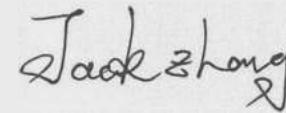


Test report No:
1992204R-RF-US-P06V01

FCC & ISED TEST REPORT

Product Name	Hue Outdoor light strip 5m
Trademark	PHILIPS
FCC ID	2AGBW9290022891AX
IC	20812-2891AX
Model and /or type reference	9290022891A
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 
Date of issue	2019-12-02
Report template No	1992204R-RF-US-P06V01

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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.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA.

GENERAL CONDITIONS

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Date(receive sample)	Sep.30, 2019
Date (start test)	Oct. 08, 2019
Date (finish test)	Nov. 04, 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.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
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
1992204R-RF-US-P06V01	V1.0	Initial issue of report.	2019-12-02

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	2020.04.11
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	2019.08.25	2020.08.24
Coaxial Cable	Suhner	RG 223	TR1-C2	2019.08.25	2020.08.24
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 Analyzer	Keysight	N9020A	MY56060147	2019.08.30	2020.08.29
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2019.07.14	2020.07.13
Power Sensor	Anritsu	MA2411B	0846014	2019.08.12	2020.08.11
Coaxial Cable	Woken	SFL402	F02-150410-044	2019.01.01	2019.12.31
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	2019.05.25	2020.05.24
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 (1GHz-40GHz)/ AC5

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2019.05.08	2020.05.07
Preamplifier	Miteq	NSP1800-25	1364185	2019.05.06	2020.05.05
Preamplifier	QuieTek	AP-040G	CHM-0906001	2019.05.06	2020.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2019.01.22	2020.01.21
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2019.09.02	2020.09.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2019.04.13	2020.04.12
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2019.04.13	2020.04.12
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2019.04.13	2020.04.12
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%. The Uncertainties is complice with standard required as below.

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	Hue Outdoor light strip 5m
Model No.	9290022891A
Trademark.....	PHILIPS
Manufacturer.....	Signify (China) Investment Co., Ltd.
Manufacturer Address	Building no.9, Lane 888, Tianlin Road, Minhang District, Shanghai, 200233, China

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

Rated power supply..... :	Voltage and Frequency	
	<input type="checkbox"/>	AC: 220 – 240 V, 50/60 Hz
	<input checked="" type="checkbox"/>	AC: 100 – 120 V, 50/60 Hz
	<input type="checkbox"/>	DC: 15~24Vdc
	<input type="checkbox"/>	Battery: 3.7V
Mounting position	<input type="checkbox"/>	Table top equipment
	<input type="checkbox"/>	Wall/Ceiling mounted equipment
	<input type="checkbox"/>	Floor standing equipment
	<input type="checkbox"/>	Hand-held equipment
	<input checked="" type="checkbox"/>	Other: Outdoor equipment

Note1: We have evaluated both modes of LE 1M, LE 2M and LE coded, the power of LE 1M mode is higher than other mode, the test data of both modes is showed in the report with test items power and bandwidth; the test data of worse mode is showed with other test items.

Note 2: Hue light strip 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	<input checked="" type="checkbox"/>	1TX + 1RX		
	<input type="checkbox"/>	2TX + 2RX		
Antenna technology.....:	<input checked="" type="checkbox"/>	SISO		
	<input type="checkbox"/>	MIMO	<input type="checkbox"/>	CDD
	<input type="checkbox"/>		<input type="checkbox"/>	Beam-forming
Antenna Type.....:	<input type="checkbox"/>	External	<input type="checkbox"/>	Dipole
	<input type="checkbox"/>		<input type="checkbox"/>	Sectorized
	<input checked="" type="checkbox"/>	Internal	<input type="checkbox"/>	PIFA
	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	PCB
	<input type="checkbox"/>		<input type="checkbox"/>	Ceramic Chip
	<input type="checkbox"/>		<input type="checkbox"/>	Others.....
Antenna Gain	2.99 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.

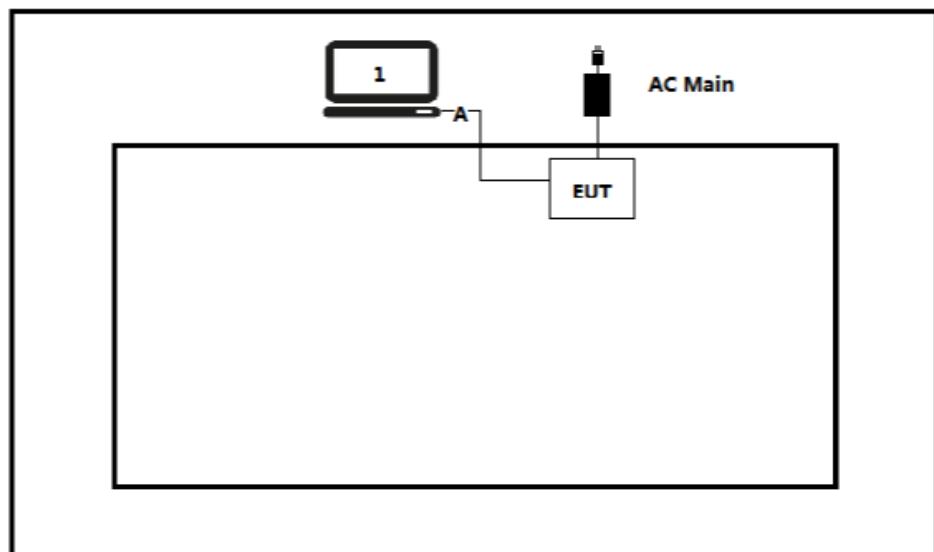
Test Mode For Bluetooth	Mode 1: Transmit by LE_1Mbps(GFSK_LE)
	Mode 2: Transmit by LE_2Mbps(GFSK_LE)
	Mode 3: Transmit by LE_Coded(S=2)(GFSK_LE)
	Mode 4: Transmit by LE_Coded(S=8)(GFSK_LE)

2.2 Auxiliary equipment / Test software for the EUT

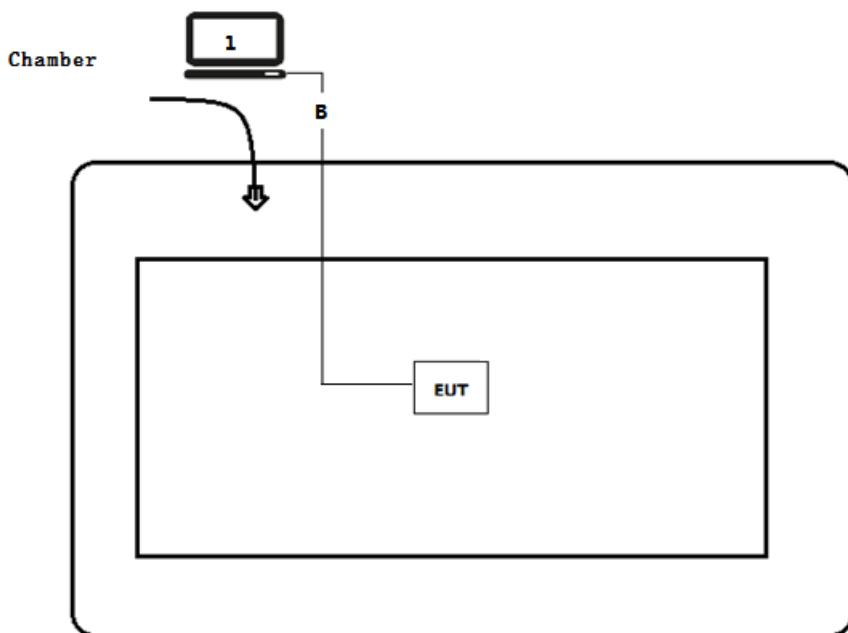
Auxiliary equipment	Type / Version	Manufacturer	Supplied by
Notebook	E470	Lenovo	N/A
software	Type / Version	Manufacturer	Supplied by
HueApprobationTool	1.1.00	Philips	N/A

2.3 Test Configuration / Block diagram used for tests

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Radiated test



2.4 Testing process

1	Setup the EUT as shown in Section 2.4.
2	Execute the HueApprobation Tool 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	N/A	
Emissions in restricted frequency bands	FCC 15.247(b)(3)	PASS	---
Duty cycle	ANSI C63.10:2013	N/A	
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(μ V) ¹⁾]	Limit: AV [dB(μ V) ¹⁾]
0,15 - 0,50	66 - 56 ²⁾	56 - 46 ²⁾
0,50 - 5,0	56	46
5,0 - 30	60	50

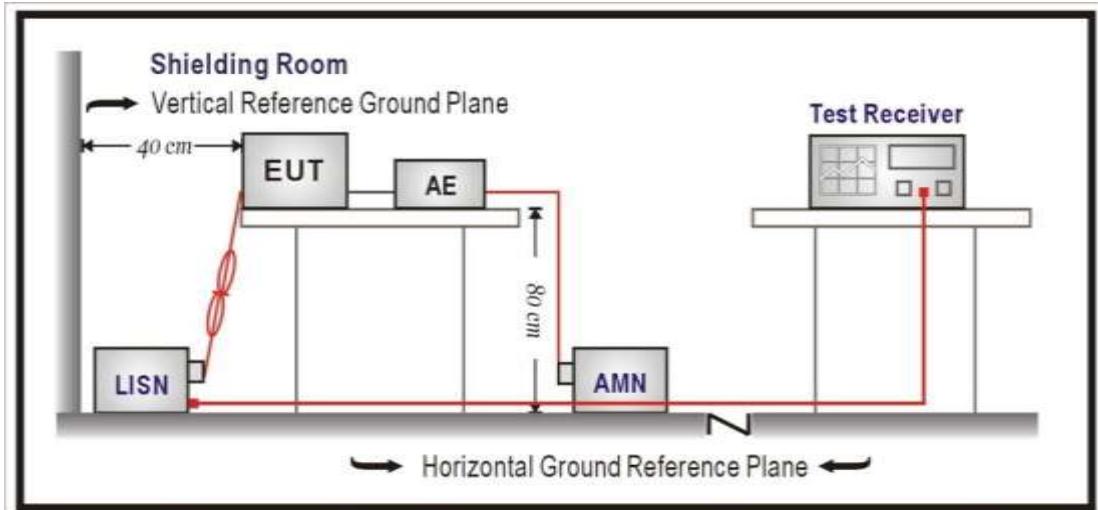
¹⁾ At the transition frequency, the lower limit applies.

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

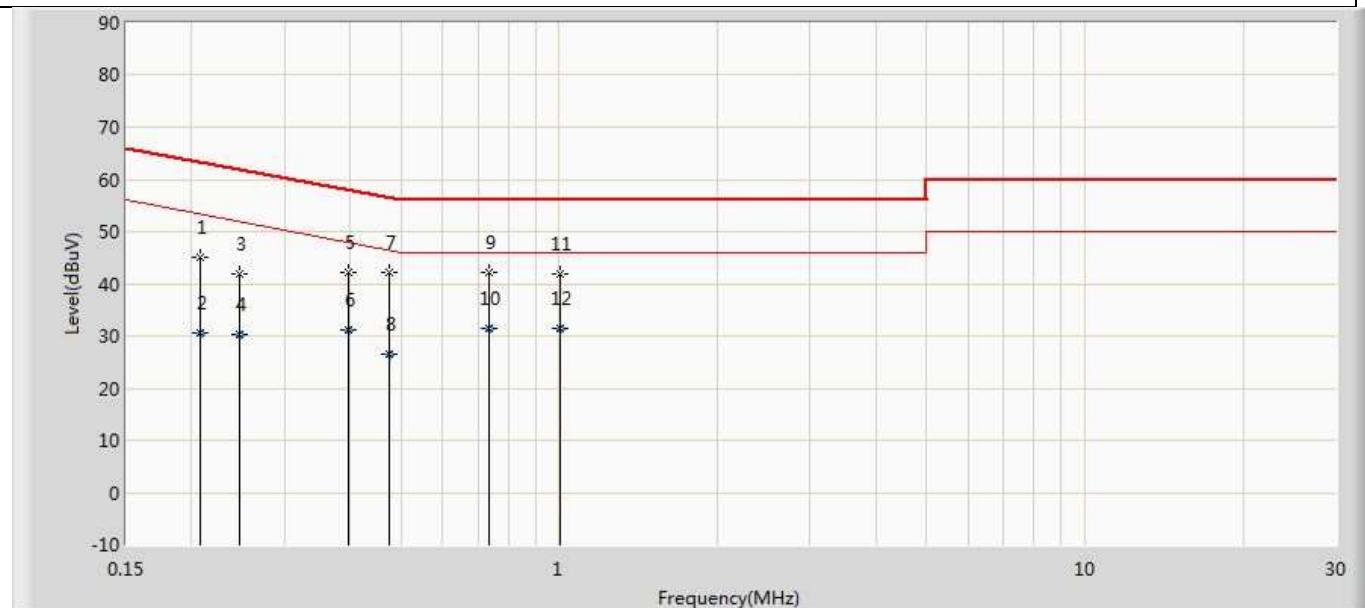


4.1.3 Test Procedure

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

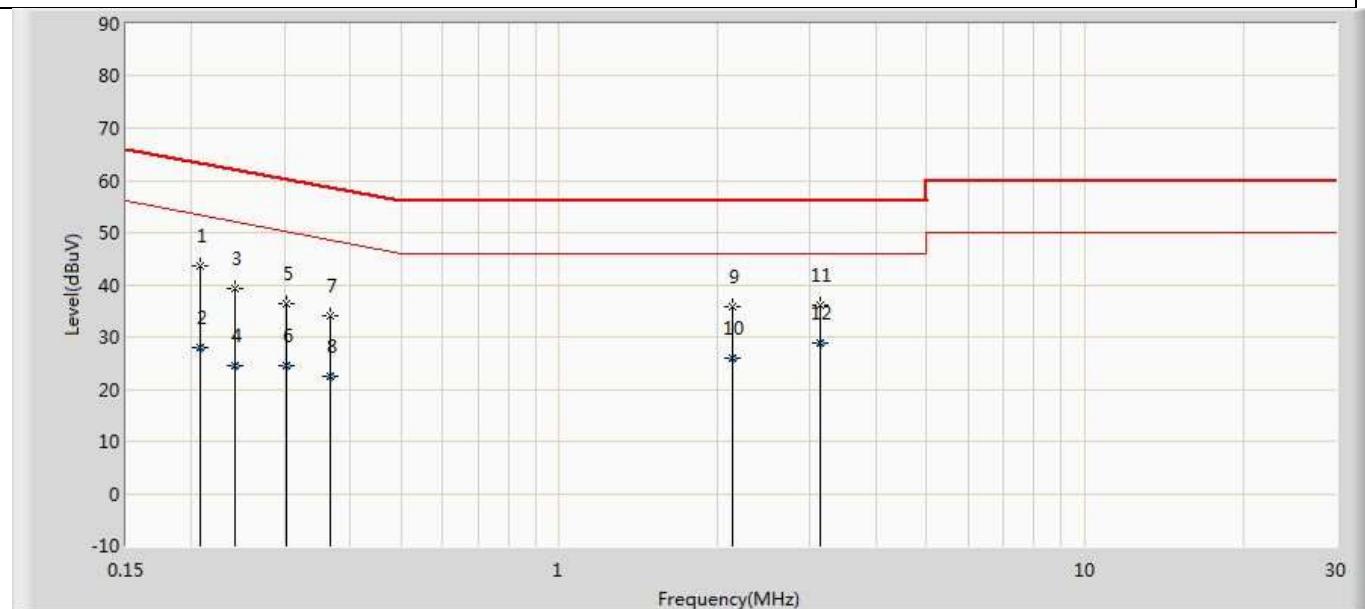
4.1.4 Test Data

Profile: 1992204R	Page No.: 3
Engineer: Cyan	
Site: TR1	Time: 2019/10/16 - 22:02
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT: Hue Outdoor light strip 5m	Power: AC 120V/60Hz
Note: Mode 1 Transmit by LE_1Mbps(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.207	45.193	35.575	-18.121	63.314	9.618	QP
2		0.207	30.446	20.828	-22.868	53.314	9.618	AV
3		0.246	41.935	32.312	-19.956	61.891	9.624	QP
4		0.246	30.229	20.605	-21.662	51.891	9.624	AV
5		0.398	42.154	32.513	-15.741	57.895	9.641	QP
6		0.398	31.184	21.543	-16.711	47.895	9.641	AV
7		0.474	42.082	32.433	-14.362	56.444	9.649	QP
8		0.474	26.459	16.810	-19.984	46.444	9.649	AV
9	*	0.734	42.172	32.500	-13.828	56.000	9.672	QP
10		0.734	31.421	21.750	-14.579	46.000	9.672	AV
11		1.002	42.003	32.312	-13.997	56.000	9.691	QP
12		1.002	31.363	21.672	-14.637	46.000	9.691	AV

Profile: 1992204R	Page No.: 4
Engineer: Cyan	
Site: TR1	Time: 2019/10/16 - 22:02
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT: Hue Outdoor light strip 5m	Power: AC 120V/60Hz
Note: Mode 1 Transmit by LE_1Mbps(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.207	43.505	33.888	-19.809	63.314	9.618	QP
2		0.207	28.090	18.472	-25.224	53.314	9.618	AV
3		0.242	39.419	29.796	-22.609	62.027	9.623	QP
4		0.242	24.451	14.829	-27.576	52.027	9.623	AV
5		0.302	36.367	26.736	-23.821	60.188	9.631	QP
6		0.302	24.613	14.982	-25.575	50.188	9.631	AV
7		0.366	34.192	24.555	-24.399	58.591	9.637	QP
8		0.366	22.575	12.938	-26.016	48.591	9.637	AV
9		2.134	35.880	26.157	-20.120	56.000	9.724	QP
10		2.134	26.038	16.315	-19.962	46.000	9.724	AV
11		3.134	36.114	26.342	-19.886	56.000	9.772	QP
12	*	3.134	28.833	19.061	-17.167	46.000	9.772	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)

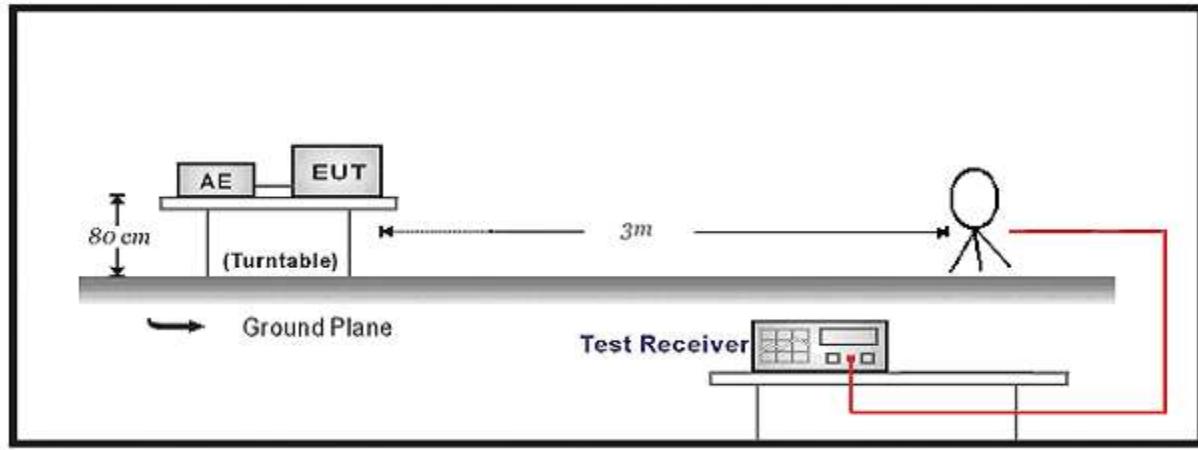
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed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

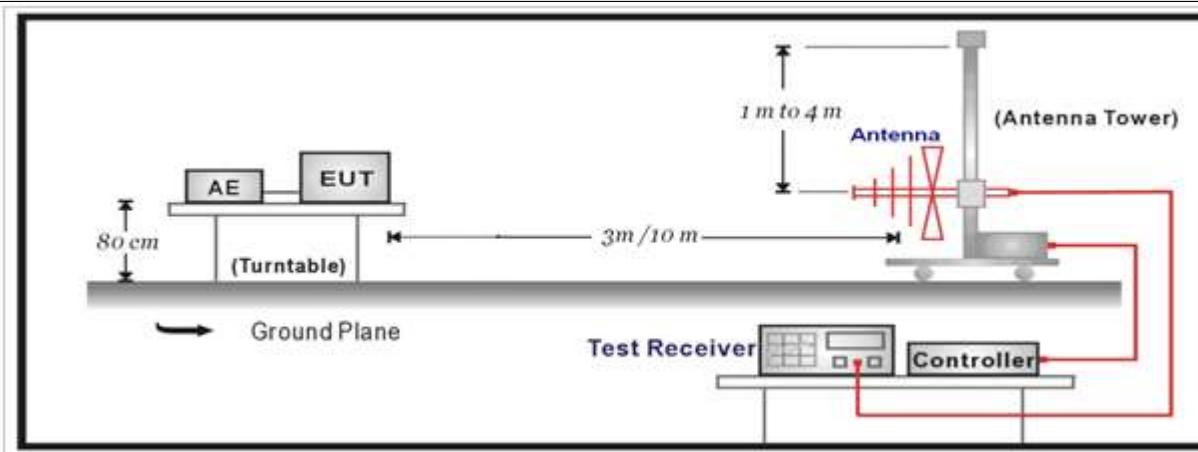
Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified 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

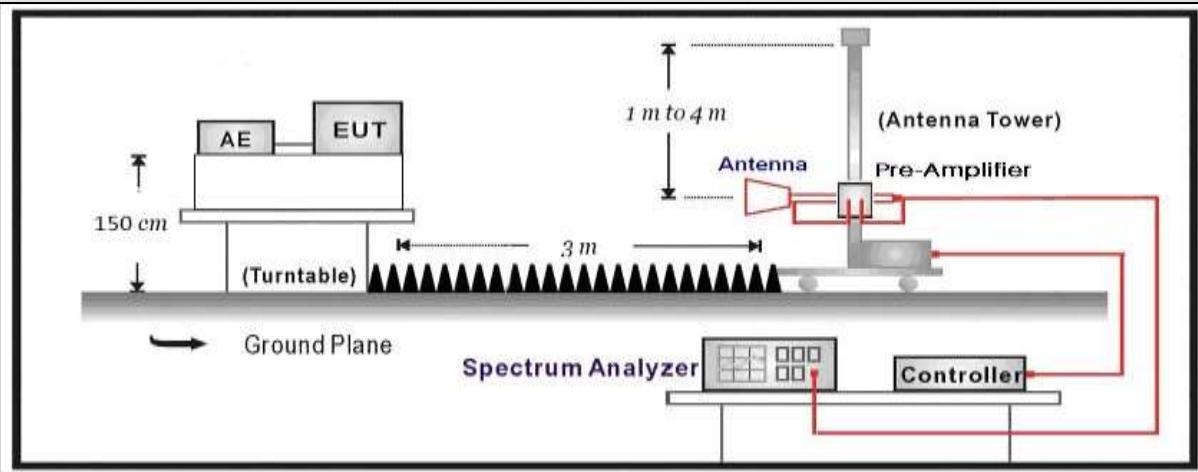
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



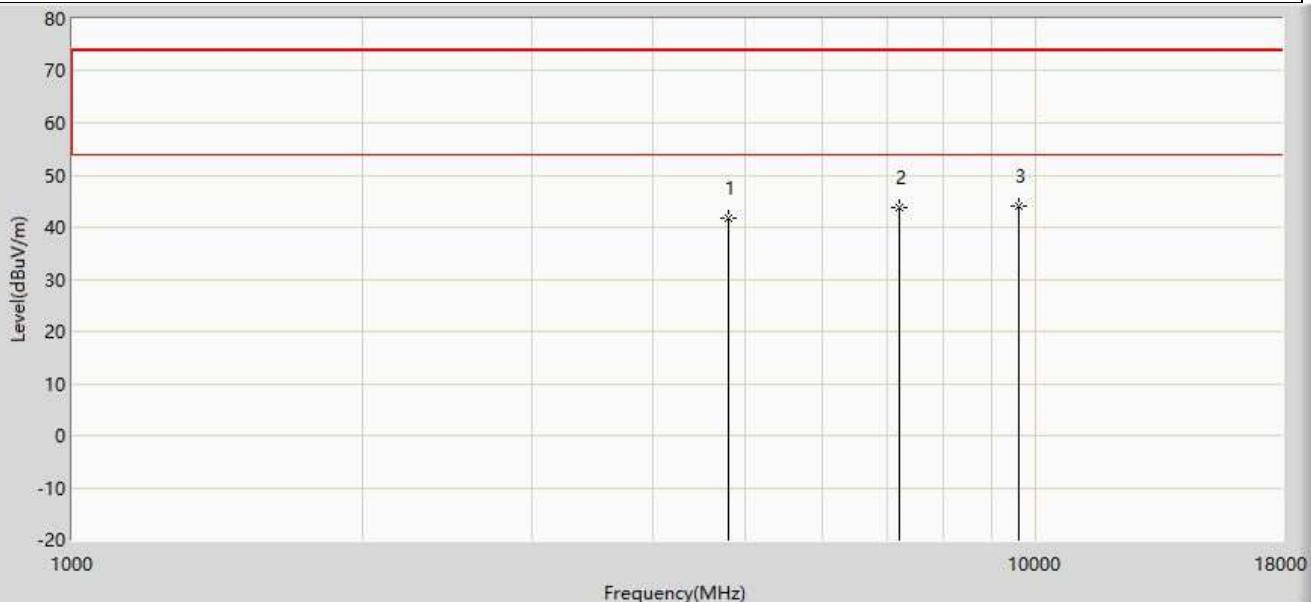
4.2.3 Test Procedure

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

4.2.4 Test Data

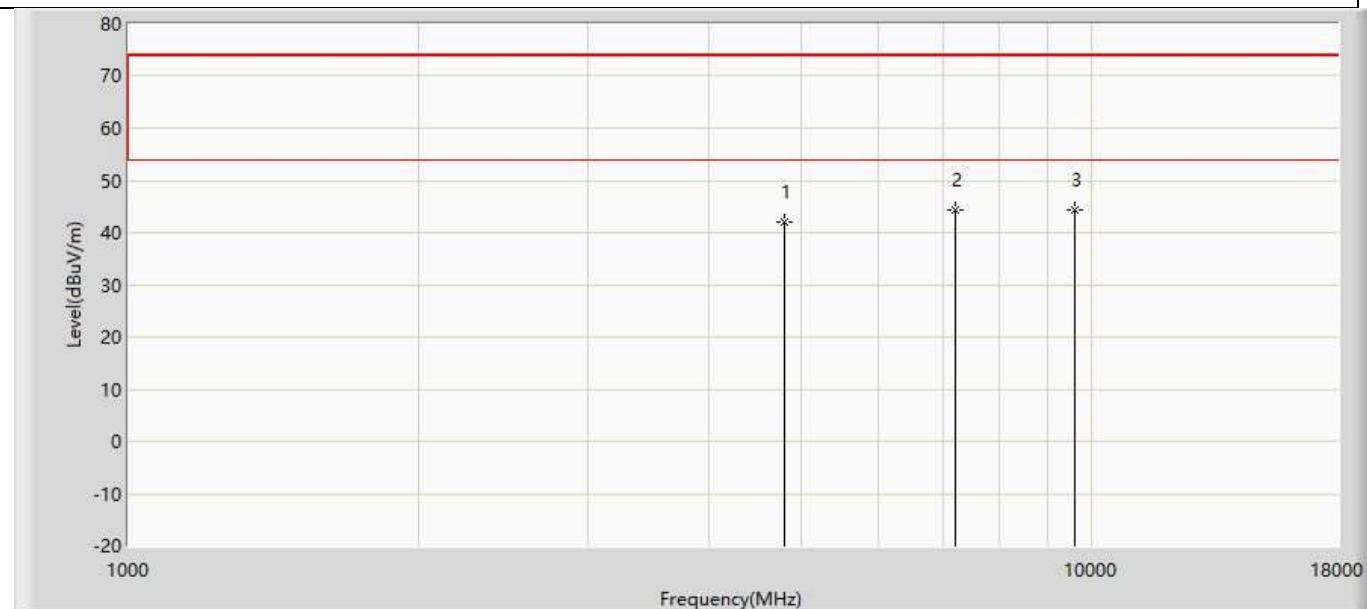
Murata:

Profile: 1992204R	Page No.: 77
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps(GFSK_LE)	



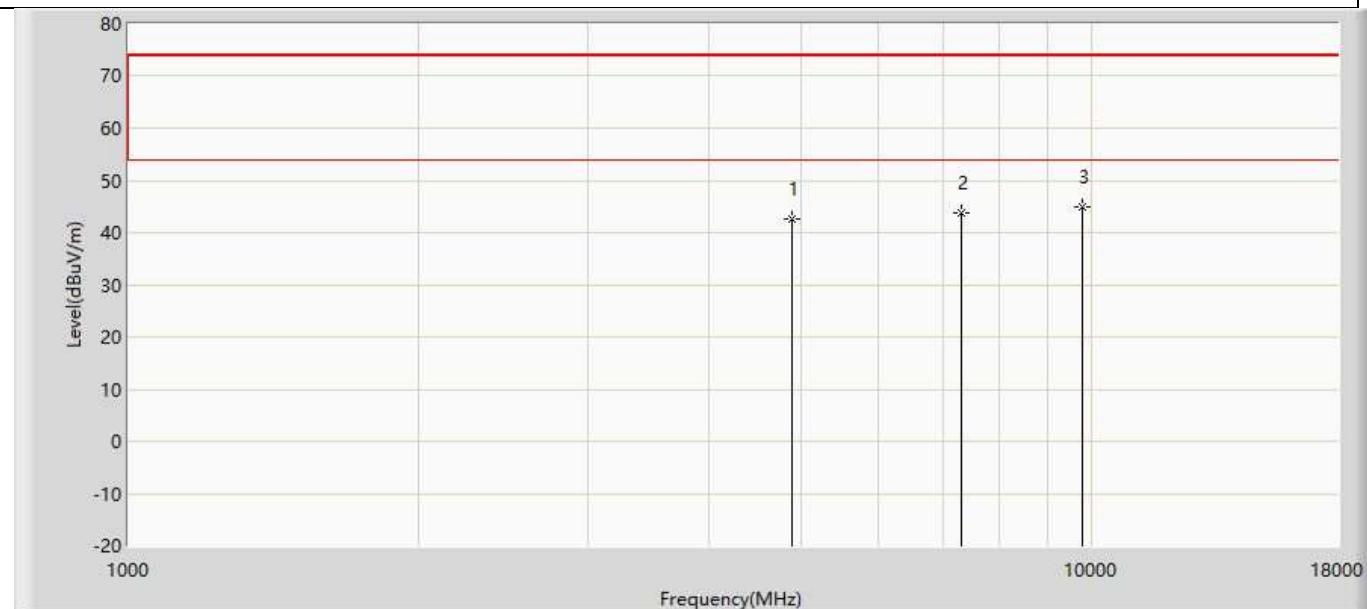
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.805	37.174	-32.195	74.000	4.631	PK
2		7206.000	43.657	35.633	-30.343	74.000	8.024	PK
3	*	9608.000	44.140	34.823	-29.860	74.000	9.318	PK

Profile: 1992204R	Page No.: 78
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps(GFSK_LE)	



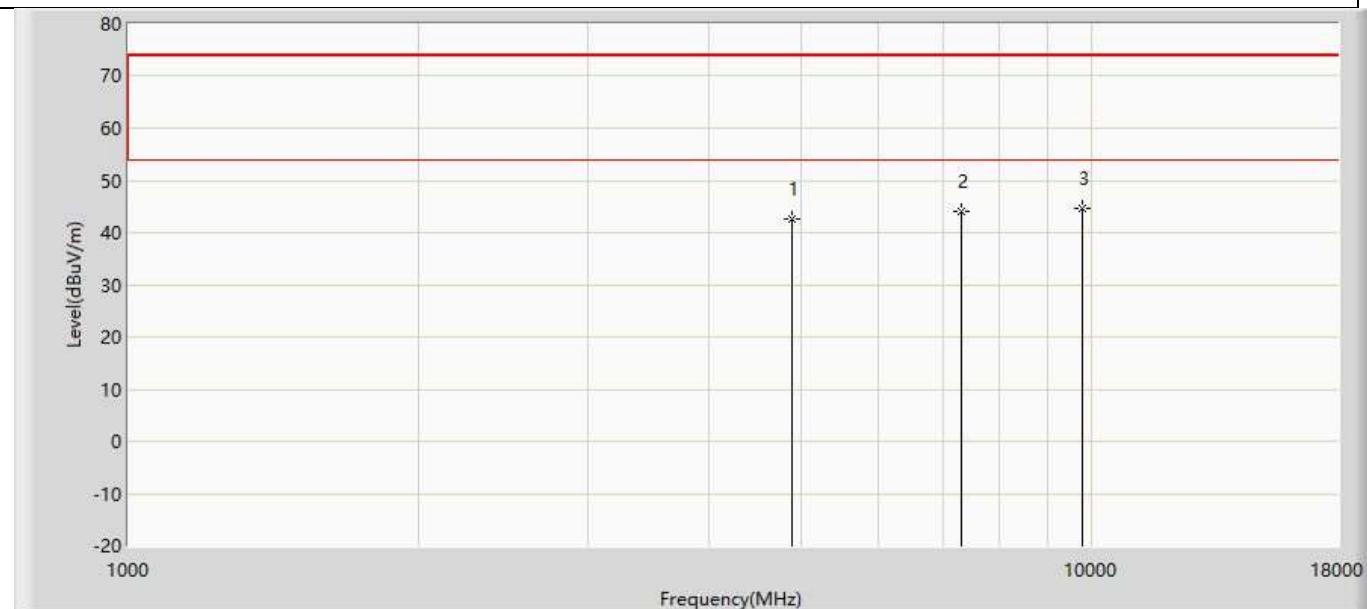
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.943	37.312	-32.057	74.000	4.631	PK
2		7206.000	44.386	36.362	-29.614	74.000	8.024	PK
3	*	9608.000	44.489	35.172	-29.511	74.000	9.318	PK

Profile: 1992204R	Page No.: 79
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps(GFSK_LE)	



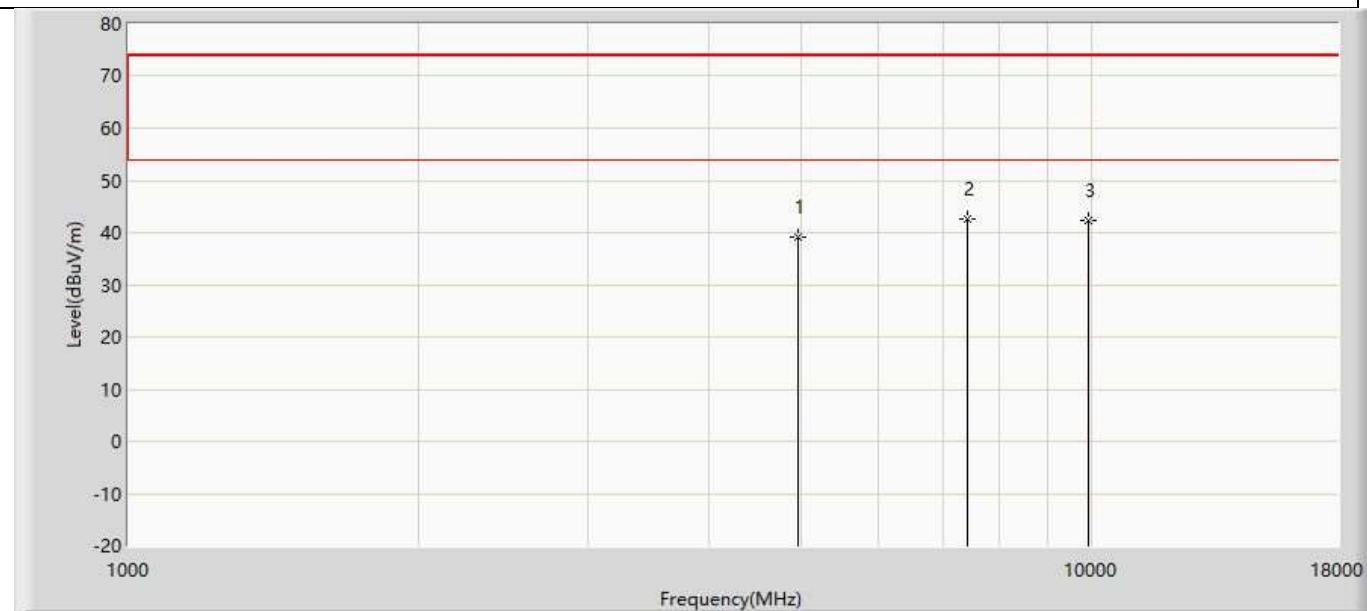
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.678	37.899	-31.322	74.000	4.778	PK
2		7320.000	43.803	35.733	-30.197	74.000	8.071	PK
3	*	9760.000	44.806	34.902	-29.194	74.000	9.904	PK

Profile: 1992204R	Page No.: 80
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps(GFSK_LE)	



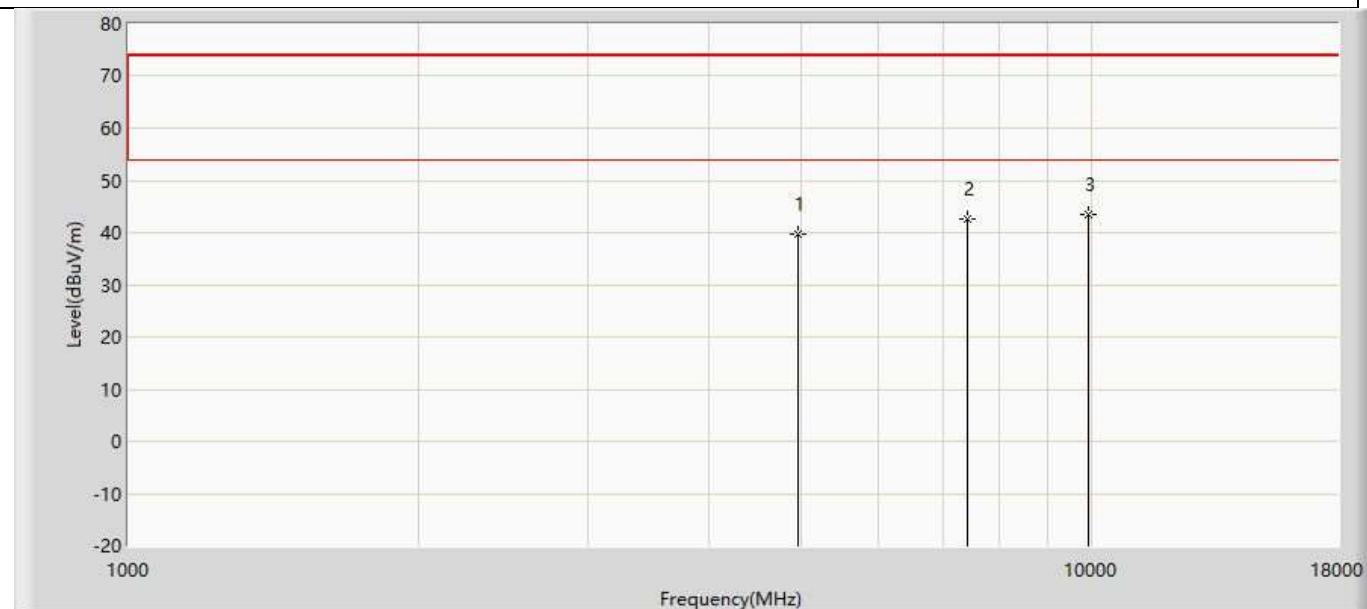
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.536	37.757	-31.464	74.000	4.778	PK
2		7320.000	43.921	35.851	-30.079	74.000	8.071	PK
3	*	9760.000	44.563	34.659	-29.437	74.000	9.904	PK

Profile: 1992204R	Page No.: 81
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps(GFSK_LE)	



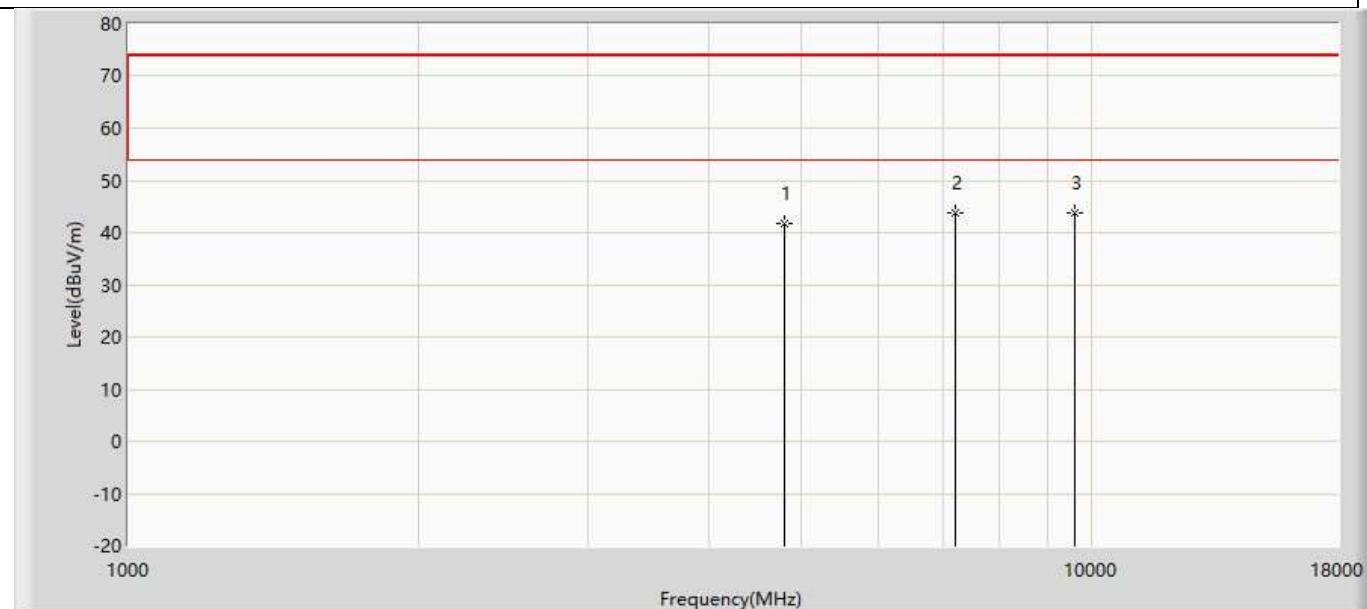
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.040	34.255	-34.960	74.000	4.784	PK
2	*	7440.000	42.720	34.669	-31.280	74.000	8.051	PK
3		9920.000	42.222	32.327	-31.778	74.000	9.894	PK

Profile: 1992204R	Page No.: 82
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps(GFSK_LE)	



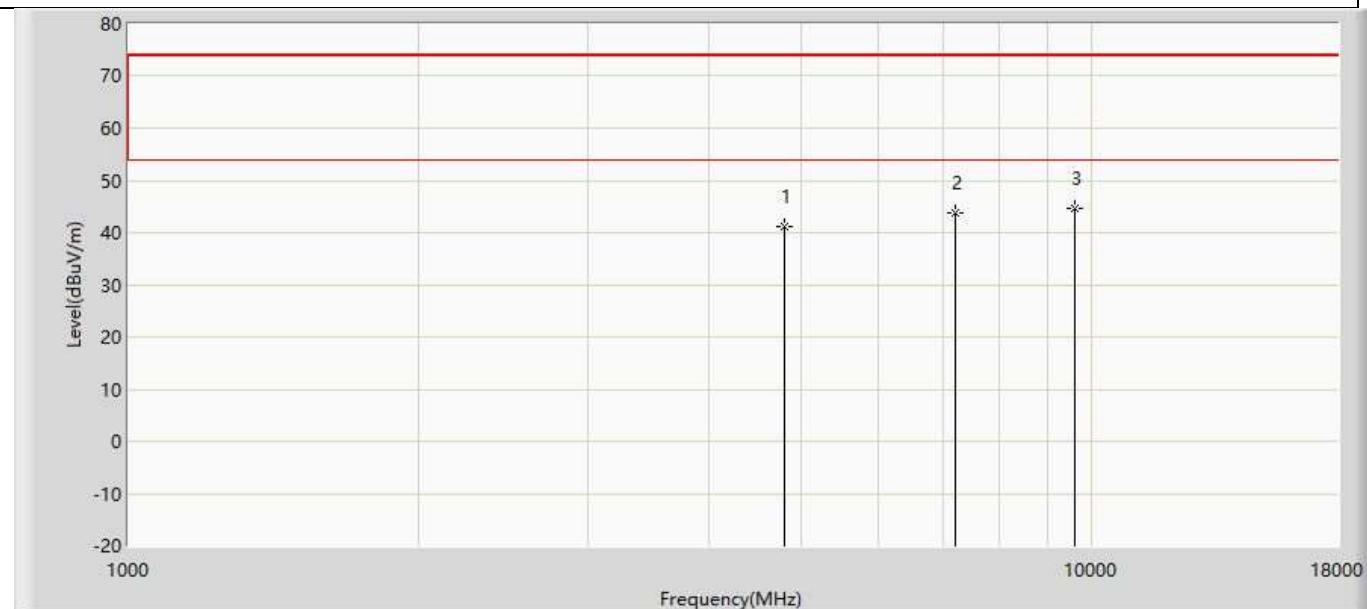
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.703	34.918	-34.297	74.000	4.784	PK
2		7440.000	42.512	34.461	-31.488	74.000	8.051	PK
3	*	9920.000	43.377	33.482	-30.623	74.000	9.894	PK

Profile: 1992204R	Page No.: 83
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps(GFSK_LE)	



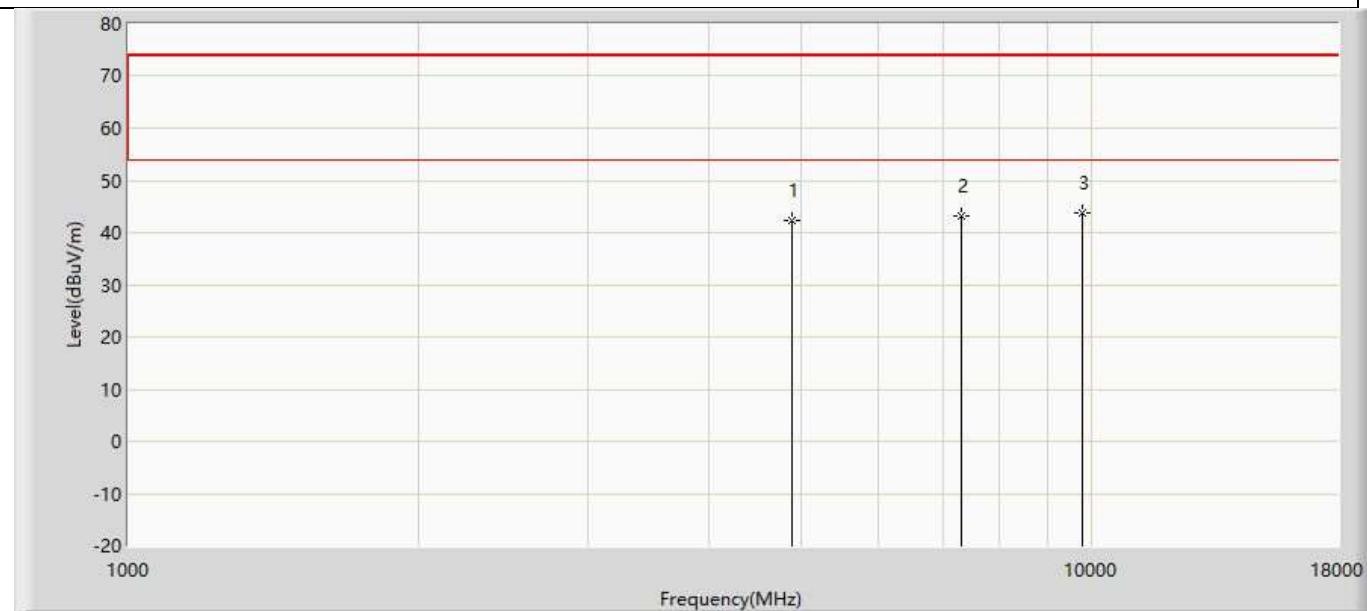
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.828	37.197	-32.172	74.000	4.631	PK
2		7206.000	43.825	35.801	-30.175	74.000	8.024	PK
3	*	9608.000	43.898	34.581	-30.102	74.000	9.318	PK

