DEKRA Testing and Certification (Suzhou) Co., Ltd.
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006, Jiangsu, China
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Test report No:
2032061R-RF-US-P06V01

FCC TEST REPORT

Product Name	Level lock
Trademark	Level
Model and /or type reference	B1, B2, B3, B4, G1, G2, G3, G4, G6, G7, G8, G9
FCC ID	2ATIO2
Applicant´s name / address	Level Home Inc 935 Main St Redwood City, CA 94063
Test method requested, standard	FCC CFR Title 47 Part 15 Subpart C Section 15.247 ANSI C63.10: 2013 KDB 558074 D01 15.247 Meas Guidance v05r02 RSS-Gen Issue 5 / RSS-247 Issue 2
Verdict Summary	IN COMPLIANCE
Documented By	Kitty Li/Project Assistant
Tested by (name / position & signature)	Frank He/ Technical Supervisor
Approved by (name / position & signature)	Jack Zhang/ Supervisor
Date of issue	2020-03-25
Report template No	2032061R-RF-US-P06V01

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COMPETENCES AND GUARANTEES

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

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

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

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

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

GENERAL CONDITIONS

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Date(receive sample)	Mar. 11, 2020
Date (start test)	Mar. 13, 2020
Date (finish test)	Mar. 23, 2020

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
2032061R-RF-US-P06V01	V1.0	Initial issue of report.	2020-03-25

REMARKS AND COMMENTS

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

USED EQUIPMENT

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

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

Radiated Emission(30MHz-1GHz) / AC3

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100573	2020.03.03	2021.03.02
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2019.09.23	2020.09.22
Temperature/Humidity Meter	RTS	RTS-8S	AC2-TH	2019.09.02	2020.09.01
Coaxial Cable	Huber+Suhner	RG 214	AC2-C	2019.04.13	2020.04.12
Dekra test software	Dekra	-	-	-	-

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

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

UNCERTAINTY

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

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

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Product Name..... :	Level lock
Model No. ..... :	B1, B2, B3, B4, G1, G2, G3, G4, G6, G7, G8, G9
Trademark ..... :	Level
FCC ID ..... :	2ATIO2
Manufacturer..... :	Level Home Inc
Manufacturer Address..... :	935 Main St Redwood City, CA 94063

Wireless specifiction..... :	Bluetooth 5.0
Operating frequency range(s)	2400~2483.5MHz
Type of Modulation..... :	GFSK
Number of channel..... :	40

Rated power supply .....:	Voltage and Frequency	
	☐	AC: 220 – 240 V, 50/60 Hz
	☐	AC: 110 – 130 V, 50/60 Hz
	☐	DC: 3Vdc
	☒	Battery: 3Vdc
Mounting position.....:	☒	Table top equipment
	☐	Wall/Ceiling mounted equipment
	☐	Floor standing equipment
	☐	Hand-held equipment
	☐	Other: Wearable equipment

Note: We only tested the B1 sample, Other equivalent models (just different color / SKU) include B2, B3, B4, G1, G2, G3, G4, G6, G7, G8, G9.

1.2 Antenna Information

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

1.3 Channel List

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

2 DESCRIPTION OF TEST SETUP

2.1 Operating mode(s) used for tests

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

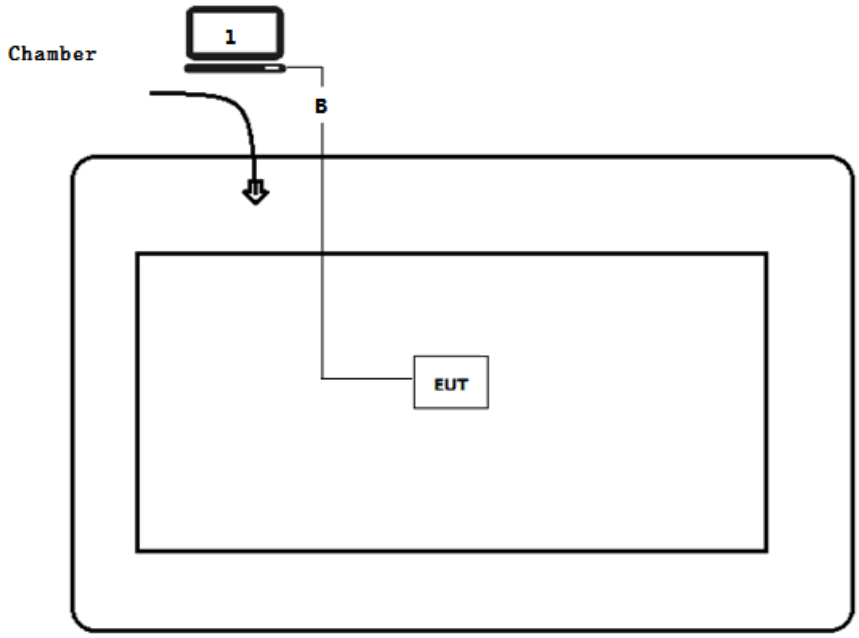
Test Mode For Bluetooth	Mode 1: Transmit by LE_1Mbps(GFSK_LE)
	Mode 2: Transmit by LE_2Mbps(GFSK_LE)
	Mode 3: Transmit by LE_Coded(S=2)(GFSK_LE)
	Mode 4: Transmit by LE_Coded(S=8)(GFSK_LE)
	Mode 5: Normal Operation

2.2 Auxiliary equipment / Test software for the EUT

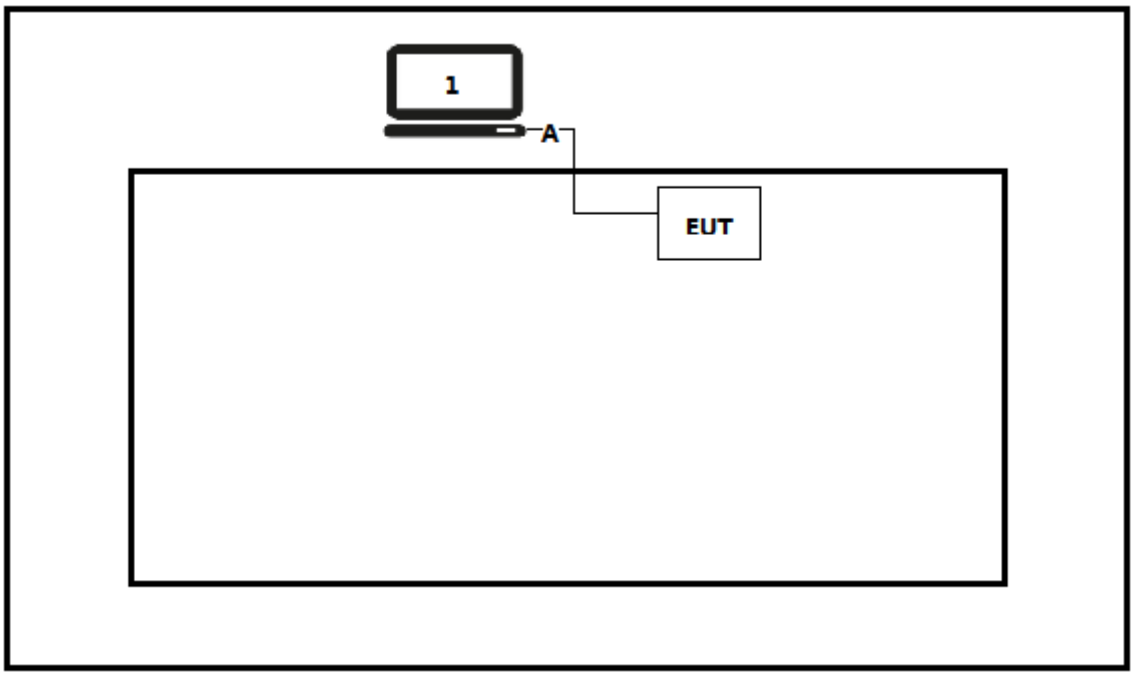
Auxiliary equipment	Type / Version	Manufacturer	Supplied by
Notebook	E470	Lenovo	N/A
Control cable	N/A	N/A	N/A

2.3 Test Configuration / Block diagram used for tests

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Conducted test



2.4 Testing process

1	Setup the EUT as shown in Section 2.3.
2	Turn on the power of all equipment.
3	Run RF software, and set the test mode and channel, then press OK to start to continue transmit.

3 VERDICT SUMMARY SECTION

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

3.1 Standards

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

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

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

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

3.3 Overview of results

For FCC

Requirement – Test case	Basic standard(s)	Verdict	Remark
AC Power Line Conducted Emission	FCC 15.207	N/A	---
Emissions in restricted frequency bands	FCC 15.247(b)(3)	PASS	---
Duty cycle	ANSI C63.10:2013	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	---

3.4 Test Facility

USA	**:**	**FCC Designation Number: CN1199**

4 TEST RESULTS

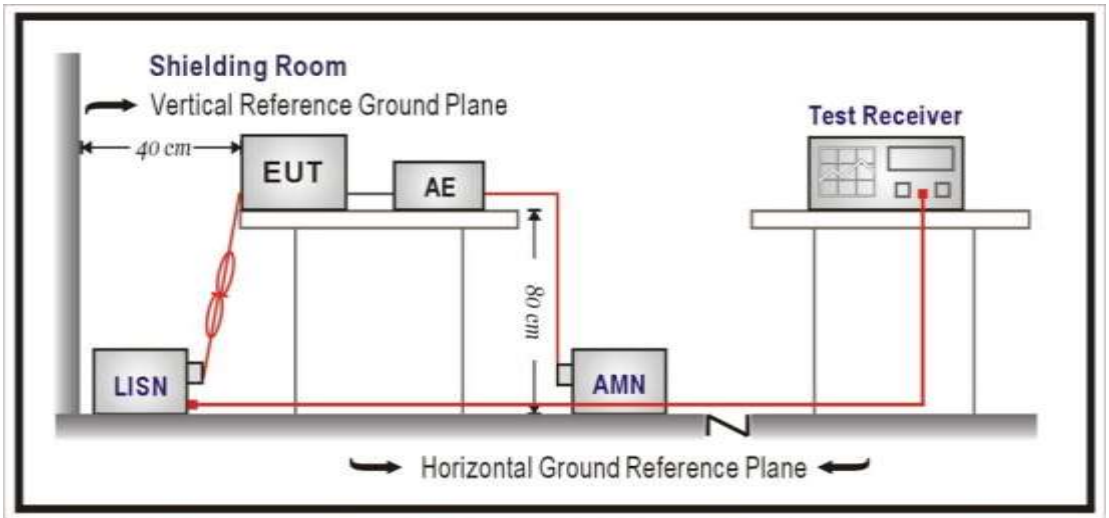
4.1 AC Power Line Conducted Emission	VERDICT: N/A

4.1.1 **Limit**

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

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

4.1.2 **Test Setup**



4.1.3 **Test Procedure**

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

4.1.4 Test Data

The product is powered by battery, so the test item is not performed.

4.2 Emissions in restricted frequency bands — VERDICT: PASS

4.2.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.207		
Restricted Bands of operation			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.69475 –16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 – 8.81475	162.0125 – 167.17	3260 – 3267	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3332 – 3339	31.2 – 31.8
12.51975–12.52025	240 – 285	3345.8 – 3358	36.43 – 36.5
12.57675–12.57725	322 – 335.4	3600 – 4400	
13.36 – 13.41			

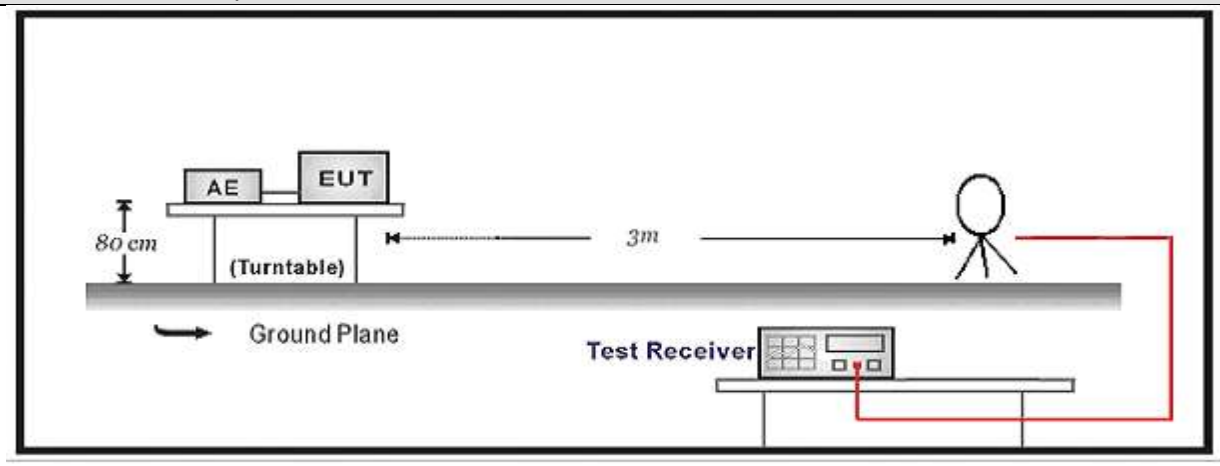
Restricted Band Emissions Limit			
Frequency (MHz)	Field strength (μV/m)	Field strength (dBμV/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30(Note 1)
1.705 - 30	30	29.5	30(Note 1)
30 - 88	100	40	3(Note 2)
88 - 216	150	43.5	3(Note 2)
216 - 960	200	46	3(Note 2)
Above 960	500	54	3(Note 2)

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

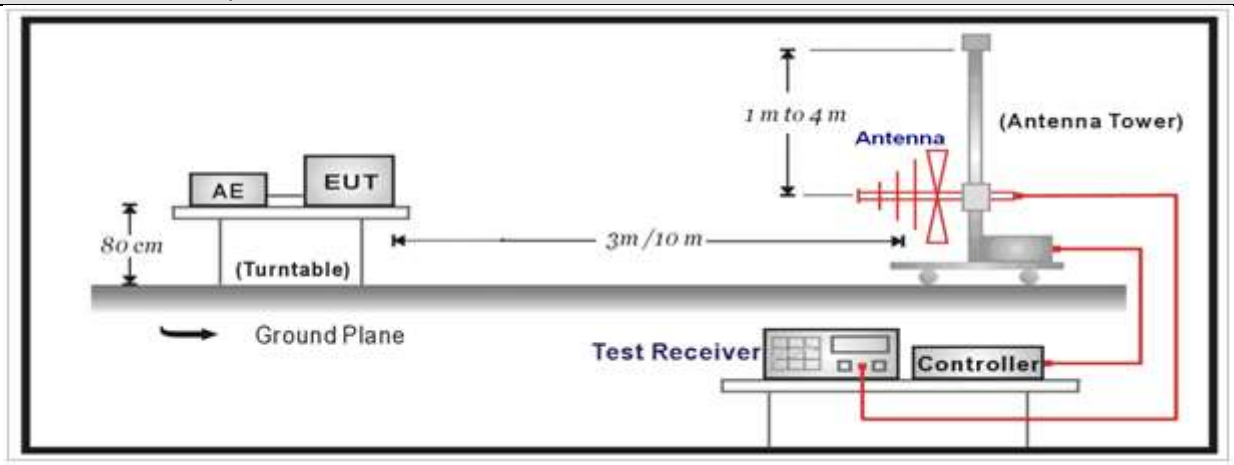
Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.2.2 Test Setup

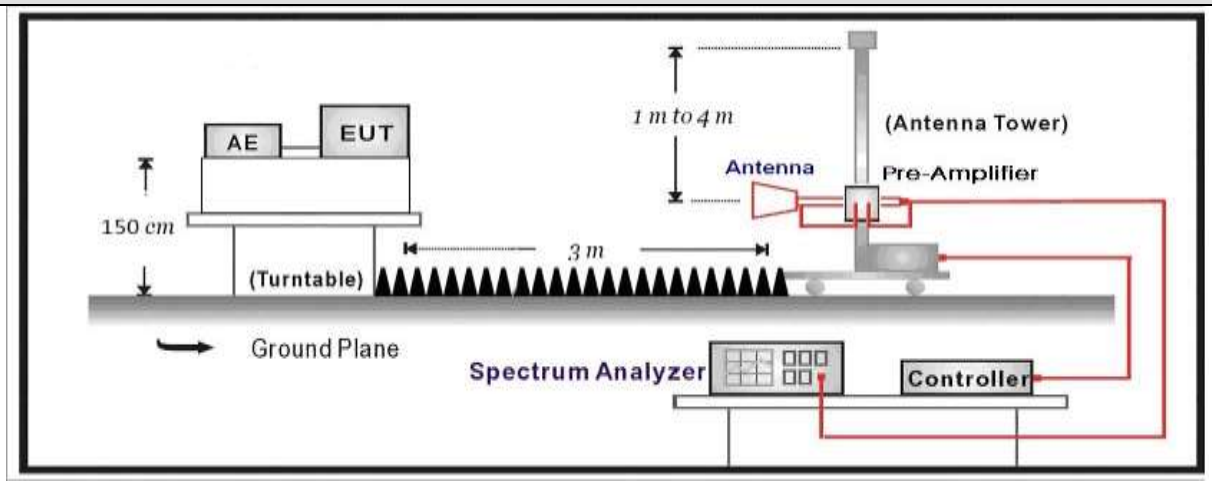
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



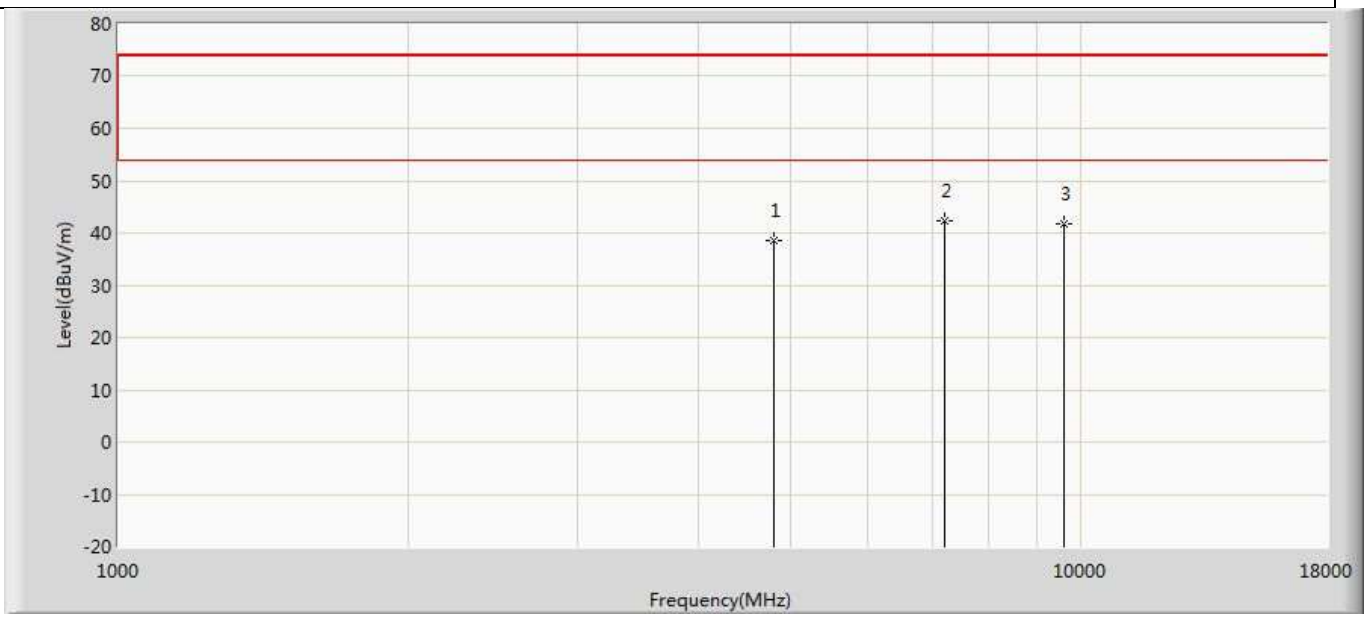
Above 1GHz Test Setup:



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

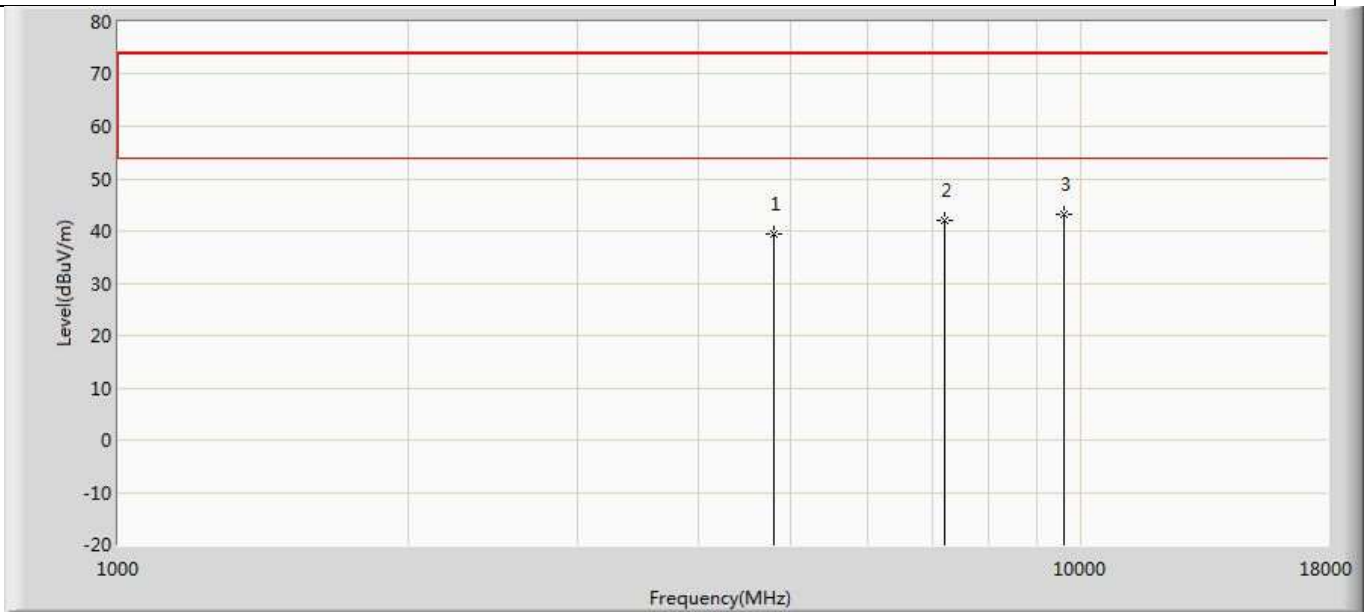
4.2.4 Test Data

Profile: 2032061R	Page No.: 55
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2402MHz	



