



Test report No:
2180208R-RF-US-P06V02

FCC & ISED TEST REPORT

Product Name	AIROC Bluetooth LE Module
Trademark	N/A
Model and /or type reference	CYBLE-343072-02, CYBLE-333073-02, CYBLE-333074-02, CYBLE-343176-02
FCC ID	WAP3072
IC	7922A-3072
Applicant's name / address	Cypress Semiconductor 198 Champion Ct, San Jose, California 95134, United States
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
Tested by (name / position & signature)	Adma Lu / Project Engineer 
Approved by (name / position & signature)	Jack Zhang/Supervisor 
Date of issue	2021-09-03
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.

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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)	Aug. 08, 2021
Date (start test)	Aug. 12, 2021
Date (finish test)	Aug. 27, 2021

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
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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
2180208R-RF-US-P06V02	V1.0	Initial issue of report.	2021-09-03

REMARKS AND COMMENTS

- The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
- 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.
- 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.
- The test results presented in this report relate only to the object tested.
- The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
- This report will not be used for social proof function in China market.
- 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.
- EUT has four models: CYBLE-343072-02, CYBLE-333073-02, CYBLE-333074-02, CYBLE-343176-02, Modules CYBLE-343072-02, CYBLE-333073-02 AND CYBLE-333074-02 have the same PCB, Bluetooth chip, periphery parts and the encapsulation of the main chip. Module CYBLE-343176-02 shares the same PCB with CYBLE-343072-02. The difference is the configuration of antenna, CYBLE-343072-02, it is configured with PCB antenna on the module, CYBLE-333073-02, it is configured with external antenna via RF pin on the bottom of the module, CYBLE-333074-02, it is configured with external dipole antenna via UFLModule CYBLE-343176-02 shares the same PCB with CYBLE-343072-02 except that working temperature is changed from -40~85°C to -40~105°C. Part of device P/N has changed to meet the working temperature requirement. We conducted all tests on the most powerful model CYBLE-343176-02, and the remaining three models evaluated power, Emissions in restricted frequency bands and Radiated Emission Band Edge.
- The EUT used for customer authentication is red, and the EUT used for final mass production will be green.

USED EQUIPMENT

AC Power Line Conducted Emission / TR1

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Two-Line V-Network	R&S	ENV216	101044	2021.03.20	2022.03.19
50ohm Termination	SHX	TF2	7081402	2020.09.23	2021.09.22
50ohm Termination	SHX	TF2	7081403	2020.09.23	2021.09.22
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-8S	TR1-TH	2021.07.09	2022.07.08
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	2021.07.11	2022.07.10
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2021.03.20	2022.03.19
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2021.07.11	2022.07.10
4TX MIMO Power Sensor	Keysight	X8750A	MY59400102	2021.03.31	2022.03.30
Coaxial Cable	Woken	SFL402	F02-150410-044	2021.01.01	2021.12.31
Temperature/Humidity Meter	RTS	RTS-8S	RF08	2021.07.09	2022.07.08

Radiated Emission(30MHz-1GHz) / AC3

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100176	2021.08.15	2022.08.14
Bilog Antenna	Teseq GmbH	CBL6112D	27613	2020.11.27	2021.11.26
Coaxial Cable	Huber+Suhner	RG 214	AC3-C	2021.03.31	2022.03.30
Temperature/Humidity Meter	RTS	RTS-8S	AC3-TH	2021.07.09	2022.07.08
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	2021.03.20	2022.03.19
Amplifier	Keleto	LNPA	SK20190225	2020.09.25	2021.09.24
Preamplifier	EMCI	EMC184045SE	980263	2021.05.22	2022.05.21
DRG Horn Antenna	ETS-Lindgren	3117	00167055	2020.09.21	2021.09.20
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2021.04.14	2023.04.13
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2021.03.31	2022.03.30
Coaxial Cable	ROSENBERGER	LA1-C011- 2000/3000	AC5-40G	2021.03.20	2022.03.19
Temperature/Humidity Meter	RTS	RTS-8S	AC5-TH	2021.07.09	2022.07.08
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	AIROC Bluetooth LE Module
Model No.	CYBLE-343072-02, CYBLE-333073-02, CYBLE-333074-02, CYBLE-343176-02
FCC ID	WAP3072
IC	7922A-3072
Manufacturer	Cypress Semiconductor
Manufacturer Address	198 Champion Ct, San Jose, California 95134, United States

Wireless specification	Bluetooth				
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 type="checkbox"/> LE Coded S=2/8		
Data Rate	<input checked="" type="checkbox"/> 1Mbit/s	<input checked="" type="checkbox"/> 2Mbit/s	<input 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 type="checkbox"/>	AC: 110 – 130 Vac, 50/60 Hz			
	<input checked="" type="checkbox"/>	DC: 2.5 – 3.6 Vdc			
	<input type="checkbox"/>	Battery:			
Mounting position	<input type="checkbox"/>	Table top equipment			
	<input type="checkbox"/>	Wall/Ceiling mounted equipment			
	<input type="checkbox"/>	Floor standing equipment			
	<input type="checkbox"/>	Head-mounted equipment			
	<input checked="" type="checkbox"/>	Other: Module			

1.2 Antenna Information

CYBLE-333073-02 and CYBLE-333074-02:

Antenna model / type number	N/A		
Antenna serial number	W1010		
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"/> Beam-forming
Antenna Type	<input checked="" type="checkbox"/>	External	<input checked="" type="checkbox"/> Dipole
			<input type="checkbox"/> Sectorized
	<input type="checkbox"/>	Internal	<input type="checkbox"/> PIFA
			<input type="checkbox"/> PCB
			<input type="checkbox"/> Metal Monopole Antenna
			<input type="checkbox"/> Others.....
Antenna Gain	2.0dbi		

CYBLE-343176-02 and CYBLE-343072-02:

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"/> 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"/> Metal Monopole Antenna
			<input type="checkbox"/> Others.....
Antenna Gain	-0.5dbi		

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.

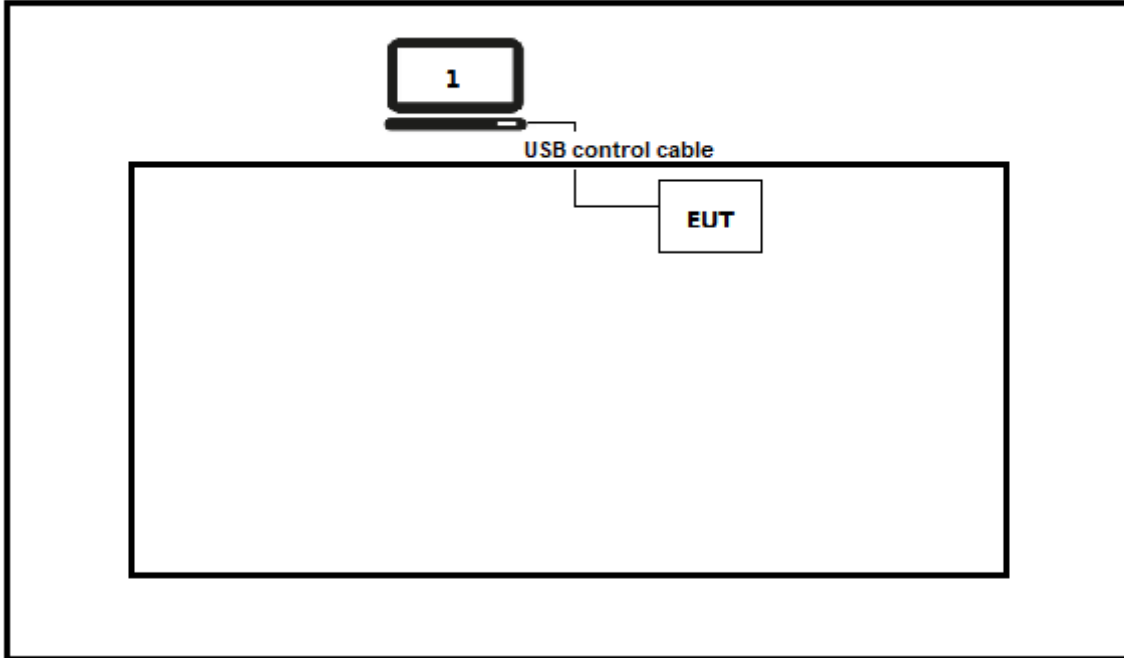
Test Mode For Bluetooth	Mode1: Transmit by LE_1Mbps
	Mode2: Transmit by LE_2Mbps

2.2 Auxiliary equipment / Test software for the EUT

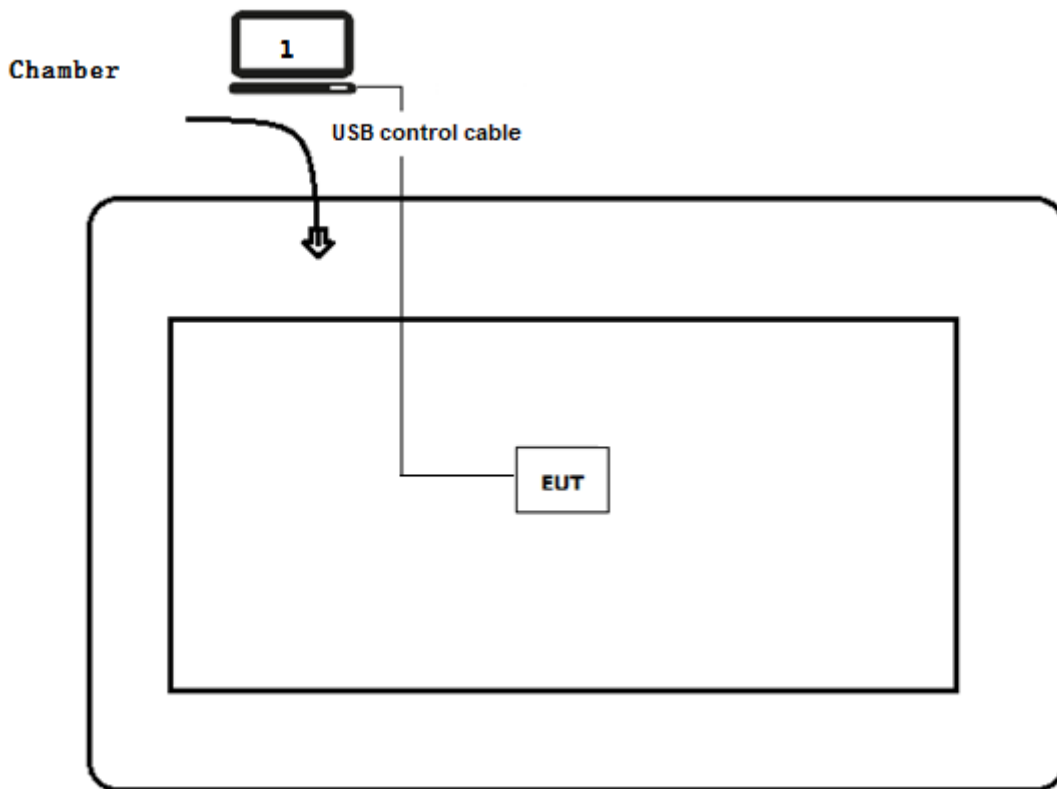
Auxiliary equipment	Type / Version	Manufacturer	Supplied by
Notebook	Think pad x220	Lenovo	Adapter
Software	Type / Version	Manufacturer	Supplied by
BlueTool	N/A	N/A	N/A

2.3 Test Configuration / Block diagram used for tests

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Radiated Emission



2.4 Testing process

1	Setup the EUT as shown in Section 2.3.
2	Execute test software“BlueTool”on the notebook.
3	Configure the test mode, the test channel, and the 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	---
Radiated Emission Band Edge	FCC 15.247(d)	PASS	---
Fundamental emission output power	FCC 15.247(d), FCC 15.209	PASS	---
DTS Bandwidth	FCC 15.247(a)(2)	PASS	---
Power Spectral Density	FCC 15.247(e)	PASS	---
Antenna Requirement	FCC 15.203	PASS	---

For ISED

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

3.4 Test Facility

USA : FCC Designation Number: CN1199

CA : ISED CAB identifier: CN0040

4 TEST RESULTS

4.1 AC Power Line Conducted Emission

VERDICT: **PASS**

4.1.1 Limit

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

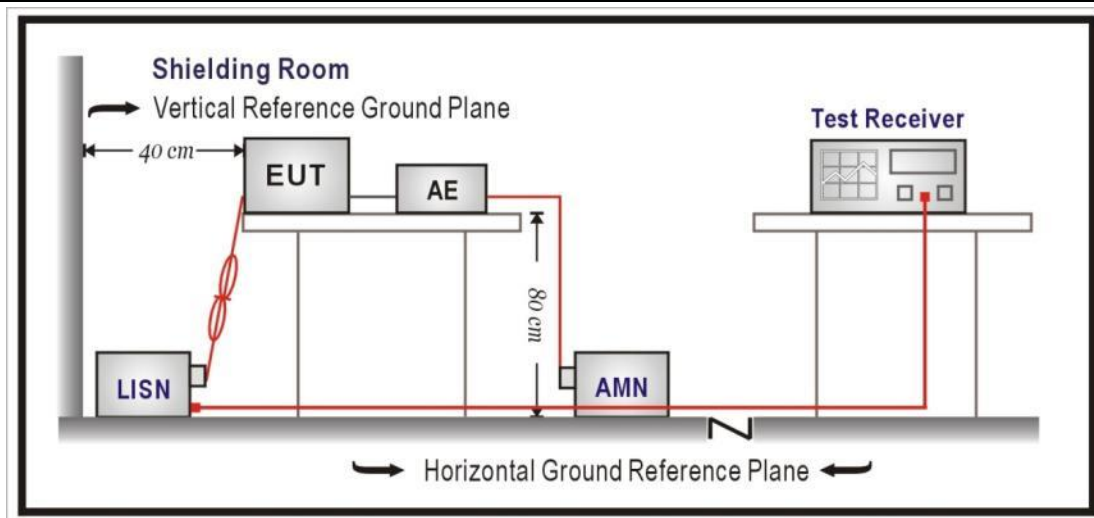
¹⁾ At the transition frequency, the lower limit applies.

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

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

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

4.1.2 Test Setup



4.1.3 Test Procedure

	References Rule	Chapter	Item
<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

Note: EUT is DC powered

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 operation for 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 operation for 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 ($\mu\text{V/m}$)	Field strength ($\text{dB}\mu\text{V/m}$)	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)

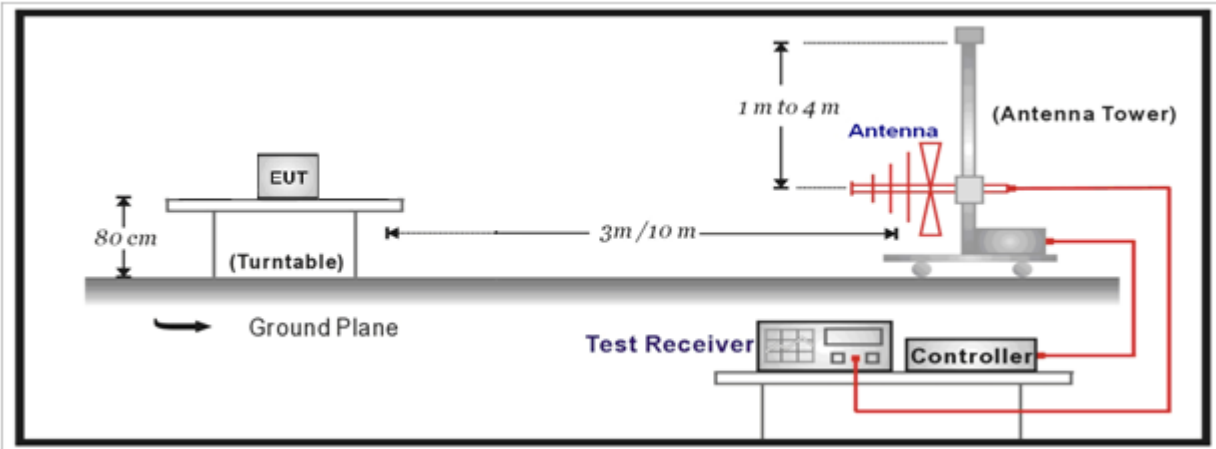
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed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

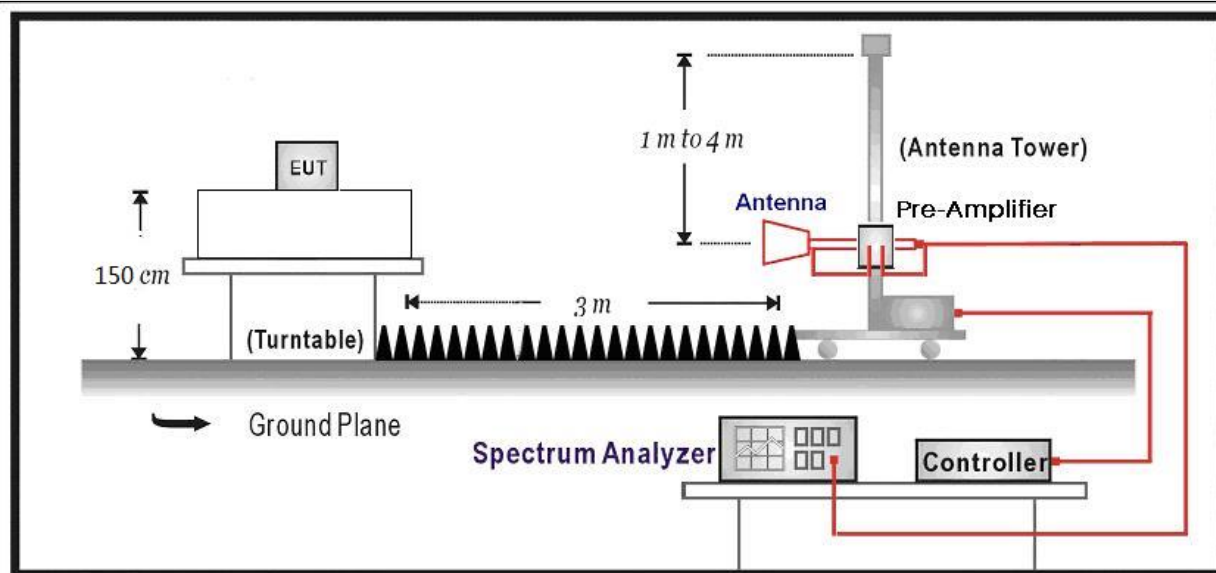
Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified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

30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



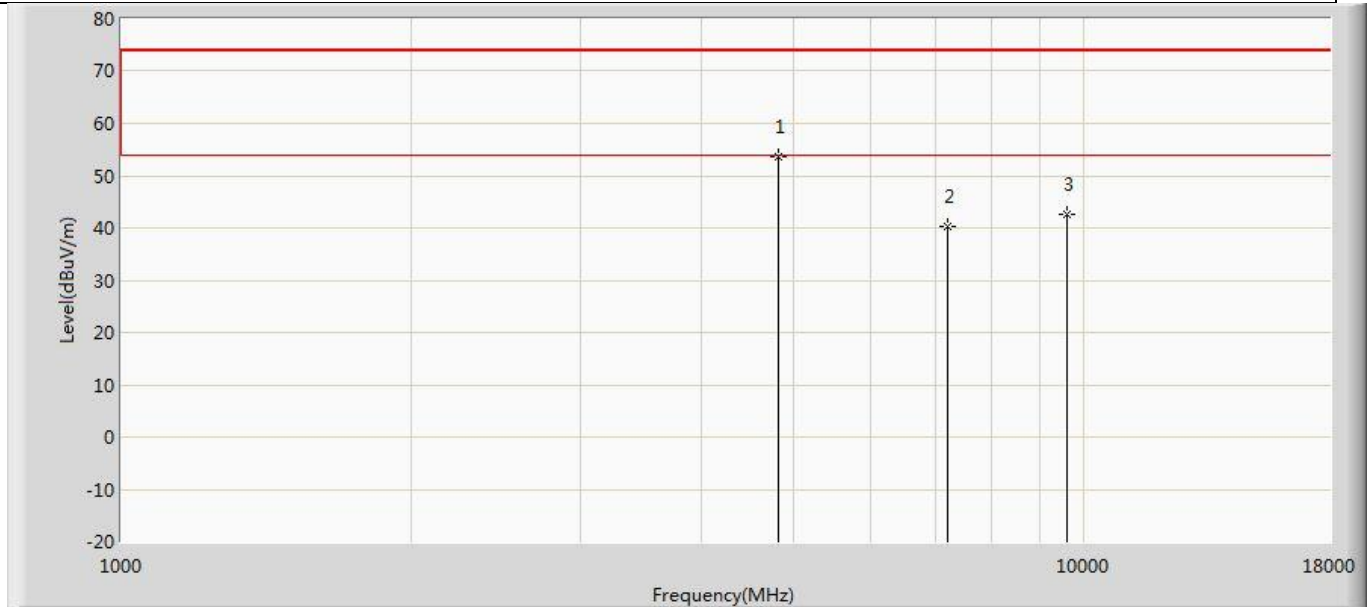
4.2.3 Test Procedure

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

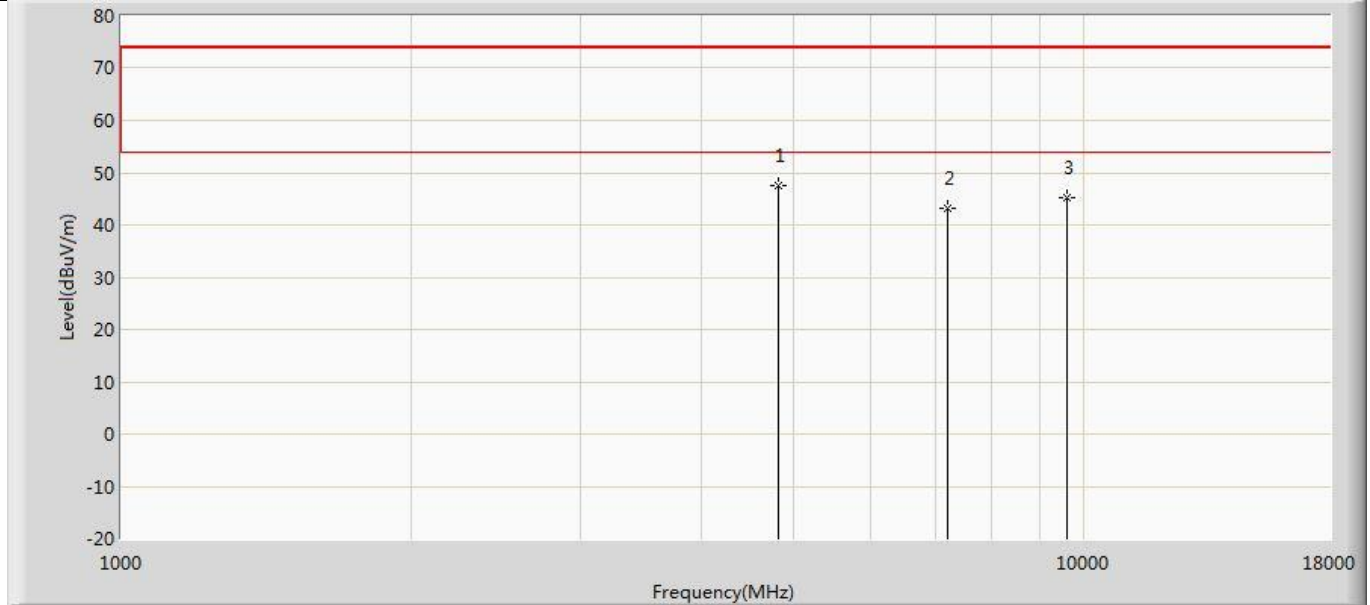
CYBLE-333073-02 Test Data

Profile: 2180208R	Page No.: 13
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/20 - 00:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



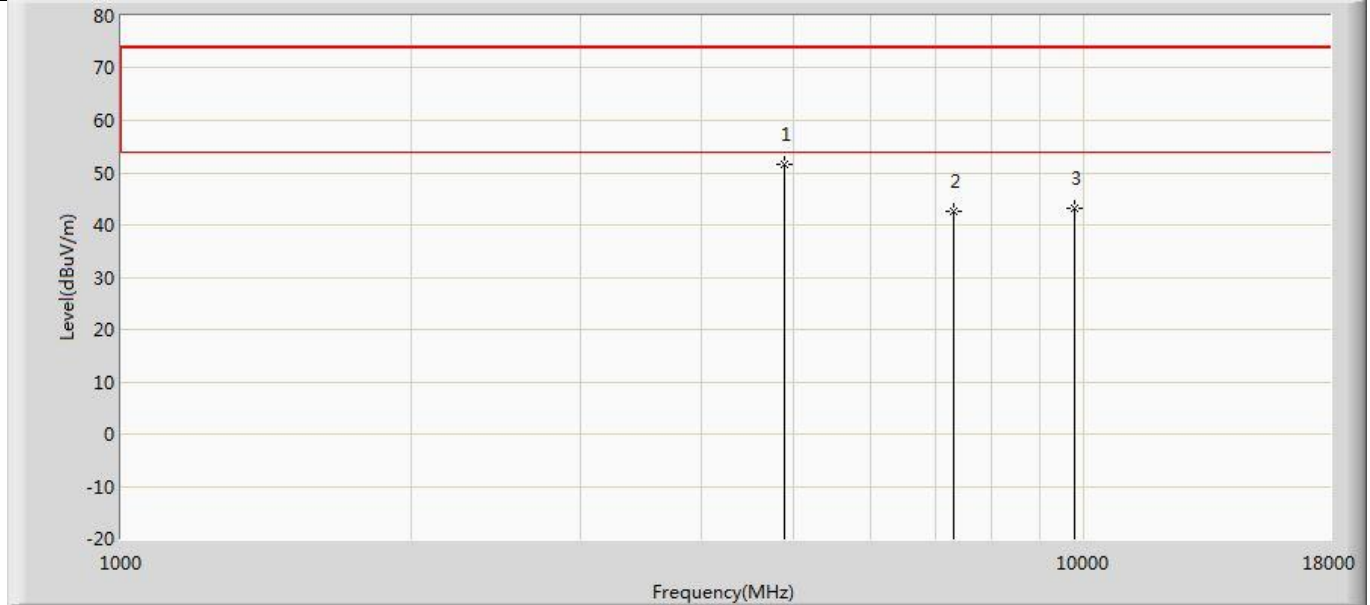
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	53.490	58.492	-20.510	74.000	-5.002	PK
2		7206.000	40.427	41.473	-33.573	74.000	-1.046	PK
3		9608.000	42.598	39.768	-31.402	74.000	2.830	PK

Profile: 2180208R	Page No.: 14
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/20 - 00:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