Profile: 1992204R	Page No.: 84
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps(GFSK_LE)	



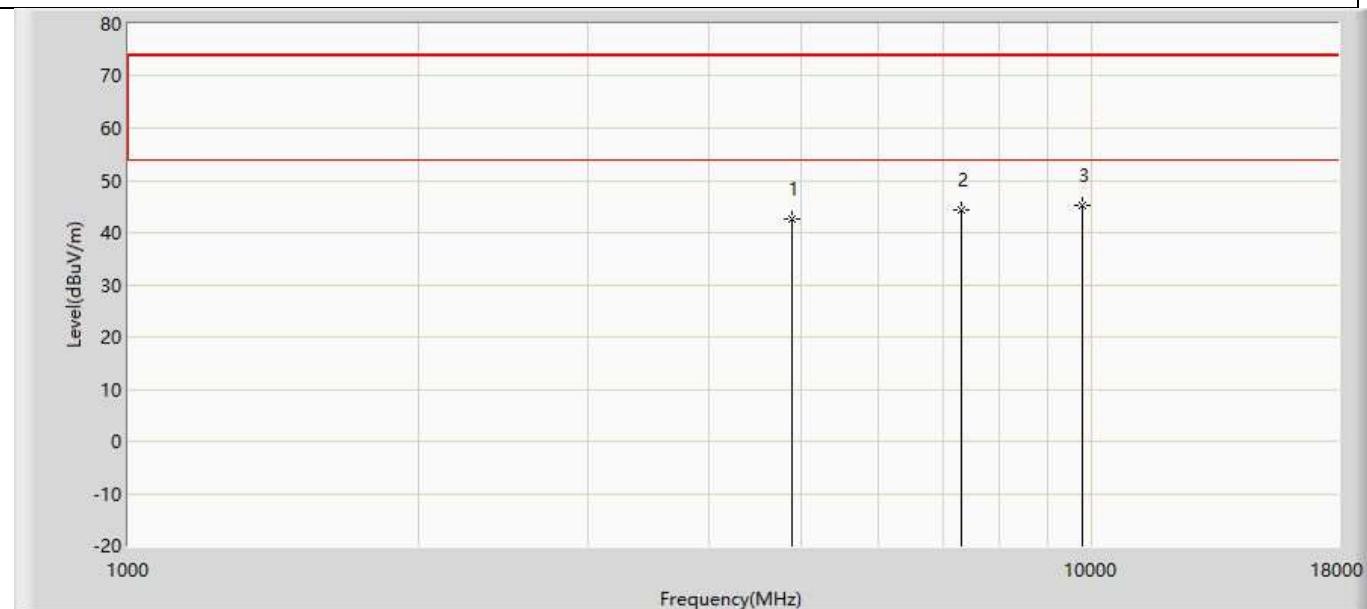
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.193	36.562	-32.807	74.000	4.631	PK
2		7206.000	43.721	35.697	-30.279	74.000	8.024	PK
3	*	9608.000	44.511	35.194	-29.489	74.000	9.318	PK

Profile: 1992204R	Page No.: 85
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps(GFSK_LE)	



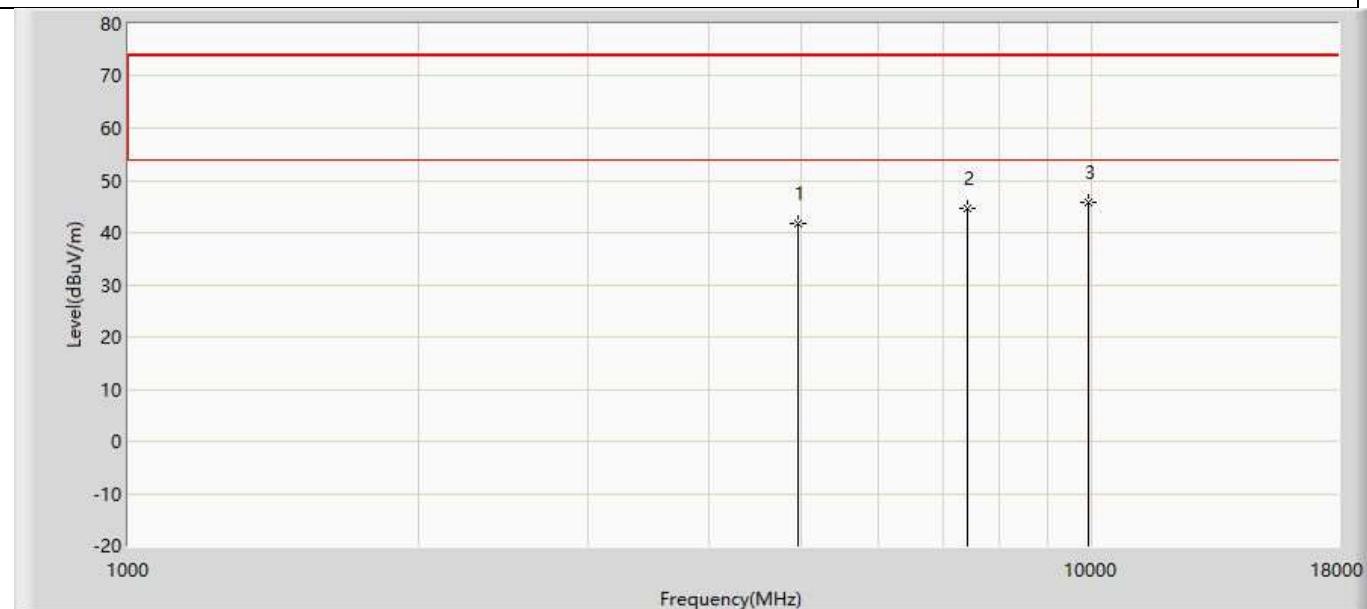
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.267	37.488	-31.733	74.000	4.778	PK
2		7320.000	43.246	35.176	-30.754	74.000	8.071	PK
3	*	9760.000	43.767	33.863	-30.233	74.000	9.904	PK

Profile: 1992204R	Page No.: 86
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps(GFSK_LE)	



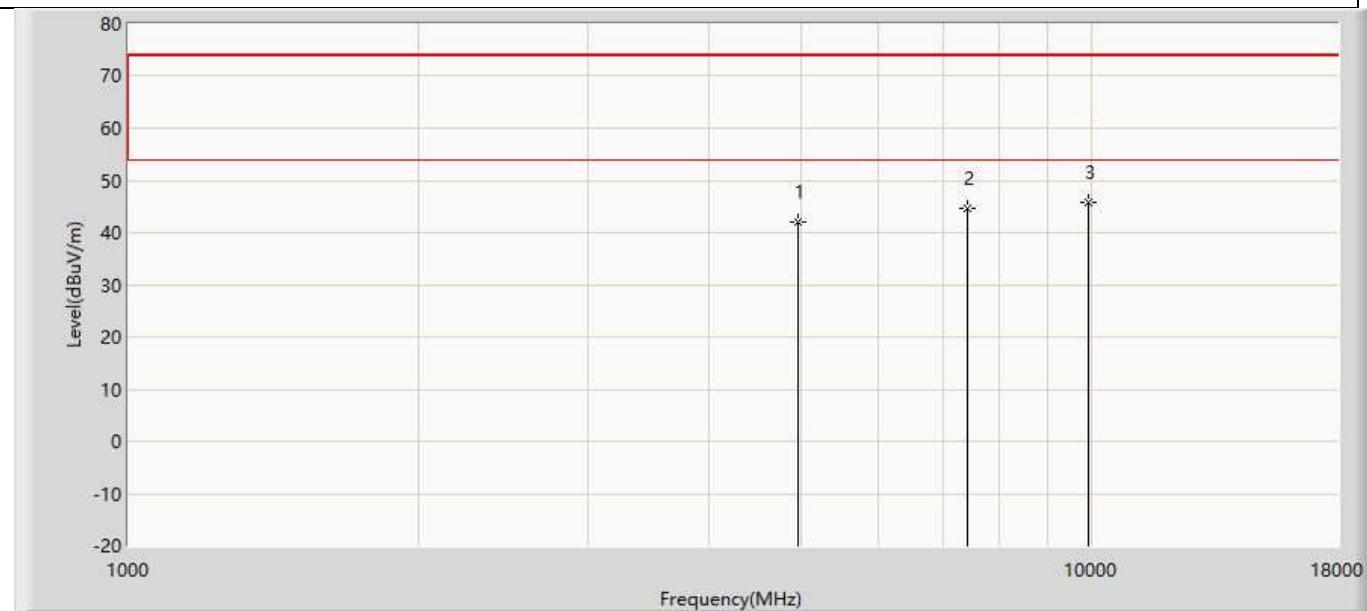
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.719	37.940	-31.281	74.000	4.778	PK
2		7320.000	44.205	36.135	-29.795	74.000	8.071	PK
3	*	9760.000	45.110	35.206	-28.890	74.000	9.904	PK

Profile: 1992204R	Page No.: 87
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps(GFSK_LE)	



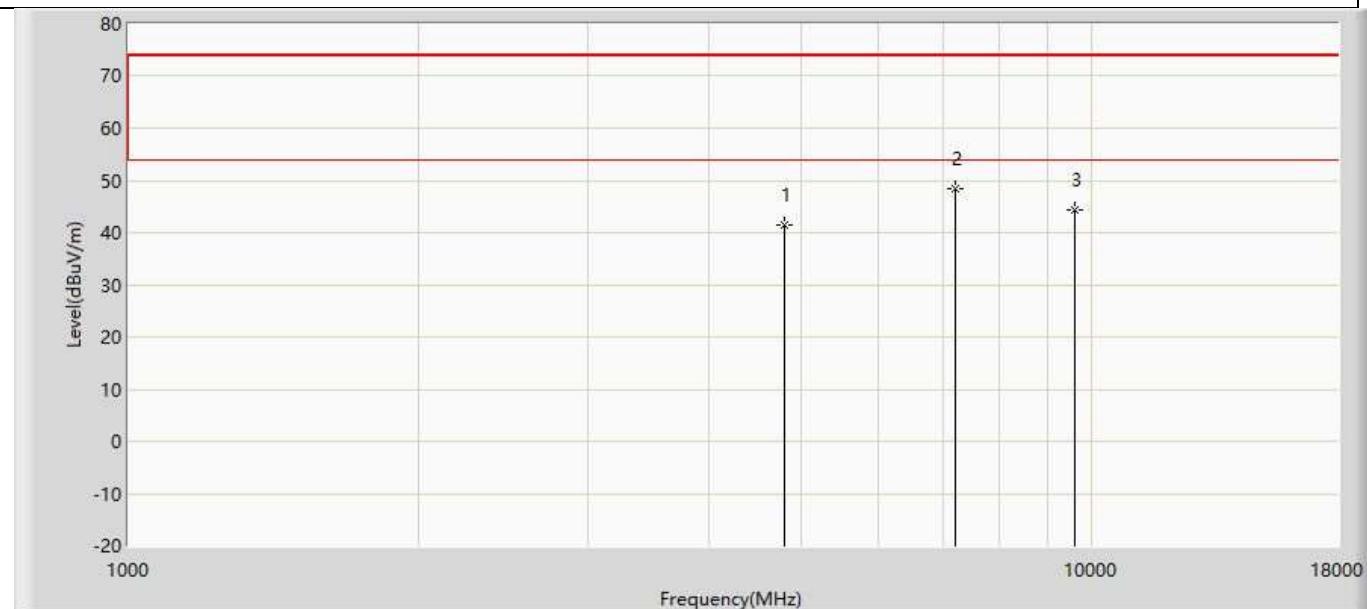
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.803	37.018	-32.197	74.000	4.784	PK
2		7440.000	44.701	36.650	-29.299	74.000	8.051	PK
3	*	9920.000	45.817	35.922	-28.183	74.000	9.894	PK

Profile: 1992204R	Page No.: 88
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps(GFSK_LE)	



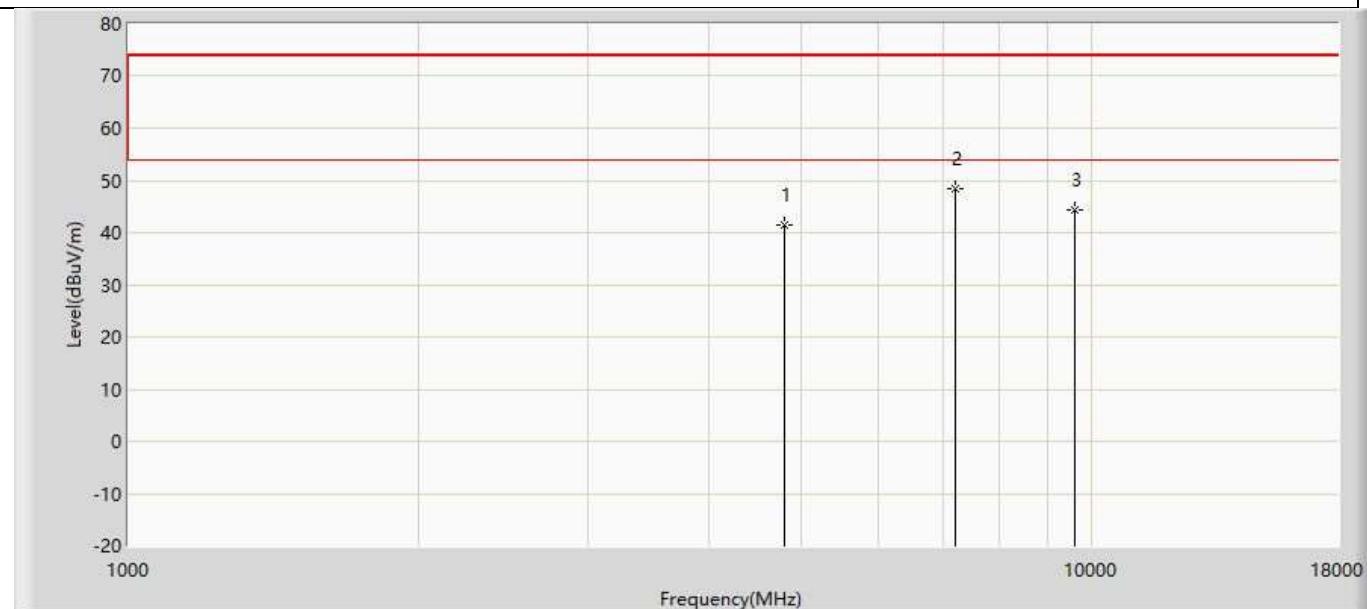
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.041	37.256	-31.959	74.000	4.784	PK
2		7440.000	44.701	36.650	-29.299	74.000	8.051	PK
3	*	9920.000	45.817	35.922	-28.183	74.000	9.894	PK

Profile: 1992204R	Page No.: 95
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded(S=2)(GFSK_LE)	



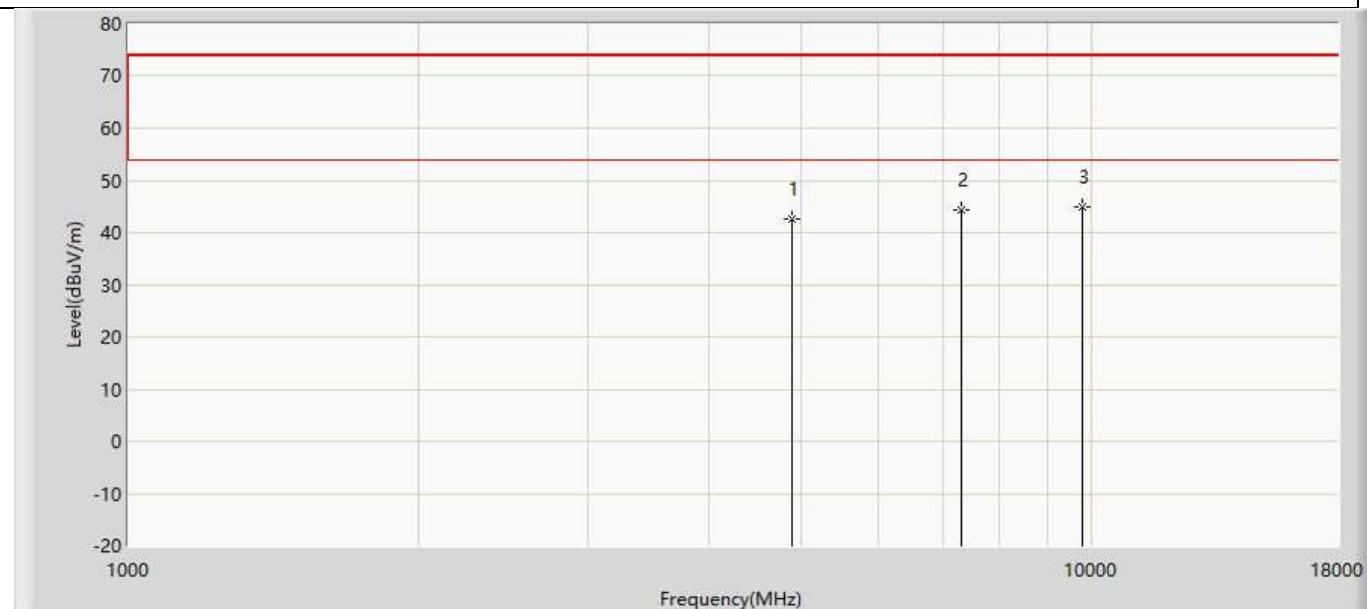
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.425	36.794	-32.575	74.000	4.631	PK
2	*	7206.000	48.283	40.259	-25.717	74.000	8.024	PK
3		9608.000	44.381	35.064	-29.619	74.000	9.318	PK

Profile: 1992204R	Page No.: 96
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded(S=2)(GFSK_LE)	



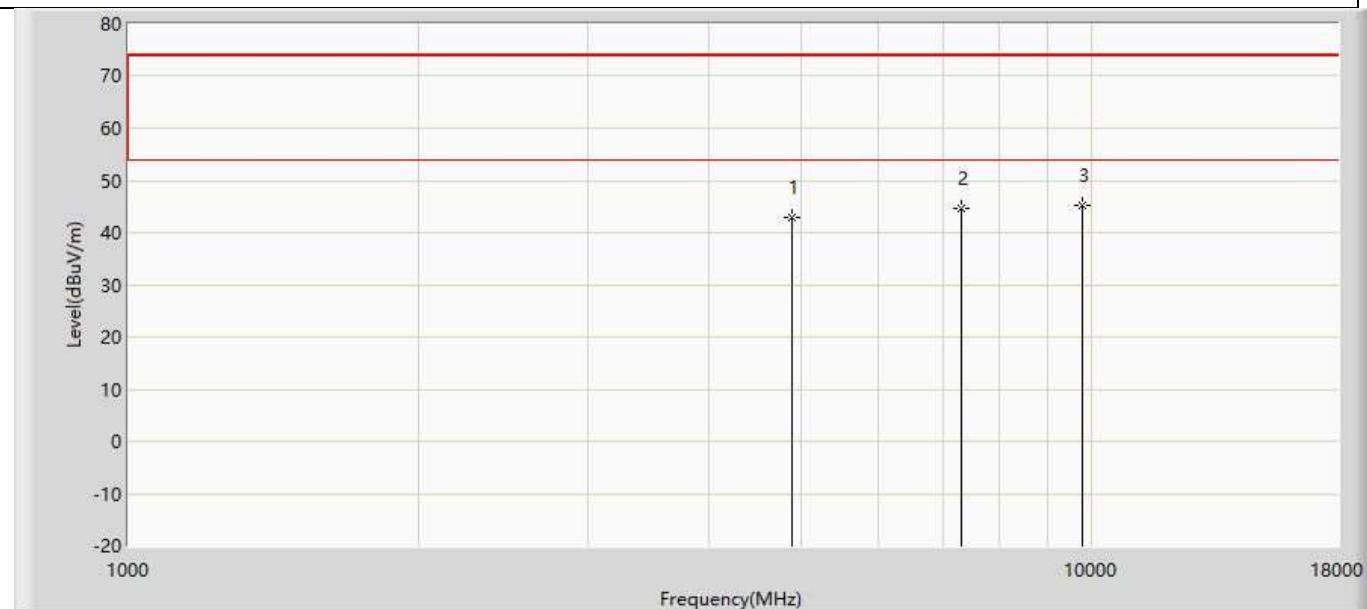
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.425	36.794	-32.575	74.000	4.631	PK
2	*	7206.000	48.446	40.422	-25.554	74.000	8.024	PK
3		9608.000	44.419	35.102	-29.581	74.000	9.318	PK

Profile: 1992204R	Page No.: 97
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2440MHz by LE_Coded(S=2)(GFSK_LE)	



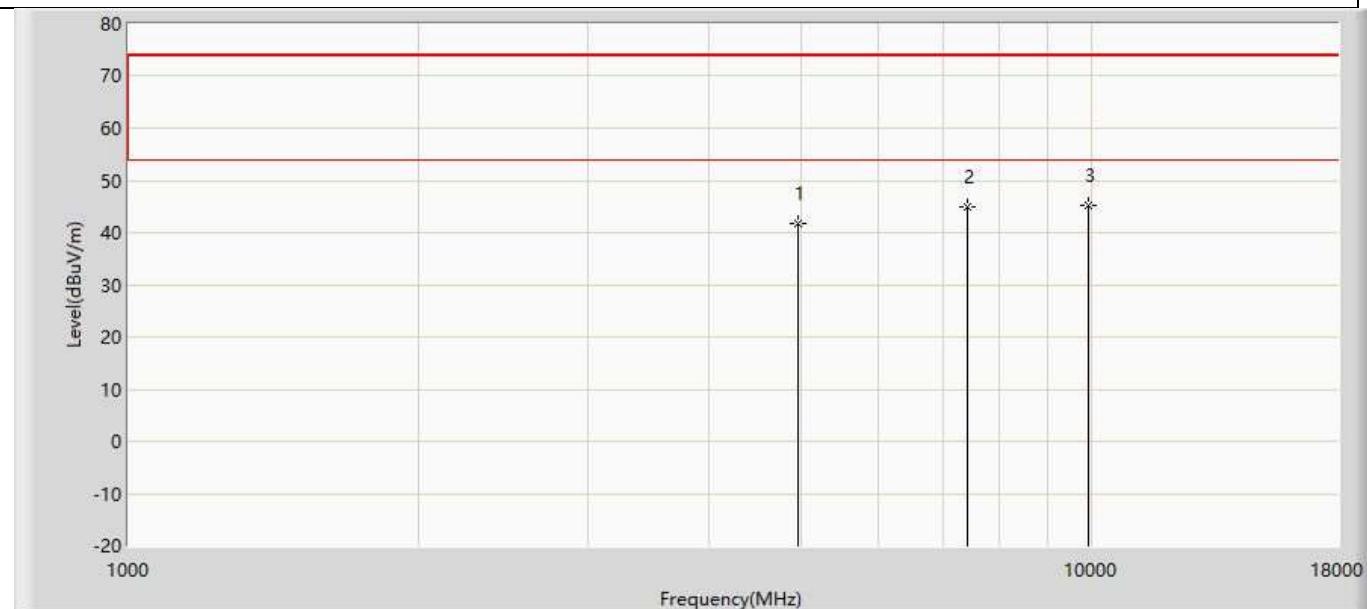
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.550	37.771	-31.450	74.000	4.778	PK
2		7320.000	44.368	36.298	-29.632	74.000	8.071	PK
3	*	9760.000	45.040	35.136	-28.960	74.000	9.904	PK

Profile: 1992204R	Page No.: 98
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2440MHz by LE_Coded(S=2)(GFSK_LE)	



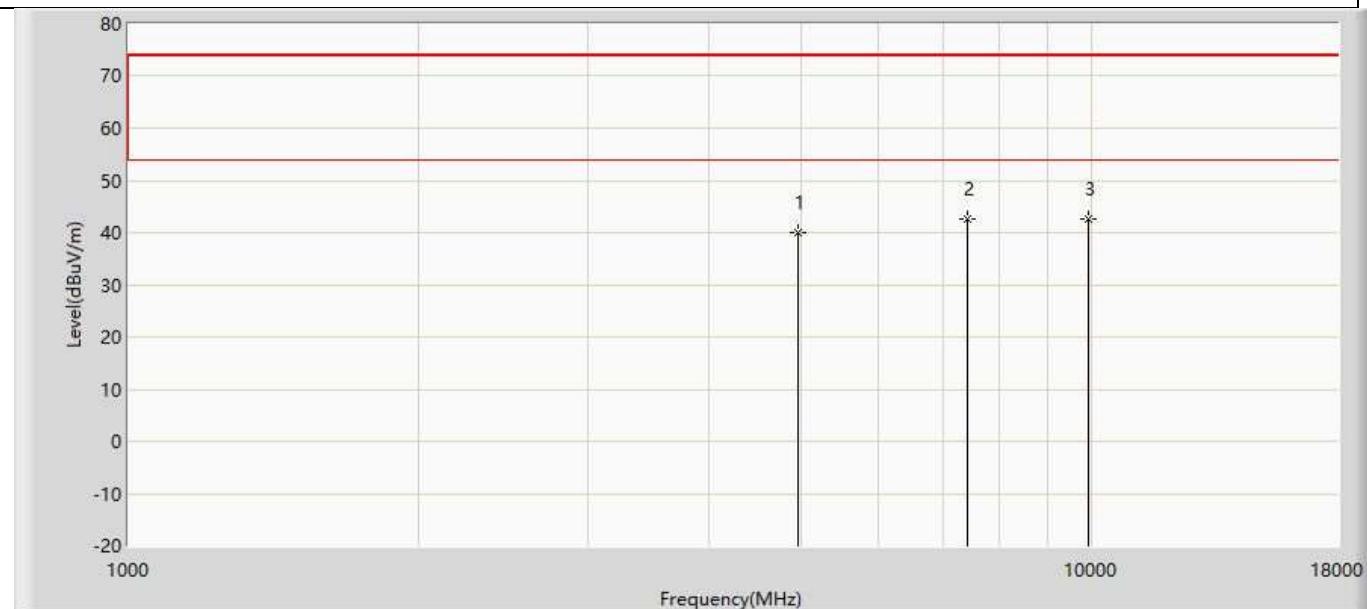
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.982	38.203	-31.018	74.000	4.778	PK
2		7320.000	44.520	36.450	-29.480	74.000	8.071	PK
3	*	9760.000	45.329	35.425	-28.671	74.000	9.904	PK

Profile: 1992204R	Page No.: 99
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded(S=2)(GFSK_LE)	



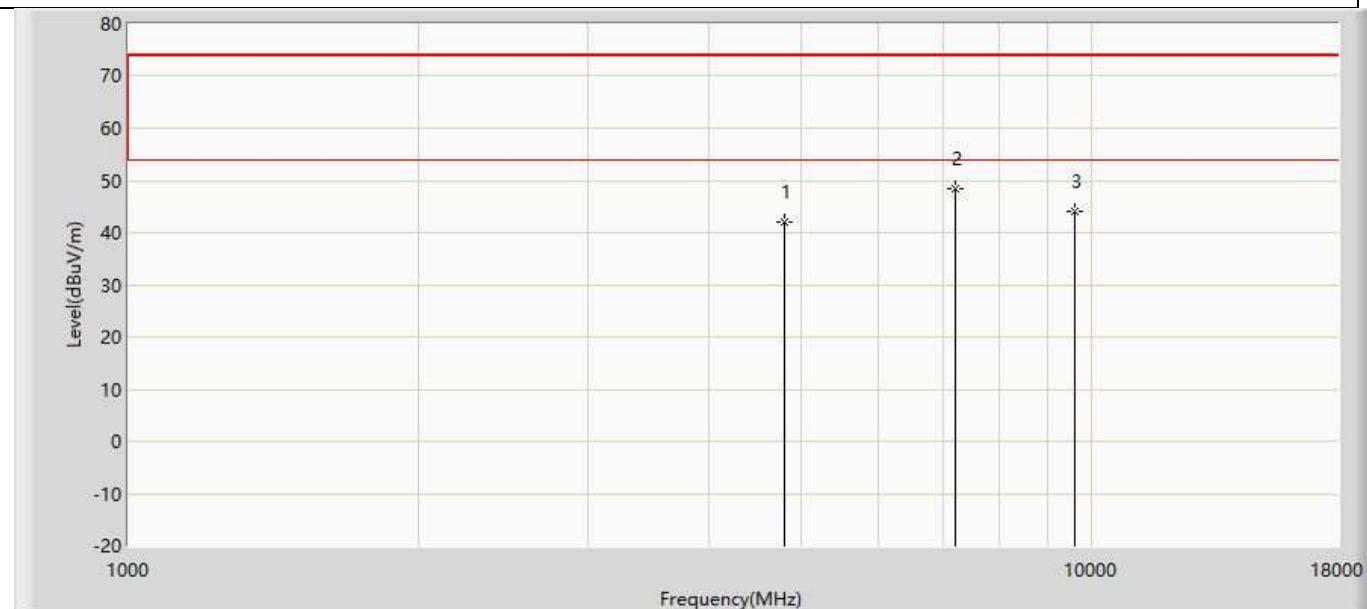
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.830	37.045	-32.170	74.000	4.784	PK
2		7440.000	44.855	36.804	-29.145	74.000	8.051	PK
3	*	9920.000	45.294	35.399	-28.706	74.000	9.894	PK

Profile: 1992204R	Page No.: 100
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded(S=2)(GFSK_LE)	



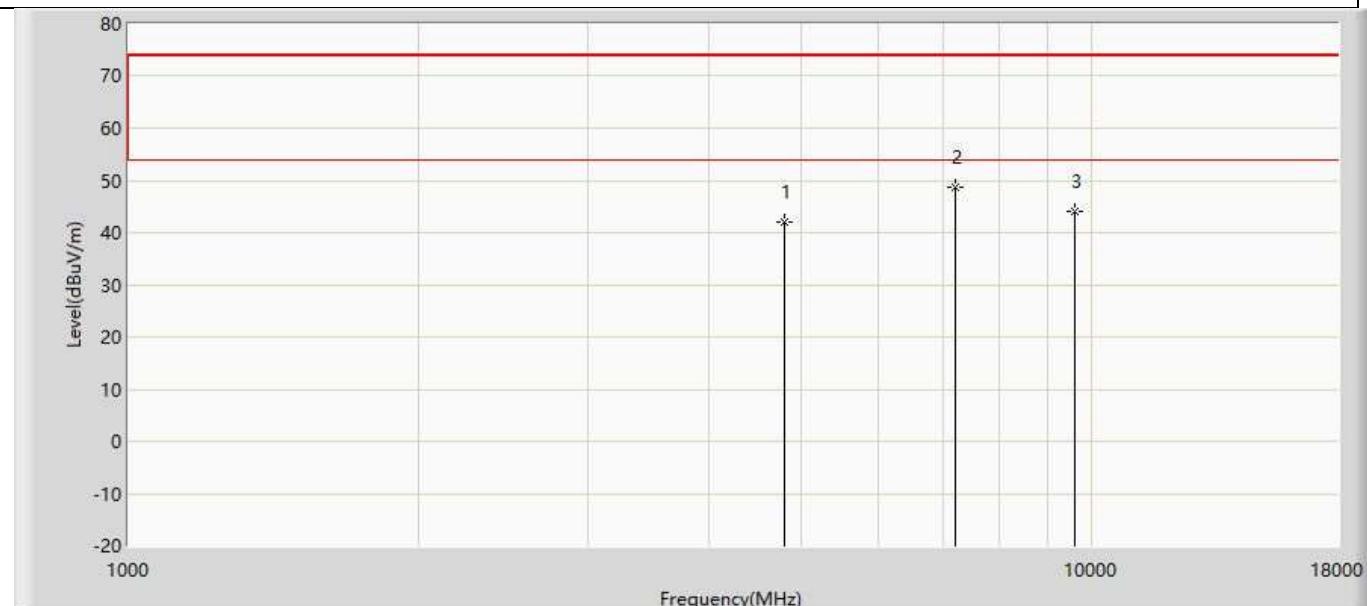
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	40.047	35.262	-33.953	74.000	4.784	PK
2		7440.000	42.494	34.443	-31.506	74.000	8.051	PK
3	*	9920.000	42.543	32.648	-31.457	74.000	9.894	PK

Profile: 1992204R	Page No.: 89
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded(S=8)(GFSK_LE)	



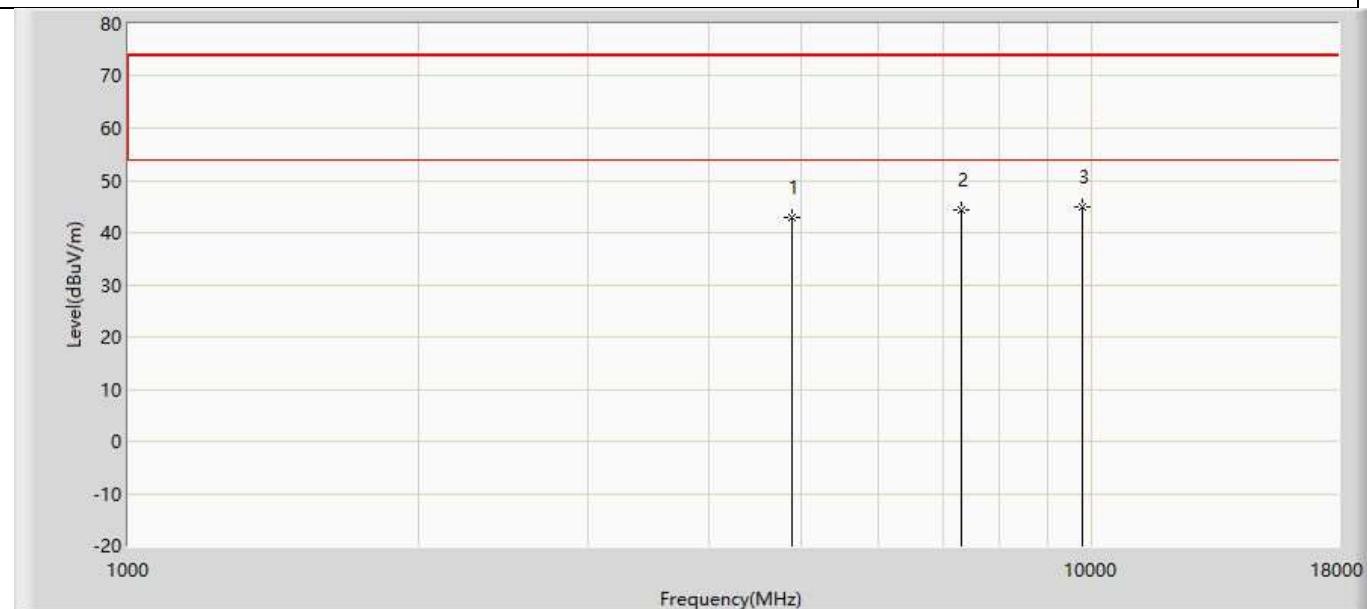
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.897	37.266	-32.103	74.000	4.631	PK
2	*	7206.000	48.543	40.519	-25.457	74.000	8.024	PK
3		9608.000	44.013	34.696	-29.987	74.000	9.318	PK

Profile: 1992204R	Page No.: 90
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded(S=8)(GFSK_LE)	



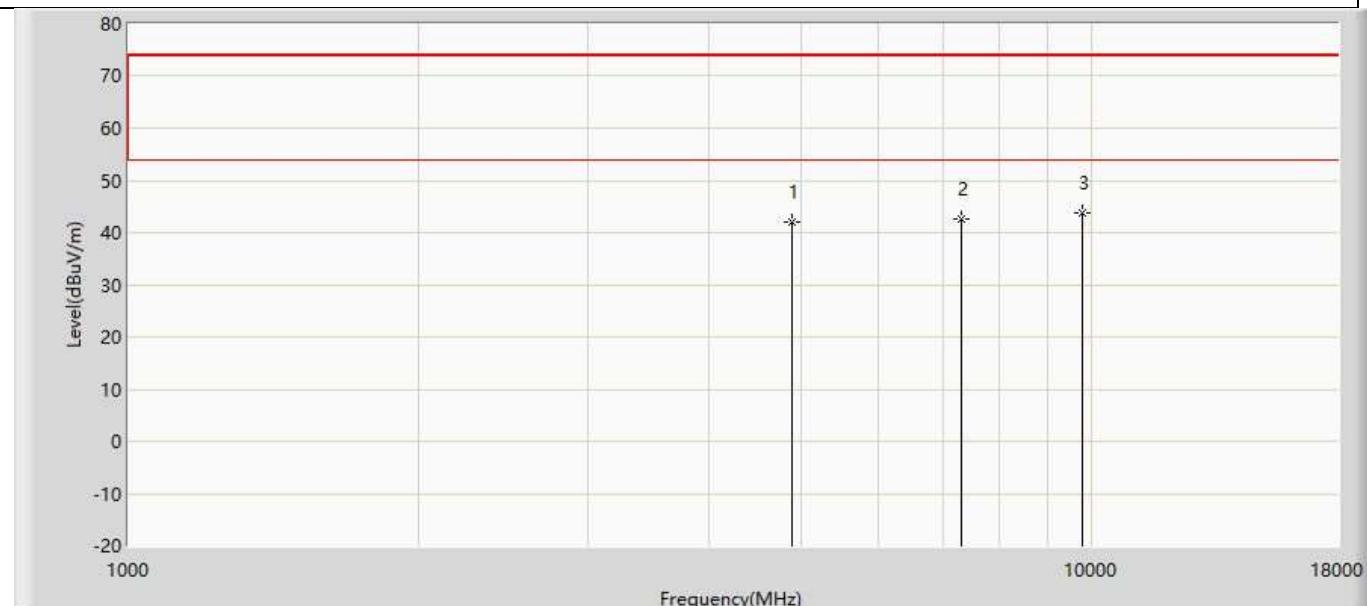
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.012	37.381	-31.988	74.000	4.631	PK
2	*	7206.000	48.564	40.540	-25.436	74.000	8.024	PK
3		9608.000	44.013	34.696	-29.987	74.000	9.318	PK

Profile: 1992204R	Page No.: 91
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2440MHz by LE_Coded(S=8)(GFSK_LE)	



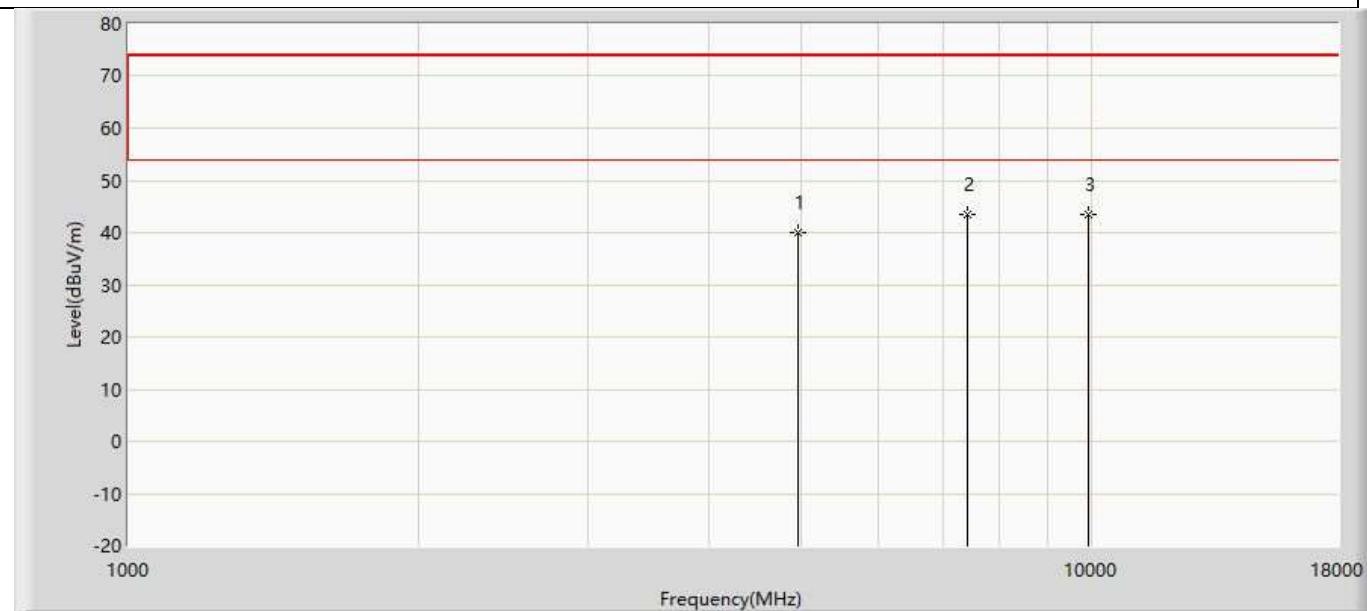
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.881	38.102	-31.119	74.000	4.778	PK
2		7320.000	44.400	36.330	-29.600	74.000	8.071	PK
3	*	9760.000	44.823	34.919	-29.177	74.000	9.904	PK

Profile: 1992204R	Page No.: 92
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2440MHz by LE_Coded(S=8)(GFSK_LE)	



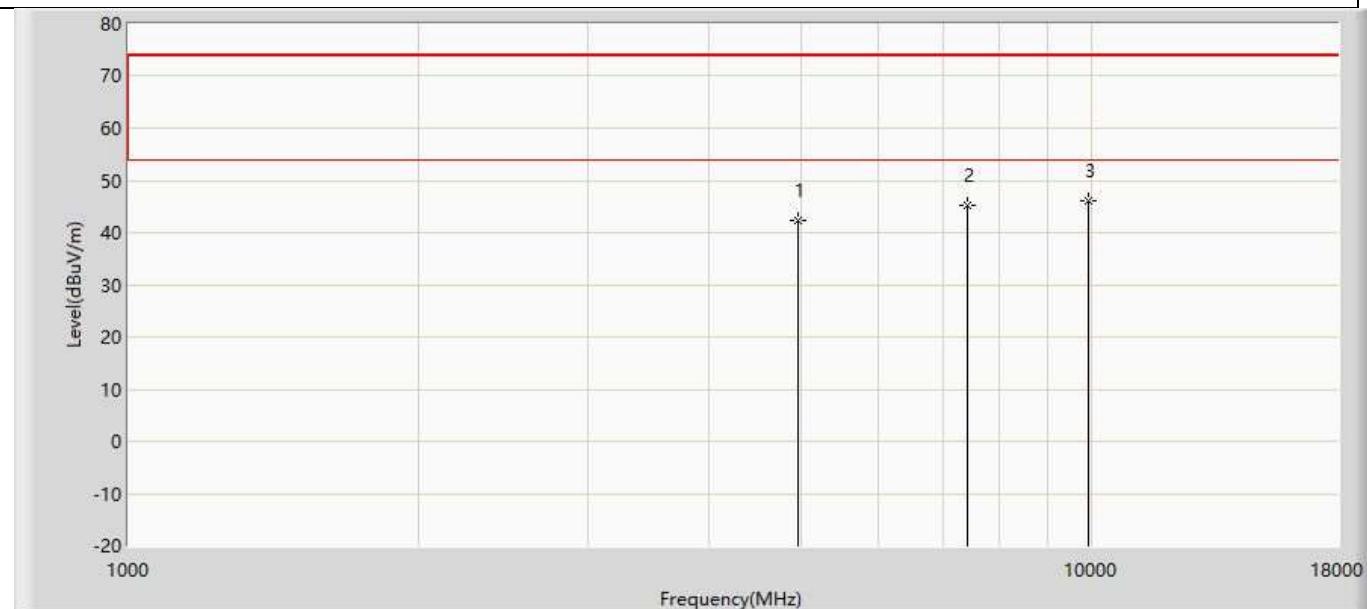
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.127	37.348	-31.873	74.000	4.778	PK
2		7320.000	42.512	34.442	-31.488	74.000	8.071	PK
3	*	9760.000	43.731	33.827	-30.269	74.000	9.904	PK

Profile: 1992204R	Page No.: 93
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded(S=8)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.927	35.142	-34.073	74.000	4.784	PK
2	*	7440.000	43.501	35.450	-30.499	74.000	8.051	PK
3		9920.000	43.426	33.531	-30.574	74.000	9.894	PK

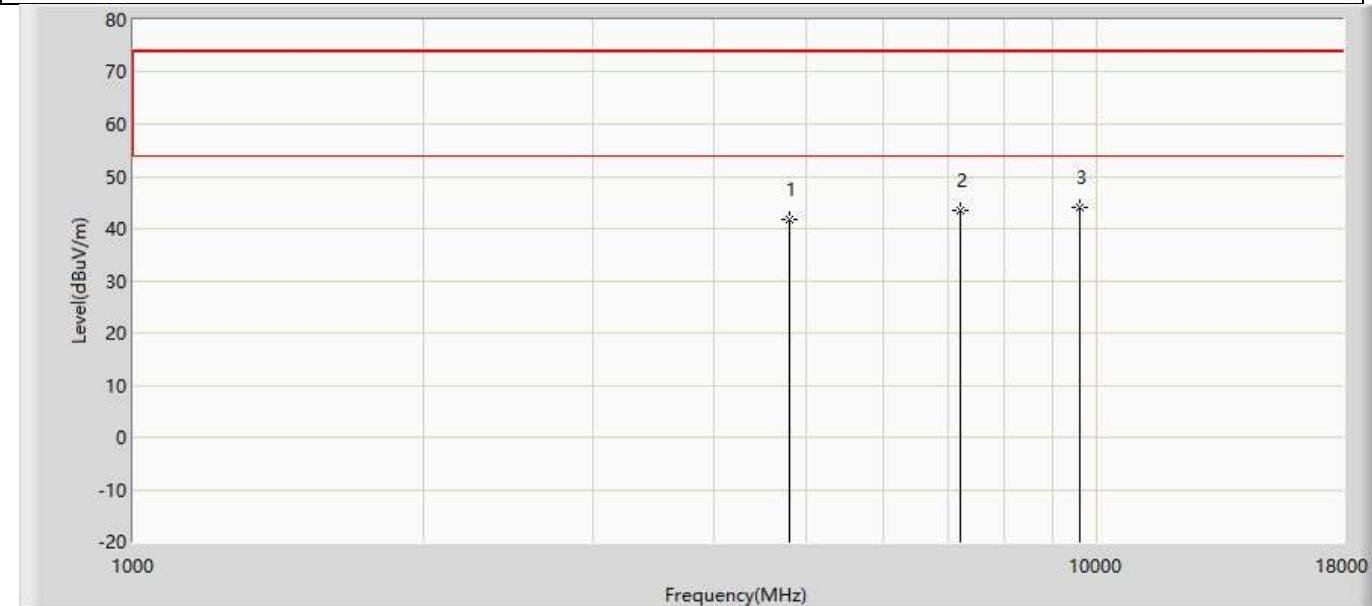
Profile: 1992204R	Page No.: 94
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 00:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded(S=8)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.454	37.669	-31.546	74.000	4.784	PK
2		7440.000	45.088	37.037	-28.912	74.000	8.051	PK
3	*	9920.000	45.958	36.063	-28.042	74.000	9.894	PK