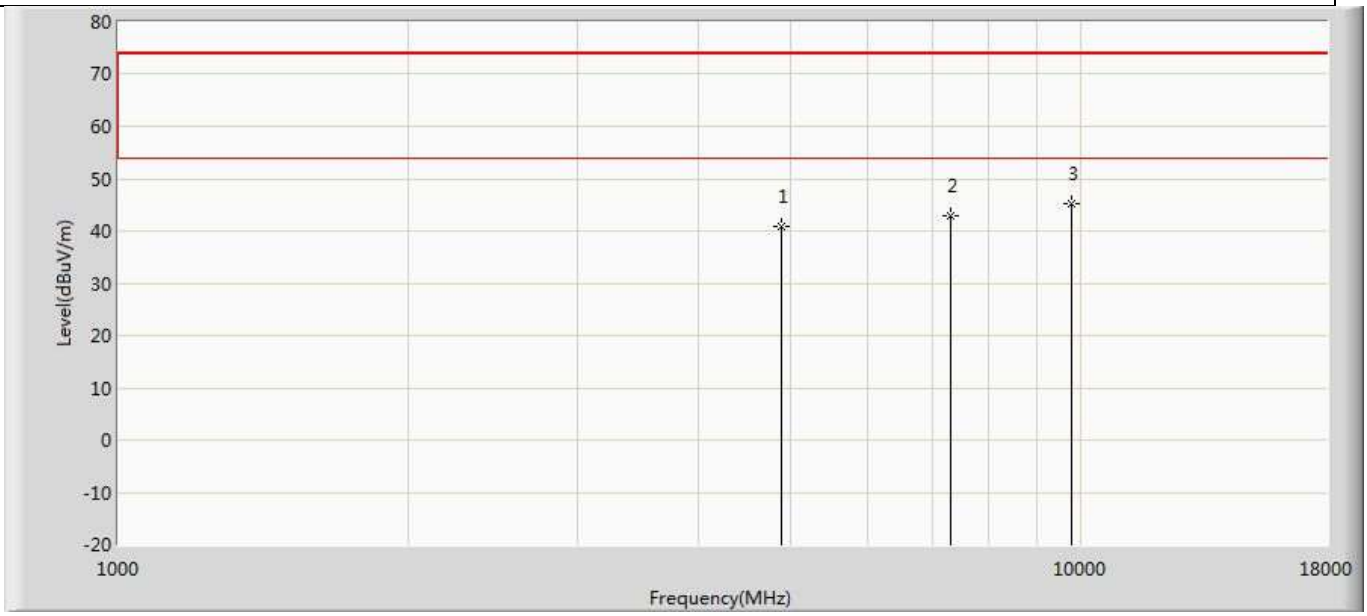
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	38.677	35.016	-35.323	74.000	3.662	PK
2	*	7206.000	42.179	35.516	-31.821	74.000	6.663	PK
3		9608.000	41.797	33.661	-32.203	74.000	8.137	PK

Profile: 2032061R	Page No.: 56
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2402MHz	



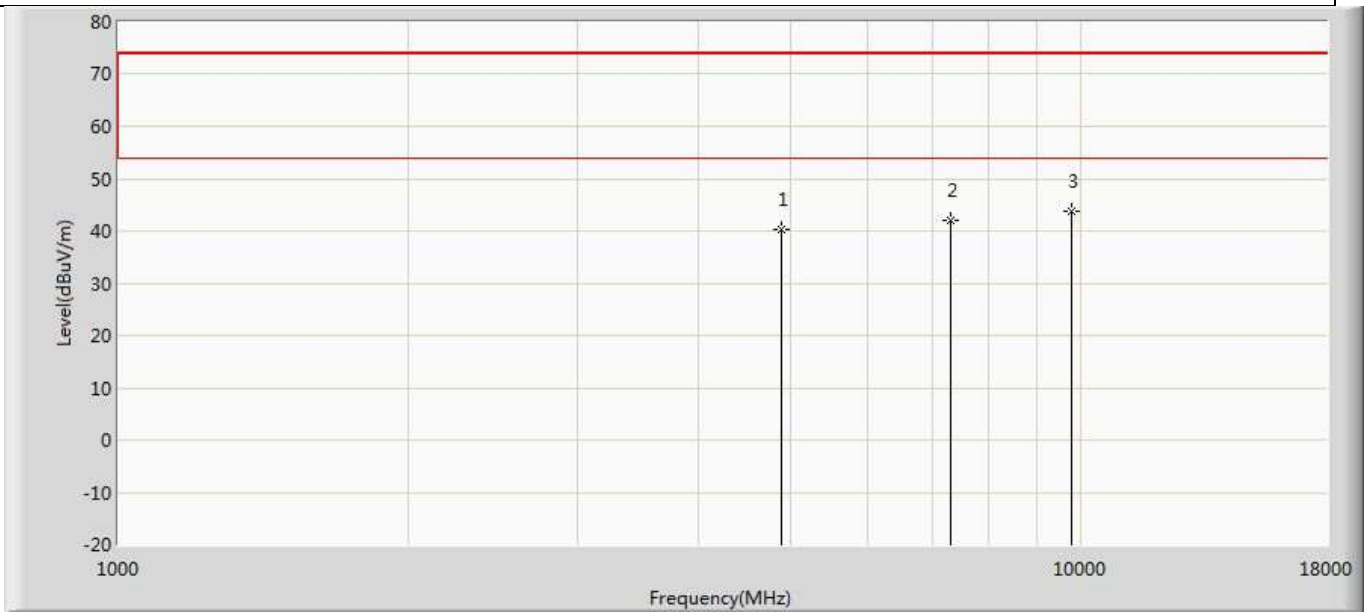
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	39.407	35.746	-34.593	74.000	3.662	PK
2		7206.000	42.031	35.368	-31.969	74.000	6.663	PK
3	*	9608.000	43.151	35.015	-30.849	74.000	8.137	PK

Profile: 2032061R	Page No.: 57
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2440MHz	



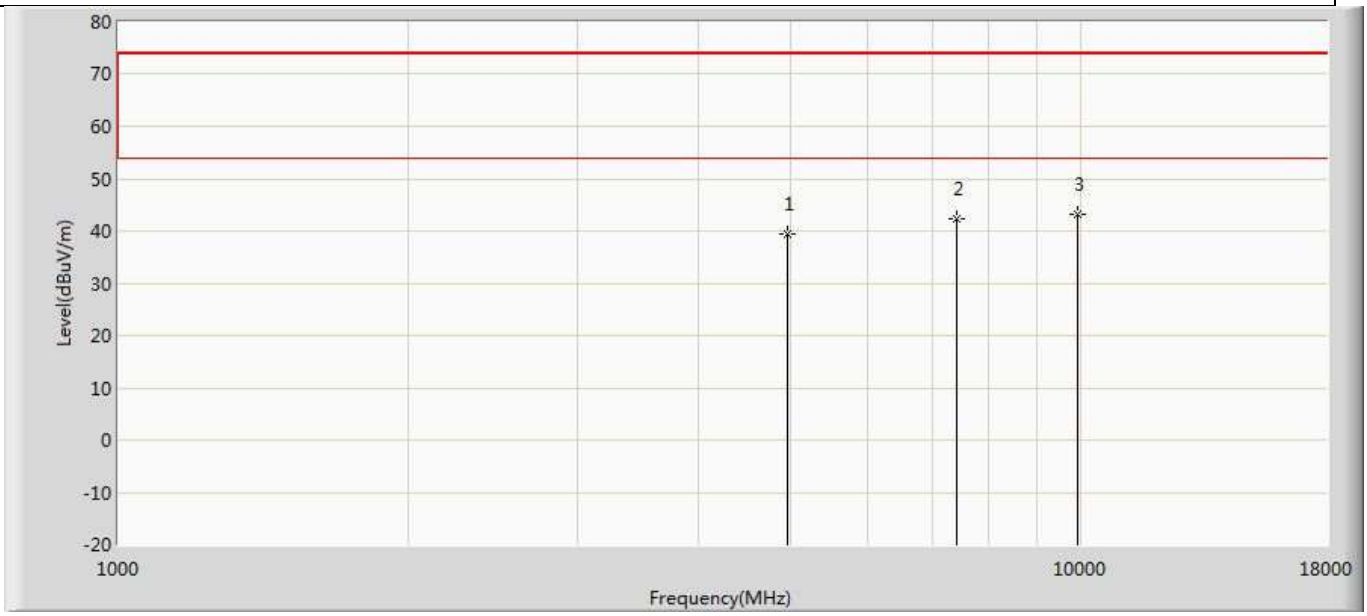
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	40.888	37.247	-33.112	74.000	3.640	PK
2		7320.000	42.800	36.115	-31.200	74.000	6.685	PK
3	*	9760.000	45.076	36.372	-28.924	74.000	8.704	PK

Profile: 2032061R	Page No.: 58
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2440MHz	



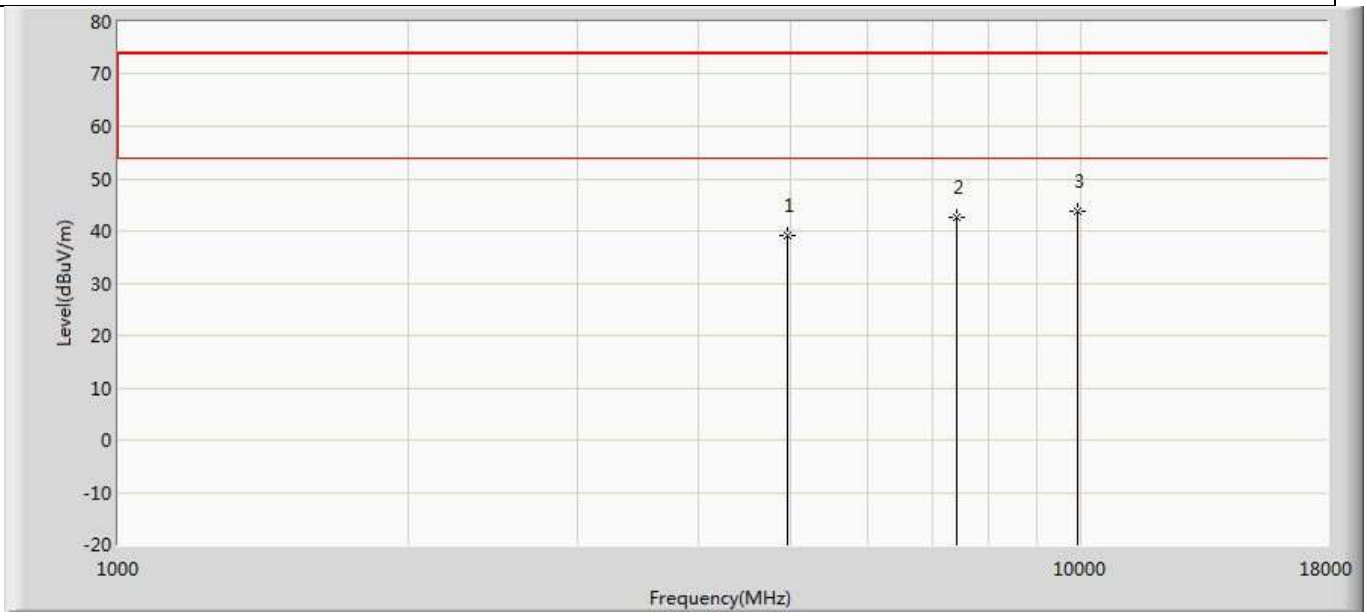
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	40.320	36.679	-33.680	74.000	3.640	PK
2		7320.000	41.899	35.214	-32.101	74.000	6.685	PK
3	*	9760.000	43.874	35.170	-30.126	74.000	8.704	PK

Profile: 2032061R	Page No.: 59
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2480MHz	



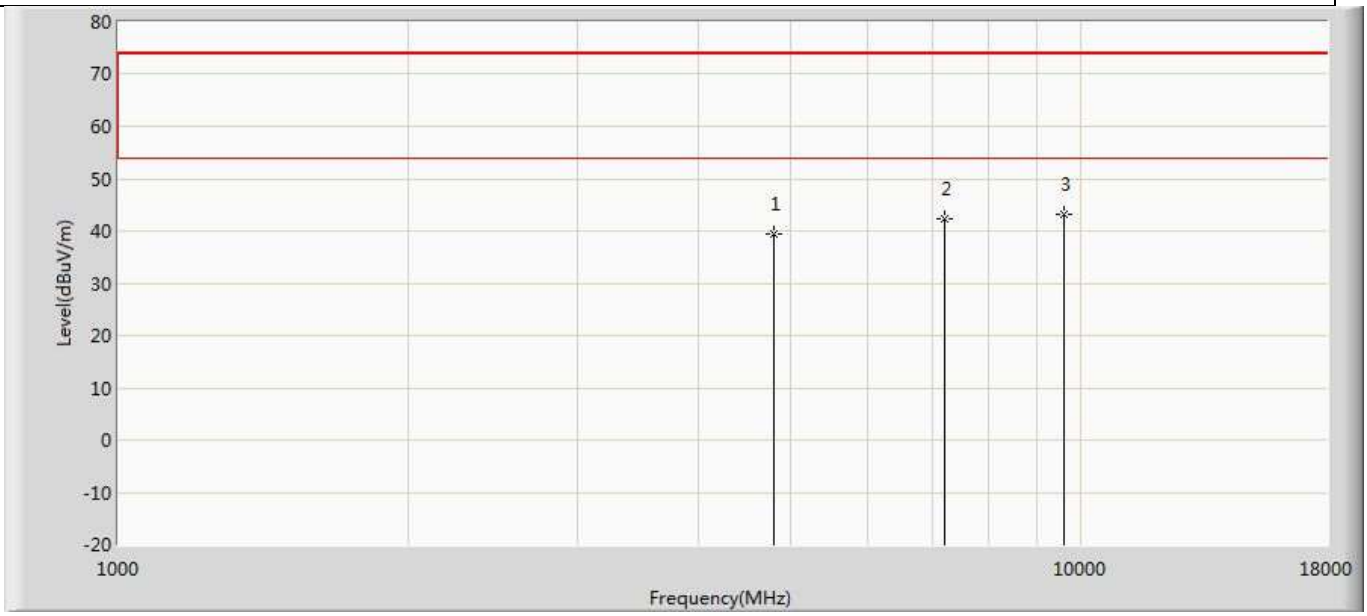
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.393	35.782	-34.607	74.000	3.611	PK
2		7440.000	42.302	35.717	-31.698	74.000	6.585	PK
3	*	9920.000	43.250	34.525	-30.750	74.000	8.725	PK

Profile: 2032061R	Page No.: 60
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2480MHz	



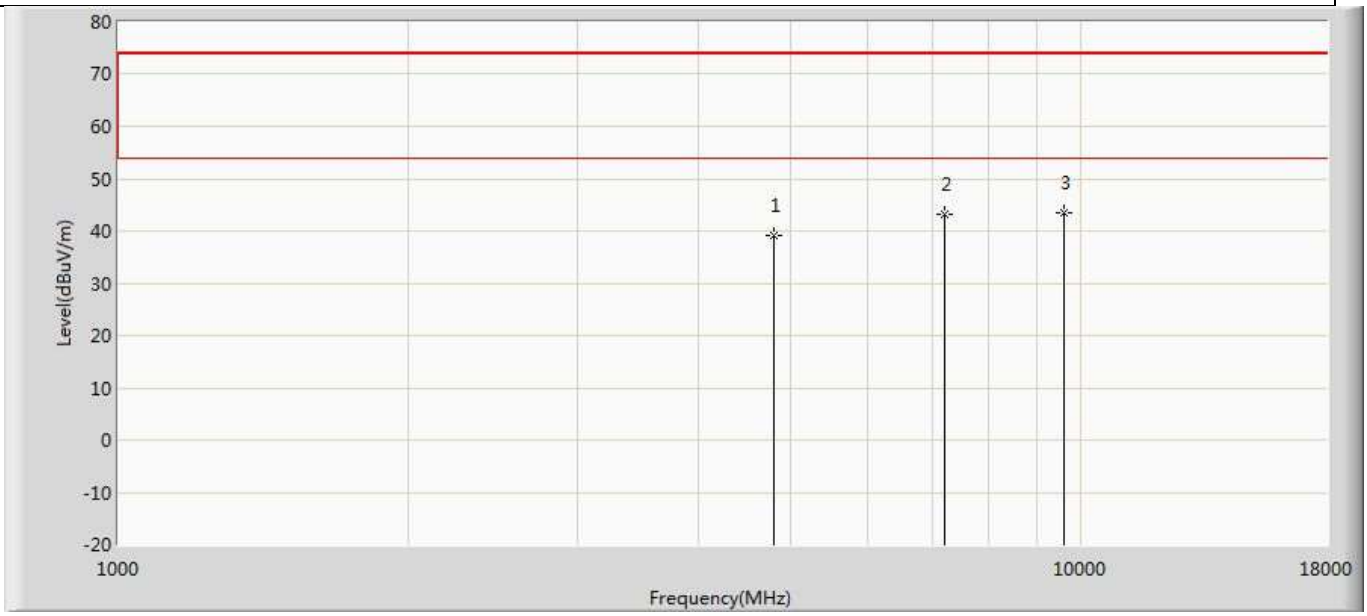
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.249	35.638	-34.751	74.000	3.611	PK
2		7440.000	42.601	36.016	-31.399	74.000	6.585	PK
3	*	9920.000	43.814	35.089	-30.186	74.000	8.725	PK

Profile: 2032061R	Page No.: 61
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2: 2402MHz	



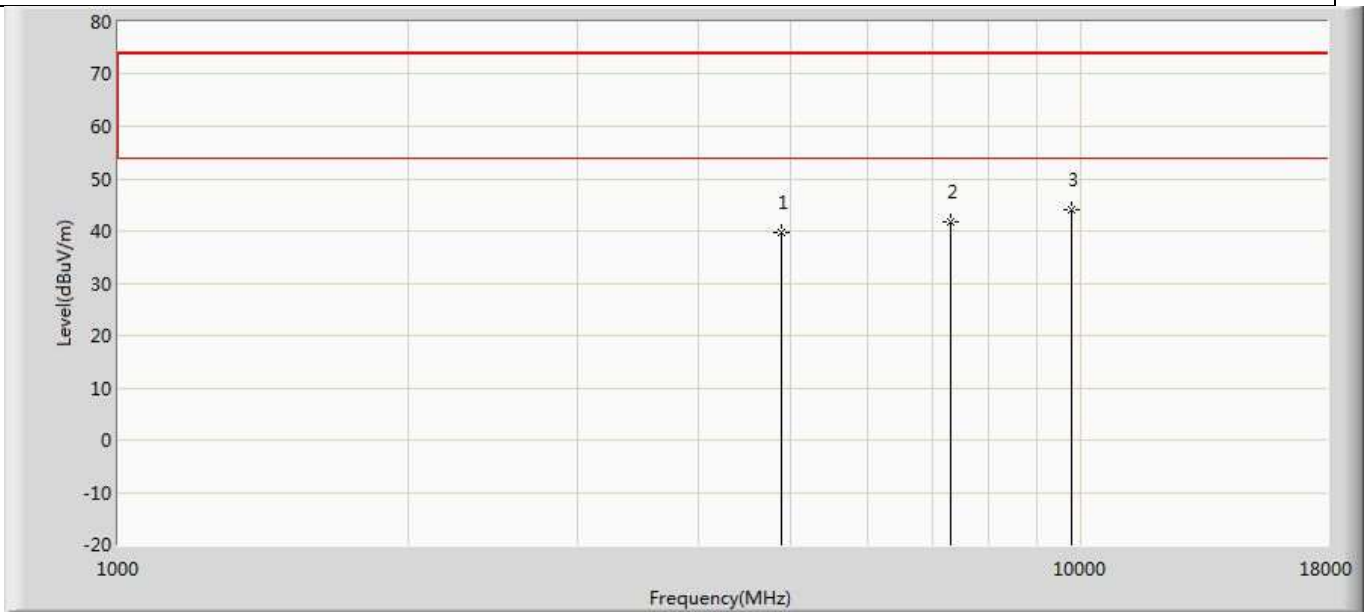
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	39.511	35.850	-34.489	74.000	3.662	PK
2		7206.000	42.439	35.776	-31.561	74.000	6.663	PK
3	*	9608.000	43.081	34.945	-30.919	74.000	8.137	PK

Profile: 2032061R	Page No.: 62
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2: 2402MHz	



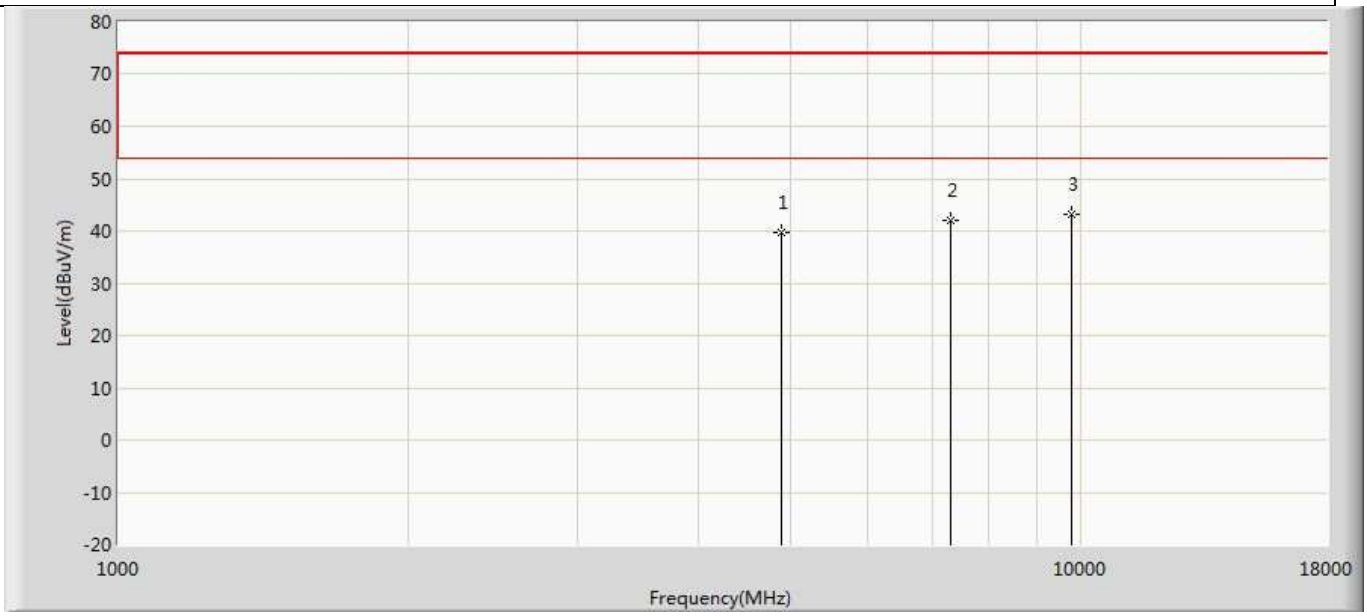
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	39.183	35.522	-34.817	74.000	3.662	PK
2		7206.000	43.144	36.481	-30.856	74.000	6.663	PK
3	*	9608.000	43.452	35.316	-30.548	74.000	8.137	PK

Profile: 2032061R	Page No.: 63
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2: 2440MHz	



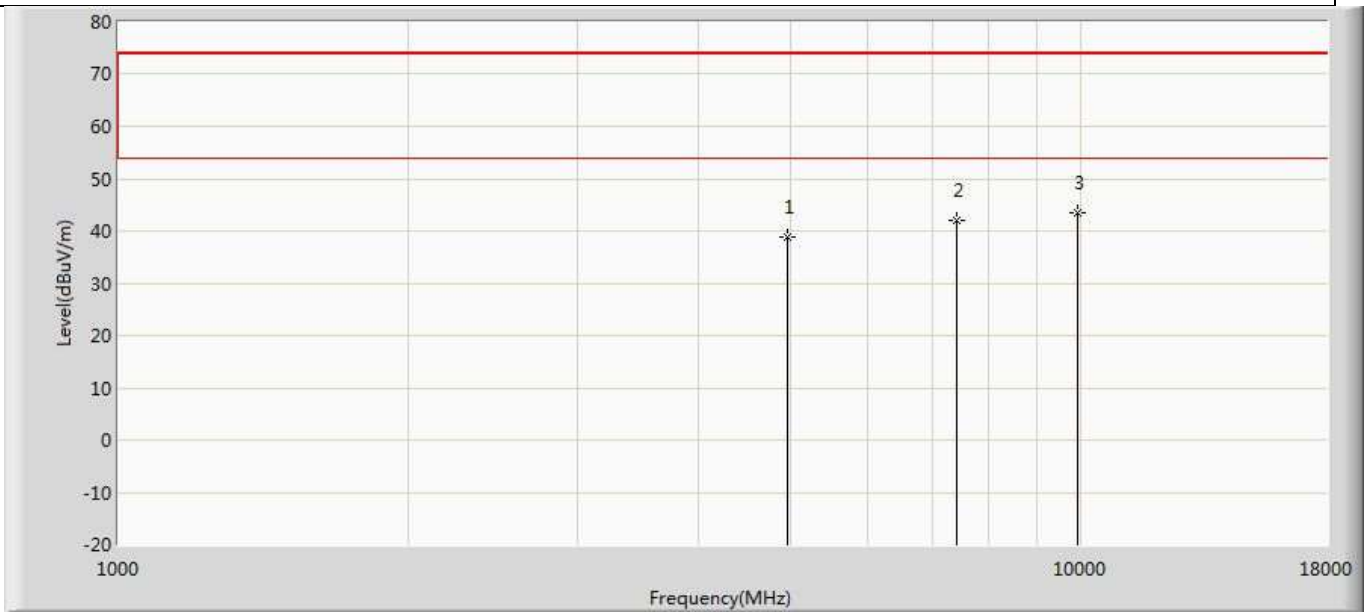
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	39.607	35.966	-34.393	74.000	3.640	PK
2		7320.000	41.688	35.003	-32.312	74.000	6.685	PK
3	*	9760.000	43.988	35.284	-30.012	74.000	8.704	PK

