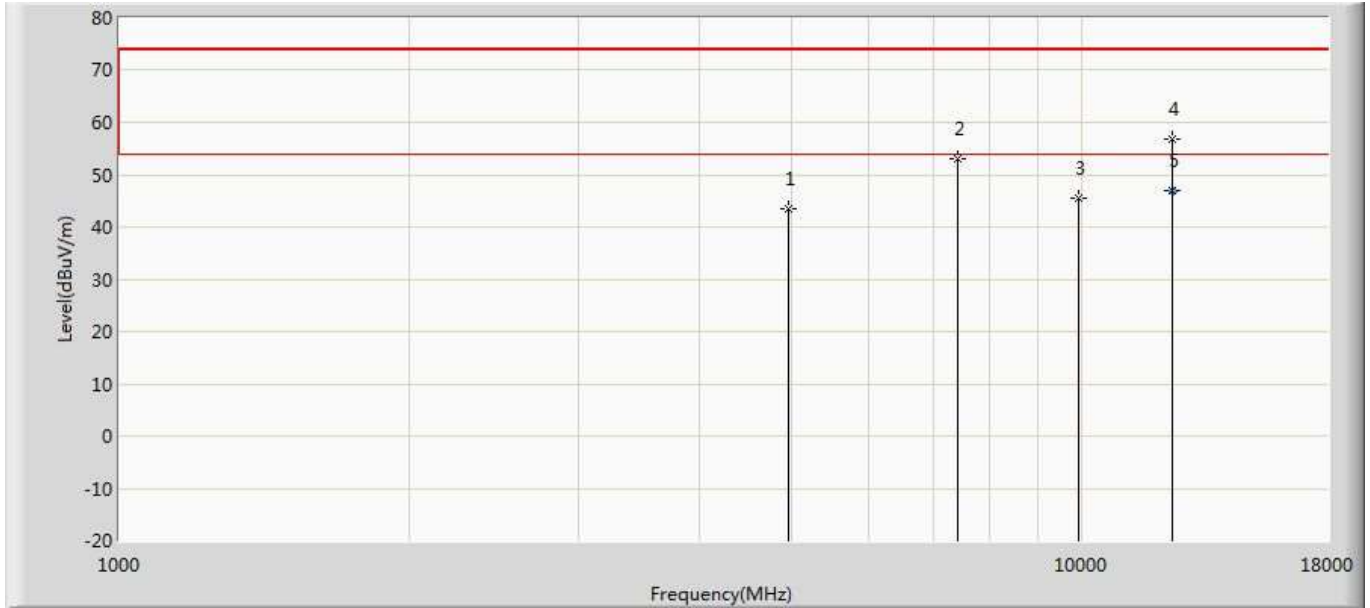
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	43.241	38.455	-30.759	74.000	4.786	PK
2		7320.000	55.133	47.471	-18.867	74.000	7.663	PK
3	*	7320.000	48.590	40.928	-5.410	54.000	7.663	AV
4		9760.000	45.570	35.710	-28.430	74.000	9.860	PK
5		12200.000	55.786	40.434	-18.214	74.000	15.351	PK
6		12200.000	46.446	31.094	-7.554	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 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	42.540	37.620	-31.460	74.000	4.920	PK
2		7440.000	49.597	41.882	-24.403	74.000	7.715	PK
3		9920.000	45.149	35.202	-28.851	74.000	9.946	PK
4	*	12400.000	53.238	37.239	-20.762	74.000	15.999	PK

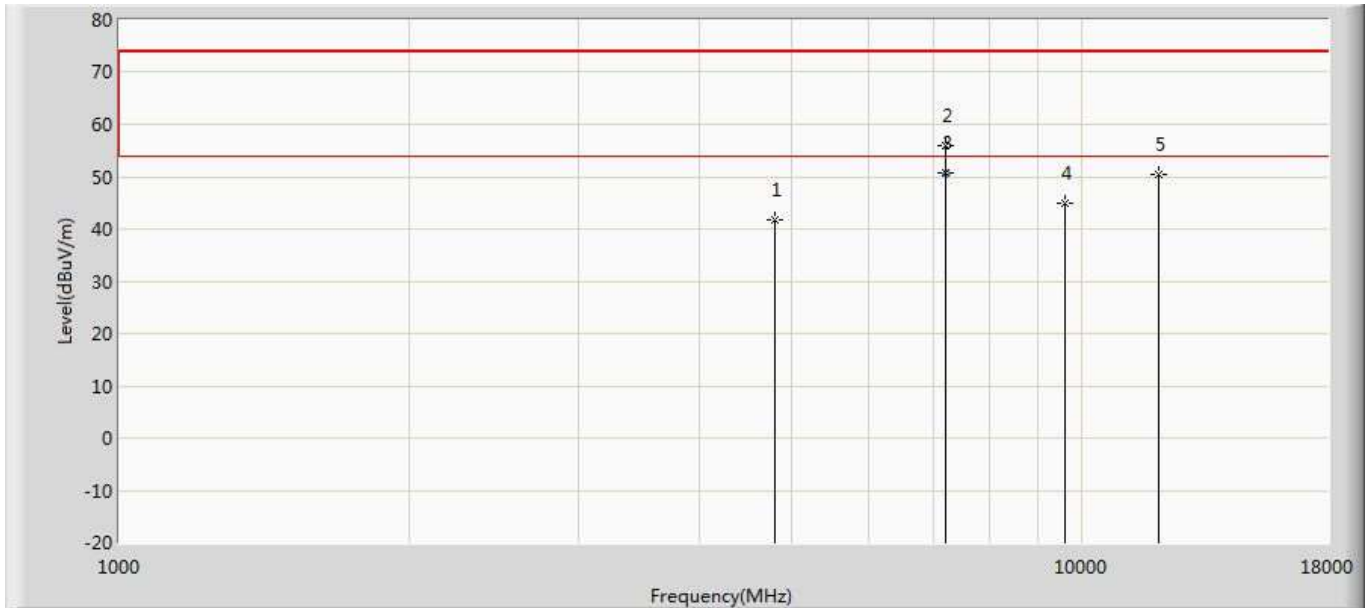
Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded (S=8)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.473	38.553	-30.527	74.000	4.920	PK
2		7440.000	53.009	45.294	-20.991	74.000	7.715	PK
3		9920.000	45.450	35.503	-28.550	74.000	9.946	PK
4		12400.000	56.711	40.712	-17.289	74.000	15.999	PK
5	*	12400.000	47.025	31.026	-6.975	54.000	15.999	AV

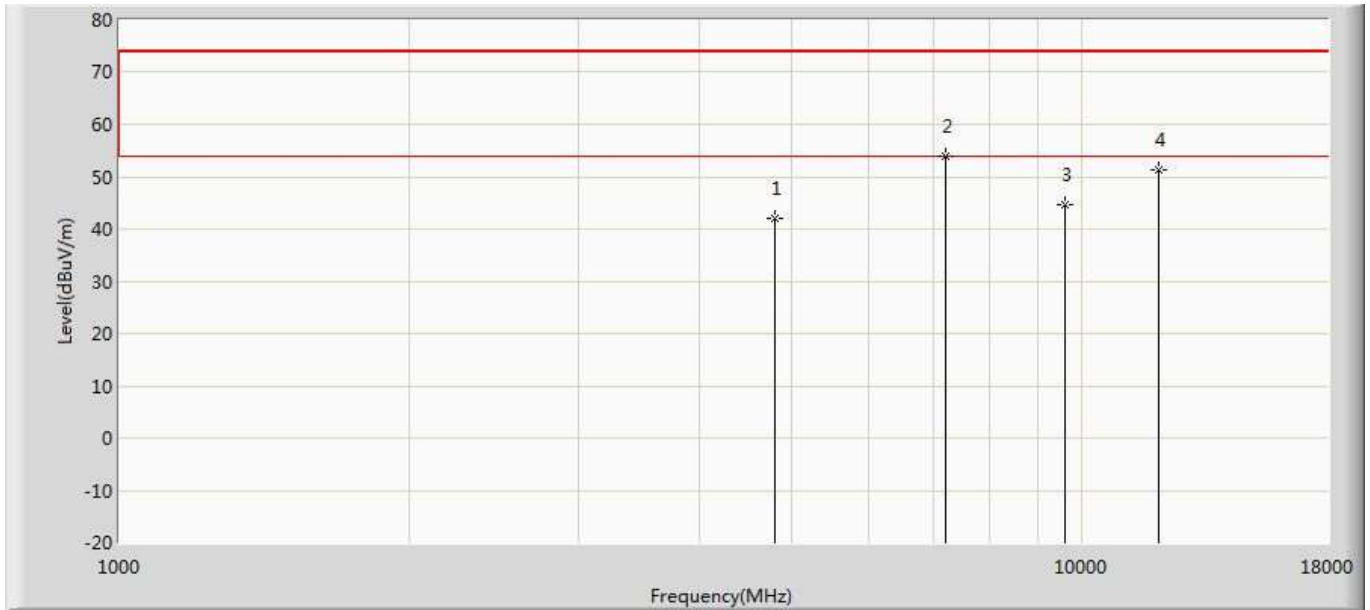
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Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



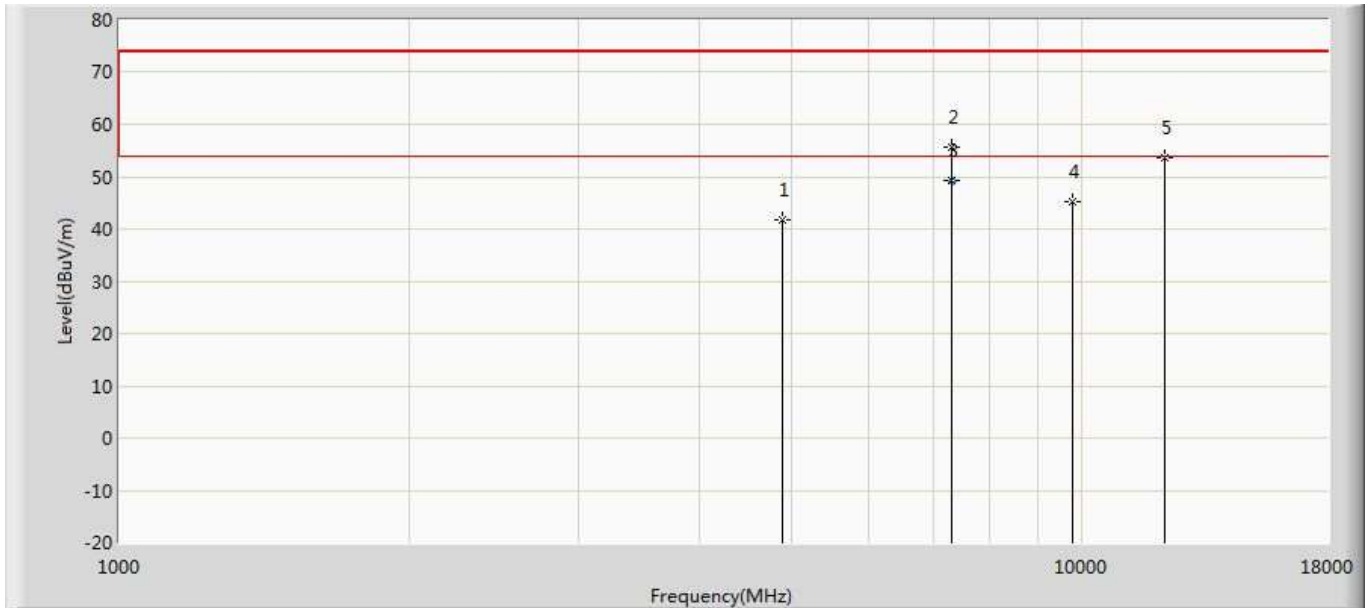
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.686	37.169	-32.314	74.000	4.517	PK
2		7206.000	56.047	48.500	-17.953	74.000	7.547	PK
3	*	7206.000	50.818	43.271	-3.182	54.000	7.547	AV
4		9608.000	44.846	35.664	-29.154	74.000	9.182	PK
5		12010.000	50.553	36.000	-23.447	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 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 2402MHz by LE_1Mbps	



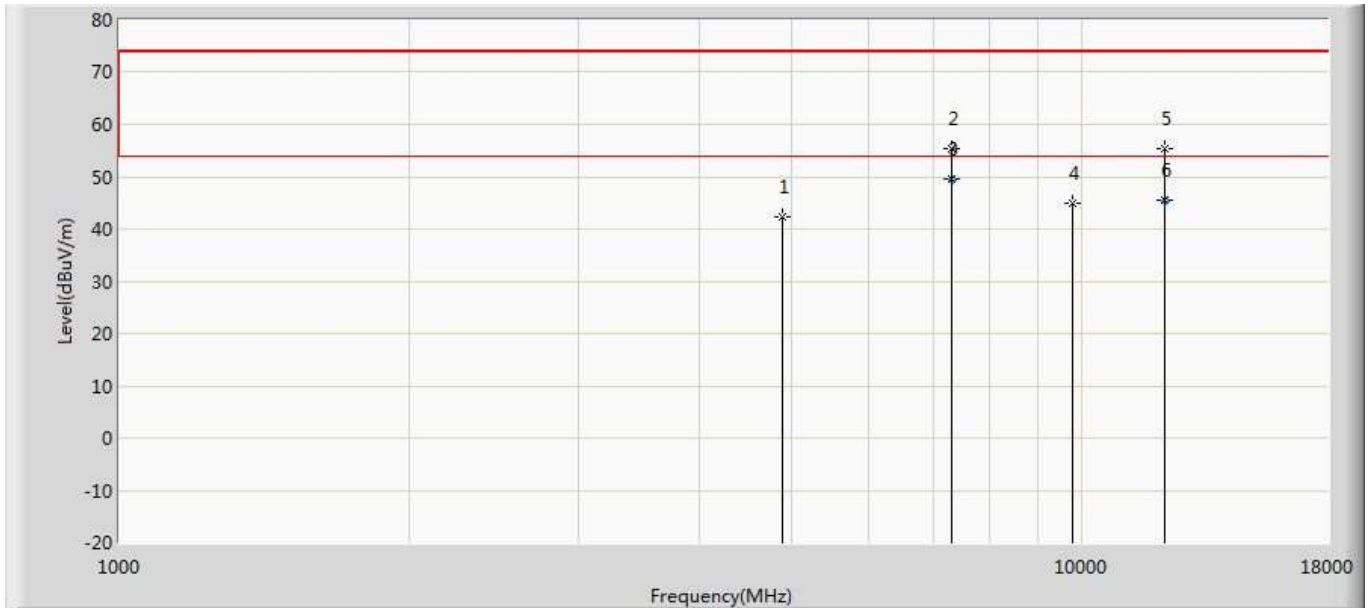
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.947	37.430	-32.053	74.000	4.517	PK
2	*	7206.000	53.945	46.398	-20.055	74.000	7.547	PK
3		9608.000	44.675	35.493	-29.325	74.000	9.182	PK
4		12010.000	51.338	36.785	-22.662	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 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 2440MHz by LE_1Mbps	



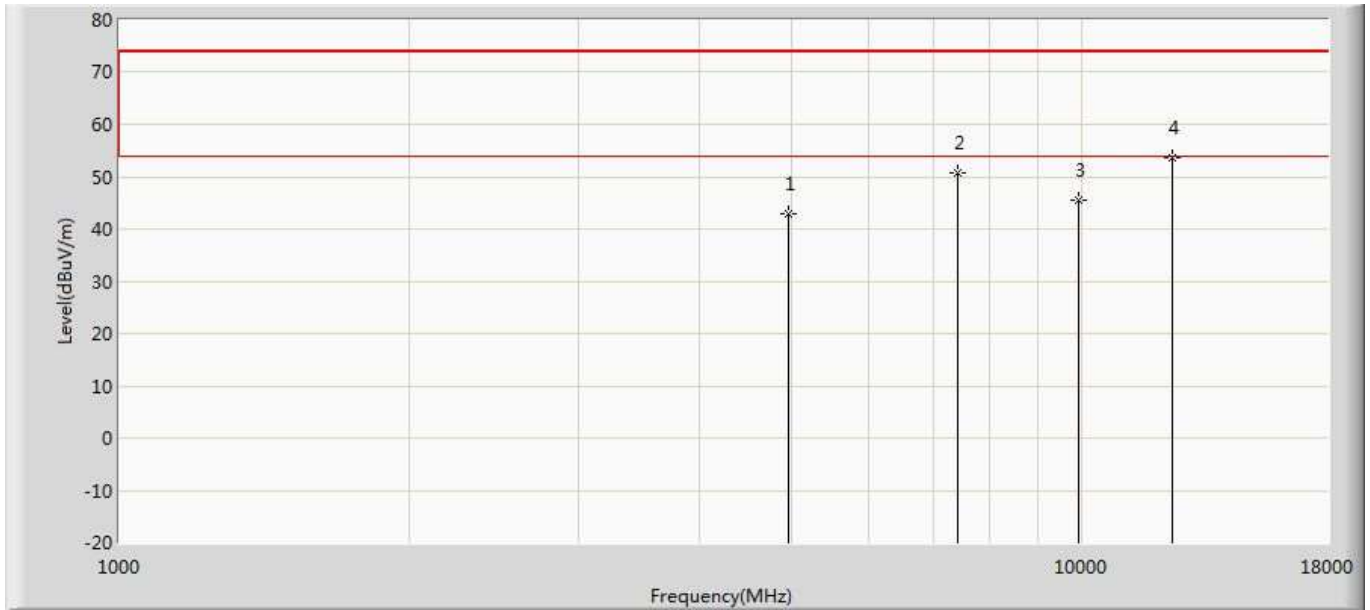
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.752	36.966	-32.248	74.000	4.786	PK
2		7320.000	55.639	47.977	-18.361	74.000	7.663	PK
3	*	7320.000	49.189	41.527	-4.811	54.000	7.663	AV
4		9760.000	45.114	35.254	-28.886	74.000	9.860	PK
5		12200.000	53.635	38.283	-20.365	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps	



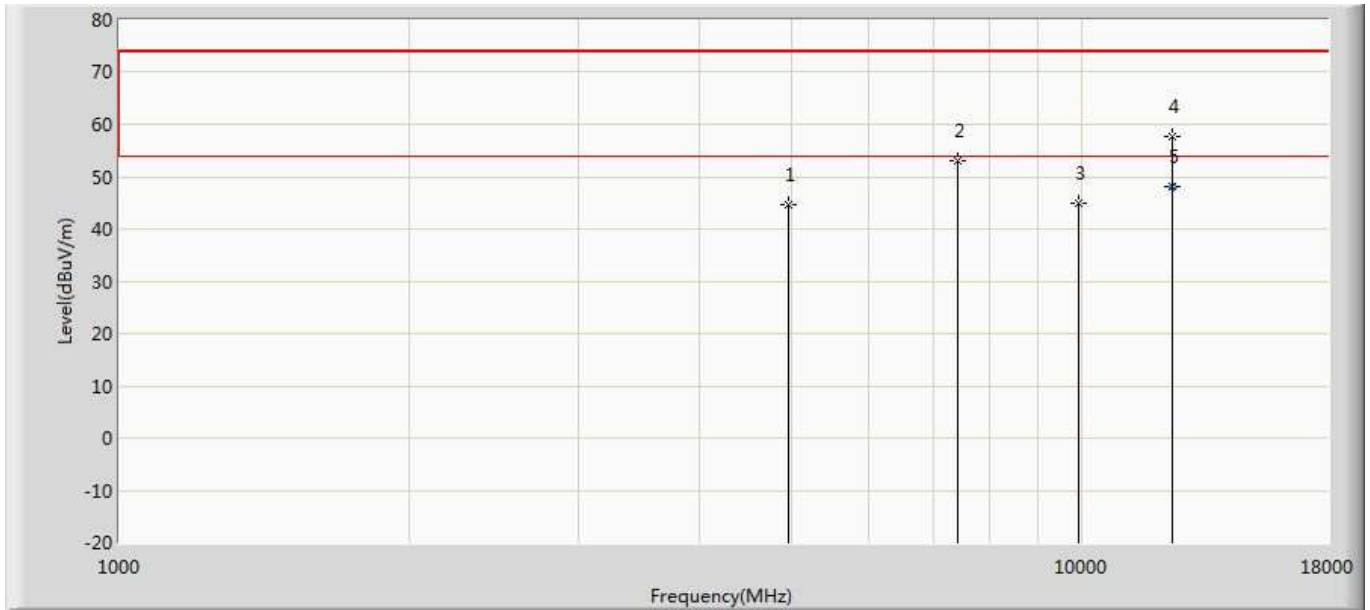
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.218	37.432	-31.782	74.000	4.786	PK
2		7320.000	55.255	47.593	-18.745	74.000	7.663	PK
3	*	7320.000	49.701	42.039	-4.299	54.000	7.663	AV
4		9760.000	45.012	35.152	-28.988	74.000	9.860	PK
5		12200.000	55.364	40.012	-18.636	74.000	15.351	PK
6		12200.000	45.645	30.293	-8.355	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 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	



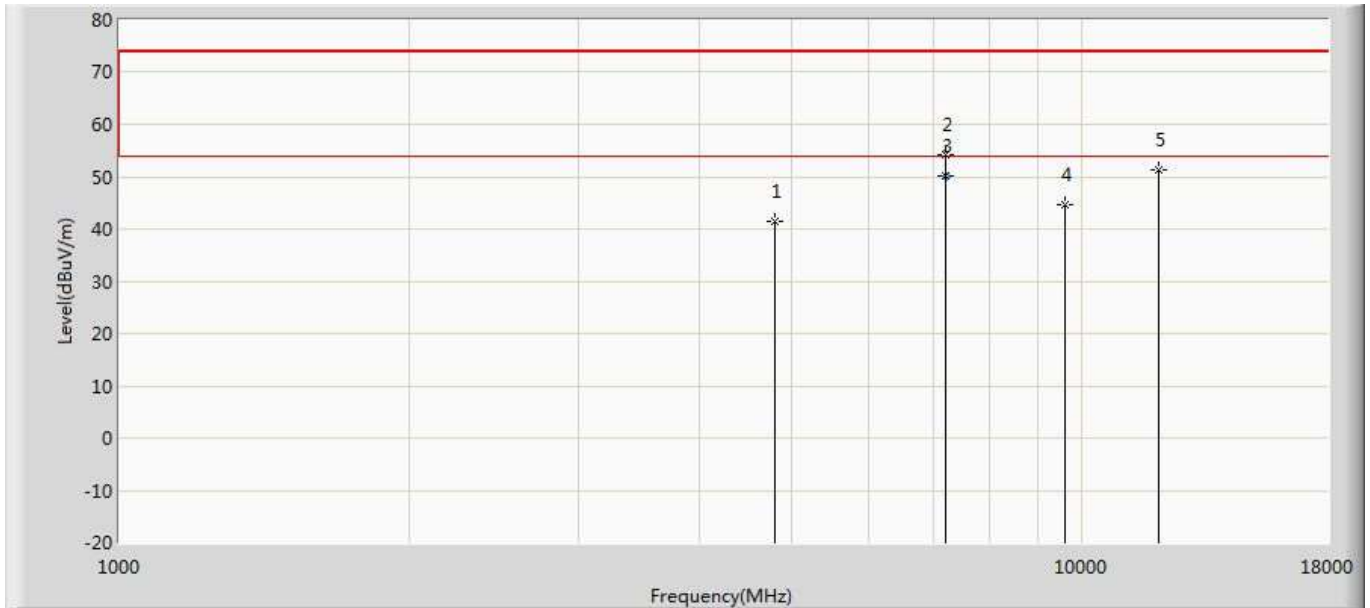
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.783	37.863	-31.217	74.000	4.920	PK
2		7440.000	50.778	43.063	-23.222	74.000	7.715	PK
3		9920.000	45.443	35.496	-28.557	74.000	9.946	PK
4	*	12400.000	53.648	37.649	-20.352	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



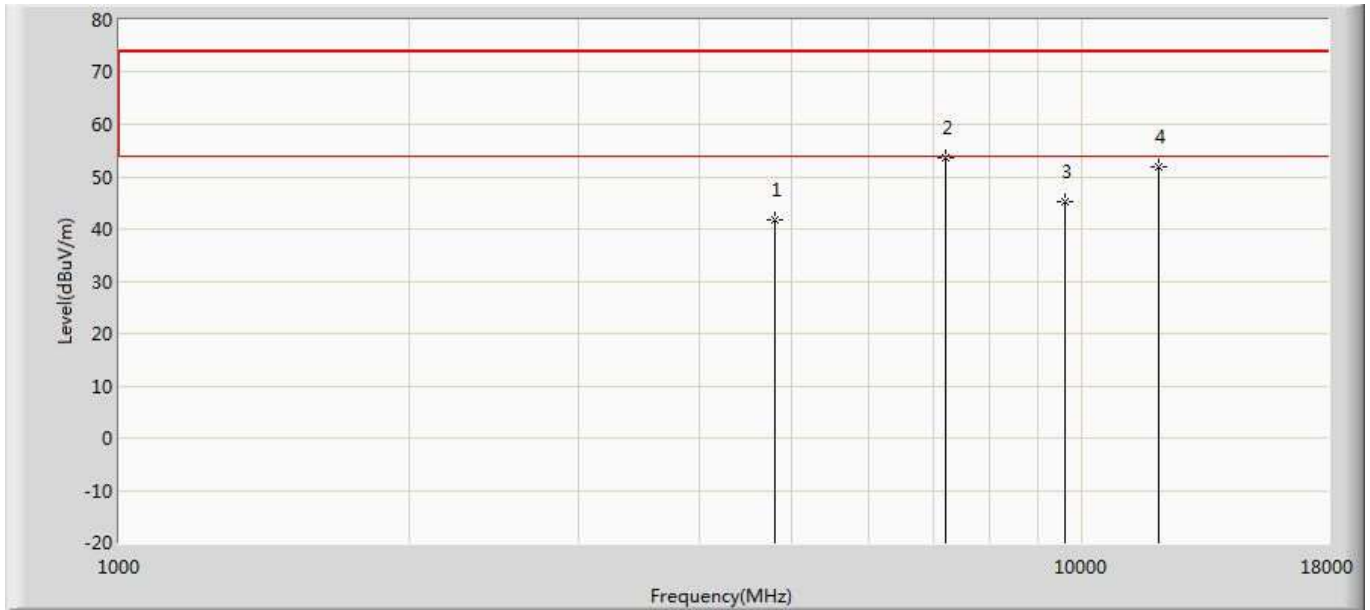
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	44.637	39.717	-29.363	74.000	4.920	PK
2		7440.000	53.082	45.367	-20.918	74.000	7.715	PK
3		9920.000	44.825	34.878	-29.175	74.000	9.946	PK
4		12400.000	57.752	41.753	-16.248	74.000	15.999	PK
5	*	12400.000	48.063	32.064	-5.937	54.000	15.999	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:13
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 2:Transmit at 2402MHz by LE_2Mbps	



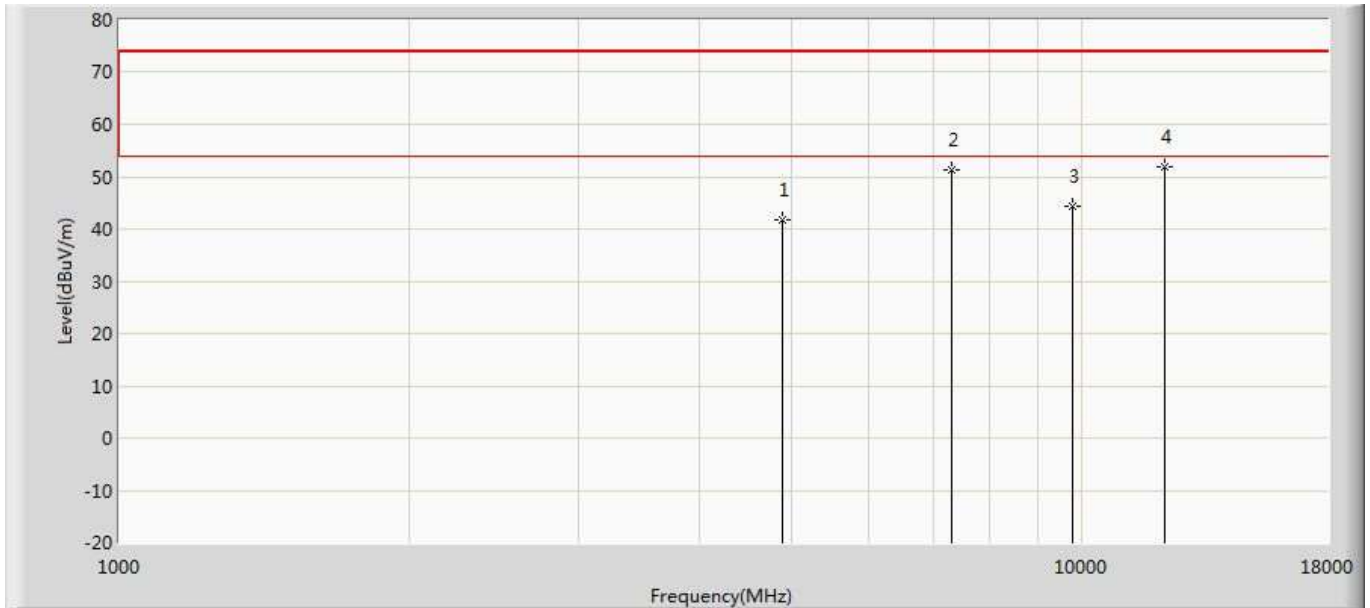
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.557	37.040	-32.443	74.000	4.517	PK
2		7206.000	54.174	46.627	-19.826	74.000	7.547	PK
3	*	7206.000	50.131	42.584	-3.869	54.000	7.547	AV
4		9608.000	44.744	35.562	-29.256	74.000	9.182	PK
5		12010.000	51.208	36.655	-22.792	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 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 2:Transmit at 2402MHz by LE_2Mbps	



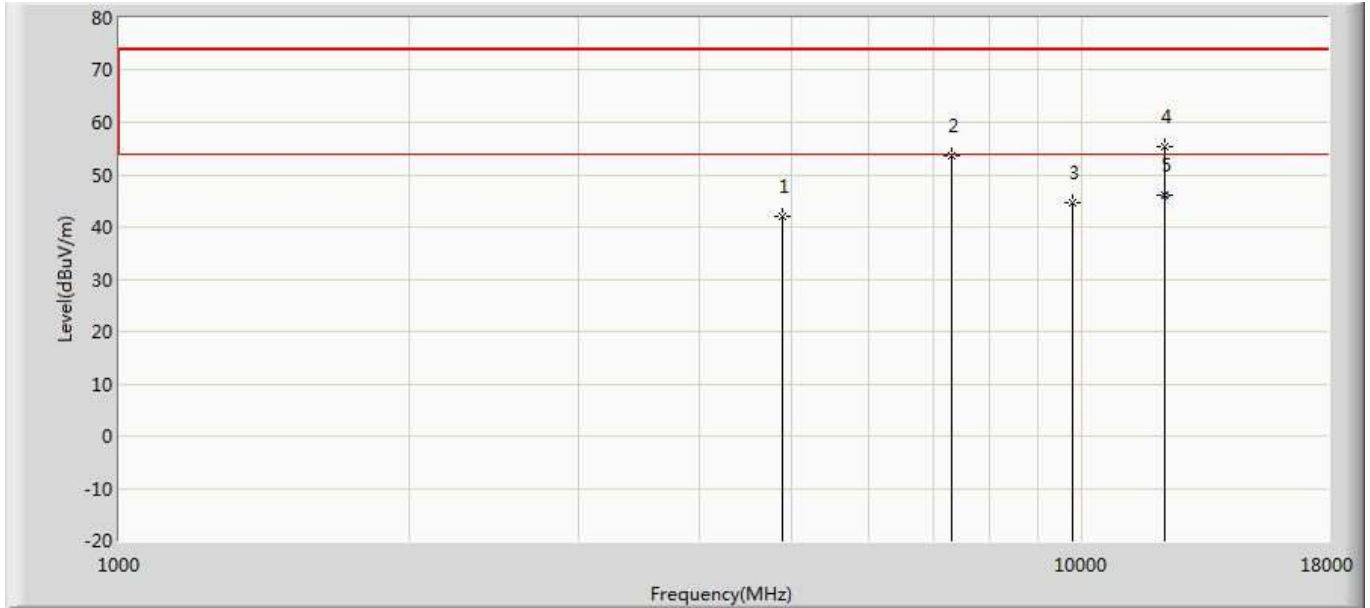
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.816	37.299	-32.184	74.000	4.517	PK
2	*	7206.000	53.630	46.083	-20.370	74.000	7.547	PK
3		9608.000	45.113	35.931	-28.887	74.000	9.182	PK
4		12010.000	51.877	37.324	-22.123	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 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 2:Transmit at 2440MHz by LE_2Mbps	



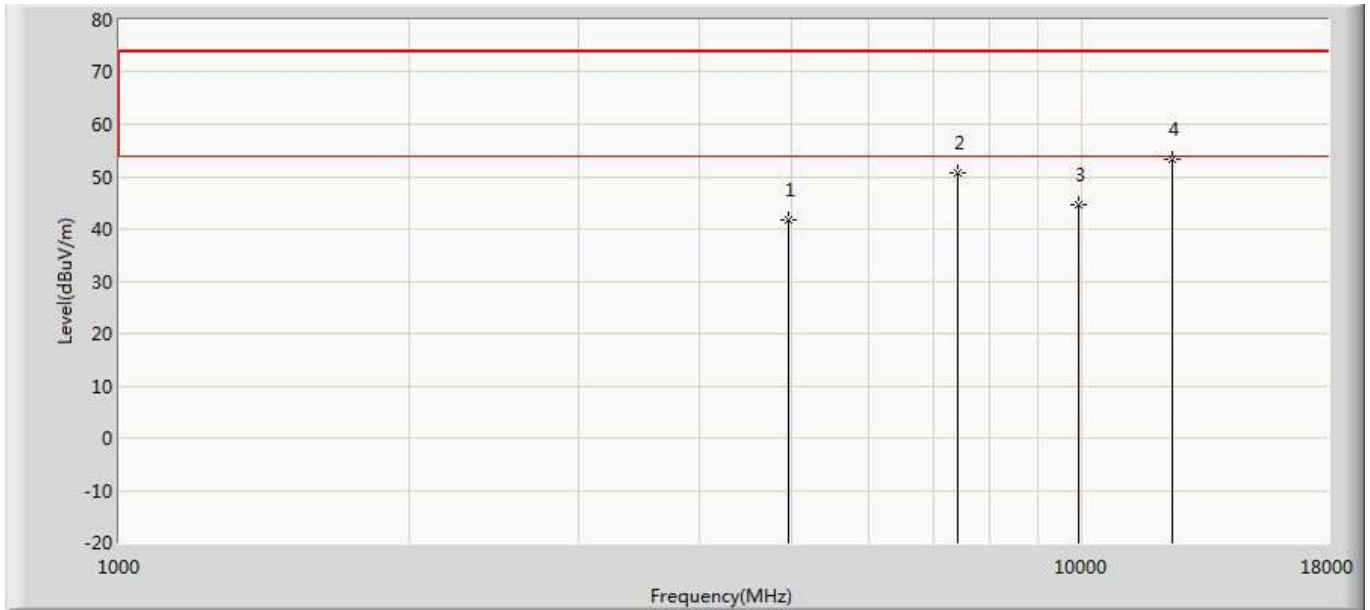
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.710	36.924	-32.290	74.000	4.786	PK
2		7320.000	51.421	43.759	-22.579	74.000	7.663	PK
3		9760.000	44.308	34.448	-29.692	74.000	9.860	PK
4	*	12200.000	51.981	36.629	-22.019	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps	



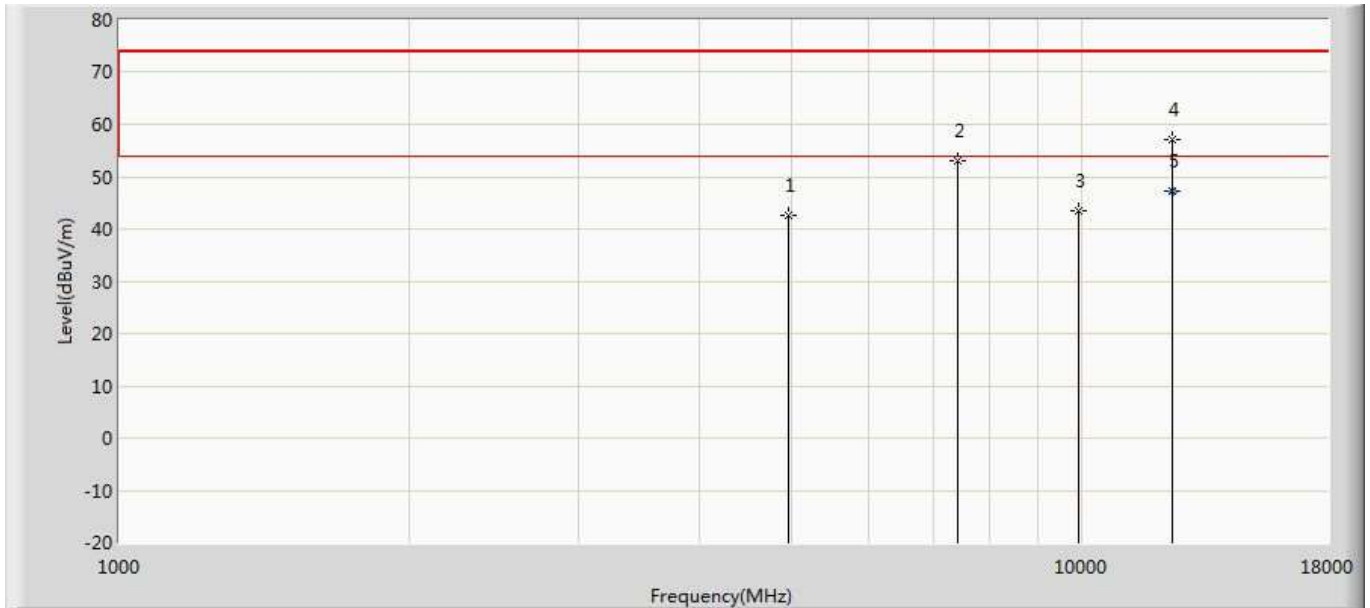
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.027	37.241	-31.973	74.000	4.786	PK
2		7320.000	53.709	46.047	-20.291	74.000	7.663	PK
3		9760.000	44.698	34.838	-29.302	74.000	9.860	PK
4		12200.000	55.368	40.016	-18.632	74.000	15.351	PK
5	*	12200.000	45.953	30.601	-8.047	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 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 2:Transmit at 2480MHz by LE_2Mbps	



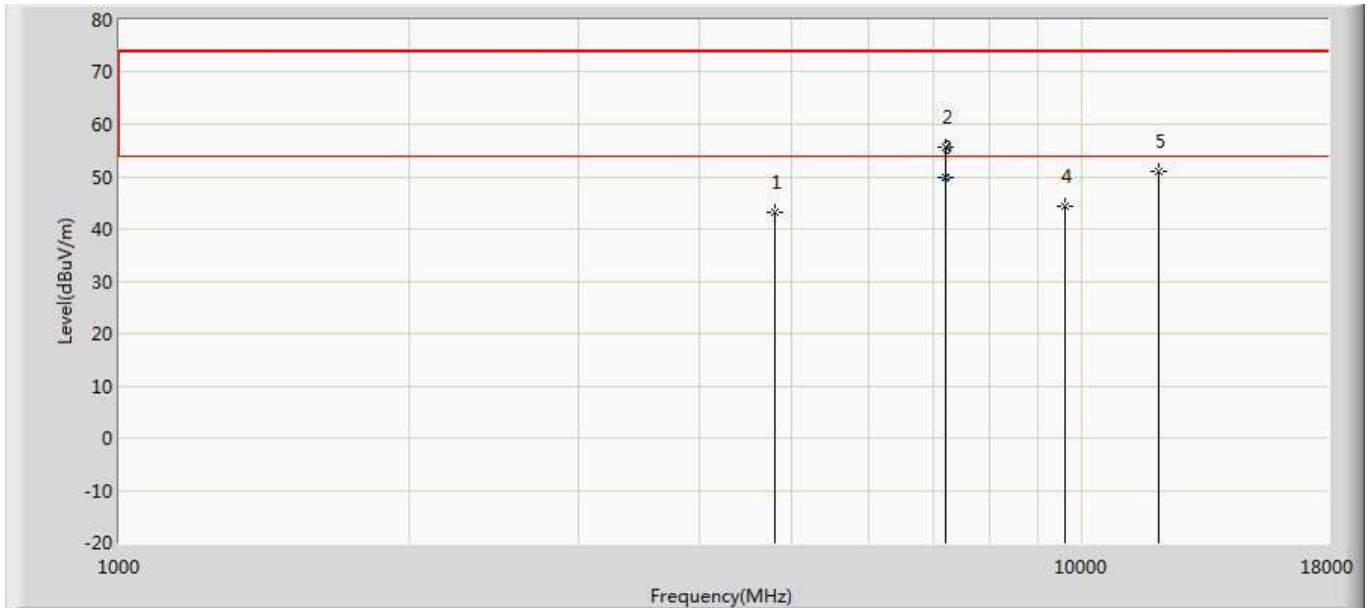
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.663	36.743	-32.337	74.000	4.920	PK
2		7440.000	50.844	43.129	-23.156	74.000	7.715	PK
3		9920.000	44.714	34.767	-29.286	74.000	9.946	PK
4	*	12400.000	53.247	37.248	-20.753	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps	



