



Test report No:
22B0838R-RF-US-P06V02

FCC & ISED TEST REPORT

Product Name	LED lamp
Trademark	PHILIPS
Model and /or type reference	9290023351B
FCC ID	2AGBW9290023351BX
IC	20812-23351BX
Applicant's name / address	Signify (China) Investment Co., Ltd. Building No.9, Lane 888, Tianlin Road, Minhang district, 200233, Shanghai, China
Test method requested, standard	CFR 47, FCC Part 15 C ANSI C63.10: 2013 RSS-Gen RSS-247
Verdict Summary	IN COMPLIANCE
Tested by (name / position & signature)	Jun Xu/ Project Engineer 
Approved by (name / position & signature)	Jack Zhang/ Manager 
Date of issue	2023-03-30
Report Version	V1.0
Report template No	Template_FCC 15.247-RF-V1.0

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COMPETENCES AND GUARANTEES

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

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

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

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

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GENERAL CONDITIONS

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Date(receive sample)	Nov. 23, 2022
Date (start test)	Nov. 24, 2022
Date (finish test)	Dec. 09, 2022

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
22B0838R-RF-US-P06V02	V1.0	Initial issue of report.	2023-03-30

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.
4. The test results presented in this report relate only to the object tested.
5. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
6. This report will not be used for social proof function in China market.
7. DEKRA declines any responsibility with the following test data provided by customer that may affect the validity of result:
 - Chapter 1.1 General Description of the Item(s);
 - Chapter 1.2 Antenna Information;
 - Chapter 1.3 Channel List.

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	100726	2022.09.17	2023.09.16
Two-Line V-Network	R&S	ENV216	101044	2022.03.12	2023.03.11
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-8S	TR1-TH	2022.07.07	2023.07.06
Dekra test software	Dekra	-	-	-	-

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

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2022.12.08	2023.12.07
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2022.12.08	2023.12.07
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2022.07.14	2023.07.13
4TX MIMO Power Sensor	Keysight	X8750A	MY59400102	2022.03.16	2023.03.15
Coaxial Cable	Woken	N/A	N/A	2022.01.18	2023.01.17
Temperature/Humidity Meter	RTS	RTS-8S	RF08	2022.08.23	2023.08.22

Radiated Emission(30MHz-1GHz) / AC3

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100176	2022.07.10	2023.07.09
Loop Antenna	R&S	HFH2-Z2	833799/003	2022.04.15	2023.04.14
Bilog Antenna	Teseq GmbH	CBL6112D	27613	2022.08.28	2023.08.27
Coaxial Cable	Huber+Suhner	RG 214	AC3-C	2022.03.30	2023.03.29
Temperature/Humidity Meter	RTS	RTS-8S	AC3-TH	2022.07.07	2023.07.06
Dekra test software	Dekra	-	-	-	-

Radiated Emission(1GHz-40GHz) / AC5

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2022.12.08	2023.12.07
Amplifier	SKET	LNPA_0118G-45	SK2021041201	2022.04.15	2023.04.14
Preamplifier	EMCI	EMC184045SE	980263	2022.07.19	2023.07.18
DRG Horn Antenna	ETS-Lindgren	3117	00167055	2022.08.29	2023.08.28
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2022.05.19	2023.05.18
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2022.03.30	2023.03.29
Coaxial Cable	ROSENBERGER	LA1-C011- 2000/3000	AC5-40G	2022.03.21	2023.03.20
High-Pass Filter	Wainwright	WHKX3.0/18G- 12SS	AC5&AC6	2022.06.07	2023.06.06
Temperature/Humidity Meter	RTS	RTS-8S	AC5-TH	2022.07.07	2023.07.06
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 comply 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	± 1.27 dB
Radiated Emission Band Edge	± 3.9 dB
DTS Bandwidth	± 150 Hz
Occupied Bandwidth	± 1 kHz
Power Density	± 1.27 dB

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Product Name	LED lamp
Model No.	9290023351B
FCC ID	2AGBW9290023351BX
IC	20812-23351BX
Manufacturer	Signify (China) Investment Co., Ltd.
Manufacturer Address	Building No.9, Lane 888, Tianlin Road, Minhang district, 200233, Shanghai, China

Wireless specification	Bluetooth 5.0			
Operating frequency range(s)	2400~2483.5MHz			
Type of Modulation	GFSK			
PHYs	<input checked="" type="checkbox"/> LE 1M	<input checked="" type="checkbox"/> LE 2M	<input checked="" type="checkbox"/> LE Coded S=2/8	
Data Rate	<input checked="" type="checkbox"/> 1Mbit/s	<input checked="" type="checkbox"/> 2Mbit/s	<input checked="" type="checkbox"/> 500/125 Kbit/s	
Number of channel	40			

Rated power supply	Voltage and Frequency			
	<input type="checkbox"/>	AC: 220 – 240 V, 50/60 Hz		
	<input checked="" type="checkbox"/>	110-130 Vac, 50/60 Hz;		
	<input type="checkbox"/>	HMD: 9V,2.23A or 5V,3A		
	<input type="checkbox"/>	Battery:3.85V		
Mounting position	<input checked="" type="checkbox"/>	Table top equipment		
	<input checked="" type="checkbox"/>	Wall/Ceiling mounted equipment		
	<input type="checkbox"/>	Floor standing equipment		
	<input type="checkbox"/>	Head-mounted equipment		
	<input type="checkbox"/>	Other: Watch		

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	
	<input type="checkbox"/>	Others:.....	
Antenna technology	<input checked="" type="checkbox"/>	SISO	
	<input type="checkbox"/>	MIMO	<input type="checkbox"/> CDD
			<input type="checkbox"/> Beam-forming
Antenna Type	<input type="checkbox"/>	External	<input type="checkbox"/> Dipole
			<input type="checkbox"/> Sectorized
	<input checked="" type="checkbox"/>	Internal	<input type="checkbox"/> PIFA
			<input checked="" type="checkbox"/> PCB
			<input type="checkbox"/> Dipole
			<input type="checkbox"/> Others.....
Antenna Gain	-2.5 dBi		

1.3 Channel List

Bluetooth Working Frequency of Each Channel:							
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

Note: The general description of the Item(s), antenna information and channel list in clause 1 are provided and confirmed by the client.

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	Mode1: Transmit by LE_1Mbps
	Mode2: Transmit by LE_2Mbps
	Mode3: Transmit by LE_Coded S=2
	Mode4: Transmit by LE_Coded S=8

2.2 Accessories Information

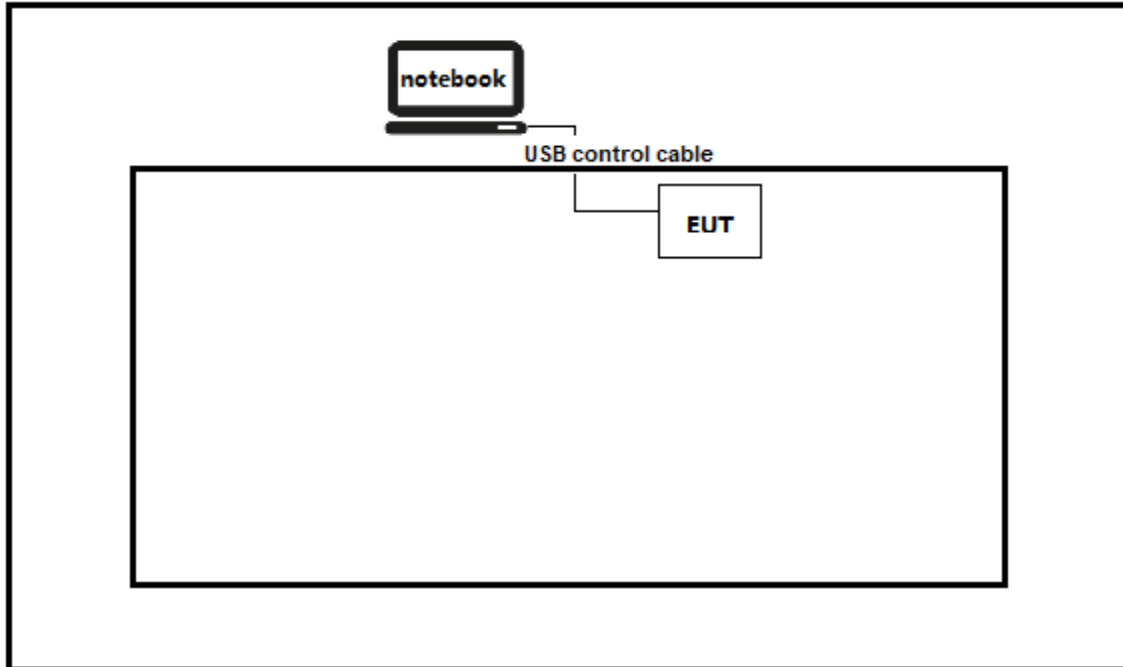
Accessories Information	Brand/model name	Cable		
		Length used during test [m]	Attached during test	Shielded
USB Cable	N/A	10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
USB Cable	N/A	0.5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

2.3 Auxiliary equipment / Test software for the EUT

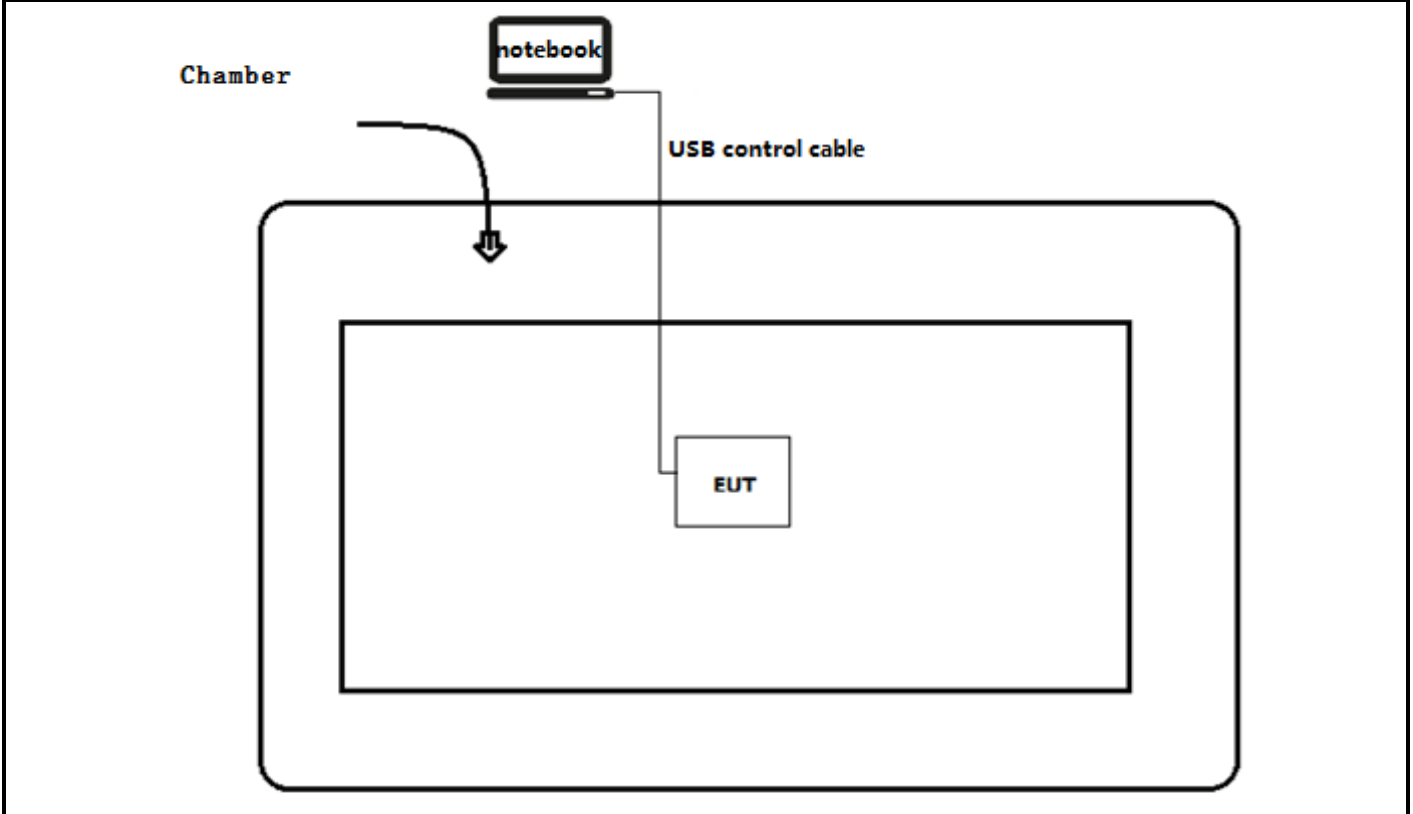
Auxiliary equipment	Type / Version	Manufacturer	Supplied by
Notebook	2526	Think Pad	N/A
Software	Type / Version	Manufacturer	Supplied by
HueApprobatonTool	N/A	N/A	N/A

2.4 Test Configuration / Block diagram used for tests

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Radiated Emission



2.5 Testing process

1	Setup the EUT as shown in Section 2.4.
2	Run the software "HueApprobationTool" on the notebook computer.
3	Open the serial port and enter the corresponding commands to configure the test mode, test channel, test power and data rate.
4	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	2021	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
KDB558074 D01 v05r02	2019	Guidance for performing compliance measurements on Digital Transmission System (DTS) operating under section 15.247
RSS-Gen Issue 5 Amendment 2	2021	General Requirements for Compliance of Radio Apparatus
RSS-247 Issue 2	2017	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

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

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

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

3.3 Overview of results

For FCC

Requirement – Test case	Basic standard(s)	Verdict	Remark
AC Power Line Conducted Emission	FCC 15.207	PASS	---
Emissions in restricted frequency bands	FCC 15.247(b)(3)	PASS	---
Duty cycle	ANSI C63.10:2013	PASS	---
Emissions in non-restricted frequency bands	FCC 15.247(d), FCC 15.209	PASS	---
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	---
Band Edge	RSS-Gen Issue 5 Section 8.10	PASS	---
Fundamental emission output power	RSS-247 Issue 2 Section 5.4(d)	PASS	---
DTS Bandwidth	RSS-Gen Issue 5 Section 6.7	PASS	---
Power Spectral Density	RSS-247 Issue 2 Section 5.2(b)	PASS	---
Antenna Requirement	RSS-Gen Issue 5 Section 6.8	PASS	---

3.4 Test Facility

USA : FCC Designation Number: CN1199

CA : ISED CAB identifier: CN0040

4 TEST RESULTS

4.1 AC Power Line Conducted Emission

VERDICT: PASS

4.1.1 Limit

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

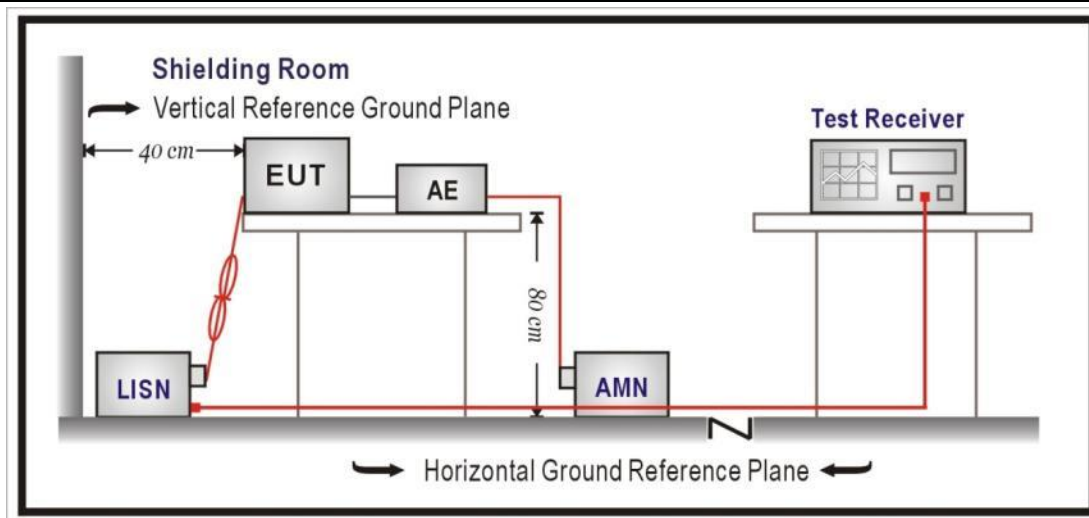
¹⁾ At the transition frequency, the lower limit applies.

²⁾ The limit decreases linearly with the logarithm of the frequency.

NOTE 1: The exclusion band for transmitters shall be considered for transmitters operating at frequencies below 30 MHz.

NOTE 2: Where the AC output port is directly connected (or via a circuit breaker) to the AC power input port of the EUT the AC power output port need not to be tested.