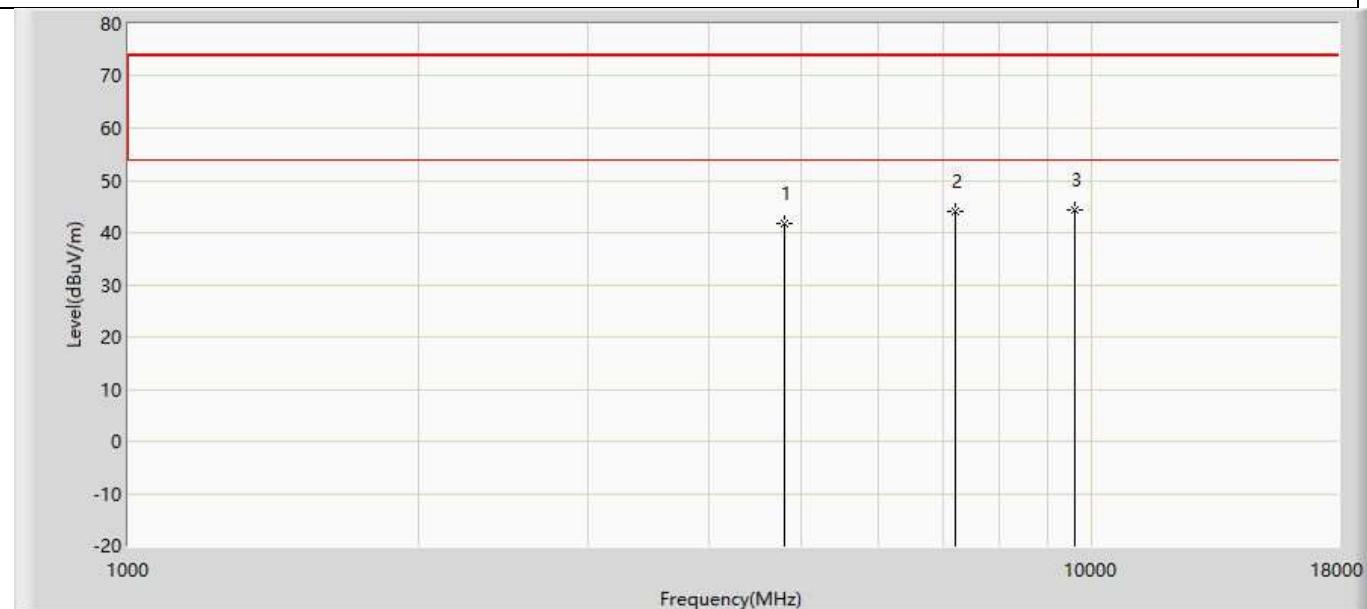
KDS:

Profile: 1992204R	Page No.: 47
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 10:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps(GFSK_LE)	



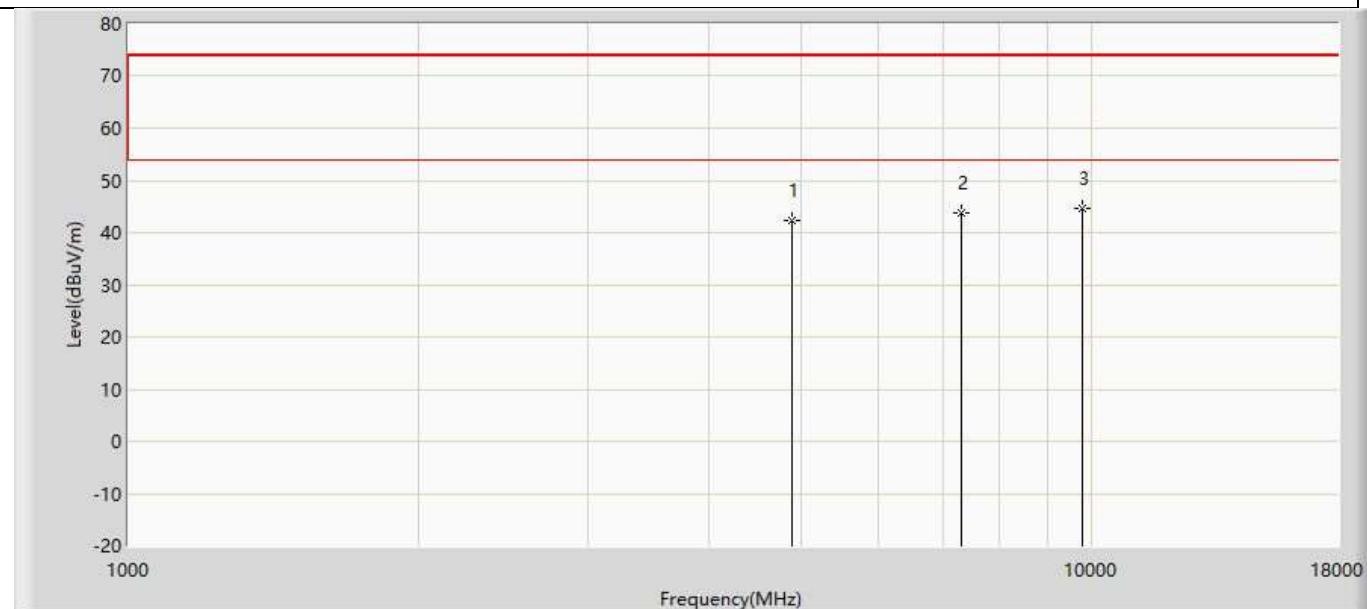
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.666	37.035	-32.334	74.000	4.631	PK
2		7206.000	43.506	35.482	-30.494	74.000	8.024	PK
3	*	9608.000	44.045	34.728	-29.955	74.000	9.318	PK

Profile: 1992204R	Page No.: 48
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 10:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps(GFSK_LE)	



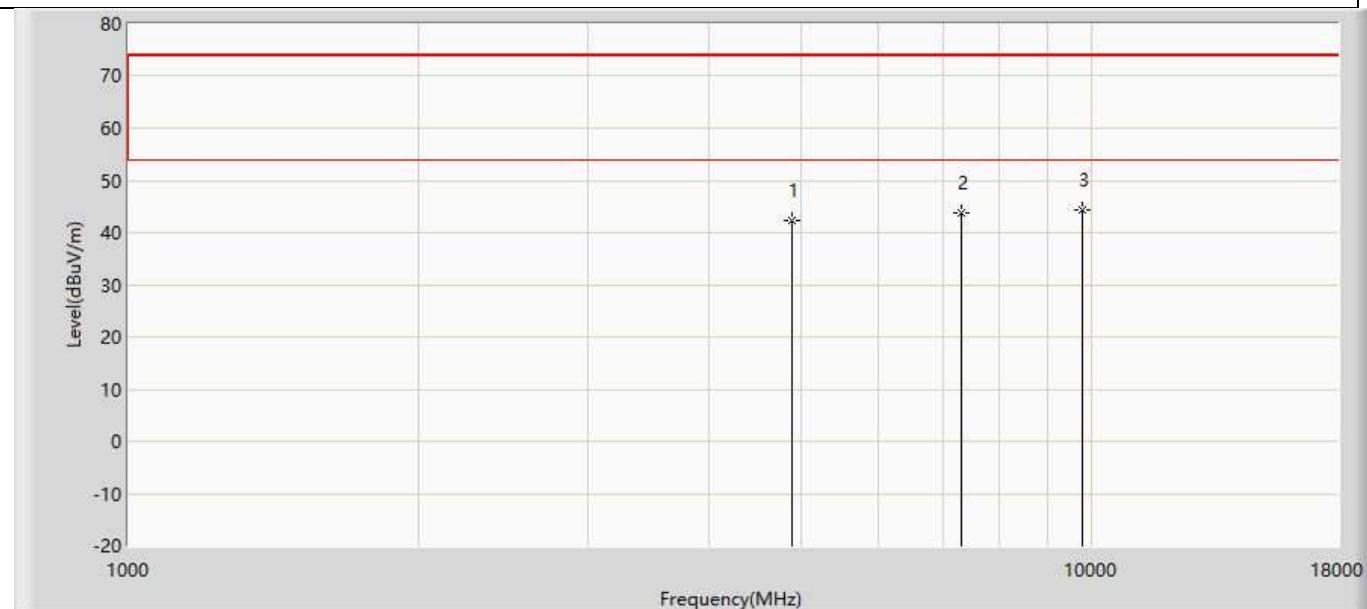
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.749	37.118	-32.251	74.000	4.631	PK
2		7206.000	44.162	36.138	-29.838	74.000	8.024	PK
3	*	9608.000	44.344	35.027	-29.656	74.000	9.318	PK

Profile: 1992204R	Page No.: 49
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 10:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps(GFSK_LE)	



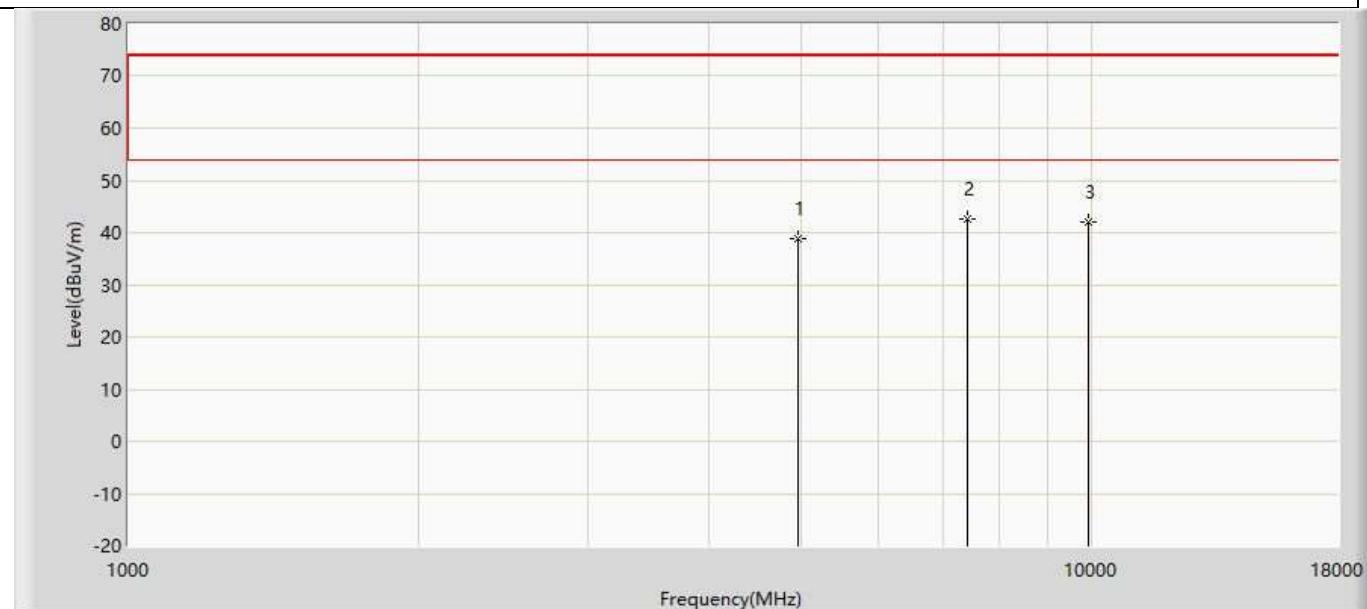
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.427	37.648	-31.573	74.000	4.778	PK
2		7320.000	43.698	35.628	-30.302	74.000	8.071	PK
3	*	9760.000	44.633	34.729	-29.367	74.000	9.904	PK

Profile: 1992204R	Page No.: 50
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 10:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps(GFSK_LE)	



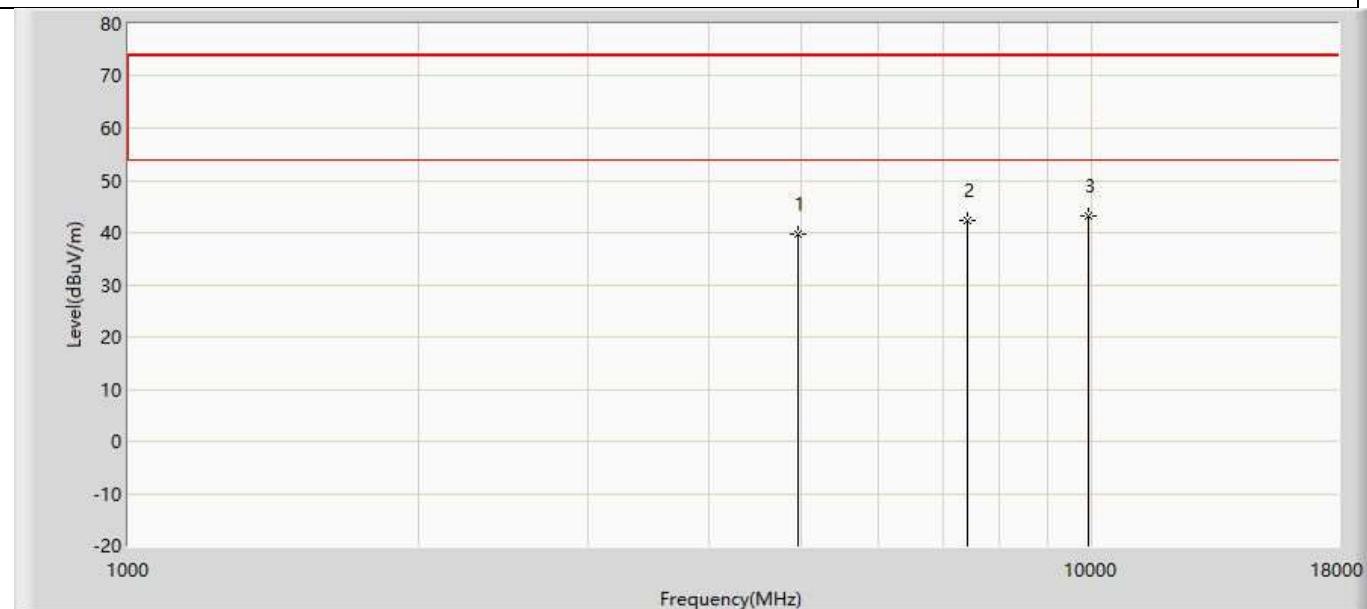
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.460	37.681	-31.540	74.000	4.778	PK
2		7320.000	43.745	35.675	-30.255	74.000	8.071	PK
3	*	9760.000	44.422	34.518	-29.578	74.000	9.904	PK

Profile: 1992204R	Page No.: 51
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 10:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps(GFSK_LE)	



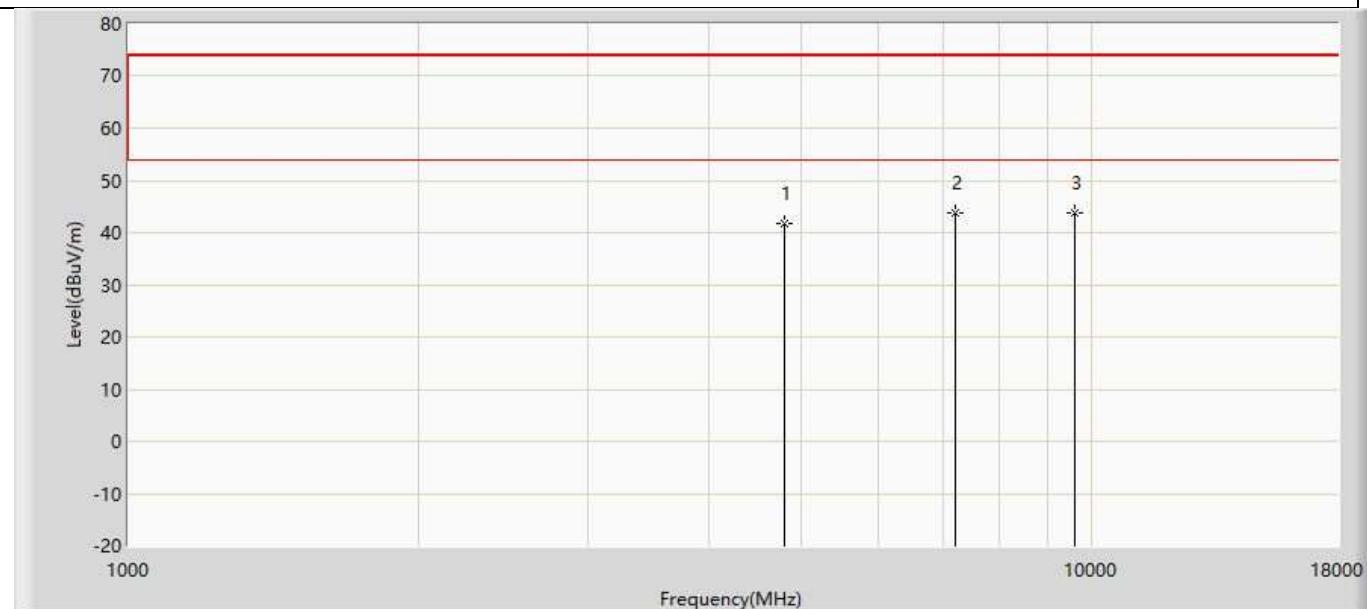
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	38.953	34.168	-35.047	74.000	4.784	PK
2	*	7440.000	42.580	34.529	-31.420	74.000	8.051	PK
3		9920.000	42.064	32.169	-31.936	74.000	9.894	PK

Profile: 1992204R	Page No.: 52
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 10:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.601	34.816	-34.399	74.000	4.784	PK
2		7440.000	42.369	34.318	-31.631	74.000	8.051	PK
3	*	9920.000	43.223	33.328	-30.777	74.000	9.894	PK

Profile: 1992204R	Page No.: 53
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 10:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps(GFSK_LE)	



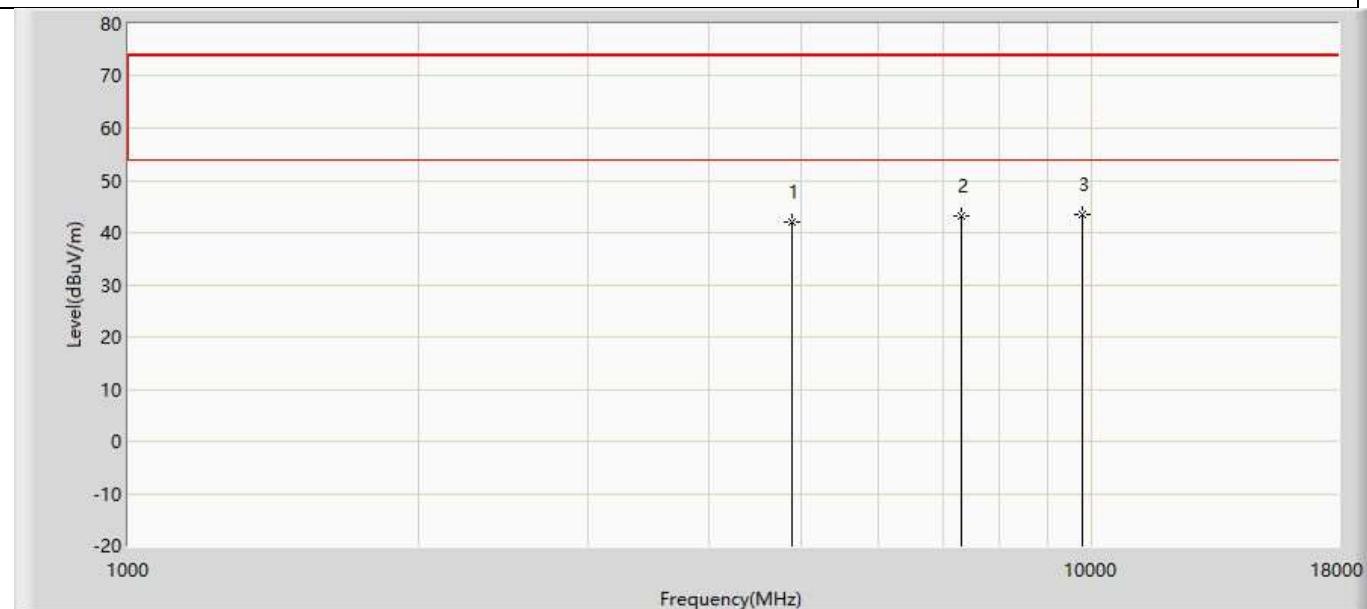
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.689	37.058	-32.311	74.000	4.631	PK
2	*	7206.000	43.686	35.662	-30.314	74.000	8.024	PK
3		9608.000	43.686	34.369	-30.314	74.000	9.318	PK

Profile: 1992204R	Page No.: 54
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 10:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps(GFSK_LE)	



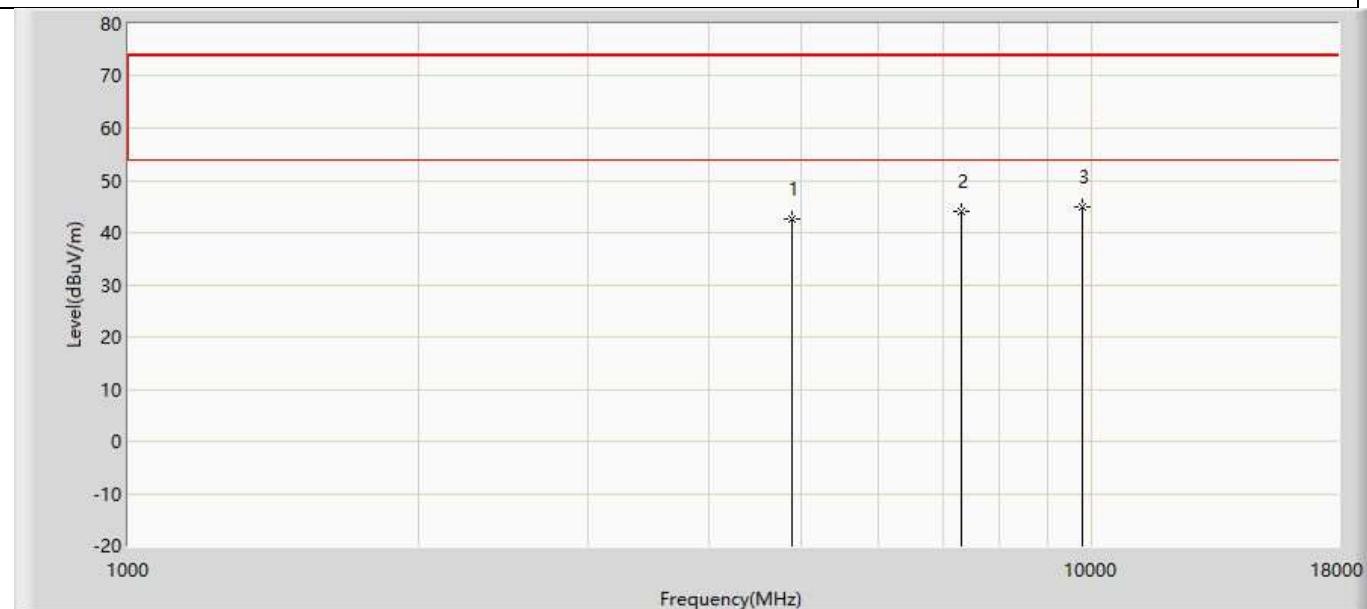
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.052	36.421	-32.948	74.000	4.631	PK
2		7206.000	43.543	35.519	-30.457	74.000	8.024	PK
3	*	9608.000	44.353	35.036	-29.647	74.000	9.318	PK

Profile: 1992204R	Page No.: 55
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 10:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps(GFSK_LE)	



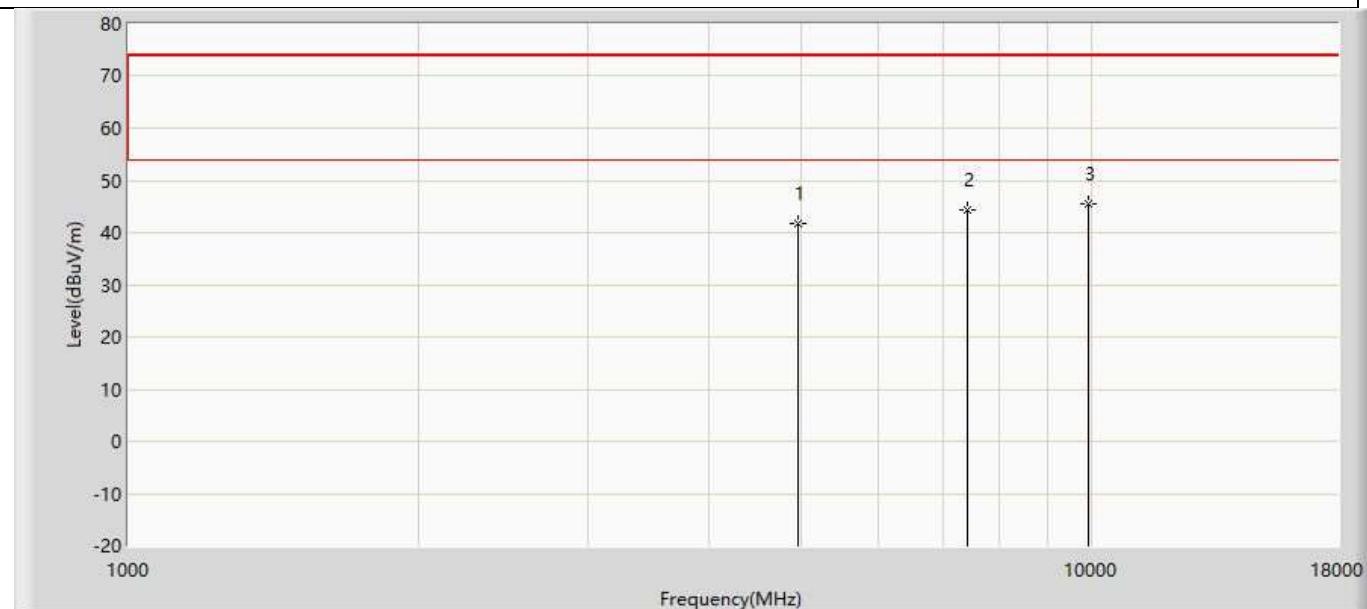
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.148	37.369	-31.852	74.000	4.778	PK
2		7320.000	43.107	35.037	-30.893	74.000	8.071	PK
3	*	9760.000	43.593	33.689	-30.407	74.000	9.904	PK

Profile: 1992204R	Page No.: 56
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 10:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps(GFSK_LE)	



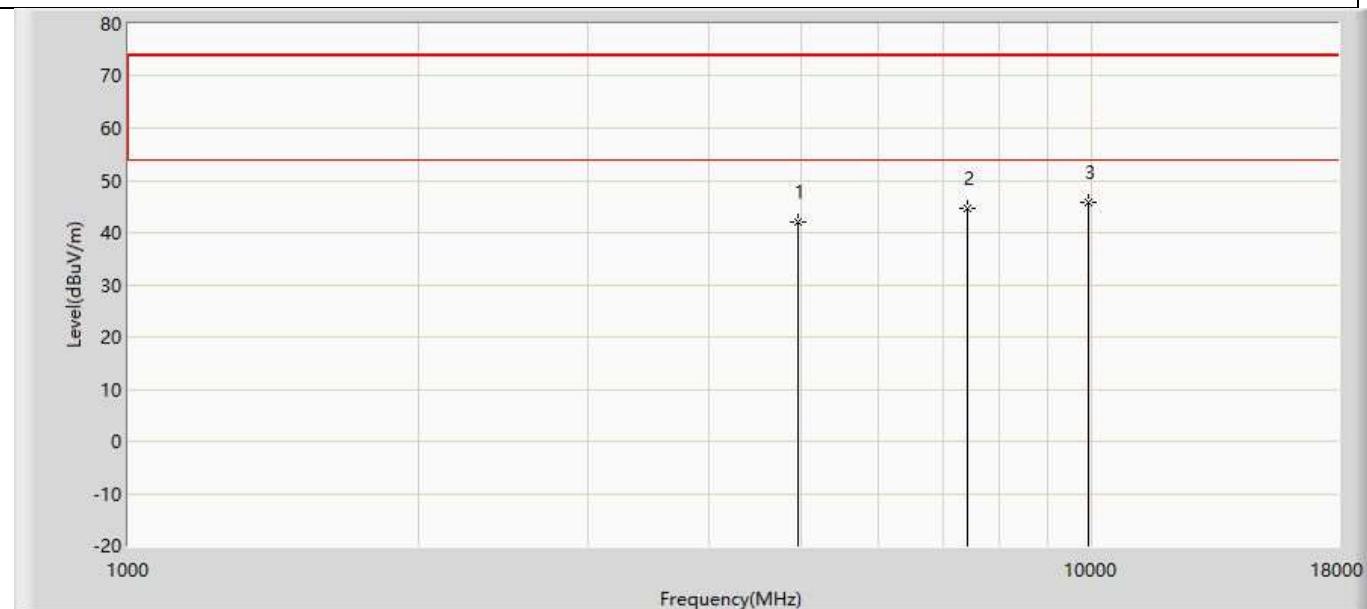
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.640	37.861	-31.360	74.000	4.778	PK
2		7320.000	44.105	36.035	-29.895	74.000	8.071	PK
3	*	9760.000	45.008	35.104	-28.992	74.000	9.904	PK

Profile: 1992204R	Page No.: 57
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 10:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps(GFSK_LE)	



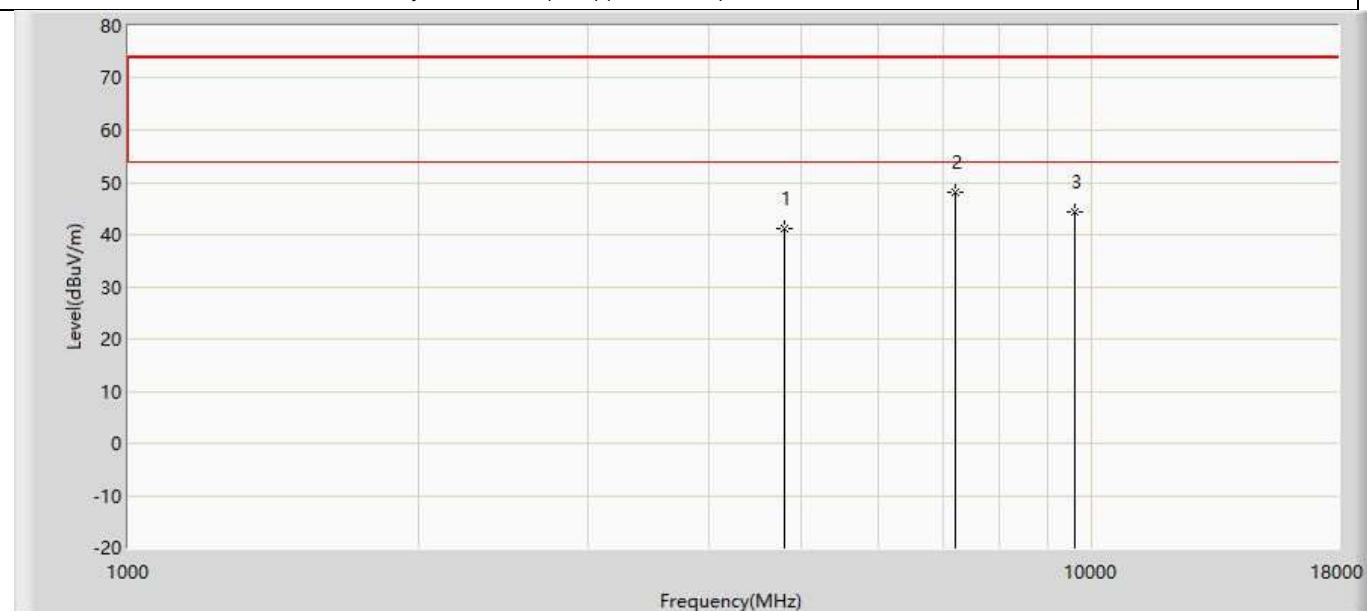
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.738	36.953	-32.262	74.000	4.784	PK
2		7440.000	44.477	36.426	-29.523	74.000	8.051	PK
3	*	9920.000	45.579	35.684	-28.421	74.000	9.894	PK

Profile: 1992204R	Page No.: 58
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 11:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps(GFSK_LE)	



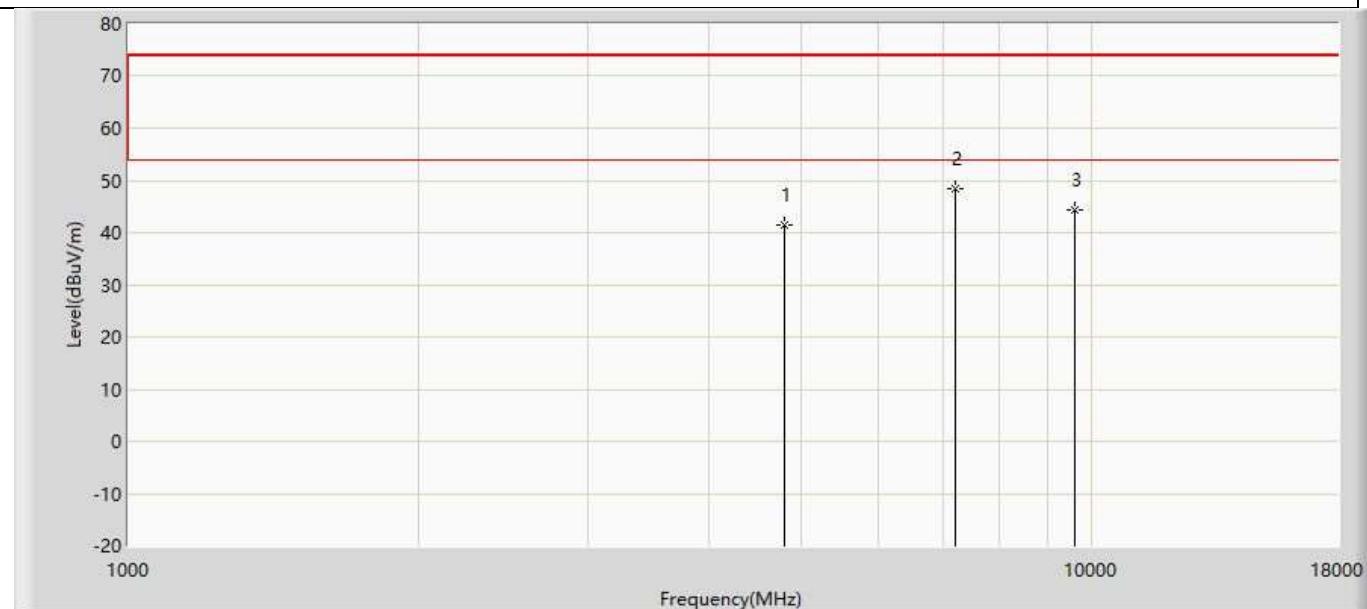
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.975	37.190	-32.025	74.000	4.784	PK
2		7440.000	44.540	36.489	-29.460	74.000	8.051	PK
3	*	9920.000	45.741	35.846	-28.259	74.000	9.894	PK

Profile: 1992204R	Page No.: 65
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 11:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded(S=2)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.171	36.540	-32.829	74.000	4.631	PK
2	*	7206.000	48.222	40.198	-25.778	74.000	8.024	PK
3		9608.000	44.245	34.928	-29.755	74.000	9.318	PK

Profile: 1992204R	Page No.: 66
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 11:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded(S=2)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.326	36.695	-32.674	74.000	4.631	PK
2	*	7206.000	48.343	40.319	-25.657	74.000	8.024	PK
3		9608.000	44.356	35.039	-29.644	74.000	9.318	PK

Profile: 1992204R	Page No.: 67
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 11:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2440MHz by LE_Coded(S=2)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.271	37.492	-31.729	74.000	4.778	PK
2		7320.000	44.208	36.138	-29.792	74.000	8.071	PK
3	*	9760.000	44.943	35.039	-29.057	74.000	9.904	PK

Profile: 1992204R	Page No.: 68
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 11:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2440MHz by LE_Coded(S=2)(GFSK_LE)	



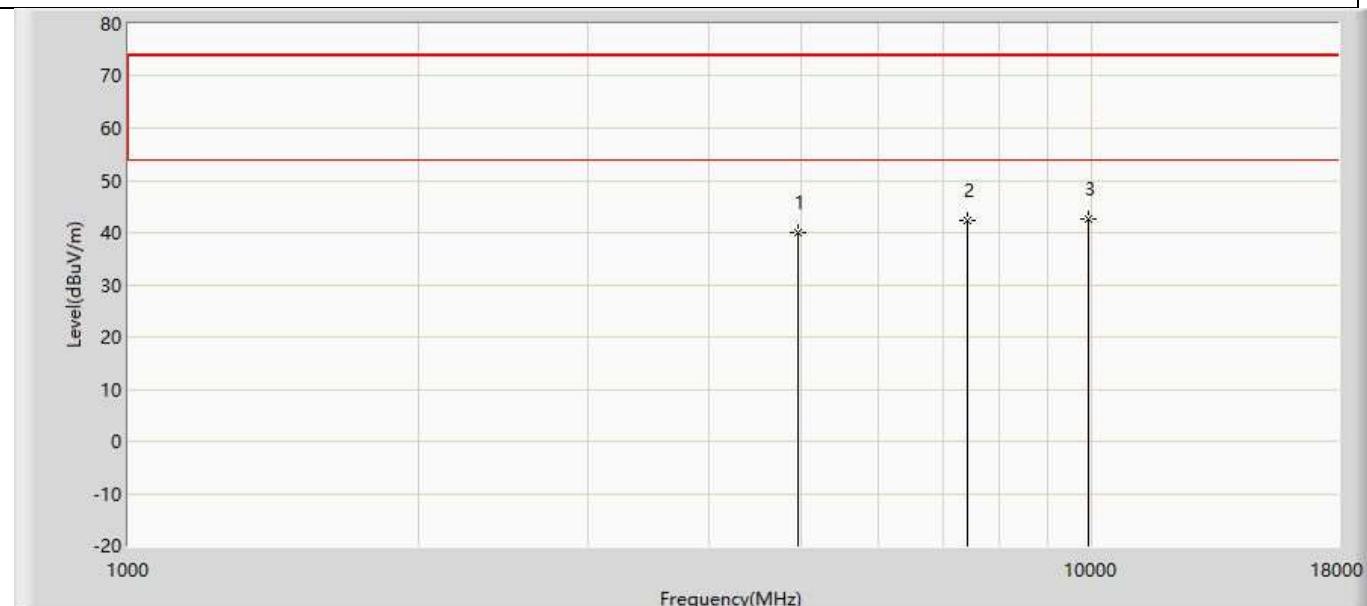
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.887	38.108	-31.113	74.000	4.778	PK
2		7320.000	44.418	36.348	-29.582	74.000	8.071	PK
3	*	9760.000	45.232	35.328	-28.768	74.000	9.904	PK

Profile: 1992204R	Page No.: 69
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 11:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2440MHz by LE_Coded(S=2)(GFSK_LE)	



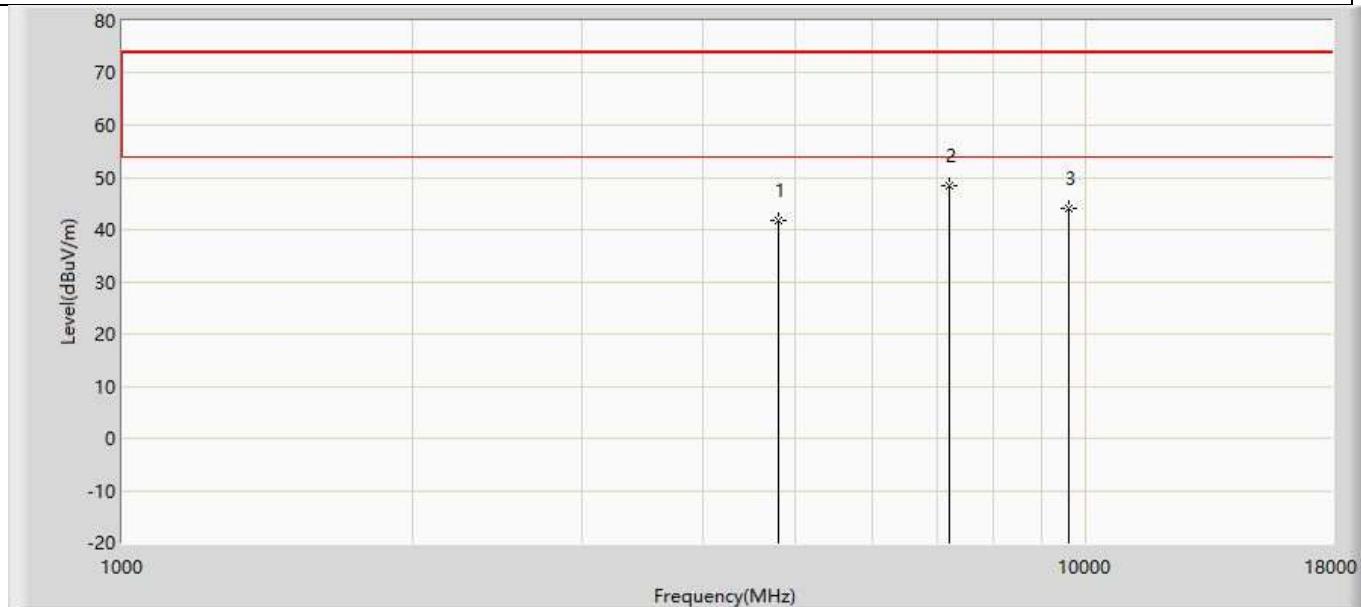
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.720	36.935	-32.280	74.000	4.784	PK
2		7440.000	44.692	36.641	-29.308	74.000	8.051	PK
3	*	9920.000	45.085	35.190	-28.915	74.000	9.894	PK

Profile: 1992204R	Page No.: 70
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 11:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2440MHz by LE_Coded(S=2)(GFSK_LE)	



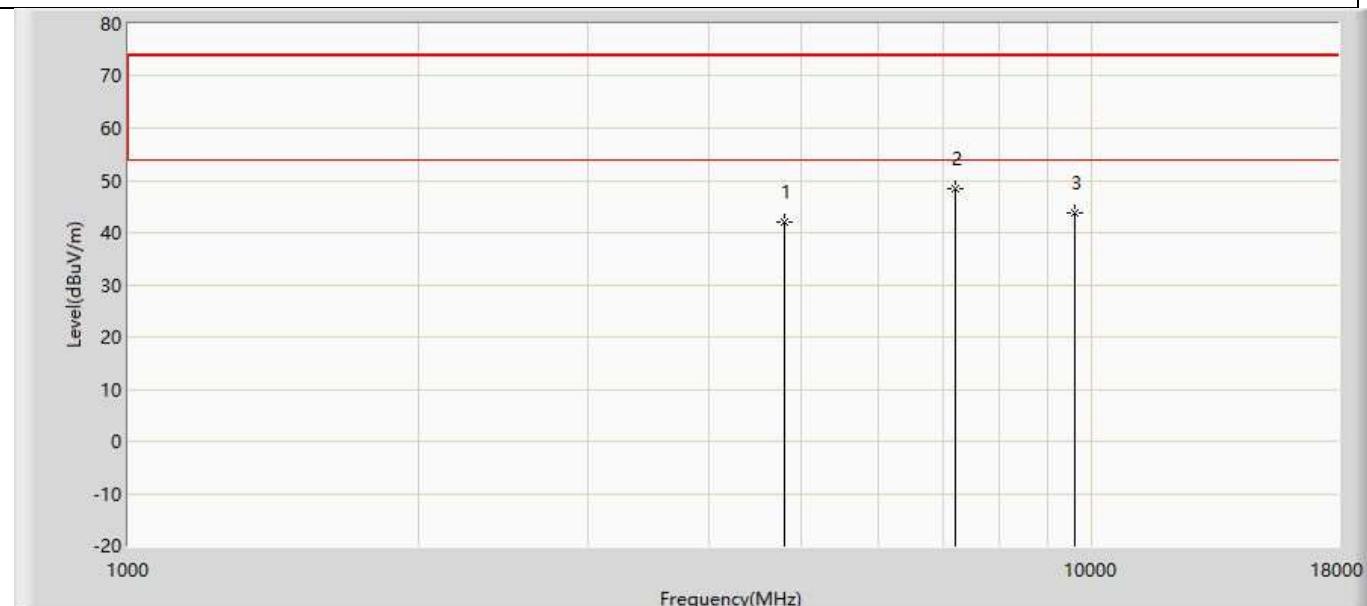
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.901	35.116	-34.099	74.000	4.784	PK
2		7440.000	42.350	34.299	-31.650	74.000	8.051	PK
3	*	9920.000	42.477	32.582	-31.523	74.000	9.894	PK

Profile: 1992204R	Page No.: 59
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 11:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded(S=8)(GFSK_LE)	



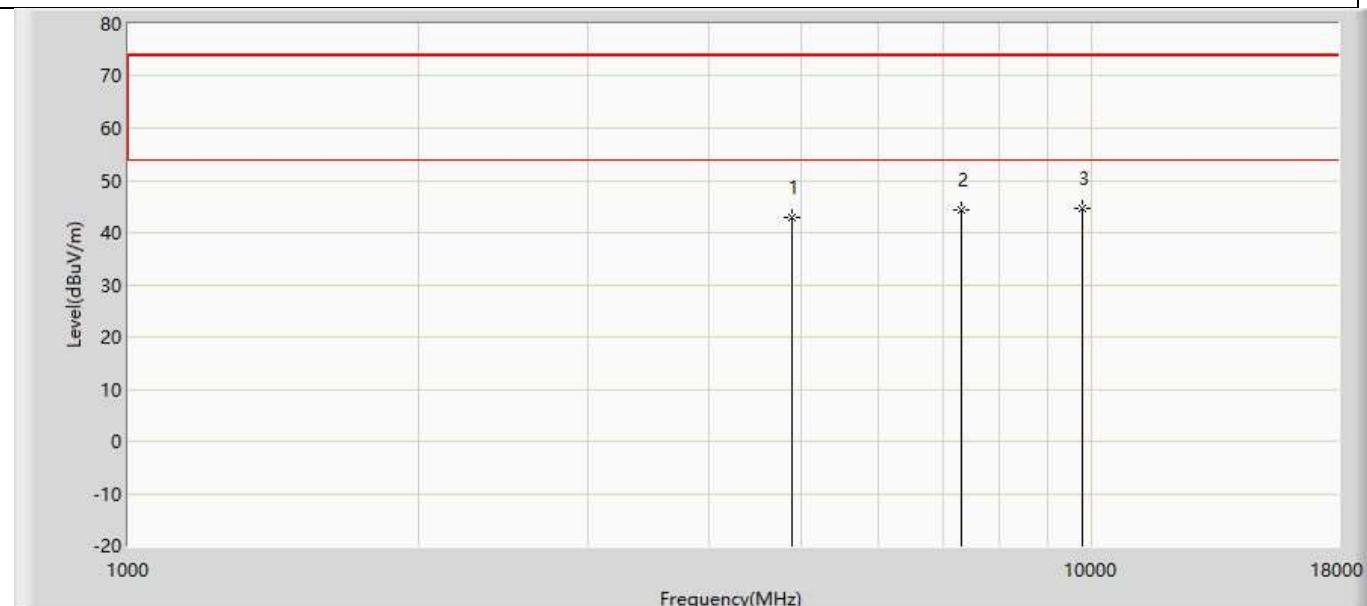
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.737	37.106	-32.263	74.000	4.631	PK
2	*	7206.000	48.393	40.369	-25.607	74.000	8.024	PK
3		9608.000	44.006	34.689	-29.994	74.000	9.318	PK