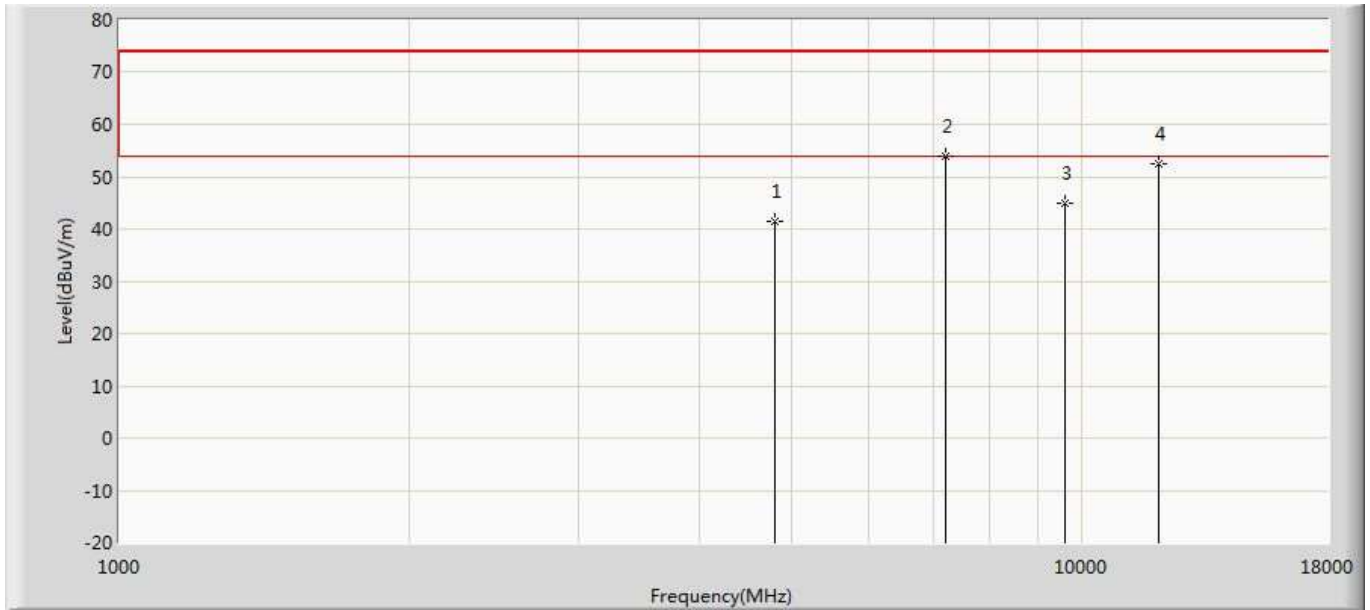
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.616	37.696	-31.384	74.000	4.920	PK
2		7440.000	53.045	45.330	-20.955	74.000	7.715	PK
3		9920.000	43.521	33.574	-30.479	74.000	9.946	PK
4		12400.000	56.980	40.981	-17.020	74.000	15.999	PK
5	*	12400.000	47.241	31.242	-6.759	54.000	15.999	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:13
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)	



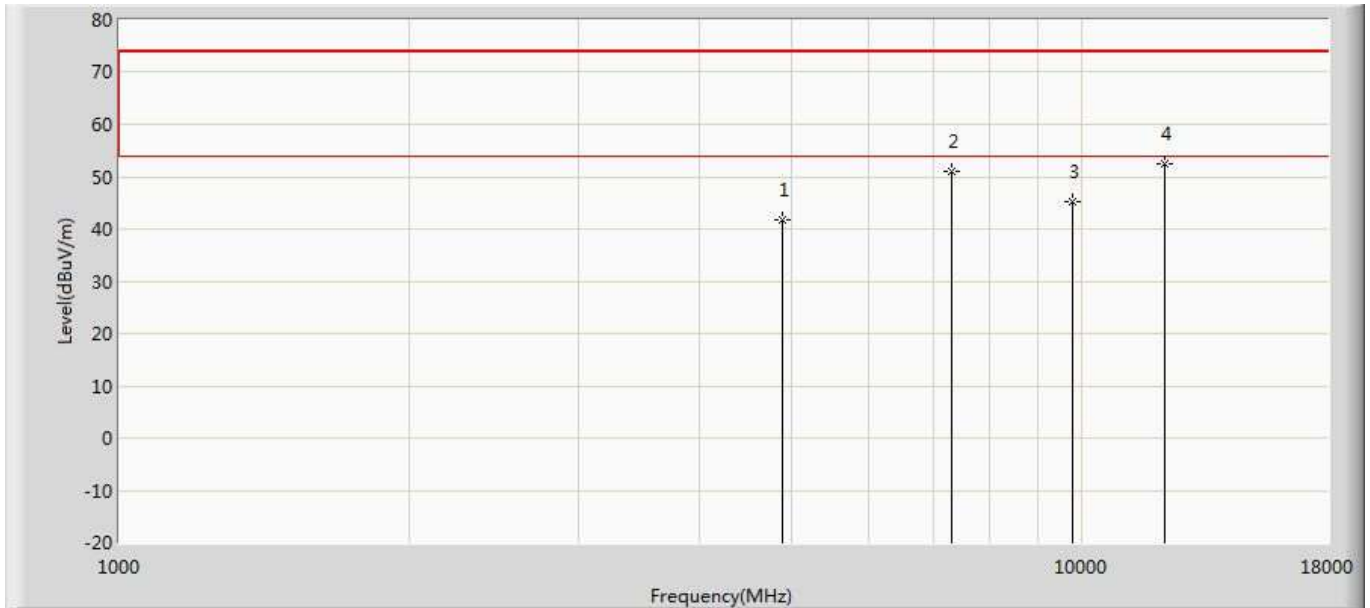
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	43.073	38.556	-30.927	74.000	4.517	PK
2		7206.000	55.722	48.175	-18.278	74.000	7.547	PK
3	*	7206.000	49.718	42.171	-4.282	54.000	7.547	AV
4		9608.000	44.262	35.080	-29.738	74.000	9.182	PK
5		12010.000	51.046	36.493	-22.954	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 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 3:Transmit at 2402MHz by LE_Coded (S=2)	



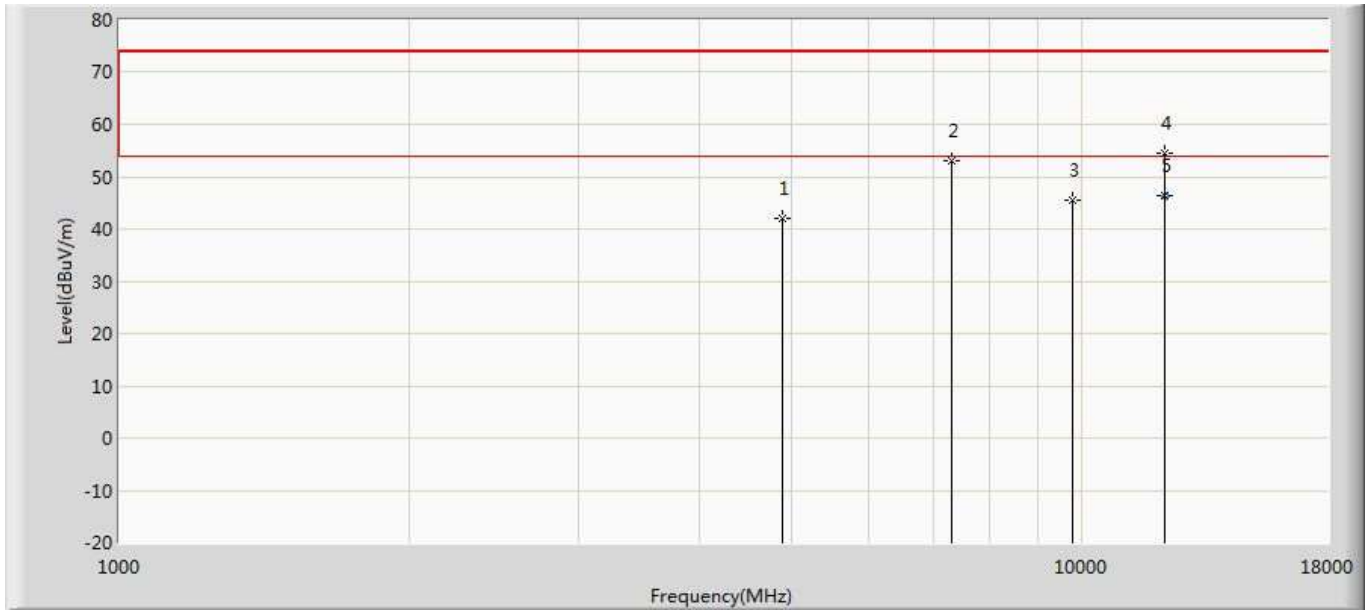
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.538	37.021	-32.462	74.000	4.517	PK
2	*	7206.000	53.923	46.376	-20.077	74.000	7.547	PK
3		9608.000	45.035	35.853	-28.965	74.000	9.182	PK
4		12010.000	52.576	38.023	-21.424	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 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 3:Transmit at 2440MHz by LE_Coded (S=2)	



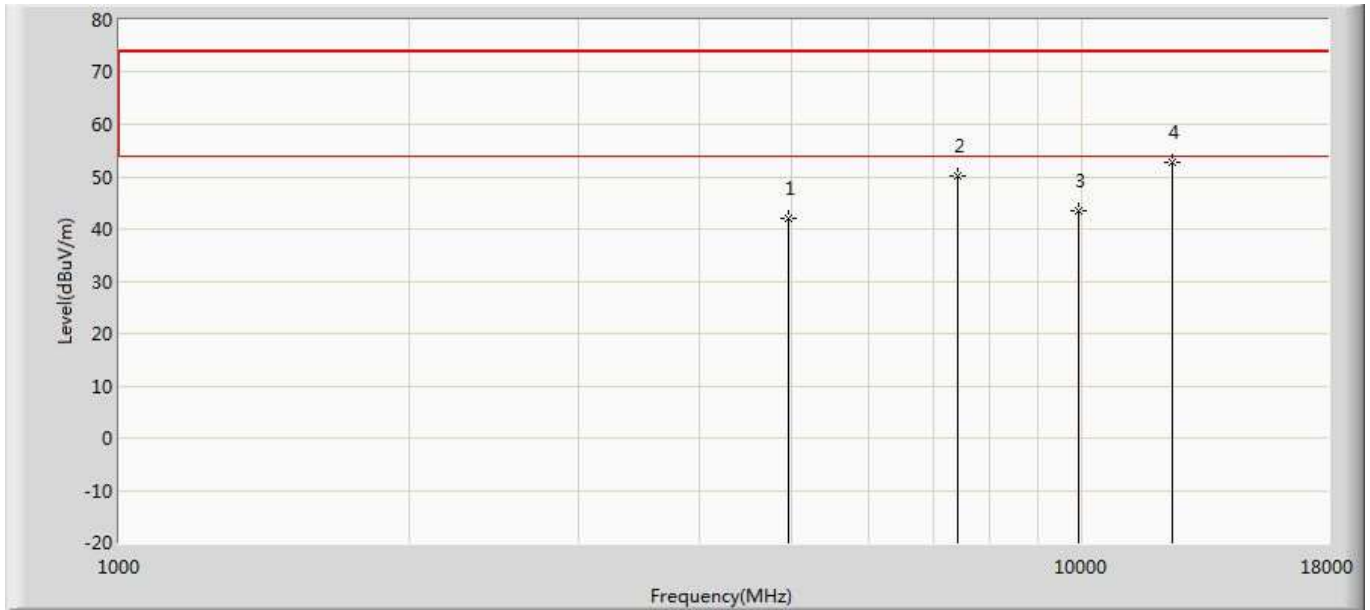
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.855	37.069	-32.145	74.000	4.786	PK
2		7320.000	51.050	43.388	-22.950	74.000	7.663	PK
3		9760.000	45.182	35.322	-28.818	74.000	9.860	PK
4	*	12200.000	52.473	37.121	-21.527	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2440MHz by LE_Coded (S=2)	



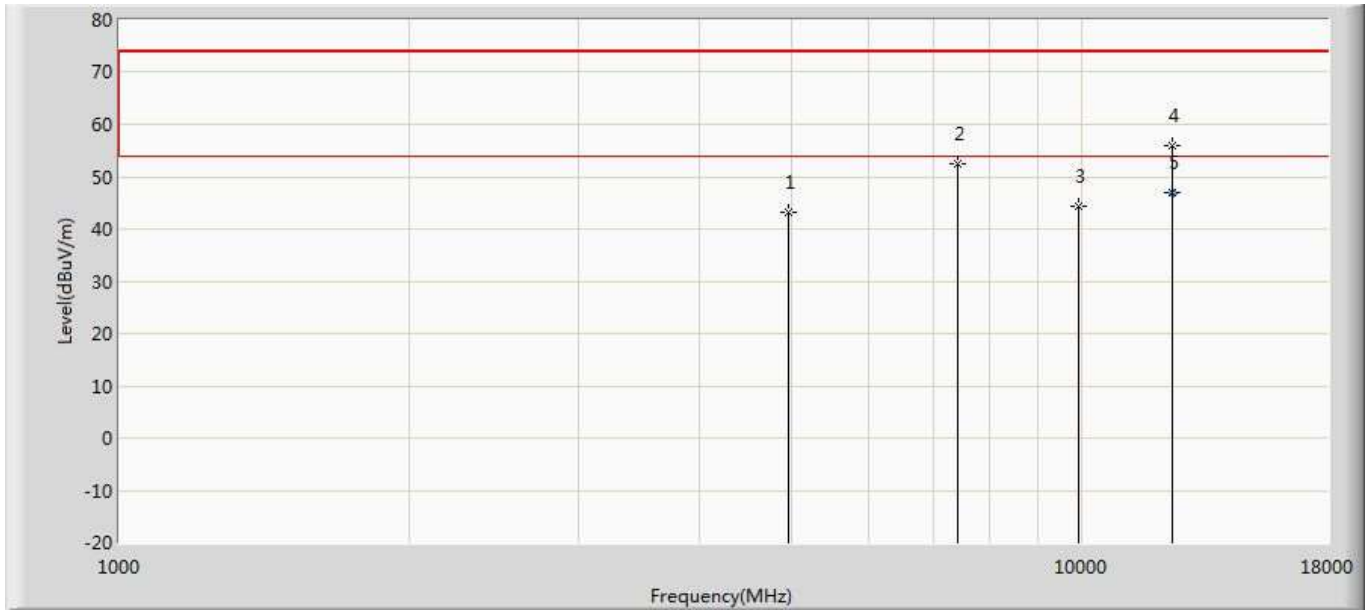
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.126	37.340	-31.874	74.000	4.786	PK
2		7320.000	53.143	45.481	-20.857	74.000	7.663	PK
3		9760.000	45.437	35.577	-28.563	74.000	9.860	PK
4		12200.000	54.631	39.279	-19.369	74.000	15.351	PK
5	*	12200.000	46.287	30.935	-7.713	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded (S=2)	



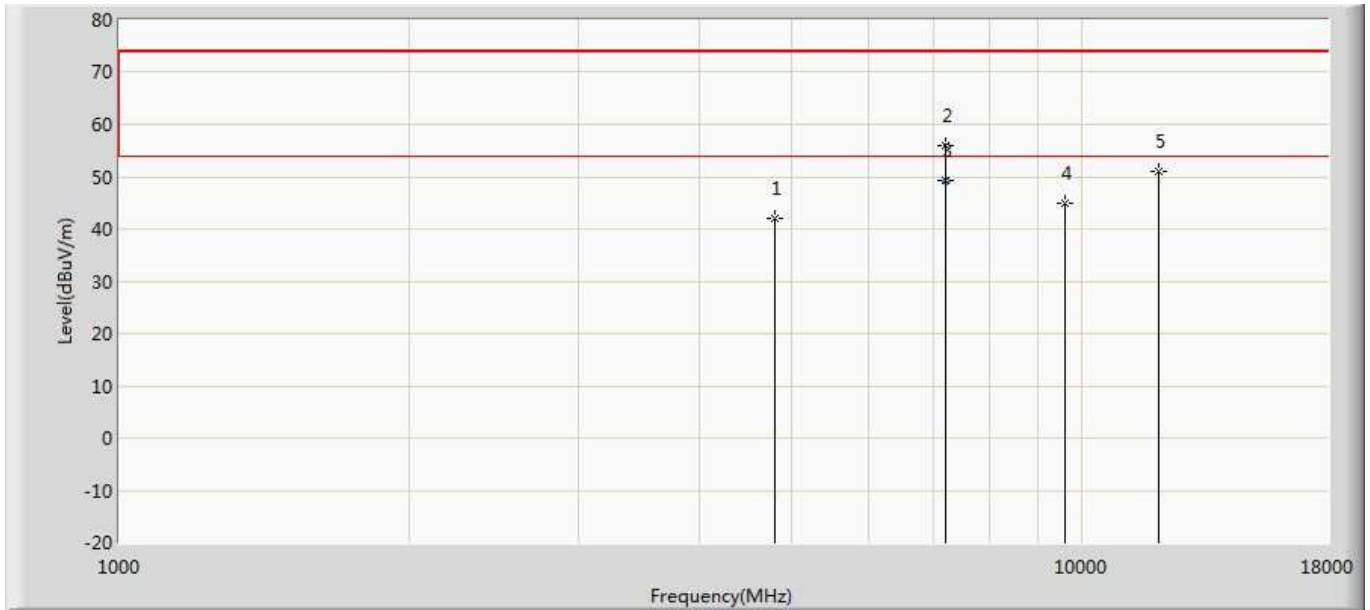
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.903	36.983	-32.097	74.000	4.920	PK
2		7440.000	50.022	42.307	-23.978	74.000	7.715	PK
3		9920.000	43.417	33.470	-30.583	74.000	9.946	PK
4	*	12400.000	52.832	36.833	-21.168	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:15
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 2480MHz by LE_Coded (S=2)	



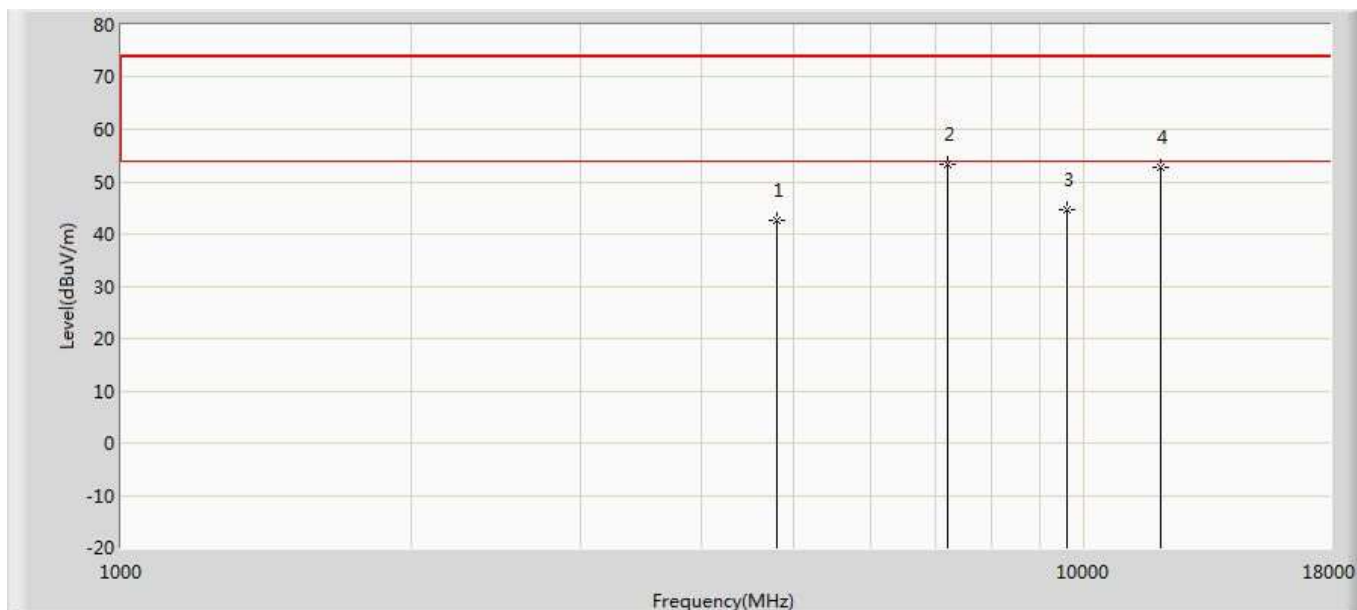
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.177	38.257	-30.823	74.000	4.920	PK
2		7440.000	52.556	44.841	-21.444	74.000	7.715	PK
3		9920.000	44.293	34.346	-29.707	74.000	9.946	PK
4		12400.000	55.860	39.861	-18.140	74.000	15.999	PK
5	*	12400.000	47.095	31.096	-6.905	54.000	15.999	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:13
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 4:Transmit at 2402MHz by LE_Coded (S=8)	



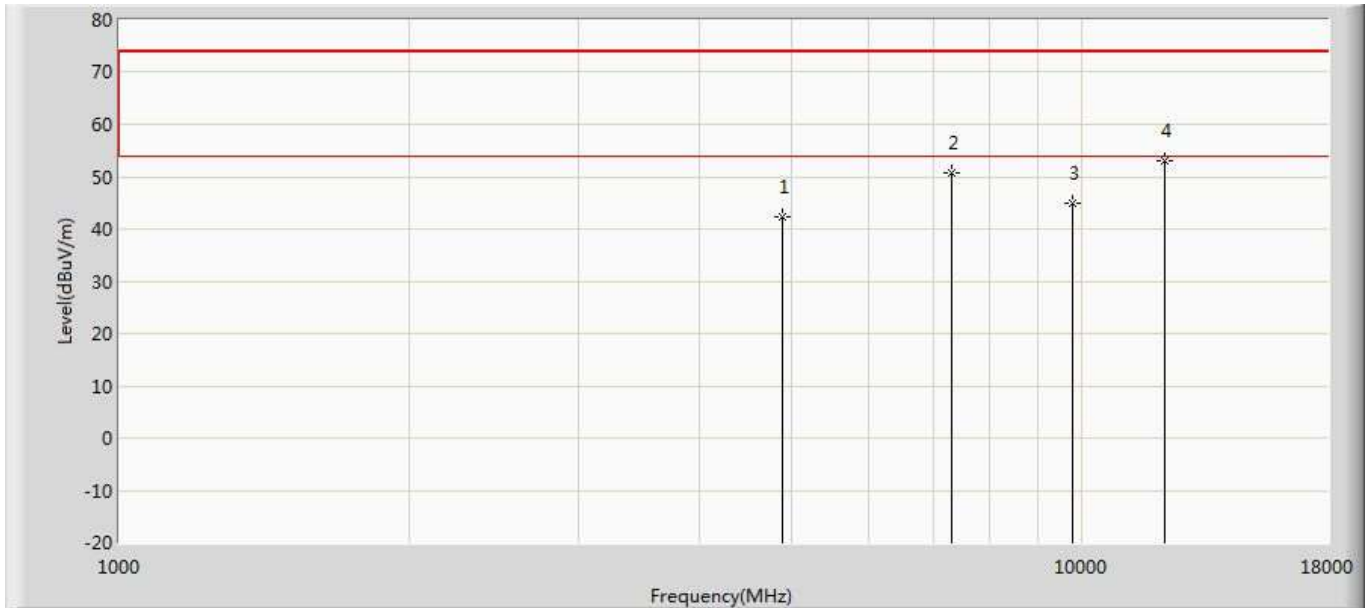
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.998	37.481	-32.002	74.000	4.517	PK
2		7206.000	56.068	48.521	-17.932	74.000	7.547	PK
3	*	7206.000	49.174	41.627	-4.826	54.000	7.547	AV
4		9608.000	44.982	35.800	-29.018	74.000	9.182	PK
5		12010.000	50.976	36.423	-23.024	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 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 4:Transmit at 2402MHz by LE_Coded (S=8)	



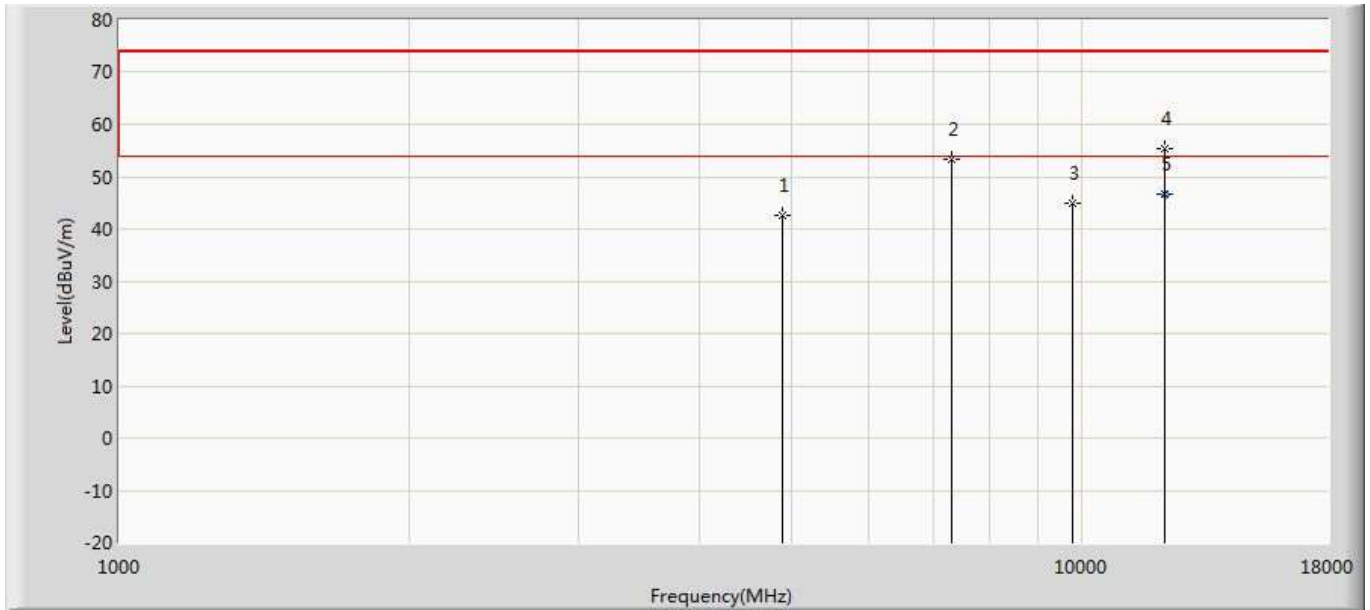
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.675	38.158	-31.325	74.000	4.517	PK
2	*	7206.000	53.441	45.894	-20.559	74.000	7.547	PK
3		9608.000	44.639	35.457	-29.361	74.000	9.182	PK
4		12010.000	52.734	38.181	-21.266	74.000	14.553	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 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 4:Transmit at 2440MHz by LE_Coded (S=8)	



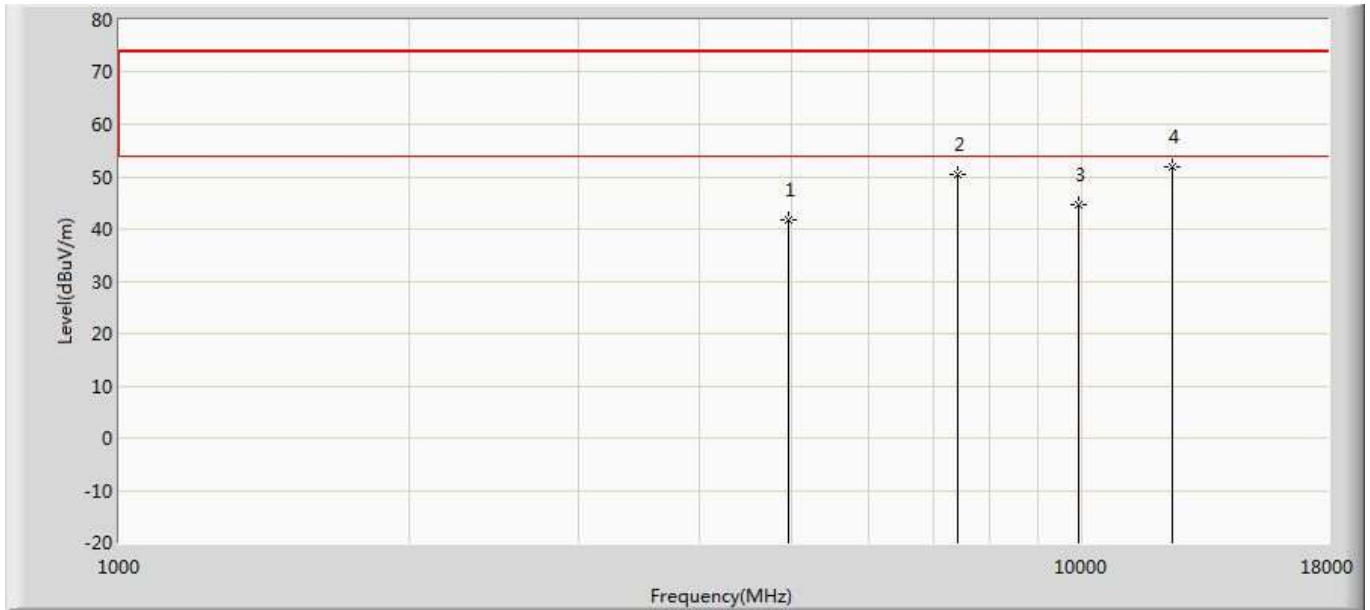
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.462	37.676	-31.538	74.000	4.786	PK
2		7320.000	50.775	43.113	-23.225	74.000	7.663	PK
3		9760.000	44.953	35.093	-29.047	74.000	9.860	PK
4	*	12200.000	52.990	37.638	-21.010	74.000	15.351	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2440MHz by LE_Coded (S=8)	



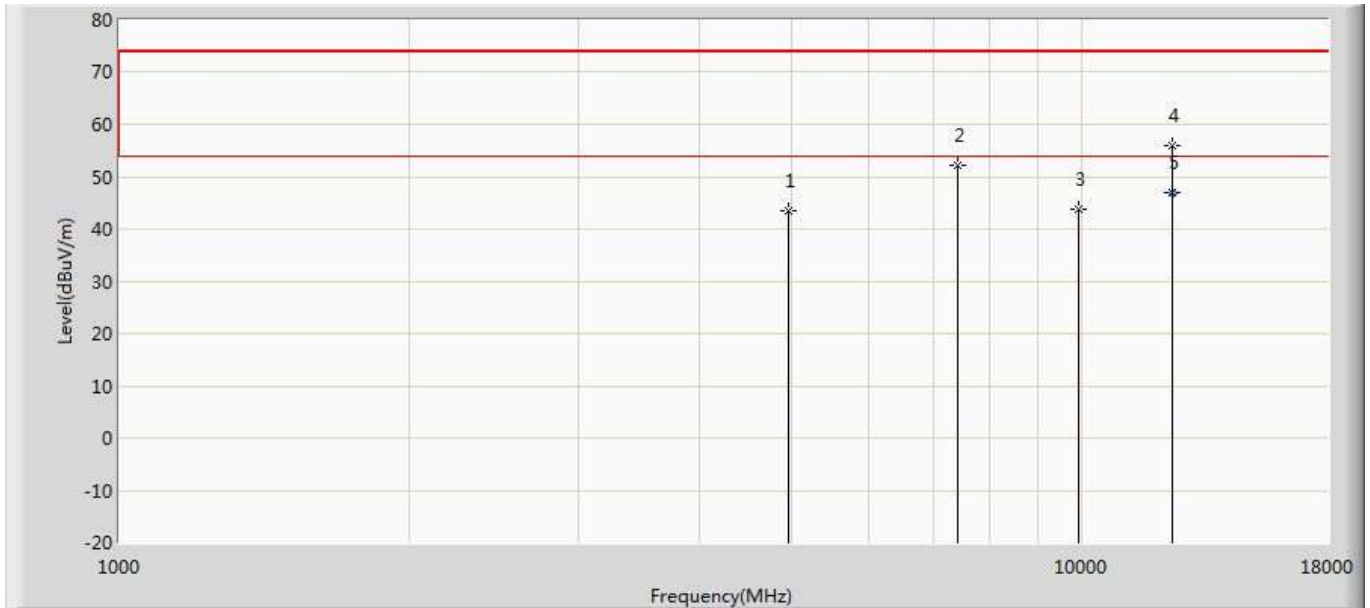
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.612	37.826	-31.388	74.000	4.786	PK
2		7320.000	53.256	45.594	-20.744	74.000	7.663	PK
3		9760.000	44.847	34.987	-29.153	74.000	9.860	PK
4		12200.000	55.431	40.079	-18.569	74.000	15.351	PK
5	*	12200.000	46.790	31.438	-7.210	54.000	15.351	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by 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	41.780	36.860	-32.220	74.000	4.920	PK
2		7440.000	50.352	42.637	-23.648	74.000	7.715	PK
3		9920.000	44.726	34.779	-29.274	74.000	9.946	PK
4	*	12400.000	51.811	35.812	-22.189	74.000	15.999	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:15
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 4:Transmit at 2480MHz by LE_Coded (S=8)	



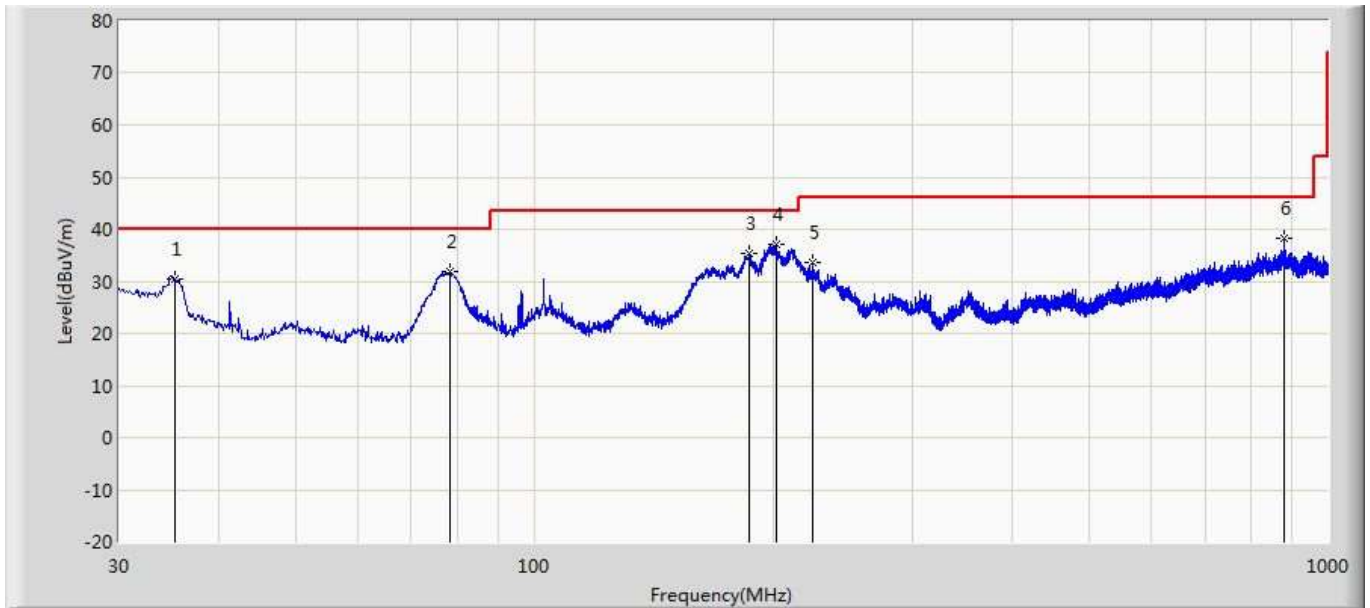
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.385	38.465	-30.615	74.000	4.920	PK
2		7440.000	52.115	44.400	-21.885	74.000	7.715	PK
3		9920.000	43.771	33.824	-30.229	74.000	9.946	PK
4		12400.000	55.876	39.877	-18.124	74.000	15.999	PK
5	*	12400.000	46.813	30.814	-7.187	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.

The worst case of Radiated Emission below 1GHz:

Engineer: Tim.Cao	
Site: AC2	Time: 2019/08/05 - 14:10
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC2_3M(30-1000M)	Polarity: Vertical
EUT: LED Lamp	Power: AC 120V/60Hz
Note: Mode5:Normal operation	

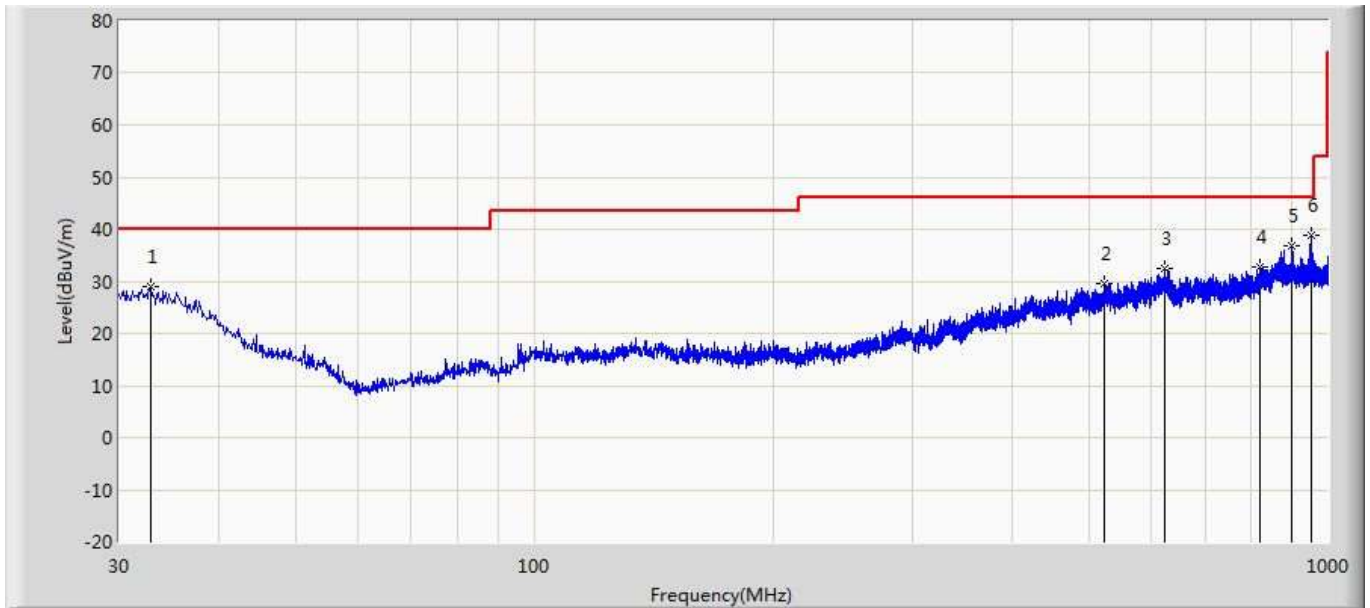


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		35.335	30.471	7.842	-9.529	40.000	22.629	100	133	PK
2		78.257	31.884	17.251	-8.116	40.000	14.633	100	23	PK
3		186.655	35.225	14.769	-8.275	43.500	20.456	100	109	PK
4	*	201.932	37.009	13.406	-6.491	43.500	23.603	100	245	PK
5		224.121	33.644	11.357	-12.356	46.000	22.286	100	332	PK
6		879.963	38.280	4.779	-7.720	46.000	33.502	100	316	PK

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: Tim.Cao	
Site: AC2	Time: 2019/08/05 - 14:11
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC2_3M(30-1000M)	Polarity: Horizontal
EUT: LED Lamp	Power: AC 120V/60Hz
Note: Mode5:Normal operation	

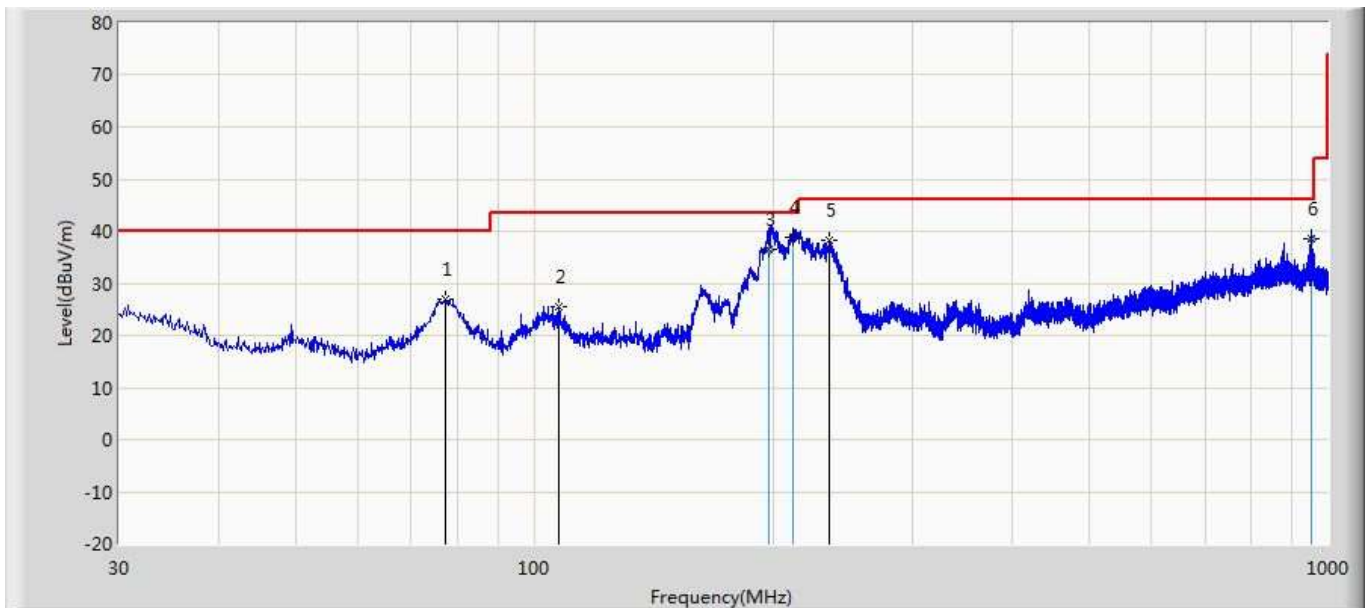


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		32.910	28.930	1.561	-11.070	40.000	27.369	100	234	PK
2		522.881	29.569	0.843	-16.431	46.000	28.726	100	56	PK
3		624.246	32.448	1.720	-13.552	46.000	30.728	100	248	PK
4		822.247	32.708	1.242	-13.292	46.000	31.465	100	109	PK
5		901.545	36.779	3.538	-9.221	46.000	33.241	100	128	PK
6	*	953.682	38.880	5.605	-7.120	46.000	33.275	100	132	PK

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: Tim.Cao	
Site: AC2	Time: 2019/08/28 - 19:34
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC2_3M(30-1000M)	Polarity: Vertical
EUT: LED Lamp	Power: AC 120V/60Hz
Note: Mode5:Normal operation	

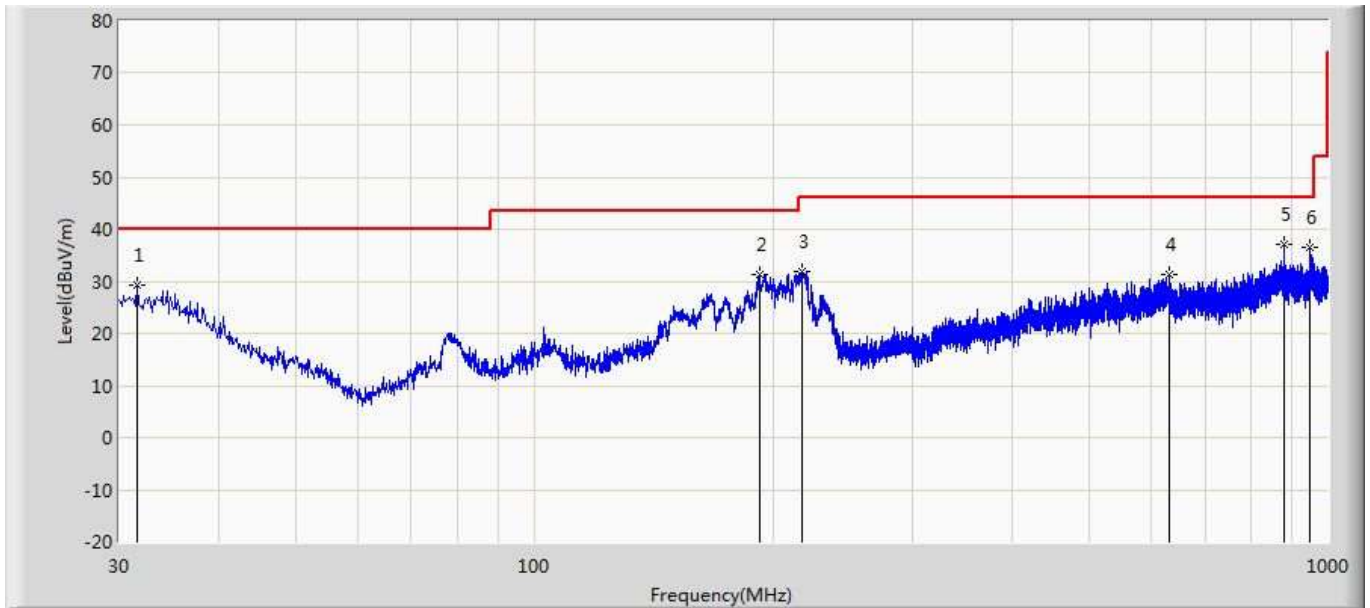


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		77.166	27.042	12.683	-12.958	40.000	14.359	100	22	PK
2		107.236	25.539	3.718	-17.961	43.500	21.822	100	102	PK
3		197.446	36.580	13.633	-6.920	43.500	22.947	100	132	QP
4	*	211.633	38.845	15.821	-4.655	43.500	23.024	100	354	QP
5		235.640	38.190	15.244	-7.810	46.000	22.946	100	231	PK
6		953.682	38.563	5.356	-7.437	46.000	33.207	100	189	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: Tim.Cao	
Site: AC2	Time: 2019/08/28 - 19:38
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC2_3M(30-1000M)	Polarity: Horizontal
EUT: LED Lamp	Power: AC 120V/60Hz
Note: Mode5:Normal operation	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		31.576	29.278	1.833	-10.722	40.000	27.445	100	123	PK
2		192.111	31.168	13.787	-12.332	43.500	17.381	100	85	PK
3		217.937	31.787	14.392	-14.213	46.000	17.395	100	323	PK
4		630.187	31.411	1.129	-14.589	46.000	30.281	100	166	PK
5	*	879.599	37.025	4.428	-8.975	46.000	32.598	100	327	PK
6		949.439	36.546	3.251	-9.454	46.000	33.295	100	154	PK

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).