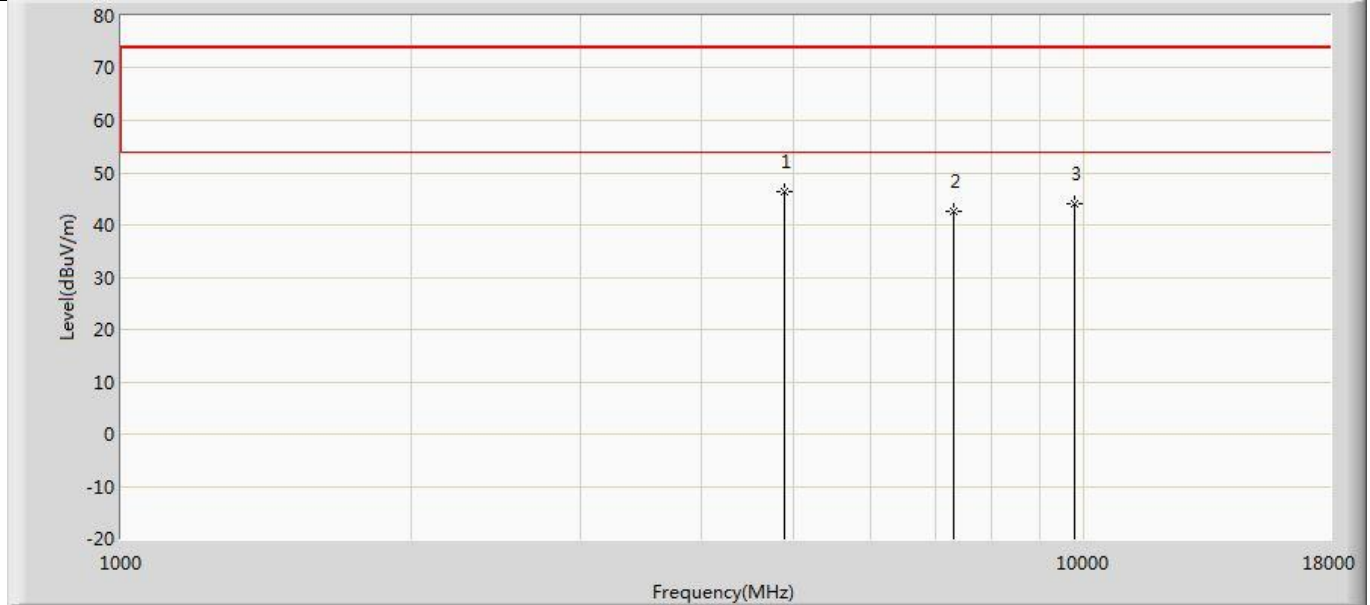
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	47.650	52.652	-26.350	74.000	-5.002	PK
2		7206.000	43.262	44.308	-30.738	74.000	-1.046	PK
3		9608.000	45.234	42.404	-28.766	74.000	2.830	PK

Profile: 2180208R	Page No.: 15
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/20 - 00:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps	



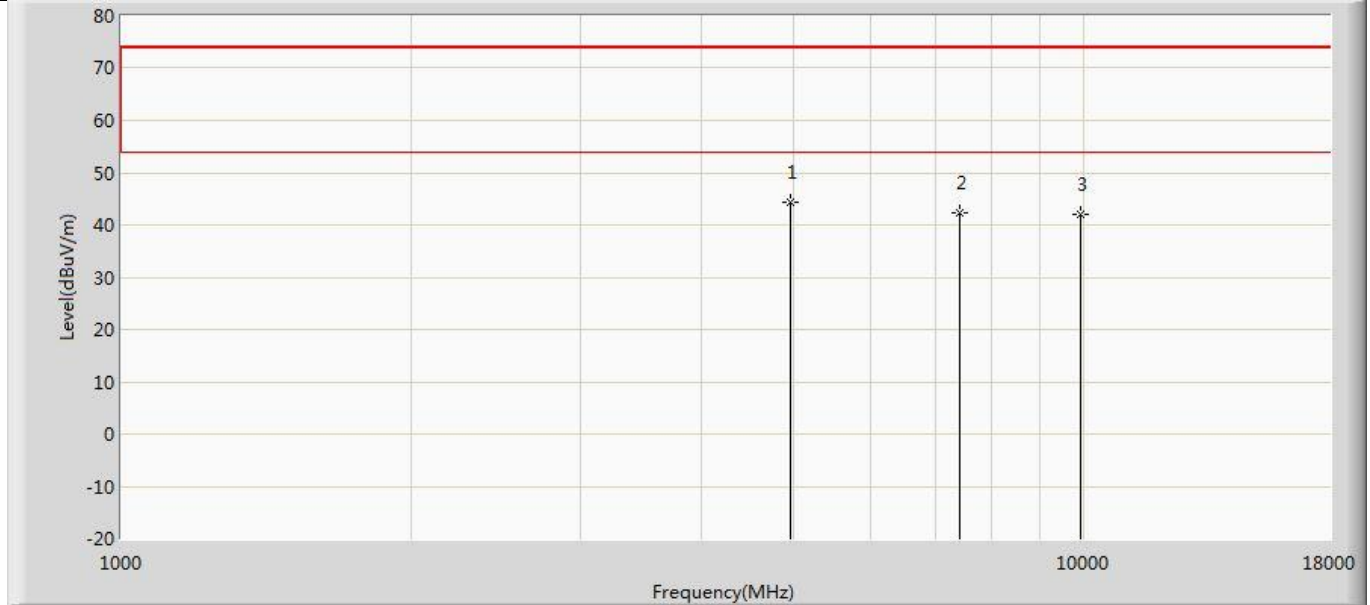
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	51.562	56.323	-22.438	74.000	-4.761	PK
2		7320.000	42.541	43.434	-31.459	74.000	-0.893	PK
3		9760.000	43.273	40.275	-30.727	74.000	2.998	PK

Profile: 2180208R	Page No.: 16
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/20 - 00:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps	



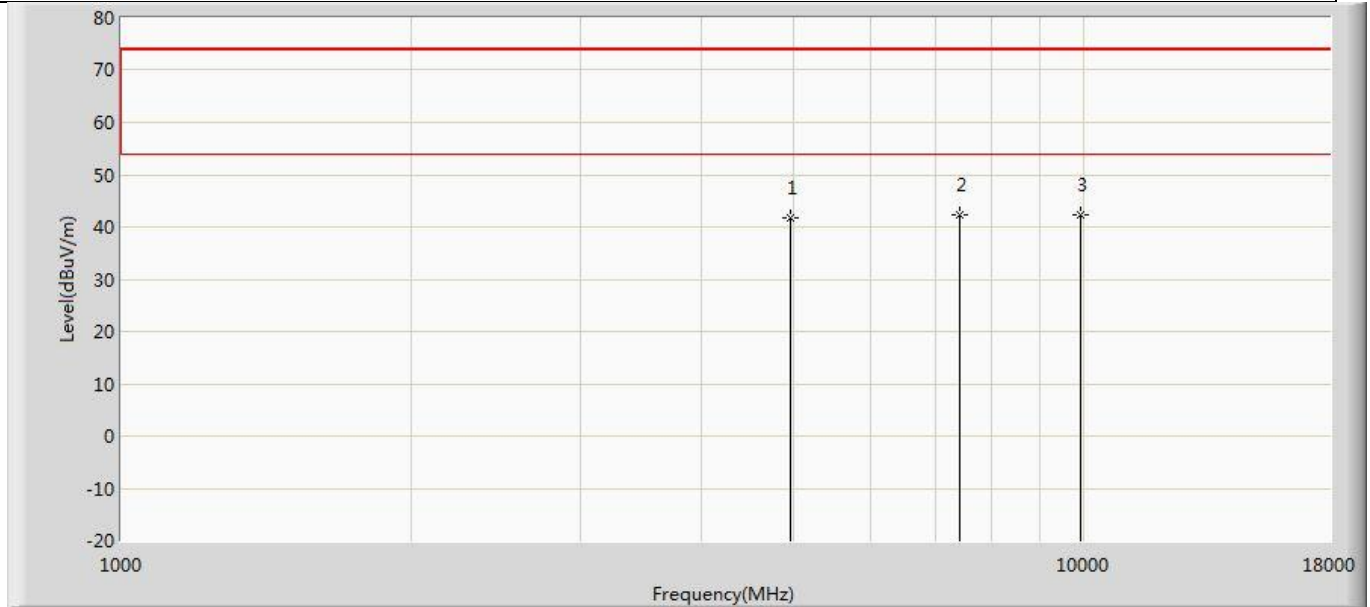
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	46.410	51.171	-27.590	74.000	-4.761	PK
2		7320.000	42.686	43.579	-31.314	74.000	-0.893	PK
3		9760.000	44.046	41.048	-29.954	74.000	2.998	PK

Profile: 2180208R	Page No.: 17
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/20 - 00:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



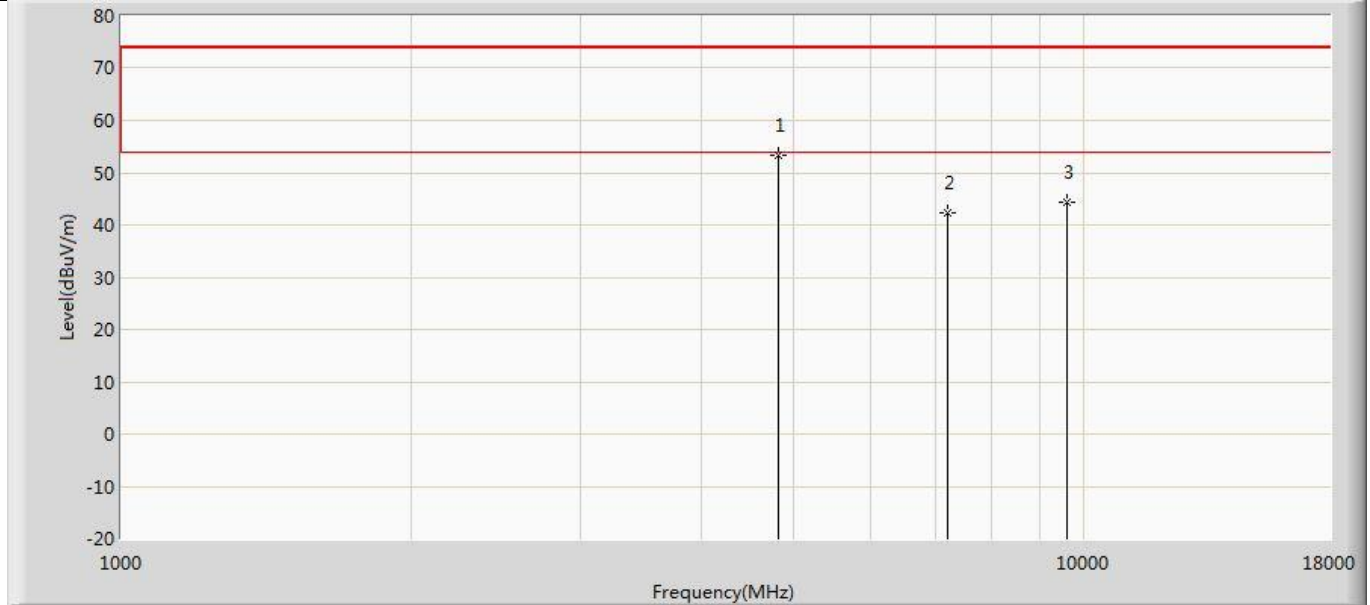
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	44.386	49.029	-29.614	74.000	-4.643	PK
2		7440.000	42.207	43.250	-31.793	74.000	-1.043	PK
3		9920.000	42.094	39.047	-31.906	74.000	3.047	PK

Profile: 2180208R	Page No.: 18
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/20 - 00:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



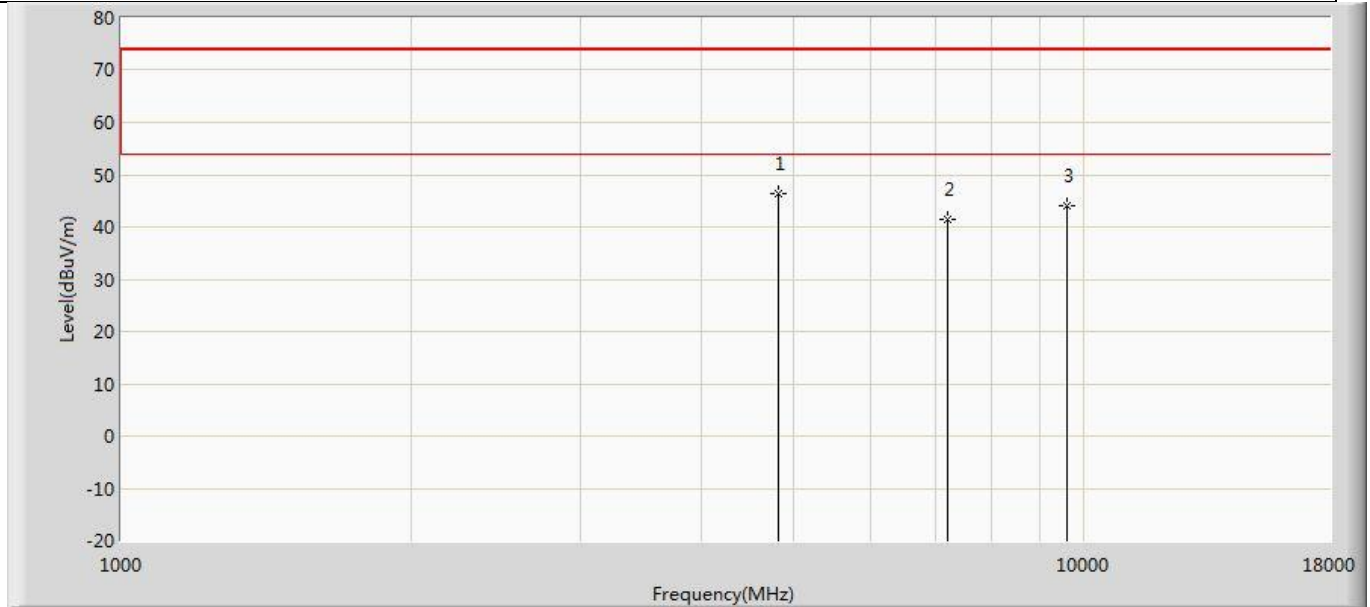
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.662	46.324	-32.338	74.000	-4.662	PK
2	*	7440.000	42.414	43.457	-31.586	74.000	-1.043	PK
3		9920.000	42.263	39.216	-31.737	74.000	3.047	PK

Profile: 2180208R	Page No.: 19
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/20 - 00:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



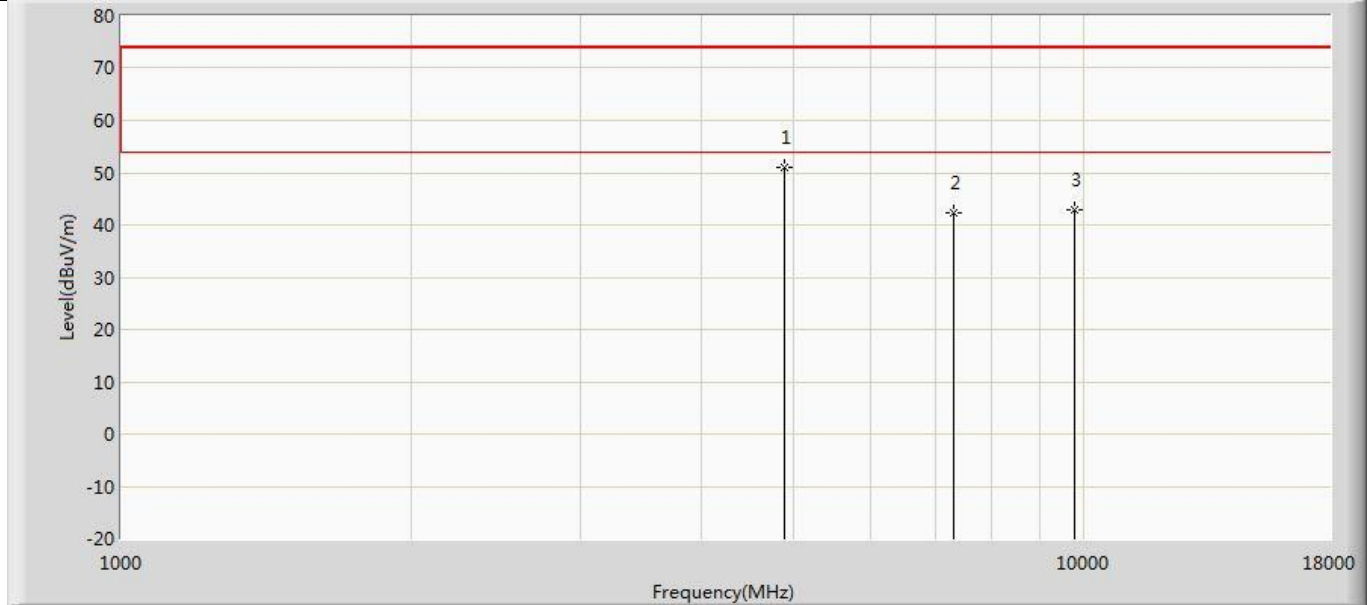
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	53.424	58.426	-20.576	74.000	-5.002	PK
2		7206.000	42.240	43.286	-31.760	74.000	-1.046	PK
3		9608.000	44.238	41.408	-29.762	74.000	2.830	PK

Profile: 2180208R	Page No.: 20
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/20 - 00:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



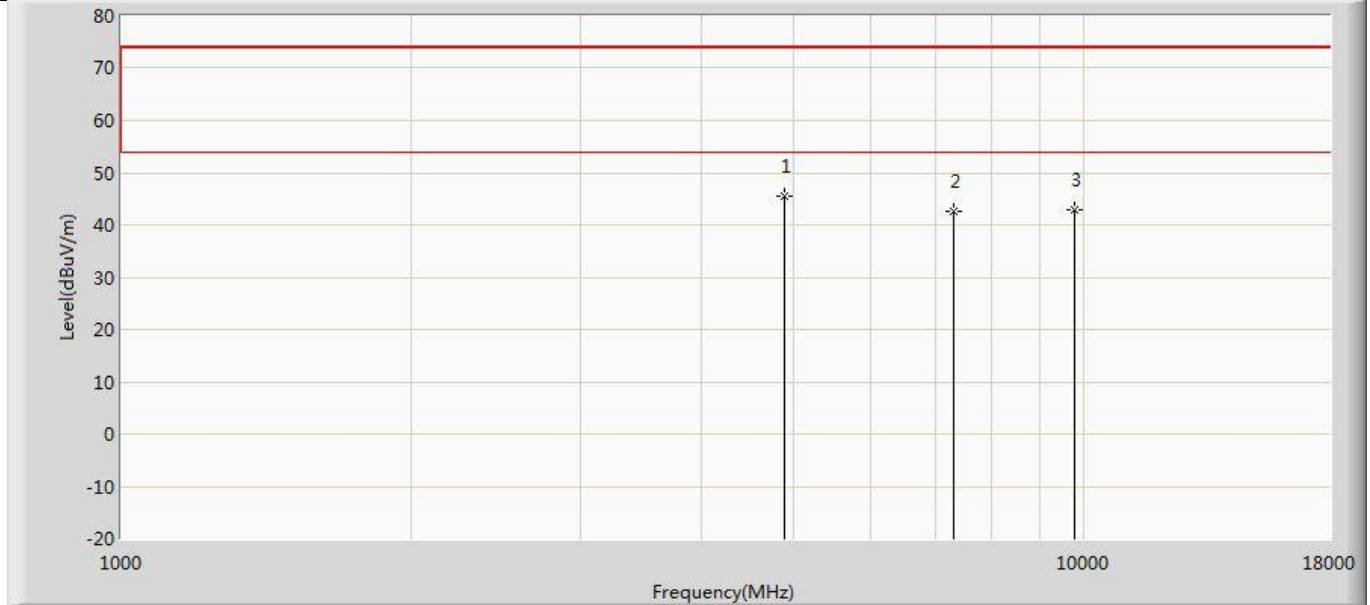
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	46.478	51.480	-27.522	74.000	-5.002	PK
2		7206.000	41.457	42.503	-32.543	74.000	-1.046	PK
3		9608.000	43.994	41.164	-30.006	74.000	2.830	PK

Profile: 2180208R	Page No.: 21
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/20 - 00:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps	



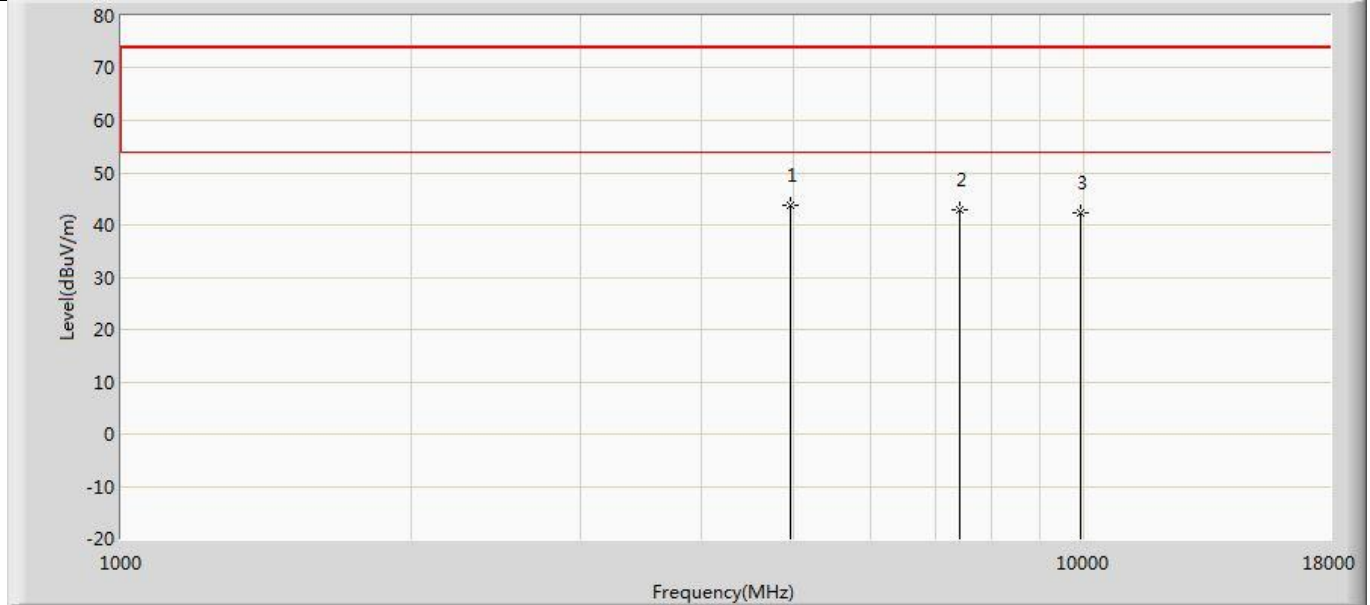
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	50.896	55.657	-23.104	74.000	-4.761	PK
2		7320.000	42.183	43.076	-31.817	74.000	-0.893	PK
3		9760.000	42.973	39.975	-31.027	74.000	2.998	PK

Profile: 2180208R	Page No.: 22
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/20 - 00:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps	



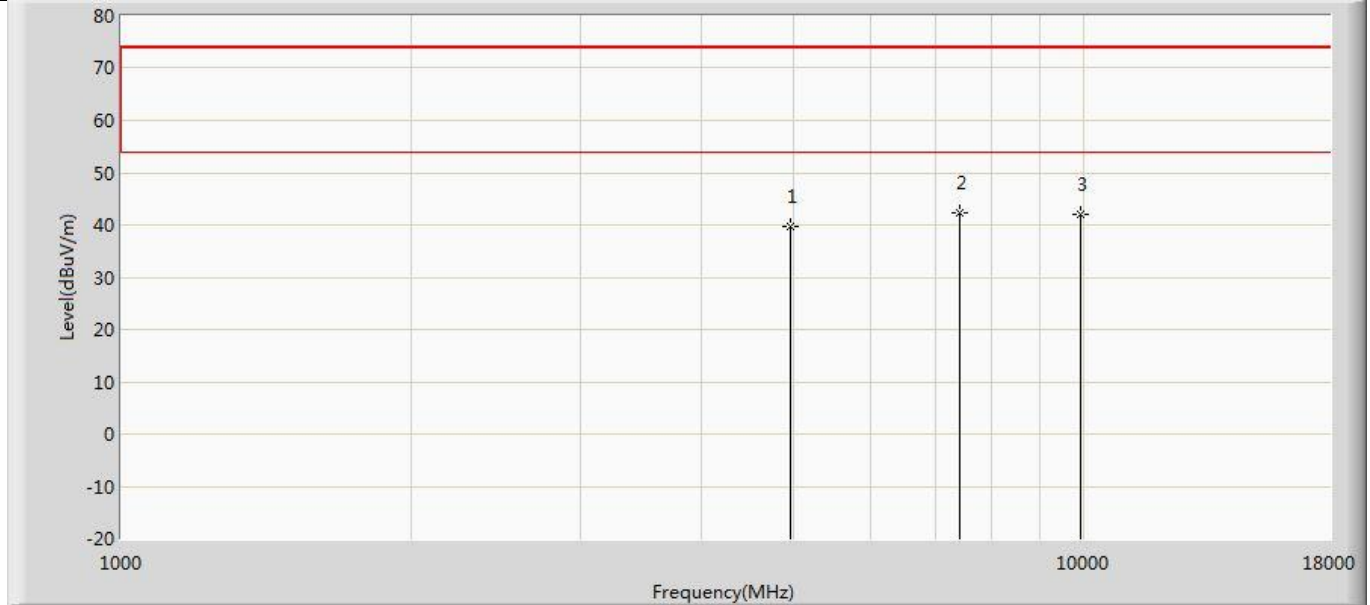
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	45.442	50.203	-28.558	74.000	-4.761	PK
2		7320.000	42.483	43.376	-31.517	74.000	-0.893	PK
3		9760.000	42.917	39.919	-31.083	74.000	2.998	PK

Profile: 2180208R	Page No.: 23
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/20 - 00:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	43.797	48.440	-30.203	74.000	-4.643	PK
2		7440.000	42.845	43.888	-31.155	74.000	-1.043	PK
3		9920.000	42.349	39.302	-31.651	74.000	3.047	PK

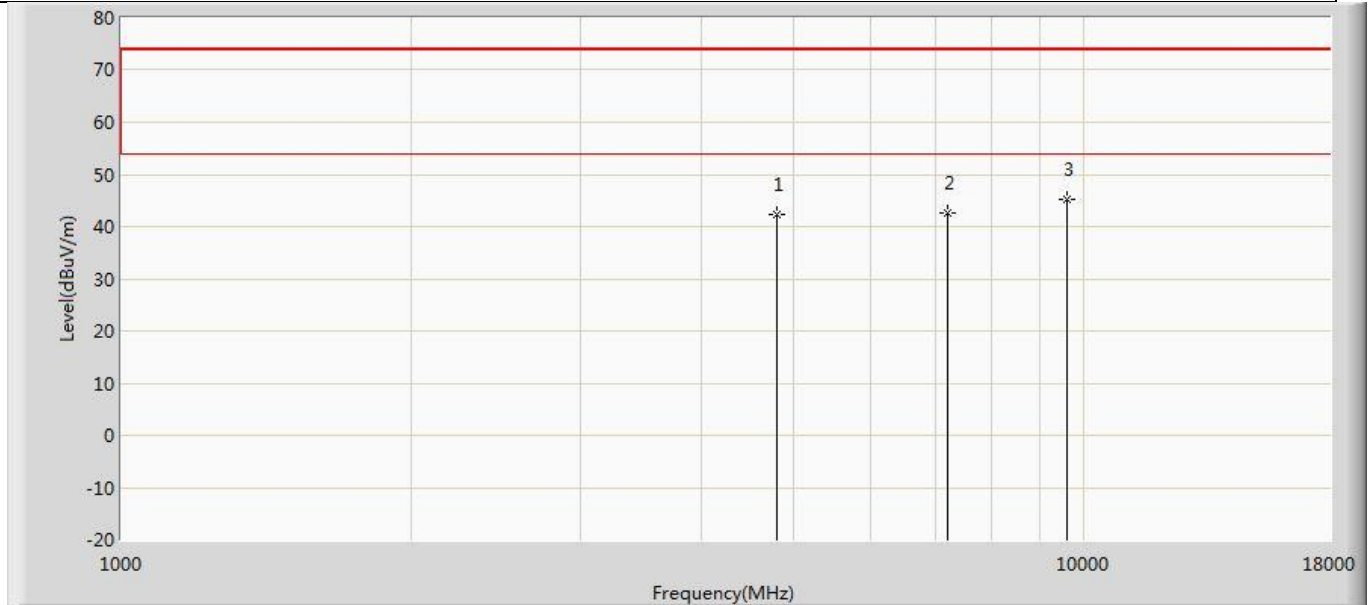
Profile: 2180208R	Page No.: 24
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/20 - 00:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.832	44.494	-34.168	74.000	-4.662	PK
2	*	7440.000	42.212	43.255	-31.788	74.000	-1.043	PK
3		9920.000	42.002	38.955	-31.998	74.000	3.047	PK