Profile: 1992204R	Page No.: 60
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 11:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded(S=8)(GFSK_LE)	



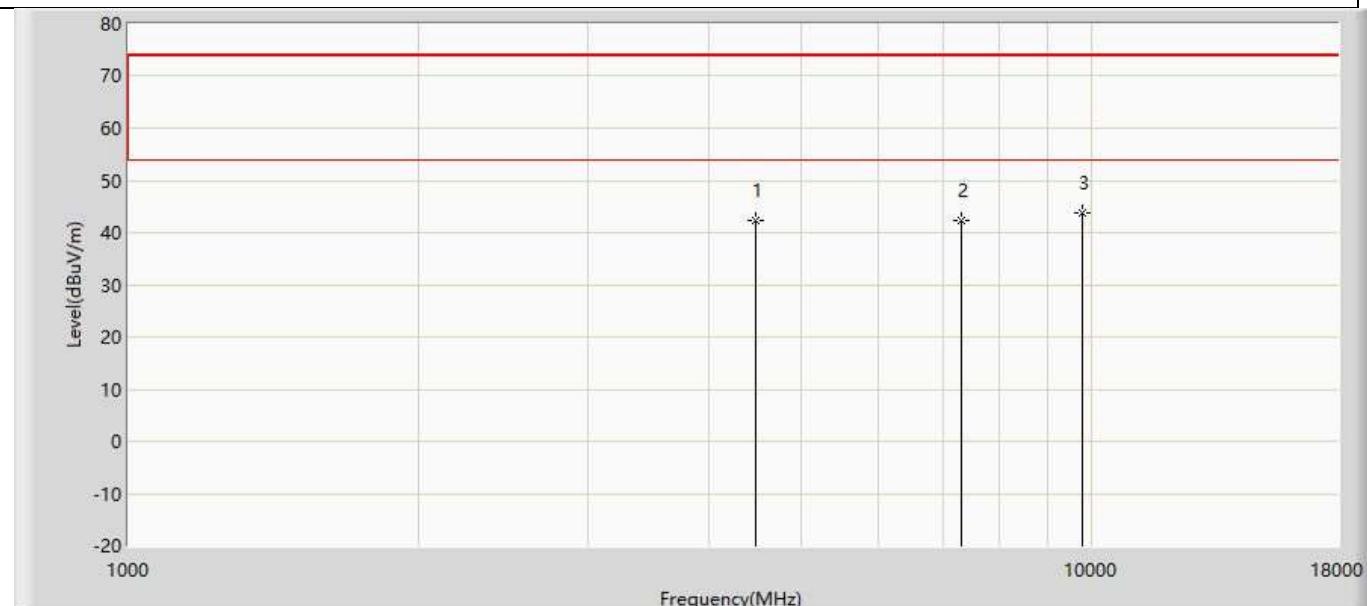
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.900	37.269	-32.100	74.000	4.631	PK
2	*	7206.000	48.516	40.492	-25.484	74.000	8.024	PK
3		9608.000	43.746	34.429	-30.254	74.000	9.318	PK

Profile: 1992204R	Page No.: 61
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 11:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2440MHz by LE_Coded(S=8)(GFSK_LE)	



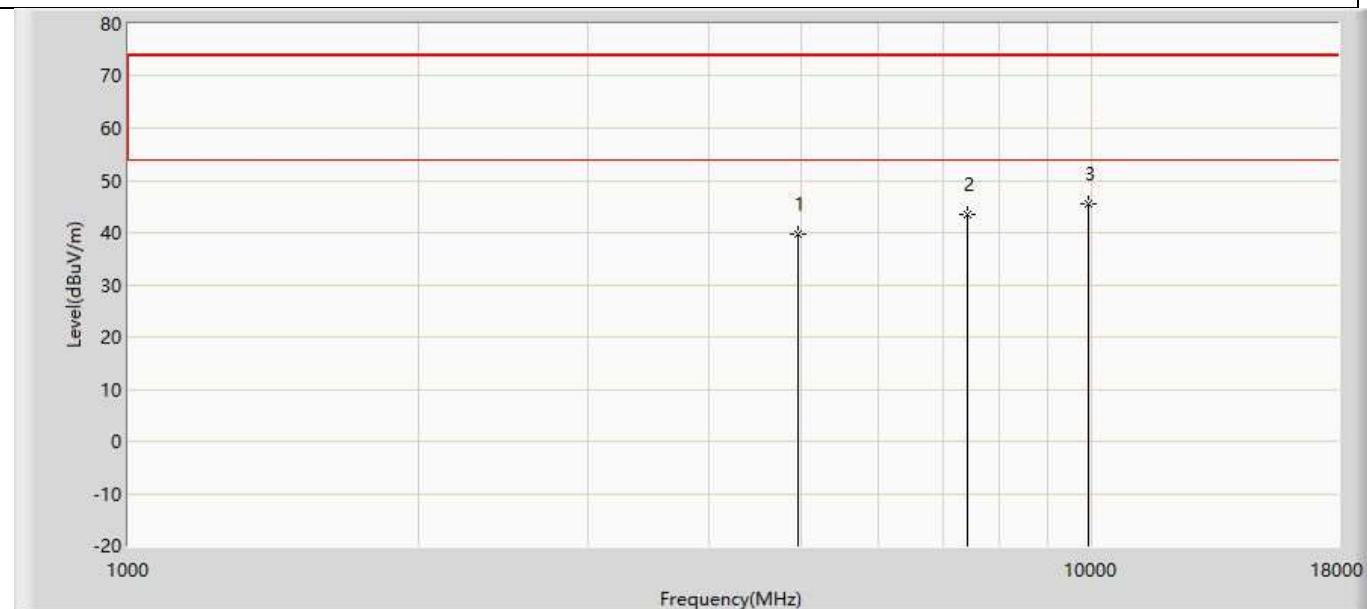
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.819	38.040	-31.181	74.000	4.778	PK
2		7320.000	44.352	36.282	-29.648	74.000	8.071	PK
3	*	9760.000	44.730	34.826	-29.270	74.000	9.904	PK

Profile: 1992204R	Page No.: 62
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 11:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2440MHz by LE_Coded(S=8)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4480.000	42.330	37.218	-31.670	74.000	5.112	PK
2		7320.000	42.388	34.318	-31.612	74.000	8.071	PK
3	*	9760.000	43.642	33.738	-30.358	74.000	9.904	PK

Profile: 1992204R	Page No.: 63
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 11:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded(S=8)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.813	35.028	-34.187	74.000	4.784	PK
2		7440.000	43.387	35.336	-30.613	74.000	8.051	PK
3	*	9920.000	45.363	35.468	-28.637	74.000	9.894	PK

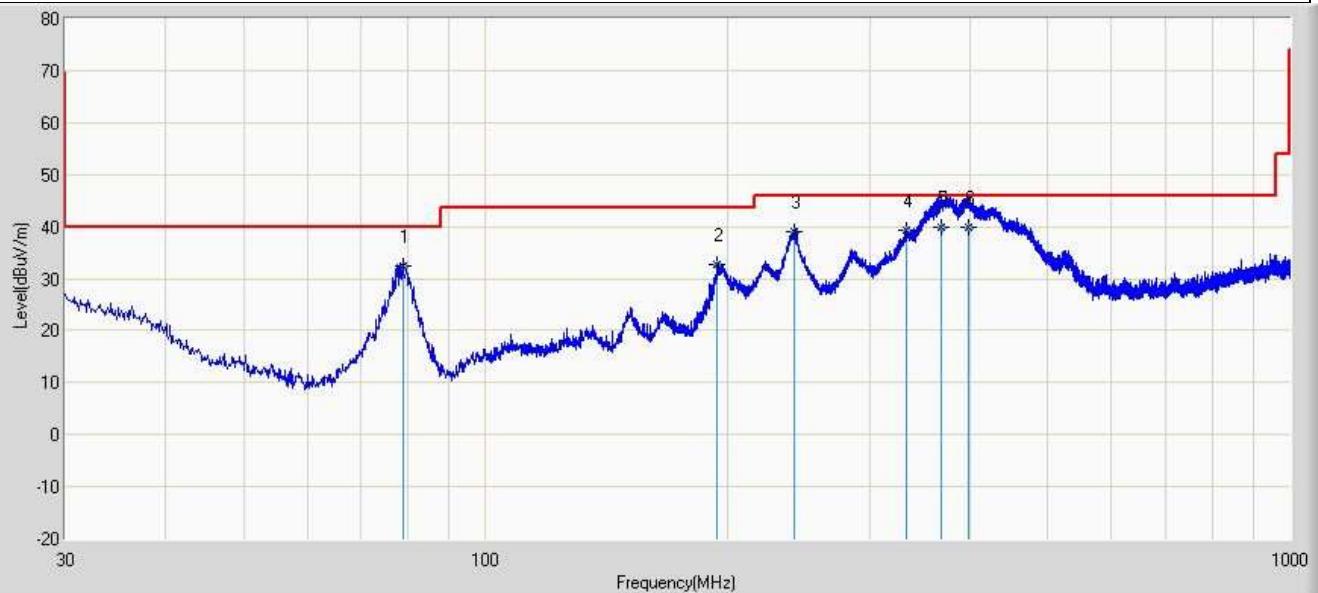
Profile: 1992204R	Page No.: 64
Engineer: Pawn	
Site: AC5	Time: 2019/10/18 - 11:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded(S=8)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.303	37.518	-31.697	74.000	4.784	PK
2		7440.000	44.865	36.814	-29.135	74.000	8.051	PK
3	*	9920.000	45.774	35.879	-28.226	74.000	9.894	PK

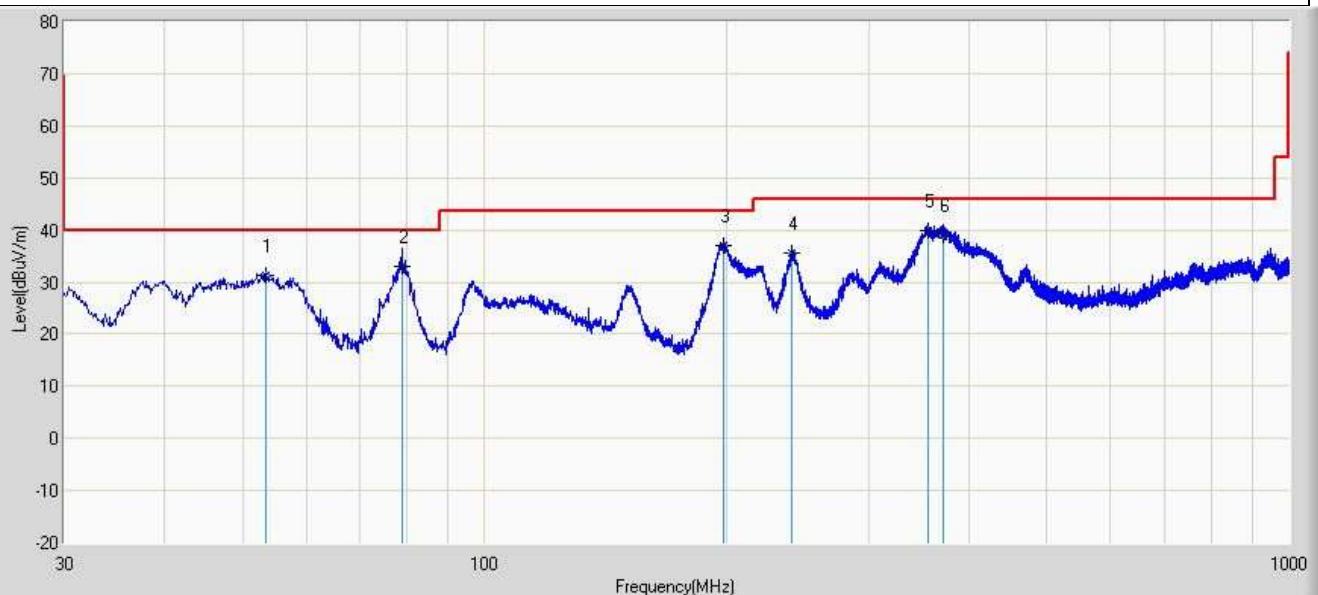
The worst case of Radiated Emission below 1GHz:

Profile: 1992204R	Page No.: 1
Engineer: Cyan	
Site: AC3	Time: 2019/05/09 - 21:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 120V/60Hz
Note: Mode 1 Transmit by LE_1Mbps(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		78.864	32.305	19.544	-7.695	40.000	12.761	QP
2		194.173	32.580	15.112	-10.920	43.500	17.468	QP
3		242.309	38.911	21.331	-7.089	46.000	17.580	QP
4		333.974	39.237	16.211	-6.763	46.000	23.026	QP
5		367.924	39.774	16.001	-6.226	46.000	23.773	QP
6	*	398.964	39.839	14.556	-6.161	46.000	25.283	QP

Profile: 1992204R	Page No.: 2
Engineer: Cyan	
Site: AC3	Time: 2019/10/17 - 01:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 120V/60Hz
Note: Mode 1 Transmit by LE_1Mbps(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		53.522	31.304	13.987	-8.696	40.000	17.317	QP
2		78.985	33.104	17.998	-6.896	40.000	15.106	QP
3		197.810	37.044	14.974	-6.456	43.500	22.070	QP
4		240.854	35.487	12.221	-10.513	46.000	23.265	QP
5	*	356.041	39.830	15.121	-6.170	46.000	24.709	QP
6		372.046	38.896	15.211	-7.104	46.000	23.685	QP

Note:

1. " * ", means this data is the worst emission level.
2. Measured Level = Reading Level + Factor(Probe+Cable+Amp).
3. 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.
4. 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.
5. As the radiated emission was performed, so conducted emission was not tested.

4.3 Emissions in non-restricted frequency band

VERDICT: PASS

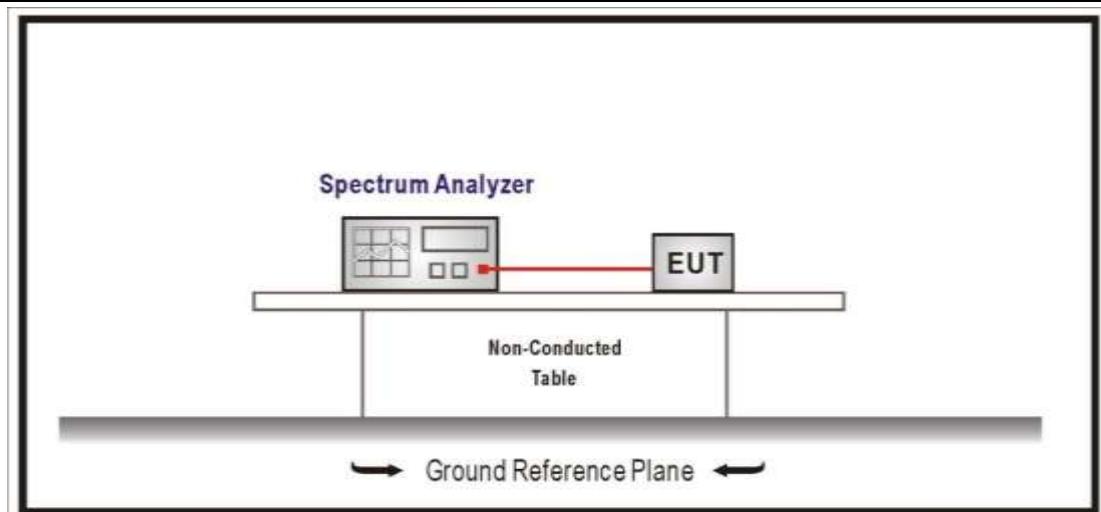
4.3.1 Limit

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

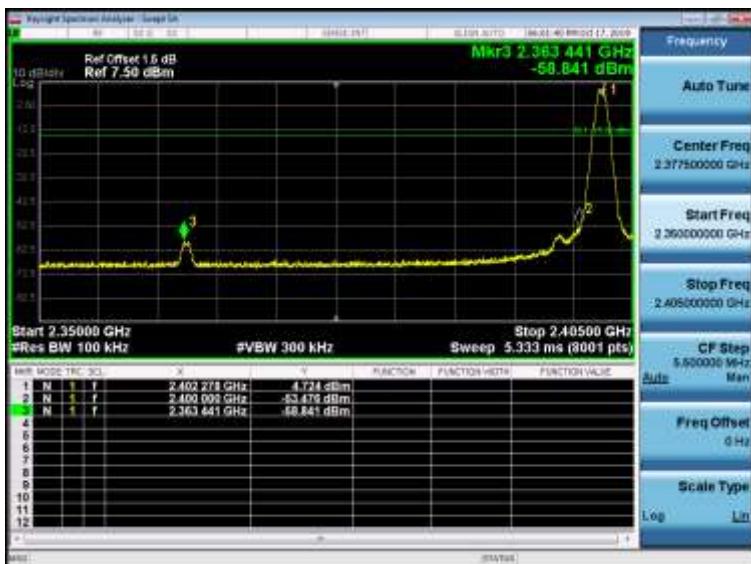
References Rule	Chapter	Description
<input checked="" type="checkbox"/> ANSI C63.10	11.11	Emissions in non-restricted frequency bands
<input checked="" type="checkbox"/> ANSI C63.10	11.11.1	General
<input checked="" type="checkbox"/> ANSI C63.10	11.11.2	Reference level measurement
<input checked="" type="checkbox"/> ANSI C63.10	11.11.3	Emission level measurement

4.3.4 Test Data

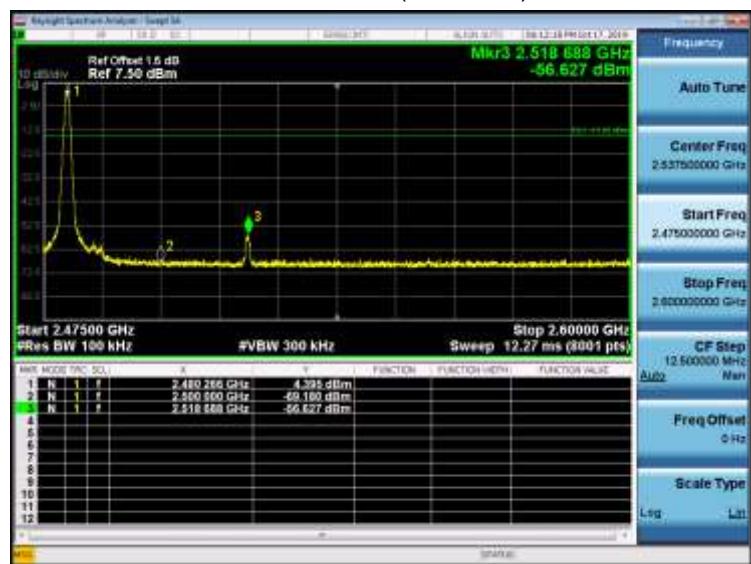
Mode	Channel	Test Frequency (MHz)	Maximum In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
Mode 1	00	2402	4.724	2400	-53.476	58.20	>20	Pass
	39	2480	4.395	2518.688	-56.627	61.02	>20	Pass
Mode 2	00	2402	2.898	2400	-31.408	34.31	>20	Pass
	39	2480	2.199	2518.406	-58.488	60.69	>20	Pass
Mode 3	00	2402	4.093	2400	-52.986	57.08	>20	Pass
	39	2480	4.288	2518.703	-56.229	60.52	>20	Pass
Mode 4	00	2402	3.009	2400	-54.666	57.68	>20	Pass
	39	2480	2.014	2518.188	-58.617	60.63	>20	Pass

Note : We evaluated all test modes, shown in the report is the worst data.

Mode 2 CH00(2402MHz)



Mode 2 CH39(2480MHz)



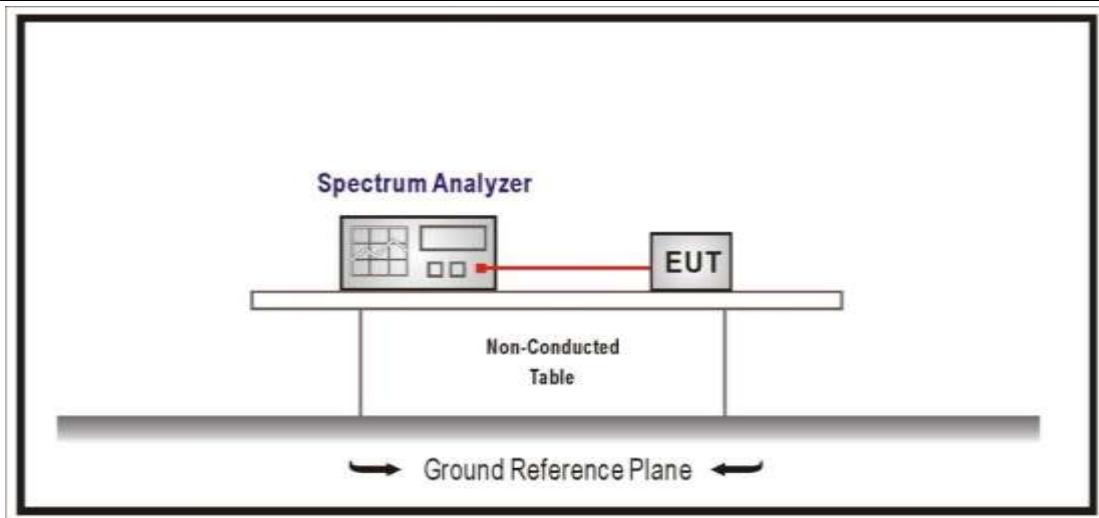
4.4 Duty cycle

VERDICT: N/A

4.4.1 Limit

N/A

4.4.2 Test Setup



4.4.3 Test Procedure

References Rule	Chapter	Description
<input checked="" type="checkbox"/> ANSI C63.10	11.6	Duty cycle (D), transmission duration (T), and maximum power control level

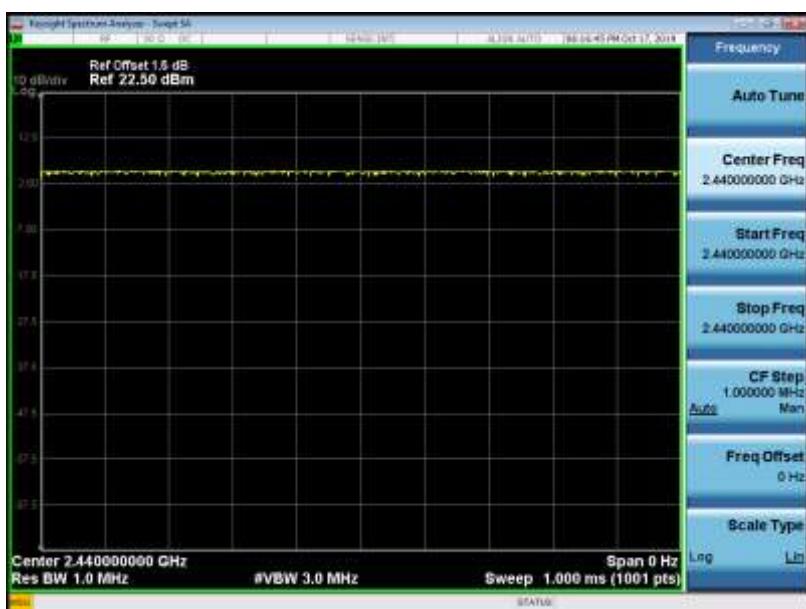
4.4.4 Test Data

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 $\geq 1/T$ will be used.

Mode 1



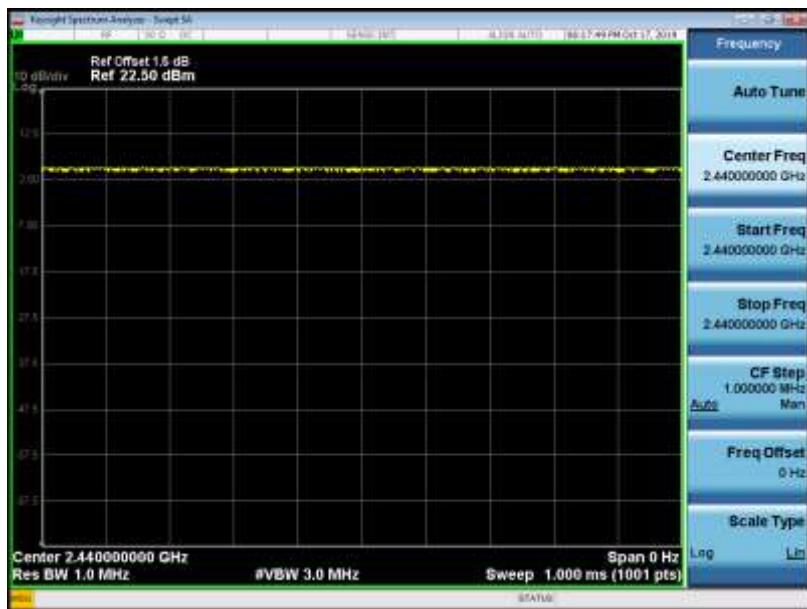
Mode 2



Mode 3



Mode 4



4.5 Radiated Emission Band Edge

VERDICT: PASS

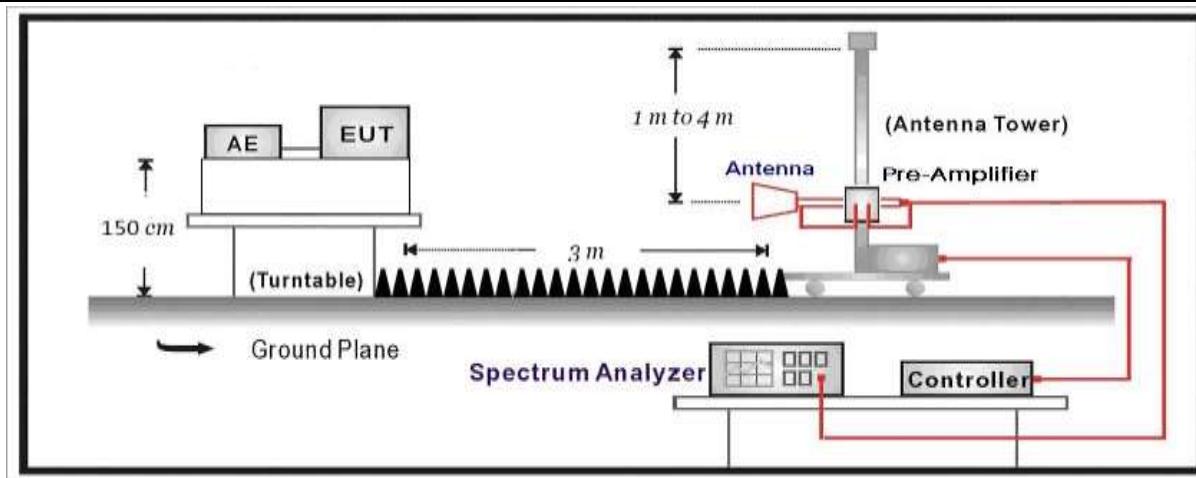
4.5.1 Limit

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	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

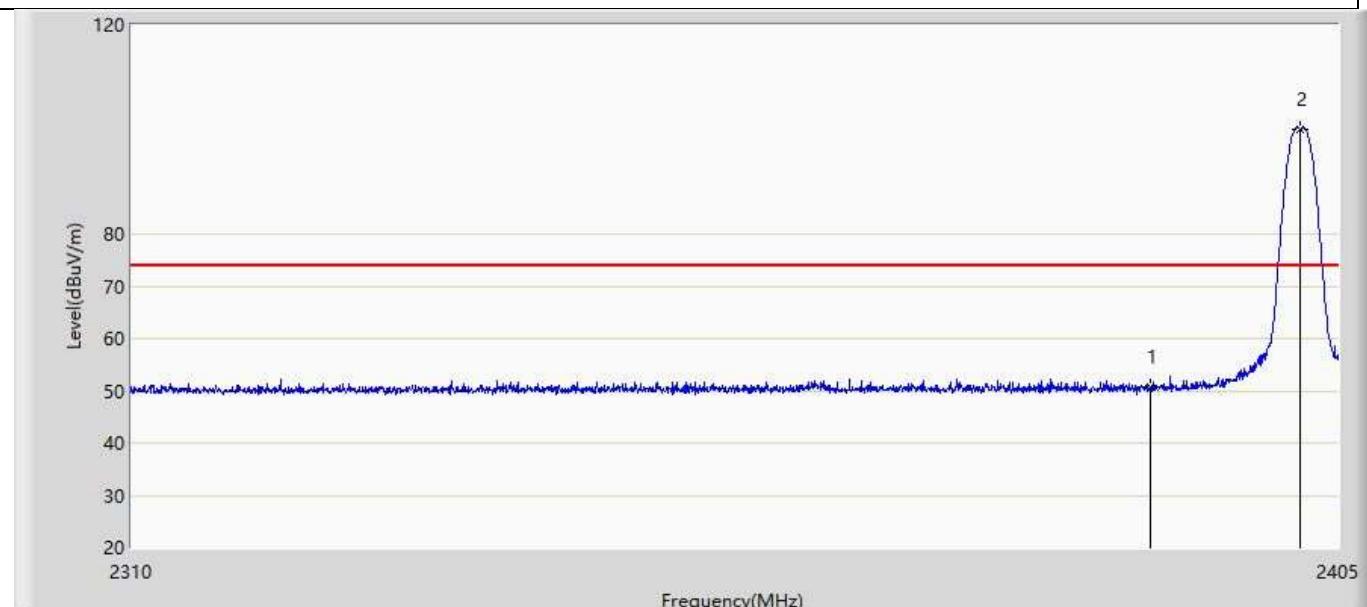
References Rule	Chapter	Description
<input checked="" type="checkbox"/> ANSI C63.10	6.10	Band-edge testing
<input checked="" type="checkbox"/> ANSI C63.10	6.10.5	Restricted-band band-edge measurements
	6.10.6	Marker-delta method
<input checked="" type="checkbox"/> ANSI C63.10	11.12	Emissions in restricted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

4.5.4 Test Data

Murata:

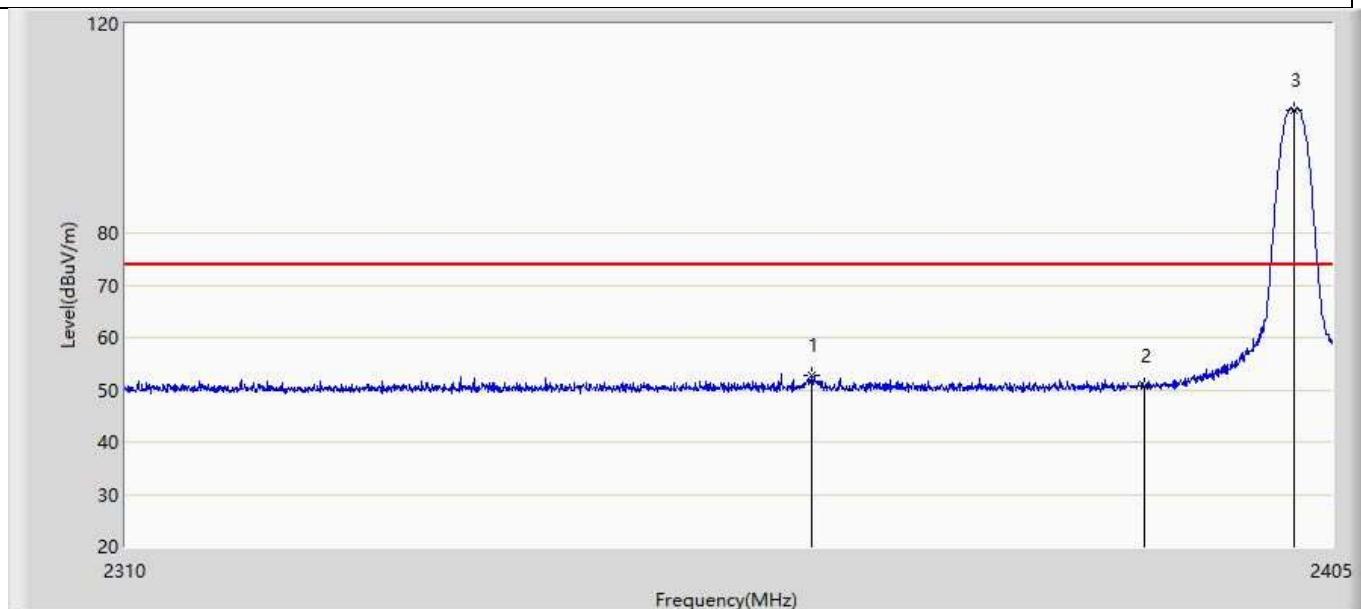
Profile: 1992204R	Page No.: 9
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz

Note: Mode 1:Transmit at 2402MHz by LE_1Mbps(GFSK_LE)



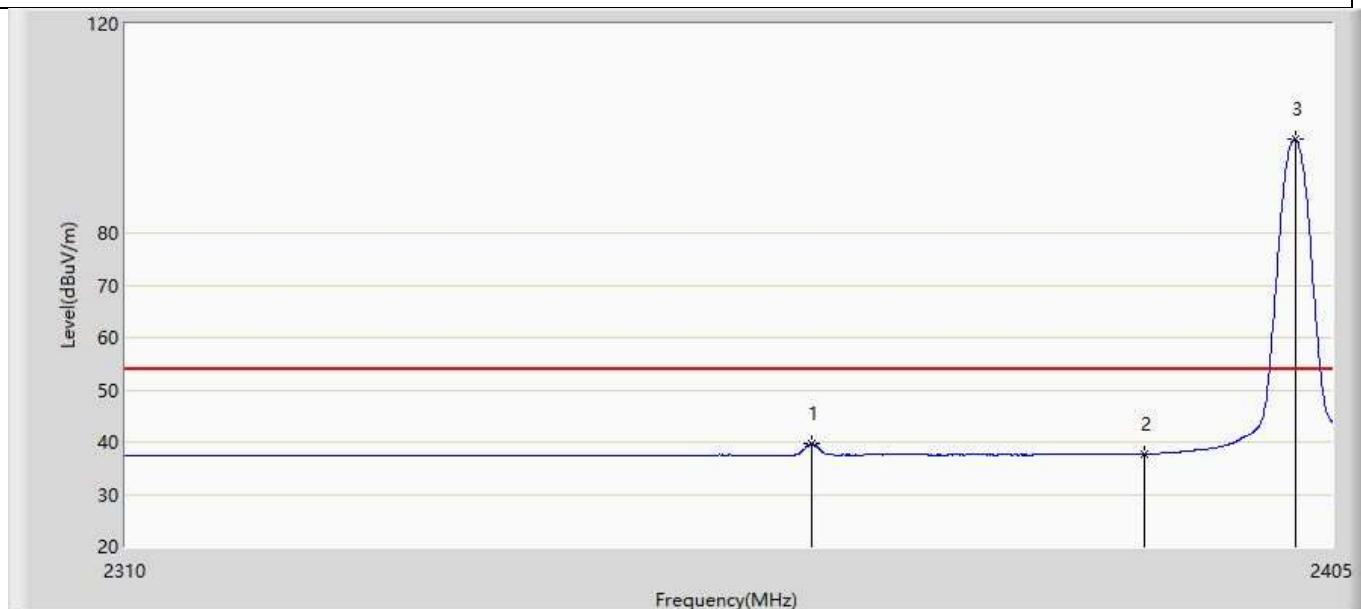
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.678	15.221	-23.322	74.000	35.458	PK
2	*	2401.913	100.110	64.641	N/A	N/A	35.469	PK

Profile: 1992204R	Page No.: 10
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps(GFSK_LE)	



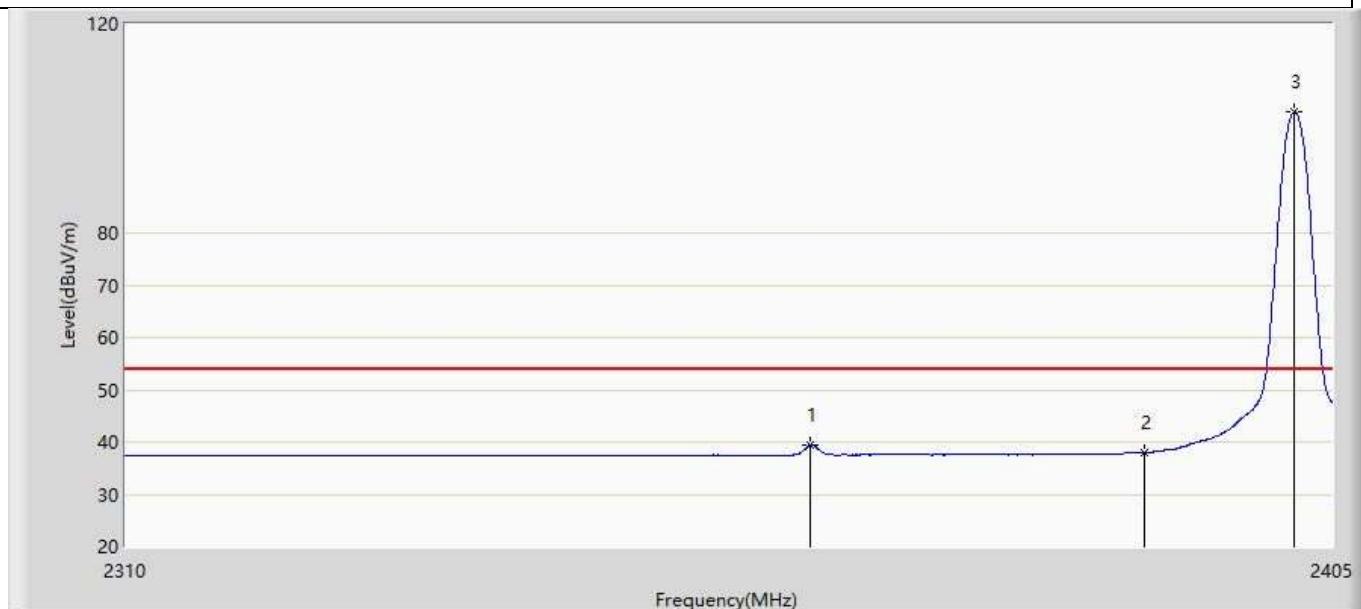
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.532	52.813	17.373	-21.187	74.000	35.441	PK
2		2390.000	50.733	15.276	-23.267	74.000	35.458	PK
3	*	2401.913	103.573	68.104	N/A	N/A	35.469	PK

Profile: 1992204R	Page No.: 11
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps(GFSK_LE)	



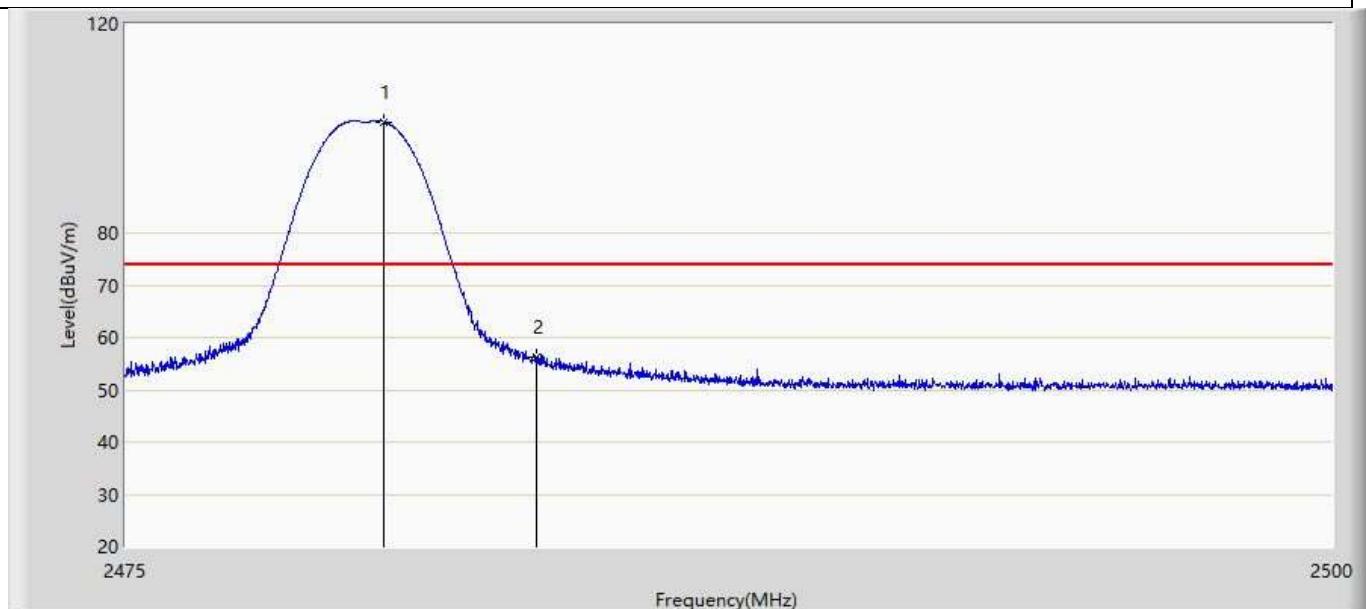
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.580	39.621	4.181	-14.379	54.000	35.441	AV
2		2390.000	37.724	2.267	-16.276	54.000	35.458	AV
3	*	2402.055	97.954	62.484	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 12
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps(GFSK_LE)	



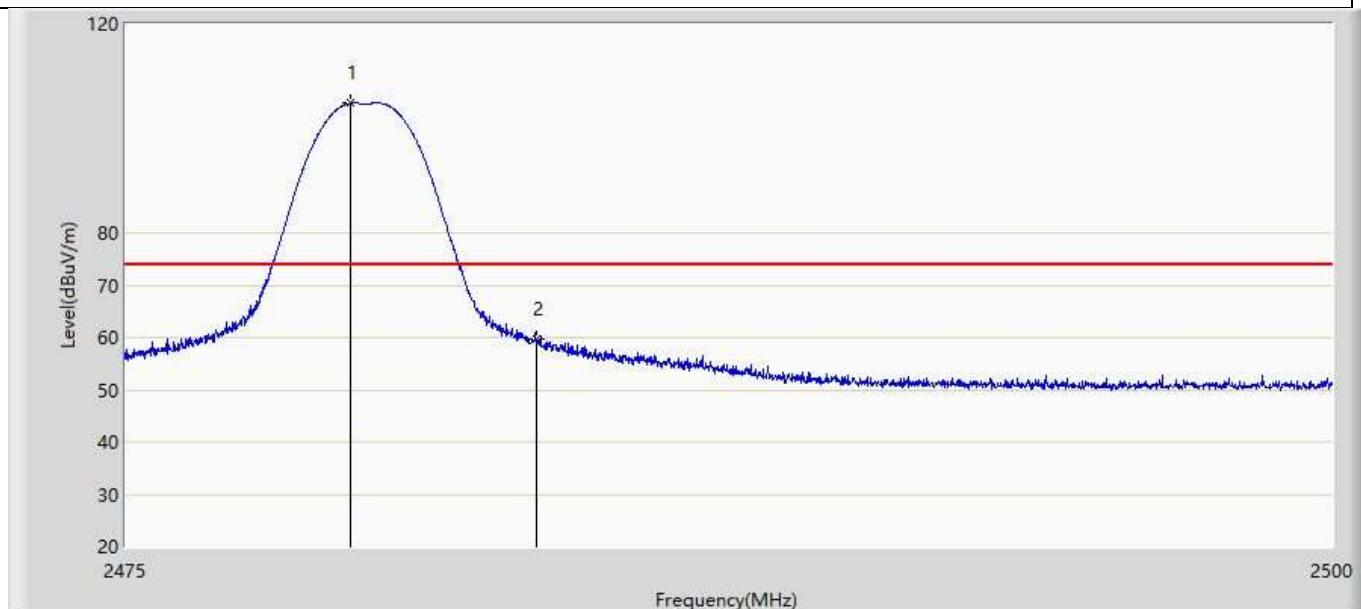
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.437	39.362	3.922	-14.638	54.000	35.440	AV
2		2390.000	38.007	2.550	-15.993	54.000	35.458	AV
3	*	2401.913	103.081	67.612	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 25
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps(GFSK_LE)	



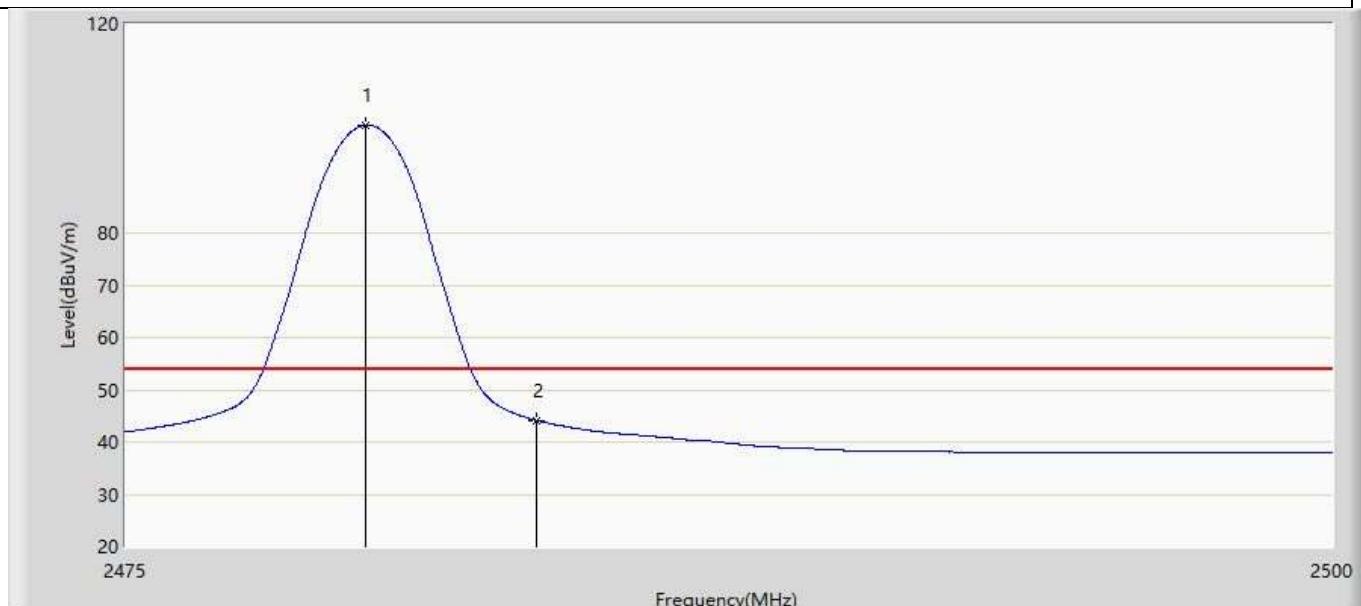
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.325	101.297	65.797	N/A	N/A	35.500	PK
2		2483.500	56.235	20.717	-17.765	74.000	35.517	PK