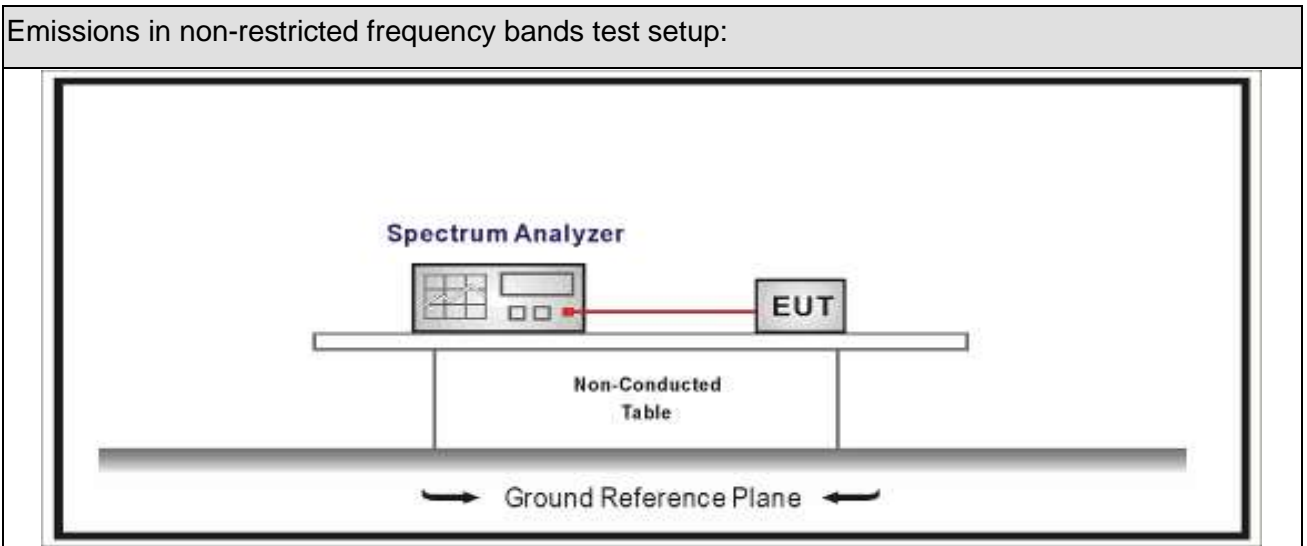
5. Emissions in non-restricted frequency bands

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



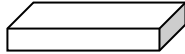
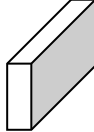
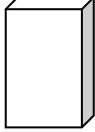



5.3. Limit

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

5.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.11	Emissions in non-restricted frequency bands
	<input checked="" type="checkbox"/> ANSI C63.10	11.11.2	Reference level measurement
	<input checked="" type="checkbox"/> ANSI C63.10	11.11.3	Emission level measurement

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	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
				

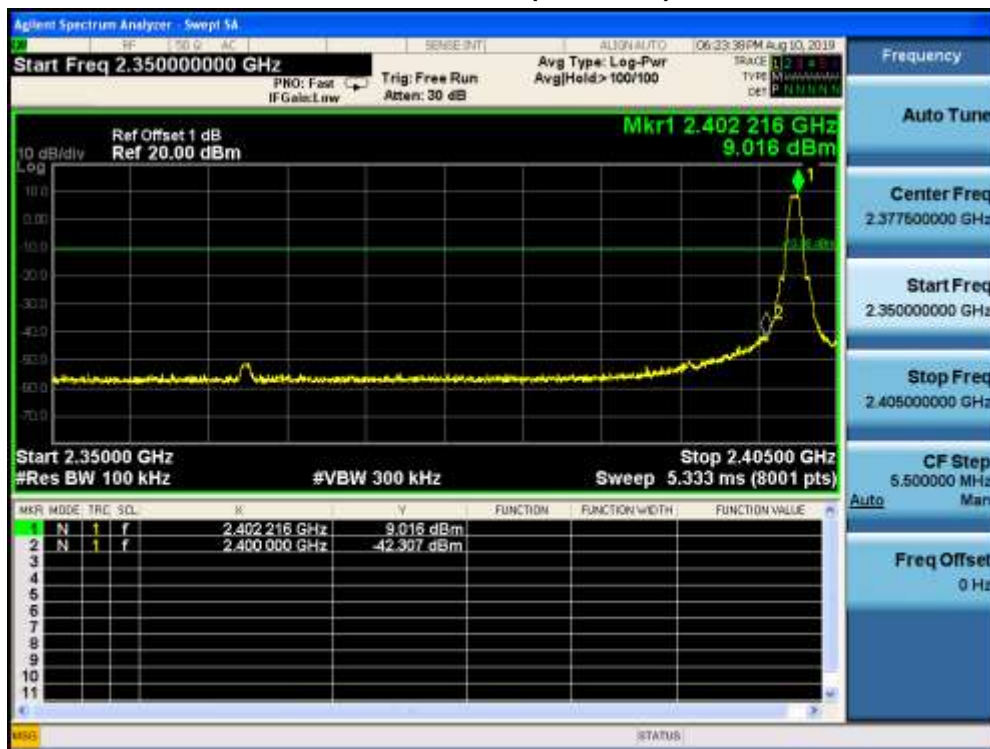
5.6. Test Result

Product Name	: LED lamp	Test Voltage	: AC 120V/60Hz
Test Mode	: Mode 1-4	Test Site	: TR-8
Test Date	: 2019.08.10	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)

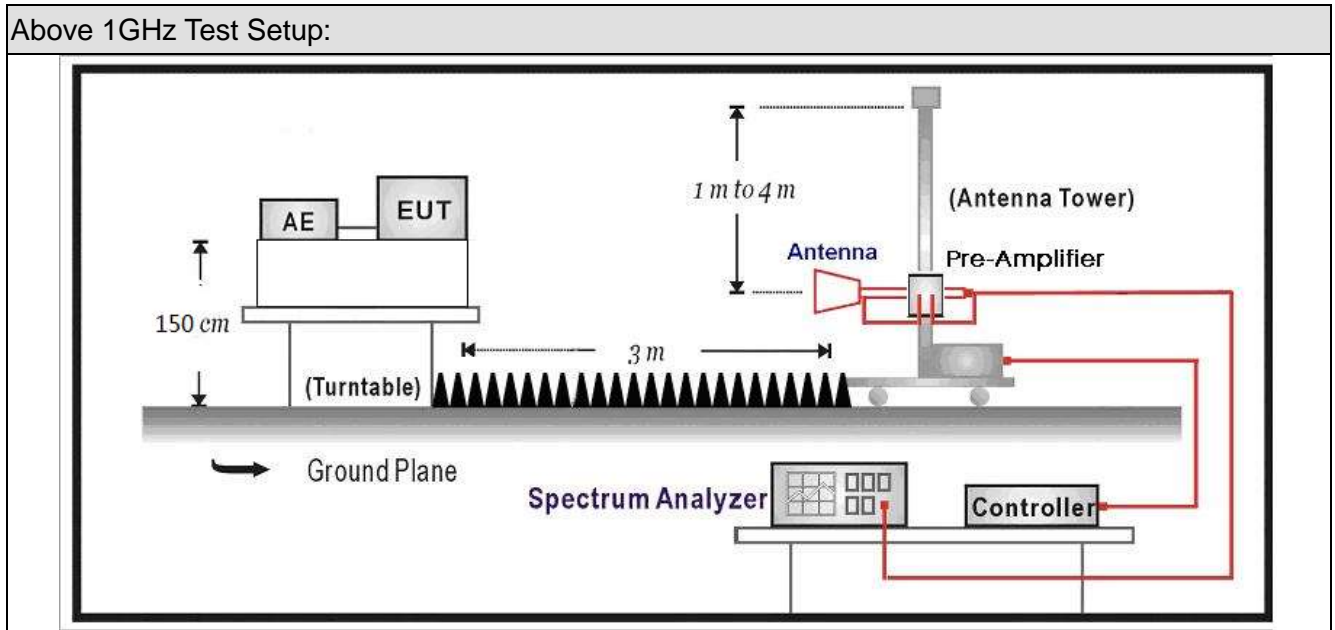


6. Radiated Emission Band Edge

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

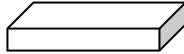
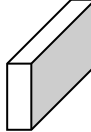
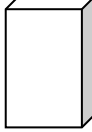


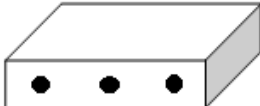
Band edge Limit				
Frequency bands (MHz)	Detector	Limit (dB μ V/m)	RBW (MHz)	Distance (m)
2310-2390	PK	74	1	3
2483.5-2500	AV	54	1	3

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

6.4. Test Procedure

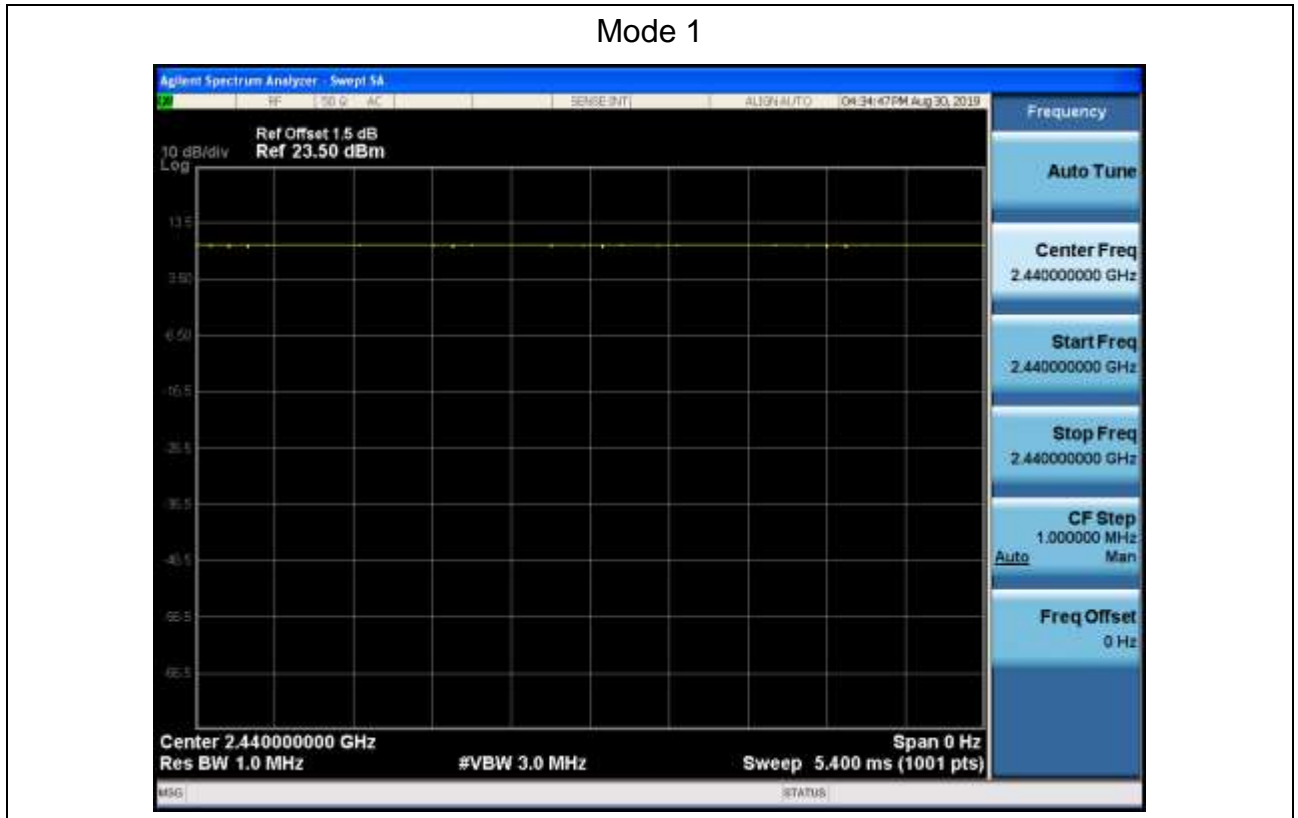
Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	6.10	Band-edge testing
	<input checked="" type="checkbox"/> ANSI C63.10	6.10.5	Restricted-band band-edge measurements
	<input type="checkbox"/> ANSI C63.10	6.10.6	Marker-delta method
<input checked=""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

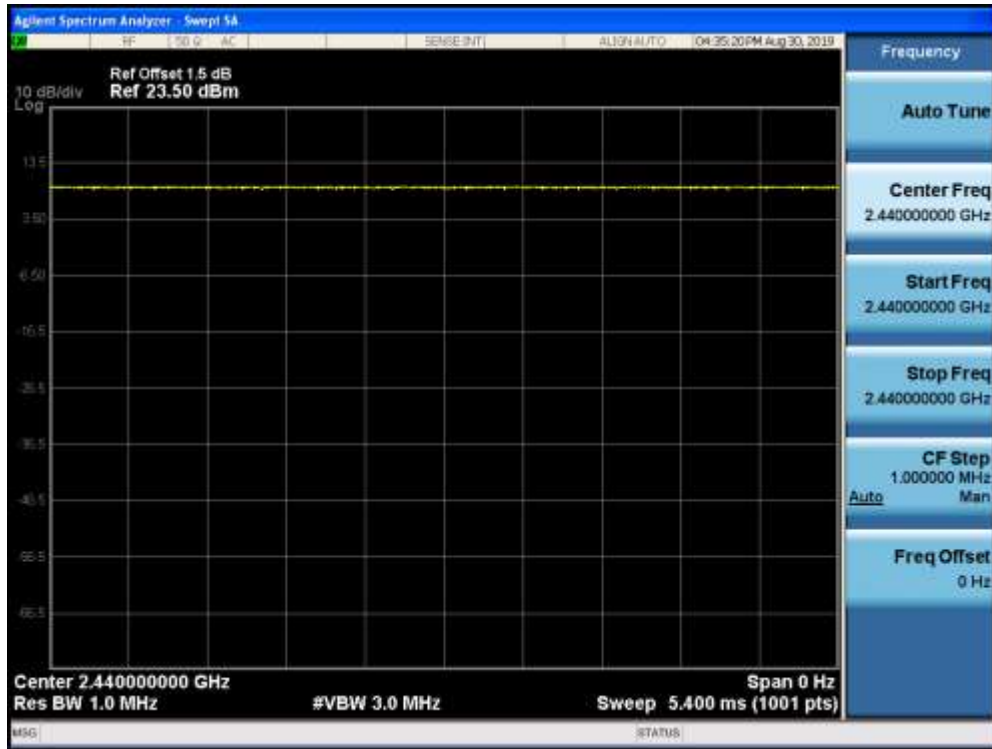
6.6. Duty Cycle

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%

Mode 2



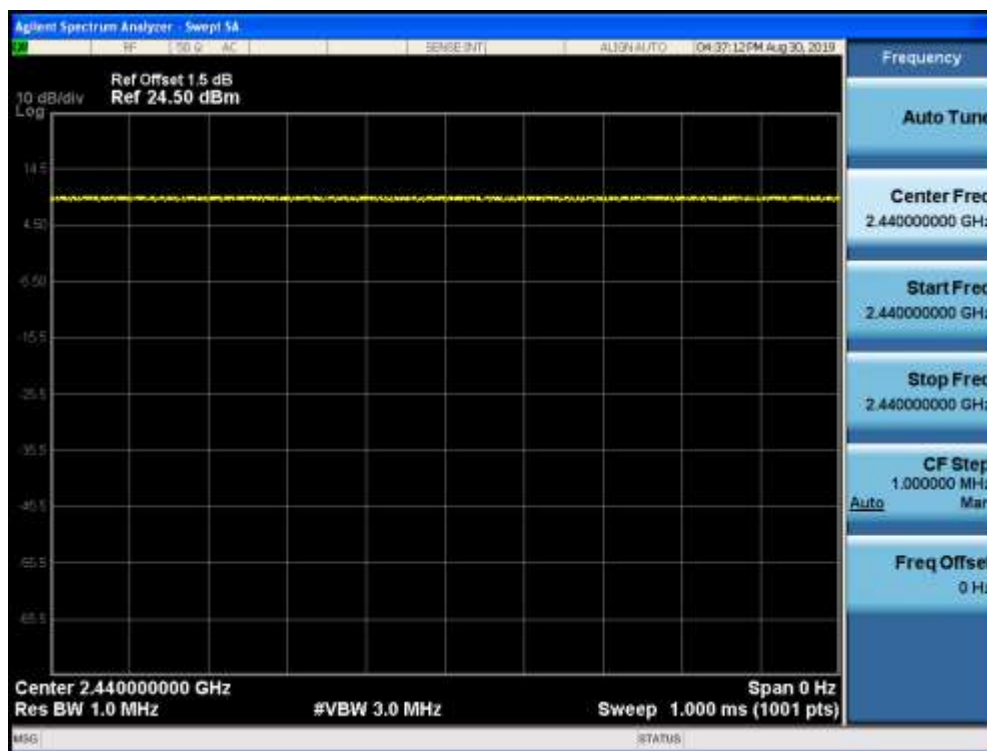
Test Mode	Tx On (ms)	Tx Off (ms)	Reduced VBW (Hz)	Tx On + Tx Off (ms)	Duty Cycle
Mode 3	N/A	N/A	10	N/A	100%

Mode 3



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%

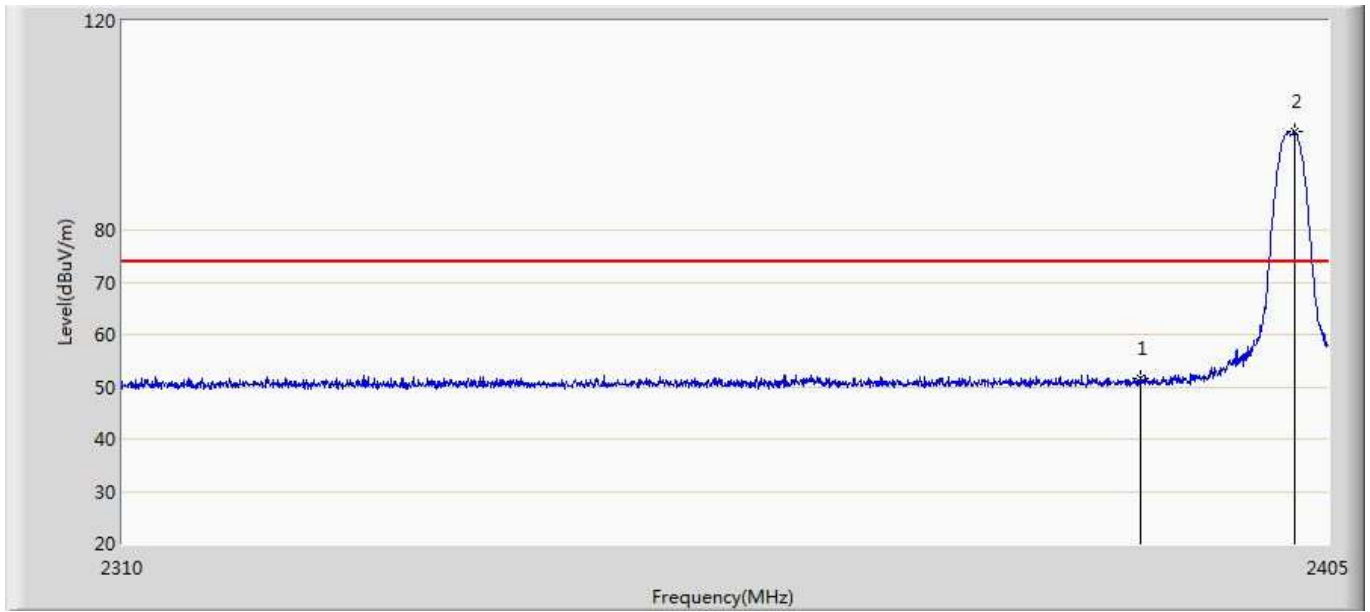
Mode 4



6.7. Test Result

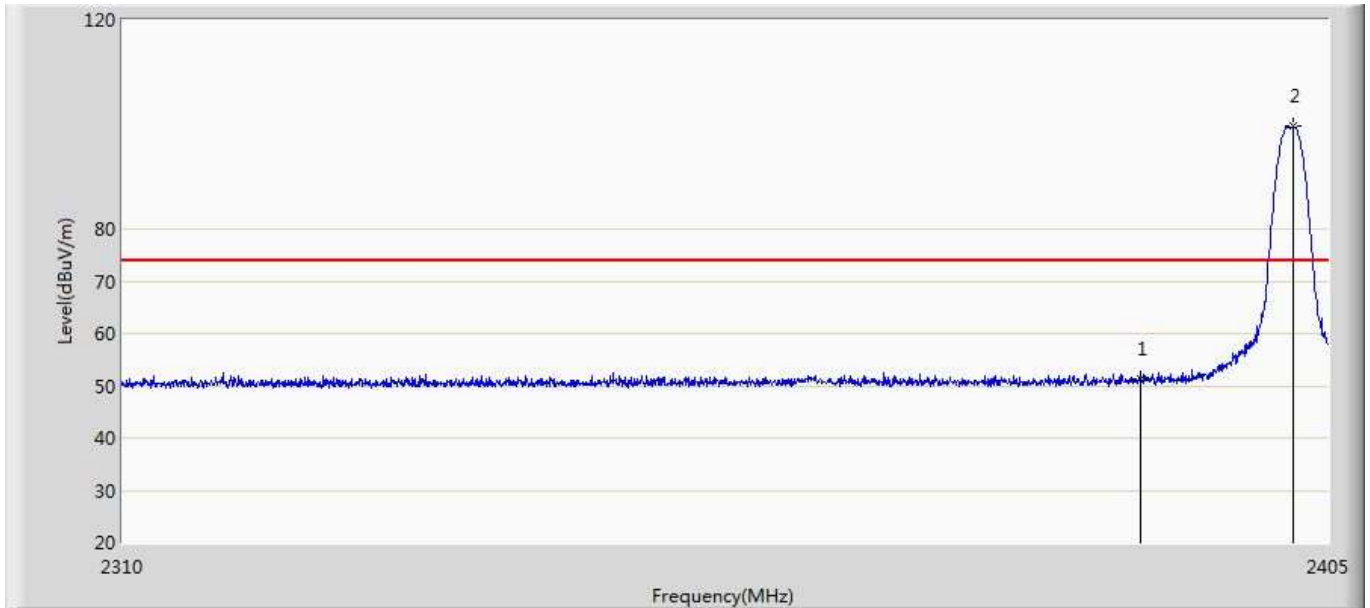
Muruta:

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 17:51
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	



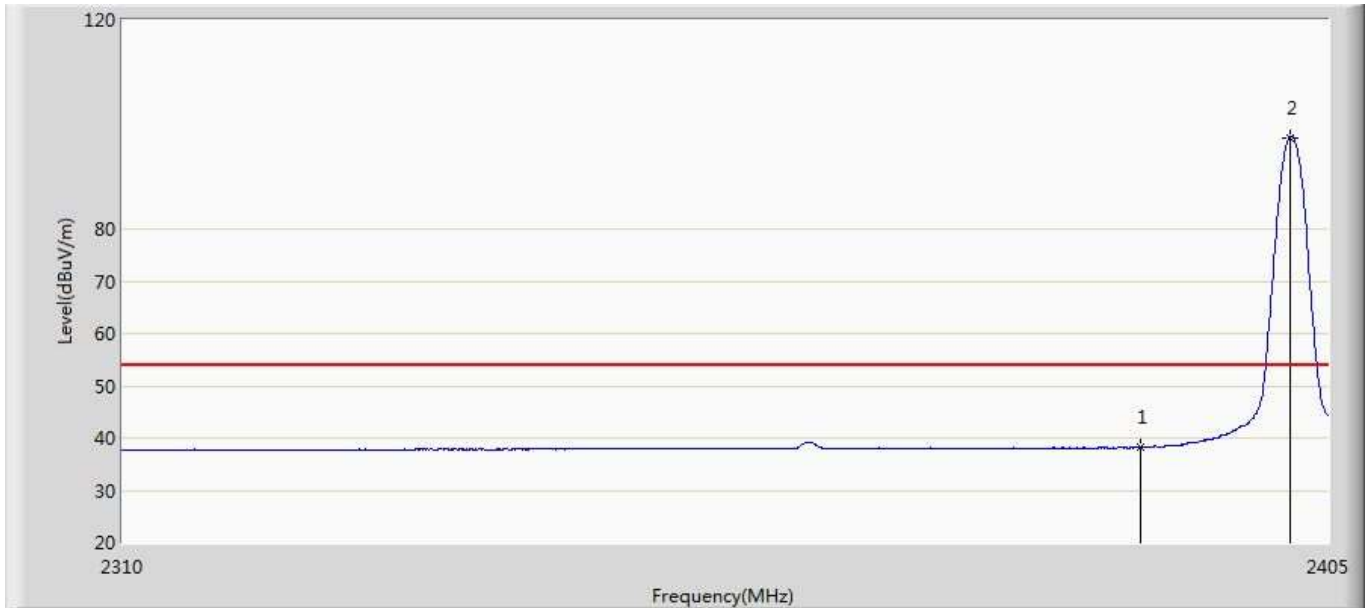
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.588	15.906	-22.412	74.000	35.682	PK
2	*	2402.292	98.789	63.076	N/A	N/A	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



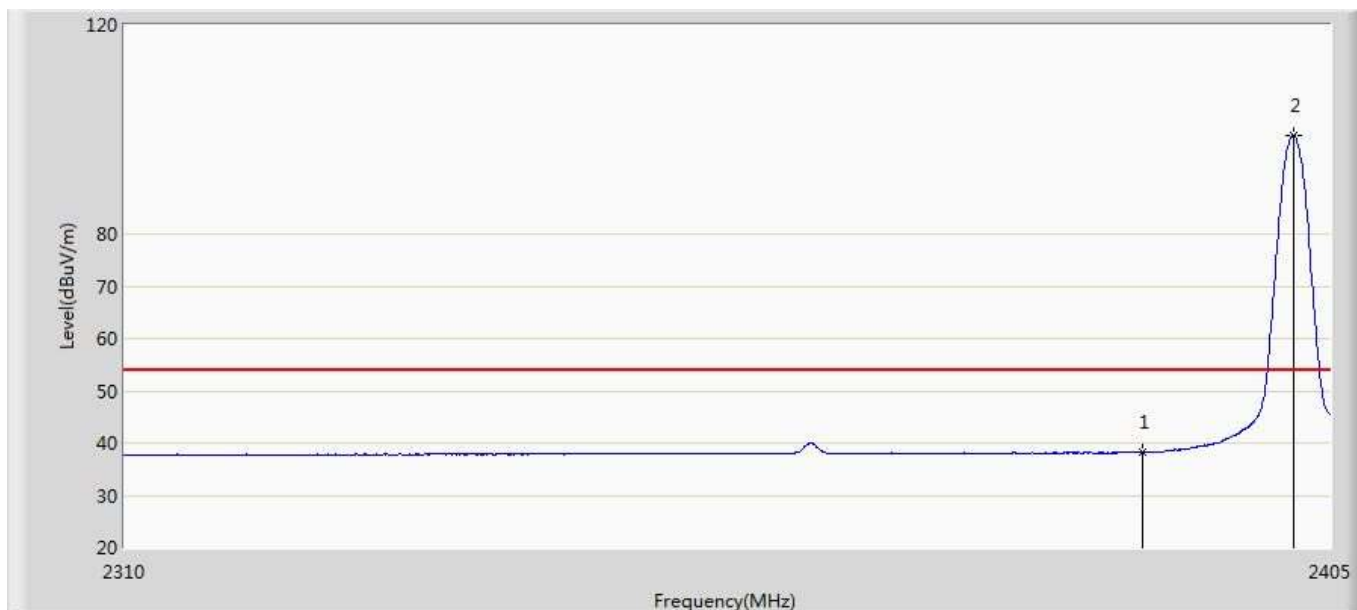
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.184	15.502	-22.816	74.000	35.682	PK
2	*	2402.150	99.665	63.952	N/A	N/A	35.713	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:02
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	



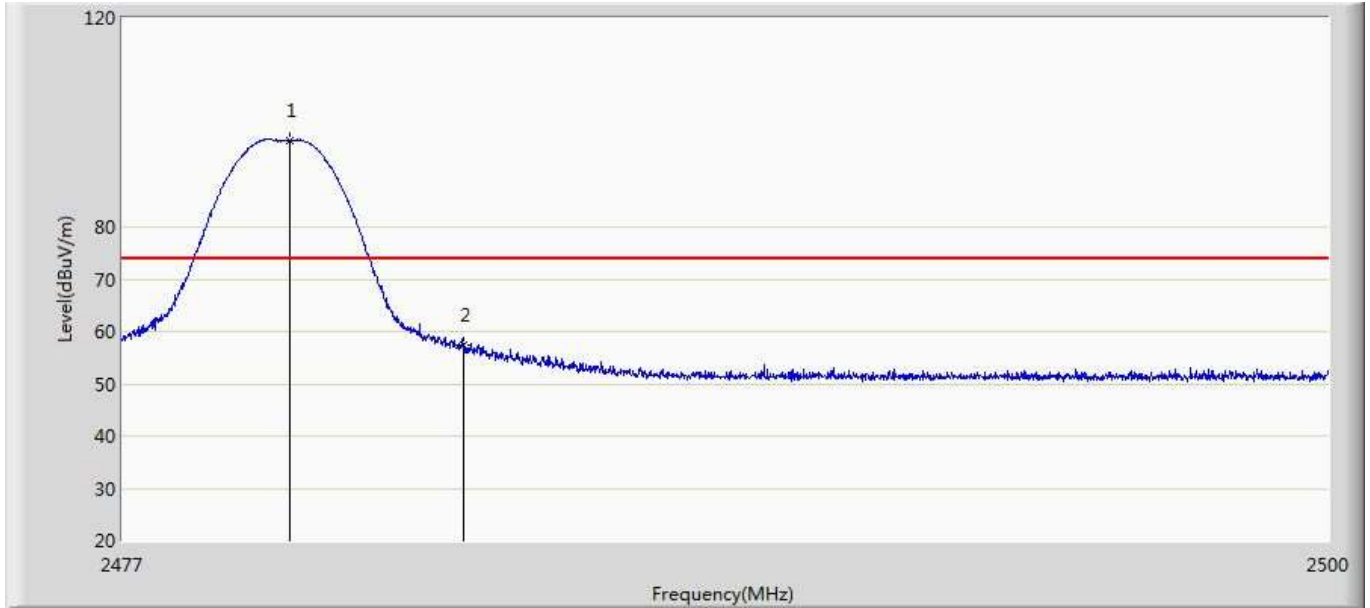
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.177	2.495	-15.823	54.000	35.682	AV
2	*	2401.913	97.520	61.808	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:04
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	



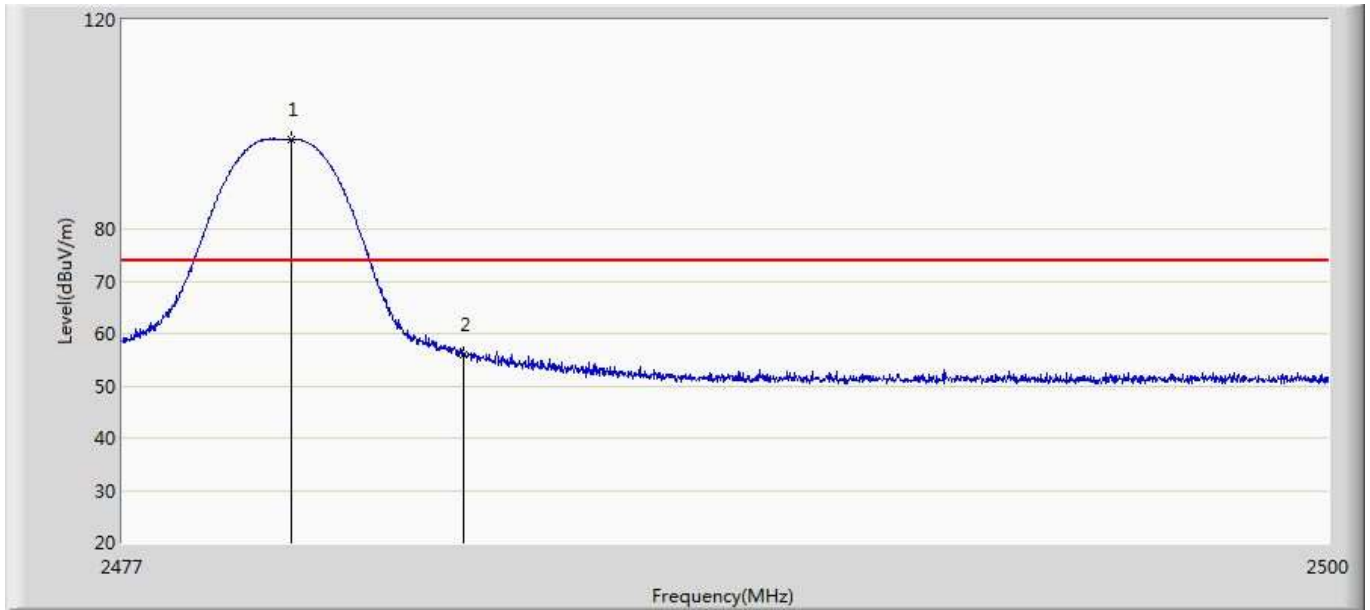
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.263	2.581	-15.737	54.000	35.682	AV
2	*	2402.055	98.825	63.112	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 16:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



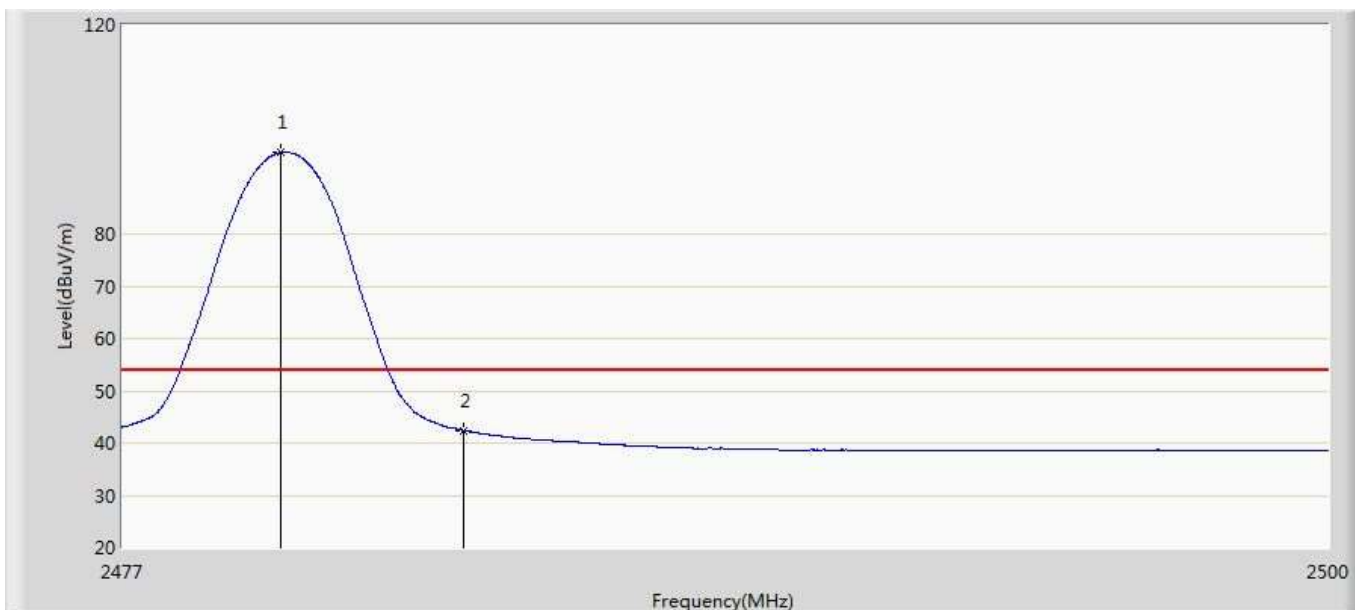
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.197	96.565	60.697	N/A	N/A	35.867	PK
2		2483.500	57.409	21.517	-16.591	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 16:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



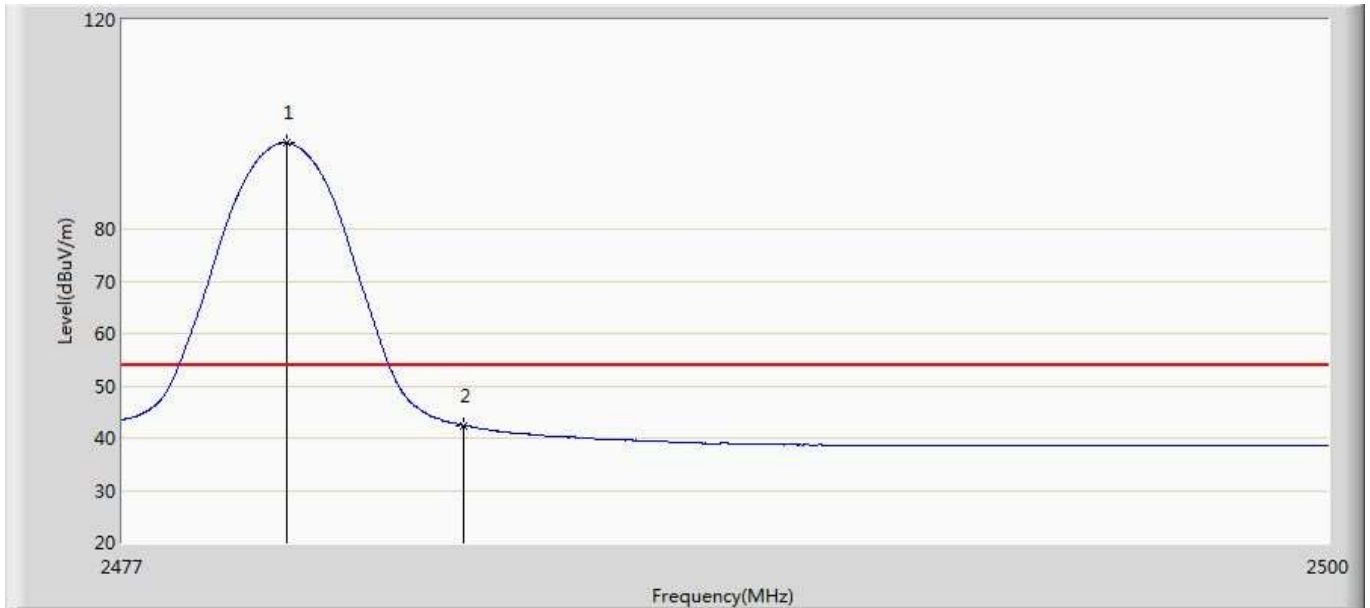
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.220	97.233	61.365	N/A	N/A	35.868	PK
2		2483.500	55.932	20.040	-18.068	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 16:42
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 1:Transmit at 2480MHz by LE_1Mbps	



