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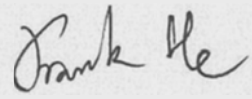
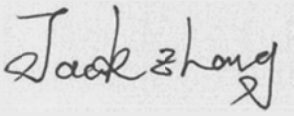
Test report No:
19A2158R-RF-US-P06V01

FCC TEST REPORT & ISED TEST REPORT

Product Name	LED lamp
Trademark	PHILIPS
Model and /or type reference	9290022943
Applicant´s name / address	Signify (China) Investment Co., Ltd Building no.9, Lane 888, Tianlin Road, Minhang District, Shanghai, 200233, China
Test method requested, standard	FCC CFR Title 47 Part 15 Subpart C Section 15.247 ANSI C63.10: 2013 KD558074 D01 15.247 Meas Guidance v05r02 RSS-Gen Issue 5 / RSS-247 Issue 2
Verdict Summary	IN COMPLIANCE
Documented By	Kitty Li/Project Assistant 
Tested by (name / position & signature)	Frank He/ Technical Supervisor 
Approved by (name / position & signature)	Jack Zhang/ Supervisor 
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COMPETENCES AND GUARANTEES

DEKRA is a testing laboratory competent to carry out the tests described in this report.
In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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GENERAL CONDITIONS

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Date(receive sample)	Oct. 29, 2019
Date (start test)	Nov. 08, 2019
Date (finish test)	Nov. 27, 2019

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
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4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT : Equipment Under Test
QP : Quasi-Peak
CAV : CISPR Average
AV : Average
CDN : Coupling Decoupling Network
SAC : Semi-Anechoic Chamber
OATS : Open Area Test Site
BW : Bandwidth
AM : Amplitude Modulation
PM : Pulse Modulation
HCP : Horizontal Coupling Plane
VCP : Vertical Coupling Plane
U_N : Nominal voltage
*T*x : Transmitter
*R*x : Receiver
N/A : Not Applicable
N/M : Not Measured

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
19A2158R-RF-US-P06V01	V1.0	Initial issue of report.	2019-11-27

REMARKS AND COMMENTS

1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
2. These test results on a sample of the device are for the purpose of demonstrating Compliance with Part 15 Subpart C Paragraph 15.247, RSS-Gen Issue 5, RSS-247 Issue 2.
3. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to account the uncertainty associated with the measurement result, unless the specification, standard or customer have special requirements.
4. The test results presented in this report relate only to the object tested.
5. The test results relate only to the samples tested.
6. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
7. This report will not be used for social proof function in China market.

USED EQUIPMENT

AC Power Line Conducted Emission / TR1

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100906	2019.04.20	2020.04.19
Two-Line V-Network	R&S	ENV216	101190	2019.05.25	2020.05.24
Two-Line V-Network	R&S	ENV216	101044	2019.05.25	2020.05.24
Current Probe	R&S	EZ-17	100678	2019.03.12	2020.03.11
50ohm Termination	SHX	TF2	07081402	2019.09.02	2020.09.01
50ohm Termination	SHX	TF2	07081403	2019.09.02	2020.09.01
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-8S	TR1-TH	2019.08.21	2020.08.20
Coaxial Cable	Suhner	RG 223	TR1-C1	2019.09.27	2020.09.26
Coaxial Cable	Suhner	RG 223	TR1-C2	2018.04.26	N/A
Dekra test software	Dekra	-	-	-	-

Emissions in non-restricted frequency bands/ Occupied Bandwidth/ Fundamental emission output power Power Spectral Density / TR8

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2019.09.28	2020.09.27
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2019.04.17	2020.04.16
MXA Signal Anlyzer	Keysight	N9020A	MY56060147	2019.08.30	2020.08.29
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2019.10.14	2020.10.13
Power Sensor	Anritsu	MA2411B	0846014	2019.10.28	2020.10.27
Coaxial Cable	Woken	SFL402	F02-150410-044	2019.06.13	N/A
Dekra test software	Dekra	-	-	-	-

Radiated Emission(30MHz-1GHz) / AC3

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100573	2019.03.03	2020.03.02
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2019.09.23	2020.09.22
Temperature/Humidity Meter	RTS	RTS-8S	AC2-TH	2019.09.02	2020.09.01
Coaxial Cable	Huber+Suhner	RG 214	AC2-C	2019.04.13	2020.04.12
Dekra test software	Dekra	-	-	-	-

Radiated Emission / AC5(1GHz-40GHz)(Chamber details)

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2019.09.28	2020.09.27
Preamplifier	Miteq	NSP1800-25	1364185	N/A	N/A
Preamplifier	QuieTek	AP-040G	CHM-0906001	N/A	N/A
DRG Horn	ETS-Lindgren	3117	00123988	2019.09.25	2020.09.24
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2019.09.02	2020.09.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	N/A	N/A
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2019.04.13	2020.04.12
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	N/A	N/A
Dekra test software	Dekra	-	-	-	-

UNCERTAINTY

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%

Test item	Uncertainty
AC Power Line Conducted Emission	9kHz~150kHz: 2.80dB 150kHz~30MHz: 2.40dB
Peak Power Output	± 1.27 dB
Radiated Emission(30MHz~1GHz)	Horizontal: 30MHz~200MHz: 3.50 dB 300MHz~1GHz: 3.60 dB Vertical: 30MHz~200MHz: 3.60 dB 300MHz~1GHz: 3.50 dB
Radiated Emission(1GHz~26.5GHz)	Horizontal: 1GHz~18GHz: 5.00 dB Vertical: 1GHz~18GHz: 4.80 dB
RF antenna conducted test	± 1.27dB
Radiated Emission Band Edge	± 3.9 dB
DTS Bandwidth	±150Hz
Occupied Bandwidth	±1kHz
Power Density	±1.27dB

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Product Name ..... :	LED lamp
Model No. ..... :	9290022943
Trademark ..... :	PHILIPS
FCC ID ..... :	2AGBW9290022943X
IC ..... :	20812-2943X
Manufacturer ..... :	Signify (China) Investment Co., Ltd.
Manufacturer Address ..... :	Building no.9, Lane 888, Tianlin Road, Minhang District, Shanghai, 200233, China

Wireless specifiction ..... :	Bluetooth 5.0
Operating frequency range(s)	2400~2483.5MHz
Type of Modulation ..... :	GFSK
Number of channel ..... :	40
Operating Temperature Range ..... :	-20℃ - 45 ℃

Rated power supply ..... :	Voltage and Frequency	
	☐	AC: 220 – 240 V, 50/60 Hz
	☒	AC: 110 – 130 V, 50/60 Hz
	☐	DC: 15~24Vdc
	☐	Battery: 3.7V
Mounting position ..... :	☒	Table top equipment
	☐	Wall/Ceiling mounted equipment
	☐	Floor standing equipment
	☐	Hand-held equipment
	☐	Other: Wearable equipment

Note 1: LED lamp supports two kinds of Crystal oscillator (Murata/ KDS), 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 Antenna Information

Antenna model / type number ..... :	N/A			
Antenna serial number ..... :	N/A			
Antenna Delivery ..... :	☒	1TX + 1RX		
	☐	2TX + 2RX		
Antenna technology ..... :	☒	SISO		
	☐	MIMO	☐	CDD
			☐	Beam-forming
Antenna Type ..... :	☐	External	☐	Dipole
			☐	Sectorized
	☒	Internal	☐	PIFA
			☒	PCB
			☐	Ceramic Chip
			☐	Others……..
Antenna Gain ..... :	1 dBi			

1.3 Channel List

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

2 DESCRIPTION OF TEST SETUP

2.1 Operating mode(s) used for tests

During the tests the following operating mode(s) has(have) been used.

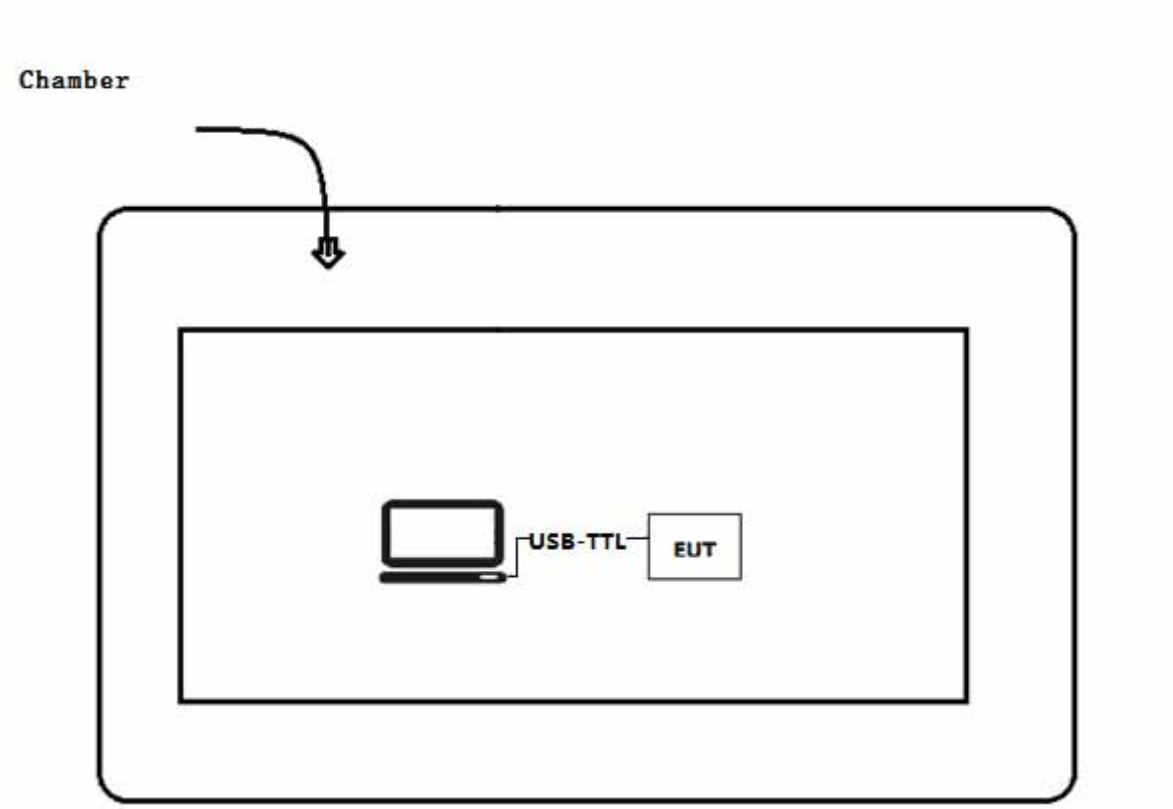
Test Mode For Bluetooth	Mode 1: Transmit by LE_1Mbps(GFSK_LE)
	Mode 2: Transmit by LE_2Mbps(GFSK_LE)
	Mode 3: Transmit by LE_Coded(S=2)(GFSK_LE)
	Mode 4: Transmit by LE_Coded(S=8)(GFSK_LE)
	Mode 5: Normal Operation

2.2 Auxiliary equipment / Test software for the EUT

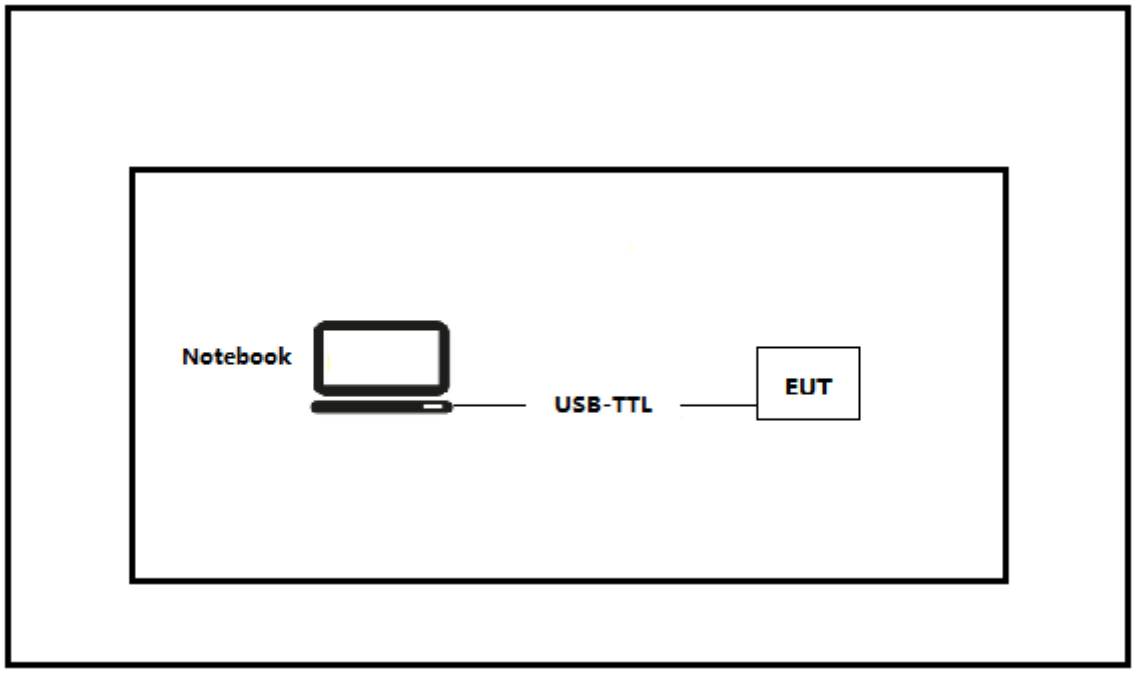
Auxiliary equipment	Type / Version	Manufacturer	Supplied by
Notebook	E470	Lenovo	N/A
software	Type / Version	Manufacturer	Supplied by
HueApprobationTool	1.1.00	Philips	N/A

2.3 Test Configuration / Block diagram used for tests

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Conducted test



2.4 Testing process

1	Setup the EUT as shown in Section 2.4.
2	Execute the nRFgo Studio on the EUT
3	Configure the test mode, the test channel, and the data rate.
4	Press “Start Test” to start the continuous Transmitter.
5	Verify that the EUT works properly.

3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

3.1 Standards

Standard	Year	Description
FCC CFR Title 47 Part 15 Subpart C Section 15.247	2019	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.
ANSI C63.10	2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
KDB 558074 D01 v05r02	2019	Guidance for performing compliance measurements on Digital Transmission System (DTS) operating under section 15.247
RSS-Gen Issue 5 Amendment 1	2019	General Requirements for Compliance of Radio Apparatus
RSS-247 Issue 2	2017	Digital Transmission Systems (DTSs),Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

3.2 Deviation(s) from the Standard(s) / Test Specification(s)

The following deviation(s) was / were made from the published requirements of the listed standards: N/A.

(Please define the deviations from the standard(s) if applicable)

3.3 Overview of results

For FCC

Requirement – Test case	Basic standard(s)	Verdict	Remark
AC Power Line Conducted Emission	FCC 15.207	PASS	---
Emissions in restricted frequency bands	FCC 15.247(b)(3)	PASS	---
Duty cycle	ANSI C63.10:2013	PASS	---
Emissions in non-restricted frequency bands	FCC 15.247(d), FCC 15.209	PASS	---
Radiated Emission Band Edge	FCC 15.247(d)	PASS	---
Fundamental emission output power	FCC 15.247(d), FCC 15.209	PASS	---
DTS Bandwidth	FCC 15.247(a)(2)	PASS	---
Power Spectral Density	FCC 15.247(e)	PASS	---
Antenna Requirement	FCC 15.203	PASS	---

For ISED

Requirement – Test case	Basic standard(s)	Verdict	Remark
AC Power Line Conducted Emission	RSS-Gen Issue 5 Section 8.8	PASS	---
Emissions in restricted frequency bands	RSS-Gen Issue 5 Section 8.9	PASS	---
Duty cycle	ANSI C63.10:2013	PASS	---
Emissions in non-restricted frequency bands	RSS-247 Issue 2 Section 5.5	PASS	---
Radiated Emission Band Edge	RSS-Gen Issue 5 Section 8.10	PASS	---
Fundamental emission output power	RSS-247 Issue 2 Section 5.4(d)	PASS	---
DTS Bandwidth	RSS-Gen Issue 5 Section 6.7	PASS	---
Power Spectral Density	RSS-247 Issue 2 Section 5.2(b)	PASS	---
Antenna Requirement	RSS-Gen Issue 5 Section 6.8	PASS	---

3.4 Test Facility

USA	**:**	**FCC Designation Number: CN1199**
CA	**:**	**ISED CAB identifier: CN0040**

4 TEST RESULTS

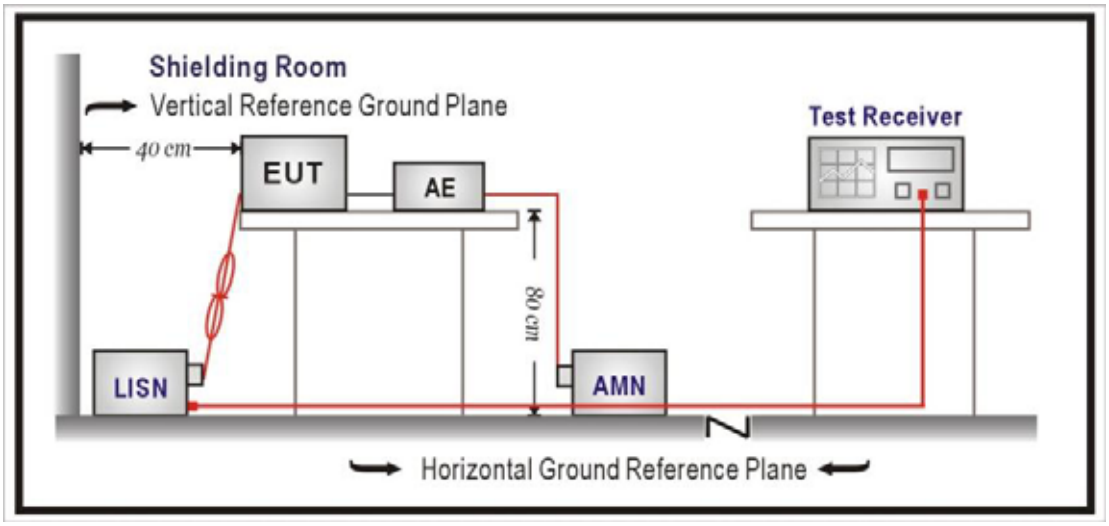
4.1 AC Power Line Conducted Emission	VERDICT: PASS

4.1.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.207	
Frequency range [MHz]	Limit: QP [dB(μV)[1)]]	Limit: AV [dB(μV) [1)]]
0,15 - 0,50	66 – 56 [2)]	56 - 46 [2)]
0,50 - 5,0	56	46
5,0 - 30	60	50

[1)] At the transition frequency, the lower limit applies.
[2)] The limit decreases linearly with the logarithm of the frequency.
NOTE 1: The exclusion band for transmitters shall be considered for transmitters operating at frequencies below 30 MHz.
NOTE 2: Where the AC output port is directly connected (or via a circuit breaker) to the AC power input port of the EUT the AC power output port need not to be tested.

4.1.2 Test Setup

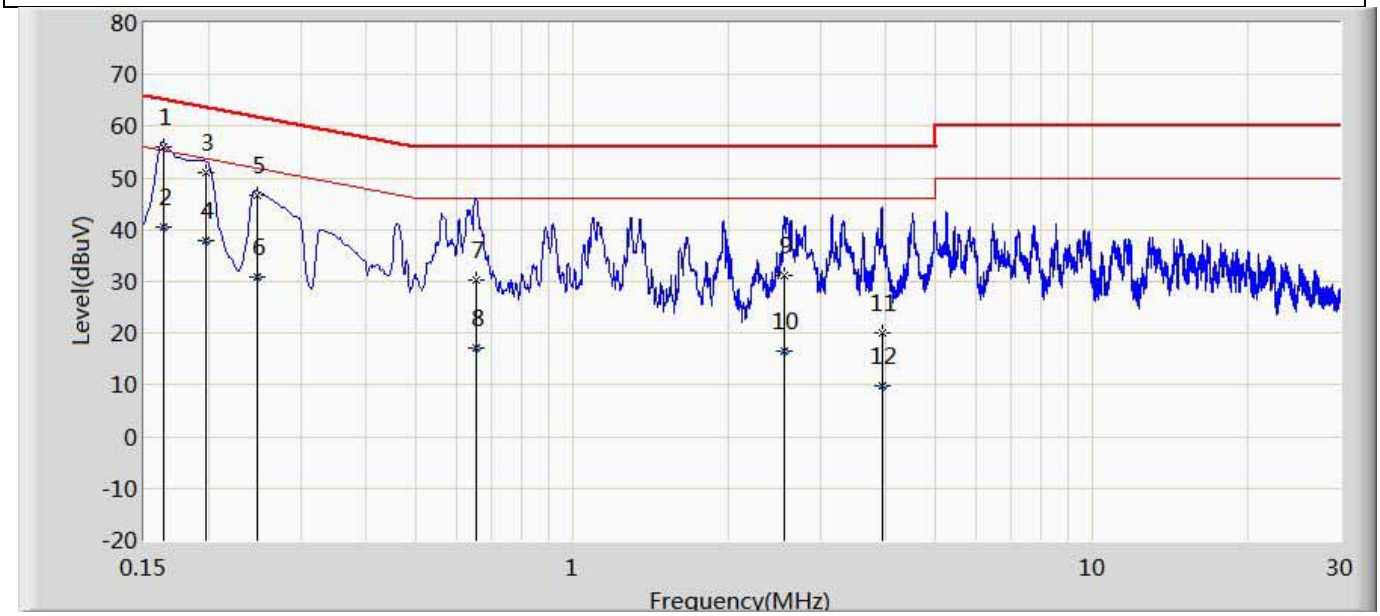


4.1.3 Test Procedure

	References Rule	Chapter	Item
☒	ANSI C63.10-2013	6.2	Standard test method for ac power-line conducted emissions from unlicensed wireless devices

4.1.4 Test Data

Engineer: lynee	
Site: TR1	Time: 2019/11/08
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101189(0.009-30MHz)	Polarity: Line
EUT: LED lamp (Murata)	Power: AC 120V/60Hz
Note: Mode 1	

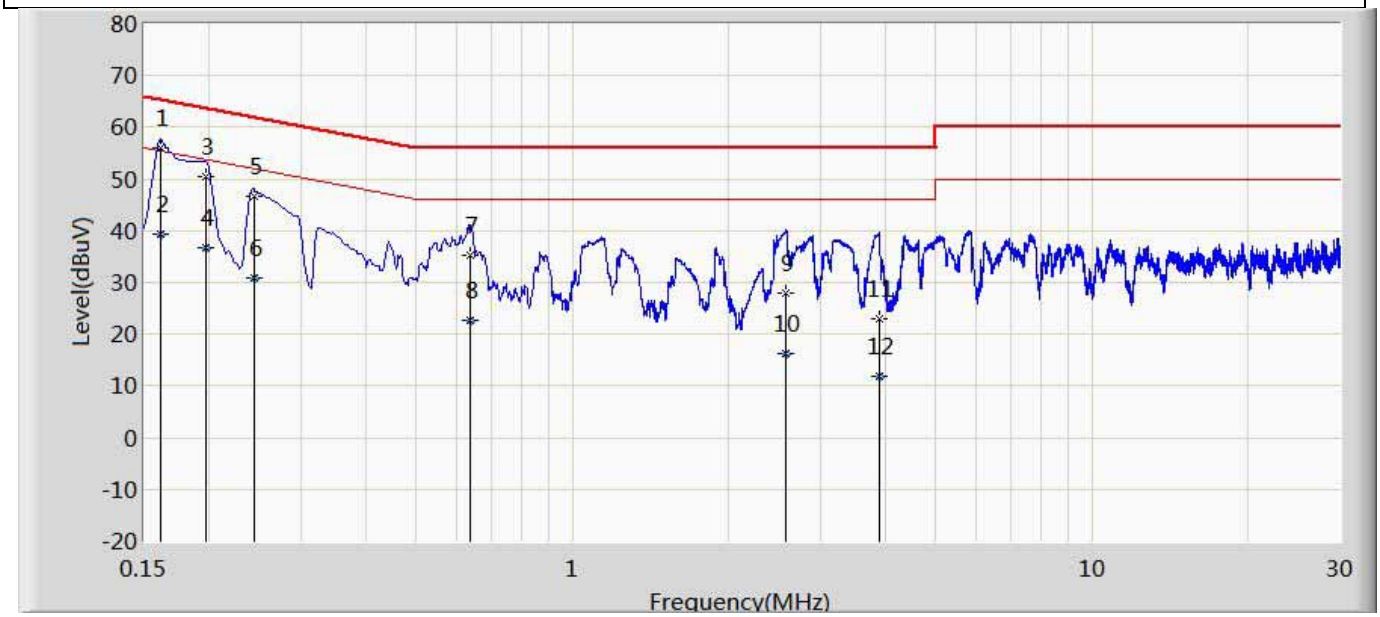


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1	*	0.164	56.077	46.195	-9.182	65.259	9.853	0.029	0.000	QP
2		0.164	40.455	30.573	-14.804	55.259	9.853	0.029	0.000	AV
3		0.197	50.916	41.028	-12.810	63.726	9.859	0.029	0.000	QP
4		0.197	37.857	27.969	-15.869	53.726	9.859	0.029	0.000	AV
5		0.247	46.603	36.711	-15.263	61.866	9.862	0.031	0.000	QP
6		0.247	30.863	20.970	-21.003	51.866	9.862	0.031	0.000	AV
7		0.655	30.405	20.480	-25.595	56.000	9.878	0.048	0.000	QP
8		0.655	17.260	7.334	-28.740	46.000	9.878	0.048	0.000	AV
9		2.558	31.285	21.388	-24.715	56.000	9.797	0.100	0.000	QP
10		2.558	16.441	6.543	-29.559	46.000	9.797	0.100	0.000	AV
11		3.939	20.031	10.140	-35.969	56.000	9.765	0.126	0.000	QP
12		3.939	9.751	-0.140	-36.249	46.000	9.765	0.126	0.000	AV

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: lynee	
Site: TR1	Time: 2019/11/08
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101189(0.009-30MHz)	Polarity: Neutral
EUT: LED lamp(Murata)	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1	*	0.161	56.065	46.194	-9.334	65.399	9.842	0.029	0.000	QP
2		0.161	39.386	29.515	-16.014	55.399	9.842	0.029	0.000	AV
3		0.197	50.388	40.511	-13.337	63.726	9.849	0.029	0.000	QP
4		0.197	36.798	26.920	-16.928	53.726	9.849	0.029	0.000	AV
5		0.244	46.793	36.911	-15.149	61.942	9.852	0.030	0.000	QP
6		0.244	30.828	20.946	-21.114	51.942	9.852	0.030	0.000	AV
7		0.636	35.257	25.341	-20.743	56.000	9.868	0.048	0.000	QP
8		0.636	22.640	12.724	-23.360	46.000	9.868	0.048	0.000	AV
9		2.580	27.933	18.185	-28.067	56.000	9.648	0.100	0.000	QP
10		2.580	16.185	6.437	-29.815	46.000	9.648	0.100	0.000	AV
11		3.889	22.946	13.156	-33.054	56.000	9.665	0.125	0.000	QP
12		3.889	11.917	2.127	-34.083	46.000	9.665	0.125	0.000	AV

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).

4.2 Emissions in restricted frequency bands — VERDICT: PASS

4.2.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.207

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			

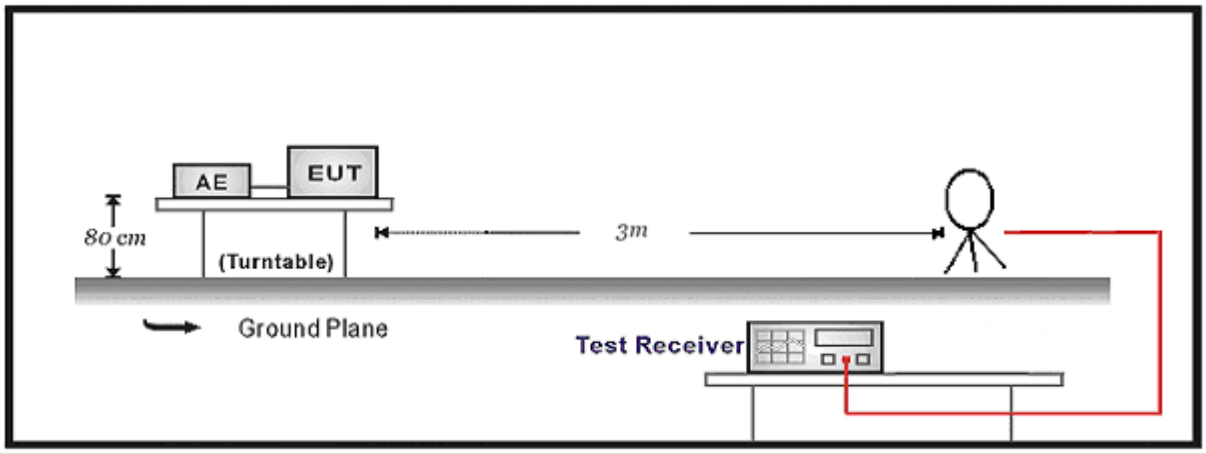
Restricted Band Emissions Limit			
Frequency (MHz)	Field strength (μ V/m)	Field strength (dB μ V/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30(Note 1)
1.705 - 30	30	29.5	30(Note 1)
30 - 88	100	40	3(Note 2)
88 - 216	150	43.5	3(Note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

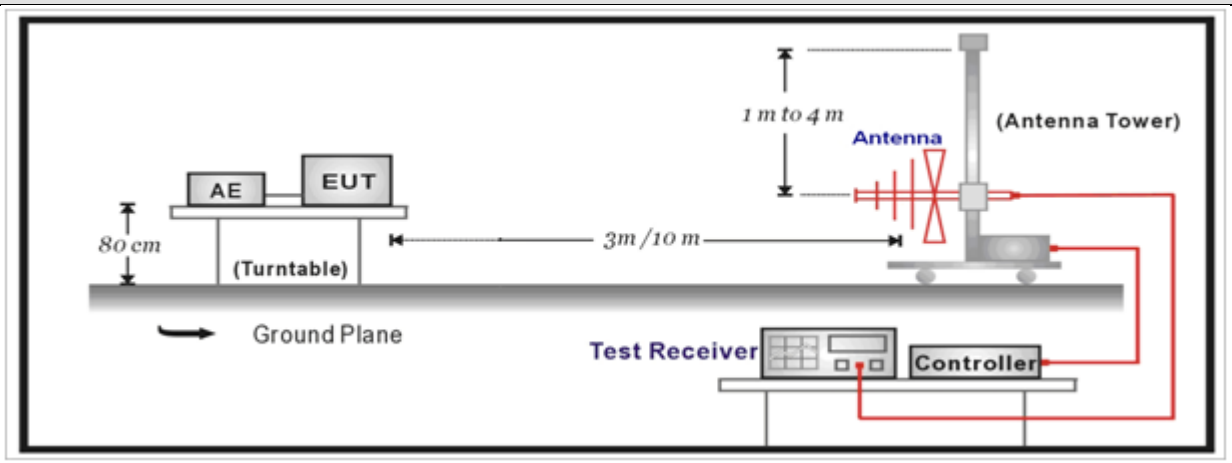
Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated 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).

4.2.2 Test Setup

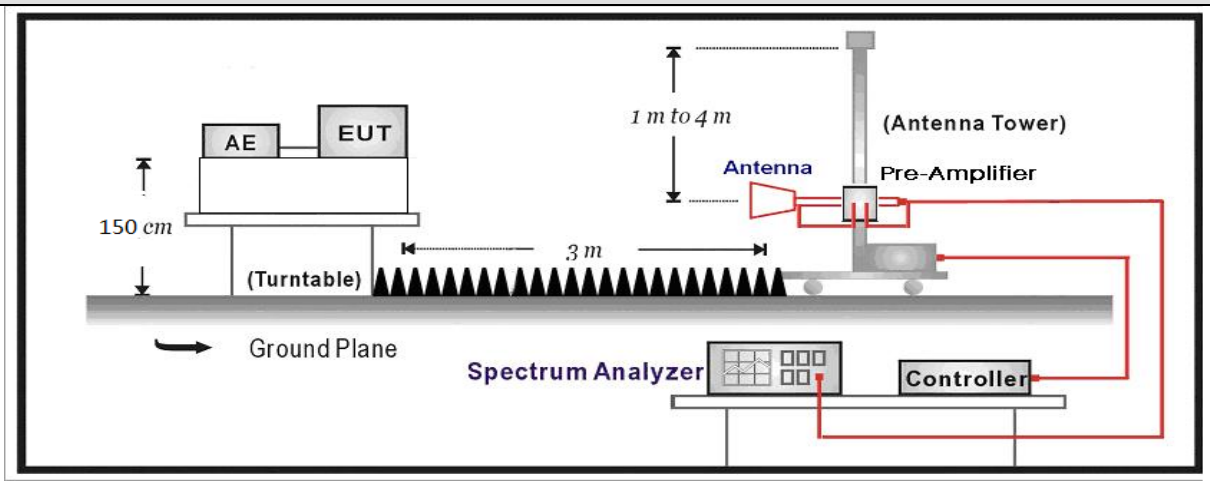
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



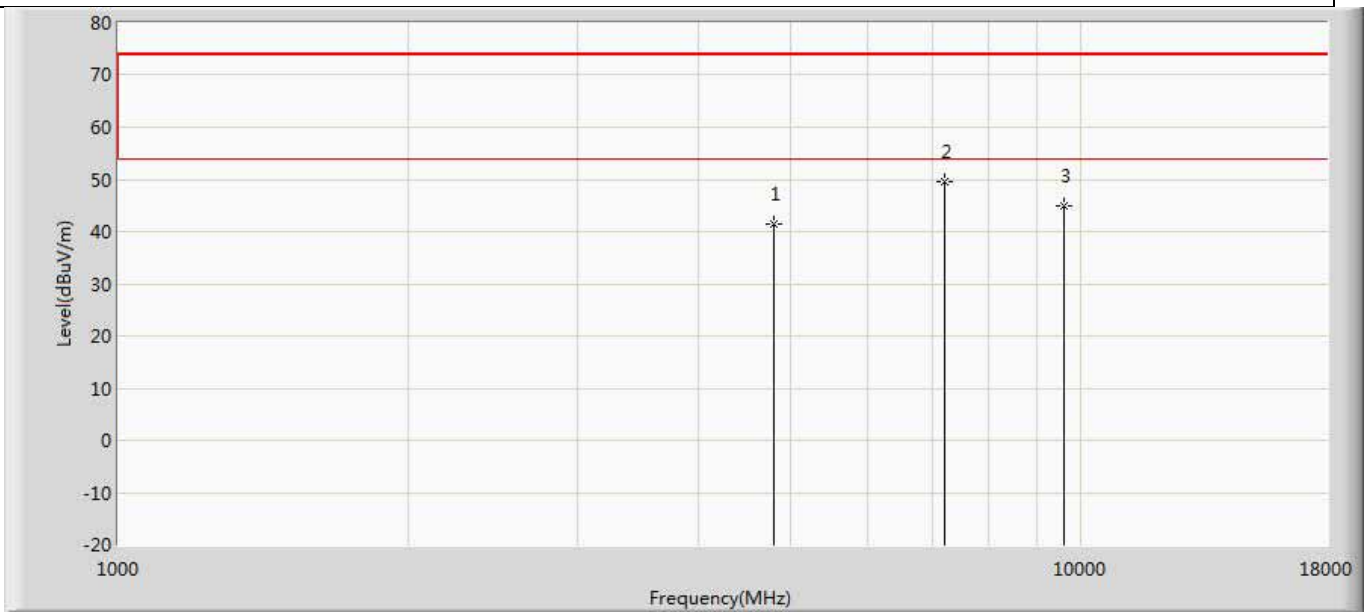
4.2.3 Test Procedure

	References Rule		Chapter	Description
☒	ANSI C63.10		11.12	Emissions in restricted frequency bands
	☒	ANSI C63.10	11.12.1	Radiated emission measurements
	☒	ANSI C63.10	11.12.2.7	Radiated spurious emission test
		☒ ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
		☒ ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
		☒ ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

4.2.4 Test Data

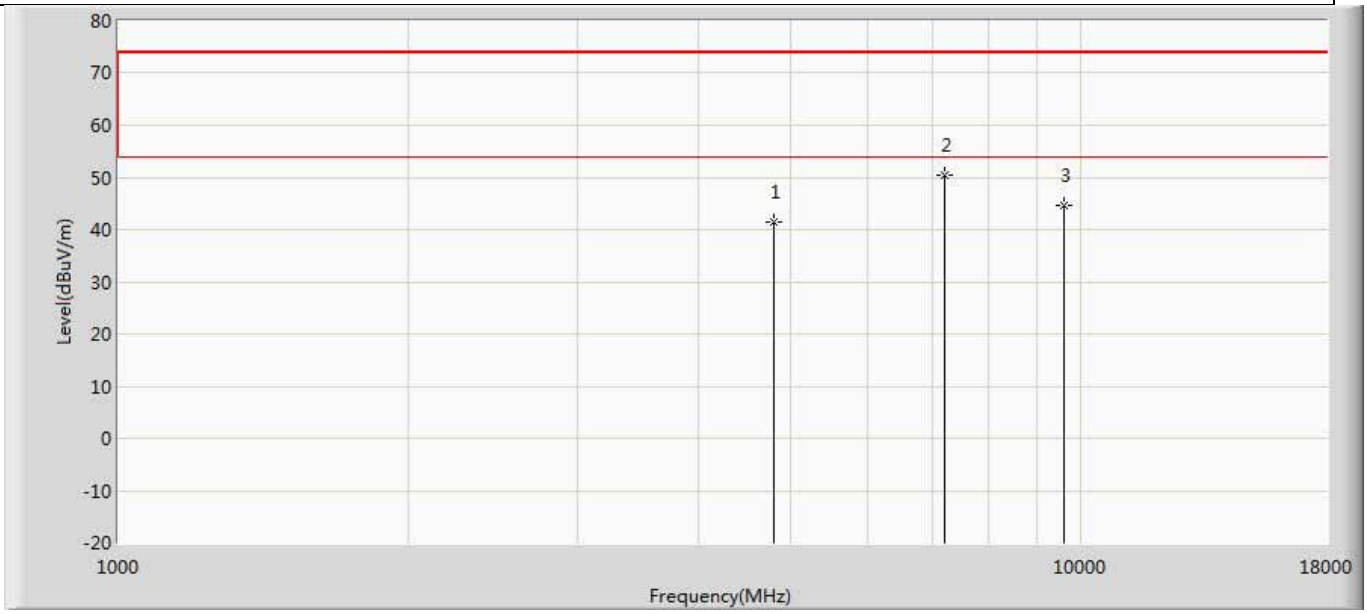
Murata:

Profile: 19A2158R	Page No.: 57
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:41
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 BLE	



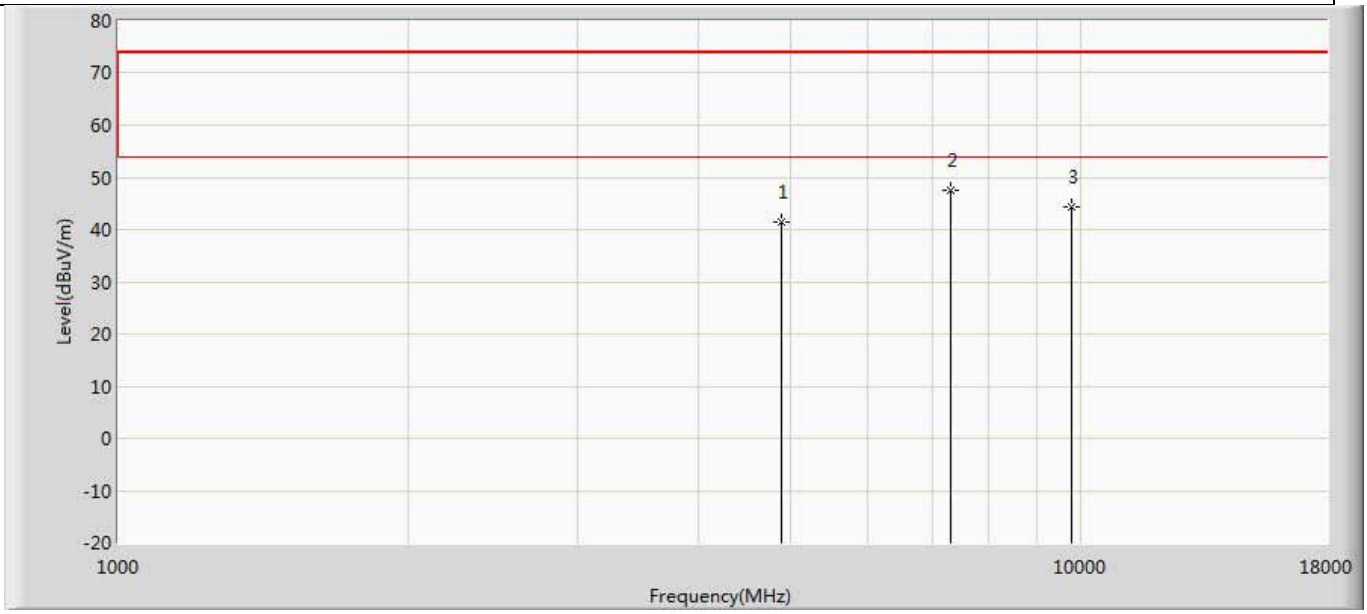
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.547	36.916	-32.453	74.000	4.631	PK
2	*	7205.000	49.532	41.509	-24.468	74.000	8.023	PK
3		9608.000	44.914	35.597	-29.086	74.000	9.318	PK

Profile: 19A2158R	Page No.: 58
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by BLE	



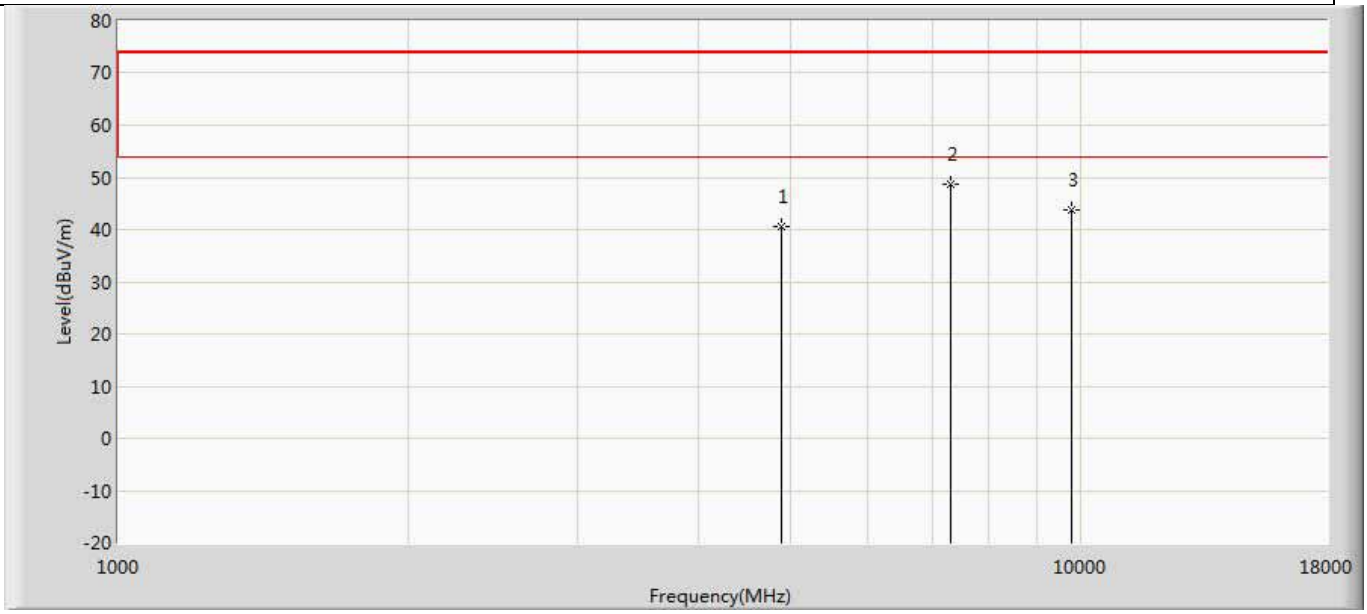
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.427	36.796	-32.573	74.000	4.631	PK
2	*	7205.000	50.542	42.519	-23.458	74.000	8.023	PK
3		9608.000	44.695	35.378	-29.305	74.000	9.318	PK

Profile: 19A2158R	Page No.: 65
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:43
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 2440MHz by BLE	



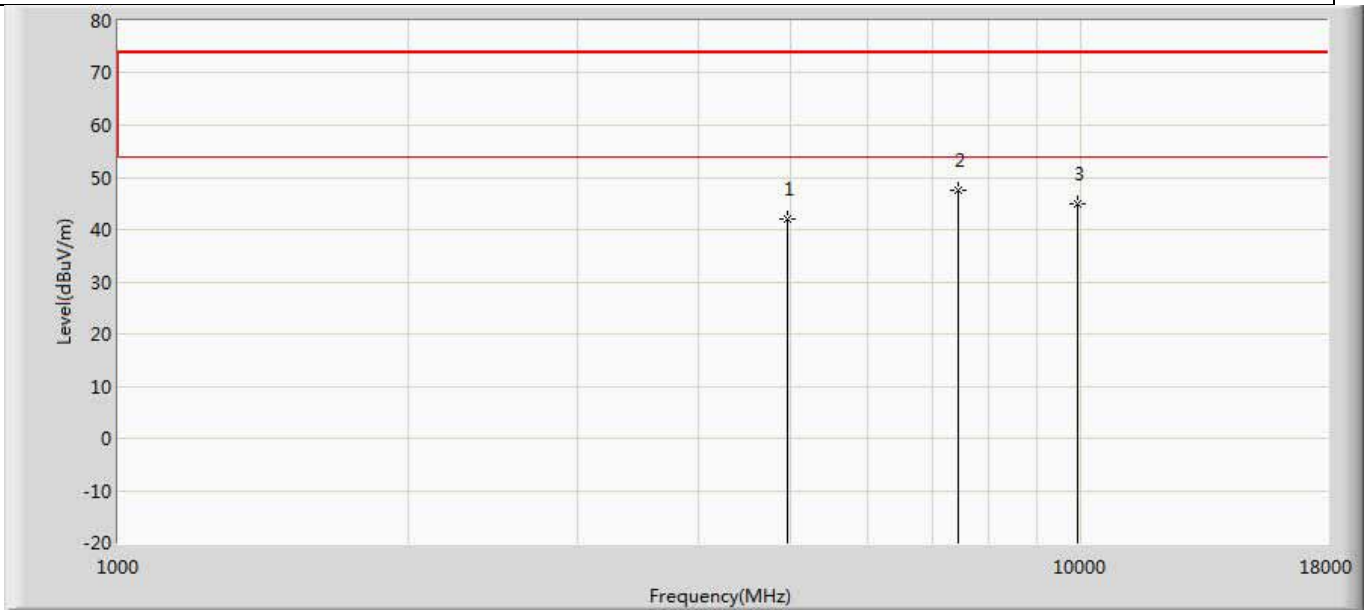
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.454	36.675	-32.546	74.000	4.778	PK
2	*	7324.000	47.644	39.539	-26.356	74.000	8.105	PK
3		9760.000	44.460	34.556	-29.540	74.000	9.904	PK

Profile: 19A2158R	Page No.: 66
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by BLE	