Profile: 2032061R	Page No.: 64
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2: 2440MHz	



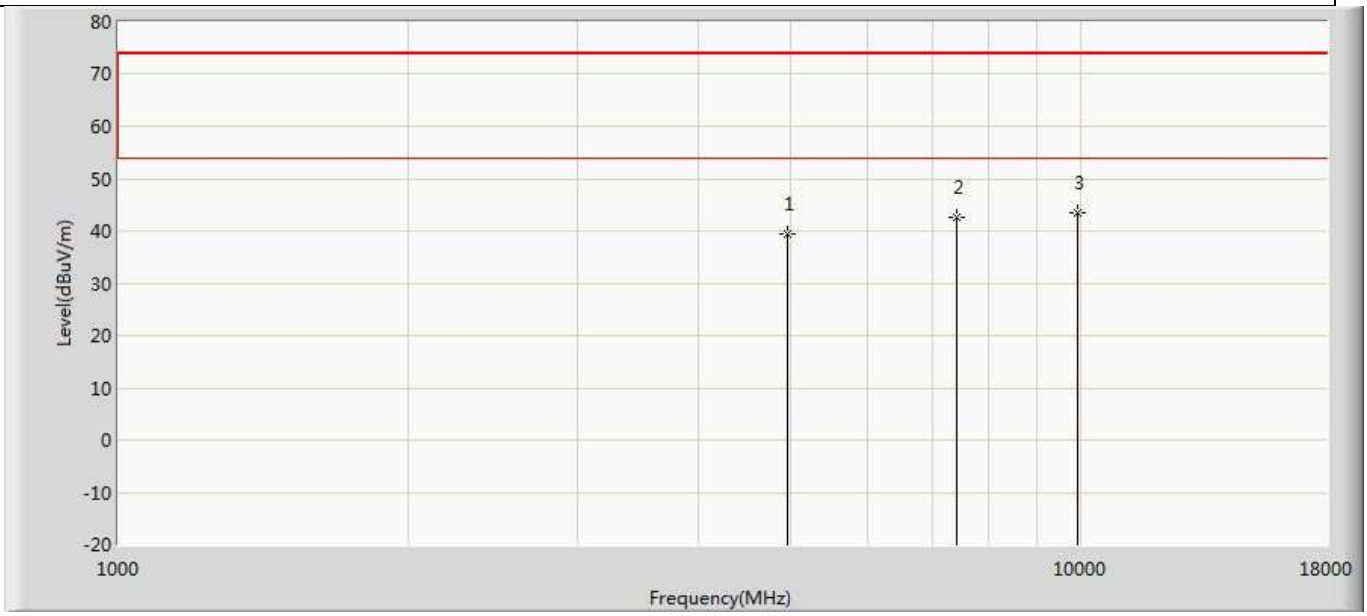
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	39.746	36.105	-34.254	74.000	3.640	PK
2		7320.000	42.152	35.467	-31.848	74.000	6.685	PK
3	*	9760.000	43.222	34.518	-30.778	74.000	8.704	PK

Profile: 2032061R	Page No.: 65
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2: 2480MHz	



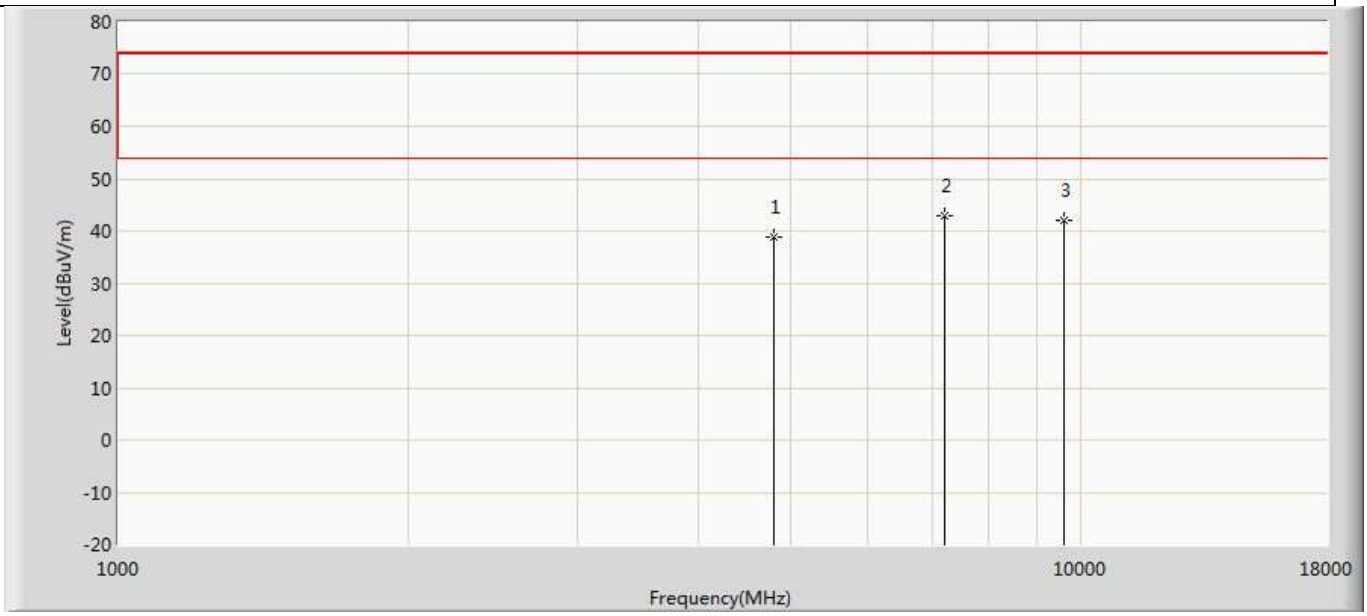
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	38.863	35.252	-35.137	74.000	3.611	PK
2		7440.000	41.893	35.308	-32.107	74.000	6.585	PK
3	*	9920.000	43.365	34.640	-30.635	74.000	8.725	PK

Profile: 2032061R	Page No.: 66
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2: 2480MHz	



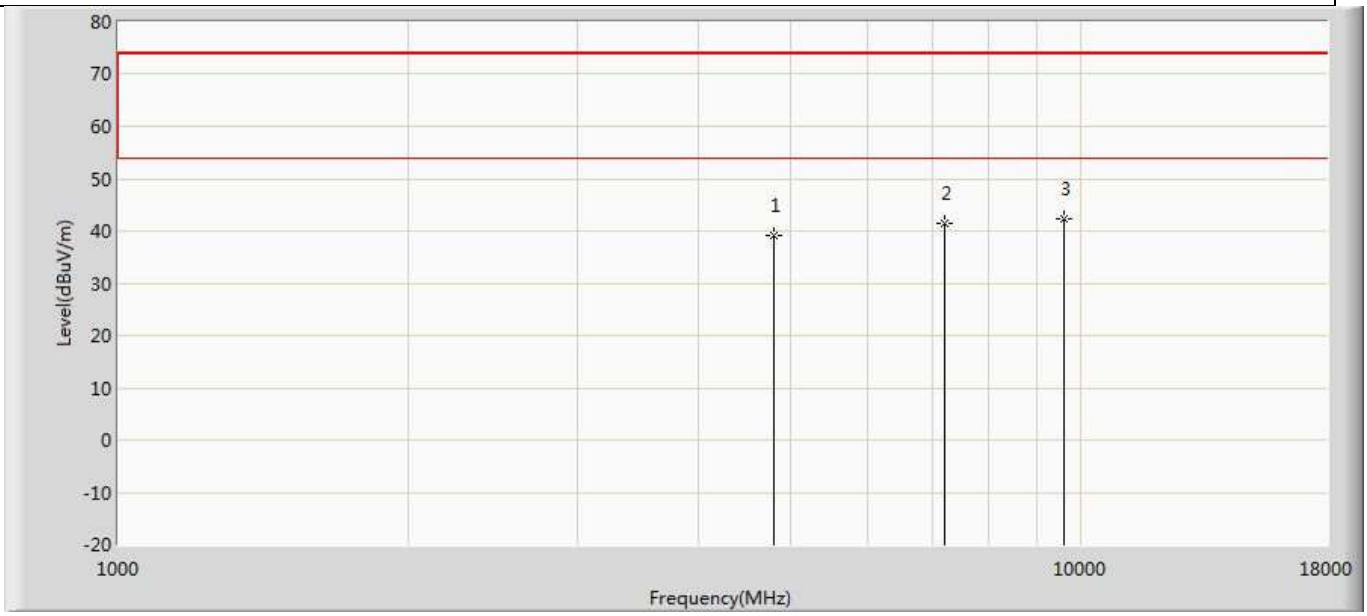
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.425	35.814	-34.575	74.000	3.611	PK
2		7440.000	42.474	35.889	-31.526	74.000	6.585	PK
3	*	9920.000	43.570	34.845	-30.430	74.000	8.725	PK

Profile: 2032061R	Page No.: 67
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2402MHz	



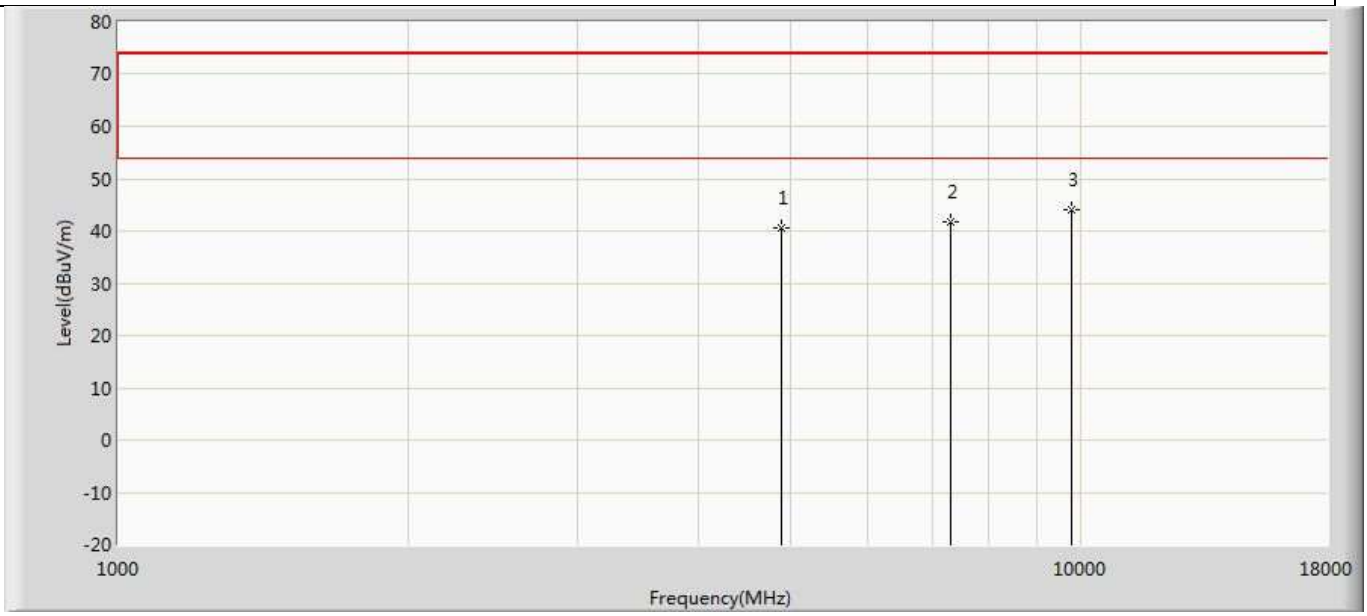
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	38.697	35.036	-35.303	74.000	3.662	PK
2	*	7206.000	42.987	36.324	-31.013	74.000	6.663	PK
3		9608.000	42.095	33.959	-31.905	74.000	8.137	PK

Profile: 2032061R	Page No.: 68
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2402MHz	



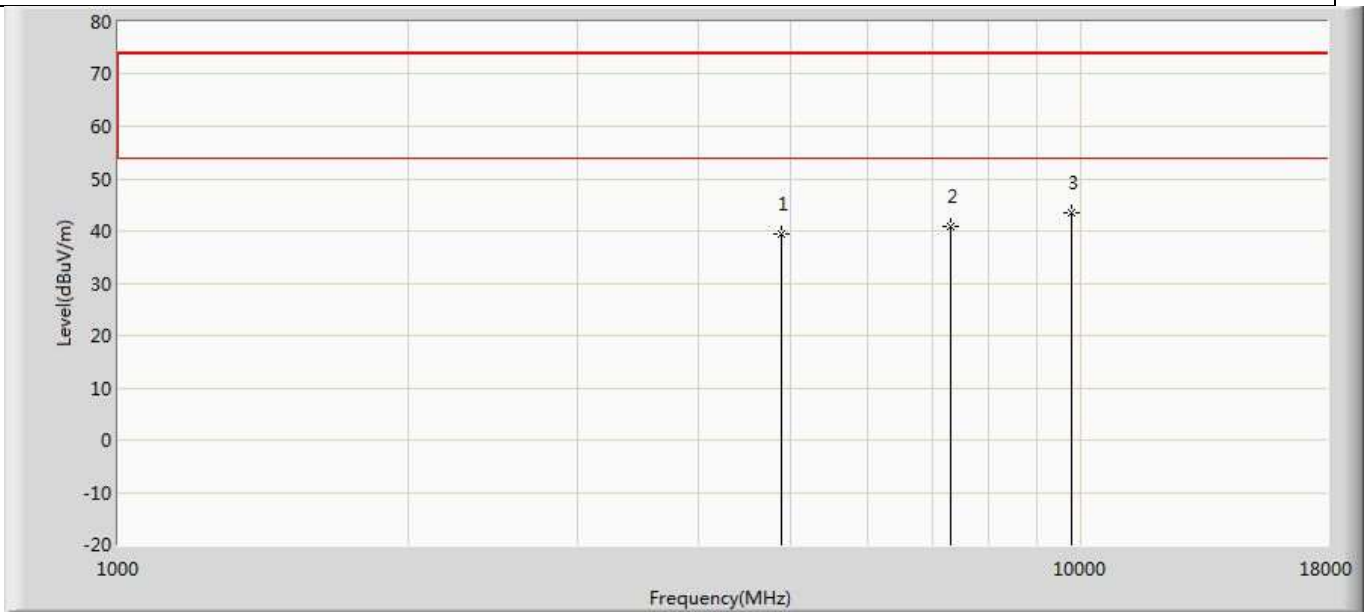
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	39.132	35.471	-34.868	74.000	3.662	PK
2		7206.000	41.360	34.697	-32.640	74.000	6.663	PK
3	*	9608.000	42.315	34.179	-31.685	74.000	8.137	PK

Profile: 2032061R	Page No.: 69
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2440MHz by	



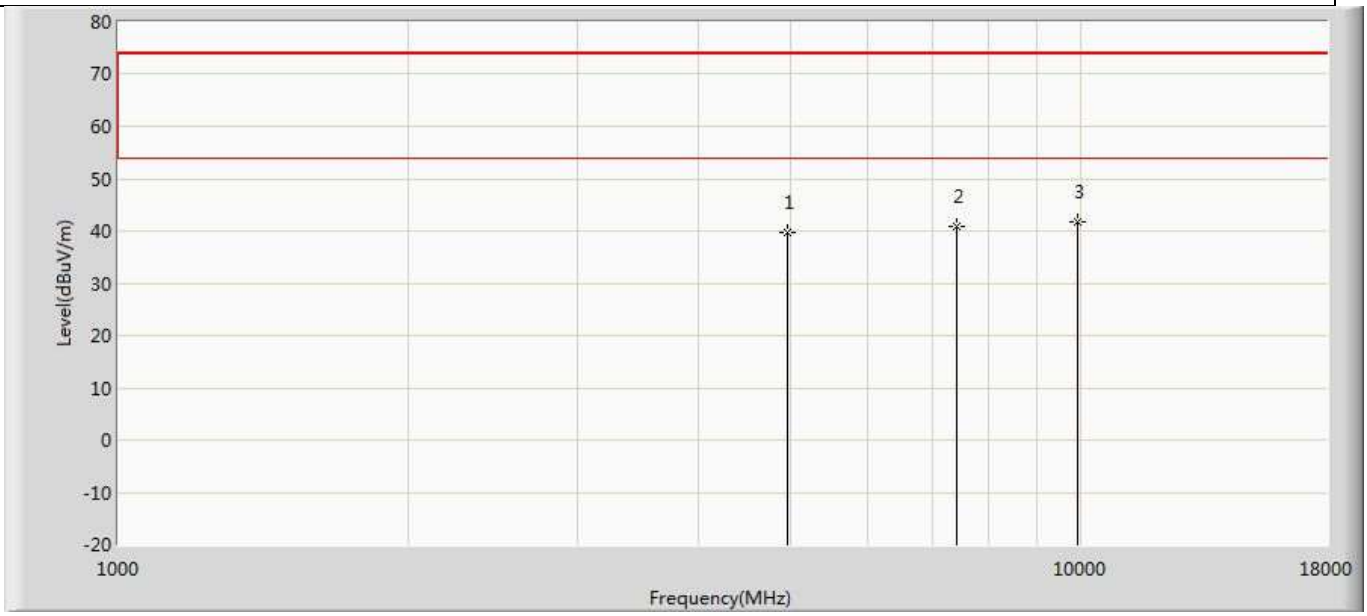
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	40.657	37.016	-33.343	74.000	3.640	PK
2		7320.000	41.787	35.102	-32.213	74.000	6.685	PK
3	*	9760.000	44.031	35.327	-29.969	74.000	8.704	PK

Profile: 2032061R	Page No.: 70
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2440MHz	



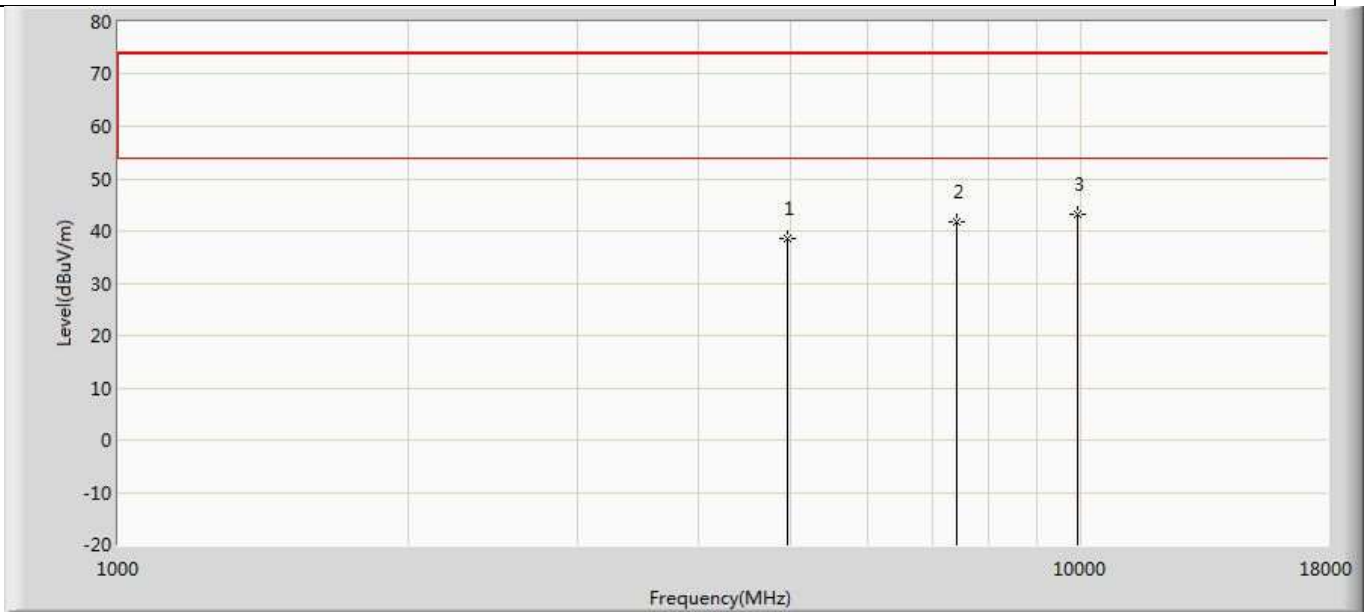
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	39.450	35.809	-34.550	74.000	3.640	PK
2		7320.000	40.745	34.060	-33.255	74.000	6.685	PK
3	*	9760.000	43.478	34.774	-30.522	74.000	8.704	PK

Profile: 2032061R	Page No.: 71
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2480MHz	



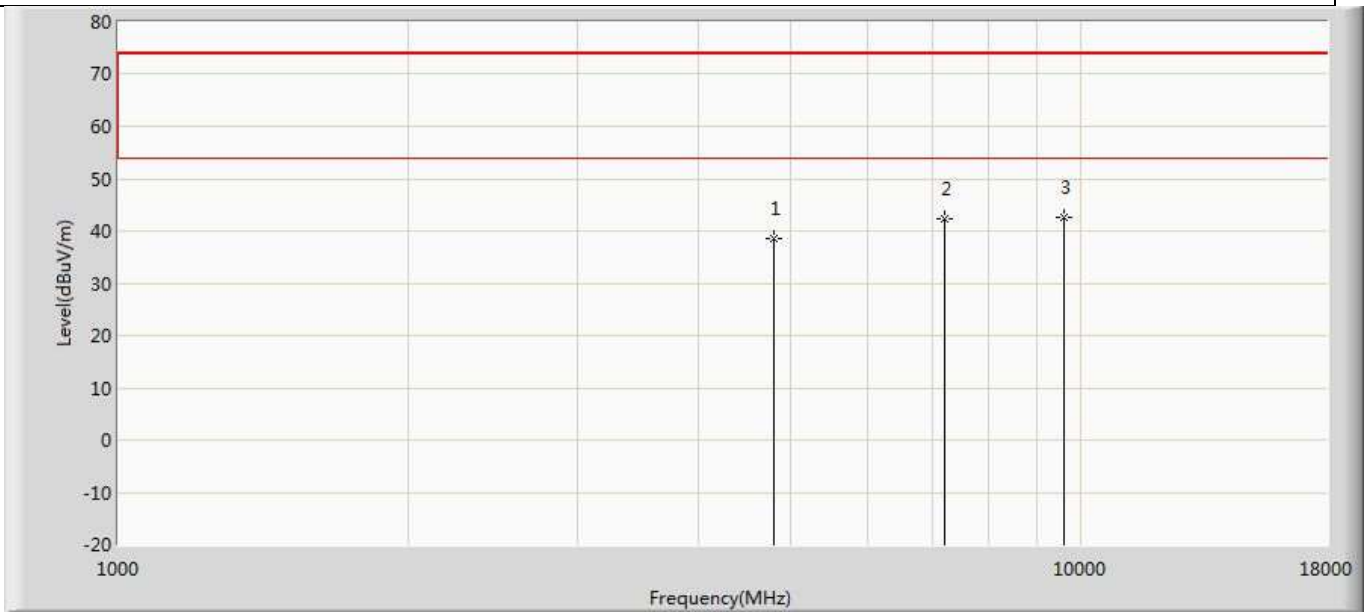
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.842	36.231	-34.158	74.000	3.611	PK
2		7440.000	40.823	34.238	-33.177	74.000	6.585	PK
3	*	9920.000	41.691	32.966	-32.309	74.000	8.725	PK