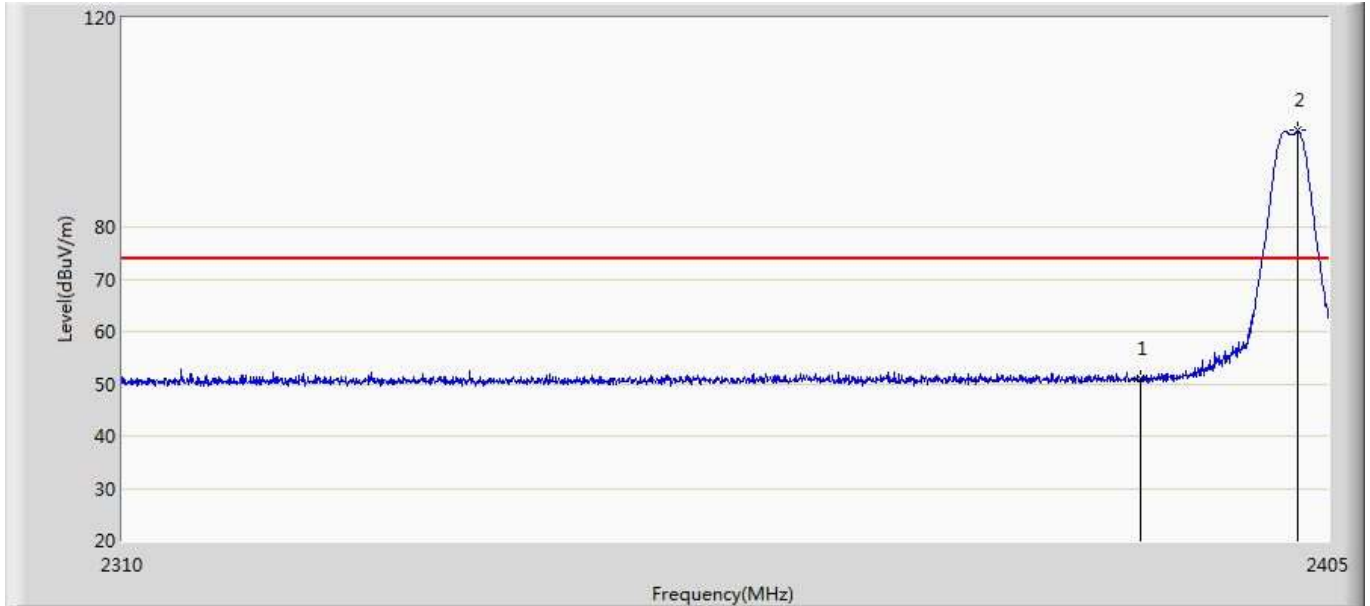
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.001	95.565	59.699	N/A	N/A	35.866	AV
2		2483.500	42.374	6.482	-11.626	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 16:44
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 1:Transmit at 2480MHz by LE_1Mbps	



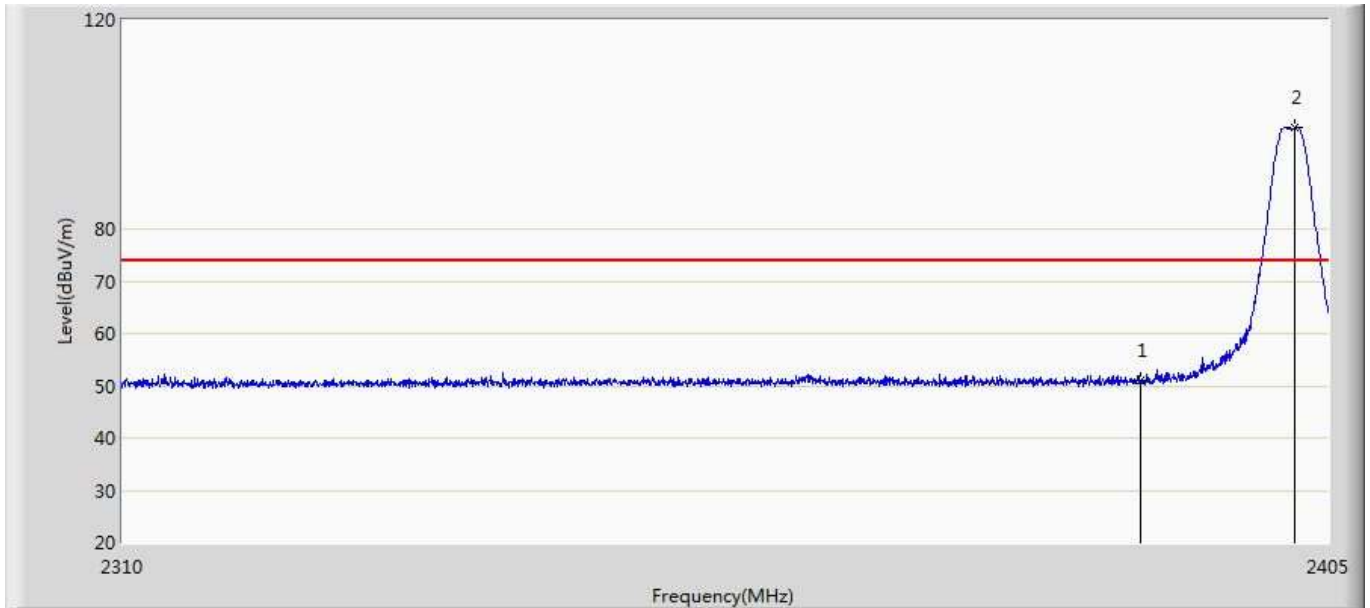
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.139	96.421	60.554	N/A	N/A	35.867	AV
2		2483.500	42.387	6.495	-11.613	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:17
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 2402MHz by LE_2Mbps	



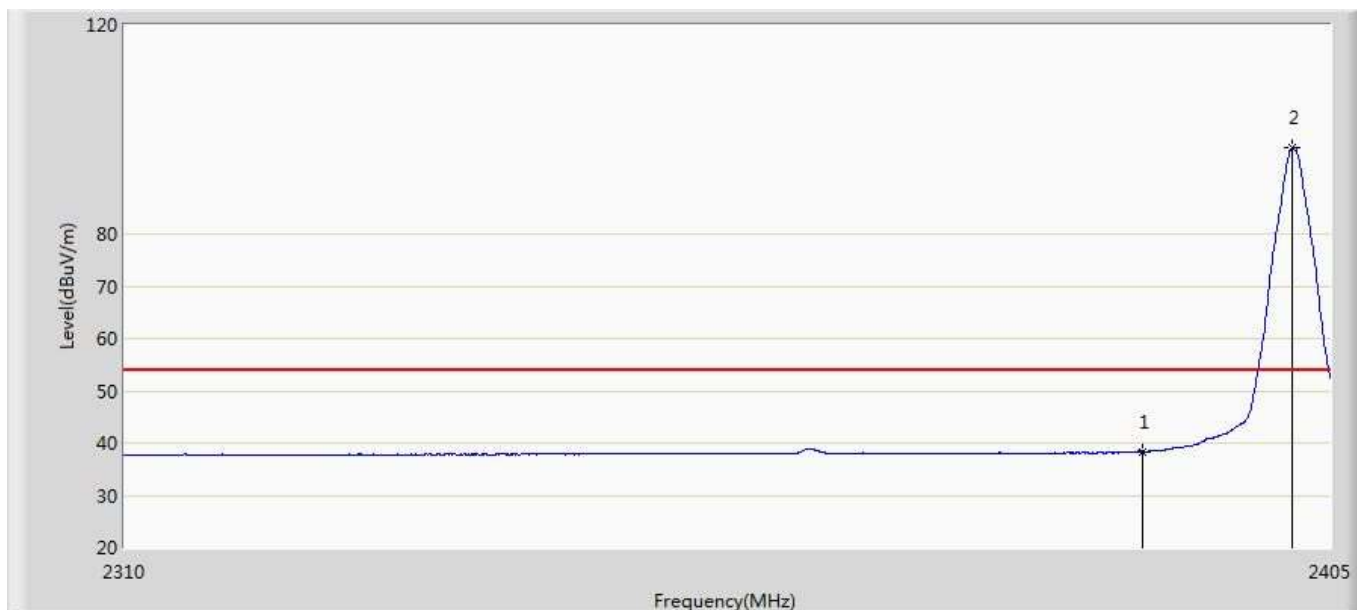
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.998	15.316	-23.002	74.000	35.682	PK
2	*	2402.530	98.432	62.718	N/A	N/A	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



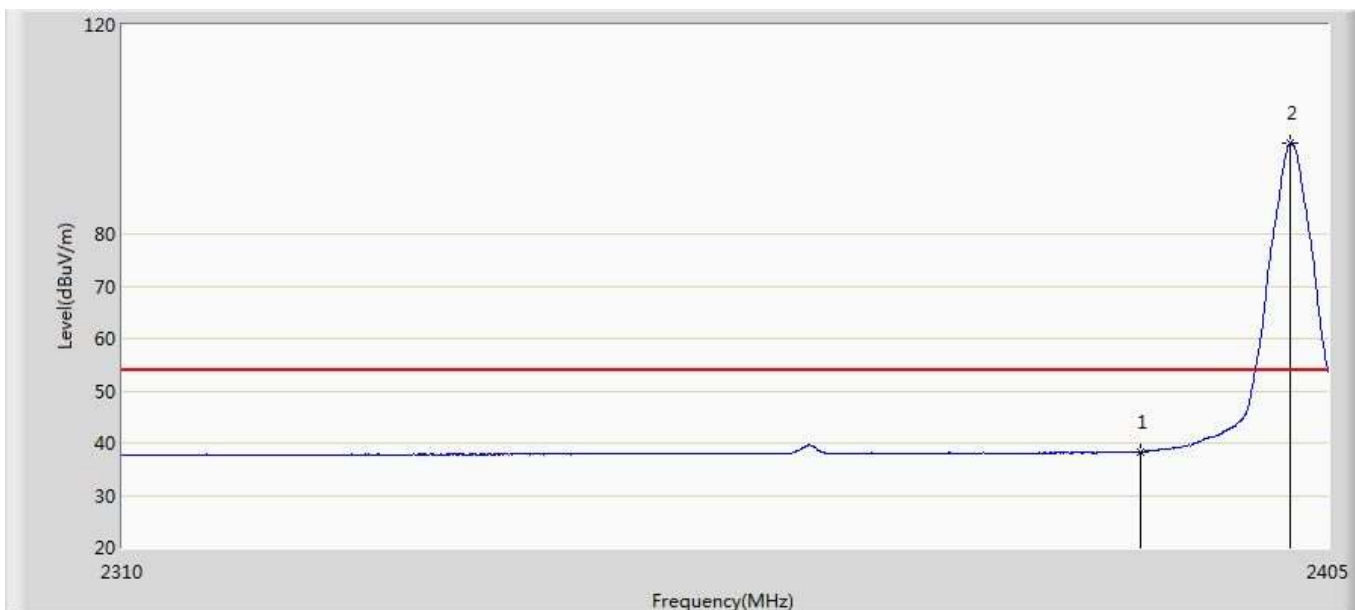
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.961	15.279	-23.039	74.000	35.682	PK
2	*	2402.387	99.472	63.758	N/A	N/A	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



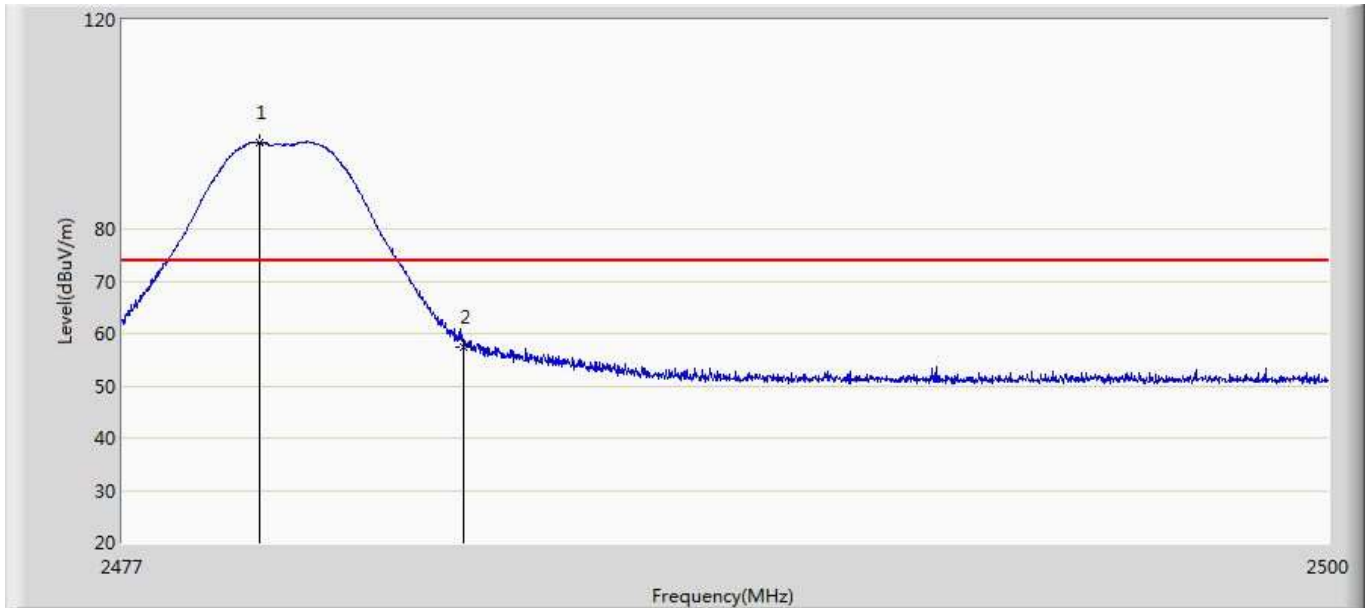
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.390	2.708	-15.610	54.000	35.682	AV
2	*	2402.008	96.624	60.911	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



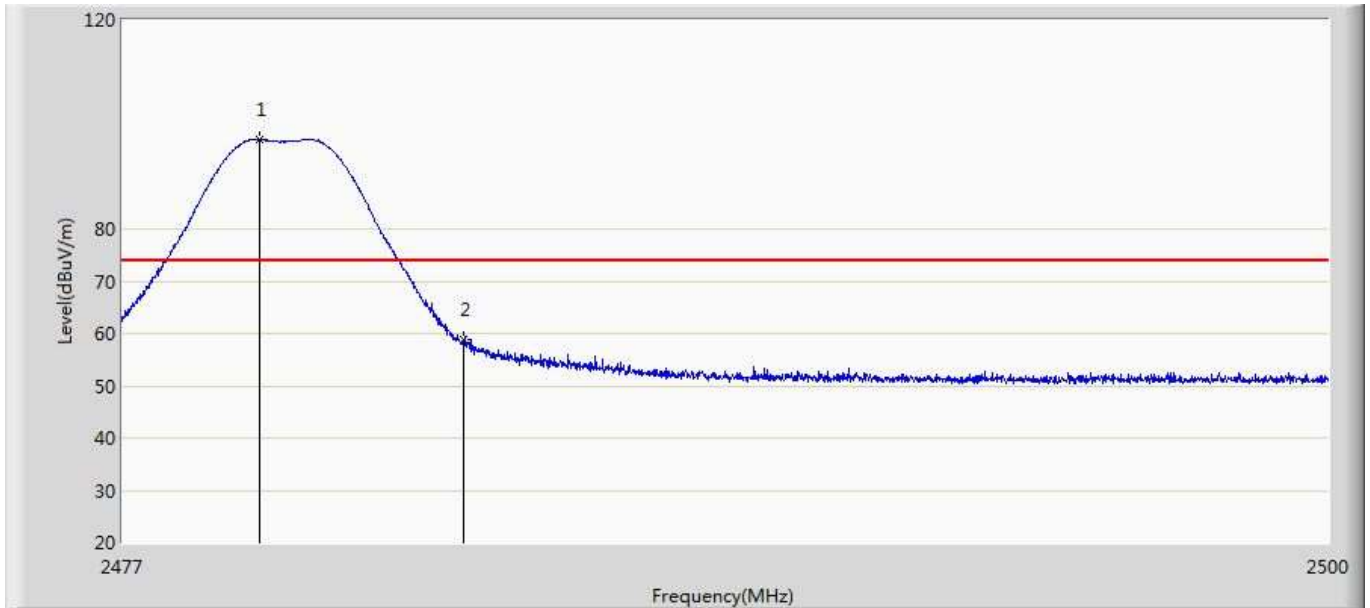
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.348	2.666	-15.652	54.000	35.682	AV
2	*	2401.960	97.296	61.583	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 17:00
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	



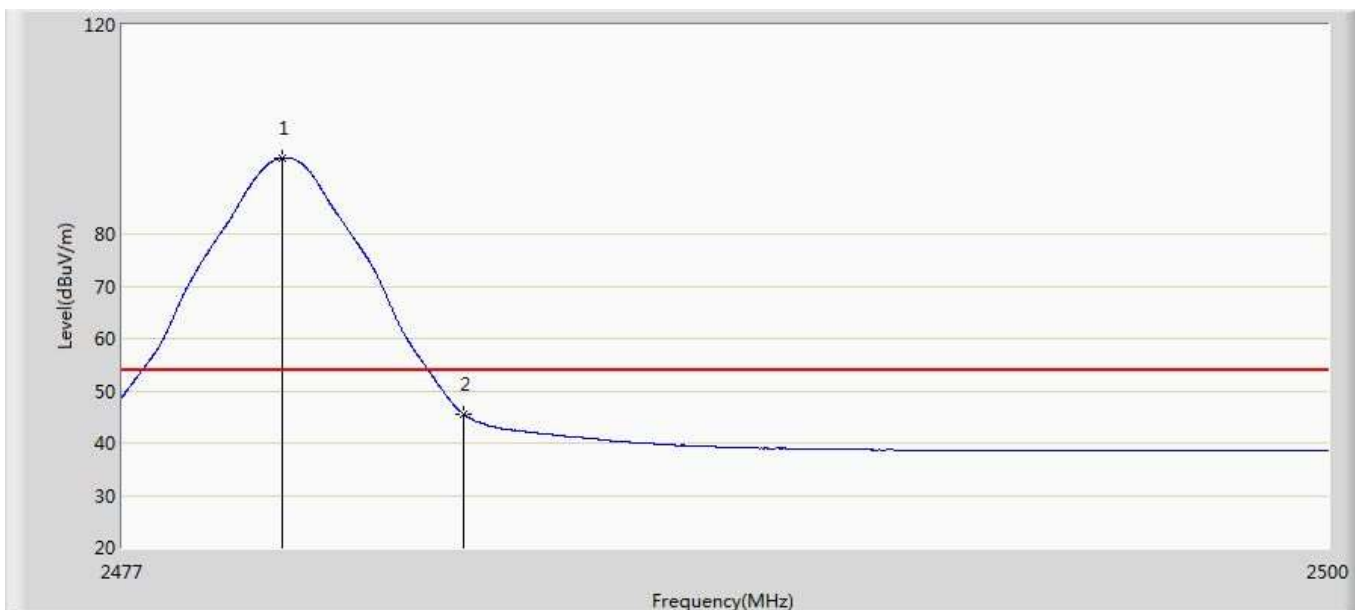
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.599	96.591	60.728	N/A	N/A	35.864	PK
2		2483.500	57.304	21.412	-16.696	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 17:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps	



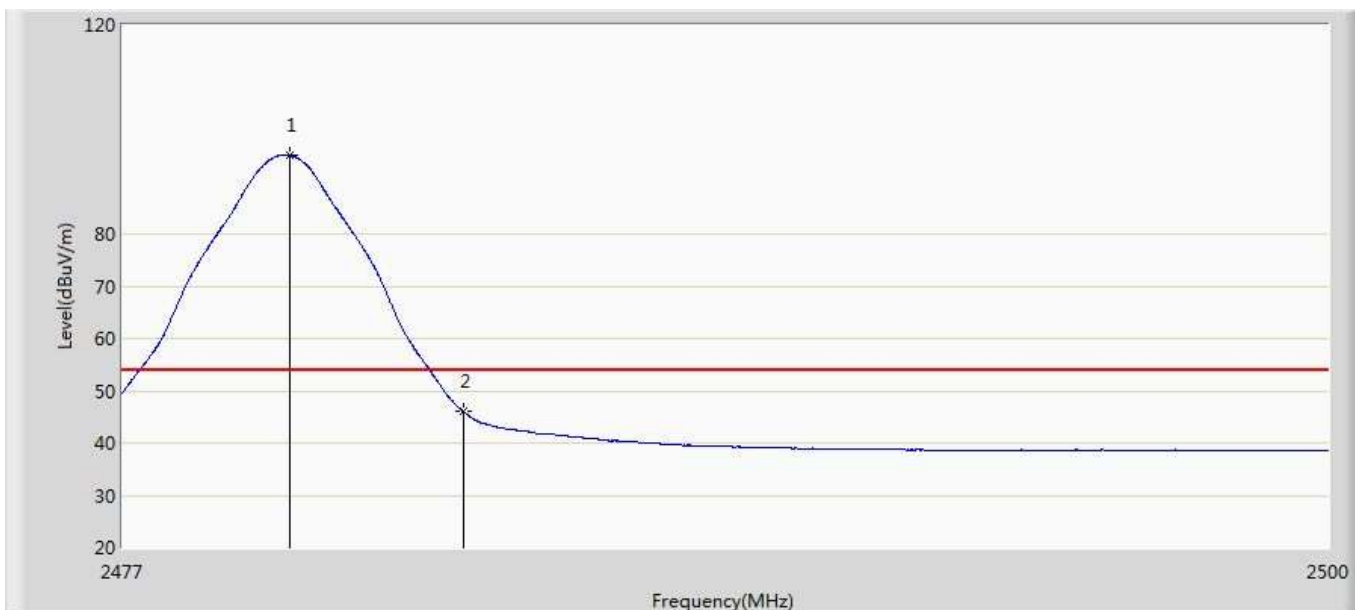
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.622	97.178	61.314	N/A	N/A	35.864	PK
2		2483.500	58.768	22.876	-15.232	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 17:04
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 2:Transmit at 2480MHz by LE_2Mbps	



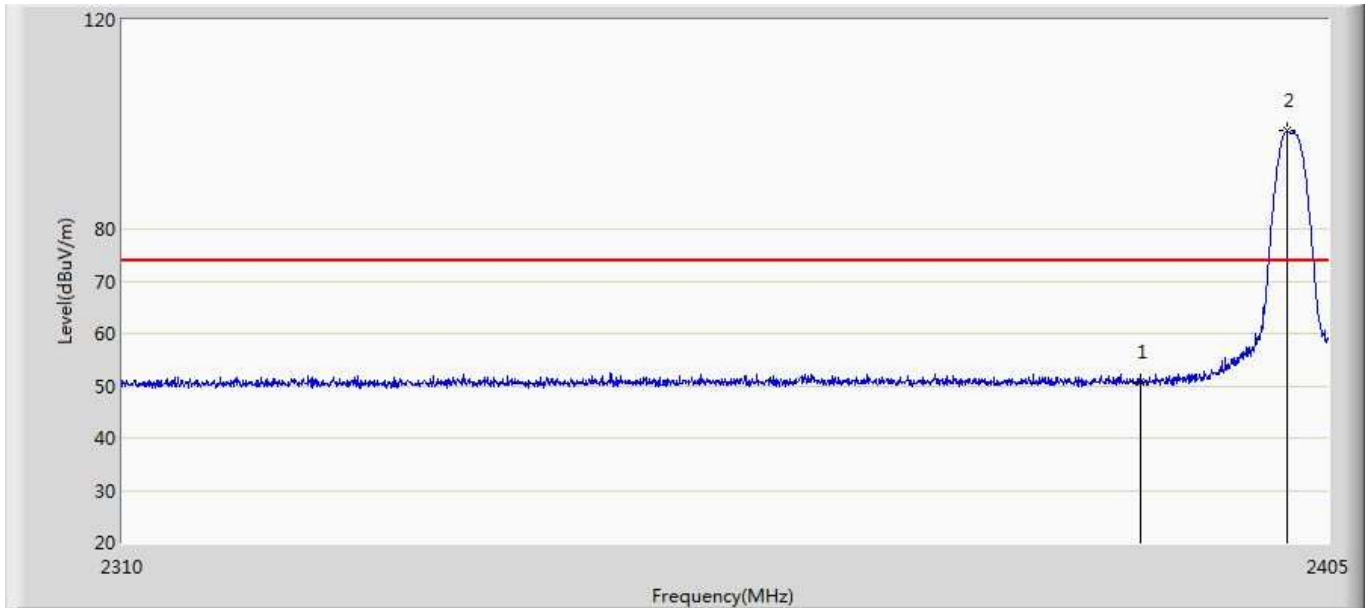
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.036	94.558	58.691	N/A	N/A	35.866	AV
2		2483.500	45.513	9.621	-8.487	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 17:06
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	



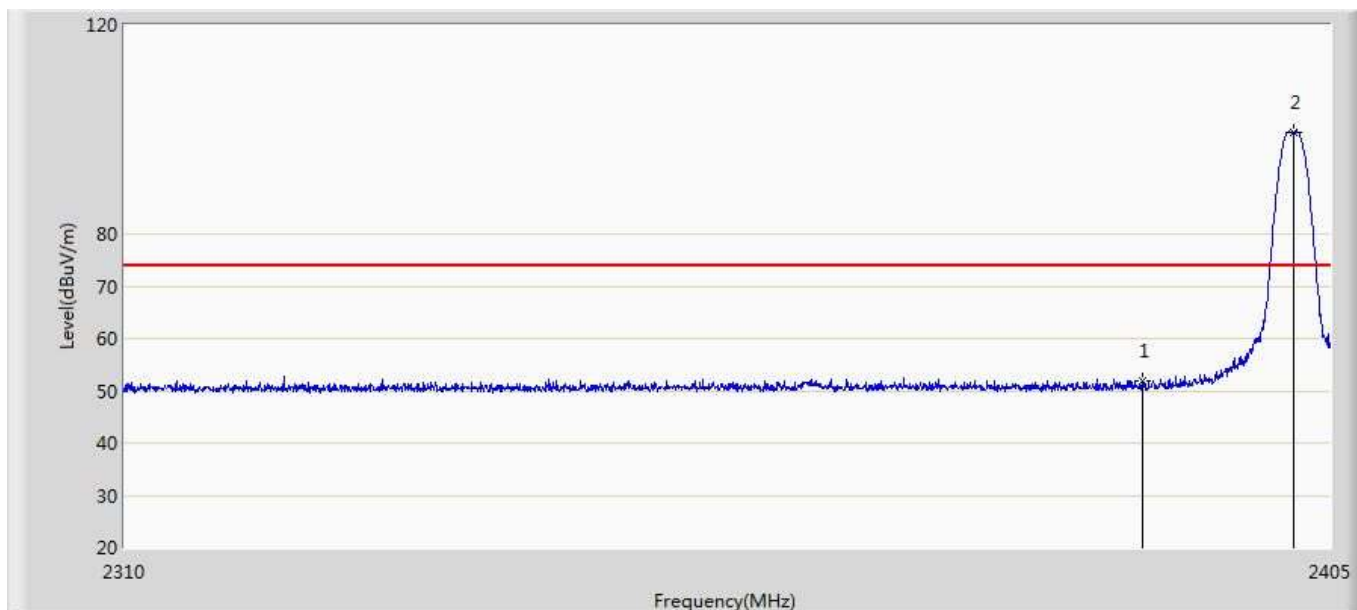
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.174	95.111	59.243	N/A	N/A	35.867	AV
2		2483.500	45.973	10.081	-8.027	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:25
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)	



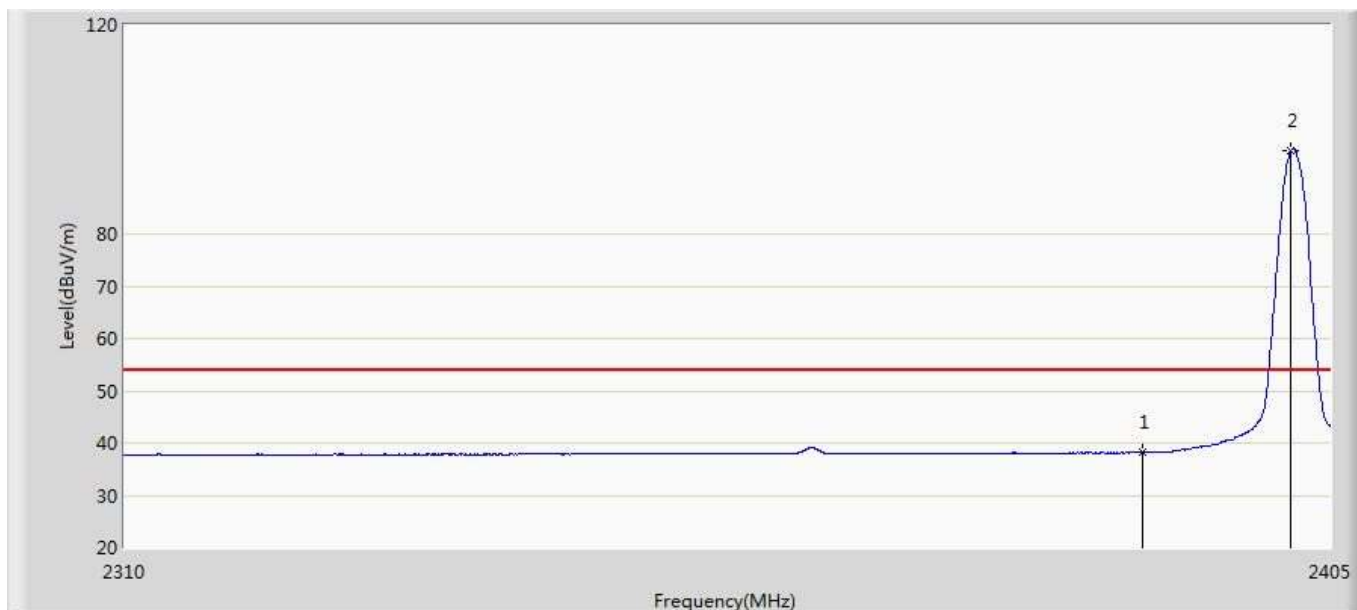
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.730	15.048	-23.270	74.000	35.682	PK
2	*	2401.722	98.765	63.053	N/A	N/A	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:27
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 3:Transmit at 2402MHz by LE_Coded (S=2)	



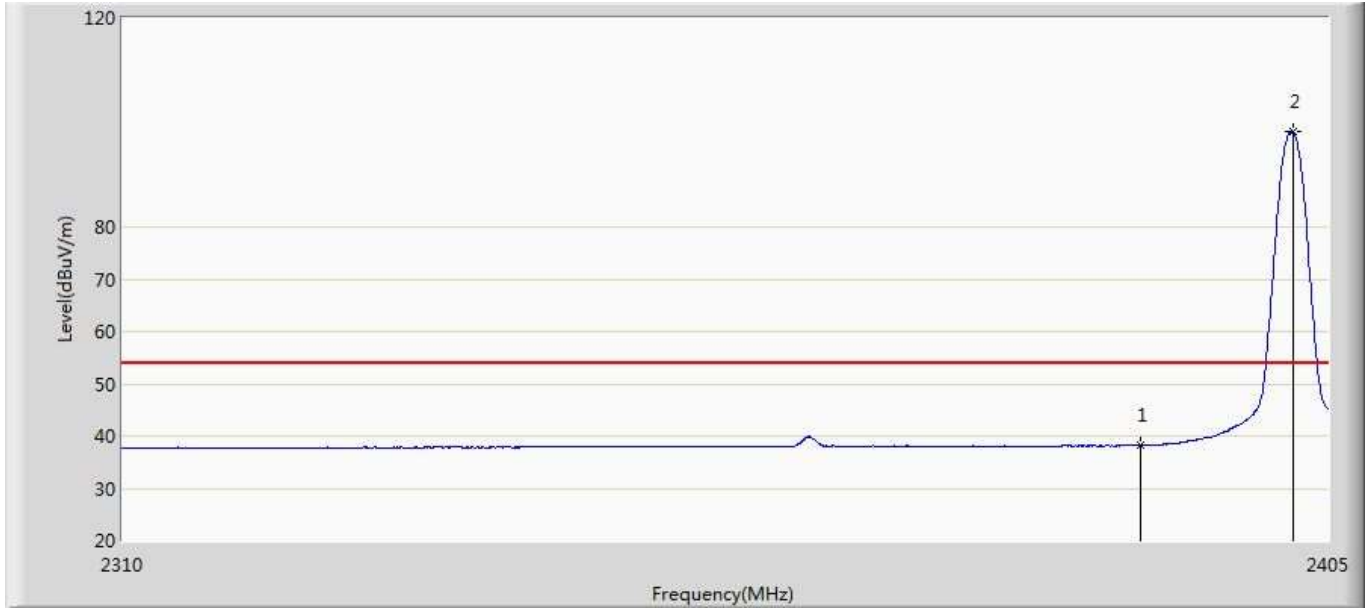
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.783	16.101	-22.217	74.000	35.682	PK
2	*	2402.055	99.458	63.745	N/A	N/A	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:29
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)	



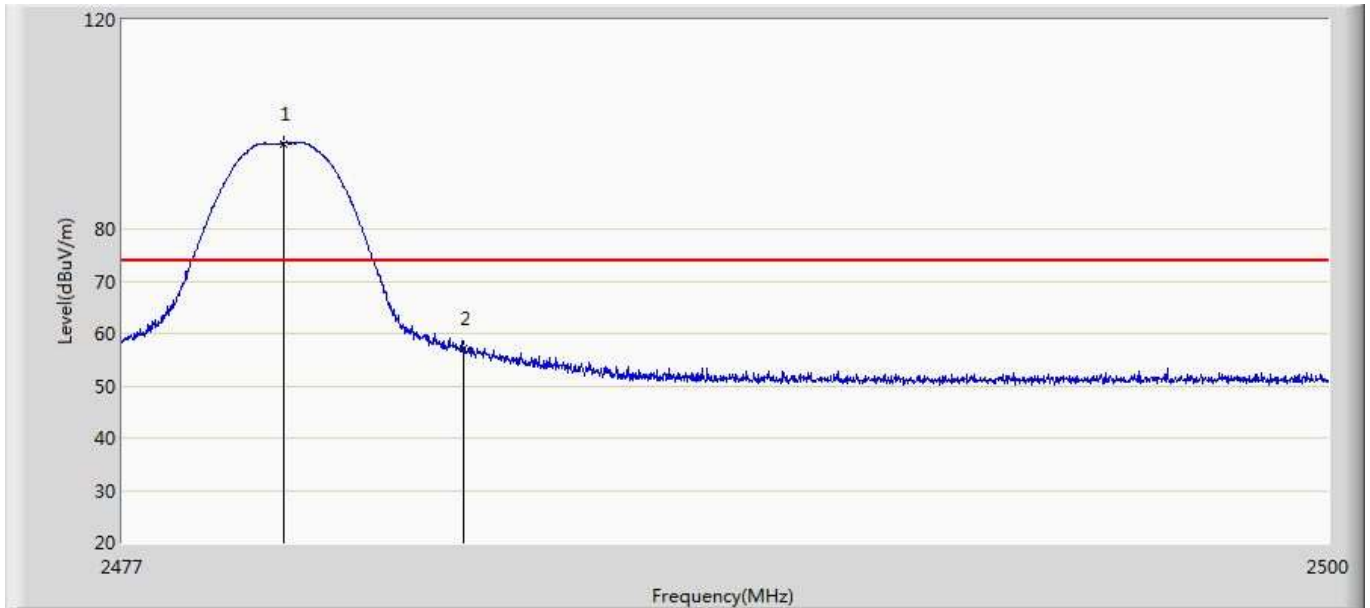
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.172	2.490	-15.828	54.000	35.682	AV
2	*	2401.865	95.933	60.221	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 18:30
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 3:Transmit at 2402MHz by LE_Coded (S=2)	



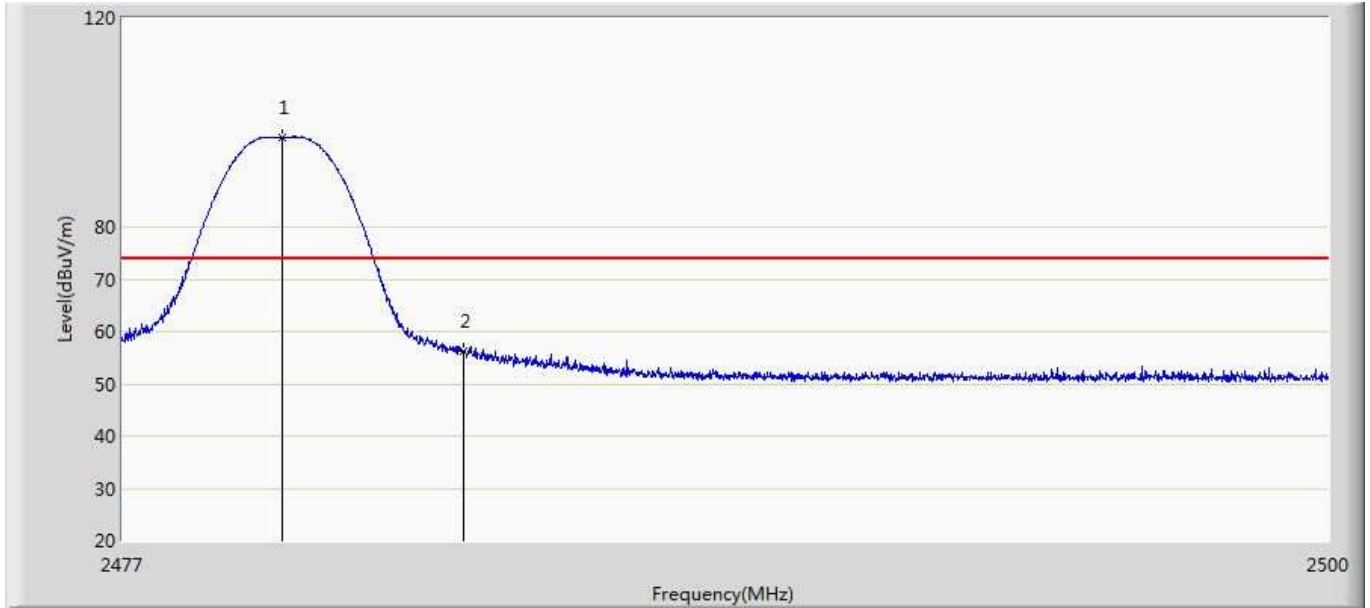
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.296	2.614	-15.704	54.000	35.682	AV
2	*	2402.198	98.248	62.535	N/A	N/A	35.714	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 17:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded (S=2)	



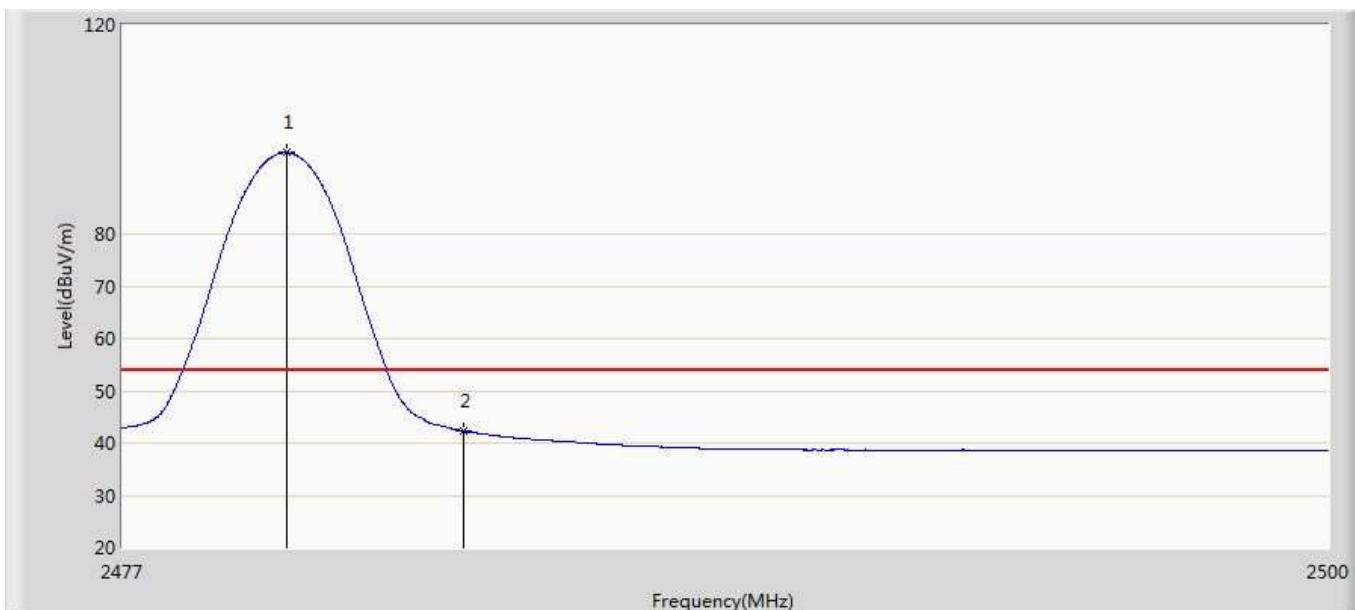
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.071	96.373	60.506	N/A	N/A	35.867	PK
2		2483.500	57.101	21.209	-16.899	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 17:24
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 3:Transmit at 2480MHz by LE_Coded (S=2)	