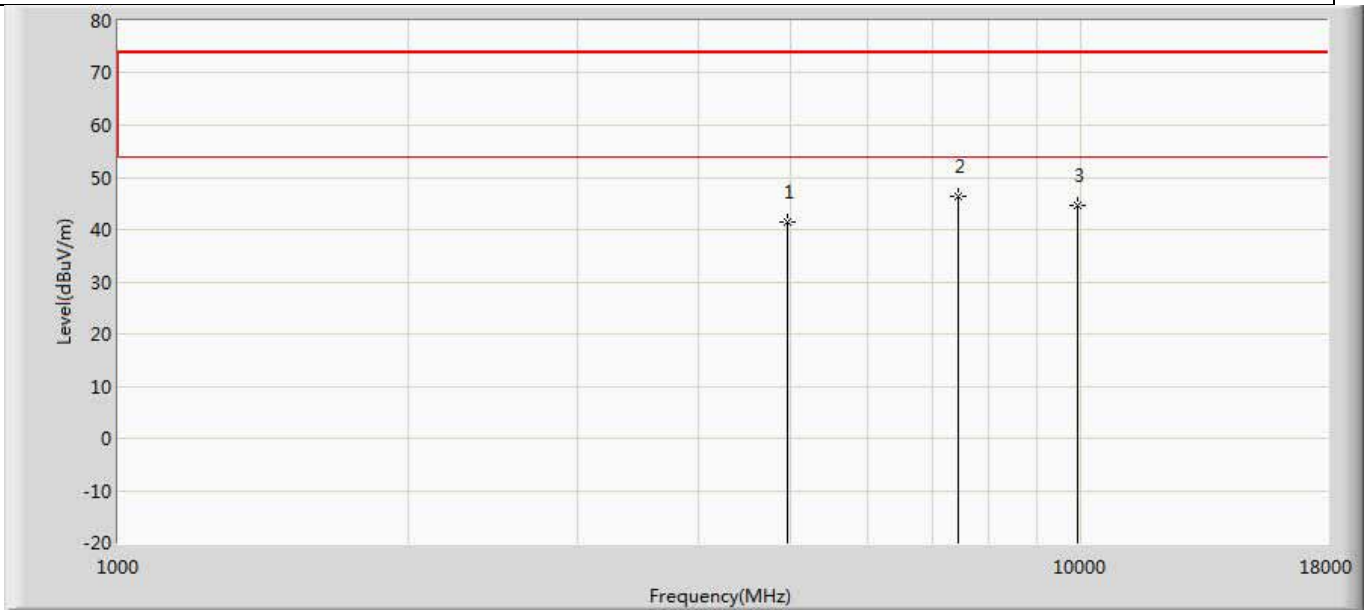
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	40.520	35.741	-33.480	74.000	4.778	PK
2	*	7324.000	48.676	40.571	-25.324	74.000	8.105	PK
3		9760.000	43.694	33.790	-30.306	74.000	9.904	PK

Profile: 19A2158R	Page No.: 73
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:43
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 BLE	



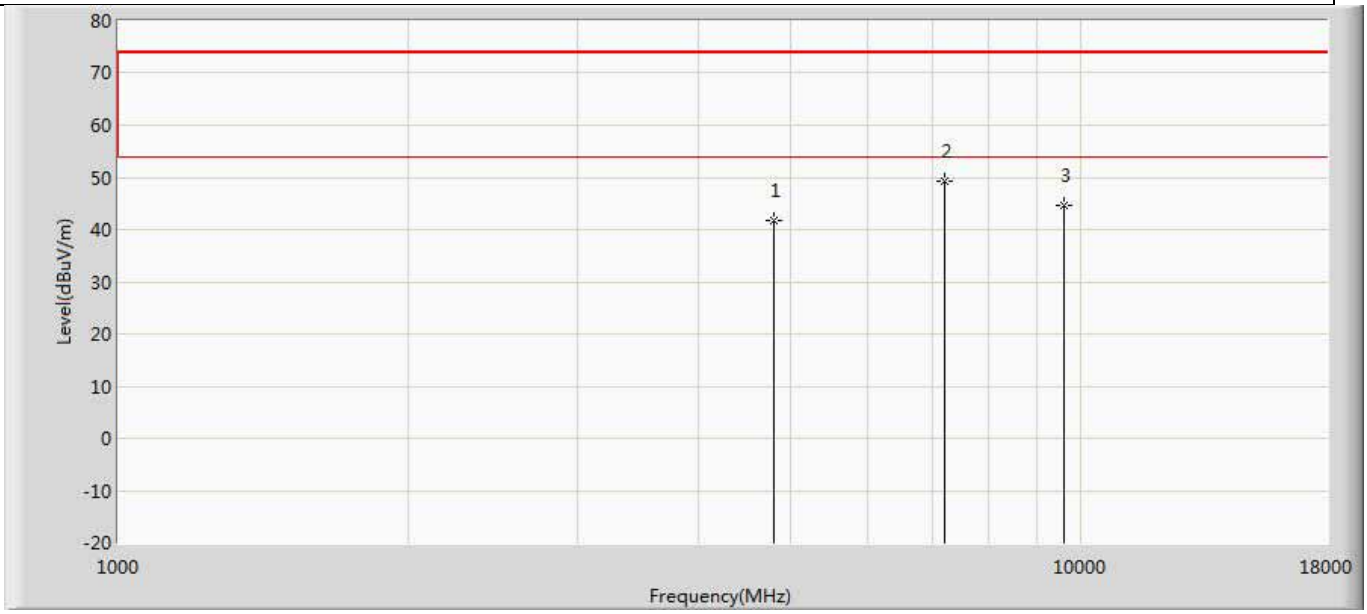
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.134	37.349	-31.866	74.000	4.784	PK
2	*	7443.000	47.417	39.326	-26.583	74.000	8.090	PK
3		9920.000	44.816	34.921	-29.184	74.000	9.894	PK

Profile: 19A2158R	Page No.: 74
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:44
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 BLE	



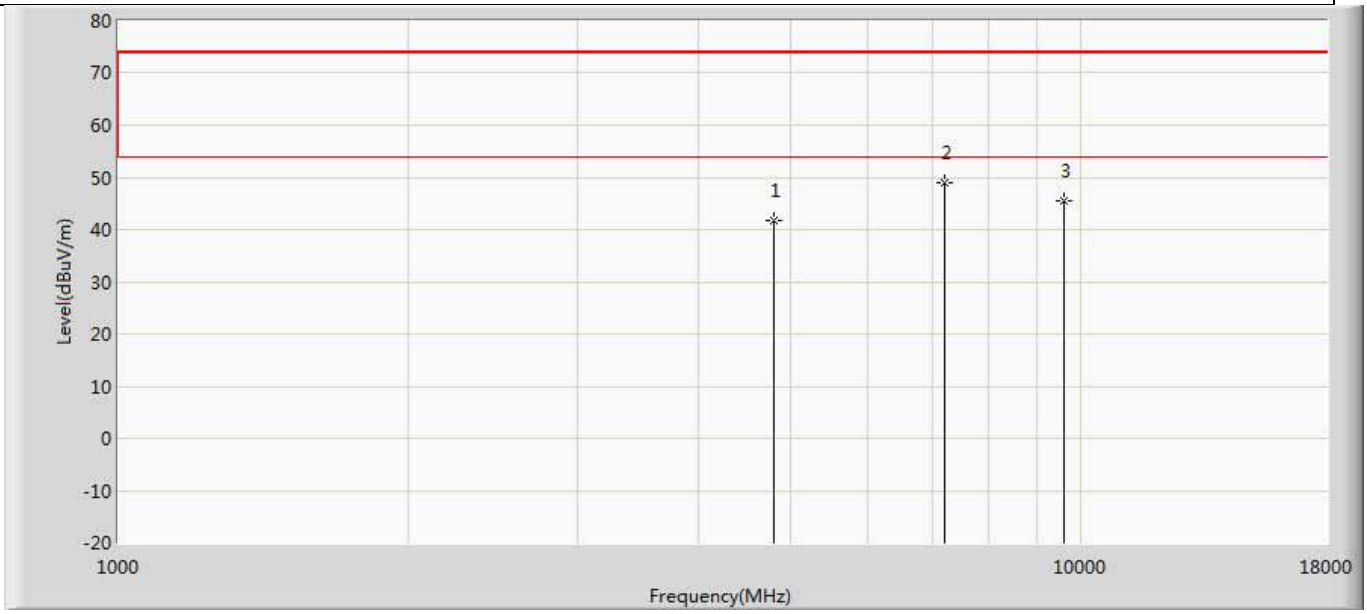
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.547	36.762	-32.453	74.000	4.784	PK
2	*	7443.000	46.315	38.224	-27.685	74.000	8.090	PK
3		9920.000	44.702	34.807	-29.298	74.000	9.894	PK

Profile: 19A2158R	Page No.: 59
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



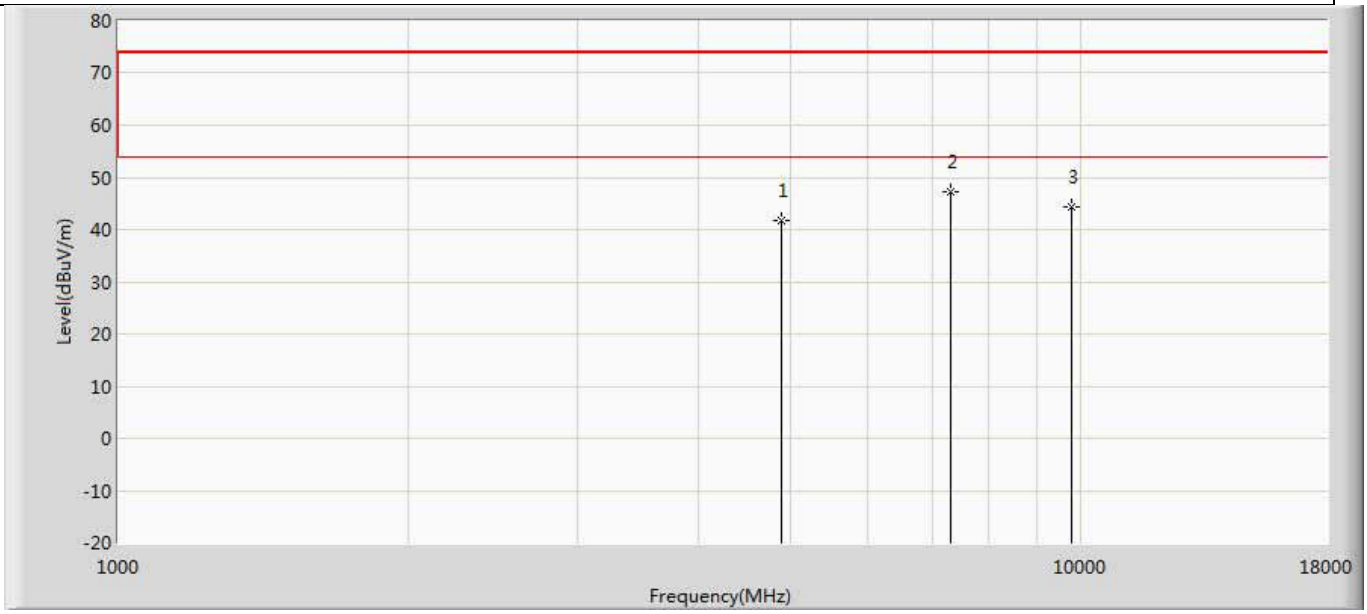
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.605	36.974	-32.395	74.000	4.631	PK
2	*	7205.000	49.192	41.169	-24.808	74.000	8.023	PK
3		9608.000	44.762	35.445	-29.238	74.000	9.318	PK

Profile: 19A2158R	Page No.: 60
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



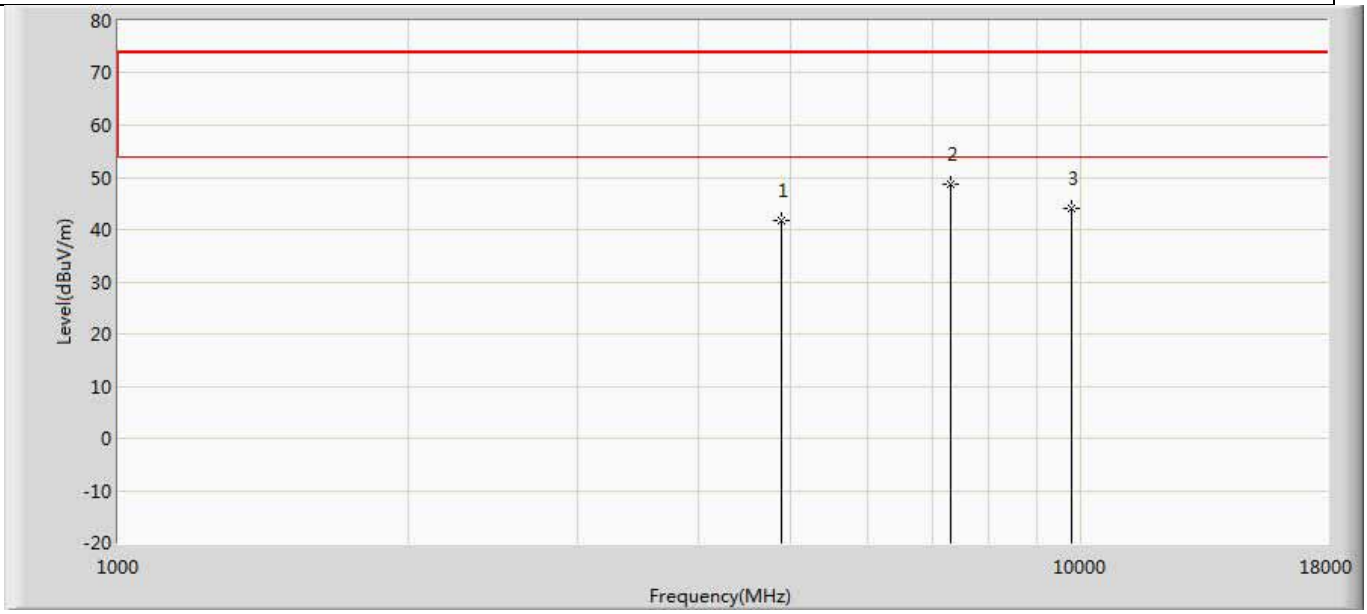
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.668	37.037	-32.332	74.000	4.631	PK
2	*	7205.000	49.053	41.030	-24.947	74.000	8.023	PK
3		9608.000	45.368	36.051	-28.632	74.000	9.318	PK

Profile: 19A2158R	Page No.: 67
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:43
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 2440MHz by 2LE	



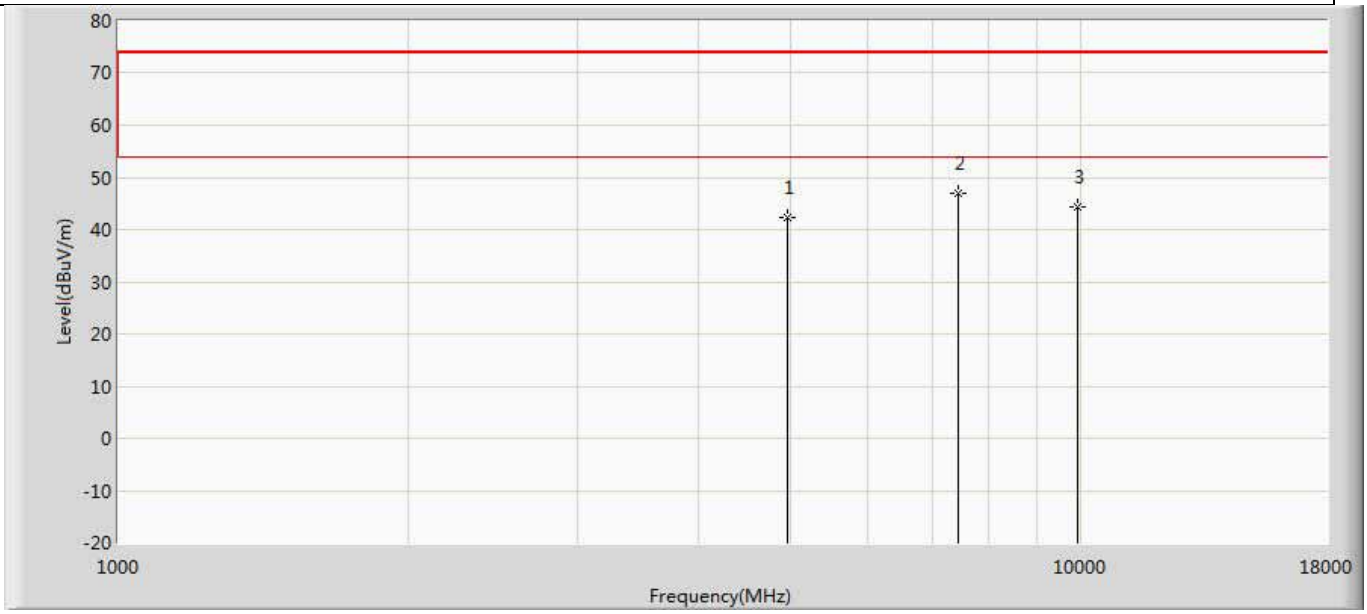
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.674	36.895	-32.326	74.000	4.778	PK
2	*	7324.000	47.326	39.221	-26.674	74.000	8.105	PK
3		9760.000	44.299	34.395	-29.701	74.000	9.904	PK

Profile: 19A2158R	Page No.: 68
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by 2LE	



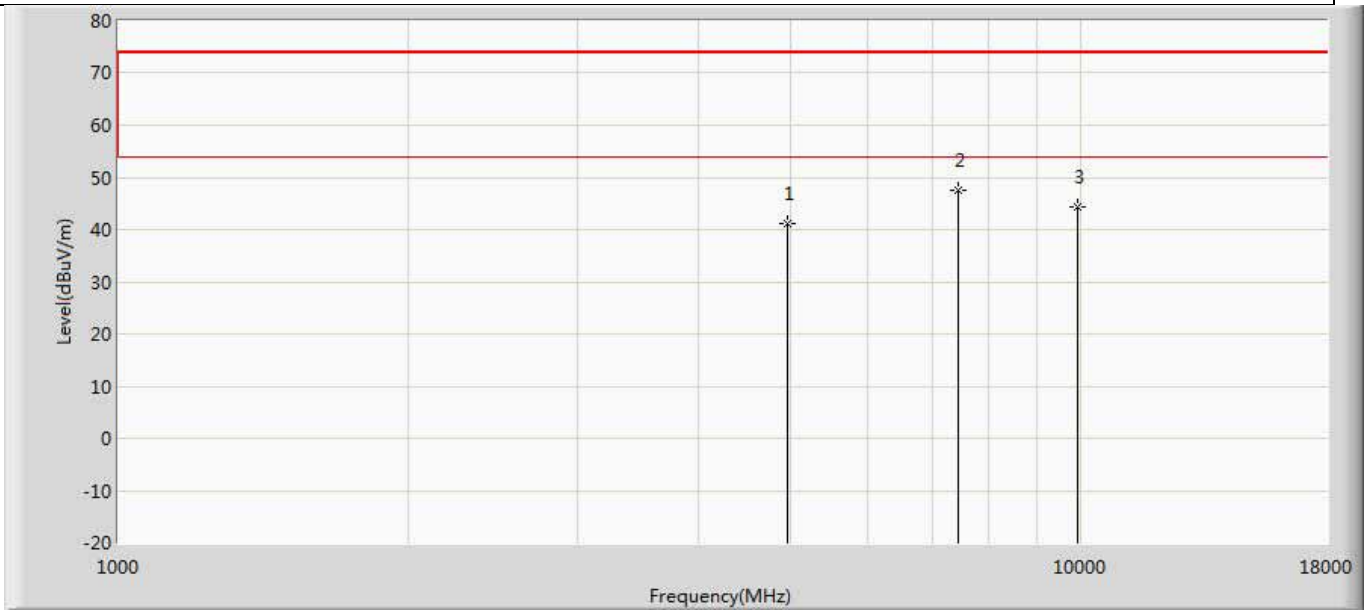
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.722	36.943	-32.278	74.000	4.778	PK
2	*	7324.000	48.586	40.481	-25.414	74.000	8.105	PK
3		9760.000	44.173	34.269	-29.827	74.000	9.904	PK

Profile: 19A2158R	Page No.: 75
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



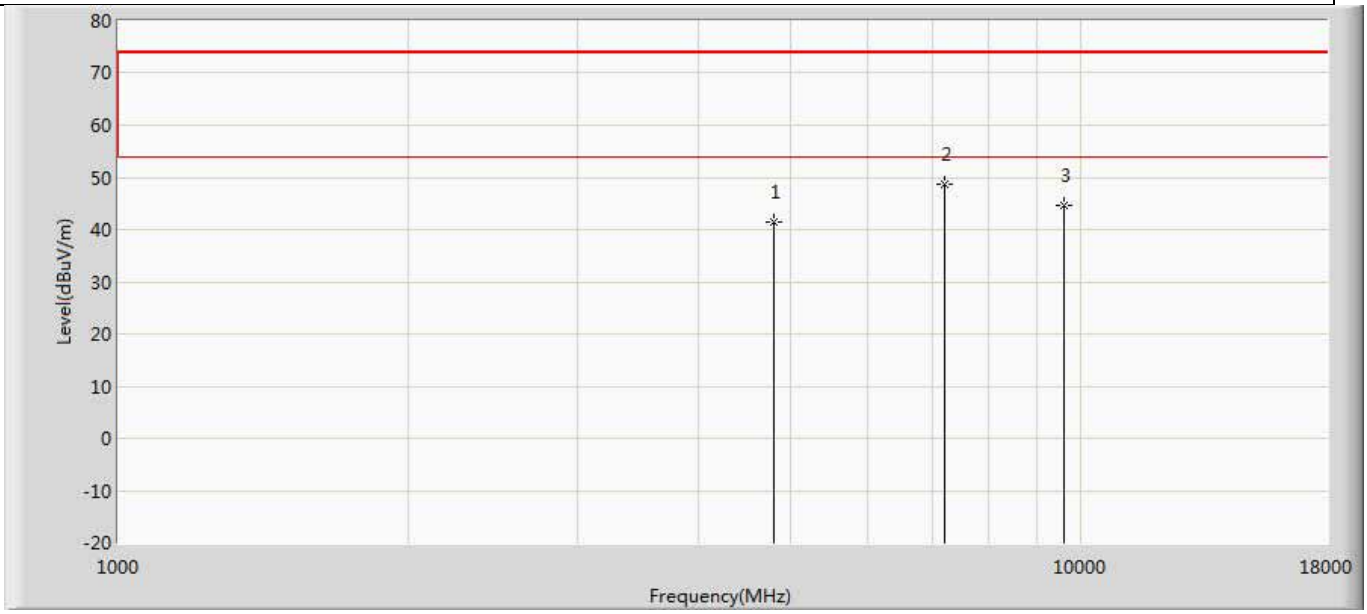
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.413	37.628	-31.587	74.000	4.784	PK
2	*	7443.000	46.871	38.780	-27.129	74.000	8.090	PK
3		9920.000	44.484	34.589	-29.516	74.000	9.894	PK

Profile: 19A2158R	Page No.: 76
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:44
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 2:Transmit at 2480MHz by 2LE	



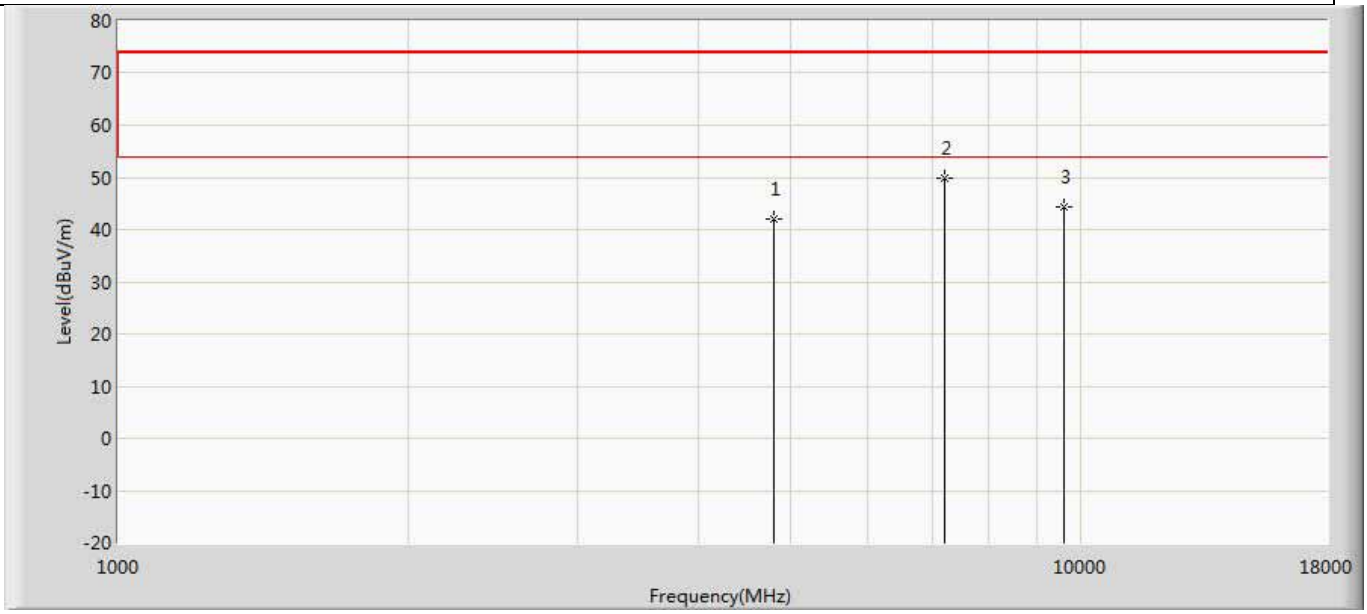
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.069	36.284	-32.931	74.000	4.784	PK
2	*	7443.000	47.540	39.449	-26.460	74.000	8.090	PK
3		9920.000	44.230	34.335	-29.770	74.000	9.894	PK

Profile: 19A2158R	Page No.: 63
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:42
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 code2	



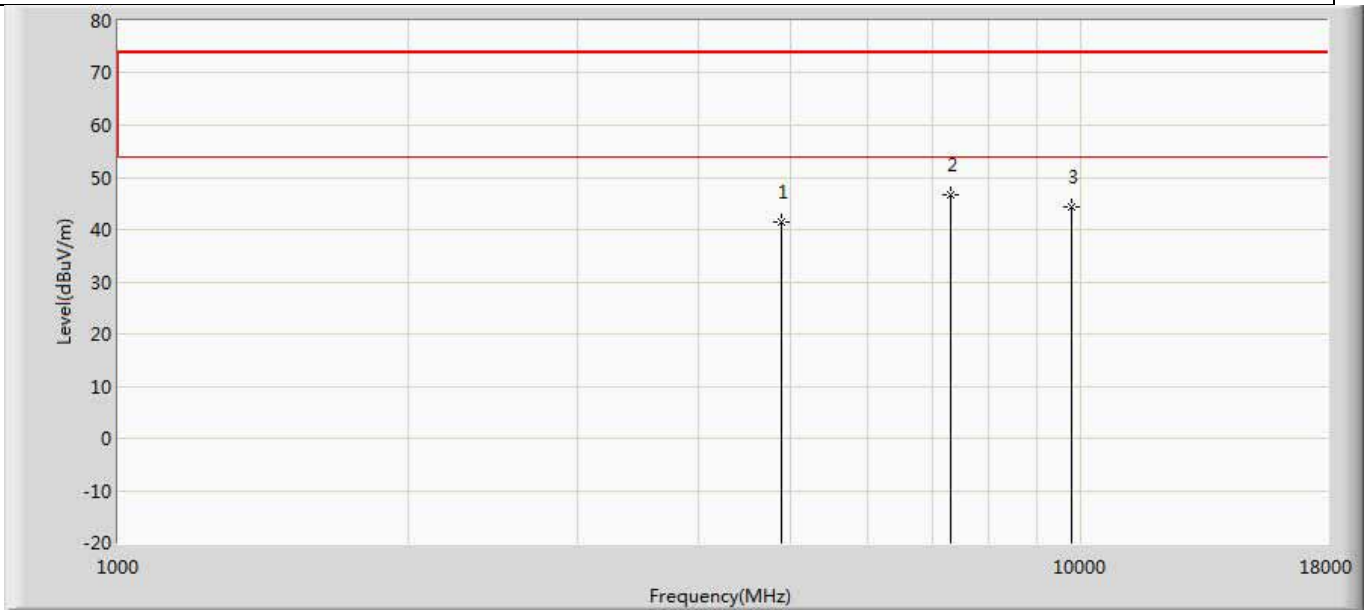
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.400	36.769	-32.600	74.000	4.631	PK
2	*	7205.000	48.689	40.666	-25.311	74.000	8.023	PK
3		9608.000	44.750	35.433	-29.250	74.000	9.318	PK

Profile: 19A2158R	Page No.: 64
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:42
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 code2	



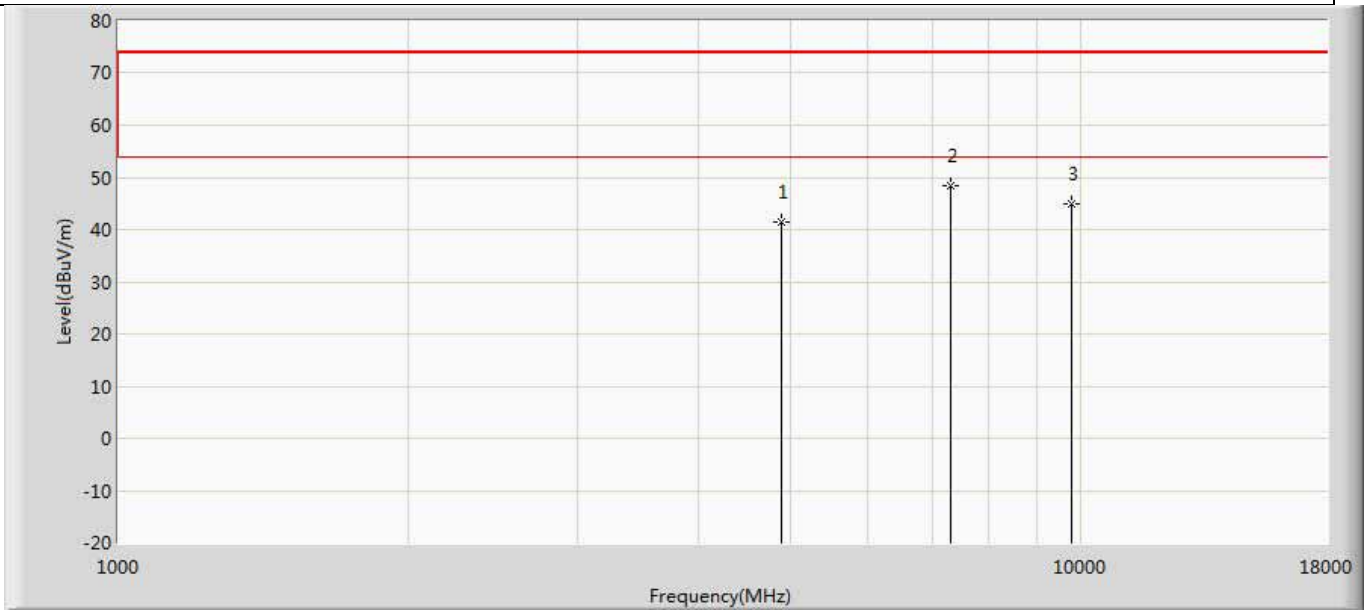
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.907	37.276	-32.093	74.000	4.631	PK
2	*	7205.000	49.784	41.761	-24.216	74.000	8.023	PK
3		9608.000	44.254	34.937	-29.746	74.000	9.318	PK

Profile: 19A2158R	Page No.: 71
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:43
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 2440MHz by code2	



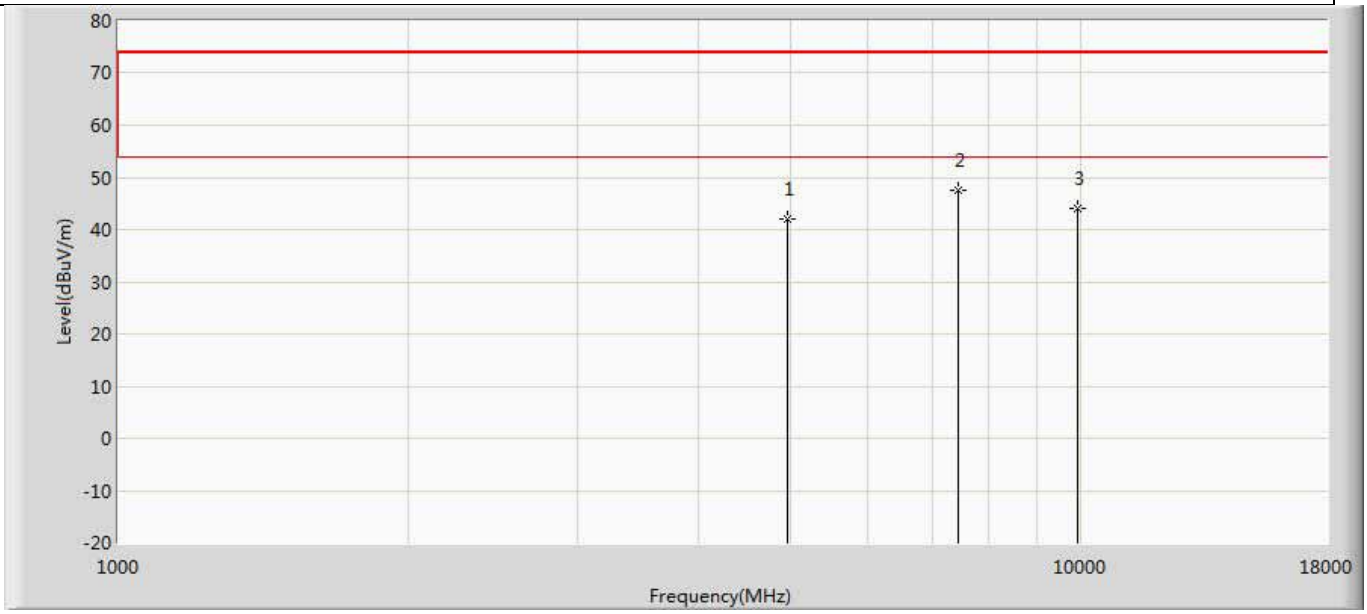
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.594	36.815	-32.406	74.000	4.778	PK
2	*	7315.500	46.665	38.635	-27.335	74.000	8.031	PK
3		9760.000	44.261	34.357	-29.739	74.000	9.904	PK

Profile: 19A2158R	Page No.: 72
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2440MHz by code2	



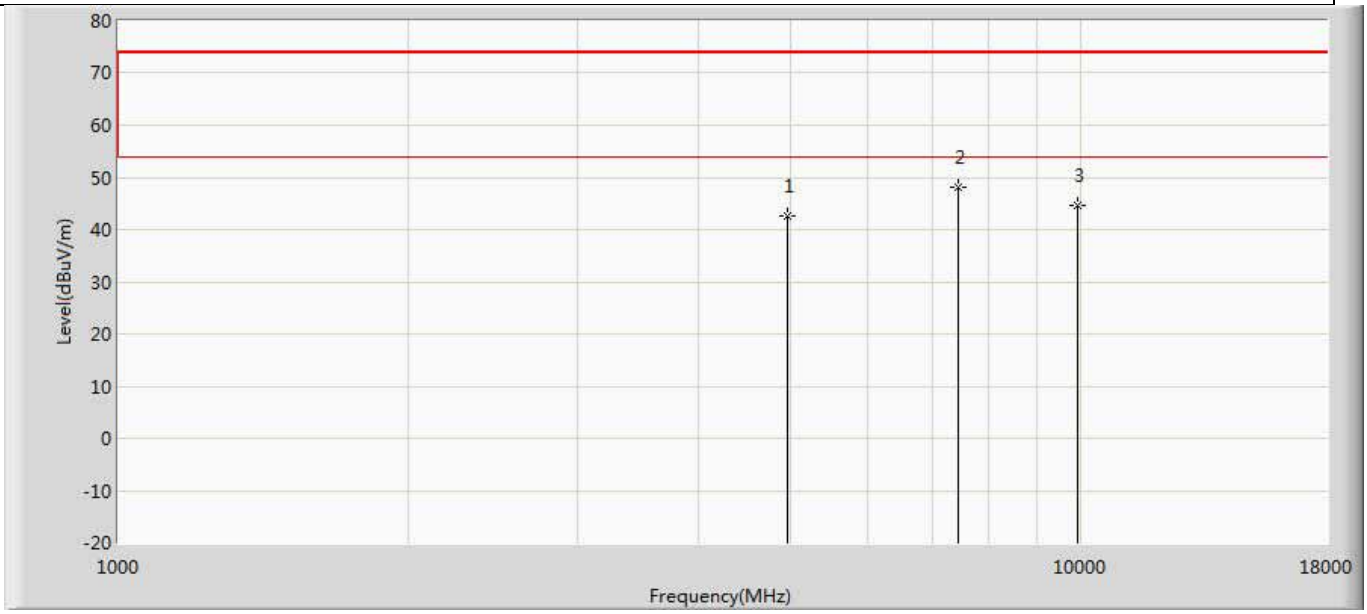
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.318	36.539	-32.682	74.000	4.778	PK
2	*	7315.500	48.547	40.517	-25.453	74.000	8.031	PK
3		9760.000	44.998	35.094	-29.002	74.000	9.904	PK

Profile: 19A2158R	Page No.: 79
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by code2	



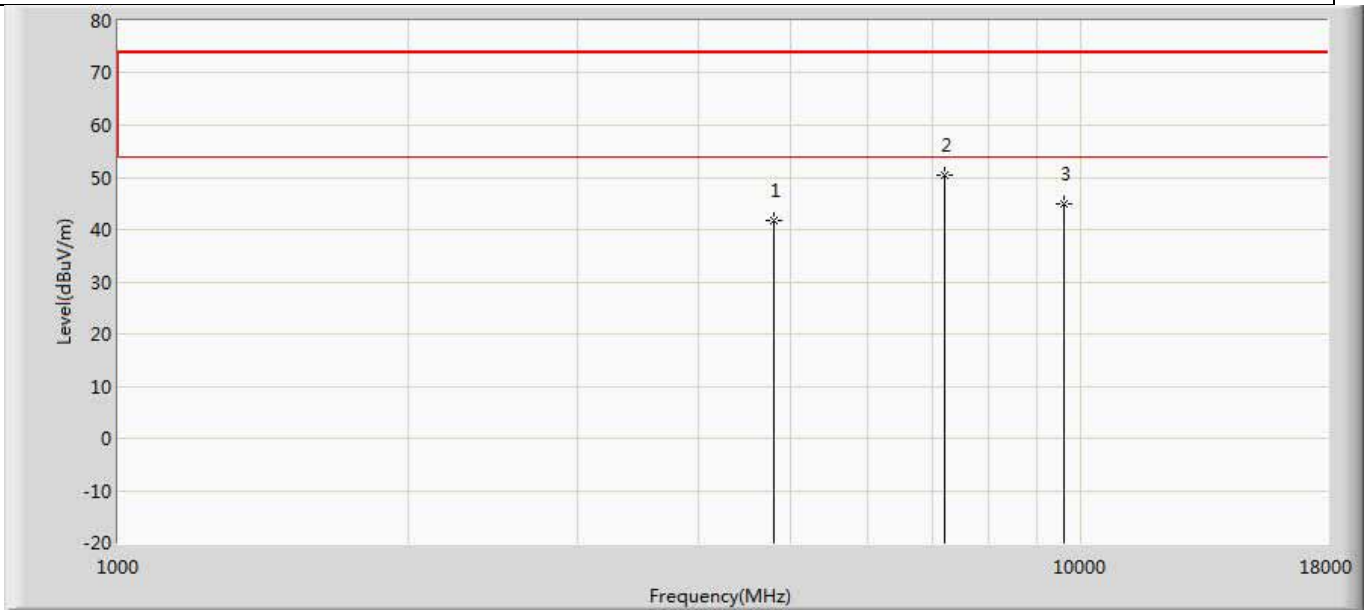
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.932	37.147	-32.068	74.000	4.784	PK
2	*	7443.000	47.599	39.508	-26.401	74.000	8.090	PK
3		9920.000	44.184	34.289	-29.816	74.000	9.894	PK

Profile: 19A2158R	Page No.: 80
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by code2	



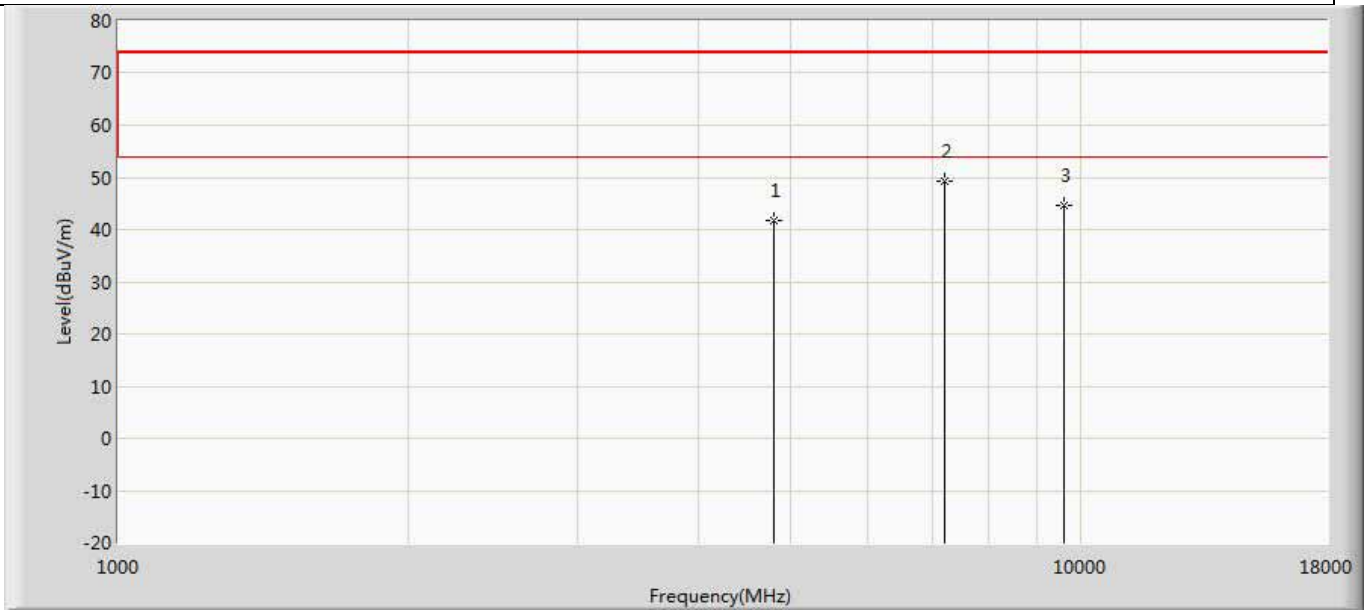
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.567	37.782	-31.433	74.000	4.784	PK
2	*	7443.000	48.206	40.115	-25.794	74.000	8.090	PK
3		9920.000	44.512	34.617	-29.488	74.000	9.894	PK

Profile: 19A2158R	Page No.: 61
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:41
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 4:Transmit at 2402MHz by code8	



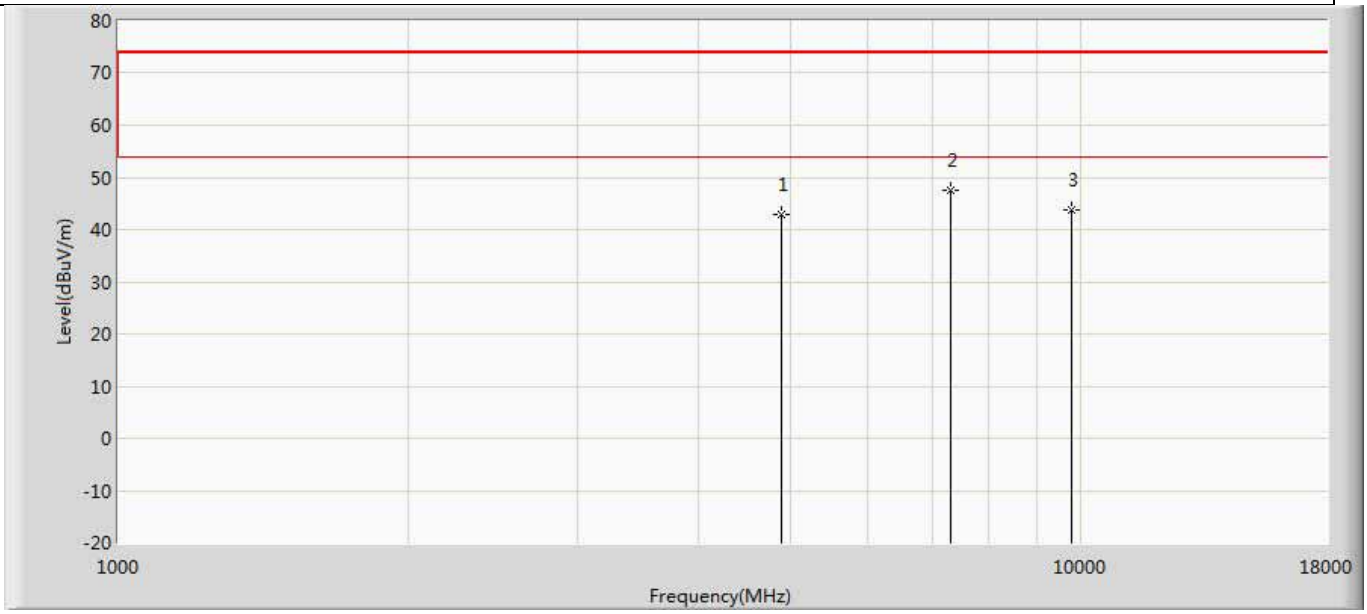
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.833	37.202	-32.167	74.000	4.631	PK
2	*	7205.000	50.503	42.480	-23.497	74.000	8.023	PK
3		9608.000	45.049	35.732	-28.951	74.000	9.318	PK

Profile: 19A2158R	Page No.: 62
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:42
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 code8	



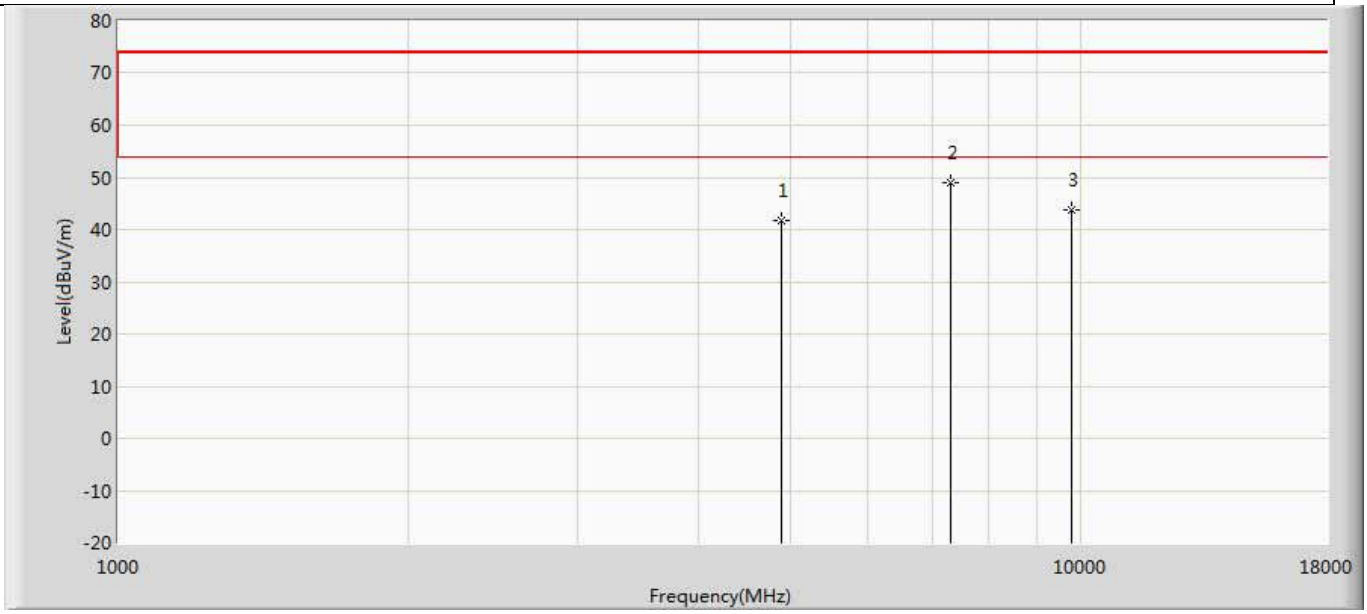
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.788	37.157	-32.212	74.000	4.631	PK
2	*	7205.000	49.179	41.156	-24.821	74.000	8.023	PK
3		9608.000	44.511	35.194	-29.489	74.000	9.318	PK