Profile: 2032061R	Page No.: 72
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2480MHz	



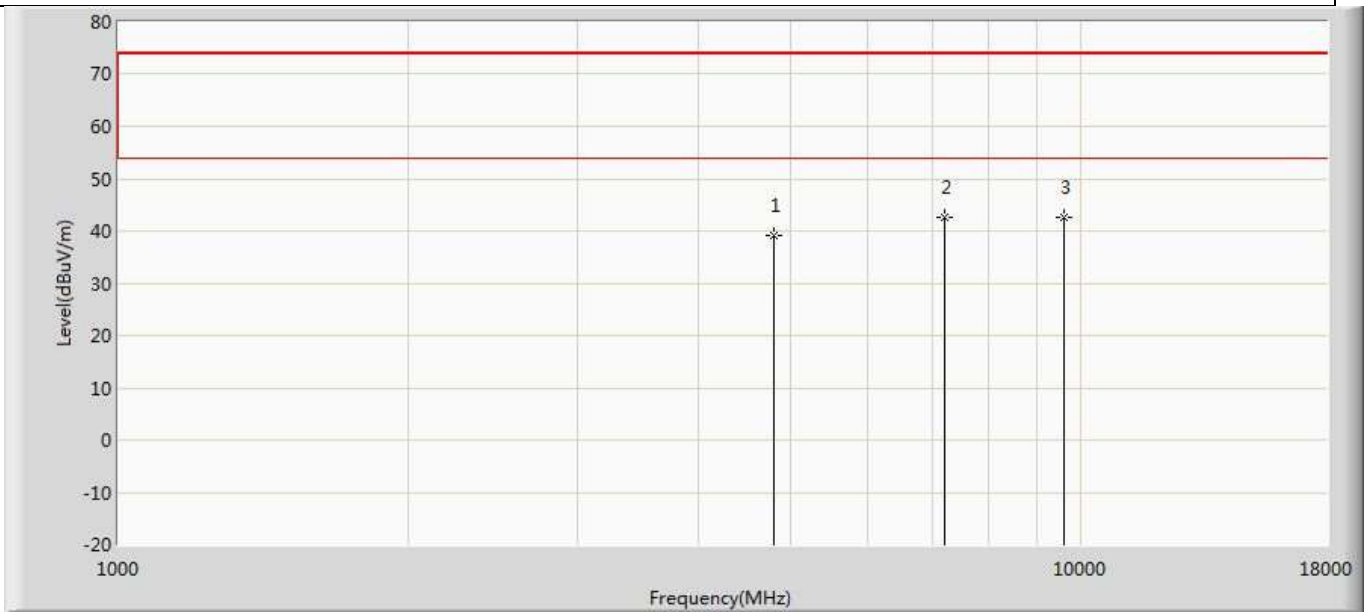
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	38.620	35.009	-35.380	74.000	3.611	PK
2		7440.000	41.603	35.018	-32.397	74.000	6.585	PK
3	*	9920.000	43.245	34.520	-30.755	74.000	8.725	PK

Profile: 2032061R	Page No.: 73
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 4: 2402MHz	



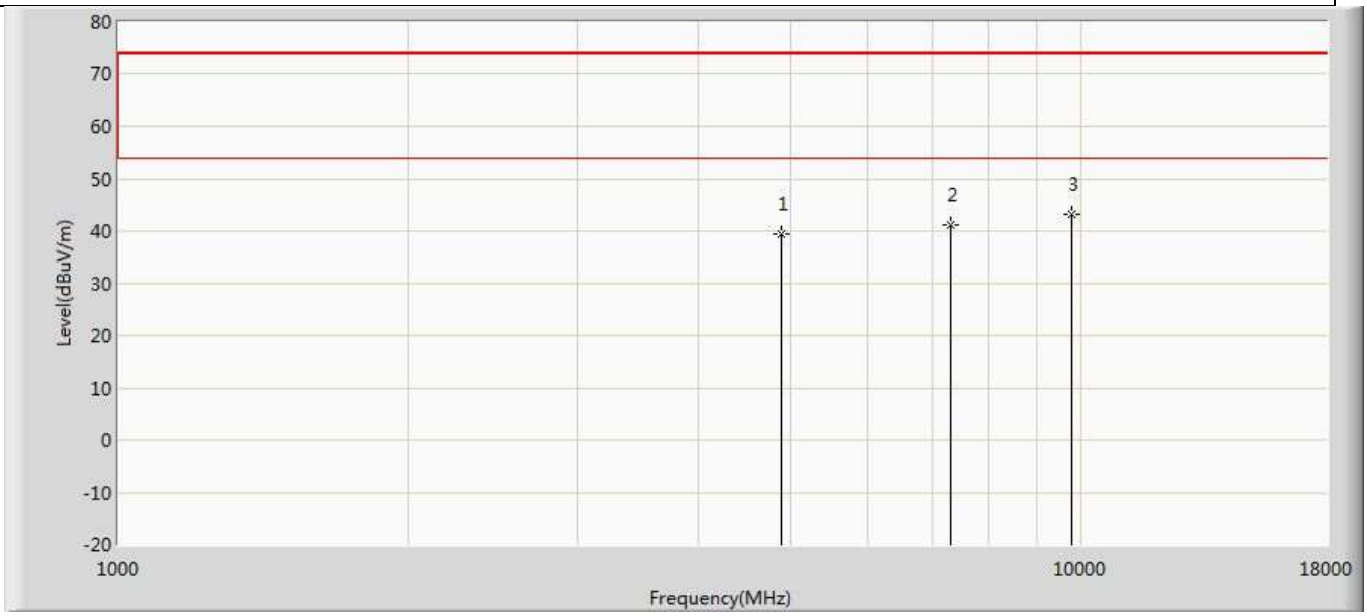
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	38.631	34.970	-35.369	74.000	3.662	PK
2		7206.000	42.250	35.587	-31.750	74.000	6.663	PK
3	*	9608.000	42.638	34.502	-31.362	74.000	8.137	PK

Profile: 2032061R	Page No.: 74
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 4: 2402MHz	



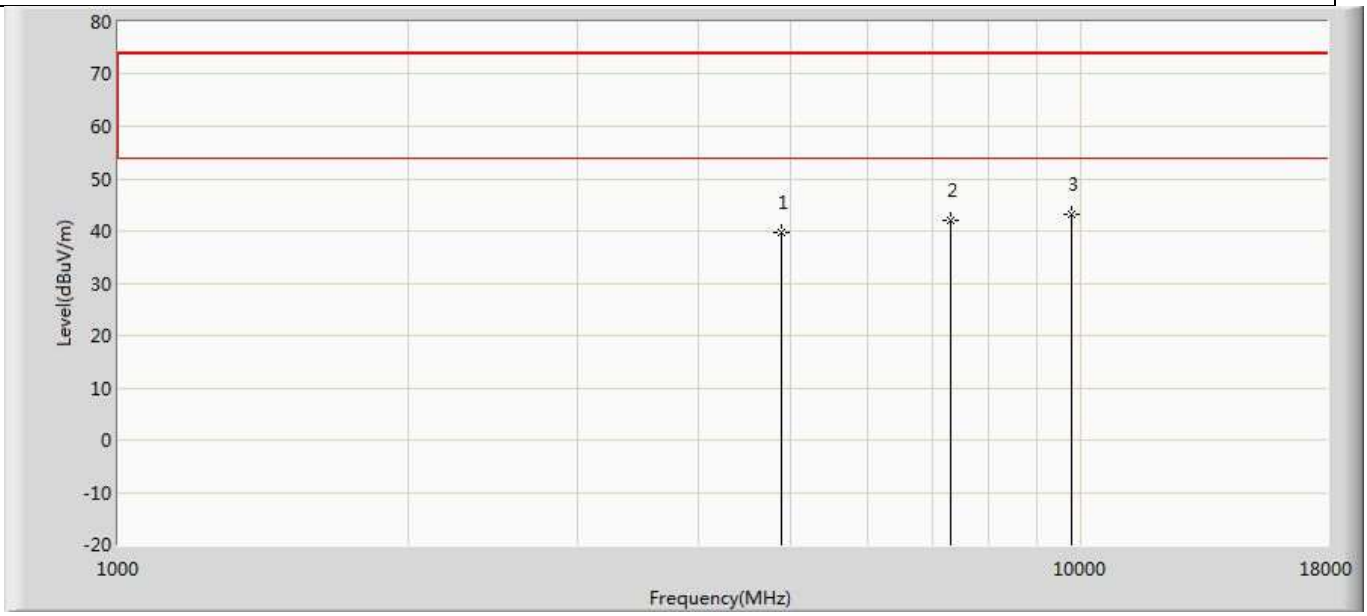
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	39.261	35.600	-34.739	74.000	3.662	PK
2	*	7206.000	42.747	36.084	-31.253	74.000	6.663	PK
3		9608.000	42.598	34.462	-31.402	74.000	8.137	PK

Profile: 2032061R	Page No.: 75
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 4: 2440MHz	



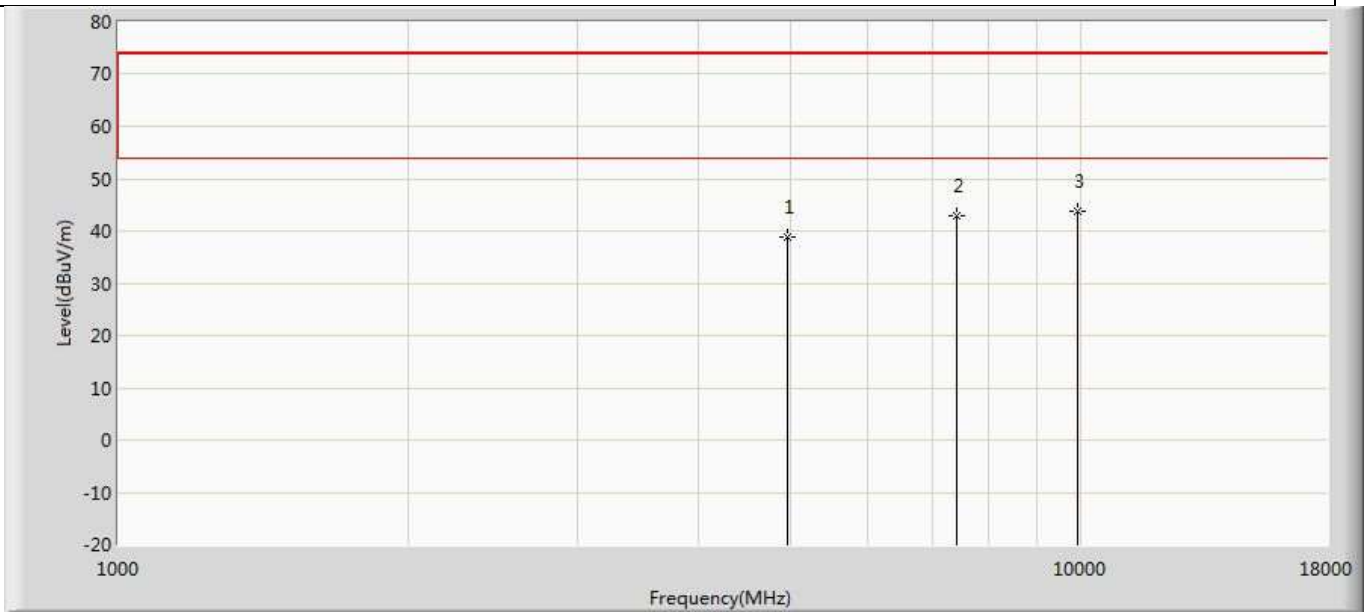
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	39.362	35.721	-34.638	74.000	3.640	PK
2		7320.000	41.271	34.586	-32.729	74.000	6.685	PK
3	*	9760.000	43.320	34.616	-30.680	74.000	8.704	PK

Profile: 2032061R	Page No.: 76
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 4: 2440MHz	



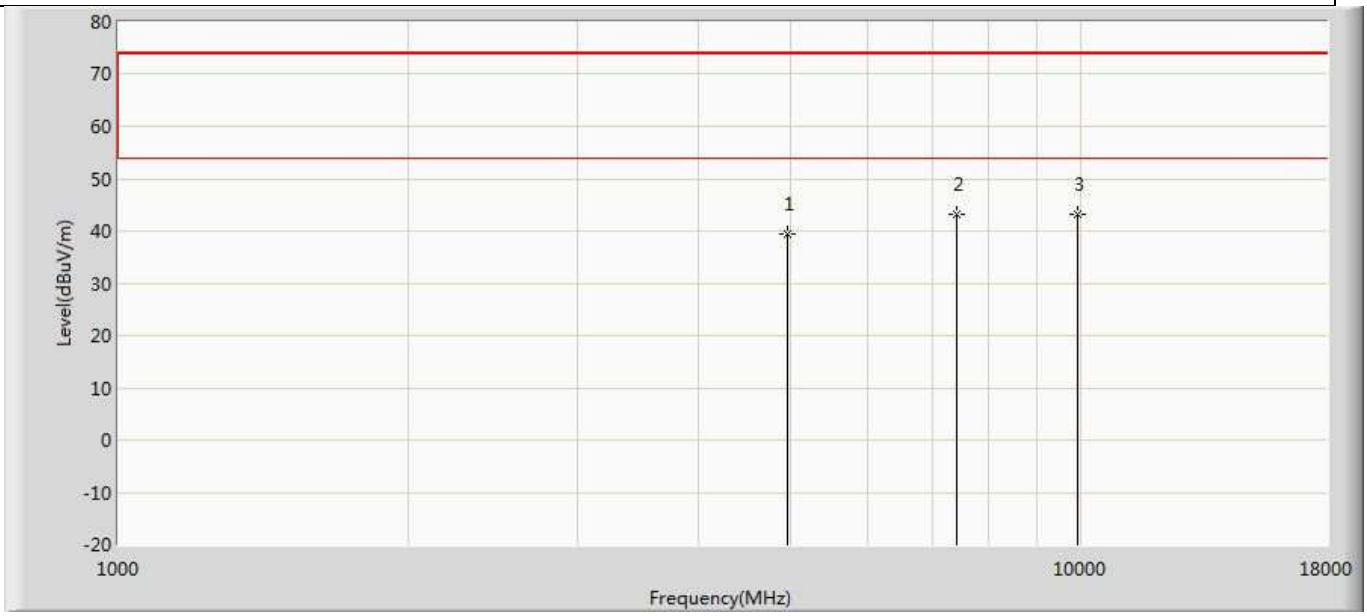
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	39.807	36.166	-34.193	74.000	3.640	PK
2		7320.000	42.134	35.449	-31.866	74.000	6.685	PK
3	*	9760.000	43.232	34.528	-30.768	74.000	8.704	PK

Profile: 2032061R	Page No.: 77
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 4: 2480MHz	



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	35.299	-35.090	74.000	3.611	PK
2		7440.000	42.851	36.266	-31.149	74.000	6.585	PK
3	*	9920.000	43.776	35.051	-30.224	74.000	8.725	PK

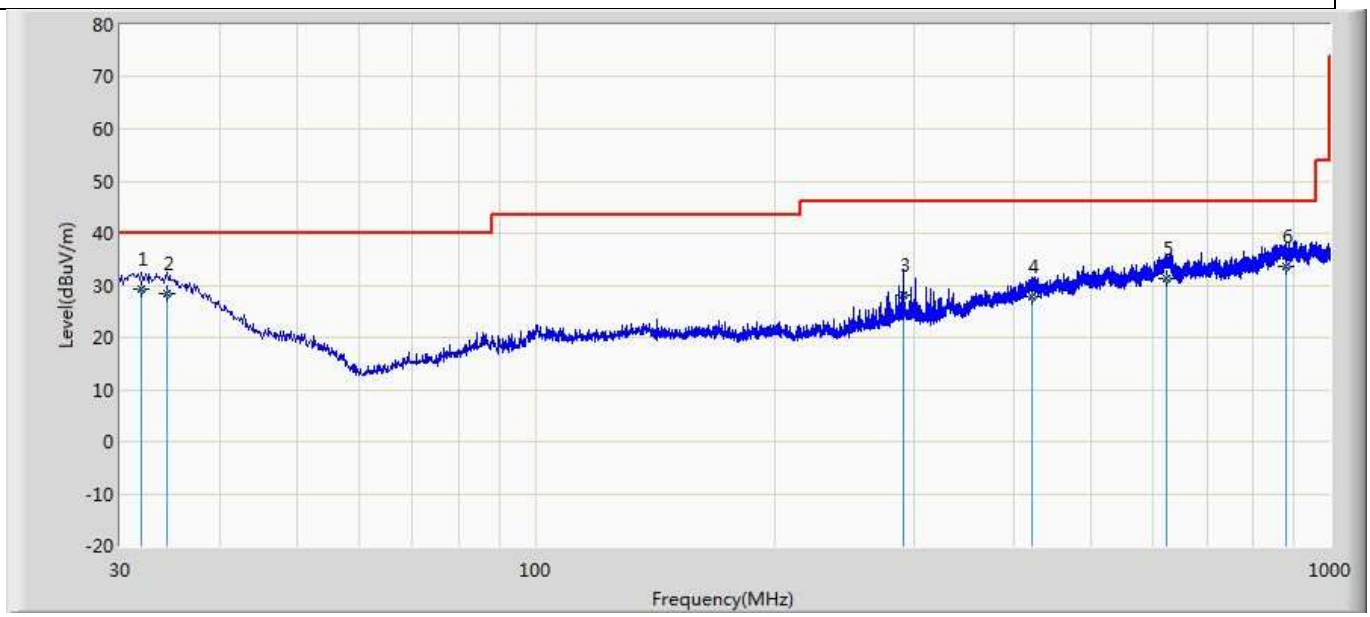
Profile: 2032061R	Page No.: 78
Engineer: Neil	
Site: AC5	Time: 2020/03/18 - 15:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 4: 2480MHz	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.563	35.952	-34.437	74.000	3.611	PK
2		7440.000	43.084	36.499	-30.916	74.000	6.585	PK
3	*	9920.000	43.106	34.381	-30.894	74.000	8.725	PK

The worst case of Radiated Emission below 1GHz:

Engineer: Beck	
Site: AC2	Time: 2020/03/17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC2_3M(30-1000M)	Polarity: Horizontal
EUT: Level lock	Power: DC 3V
Note: Mode 1	

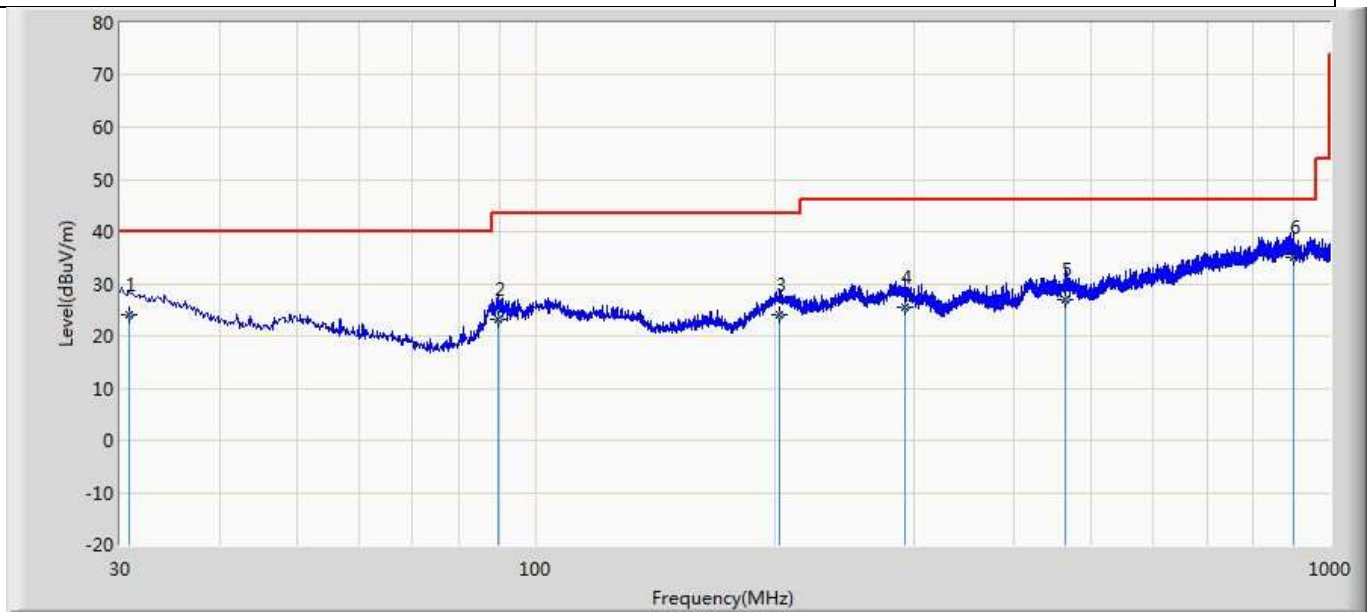


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1	*	31.940	29.246	2.161	-10.754	40.000	20.746	6.339	0.000	100	268	QP
2		34.365	28.393	1.368	-11.607	40.000	20.687	6.338	0.000	200	28	QP
3		289.960	28.230	7.594	-17.770	46.000	13.107	7.529	0.000	100	311	QP
4		421.516	27.808	0.644	-18.192	46.000	19.223	7.941	0.000	100	101	QP
5		623.640	31.327	0.645	-14.673	46.000	22.182	8.500	0.000	200	67	QP
6		882.509	33.702	1.155	-12.298	46.000	23.416	9.131	0.000	100	92	QP

Note:

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

Engineer: Beck	
Site: AC2	Time: 2020/03/17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC2_3M(30-1000M)	Polarity: Vertical
EUT: Level lock	Power: DC 3V
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		30.849	24.139	0.364	-15.861	40.000	17.436	6.339	0.000	100	45	QP
2		89.897	23.080	6.184	-20.420	43.500	10.175	6.721	0.000	200	109	QP
3		203.024	24.098	0.644	-19.402	43.500	16.242	7.212	0.000	100	217	QP
4		291.172	25.598	1.054	-20.402	46.000	17.012	7.533	0.000	100	286	QP
5		463.469	27.019	0.361	-18.981	46.000	18.593	8.065	0.000	100	39	QP
6	*	901.666	35.029	2.156	-10.971	46.000	23.700	9.173	0.000	100	307	QP

Note:

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

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

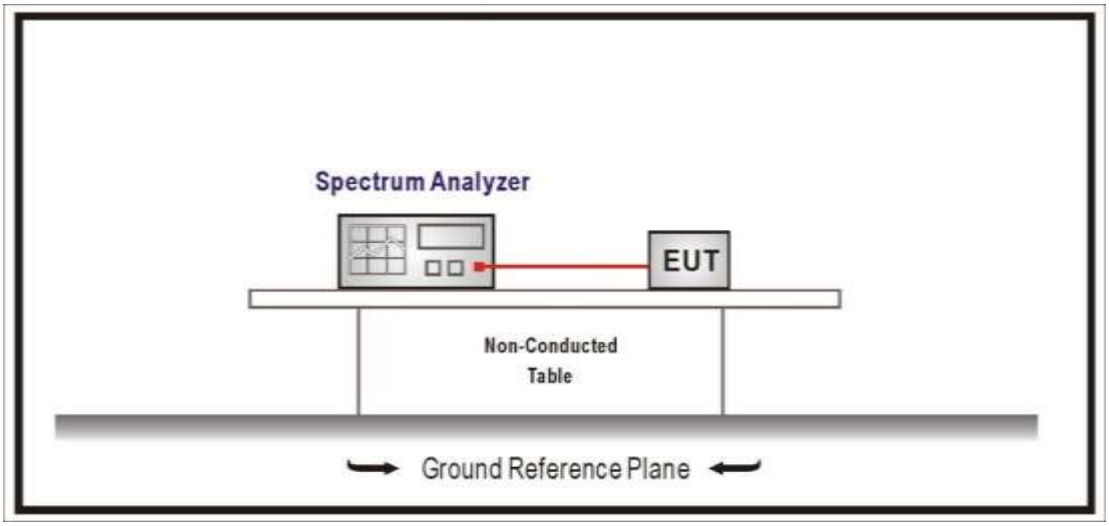
4.3.1 Limit

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)