4.1.2 Test Setup

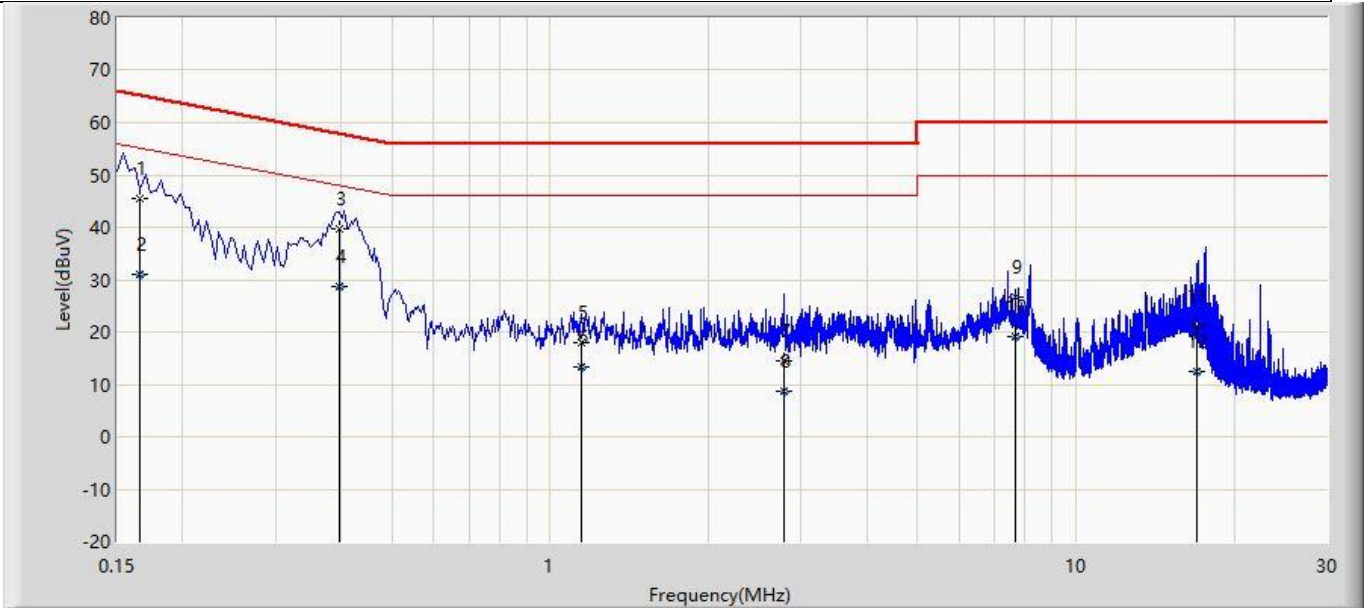


4.1.3 Test Procedure

	References Rule	Chapter	Item
<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:22B0838R	Page No.: 91
Engineer: YuLiu	
Site: TR1	Time: 2022/12/05 - 01:02
Limit: FCC_Part15.207	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1: Transmit by LE_1Mbps 2402MHz	

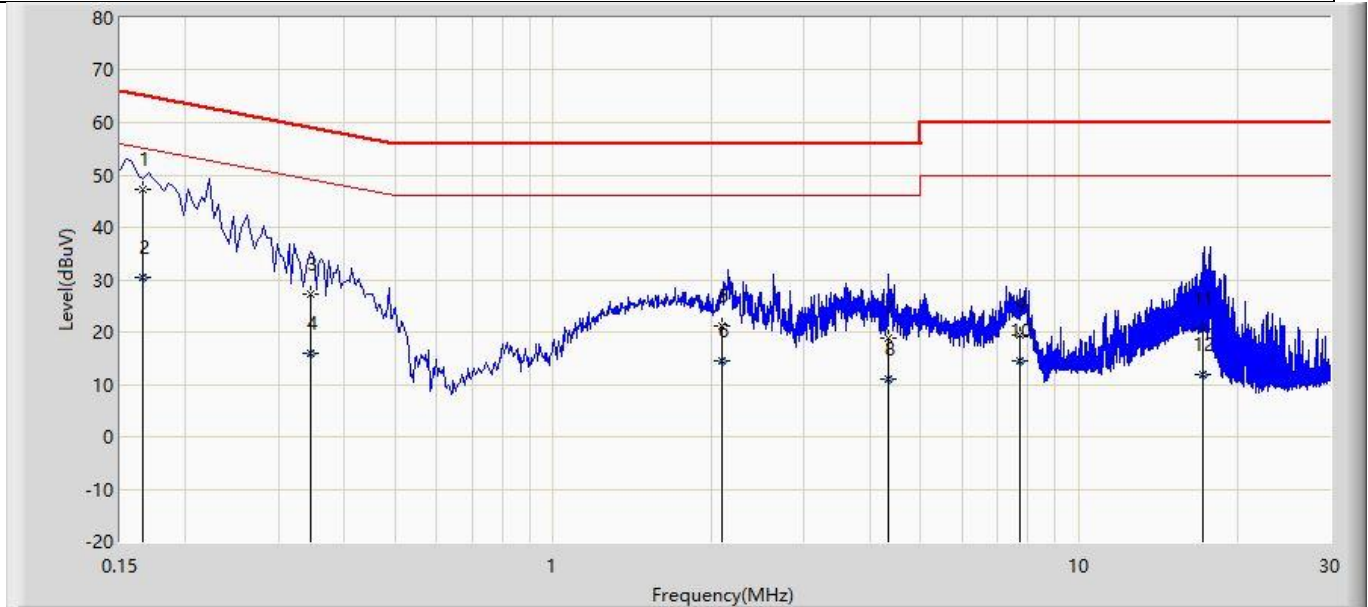


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.166	45.589	36.017	-19.584	65.174	9.572	QP
2		0.166	31.143	21.571	-24.030	55.174	9.572	AV
3	*	0.398	39.636	30.024	-18.259	57.895	9.612	QP
4		0.398	28.700	19.088	-19.195	47.895	9.612	AV
5		1.146	17.842	8.188	-38.158	56.000	9.654	QP
6		1.146	13.264	3.609	-32.736	46.000	9.654	AV
7		2.782	14.516	4.796	-41.484	56.000	9.719	QP
8		2.782	8.737	-0.982	-37.263	46.000	9.719	AV
9		7.674	26.743	16.815	-33.257	60.000	9.928	QP
10		7.674	18.994	9.066	-31.006	50.000	9.928	AV
11		16.970	21.246	11.051	-38.754	60.000	10.196	QP
12		16.970	12.519	2.324	-37.481	50.000	10.196	AV

Note:

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

Profile: 22B0838R	Page No.: 92
Engineer: YuLiu	
Site: TR1	Time: 2022/12/05 - 01:16
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT: LED lamp	Power: AC 120V/60Hz
Note: Mode1: Transmit by LE_1Mbps 2402MHz	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.166	47.313	37.730	-17.845	65.158	9.582	QP
2		0.166	30.335	20.752	-24.824	55.158	9.582	AV
3		0.346	27.195	17.596	-31.863	59.058	9.599	QP
4		0.346	16.049	6.450	-33.009	49.058	9.599	AV
5		2.090	21.016	11.337	-34.984	56.000	9.679	QP
6		2.090	14.460	4.781	-31.540	46.000	9.679	AV
7		4.338	18.718	8.934	-37.282	56.000	9.784	QP
8		4.338	10.880	1.095	-35.120	46.000	9.784	AV
9		7.730	19.559	9.628	-40.441	60.000	9.931	QP
10		7.730	14.514	4.583	-35.486	50.000	9.931	AV
11		17.178	20.455	10.276	-39.545	60.000	10.178	QP
12		17.178	11.769	1.590	-38.231	50.000	10.178	AV

Note:

1. " * ", means this data is the worst emission level.
2. 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 15.209	
Restricted Bands of operationfor FCC			
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 Bands of operationfor IC			
0.090 - 0.110	13.36 - 13.41	960 - 1427	9.0 - 9.2
0.495 - 0.505	16.42 - 16.423	1435 - 1626.5	9.3 - 9.5
2.1735 - 2.1905	16.69475 - 16.69525	1645.5 - 1646.5	10.6 - 12.7
3.020 - 3.026	16.80425 - 16.80475	1660 - 1710	13.25 - 13.4
4.125 - 4.128	25.5 - 25.67	1718.8 - 1722.2	14.47 - 14.5
4.17725 - 4.17775	37.5 - 38.25	2200 - 2300	15.35 - 16.2
4.20725 - 4.20775	73 - 74.6	2310 - 2390	17.7 - 21.4
5.677 - 5.683	74.8 - 75.2	2483.5 - 2500	22.01 - 23.12
6.215 - 6.218	108 - 138	2655 - 2900	23.6 - 24.0
6.26775 - 6.26825	149.9 - 150.05	3260 - 3267	31.2 - 31.8
6.31175 - 6.31225	156.52475 - 156.52525	3332 - 3339	36.43 - 36.5
8.291 - 8.294	156.7 - 156.9	3345.8 - 3358	Above 38.6
8.362 - 8.366	162.0125 - 167.17	3500 - 4400	
8.37625 - 8.38675	167.72 - 173.2	4500 - 5150	
8.81425 - 8.81475	240 - 285	5350 - 5460	
12.29 - 12.293	322 - 335.4	7250 - 7750	
12.51975 - 12.52025	399.9 - 410	8025 - 8500	
12.57675 - 12.57725	608 - 614	--	

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)

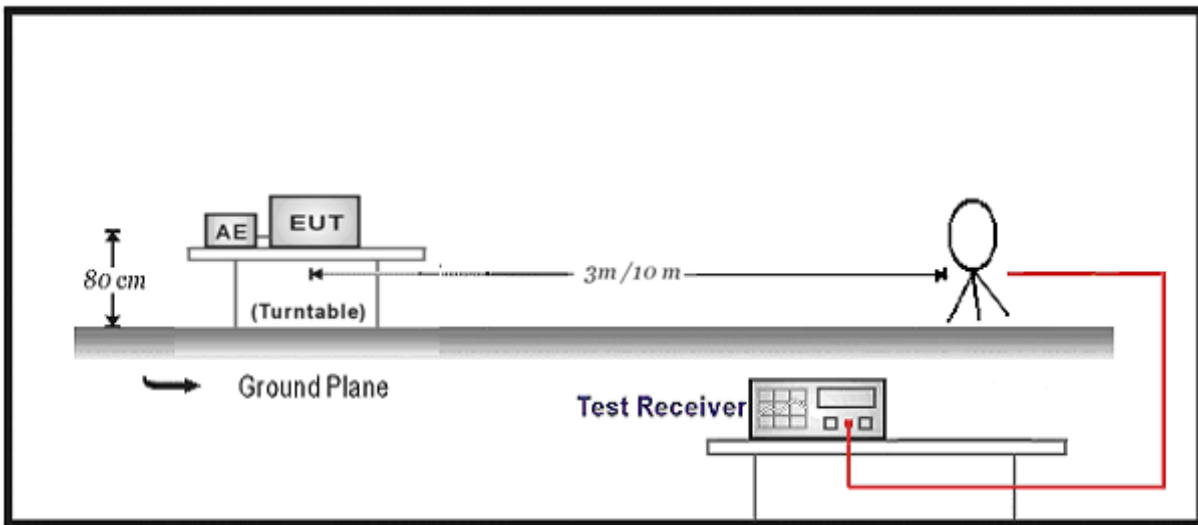
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed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

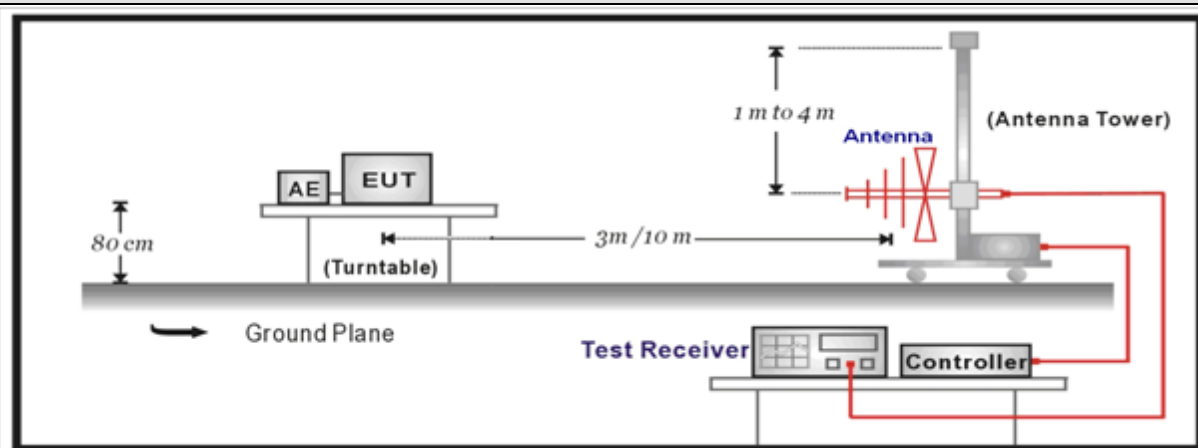
Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified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

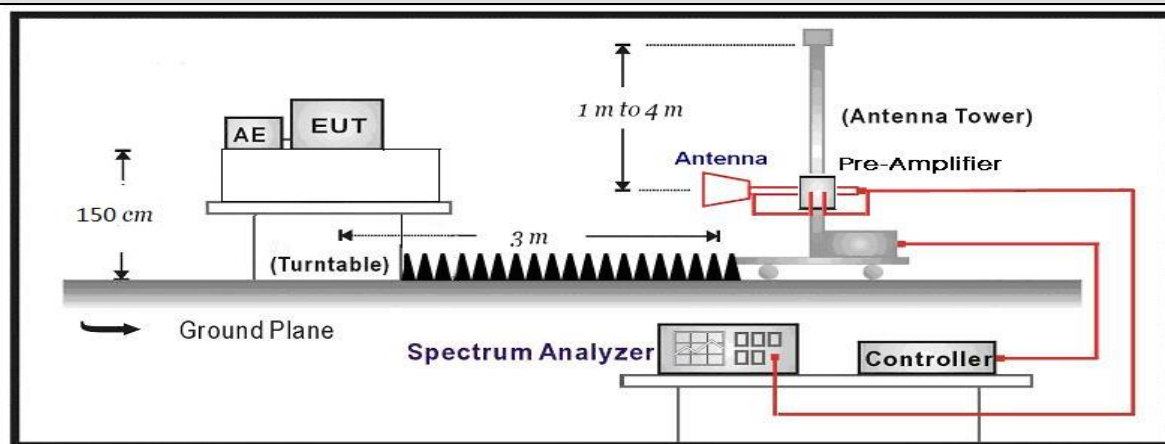
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



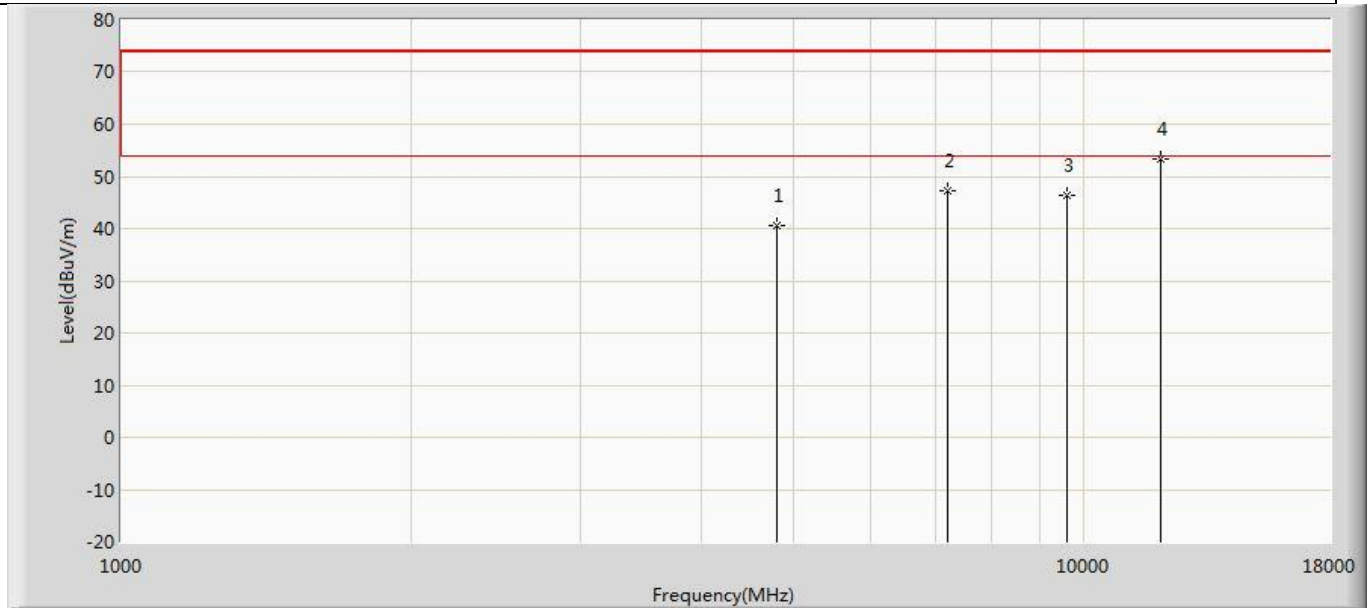
Above 1GHz Test Setup:



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

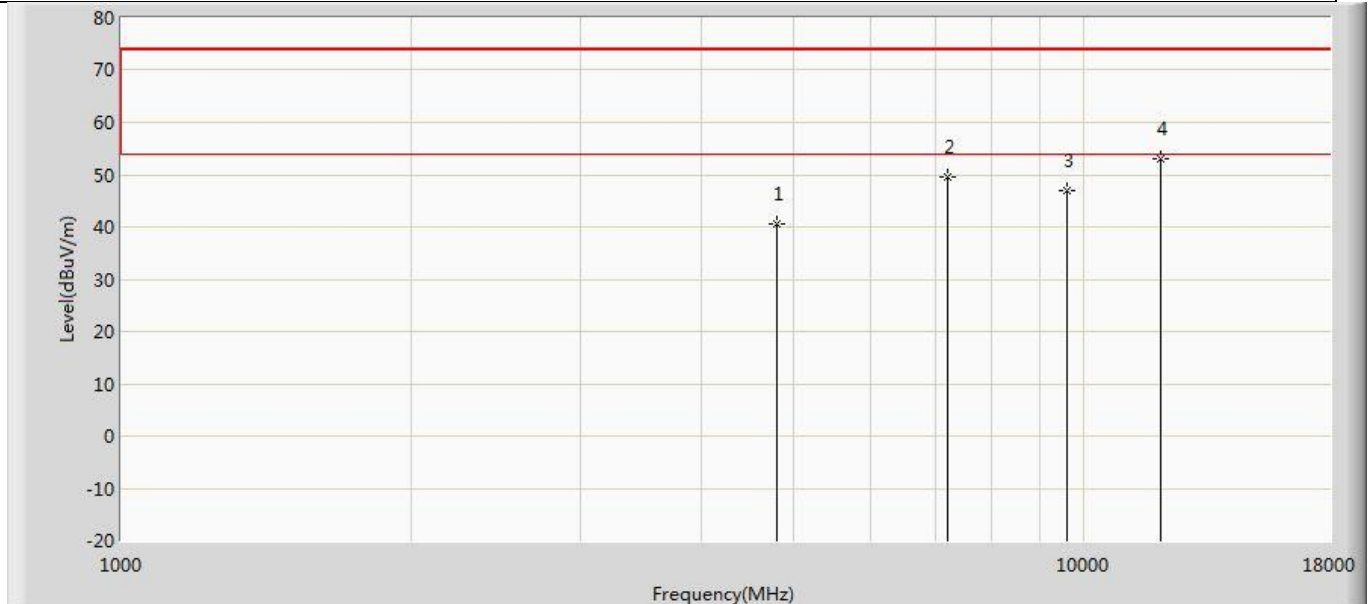
4.2.4 Test Data

Profile: 22B0838R	Page No.: 37
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode1:Transmit at 2402MHz by BLE 1M	