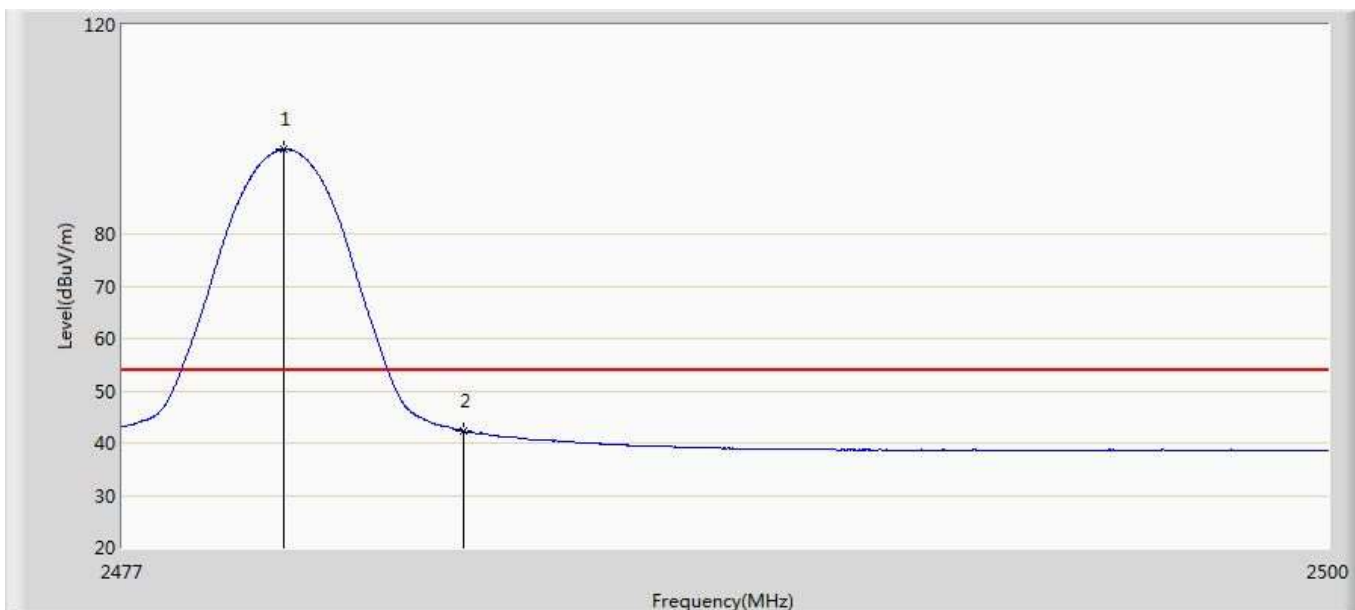
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.036	97.000	61.133	N/A	N/A	35.866	PK
2		2483.500	56.317	20.425	-17.683	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 17:26
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)	



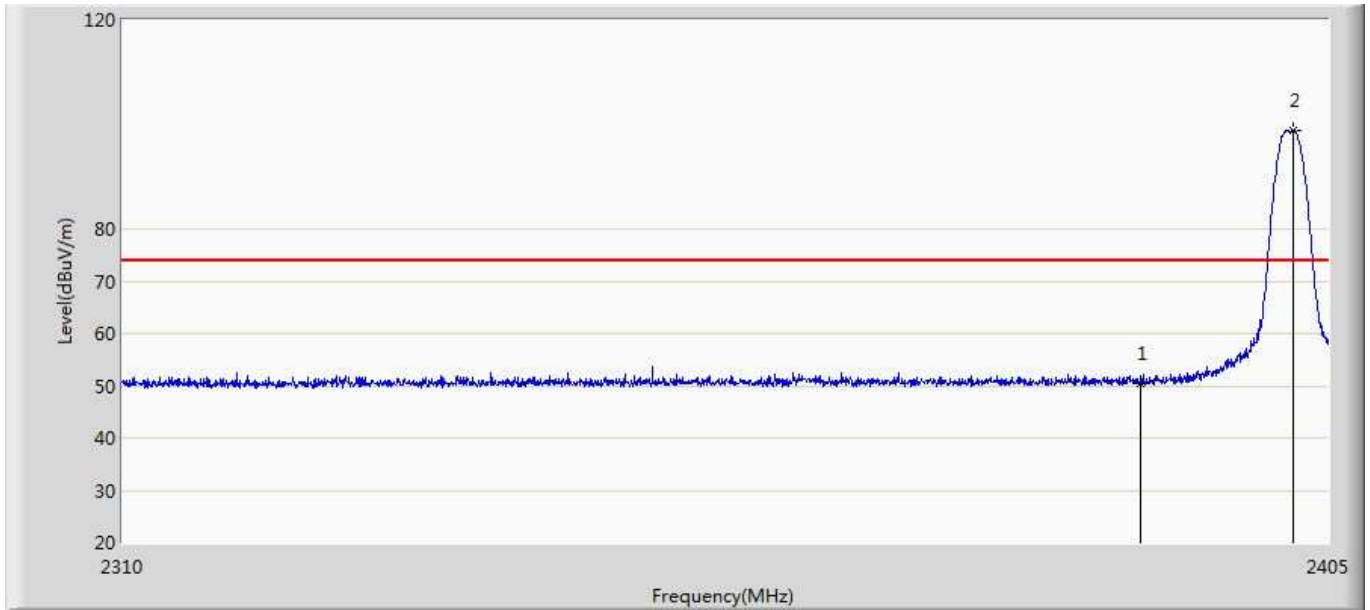
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.139	95.540	59.673	N/A	N/A	35.867	AV
2		2483.500	42.300	6.408	-11.700	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 17:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded (S=2)	



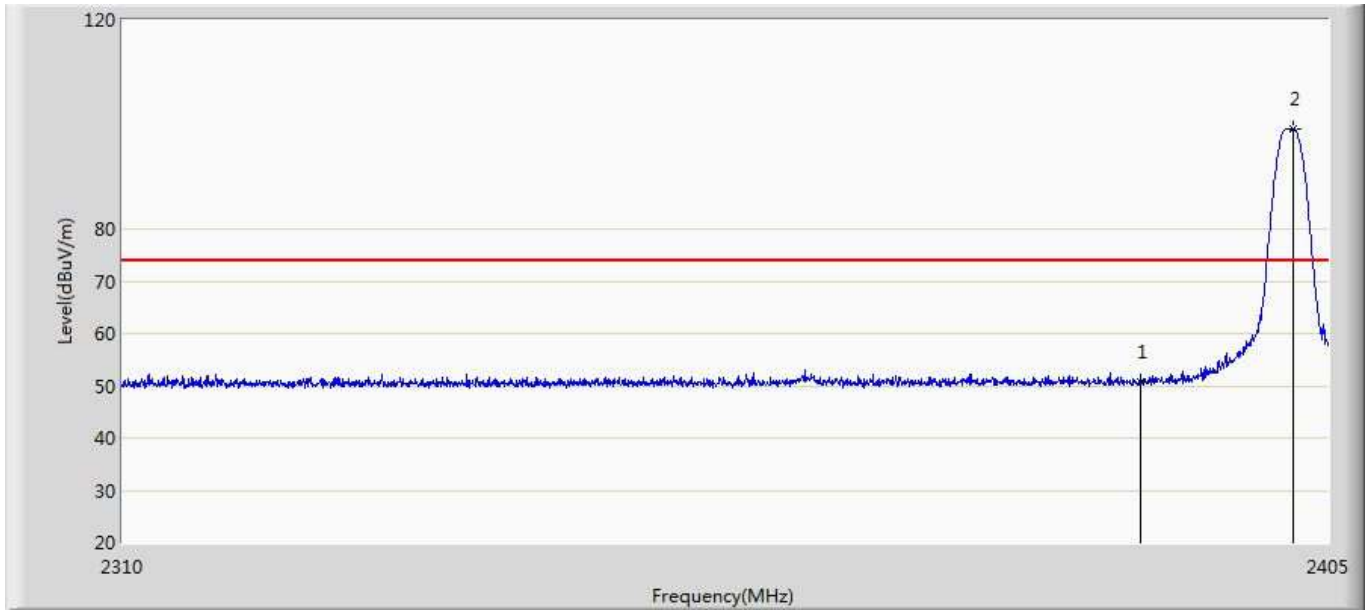
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.071	96.150	60.283	N/A	N/A	35.867	AV
2		2483.500	42.328	6.436	-11.672	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 15:48
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 4:Transmit at 2402MHz by LE_Coded (S=8)	



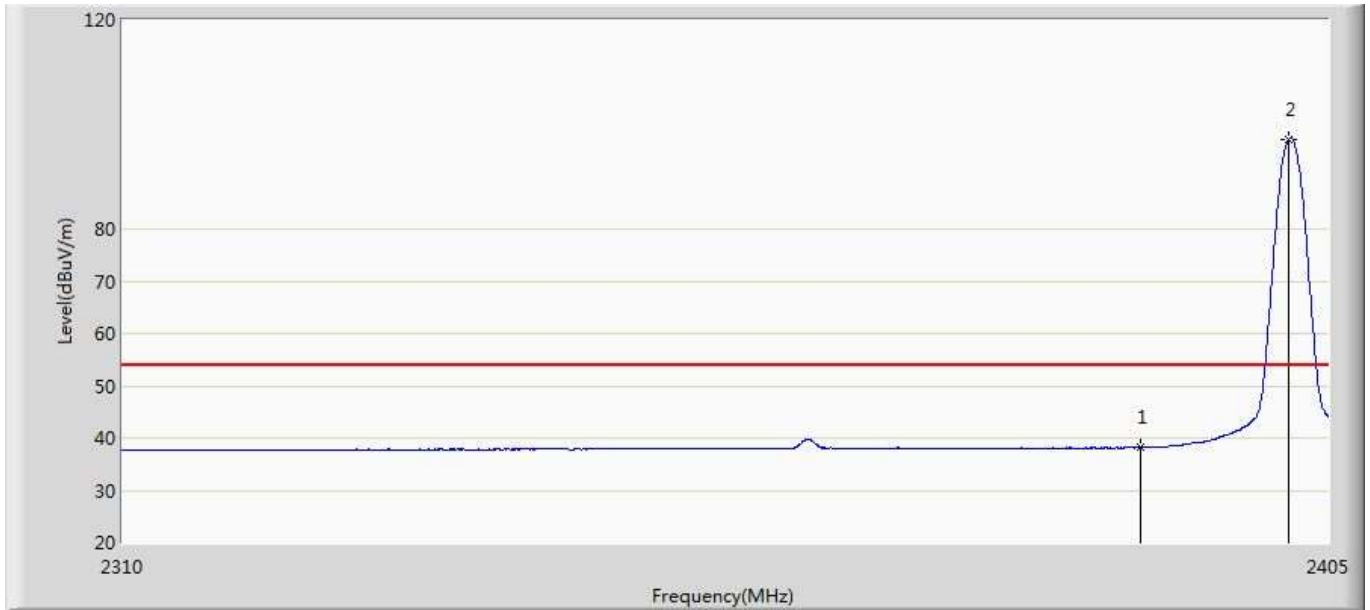
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.450	14.768	-23.550	74.000	35.682	PK
2	*	2402.245	98.764	63.051	N/A	N/A	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 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 4:Transmit at 2402MHz by LE_Coded (S=8)	



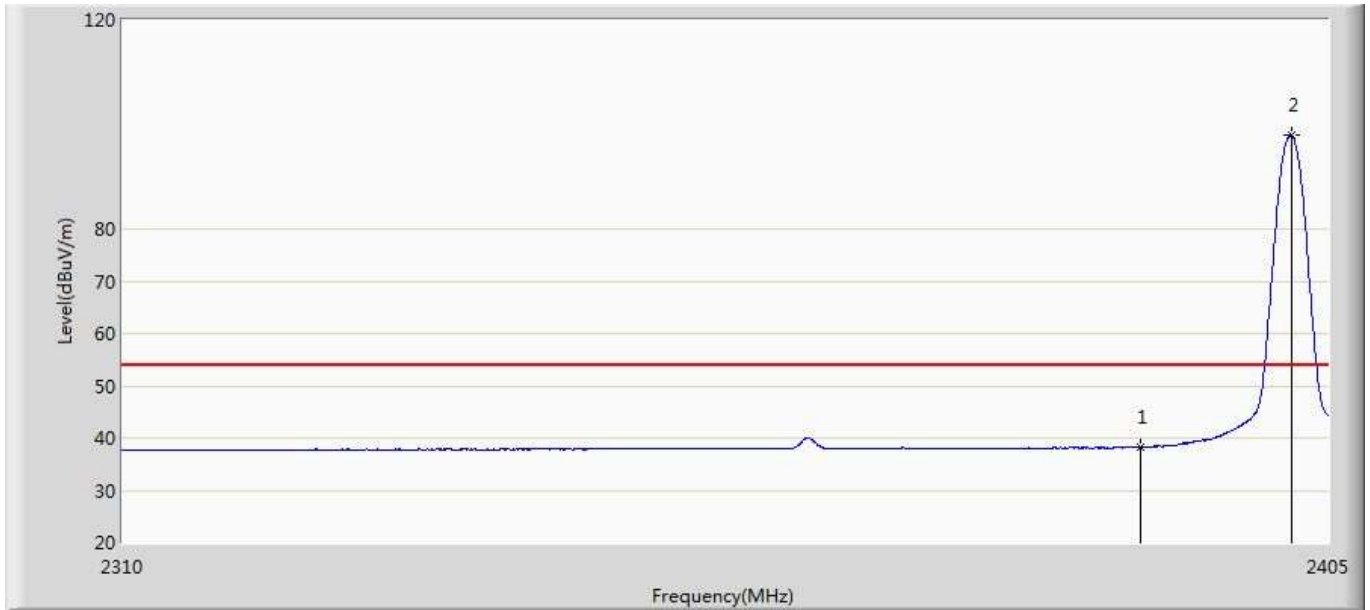
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.840	15.158	-23.160	74.000	35.682	PK
2	*	2402.245	99.178	63.465	N/A	N/A	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 15:51
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)	



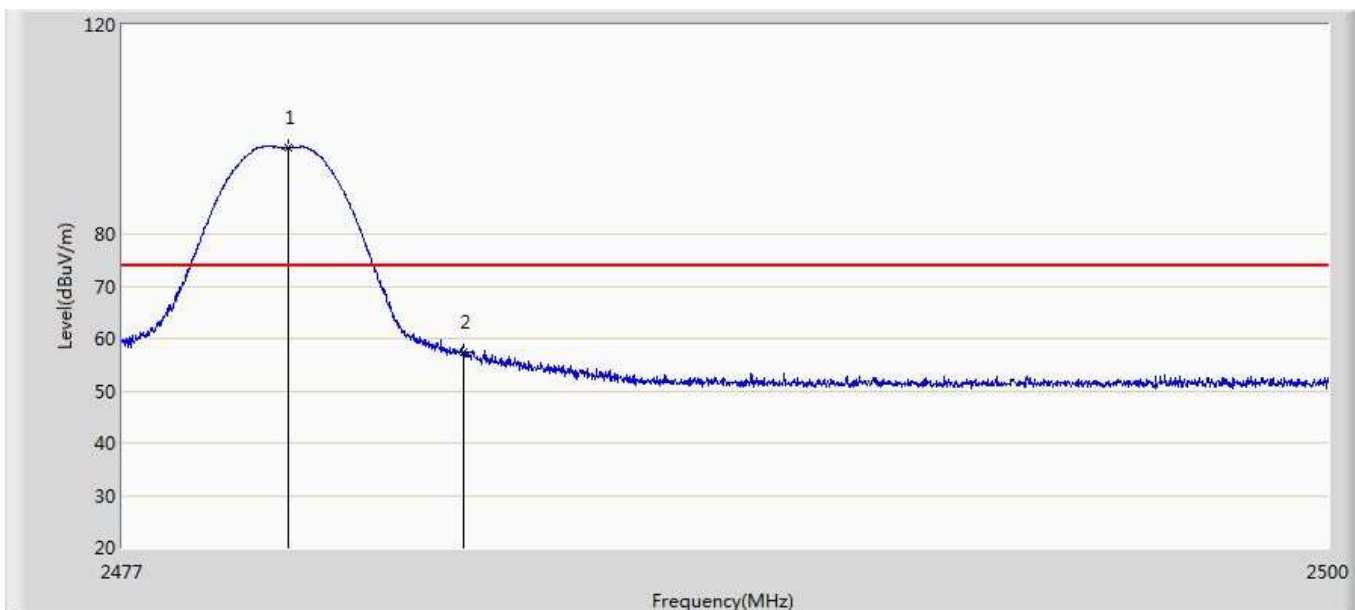
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.175	2.493	-15.825	54.000	35.682	AV
2	*	2401.865	97.236	61.524	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 15:53
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 4:Transmit at 2402MHz by LE_Coded (S=8)	



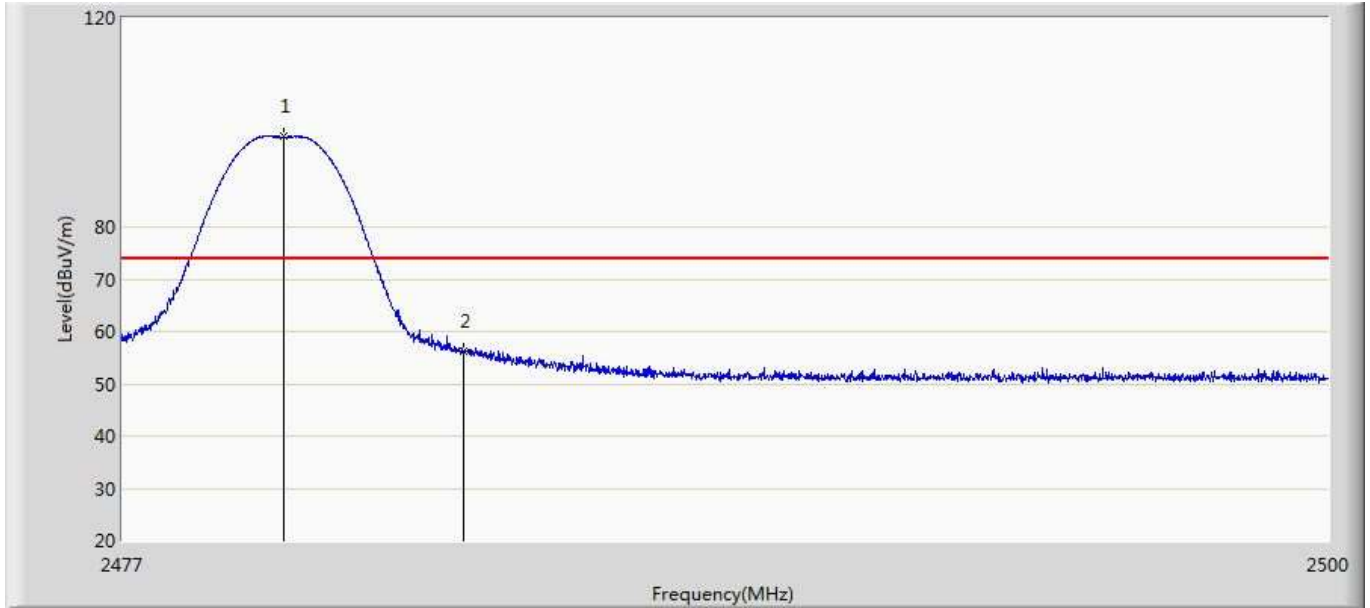
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.213	2.531	-15.787	54.000	35.682	AV
2	*	2402.055	98.005	62.292	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 17:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded (S=8)	



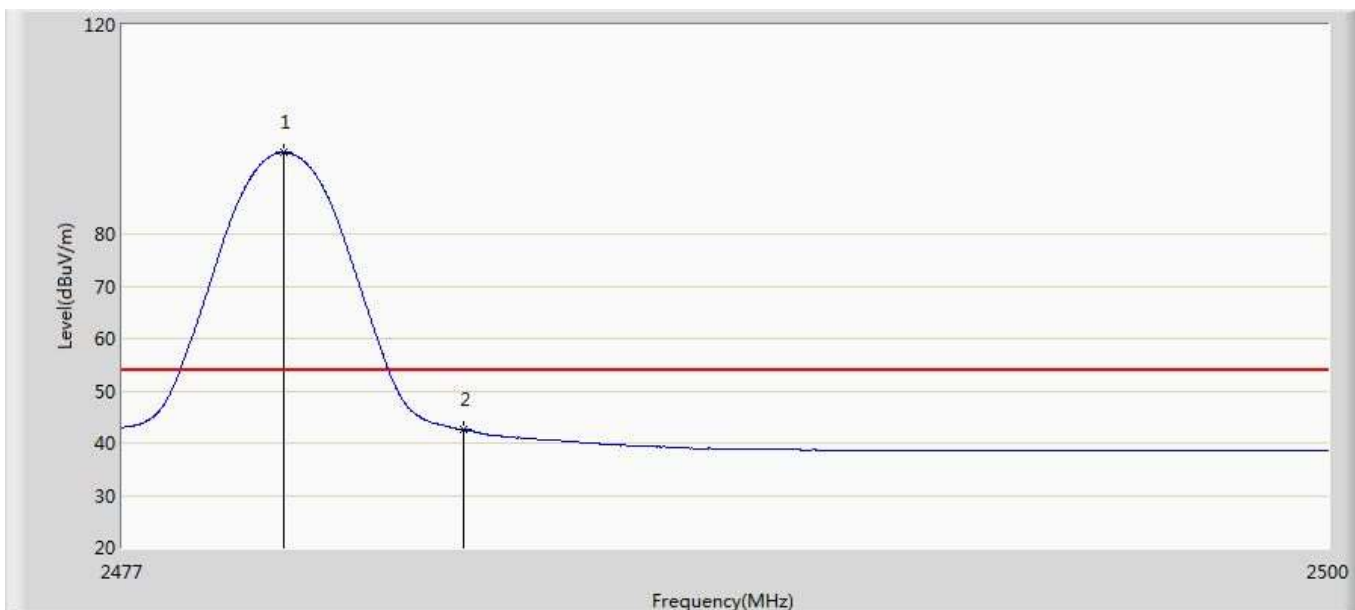
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.163	96.565	60.697	N/A	N/A	35.867	PK
2		2483.500	57.421	21.529	-16.579	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 17:46
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 4:Transmit at 2480MHz by LE_Coded (S=8)	



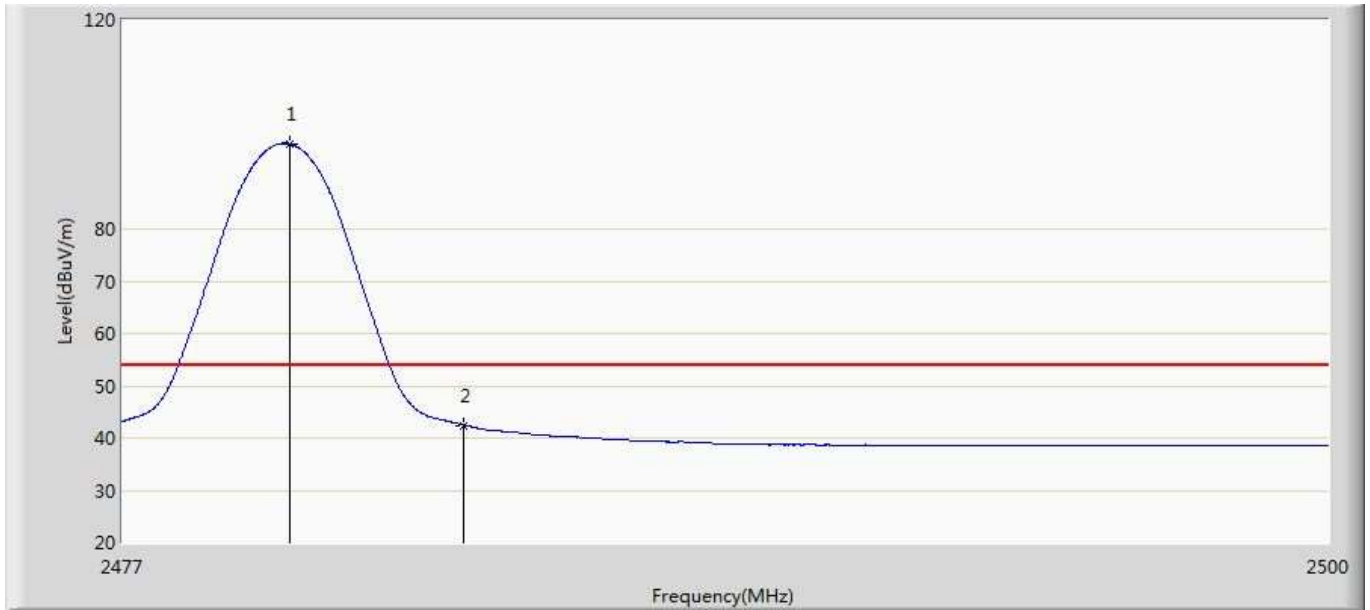
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.082	97.250	61.383	N/A	N/A	35.867	PK
2		2483.500	56.280	20.388	-17.720	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 17:48
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 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	95.630	59.763	N/A	N/A	35.867	AV
2		2483.500	42.516	6.624	-11.484	54.000	35.891	AV

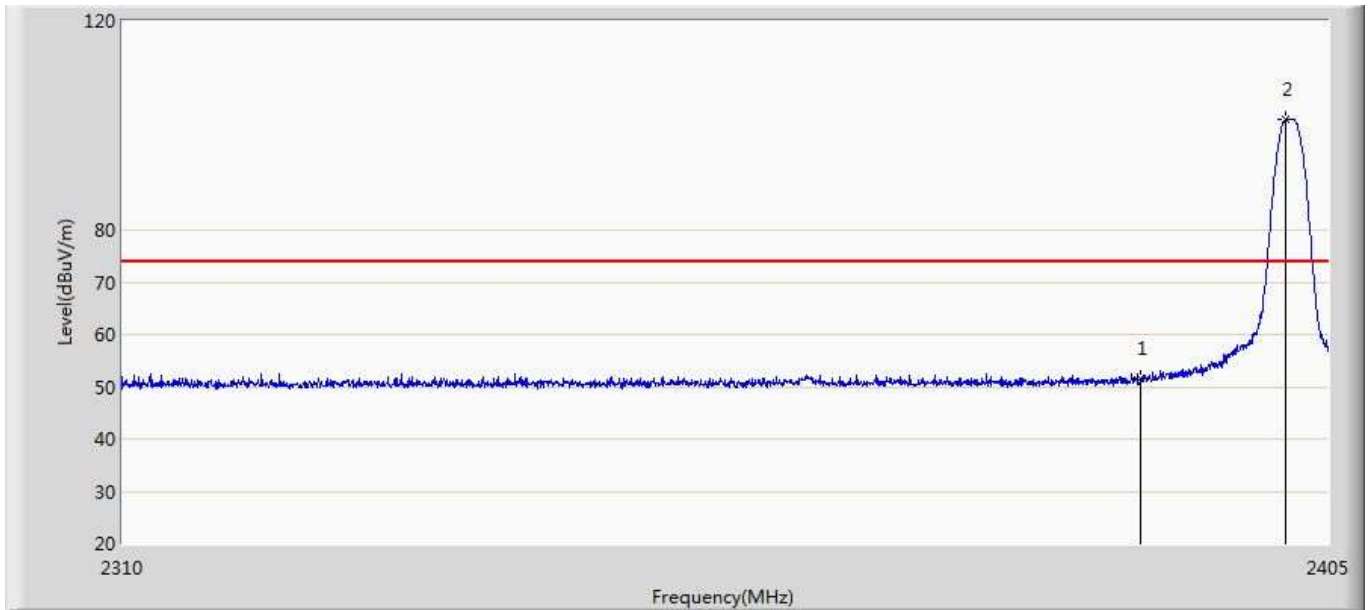
Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 17:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded (S=8)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.174	96.314	60.446	N/A	N/A	35.867	AV
2		2483.500	42.457	6.565	-11.543	54.000	35.891	AV

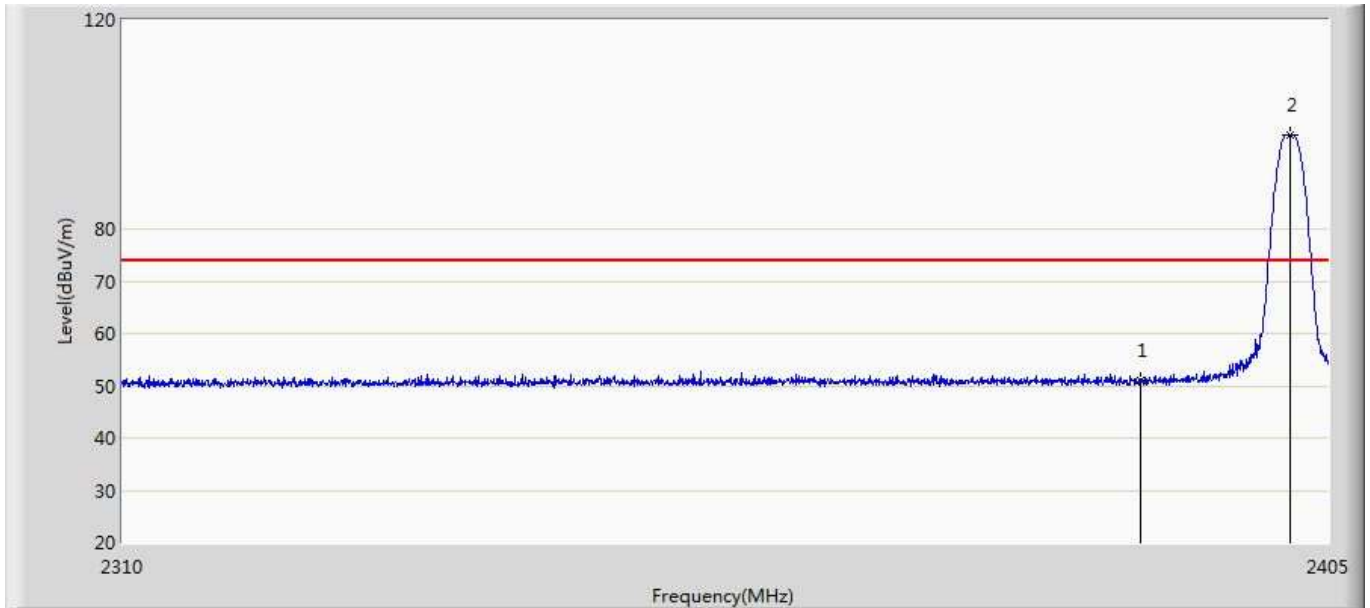
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Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 15:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



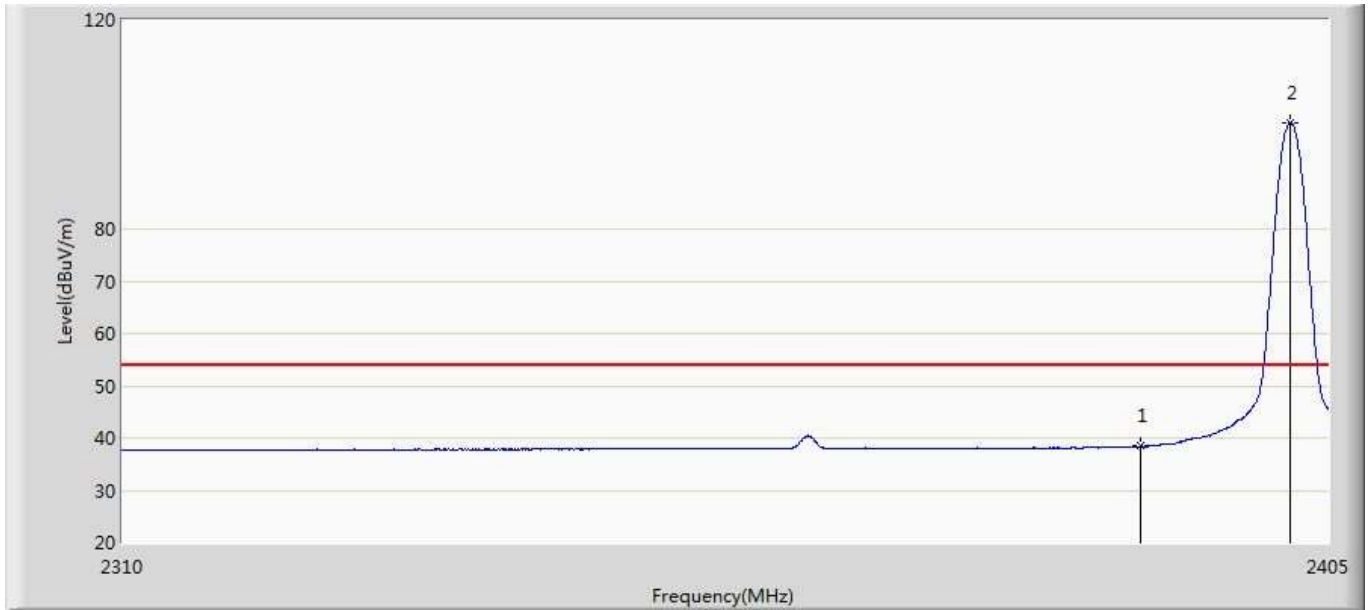
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.524	15.842	-22.476	74.000	35.682	PK
2	*	2401.627	101.230	65.518	N/A	N/A	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 19:24
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 1:Transmit at 2402MHz by LE_1Mbps	



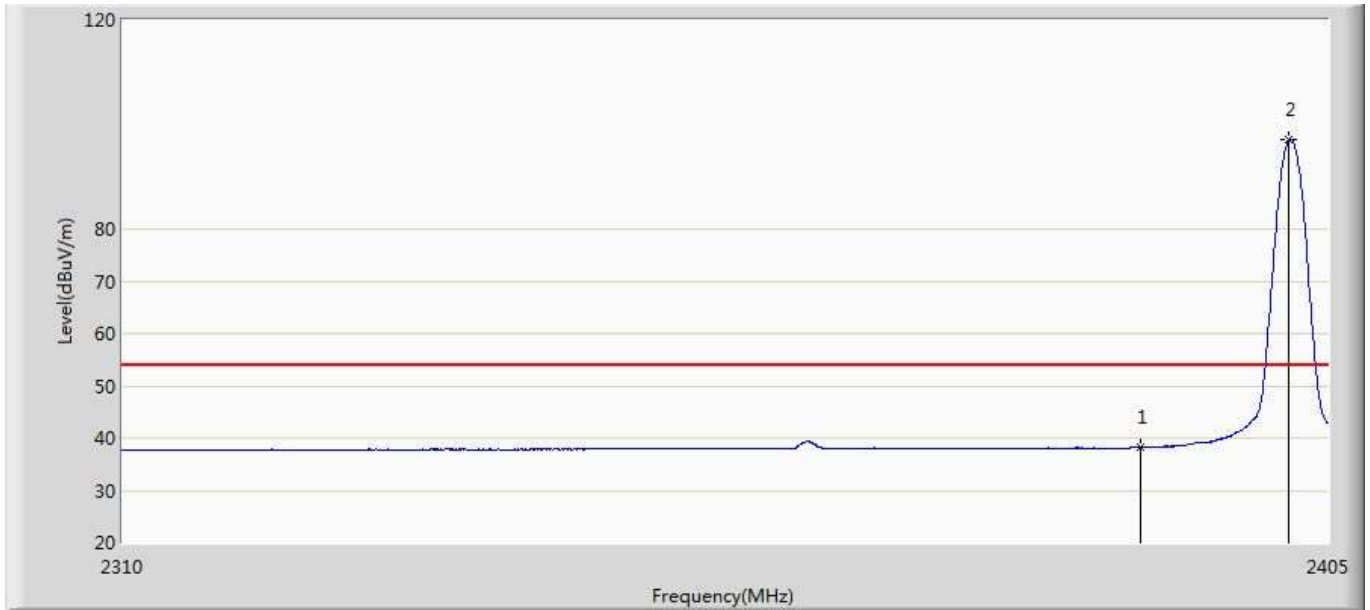
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.037	15.355	-22.963	74.000	35.682	PK
2	*	2401.913	97.870	62.158	N/A	N/A	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 19:26
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 2402MHz by LE_1Mbps	



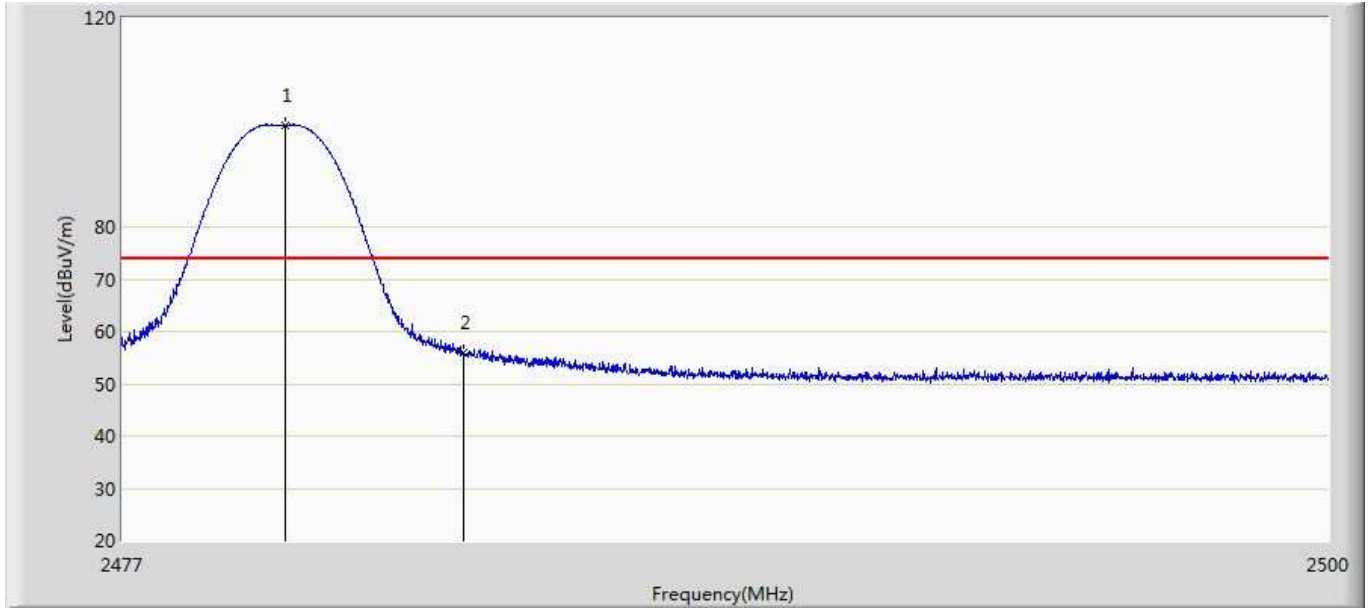
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.470	2.788	-15.530	54.000	35.682	AV
2	*	2401.960	100.331	64.618	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 19:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



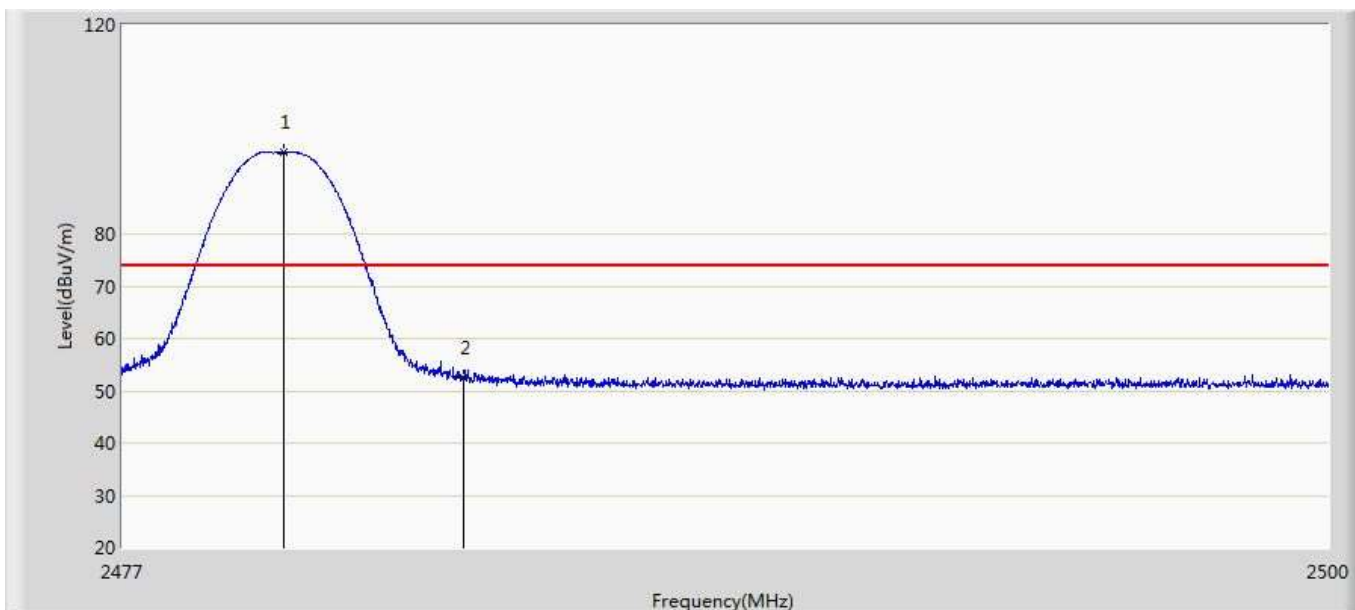
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.205	2.523	-15.795	54.000	35.682	AV
2	*	2401.865	97.002	61.290	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:14
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	



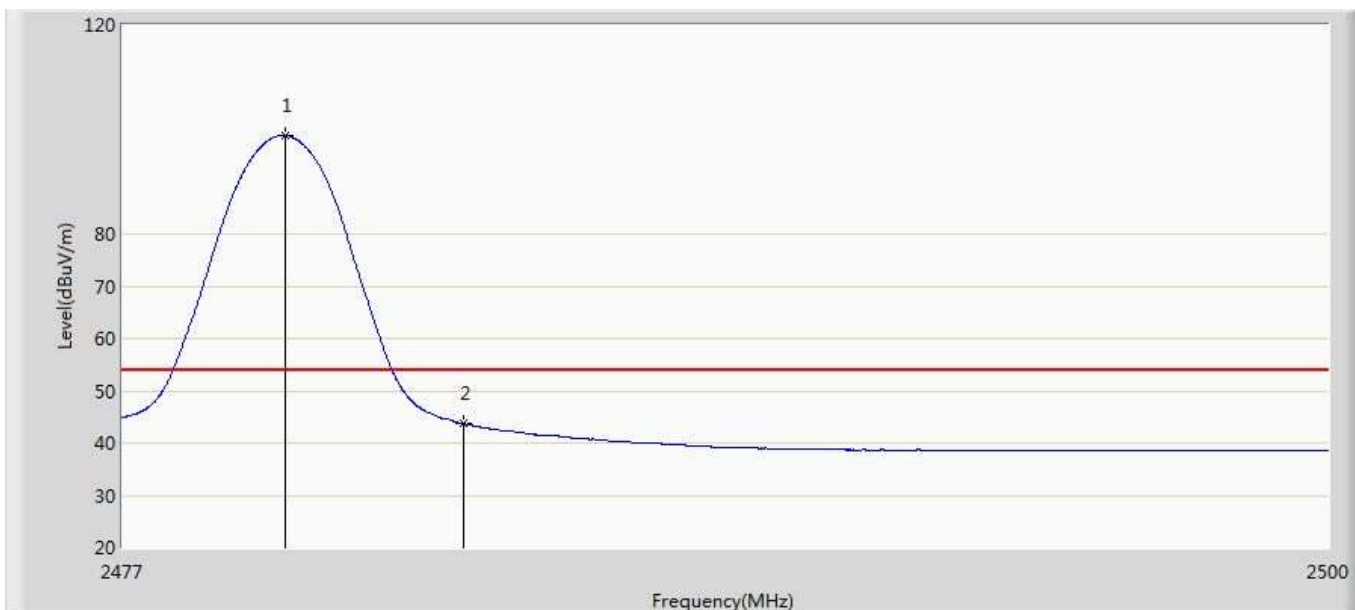
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.105	99.413	63.546	N/A	N/A	35.867	PK
2		2483.500	55.990	20.098	-18.010	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:17
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 2480MHz by LE_1Mbps	