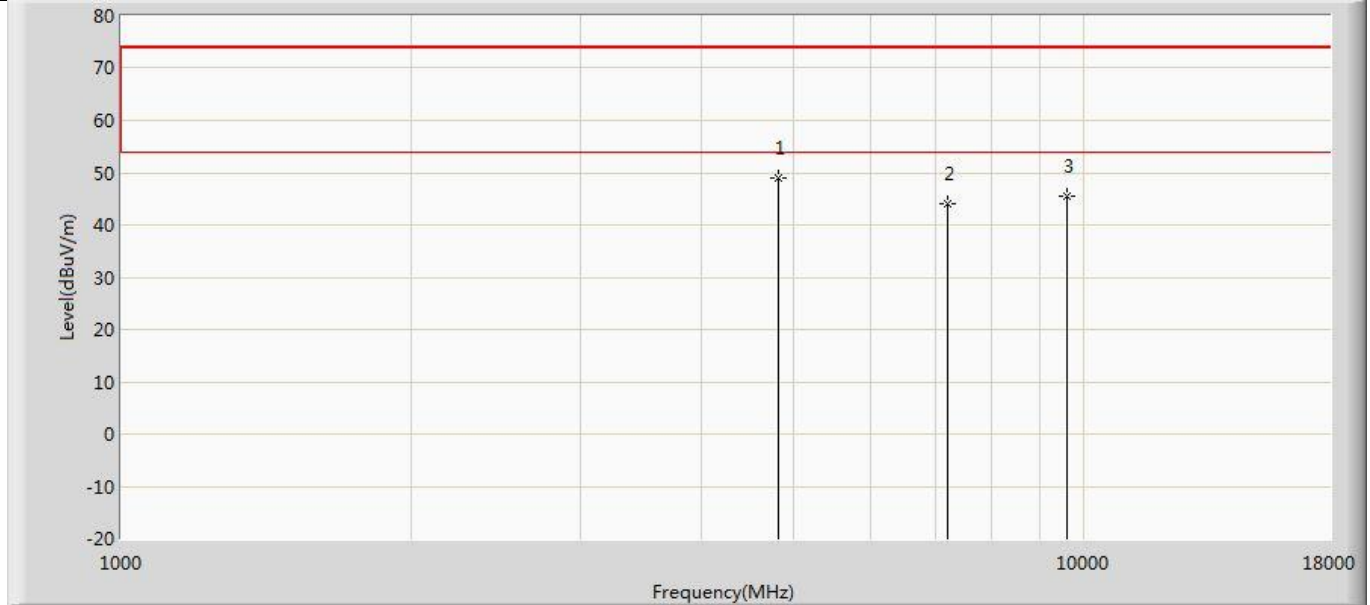
CYBLE-333074-02 Test Data

Profile: 2180208R	Page No.: 13
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 22:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



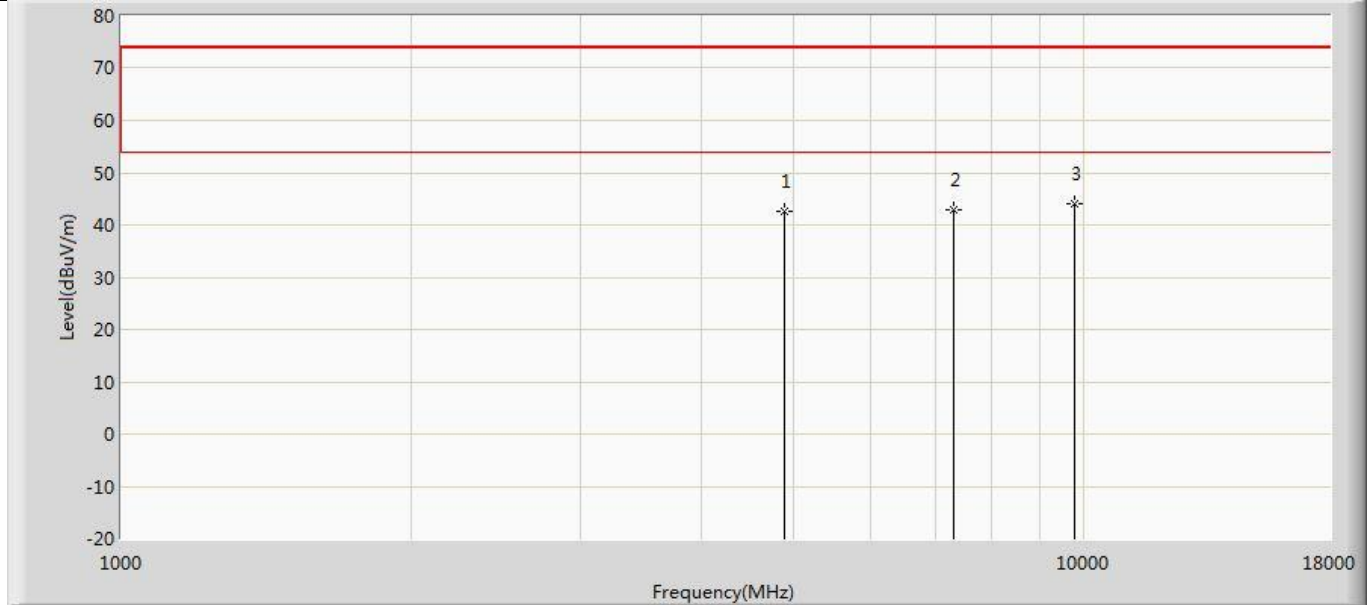
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.289	47.332	-31.711	74.000	-5.044	PK
2		7206.000	42.636	43.682	-31.364	74.000	-1.046	PK
3	*	9608.000	45.104	42.274	-28.896	74.000	2.830	PK

Profile: 2180208R	Page No.: 14
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 22:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



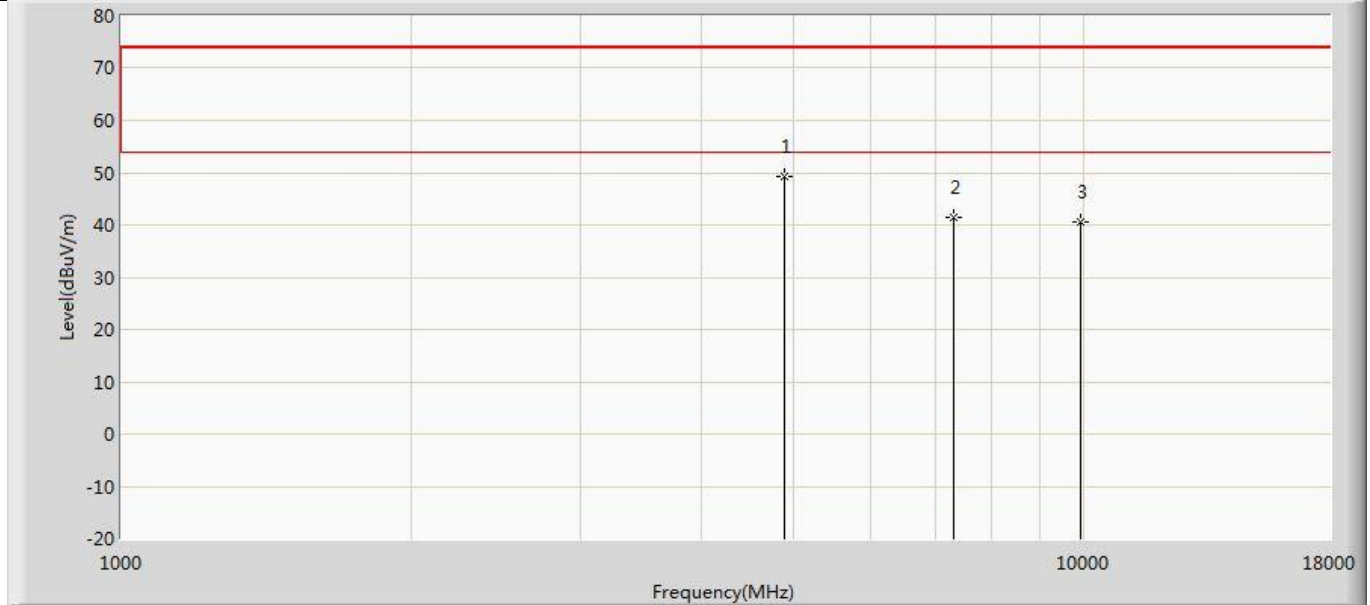
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	48.970	53.972	-25.030	74.000	-5.002	PK
2		7206.000	44.184	45.230	-29.816	74.000	-1.046	PK
3		9608.000	45.452	42.622	-28.548	74.000	2.830	PK

Profile: 2180208R	Page No.: 15
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 22:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps	



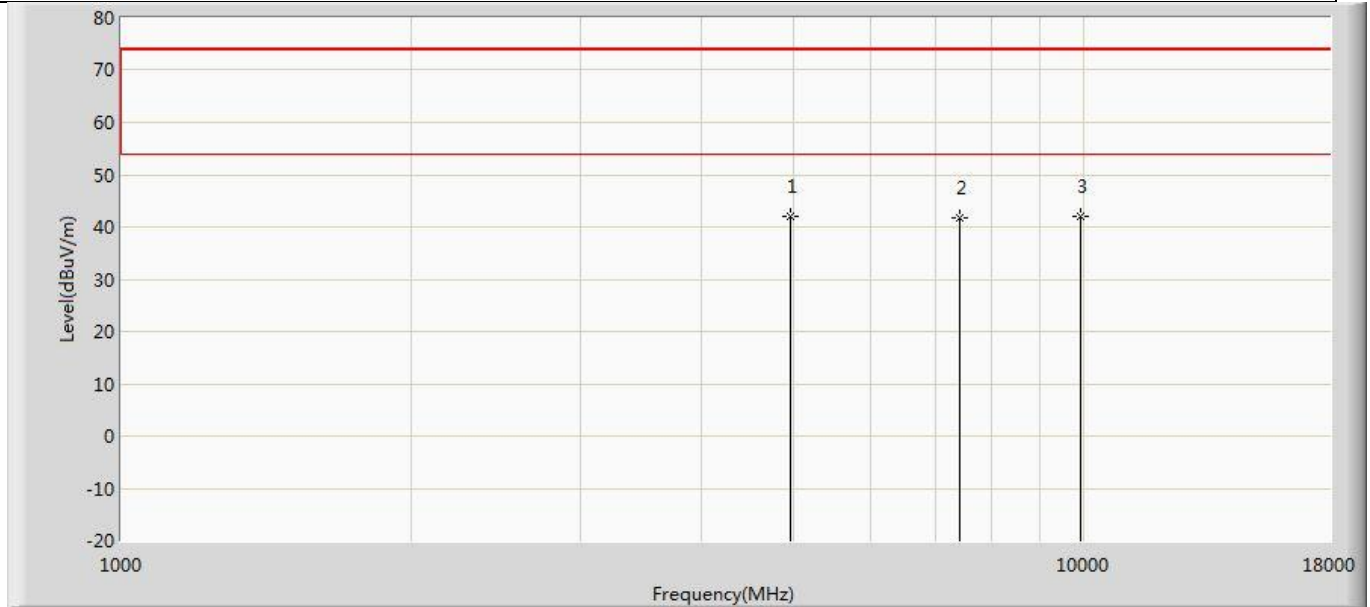
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.510	47.337	-31.490	74.000	-4.827	PK
2		7320.000	42.767	43.660	-31.233	74.000	-0.893	PK
3	*	9760.000	43.987	40.989	-30.013	74.000	2.998	PK

Profile: 2180208R	Page No.: 16
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 22:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps	



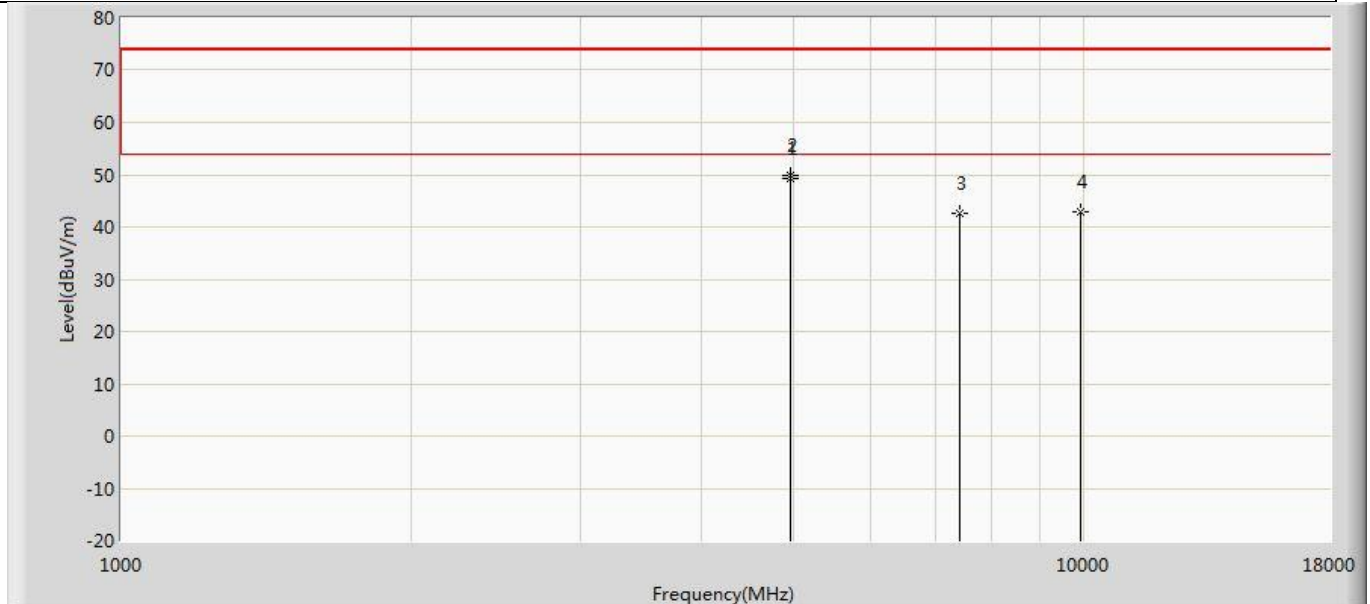
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	49.244	54.005	-24.756	74.000	-4.761	PK
2		7320.000	41.356	42.249	-32.644	74.000	-0.893	PK
3		9920.000	40.590	37.543	-33.410	74.000	3.047	PK

Profile: 2180208R	Page No.: 17
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 22:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



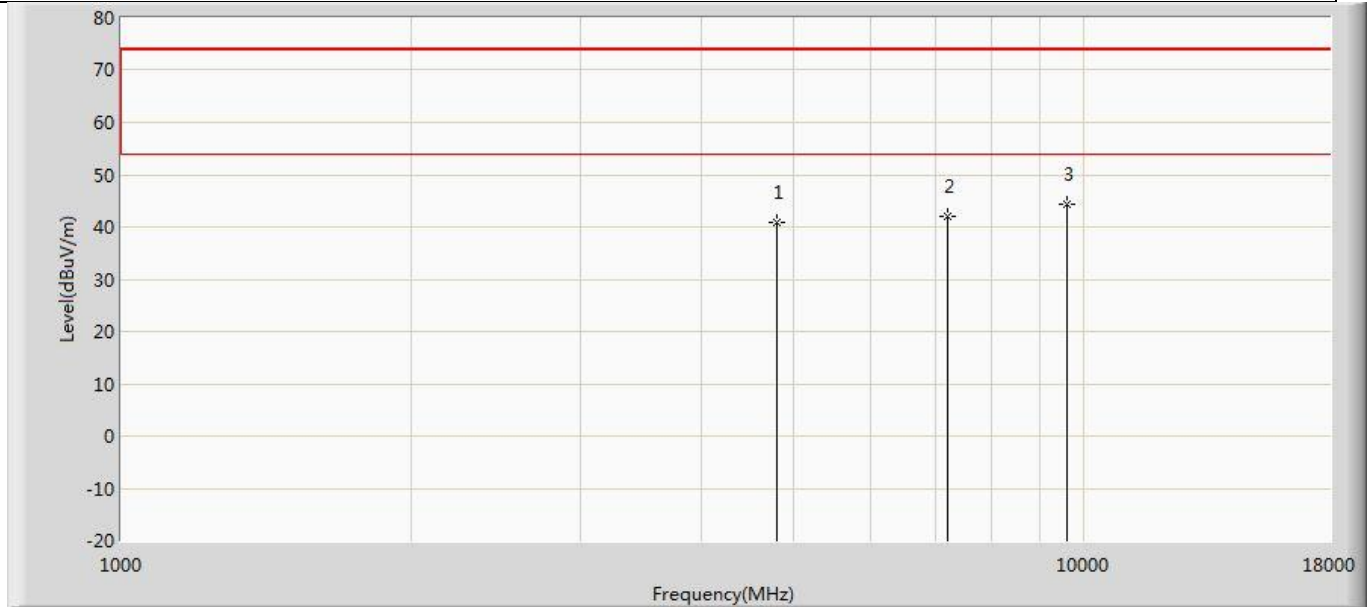
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.890	46.552	-32.110	74.000	-4.662	PK
2		7440.000	41.877	42.920	-32.123	74.000	-1.043	PK
3	*	9920.000	42.034	38.987	-31.966	74.000	3.047	PK

Profile: 2180208R	Page No.: 18
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 22:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



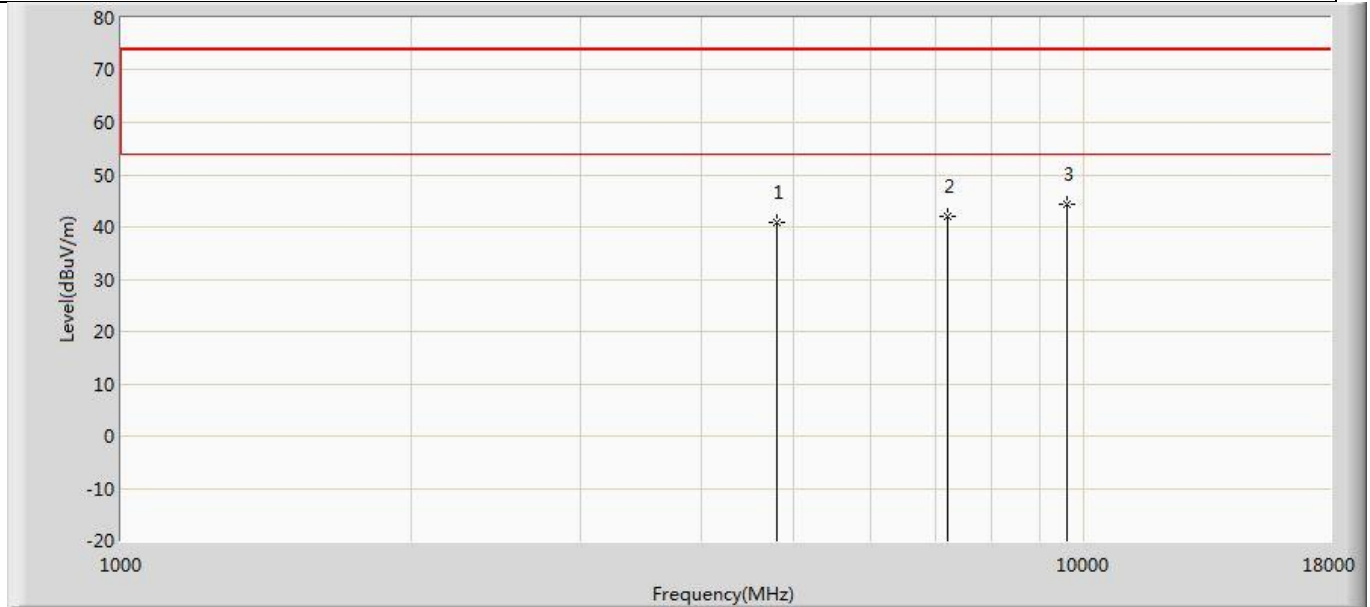
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	49.282	53.944	-24.718	74.000	-4.662	PK
2	*	4961.000	49.893	54.536	-24.107	74.000	-4.643	PK
3		7440.000	42.715	43.758	-31.285	74.000	-1.043	PK
4		9920.000	42.856	39.809	-31.144	74.000	3.047	PK

Profile: 2180208R	Page No.: 19
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 22:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



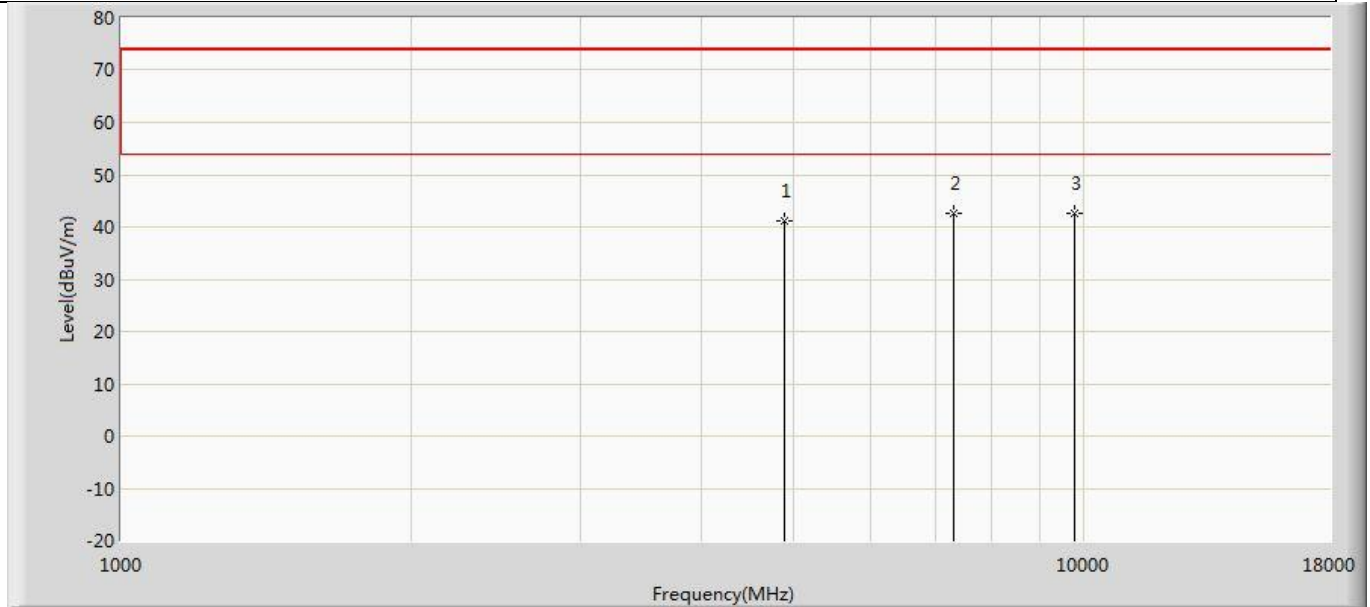
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	40.734	45.777	-33.266	74.000	-5.044	PK
2		7206.000	42.102	43.148	-31.898	74.000	-1.046	PK
3	*	9608.000	44.450	41.620	-29.550	74.000	2.830	PK

Profile: 2180208R	Page No.: 20
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 22:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



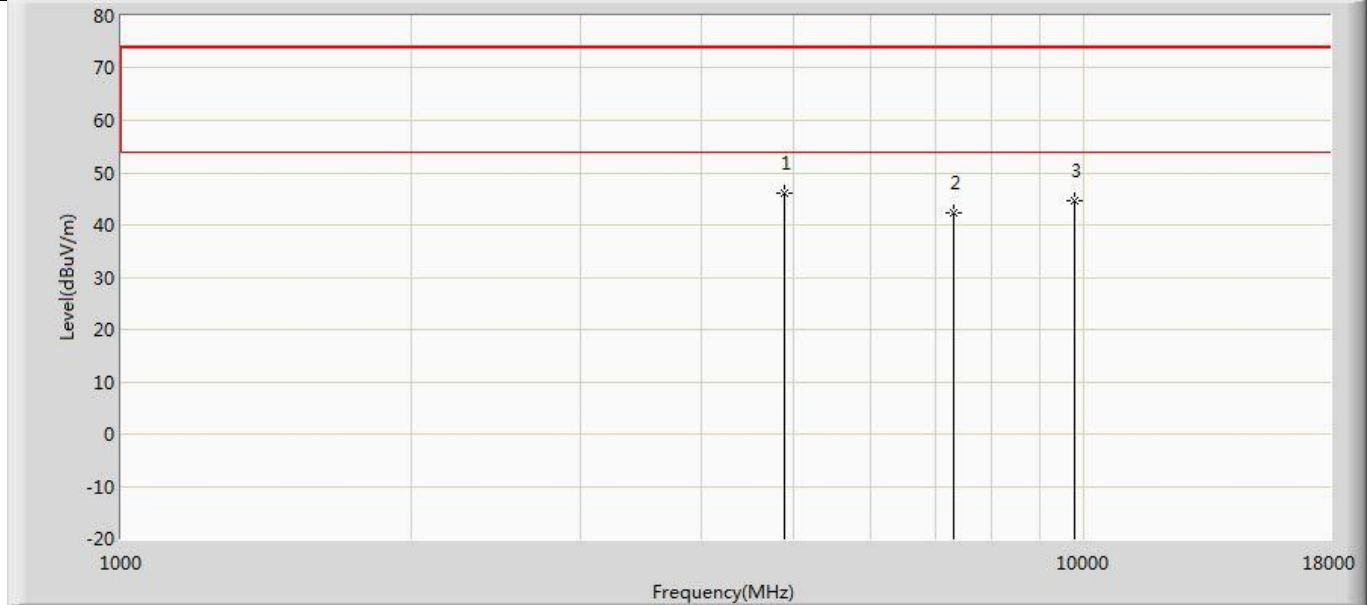
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	40.734	45.777	-33.266	74.000	-5.044	PK
2		7206.000	42.102	43.148	-31.898	74.000	-1.046	PK
3	*	9608.000	44.450	41.620	-29.550	74.000	2.830	PK

Profile: 2180208R	Page No.: 21
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 22:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps	



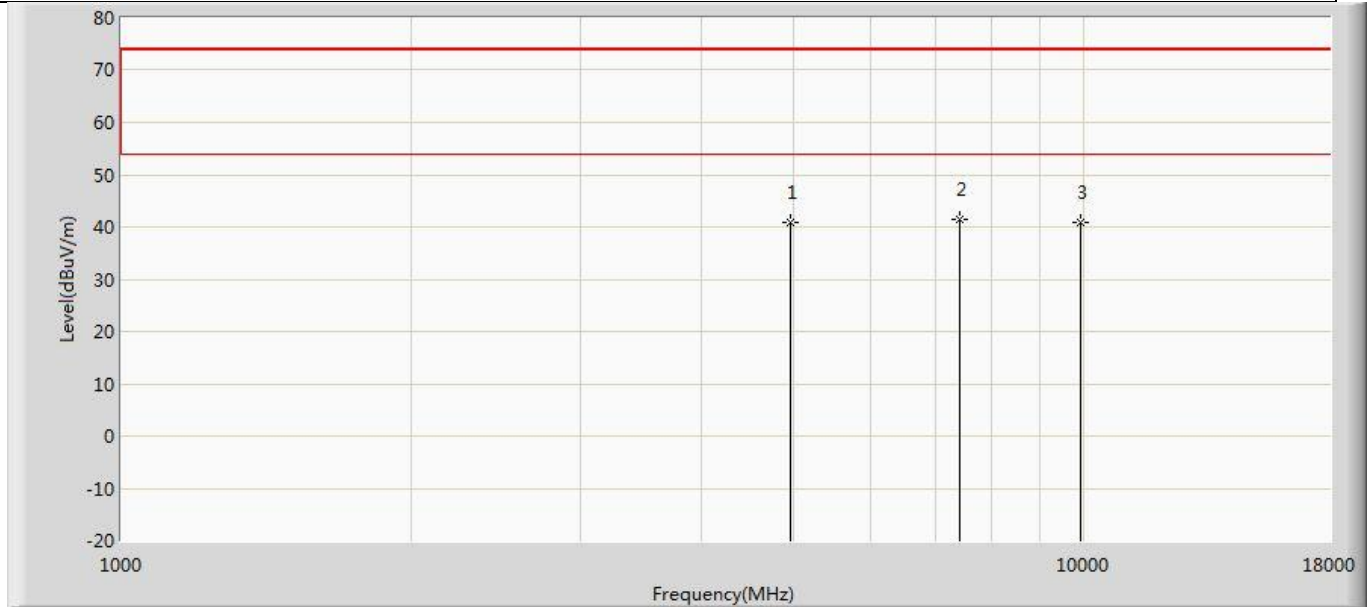
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.080	45.907	-32.920	74.000	-4.827	PK
2	*	7320.000	42.619	43.512	-31.381	74.000	-0.893	PK
3		9760.000	42.547	39.549	-31.453	74.000	2.998	PK