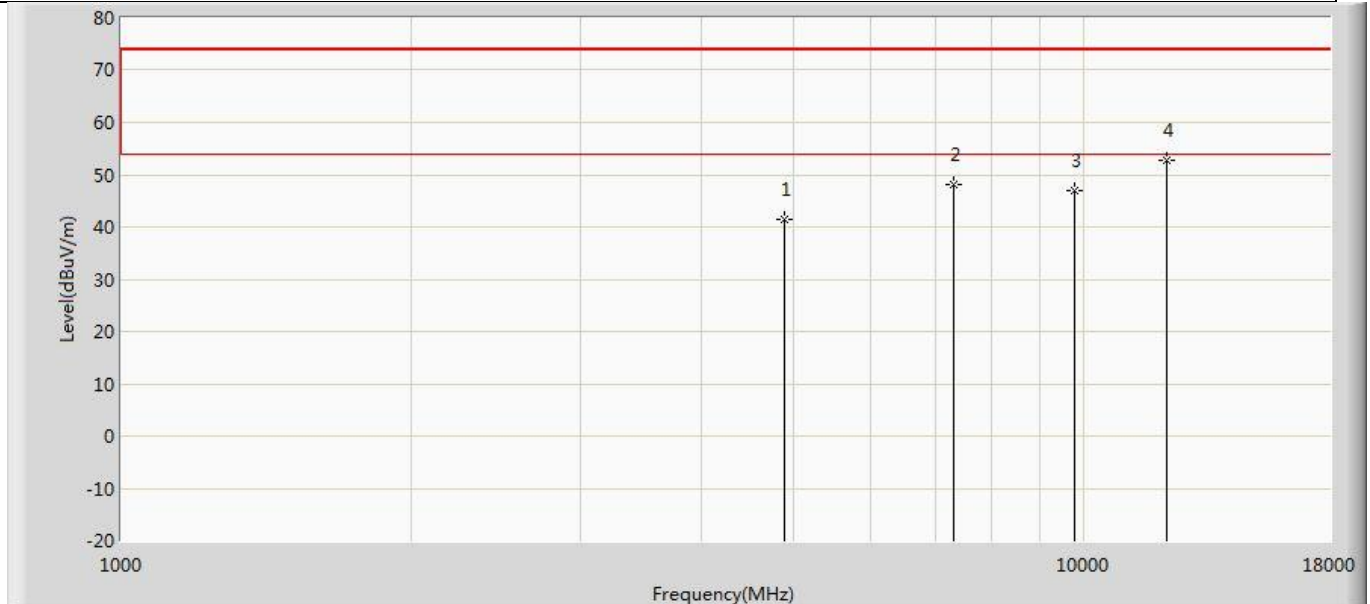
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	40.641	55.621	-33.359	74.000	-14.981	PK
2		7205.000	47.250	58.062	-26.750	74.000	-10.813	PK
3		9608.000	46.509	54.603	-27.491	74.000	-8.094	PK
4	*	12016.000	53.452	58.091	-20.548	74.000	-4.639	PK

Profile: 22B0838R	Page No.: 38
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode1:Transmit at 2402MHz by BLE 1M	



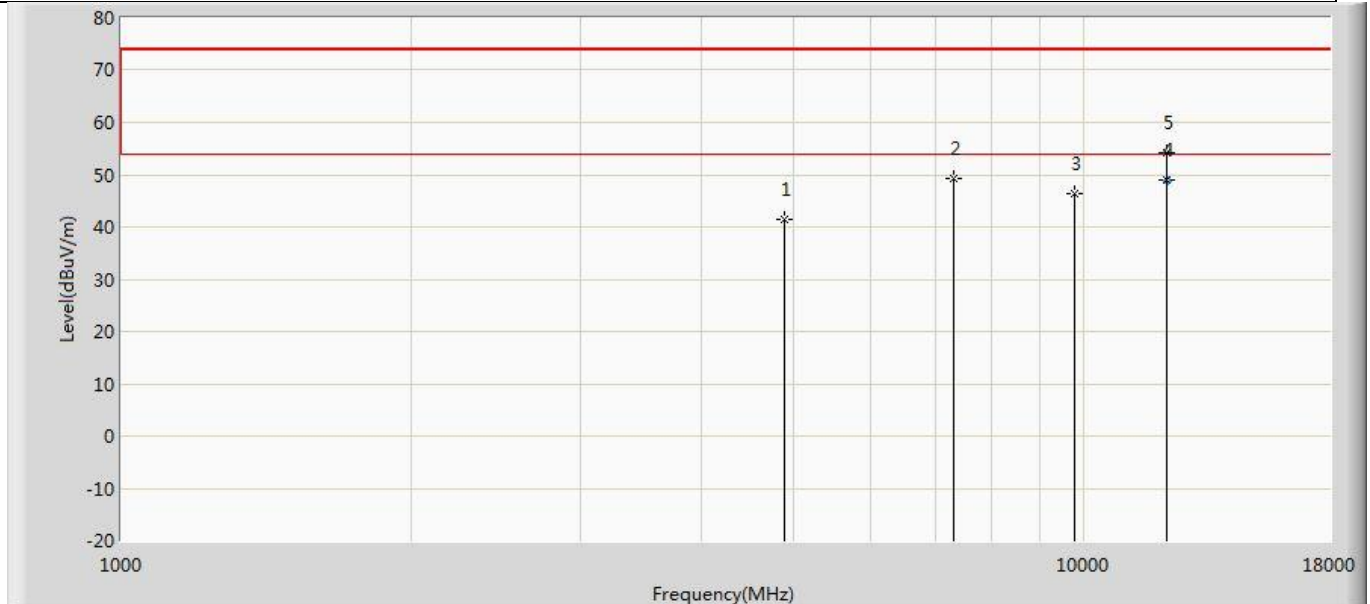
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	40.696	55.676	-33.304	74.000	-14.981	PK
2		7205.000	49.536	60.348	-24.464	74.000	-10.813	PK
3		9608.000	47.045	55.139	-26.955	74.000	-8.094	PK
4	*	12016.000	53.052	57.691	-20.948	74.000	-4.639	PK

Profile: 22B0838R	Page No.: 39
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode1:Transmit at 2440MHz by BLE 1M	



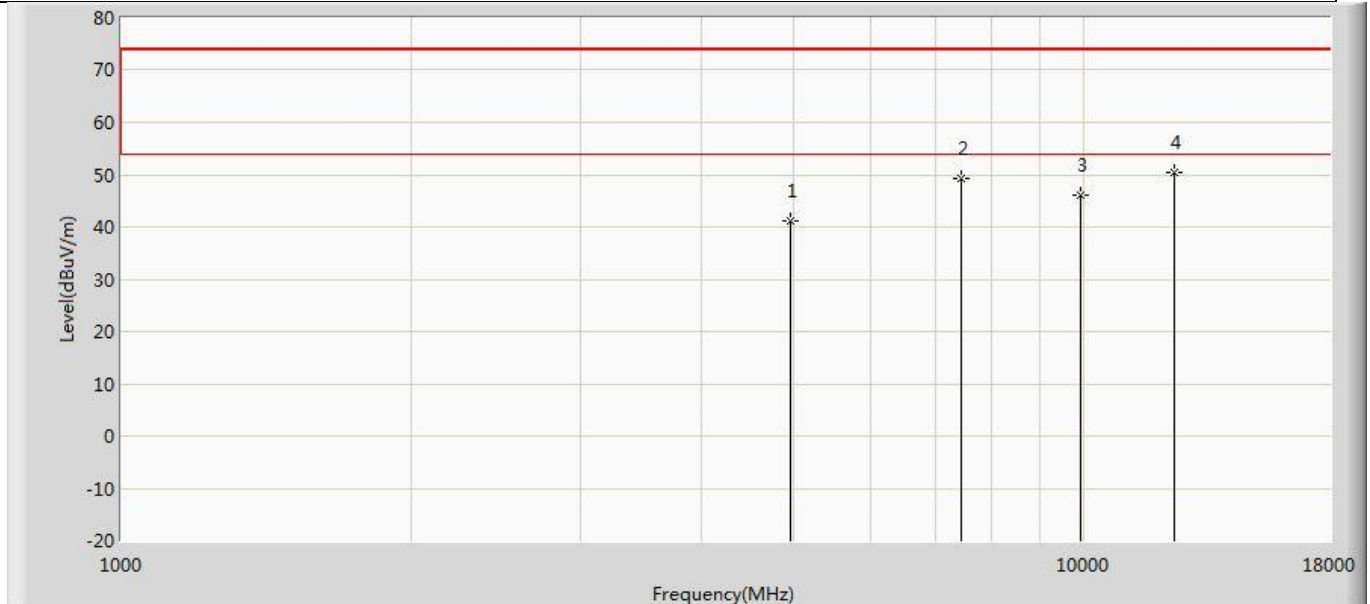
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.465	56.065	-32.535	74.000	-14.600	PK
2		7324.000	48.161	59.040	-25.839	74.000	-10.879	PK
3		9760.000	46.829	54.626	-27.171	74.000	-7.797	PK
4	*	12203.000	52.848	57.748	-21.152	74.000	-4.900	PK

Profile: 22B0838R	Page No.: 40
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode1:Transmit at 2440MHz by BLE 1M	



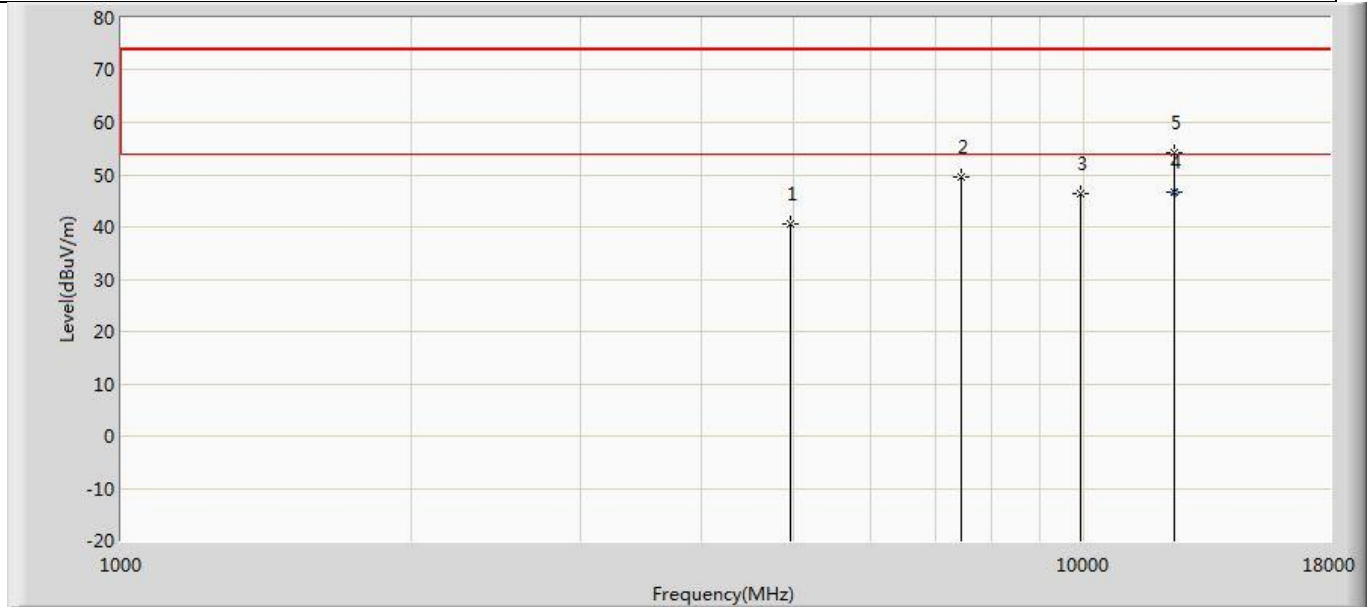
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.506	56.106	-32.494	74.000	-14.600	PK
2		7324.000	49.376	60.255	-24.624	74.000	-10.879	PK
3		9760.000	46.484	54.281	-27.516	74.000	-7.797	PK
4	*	12200.910	49.100	53.982	-4.900	54.000	-4.882	AV
5		12203.000	54.191	59.091	-19.809	74.000	-4.900	PK

Profile: 22B0838R	Page No.: 41
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode1:Transmit at 2480MHz by BLE 1M	



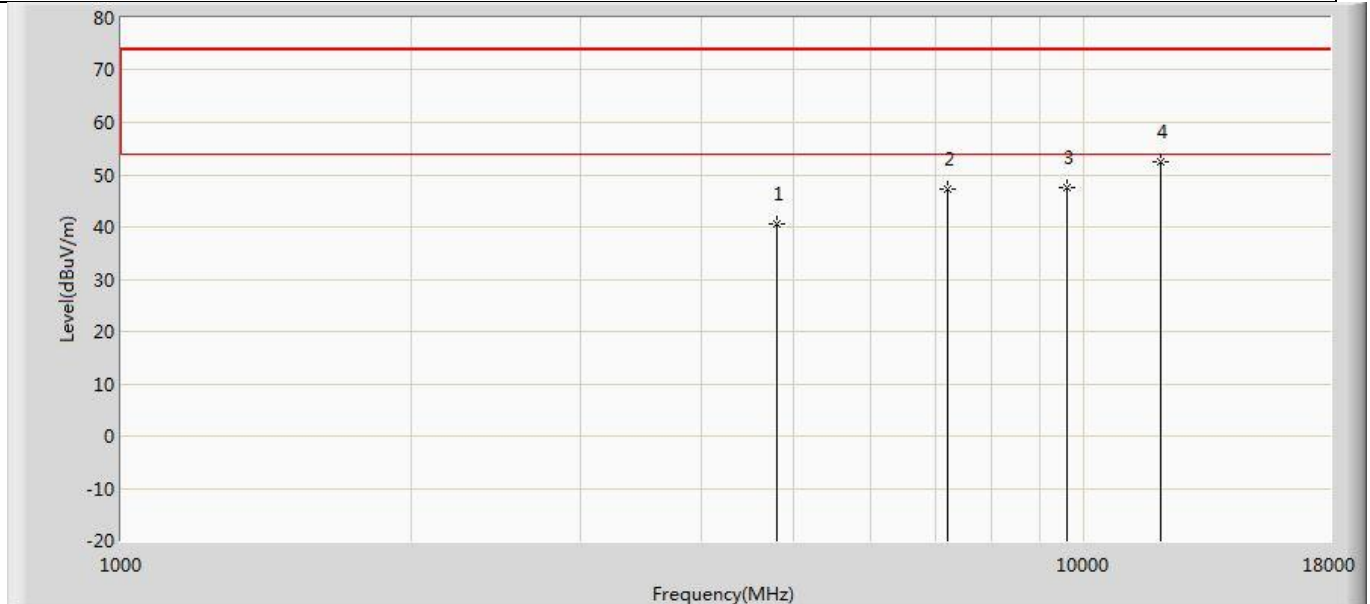
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.015	55.579	-32.985	74.000	-14.565	PK
2		7443.000	49.157	59.931	-24.843	74.000	-10.774	PK
3		9920.000	46.221	53.798	-27.779	74.000	-7.578	PK
4	*	12400.000	50.312	54.939	-23.688	74.000	-4.628	PK

Profile: 22B0838R	Page No.: 42
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode1:Transmit at 2480MHz by BLE 1M	



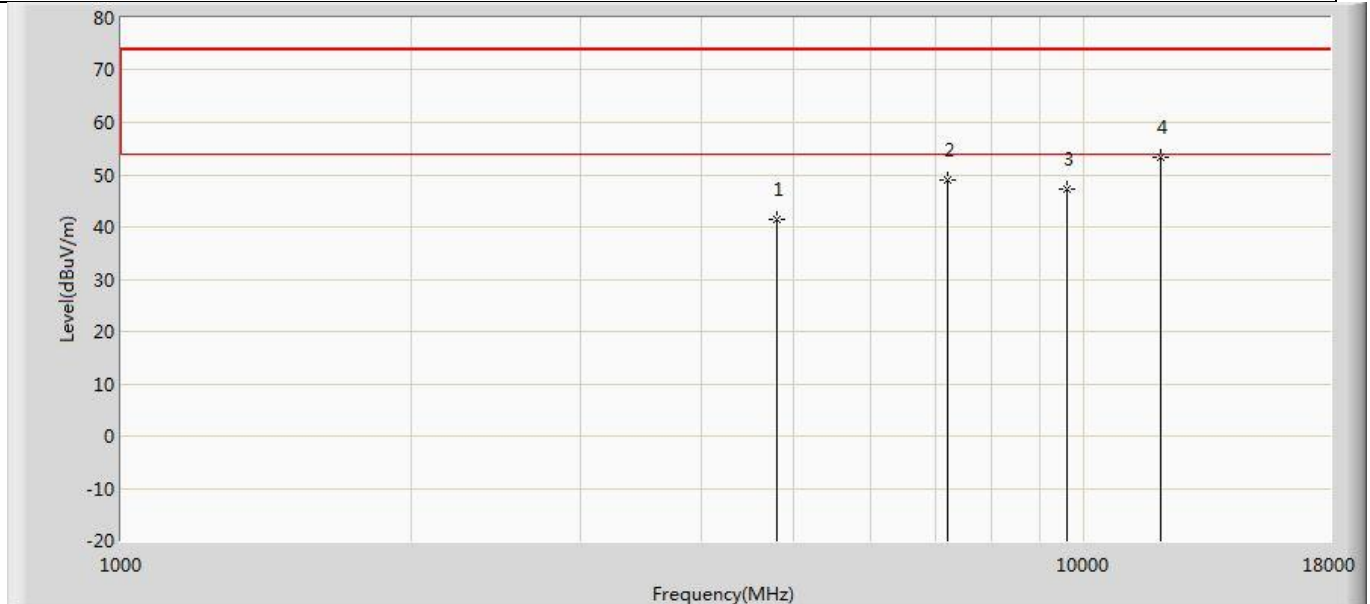
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	40.713	55.277	-33.287	74.000	-14.565	PK
2		7443.000	49.493	60.267	-24.507	74.000	-10.774	PK
3		9920.000	46.395	53.972	-27.605	74.000	-7.578	PK
4	*	12398.670	46.803	51.399	-7.197	54.000	-4.595	AV
5		12407.000	54.186	58.979	-19.814	74.000	-4.793	PK

Profile: 22B0838R	Page No.: 43
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode2:Transmit at 2402MHz by BLE 2M	



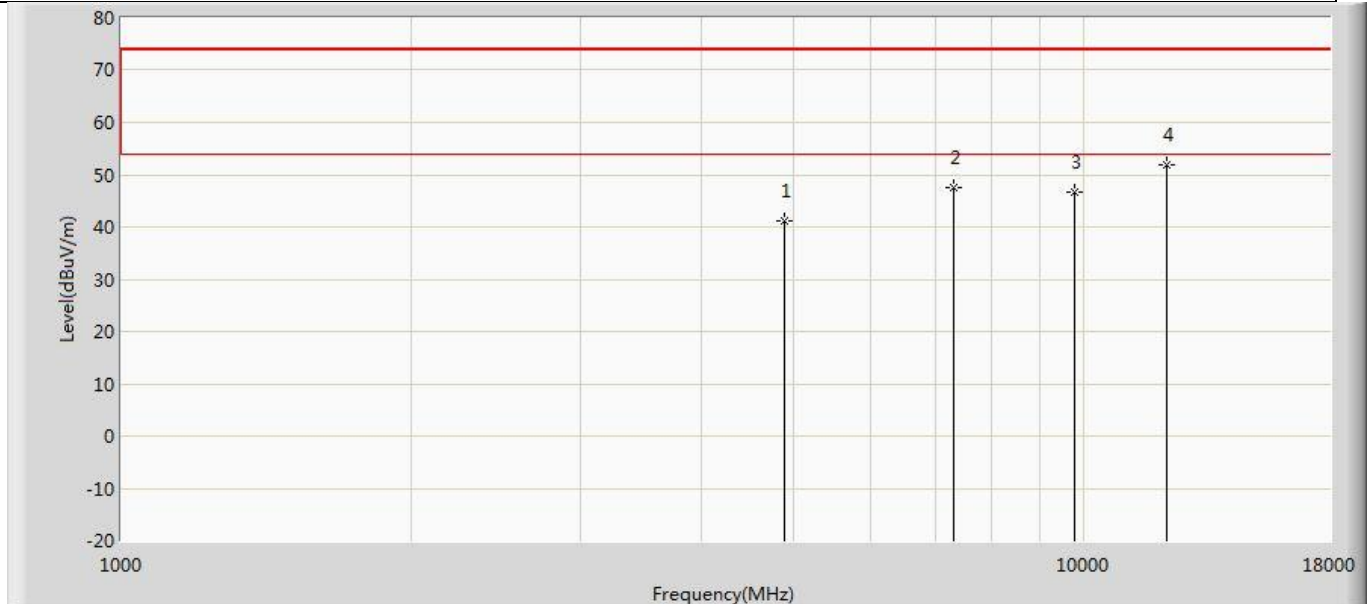
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	40.448	55.428	-33.552	74.000	-14.981	PK
2		7205.000	47.192	58.004	-26.808	74.000	-10.813	PK
3		9608.000	47.673	55.767	-26.327	74.000	-8.094	PK
4	*	11999.000	52.494	57.461	-21.506	74.000	-4.967	PK