Profile: 1992204R	Page No.: 26
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps(GFSK_LE)	



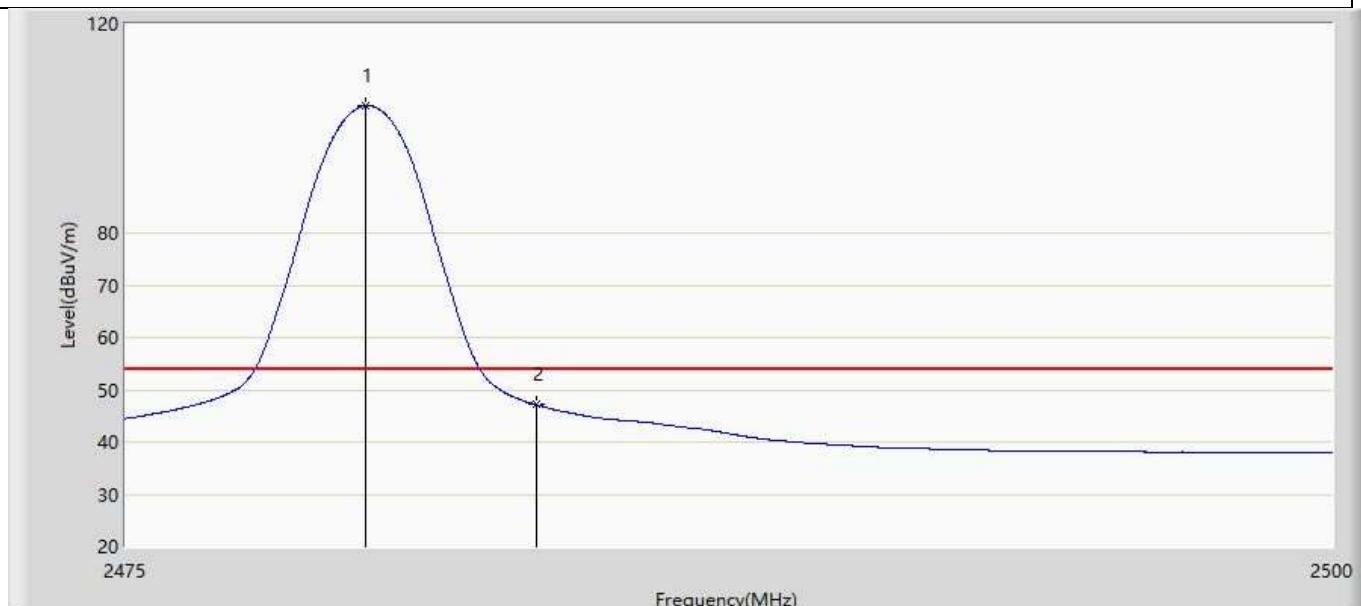
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.663	104.797	69.301	N/A	N/A	35.496	PK
2		2483.500	59.791	24.273	-14.209	74.000	35.517	PK

Profile: 1992204R	Page No.: 27
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps(GFSK_LE)	



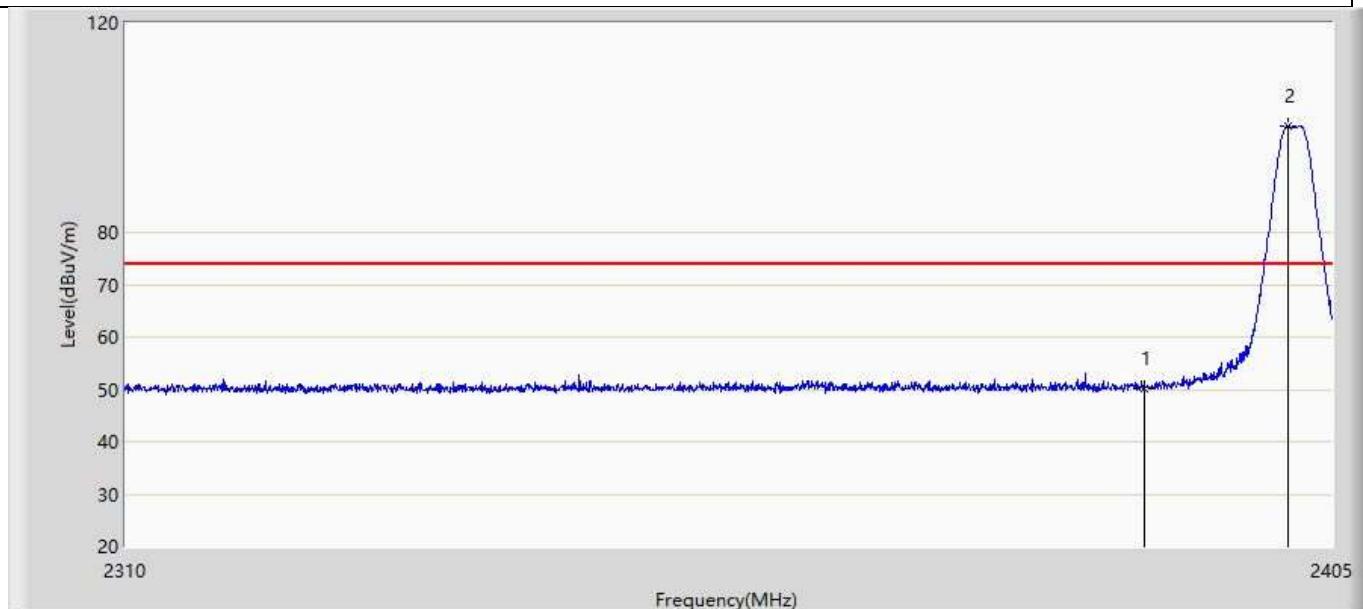
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.975	100.630	65.132	N/A	N/A	35.498	AV
2		2483.500	44.094	8.576	-9.906	54.000	35.517	AV

Profile: 1992204R	Page No.: 28
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps(GFSK_LE)	



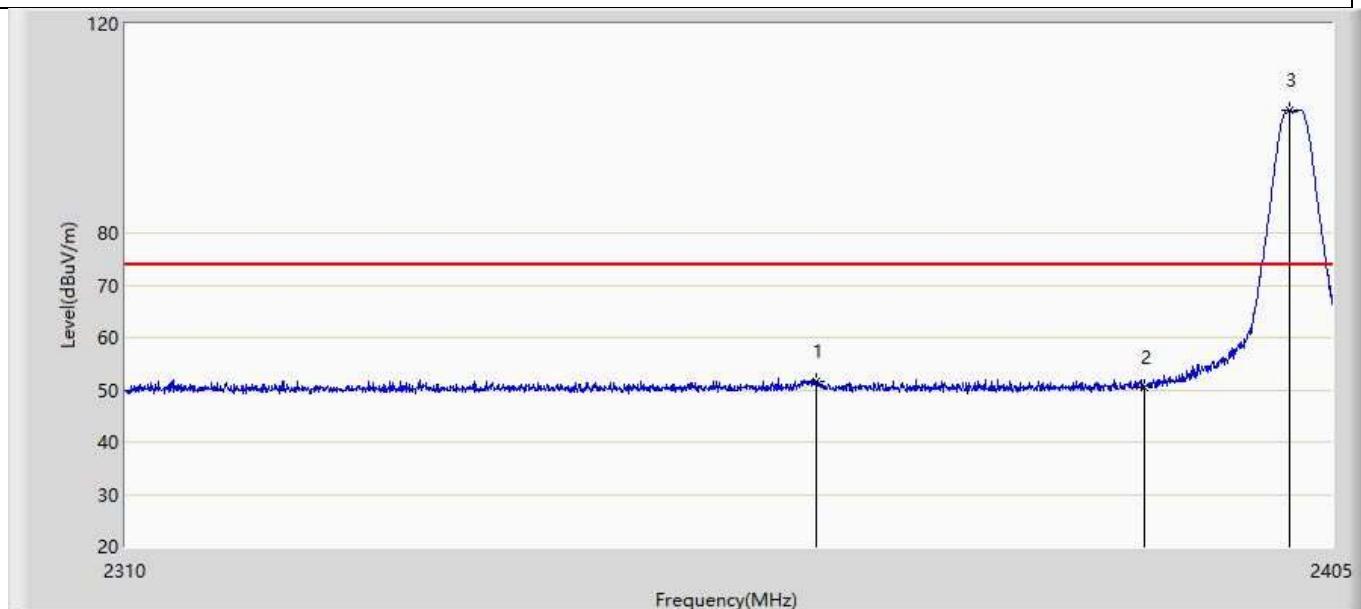
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.975	104.339	68.841	N/A	N/A	35.498	AV
2		2483.500	47.131	11.613	-6.869	54.000	35.517	AV

Profile: 1992204R	Page No.: 13
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps(GFSK_LE)	



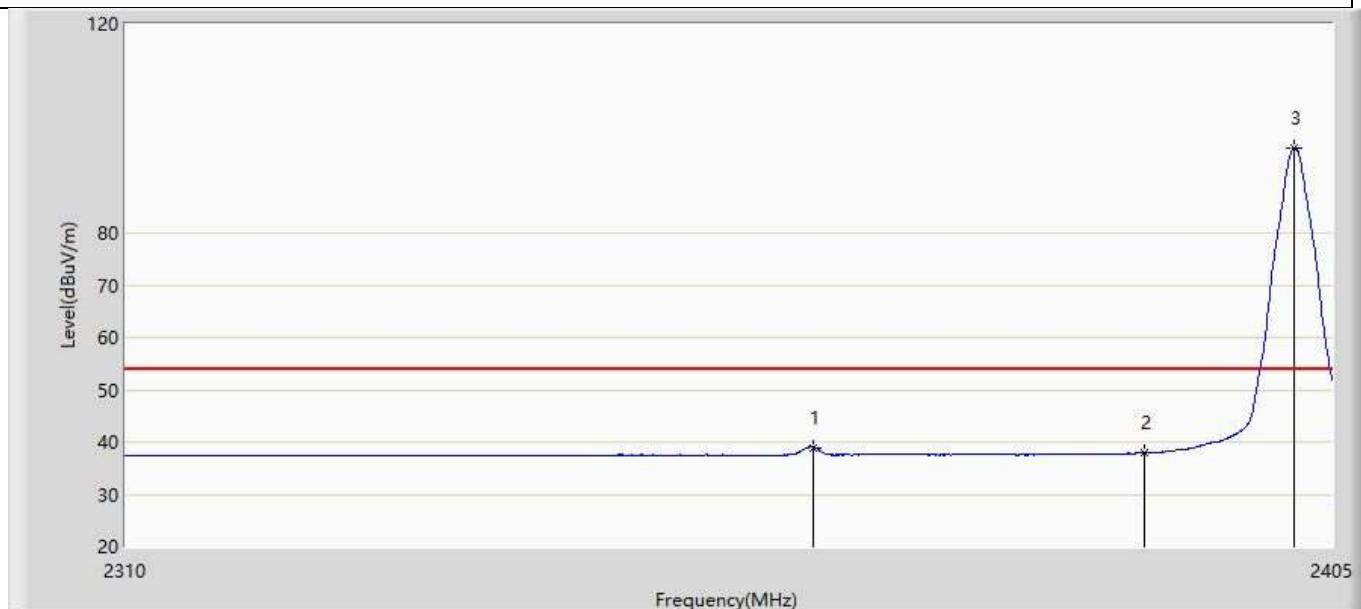
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.083	14.626	-23.917	74.000	35.458	PK
2	*	2401.485	100.315	64.846	N/A	N/A	35.468	PK

Profile: 1992204R	Page No.: 14
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps(GFSK_LE)	



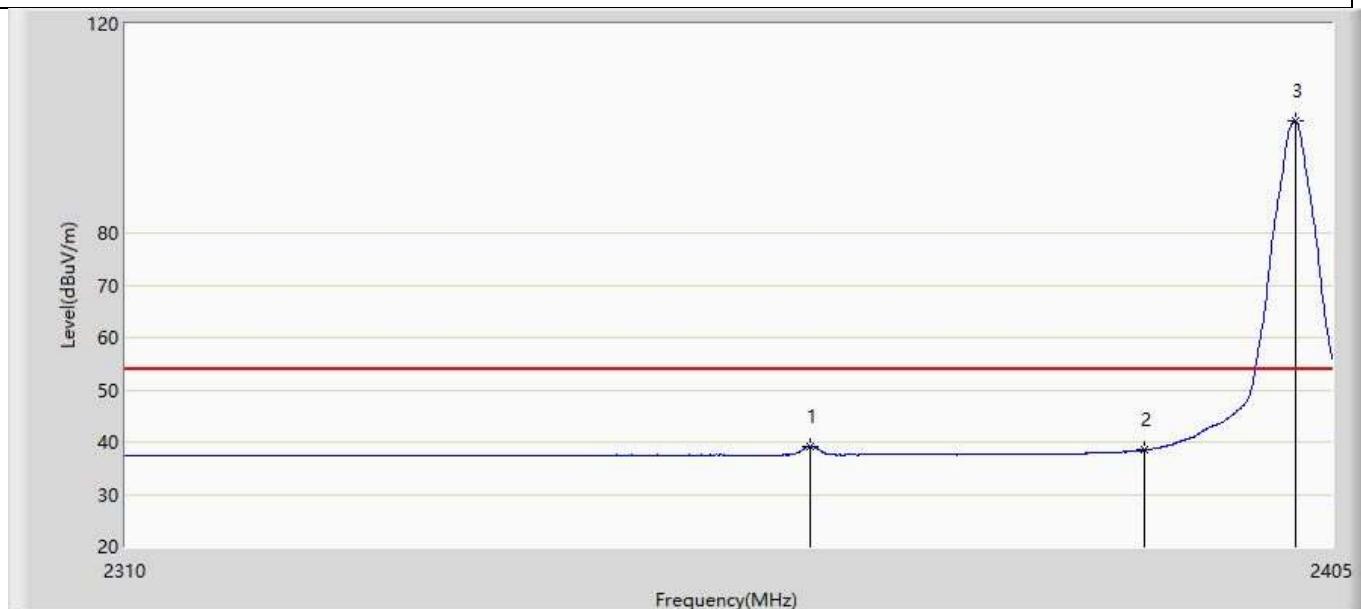
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.960	51.667	16.227	-22.333	74.000	35.440	PK
2		2390.000	50.355	14.898	-23.645	74.000	35.458	PK
3	*	2401.627	103.462	67.993	N/A	N/A	35.469	PK

Profile: 1992204R	Page No.: 15
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps(GFSK_LE)	



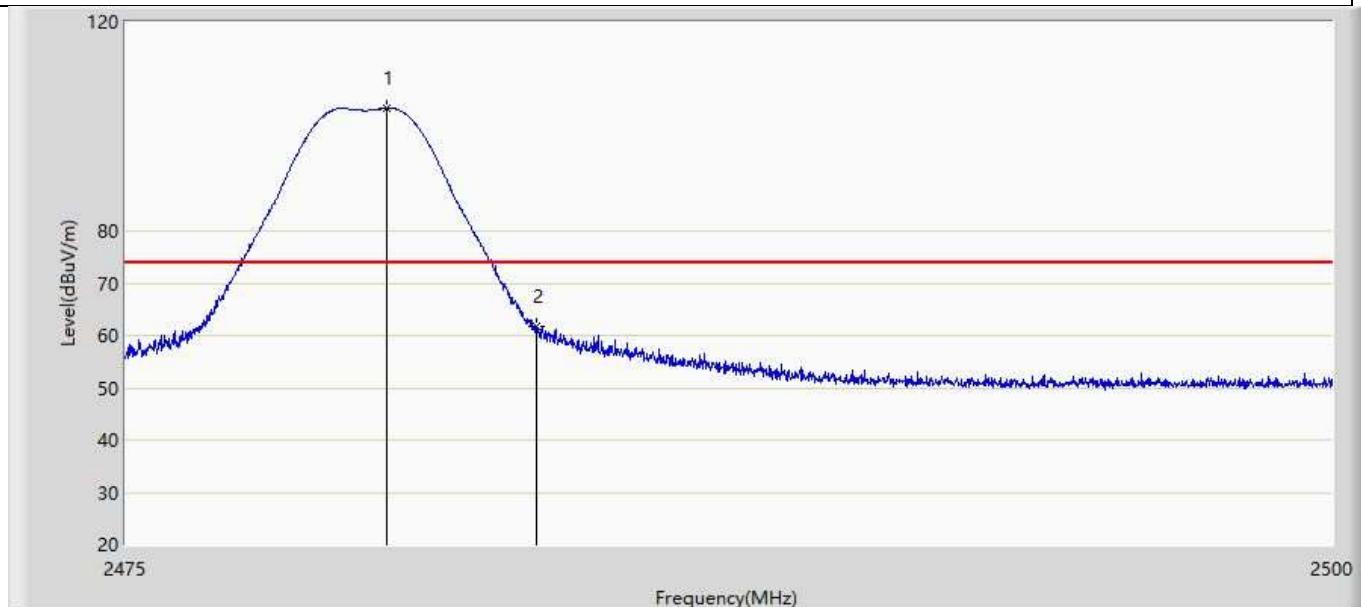
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.722	38.960	3.520	-15.040	54.000	35.440	AV
2		2390.000	37.899	2.442	-16.101	54.000	35.458	AV
3	*	2401.913	96.276	60.807	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 16
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps(GFSK_LE)	



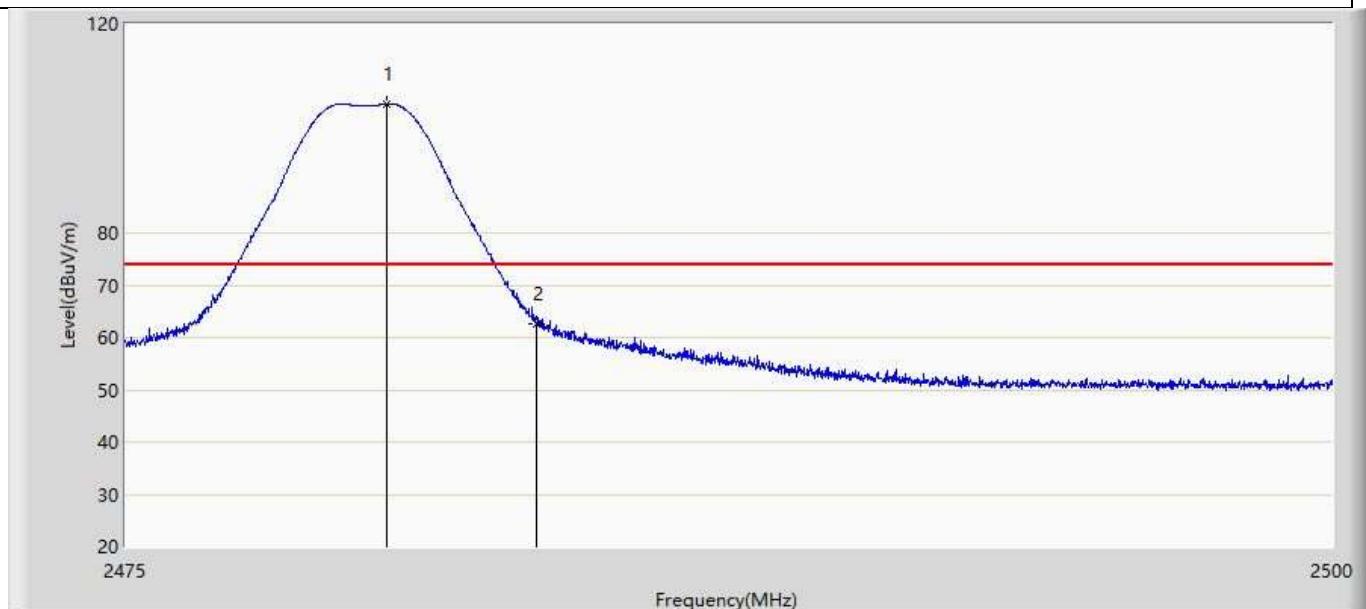
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.437	39.188	3.748	-14.812	54.000	35.440	AV
2		2390.000	38.470	3.013	-15.530	54.000	35.458	AV
3	*	2402.055	101.437	65.967	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 29
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps(GFSK_LE)	



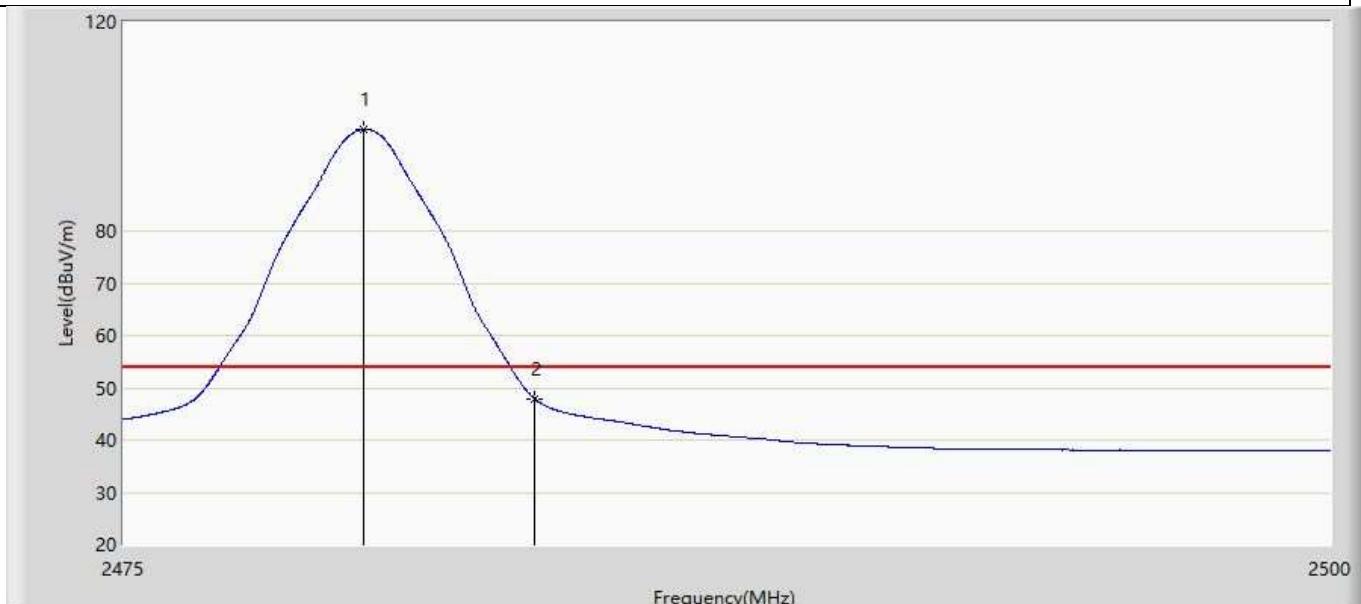
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.400	103.500	68.000	N/A	N/A	35.501	PK
2		2483.500	61.868	26.350	-12.132	74.000	35.517	PK

Profile: 1992204R	Page No.: 30
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps(GFSK_LE)	



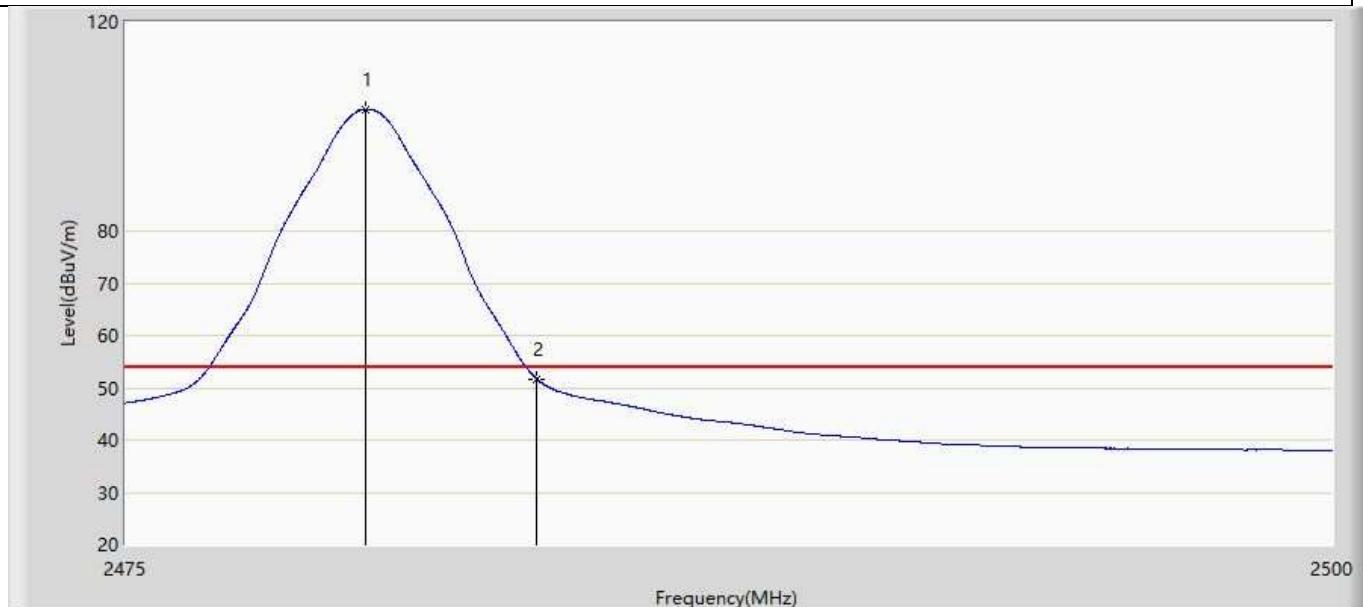
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.400	104.741	69.241	N/A	N/A	35.501	PK
2		2483.500	62.578	27.060	-11.422	74.000	35.517	PK

Profile: 1992204R	Page No.: 31
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps(GFSK_LE)	



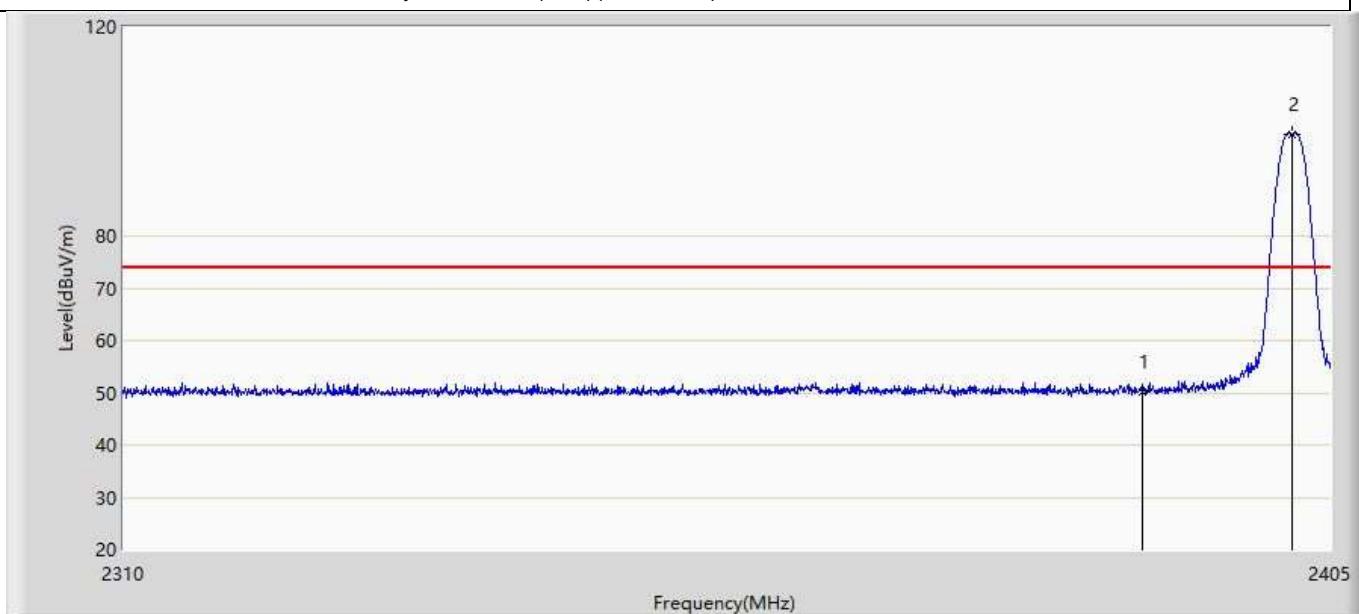
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.975	99.458	63.960	N/A	N/A	35.498	AV
2		2483.500	47.901	12.383	-6.099	54.000	35.517	AV

Profile: 1992204R	Page No.: 32
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps(GFSK_LE)	



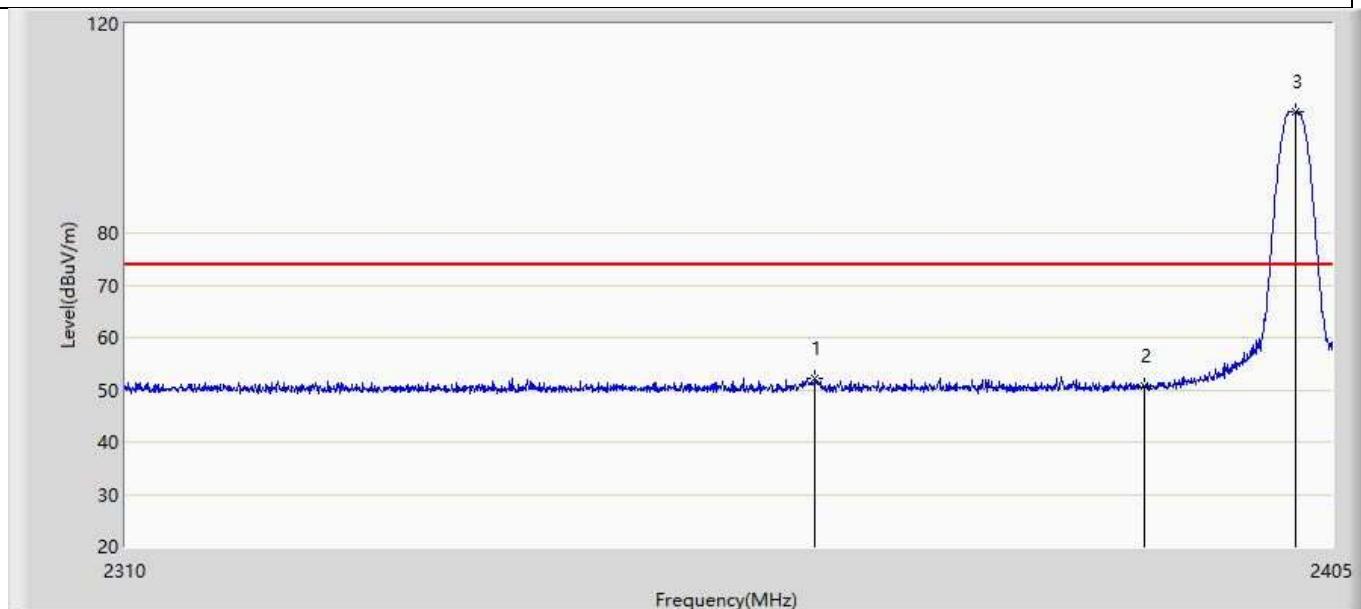
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.975	103.311	67.813	N/A	N/A	35.498	AV
2		2483.500	51.678	16.160	-2.322	54.000	35.517	AV

Profile: 1992204R	Page No.: 21
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded(S=2)(GFSK_LE)	



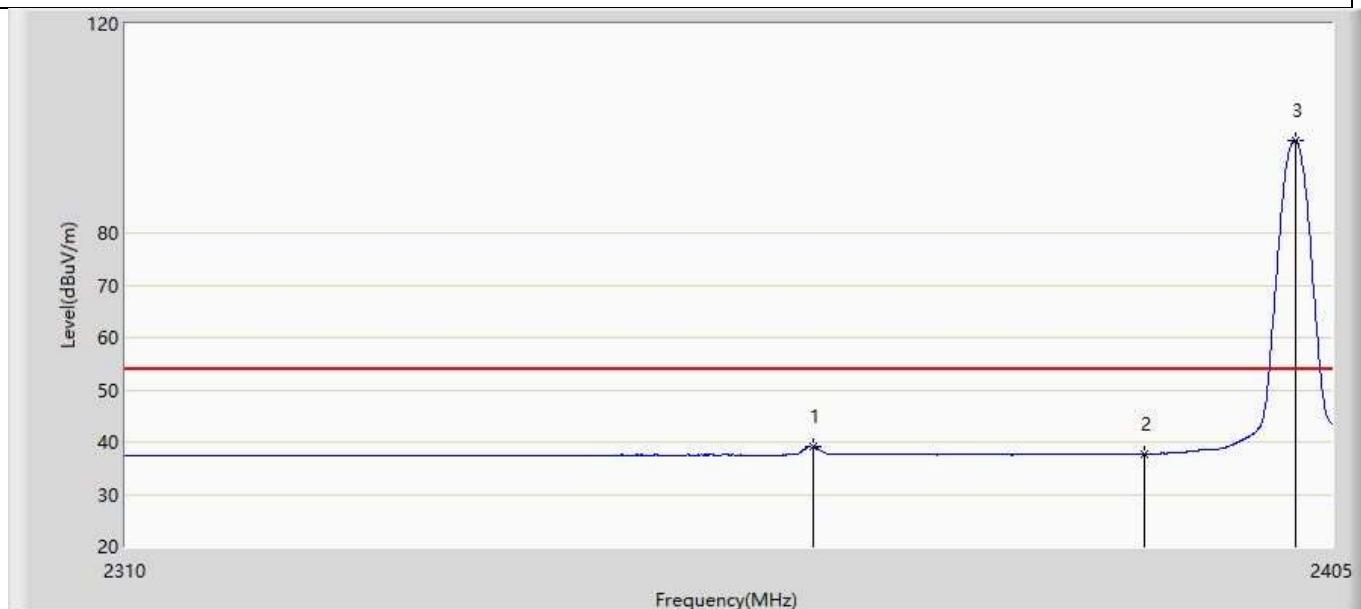
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.065	14.608	-23.935	74.000	35.458	PK
2	*	2401.913	99.454	63.985	N/A	N/A	35.469	PK

Profile: 1992204R	Page No.: 22
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded(S=2)(GFSK_LE)	



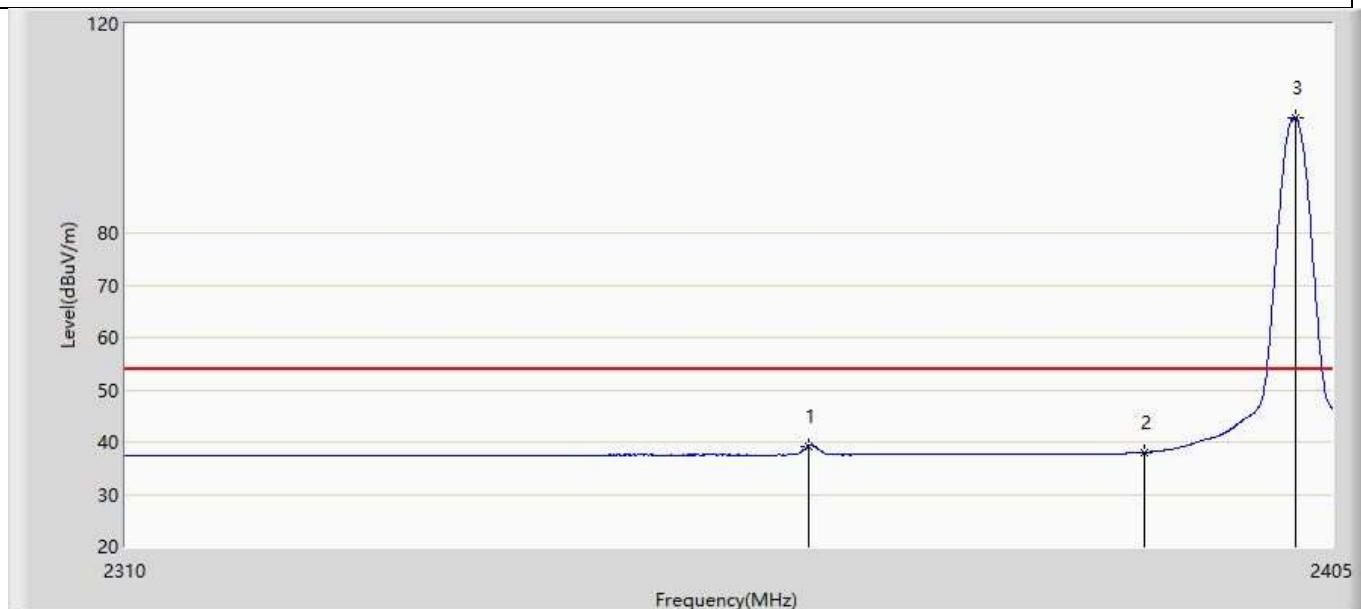
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.817	52.296	16.856	-21.704	74.000	35.440	PK
2		2390.000	50.749	15.292	-23.251	74.000	35.458	PK
3	*	2402.103	103.095	67.625	N/A	N/A	35.469	PK

Profile: 1992204R	Page No.: 23
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded(S=2)(GFSK_LE)	



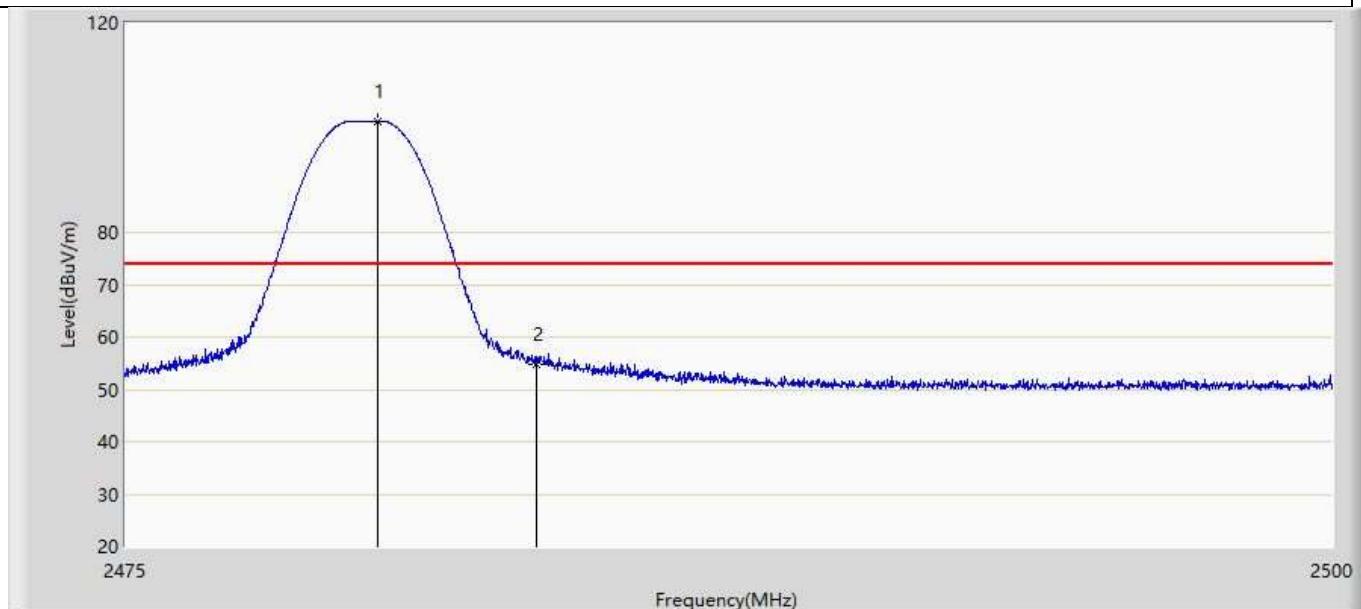
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.722	39.260	3.820	-14.740	54.000	35.440	AV
2		2390.000	37.708	2.251	-16.292	54.000	35.458	AV
3	*	2402.055	97.784	62.314	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 24
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded(S=2)(GFSK_LE)	



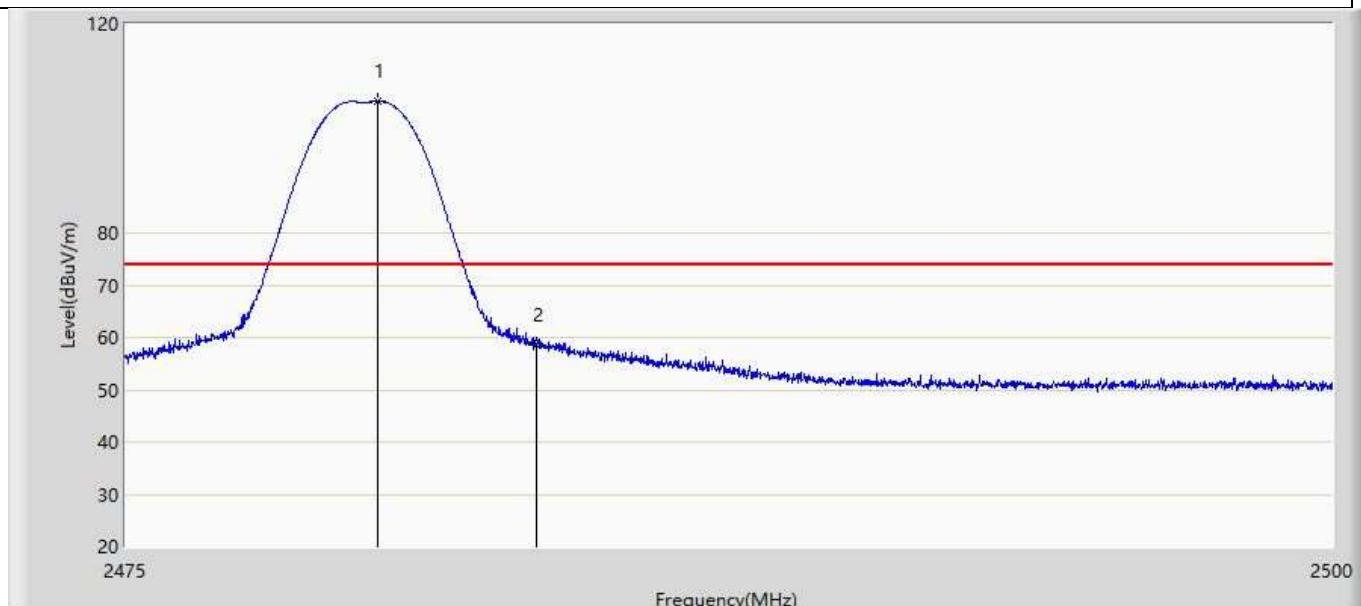
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.295	39.157	3.717	-14.843	54.000	35.440	AV
2		2390.000	38.021	2.564	-15.979	54.000	35.458	AV
3	*	2402.055	102.153	66.683	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 37
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded(S=2)(GFSK_LE)	



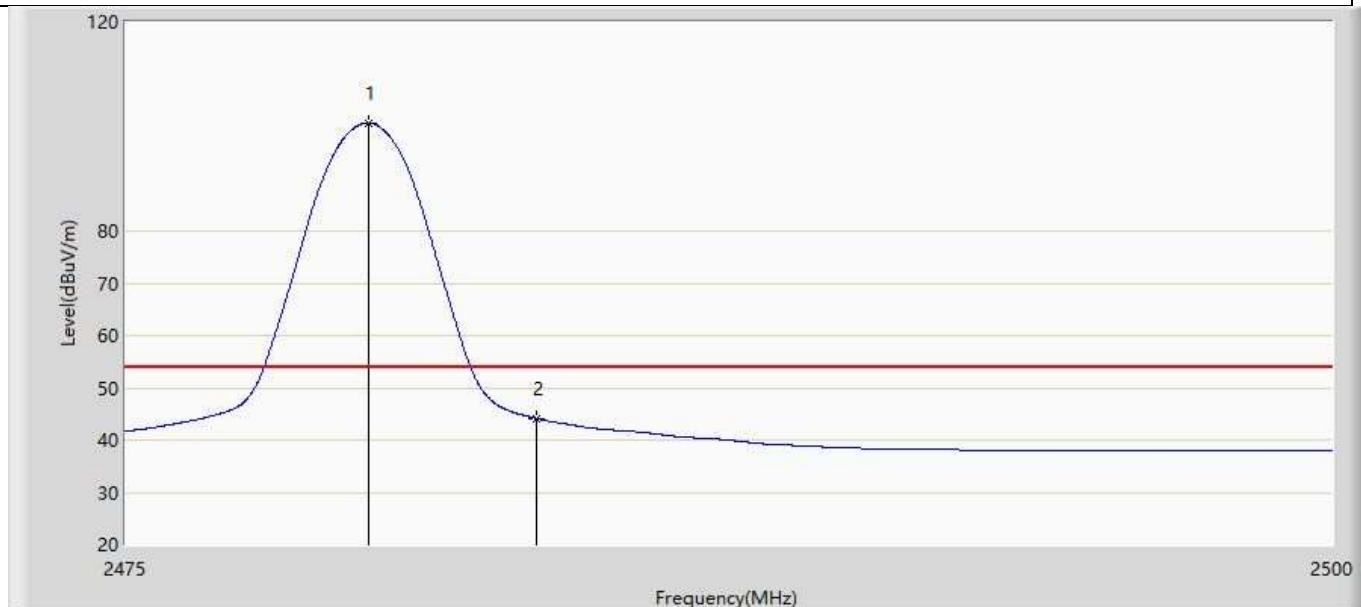
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.212	101.297	65.798	N/A	N/A	35.499	PK
2		2483.500	54.807	19.289	-19.193	74.000	35.517	PK

Profile: 1992204R	Page No.: 38
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded(S=2)(GFSK_LE)	