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

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

4.3.2 Test Setup



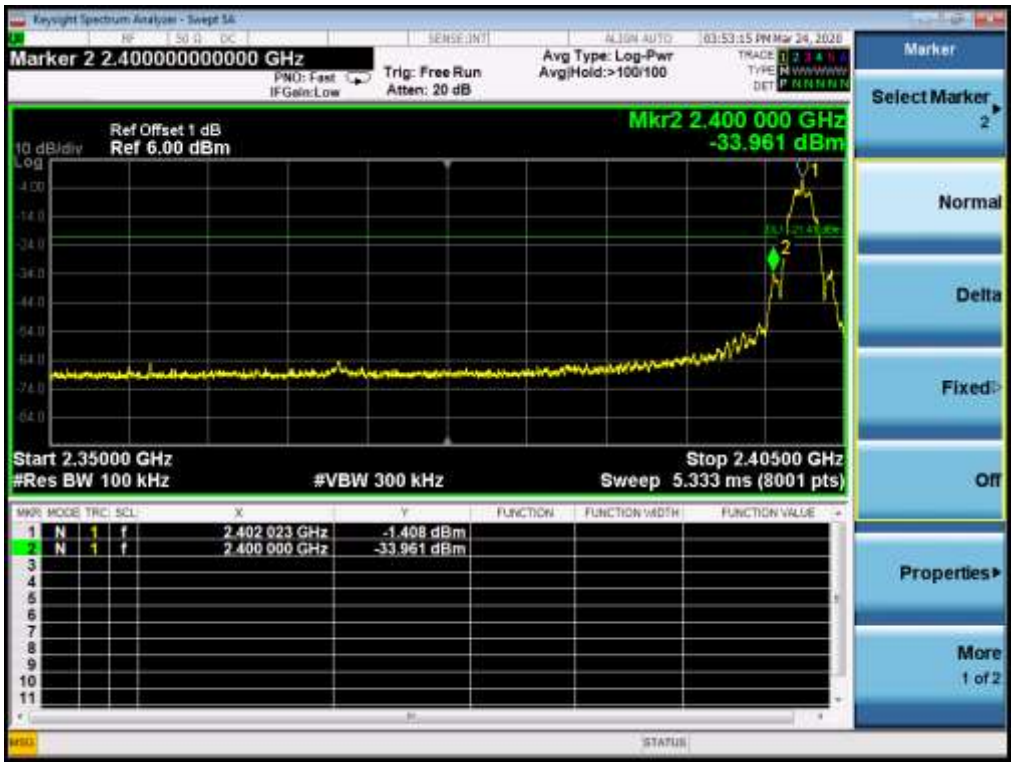
4.3.3 Test Procedure

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

4.3.4 Test Data

Mode	Channel	Test Frequency (MHz)	Maximum In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	00	2402	-1.520	2400	-51.196	49.676	>20	Pass
	39	2480	-1.918	2500	-68.927	67.009	>20	Pass
2	00	2402	-1.408	2400	-33.961	32.553	>20	Pass
	39	2480	-1.965	2500	-69.170	67.205	>20	Pass
3	00	2402	-1.455	2400	-53.565	52.110	>20	Pass
	39	2480	-3.340	2500	-69.870	66.530	>20	Pass
4	00	2402	-1.529	2400	-52.454	50.925	>20	Pass
	39	2480	-2.157	2500	-68.804	66.647	>20	Pass

Mode 2 CH00(2402MHz)

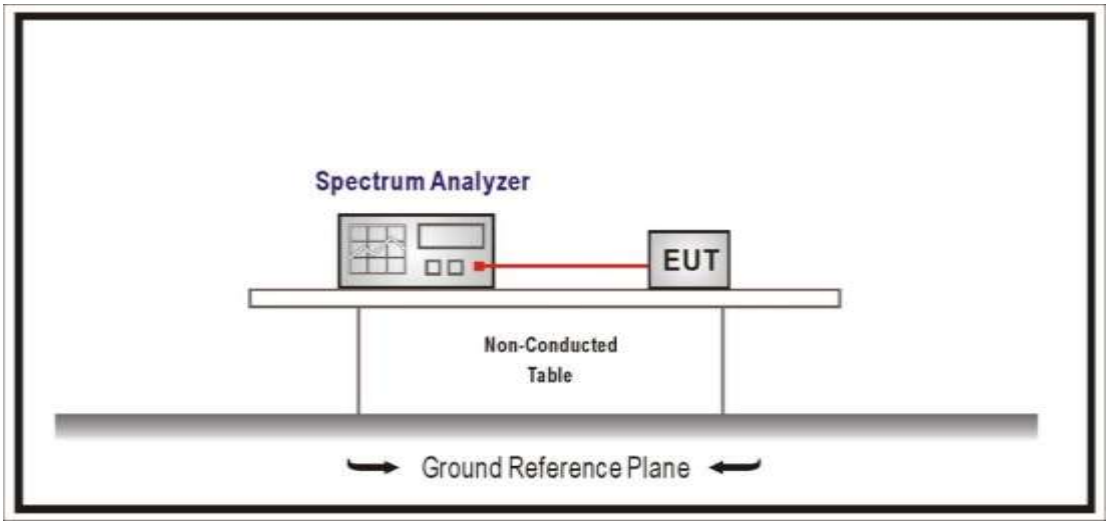


4.4 Duty cycle	**VERDICT: PASS**

4.4.1 Limit

N/A

4.4.2 Test Setup



4.4.3 Test Procedure

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

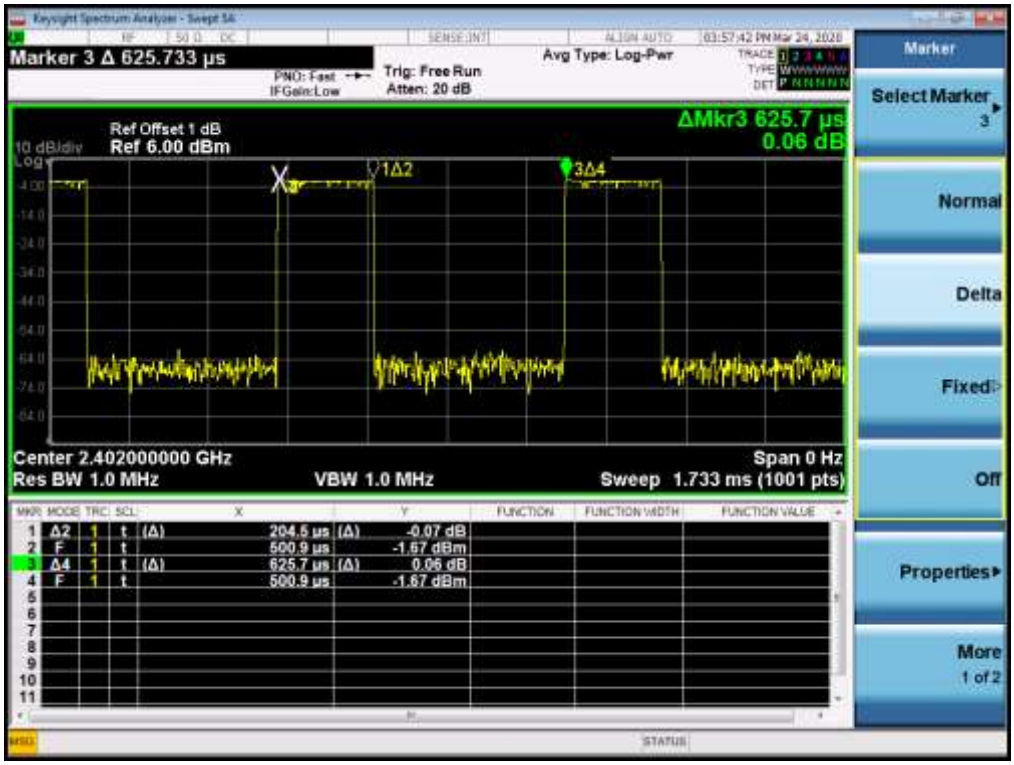
4.4.4 Test Data

Test Mode	Tx On (ms)	Tx Off (ms)	VBW	Tx On + Tx Off (ms)	Duty Cycle
Mode 1	0.3883	0.237	10	0.6257	62.06%
Mode 2	0.2045	0.421	10	0.6257	32.68%
Mode 3	1.075	0.800	10	1.875	57.33%
Mode 4	3.088	0.656	10	3.744	82.48%

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

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

Mode 2



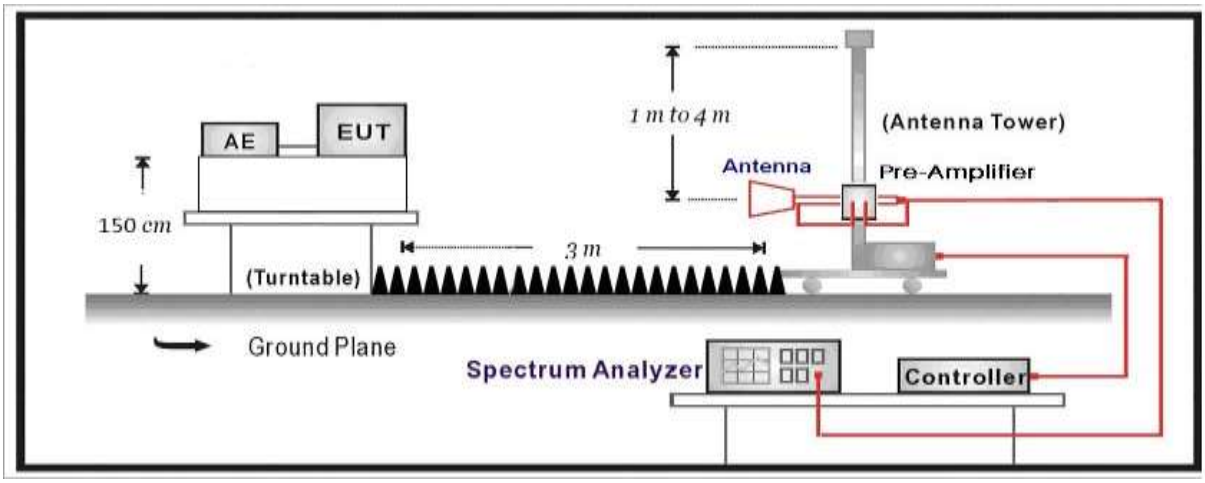
4.5 Radiated Emission Band Edge — VERDICT: PASS

4.5.1 Limit

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

4.5.2 Test Setup

Above 1GHz Test Setup:

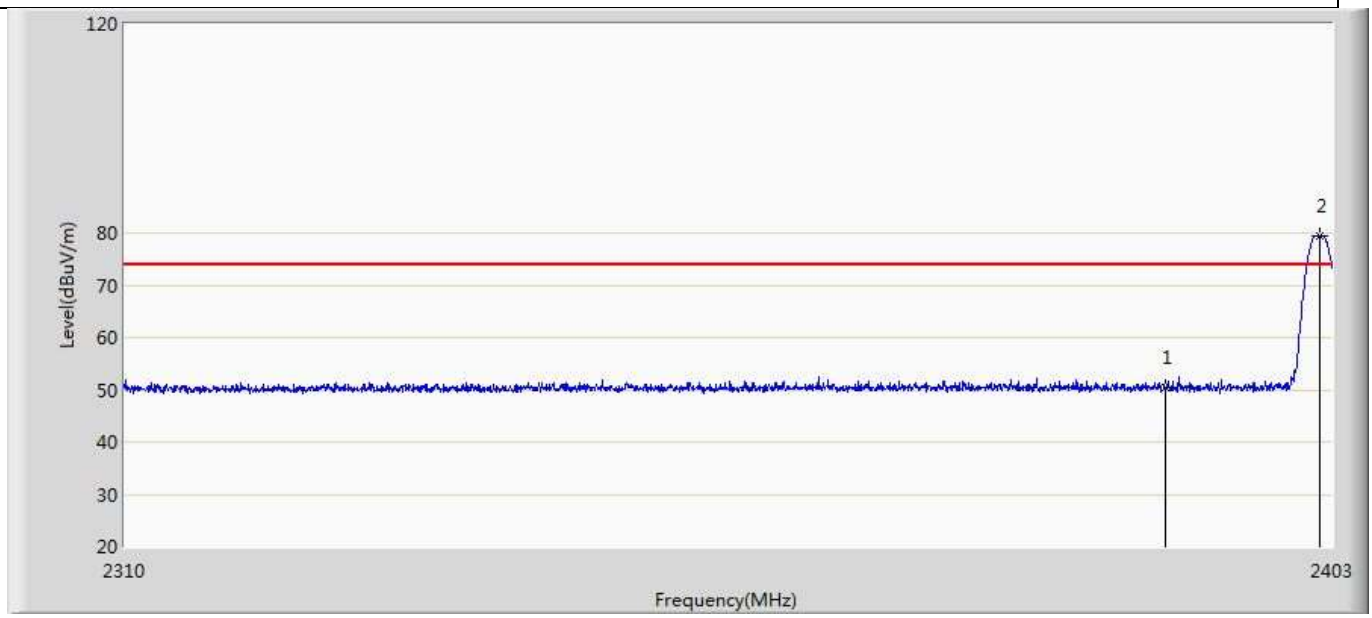


4.5.3 Test Procedure

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

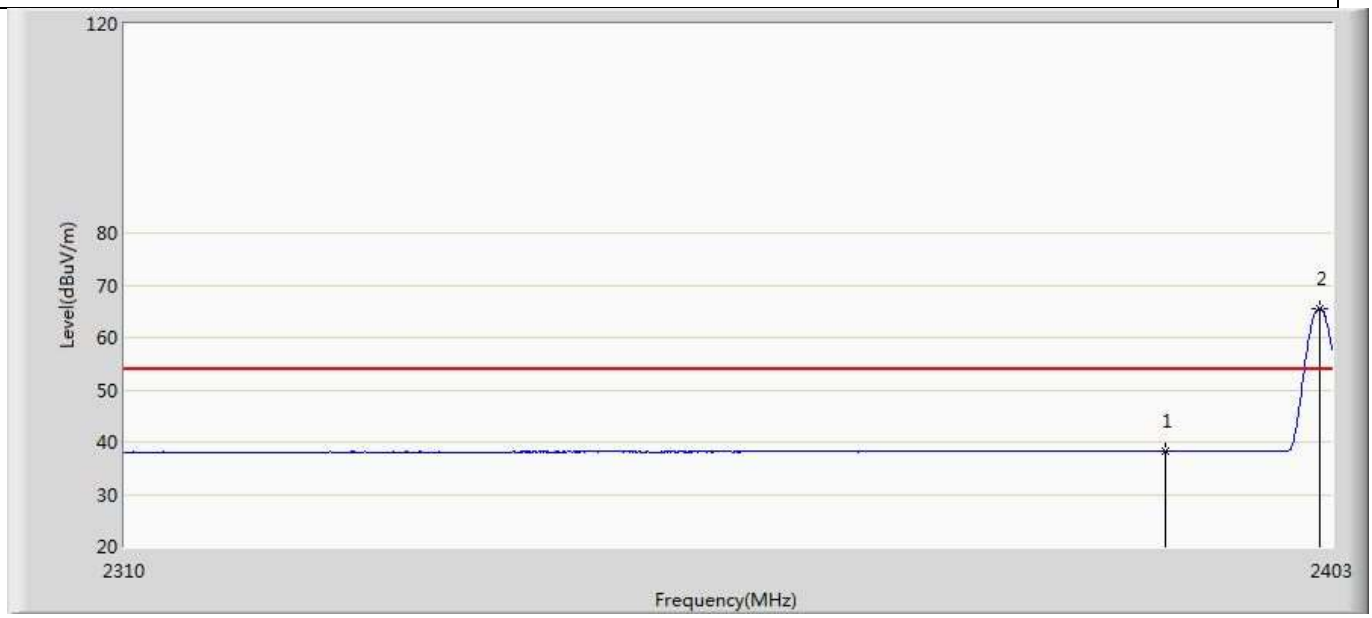
4.5.4 Test Data

Profile: 2032061R	Page No.: 1
Engineer: Neil	
Site: AC5	Time: 2020/03/01 - 09:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2402MHz	



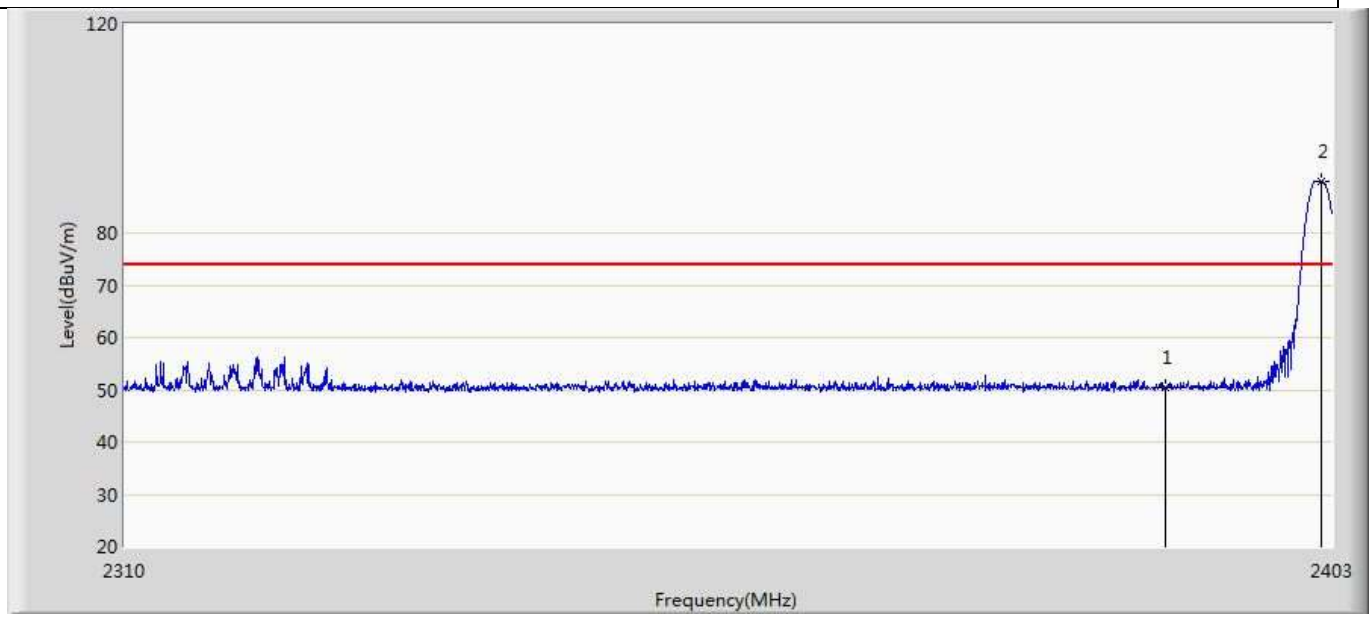
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.317	15.002	N/A	N/A	35.315	PK
2	*	2402.070	79.504	44.192	5.504	74.000	35.312	PK

Profile: 2032061R	Page No.: 2
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 18:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2402MHz	



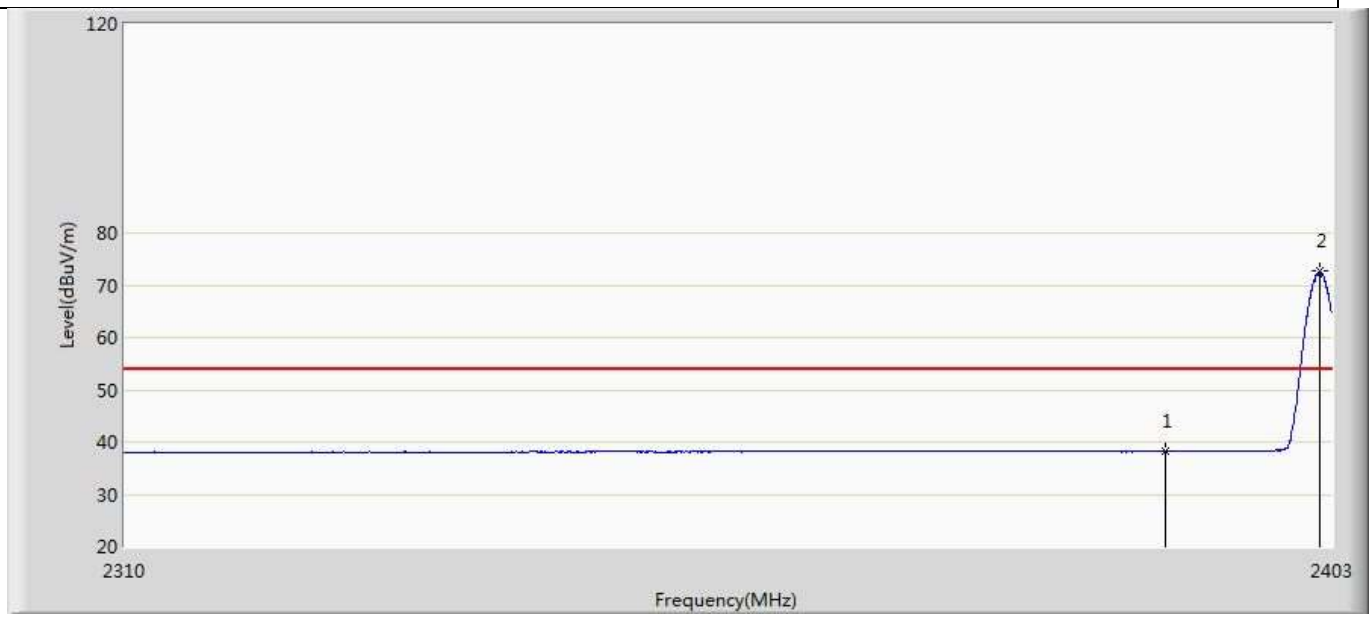
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.245	2.930	N/A	N/A	35.315	AV
2	*	2402.070	65.628	30.316	11.628	54.000	35.312	AV

Profile: 2032061R	Page No.: 3
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 18:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2402MHz	