Profile: 22B0838R	Page No.: 44
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode2:Transmit at 2402MHz by BLE 2M	



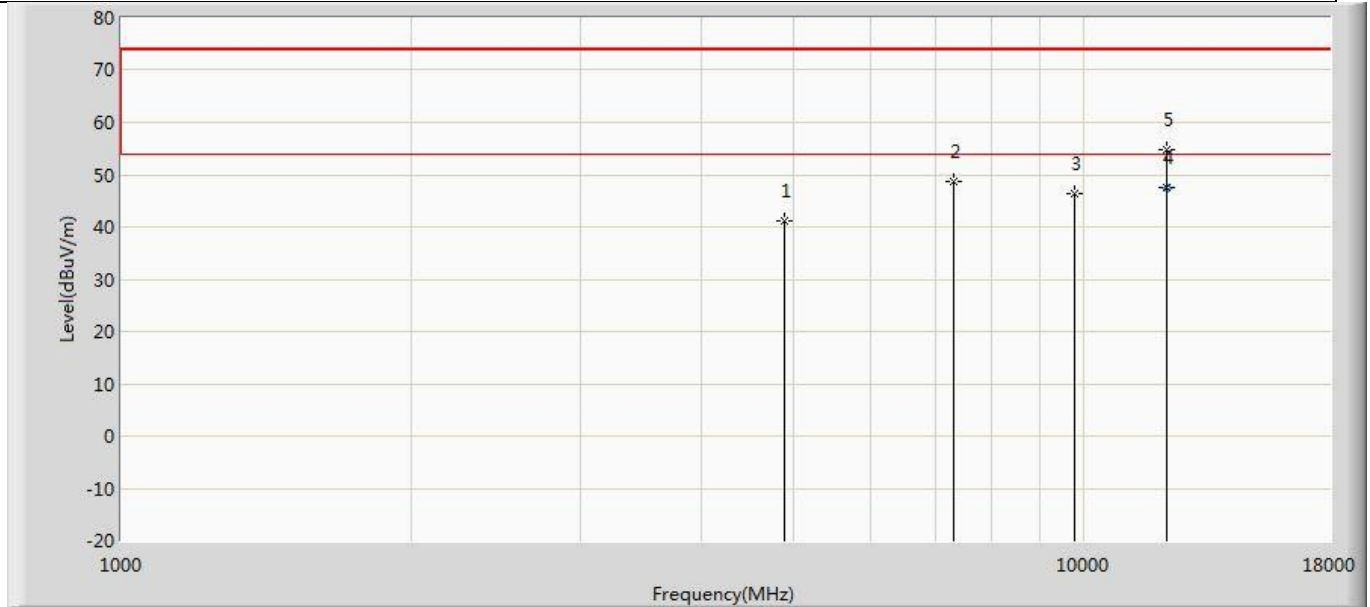
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.432	56.412	-32.568	74.000	-14.981	PK
2		7205.000	49.048	59.860	-24.952	74.000	-10.813	PK
3		9608.000	47.384	55.478	-26.616	74.000	-8.094	PK
4	*	11999.000	53.275	58.242	-20.725	74.000	-4.967	PK

Profile: 22B0838R	Page No.: 45
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode2:Transmit at 2440MHz by BLE 2M	



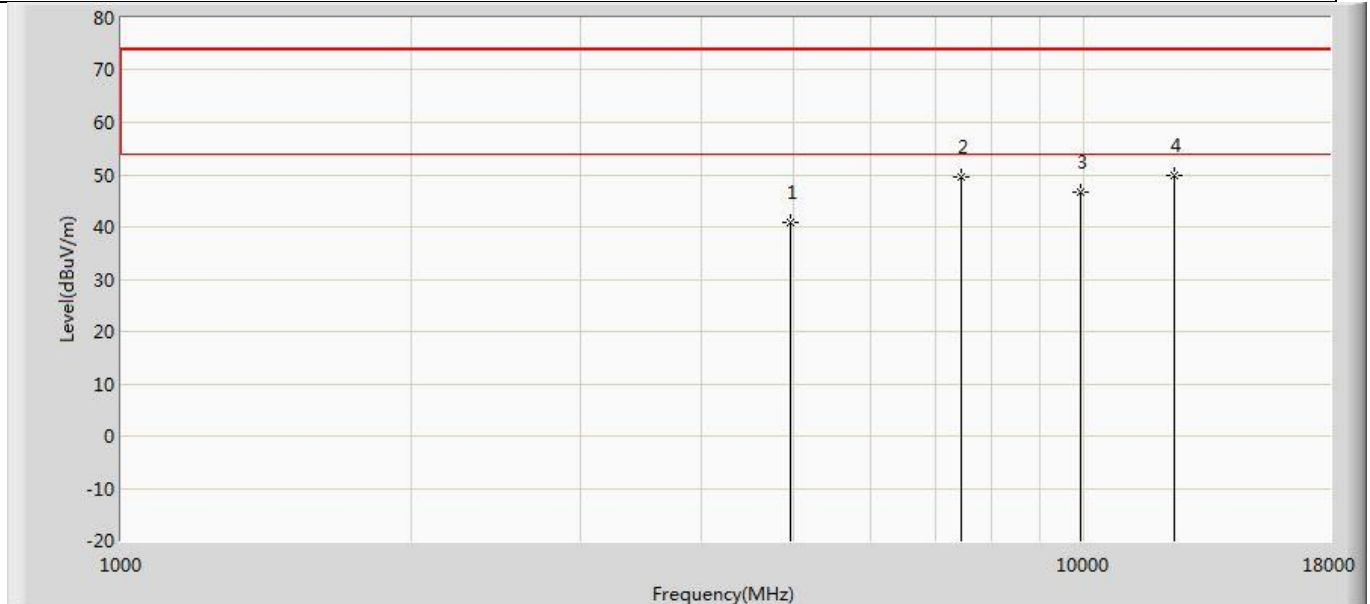
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.133	55.733	-32.867	74.000	-14.600	PK
2		7324.000	47.530	58.409	-26.470	74.000	-10.879	PK
3		9760.000	46.609	54.406	-27.391	74.000	-7.797	PK
4	*	12203.000	51.958	56.858	-22.042	74.000	-4.900	PK

Profile: 22B0838R	Page No.: 46
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode2:Transmit at 2440MHz by BLE 2M	



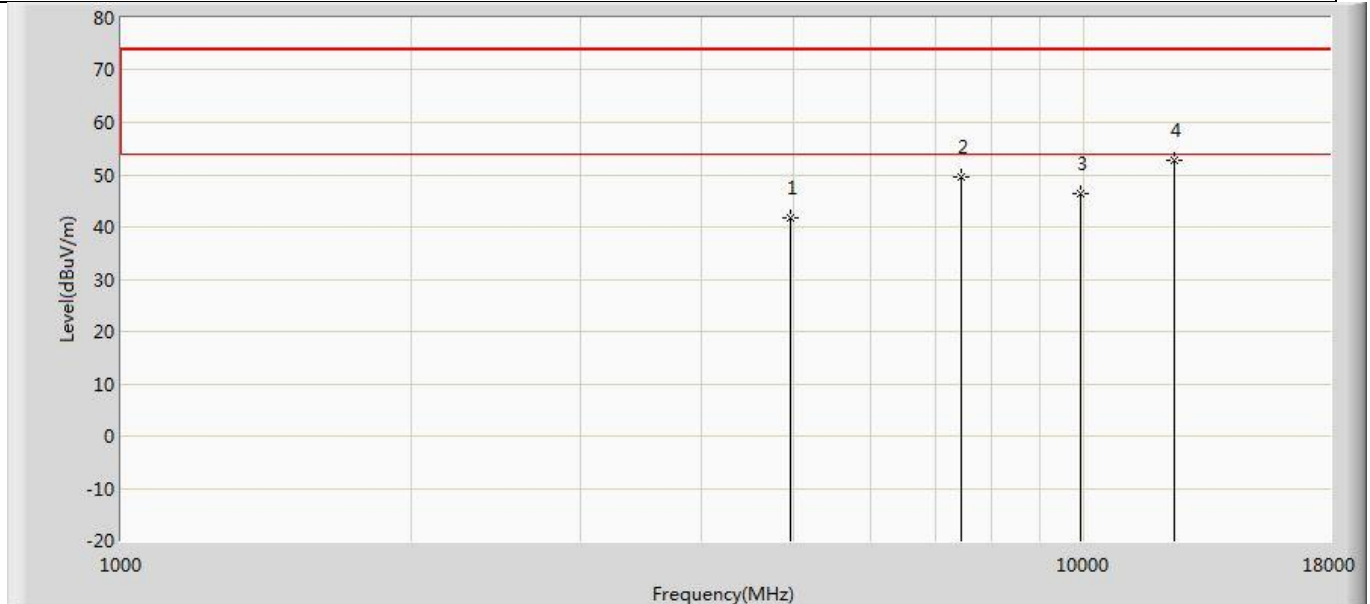
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.142	55.742	-32.858	74.000	-14.600	PK
2		7324.000	48.779	59.658	-25.221	74.000	-10.879	PK
3		9760.000	46.386	54.183	-27.614	74.000	-7.797	PK
4	*	12202.020	47.549	52.441	-6.451	54.000	-4.892	AV
5		12203.000	54.719	59.619	-19.281	74.000	-4.900	PK

Profile: 22B0838R	Page No.: 47
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode2:Transmit at 2480MHz by BLE 2M	



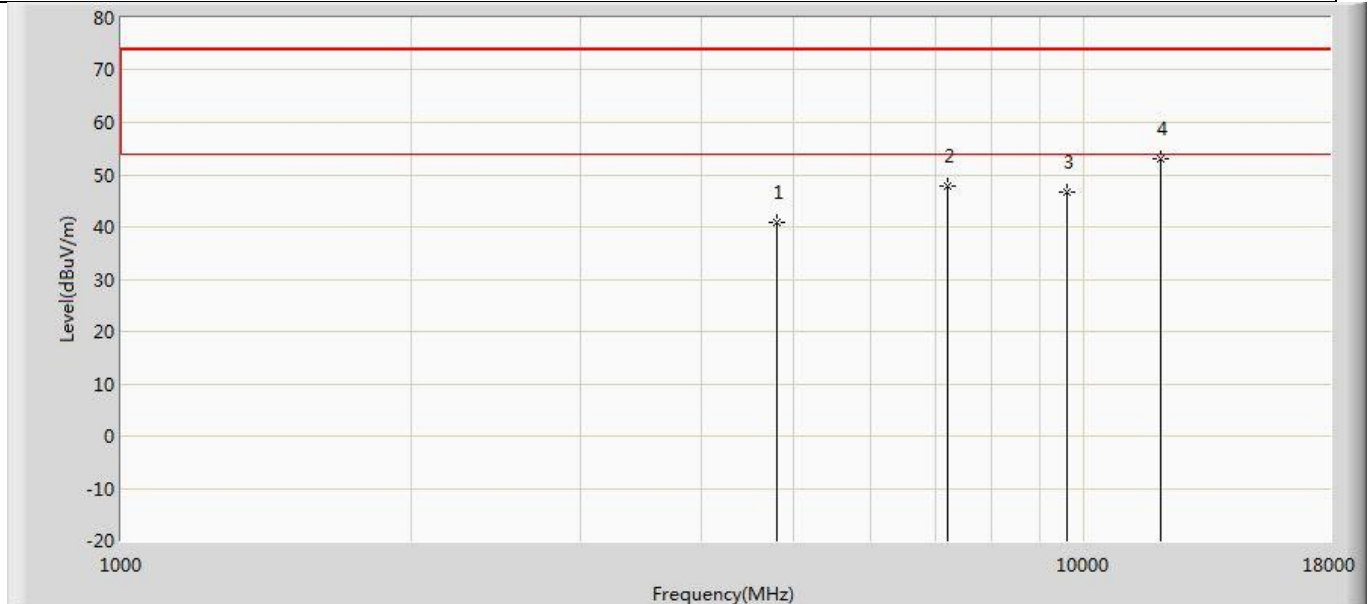
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	40.970	55.534	-33.030	74.000	-14.565	PK
2		7443.000	49.556	60.330	-24.444	74.000	-10.774	PK
3		9920.000	46.538	54.115	-27.462	74.000	-7.578	PK
4	*	12400.000	49.843	54.470	-24.157	74.000	-4.628	PK

Profile: 22B0838R	Page No.: 48
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode2:Transmit at 2480MHz by BLE 2M	



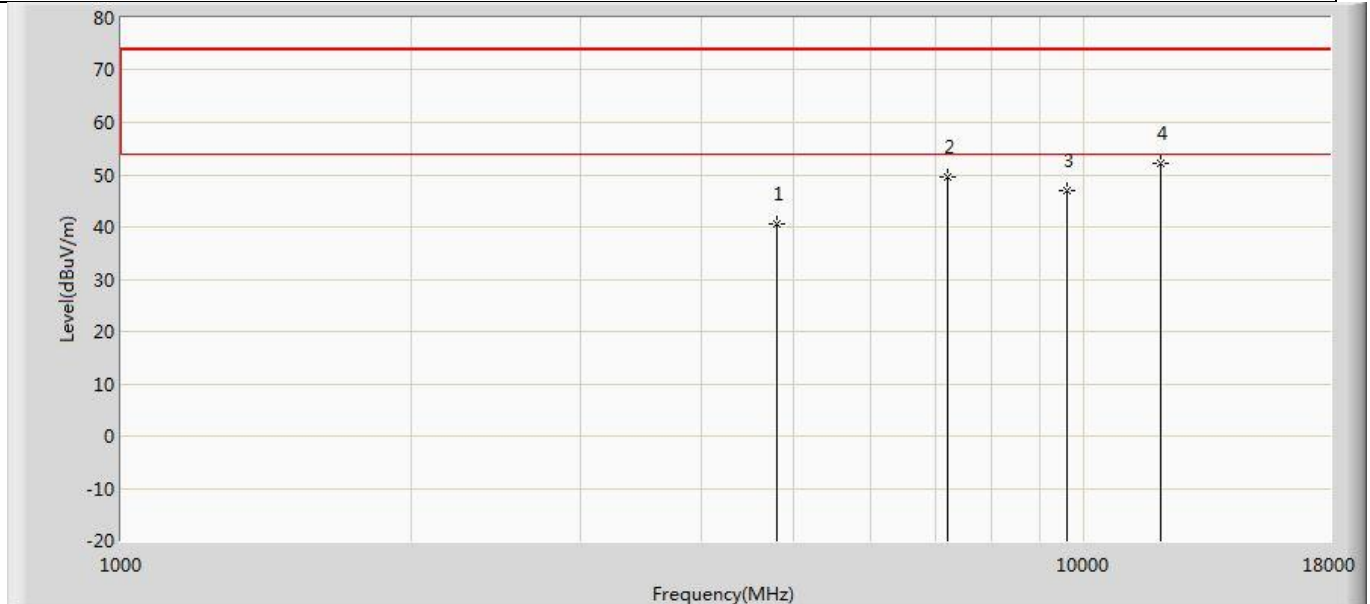
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.716	56.280	-32.284	74.000	-14.565	PK
2		7443.000	49.538	60.312	-24.462	74.000	-10.774	PK
3		9920.000	46.349	53.926	-27.651	74.000	-7.578	PK
4	*	12390.000	52.832	57.223	-21.168	74.000	-4.392	PK

Profile: 22B0838R	Page No.: 49
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode3:Transmit at 2402MHz by BLE Coded2	



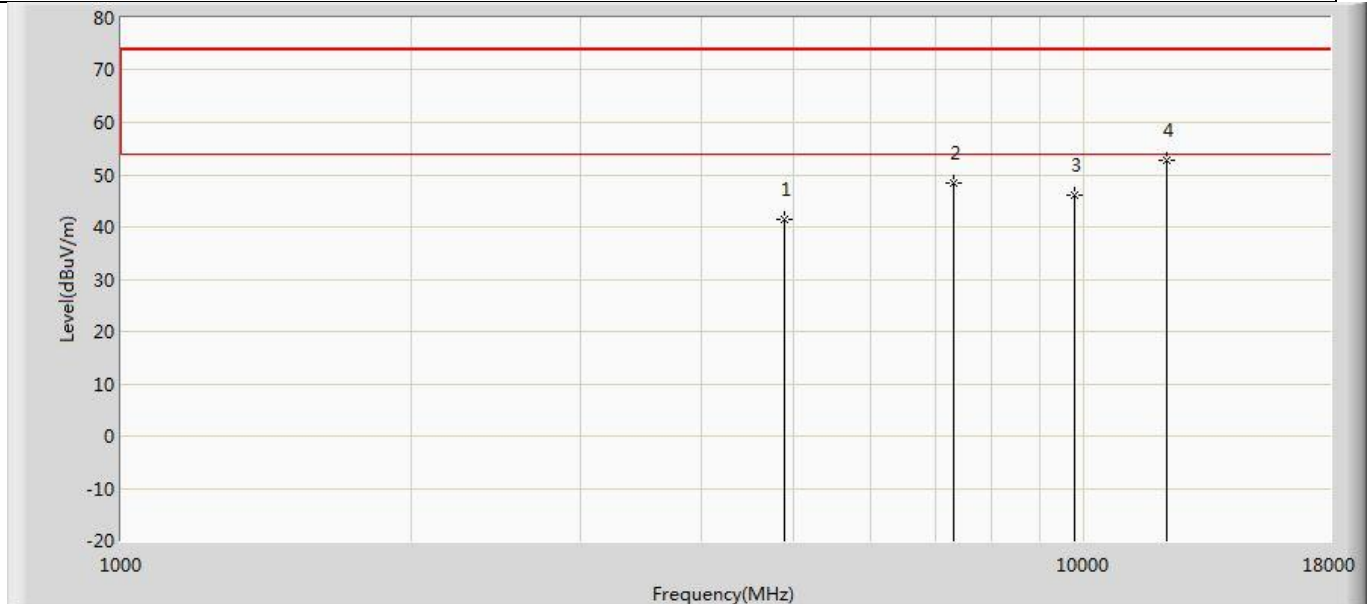
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	40.821	55.801	-33.179	74.000	-14.981	PK
2		7205.000	47.784	58.596	-26.216	74.000	-10.813	PK
3		9608.000	46.696	54.790	-27.304	74.000	-8.094	PK
4	*	12016.000	53.018	57.657	-20.982	74.000	-4.639	PK