Profile: 2180208R	Page No.: 22
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 22:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps	



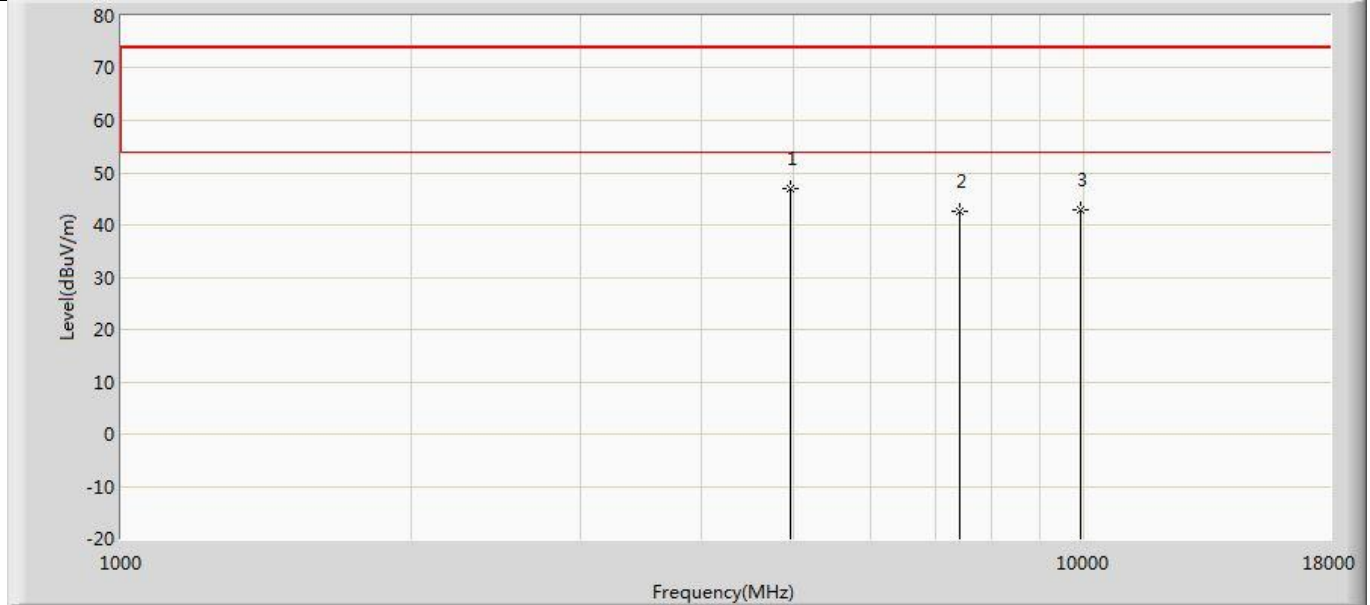
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	46.091	50.852	-27.909	74.000	-4.761	PK
2		7320.000	42.368	43.261	-31.632	74.000	-0.893	PK
3		9760.000	44.554	41.556	-29.446	74.000	2.998	PK

Profile: 2180208R	Page No.: 23
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 22:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	40.995	45.657	-33.005	74.000	-4.662	PK
2	*	7440.000	41.592	42.635	-32.408	74.000	-1.043	PK
3		9920.000	40.864	37.817	-33.136	74.000	3.047	PK

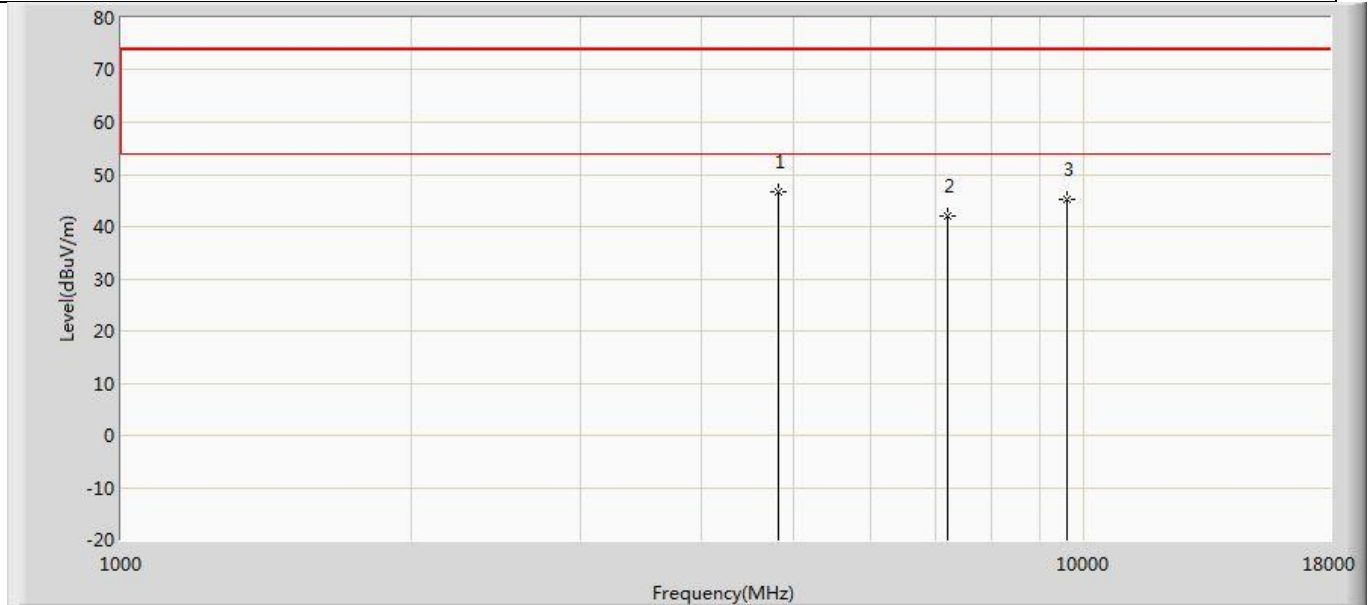
Profile: 2180208R	Page No.: 24
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 22:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	46.826	51.469	-27.174	74.000	-4.643	PK
2		7440.000	42.623	43.666	-31.377	74.000	-1.043	PK
3		9920.000	42.754	39.707	-31.246	74.000	3.047	PK

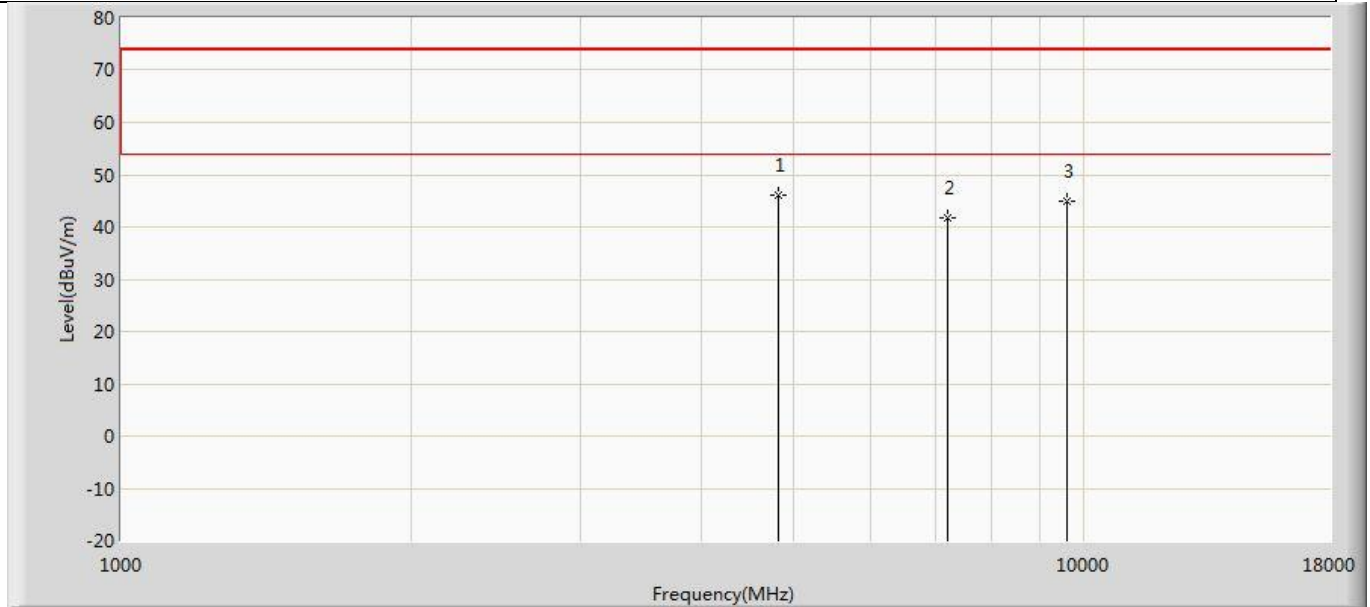
CYBLE-343072-02 Test Data

Profile: 2180208R	Page No.: 13
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



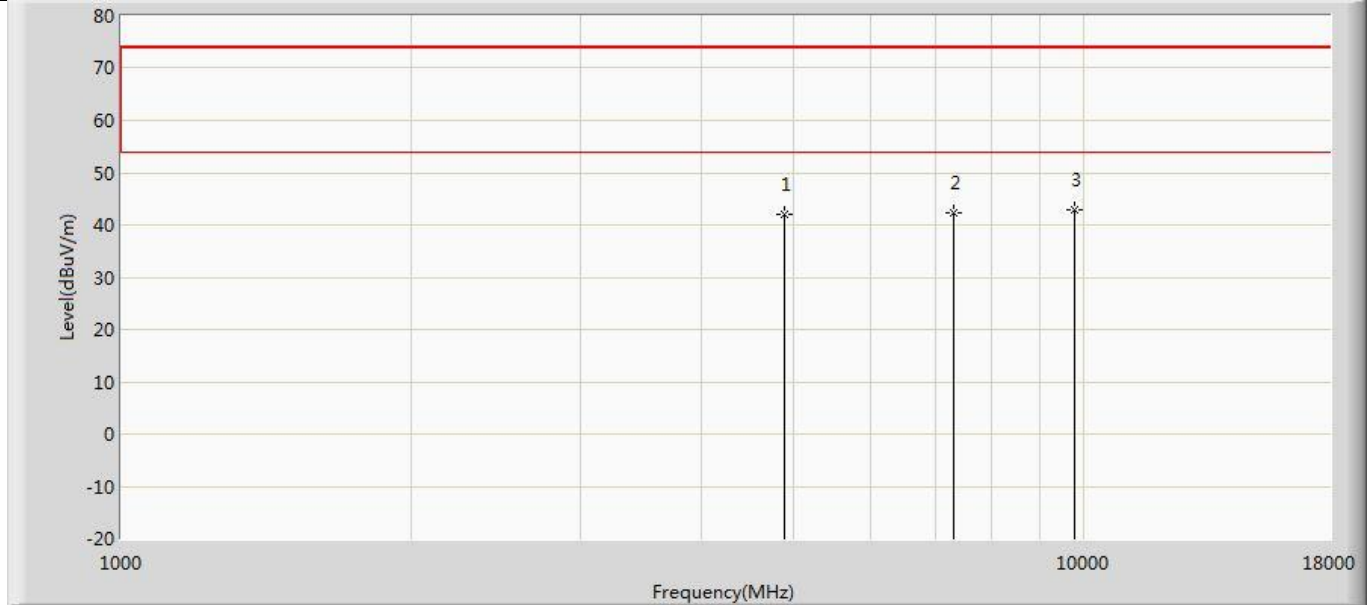
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	46.807	51.809	-27.193	74.000	-5.002	PK
2		7206.000	42.146	43.192	-31.854	74.000	-1.046	PK
3		9608.000	45.257	42.427	-28.743	74.000	2.830	PK

Profile: 2180208R	Page No.: 14
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



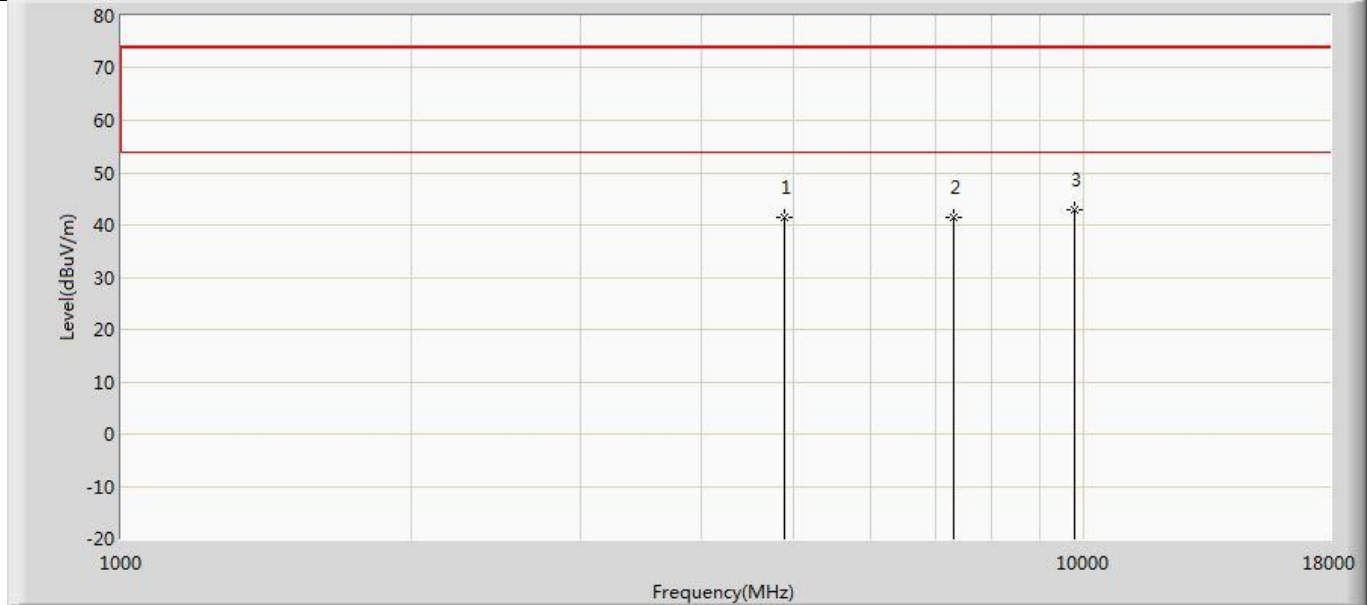
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	45.970	50.972	-28.030	74.000	-5.002	PK
2		7206.000	41.739	42.785	-32.261	74.000	-1.046	PK
3		9608.000	44.953	42.123	-29.047	74.000	2.830	PK

Profile: 2180208R	Page No.: 15
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps	



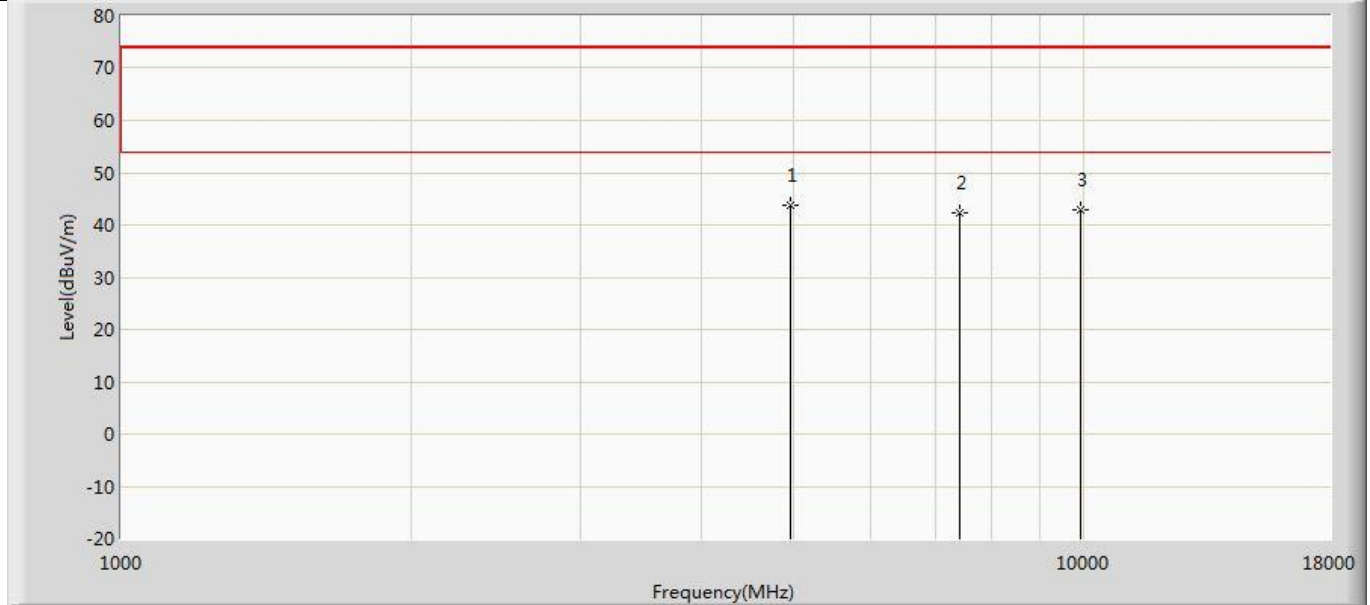
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.891	46.718	-32.109	74.000	-4.827	PK
2		7320.000	42.379	43.272	-31.621	74.000	-0.893	PK
3	*	9760.000	43.010	40.012	-30.990	74.000	2.998	PK

Profile: 2180208R	Page No.: 16
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps	



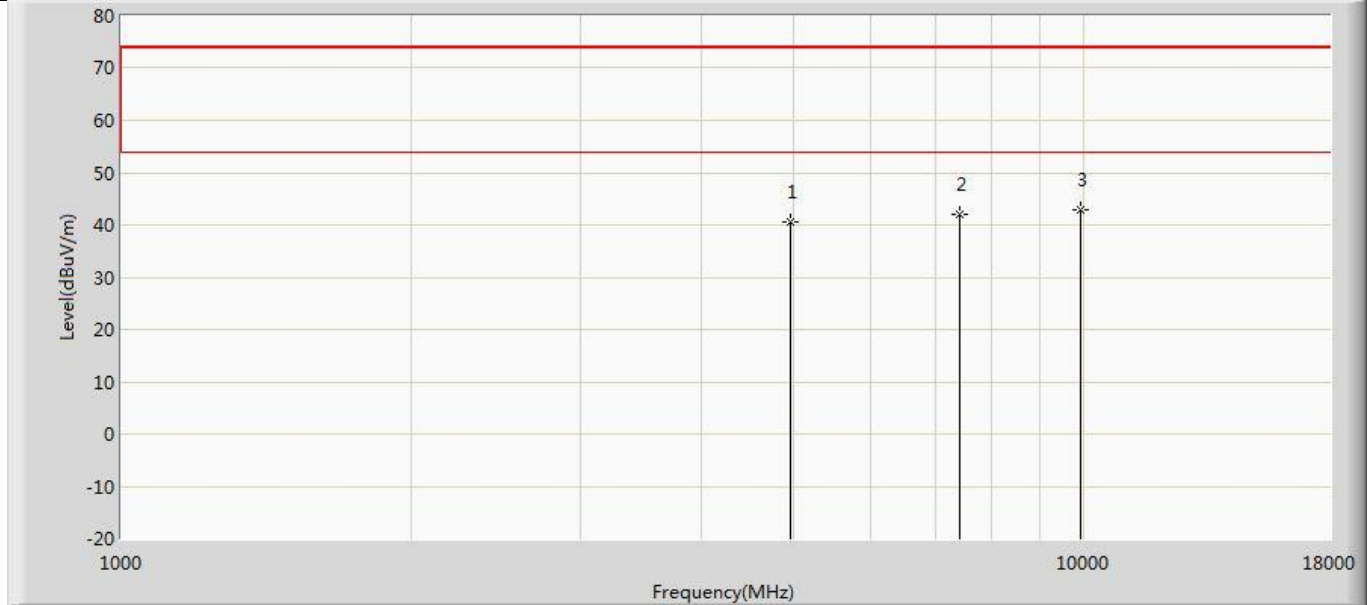
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.403	46.230	-32.597	74.000	-4.827	PK
2		7320.000	41.520	42.413	-32.480	74.000	-0.893	PK
3	*	9760.000	42.870	39.872	-31.130	74.000	2.998	PK

Profile: 2180208R	Page No.: 17
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



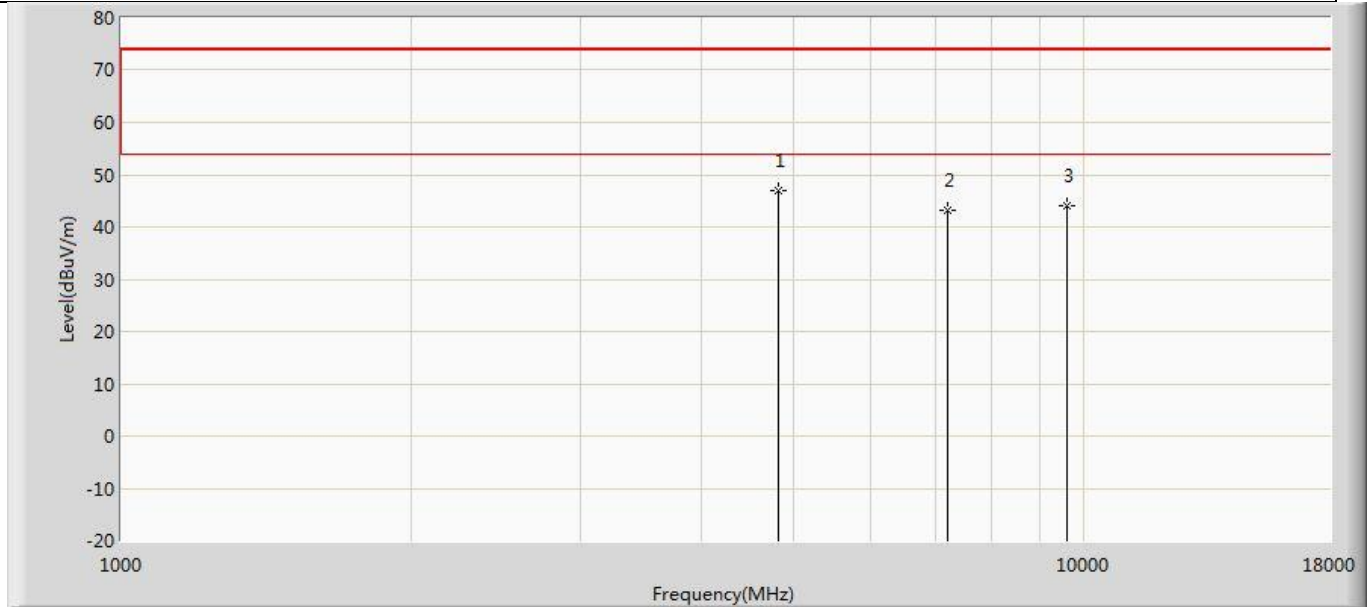
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	43.888	48.531	-30.112	74.000	-4.643	PK
2		7440.000	42.451	43.494	-31.549	74.000	-1.043	PK
3		9920.000	42.880	39.833	-31.120	74.000	3.047	PK

Profile: 2180208R	Page No.: 18
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



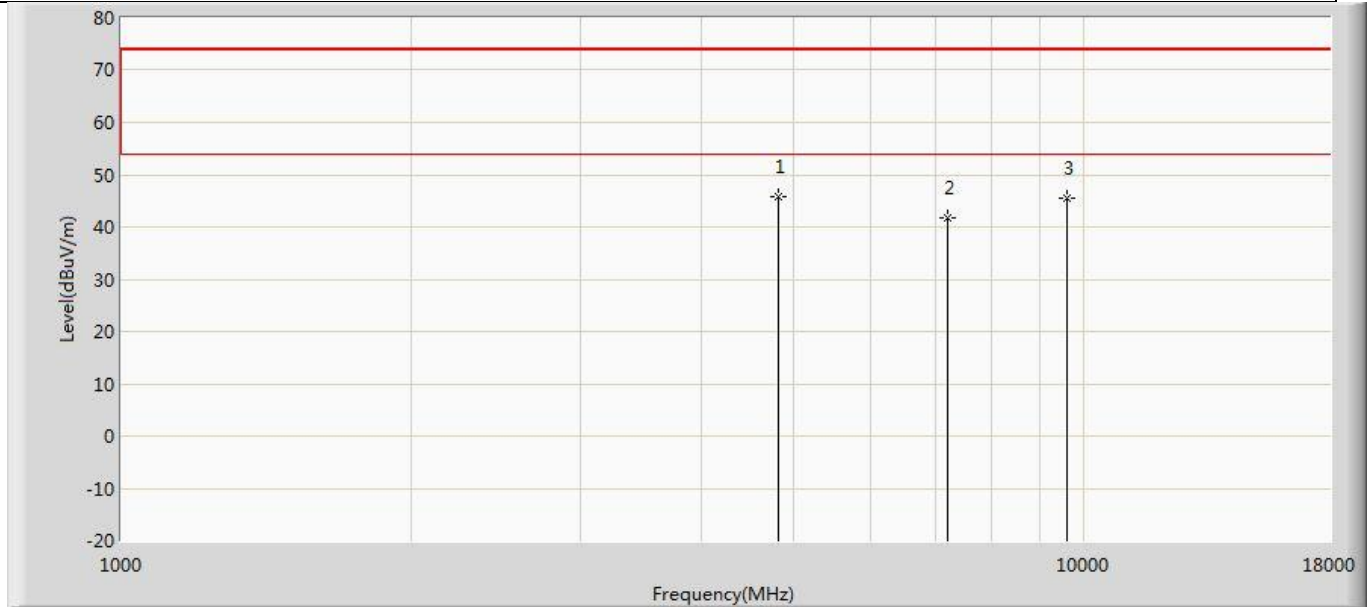
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	40.566	45.228	-33.434	74.000	-4.662	PK
2		7440.000	41.941	42.984	-32.059	74.000	-1.043	PK
3	*	9920.000	42.912	39.865	-31.088	74.000	3.047	PK

Profile: 2180208R	Page No.: 19
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



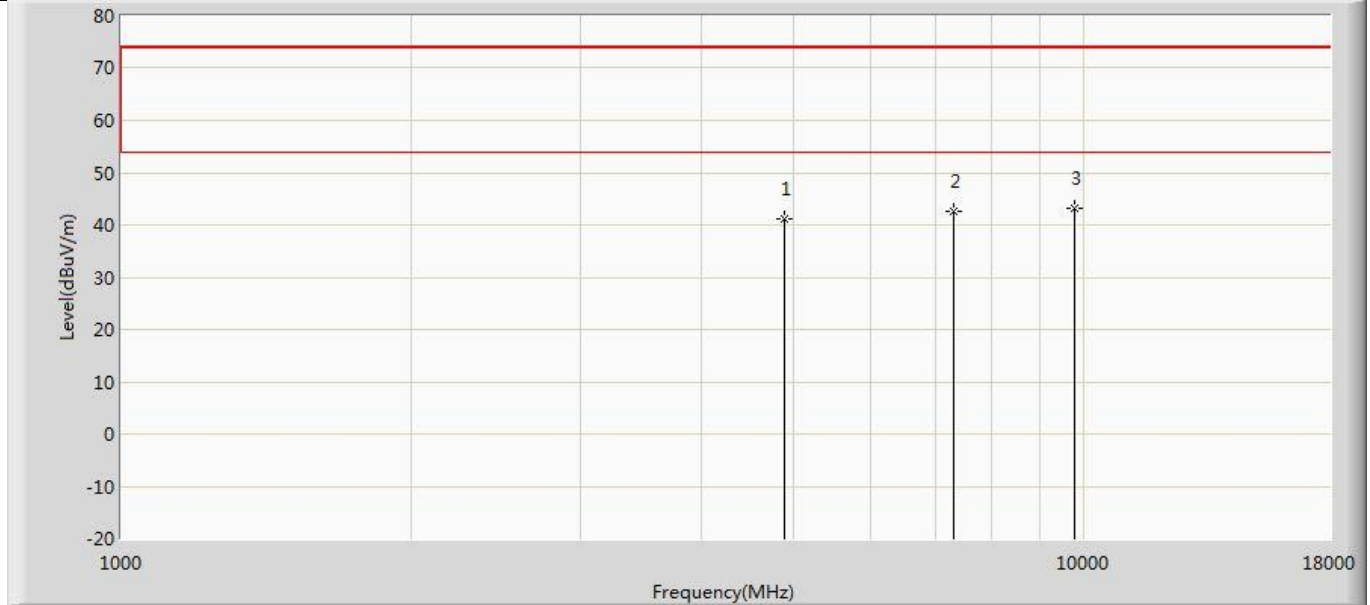
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	46.982	51.984	-27.018	74.000	-5.002	PK
2		7206.000	43.226	44.272	-30.774	74.000	-1.046	PK
3		9608.000	44.123	41.293	-29.877	74.000	2.830	PK