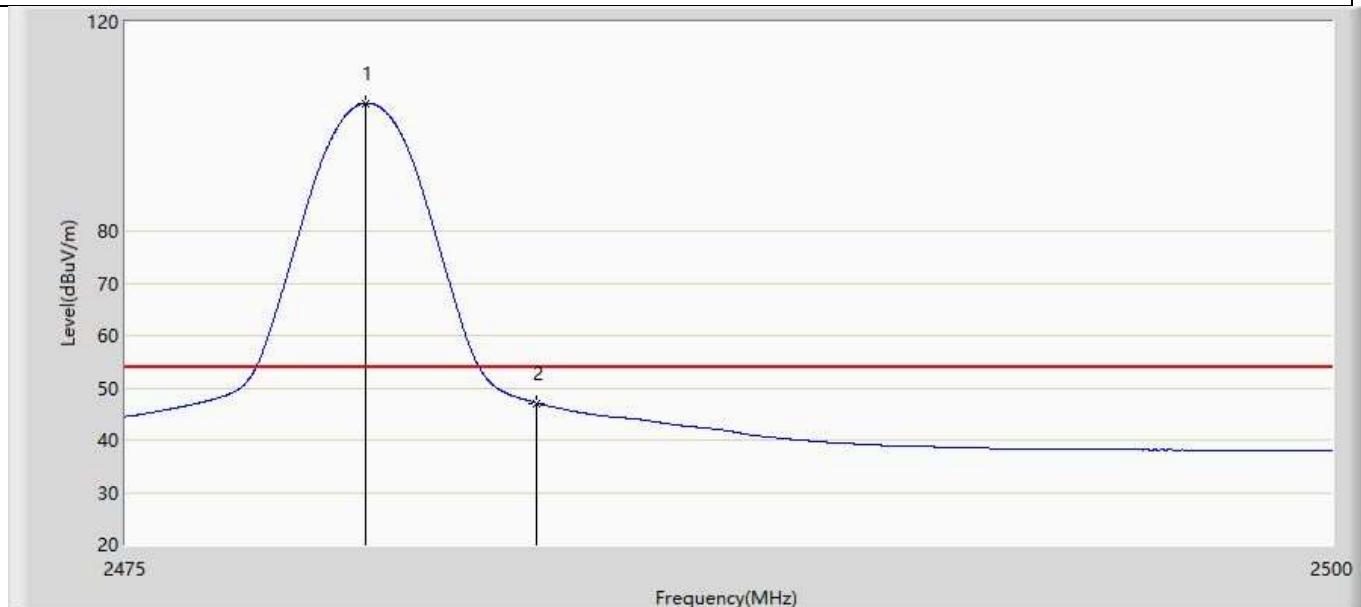
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.212	105.128	69.629	N/A	N/A	35.499	PK
2		2483.500	58.461	22.943	-15.539	74.000	35.517	PK

Profile: 1992204R	Page No.: 39
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded(S=2)(GFSK_LE)	



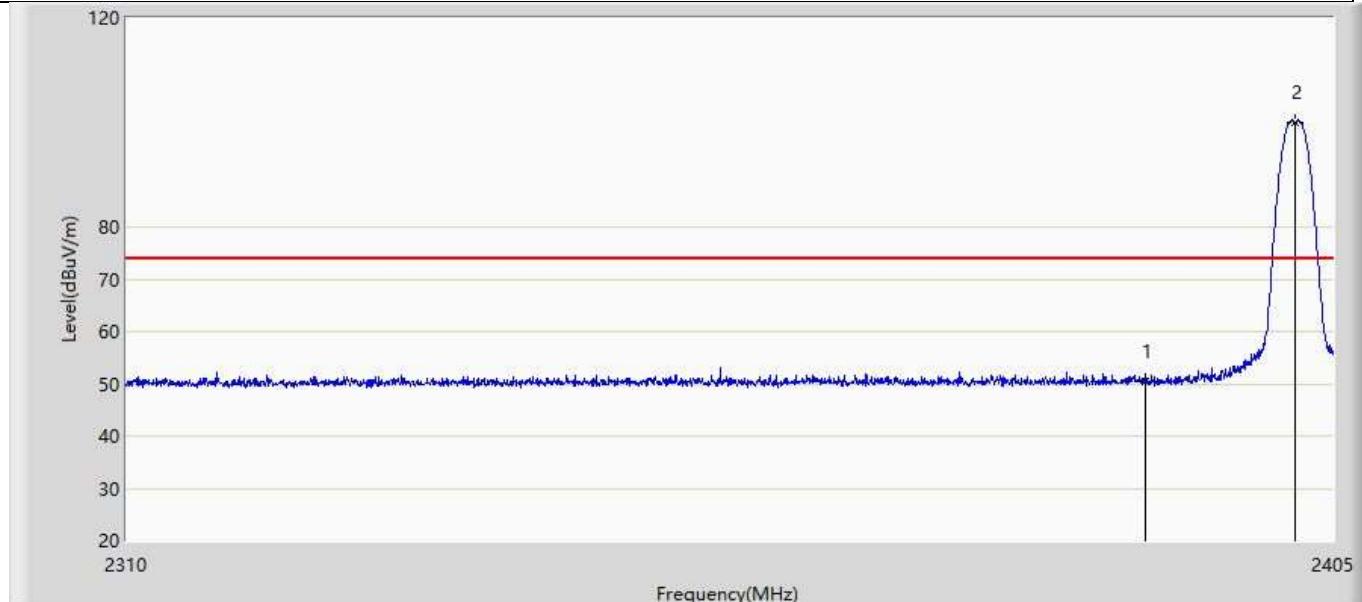
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.012	100.606	65.108	N/A	N/A	35.498	AV
2		2483.500	44.133	8.615	-9.867	54.000	35.517	AV

Profile: 1992204R	Page No.: 40
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded(S=2)(GFSK_LE)	



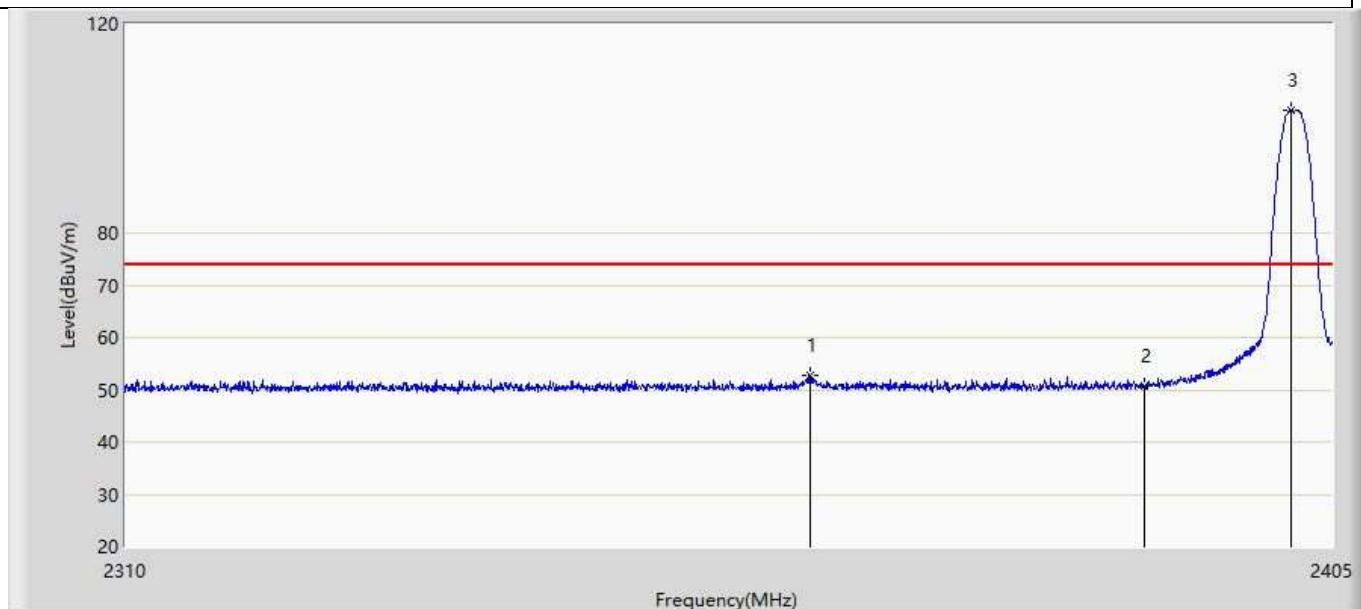
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.975	104.484	68.986	N/A	N/A	35.498	AV
2		2483.500	47.055	11.537	-6.945	54.000	35.517	AV

Profile: 1992204R	Page No.: 17
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded(S=8)(GFSK_LE)	



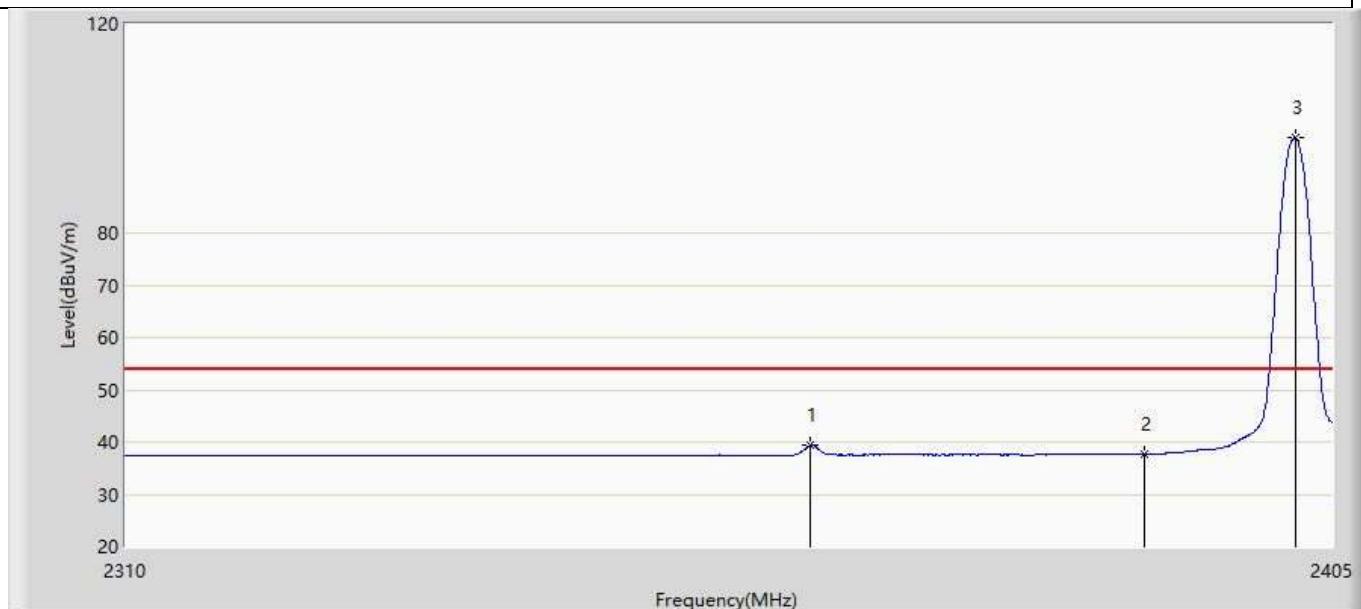
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.443	14.986	-23.557	74.000	35.458	PK
2	*	2401.913	100.096	64.627	N/A	N/A	35.469	PK

Profile: 1992204R	Page No.: 18
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded(S=8)(GFSK_LE)	



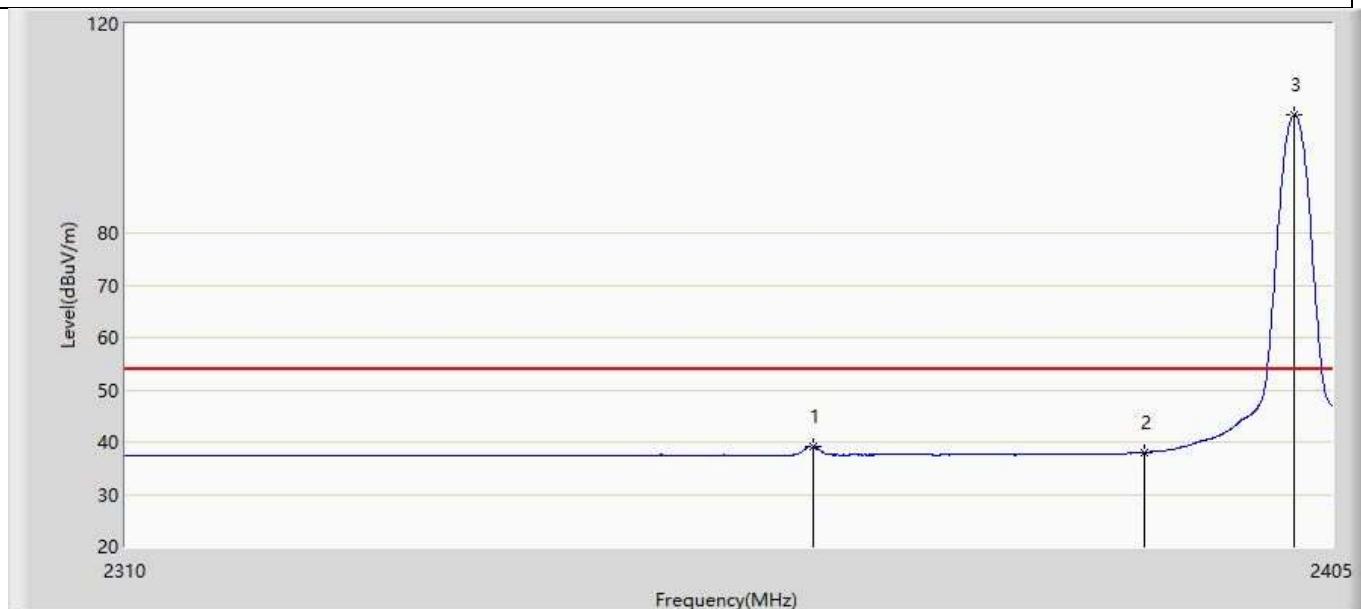
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.437	52.769	17.329	-21.231	74.000	35.440	PK
2		2390.000	50.758	15.301	-23.242	74.000	35.458	PK
3	*	2401.770	103.404	67.935	N/A	N/A	35.469	PK

Profile: 1992204R	Page No.: 19
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded(S=8)(GFSK_LE)	



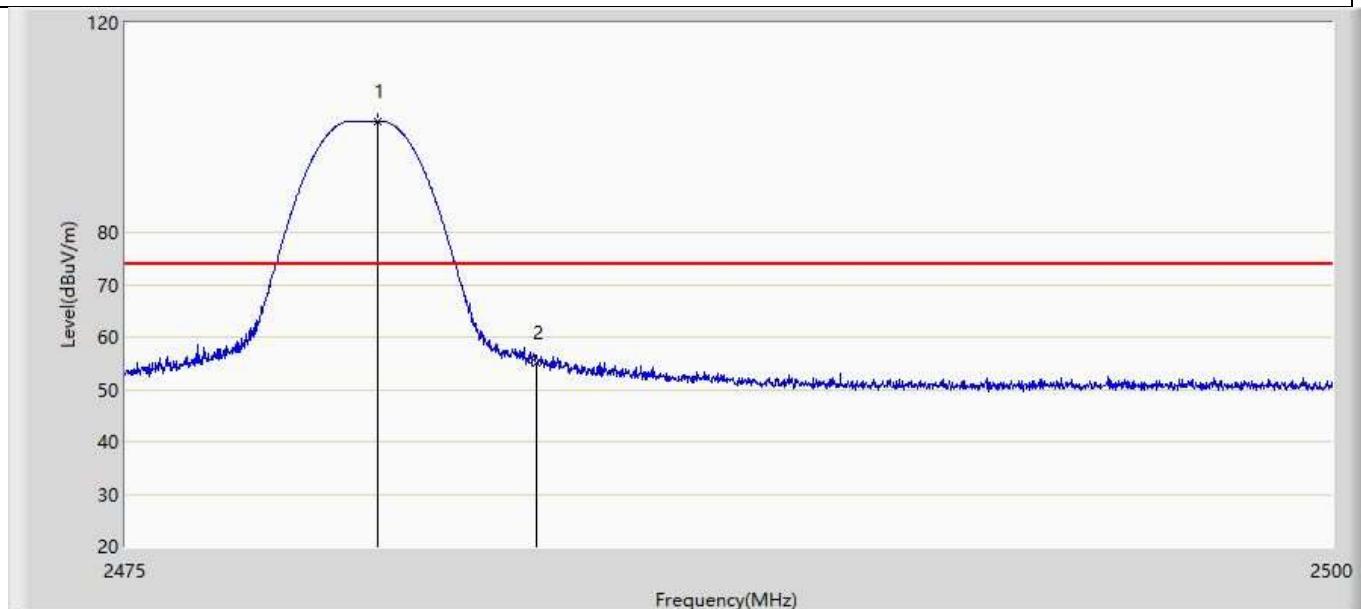
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.437	39.324	3.884	-14.676	54.000	35.440	AV
2		2390.000	37.729	2.272	-16.271	54.000	35.458	AV
3	*	2402.055	98.256	62.786	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 20
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 19:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded(S=8)(GFSK_LE)	



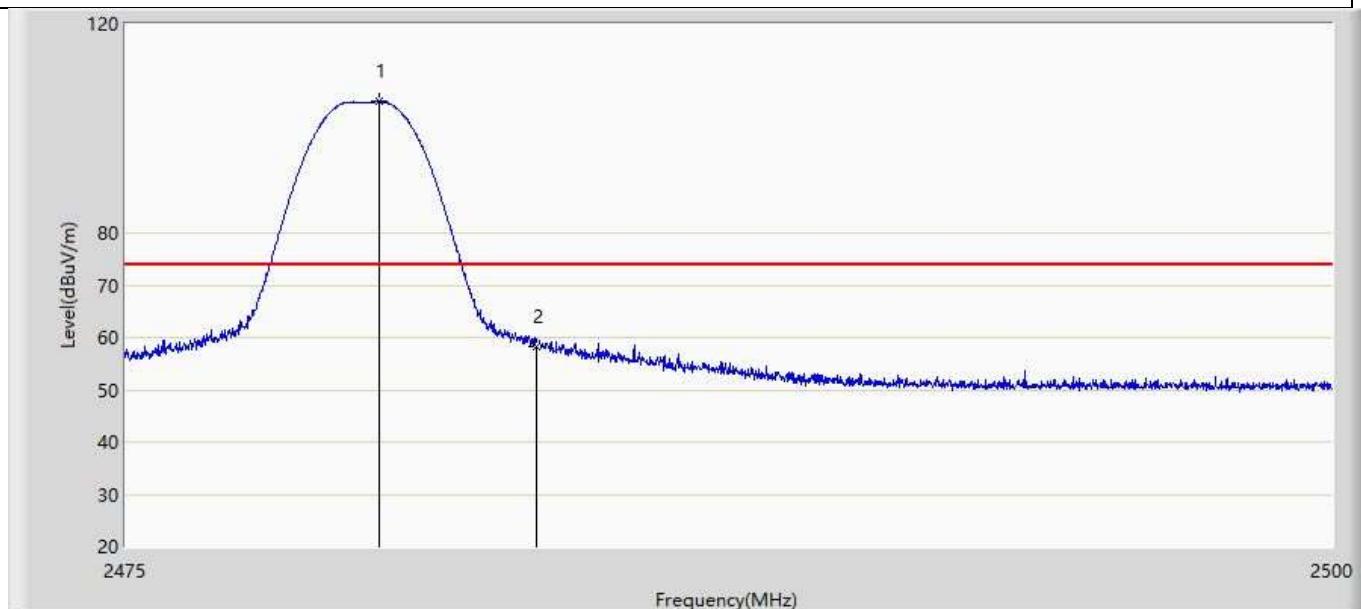
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.722	39.246	3.806	-14.754	54.000	35.440	AV
2		2390.000	37.971	2.514	-16.029	54.000	35.458	AV
3	*	2401.913	102.542	67.073	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 33
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded(S=8)(GFSK_LE)	



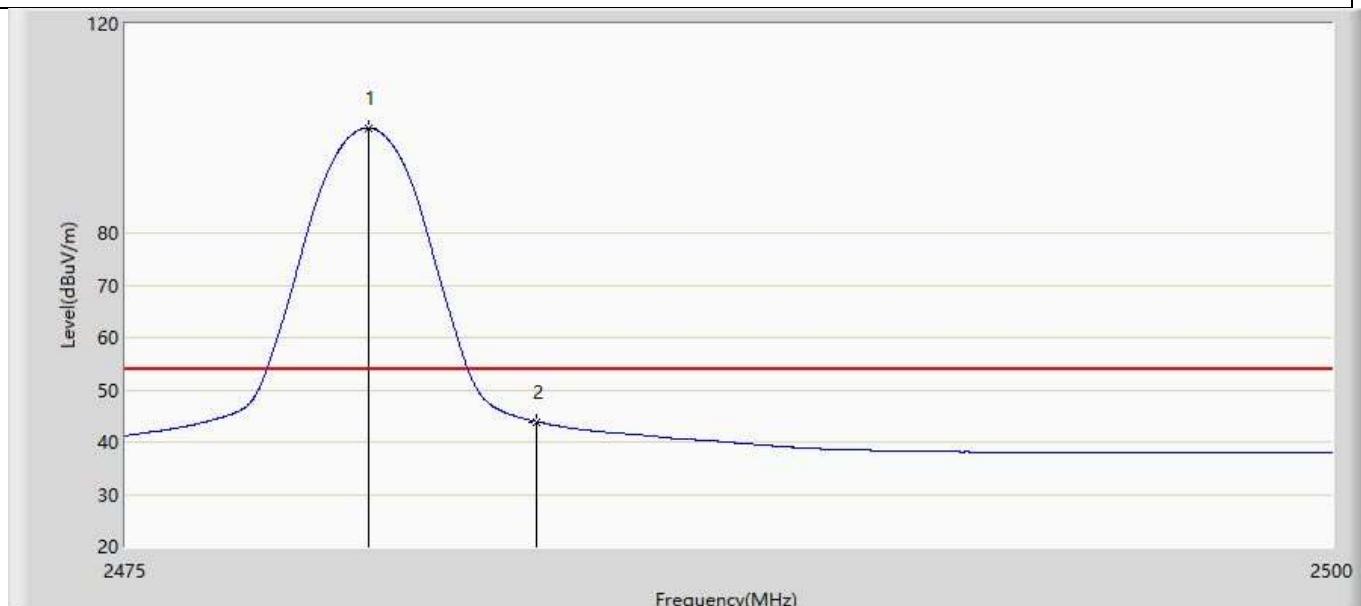
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.212	101.261	65.762	N/A	N/A	35.499	PK
2		2483.500	55.103	19.585	-18.897	74.000	35.517	PK

Profile: 1992204R	Page No.: 34
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded(S=8)(GFSK_LE)	



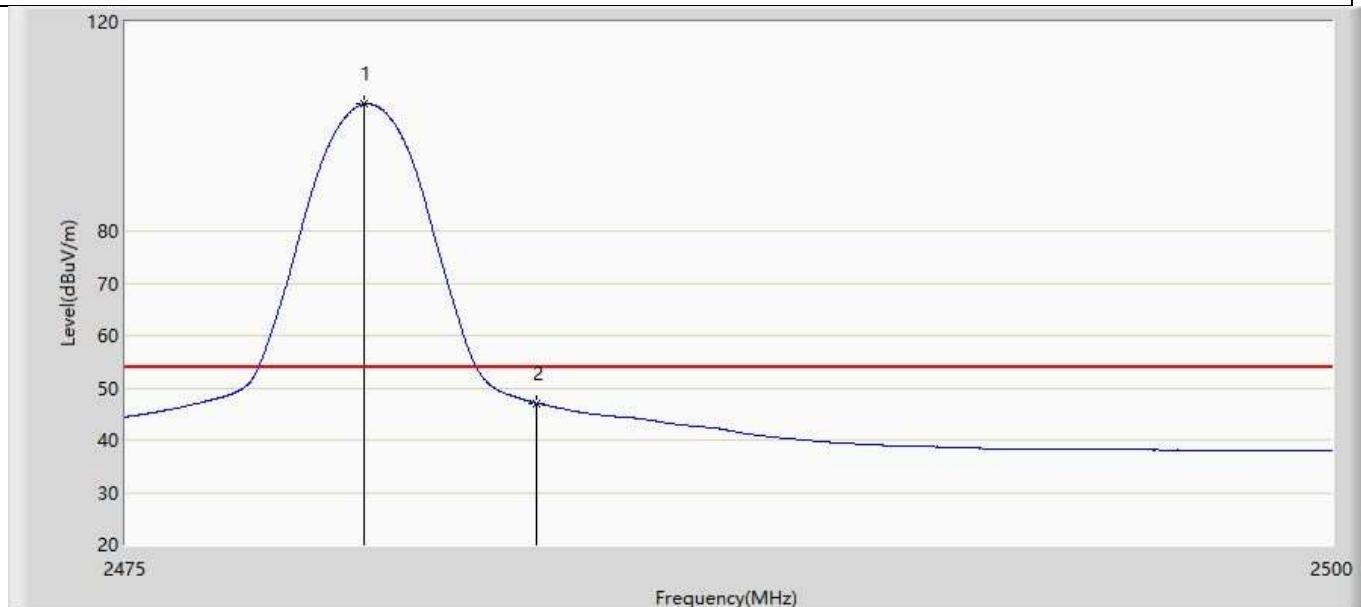
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.250	105.095	69.596	N/A	N/A	35.500	PK
2		2483.500	58.309	22.791	-15.691	74.000	35.517	PK

Profile: 1992204R	Page No.: 35
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded(S=8)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.012	100.060	64.562	N/A	N/A	35.498	AV
2		2483.500	43.888	8.370	-10.112	54.000	35.517	AV

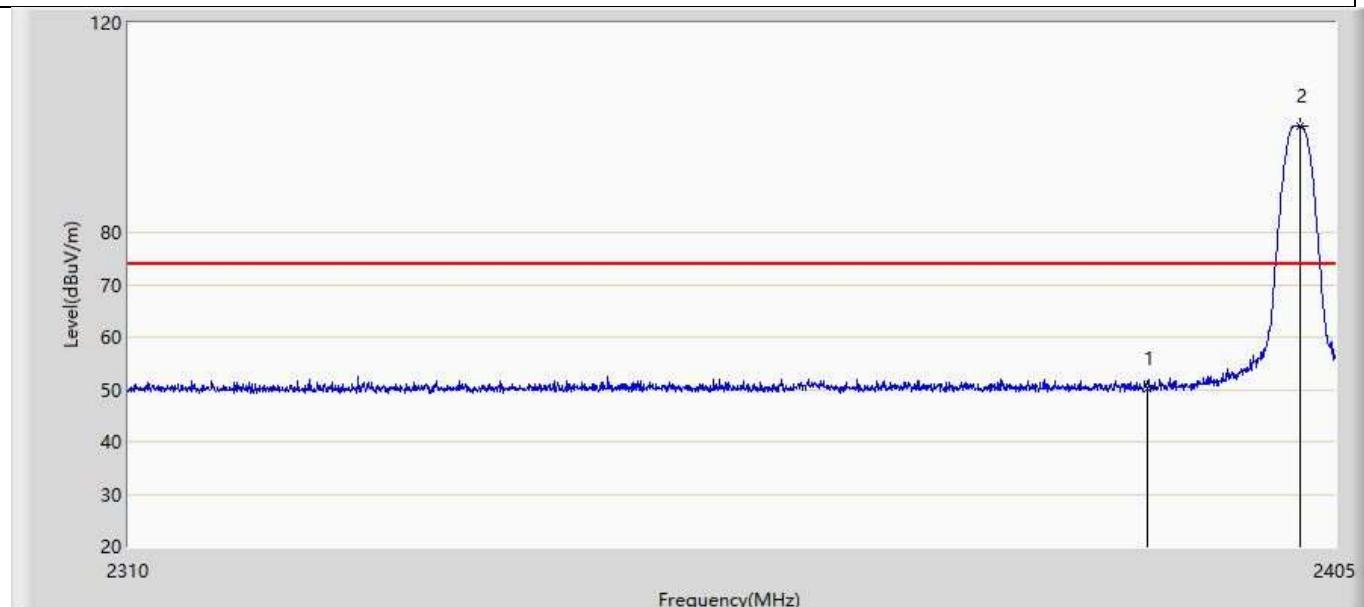
Profile: 1992204R	Page No.: 36
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded(S=8)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.937	104.269	68.772	N/A	N/A	35.498	AV
2		2483.500	47.034	11.516	-6.966	54.000	35.517	AV

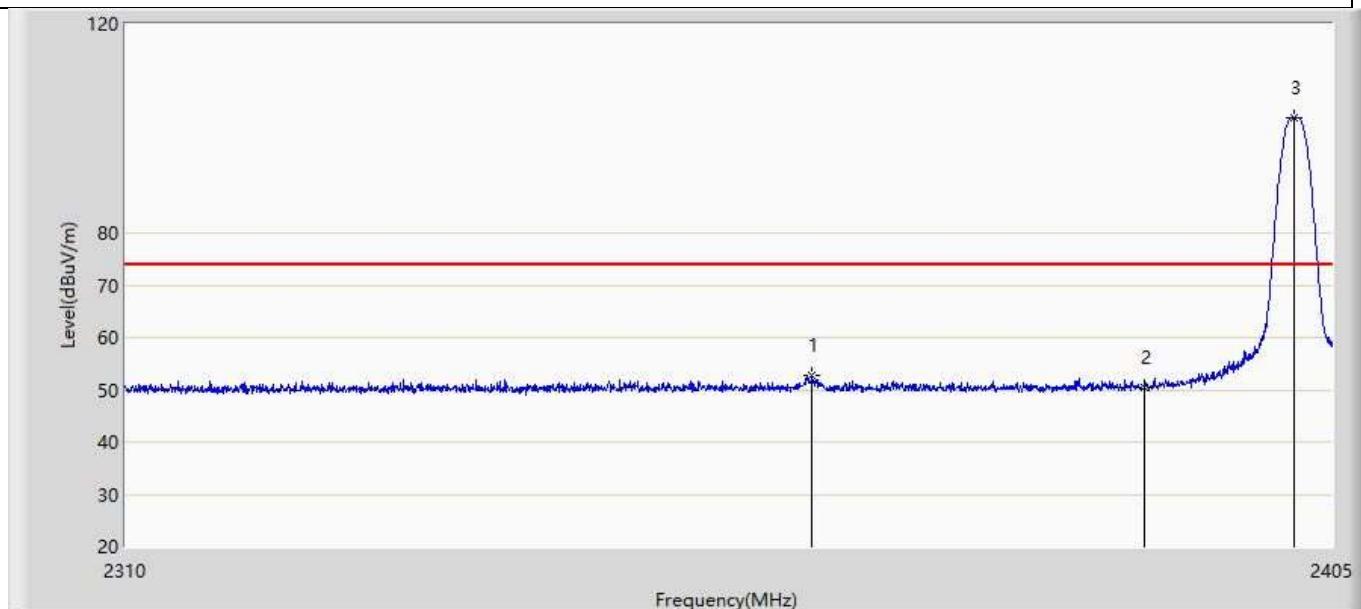
KDS:

Profile: 1992204R	Page No.: 9
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.015	14.558	-23.985	74.000	35.458	PK
2	*	2402.150	100.289	64.819	N/A	N/A	35.469	PK

Profile: 1992204R	Page No.: 10
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps(GFSK_LE)	



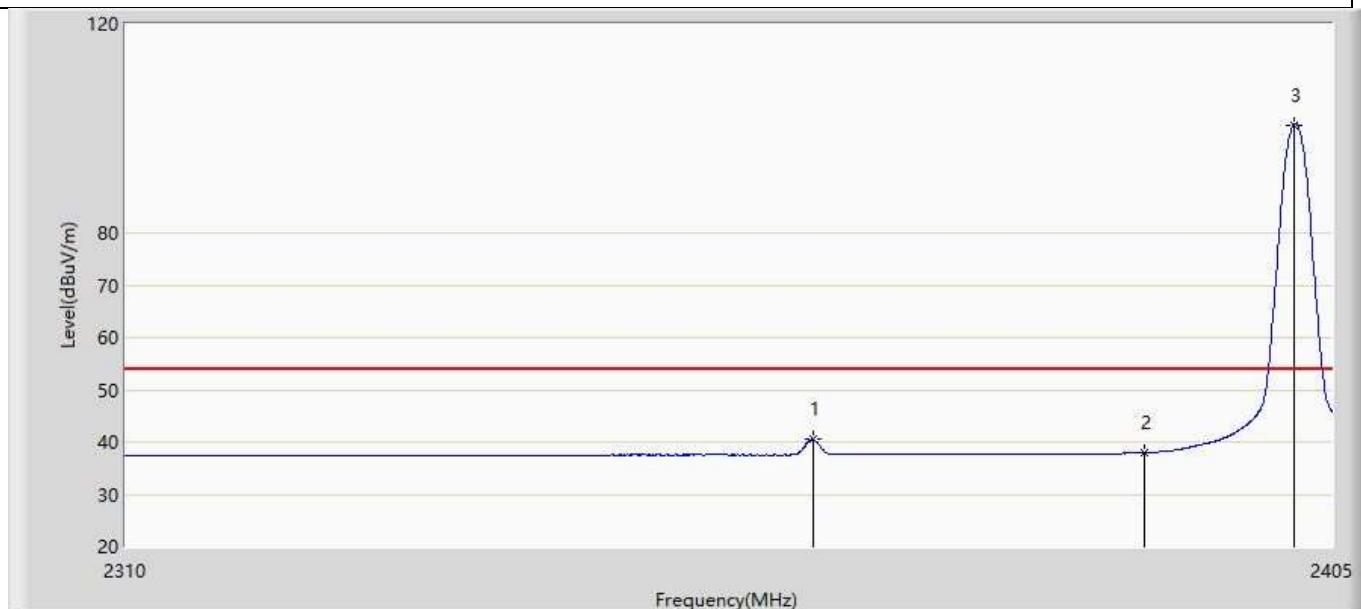
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.580	52.830	17.390	-21.170	74.000	35.441	PK
2		2390.000	50.421	14.964	-23.579	74.000	35.458	PK
3	*	2401.913	101.965	66.496	N/A	N/A	35.469	PK

Profile: 1992204R	Page No.: 11
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps(GFSK_LE)	



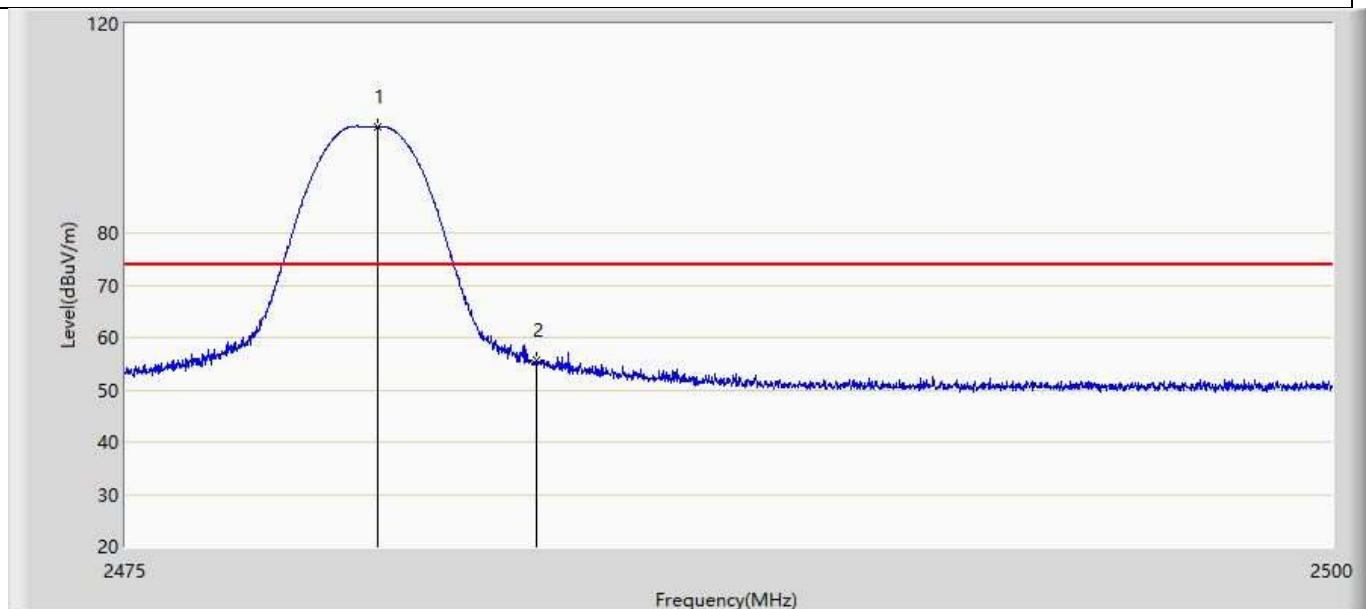
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.722	39.305	3.865	-14.695	54.000	35.440	AV
2		2390.000	37.814	2.357	-16.186	54.000	35.458	AV
3	*	2401.913	100.020	64.551	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 12
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 20:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps(GFSK_LE)	



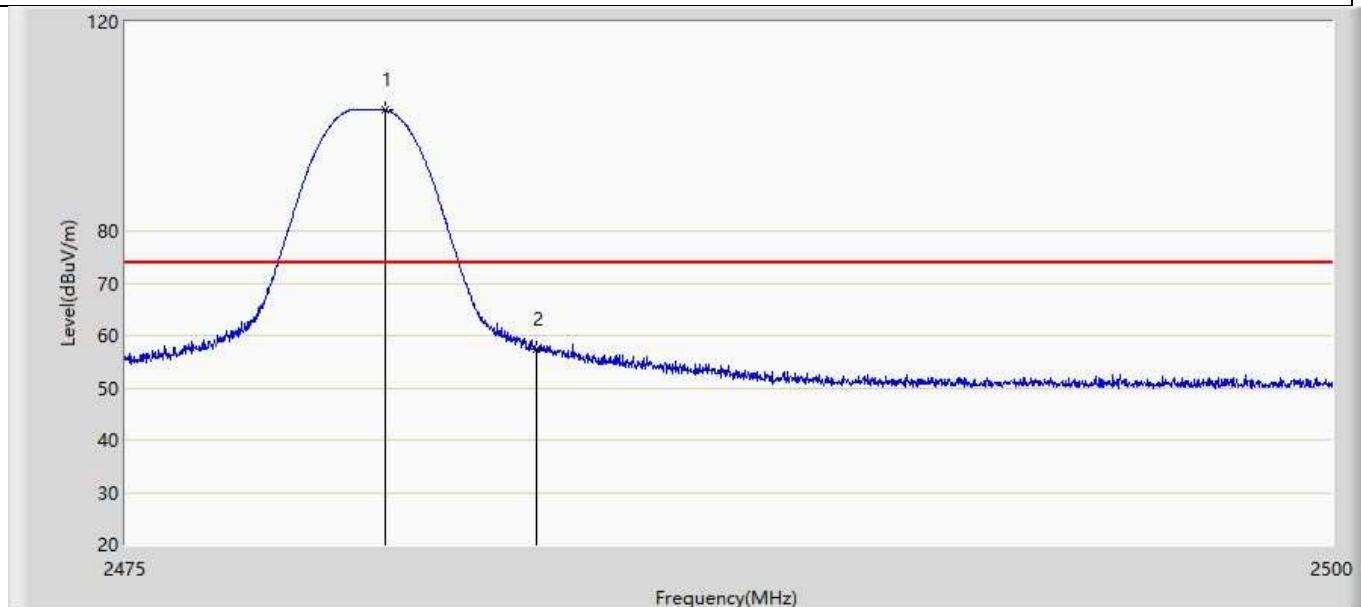
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.722	40.491	5.051	-13.509	54.000	35.440	AV
2		2390.000	37.978	2.521	-16.022	54.000	35.458	AV
3	*	2401.913	100.653	65.184	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 25
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps(GFSK_LE)	



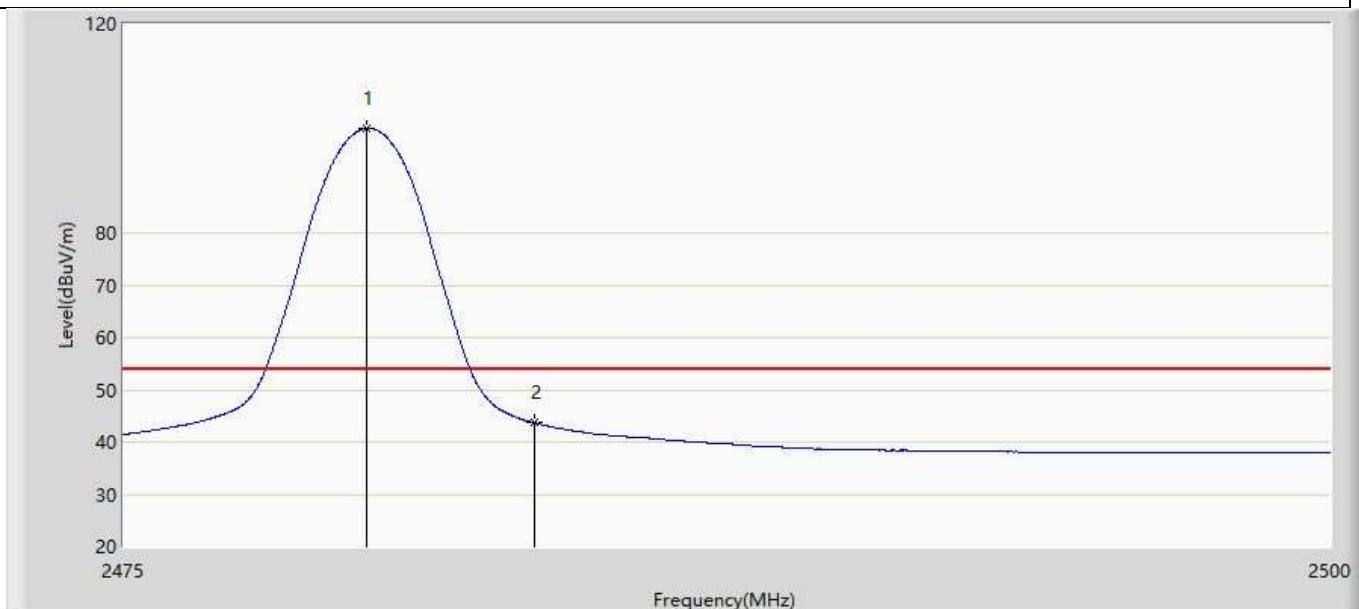
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.212	100.378	64.879	N/A	N/A	35.499	PK
2		2483.500	55.642	20.124	-18.358	74.000	35.517	PK

Profile: 1992204R	Page No.: 26
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps(GFSK_LE)	



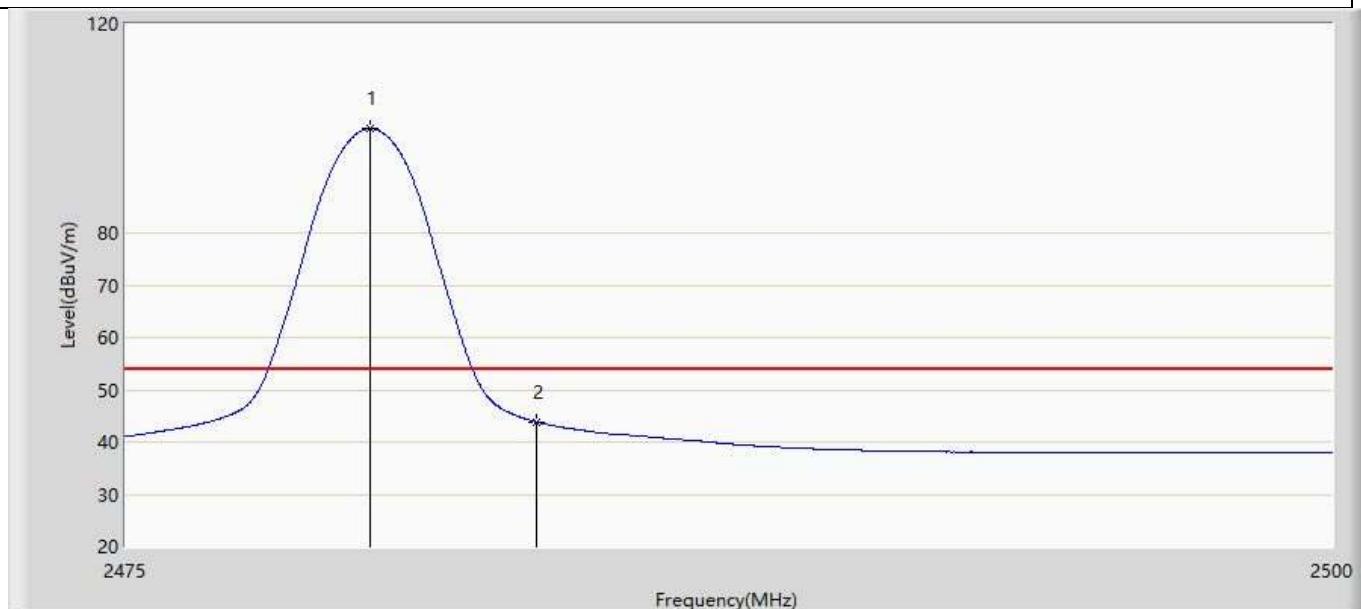
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.363	103.180	67.680	N/A	N/A	35.500	PK
2		2483.500	57.290	21.772	-16.710	74.000	35.517	PK

Profile: 1992204R	Page No.: 27
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps(GFSK_LE)	



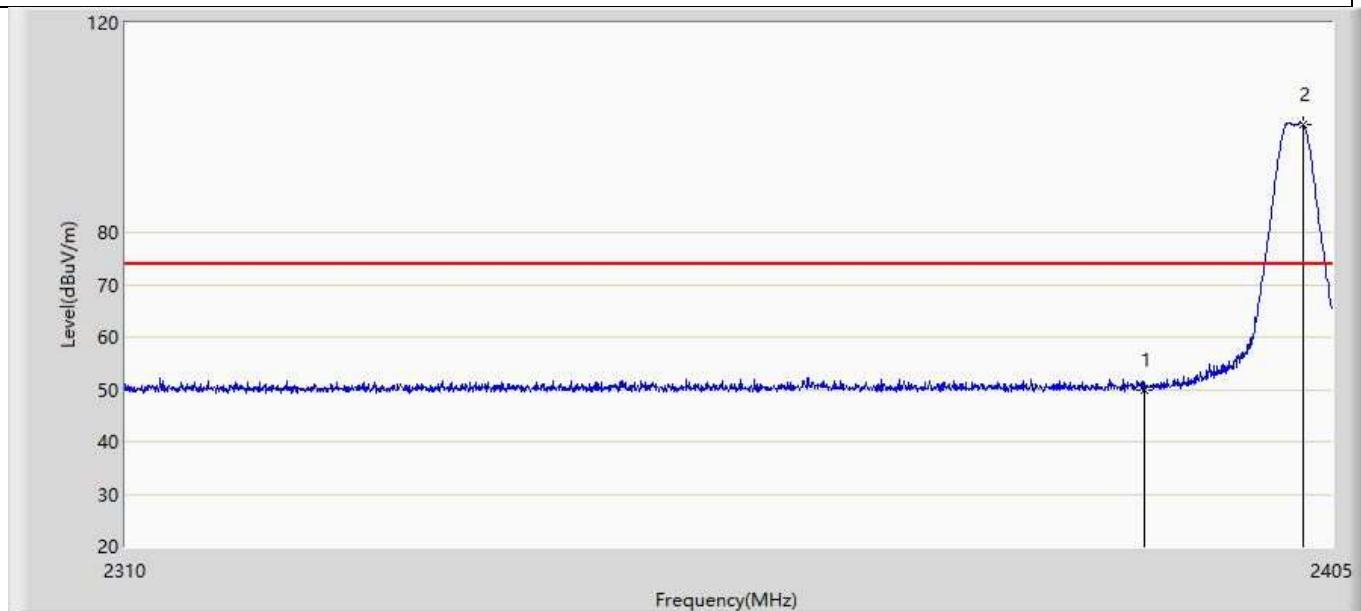
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.012	99.982	64.484	N/A	N/A	35.498	AV
		2483.500	43.659	8.141	-10.341	54.000	35.517	AV