Profile: 22B0838R	Page No.: 50
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode3:Transmit at 2402MHz by BLE Coded2	



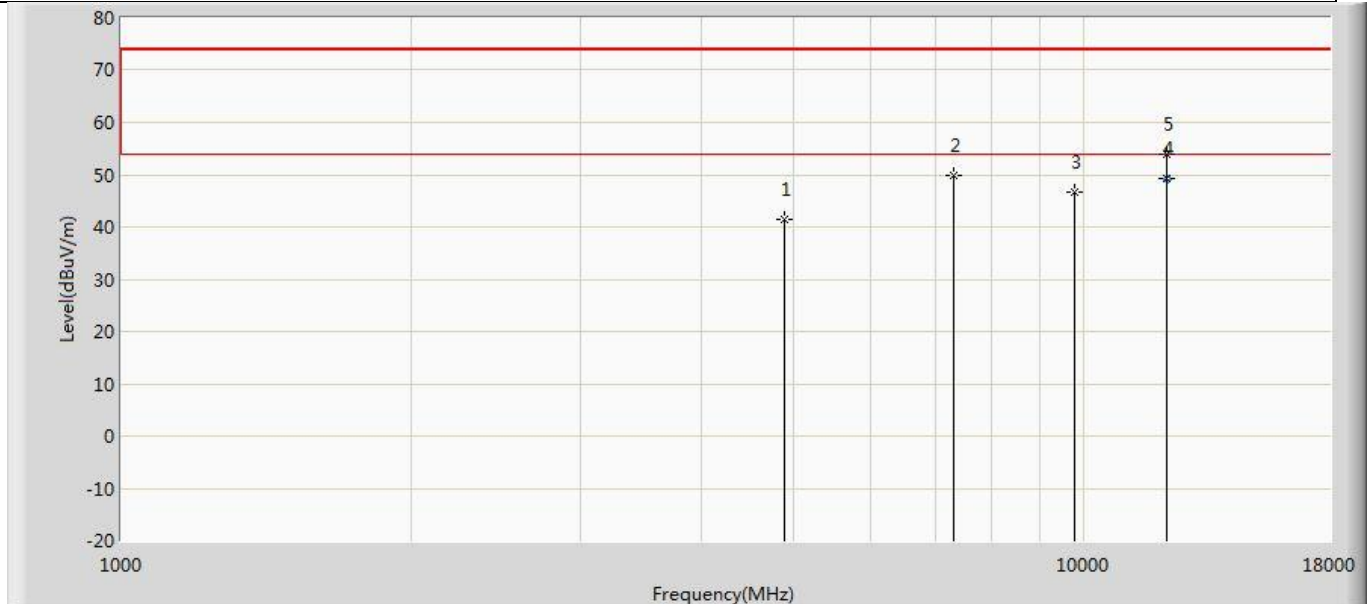
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	40.474	55.454	-33.526	74.000	-14.981	PK
2		7205.000	49.426	60.238	-24.574	74.000	-10.813	PK
3		9608.000	46.951	55.045	-27.049	74.000	-8.094	PK
4	*	12016.000	52.101	56.740	-21.899	74.000	-4.639	PK

Profile: 22B0838R	Page No.: 51
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode3:Transmit at 2440MHz by BLE Coded2	



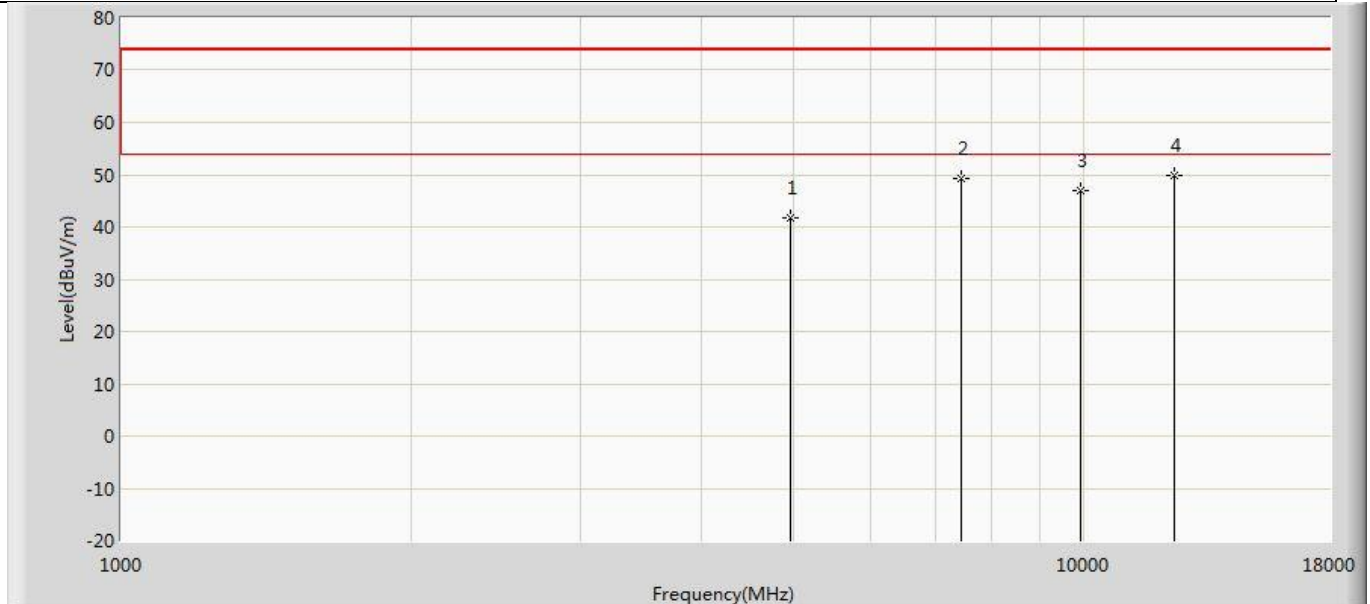
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.499	56.099	-32.501	74.000	-14.600	PK
2		7324.000	48.302	59.181	-25.698	74.000	-10.879	PK
3		9760.000	46.110	53.907	-27.890	74.000	-7.797	PK
4	*	12203.000	52.741	57.641	-21.259	74.000	-4.900	PK

Profile: 22B0838R	Page No.: 52
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode3:Transmit at 2440MHz by BLE Coded2	



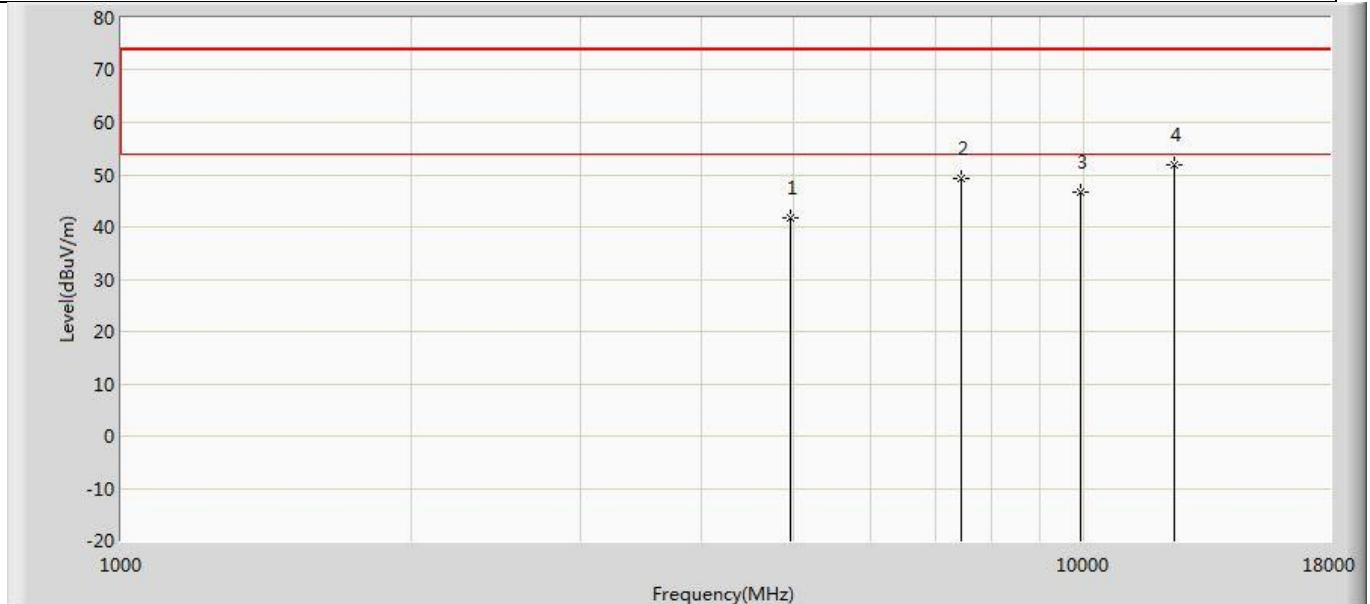
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.434	56.034	-32.566	74.000	-14.600	PK
2		7324.000	49.841	60.720	-24.159	74.000	-10.879	PK
3		9760.000	46.584	54.381	-27.416	74.000	-7.797	PK
4	*	12200.970	49.185	54.068	-4.815	54.000	-4.882	AV
5		12203.000	53.885	58.785	-20.115	74.000	-4.900	PK

Profile: 22B0838R	Page No.: 53
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode3:Transmit at 2480MHz by BLE Coded2	



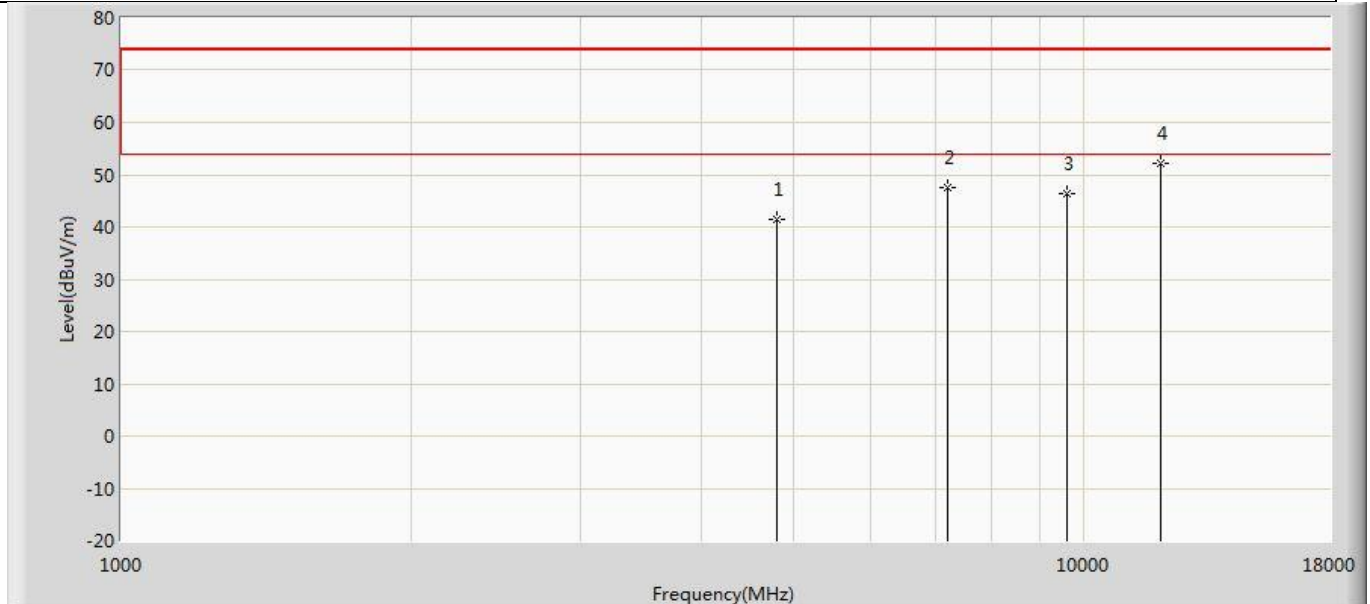
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.874	56.438	-32.126	74.000	-14.565	PK
2		7443.000	49.142	59.916	-24.858	74.000	-10.774	PK
3		9920.000	46.970	54.547	-27.030	74.000	-7.578	PK
4	*	12400.000	49.761	54.388	-24.239	74.000	-4.628	PK

Profile: 22B0838R	Page No.: 54
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode3:Transmit at 2480MHz by BLE Coded2	



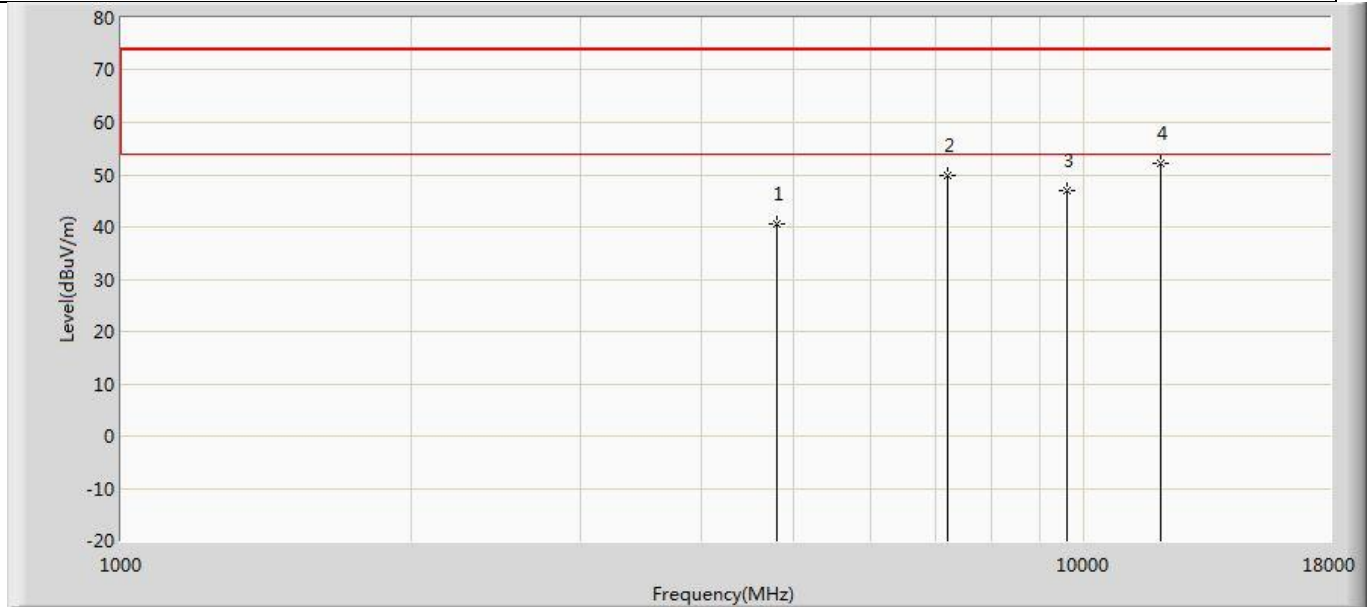
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.605	56.169	-32.395	74.000	-14.565	PK
2		7443.000	49.403	60.177	-24.597	74.000	-10.774	PK
3		9920.000	46.562	54.139	-27.438	74.000	-7.578	PK
4	*	12407.000	52.001	56.794	-21.999	74.000	-4.793	PK

Profile: 22B0838R	Page No.: 55
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode4:Transmit at 2402MHz by BLE Coded8	



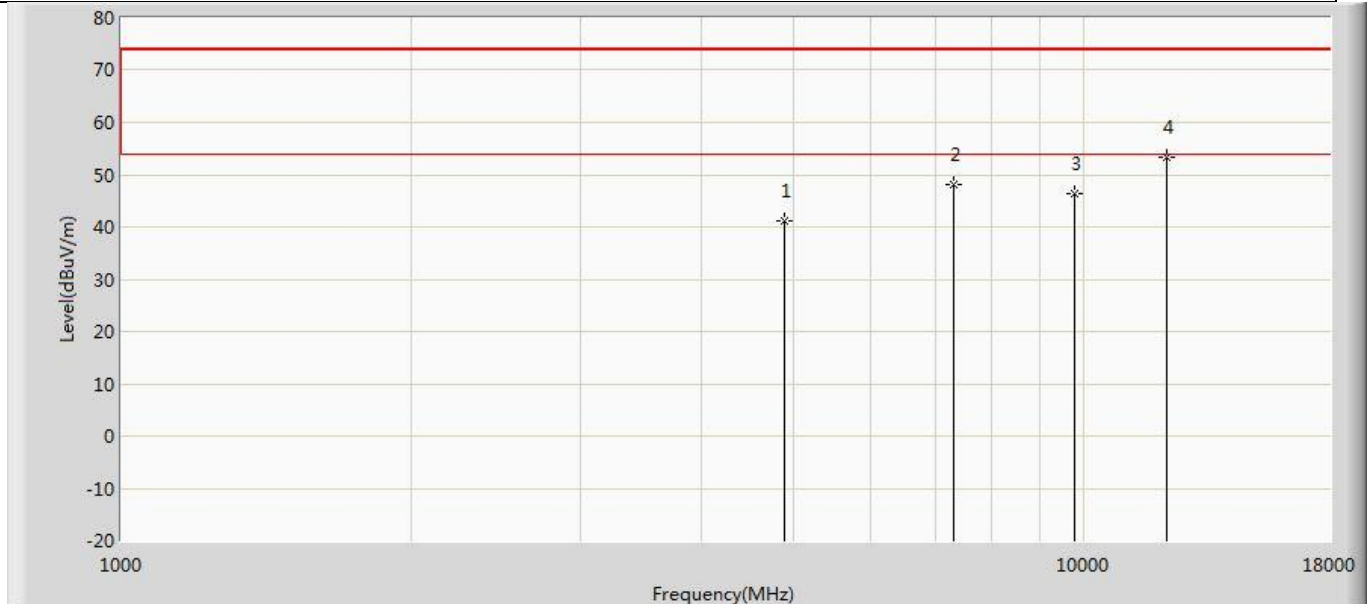
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.530	56.510	-32.470	74.000	-14.981	PK
2		7205.000	47.487	58.299	-26.513	74.000	-10.813	PK
3		9608.000	46.439	54.533	-27.561	74.000	-8.094	PK
4	*	12016.000	52.117	56.756	-21.883	74.000	-4.639	PK

Profile: 22B0838R	Page No.: 56
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode4:Transmit at 2402MHz by BLE Coded8	