Profile: 19A2158R	Page No.: 69
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:43
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 code8	



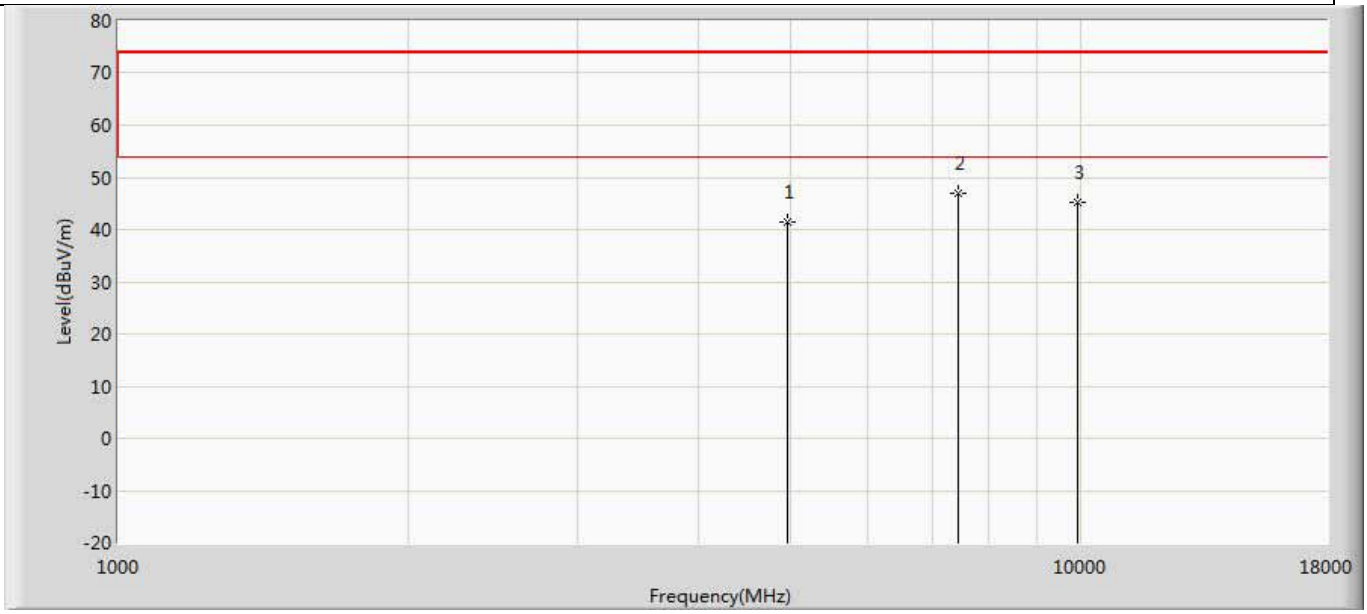
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.998	38.219	-31.002	74.000	4.778	PK
2	*	7324.000	47.397	39.292	-26.603	74.000	8.105	PK
3		9760.000	43.828	33.924	-30.172	74.000	9.904	PK

Profile: 19A2158R	Page No.: 70
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2440MHz by code8	



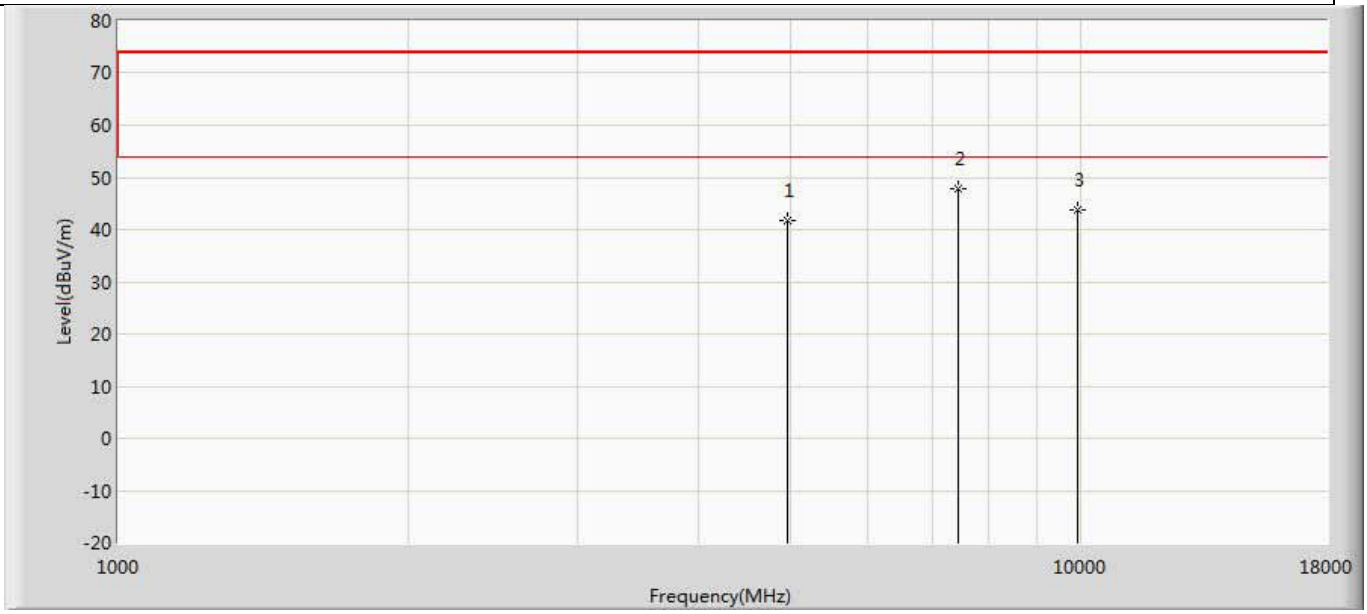
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.770	36.991	-32.230	74.000	4.778	PK
2	*	7324.000	48.861	40.756	-25.139	74.000	8.105	PK
3		9760.000	43.858	33.954	-30.142	74.000	9.904	PK

Profile: 19A2158R	Page No.: 77
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by code8	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.400	36.615	-32.600	74.000	4.784	PK
2	*	7443.000	46.959	38.868	-27.041	74.000	8.090	PK
3		9920.000	45.254	35.359	-28.746	74.000	9.894	PK

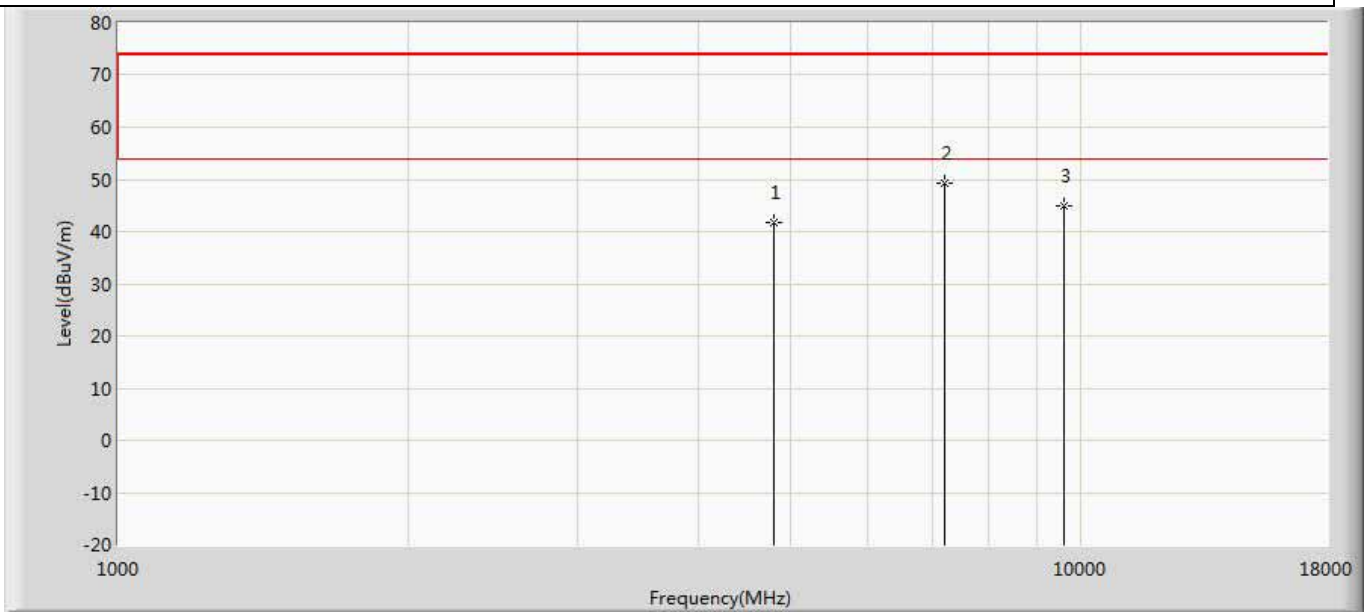
Profile: 19A2158R	Page No.: 78
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 10:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by code8	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.730	36.945	-32.270	74.000	4.784	PK
2	*	7443.000	47.685	39.594	-26.315	74.000	8.090	PK
3		9920.000	43.640	33.745	-30.360	74.000	9.894	PK

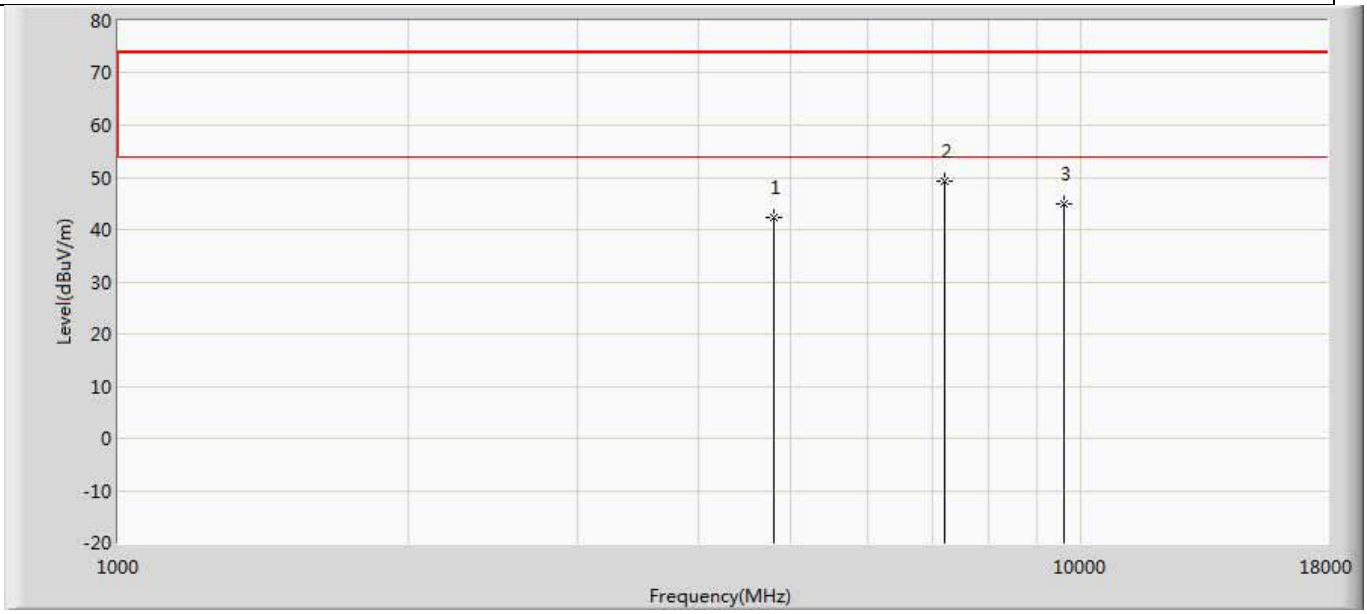
KDS:

Profile: 19A2158R	Page No.: 57
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by BLE	



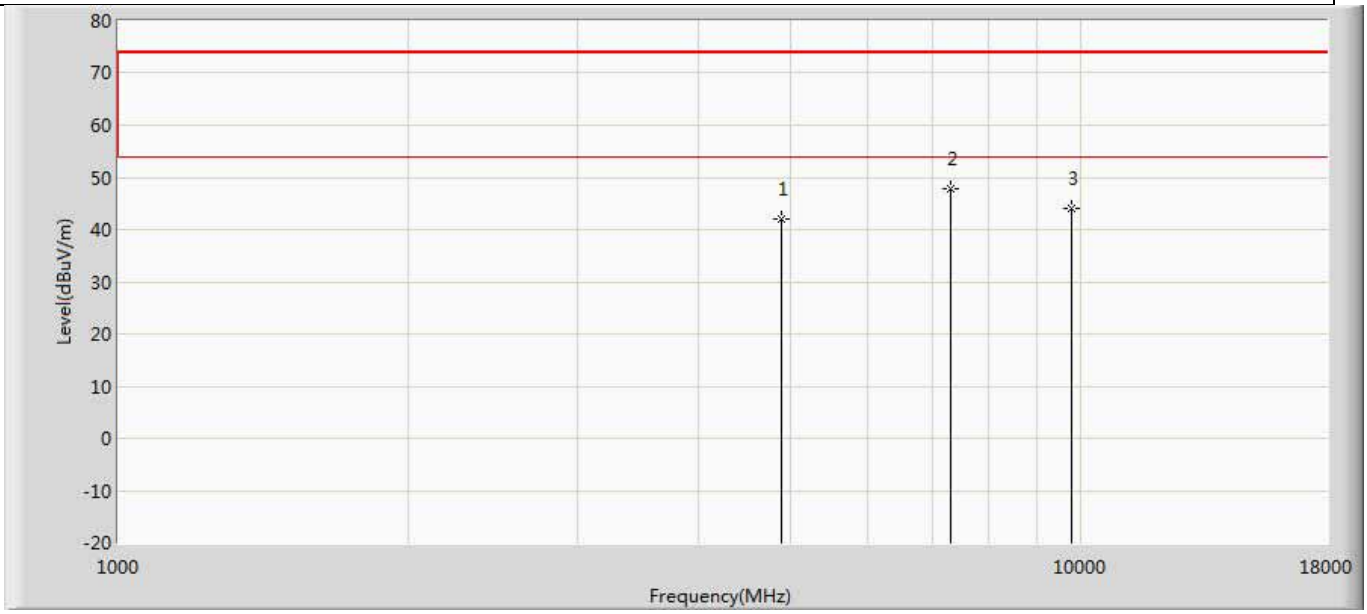
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.783	37.152	-32.217	74.000	4.631	PK
2	*	7205.000	49.211	41.188	-24.789	74.000	8.023	PK
3		9608.000	45.068	35.751	-28.932	74.000	9.318	PK

Profile: 19A2158R	Page No.: 58
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by BLE	



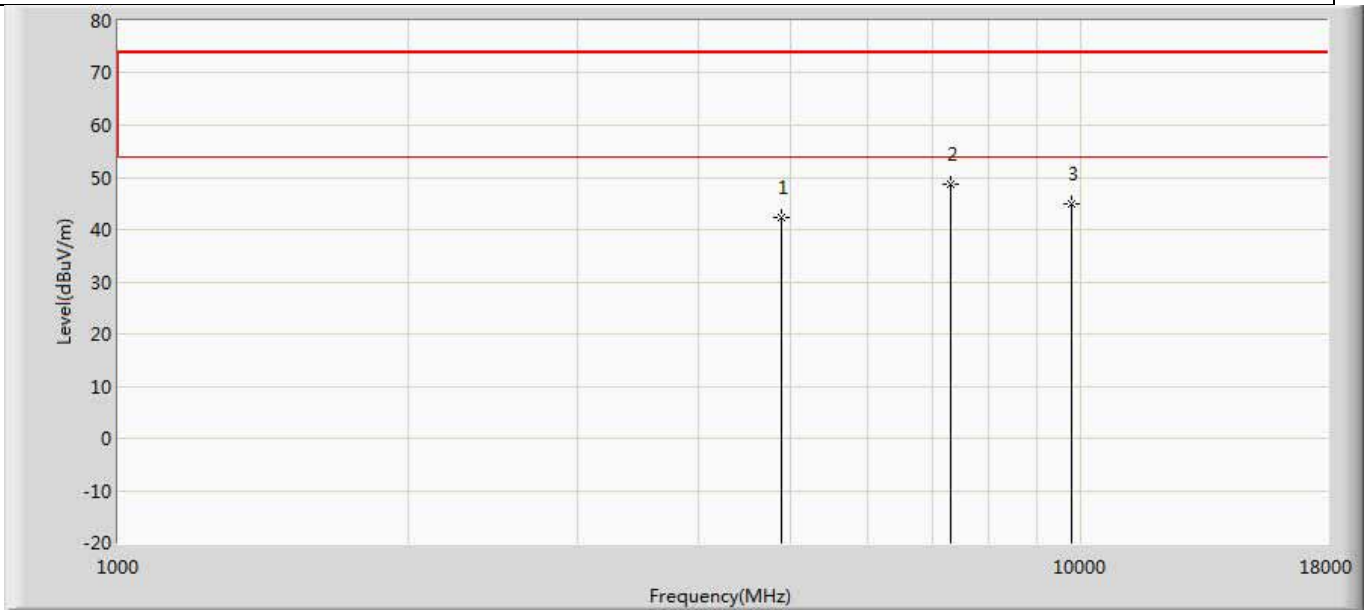
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.207	37.576	-31.793	74.000	4.631	PK
2	*	7205.000	49.399	41.376	-24.601	74.000	8.023	PK
3		9608.000	44.957	35.640	-29.043	74.000	9.318	PK

Profile: 19A2158R	Page No.: 65
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by BLE	



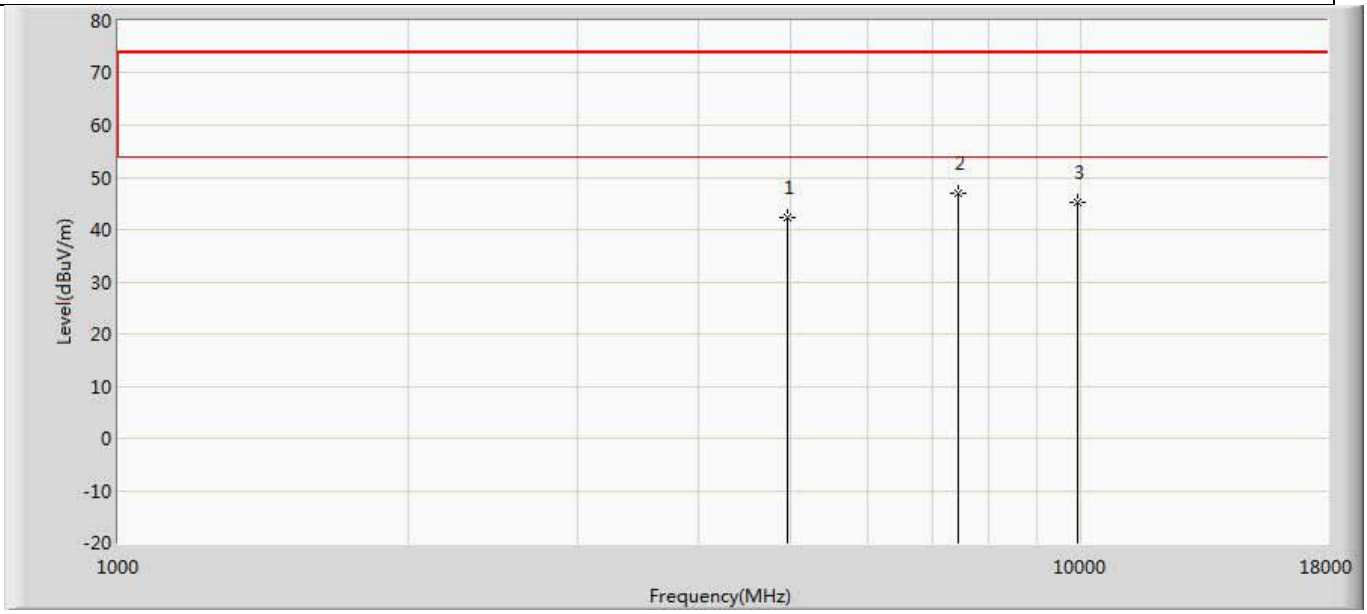
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.064	37.285	-31.936	74.000	4.778	PK
2	*	7315.500	47.729	39.699	-26.271	74.000	8.031	PK
3		9760.000	44.168	34.264	-29.832	74.000	9.904	PK

Profile: 19A2158R	Page No.: 66
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by BLE	



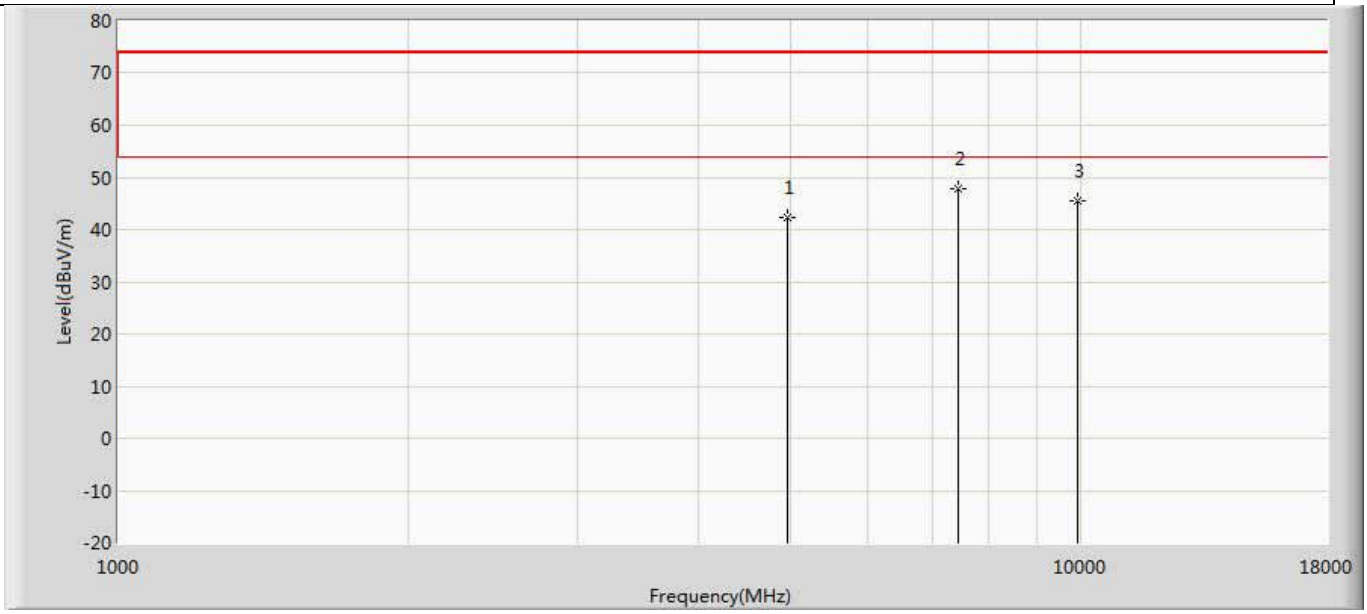
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.423	37.644	-31.577	74.000	4.778	PK
2	*	7324.000	48.759	40.654	-25.241	74.000	8.105	PK
3		9760.000	44.940	35.036	-29.060	74.000	9.904	PK

Profile: 19A2158R	Page No.: 73
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:21
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 1:Transmit at 2480MHz by BLE	



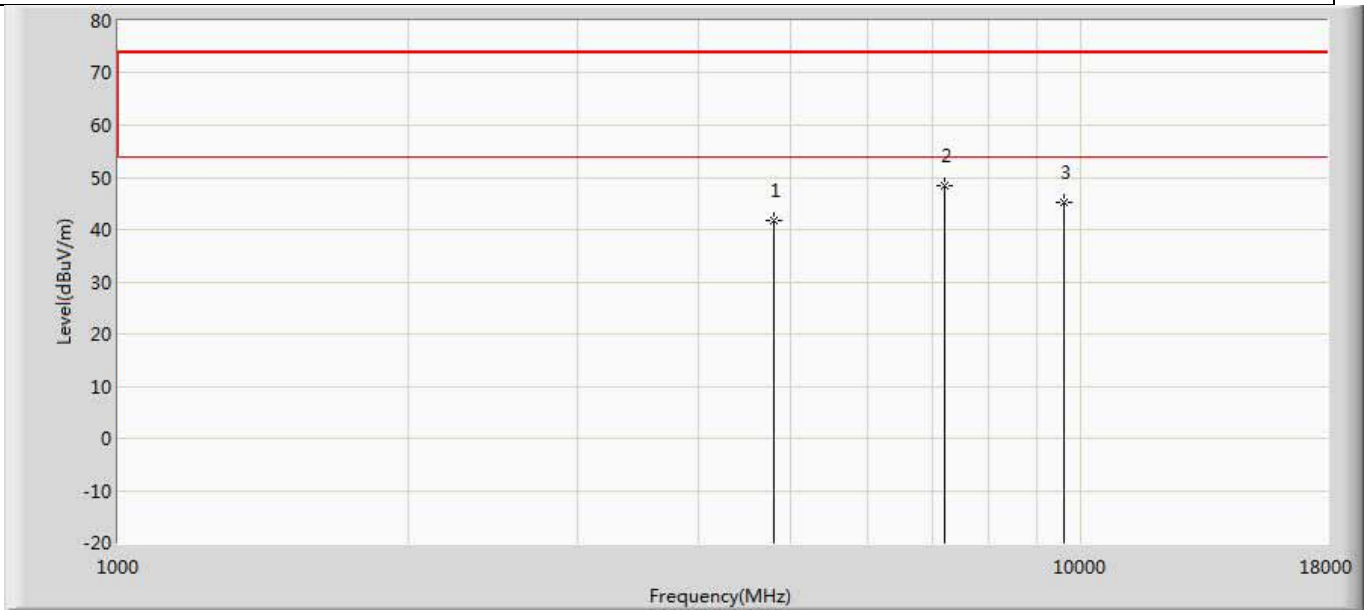
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.299	37.514	-31.701	74.000	4.784	PK
2	*	7443.000	46.921	38.830	-27.079	74.000	8.090	PK
3		9920.000	45.191	35.296	-28.809	74.000	9.894	PK

Profile: 19A2158R	Page No.: 74
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:21
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 BLE	



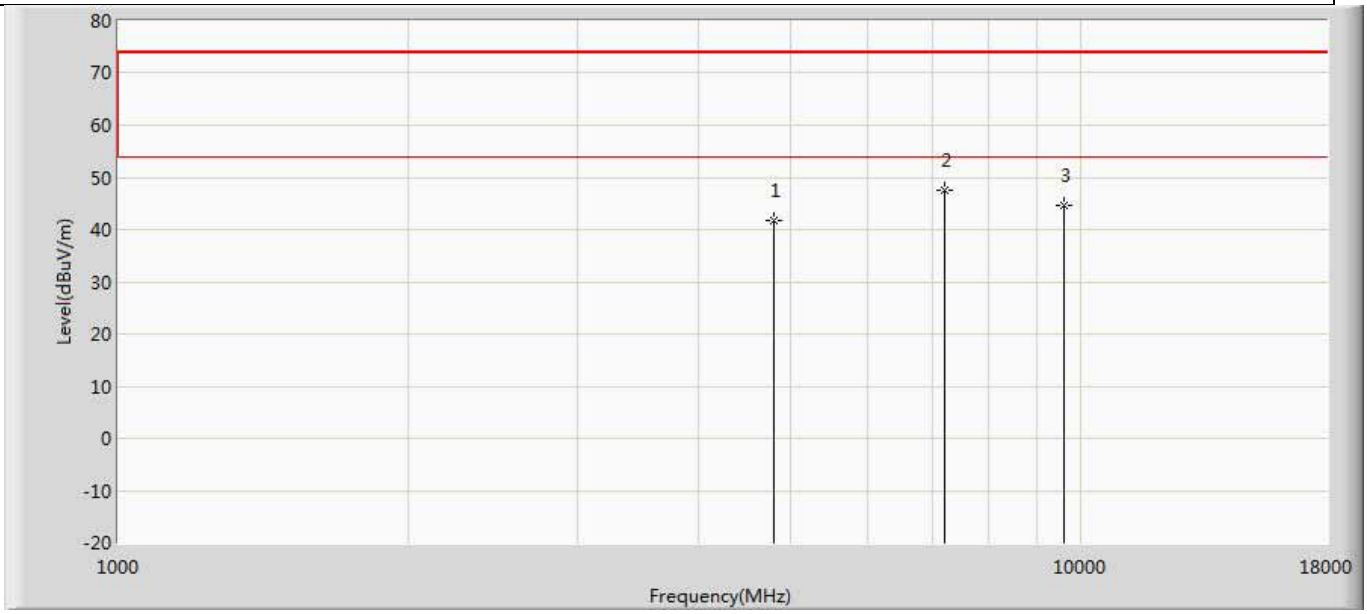
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.413	37.628	-31.587	74.000	4.784	PK
2	*	7443.000	47.930	39.839	-26.070	74.000	8.090	PK
3		9920.000	45.381	35.486	-28.619	74.000	9.894	PK

Profile: 19A2158R	Page No.: 59
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



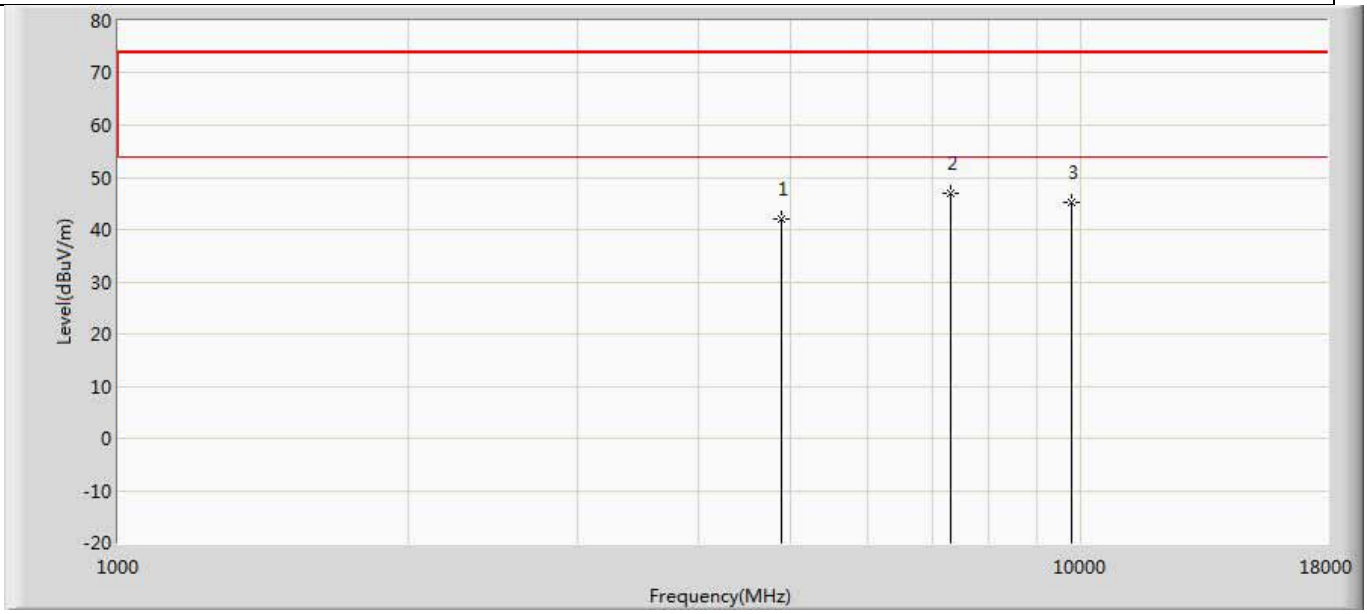
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.703	37.072	-32.297	74.000	4.631	PK
2	*	7205.000	48.512	40.489	-25.488	74.000	8.023	PK
3		9608.000	45.219	35.902	-28.781	74.000	9.318	PK

Profile: 19A2158R	Page No.: 60
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



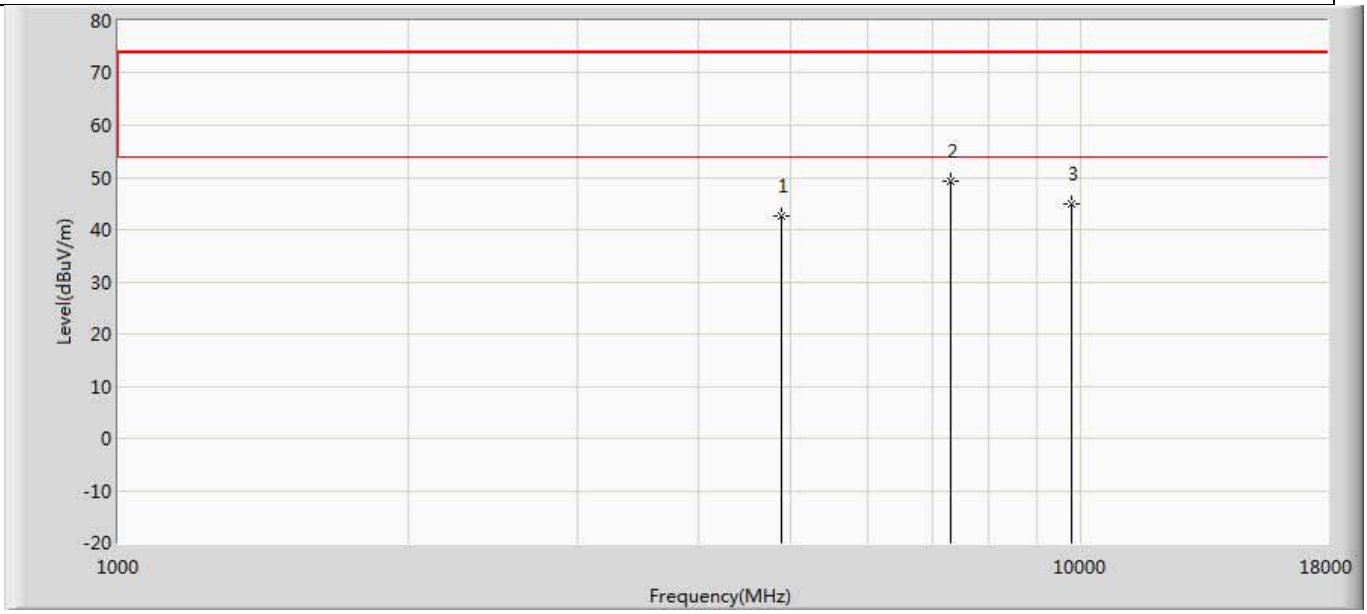
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.794	37.163	-32.206	74.000	4.631	PK
2	*	7205.000	47.415	39.392	-26.585	74.000	8.023	PK
3		9608.000	44.612	35.295	-29.388	74.000	9.318	PK

Profile: 19A2158R	Page No.: 67
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by 2LE	



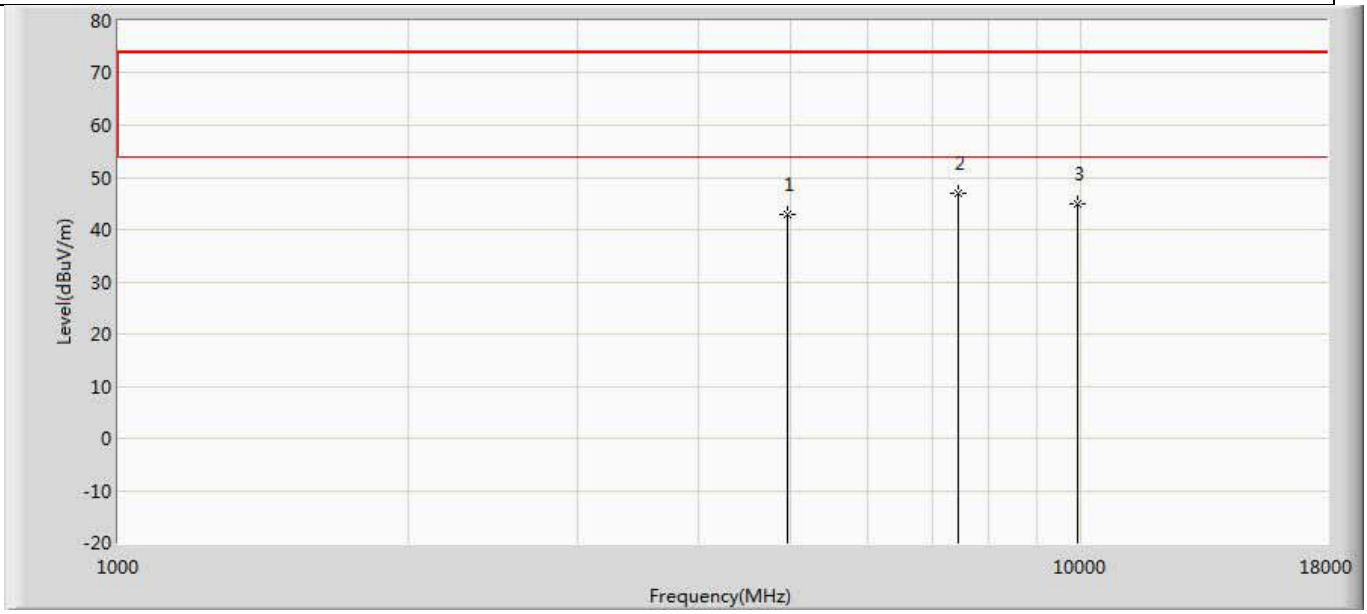
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.996	37.217	-32.004	74.000	4.778	PK
2	*	7324.000	47.035	38.930	-26.965	74.000	8.105	PK
3		9760.000	45.218	35.314	-28.782	74.000	9.904	PK

Profile: 19A2158R	Page No.: 68
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by 2LE	



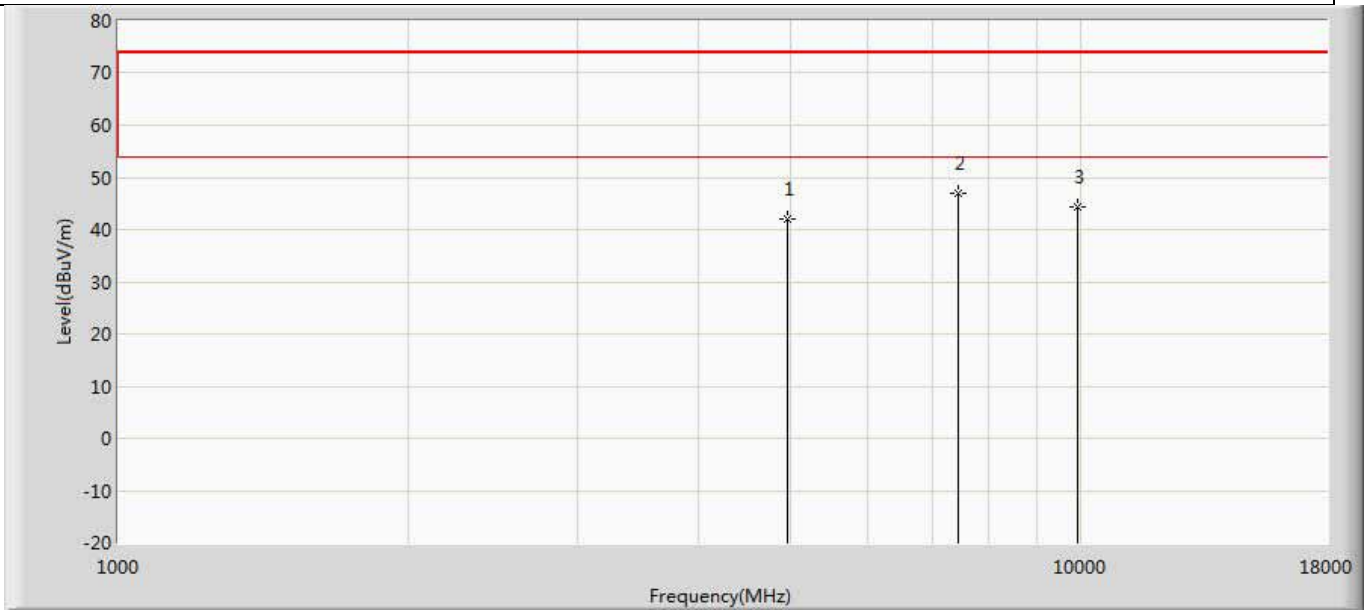
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.645	37.866	-31.355	74.000	4.778	PK
2	*	7315.500	49.233	41.203	-24.767	74.000	8.031	PK
3		9760.000	45.040	35.136	-28.960	74.000	9.904	PK

Profile: 19A2158R	Page No.: 75
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:21
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 2480MHz by 2LE	



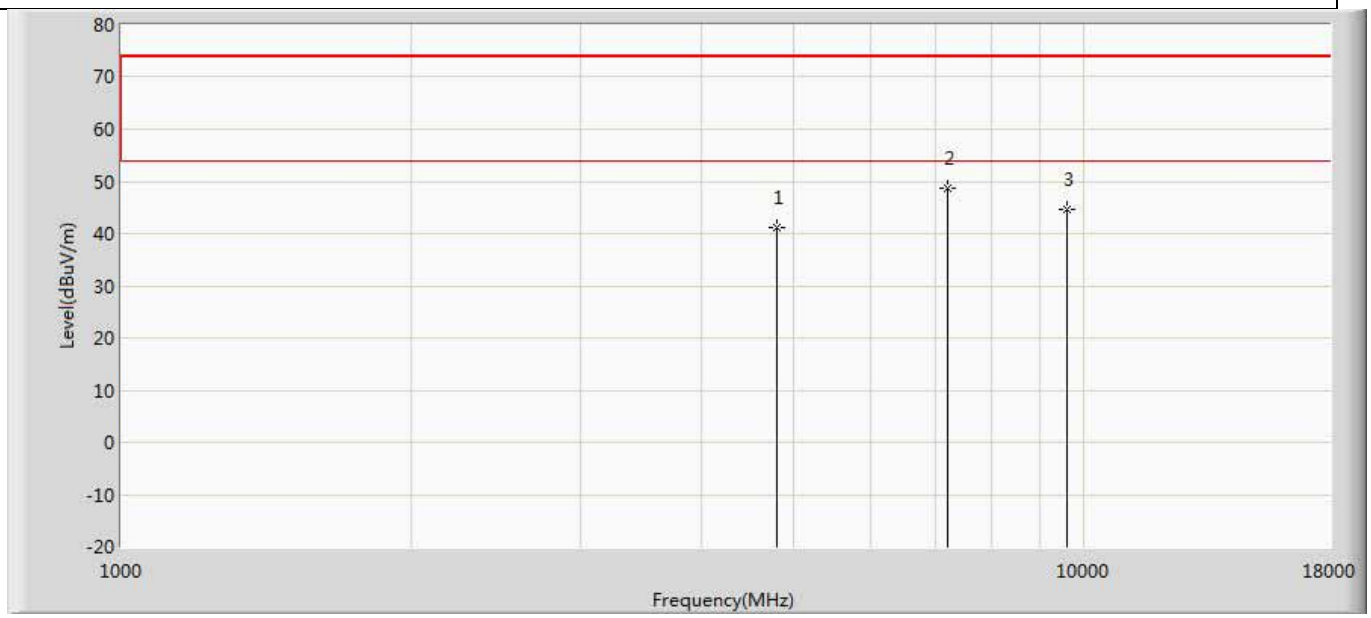
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.036	38.251	-30.964	74.000	4.784	PK
2	*	7443.000	47.085	38.994	-26.915	74.000	8.090	PK
3		9920.000	45.025	35.130	-28.975	74.000	9.894	PK

Profile: 19A2158R	Page No.: 76
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:21
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 2:Transmit at 2480MHz by 2LE	



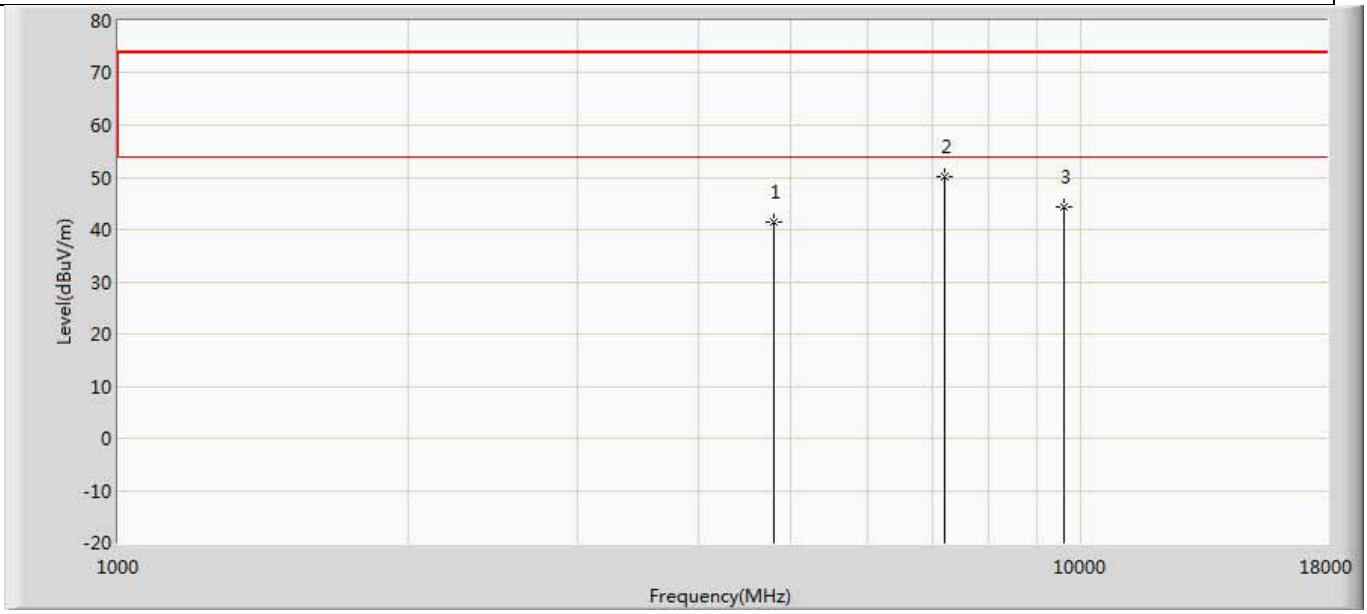
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.930	37.145	-32.070	74.000	4.784	PK
2	*	7443.000	46.959	38.868	-27.041	74.000	8.090	PK
3		9920.000	44.483	34.588	-29.517	74.000	9.894	PK

Profile: 19A2158R	Page No.: 63
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by code2	