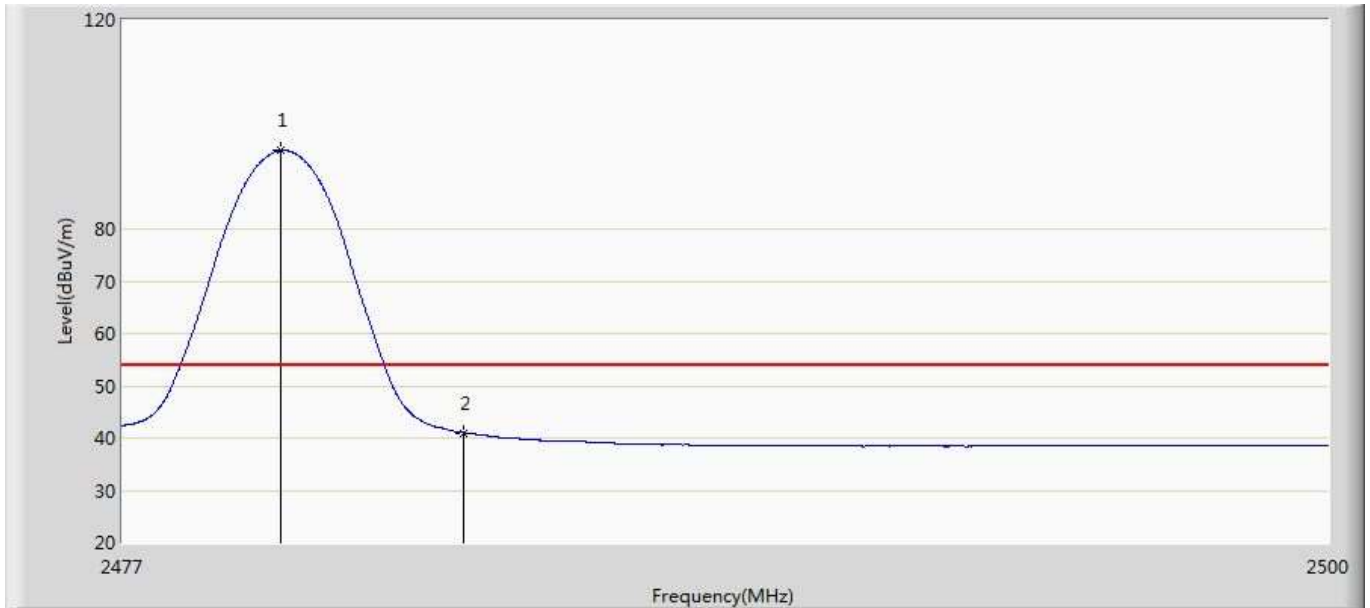
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.071	95.625	59.758	N/A	N/A	35.867	PK
2		2483.500	52.390	16.498	-21.610	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



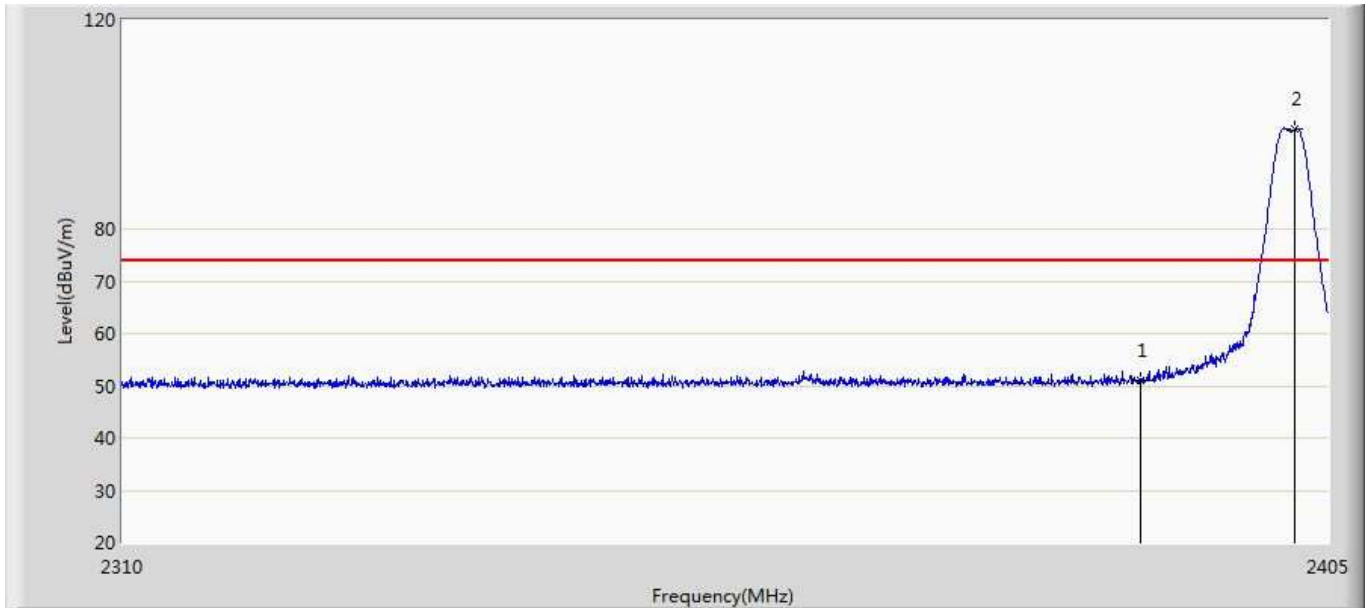
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.105	98.818	62.951	N/A	N/A	35.867	AV
2		2483.500	43.664	7.772	-10.336	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:21
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	



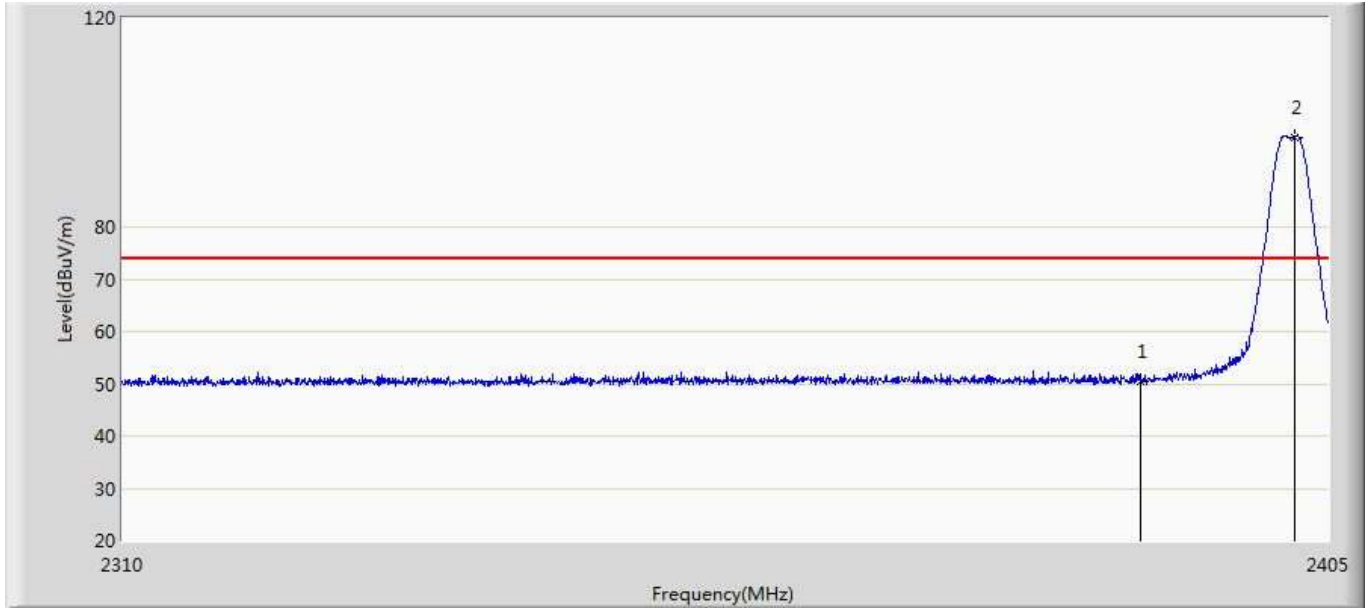
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.001	95.017	59.151	N/A	N/A	35.866	AV
2		2483.500	40.997	5.105	-13.003	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 19:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



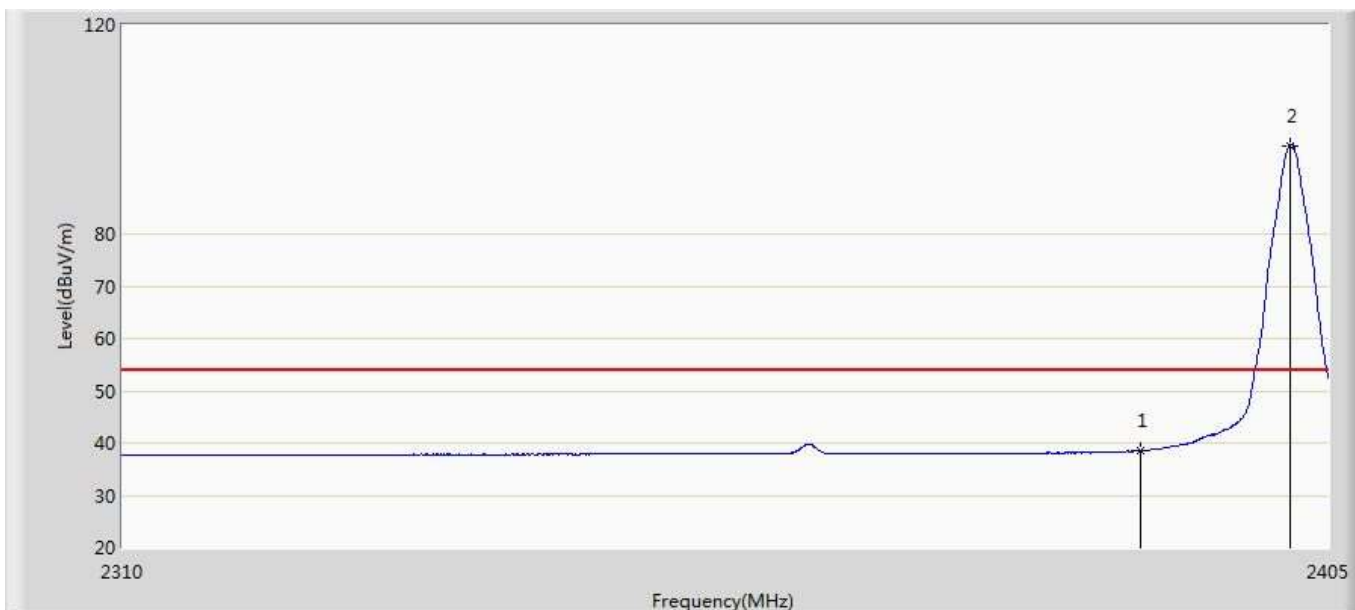
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.938	15.256	-23.062	74.000	35.682	PK
2	*	2402.340	99.066	63.352	N/A	N/A	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 19:45
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	



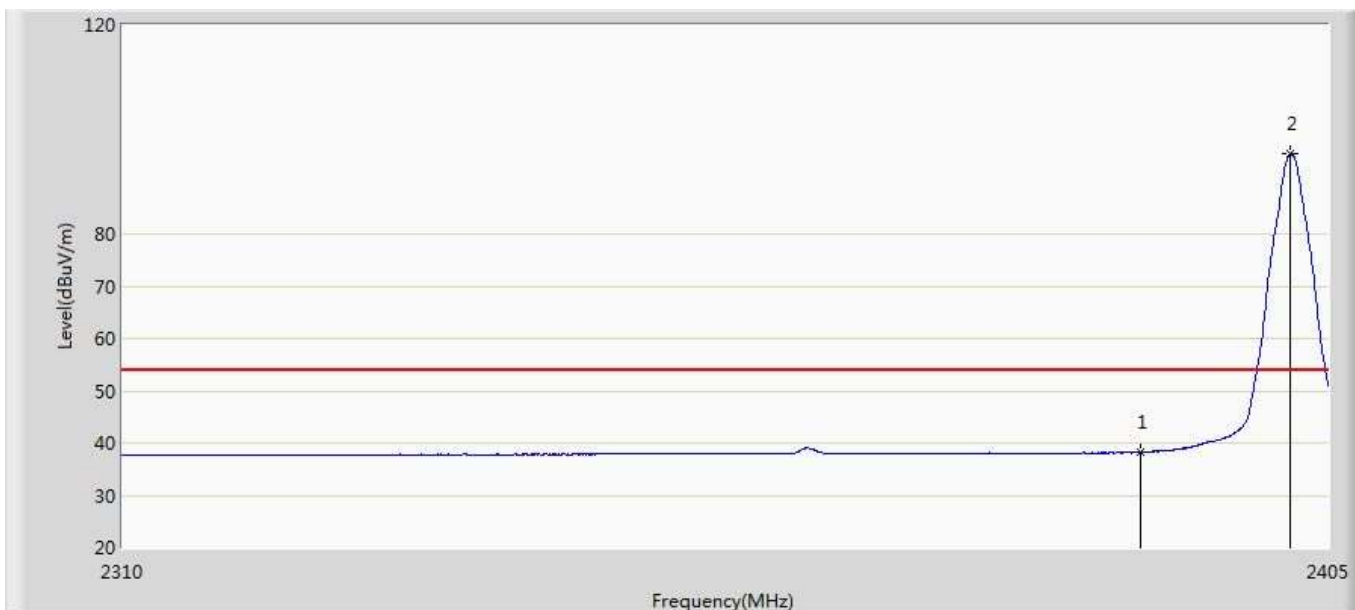
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.523	14.841	-23.477	74.000	35.682	PK
2	*	2402.292	97.239	61.526	N/A	N/A	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 19:47
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	



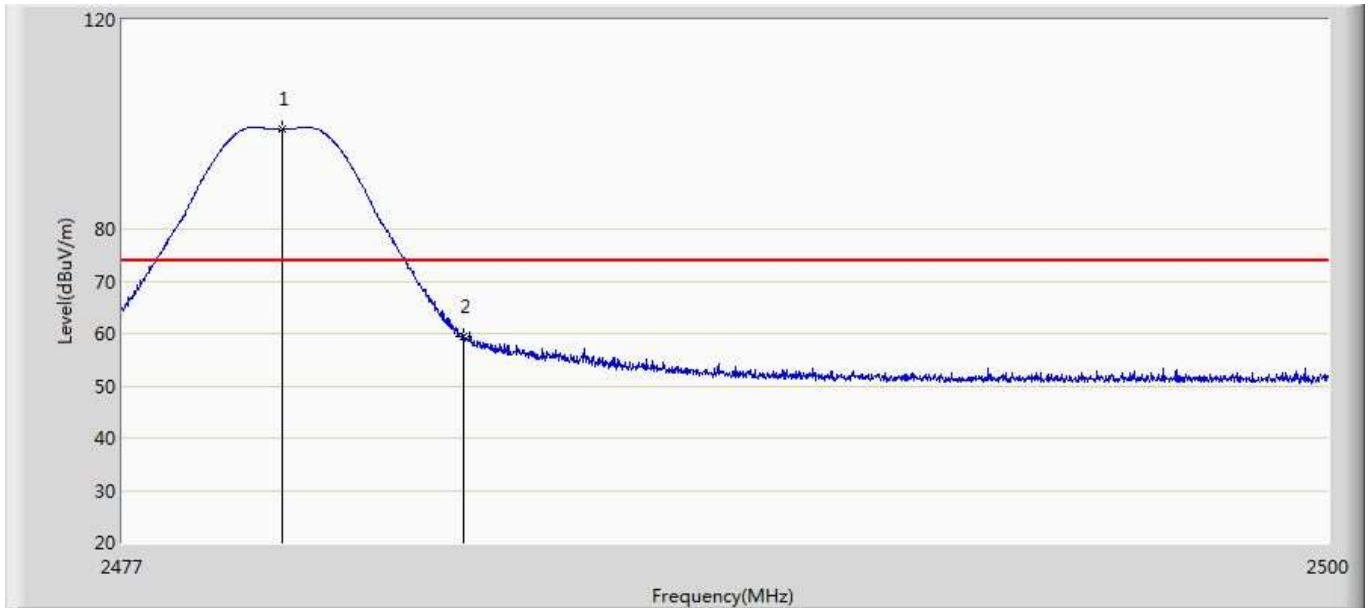
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.505	2.823	-15.495	54.000	35.682	AV
2	*	2401.913	96.871	61.159	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 19:49
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	



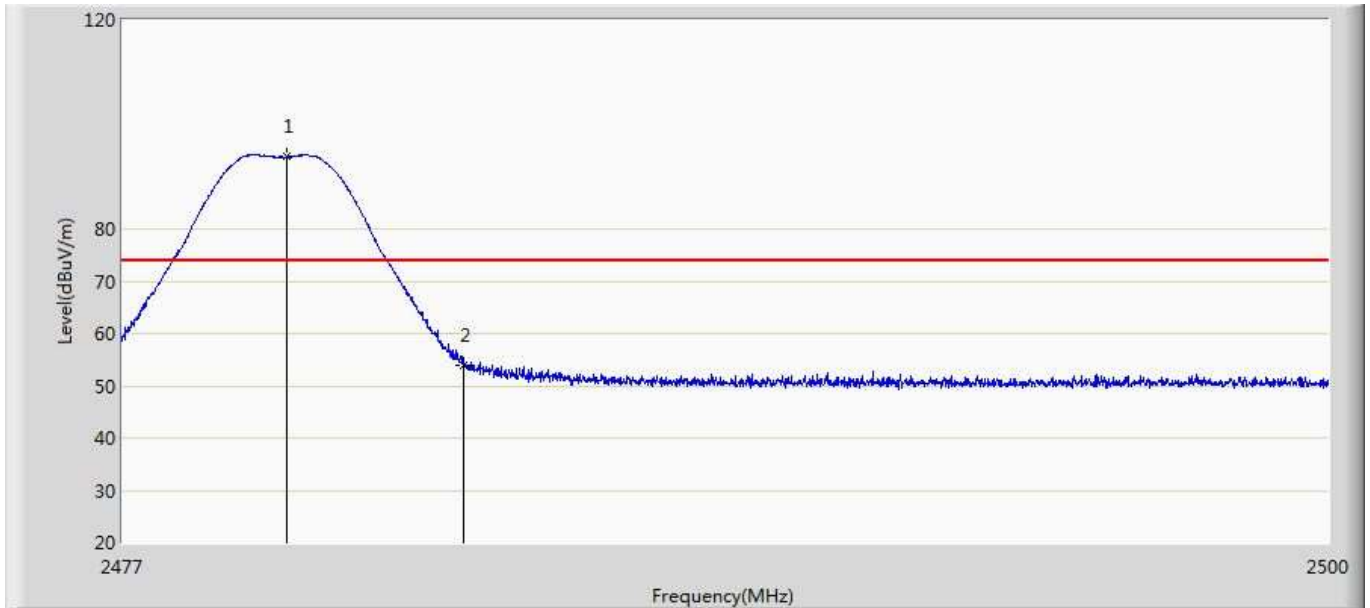
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.247	2.565	-15.753	54.000	35.682	AV
2	*	2401.960	95.424	59.711	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:23
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 2:Transmit at 2480MHz by LE_2Mbps	



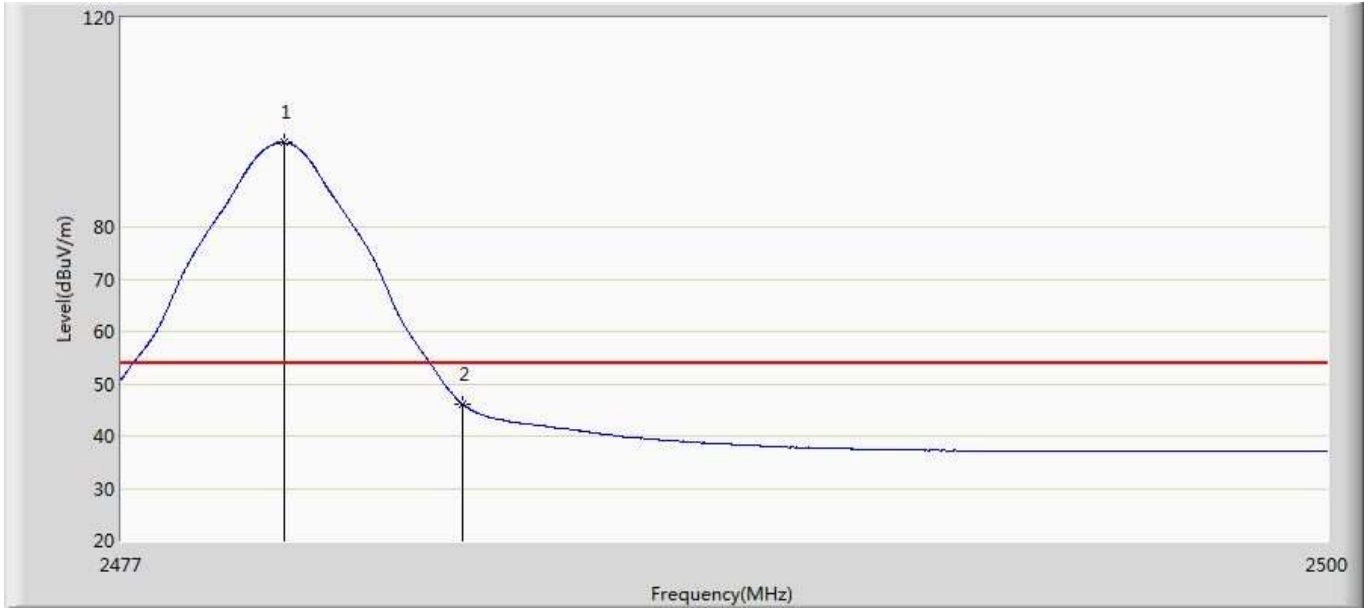
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.048	99.038	63.171	N/A	N/A	35.866	PK
2		2483.500	59.514	23.622	-14.486	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 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	



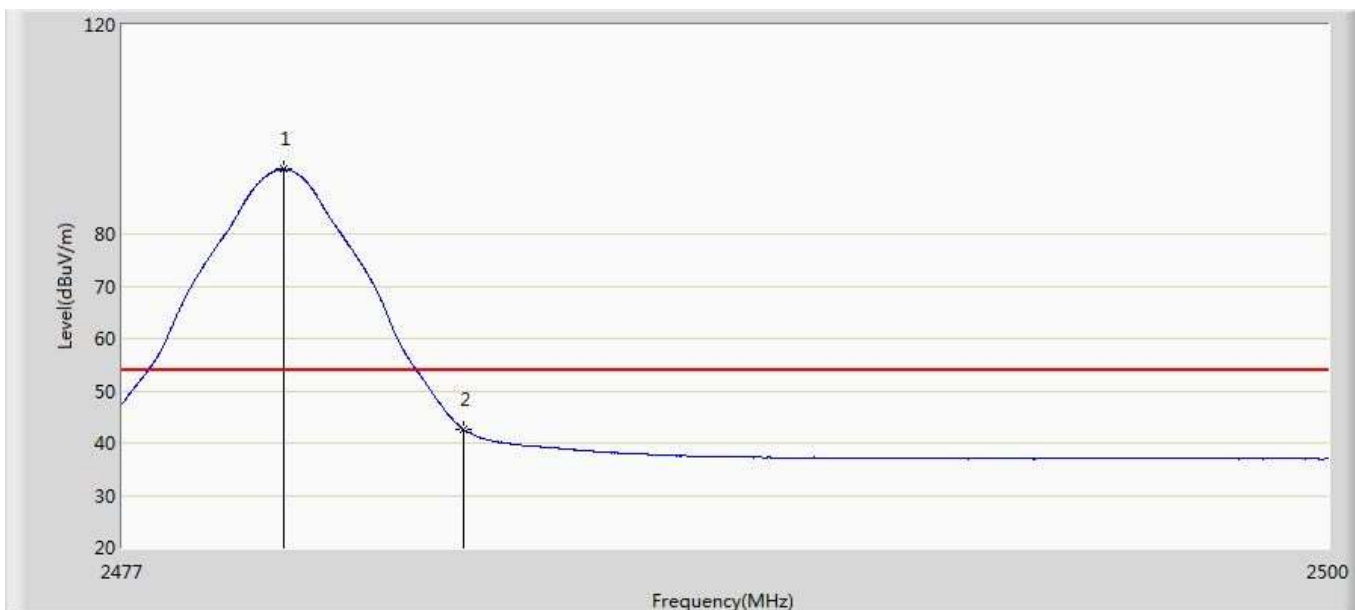
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.139	93.789	57.922	N/A	N/A	35.867	PK
2		2483.500	53.936	18.044	-20.064	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps	



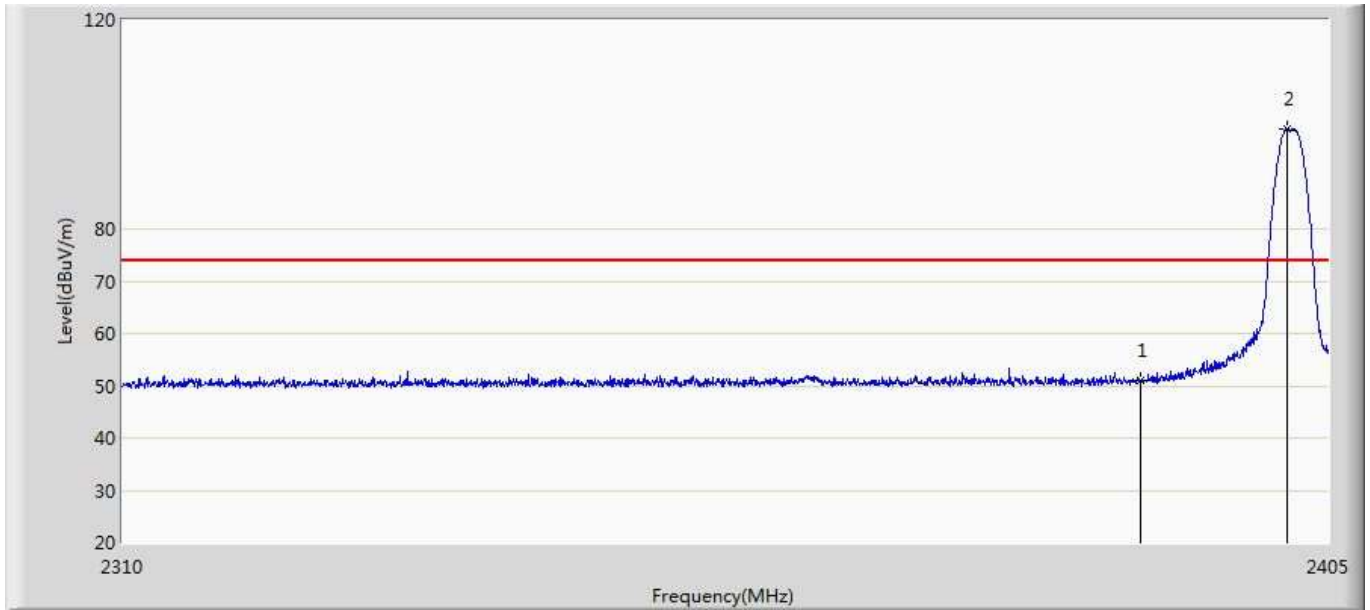
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.105	96.088	60.221	N/A	N/A	35.867	AV
2		2483.500	46.031	10.139	-7.969	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:30
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 2:Transmit at 2480MHz by LE_2Mbps	



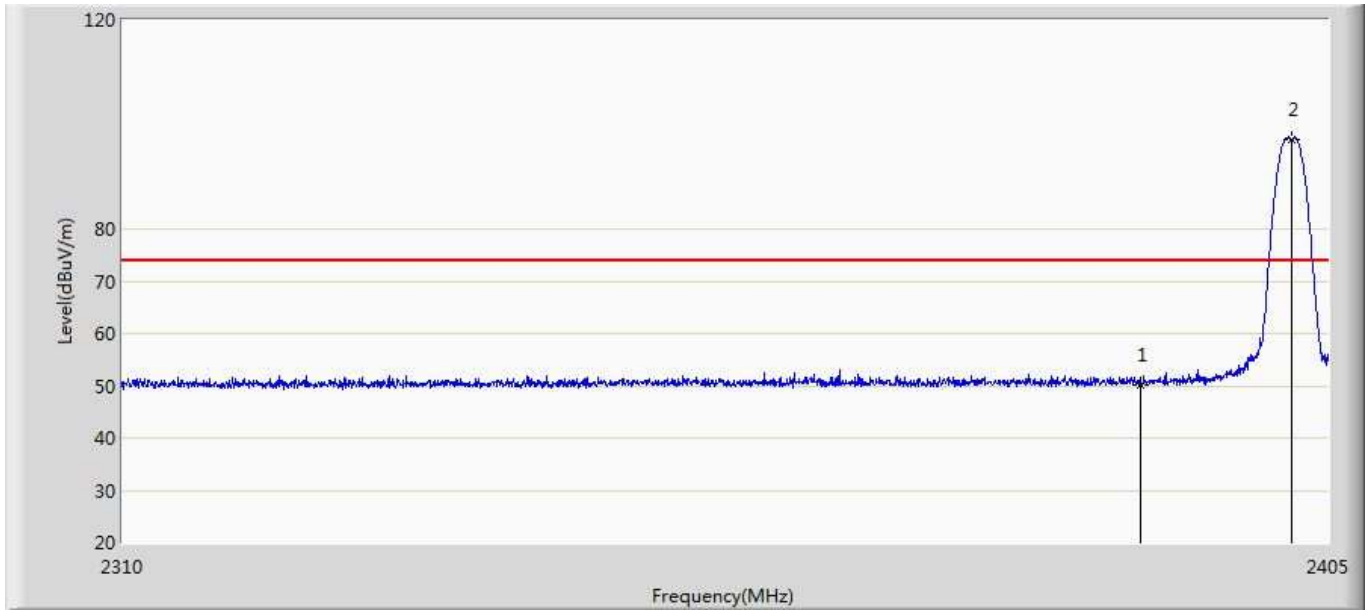
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.071	92.344	56.477	N/A	N/A	35.867	AV
2		2483.500	42.495	6.603	-11.505	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 19:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded (S=2)	



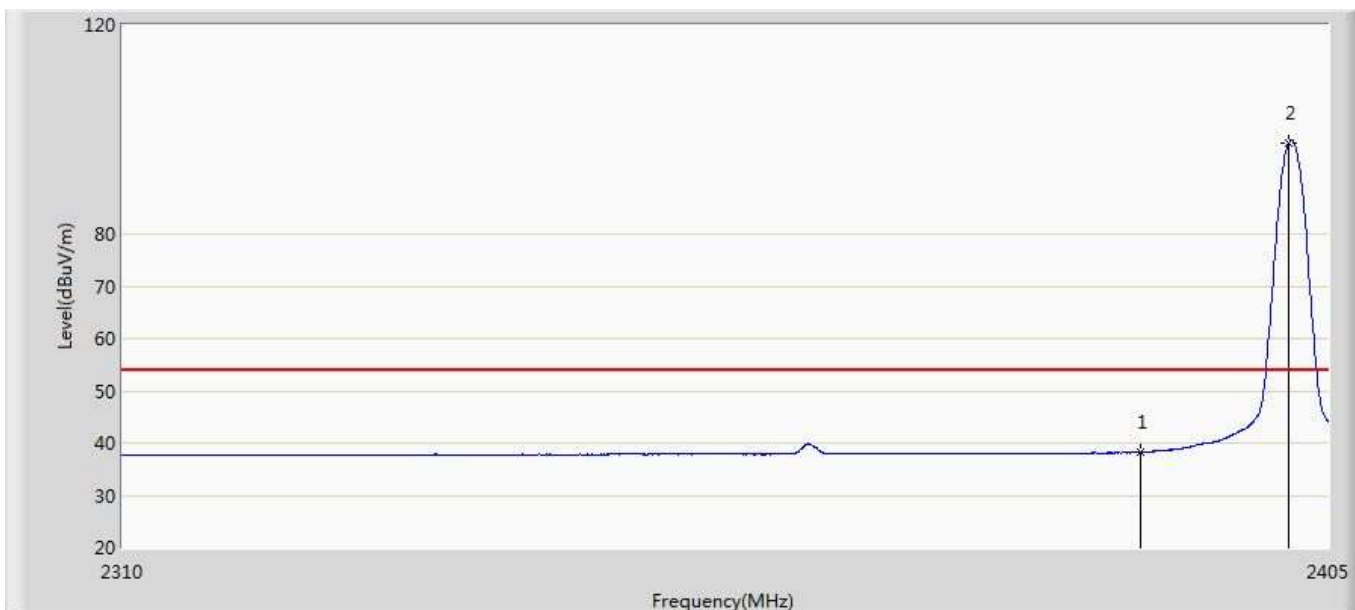
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.073	15.391	-22.927	74.000	35.682	PK
2	*	2401.770	99.031	63.319	N/A	N/A	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 19:53
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)	



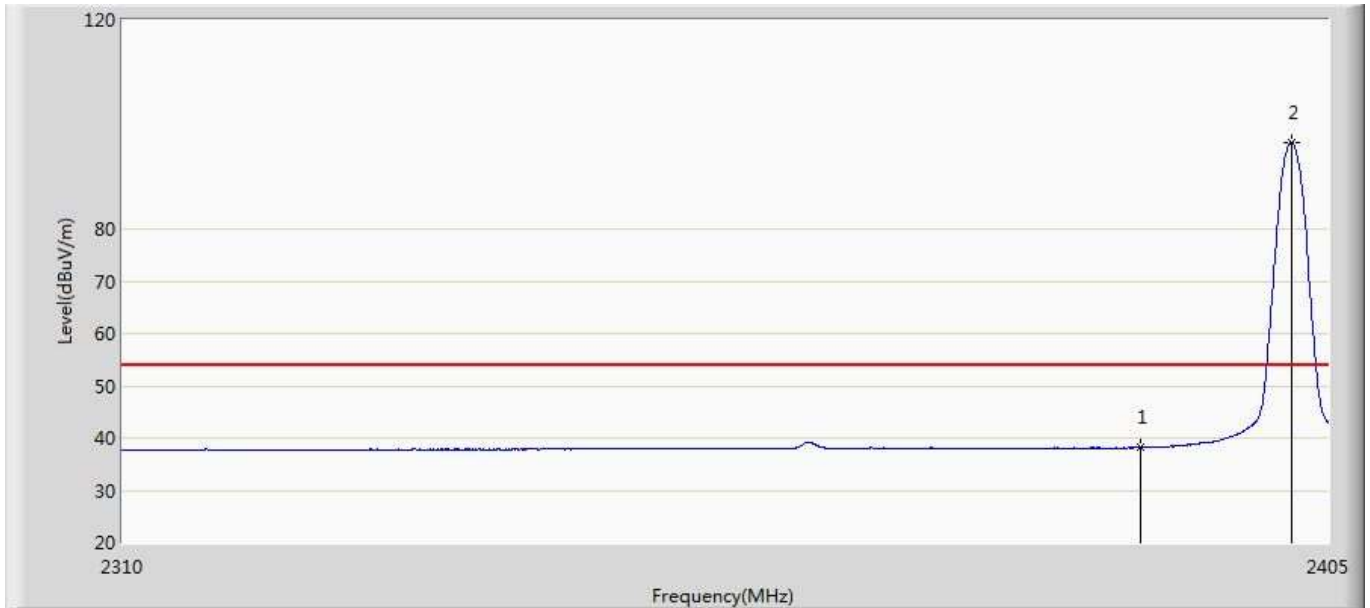
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.204	14.522	-23.796	74.000	35.682	PK
2	*	2402.055	97.180	61.467	N/A	N/A	35.712	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 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 3:Transmit at 2402MHz by LE_Coded (S=2)	



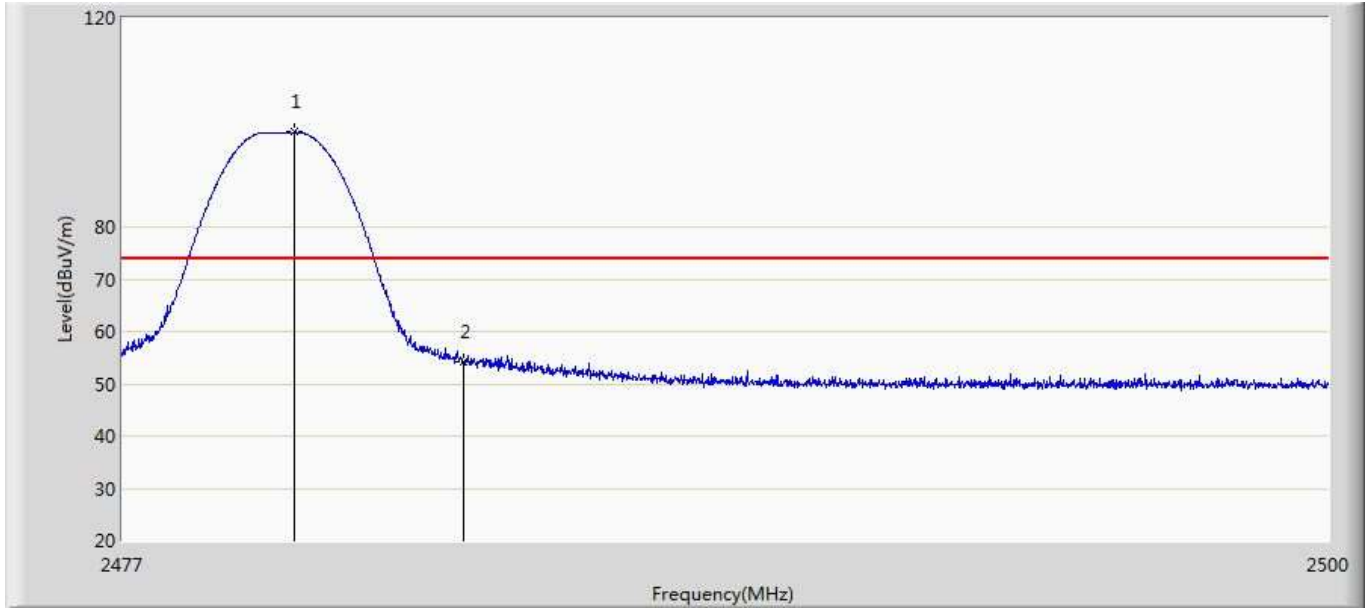
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.275	2.593	-15.725	54.000	35.682	AV
2	*	2401.865	97.530	61.818	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/25 - 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 3:Transmit at 2402MHz by LE_Coded (S=2)	



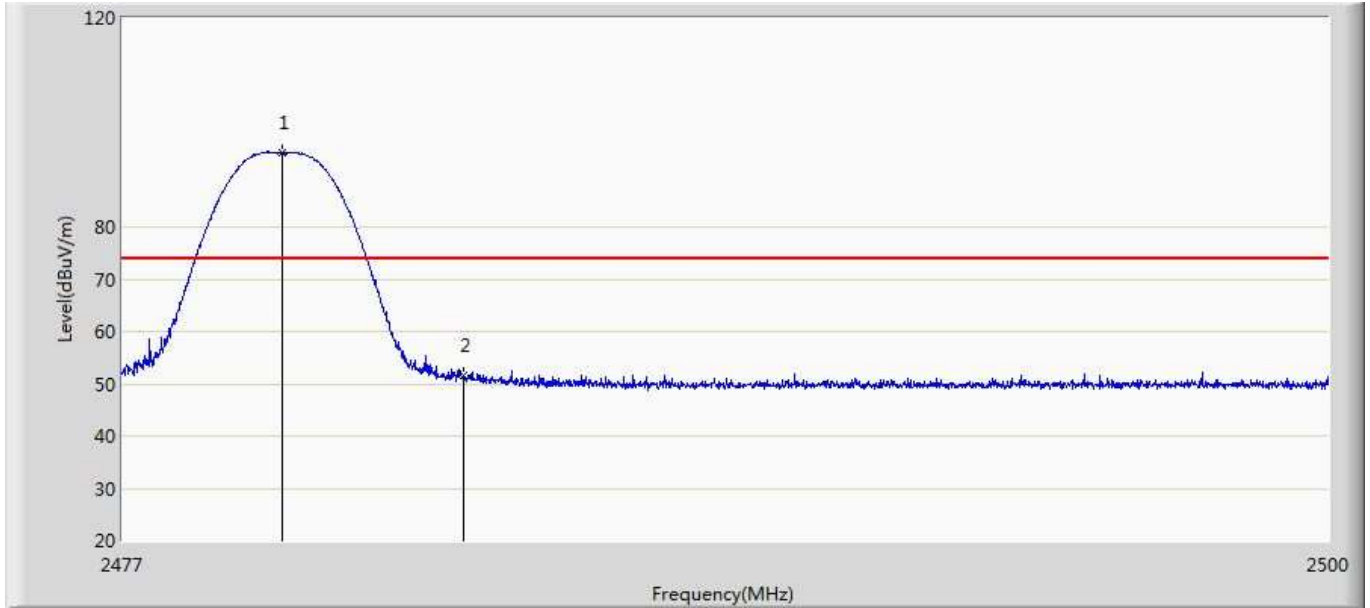
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.226	2.544	-15.774	54.000	35.682	AV
2	*	2402.055	96.499	60.786	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded (S=2)	