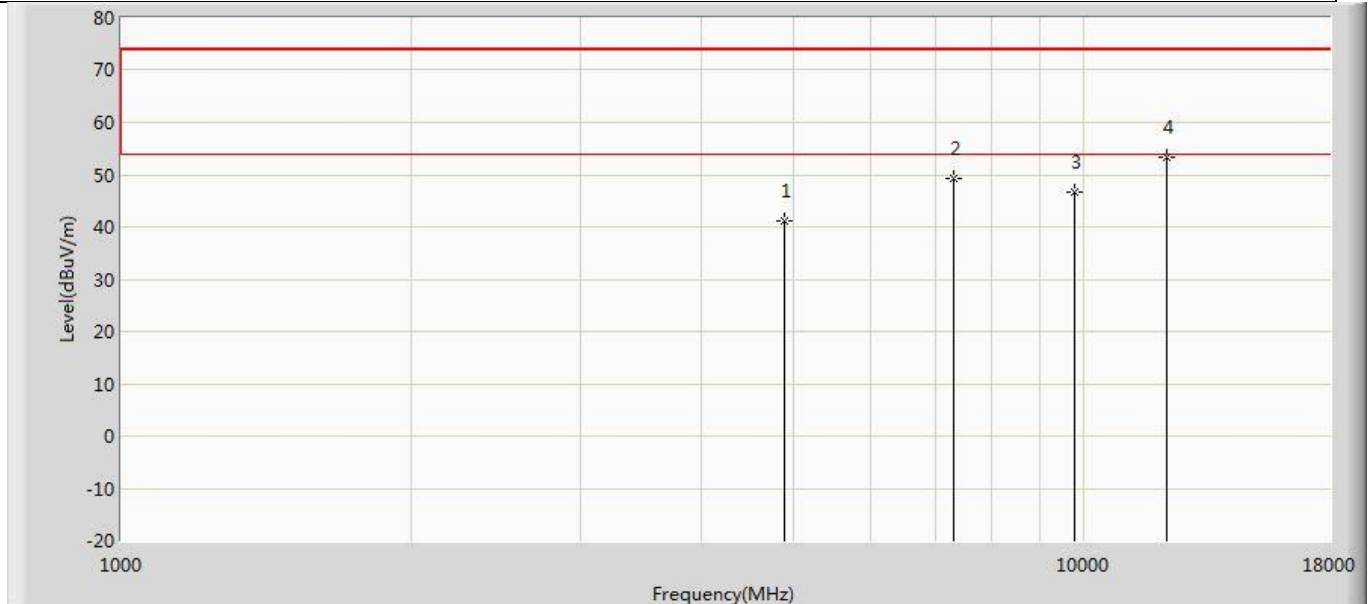
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	40.582	55.562	-33.418	74.000	-14.981	PK
2		7205.000	49.930	60.742	-24.070	74.000	-10.813	PK
3		9608.000	46.970	55.064	-27.030	74.000	-8.094	PK
4	*	12016.000	52.222	56.861	-21.778	74.000	-4.639	PK

Profile: 22B0838R	Page No.: 57
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode4:Transmit at 2440MHz by BLE Coded8	



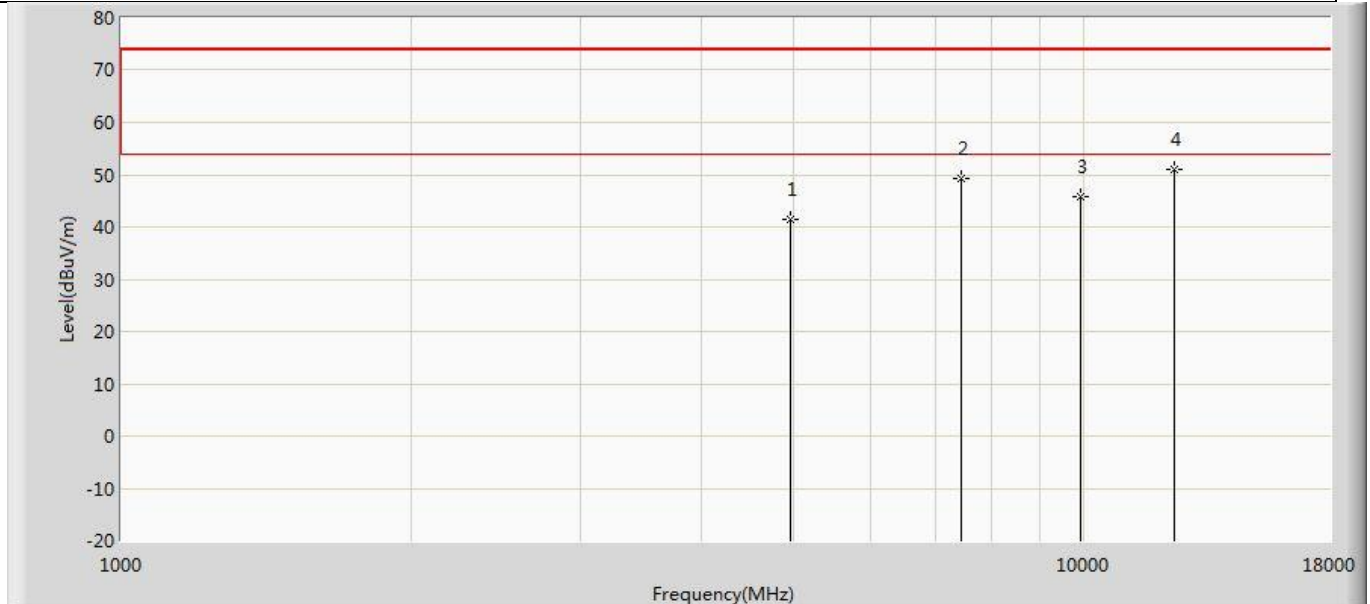
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.297	55.897	-32.703	74.000	-14.600	PK
2		7324.000	47.986	58.865	-26.014	74.000	-10.879	PK
3		9760.000	46.413	54.210	-27.587	74.000	-7.797	PK
4	*	12203.000	53.222	58.122	-20.778	74.000	-4.900	PK

Profile: 22B0838R	Page No.: 58
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode4:Transmit at 2440MHz by BLE Coded8	



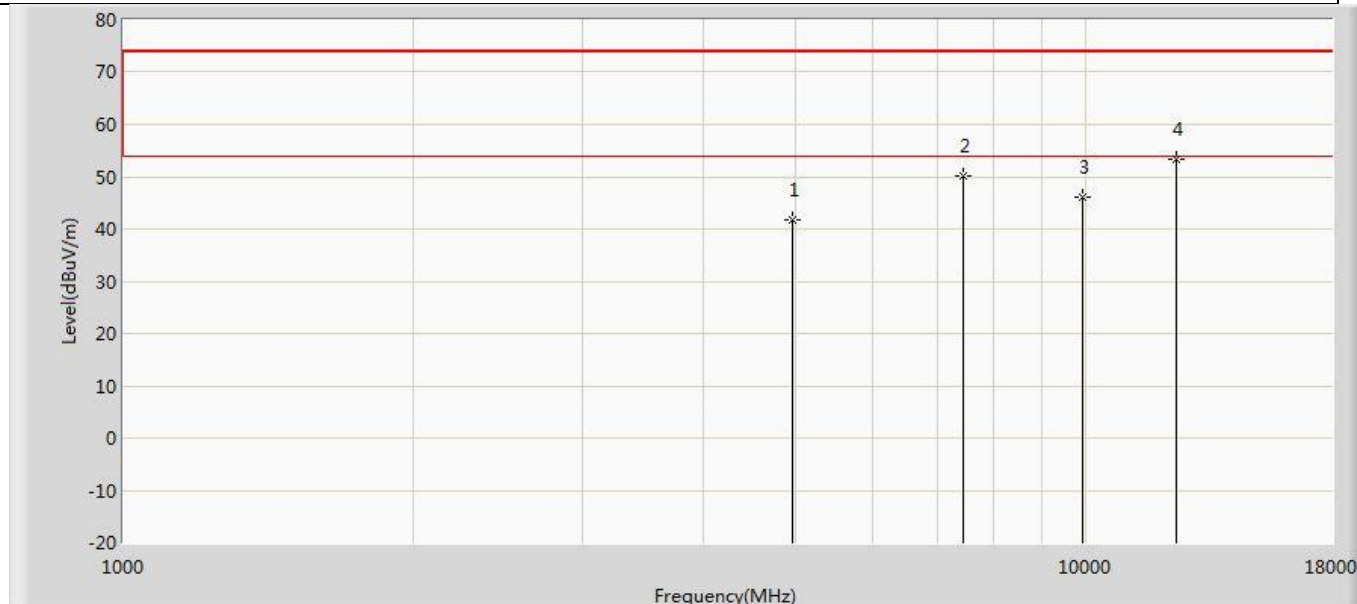
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.157	55.757	-32.843	74.000	-14.600	PK
2		7324.000	49.400	60.279	-24.600	74.000	-10.879	PK
3		9760.000	46.532	54.329	-27.468	74.000	-7.797	PK
4	*	12203.000	53.441	58.341	-20.559	74.000	-4.900	PK

Profile: 22B0838R	Page No.: 59
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode4:Transmit at 2480MHz by BLE Coded8	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.431	55.995	-32.569	74.000	-14.565	PK
2		7443.000	49.309	60.083	-24.691	74.000	-10.774	PK
3		9920.000	45.760	53.337	-28.240	74.000	-7.578	PK
4	*	12400.000	50.888	55.515	-23.112	74.000	-4.628	PK

Profile: 22B0838R	Page No.: 60
Engineer: YuLiu	
Site: AC5	Time: 2022/12/04 - 23:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode4:Transmit at 2480MHz by BLE Coded8	



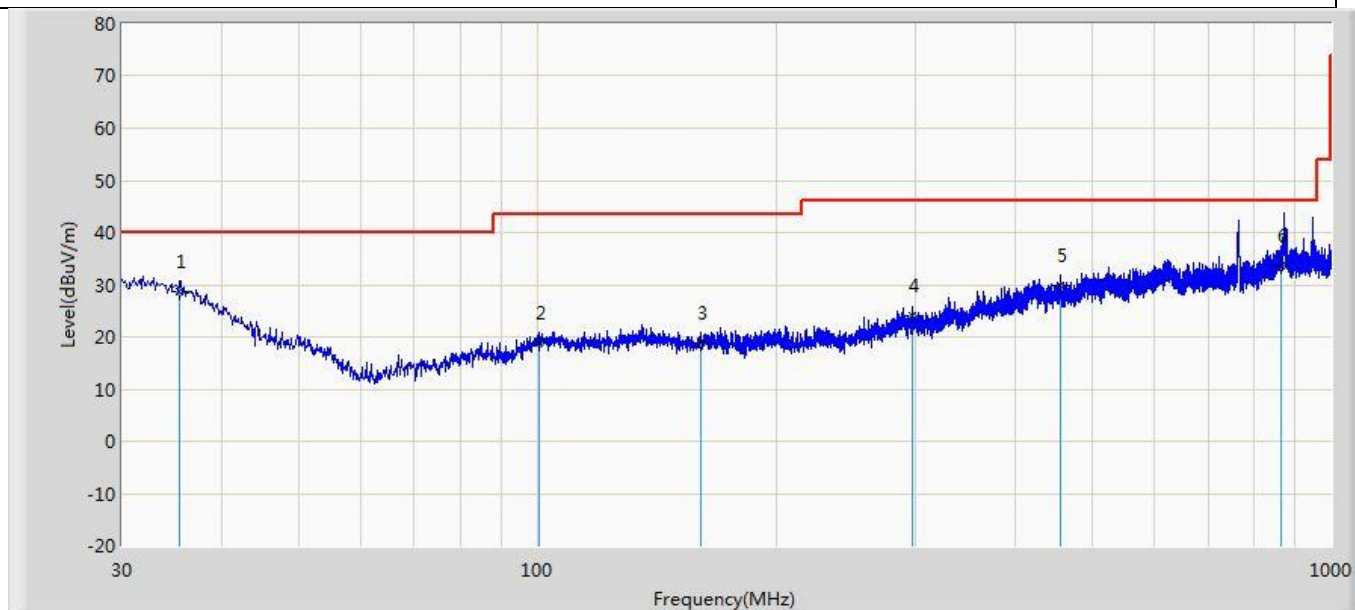
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.721	56.285	-32.279	74.000	-14.565	PK
2		7443.000	50.123	60.897	-23.877	74.000	-10.774	PK
3		9920.000	46.098	53.675	-27.902	74.000	-7.578	PK
4	*	12390.000	53.222	57.613	-20.778	74.000	-4.392	PK

Note:

1. Measured Level = Reading Level + Factor.
2. The test frequency range, 9kHz~30MHz, worst case are at least 20dB below the limits, therefore no data appear in the report.
3. The test frequency range, 18GHz~26GHz test result on peak is lower than average limit, all is the noise base, 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.

The worst case of Radiated Emission below 1GHz:

Profile: 22B0838R	Page No.: 64
Engineer: YuLiu	
Site: AC3	Time: 2022/12/05 - 20:38
Limit: FCC_Part15.209	Margin: 0
Probe: AC3_3M(30-1000M)	Polarity: Horizontal
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode 1: Transmit at 2440MHz by LE_1Mbps	

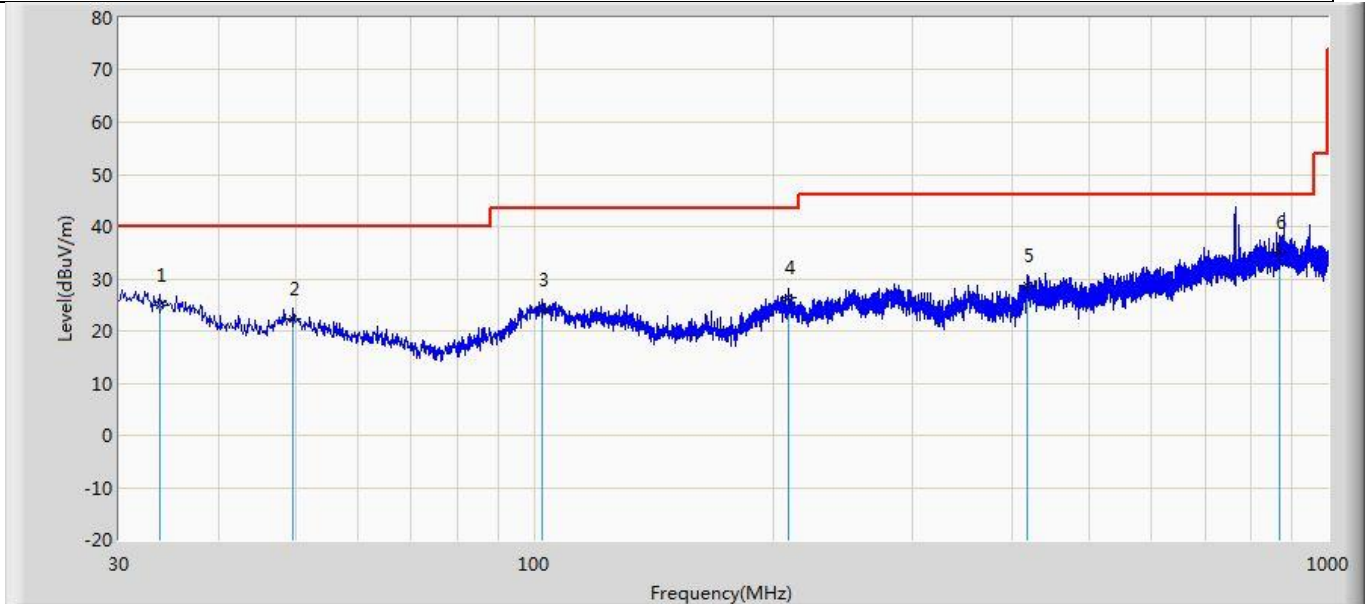


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	35.456	28.789	2.235	-11.211	40.000	26.554	QP
2		100.689	18.836	1.697	-24.664	43.500	17.139	QP
3		160.829	18.960	1.821	-24.540	43.500	17.140	QP
4		297.356	23.915	3.327	-22.085	46.000	20.588	QP
5		455.830	29.849	2.578	-16.151	46.000	27.271	QP
6		866.867	33.654	0.716	-12.346	46.000	32.938	QP

Note:

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

Profile: 22B0838R	Page No.: 65
Engineer: YuLiu	
Site: AC3	Time: 2022/12/05 - 20:41
Limit: FCC_Part15.209	Margin: 0
Probe: AC3_3M(30-1000M)	Polarity: Vertical
EUT: LED LAMP	Power: 120V/60Hz
Note: Mode 1: Transmit at 2440MHz by LE_1Mbps	



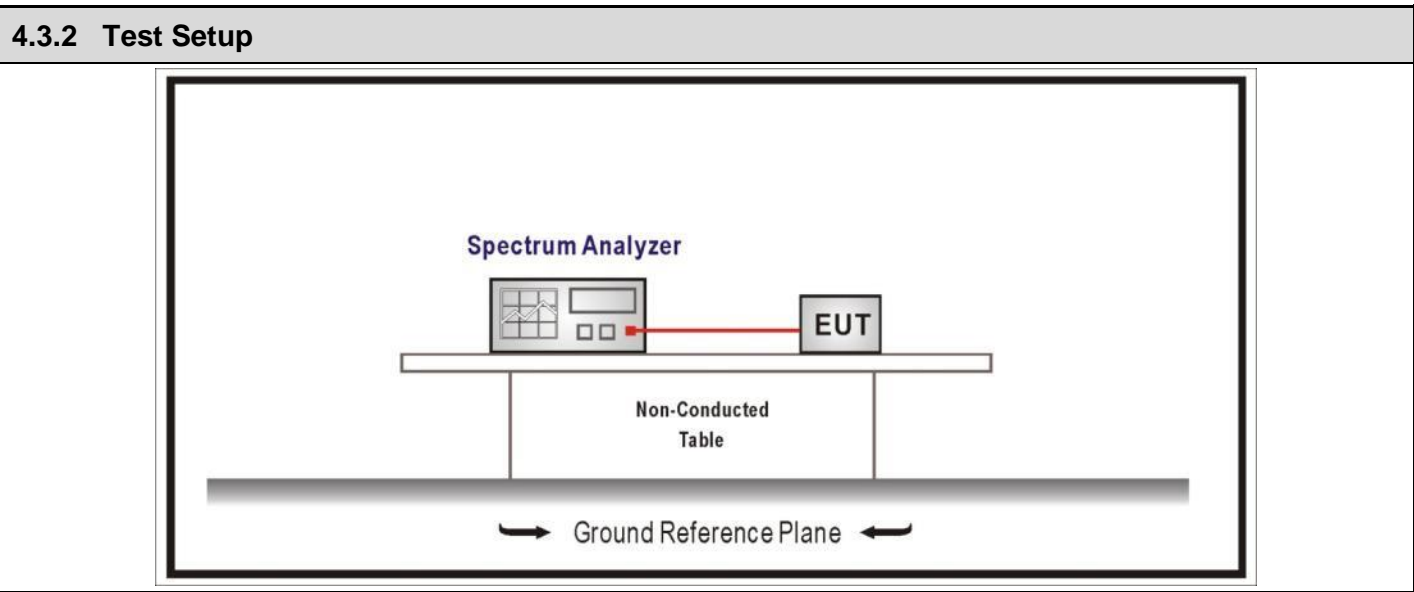
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		33.759	24.816	1.891	-15.184	40.000	22.925	QP
2		49.764	22.230	2.800	-17.770	40.000	19.430	QP
3		102.265	24.186	2.071	-19.314	43.500	22.115	QP
4		209.208	26.253	2.950	-17.247	43.500	23.303	QP
5		418.364	28.799	2.212	-17.201	46.000	26.588	QP
6	*	867.474	35.065	2.094	-10.935	46.000	32.971	QP