Profile: 2180208R	Page No.: 20
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



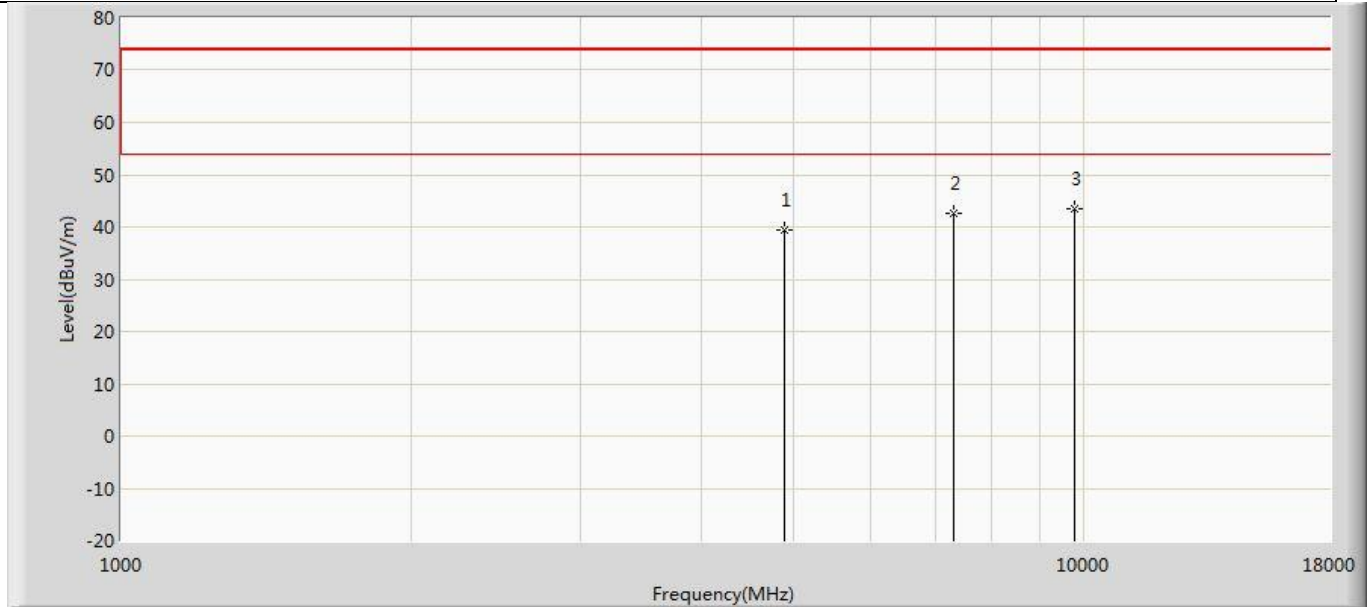
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	45.853	50.855	-28.147	74.000	-5.002	PK
2		7206.000	41.733	42.779	-32.267	74.000	-1.046	PK
3		9608.000	45.578	42.748	-28.422	74.000	2.830	PK

Profile: 2180208R	Page No.: 21
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps	



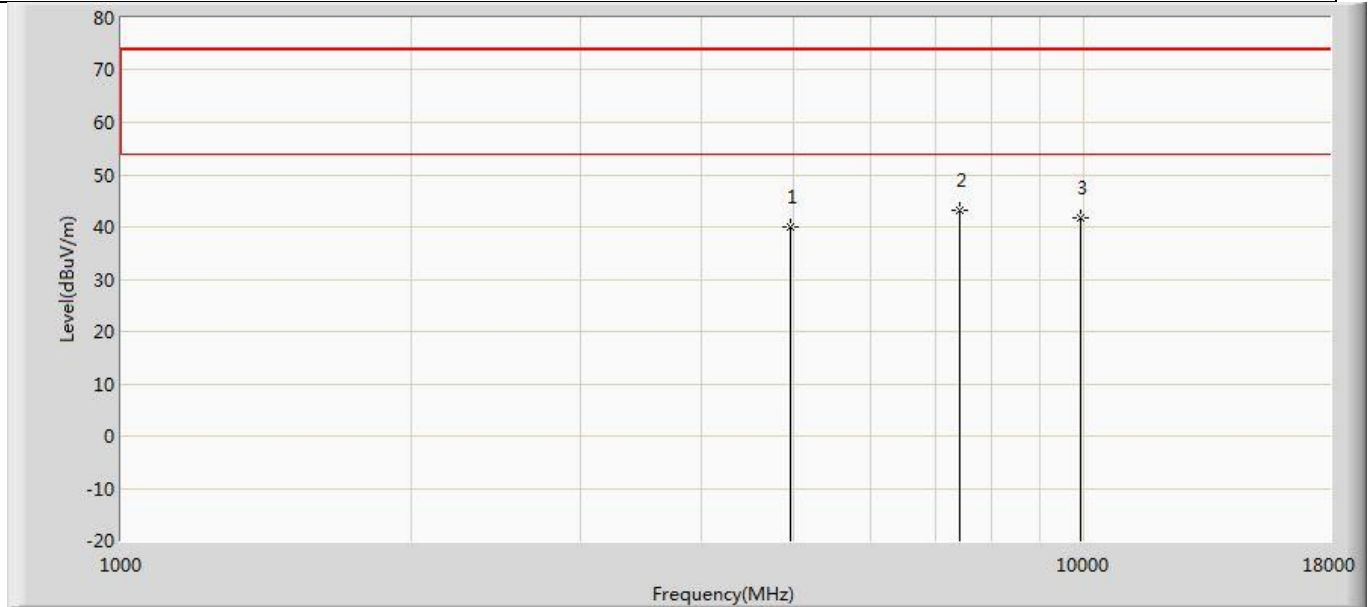
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.034	45.861	-32.966	74.000	-4.827	PK
2		7320.000	42.636	43.529	-31.364	74.000	-0.893	PK
3	*	9760.000	43.182	40.184	-30.818	74.000	2.998	PK

Profile: 2180208R	Page No.: 22
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps	



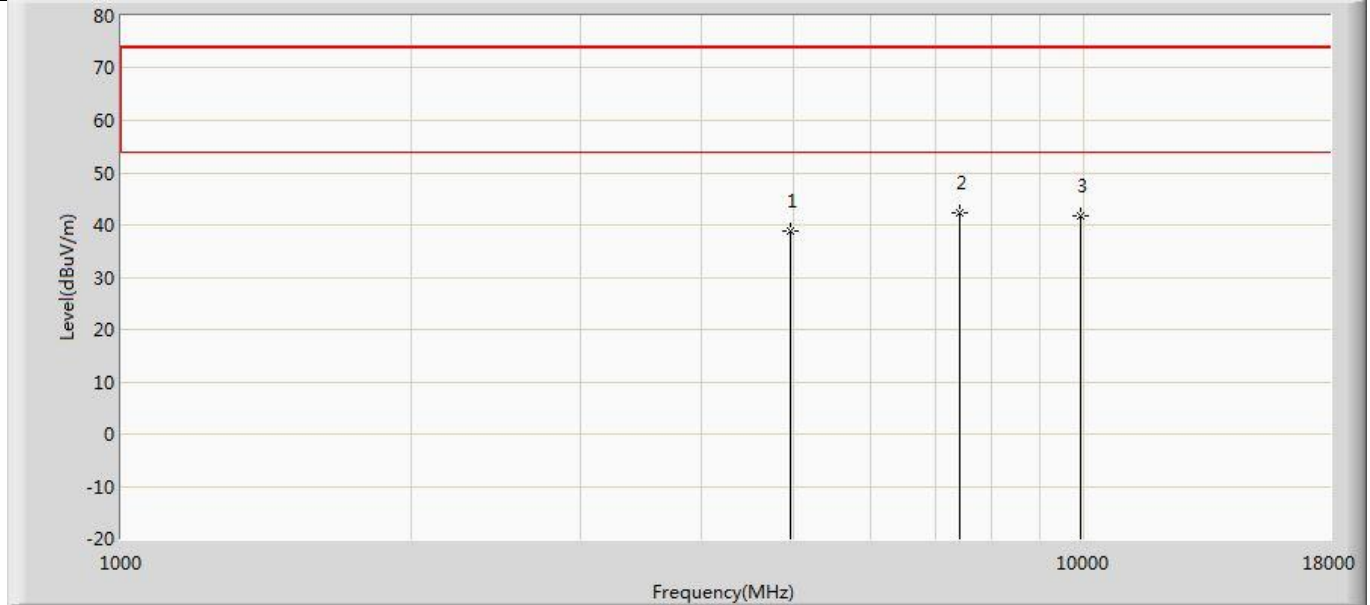
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	39.529	44.356	-34.471	74.000	-4.827	PK
2		7320.000	42.470	43.363	-31.530	74.000	-0.893	PK
3	*	9760.000	43.567	40.569	-30.433	74.000	2.998	PK

Profile: 2180208R	Page No.: 23
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	40.007	44.669	-33.993	74.000	-4.662	PK
2	*	7440.000	43.108	44.151	-30.892	74.000	-1.043	PK
3		9920.000	41.871	38.824	-32.129	74.000	3.047	PK

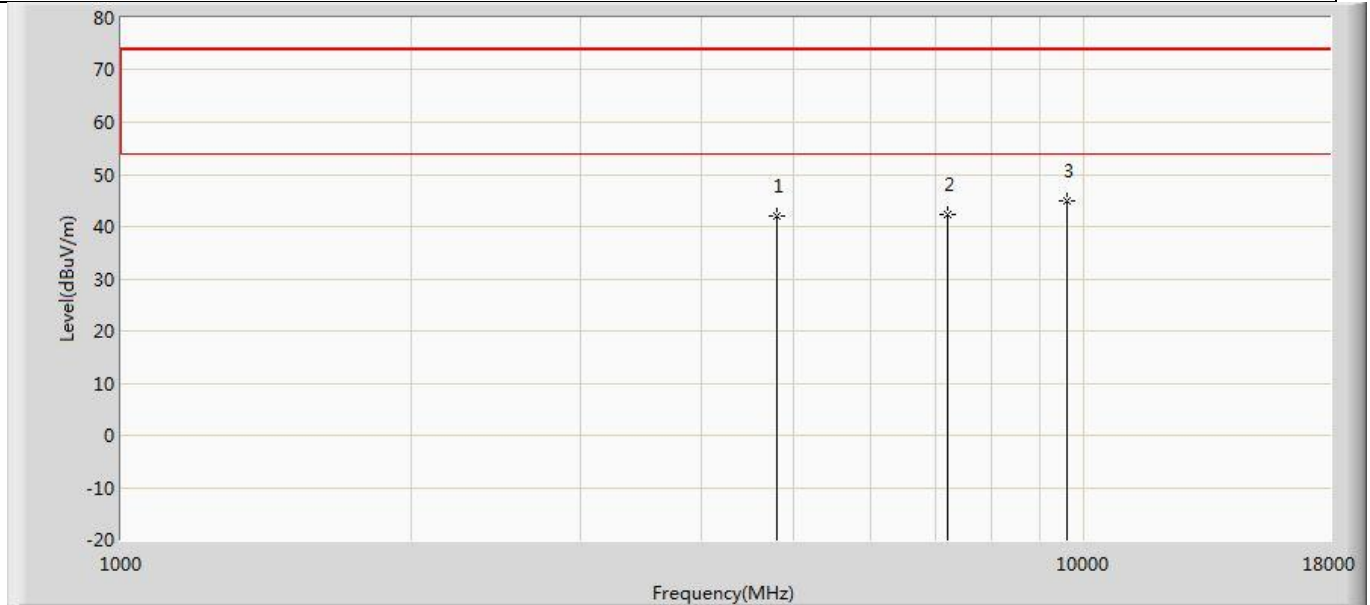
Profile: 2180208R	Page No.: 24
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	38.873	43.535	-35.127	74.000	-4.662	PK
2	*	7440.000	42.365	43.408	-31.635	74.000	-1.043	PK
3		9920.000	41.596	38.549	-32.404	74.000	3.047	PK

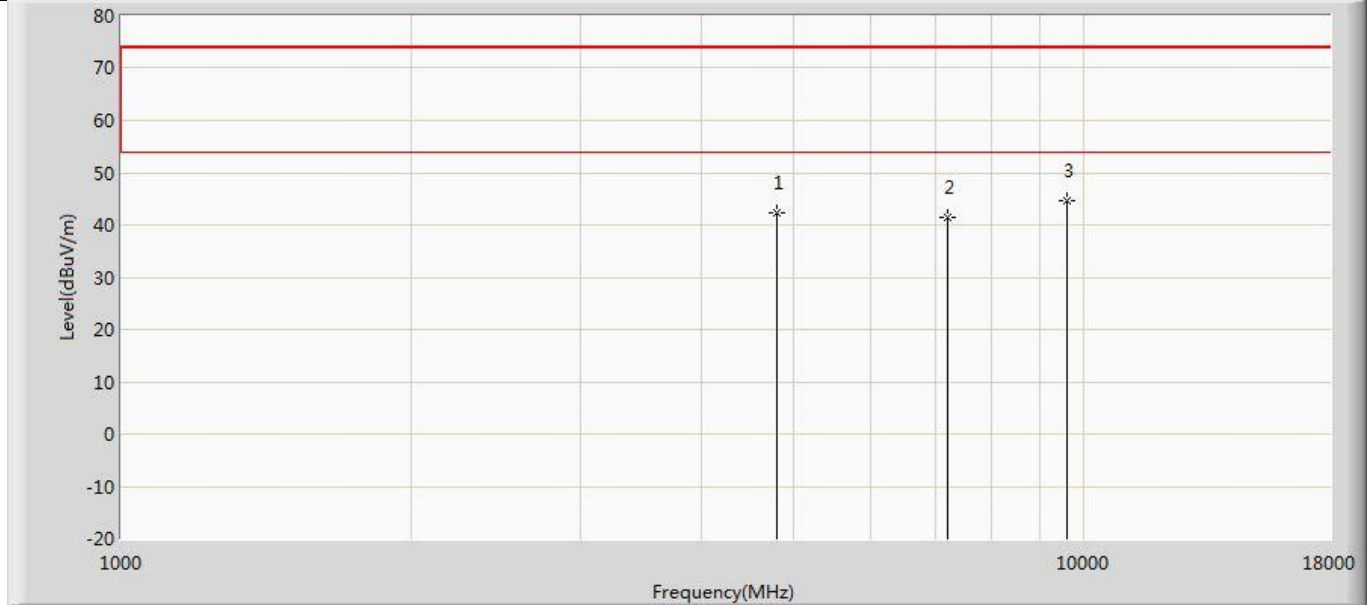
CYBLE-343176-02 Test Data

Profile: 2180208R	Page No.: 13
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



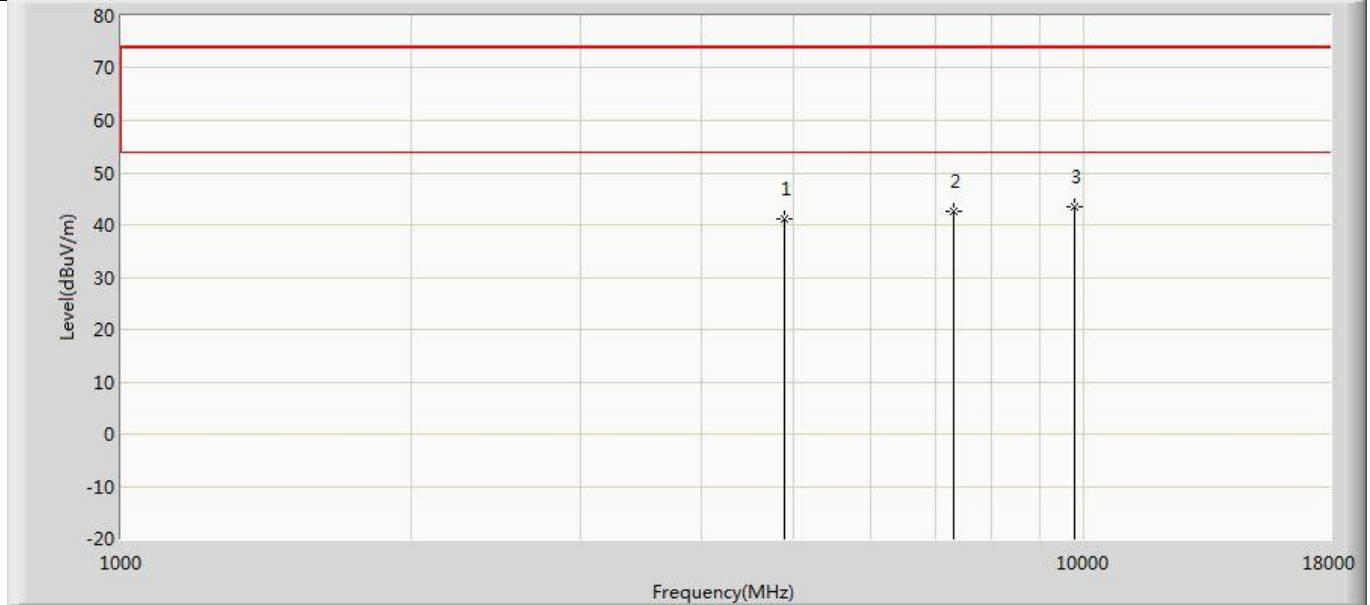
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.006	47.049	-31.994	74.000	-5.044	PK
2		7206.000	42.249	43.295	-31.751	74.000	-1.046	PK
3	*	9608.000	44.784	41.954	-29.216	74.000	2.830	PK

Profile: 2180208R	Page No.: 14
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



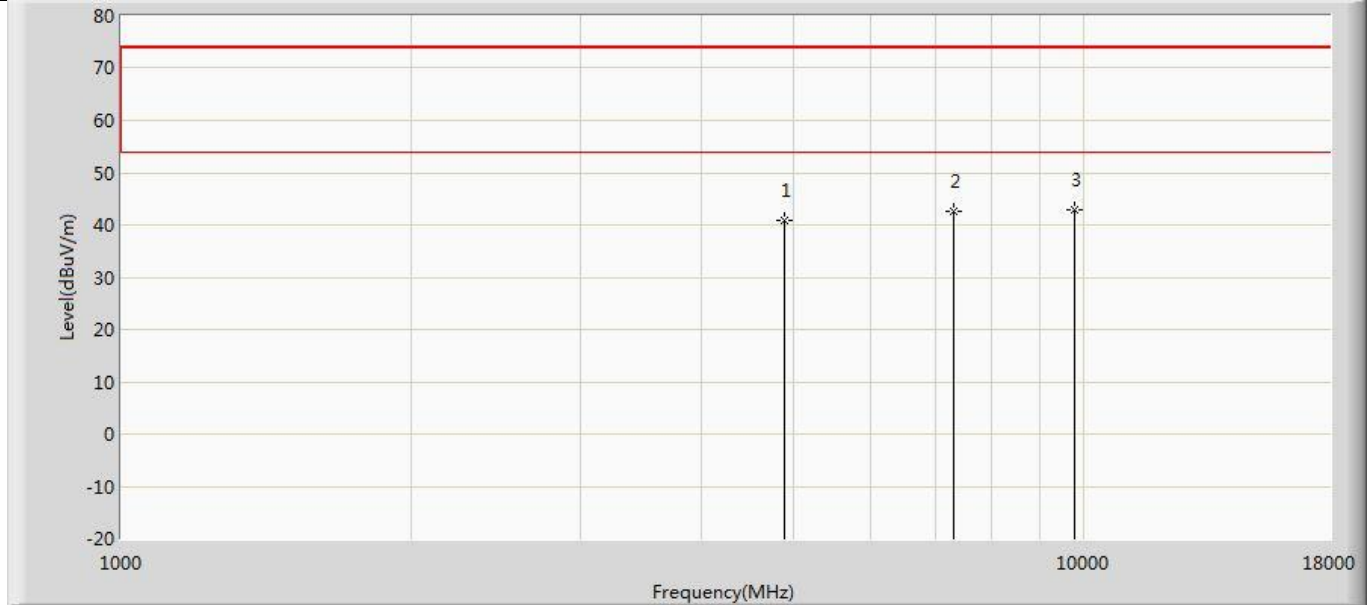
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	42.291	47.334	-31.709	74.000	-5.044	PK
2		7206.000	41.423	42.469	-32.577	74.000	-1.046	PK
3	*	9608.000	44.639	41.809	-29.361	74.000	2.830	PK

Profile: 2180208R	Page No.: 15
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps	



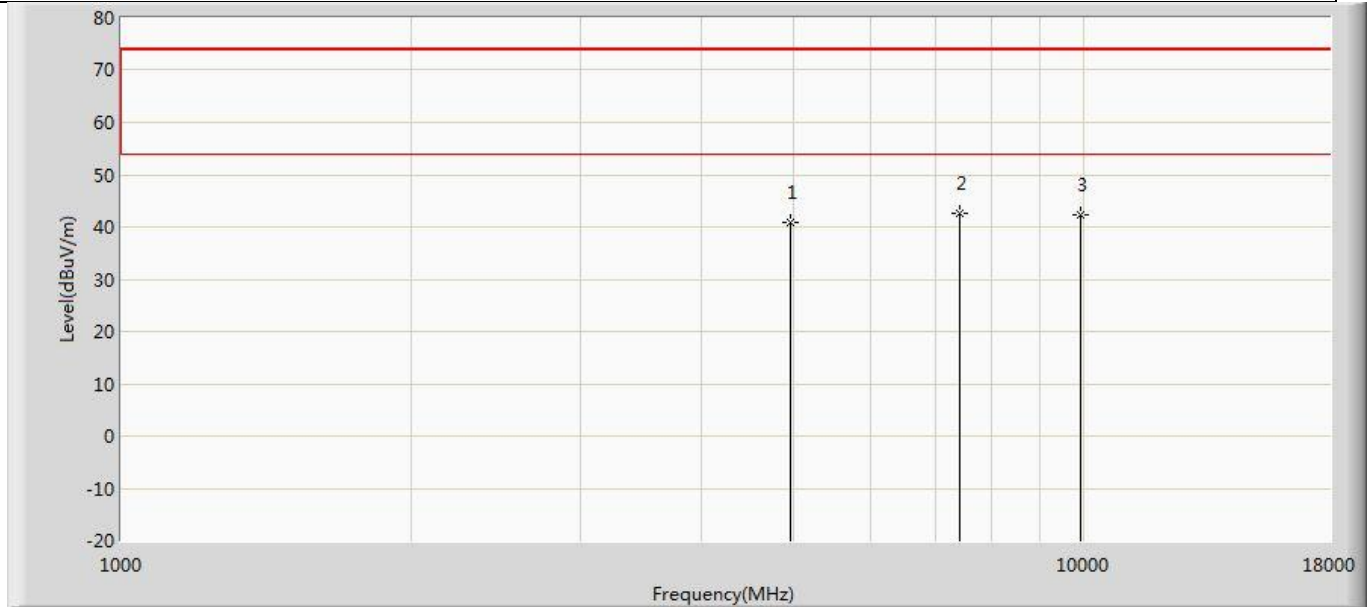
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	41.185	46.012	-32.815	74.000	-4.827	PK
2		7320.000	42.704	43.597	-31.296	74.000	-0.893	PK
3	*	9760.000	43.407	40.409	-30.593	74.000	2.998	PK

Profile: 2180208R	Page No.: 16
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2440MHz by LE_1Mbps	



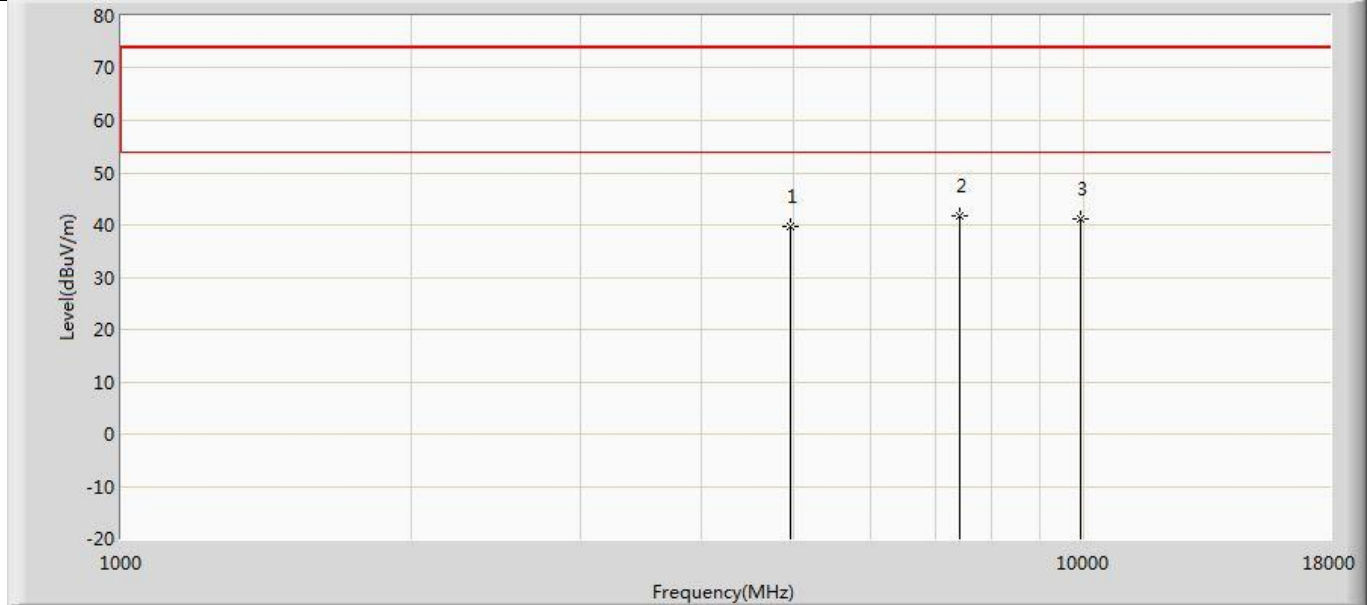
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	40.950	45.777	-33.050	74.000	-4.827	PK
2		7320.000	42.481	43.374	-31.519	74.000	-0.893	PK
3	*	9760.000	42.956	39.958	-31.044	74.000	2.998	PK

Profile: 2180208R	Page No.: 17
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