Profile: 1992204R	Page No.: 28
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps(GFSK_LE)	



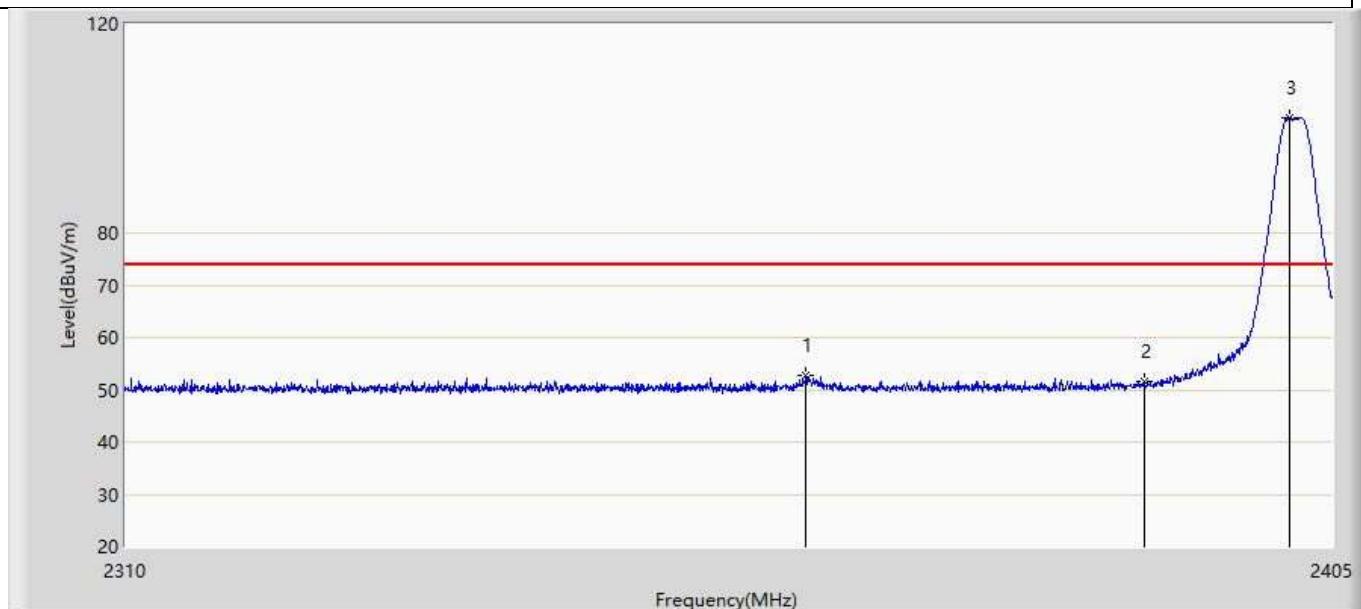
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.050	99.926	64.428	N/A	N/A	35.498	AV
2		2483.500	43.791	8.273	-10.209	54.000	35.517	AV

Profile: 1992204R	Page No.: 13
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps(GFSK_LE)	



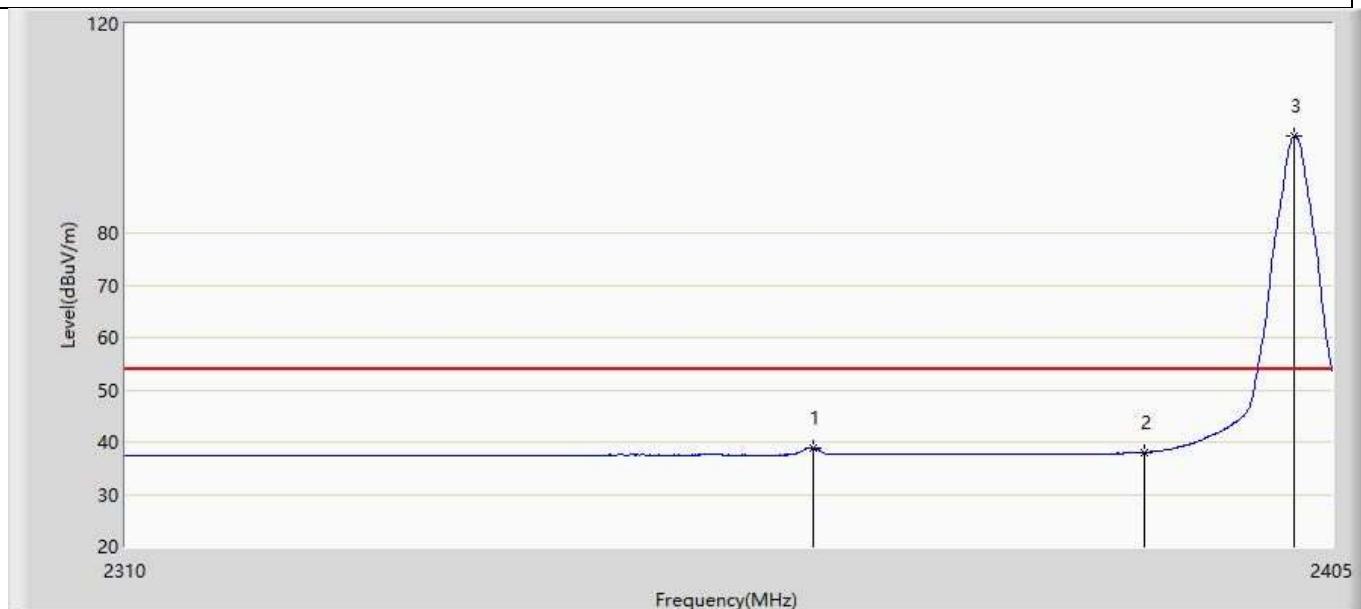
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	49.953	14.496	-24.047	74.000	35.458	PK
2	*	2402.673	100.678	65.208	N/A	N/A	35.470	PK

Profile: 1992204R	Page No.: 14
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps(GFSK_LE)	



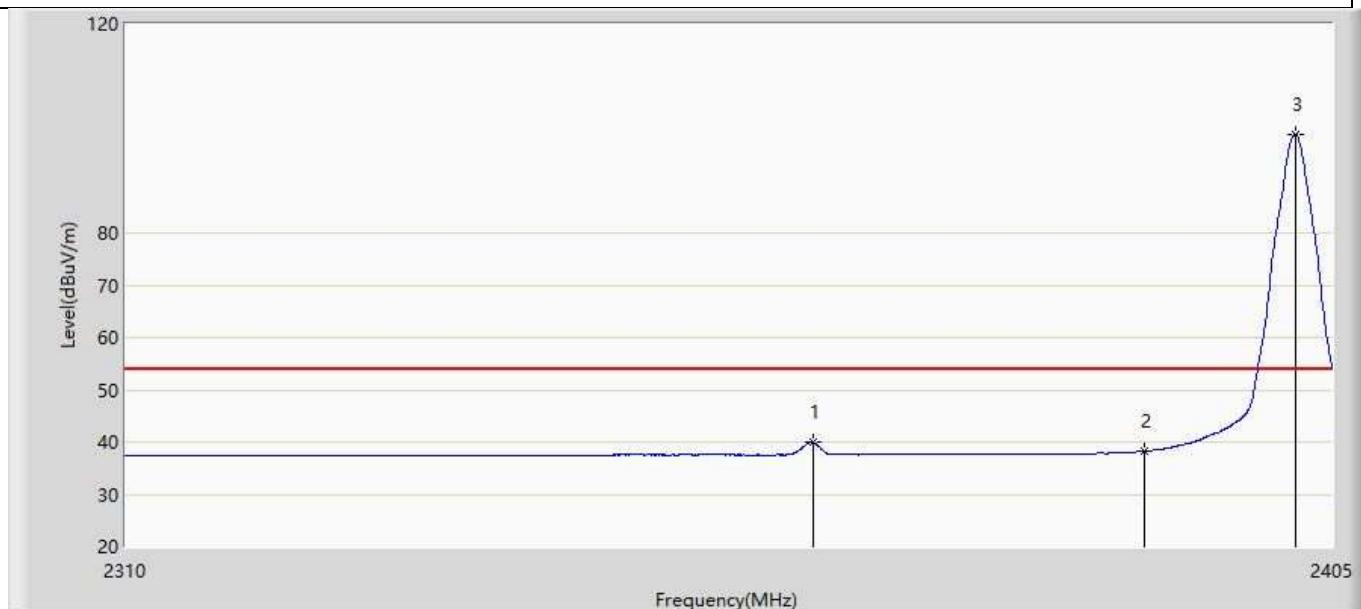
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.105	52.799	17.359	-21.201	74.000	35.440	PK
2		2390.000	51.463	16.006	-22.537	74.000	35.458	PK
3	*	2401.627	102.078	66.609	N/A	N/A	35.469	PK

Profile: 1992204R	Page No.: 15
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps(GFSK_LE)	



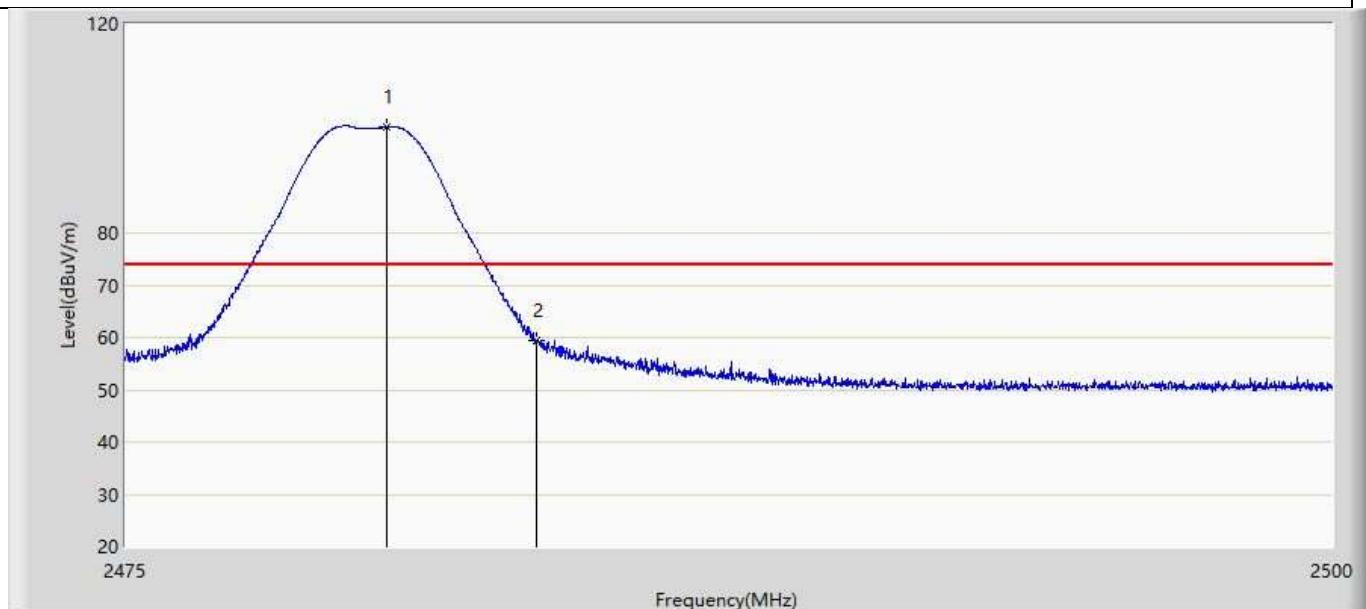
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.722	38.883	3.443	-15.117	54.000	35.440	AV
2		2390.000	38.017	2.560	-15.983	54.000	35.458	AV
3	*	2401.913	98.528	63.059	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 16
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps(GFSK_LE)	



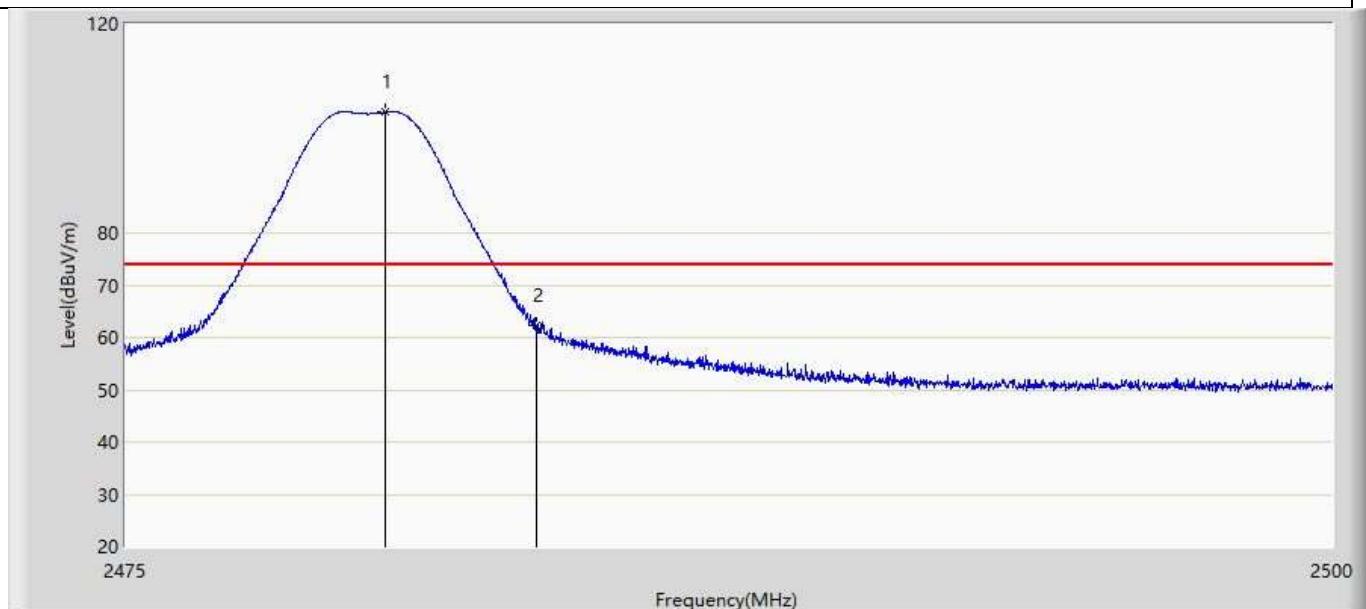
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.722	39.898	4.458	-14.102	54.000	35.440	AV
2		2390.000	38.280	2.823	-15.720	54.000	35.458	AV
3	*	2402.055	98.803	63.333	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 29
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps(GFSK_LE)	



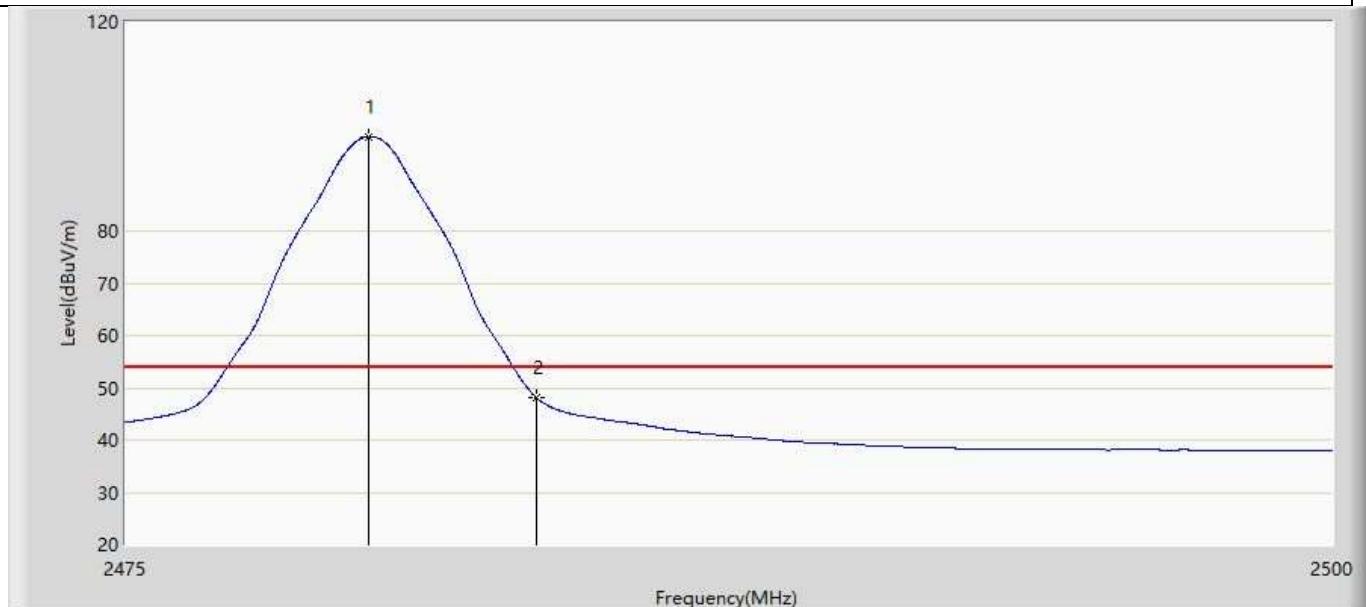
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.387	100.289	64.789	N/A	N/A	35.501	PK
2		2483.500	59.279	23.761	-14.721	74.000	35.517	PK

Profile: 1992204R	Page No.: 30
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps(GFSK_LE)	



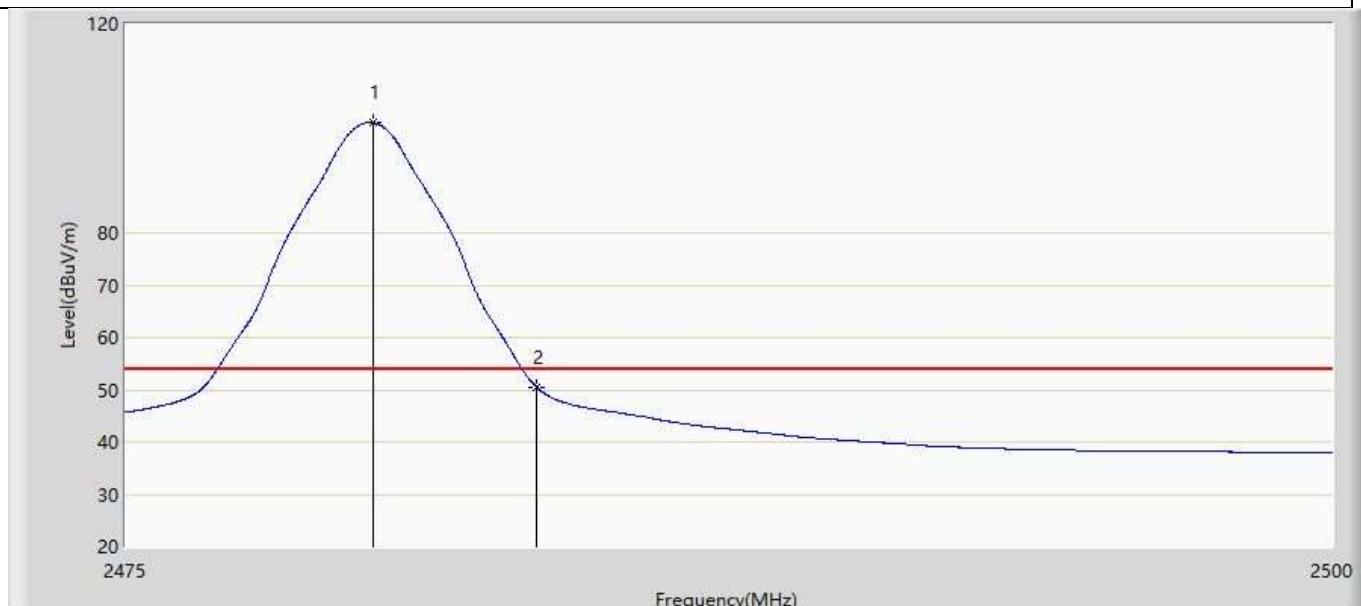
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.363	103.122	67.622	N/A	N/A	35.500	PK
2		2483.500	62.338	26.820	-11.662	74.000	35.517	PK

Profile: 1992204R	Page No.: 31
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps(GFSK_LE)	



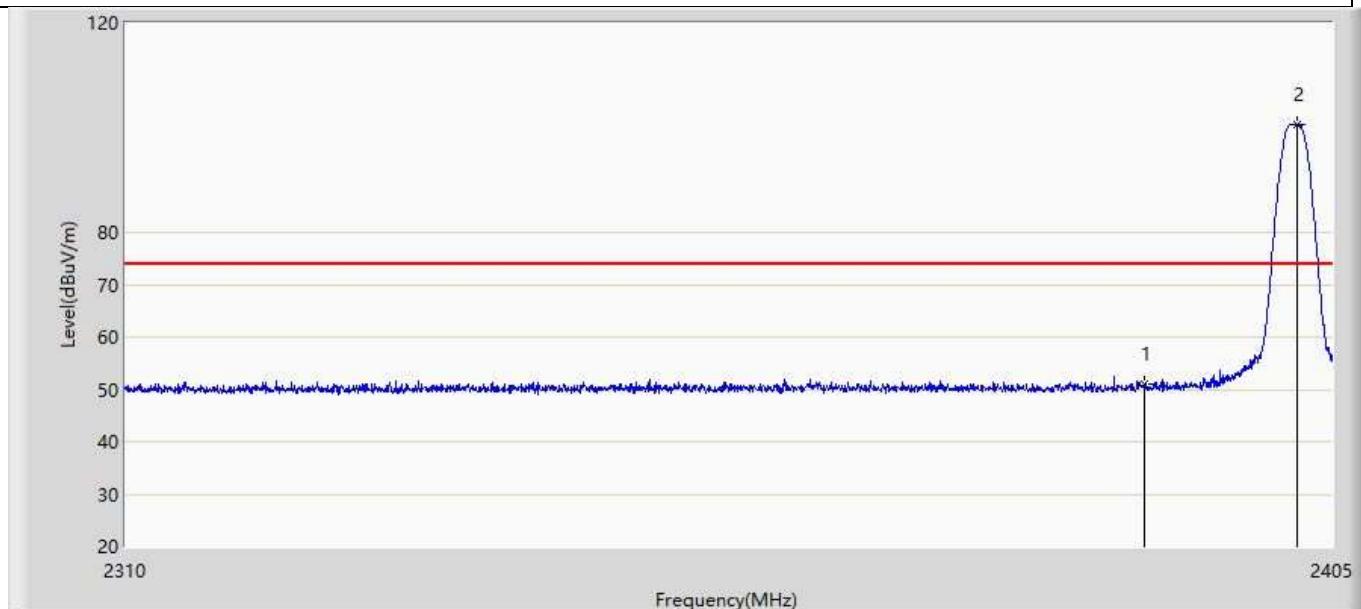
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.012	98.032	62.534	N/A	N/A	35.498	AV
2		2483.500	48.036	12.518	-5.964	54.000	35.517	AV

Profile: 1992204R	Page No.: 32
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps(GFSK_LE)	



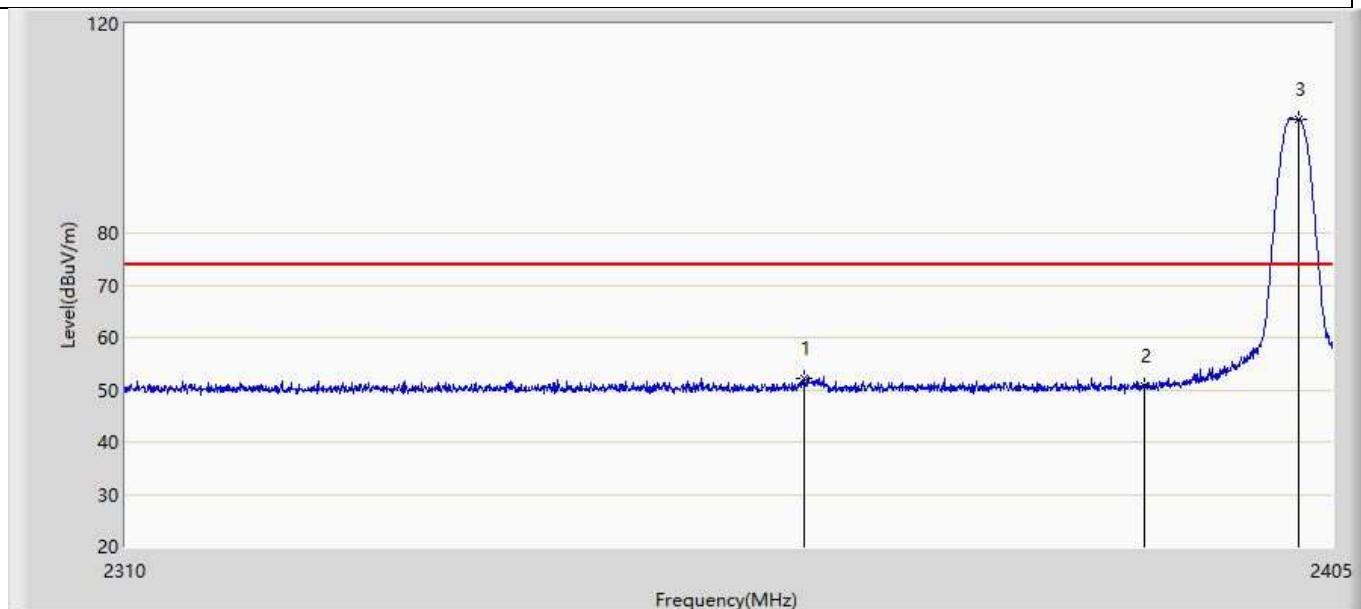
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.125	101.099	65.600	N/A	N/A	35.499	AV
2		2483.500	50.469	14.951	-3.531	54.000	35.517	AV

Profile: 1992204R	Page No.: 21
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded(S=2)(GFSK_LE)	



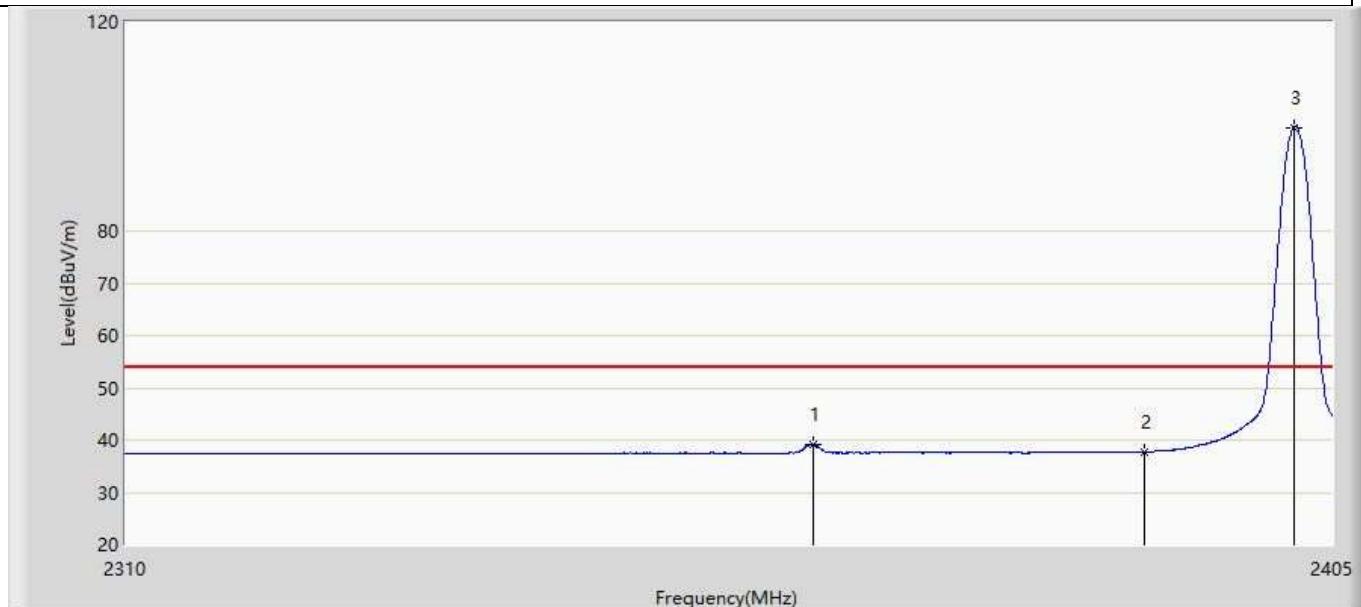
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.982	15.525	-23.018	74.000	35.458	PK
2	*	2402.150	100.593	65.123	N/A	N/A	35.469	PK

Profile: 1992204R	Page No.: 22
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded(S=2)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.010	52.304	16.864	-21.696	74.000	35.440	PK
2		2390.000	50.825	15.368	-23.175	74.000	35.458	PK
3	*	2402.387	101.841	66.371	N/A	N/A	35.470	PK

Profile: 1992204R	Page No.: 23
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded(S=2)(GFSK_LE)	



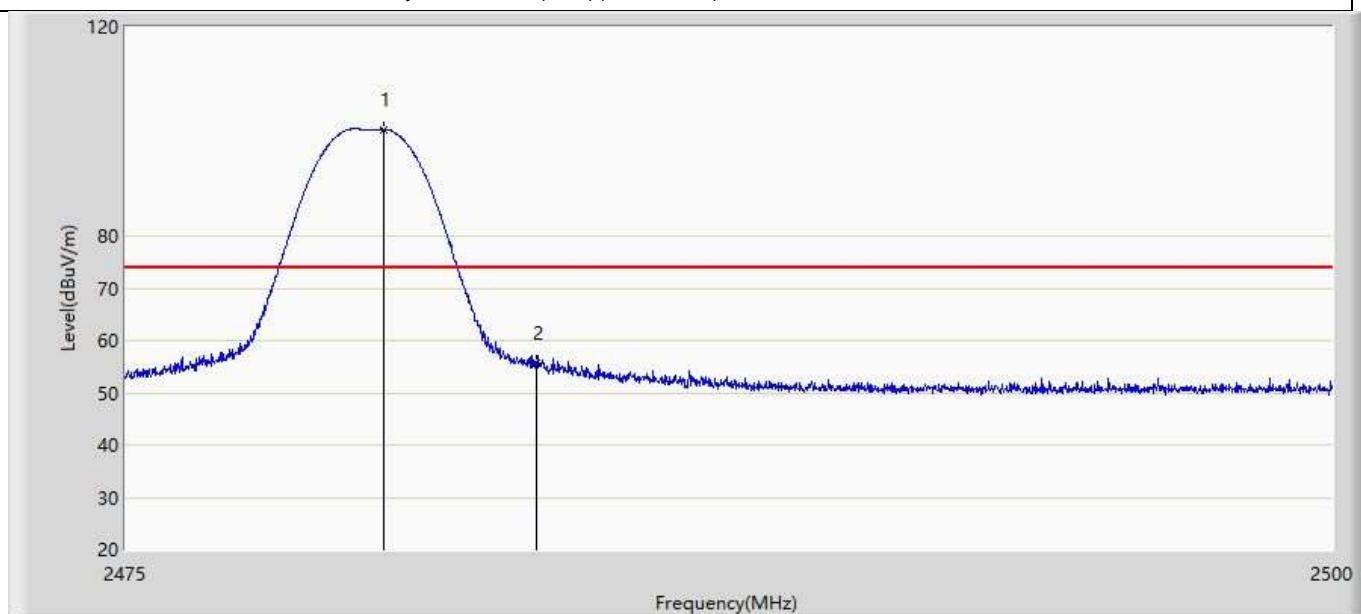
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.722	39.169	3.729	-14.831	54.000	35.440	AV
2		2390.000	37.772	2.315	-16.228	54.000	35.458	AV
3	*	2401.913	99.775	64.306	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 24
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2402MHz by LE_Coded(S=2)(GFSK_LE)	



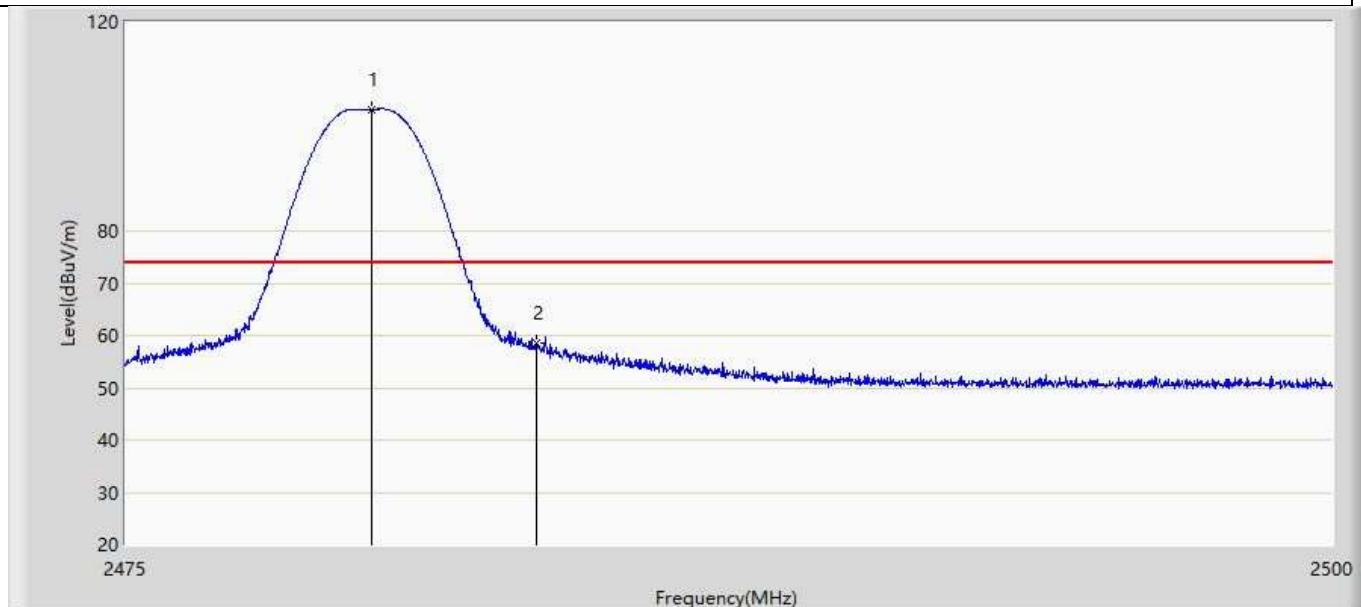
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.580	40.021	4.581	-13.979	54.000	35.441	AV
2		2390.000	37.951	2.494	-16.049	54.000	35.458	AV
3	*	2402.055	100.650	65.180	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 37
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded(S=2)(GFSK_LE)	



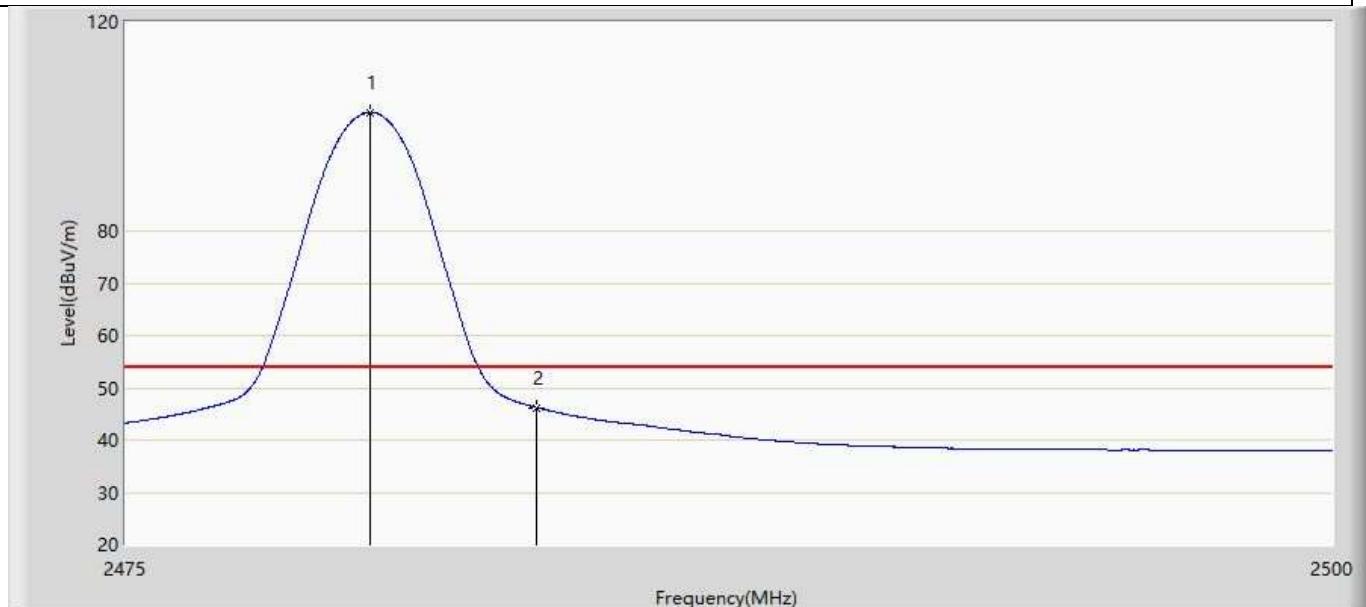
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.325	100.406	64.906	N/A	N/A	35.500	PK
2		2483.500	55.644	20.126	-18.356	74.000	35.517	PK

Profile: 1992204R	Page No.: 38
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded(S=2)(GFSK_LE)	



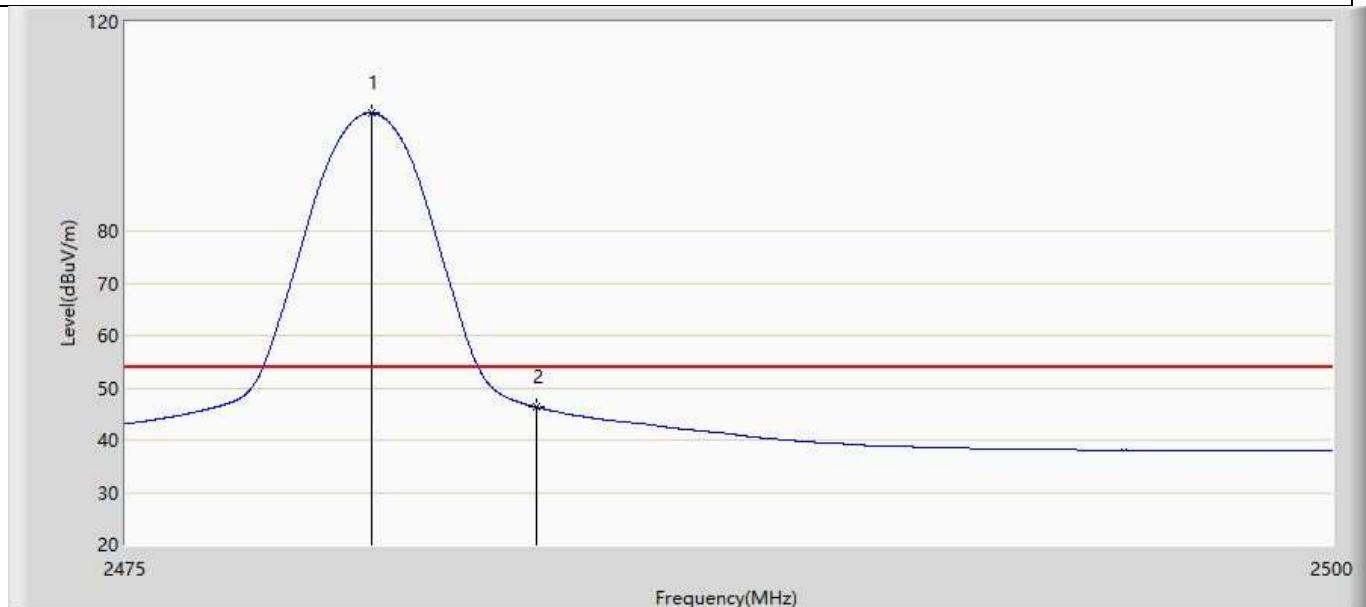
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.087	103.235	67.737	N/A	N/A	35.499	PK
2		2483.500	58.630	23.112	-15.370	74.000	35.517	PK

Profile: 1992204R	Page No.: 39
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded(S=2)(GFSK_LE)	



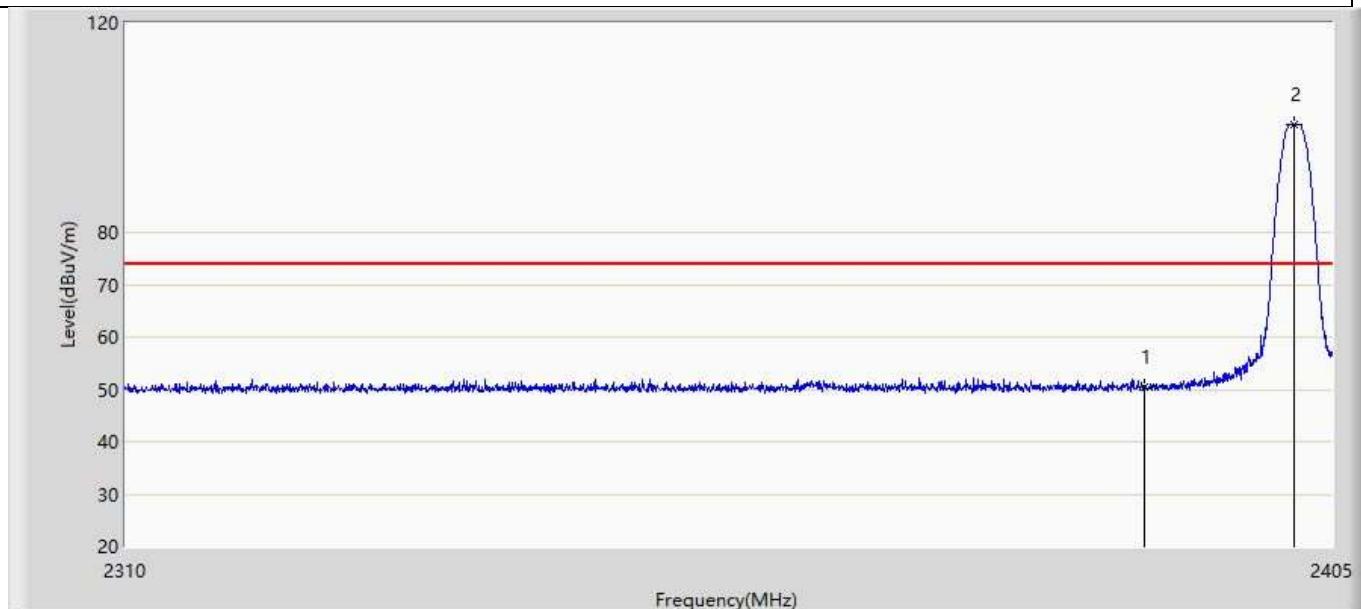
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.050	102.658	67.160	N/A	N/A	35.498	AV
2		2483.500	46.208	10.690	-7.792	54.000	35.517	AV

Profile: 1992204R	Page No.: 40
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 3:Transmit at 2480MHz by LE_Coded(S=2)(GFSK_LE)	



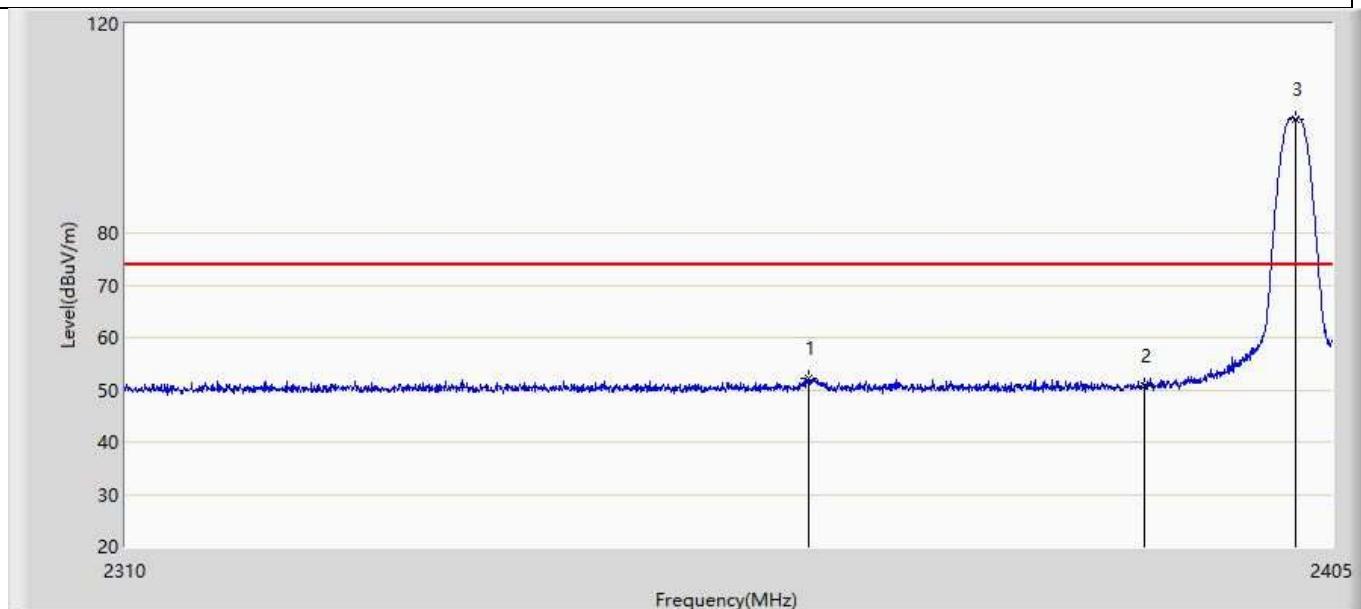
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.087	102.560	67.062	N/A	N/A	35.499	AV
2		2483.500	46.273	10.755	-7.727	54.000	35.517	AV

Profile: 1992204R	Page No.: 17
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded(S=8)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.522	15.065	-23.478	74.000	35.458	PK
2	*	2401.913	100.624	65.155	N/A	N/A	35.469	PK

Profile: 1992204R	Page No.: 18
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded(S=8)(GFSK_LE)	