Note:

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

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

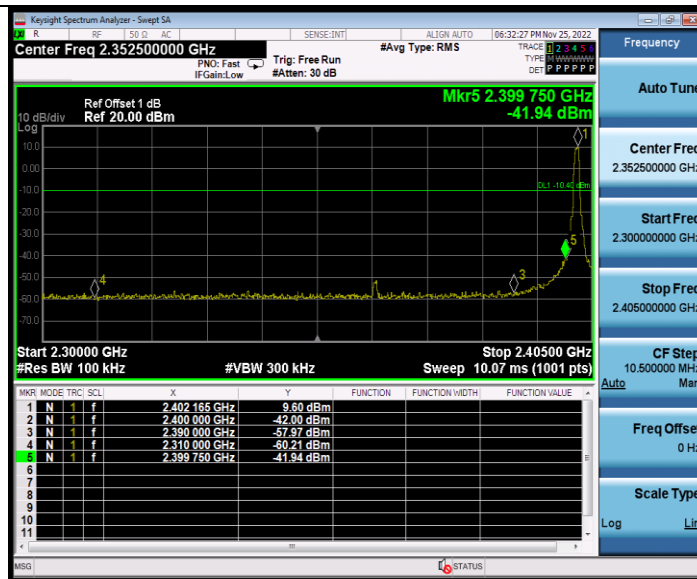
4.3.1 Limit	
Standard	FCC Part 15 Subpart C Paragraph 15.247(d)
RF Output power (Detection methods)	Limit(dB)
RF Output power(Average detector)	30dBc(Note1)
RF Output power(PK detector)	20dBc(Note2)
<p>Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).</p> <p>Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).</p>	



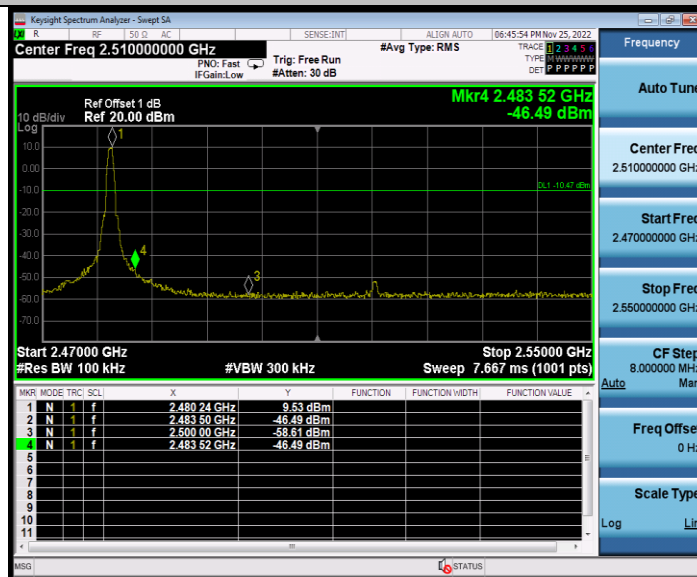
4.3.3 Test Procedure			
References Rule	Chapter	Description	
<input checked="" type="checkbox"/>	ANSI C63.10	11.11	Emissions in non-restricted frequency bands
<input checked="" type="checkbox"/>	ANSI C63.10	11.11.1	General
<input checked="" type="checkbox"/>	ANSI C63.10	11.11.2	Reference level measurement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

4.3.4 Test Data

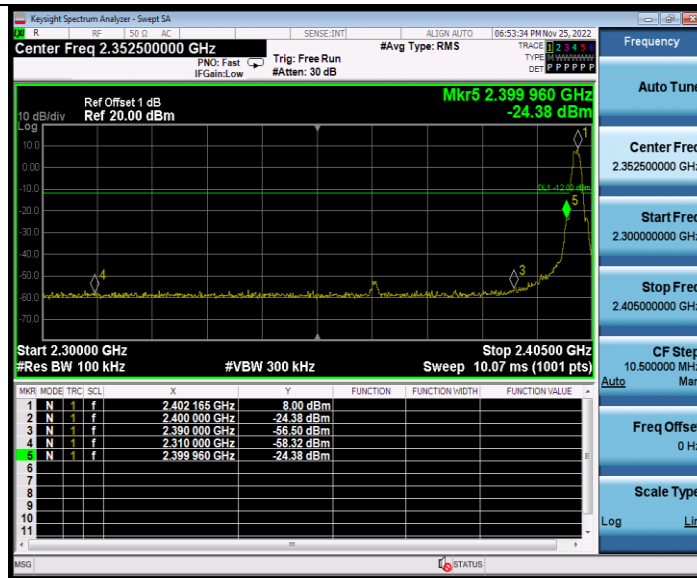
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	9.60	-41.94	≤-10.4	PASS
		High	2480	9.53	-46.49	≤-10.47	PASS
BLE_2M	Ant1	Low	2402	8.00	-24.38	≤-12	PASS
		High	2480	7.83	-43.05	≤-12.17	PASS
BLE_500K	Ant1	Low	2402	9.54	-41.58	≤-10.46	PASS
		High	2480	9.45	-47.23	≤-10.56	PASS
BLE_125K	Ant1	Low	2402	6.92	-42.87	≤-13.08	PASS
		High	2480	6.80	-47.75	≤-13.2	PASS



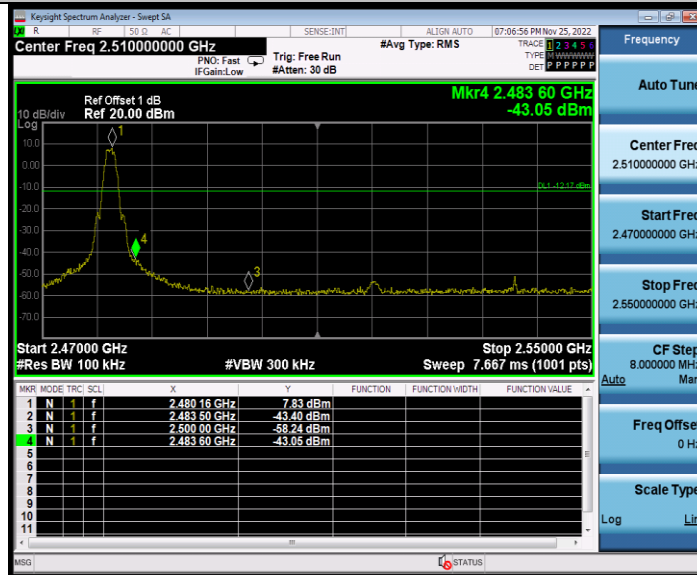
BLE_1M_Ant1_Low_2402



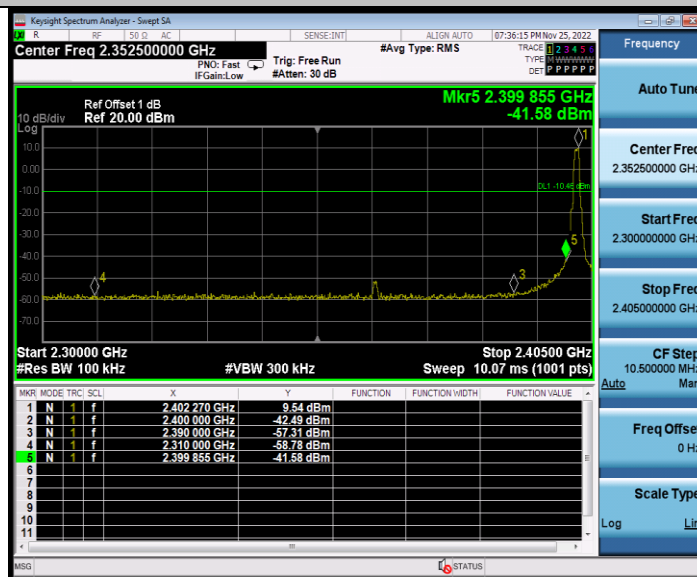
BLE_1M_Ant1_High_2480



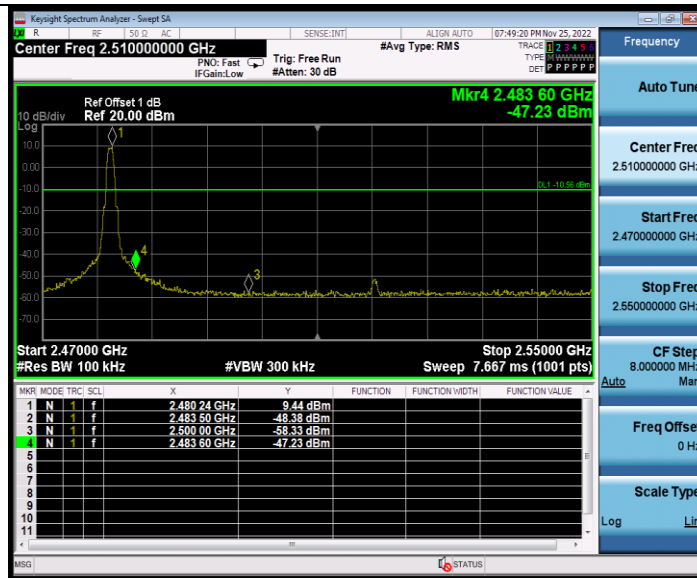
BLE_2M_Ant1_Low_2402



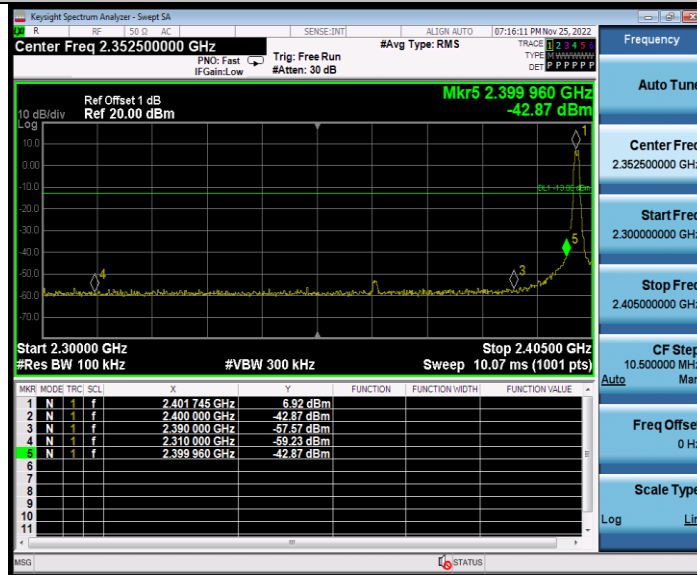
BLE_2M_Ant1_High_2480



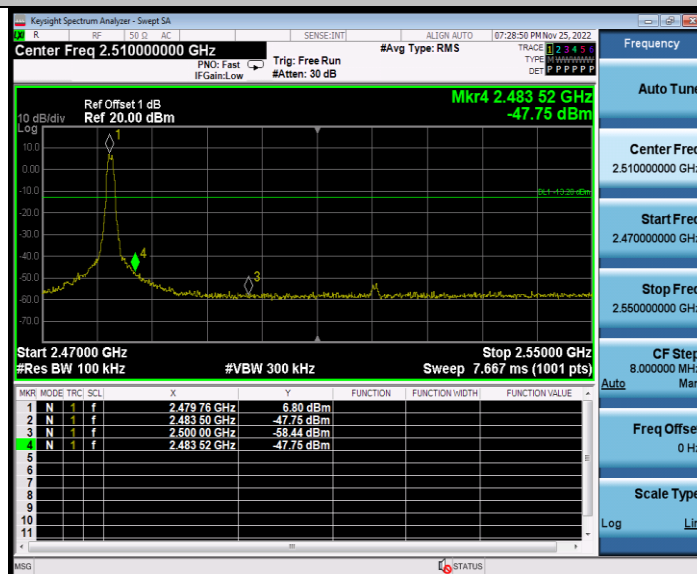
BLE_500K_Ant1_Low_2402



BLE_500K_Ant1_High_2480



BLE_125K_Ant1_Low_2402



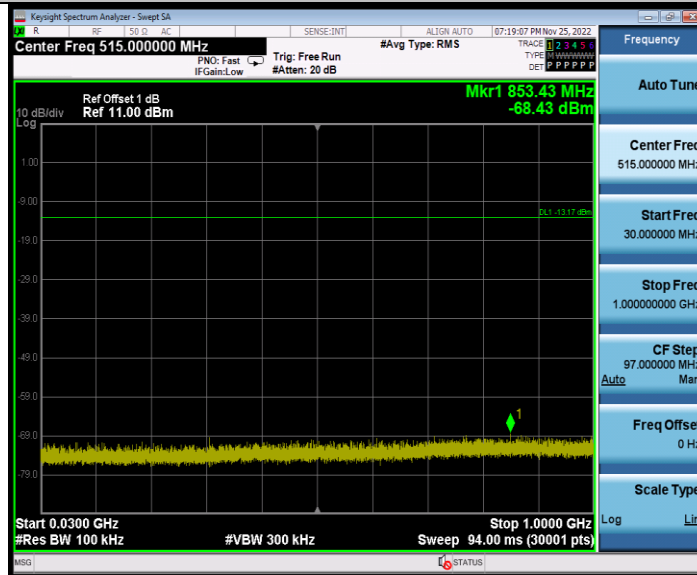
BLE_125K_Ant1_High_2480

The data of entire corresponding spectrum:

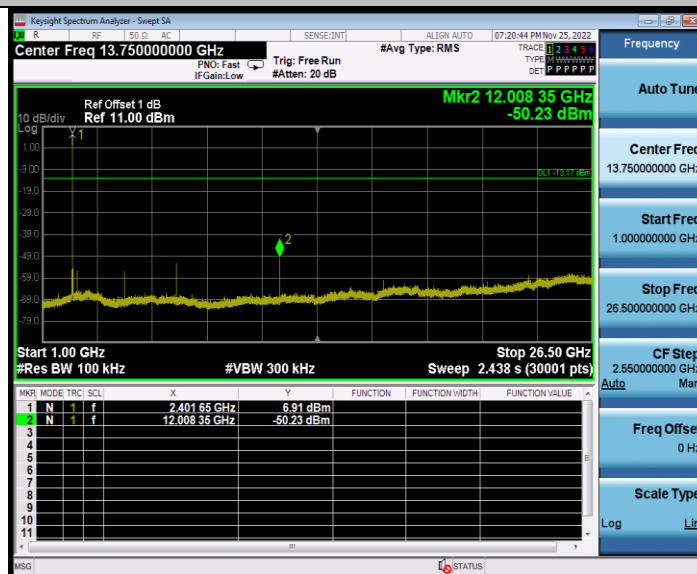
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_125K	Ant1	2402	Reference	6.83	6.83	---	PASS
			30~1000	6.83	-68.43	≤-13.17	PASS
			1000~26500	6.83	-50.23	≤-13.17	PASS
		2440	Reference	6.94	6.94	---	PASS
			30~1000	6.94	-68.43	≤-13.06	PASS
			1000~26500	6.94	-48.41	≤-13.06	PASS
		2480	Reference	6.70	6.70	---	PASS
			30~1000	6.70	-68.2	≤-13.3	PASS
			1000~26500	6.70	-50.28	≤-13.3	PASS
BLE_1M	Ant1	2402	Reference	9.35	9.35	---	PASS
			30~1000	9.35	-68.52	≤-10.65	PASS
			1000~26500	9.35	-46.51	≤-10.65	PASS
		2440	Reference	9.64	9.64	---	PASS
			30~1000	9.64	-68.09	≤-10.36	PASS
			1000~26500	9.64	-44.5	≤-10.36	PASS
		2480	Reference	9.27	9.27	---	PASS
			30~1000	9.27	-68.12	≤-10.73	PASS
			1000~26500	9.27	-49.12	≤-10.73	PASS
BLE_2M	Ant1	2402	Reference	7.24	7.24	---	PASS
			30~1000	7.24	-68.19	≤-12.76	PASS
			1000~26500	7.24	-48.37	≤-12.76	PASS
		2440	Reference	7.36	7.36	---	PASS
			30~1000	7.36	-68.04	≤-12.64	PASS
			1000~26500	7.36	-48.23	≤-12.64	PASS
		2480	Reference	7.12	7.12	---	PASS
			30~1000	7.12	-67.86	≤-12.88	PASS
			1000~26500	7.12	-50.53	≤-12.88	PASS
BLE_500K	Ant1	2402	Reference	9.35	9.35	---	PASS
			30~1000	9.35	-68.07	≤-10.65	PASS
			1000~26500	9.35	-46.81	≤-10.65	PASS
		2440	Reference	9.49	9.49	---	PASS
			30~1000	9.49	-67.86	≤-10.51	PASS
			1000~26500	9.49	-46.11	≤-10.51	PASS
		2480	Reference	9.24	9.24	---	PASS
			30~1000	9.24	-67.66	≤-10.76	PASS
			1000~26500	9.24	-48.08	≤-10.76	PASS