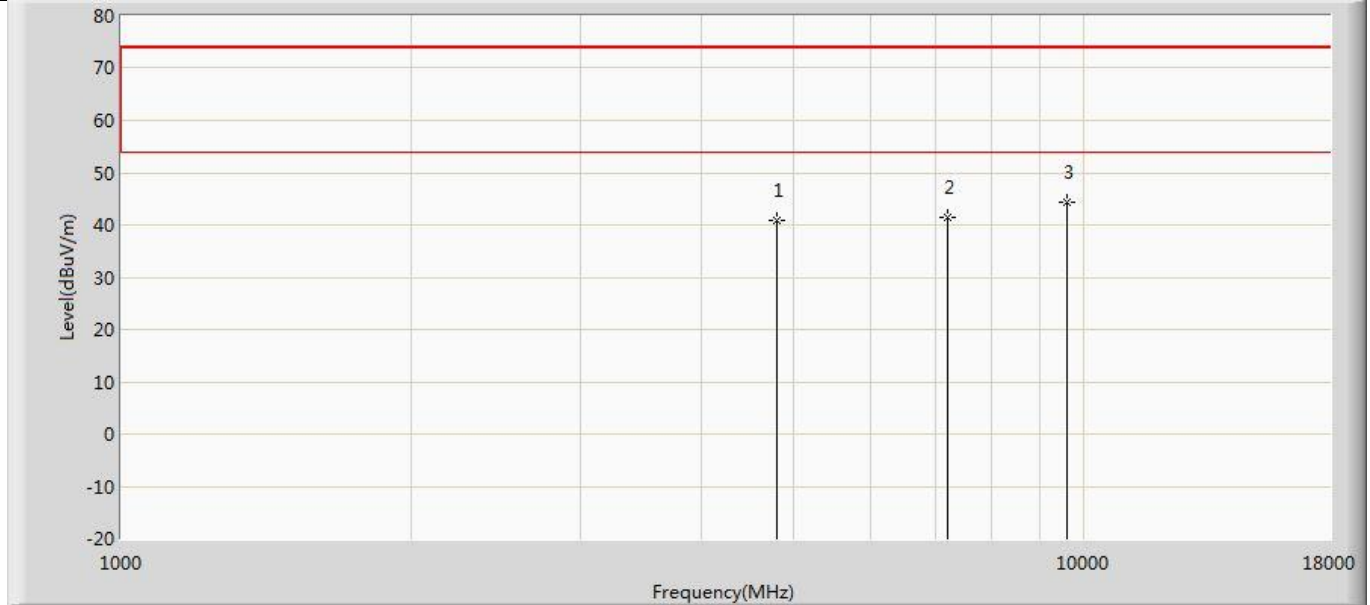
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	40.756	45.418	-33.244	74.000	-4.662	PK
2	*	7440.000	42.673	43.716	-31.327	74.000	-1.043	PK
3		9920.000	42.220	39.173	-31.780	74.000	3.047	PK

Profile: 2180208R	Page No.: 18
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2480MHz by LE_1Mbps	



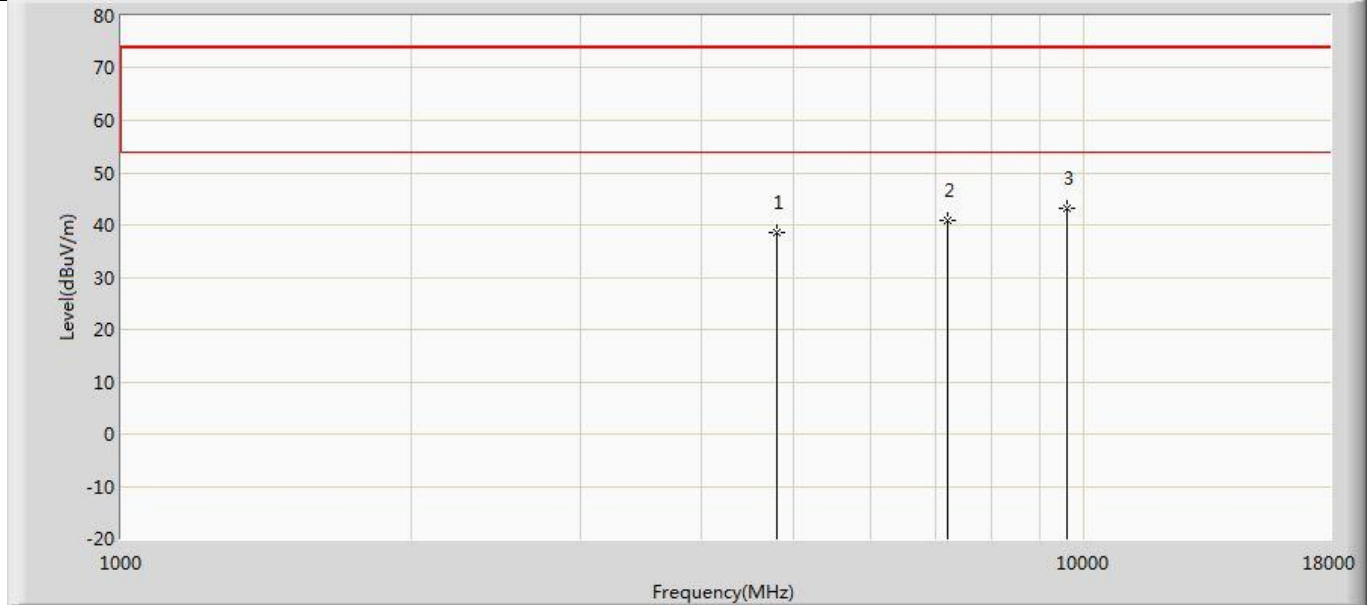
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.735	44.397	-34.265	74.000	-4.662	PK
2	*	7440.000	41.850	42.893	-32.150	74.000	-1.043	PK
3		9920.000	41.232	38.185	-32.768	74.000	3.047	PK

Profile: 2180208R	Page No.: 19
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



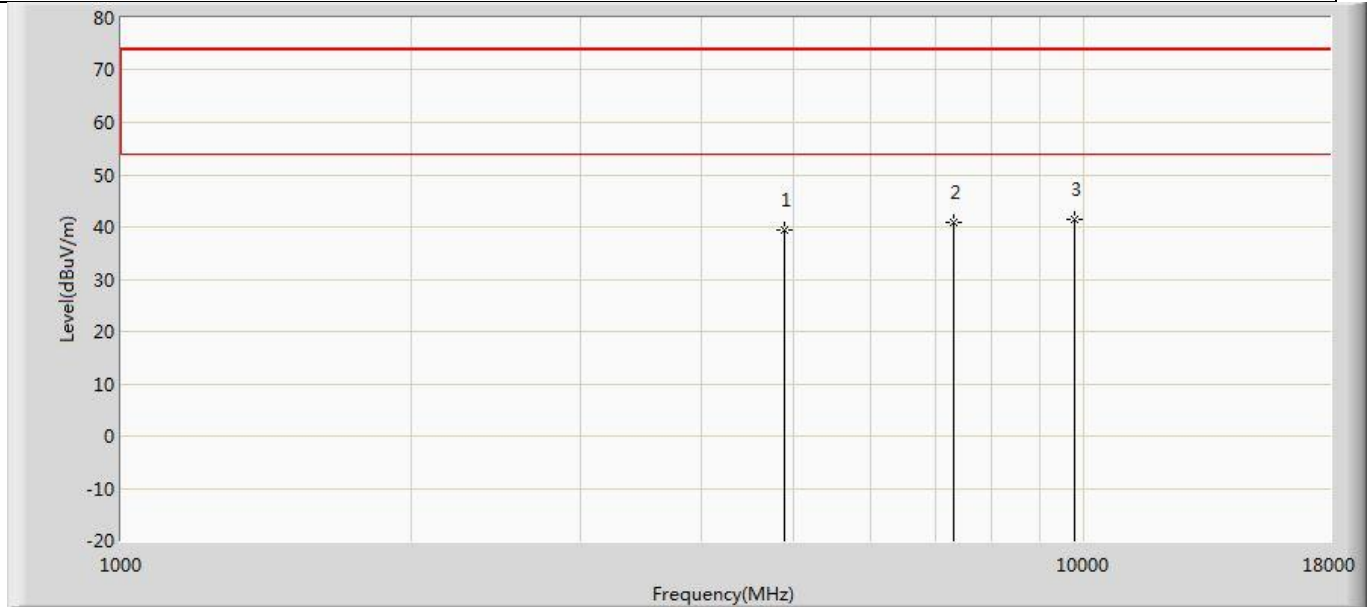
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.001	46.044	-32.999	74.000	-5.044	PK
2		7206.000	41.438	42.484	-32.562	74.000	-1.046	PK
3	*	9608.000	44.448	41.618	-29.552	74.000	2.830	PK

Profile: 2180208R	Page No.: 20
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



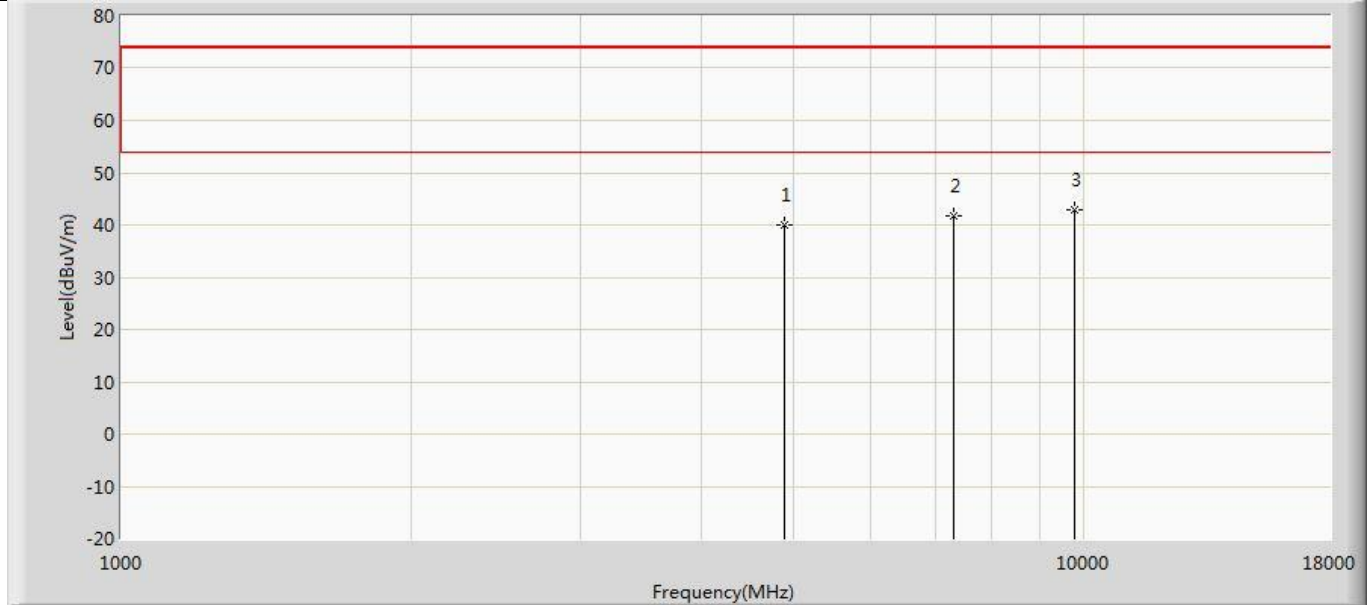
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	38.527	43.570	-35.473	74.000	-5.044	PK
2		7206.000	40.767	41.813	-33.233	74.000	-1.046	PK
3	*	9608.000	43.152	40.322	-30.848	74.000	2.830	PK

Profile: 2180208R	Page No.: 21
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps	



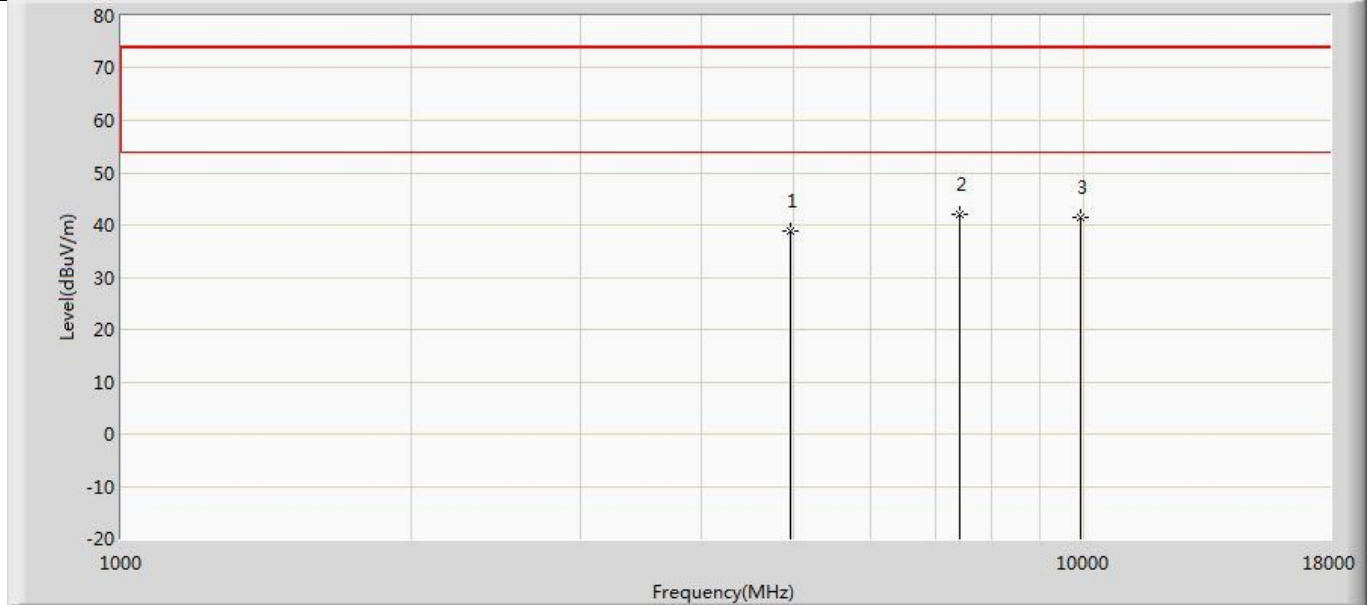
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	39.506	44.333	-34.494	74.000	-4.827	PK
2		7320.000	40.815	41.708	-33.185	74.000	-0.893	PK
3	*	9760.000	41.466	38.468	-32.534	74.000	2.998	PK

Profile: 2180208R	Page No.: 22
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2440MHz by LE_2Mbps	



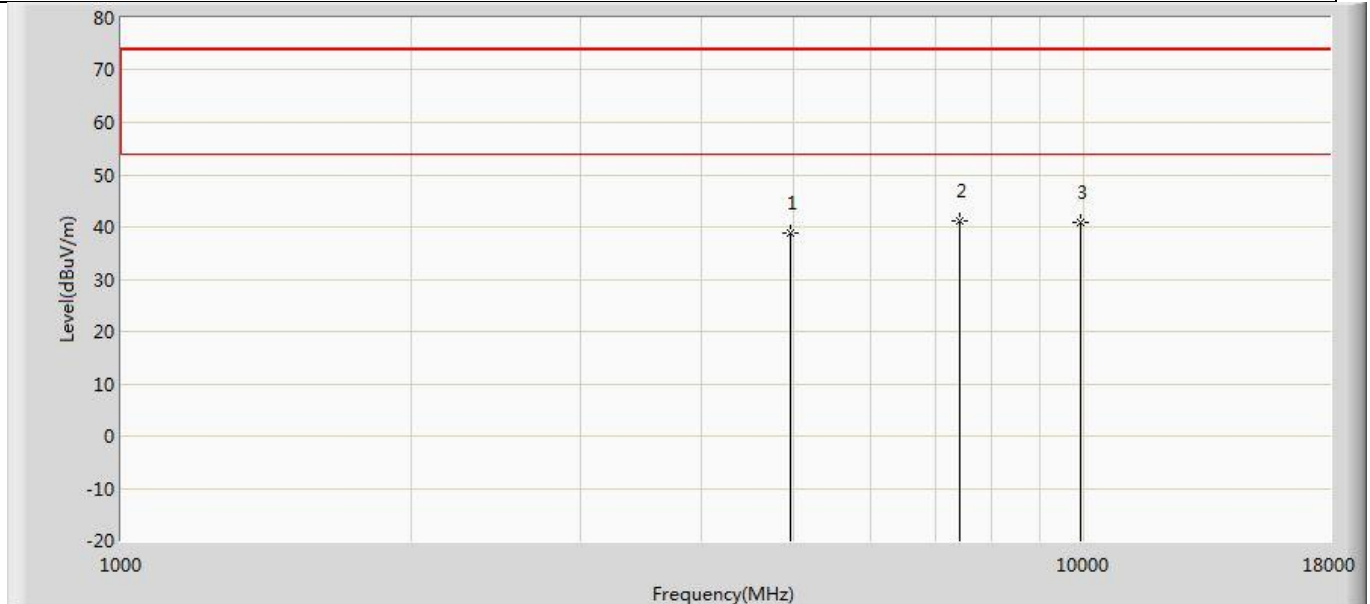
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	40.124	44.951	-33.876	74.000	-4.827	PK
2		7320.000	41.672	42.565	-32.328	74.000	-0.893	PK
3	*	9760.000	42.935	39.937	-31.065	74.000	2.998	PK

Profile: 2180208R	Page No.: 23
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	38.758	43.420	-35.242	74.000	-4.662	PK
2	*	7440.000	42.098	43.141	-31.902	74.000	-1.043	PK
3		9920.000	41.423	38.376	-32.577	74.000	3.047	PK

Profile: 2180208R	Page No.: 24
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/19 - 23:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	38.910	43.572	-35.090	74.000	-4.662	PK
2	*	7440.000	41.105	42.148	-32.895	74.000	-1.043	PK
3		9920.000	40.734	37.687	-33.266	74.000	3.047	PK

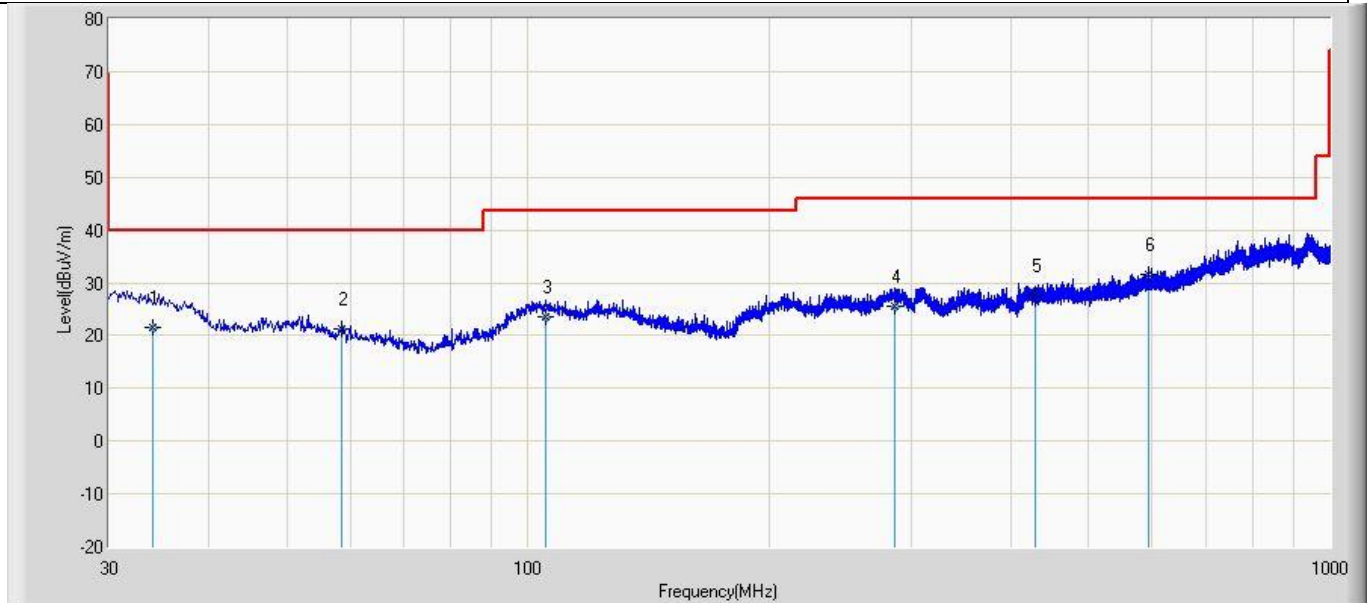
Note:

1. Measured Level = Reading Level + Factor.
2. The test frequency range, 9kHz~30MHz, 18GHz~26GHz, both of the worst case are at least 20dB below the limits, therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
4. As the radiated emission was performed, so conducted emission was not tested.

The worst case of Radiated Emission below 1GHz:

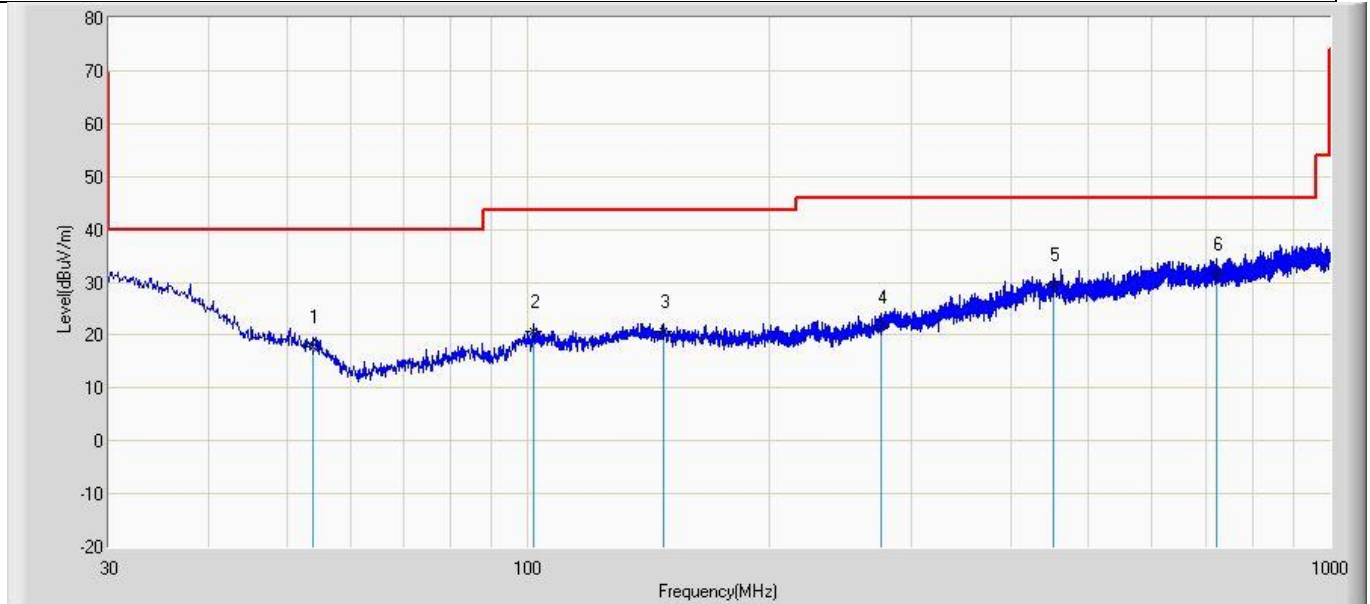
CYBLE-333073-02 Test Data

Profile: 2180208R	Page No.: 1
Engineer: Juliuszhou	
Site: AC3	Time: 2021/01/29 - 05:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		34.001	21.547	-1.143	-18.453	40.000	22.690	QP
2		58.615	21.346	4.963	-18.654	40.000	16.382	QP
3		104.933	23.645	1.736	-19.855	43.500	21.908	QP
4		286.201	25.485	0.837	-20.515	46.000	24.648	QP
5		428.306	27.485	2.902	-18.515	46.000	24.583	QP
6	*	593.449	31.475	4.477	-14.525	46.000	26.998	QP

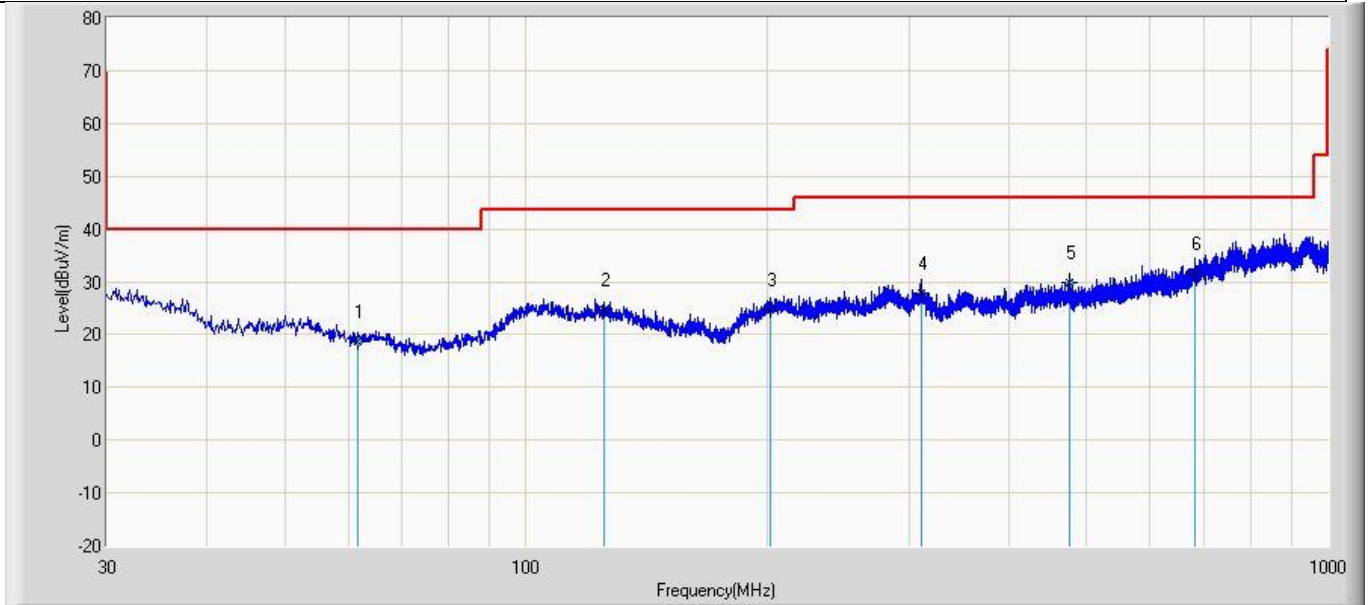
Profile: 2180208R	Page No.: 2
Engineer: Juliuszhou	
Site: AC3	Time: 2021/08/24 - 22:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		54.007	17.684	4.130	-22.316	40.000	13.553	QP
2		101.659	20.648	4.139	-22.852	43.500	16.509	QP
3		147.249	20.648	3.399	-22.852	43.500	17.248	QP
4		275.895	21.648	1.690	-24.352	46.000	19.957	QP
5		451.223	29.568	2.604	-16.432	46.000	26.965	QP
6	*	720.883	31.485	2.110	-14.515	46.000	29.374	QP