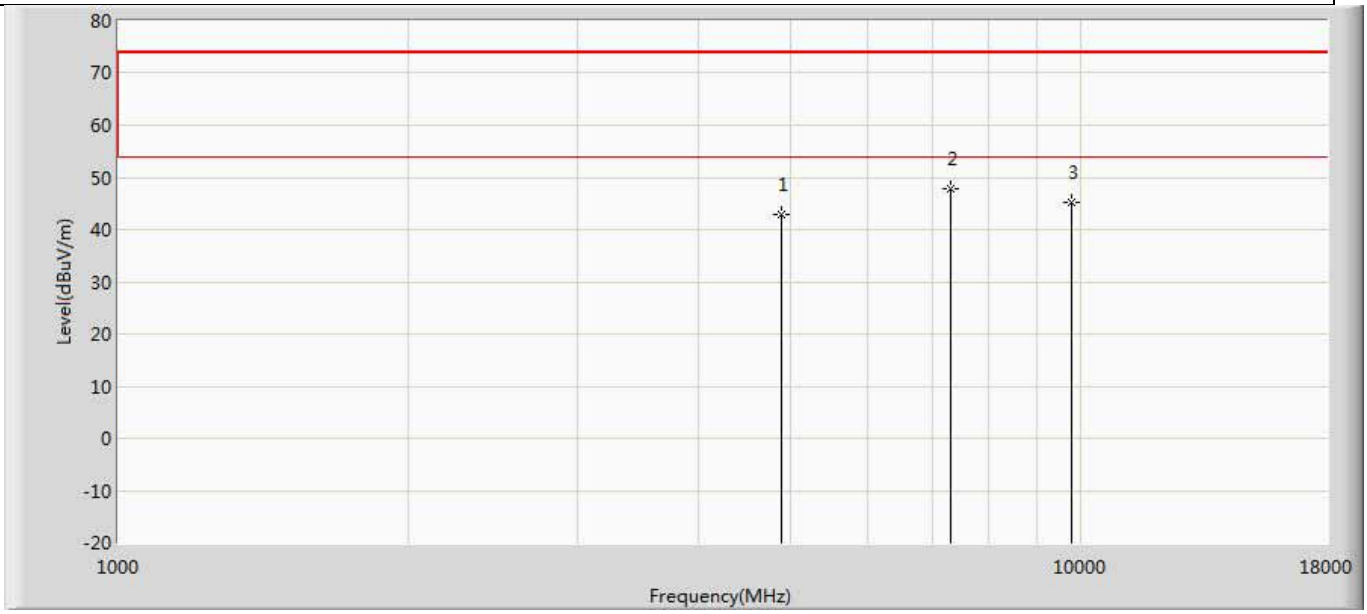
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.218	36.587	-32.782	74.000	4.631	PK
2	*	7205.000	48.818	40.795	-25.182	74.000	8.023	PK
3		9608.000	44.498	35.181	-29.502	74.000	9.318	PK

Profile: 19A2158R	Page No.: 64
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by code2	



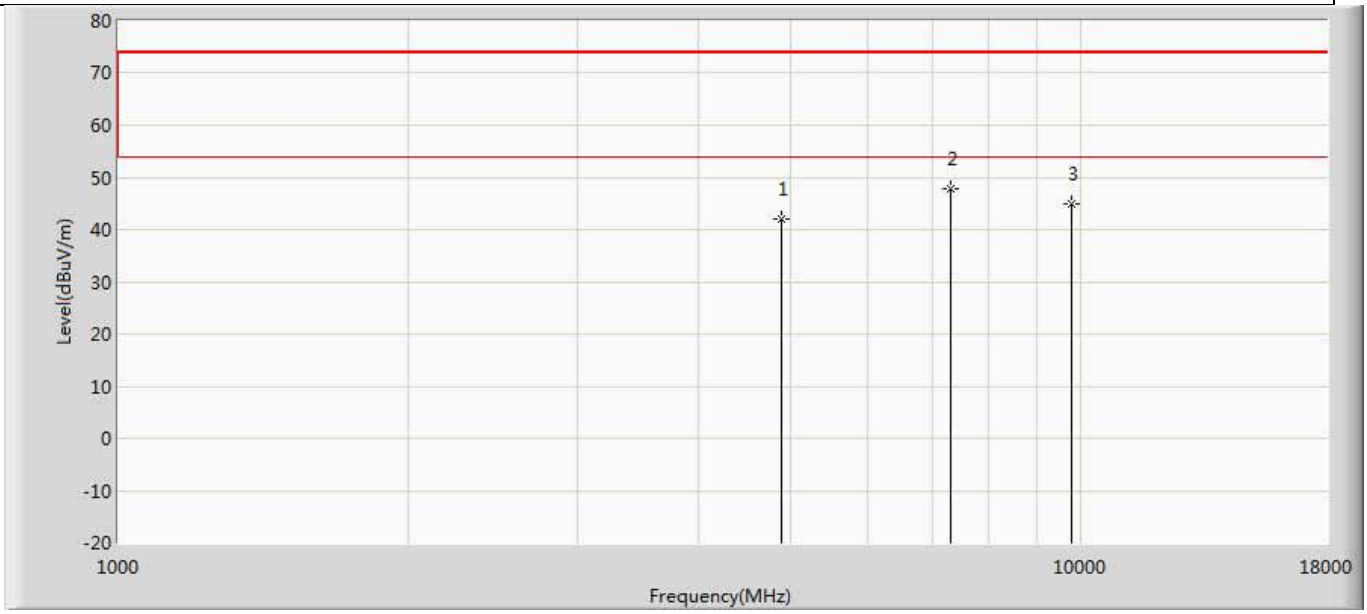
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.480	36.849	-32.520	74.000	4.631	PK
2	*	7205.000	50.222	42.199	-23.778	74.000	8.023	PK
3		9608.000	44.331	35.014	-29.669	74.000	9.318	PK

Profile: 19A2158R	Page No.: 71
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2440MHz by code2	



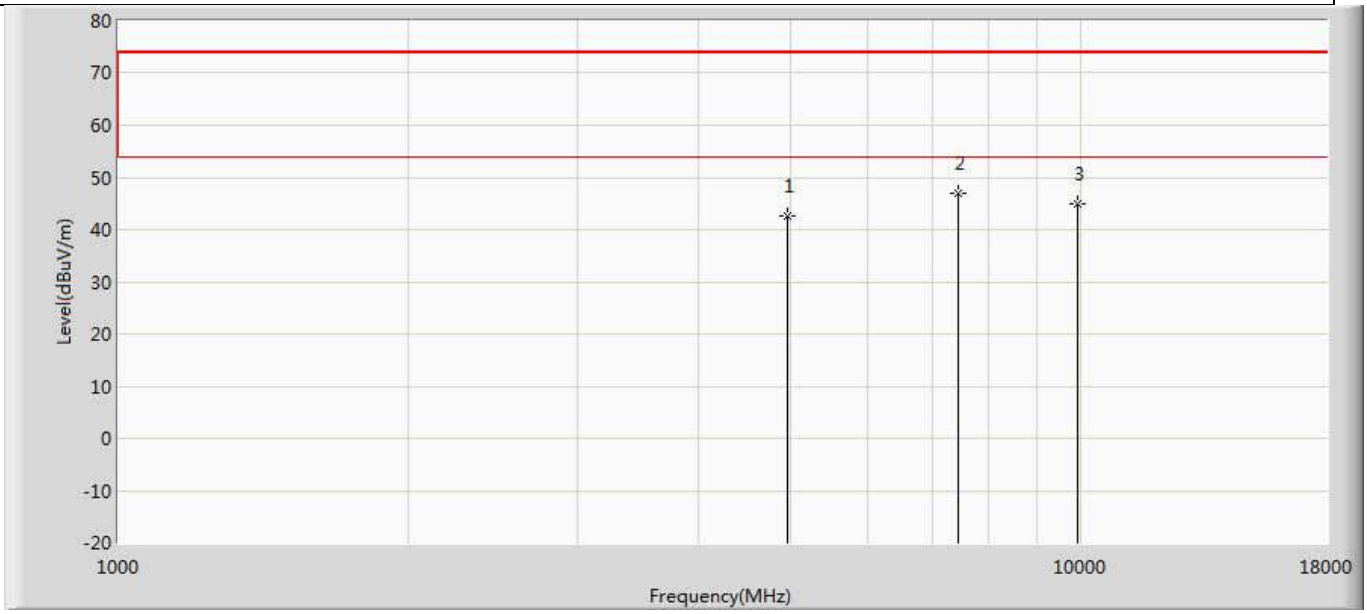
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.776	37.997	-31.224	74.000	4.778	PK
2	*	7324.000	47.840	39.735	-26.160	74.000	8.105	PK
3		9760.000	45.303	35.399	-28.697	74.000	9.904	PK

Profile: 19A2158R	Page No.: 72
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2440MHz by code2	



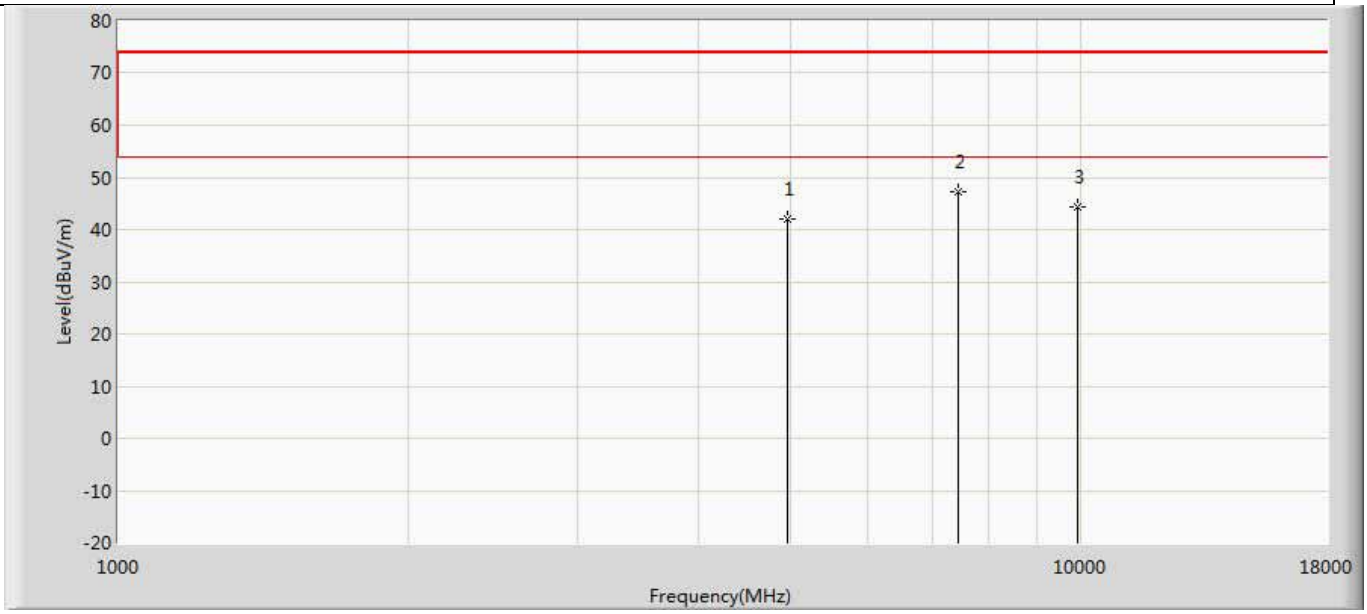
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.039	37.260	-31.961	74.000	4.778	PK
2	*	7324.000	47.914	39.809	-26.086	74.000	8.105	PK
3		9760.000	45.017	35.113	-28.983	74.000	9.904	PK

Profile: 19A2158R	Page No.: 79
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:21
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 3:Transmit at 2480MHz by code2	



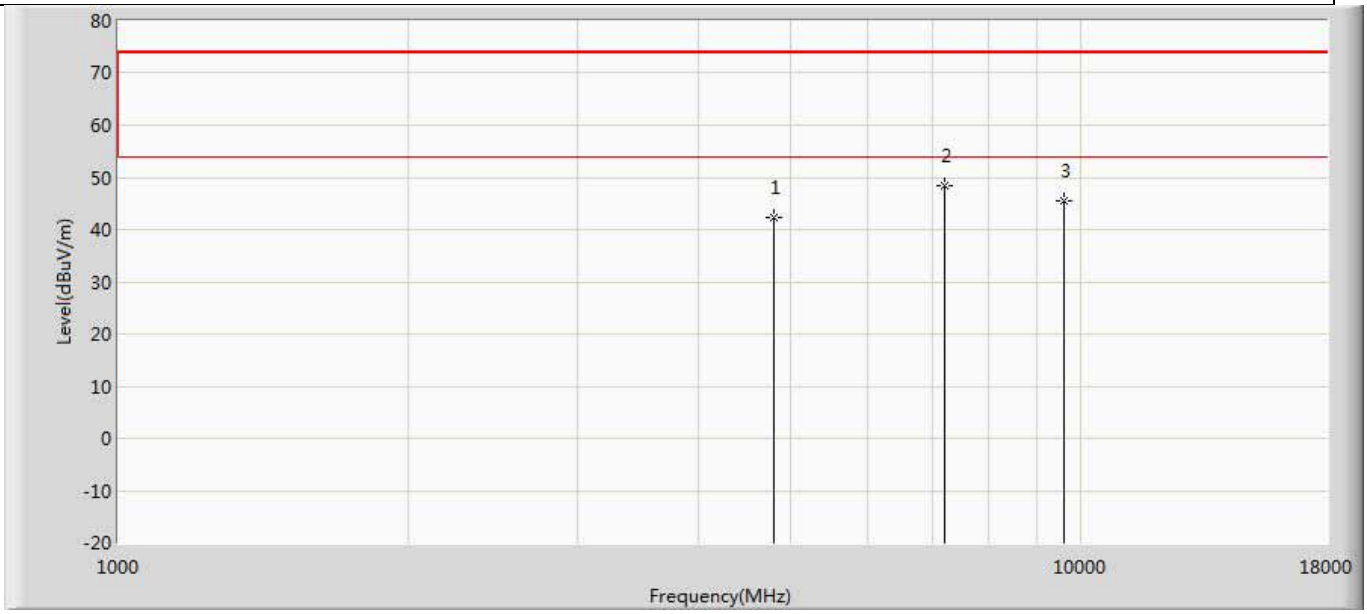
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.542	37.757	-31.458	74.000	4.784	PK
2	*	7443.000	46.894	38.803	-27.106	74.000	8.090	PK
3		9920.000	45.003	35.108	-28.997	74.000	9.894	PK

Profile: 19A2158R	Page No.: 80
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:21
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 3:Transmit at 2480MHz by code2	



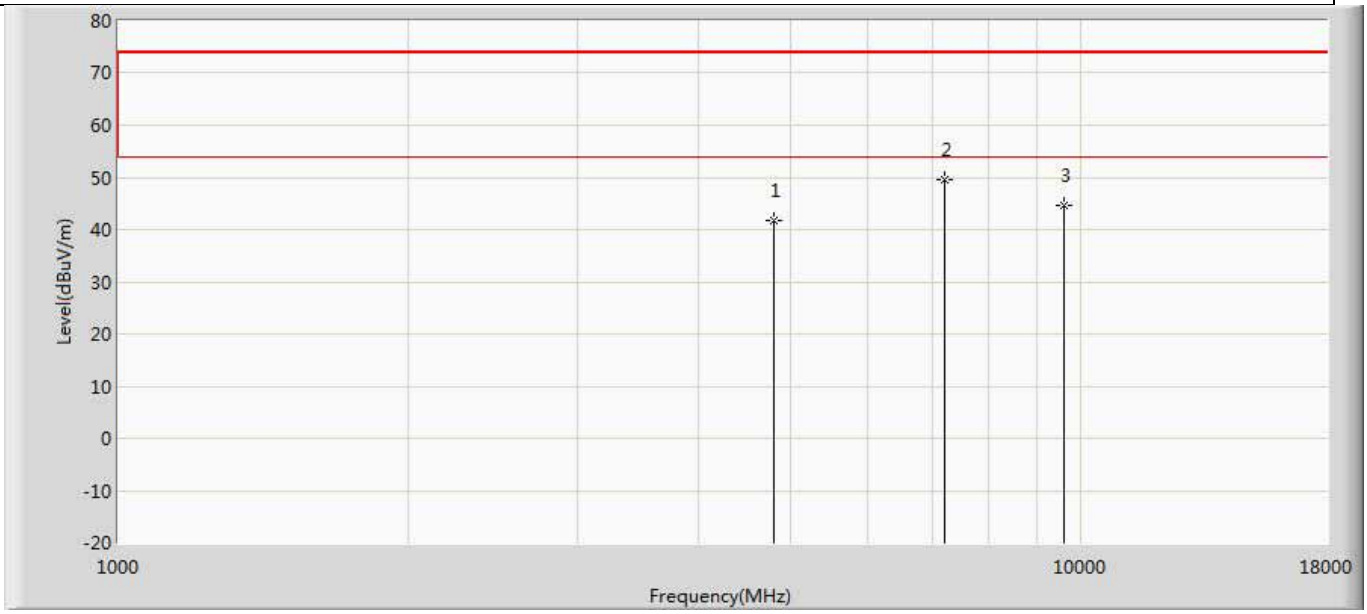
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.073	37.288	-31.927	74.000	4.784	PK
2	*	7443.000	47.163	39.072	-26.837	74.000	8.090	PK
3		9920.000	44.434	34.539	-29.566	74.000	9.894	PK

Profile: 19A2158R	Page No.: 61
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by code8	



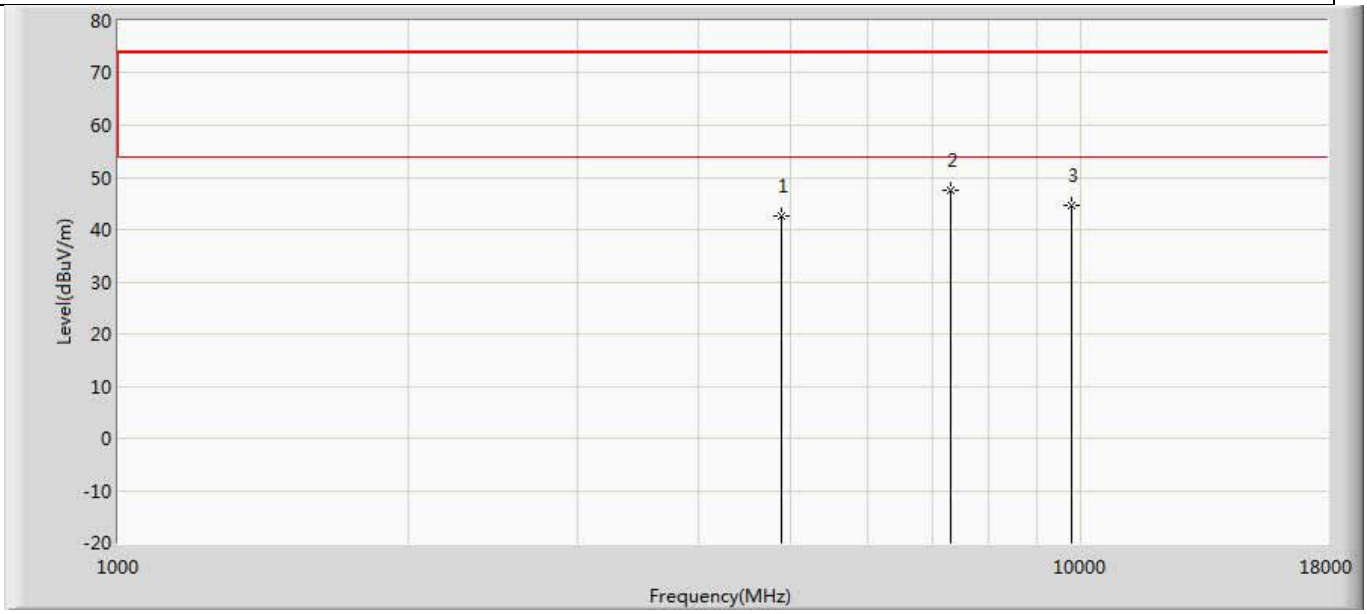
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.414	37.783	-31.586	74.000	4.631	PK
2	*	7205.000	48.373	40.350	-25.627	74.000	8.023	PK
3		9608.000	45.537	36.220	-28.463	74.000	9.318	PK

Profile: 19A2158R	Page No.: 62
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by code8	



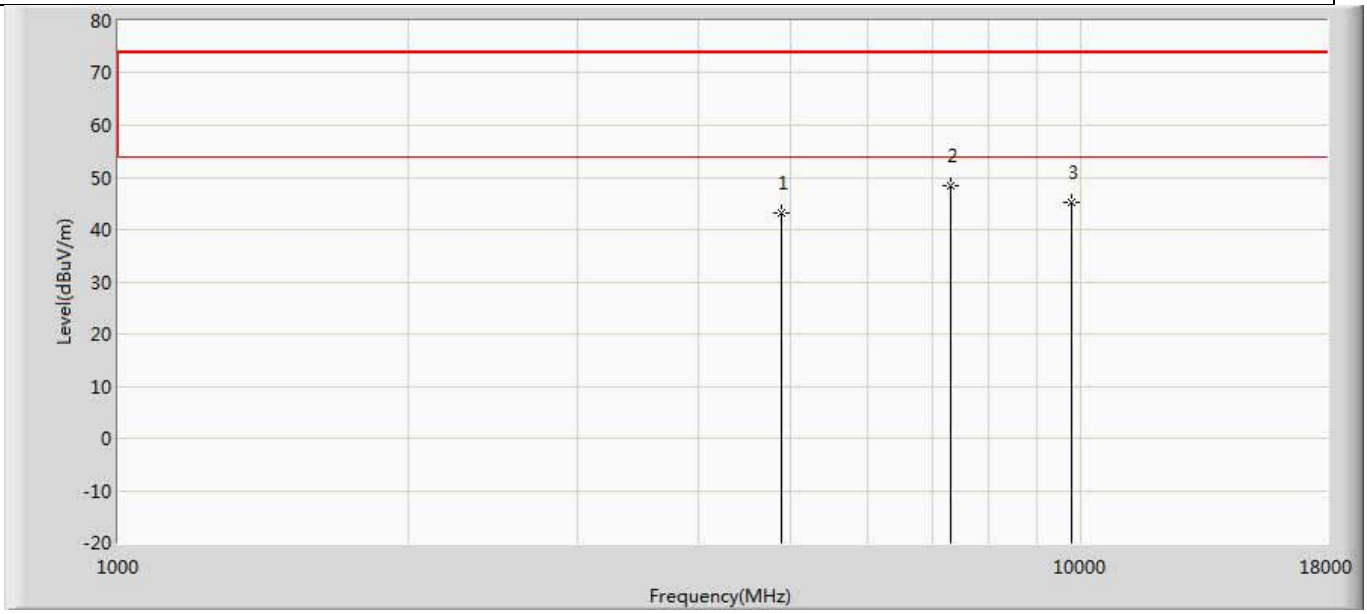
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.692	37.061	-32.308	74.000	4.631	PK
2	*	7205.000	49.618	41.595	-24.382	74.000	8.023	PK
3		9608.000	44.746	35.429	-29.254	74.000	9.318	PK

Profile: 19A2158R	Page No.: 69
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2440MHz by code8	



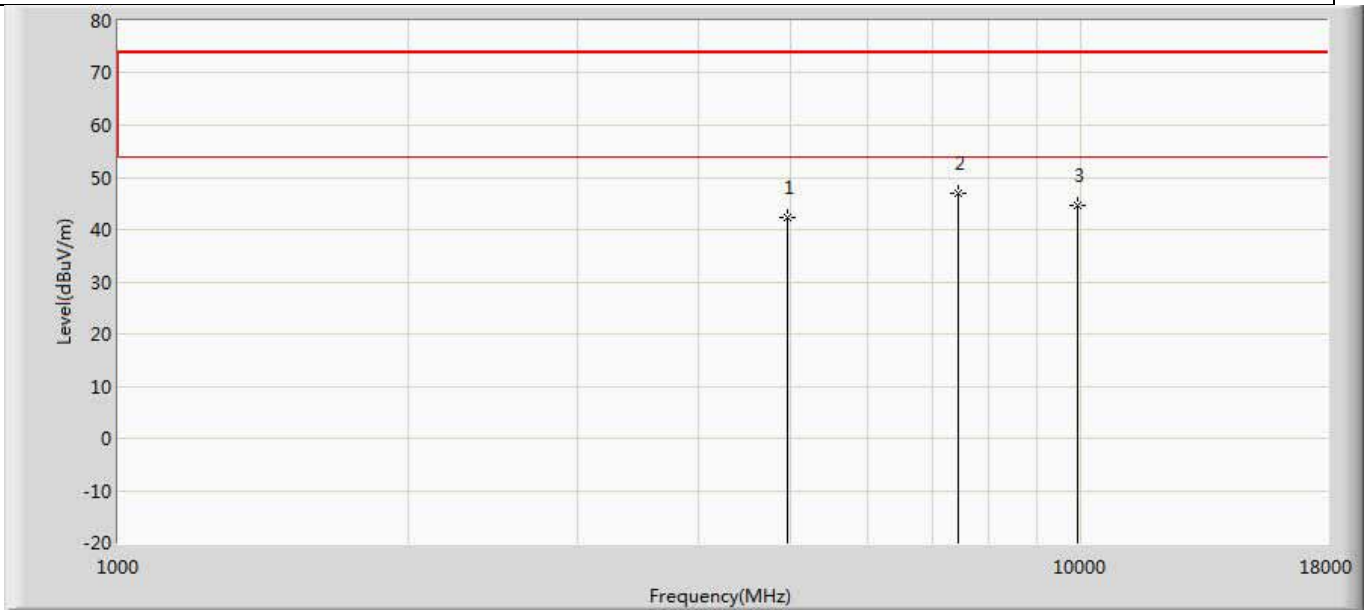
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.530	37.751	-31.470	74.000	4.778	PK
2	*	7315.500	47.482	39.452	-26.518	74.000	8.031	PK
3		9760.000	44.750	34.846	-29.250	74.000	9.904	PK

Profile: 19A2158R	Page No.: 70
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2440MHz by code8	



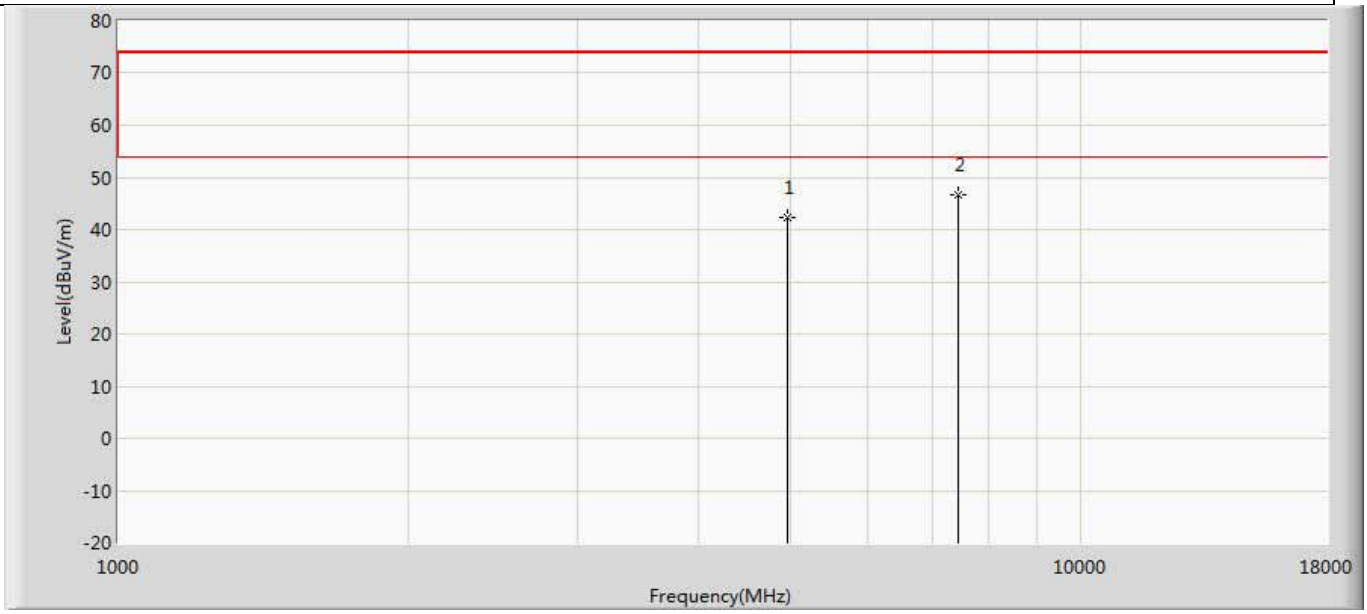
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	43.066	38.287	-30.934	74.000	4.778	PK
2	*	7315.500	48.283	40.253	-25.717	74.000	8.031	PK
3		9760.000	45.280	35.376	-28.720	74.000	9.904	PK

Profile: 19A2158R	Page No.: 77
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:21
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 4:Transmit at 2480MHz by code8	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.389	37.604	-31.611	74.000	4.784	PK
2	*	7443.000	47.021	38.930	-26.979	74.000	8.090	PK
3		9920.000	44.743	34.848	-29.257	74.000	9.894	PK

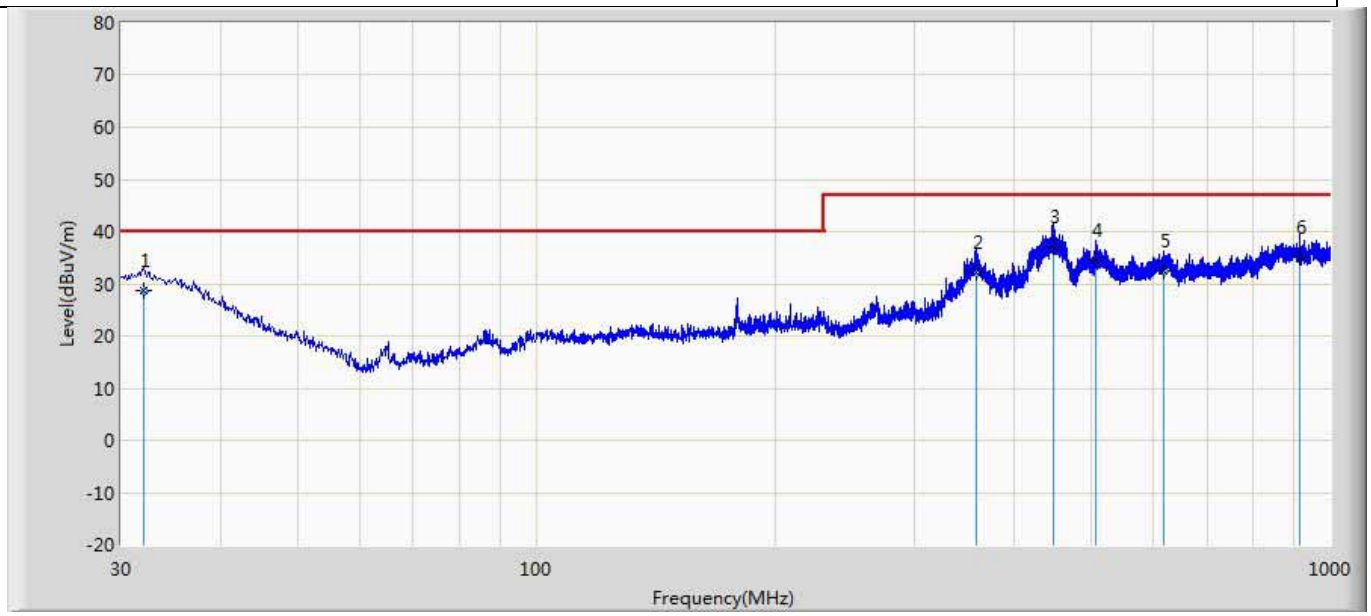
Profile: 19A2158R	Page No.: 78
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by code8	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.222	37.437	-31.778	74.000	4.784	PK
2	*	7443.000	46.778	38.687	-27.222	74.000	8.090	PK

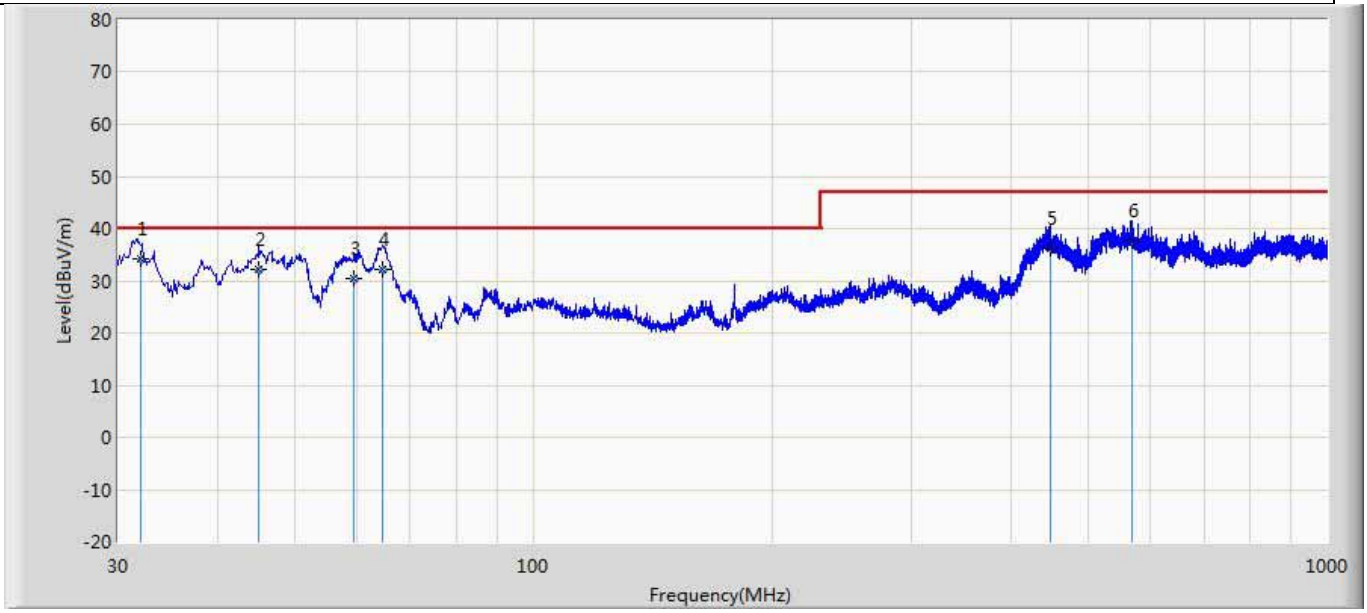
The worst case of Radiated Emission below 1GHz:

Engineer: Kang	
Site: AC2	Time: 2019/11/04
Limit: CISPR15_RE(3m) 1G	Margin: 0
Probe: AC2_3M(30-1000M)	Polarity: Horizontal
EUT: LED lamp	Power: AC 230V/50Hz
Note: Mode 1:Transmit at 2402MHz by BLE	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		32.000	28.683	1.600	-11.317	40.000	20.744	6.339	0.000	100	203	QP
2		358.600	32.285	8.100	-14.715	47.000	16.437	7.748	0.000	100	169	QP
3	*	448.100	37.030	10.300	-9.970	47.000	18.710	8.019	0.000	100	195	QP
4		507.100	34.362	6.600	-12.638	47.000	19.570	8.192	0.000	100	103	QP
5		616.900	32.516	2.300	-14.484	47.000	21.732	8.483	0.000	100	107	QP
6		917.700	34.963	2.600	-12.037	47.000	23.152	9.211	0.000	100	214	QP

Engineer: Kang	
Site: AC2	Time: 2019/11/04
Limit: CISPR15_RE(3m) 1G	Margin: 0
Probe: AC2_3M(30-1000M)	Polarity: Vertical
EUT: LED lamp	Power: AC 230V/50Hz
Note: Mode 1:Transmit at 2402MHz by BLE	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1	*	32.082	34.309	11.000	-5.691	40.000	16.971	6.339	0.000	200	125	QP
2		45.150	32.103	14.200	-7.897	40.000	11.446	6.457	0.000	100	135	QP
3		59.500	30.533	14.200	-9.467	40.000	9.781	6.552	0.000	100	177	QP
4		64.600	32.056	16.100	-7.944	40.000	9.376	6.580	0.000	100	136	QP
5		448.500	36.339	10.300	-10.661	47.000	18.019	8.020	0.000	100	216	QP
6		567.900	37.537	10.300	-9.463	47.000	18.884	8.354	0.000	100	188	QP

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.

4.3 Emissions in non-restricted frequency band — VERDICT: PASS

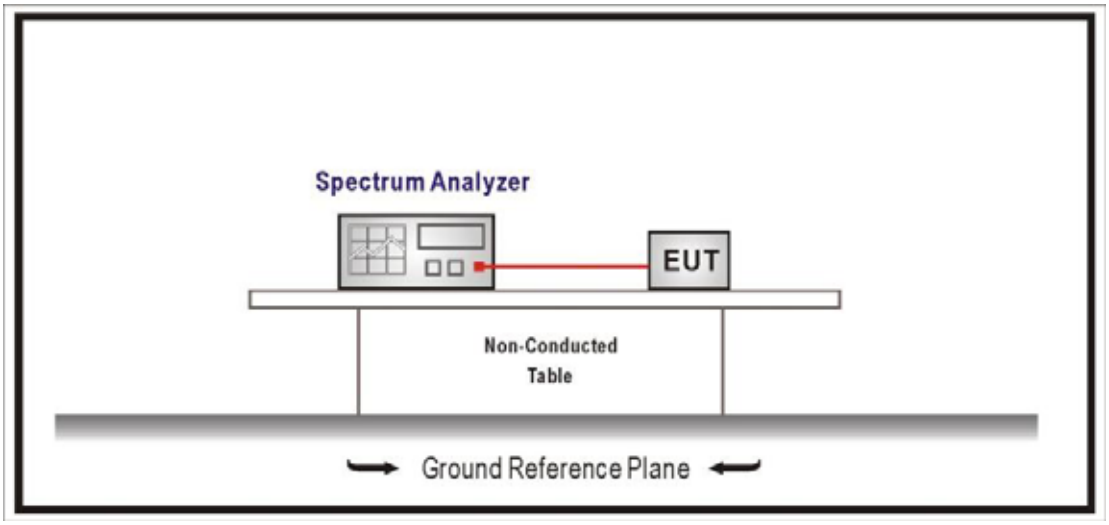
4.3.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247(d)
RF Output power (Detection methods)	Limit(dB)
RF Output power(Average detector)	30dBc(Note1)
RF Output power(PK detector)	20dBc(Note2)

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

Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).

4.3.2 Test Setup



4.3.3 Test Procedure

References Rule			Chapter	Description
☒	ANSI C63.10		11.11	Emissions in non-restricted frequency bands
	☒	ANSI C63.10	11.11.1	General
	☒	ANSI C63.10	11.11.2	Reference level measurement
	☒	ANSI C63.10	11.11.3	Emission level measurement

4.3.4 Test Data

Mode	Channel	Test Frequency (MHz)	Maximum In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	00	2402	9.274	2400	-40.579	49.853	>20	Pass
	39	2480	9.223	2500	-57.115	66.338	>20	Pass
2	00	2402	7.229	2400	-23.151	30.380	>20	Pass
	39	2480	7.199	2500	-57.034	64.233	>20	Pass
3	00	2402	9.190	2400	-42.561	51.751	>20	Pass
	39	2480	9.138	2500	-58.485	67.623	>20	Pass
4	00	2402	6.506	2400	-42.106	48.612	>20	Pass
	39	2480	6.410	2500	-57.218	63.628	>20	Pass

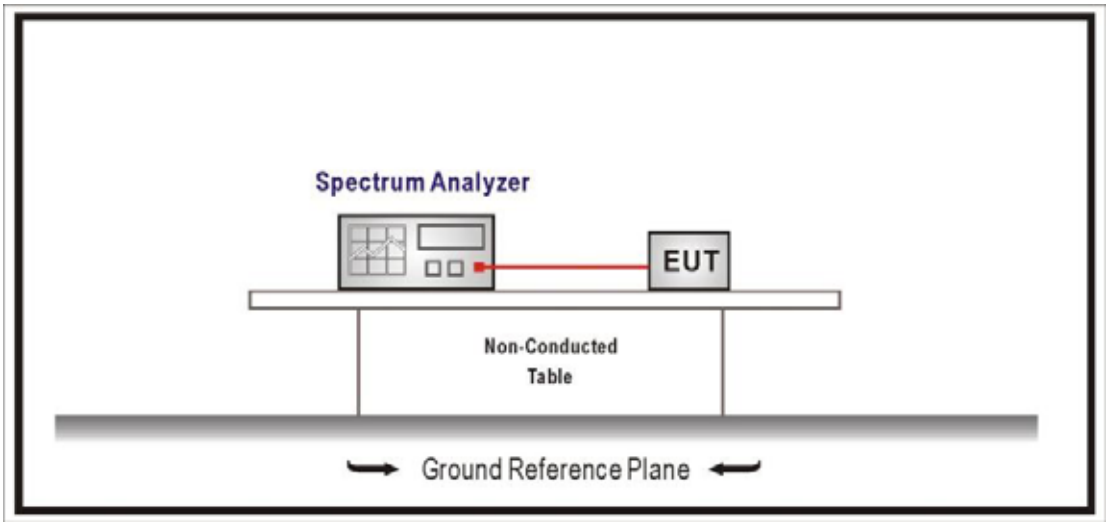
Mode 2 CH00(2402MHz)

4.4 Duty cycle — VERDICT: PASS

4.4.1 Limit

N/A

4.4.2 Test Setup



4.4.3 Test Procedure

References Rule		Chapter	Description
☒	ANSI C63.10	11.6	Duty cycle (D), transmission duration (T), and maximum power control level

4.4.4 Test Data

Test Mode	Tx On (ms)	Tx Off (ms)	VBW	Tx On + Tx Off (ms)	Duty Cycle
Mode 1	N/A	N/A	10	N/A	100%
Mode 2	N/A	N/A	10	N/A	100%
Mode 3	N/A	N/A	10	N/A	100%
Mode 4	N/A	N/A	10	N/A	100%

Note 1: T means the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

Note 2: According to KDB 558074, when test for Radiated Emission Band Edge and Radiated Emission, for average detector set: VBW ≥ 1/T will be used.

Mode 1

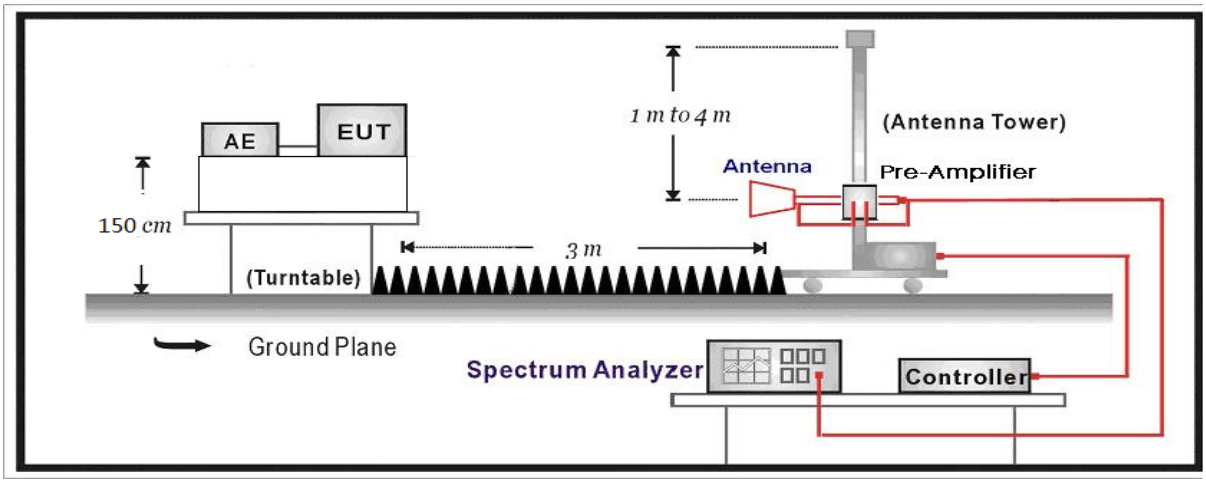
4.5 Radiated Emission Band Edge — VERDICT: PASS

4.5.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247(d) , 15.209			
Frequency bands (MHz)	Detector	Limit (dB μ V/m)	RBW (MHz)	Distance (m)
2310-2390 2483.5-2500	PK	74	1	3
	AV	54	1	3
Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.				