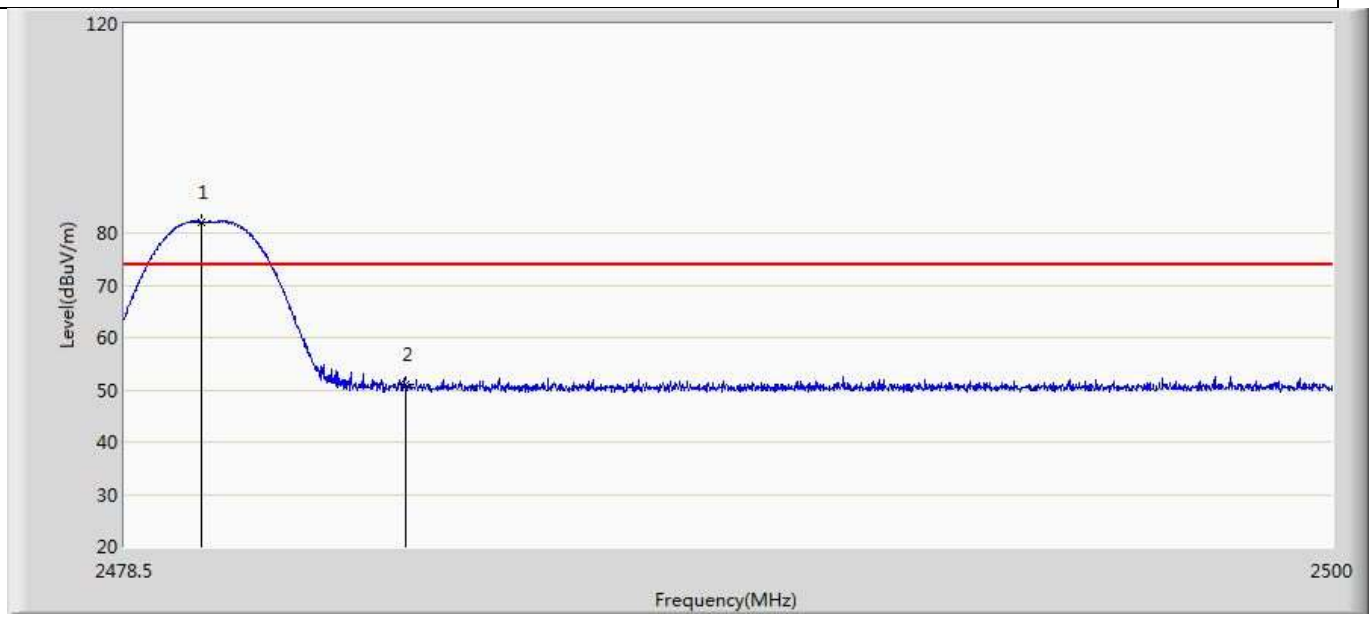
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.450	15.135	N/A	N/A	35.315	PK
2	*	2402.209	89.746	54.434	15.746	74.000	35.312	PK

Profile: 2032061R	Page No.: 4
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 18:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2402MHz	



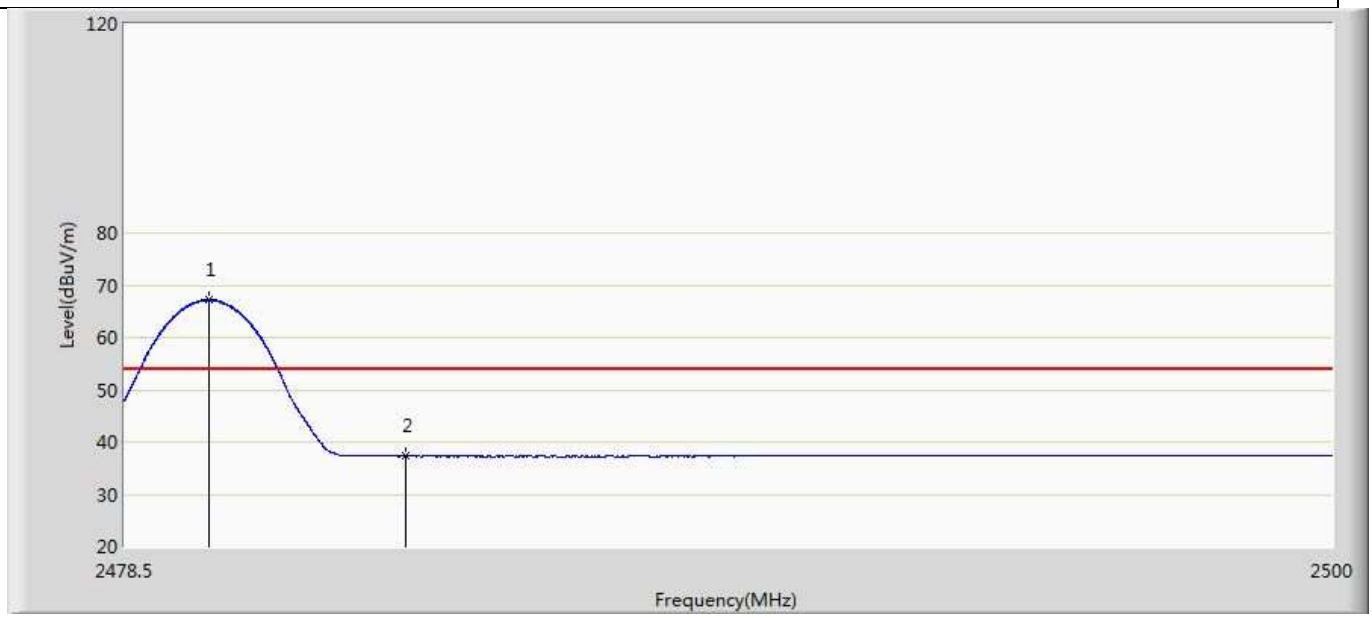
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.231	2.916	N/A	N/A	35.315	AV
2	*	2402.070	72.694	37.382	18.694	54.000	35.312	AV

Profile: 2032061R	Page No.: 5
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 18:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2480MHz	



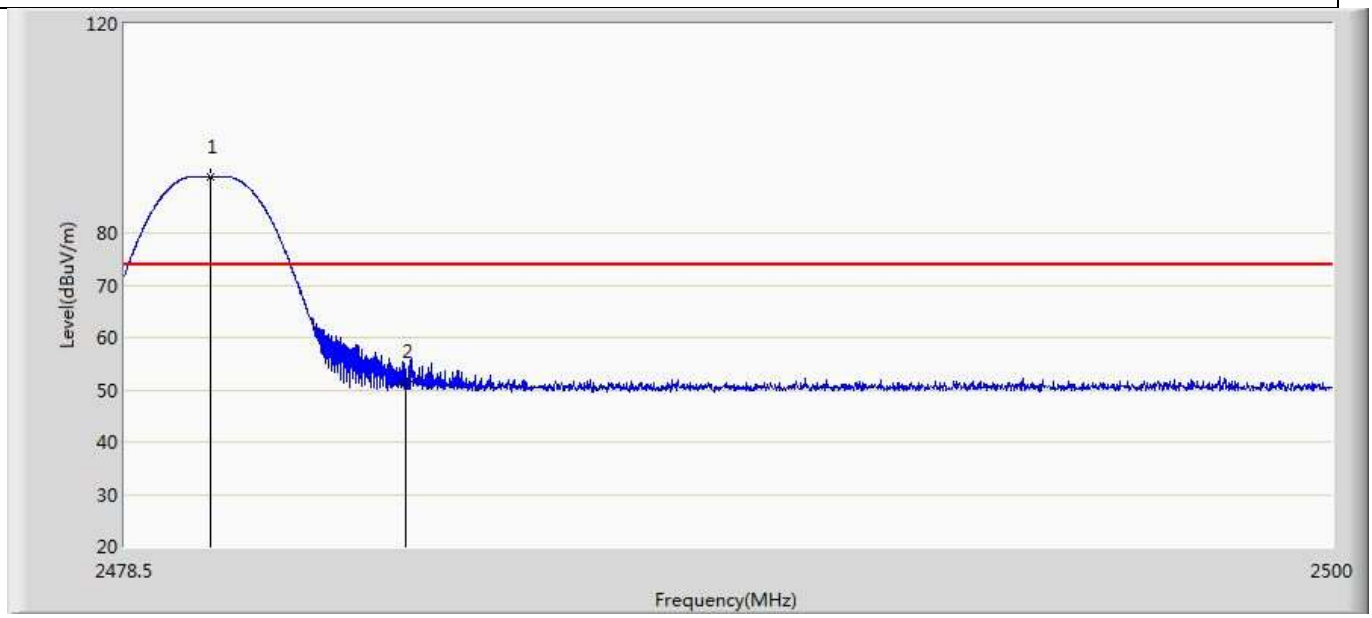
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.865	82.134	46.835	8.134	74.000	35.299	PK
2		2483.500	50.938	15.640	N/A	N/A	35.297	PK

Profile: 2032061R	Page No.: 6
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 18:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2480MHz	



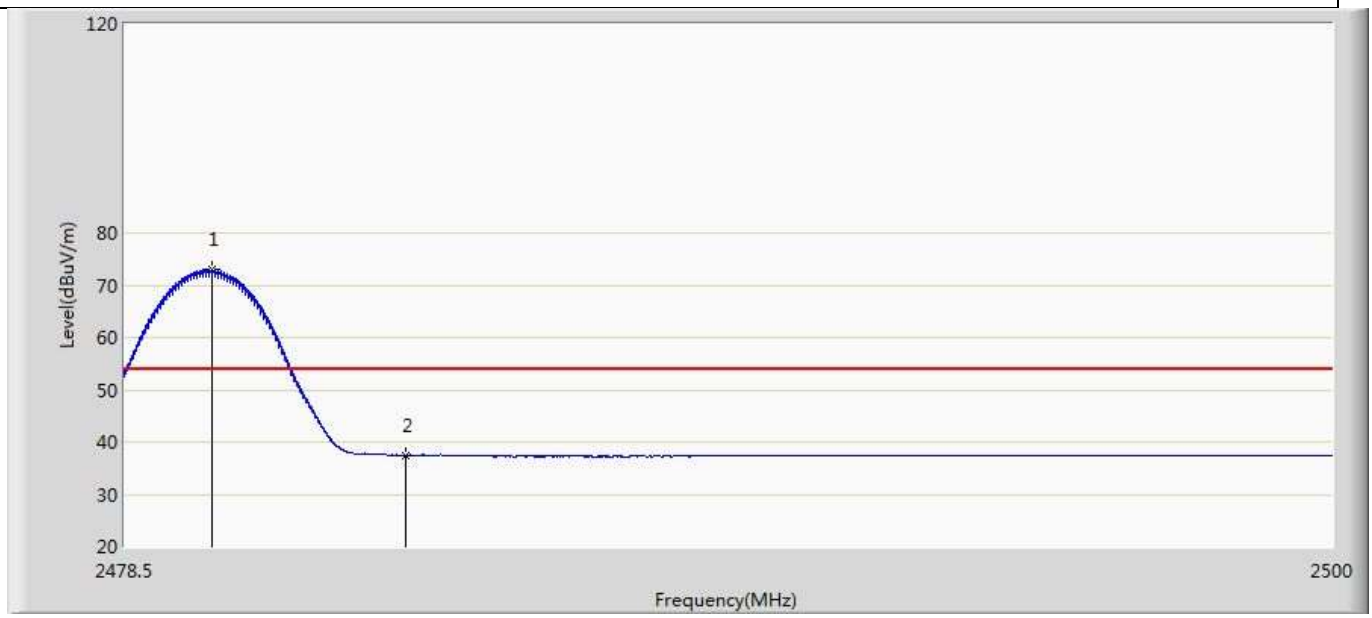
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.994	67.106	31.807	13.106	54.000	35.299	AV
2		2483.500	37.287	1.989	N/A	N/A	35.297	AV

Profile: 2032061R	Page No.: 7
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 18:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2480MHz	



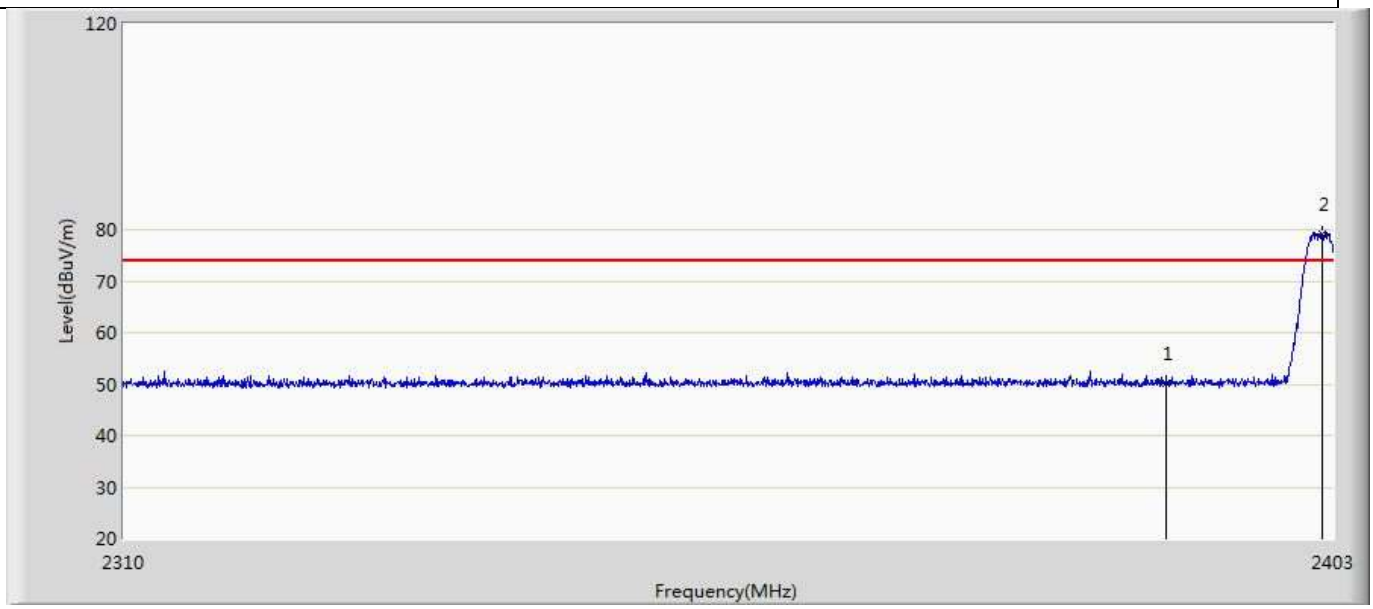
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.027	90.814	55.515	16.814	74.000	35.299	PK
2		2483.500	51.683	16.385	N/A	N/A	35.297	PK

Profile: 2032061R	Page No.: 8
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 18:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 1: 2480MHz	



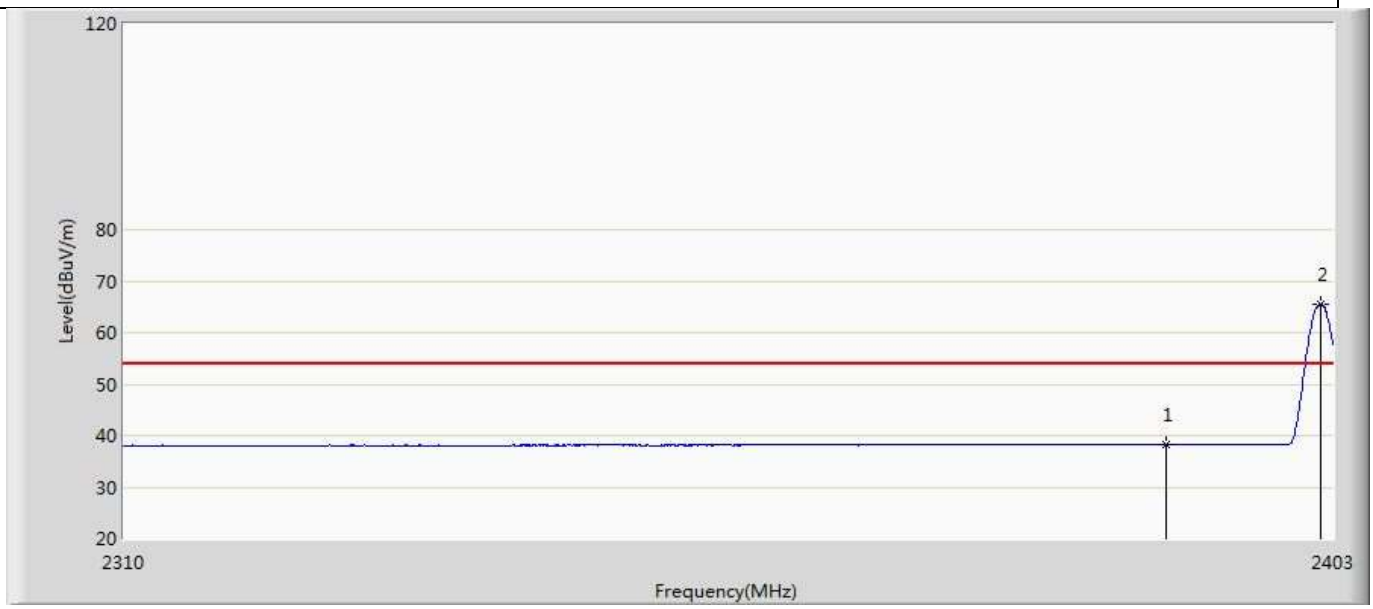
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.048	73.022	37.723	19.022	54.000	35.299	AV
2		2483.500	37.489	2.191	N/A	N/A	35.297	AV

Profile: 2032061R	Page No.: 9
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 18:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2M	



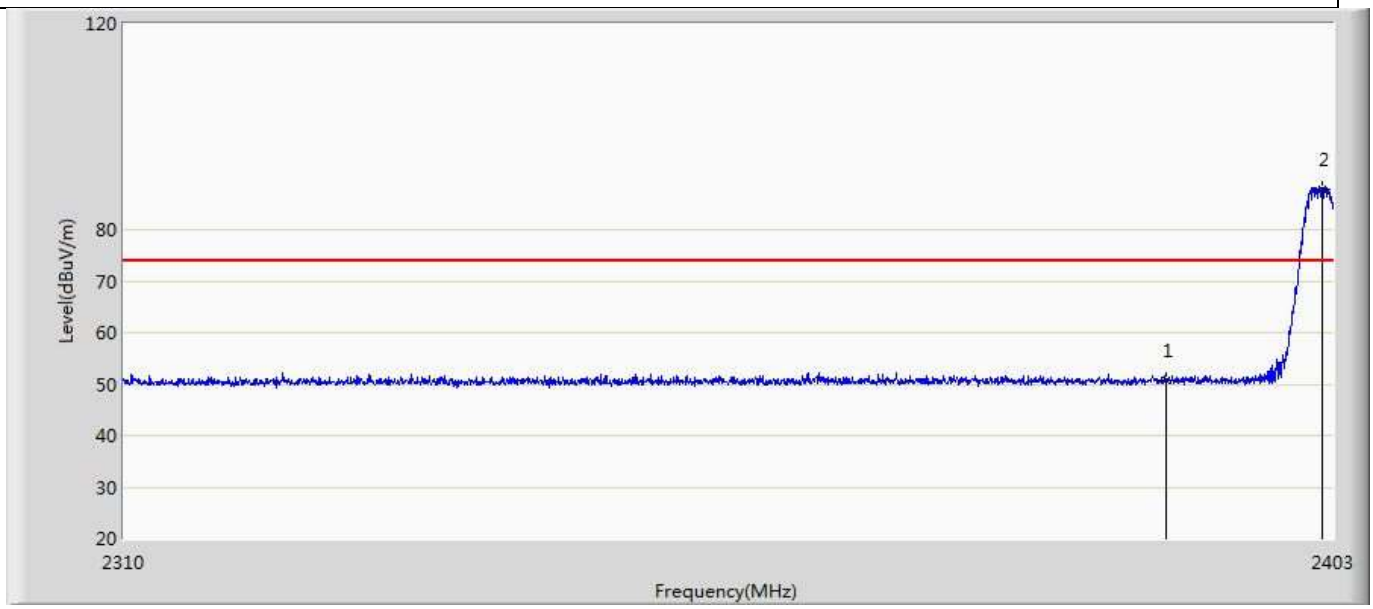
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.092	14.777	N/A	N/A	35.315	PK
2	*	2402.116	79.186	43.874	5.186	74.000	35.312	PK

Profile: 2032061R	Page No.: 10
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 18:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2M	



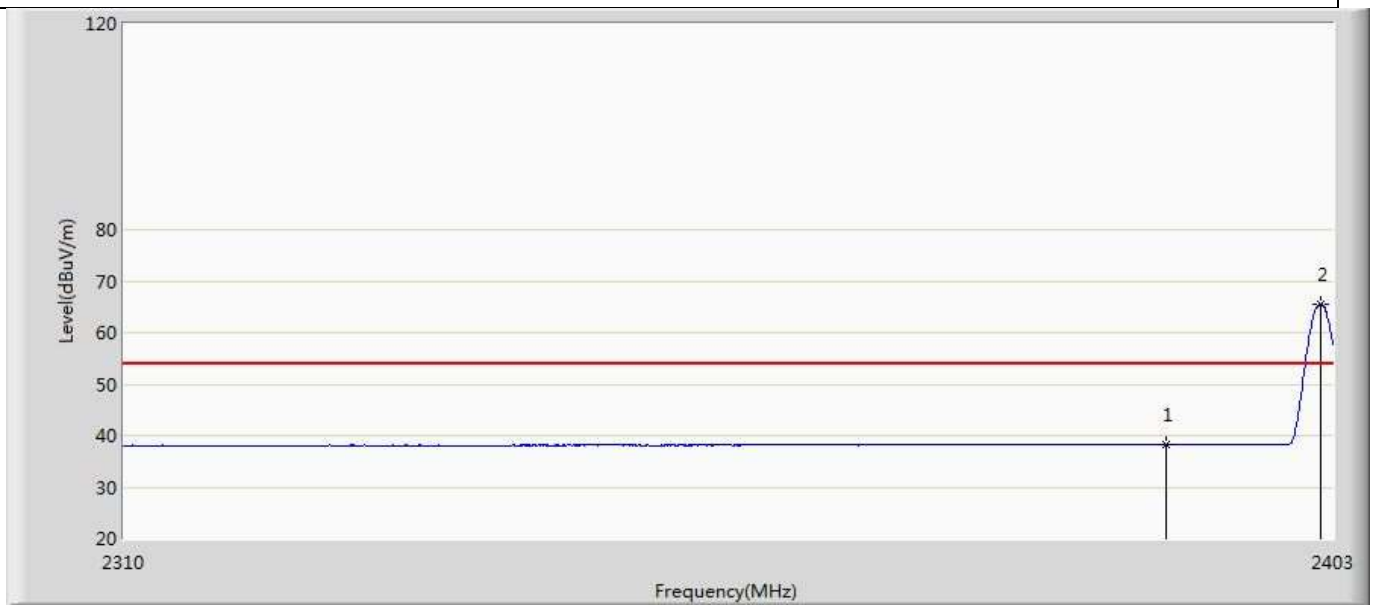
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.253	2.938	N/A	N/A	35.315	AV
2	*	2402.070	68.131	32.819	14.131	54.000	35.312	AV

Profile: 2032061R	Page No.: 11
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2M	



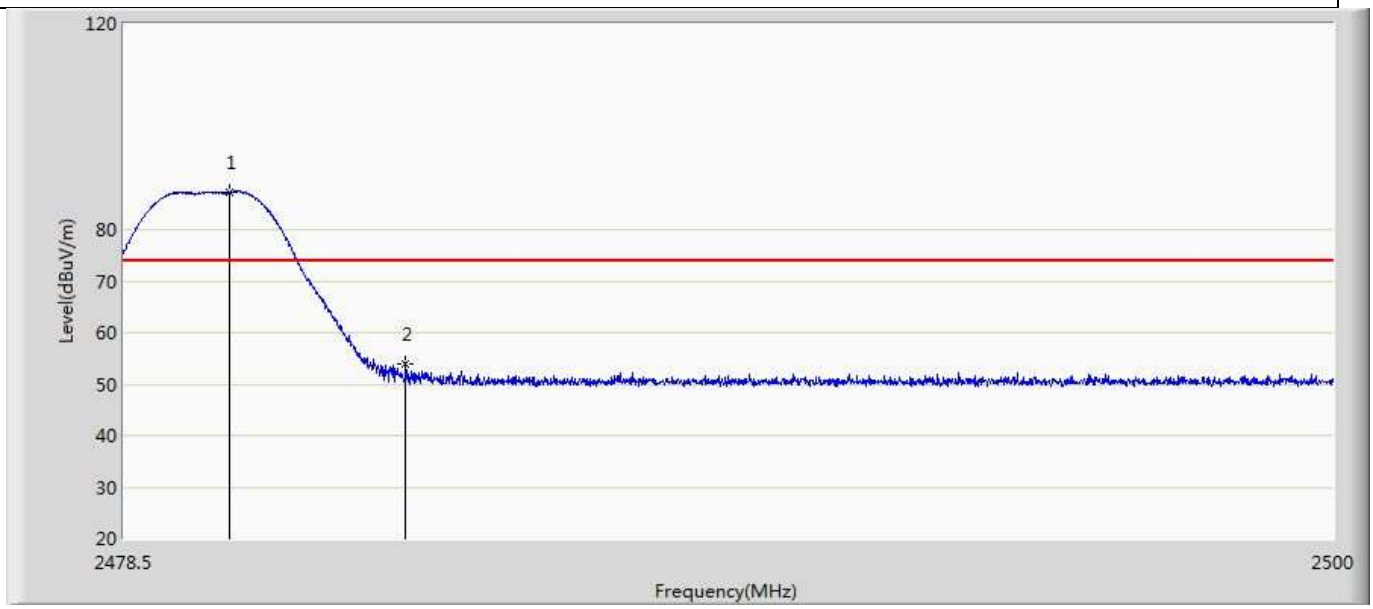
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.775	15.460	N/A	N/A	35.315	PK
2	*	2402.209	87.939	52.627	13.939	74.000	35.312	PK