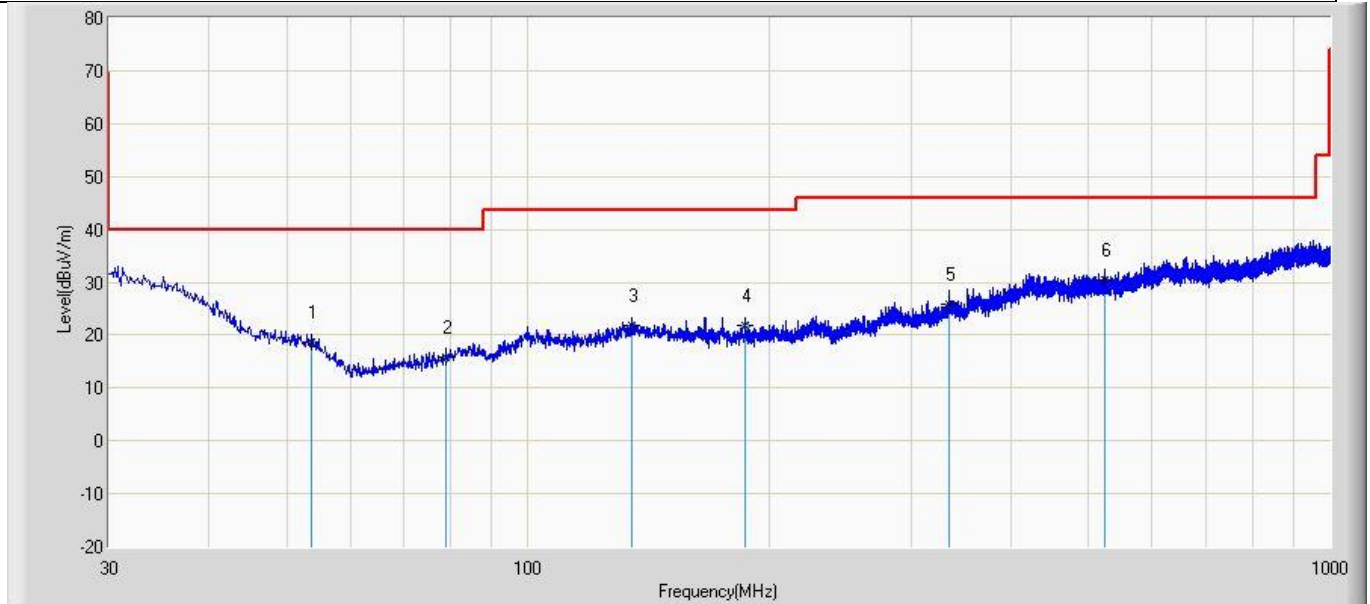
CYBLE-333074-02 Test Data

Profile: 2180208R	Page No.: 3
Engineer: Juliuszhou	
Site: AC3	Time: 2021/08/24 - 22:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		61.768	18.546	2.745	-21.454	40.000	15.801	QP
2		125.302	24.584	3.291	-18.916	43.500	21.293	QP
3		201.569	24.648	2.111	-18.852	43.500	22.537	QP
4		310.573	27.845	2.590	-18.155	46.000	25.255	QP
5		476.564	29.846	4.730	-16.154	46.000	25.116	QP
6	*	683.537	31.485	2.794	-14.515	46.000	28.691	QP

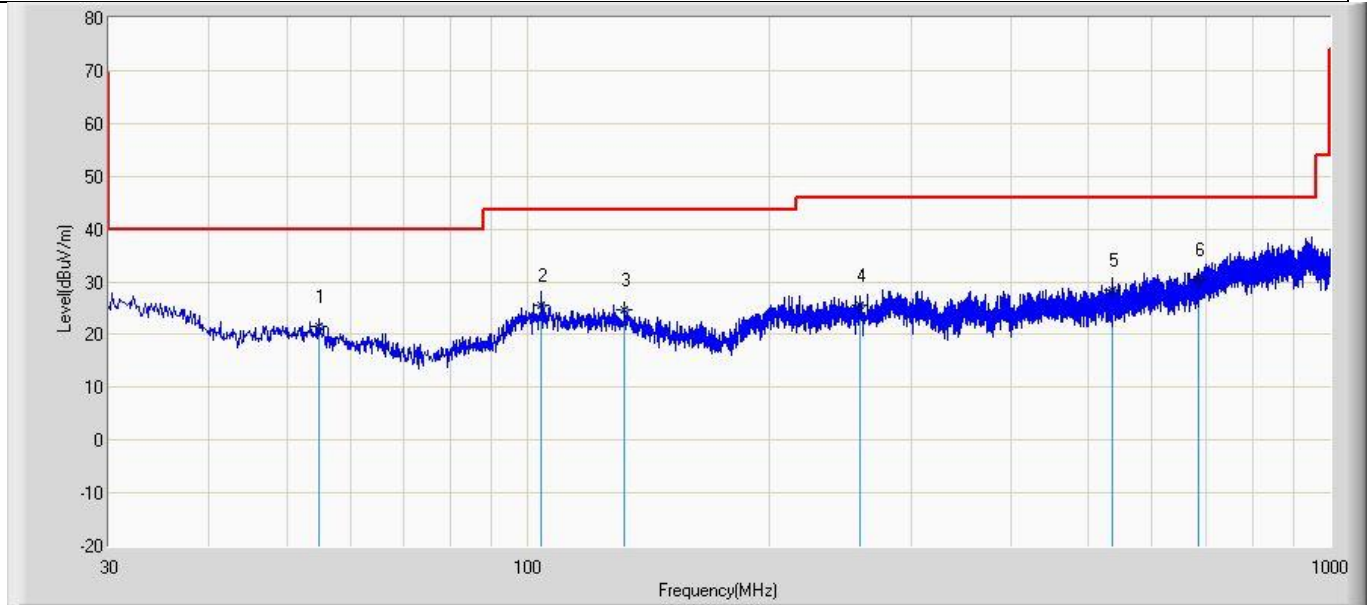
Profile: 2180208R	Page No.: 4
Engineer: Juliuszhou	
Site: AC3	Time: 2021/08/24 - 22:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		53.765	18.569	4.905	-21.431	40.000	13.663	QP
2		78.985	15.764	3.089	-24.236	40.000	12.675	QP
3		134.881	21.869	4.358	-21.631	43.500	17.511	QP
4		186.776	21.765	4.552	-21.735	43.500	17.214	QP
5		334.944	25.964	2.986	-20.036	46.000	22.978	QP
6	*	523.609	30.467	3.305	-15.533	46.000	27.162	QP

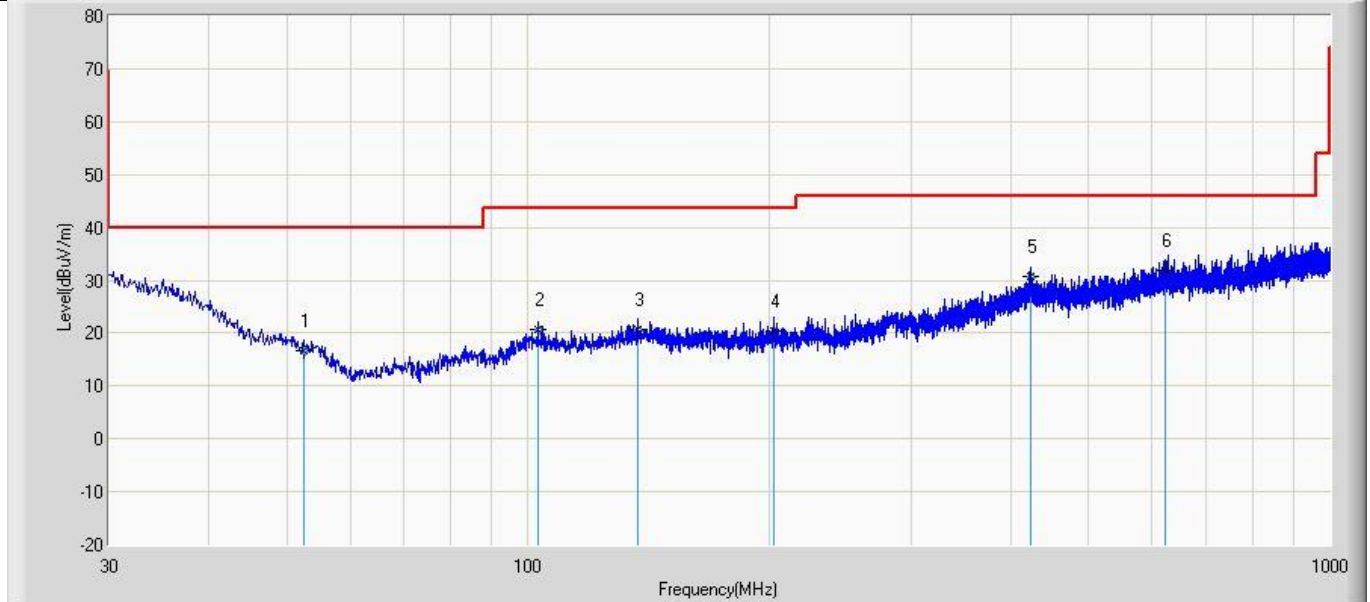
CYBLE-343072-02 Test Data

Profile: 2180208R	Page No.: 5
Engineer: Juliuszhou	
Site: AC3	Time: 2021/08/24 - 22:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		54.856	21.476	4.655	-18.524	40.000	16.821	QP
2		103.720	25.648	3.699	-17.852	43.500	21.949	QP
3		131.729	24.649	3.864	-18.851	43.500	20.785	QP
4		259.041	25.486	2.904	-20.514	46.000	22.582	QP
5		536.219	28.469	2.715	-17.531	46.000	25.754	QP
6	*	685.356	30.346	1.573	-15.654	46.000	28.773	QP

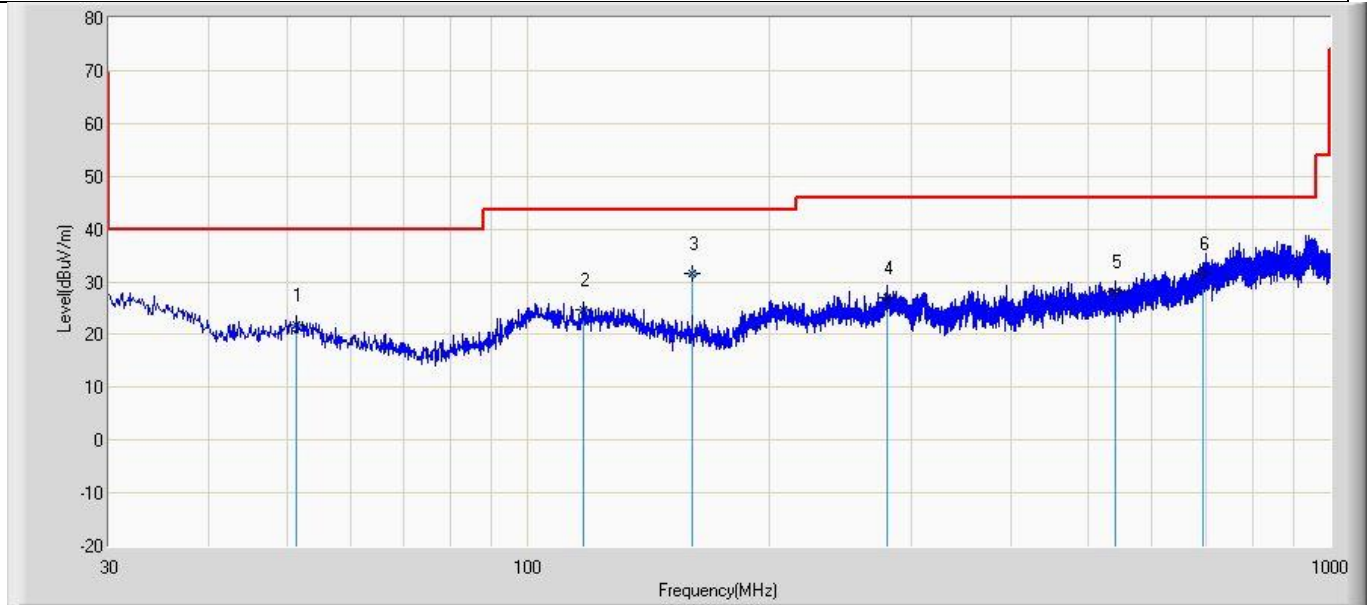
Profile: 2180208R	Page No.: 6
Engineer: Juliuszhou	
Site: AC3	Time: 2021/08/24 - 22:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		52.431	16.584	2.312	-23.416	40.000	14.272	QP
2		102.750	20.648	4.217	-22.852	43.500	16.431	QP
3		136.821	20.648	3.097	-22.852	43.500	17.551	QP
4		202.902	20.469	2.861	-23.031	43.500	17.608	QP
5		422.608	30.648	3.482	-15.352	46.000	27.166	QP
6	*	624.246	31.845	2.120	-14.155	46.000	29.725	QP

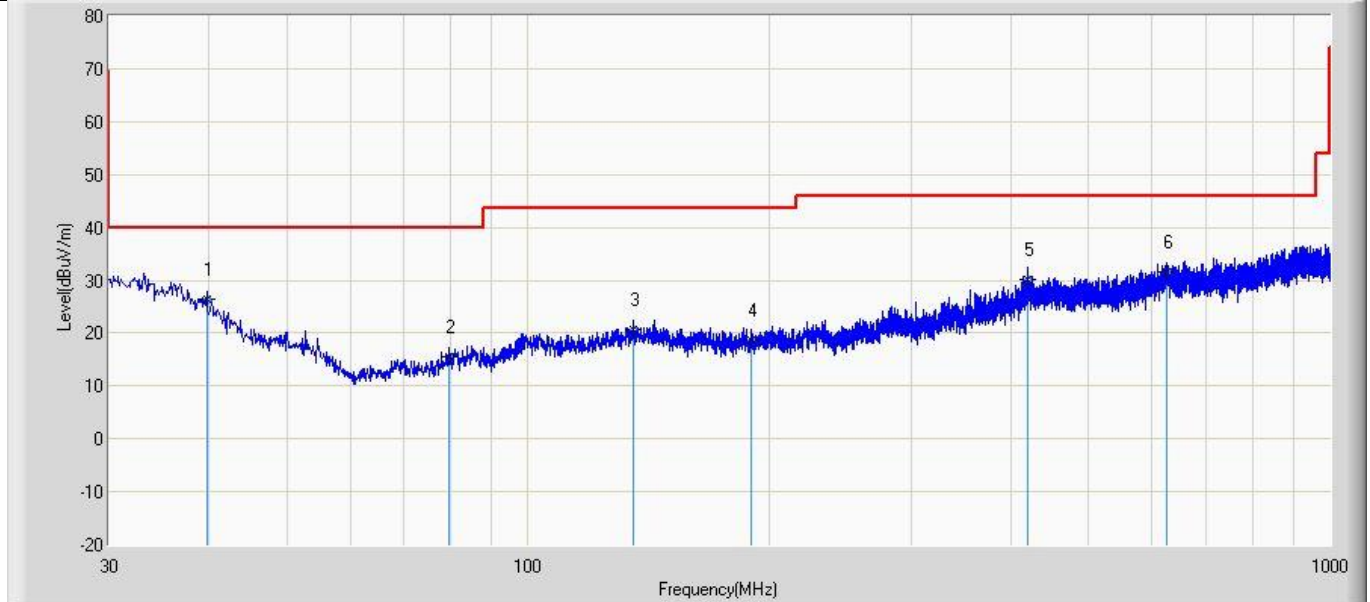
CYBLE-343176-02 Test Data

Profile: 2180208R	Page No.: 7
Engineer: Juliuszhou	
Site: AC3	Time: 2021/08/24 - 22:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		51.461	21.845	4.099	-18.155	40.000	17.746	QP
2		117.058	24.648	3.689	-18.852	43.500	20.960	QP
3	*	159.980	31.648	13.193	-11.852	43.500	18.455	QP
4		280.745	26.945	2.399	-19.055	46.000	24.546	QP
5		540.705	28.053	2.092	-17.947	46.000	25.961	QP
6		695.177	31.648	2.073	-14.352	46.000	29.575	QP

Profile: 2180208R	Page No.: 8
Engineer: Juliuszhou	
Site: AC3	Time: 2021/08/24 - 22:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1	

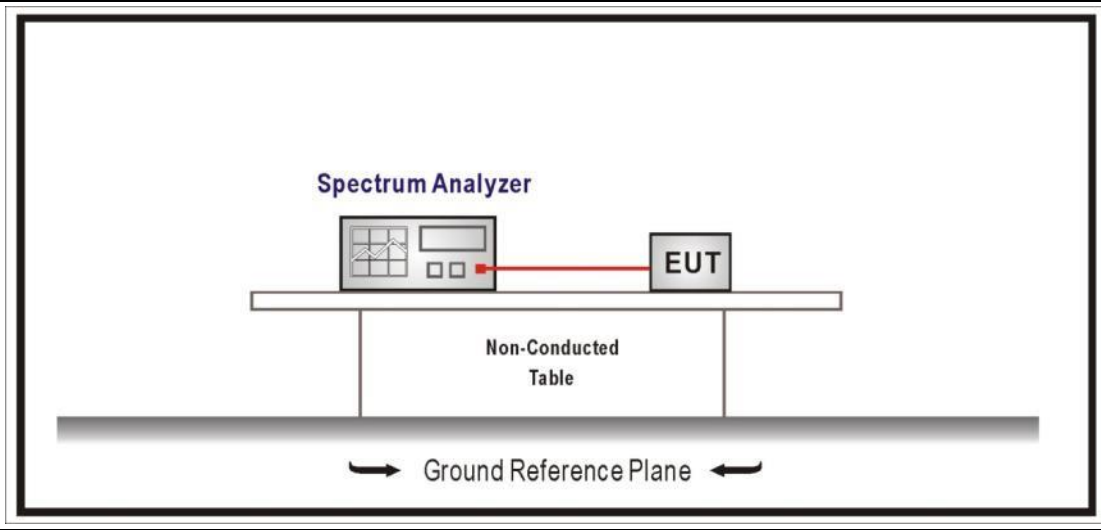


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	39.700	26.458	4.133	-13.542	40.000	22.325	QP
2		79.713	15.485	2.620	-24.515	40.000	12.865	QP
3		135.245	20.584	3.064	-22.916	43.500	17.520	QP
4		189.565	18.569	1.524	-24.931	43.500	17.045	QP
5		418.970	30.264	3.399	-15.736	46.000	26.865	QP
6		626.792	31.654	2.005	-14.346	46.000	29.648	QP

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>	

4.3.2 Test Setup



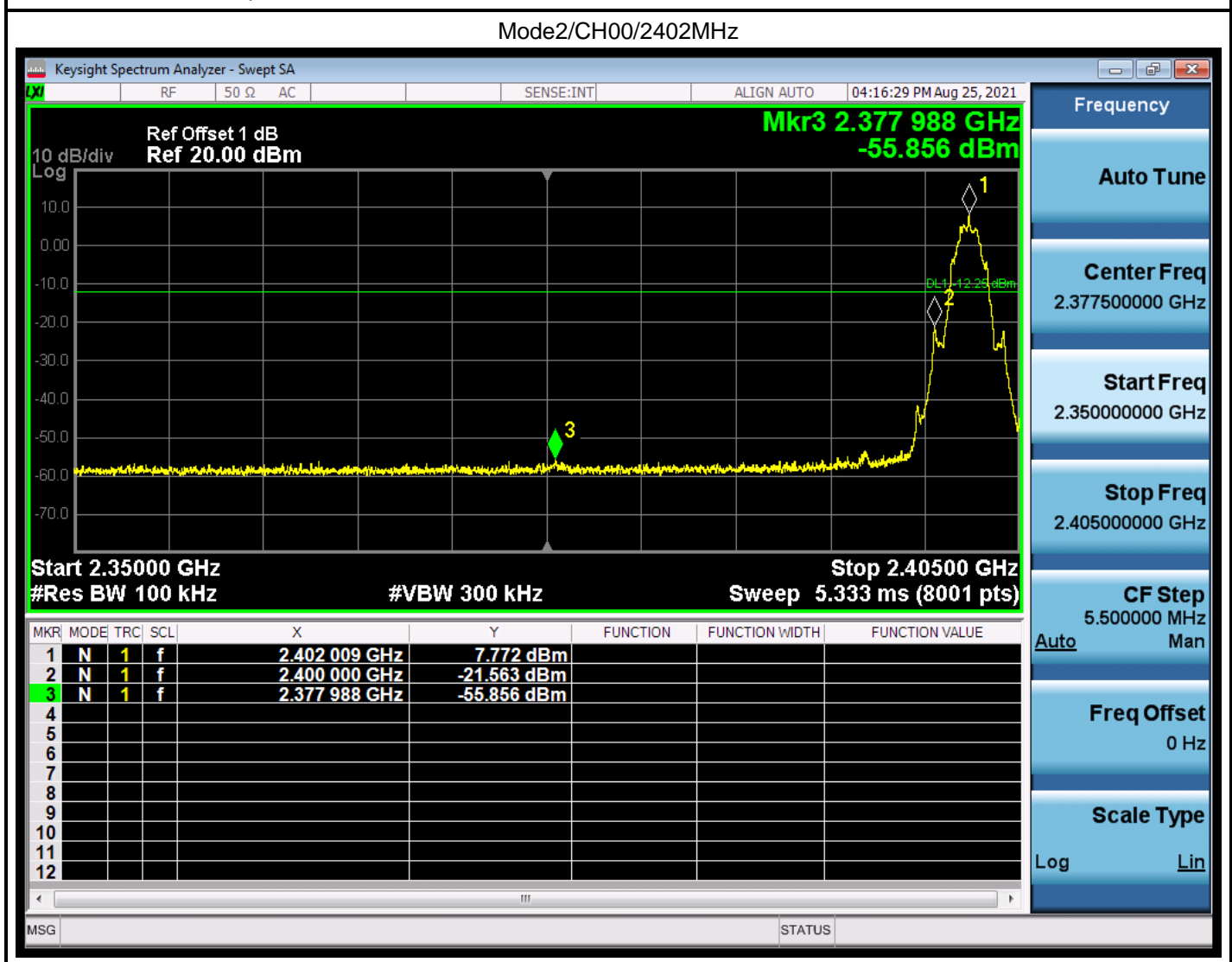
4.3.3 Test Procedure

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

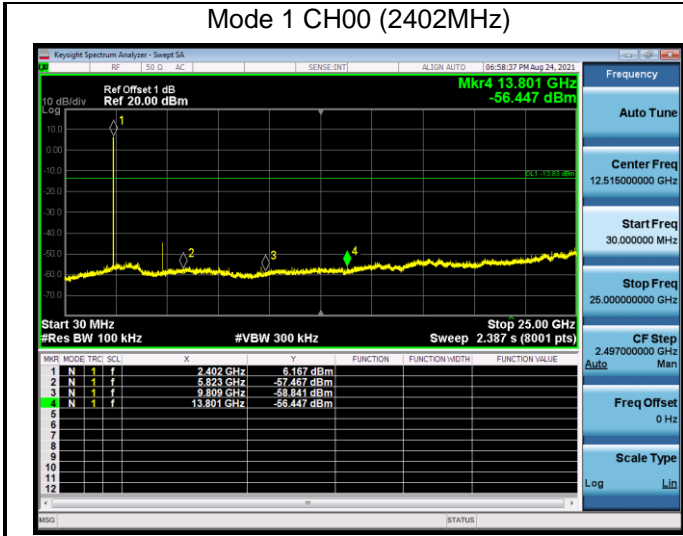
4.3.4 Test Data

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)
1	00	2402	7.759	2400	-42.854	50.613	>20
	39	2480	6.501	2500	-57.392	63.893	>20
2	00	2402	7.772	2400	-21.563	29.335	>20
	39	2480	6.497	2500	-58.114	64.611	>20

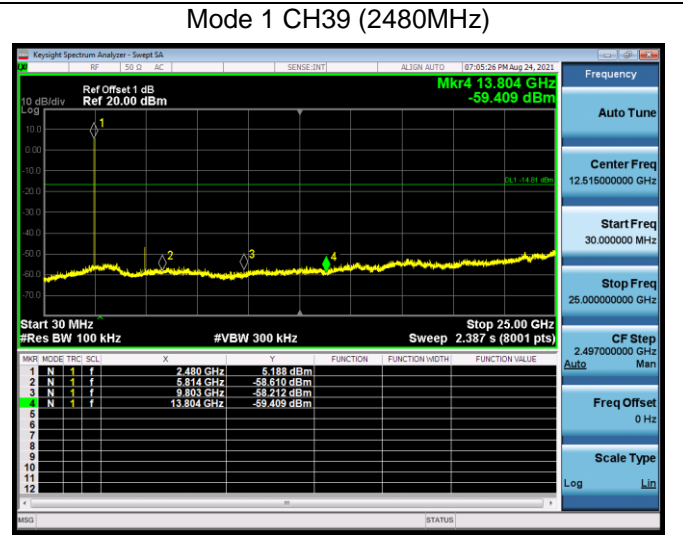
Note 1: The worst data plot as below:



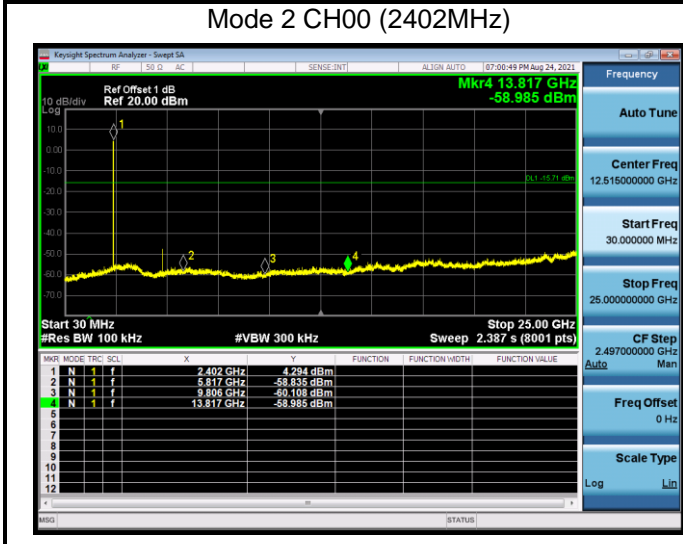
Mode 1 CH00 (2402MHz)



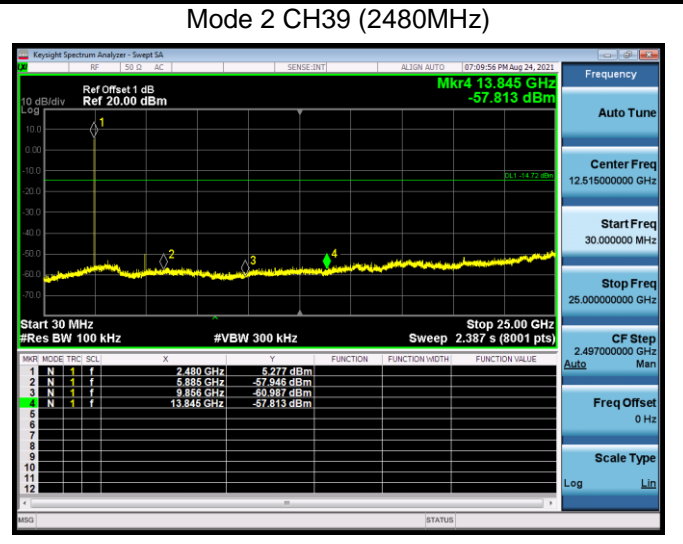
Mode 1 CH39 (2480MHz)



Mode 2 CH00 (2402MHz)



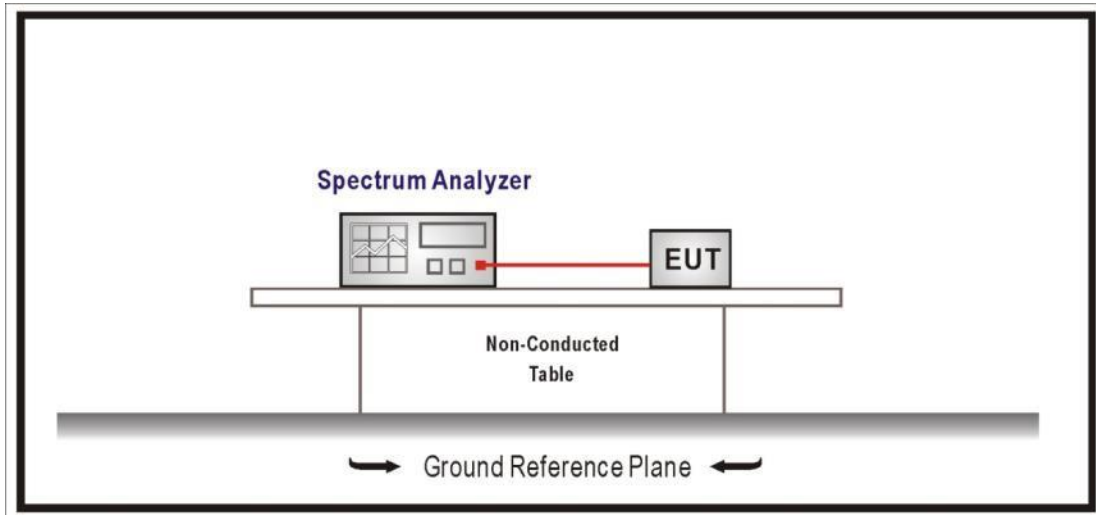
Mode 2 CH39 (2480MHz)



4.4 Duty cycle	VERDICT: PASS
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4.4.1 Limit
N/A

4.4.2 Test Setup



4.4.3 Test Procedure

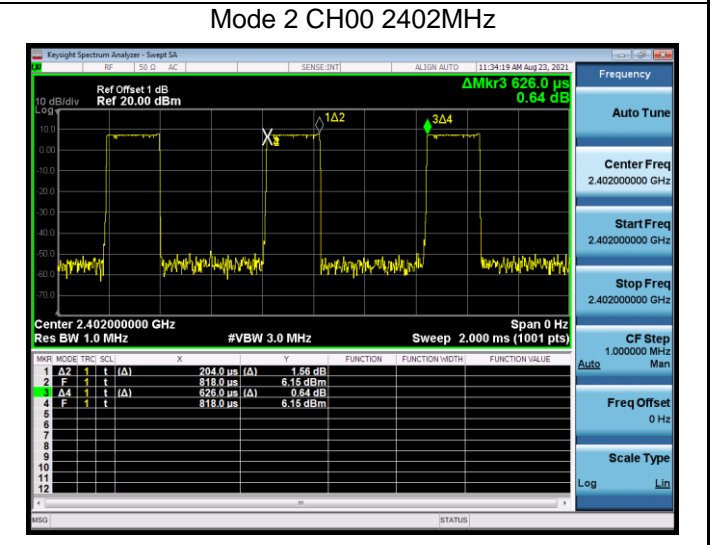
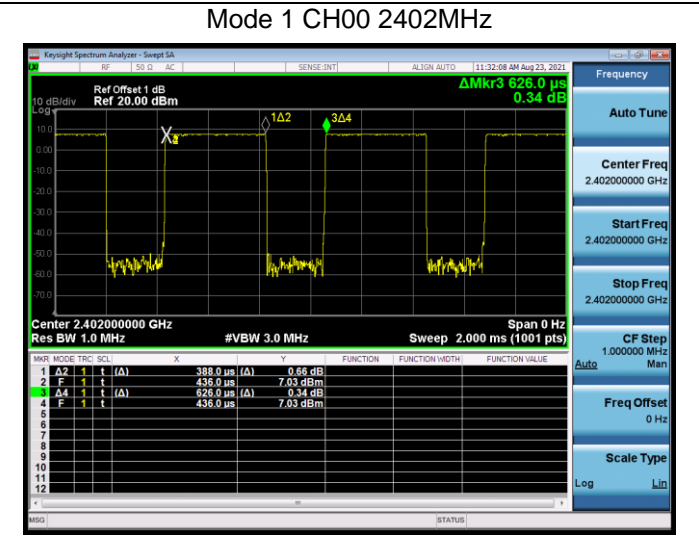
References Rule	Chapter	Description
<input checked="" type="checkbox"/> ANSI C63.10	11.6	Duty cycle (D), transmission duration (T), and maximum power control level

4.4.4 Test Data

Test Mode	Tx On (us)	Tx Off (us)	VBW (kHz)	Tx On + Tx Off (us)	Duty Cycle (%)
Mode 1	388	238	2.58	626	61.98
Mode 2	204	422	4.90	626	32.59

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.