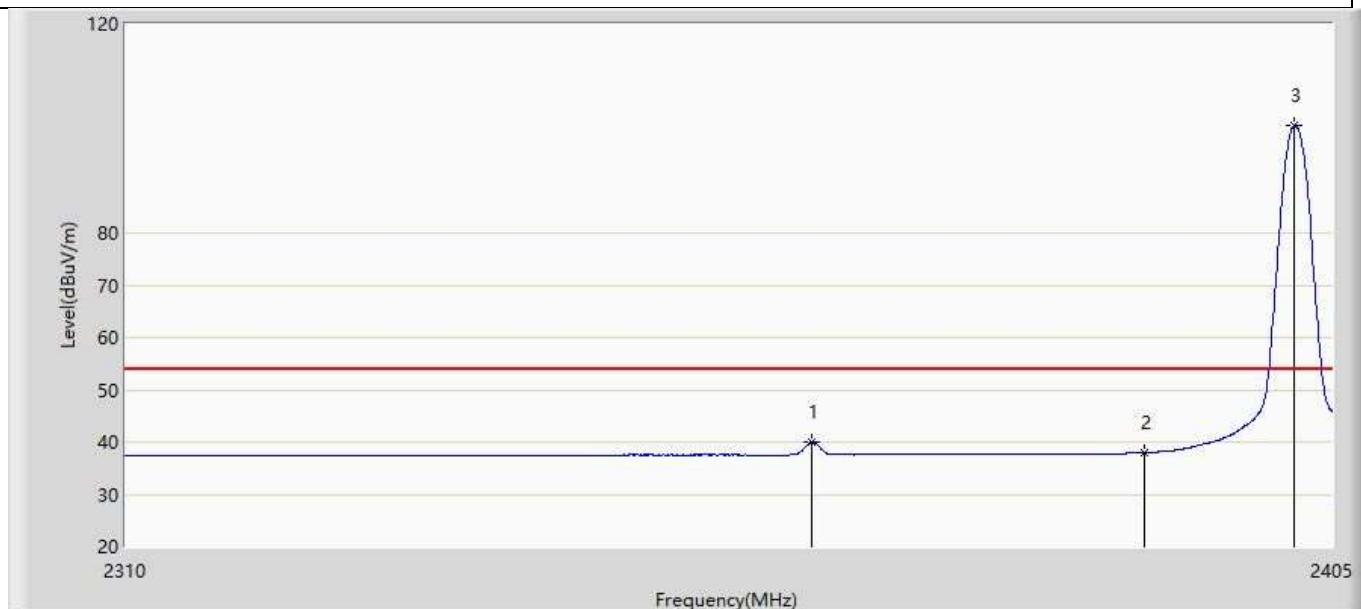
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.390	52.288	16.848	-21.712	74.000	35.440	PK
2		2390.000	50.666	15.209	-23.334	74.000	35.458	PK
3	*	2402.103	101.849	66.379	N/A	N/A	35.469	PK

Profile: 1992204R	Page No.: 19
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded(S=8)(GFSK_LE)	



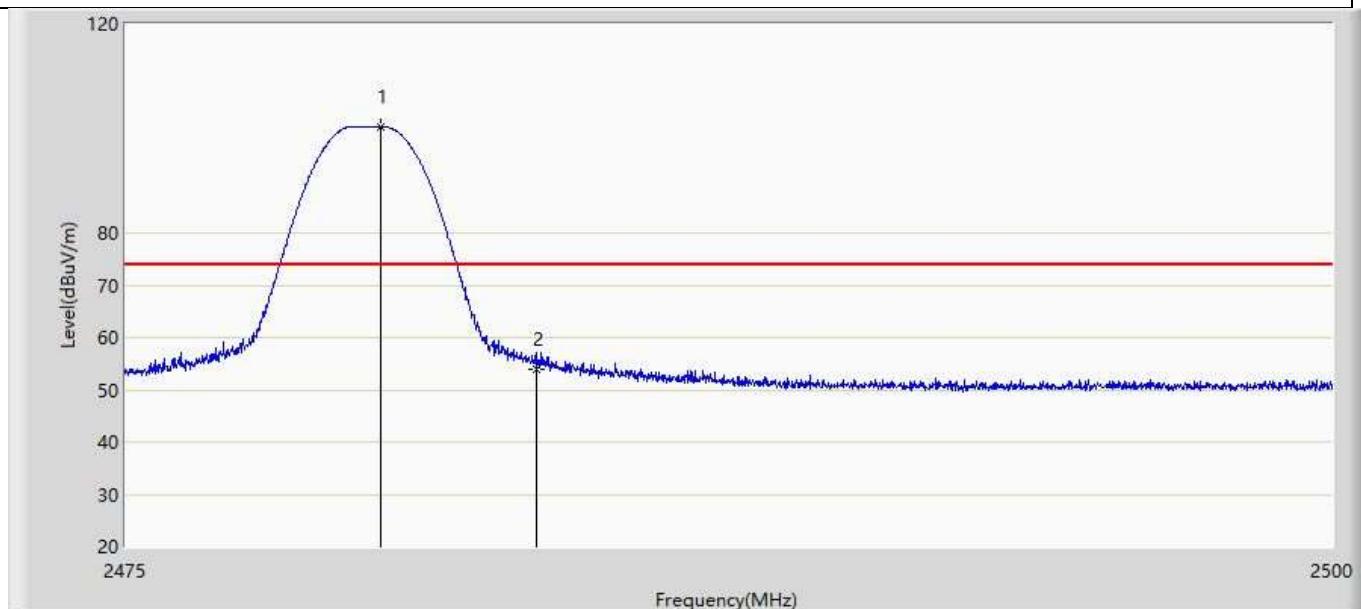
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.722	39.147	3.707	-14.853	54.000	35.440	AV
2		2390.000	37.810	2.353	-16.190	54.000	35.458	AV
3	*	2401.913	99.670	64.201	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 20
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2402MHz by LE_Coded(S=8)(GFSK_LE)	



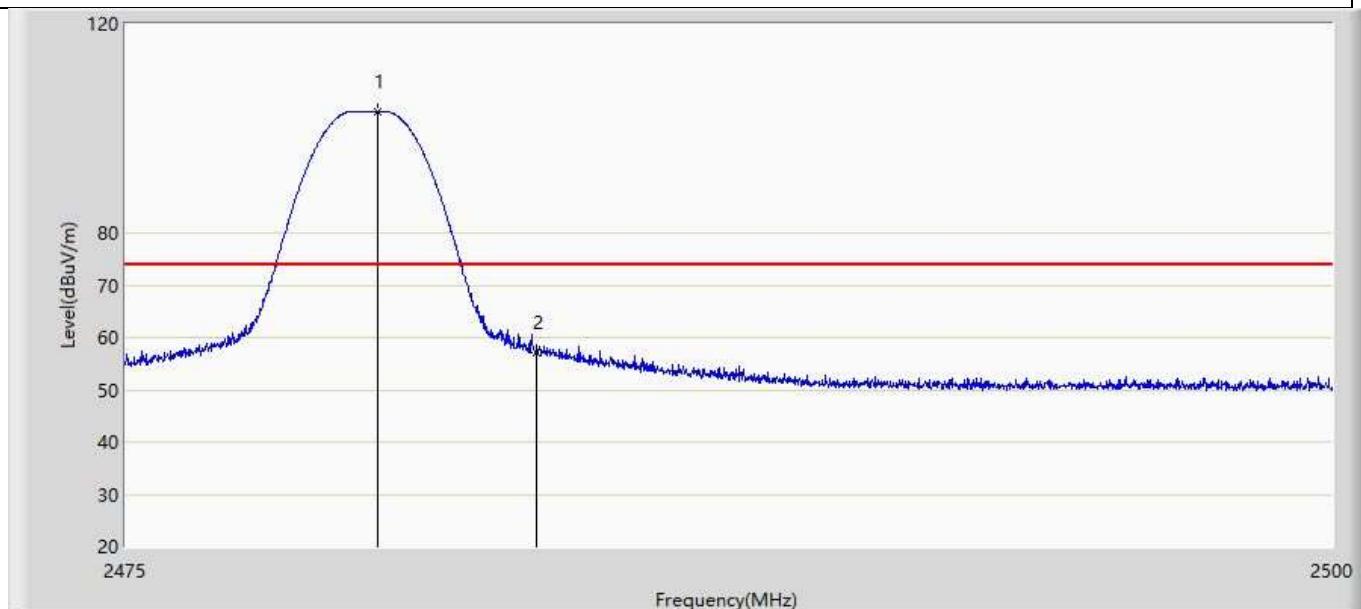
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2363.580	40.024	4.584	-13.976	54.000	35.441	AV
2		2390.000	37.950	2.493	-16.050	54.000	35.458	AV
3	*	2402.008	100.593	65.124	N/A	N/A	35.469	AV

Profile: 1992204R	Page No.: 33
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded(S=8)(GFSK_LE)	



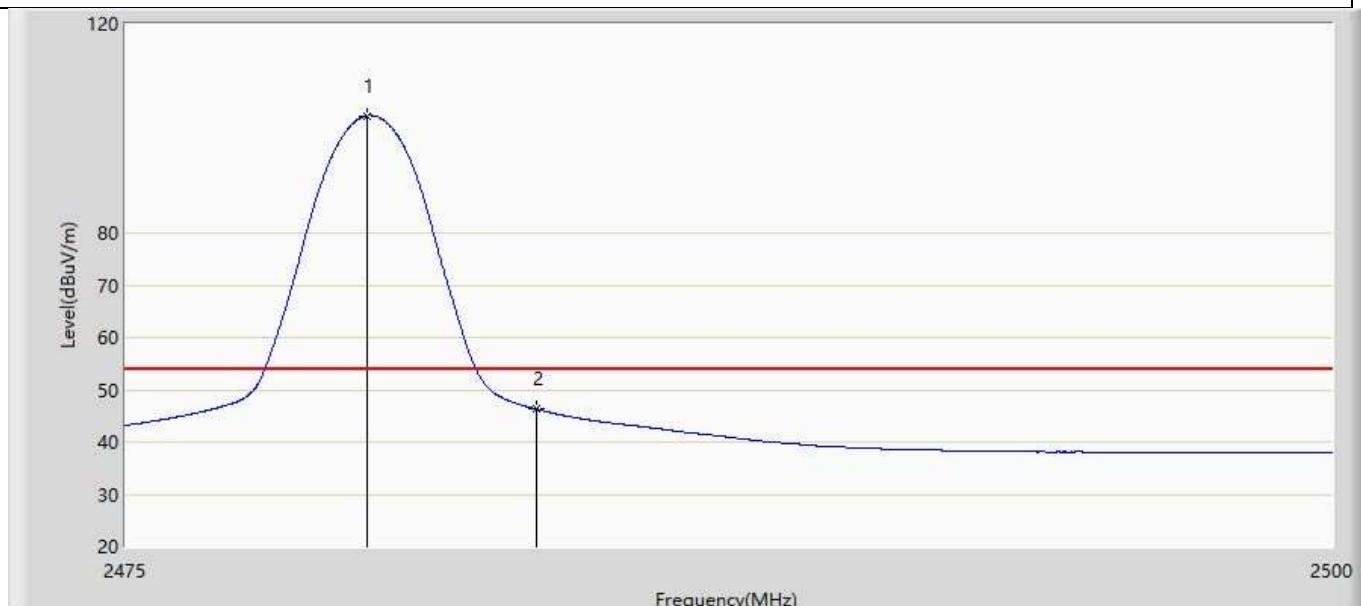
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.288	100.321	64.822	N/A	N/A	35.500	PK
2		2483.500	54.041	18.523	-19.959	74.000	35.517	PK

Profile: 1992204R	Page No.: 34
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded(S=8)(GFSK_LE)	



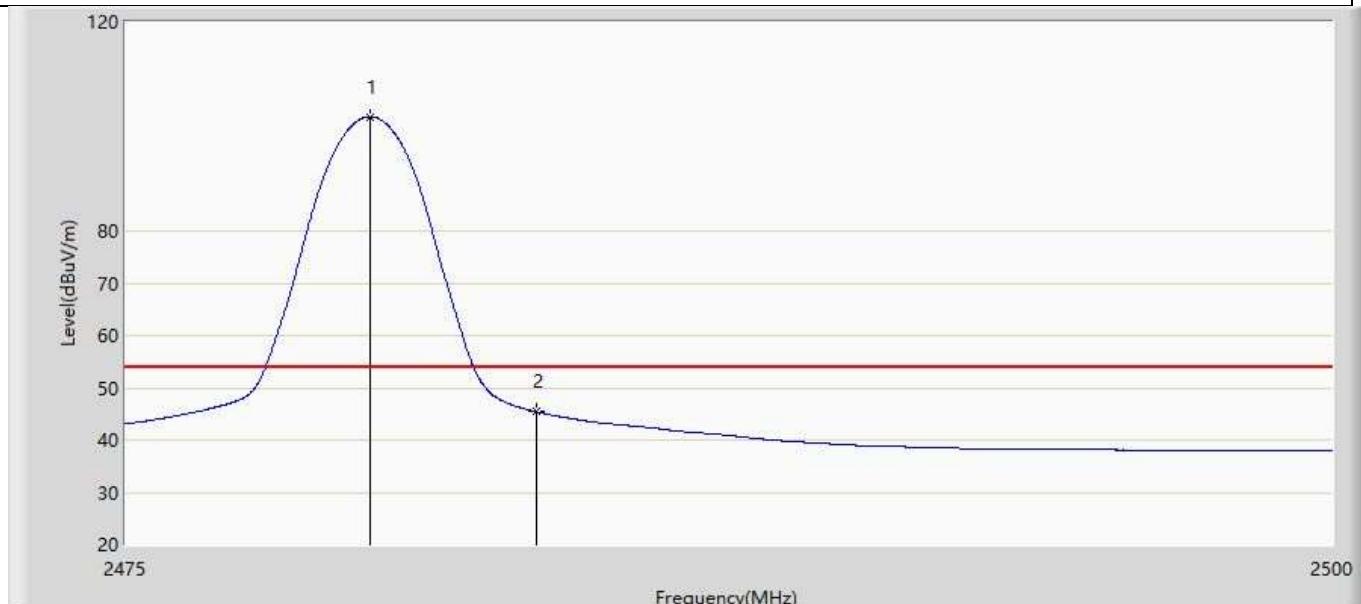
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.212	103.302	67.803	N/A	N/A	35.499	PK
2		2483.500	57.058	21.540	-16.942	74.000	35.517	PK

Profile: 1992204R	Page No.: 35
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded(S=8)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.000	102.455	66.957	N/A	N/A	35.498	AV
2		2483.500	46.289	10.771	-7.711	54.000	35.517	AV

Profile: 1992204R	Page No.: 36
Engineer: Pawn	
Site: AC5	Time: 2019/10/17 - 21:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Hue Outdoor light strip 5m	Power: AC 110V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_Coded(S=8)(GFSK_LE)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.050	101.810	66.312	N/A	N/A	35.498	AV
		2483.500	45.385	9.867	-8.615	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

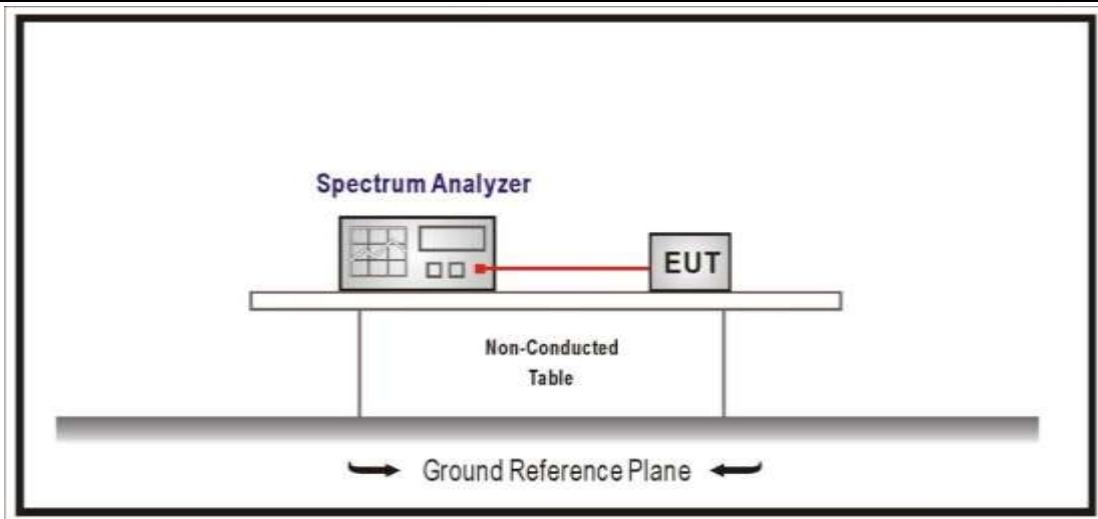
VERDICT: PASS

4.6.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247 (a)(2)
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Systems using digital modulation techniques operate in the 2400-2483.5 MHz. The minimum 6 dB bandwidth shall be at least 500 kHz

4.6.2 Test Setup



4.6.3 Test Procedure

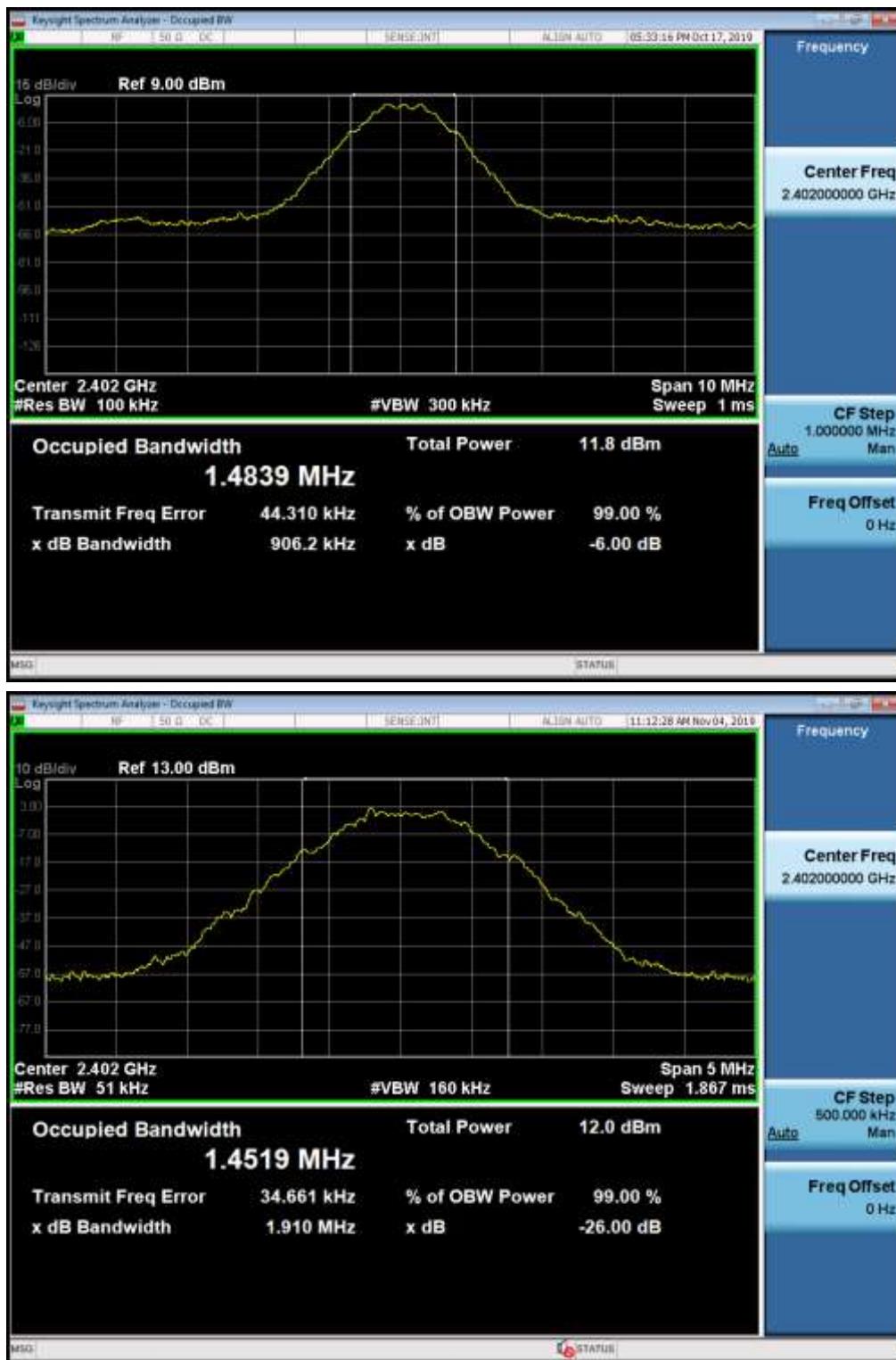
	Reference Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.8	DTS bandwidth
	<input type="checkbox"/> ANSI C63.10	11.8.1	Option 1
	<input checked="" type="checkbox"/> ANSI C63.10	11.8.2	Option 2

4.6.4 Test Data

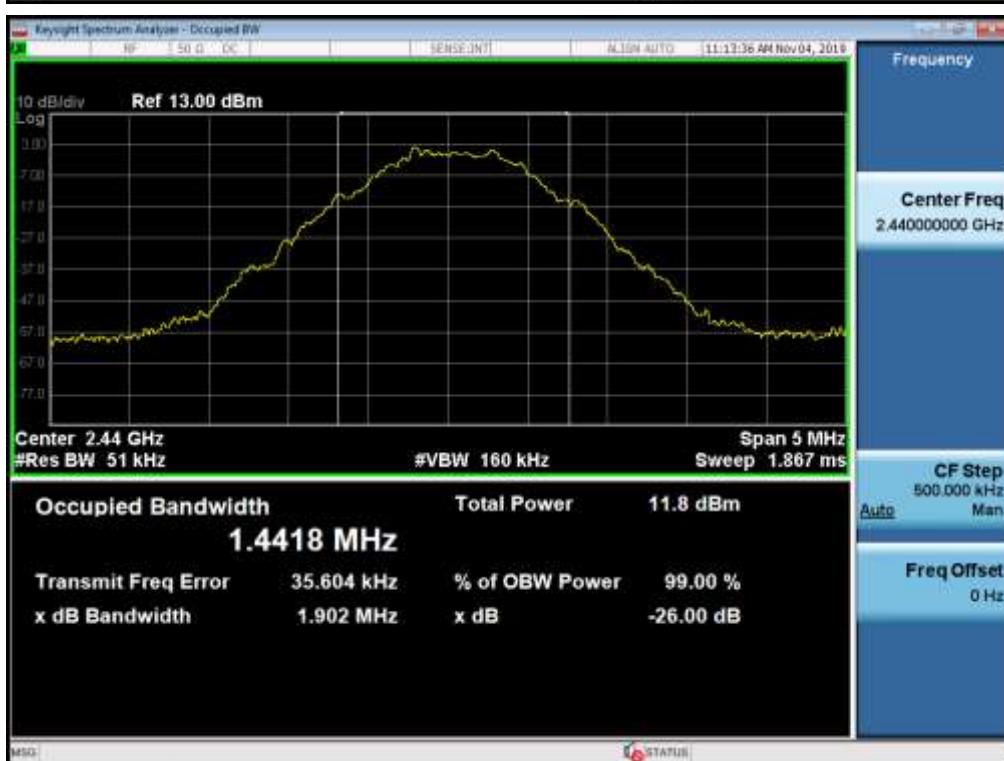
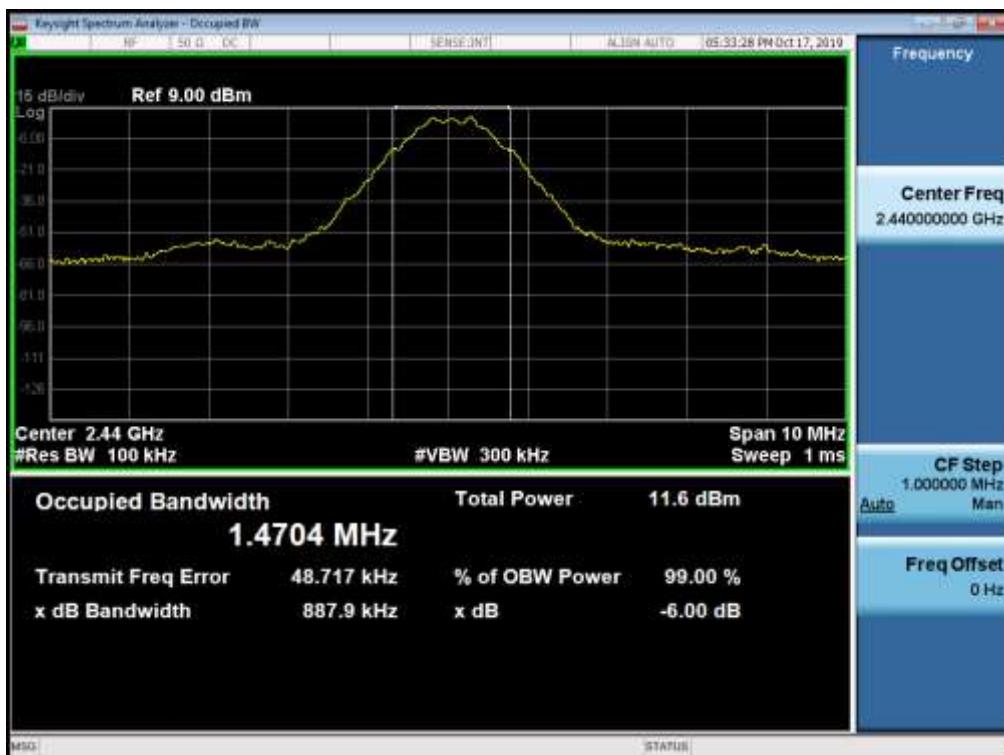
Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (MHz)	6dB Occupied Bandwidth (MHz)	Limit (kHz)	Result
Mode 1	00	2402	1.4519	0.9062	>500	Pass
	19	2440	1.4418	0.8879	>500	Pass
	39	2480	1.4096	0.8896	>500	Pass
Mode 2	00	2402	2.4069	1.612	>500	Pass
	19	2440	2.3733	1.616	>500	Pass
	39	2480	2.3655	1.613	>500	Pass
Mode 3	00	2402	1.5995	0.9274	>500	Pass
	19	2440	1.5843	0.9345	>500	Pass
	39	2480	1.5801	0.9376	>500	Pass
Mode 4	00	2402	1.5352	0.8912	>500	Pass
	19	2440	1.5339	1.052	>500	Pass
	39	2480	1.5242	0.7609	>500	Pass

Note : We evaluated all test modes, shown in the report is the worst data.

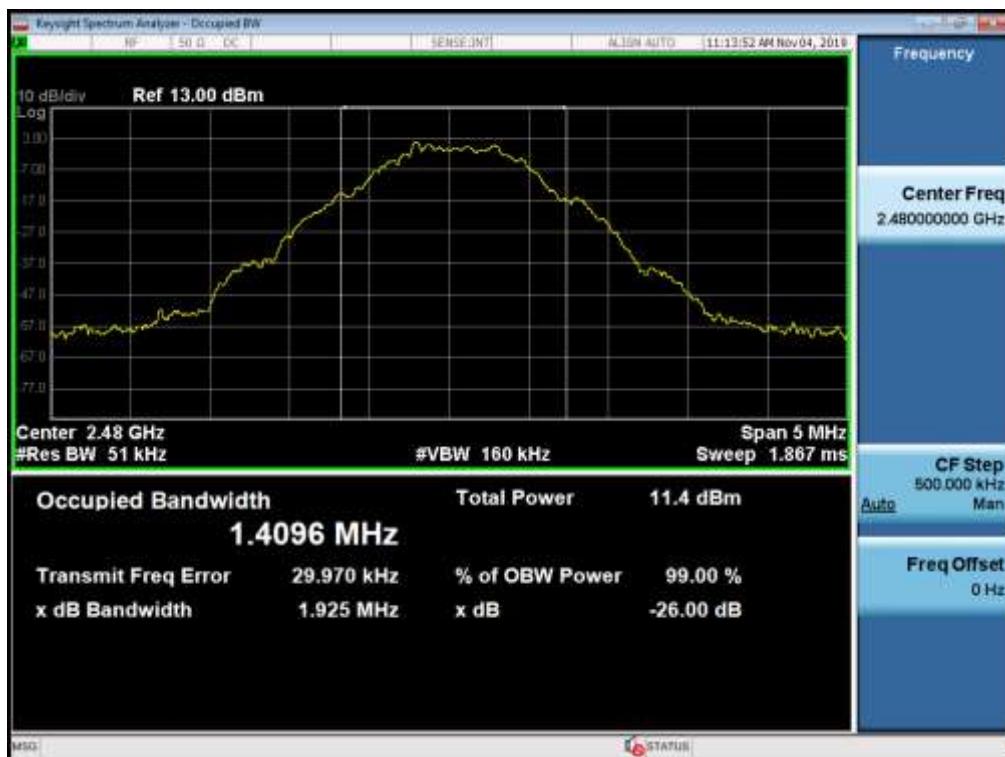
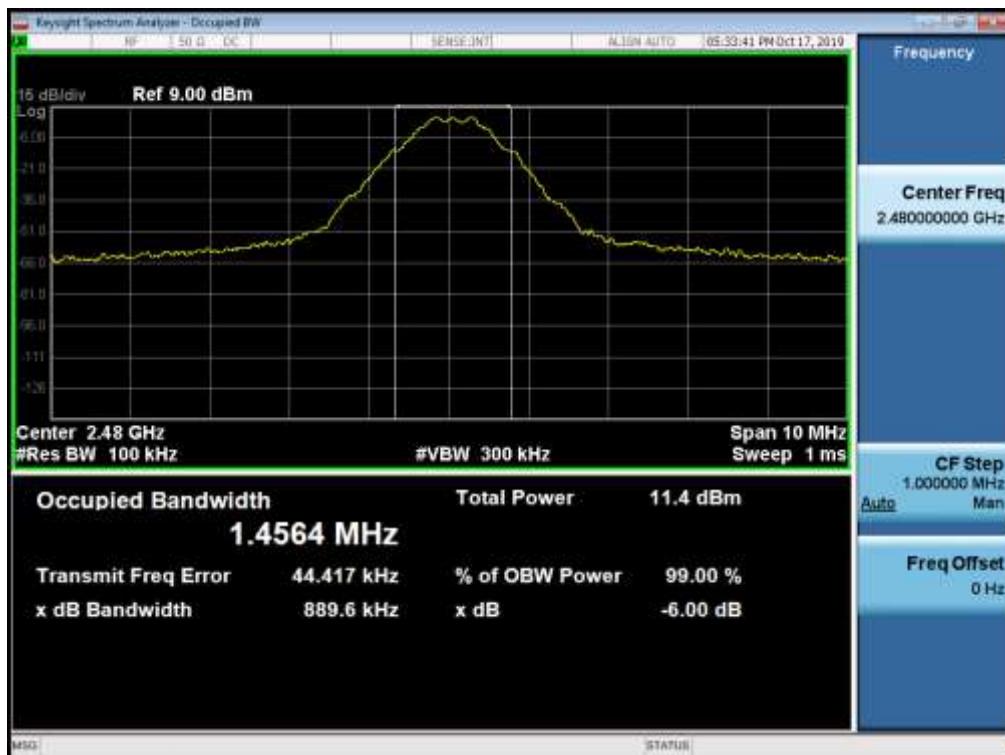
Mode 1 CH00 (2402MHz)



Mode 1 CH19 (2440MHz)



Mode 1 CH39 (2480MHz)



4.7 Fundamental emission output power

VERDICT: PASS

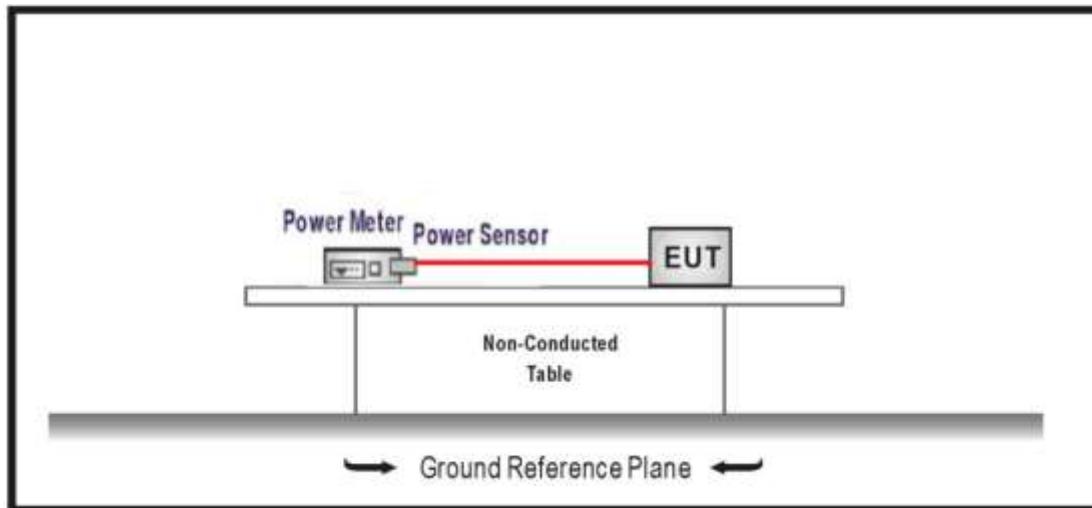
4.7.1 Limit

Standard		FCC Part 15 Subpart C Paragraph 15.247 (b)(3)
<input checked="" type="checkbox"/>	GTX <6dBi	Pout≤30dBm
<input type="checkbox"/>	GTX >6dBi	
<input type="checkbox"/>	Non-Fix point-point	Pout≤30-(GTX-6)
<input type="checkbox"/>	Fix point-point	Pout≤30-[(GTX-6)]/3
<input type="checkbox"/>	Point-to-multipoint	Pout≤30-(GTX-6)
<input type="checkbox"/>	Overlap Beams	Pout≤30-[(GTX-6)]/3
<input type="checkbox"/>	Aggregate power transmitted simultaneously on all beams	Pout≤30-[(GTX-6)]/3
<input type="checkbox"/>	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
<input checked="" type="checkbox"/>	ANSI C63.10	11.9	Fundamental emission output power
<input checked="" type="checkbox"/>	ANSI C63.10	11.9.1	Maximum peak conducted output power
	<input type="checkbox"/> ANSI C63.10	11.9.1.1	RBW \geq DTS bandwidth
	<input type="checkbox"/> ANSI C63.10	11.9.1.2	Integrated band power method
	<input type="checkbox"/> ANSI C63.10	11.9.1.3	PKPM1 Peak power meter method
<input type="checkbox"/>	ANSI C63.10	11.9.2	Maximum conducted (average) output power
	<input type="checkbox"/> ANSI C63.10	11.9.2.2	Measurement using a spectrum analyzer (SA)
	<input type="checkbox"/> ANSI C63.10	11.9.2.2.2	Method AVGSA-1(Duty cycle $\geq 98\%$)
	<input type="checkbox"/> ANSI C63.10	11.9.2.2.3	Method AVGSA-1A(Duty cycle $\geq 98\%$)
	<input type="checkbox"/> ANSI C63.10	11.9.2.2.4	Method AVGSA-2(Duty cycle $\leq 98\%$)
	<input type="checkbox"/> ANSI C63.10	11.9.2.2.5	Method AVGSA-2A(Duty cycle $\leq 98\%$)
	<input type="checkbox"/> ANSI C63.10	11.9.2.2.4	Method AVGSA-3
	<input type="checkbox"/> ANSI C63.10	11.9.2.2.5	Method AVGSA-3A
	<input checked="" type="checkbox"/> ANSI C63.10	11.9.2.3	Measurement using a power meter (PM)
	<input checked="" type="checkbox"/> ANSI C63.10	11.9.2.3.1	Method AVGPM
	<input type="checkbox"/> ANSI C63.10	11.9.2.3.2	Method AVGPM-G

4.7.4 Test Data

Murata:

Mode	Channel	Test Frequency (MHz)	Power Output (dBm)	Limit (dBm)	Result
Mode 1	00	2402	8.98	≤30	Pass
	19	2440	8.67	≤30	Pass
	39	2480	8.03	≤30	Pass
Mode 2	00	2402	9.31	≤30	Pass
	19	2440	9.13	≤30	Pass
	39	2480	9.17	≤30	Pass
Mode 3	00	2402	9.30	≤30	Pass
	19	2440	8.88	≤30	Pass
	39	2480	8.51	≤30	Pass
Mode 4	00	2402	9.06	≤30	Pass
	19	2440	8.69	≤30	Pass
	39	2480	8.48	≤30	Pass

KDS:

Mode	Channel	Test Frequency (MHz)	Power Output (dBm)	Limit (dBm)	Result
Mode 1	00	2402	8.73	≤30	Pass
	19	2440	8.52	≤30	Pass
	39	2480	8.03	≤30	Pass
Mode 2	00	2402	9.15	≤30	Pass
	19	2440	9.05	≤30	Pass
	39	2480	9.02	≤30	Pass
Mode 3	00	2402	9.19	≤30	Pass
	19	2440	8.76	≤30	Pass
	39	2480	8.34	≤30	Pass
Mode 4	00	2402	8.92	≤30	Pass
	19	2440	8.52	≤30	Pass
	39	2480	8.31	≤30	Pass

4.8 Power Density

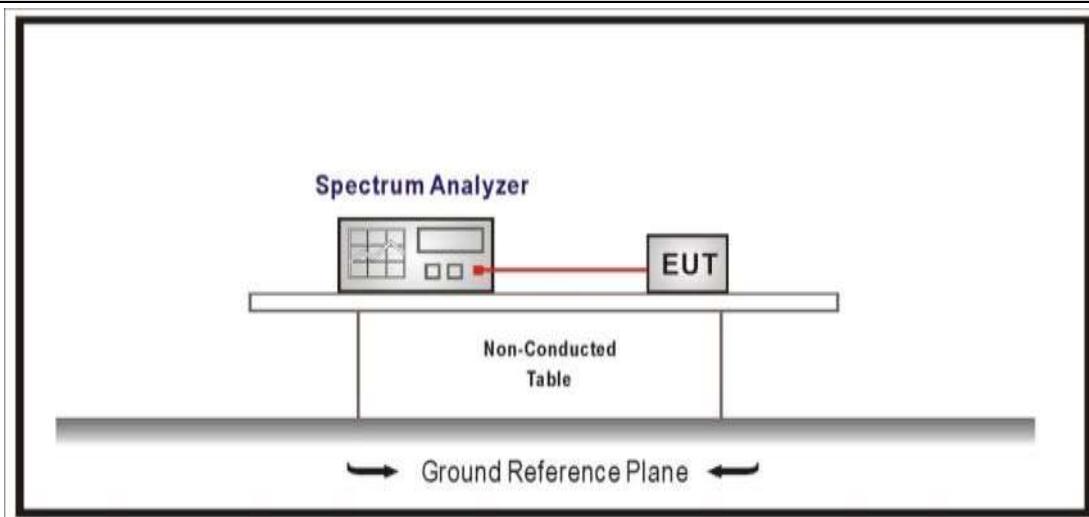
VERDICT: PASS

4.8.1 Limit:

Standard	FCC Part 15 Subpart C Paragraph 15.247 (b)(3)
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Power Spectral Density $\leq 8\text{dBm}/3\text{kHz}$

4.8.2 Test Setup



4.8.3 Test Procedure

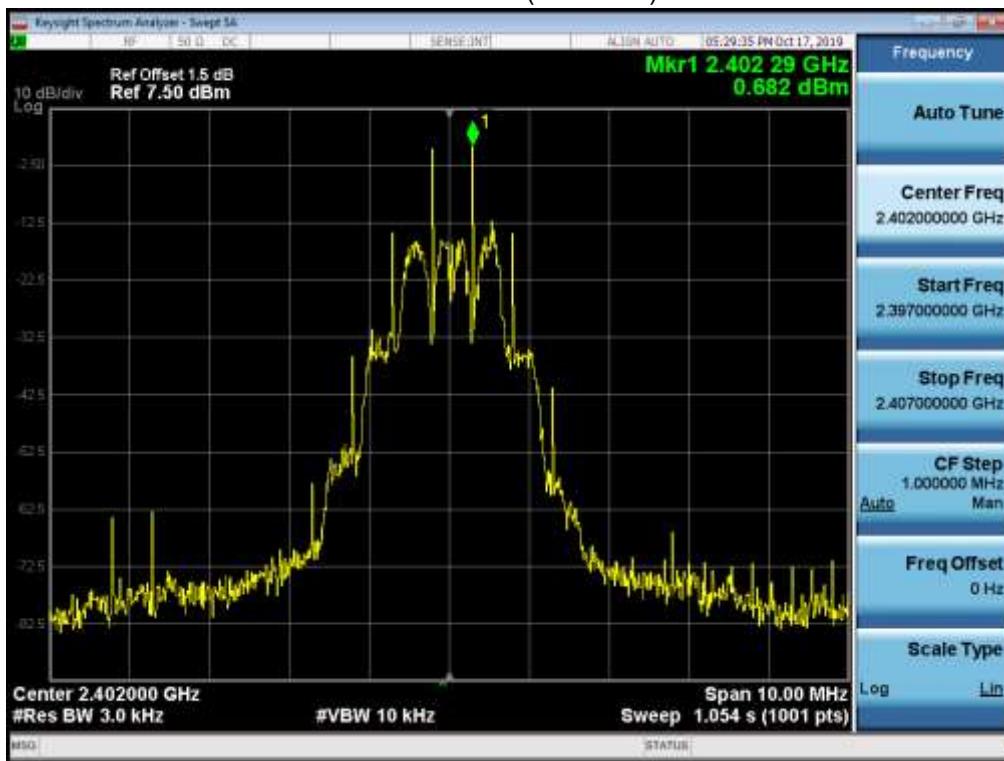
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.10	Maximum power spectral density level in the fundamental emission
<input checked="" type="checkbox"/>	ANSI C63.10	11.10.2	Method PKPSD (peak PSD)
	ANSI C63.10	11.10.3	Method AVGPSD-1(Duty cycle $\geq 98\%$)
	ANSI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

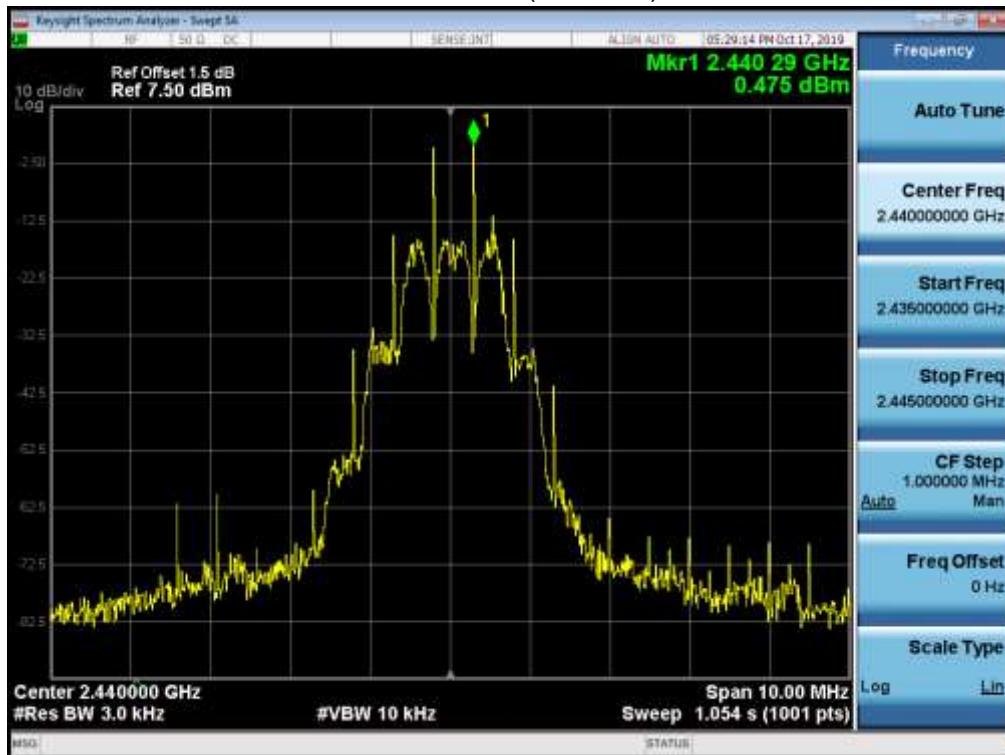
Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)	Total Measurement PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
Mode 1	00	2402	-11.582	-11.582	≤8	Pass
	19	2440	-12.051	-12.051	≤8	Pass
	39	2480	-12.269	-12.269	≤8	Pass
Mode 2	00	2402	-13.254	-13.254	≤8	Pass
	19	2440	-13.358	-13.358	≤8	Pass
	39	2480	-13.839	-13.839	≤8	Pass
Mode 3	00	2402	-13.037	-13.037	≤8	Pass
	19	2440	-12.812	-12.812	≤8	Pass
	39	2480	-13.715	-13.715	≤8	Pass
Mode 4	00	2402	0.682	0.682	≤8	Pass
	19	2440	0.475	0.475	≤8	Pass
	39	2480	-0.074	-0.074	≤8	Pass

Note: We evaluated all test modes, shown in the report is the worst data.

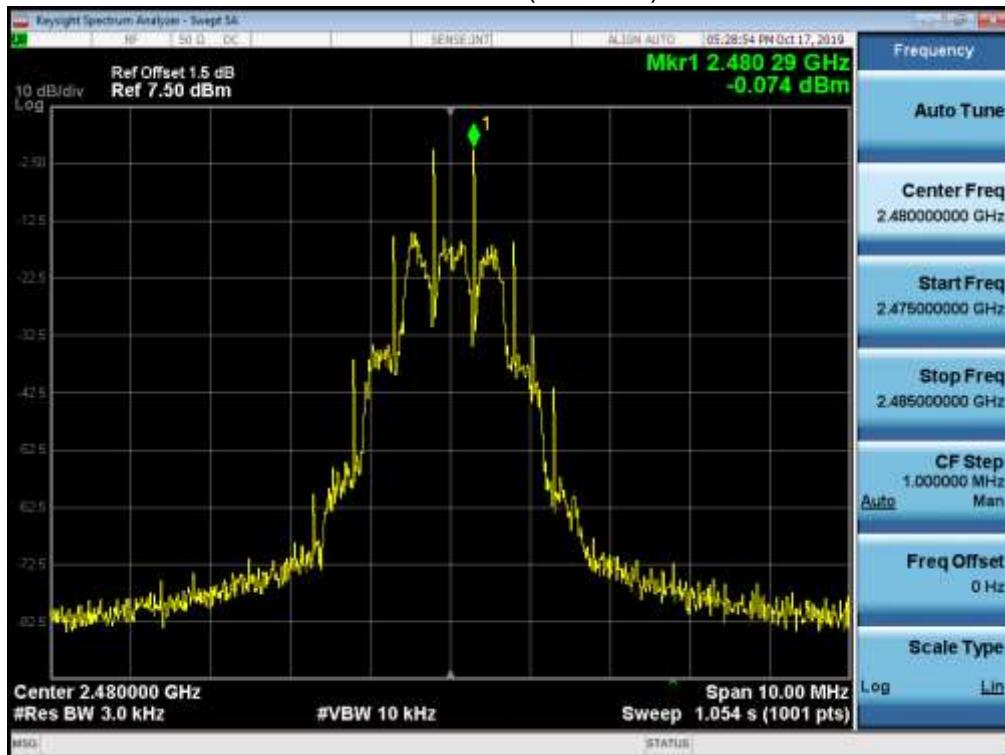
Mode 5 CH00(2402MHz)



Mode 5 CH19(2440MHz)



Mode 5 CH39(2480MHz)



4.9 Antenna Requirement**VERDICT: PASS****4.9.1 Limit:**

Standard	FCC Part 15 Subpart C Paragraph 15.203
<p>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.</p>	

4.9.2 Antenna Connector Construction:

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

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

4.10 Test setup photo and EUT Photo

VERDICT: PASS

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

The End