4.5.2 Test Setup

Above 1GHz Test Setup:



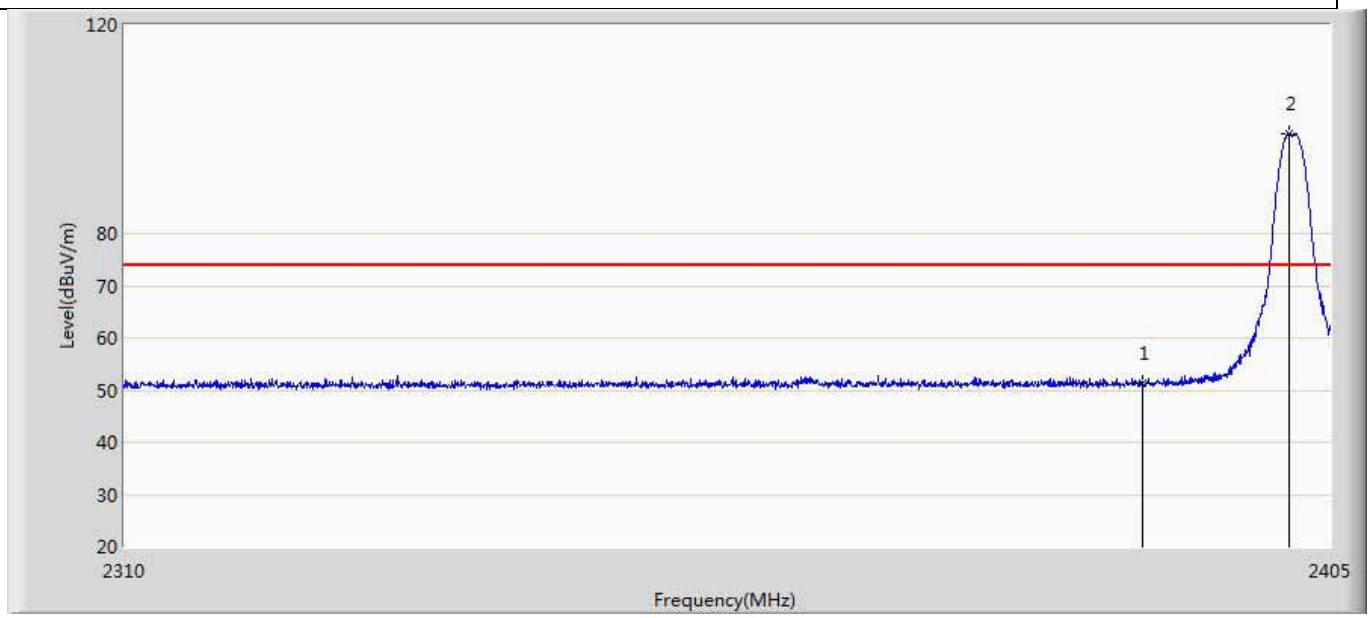
4.5.3 Test Procedure

	References Rule	Chapter	Description
☒	ANSI C63.10	6.10	Band-edge testing
	☒ ANSI C63.10	6.10.5	Restricted-band band-edge measurements
	☐ ANSI C63.10	6.10.6	Marker-delta method
☒	ANSI C63.10	11.12	Emissions in restricted frequency bands
	☒ ANSI C63.10	11.12.1	Radiated emission measurements
	☒ ANSI C63.10	11.12.2.7	Radiated spurious emission test
☐	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
☐	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
☒	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

4.5.4 Test Data

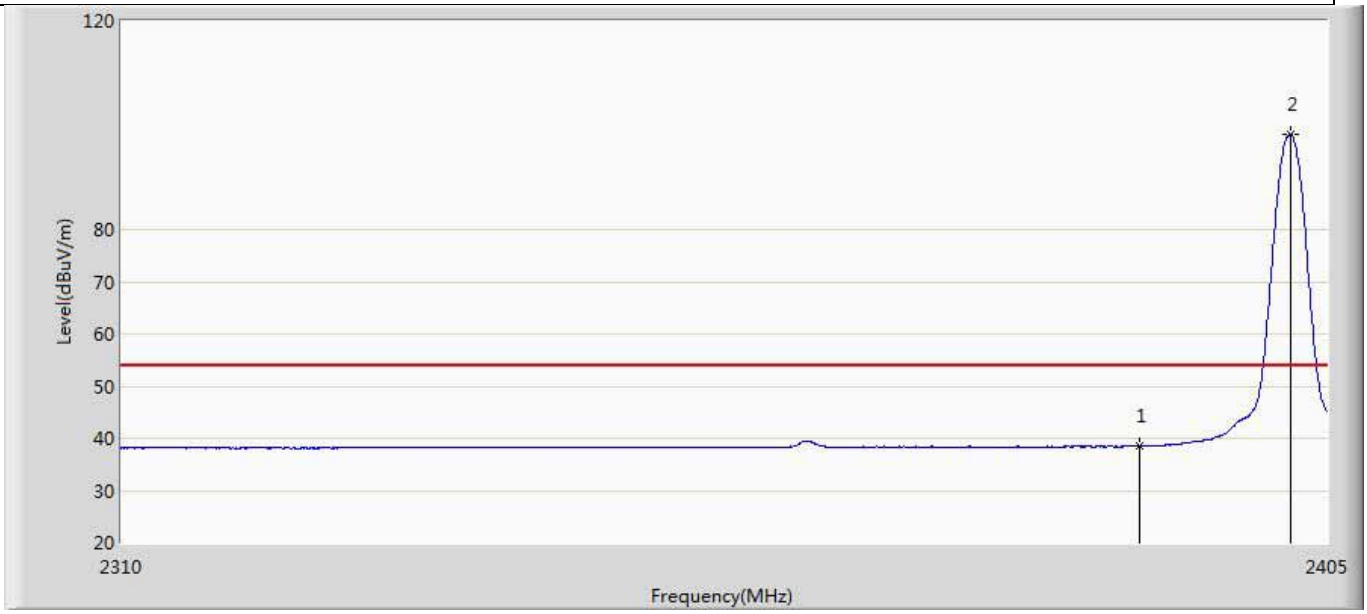
Murata:

Profile: 19A2158R	Page No.: 1
Engineer: Simon Lu	
Site: AC5	Time: 2019/10/31 - 11:48
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 1:Transmit at 2402MHz by BLE	



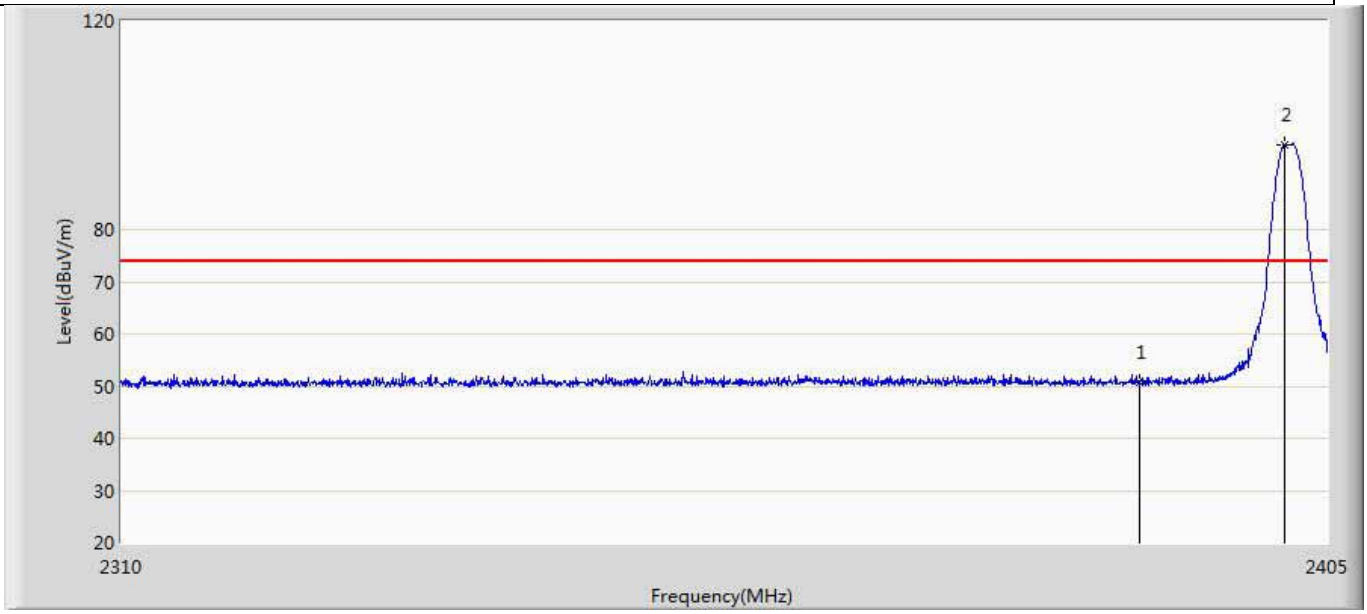
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.435	15.978	-22.565	74.000	35.458	PK
2	*	2401.675	99.054	63.585	N/A	N/A	35.469	PK

Profile: 19A2158R	Page No.: 2
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 19:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by BLE	



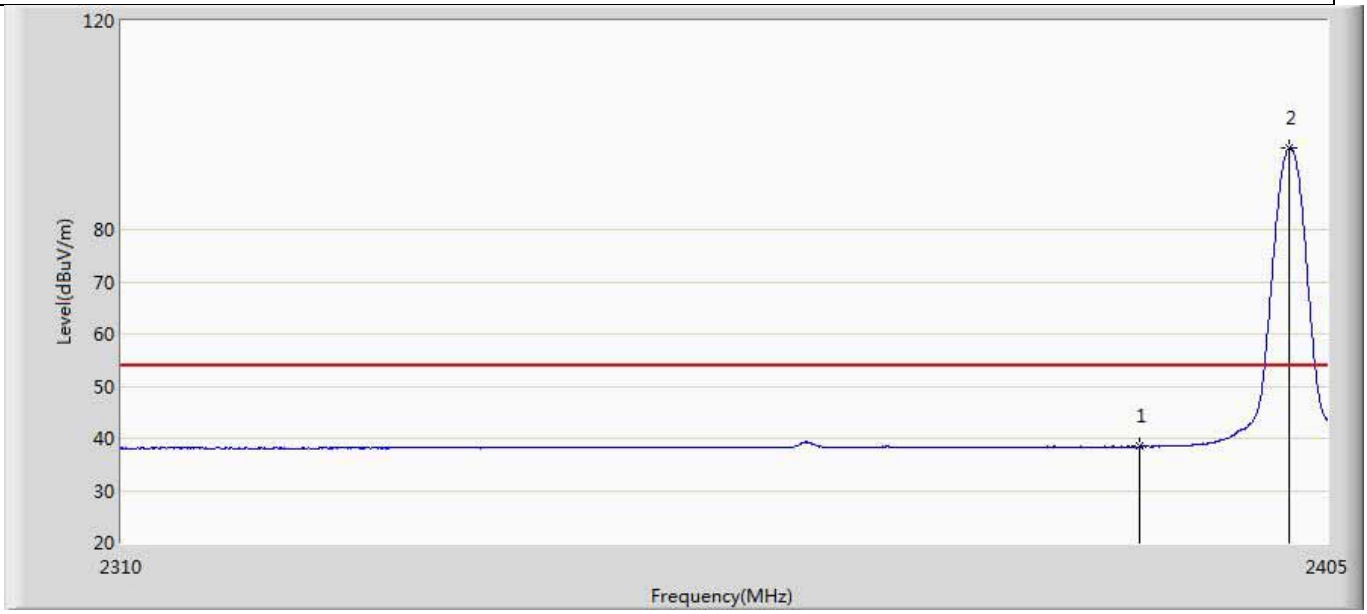
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.547	3.090	-15.453	54.000	35.458	AV
2	*	2402.055	98.345	62.875	N/A	N/A	35.469	AV

Profile: 19A2158R	Page No.: 3
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 20:00
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 BLE	



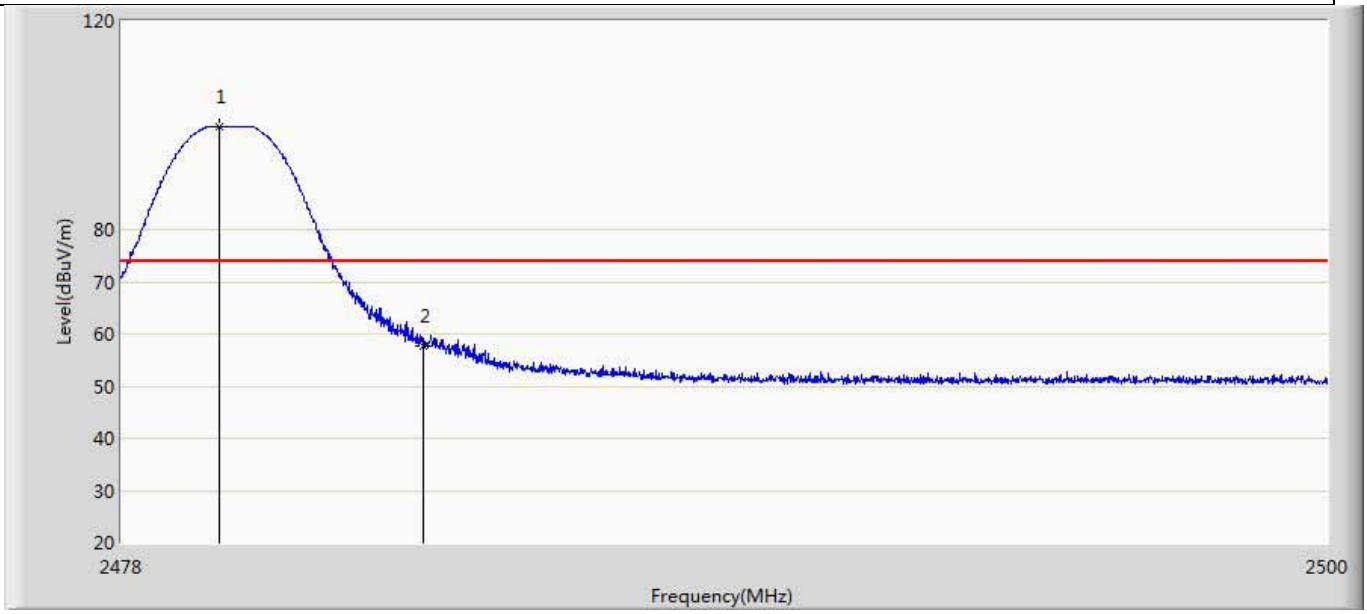
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.812	15.355	-23.188	74.000	35.458	PK
2	*	2401.580	96.275	60.806	N/A	N/A	35.469	PK

Profile: 19A2158R	Page No.: 4
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 20:04
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 BLE	



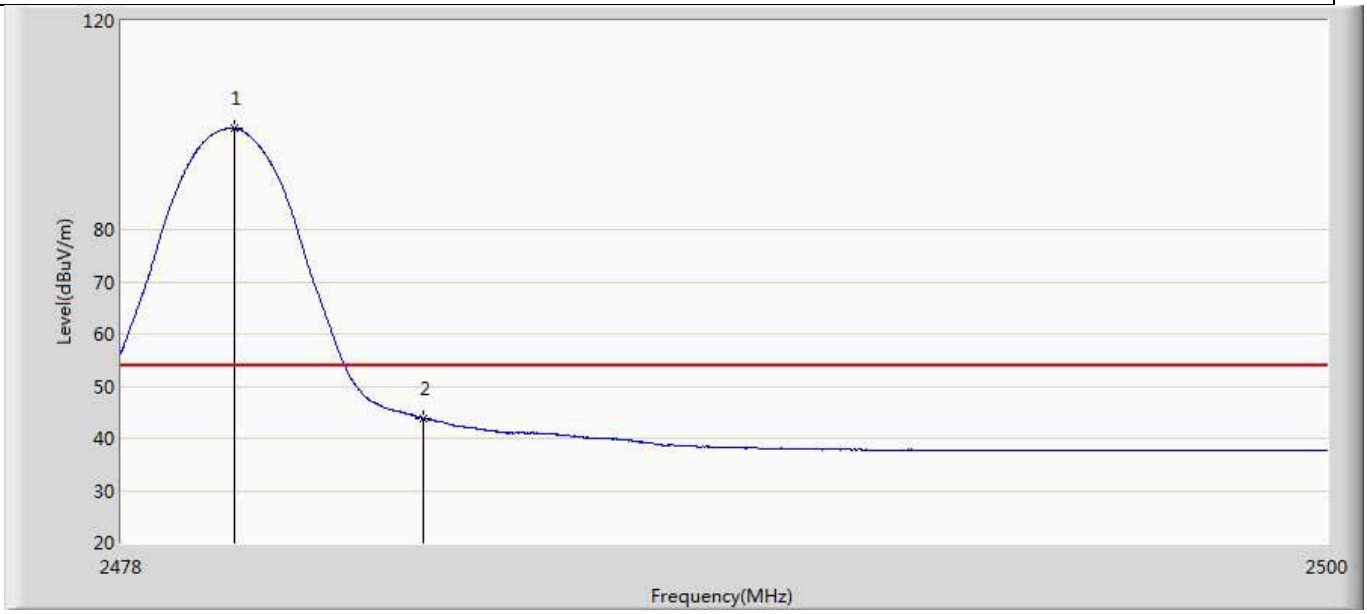
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.415	2.958	-15.585	54.000	35.458	AV
2	*	2401.960	95.711	60.242	N/A	N/A	35.469	AV

Profile: 19A2158R	Page No.: 17
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by BLE	



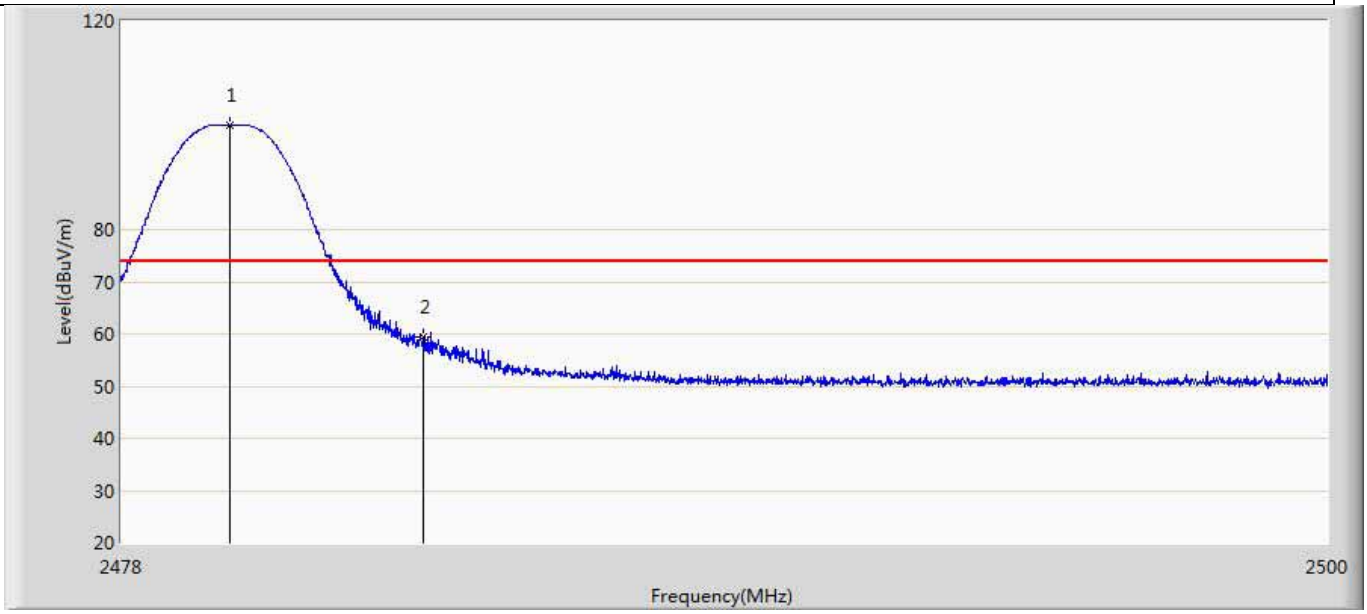
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.771	99.828	64.331	N/A	N/A	35.497	PK
2		2483.500	57.600	22.082	-16.400	74.000	35.517	PK

Profile: 19A2158R	Page No.: 18
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 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 BLE	



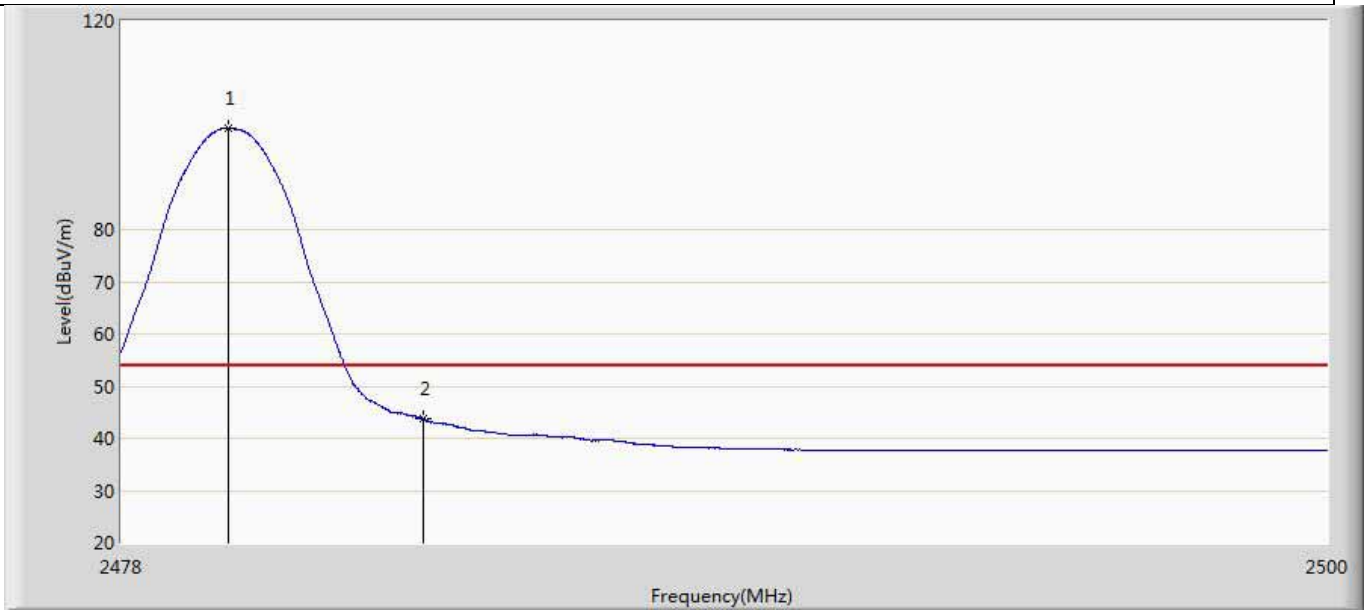
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.046	99.406	63.908	N/A	N/A	35.498	AV
2		2483.500	43.722	8.204	-10.278	54.000	35.517	AV

Profile: 19A2158R	Page No.: 19
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 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 1:Transmit at 2480MHz by BLE	



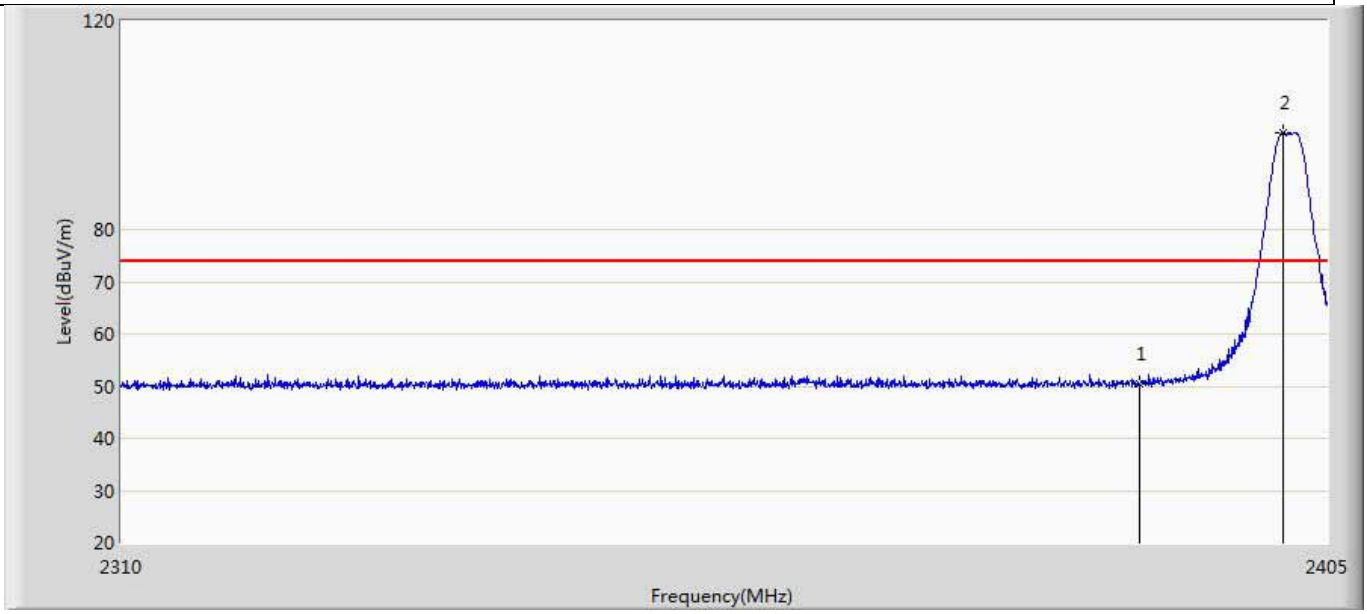
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.980	99.991	64.493	N/A	N/A	35.498	PK
2		2483.500	59.354	23.836	-14.646	74.000	35.517	PK

Profile: 19A2158R	Page No.: 20
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:17
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 BLE	



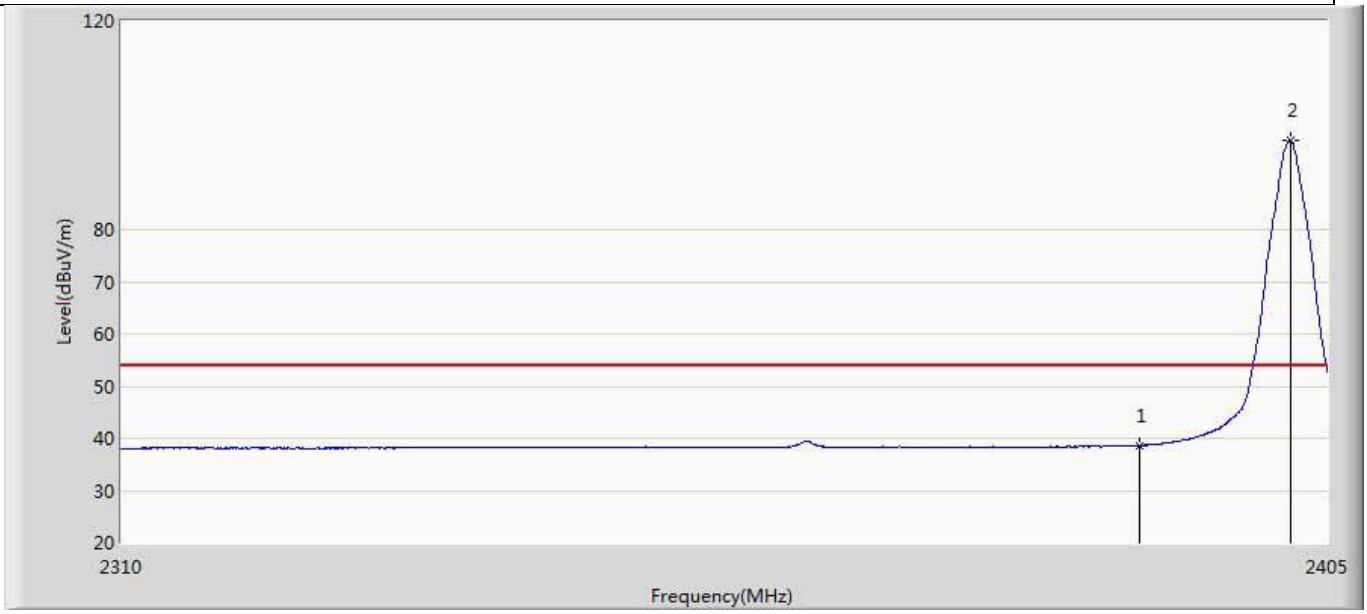
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.947	99.351	63.853	N/A	N/A	35.498	AV
2		2483.500	43.695	8.177	-10.305	54.000	35.517	AV

Profile: 19A2158R	Page No.: 5
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 20:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



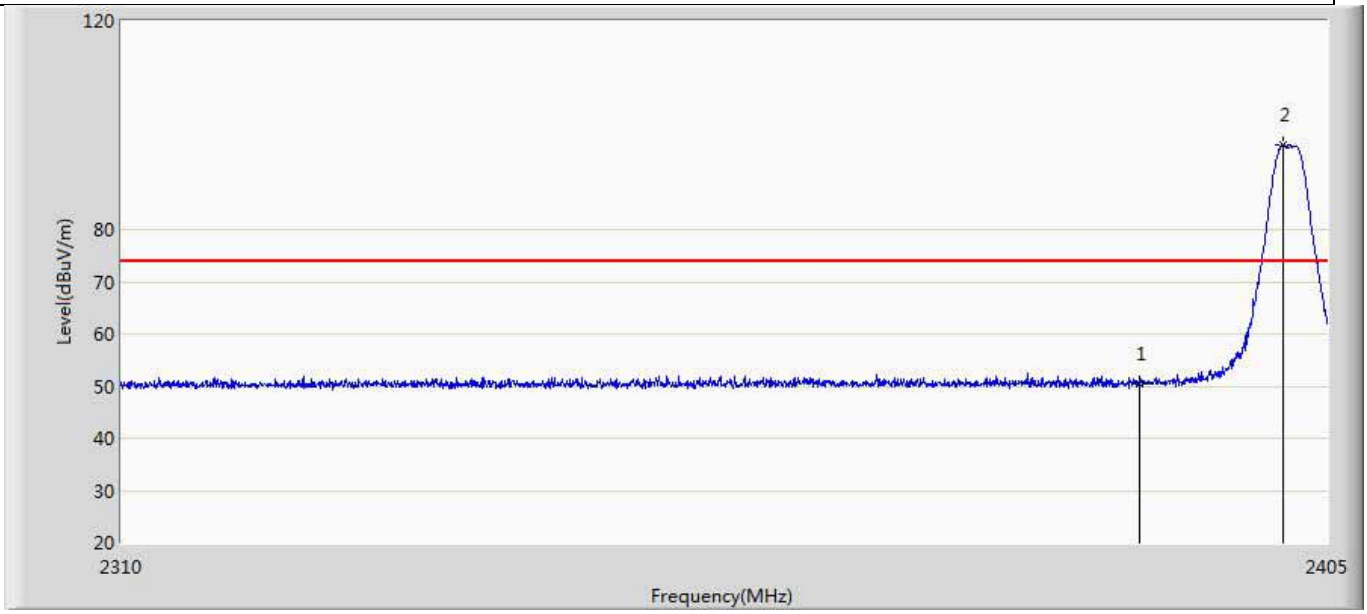
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.474	15.017	-23.526	74.000	35.458	PK
2	*	2401.485	98.576	63.107	N/A	N/A	35.468	PK

Profile: 19A2158R	Page No.: 6
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 20:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



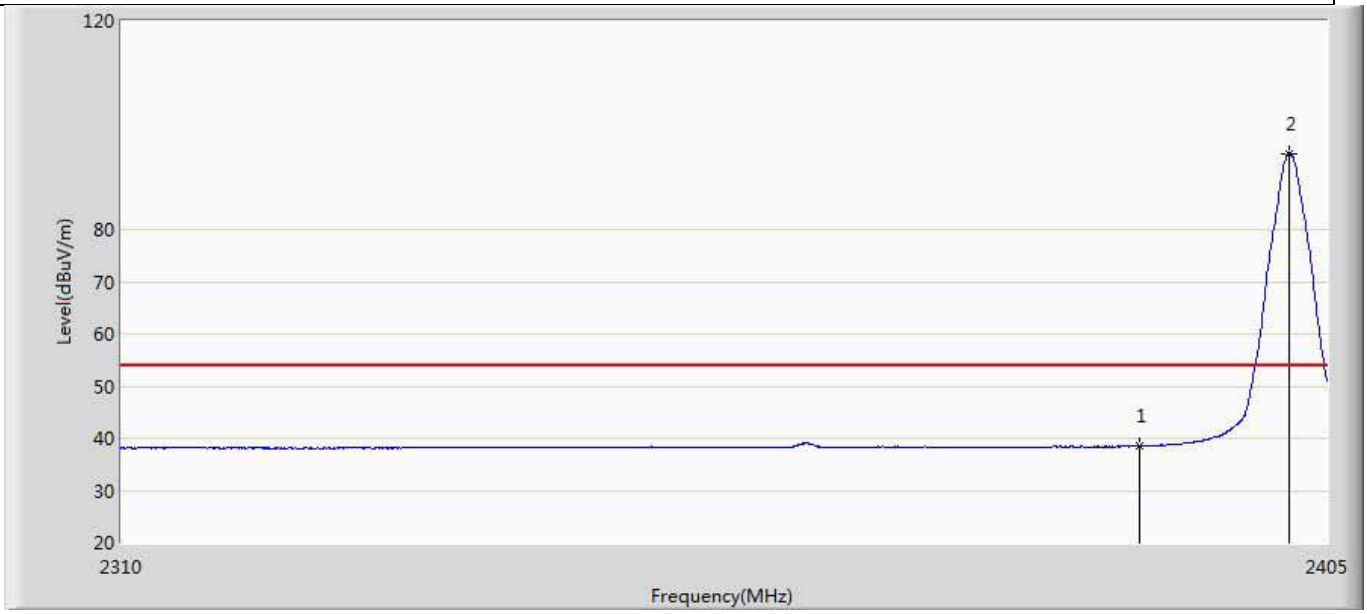
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.679	3.222	-15.321	54.000	35.458	AV
2	*	2402.055	97.000	61.530	N/A	N/A	35.469	AV

Profile: 19A2158R	Page No.: 7
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 20:14
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 2402MHz by 2LE	



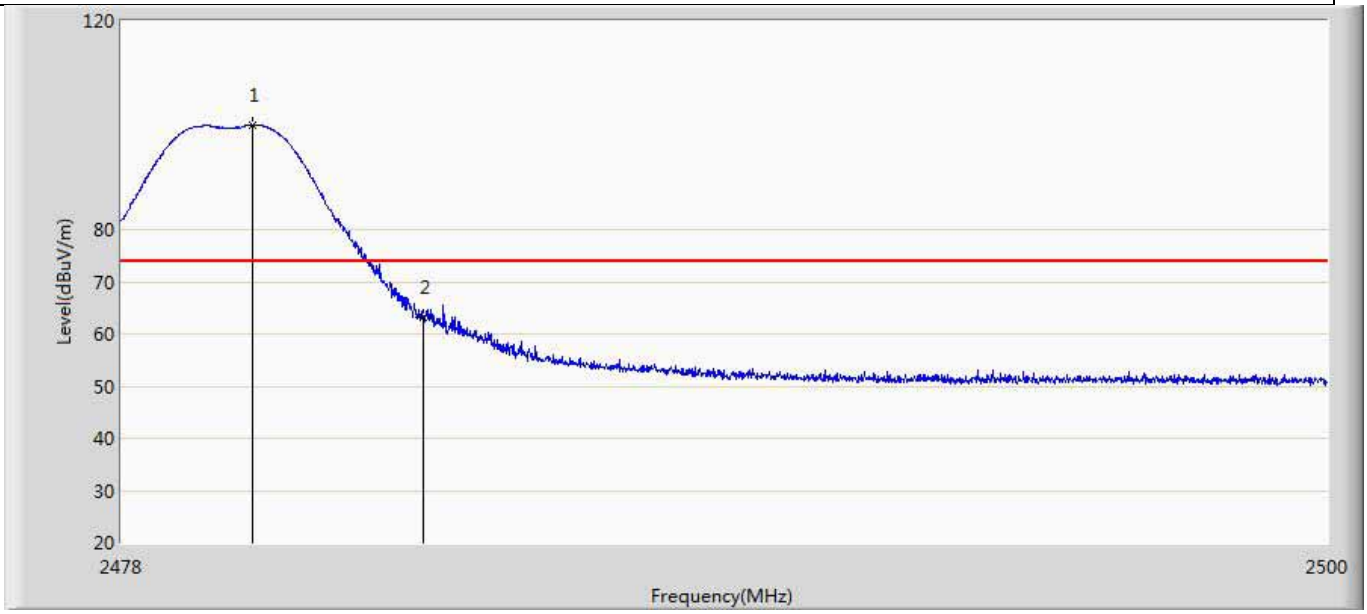
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.296	14.839	-23.704	74.000	35.458	PK
2	*	2401.485	96.161	60.692	N/A	N/A	35.468	PK

Profile: 19A2158R	Page No.: 8
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 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 2:Transmit at 2402MHz by 2LE	



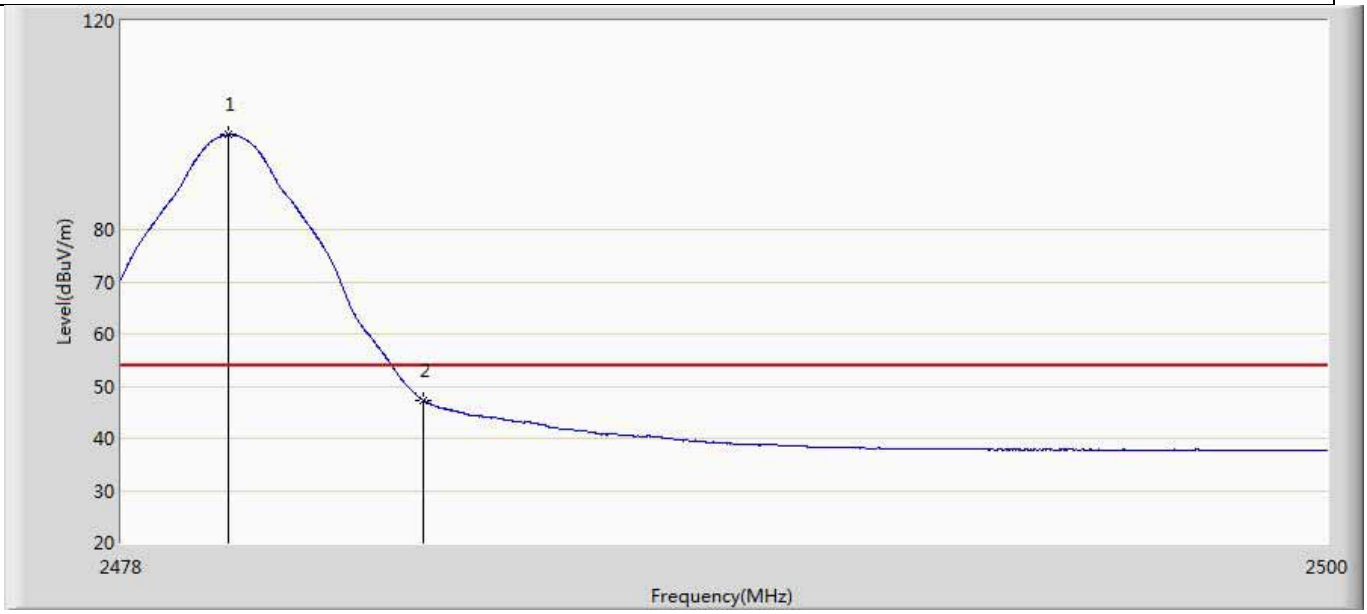
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.477	3.020	-15.523	54.000	35.458	AV
2	*	2401.913	94.598	59.129	N/A	N/A	35.469	AV

Profile: 19A2158R	Page No.: 21
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



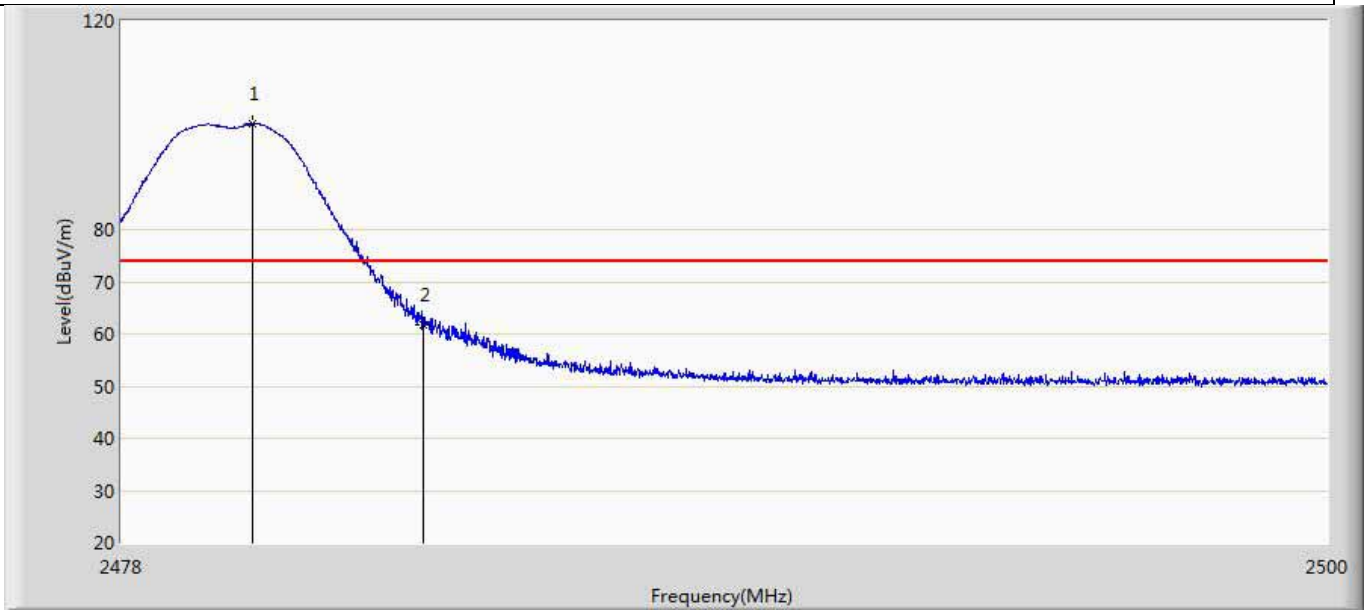
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.387	100.119	64.619	N/A	N/A	35.501	PK
2		2483.500	63.190	27.672	-10.810	74.000	35.517	PK

Profile: 19A2158R	Page No.: 22
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



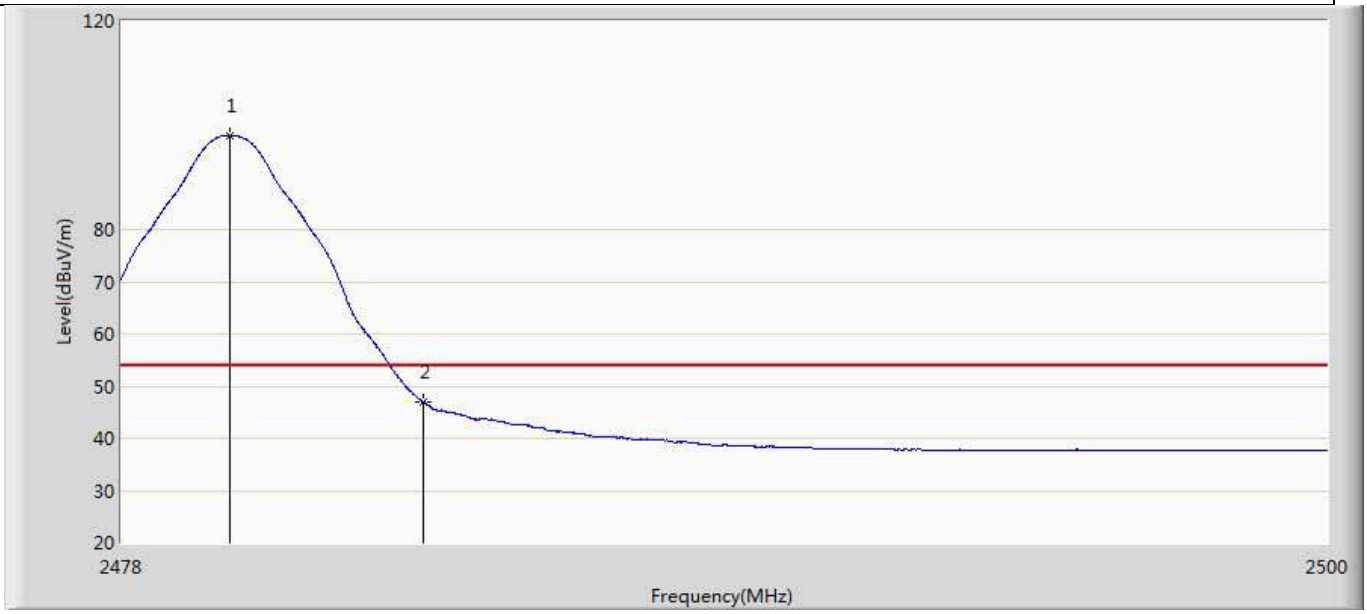
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.947	98.135	62.637	N/A	N/A	35.498	AV
2		2483.500	47.249	11.731	-6.751	54.000	35.517	AV

Profile: 19A2158R	Page No.: 23
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:28
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 2:Transmit at 2480MHz by 2LE	



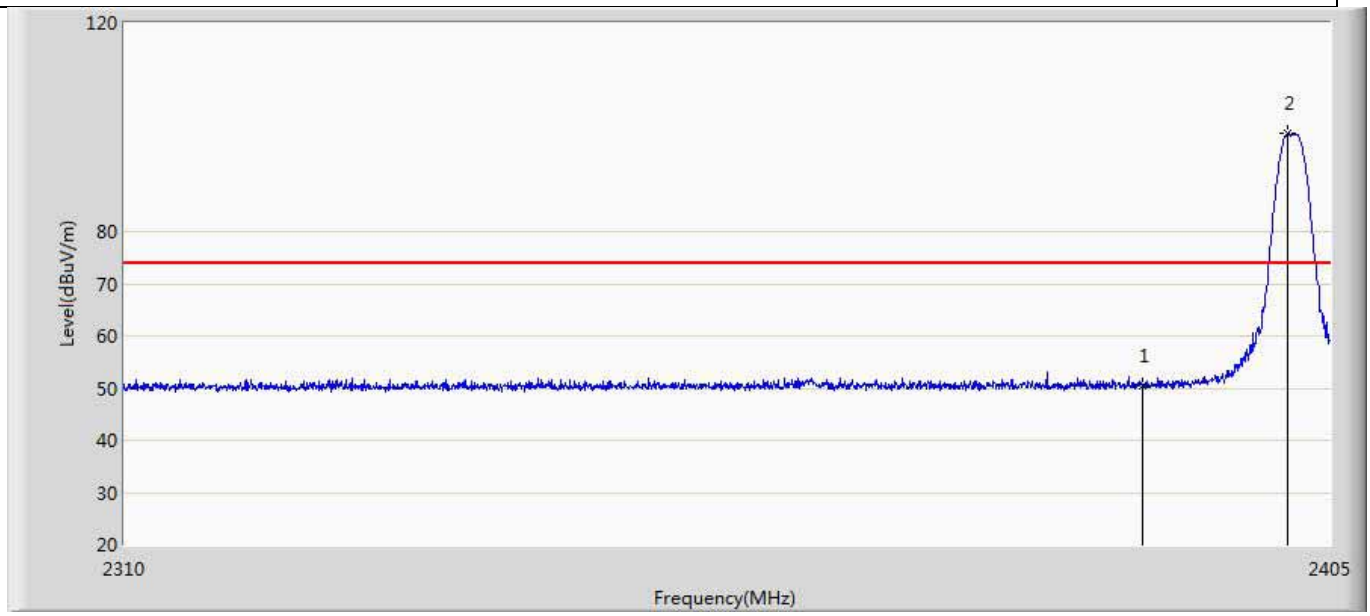
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.398	100.308	64.808	N/A	N/A	35.501	PK
2		2483.500	61.873	26.355	-12.127	74.000	35.517	PK

Profile: 19A2158R	Page No.: 24
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



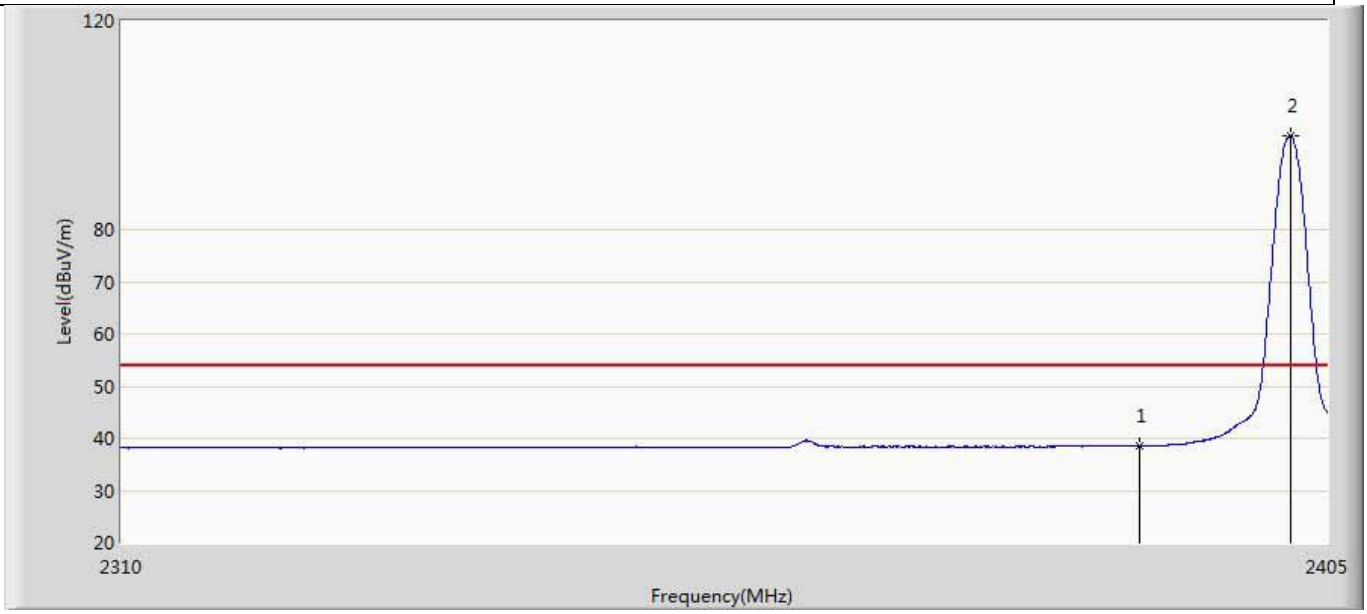
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.980	97.981	62.483	N/A	N/A	35.498	AV
2		2483.500	47.003	11.485	-6.997	54.000	35.517	AV

Profile: 19A2158R	Page No.: 13
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 20:49
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 code2	