4.5 Radiated Emission Band Edge	VERDICT:	PASS
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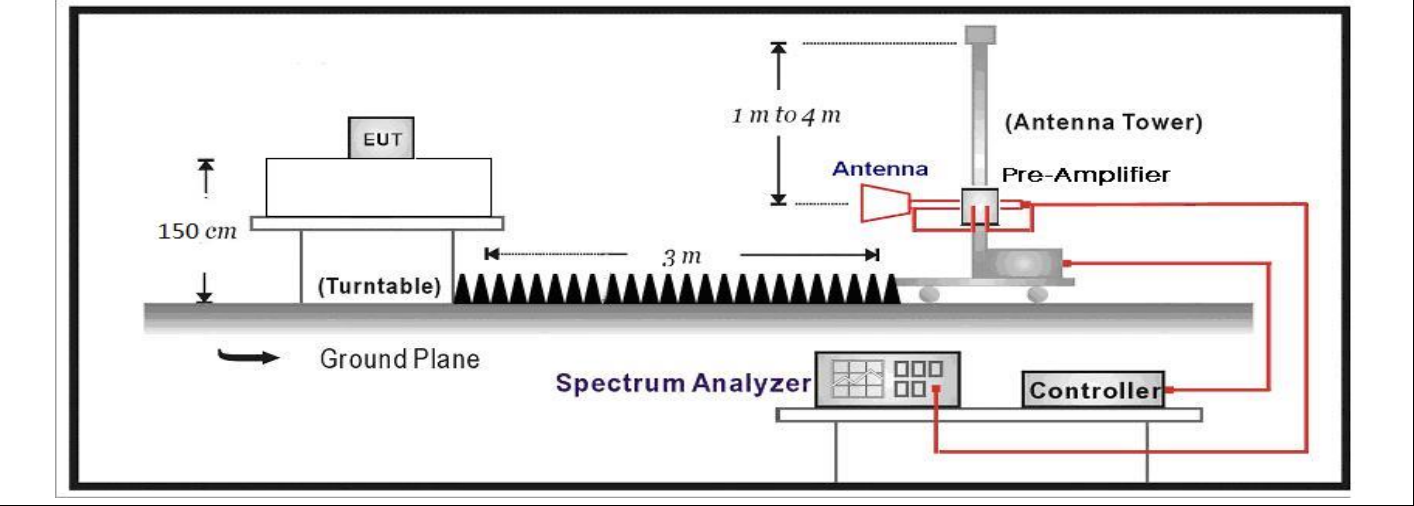
4.5.1 Limit

Standard		FCC Part 15 Subpart C Paragraph 15.247(d) ,15.209		
Frequency bands (MHz)	Detector	Limit (dBµV/m)	RBW (MHz)	Distance (m)
2310-2390	PK	74	1	3
2483.5-2500	AV	54	1	3

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

4.5.2 Test Setup

Above 1GHz Test Setup:



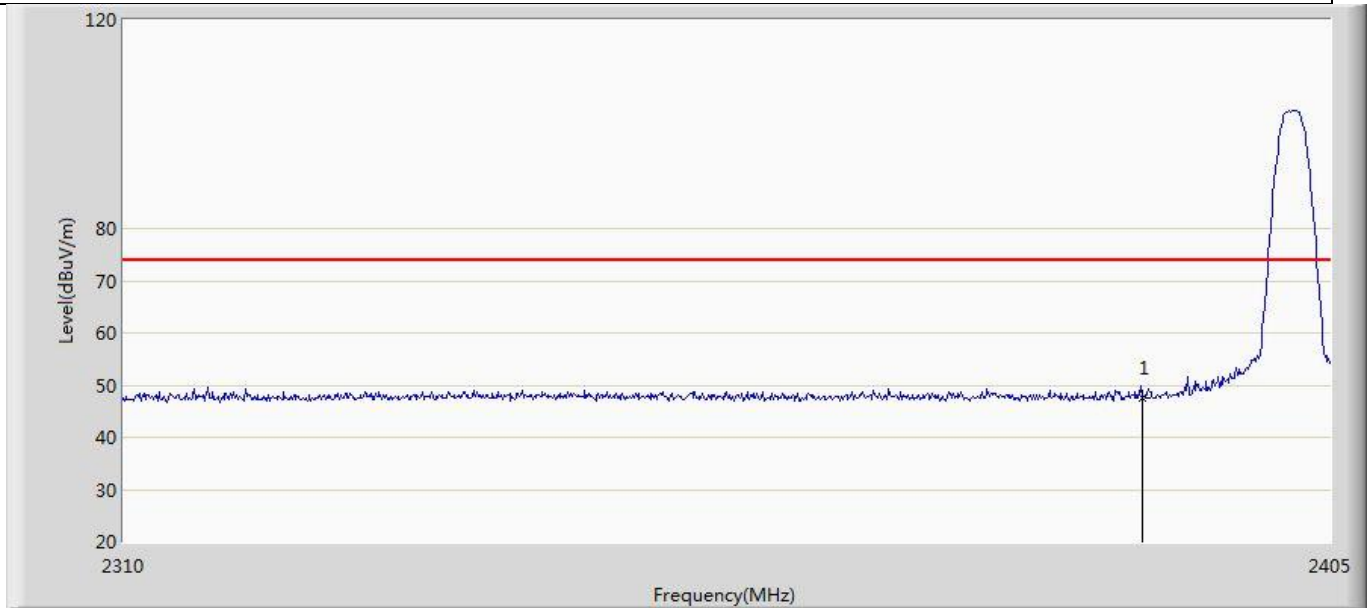
4.5.3 Test Procedure

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

4.5.4 Test Data

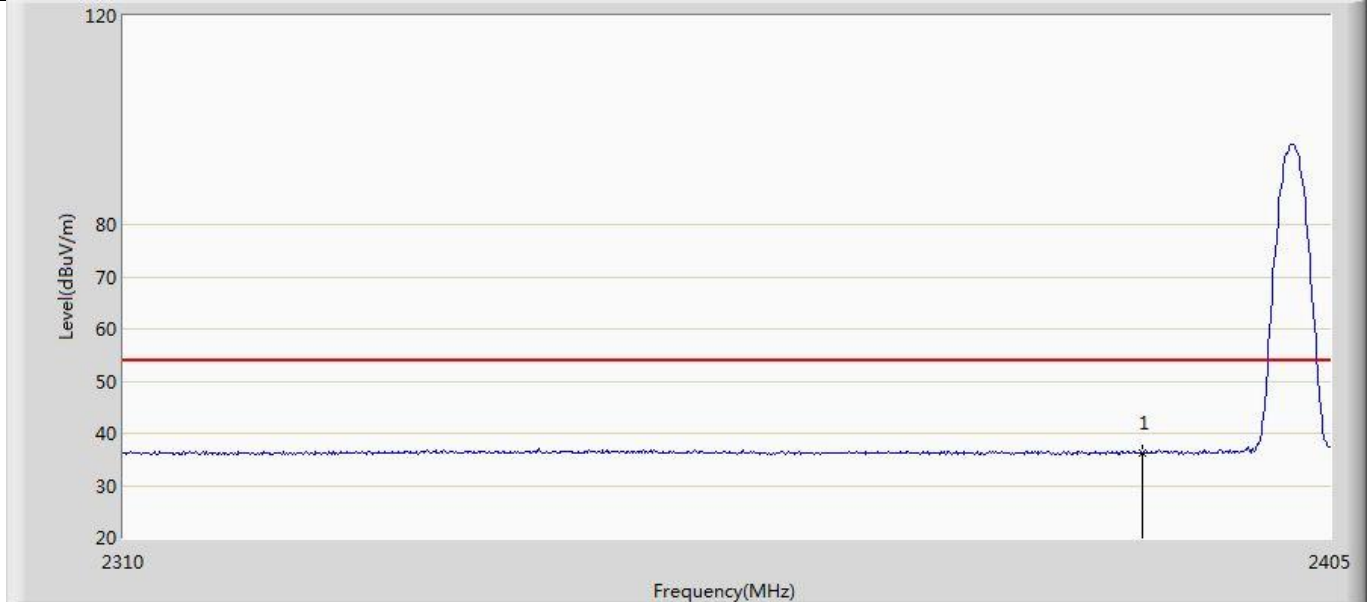
CYBLE-333073-02 Test Data

Profile: 2180208R	Page No.: 1
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/22 - 00:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



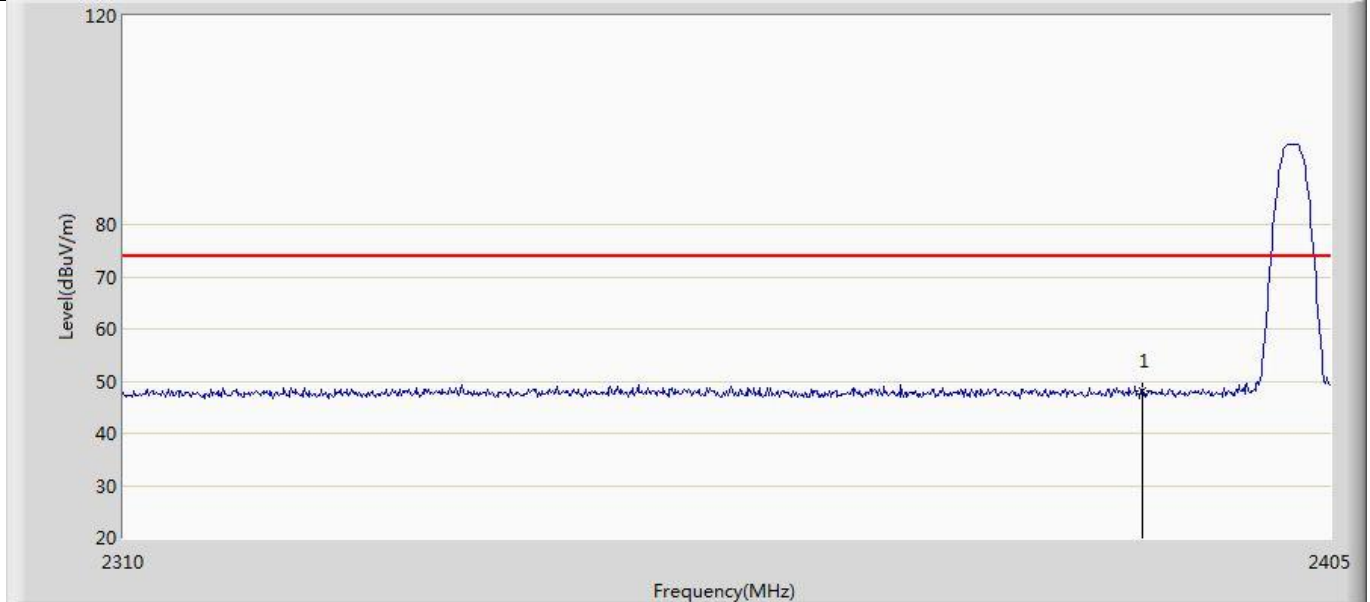
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	47.577	112.221	-26.423	74.000	36.357	PK

Profile: 2180208R	Page No.: 2
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/22 - 19:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



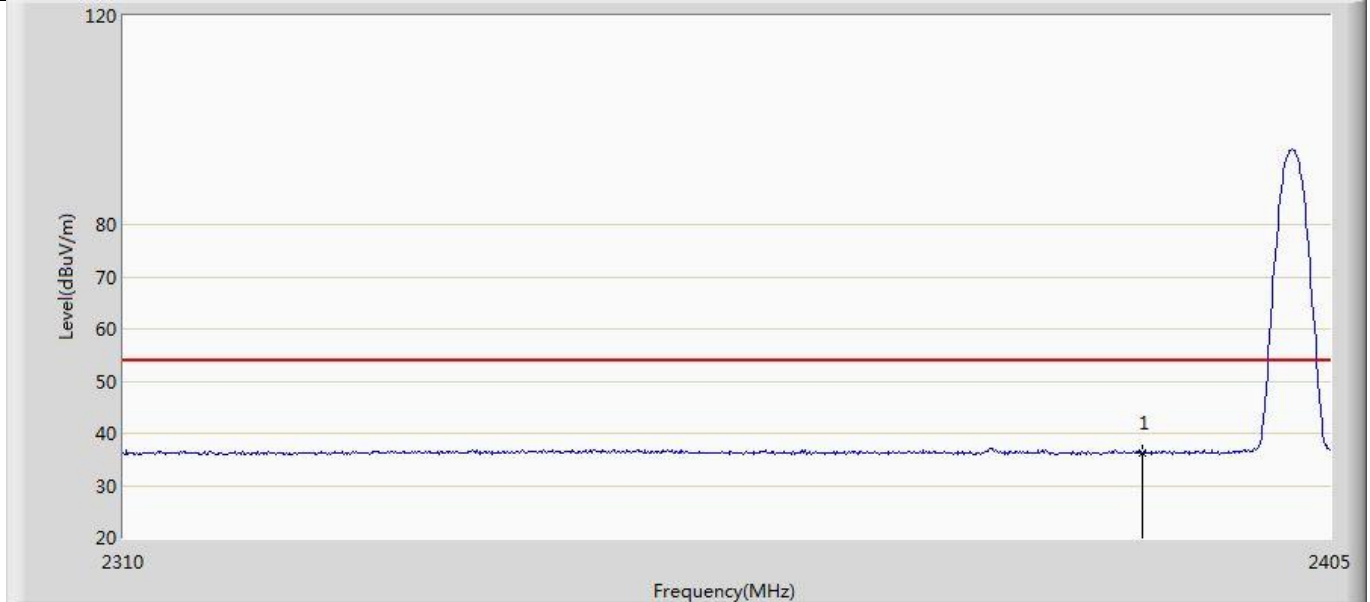
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	36.260	-0.096	-17.740	54.000	36.357	AV

Profile: 2180208R	Page No.: 3
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/22 - 19:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



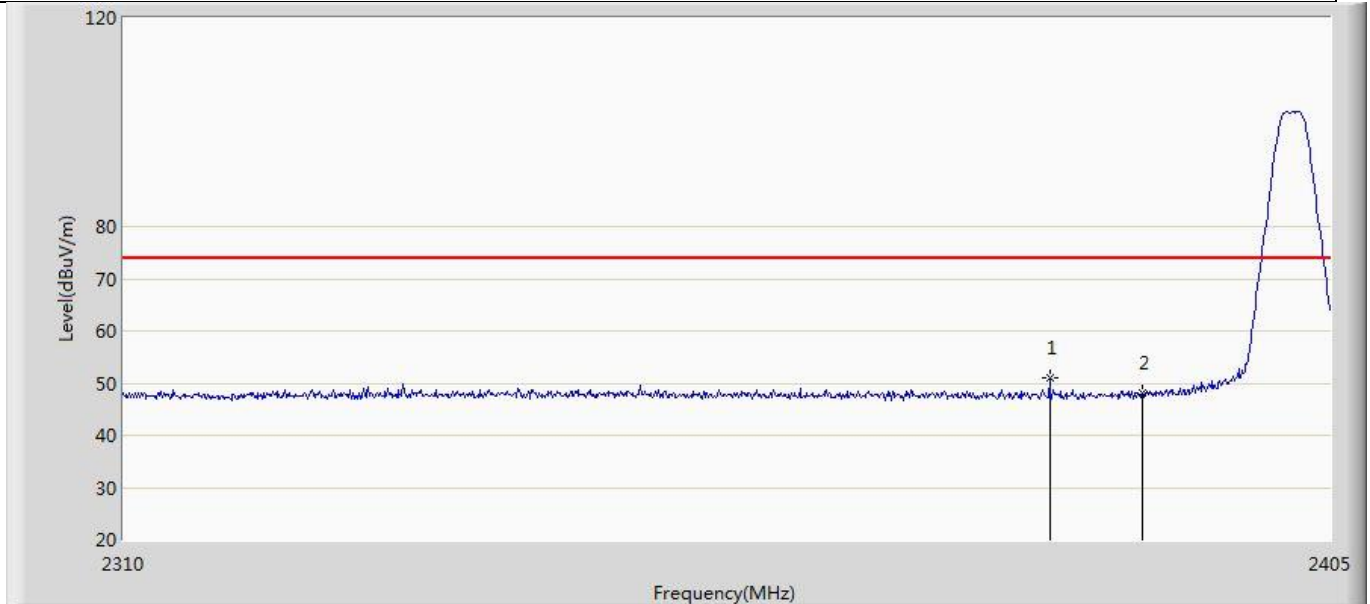
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	48.187	11.831	-25.813	74.000	36.357	PK

Profile: 2180208R	Page No.: 4
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/22 - 19:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2402MHz by LE_1Mbps	



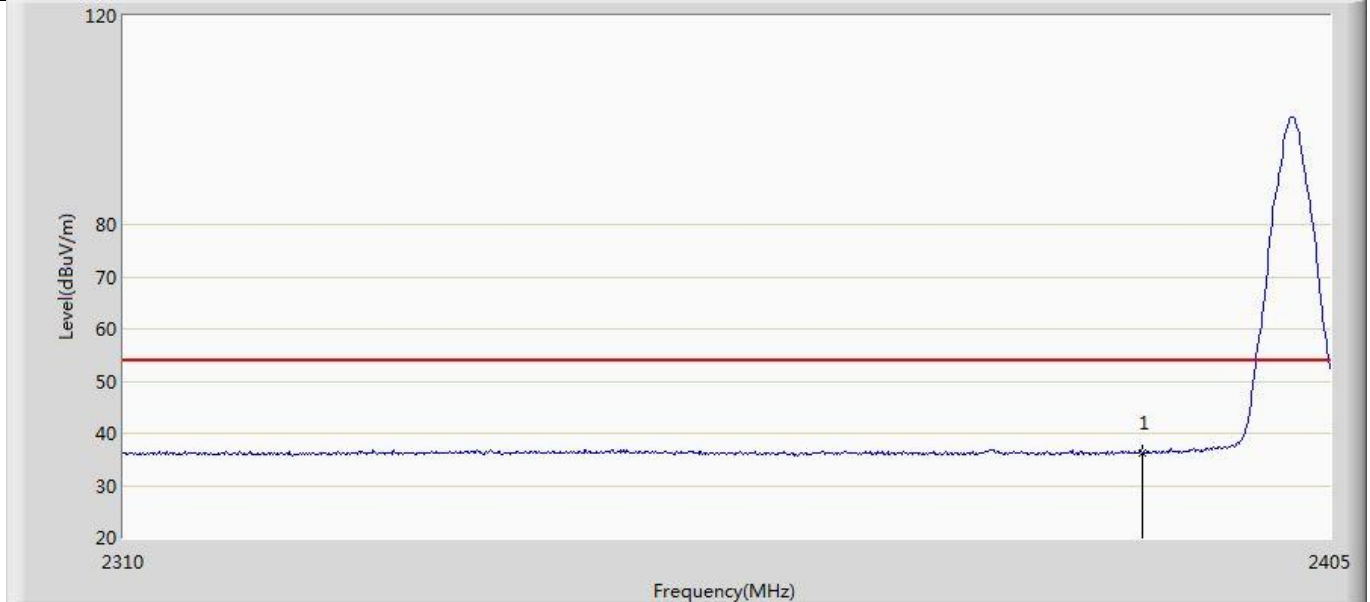
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	36.099	-0.257	-17.901	54.000	36.357	AV

Profile: 2180208R	Page No.: 5
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/22 - 19:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



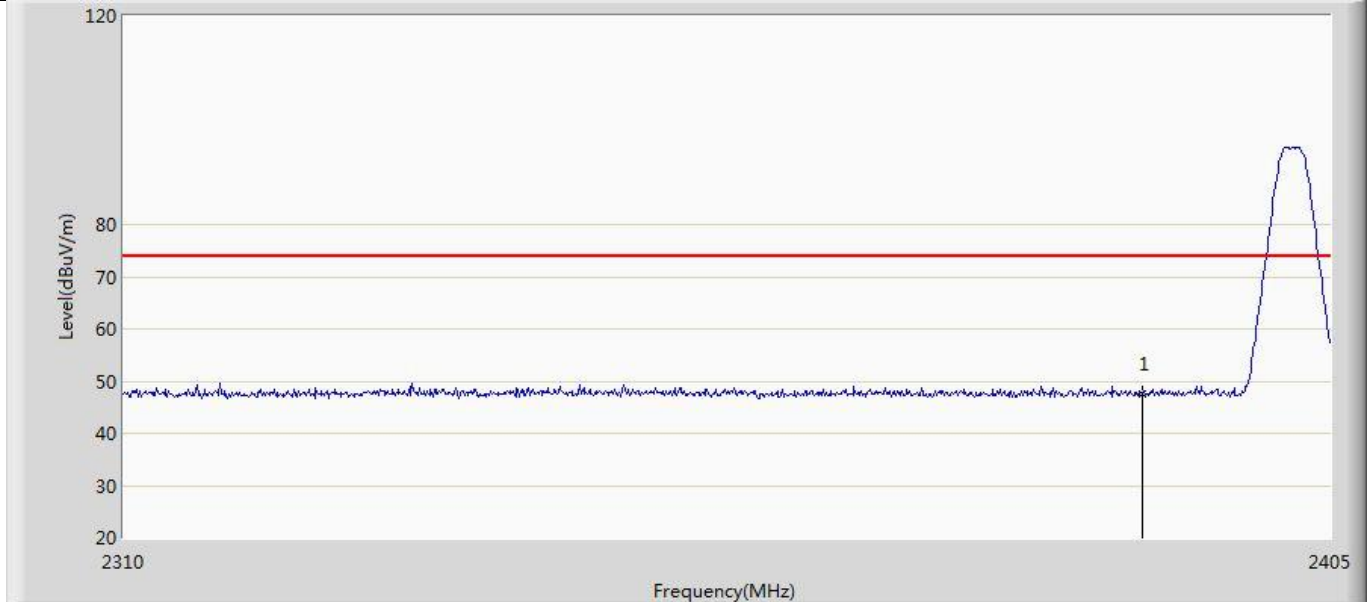
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2382.580	50.965	14.654	-23.035	74.000	36.312	PK
2		2390.000	48.107	11.751	-25.893	74.000	36.357	PK

Profile: 2180208R	Page No.: 6
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/22 - 19:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



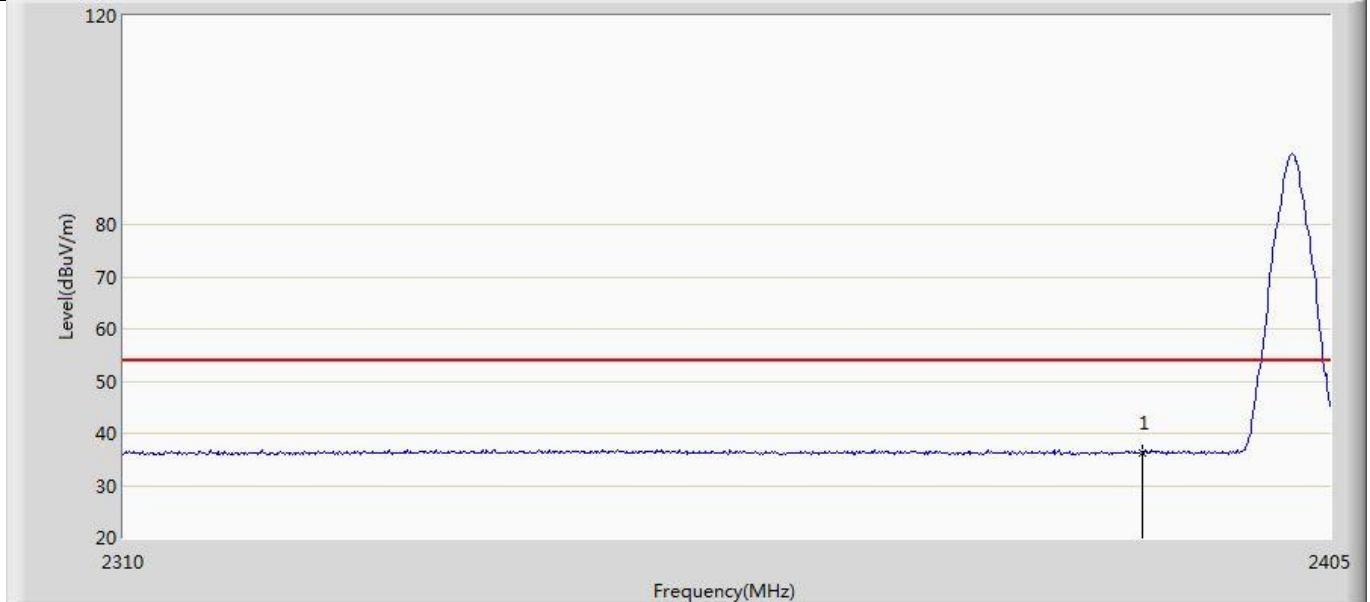
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	36.261	-0.095	-17.739	54.000	36.357	AV

Profile: 2180208R	Page No.: 7
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/22 - 19:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	47.588	11.232	-26.412	74.000	36.357	PK

Profile: 2180208R	Page No.: 8
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/22 - 19:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: AIROC BLUETOOTH LE MODULE	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	36.370	0.014	-17.630	54.000	36.357	AV