Profile: 2032061R	Page No.: 12
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2402MHz by LE_2M	



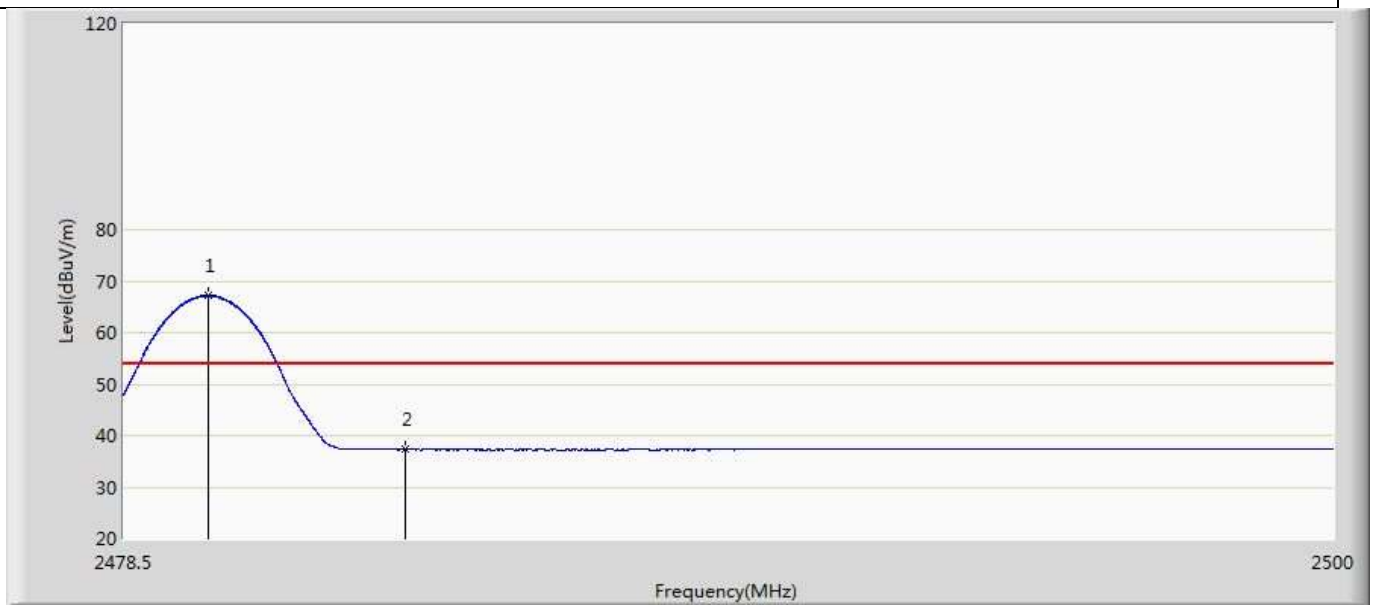
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.251	2.936	N/A	N/A	35.315	AV
2	*	2402.055	67.388	32.076	13.388	54.000	35.312	AV

Profile: 2032061R	Page No.: 13
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2M	



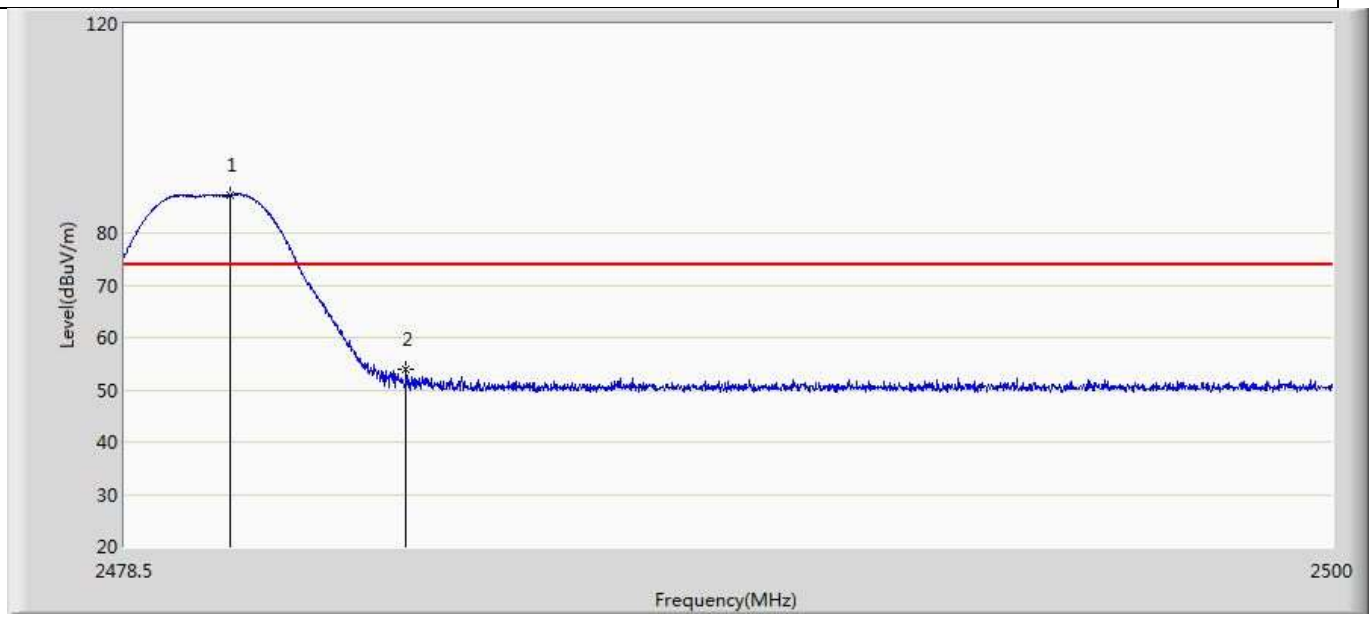
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.371	87.307	52.009	13.307	74.000	35.299	PK
2		2483.500	53.849	18.551	N/A	N/A	35.297	PK

Profile: 2032061R	Page No.: 14
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2M	



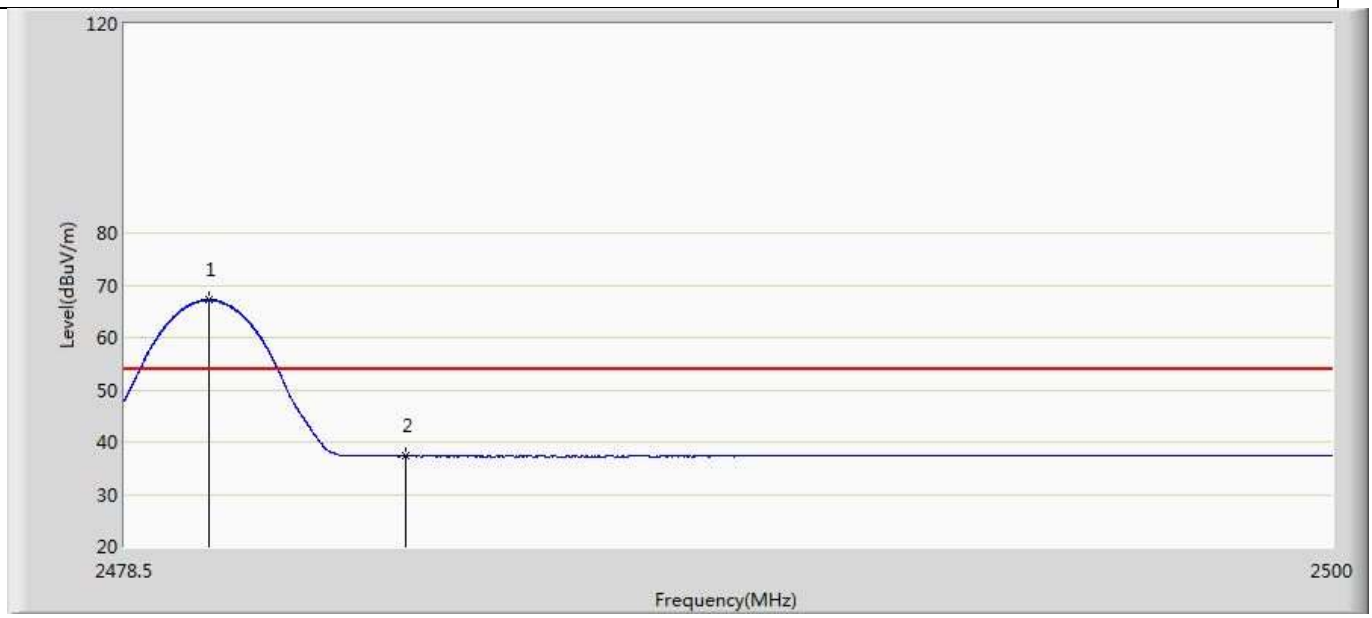
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.994	68.187	32.888	14.187	54.000	35.299	AV
2		2483.500	39.429	4.131	N/A	N/A	35.297	AV

Profile: 2032061R	Page No.: 1
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2M	



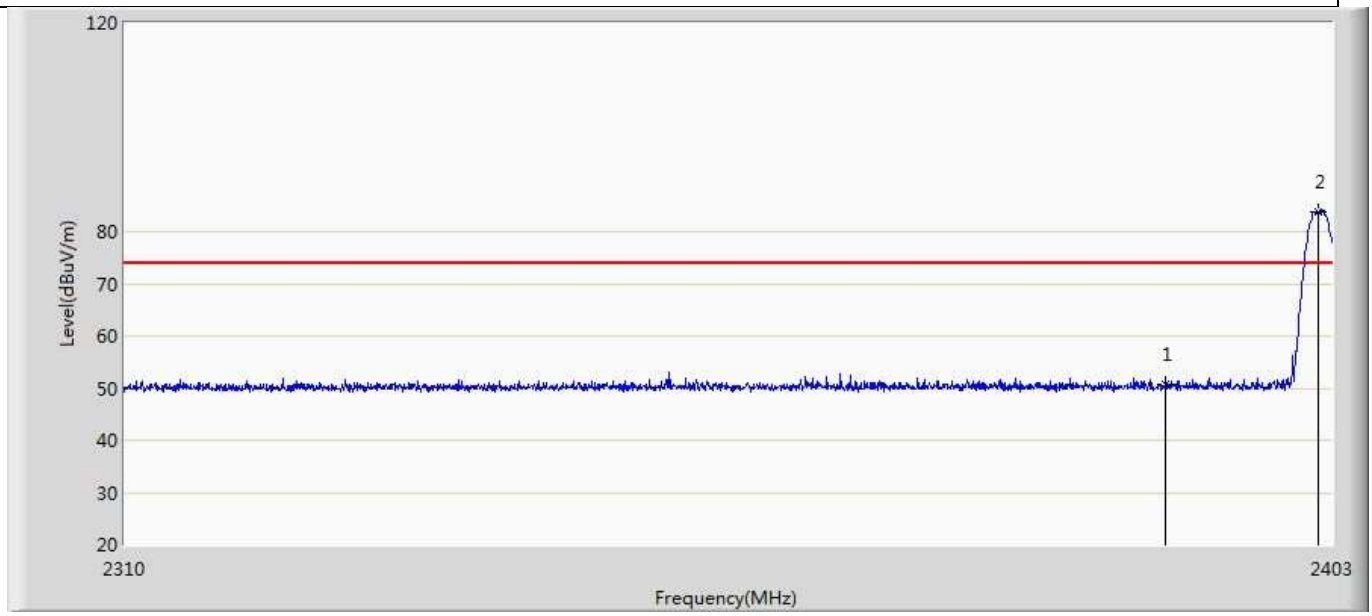
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.362	87.109	51.81	13.109	74.000	35.299	PK
2		2483.500	53.849	18.551	N/A	N/A	35.297	PK

Profile: 2032061R	Page No.: 14
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 2:Transmit at 2480MHz by LE_2M	



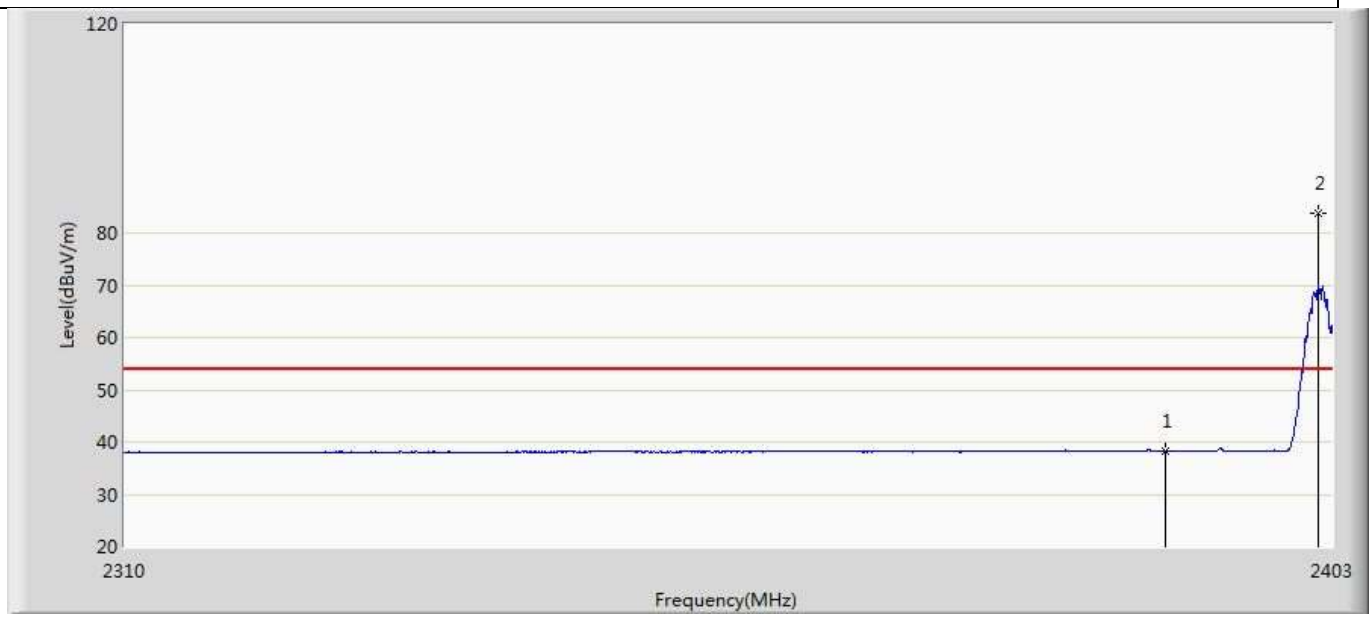
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.977	67.231	31.932	13.231	54.000	35.299	AV
2		2483.500	37.183	1.866	N/A	N/A	35.297	AV

Profile: 2032061R	Page No.: 23
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2402MHz	



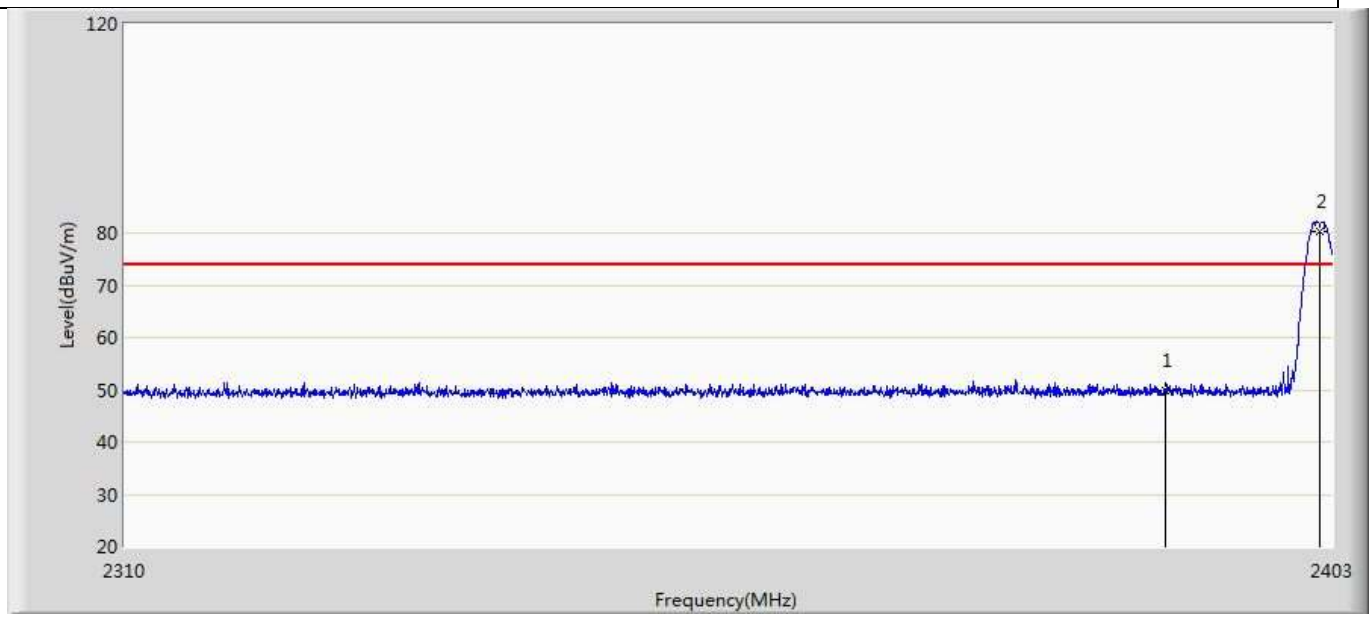
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.816	15.501	N/A	N/A	35.315	PK
2	*	2401.930	83.853	48.540	9.853	74.000	35.312	PK

Profile: 2032061R	Page No.: 24
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2402MHz	



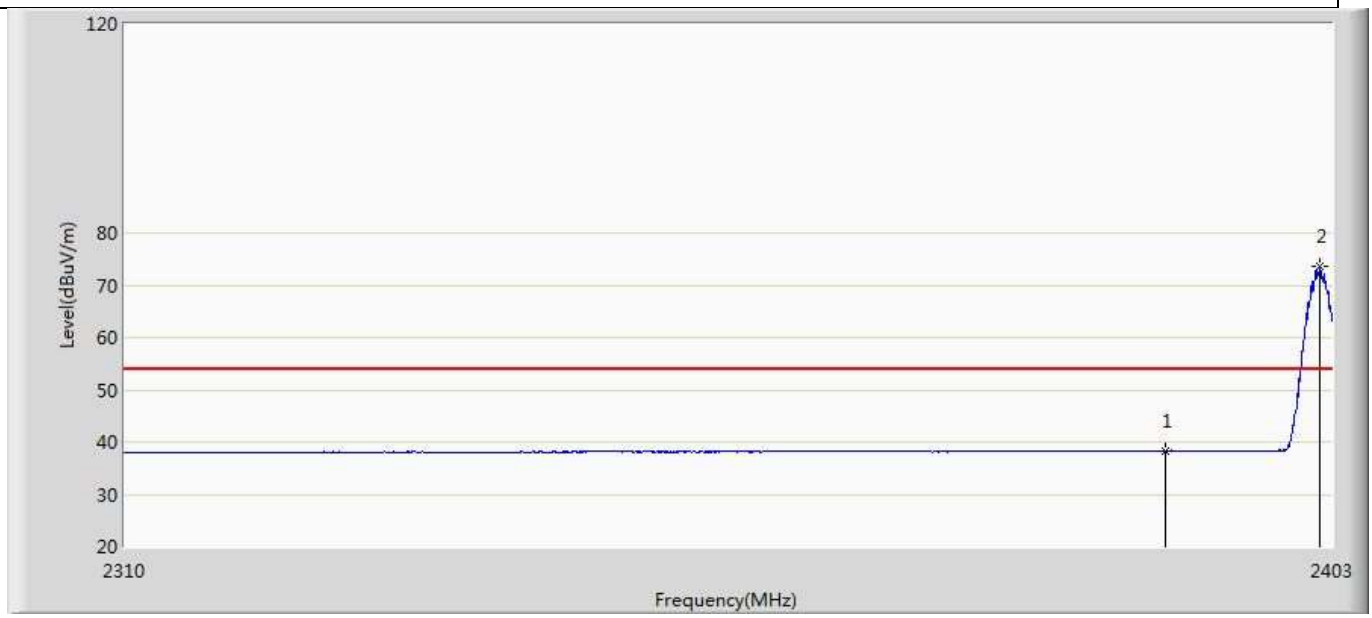
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.233	2.918	N/A	N/A	35.315	AV
2	*	2401.930	83.853	48.540	29.853	54.000	35.312	AV

Profile: 2032061R	Page No.: 25
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2402MHz	



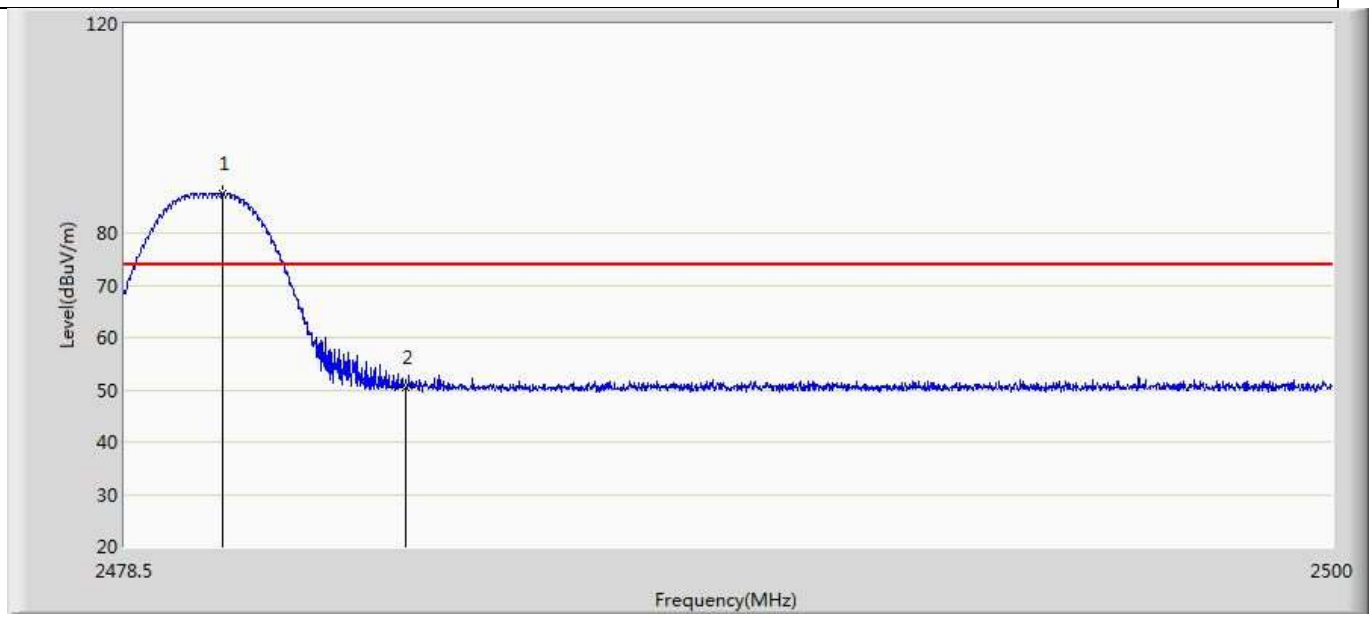
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	49.720	14.405	N/A	N/A	35.315	PK
2	*	2402.023	80.239	44.927	6.239	74.000	35.312	PK