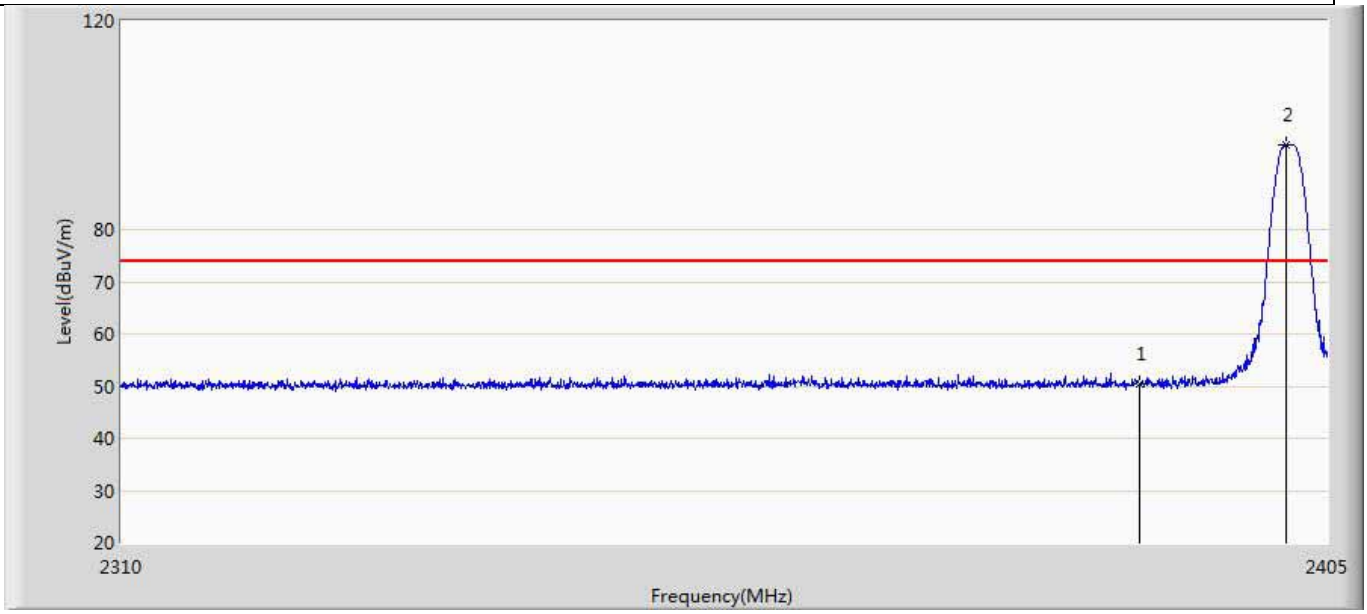
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.394	14.937	-23.606	74.000	35.458	PK
2	*	2401.627	98.763	63.294	N/A	N/A	35.469	PK

Profile: 19A2158R	Page No.: 14
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 20:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by code2	



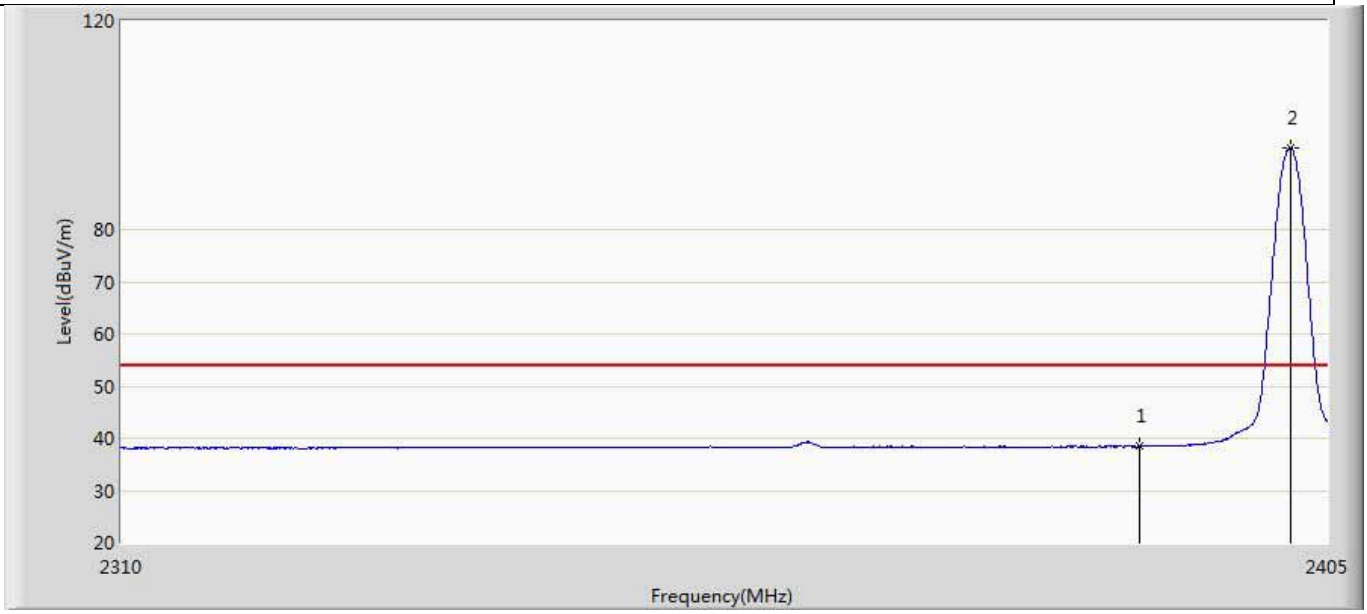
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.488	3.031	-15.512	54.000	35.458	AV
2	*	2402.055	98.082	62.612	N/A	N/A	35.469	AV

Profile: 19A2158R	Page No.: 15
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 20:58
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 code2	



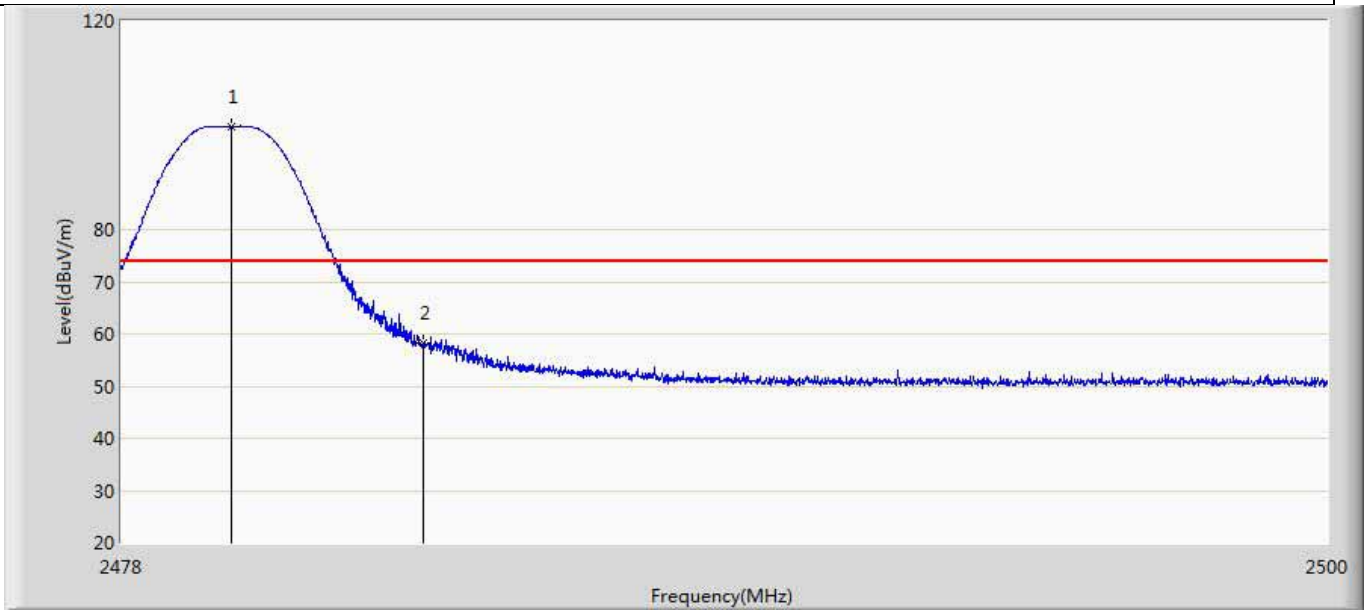
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.504	15.047	-23.496	74.000	35.458	PK
2	*	2401.770	96.323	60.854	N/A	N/A	35.469	PK

Profile: 19A2158R	Page No.: 16
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 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 3:Transmit at 2402MHz by code2	



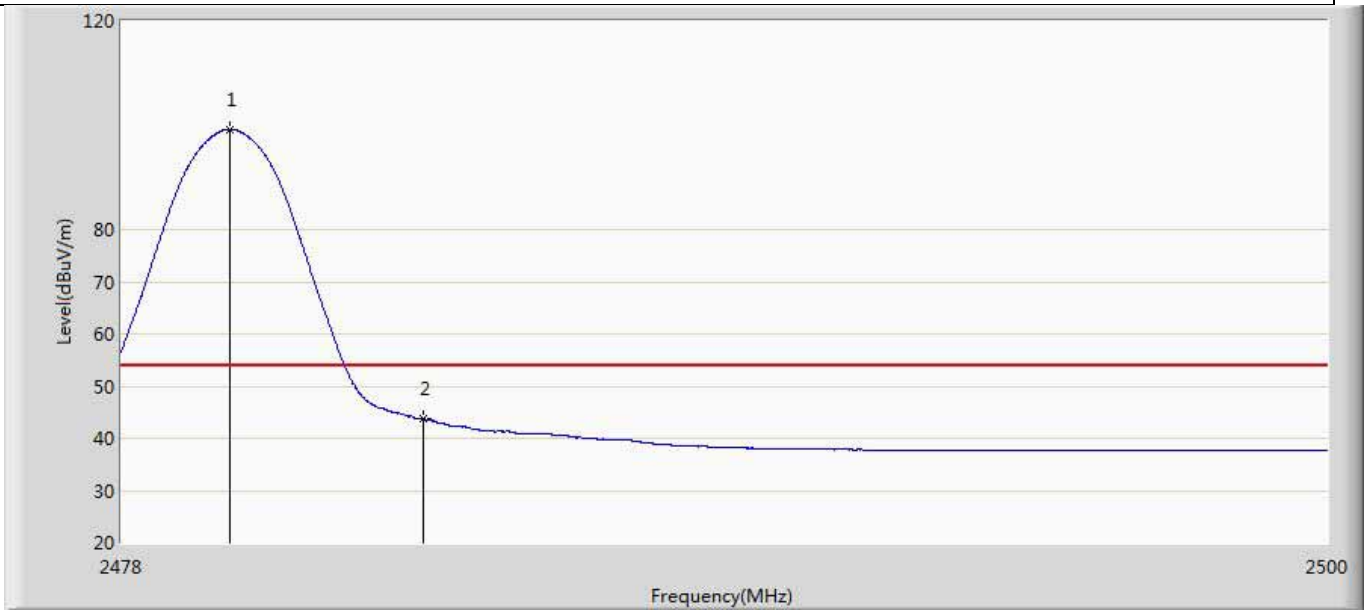
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.437	2.980	-15.563	54.000	35.458	AV
2	*	2402.055	95.761	60.291	N/A	N/A	35.469	AV

Profile: 19A2158R	Page No.: 29
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:47
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 3:Transmit at 2480MHz by code2	



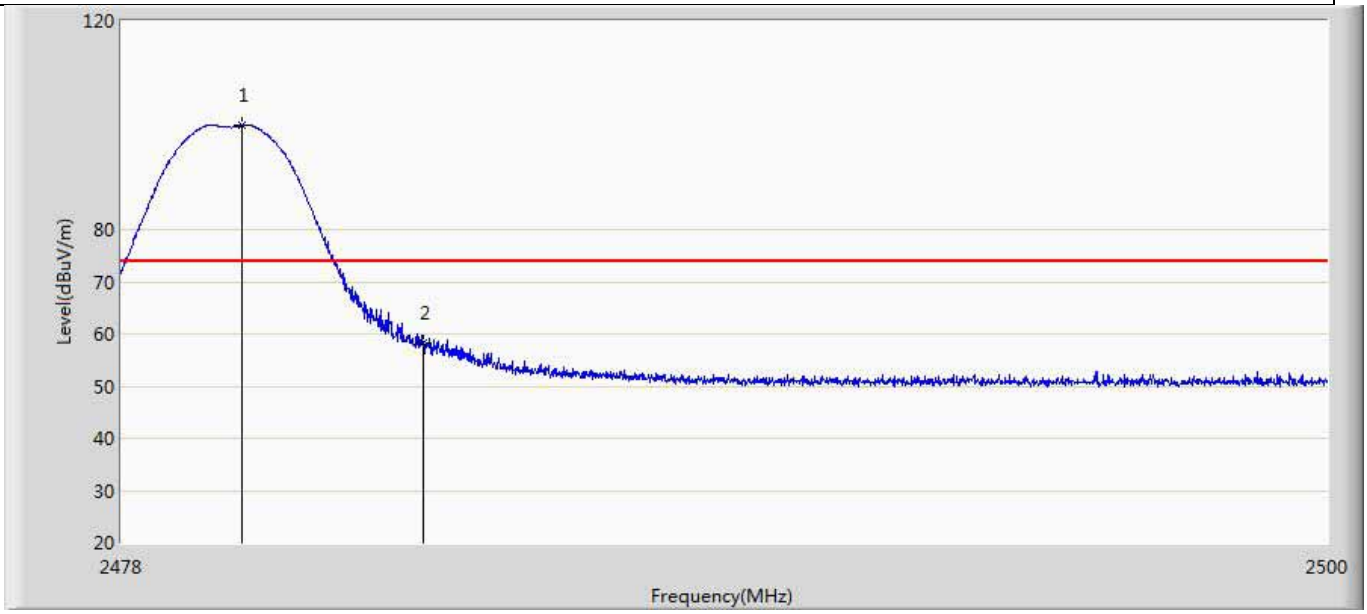
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.013	99.775	64.277	N/A	N/A	35.498	PK
2		2483.500	58.339	22.821	-15.661	74.000	35.517	PK

Profile: 19A2158R	Page No.: 30
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:50
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 code2	



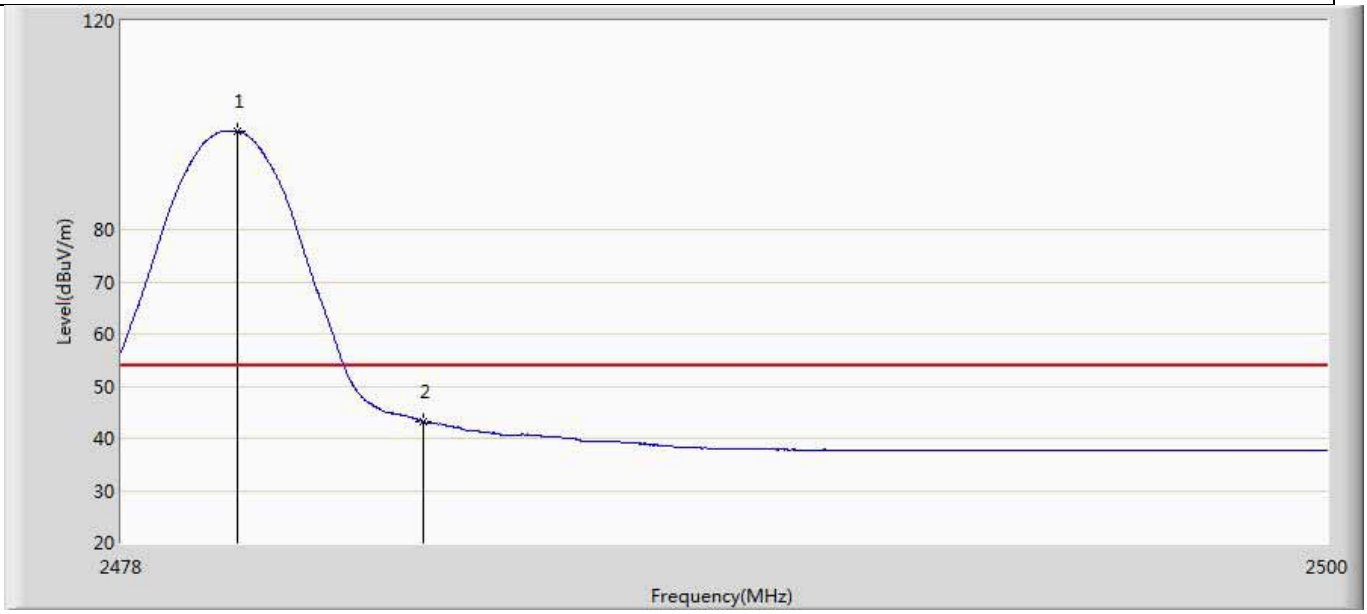
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.980	99.133	63.635	N/A	N/A	35.498	AV
2		2483.500	43.709	8.191	-10.291	54.000	35.517	AV

Profile: 19A2158R	Page No.: 31
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:52
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 code2	



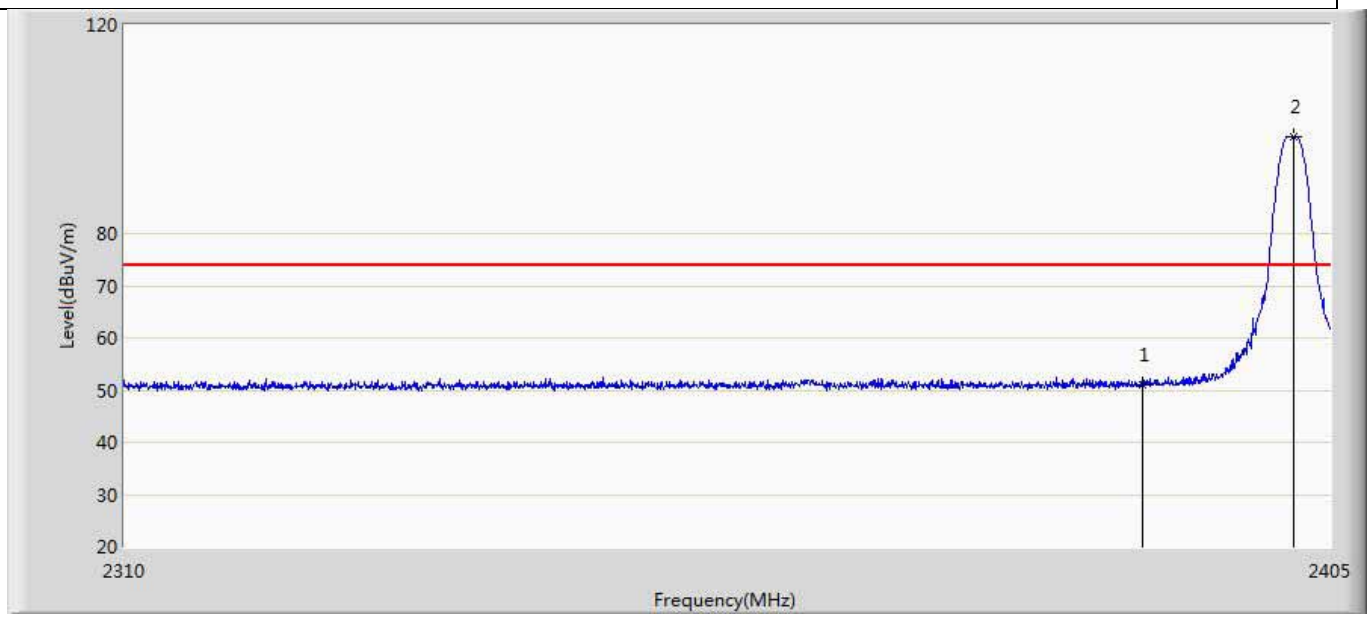
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.200	100.038	64.539	N/A	N/A	35.499	PK
2		2483.500	58.204	22.686	-15.796	74.000	35.517	PK

Profile: 19A2158R	Page No.: 32
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by code2	



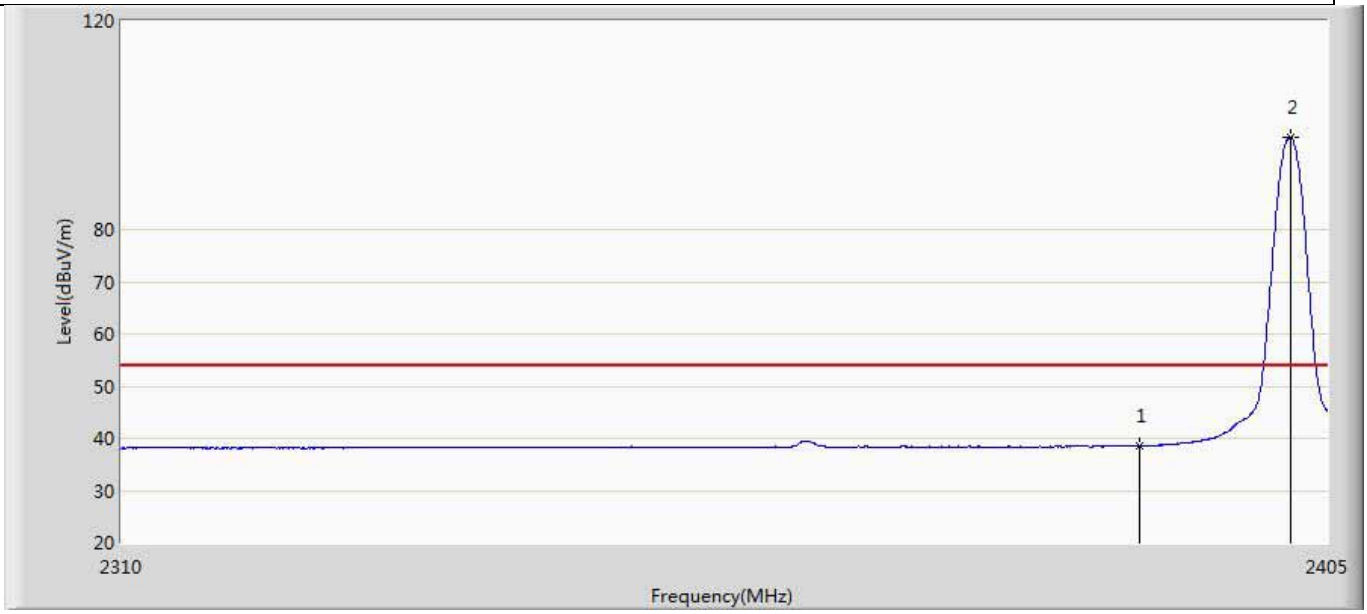
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.112	98.880	63.382	N/A	N/A	35.499	AV
2		2483.500	43.197	7.679	-10.803	54.000	35.517	AV

Profile: 19A2158R	Page No.: 9
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 20:21
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 4:Transmit at 2402MHz by code8	



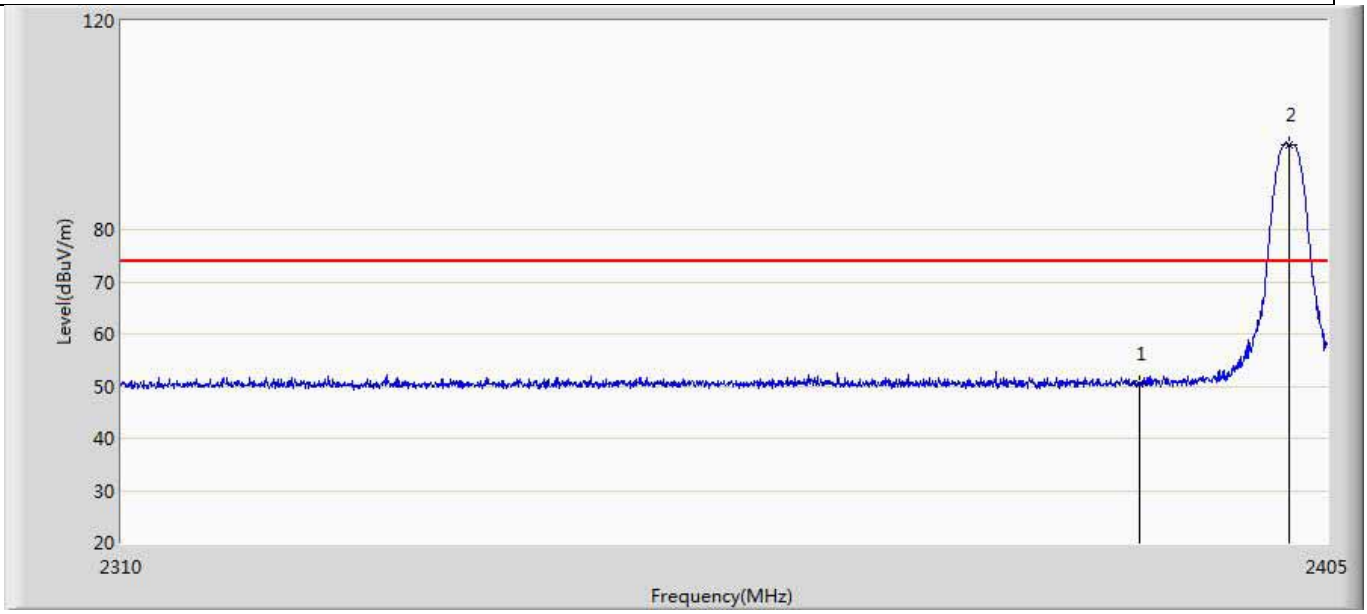
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.103	15.646	-22.897	74.000	35.458	PK
2	*	2402.055	98.513	63.043	N/A	N/A	35.469	PK

Profile: 19A2158R	Page No.: 10
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 20:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by code8	



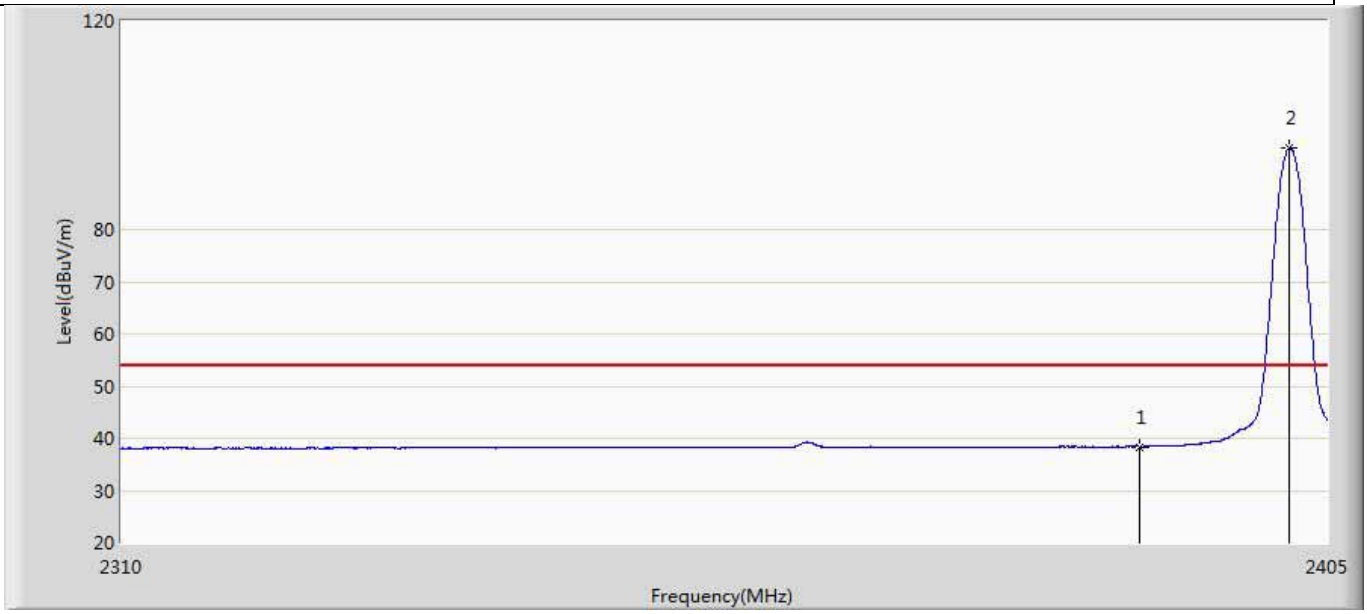
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.528	3.071	-15.472	54.000	35.458	AV
2	*	2402.055	97.810	62.340	N/A	N/A	35.469	AV

Profile: 19A2158R	Page No.: 11
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 20:45
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 4:Transmit at 2402MHz by code8	



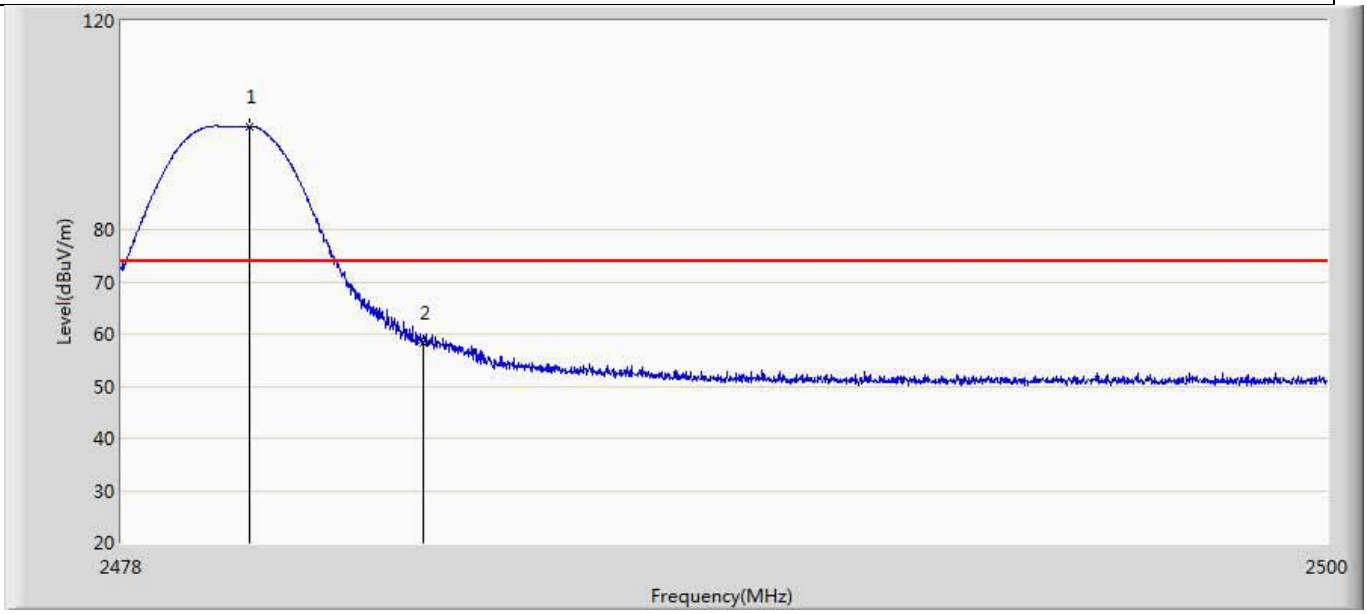
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.320	14.863	-23.680	74.000	35.458	PK
2	*	2401.913	96.283	60.814	N/A	N/A	35.469	PK

Profile: 19A2158R	Page No.: 12
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 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 4:Transmit at 2402MHz by code8	



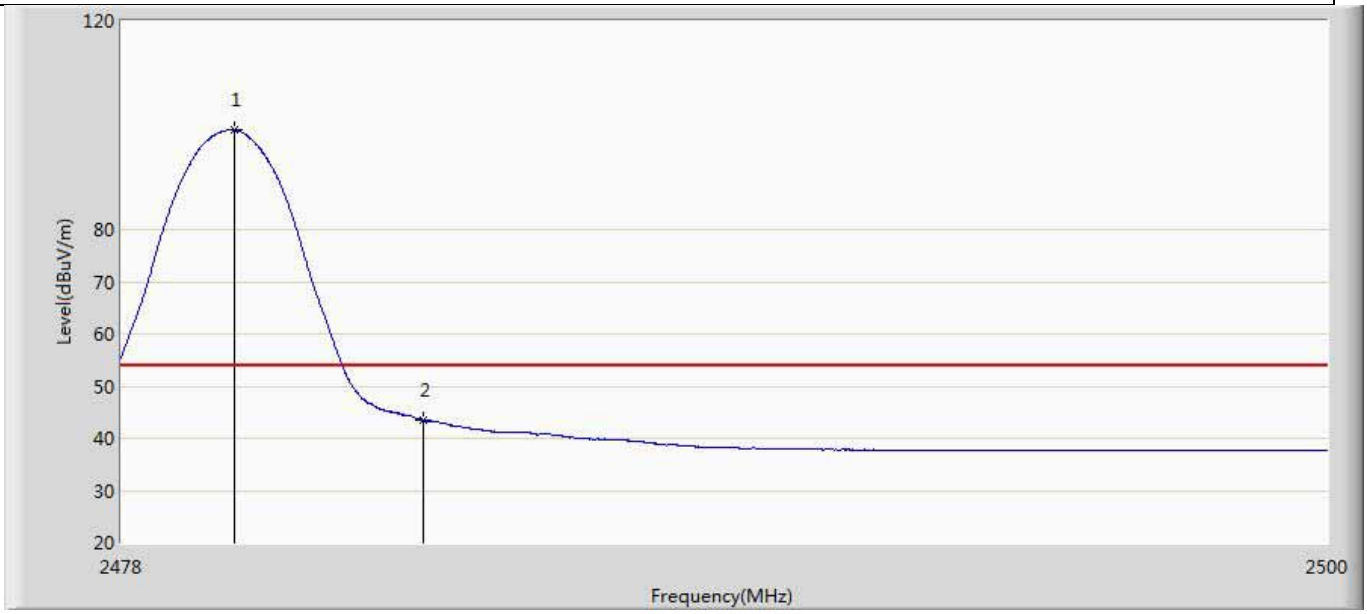
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.380	2.923	-15.620	54.000	35.458	AV
2	*	2401.960	95.638	60.169	N/A	N/A	35.469	AV

Profile: 19A2158R	Page No.: 25
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:37
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 code8	



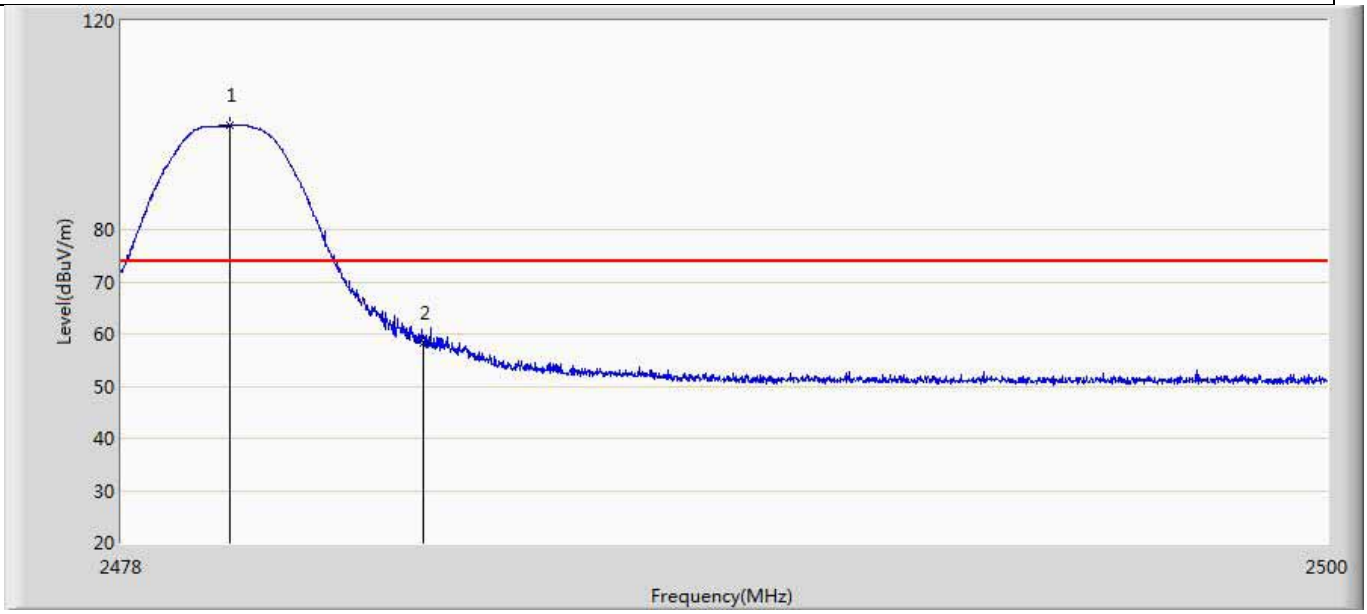
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.321	99.772	64.272	N/A	N/A	35.500	PK
2		2483.500	58.264	22.746	-15.736	74.000	35.517	PK

Profile: 19A2158R	Page No.: 26
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by code8	



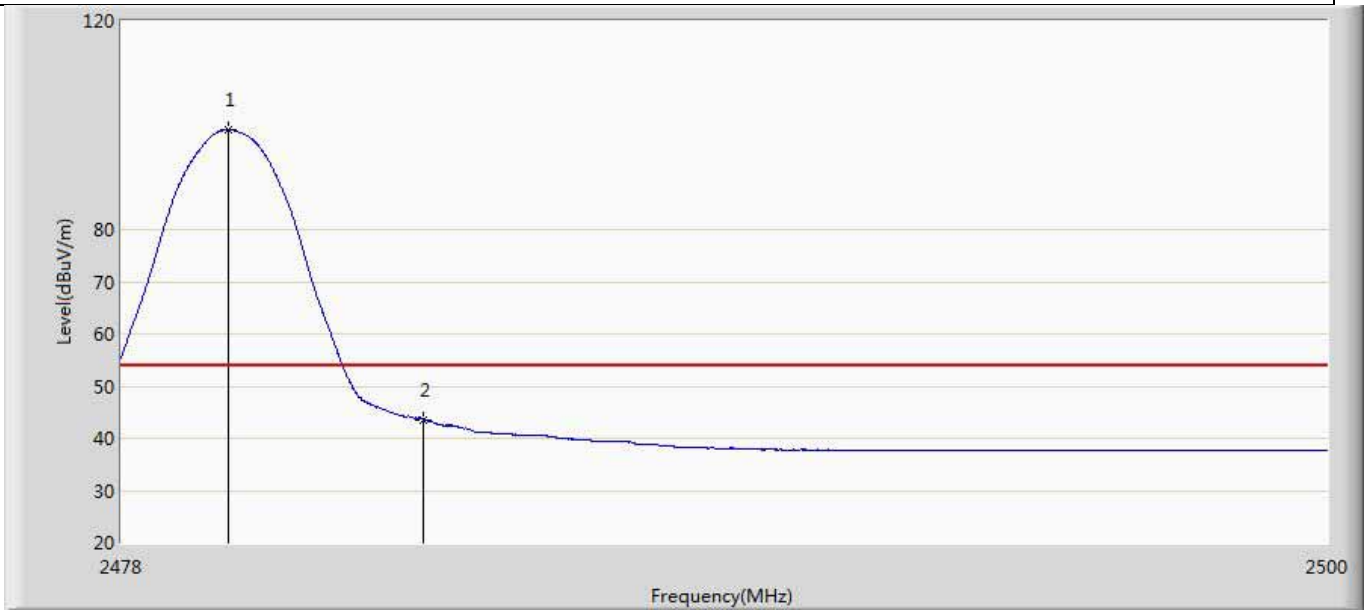
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.046	99.064	63.566	N/A	N/A	35.498	AV
2		2483.500	43.561	8.043	-10.439	54.000	35.517	AV

Profile: 19A2158R	Page No.: 27
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:42
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 2480MHz by code8	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.969	99.987	64.489	N/A	N/A	35.498	PK
2		2483.500	58.306	22.788	-15.694	74.000	35.517	PK

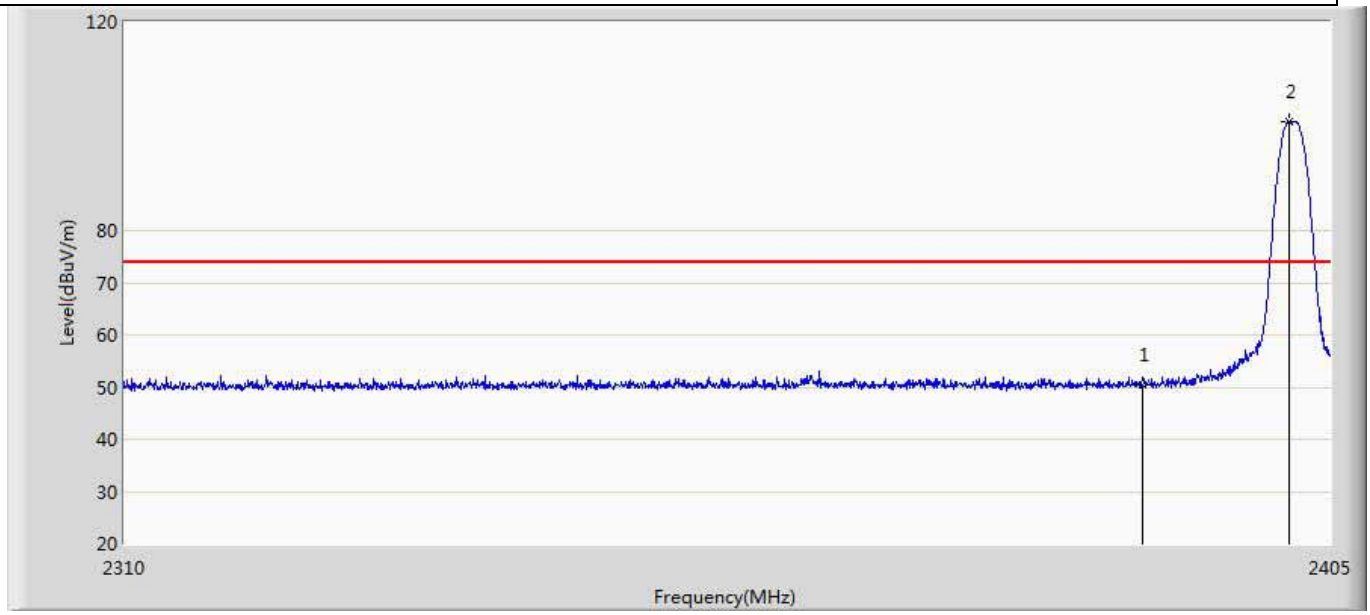
Profile: 19A2158R	Page No.: 28
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/07 - 21:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by code8	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.947	99.170	63.672	N/A	N/A	35.498	AV
2		2483.500	43.579	8.061	-10.421	54.000	35.517	AV

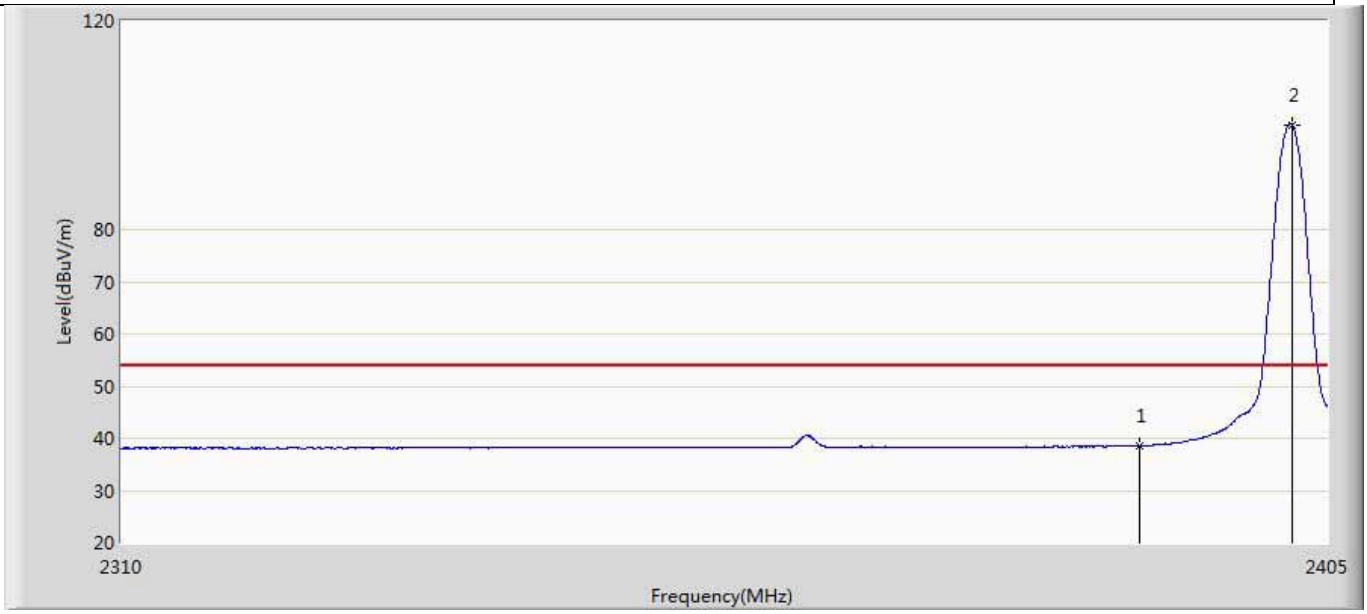
KDS:

Profile: 19A2158R	Page No.: 25
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 14:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by BLE	



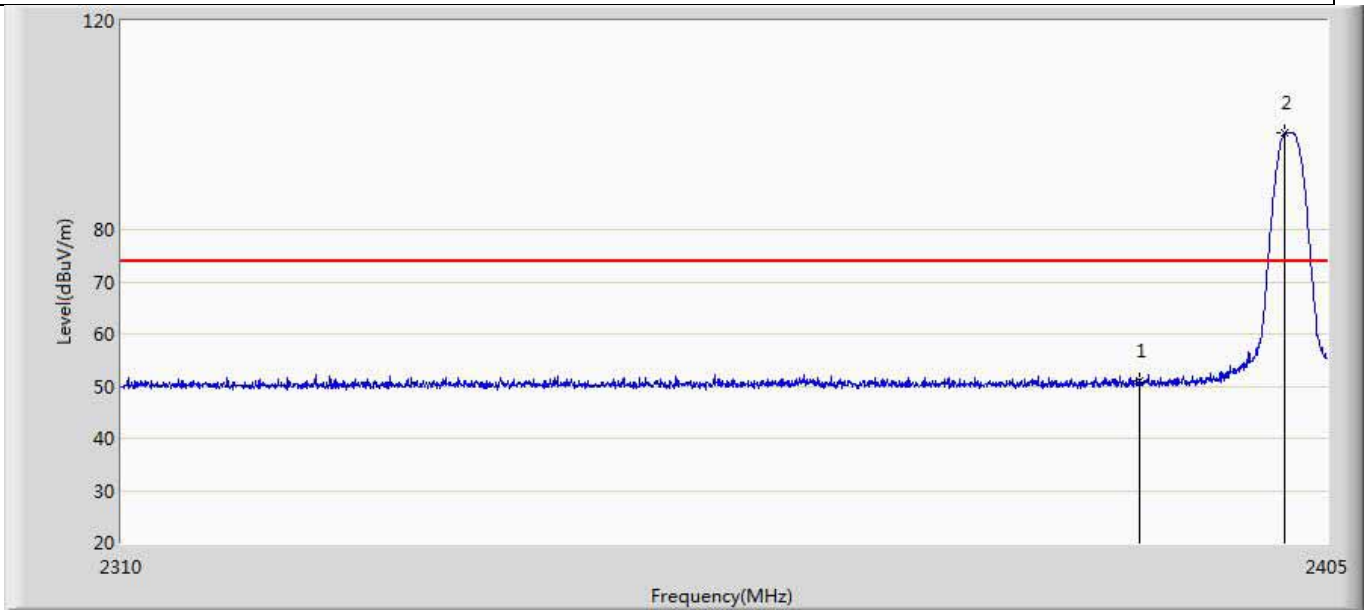
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.420	14.963	-23.580	74.000	35.458	PK
2	*	2401.675	100.944	65.475	N/A	N/A	35.469	PK

Profile: 19A2158R	Page No.: 26
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 14:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by BLE	