BLE_125K_Ant1_2402_0~Reference



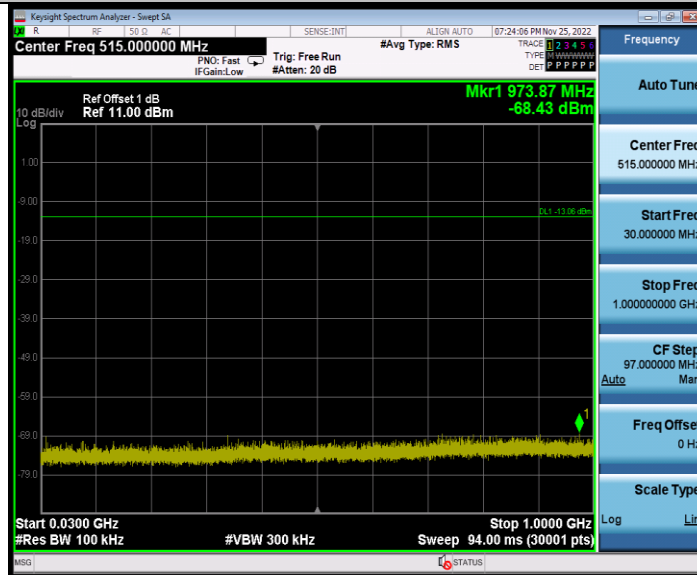
BLE_125K_Ant1_2402_30~1000



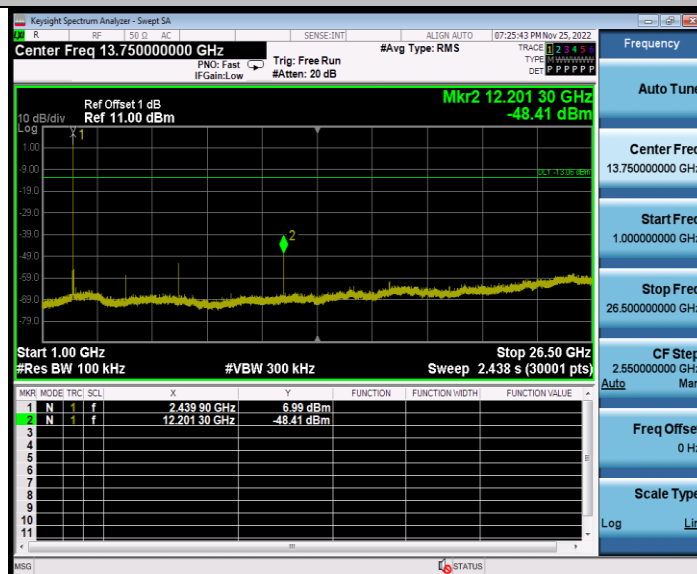
BLE_125K_Ant1_2402_1000~26500



BLE_125K_Ant1_2440_0-Reference



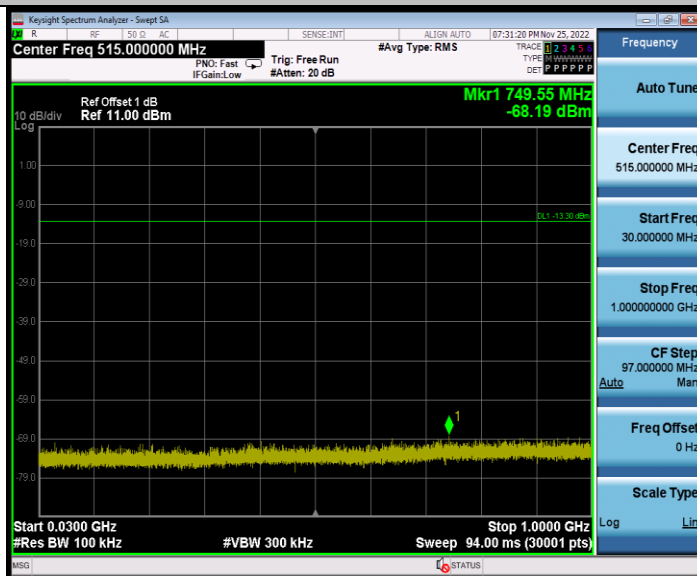
BLE_125K_Ant1_2440_30~1000



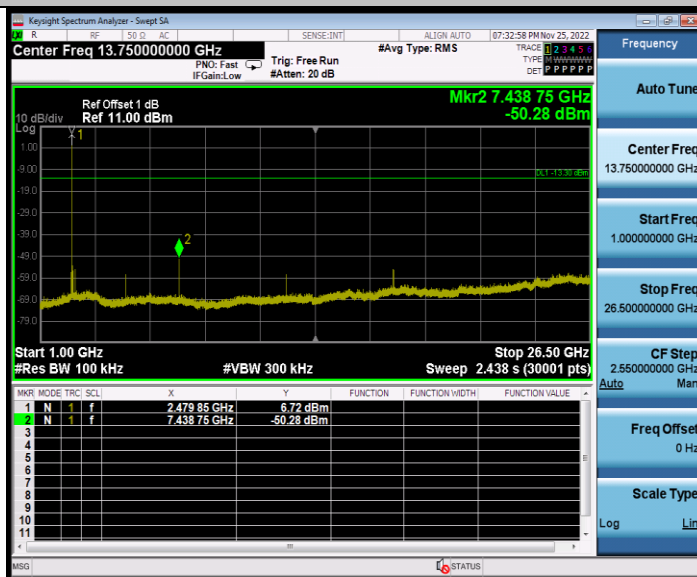
BLE_125K_Ant1_2440_1000~26500



BLE_125K_Ant1_2480_0-Reference



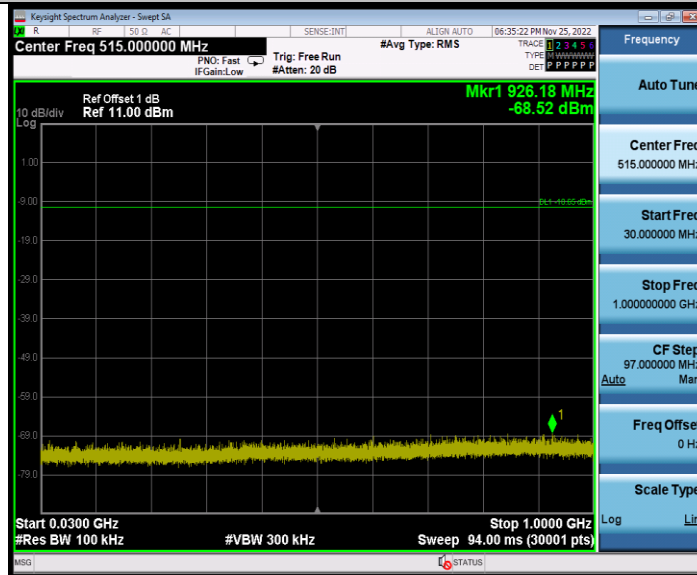
BLE_125K_Ant1_2480_30~1000



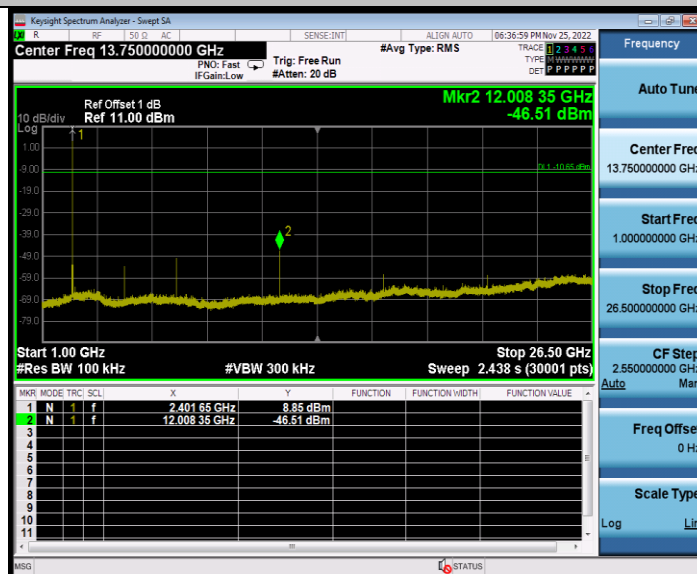
BLE_125K_Ant1_2480_1000~26500



BLE_1M_Ant1_2402_0~Reference



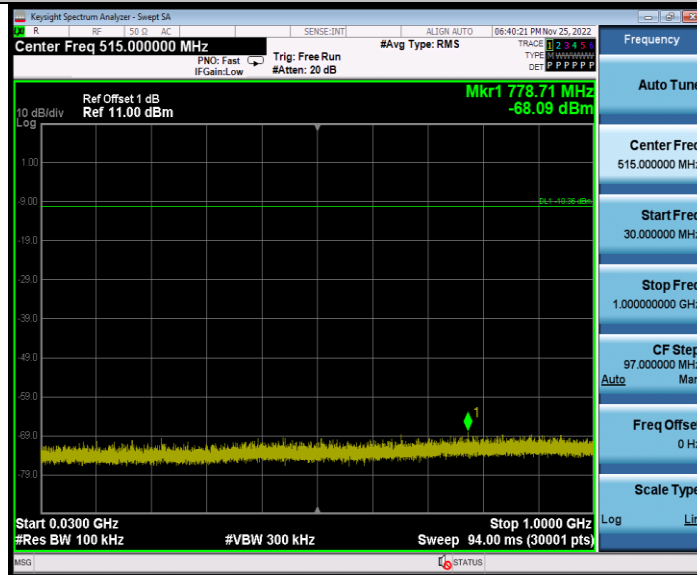
BLE_1M_Ant1_2402_30~1000



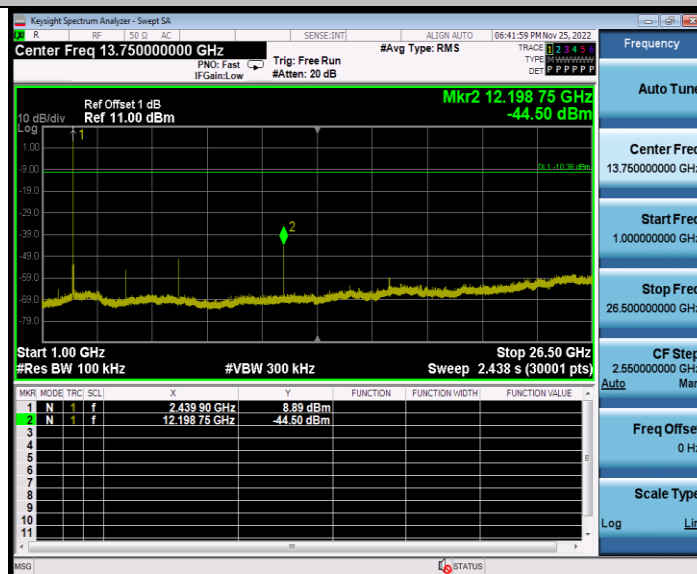
BLE_1M_Ant1_2402_1000~26500



BLE_1M_Ant1_2440_0~Reference



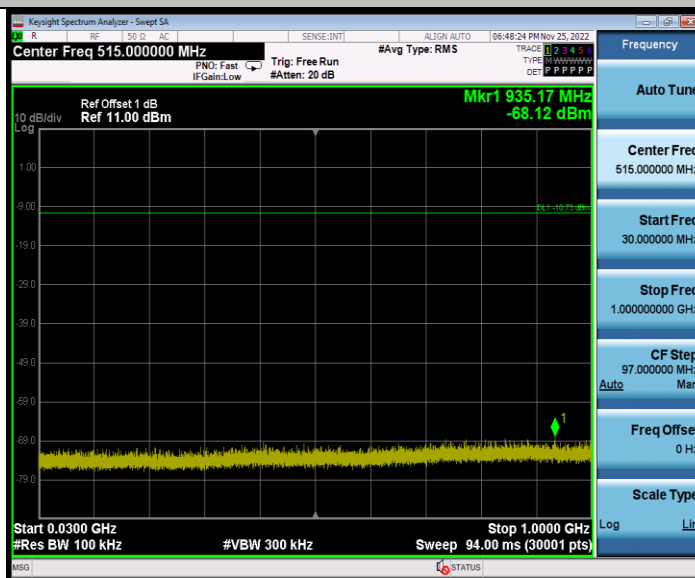
BLE_1M_Ant1_2440_30~1000



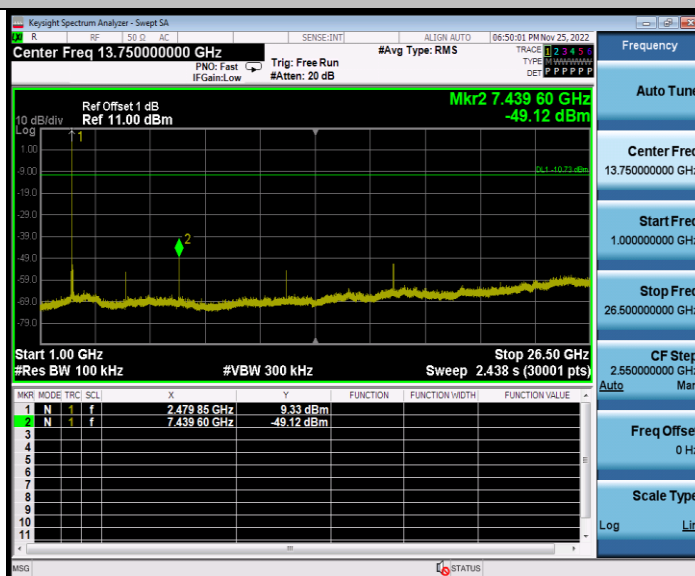
BLE_1M_Ant1_2440_1000~26500



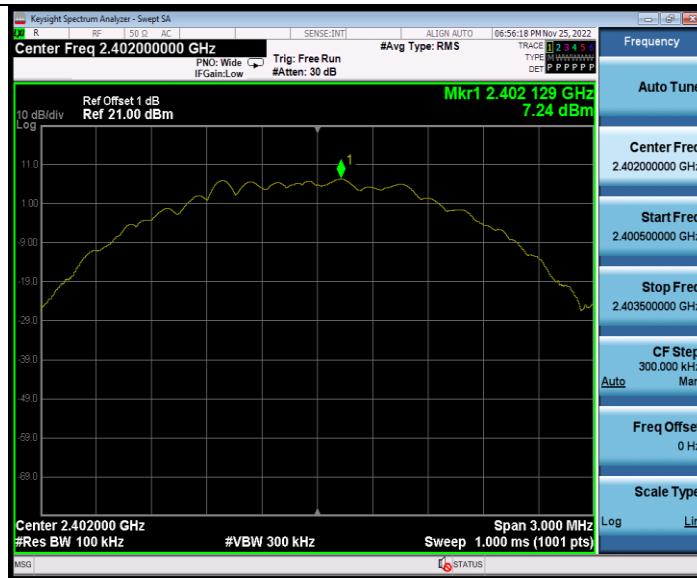
BLE_1M_Ant1_2480_0~Reference



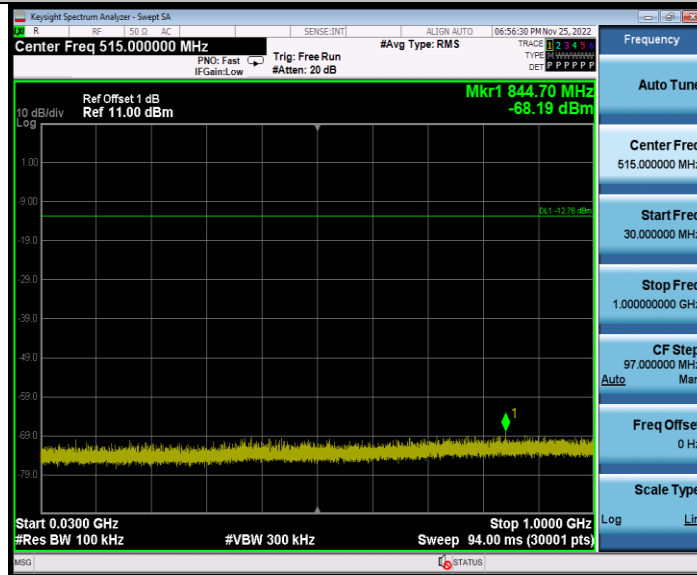
BLE_1M_Ant1_2480_30~1000



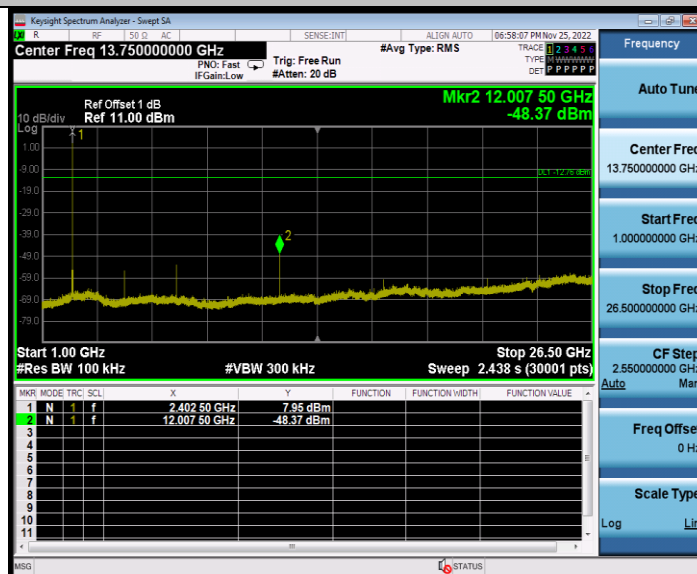
BLE_1M_Ant1_2480_1000~26500



BLE_2M_Ant1_2402_0~Reference



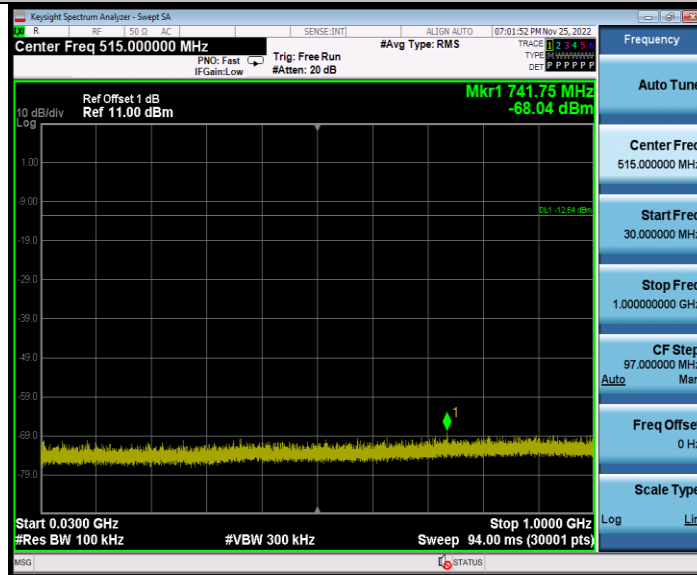
BLE_2M_Ant1_2402_30~1000



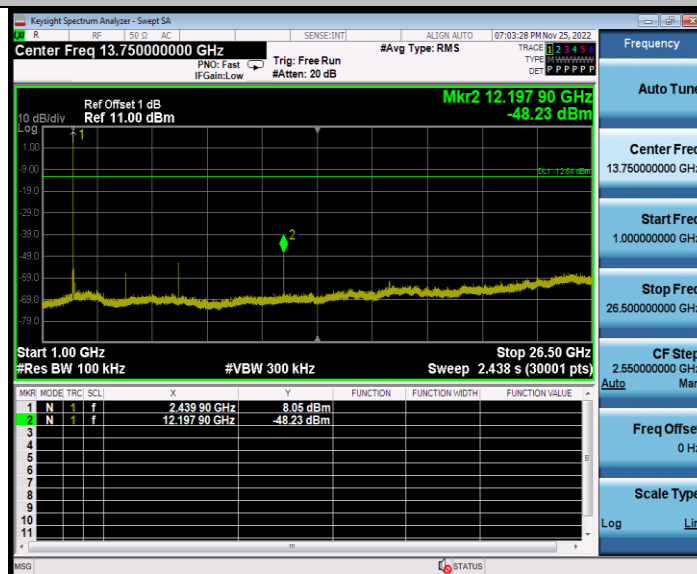
BLE_2M_Ant1_2402_1000~26500



BLE_2M_Ant1_2440_0~Reference



BLE_2M_Ant1_2440_30~1000



BLE_2M_Ant1_2440_1000~26500