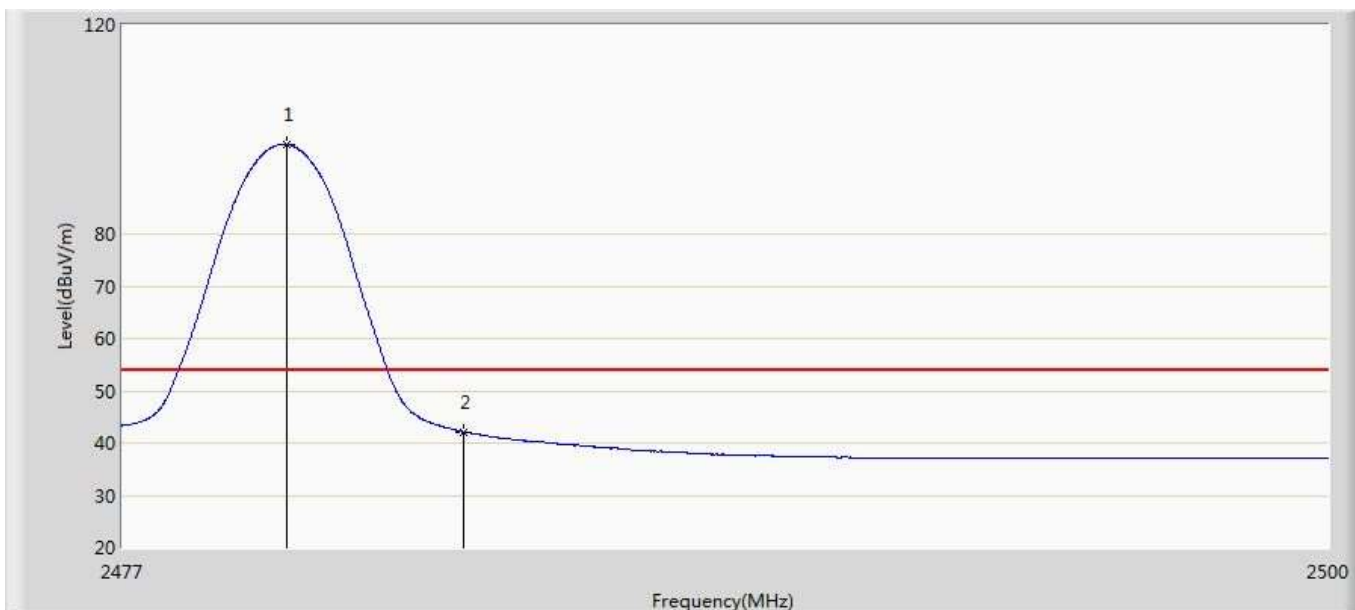
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.266	98.130	62.262	N/A	N/A	35.868	PK
2		2483.500	54.304	18.412	-19.696	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:47
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)	



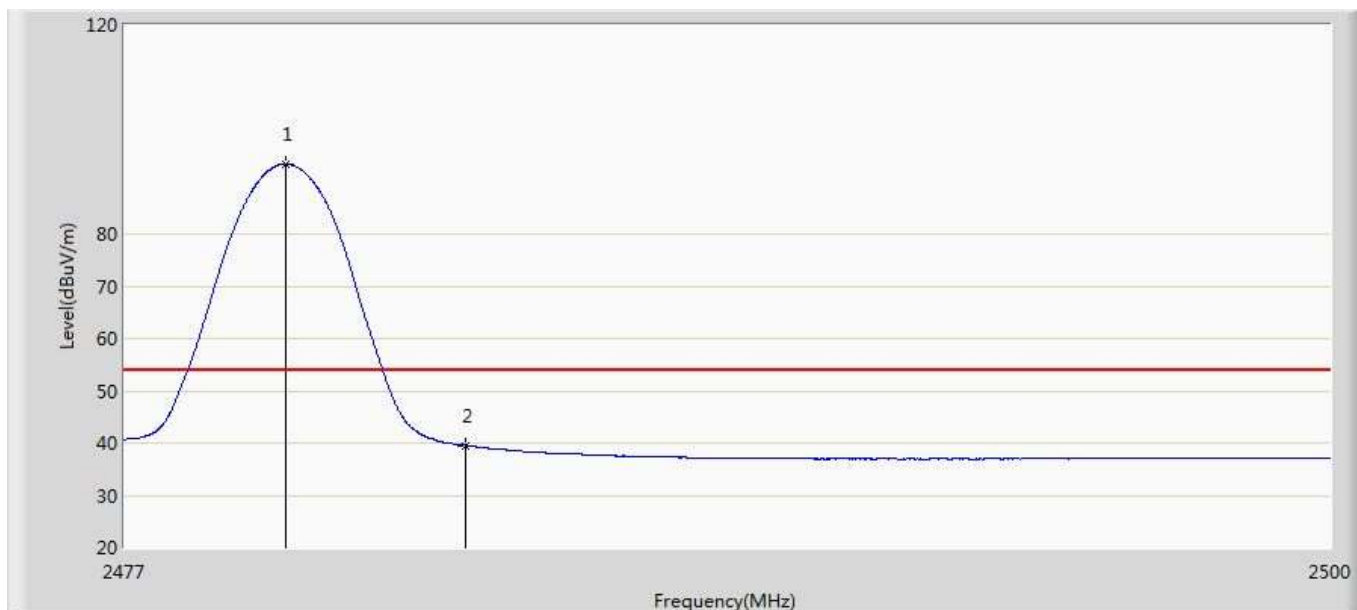
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.036	94.116	58.249	N/A	N/A	35.866	PK
2		2483.500	51.535	15.643	-22.465	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded (S=2)	



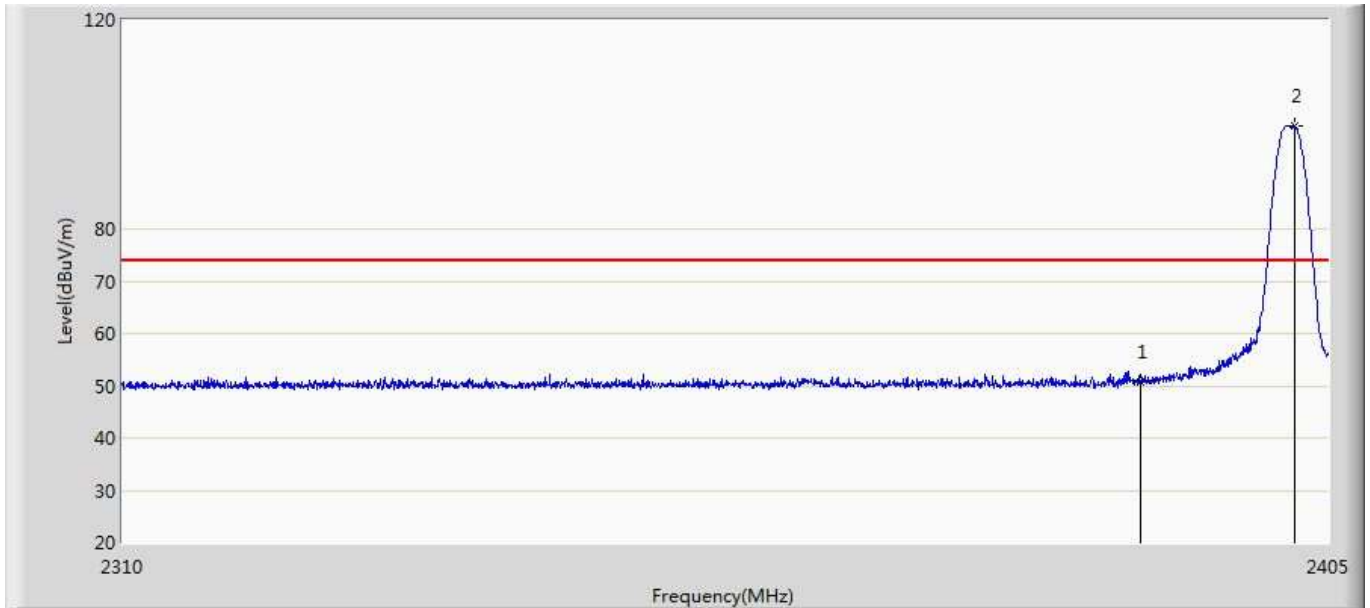
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.139	97.109	61.242	N/A	N/A	35.867	AV
2		2483.500	42.158	6.266	-11.842	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded (S=2)	



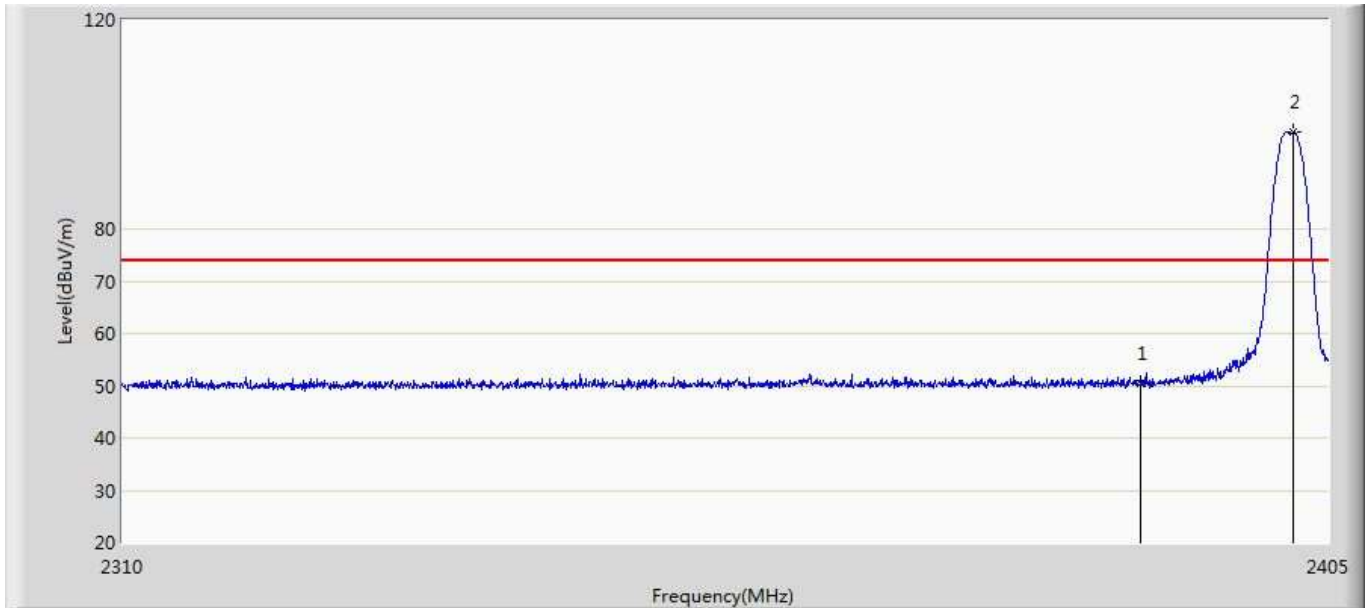
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.071	93.396	57.529	N/A	N/A	35.867	AV
2		2483.500	39.509	3.617	-14.491	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 08:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded (S=8)	



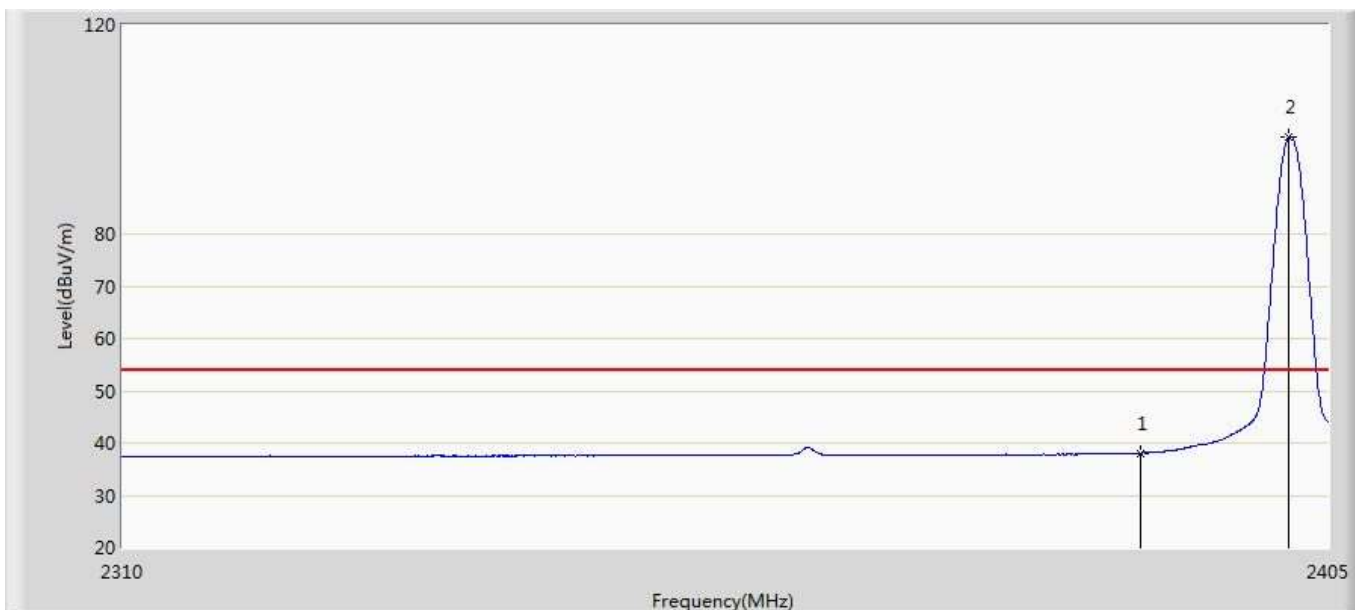
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.756	15.074	-23.244	74.000	35.682	PK
2	*	2402.292	99.708	63.995	N/A	N/A	35.714	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 08:44
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 4:Transmit at 2402MHz by LE_Coded (S=8)	



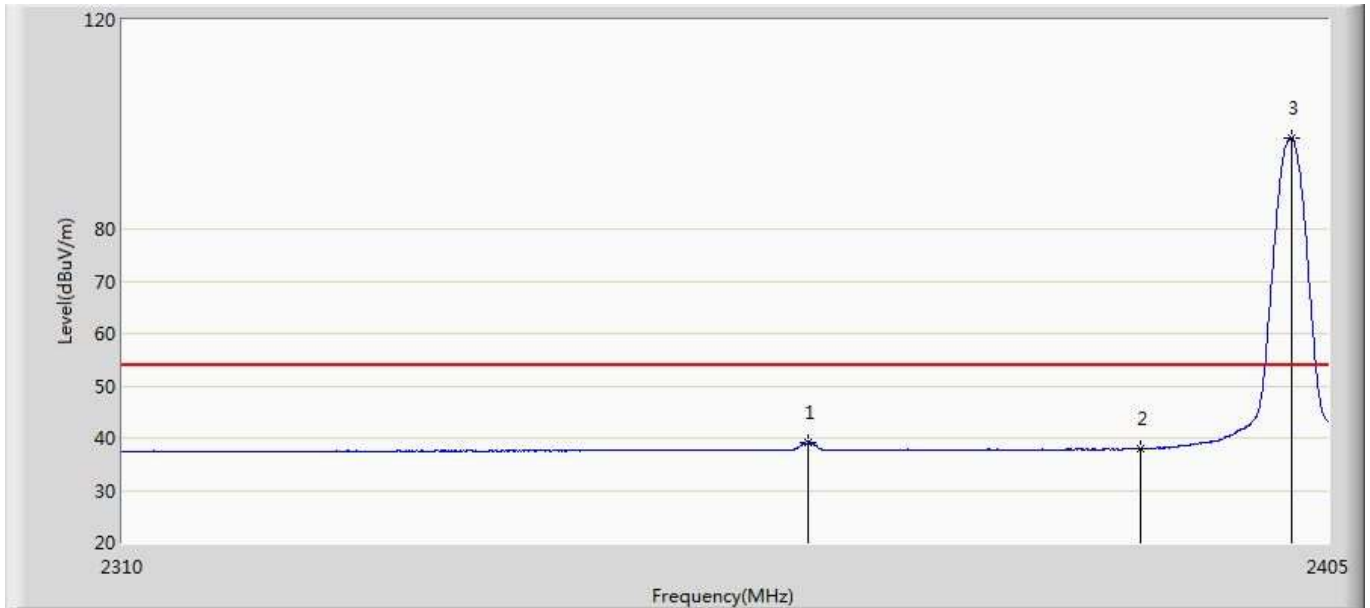
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.559	14.877	-23.441	74.000	35.682	PK
2	*	2402.150	98.418	62.705	N/A	N/A	35.713	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 08:45
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 4:Transmit at 2402MHz by LE_Coded (S=8)	



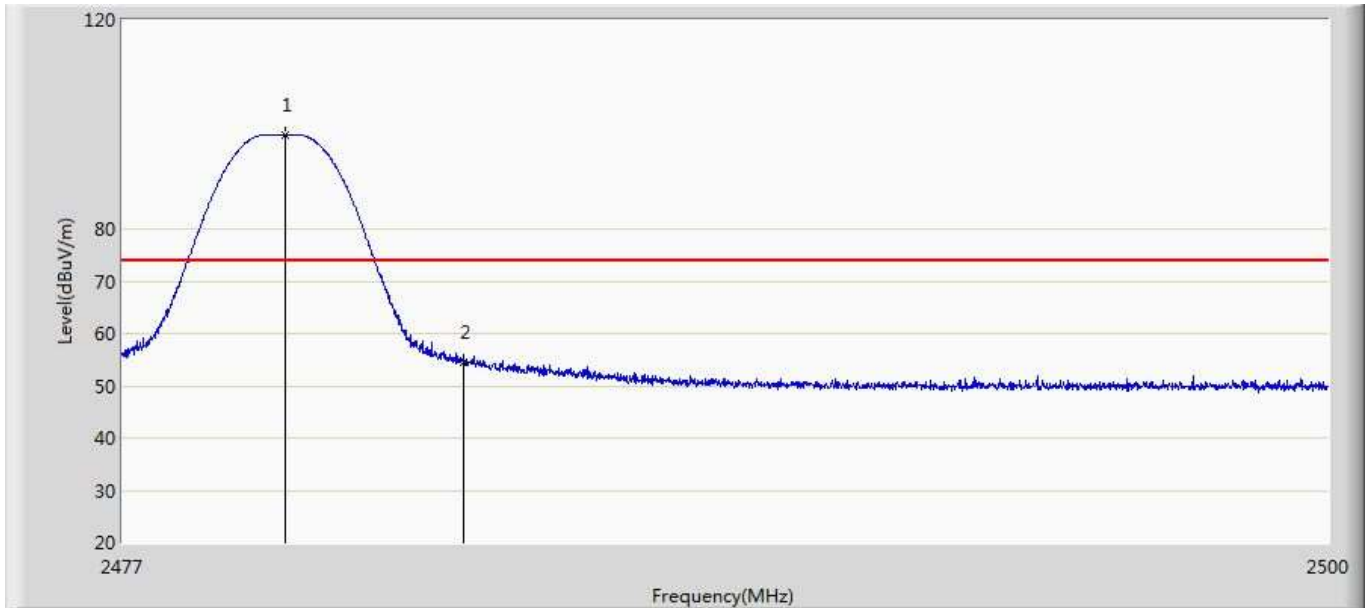
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.084	2.402	-15.916	54.000	35.682	AV
2	*	2401.865	98.556	62.844	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 08:48
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 4:Transmit at 2402MHz by LE_Coded (S=8)	



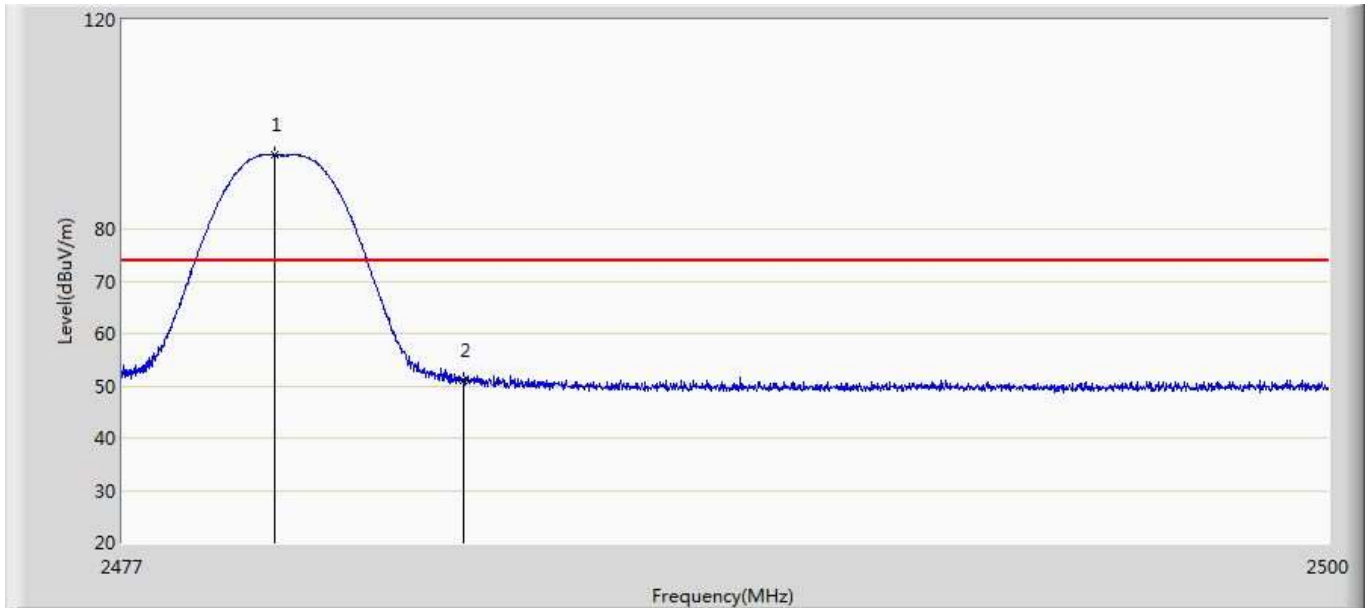
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.580	39.272	3.650	-14.728	54.000	35.622	AV
2		2390.000	37.949	2.267	-16.051	54.000	35.682	AV
3	*	2402.055	97.463	61.750	N/A	N/A	35.712	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:54
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)	



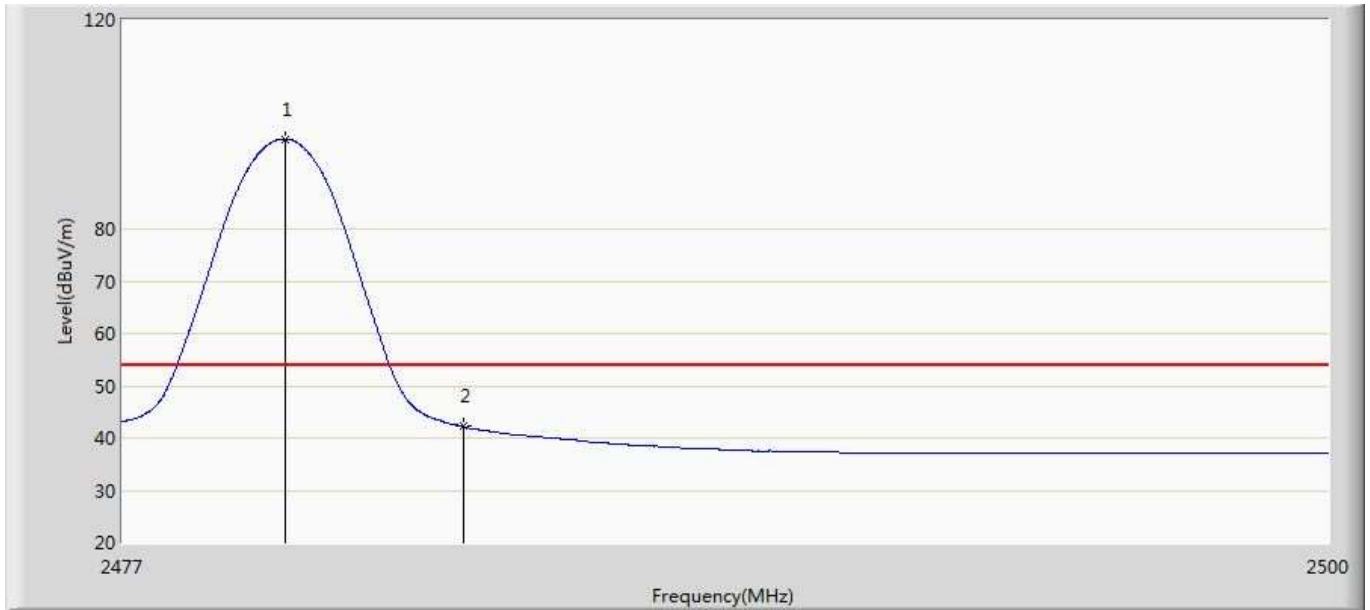
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.105	97.899	62.032	N/A	N/A	35.867	PK
2		2483.500	54.413	18.521	-19.587	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:57
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)	



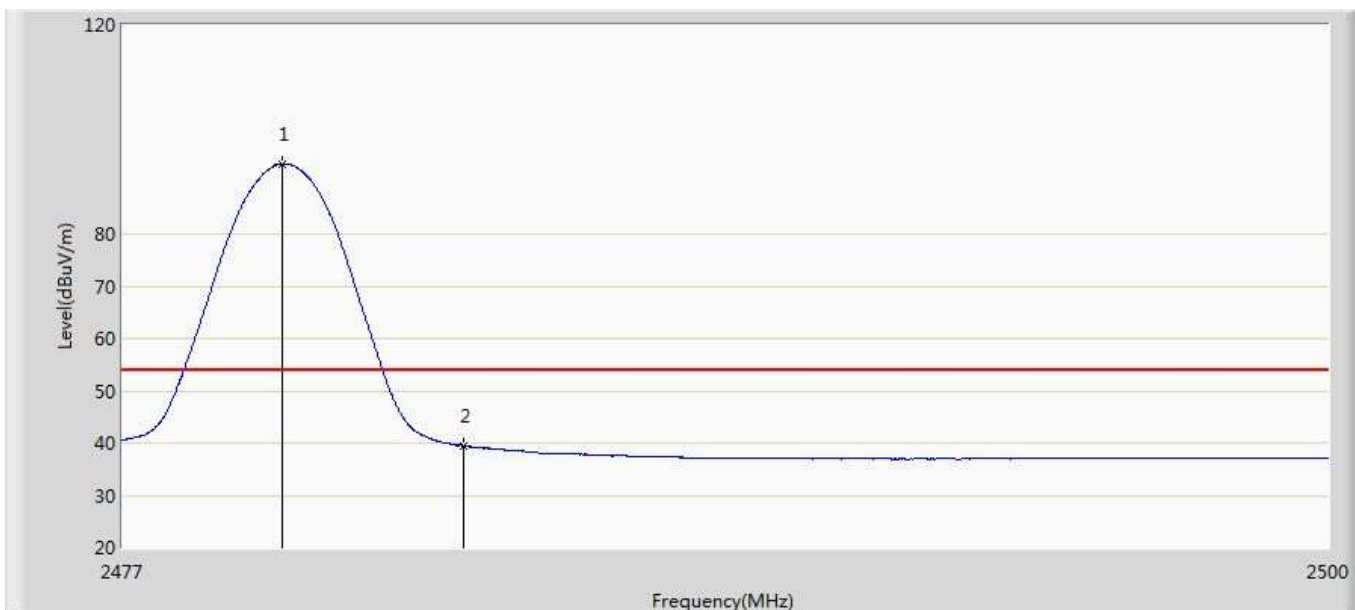
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.886	94.211	58.345	N/A	N/A	35.865	PK
2		2483.500	50.994	15.102	-23.006	74.000	35.891	PK

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 20:59
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	*	2480.105	97.196	61.329	N/A	N/A	35.867	AV
2		2483.500	42.175	6.283	-11.825	54.000	35.891	AV

Engineer: Tongben	
Site: AC5	Time: 2019/08/27 - 21:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 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	*	2480.036	93.422	57.555	N/A	N/A	35.866	AV
2		2483.500	39.460	3.568	-14.540	54.000	35.891	AV

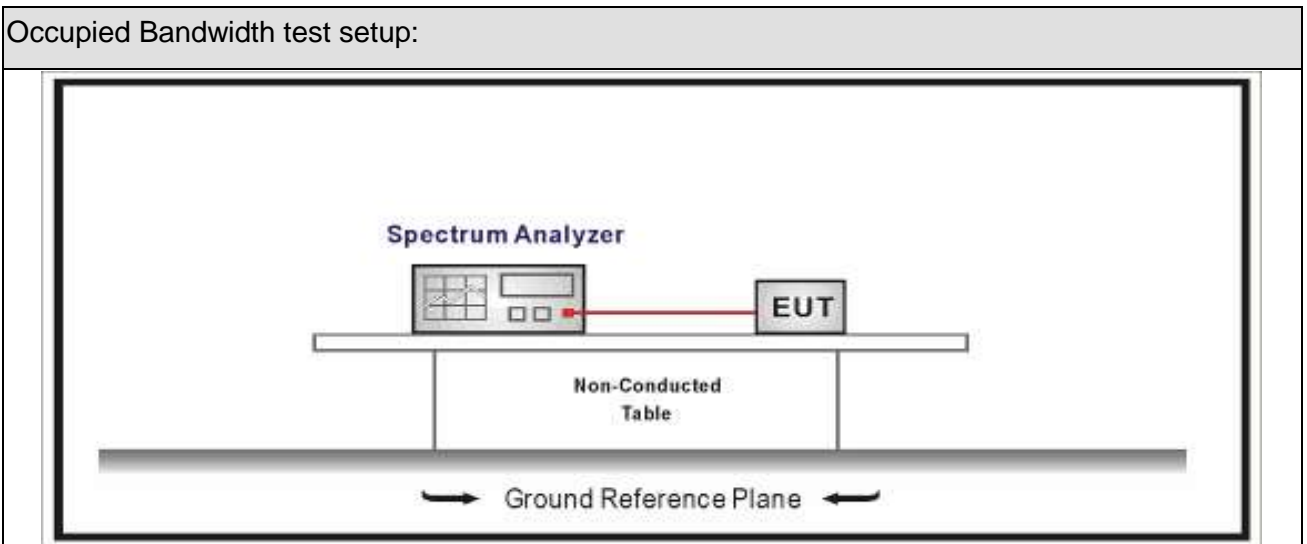
7. Occupied Bandwidth

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



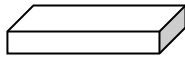
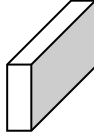
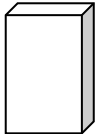
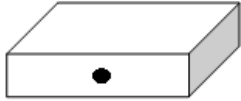
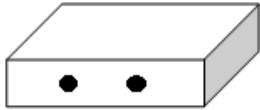

7.3. Limit

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"/> 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	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
				

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

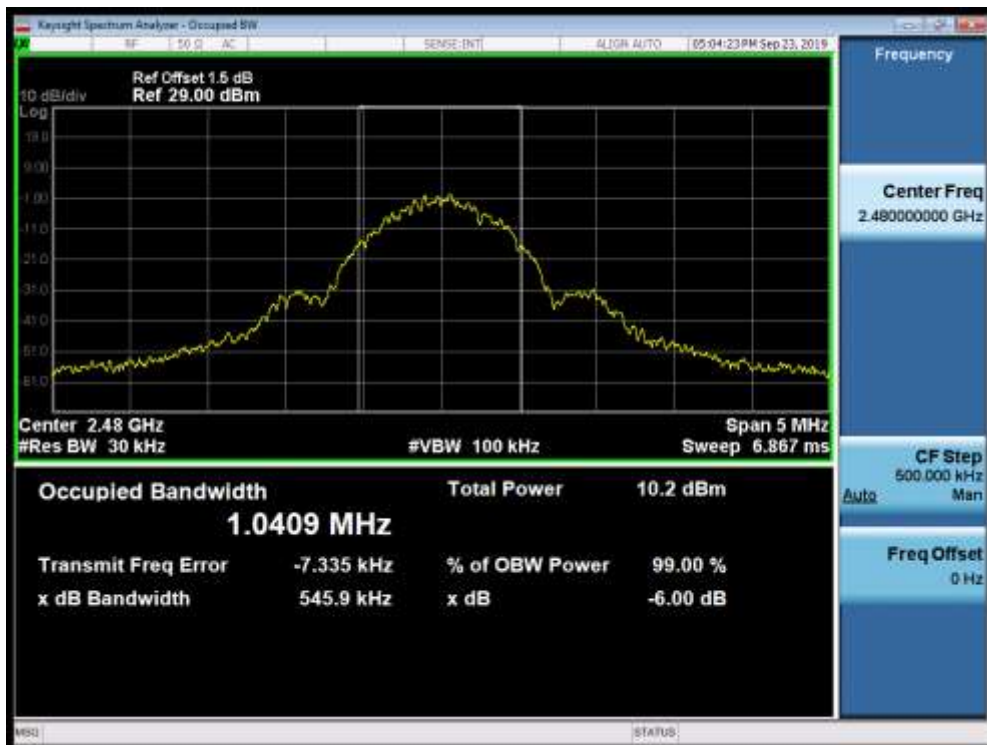
Mode 1 CH00 (2402MHz)



Mode 1 CH18 (2440MHz)



Mode 1 CH39 (2480MHz)

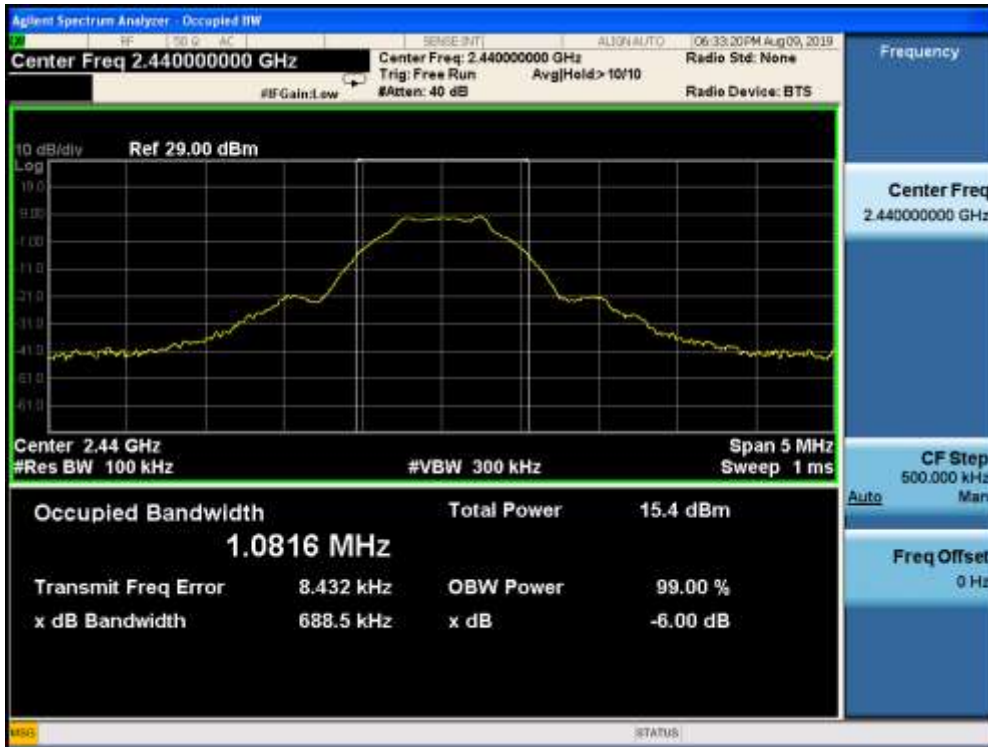


Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
1	00	2402	696.0	>500	Pass
1	19	2440	688.5	>500	Pass
1	39	2480	682.7	>500	Pass

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

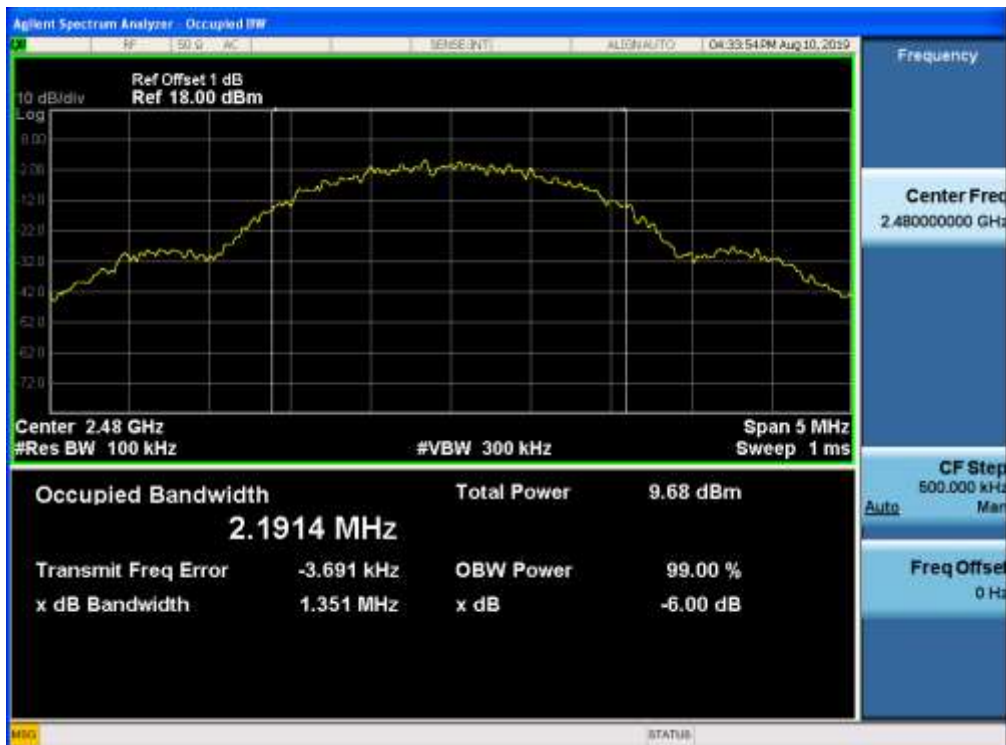
Mode 2 CH00 (2402MHz)



Mode 2 CH19 (2440MHz)

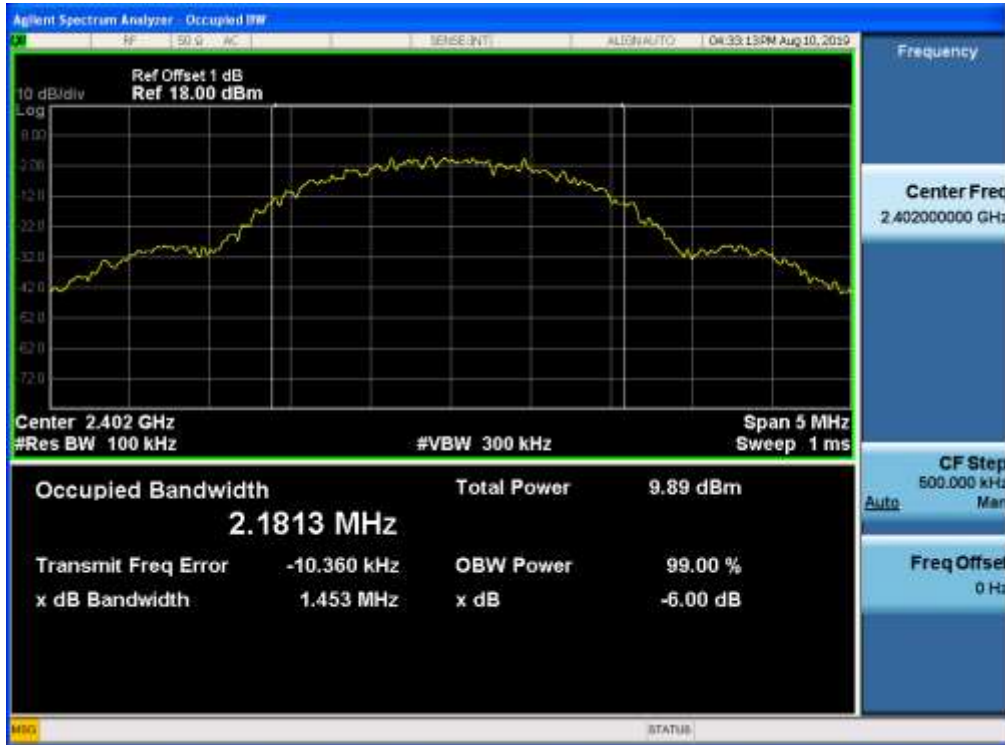


Mode 2 CH39 (2480MHz)

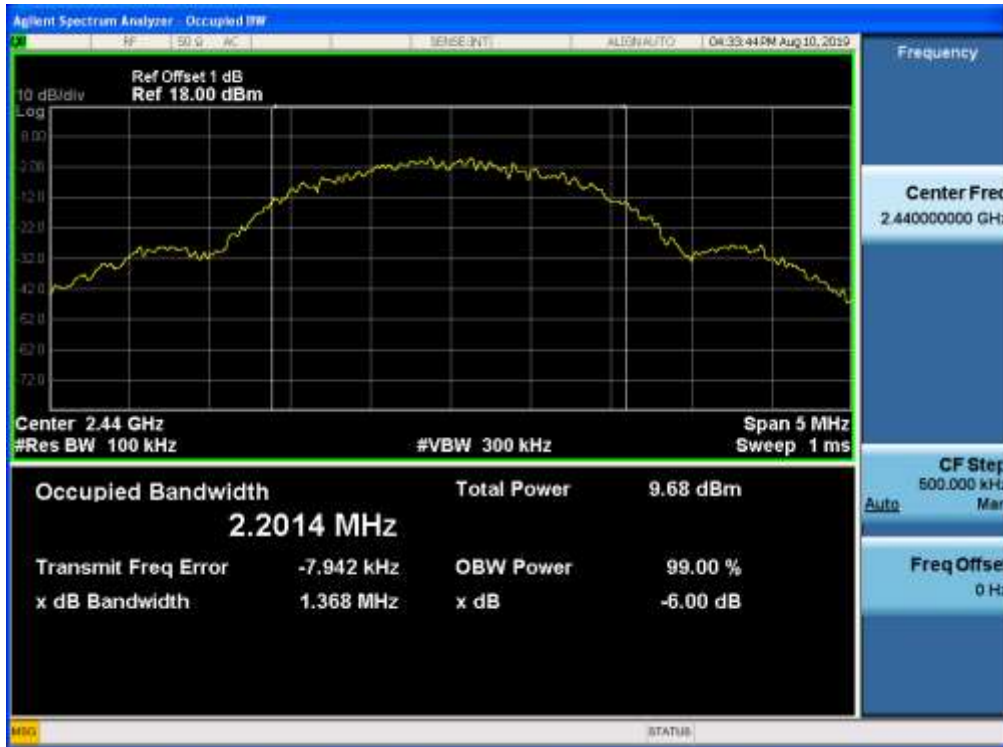


Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
2	00	2402	1453	>500	Pass
2	19	2440	1368	>500	Pass
2	39	2480	1351	>500	Pass