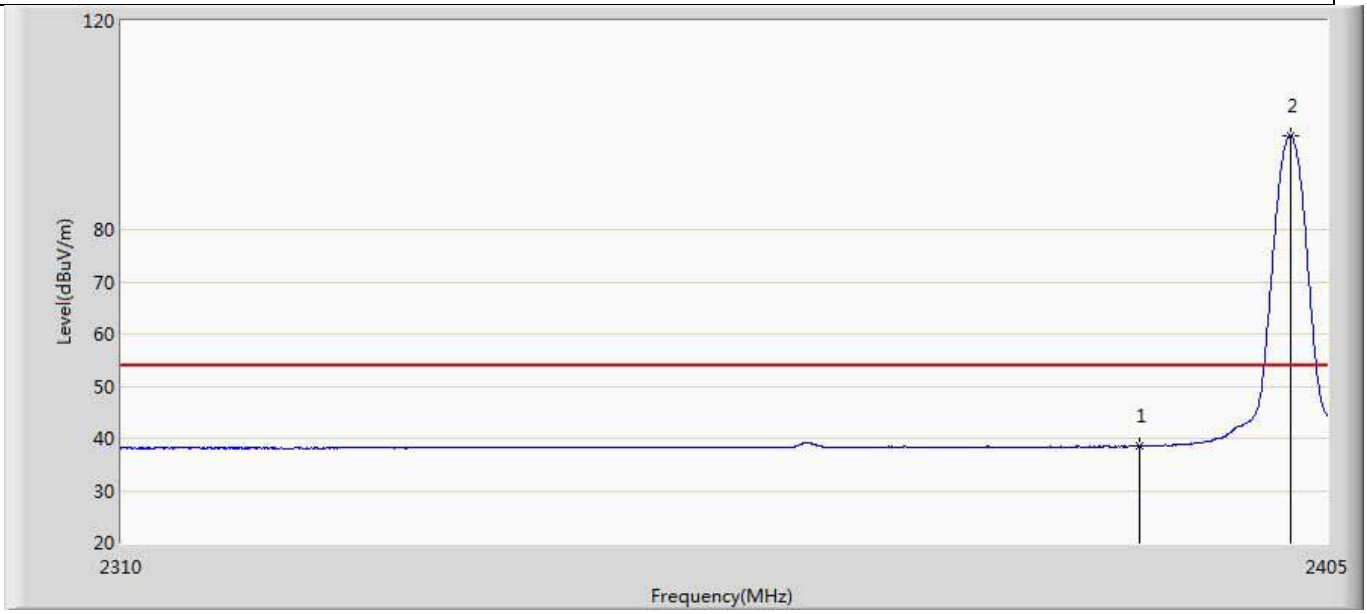
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.523	3.066	-15.477	54.000	35.458	AV
2	*	2402.198	100.100	64.630	N/A	N/A	35.470	AV

Profile: 19A2158R	Page No.: 27
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 14:46
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 1:Transmit at 2402MHz by BLE	



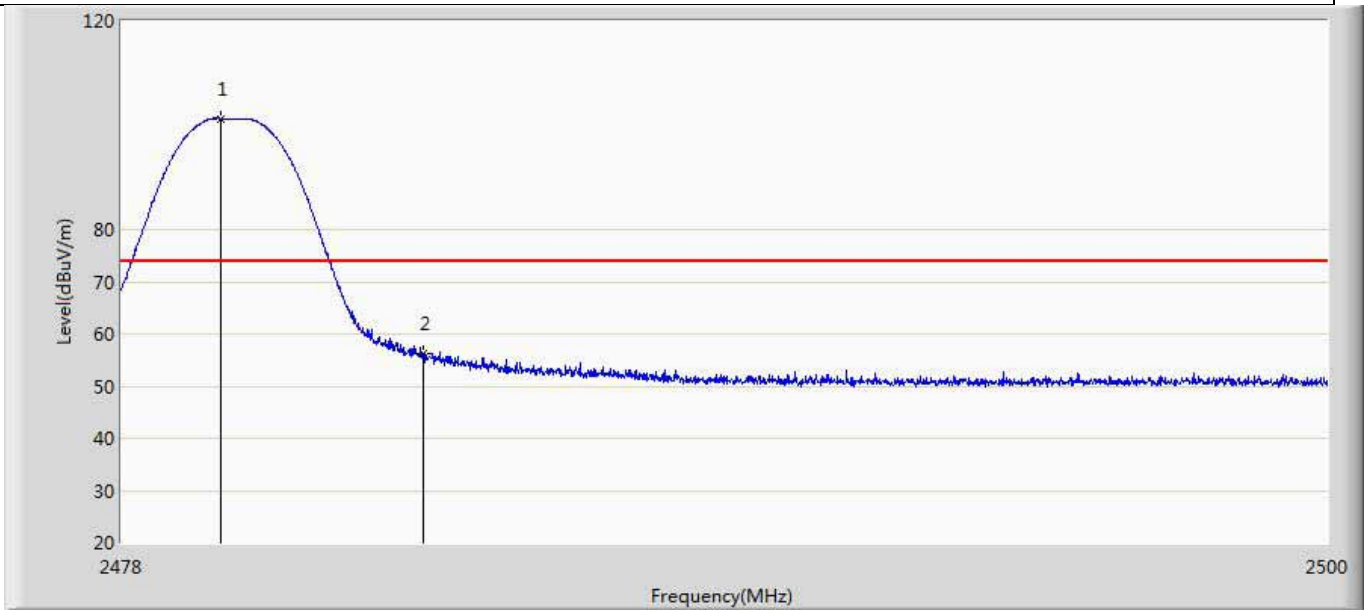
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.989	15.532	-23.011	74.000	35.458	PK
2	*	2401.627	98.487	63.018	N/A	N/A	35.469	PK

Profile: 19A2158R	Page No.: 28
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 14:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by BLE	



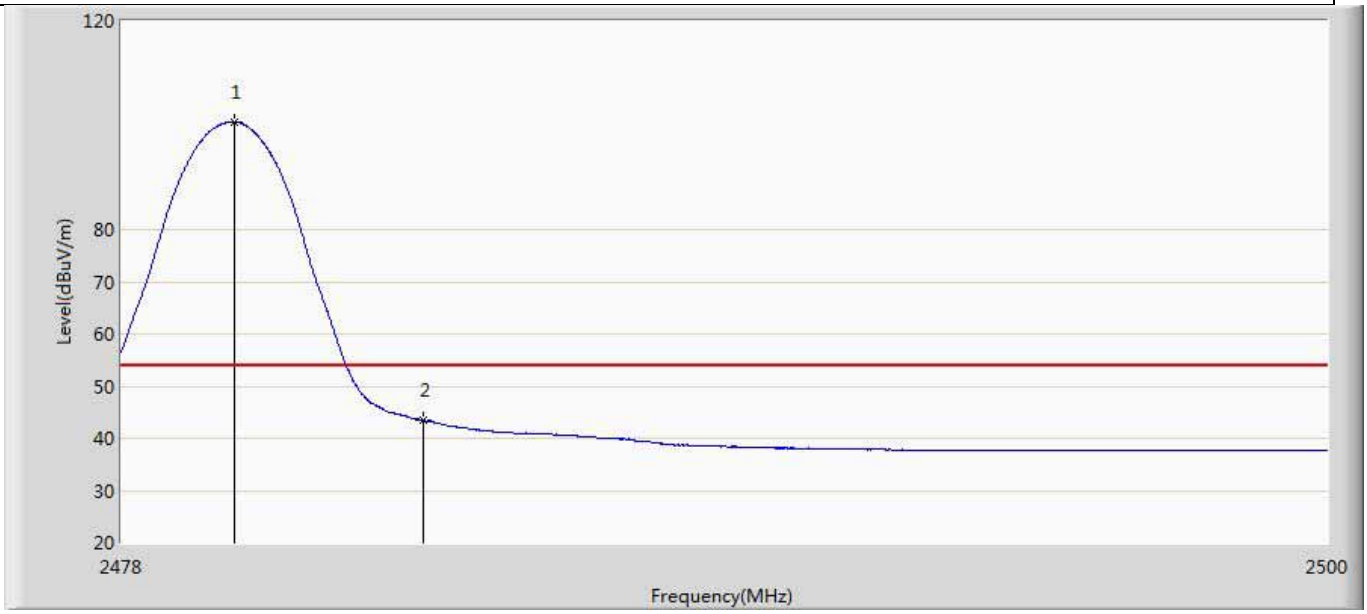
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.430	2.973	-15.570	54.000	35.458	AV
2	*	2402.055	97.916	62.446	N/A	N/A	35.469	AV

Profile: 19A2158R	Page No.: 41
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:36
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 BLE	



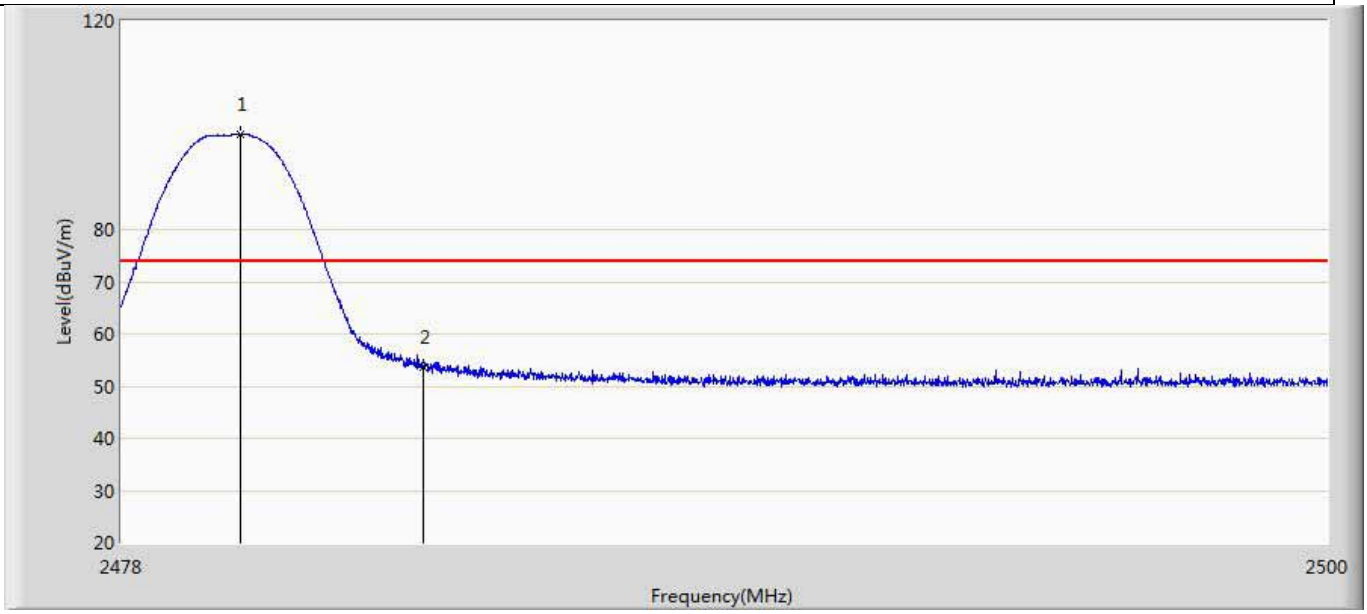
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.804	101.247	65.750	N/A	N/A	35.497	PK
2		2483.500	56.129	20.611	-17.871	74.000	35.517	PK

Profile: 19A2158R	Page No.: 42
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by BLE	



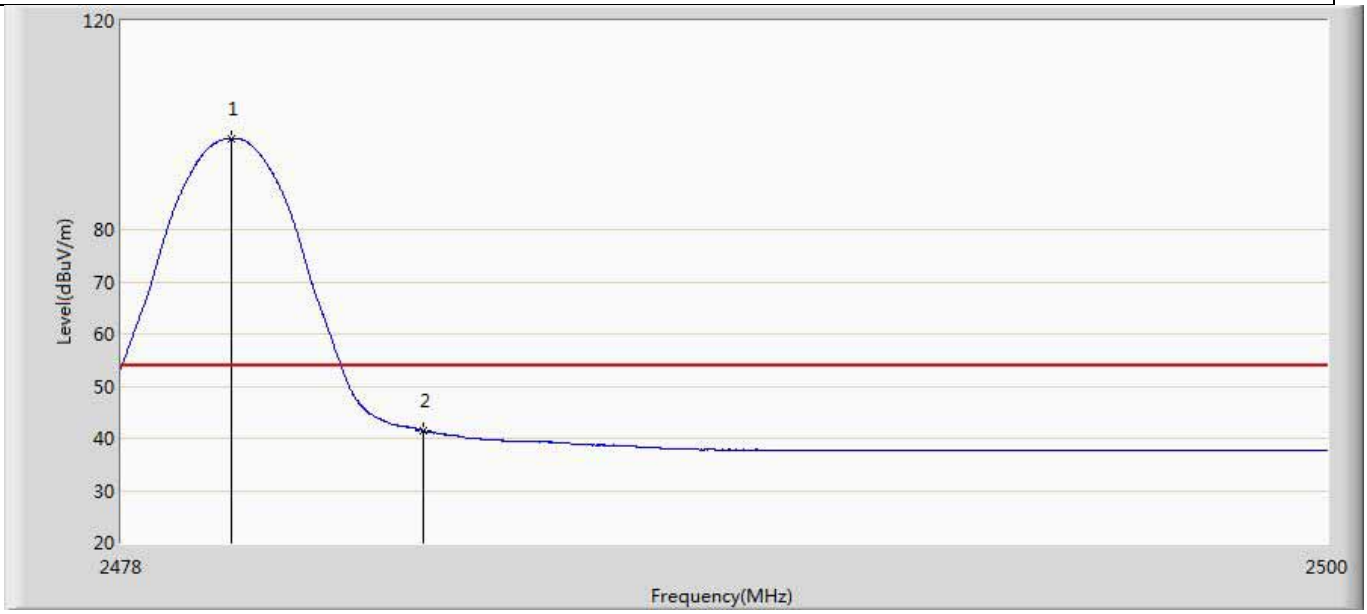
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.046	100.618	65.120	N/A	N/A	35.498	AV
2		2483.500	43.368	7.850	-10.632	54.000	35.517	AV

Profile: 19A2158R	Page No.: 43
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:40
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 BLE	



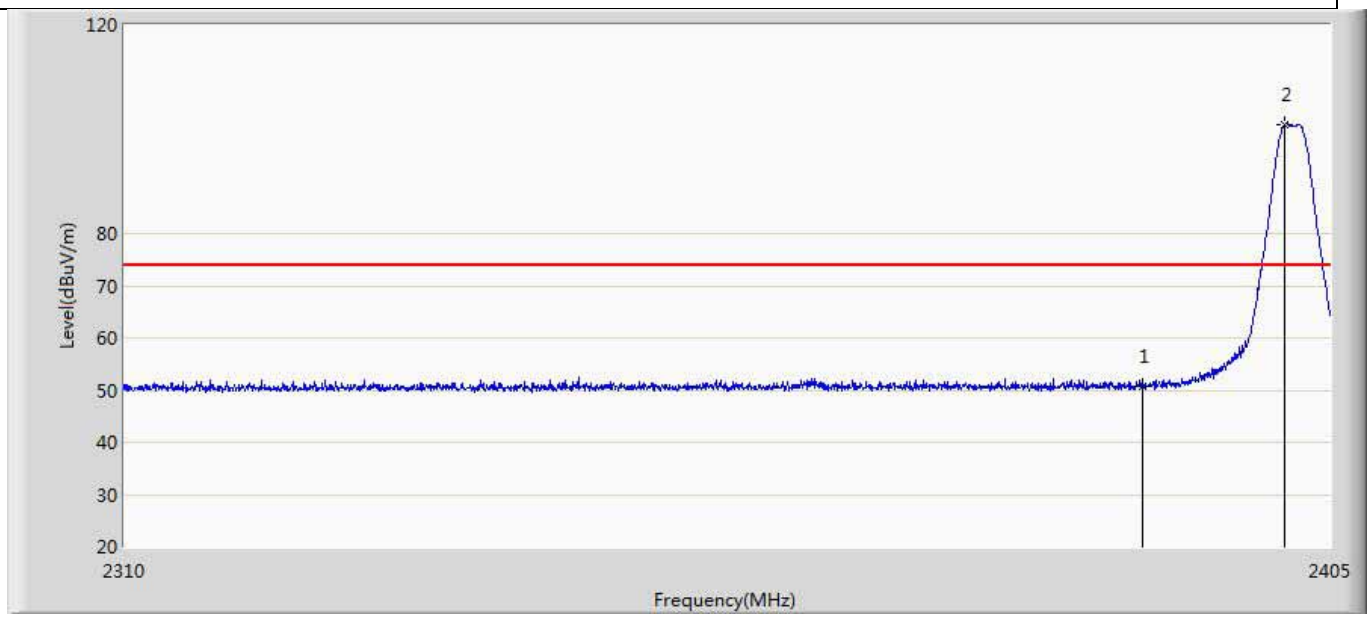
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.178	98.242	62.743	N/A	N/A	35.499	PK
2		2483.500	53.621	18.103	-20.379	74.000	35.517	PK

Profile: 19A2158R	Page No.: 44
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:42
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 2480MHz by BLE	



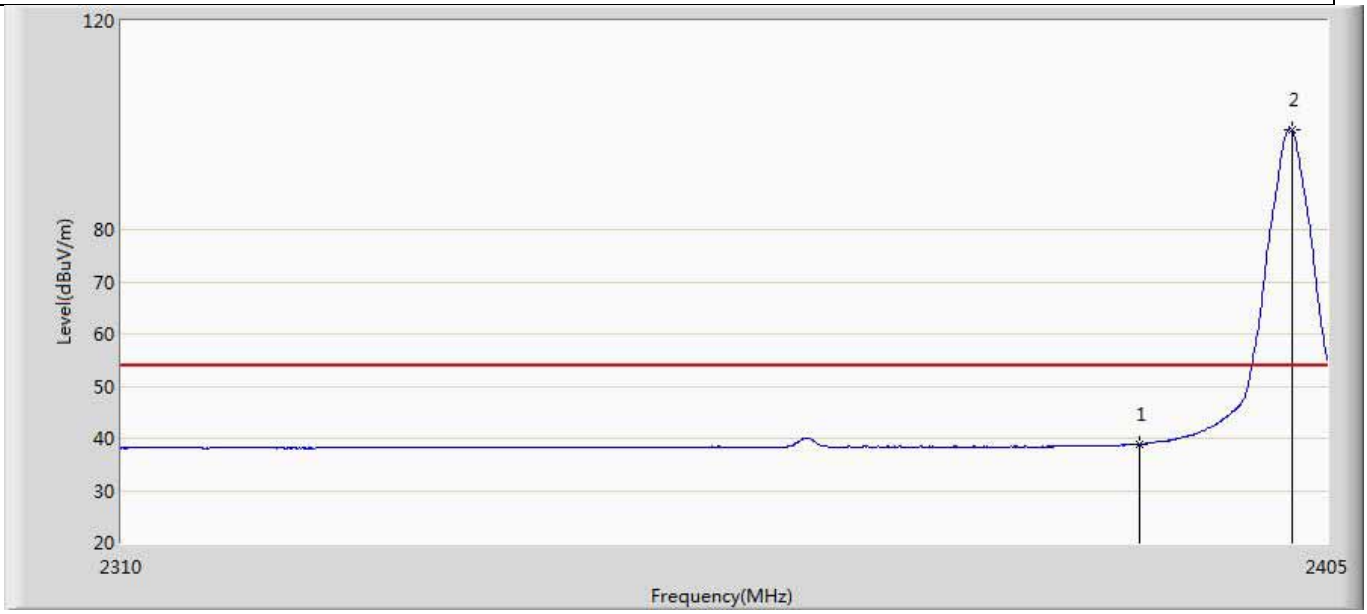
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.013	97.508	62.010	N/A	N/A	35.498	AV
2		2483.500	41.402	5.884	-12.598	54.000	35.517	AV

Profile: 19A2158R	Page No.: 29
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 14:50
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 2:Transmit at 2402MHz by 2LE	



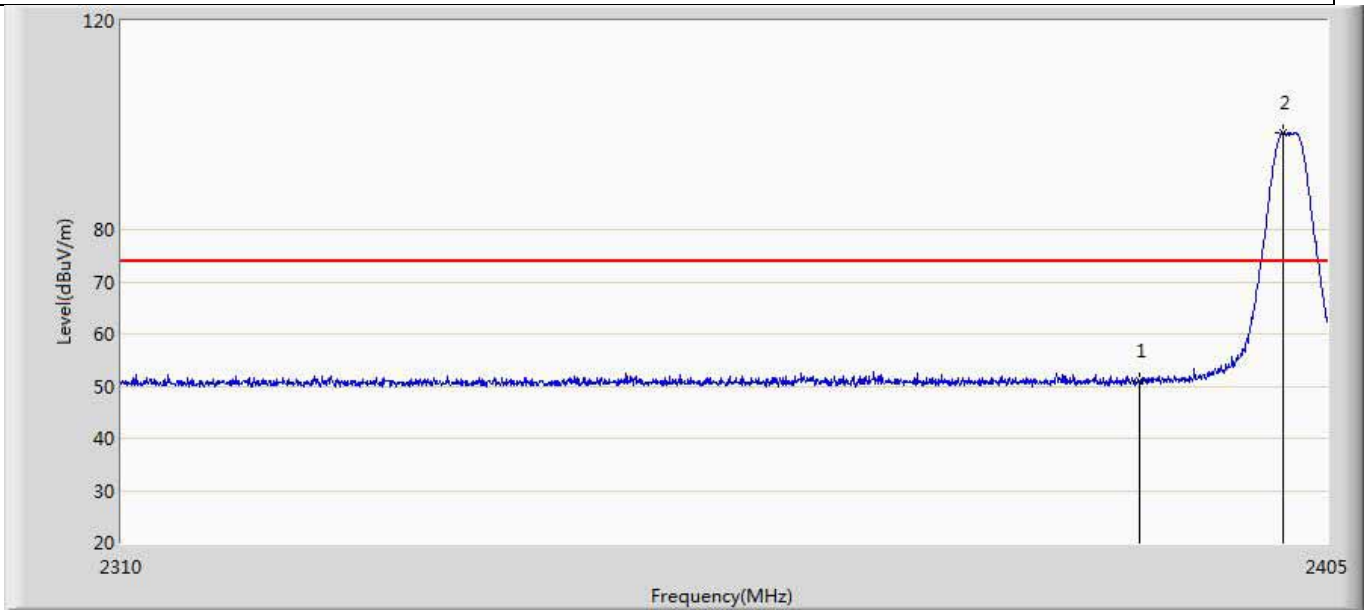
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.647	15.190	-23.353	74.000	35.458	PK
2	*	2401.390	100.974	65.505	N/A	N/A	35.468	PK

Profile: 19A2158R	Page No.: 30
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 14:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



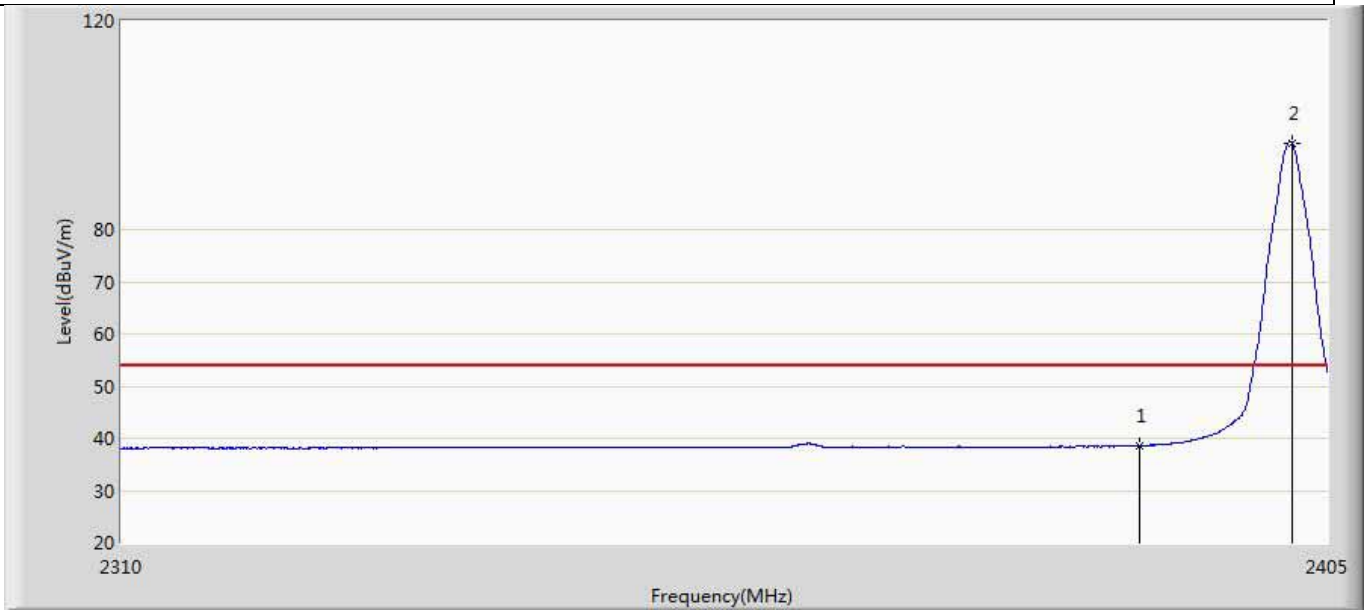
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.910	3.453	-15.090	54.000	35.458	AV
2	*	2402.198	99.136	63.666	N/A	N/A	35.470	AV

Profile: 19A2158R	Page No.: 31
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by 2LE	



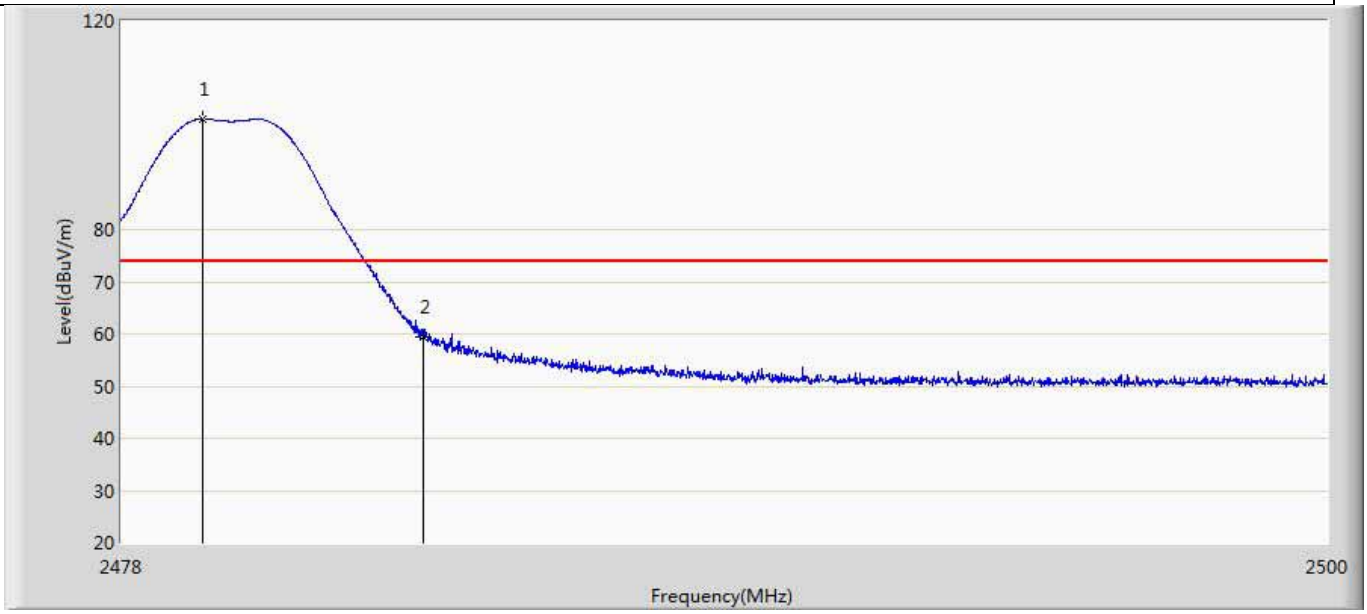
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.988	15.531	-23.012	74.000	35.458	PK
2	*	2401.485	98.483	63.014	N/A	N/A	35.468	PK

Profile: 19A2158R	Page No.: 32
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:06
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 2402MHz by 2LE	



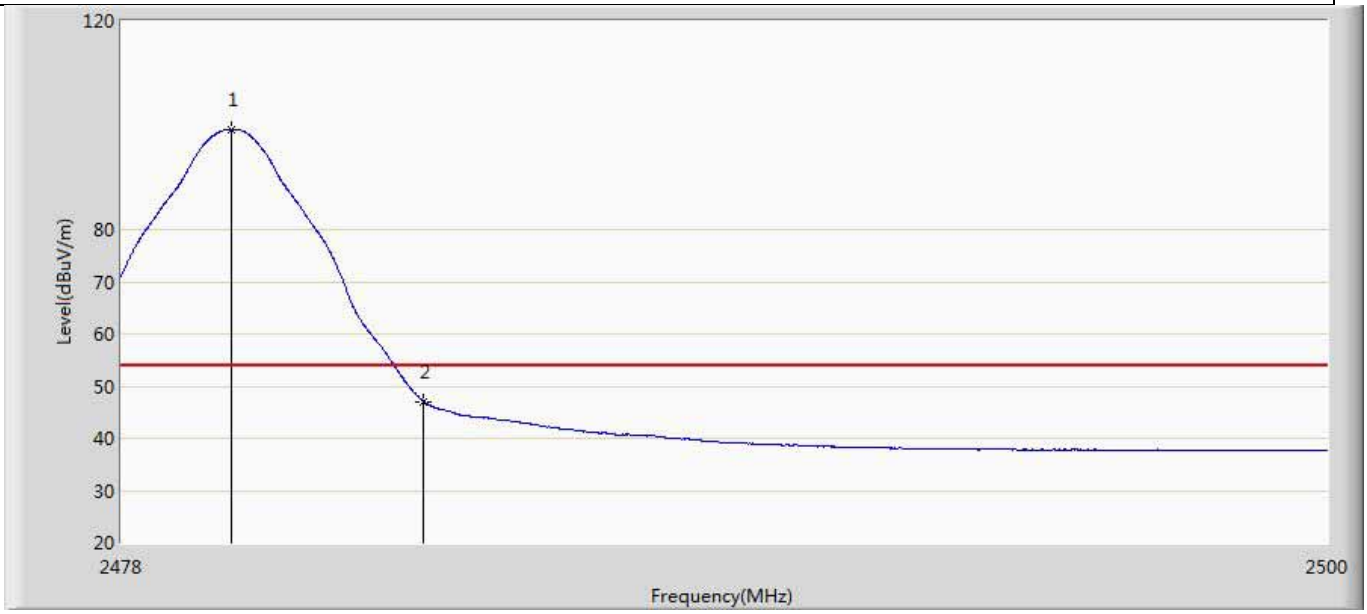
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.578	3.121	-15.422	54.000	35.458	AV
2	*	2402.198	96.615	61.145	N/A	N/A	35.470	AV

Profile: 19A2158R	Page No.: 45
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 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 2:Transmit at 2480MHz by 2LE	



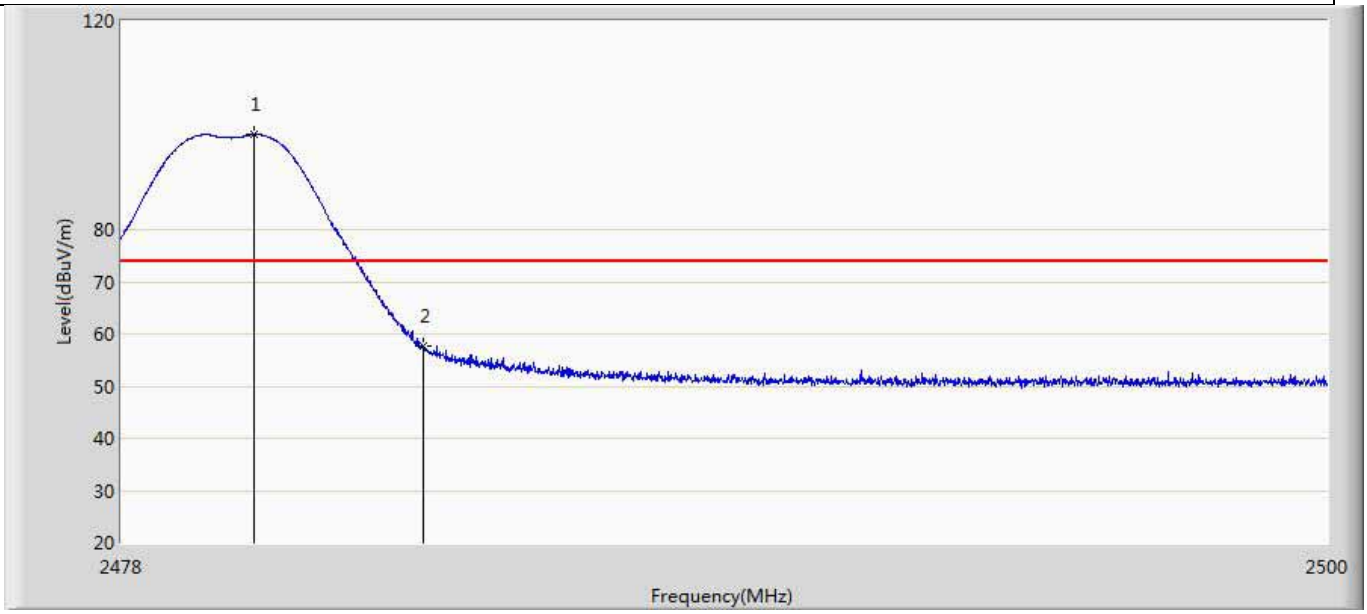
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.496	101.298	65.803	N/A	N/A	35.495	PK
2		2483.500	59.370	23.852	-14.630	74.000	35.517	PK

Profile: 19A2158R	Page No.: 46
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



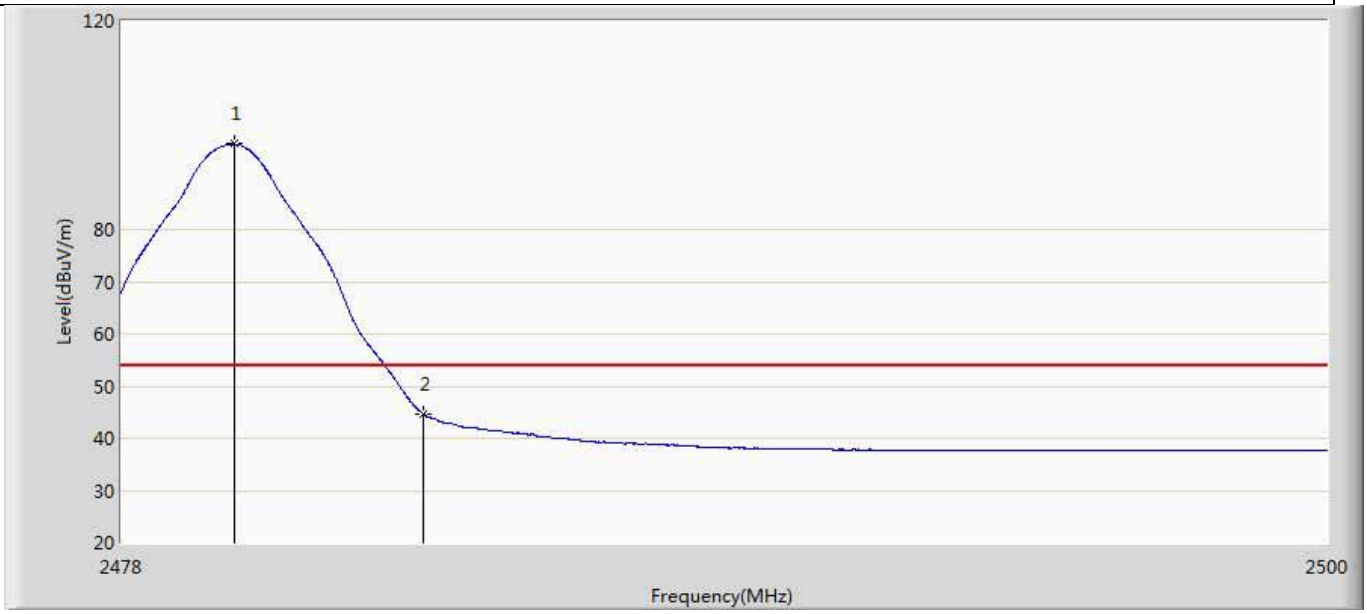
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.013	99.274	63.776	N/A	N/A	35.498	AV
2		2483.500	47.064	11.546	-6.936	54.000	35.517	AV

Profile: 19A2158R	Page No.: 47
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:48
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 2:Transmit at 2480MHz by 2LE	



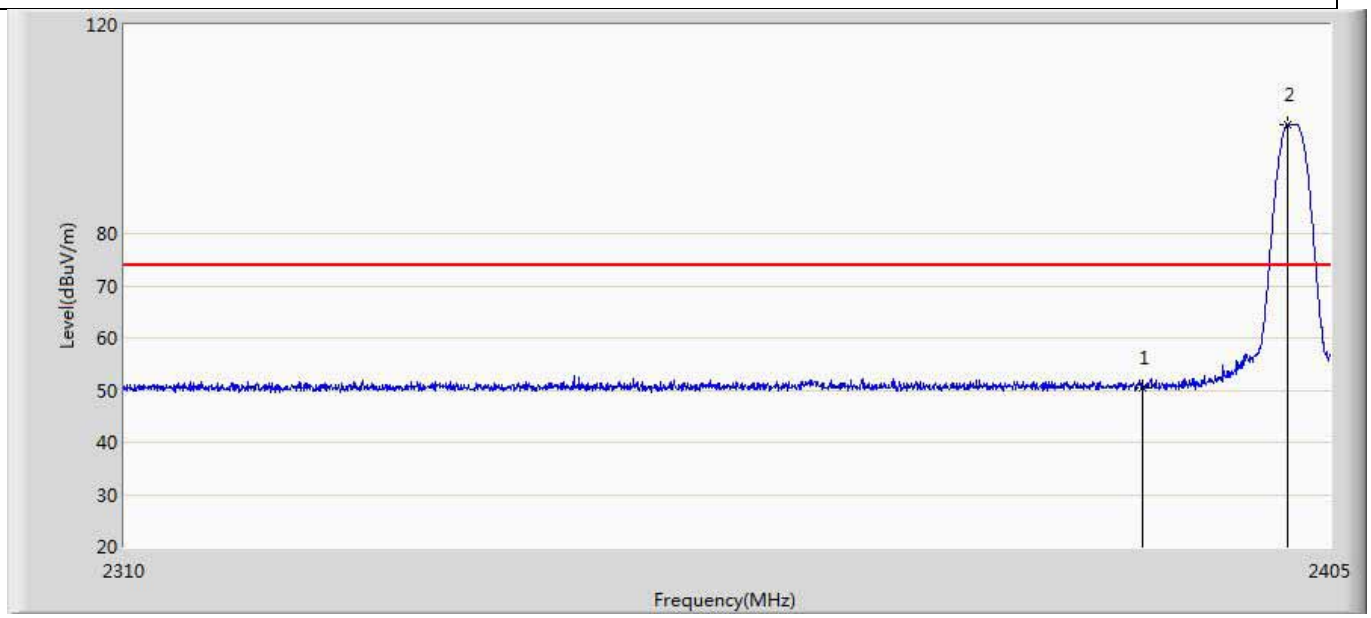
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.420	98.139	62.639	N/A	N/A	35.500	PK
2		2483.500	57.785	22.267	-16.215	74.000	35.517	PK

Profile: 19A2158R	Page No.: 48
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by 2LE	



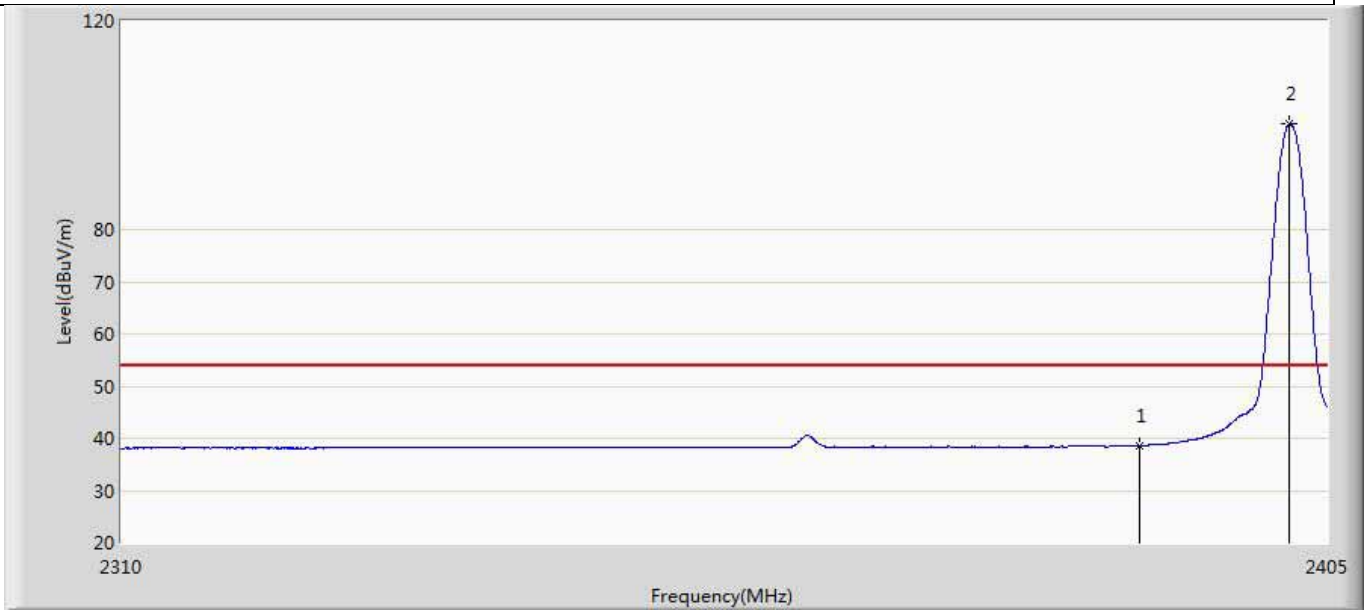
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.046	96.390	60.892	N/A	N/A	35.498	AV
2		2483.500	44.660	9.142	-9.340	54.000	35.517	AV

Profile: 19A2158R	Page No.: 37
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2402MHz by code2	



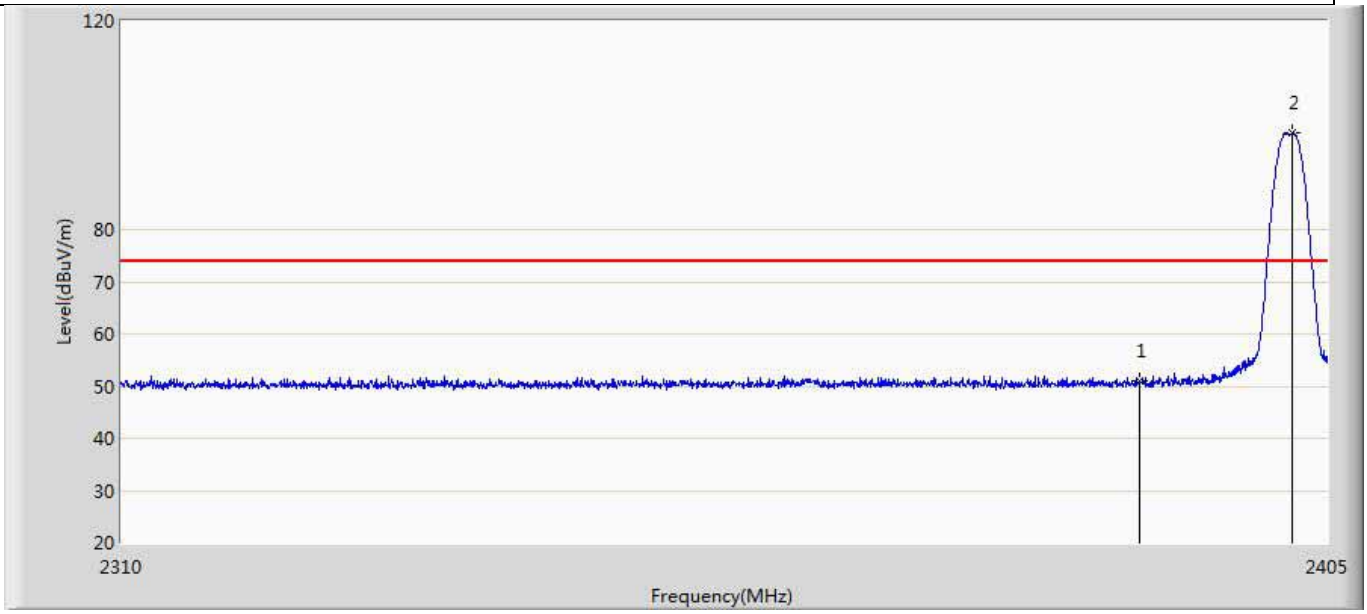
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.397	14.940	-23.603	74.000	35.458	PK
2	*	2401.627	100.968	65.499	N/A	N/A	35.469	PK

Profile: 19A2158R	Page No.: 38
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:25
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 code2	



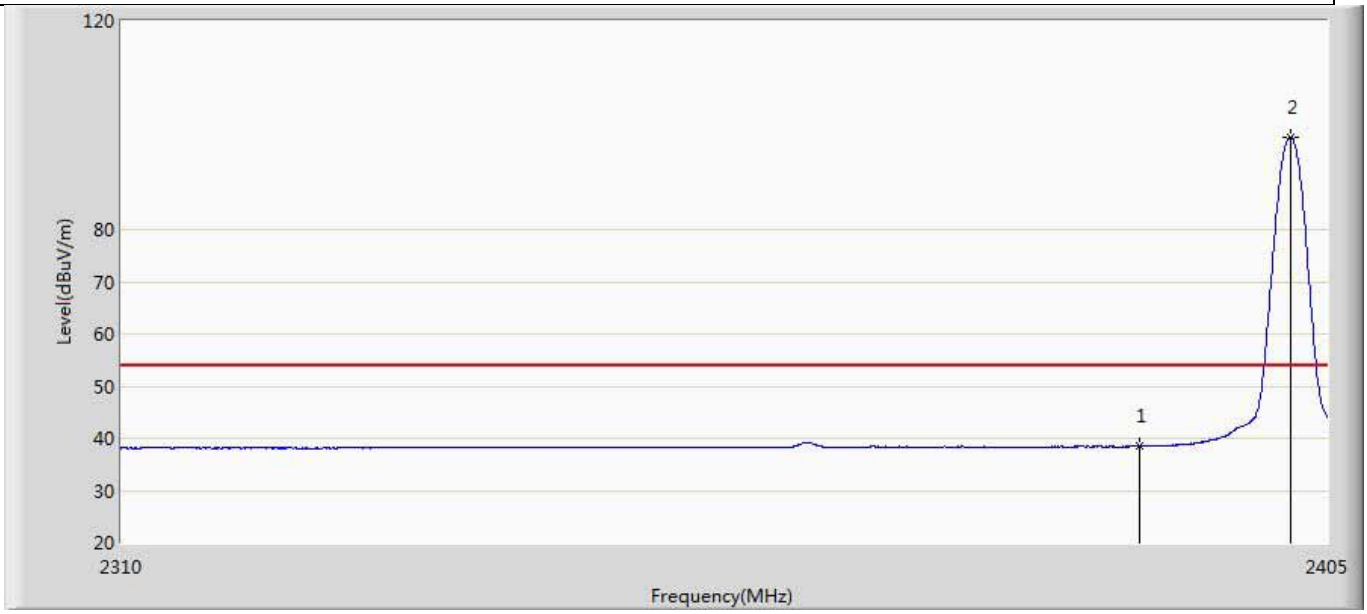
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.589	3.132	-15.411	54.000	35.458	AV
2	*	2401.960	100.282	64.813	N/A	N/A	35.469	AV

Profile: 19A2158R	Page No.: 39
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:27
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 code2	



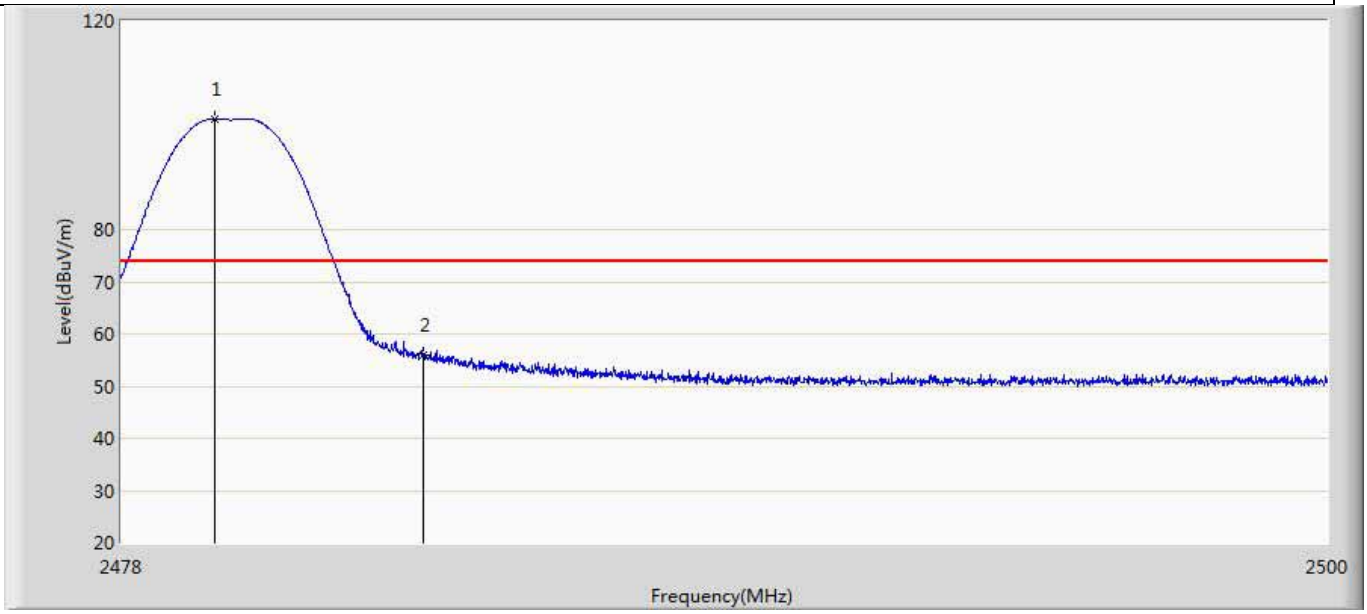
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.921	15.464	-23.079	74.000	35.458	PK
2	*	2402.198	98.454	62.984	N/A	N/A	35.470	PK

Profile: 19A2158R	Page No.: 40
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:29
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 code2	



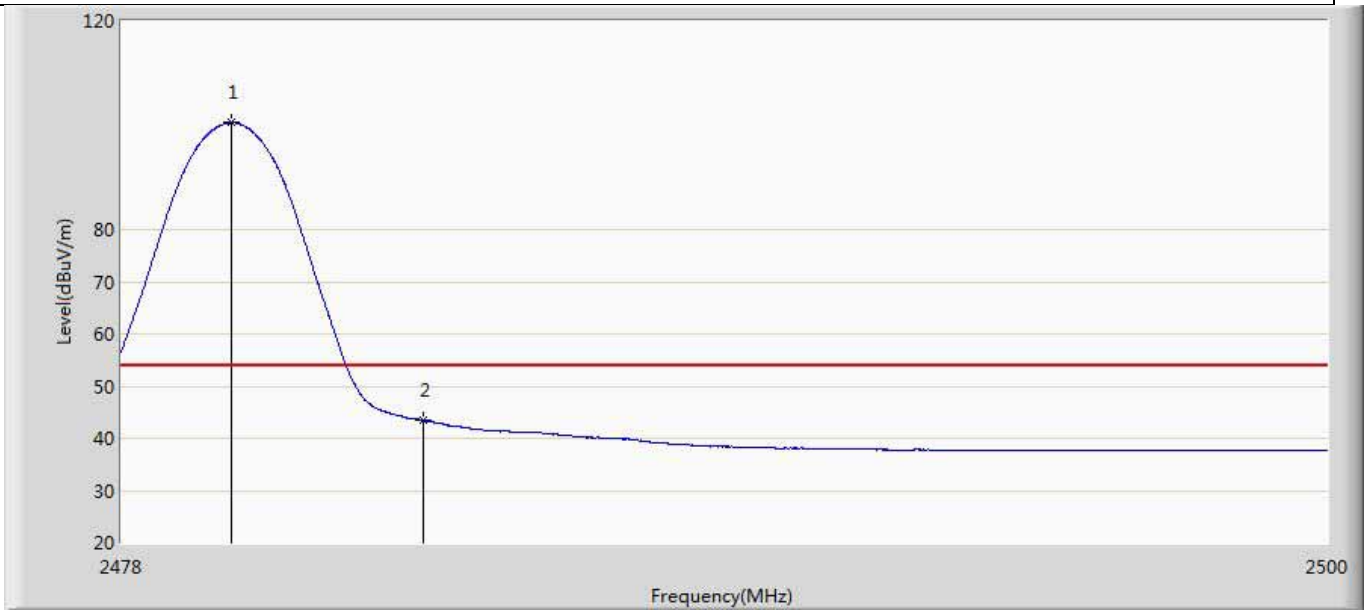
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.473	3.016	-15.527	54.000	35.458	AV
2	*	2402.055	97.818	62.348	N/A	N/A	35.469	AV

Profile: 19A2158R	Page No.: 53
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by code2	



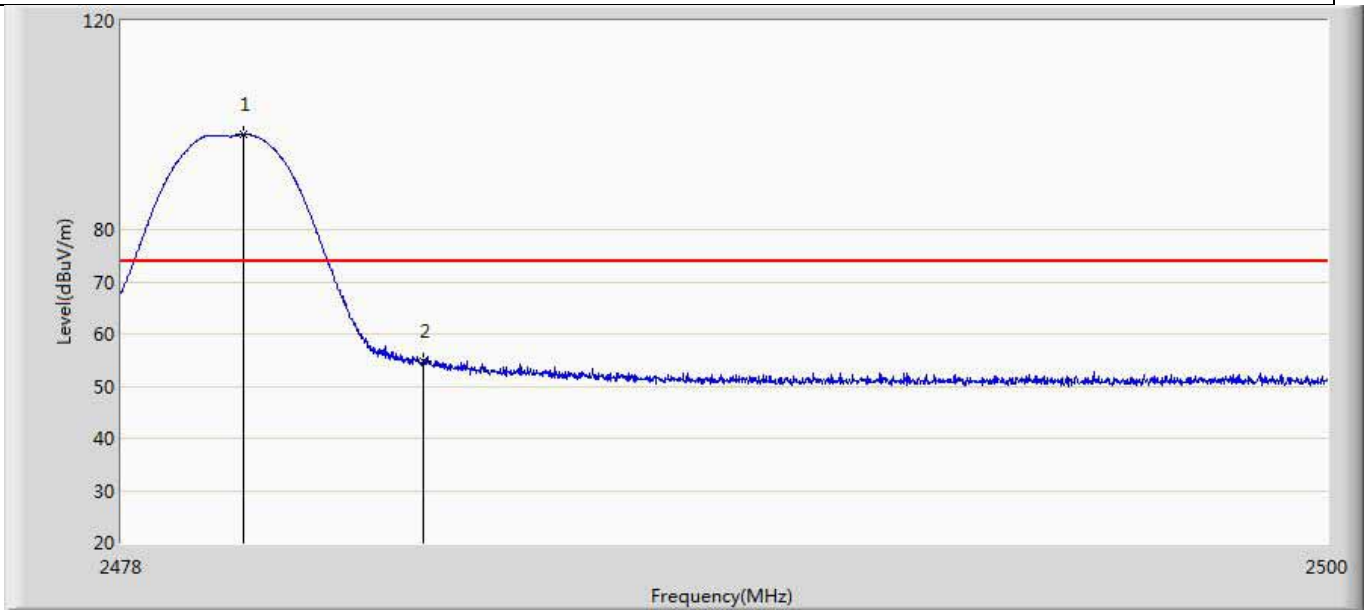
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.705	101.272	65.776	N/A	N/A	35.496	PK
2		2483.500	55.857	20.339	-18.143	74.000	35.517	PK

Profile: 19A2158R	Page No.: 54
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by code2	



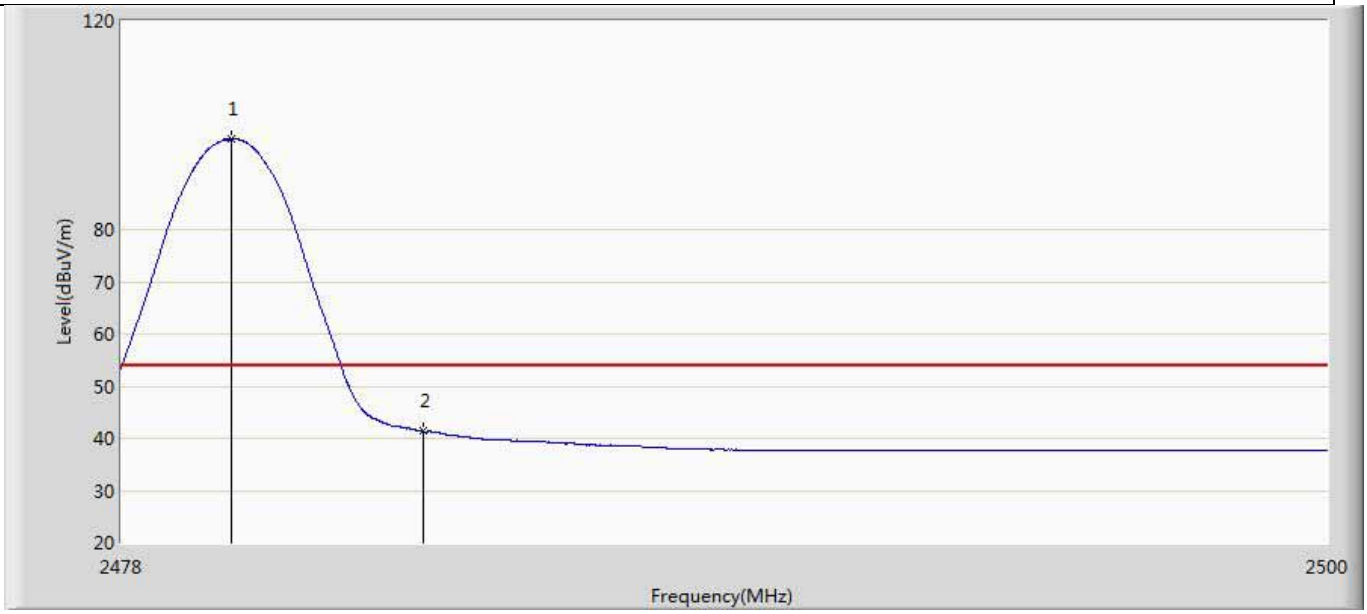
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.013	100.490	64.992	N/A	N/A	35.498	AV
2		2483.500	43.370	7.852	-10.630	54.000	35.517	AV

Profile: 19A2158R	Page No.: 55
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by code2	



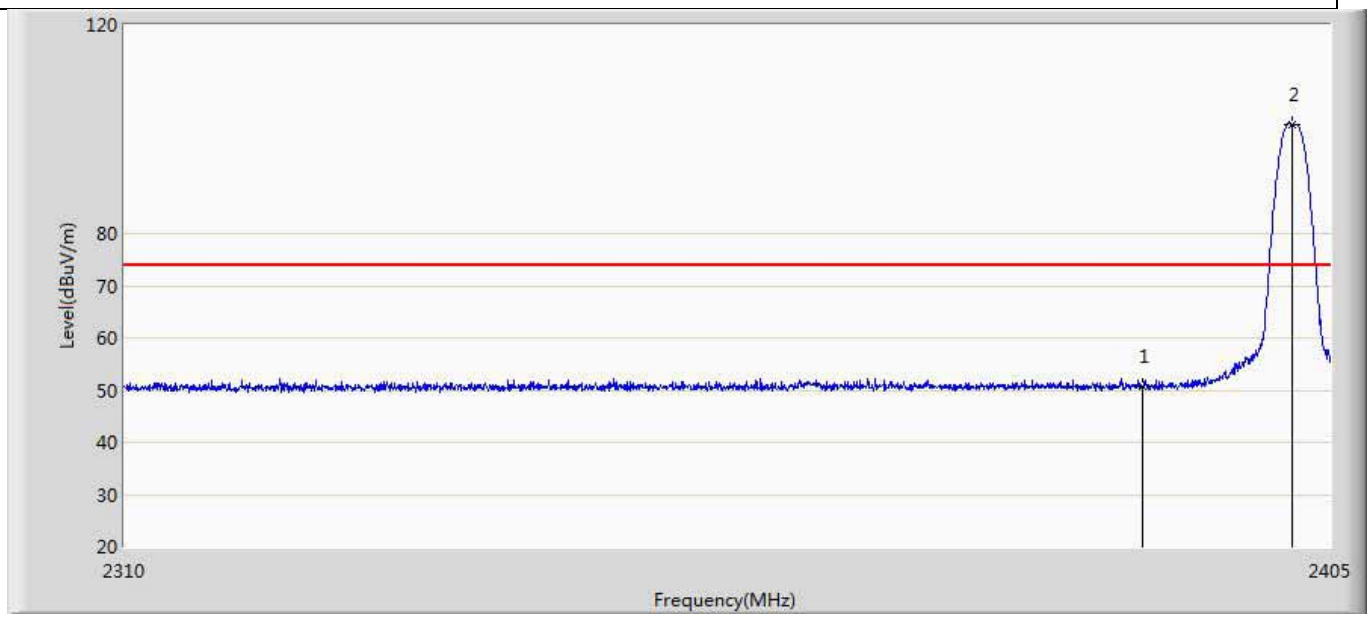
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.222	98.188	62.689	N/A	N/A	35.500	PK
2		2483.500	54.927	19.409	-19.073	74.000	35.517	PK

Profile: 19A2158R	Page No.: 56
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 3:Transmit at 2480MHz by code2	



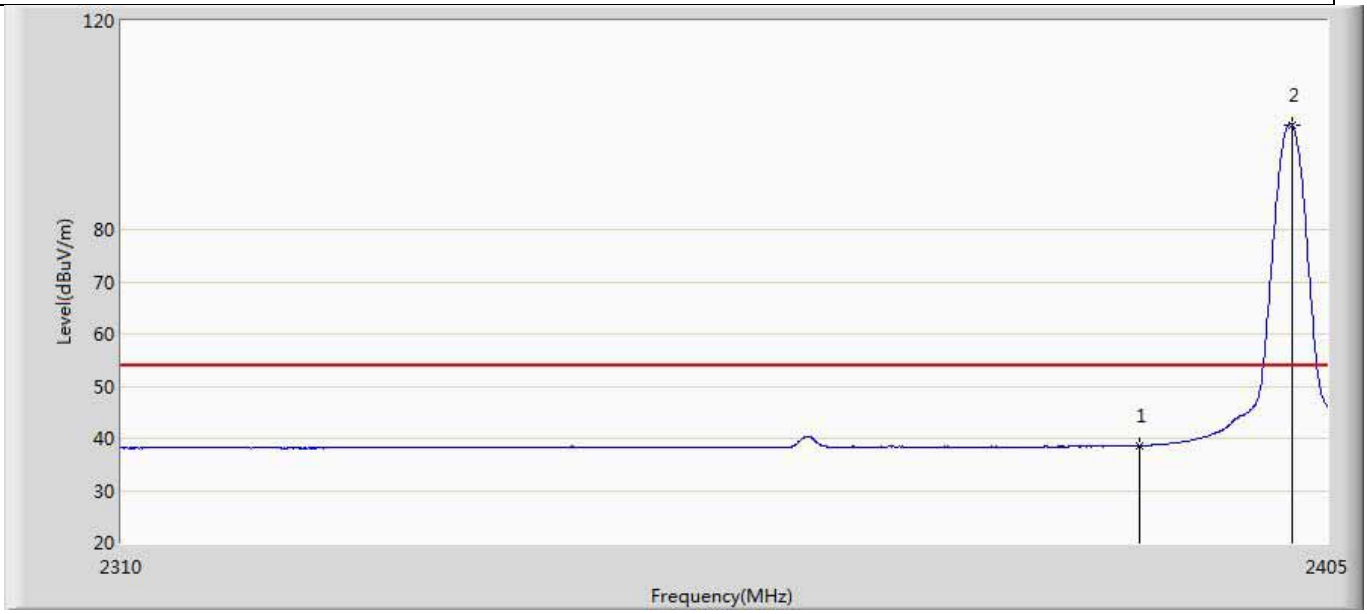
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.013	97.342	61.844	N/A	N/A	35.498	AV
2		2483.500	41.319	5.801	-12.681	54.000	35.517	AV

Profile: 19A2158R	Page No.: 33
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by code8	



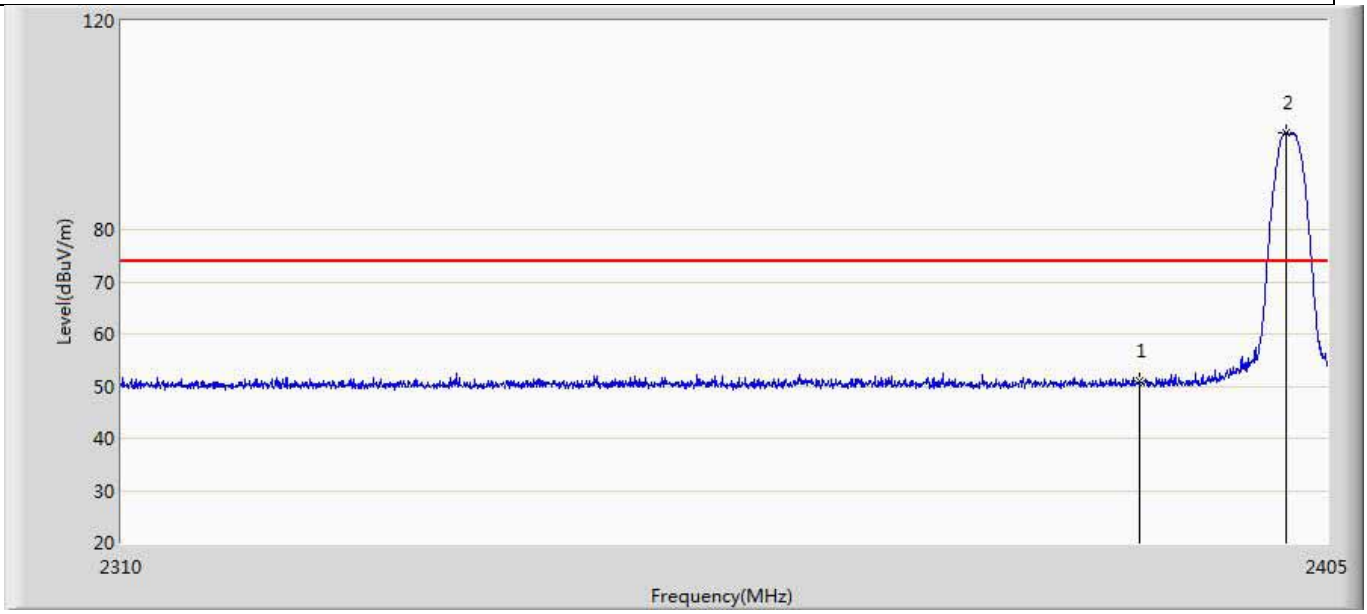
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.694	15.237	-23.306	74.000	35.458	PK
2	*	2401.913	100.928	65.459	N/A	N/A	35.469	PK

Profile: 19A2158R	Page No.: 34
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:12
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 code8	



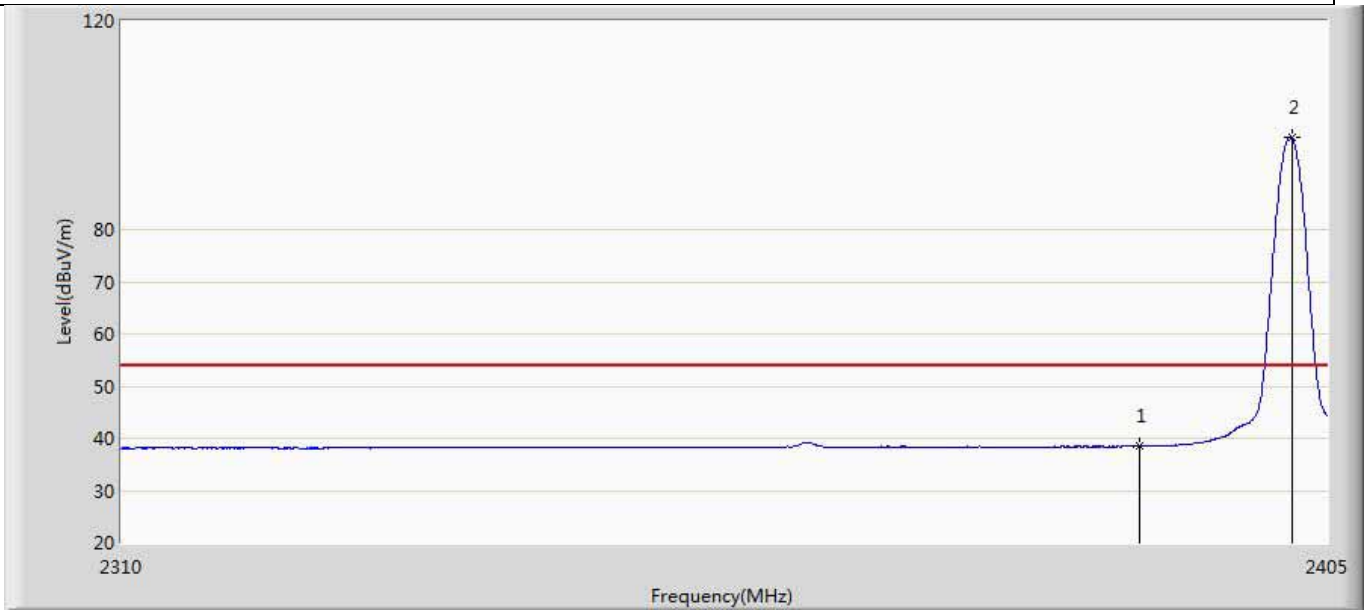
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.603	3.146	-15.397	54.000	35.458	AV
2	*	2402.198	100.102	64.632	N/A	N/A	35.470	AV

Profile: 19A2158R	Page No.: 35
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:15
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 2402MHz by code8	



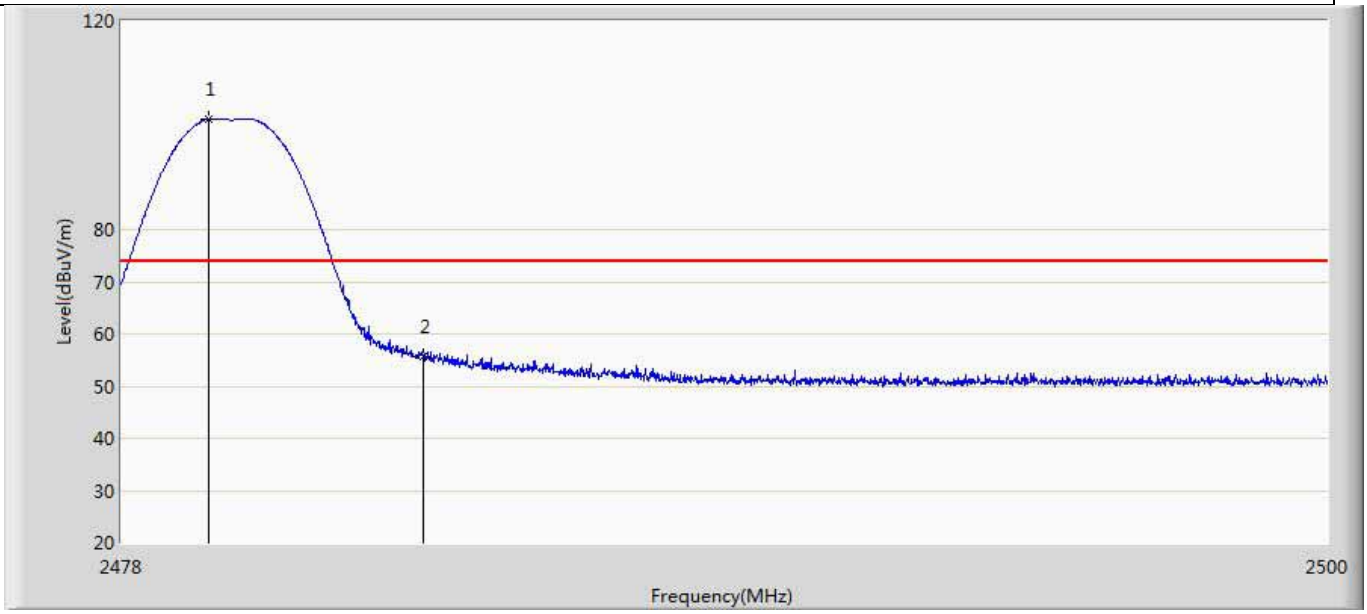
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.971	15.514	-23.029	74.000	35.458	PK
2	*	2401.770	98.473	63.004	N/A	N/A	35.469	PK

Profile: 19A2158R	Page No.: 36
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2402MHz by code8	



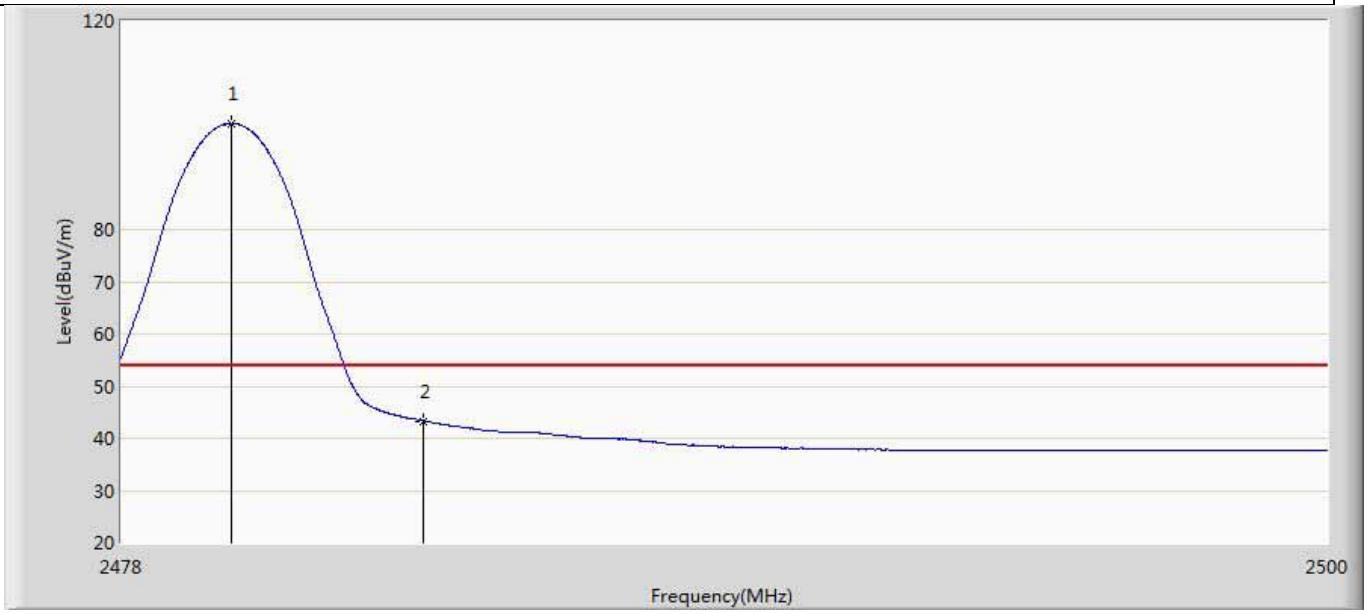
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.446	2.989	-15.554	54.000	35.458	AV
2	*	2402.198	97.602	62.132	N/A	N/A	35.470	AV

Profile: 19A2158R	Page No.: 49
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:53
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 code8	



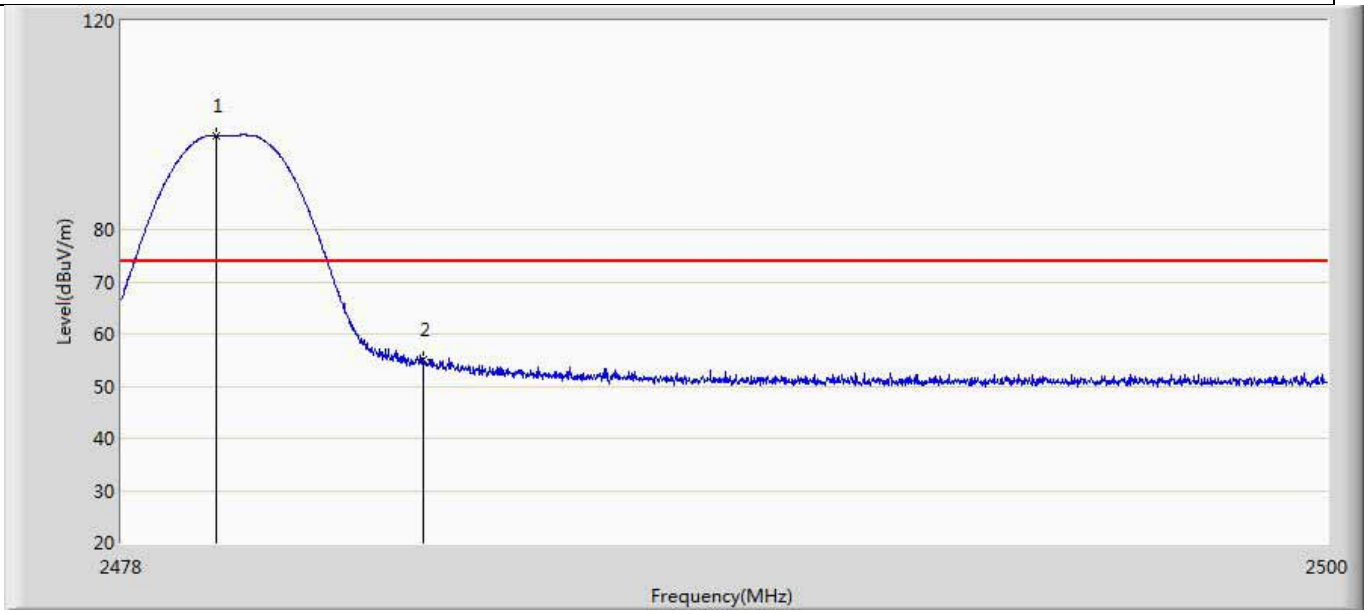
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.606	101.218	65.722	N/A	N/A	35.496	PK
2		2483.500	55.588	20.070	-18.412	74.000	35.517	PK

Profile: 19A2158R	Page No.: 50
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by code8	



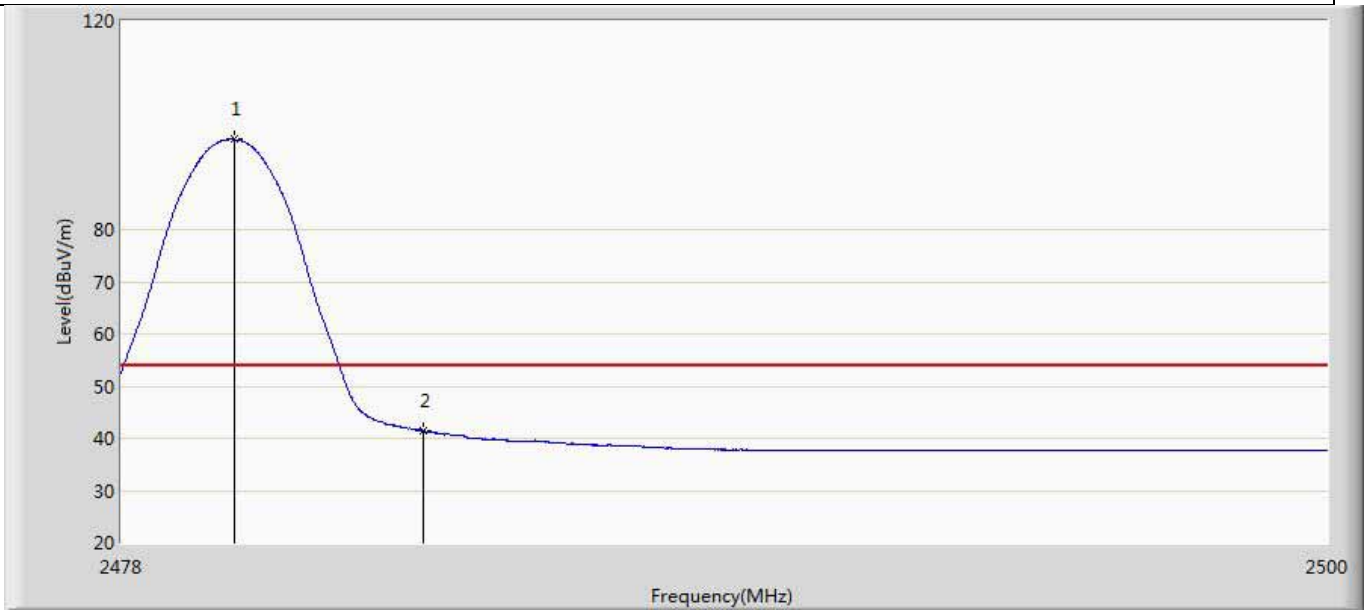
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.013	100.299	64.801	N/A	N/A	35.498	AV
2		2483.500	43.323	7.805	-10.677	54.000	35.517	AV

Profile: 19A2158R	Page No.: 51
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 15:58
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 code8	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.727	98.105	62.609	N/A	N/A	35.497	PK
2		2483.500	55.095	19.577	-18.905	74.000	35.517	PK

Profile: 19A2158R	Page No.: 52
Engineer: Simon Lu	
Site: AC5	Time: 2019/11/09 - 16:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by code8	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.046	97.251	61.753	N/A	N/A	35.498	AV
2		2483.500	41.375	5.857	-12.625	54.000	35.517	AV

Note:

1. Measured Level = Reading Level + Factor.
2. 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.
3. As the radiated emission was performed, so conducted emission was not tested.

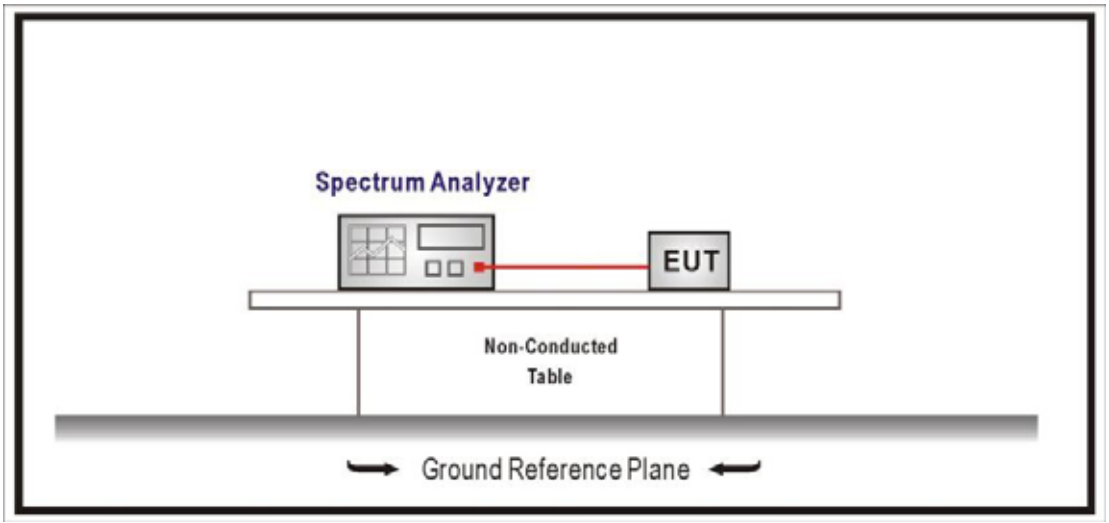
4.6 DTS Bandwidth — VERDICT: PASS

4.6.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247 (a)(2)

Systems using digital modulation techniques operate in the2400-2483.5 MHz .The minimum 6 dB bandwidth shall be at least 500 kHz

4.6.2 Test Setup



4.6.3 Test Procedure

	Reference Rule		Chapter	Description
☒	ANSI C63.10		11.8	DTS bandwidth
	☐	ANSI C63.10	11.8.1	Option 1
	☒	ANSI C63.10	11.8.2	Option 2

4.6.4 Test Data

Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (MHz)	6dB Occupied Bandwidth (MHz)	Limit (kHz)	Result
1	00	2402	1.0642	0.7963	>500	Pass
	19	2440	1.0628	0.8139	>500	Pass
	39	2480	1.0621	0.7669	>500	Pass
2	00	2402	2.1663	1.530	>500	Pass
	19	2440	2.1704	1.539	>500	Pass
	39	2480	2.1747	1.421	>500	Pass
3	00	2402	1.1338	0.8996	>500	Pass
	19	2440	1.1281	0.9029	>500	Pass
	39	2480	1.1248	0.8914	>500	Pass
4	00	2402	1.1456	0.7188	>500	Pass
	19	2440	1.1433	0.7220	>500	Pass
	39	2480	1.1419	0.7194	>500	Pass

Note : The worst case of Occupied Bandwidth as below in next page:

Mode 4 CH00 (2402MHz)

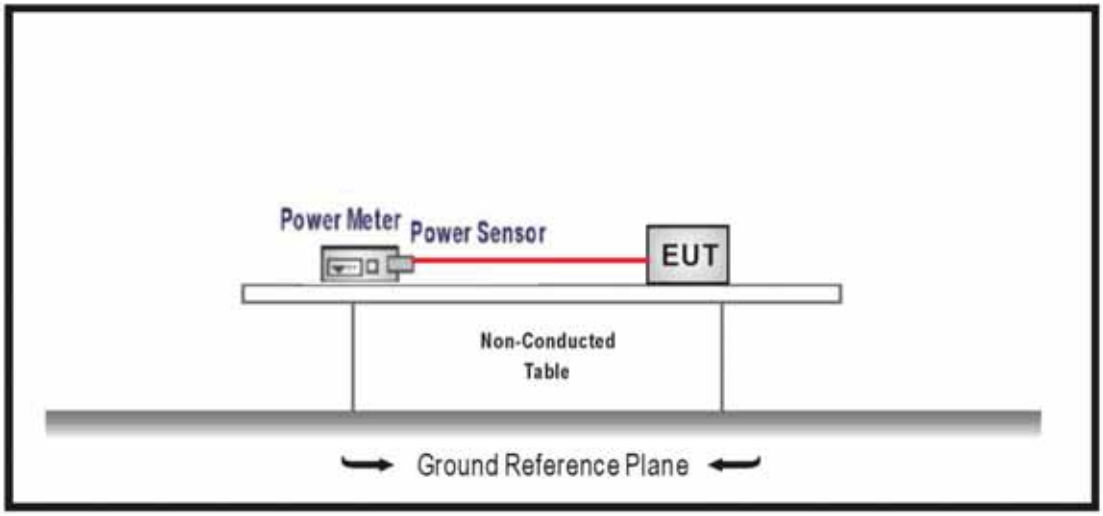
4.7 Fundamental emission output power — VERDICT: PASS

4.7.1 Limit

Standard			FCC Part 15 Subpart C Paragraph 15.247 (b)(3)
☒	GTX ＜6dBi		Pout≤30dBm
☐	GTX ＞6dBi		
	☐	Non-Fix point-point	Pout≤30-(GTX -6)
	☐	Fix point-point	Pout≤30-[(GTX-6)]/3
	☐	Point-to-multipoint	Pout≤30-(GTX-6)
	☐	Overlap Beams	Pout≤30-[(GTX-6)]/3
	☐	Aggregate power transmitted simultaneously on all beams	Pout≤30-[(GTX-6)]/3
	☐	single directional beam	Pout≤30-[(GTX-6)]/3+8dB

Note 1 : GTX directional gain of transmitting antennas.
Note 2 : Pout is maximum peak conducted output power .

4.7.2 Test Setup



4.7.3 **Test Procedure**						
	References Rule				Chapter	Description
☒	ANSI C63.10				11.9	Fundamental emission output power
	☒	ANSI C63.10			11.9.1	Maximum peak conducted output power
		☐	ANSI C63.10		11.9.1.1	RBW ≥ DTS bandwidth
		☐	ANSI C63.10		11.9.1.2	Integrated band power method
		☐	ANSI C63.10		11.9.1.3	PKPM1 Peak power meter method
	☐	ANSI C63.10			11.9.2	Maximum conducted (average) output power
		☐	ANSI C63.10		11.9.2.2	Measurement using a spectrum analyzer (SA)
			☐	ANSI C63.10	11.9.2.2.2	Method AVGSA-1(Duty cycle≥98%)
			☐	ANSI C63.10	11.9.2.2.3	Method AVGSA-1A(Duty cycle≥98%)
			☐	ANSI C63.10	11.9.2.2.4	Method AVGSA-2(Duty cycle≤98%)
			☐	ANSI C63.10	11.9.2.2.5	Method AVGSA-2A(Duty cycle≤98%)
			☐	ANSI C63.10	11.9.2.2.4	Method AVGSA-3
			☐	ANSI C63.10	11.9.2.2.5	Method AVGSA-3A
		☒	ANSI C63.10		11.9.2.3	Measurement using a power meter (PM)
			☒	ANSI C63.10	11.9.2.3.1	Method AVGPM
			☐	ANSI C63.10	11.9.2.3.2	Method AVGPM-G

4.7.4 Test Data

Murata:

Mode	Channel	Test Frequency (MHz)	Power Output (dBm)	Limit (dBm)	Result
Mode 1	00	2402	10.57	≤30	Pass
	19	2440	10.56	≤30	Pass
	39	2480	10.46	≤30	Pass
Mode 2	00	2402	11.04	≤30	Pass
	19	2440	11.06	≤30	Pass
	39	2480	10.97	≤30	Pass
Mode 3	00	2402	10.62	≤30	Pass
	19	2440	10.64	≤30	Pass
	39	2480	10.57	≤30	Pass
Mode 4	00	2402	10.55	≤30	Pass
	19	2440	10.54	≤30	Pass
	39	2480	10.46	≤30	Pass

KDS:

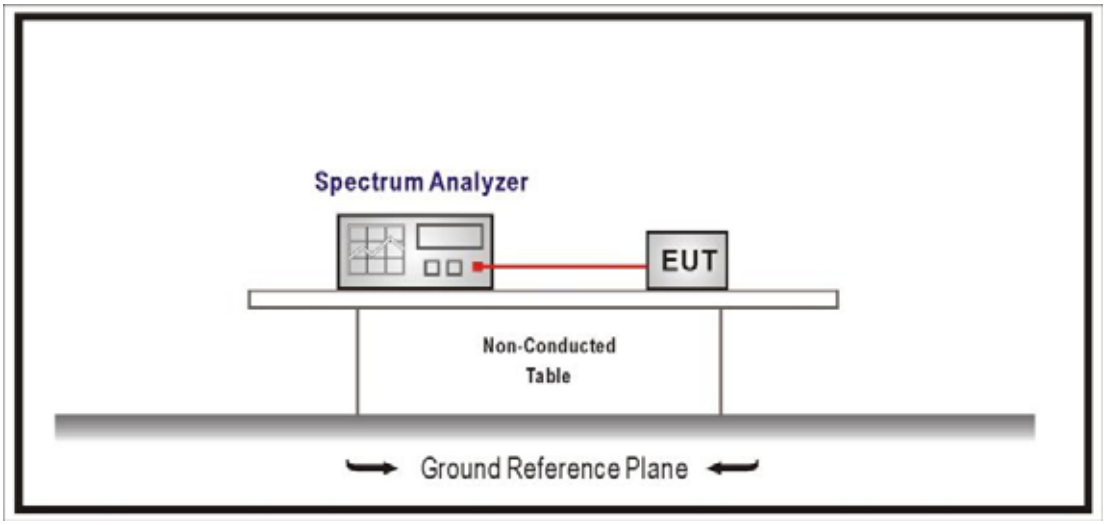
Mode	Channel	Test Frequency (MHz)	Power Output (dBm)	Limit (dBm)	Result
Mode 1	00	2402	10.53	≤30	Pass
	19	2440	10.47	≤30	Pass
	39	2480	10.39	≤30	Pass
Mode 2	00	2402	11.01	≤30	Pass
	19	2440	10.99	≤30	Pass
	39	2480	10.93	≤30	Pass
Mode 3	00	2402	10.63	≤30	Pass
	19	2440	10.59	≤30	Pass
	39	2480	10.49	≤30	Pass
Mode 4	00	2402	10.53	≤30	Pass
	19	2440	10.52	≤30	Pass
	39	2480	10.42	≤30	Pass

4.8 Power Density — VERDICT: PASS

4.8.1 Limit:

Standard	FCC Part 15 Subpart C Paragraph 15.247 (b)(3)
Power Spectral Density≤8dBm/3kHz	

4.8.2 Test Setup



4.8.3 Test Procedure

	References Rule		Chapter	Description
☒	ANSI C63.10		11.10	Maximum power spectral density level in the fundamental emission
	☒	ANSI C63.10	11.10.2	Method PKPSD (peak PSD)
	☐	ANSI C63.10	11.10.3	Method AVGPSD-1(Duty cycle≥98%)
	☐	ANSI C63.10	11.10.4	Method AVGPSD-1A(Duty cycle≥98%)
	☐	ANSI C63.10	11.10.5	Method AVGPSD-2(Duty cycle＜98%)
	☐	ANSI C63.10	11.10.6	Method AVGPSD-2A(Duty cycle＜98%)
	☐	ANSI C63.10	11.10.7	Method AVGPSD-3
	☐	ANSI C63.10	11.10.8	Method AVGPSD-3A

4.8.4 Test Data

Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)	Total Measurement PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
Mode 1	00	2402	-5.247	-5.247	≤8	Pass
	19	2440	-5.320	-5.320	≤8	Pass
	39	2480	-5.387	-5.387	≤8	Pass
Mode 2	00	2402	-8.160	-8.160	≤8	Pass
	19	2440	-8.173	-8.173	≤8	Pass
	39	2480	-8.275	-8.275	≤8	Pass
Mode 3	00	2402	-7.750	-7.750	≤8	Pass
	19	2440	-7.700	-7.700	≤8	Pass
	39	2480	-7.793	-7.793	≤8	Pass
Mode 4	00	2402	4.304	4.304	≤8	Pass
	19	2440	4.145	4.145	≤8	Pass
	39	2480	4.166	4.166	≤8	Pass

Remark: The worst data as below:

Mode 4 CH00(2402MHz)

4.9 Antenna Requirement	VERDICT: PASS

4.9.1 **Limit:**	
Standard	FCC Part 15 Subpart C Paragraph 15.203
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. 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.	

4.9.2 **Antenna Connector Construction:**	
☒	The use of a permanently attached antenna
☐	The antenna use of a unique coupling to the intentional radiator
☐	The use of a nonstandard antenna jack or electrical connector
Please refer to the attached document “Internal Photograph” to show the antenna connector.	

4.10 Test setup photo and EUT Photo	VERDICT: PASS

Remark: The test setup photo and EUT Photo please see appendix.

The End