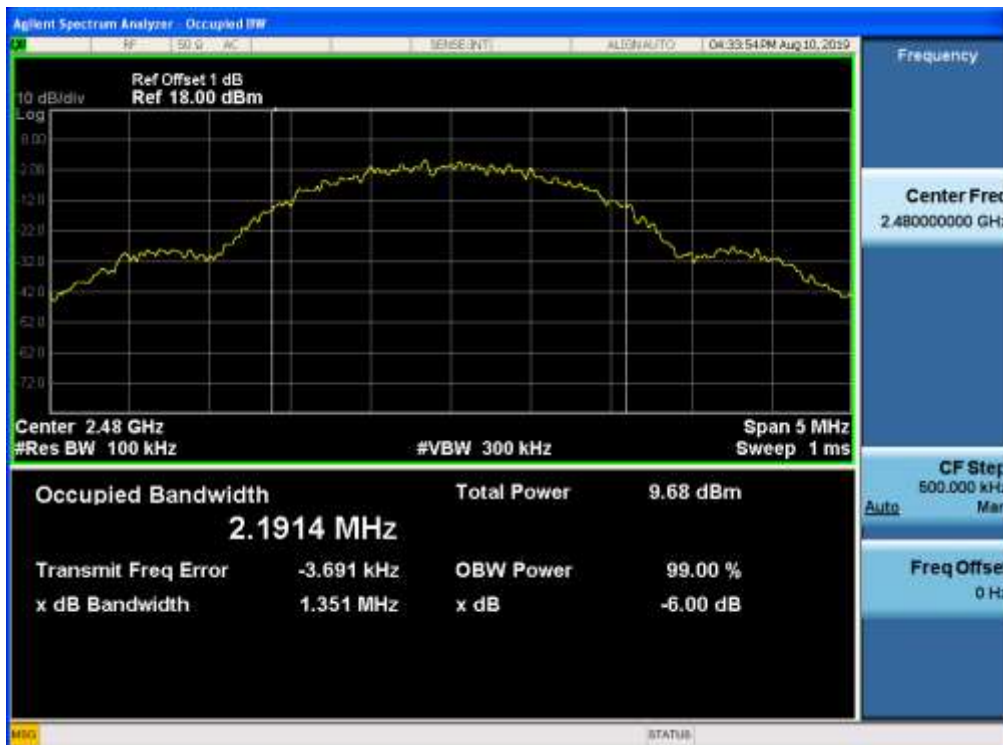
Mode 2 CH00 (2402MHz)



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)

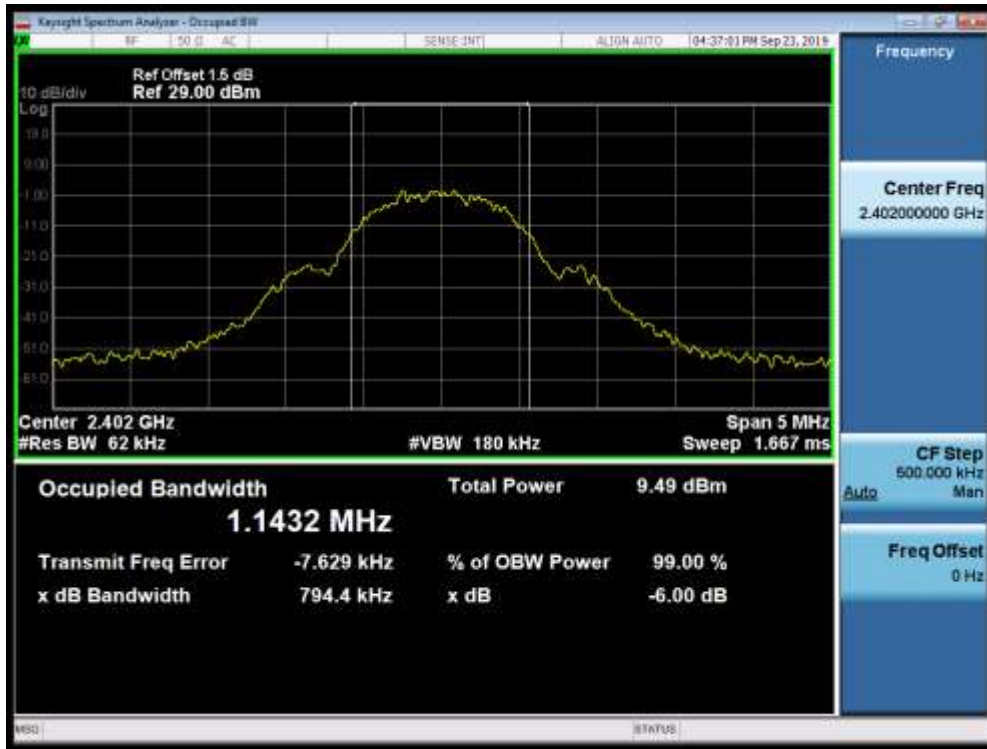


Mode 3 CH39 (2480MHz)

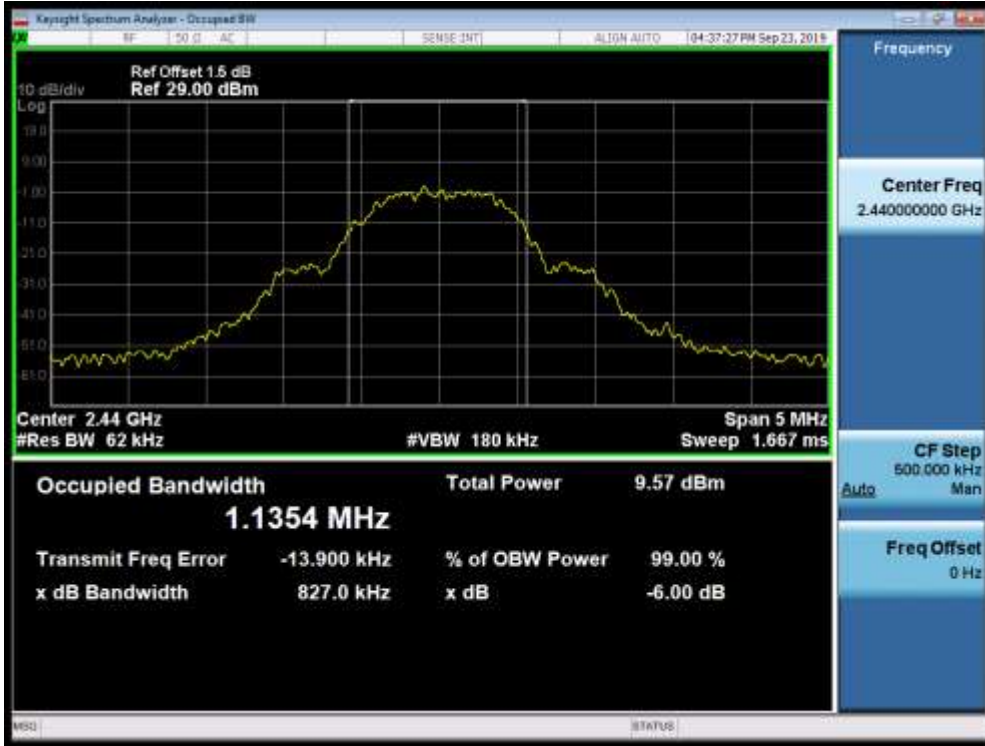


Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
3	00	2402	794.4	>500	Pass
3	19	2440	827.0	>500	Pass
3	39	2480	736.6	>500	Pass

Mode 3 CH00 (2402MHz)



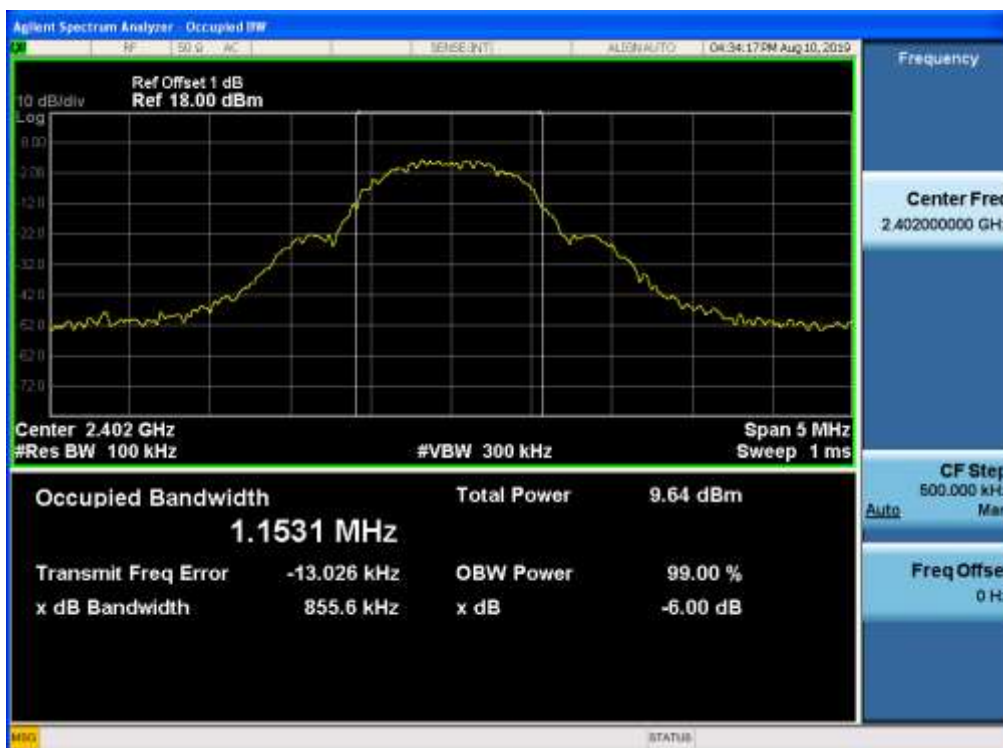
Mode 3 CH19 (2440MHz)



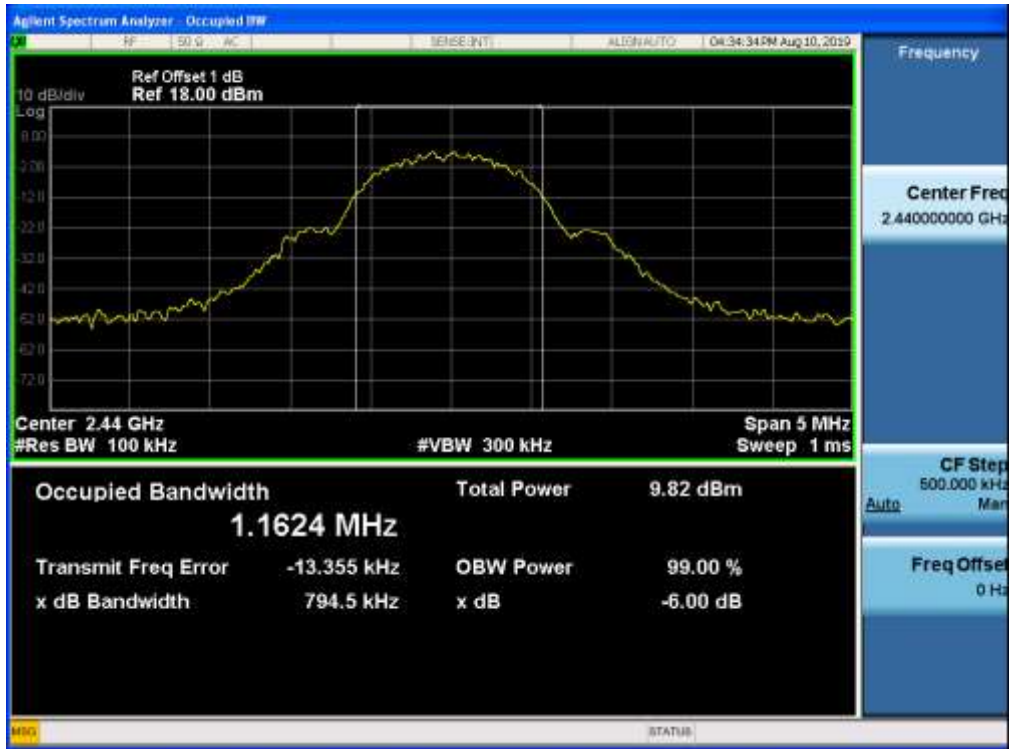
Mode 3 CH39 (2480MHz)



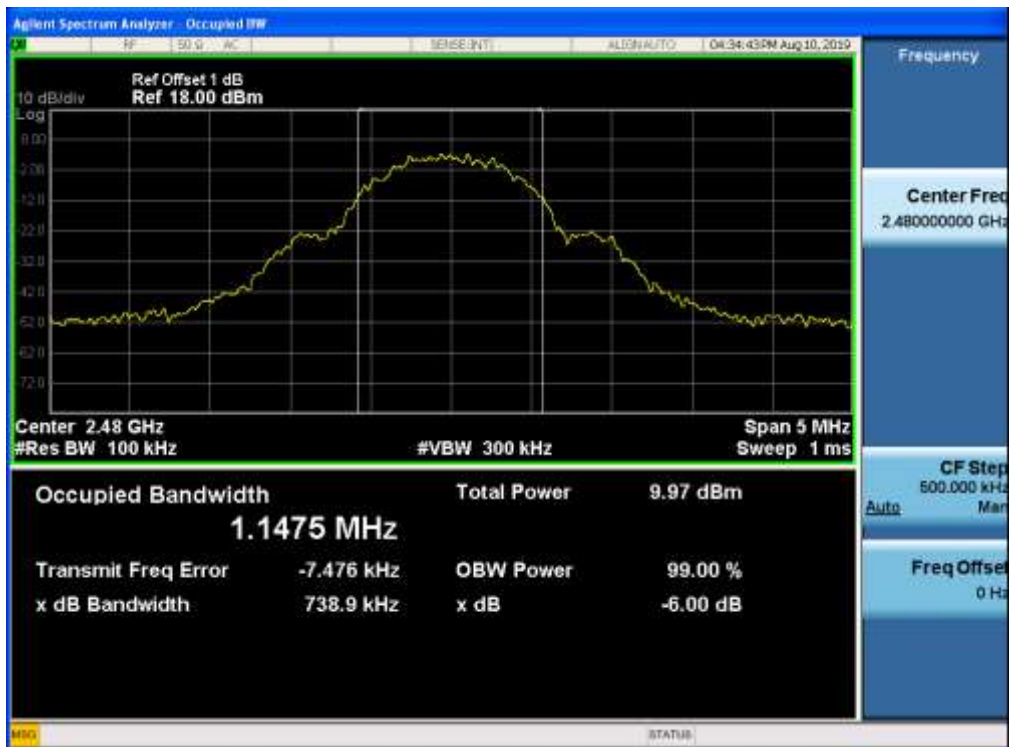
Mode 3 CH00 (2402MHz)



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)

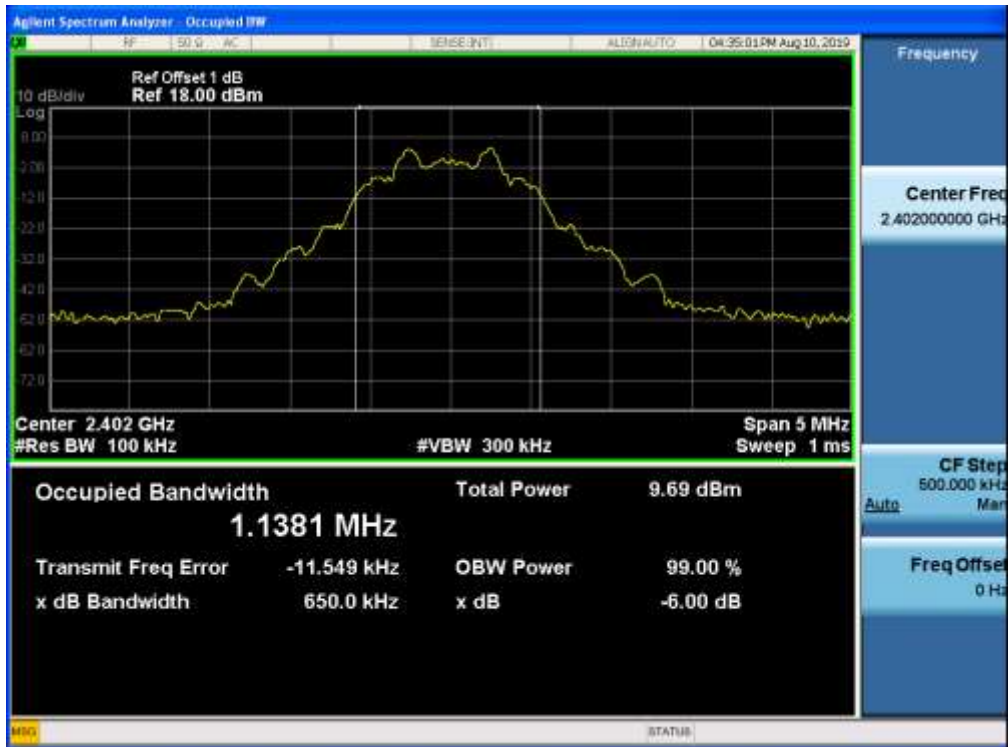


Mode 4 CH39 (2480MHz)

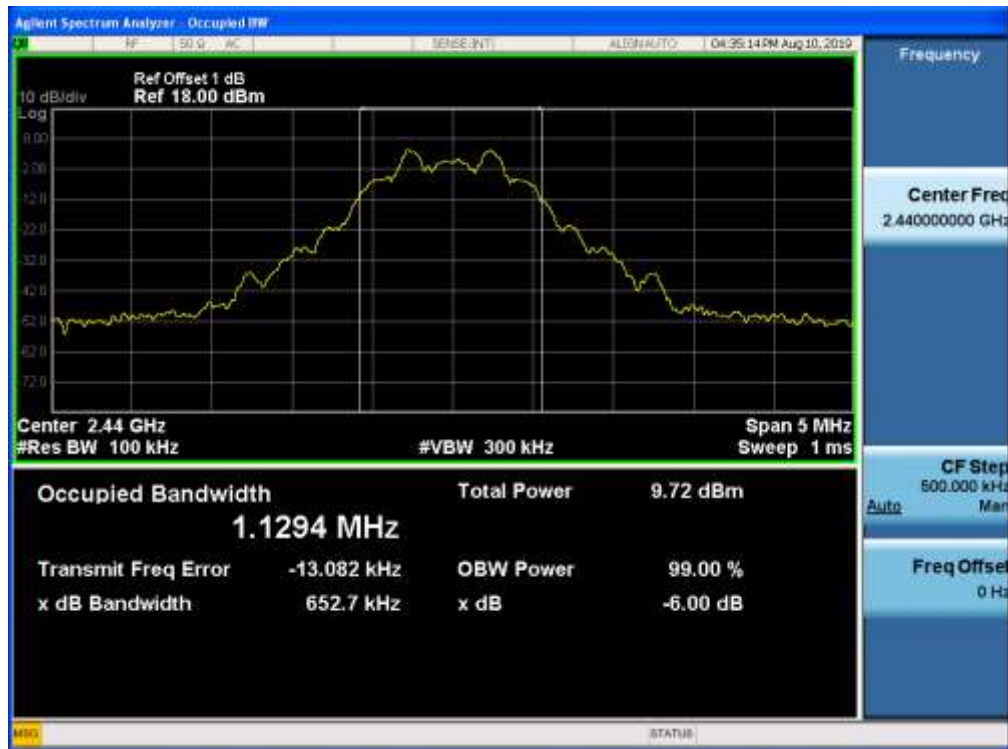


Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
4	00	2402	650.0	>500	Pass
4	19	2440	652.7	>500	Pass
4	39	2480	645.7	>500	Pass

Mode 4 CH00 (2402MHz)



Mode 4 CH19 (2440MHz)



Mode 4 CH39 (2480MHz)



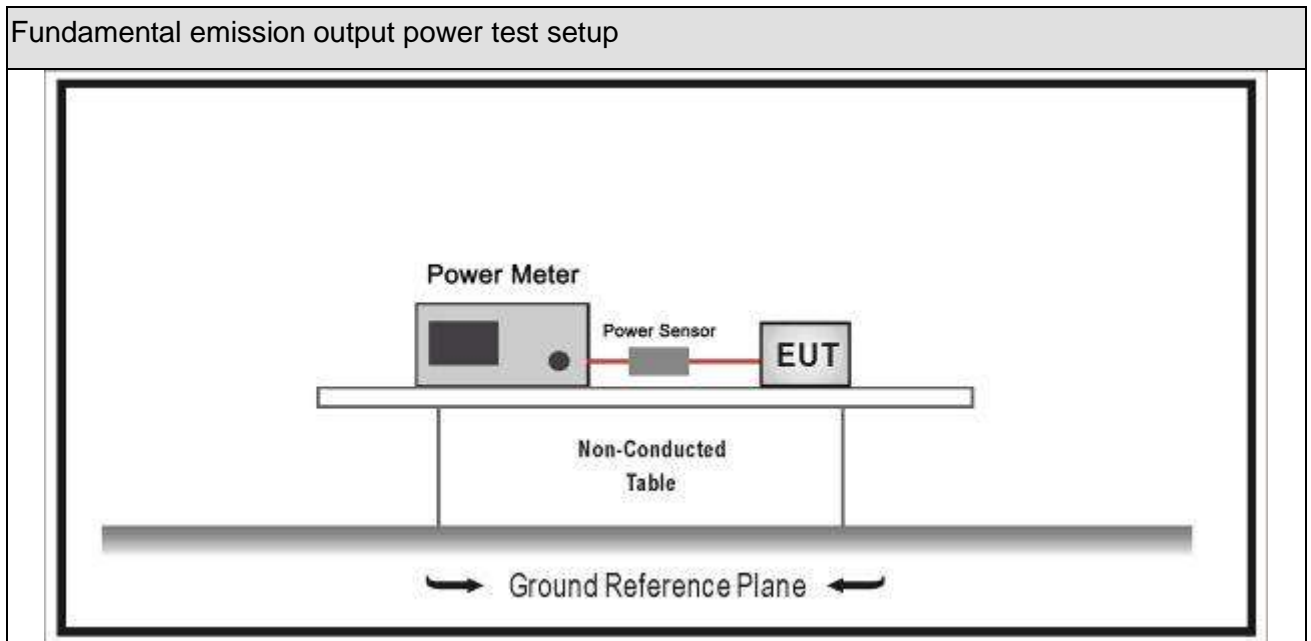
8. Fundamental emission output power

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



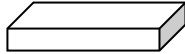
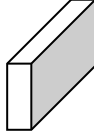
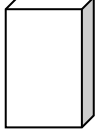


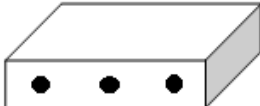
8.3. Limit

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"/>	Non-Fix point-point	$P_{out} \leq 30 - (G_{TX} - 6)$
<input type="checkbox"/>	Fix point-point	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
<input type="checkbox"/>	Point-to-multipoint	$P_{out} \leq 30 - (G_{TX} - 6)$
<input type="checkbox"/>	Overlap Beams	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
<input type="checkbox"/>	Aggregate power transmitted simultaneously on all beams	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
<input type="checkbox"/>	single directional beam	$P_{out} \leq 30 - [(G_{TX} - 6)]/3 + 8\text{dB}$
<p>Note 1 : G_{TX} directional gain of transmitting antennas.</p> <p>Note 2 : P_{out} is maximum peak conducted output power .</p>		

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	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
				

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	7.86	30	Pass
	19	2440	8.13	30	Pass
	39	2480	7.45	30	Pass
Mode 2	00	2402	7.34	30	Pass
	19	2440	7.78	30	Pass
	39	2480	8.12	30	Pass
Mode 3	00	2402	7.25	30	Pass
	19	2440	7.45	30	Pass
	39	2480	7.63	30	Pass
Mode 4	00	2402	7.29	30	Pass
	19	2440	7.13	30	Pass
	39	2480	7.27	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	7.78	30	Pass
	19	2440	8.01	30	Pass
	39	2480	8.13	30	Pass
Mode 2	00	2402	7.98	30	Pass
	19	2440	8.02	30	Pass
	39	2480	8.12	30	Pass
Mode 3	00	2402	7.94	30	Pass
	19	2440	8.14	30	Pass
	39	2480	8.23	30	Pass
Mode 4	00	2402	7.84	30	Pass
	19	2440	8.08	30	Pass
	39	2480	8.11	30	Pass

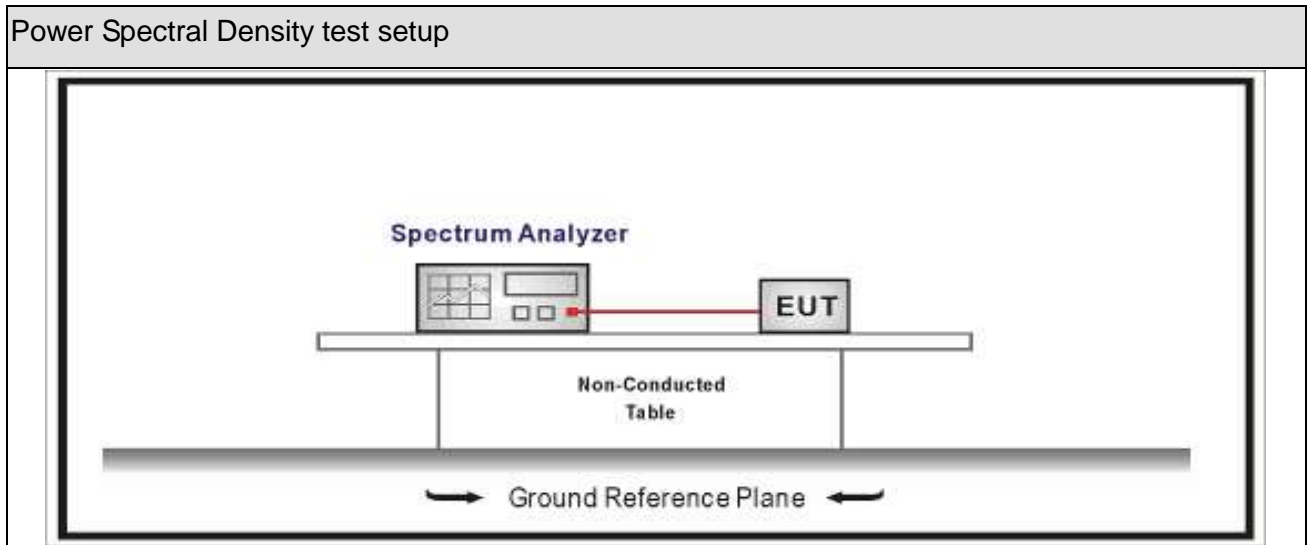
9. Power Spectral Density

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



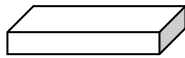
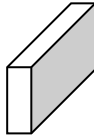
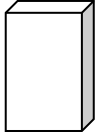
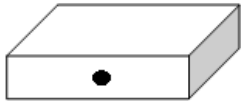
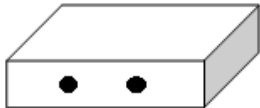
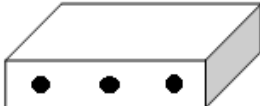
9.3. Limit

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
				

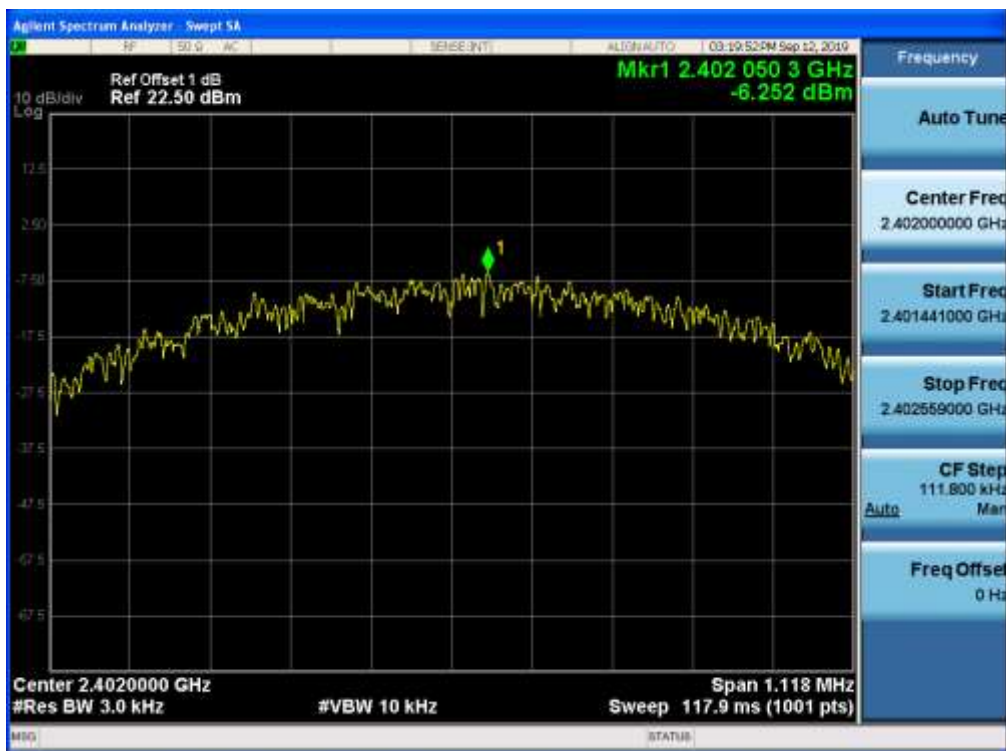
9.6. Test Result

Product Name	: LED lamp	Test Voltage	: AC 120V/60Hz
Test Mode	: Mode 1: Transmit-1Mbps(GFSK_LE 1M)	Test Site	: TR-8
Test Date	: 2019.09.12	Test Engineer	: Simon

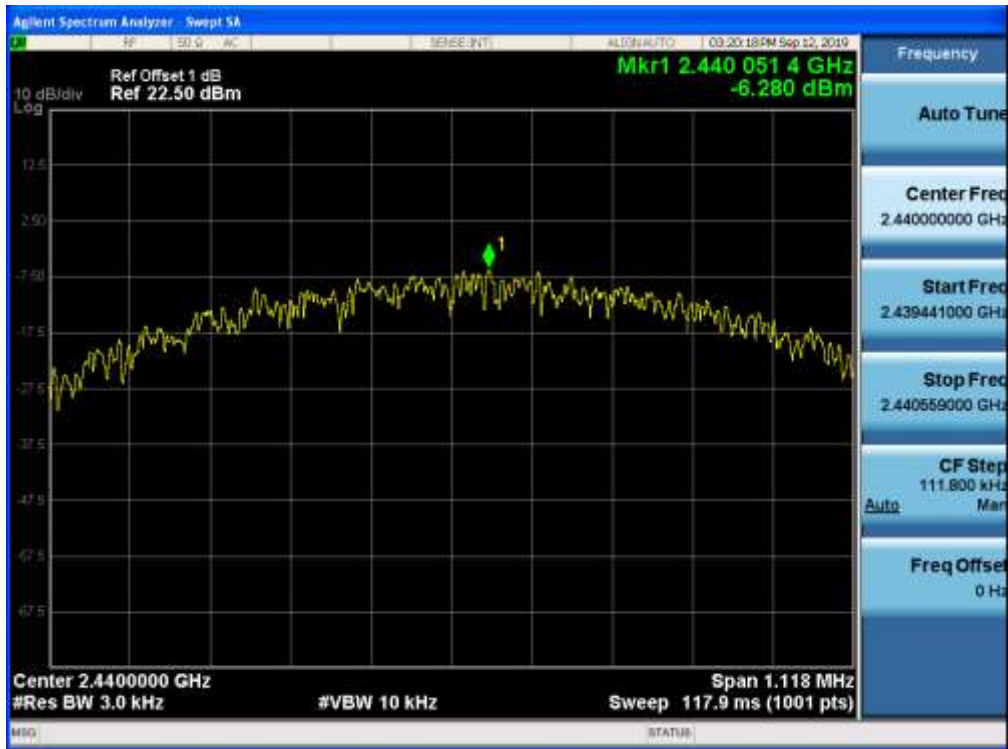
Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
1	00	2402	-6.252	-6.252	8	Pass
1	19	2440	-6.280	-6.280	8	Pass
1	39	2480	-6.648	-6.648	8	Pass

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

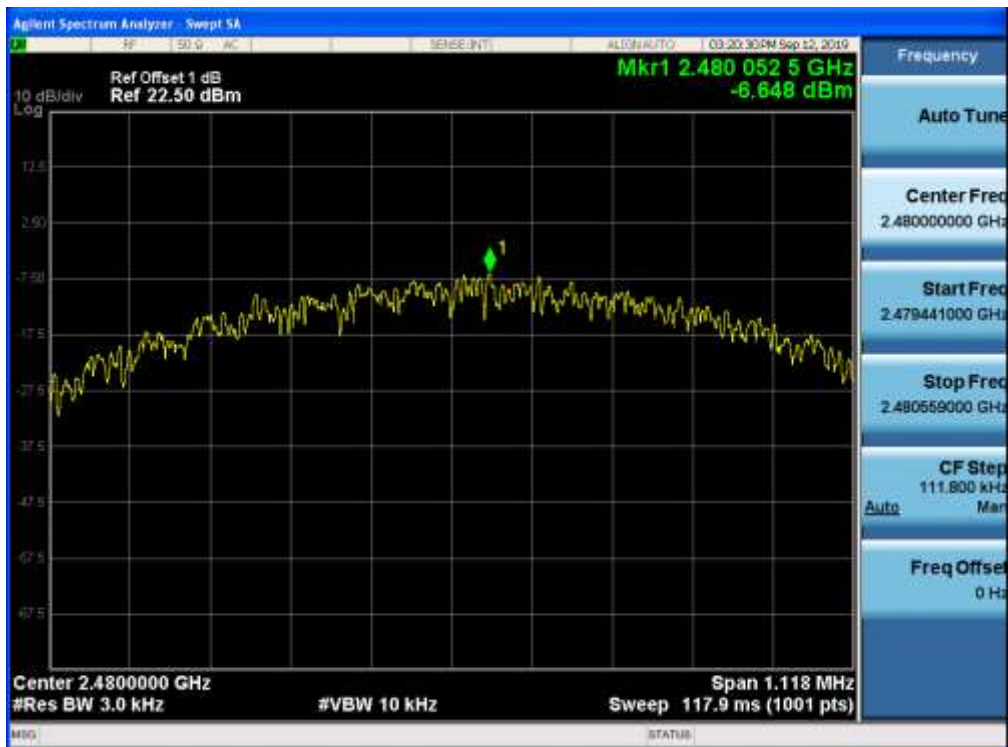
Mode 1 CH00(2402MHz)



Mode 1 CH19(2440MHz)



Mode 1 CH39(2480MHz)

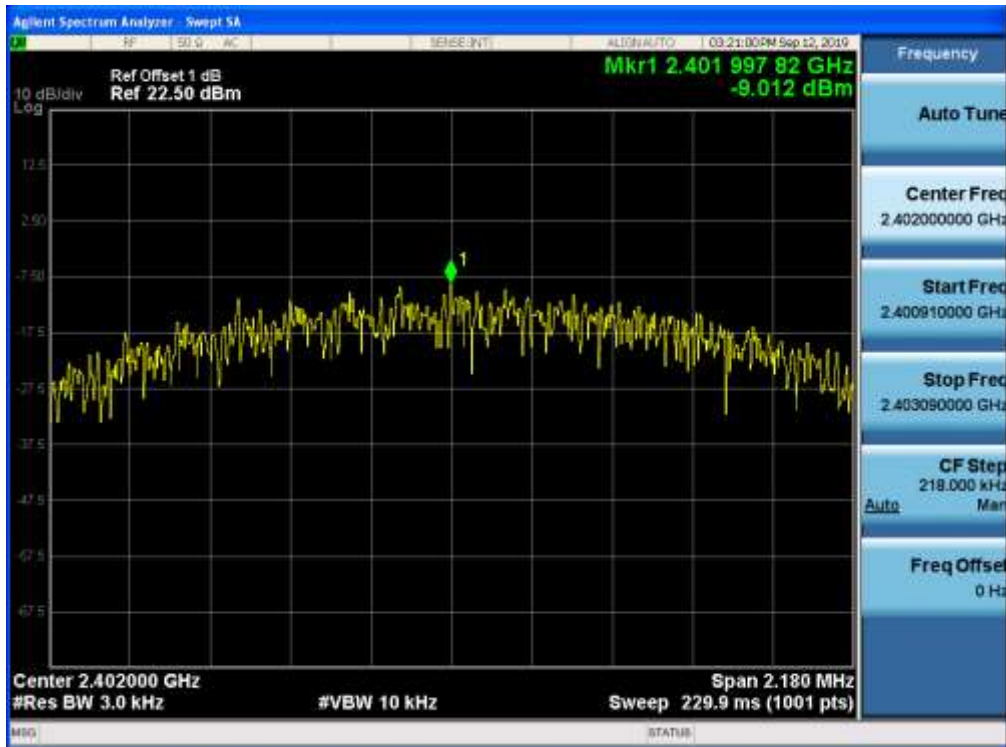


Product Name	: LED lamp	Test Voltage	: AC 120V/60Hz
Test Mode	: Mode 2: Transmit-1Mbps(GFSK_LE 2M)	Test Site	: TR-8
Test Date	: 2019.09.12	Test Engineer	: Simon

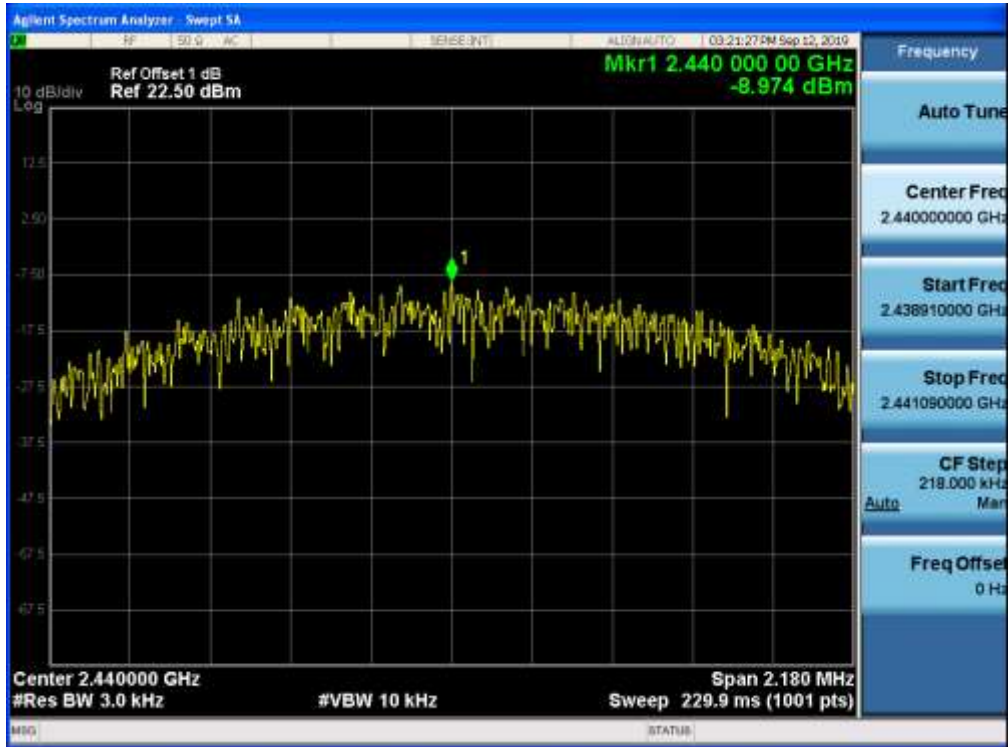
Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
1	00	2402	-9.102	-9.102	8	Pass
1	19	2440	-8.974	-8.974	8	Pass
1	39	2480	-9.477	-9.477	8	Pass

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

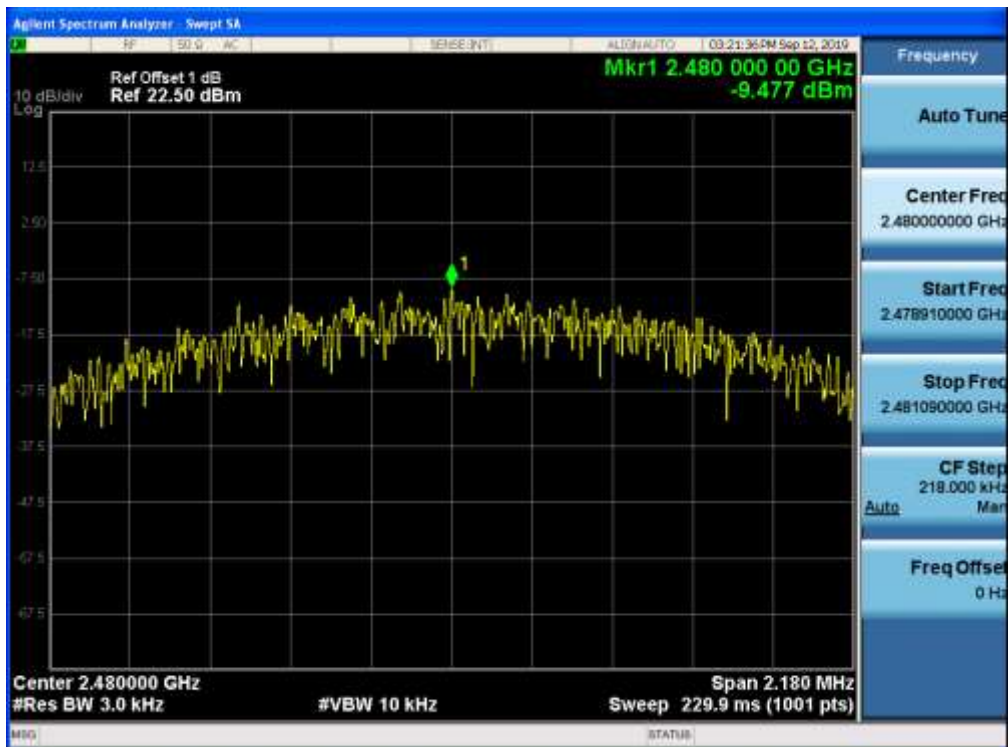
Mode 2 CH00(2402MHz)



Mode 2 CH19(2440MHz)



Mode 2 CH39(2480MHz)



10. Antenna Requirement

10.1. Limit

Antenna Requirement Limit
<p>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.</p>

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 _____