Profile: 2032061R	Page No.: 26
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2402MHz	



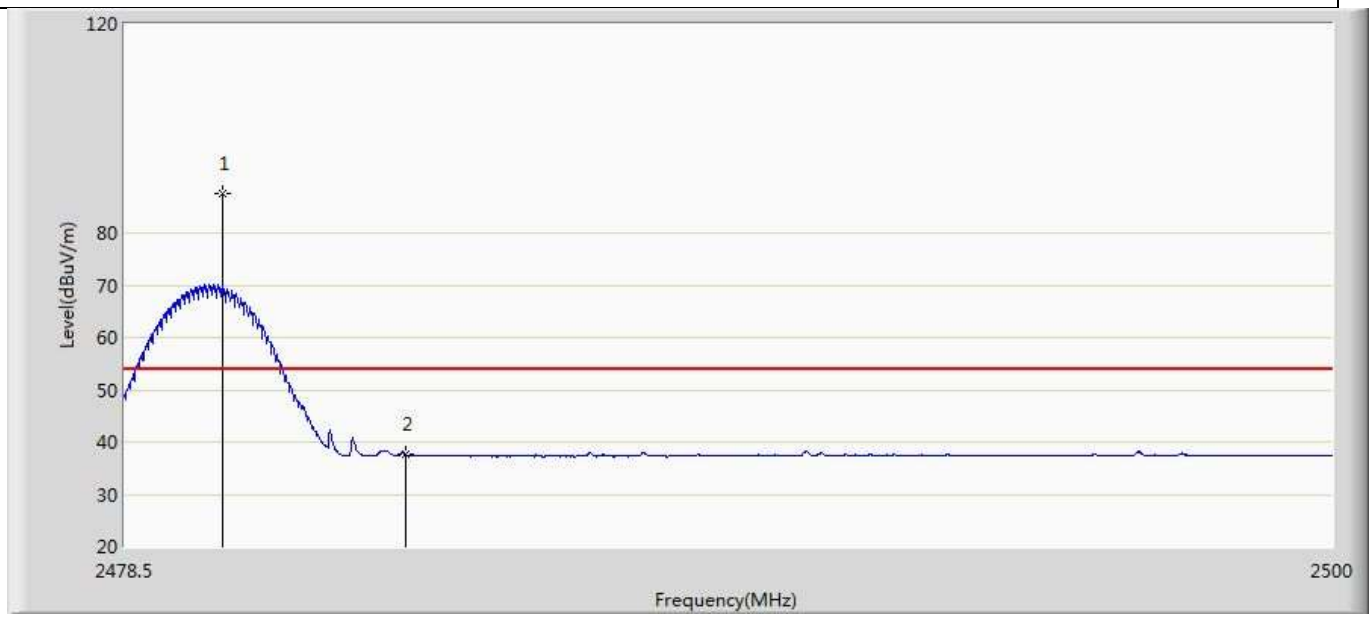
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.234	2.919	N/A	N/A	35.315	AV
2	*	2402.070	73.621	38.309	19.621	54.000	35.312	AV

Profile: 2032061R	Page No.: 27
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2480MHz	



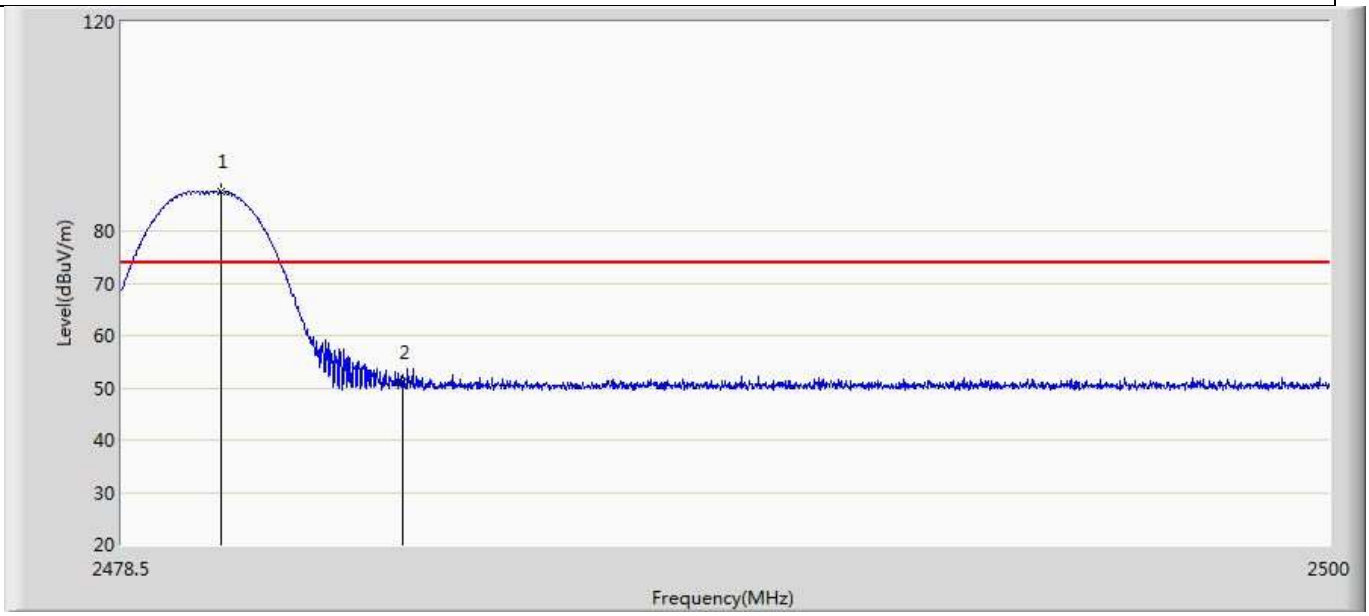
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.241	87.556	52.258	13.556	74.000	35.299	PK
2		2483.500	50.397	15.099	N/A	N/A	35.297	PK

Profile: 2032061R	Page No.: 28
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 20:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2480MHz	



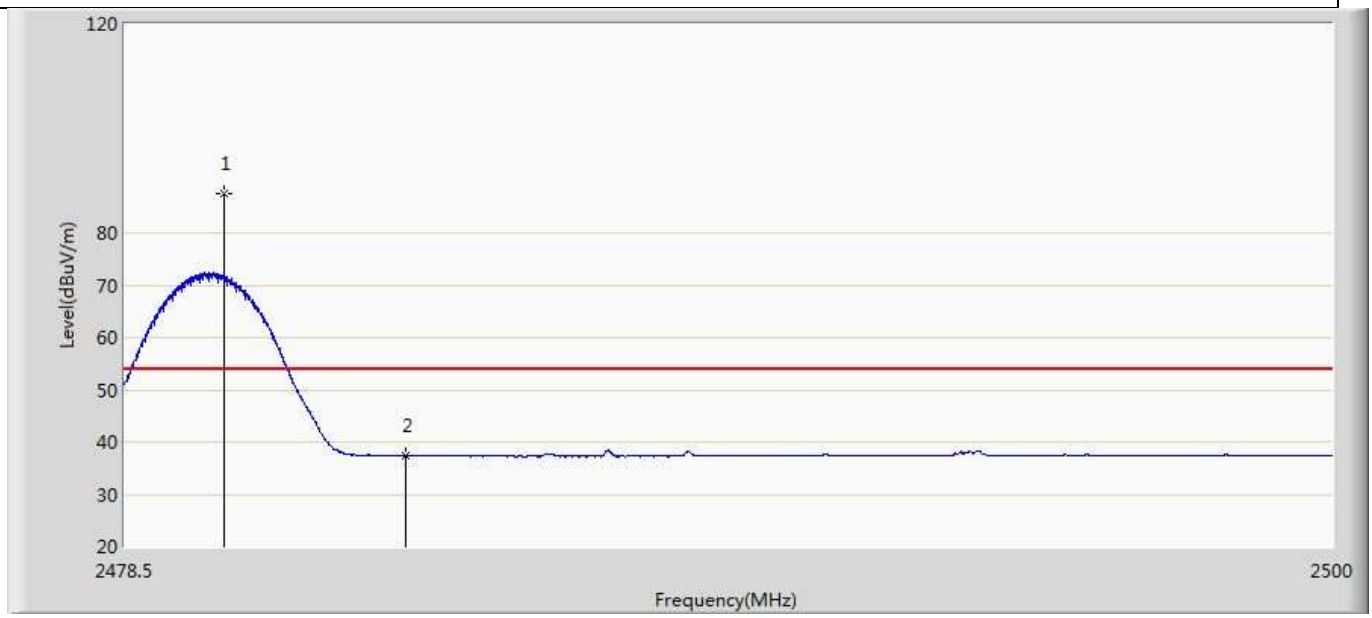
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.241	87.556	52.258	33.556	54.000	35.299	AV
2		2483.500	37.588	2.290	N/A	N/A	35.297	AV

Profile: 2032061R	Page No.: 29
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 20:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2480MHz	



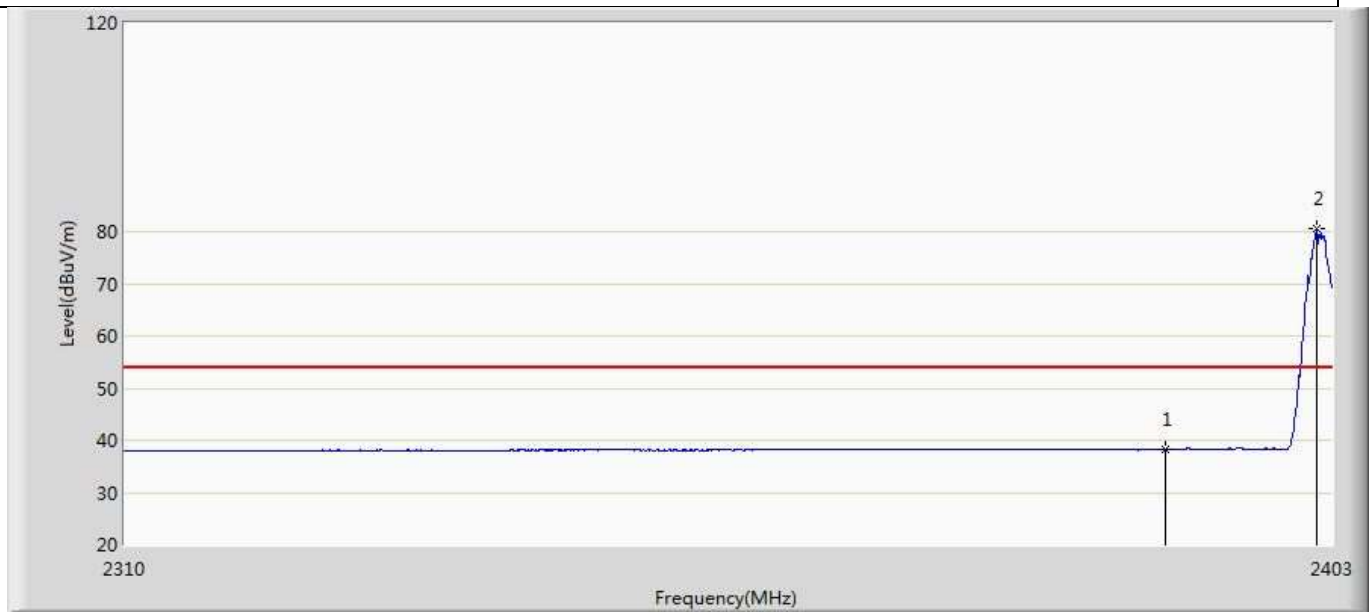
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.263	87.552	52.254	13.552	74.000	35.299	PK
2		2483.500	51.082	15.784	N/A	N/A	35.297	PK

Profile: 2032061R	Page No.: 30
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 20:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 3: 2480MHz	



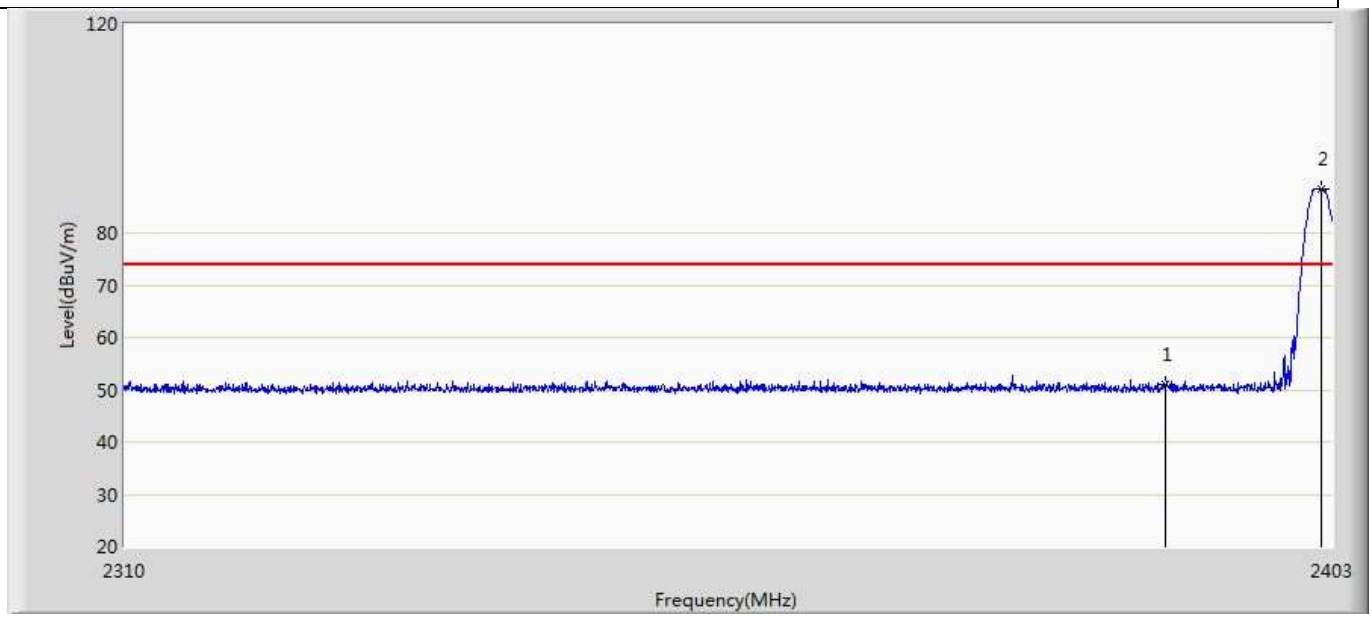
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.263	87.552	52.254	33.552	54.000	35.299	AV
2		2483.500	37.411	2.113	N/A	N/A	35.297	AV

Profile: 2032061R	Page No.: 16
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 4: 2402MHz	



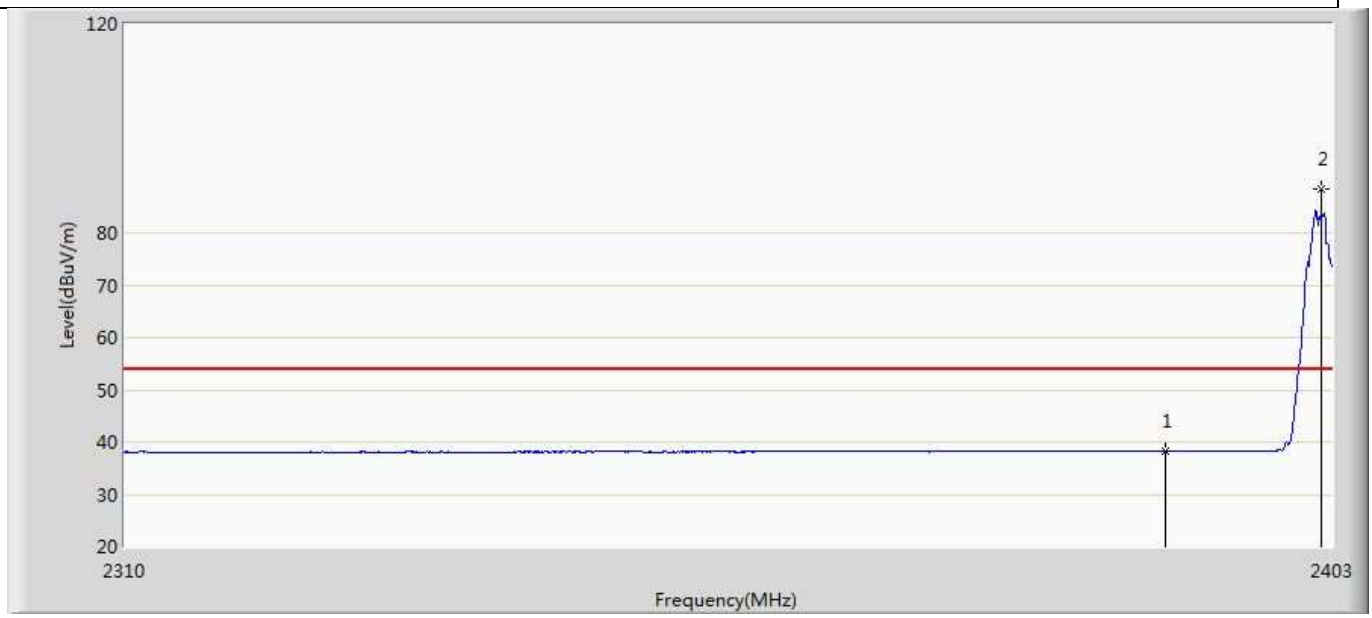
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.210	2.895	N/A	N/A	35.315	AV
2	*	2401.837	80.554	45.241	26.554	54.000	35.312	AV

Profile: 2032061R	Page No.: 17
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 4: 2402MHz	



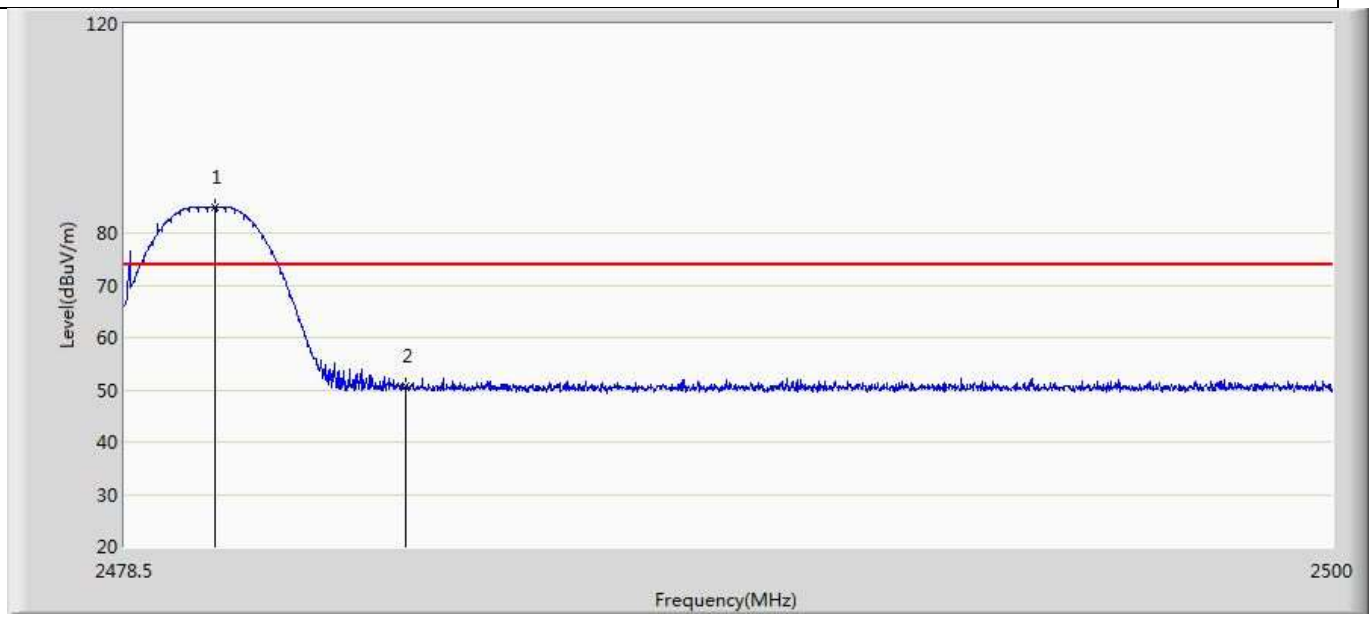
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.976	15.661	N/A	N/A	35.315	PK
2	*	2402.209	88.538	53.226	14.538	74.000	35.312	PK

Profile: 2032061R	Page No.: 18
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 4: 2402MHz	



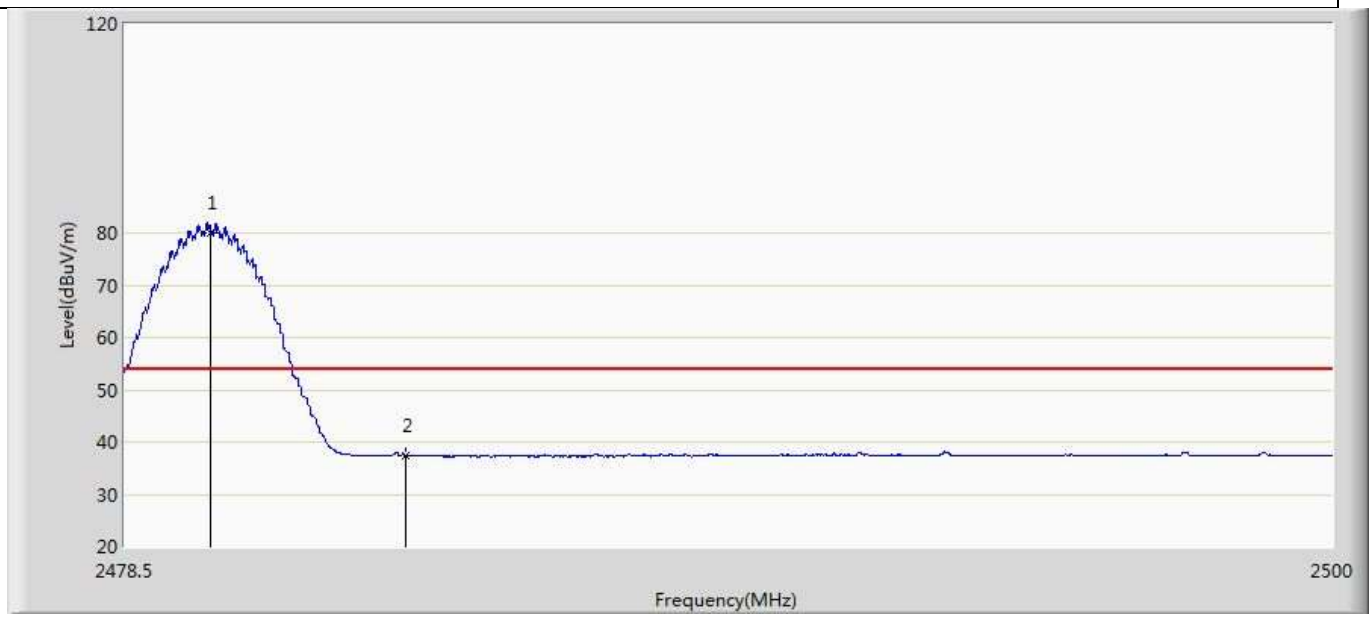
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.203	2.888	N/A	N/A	35.315	AV
2	*	2402.209	88.538	53.226	34.538	54.000	35.312	AV

Profile: 2032061R	Page No.: 19
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 4: 2480MHz	



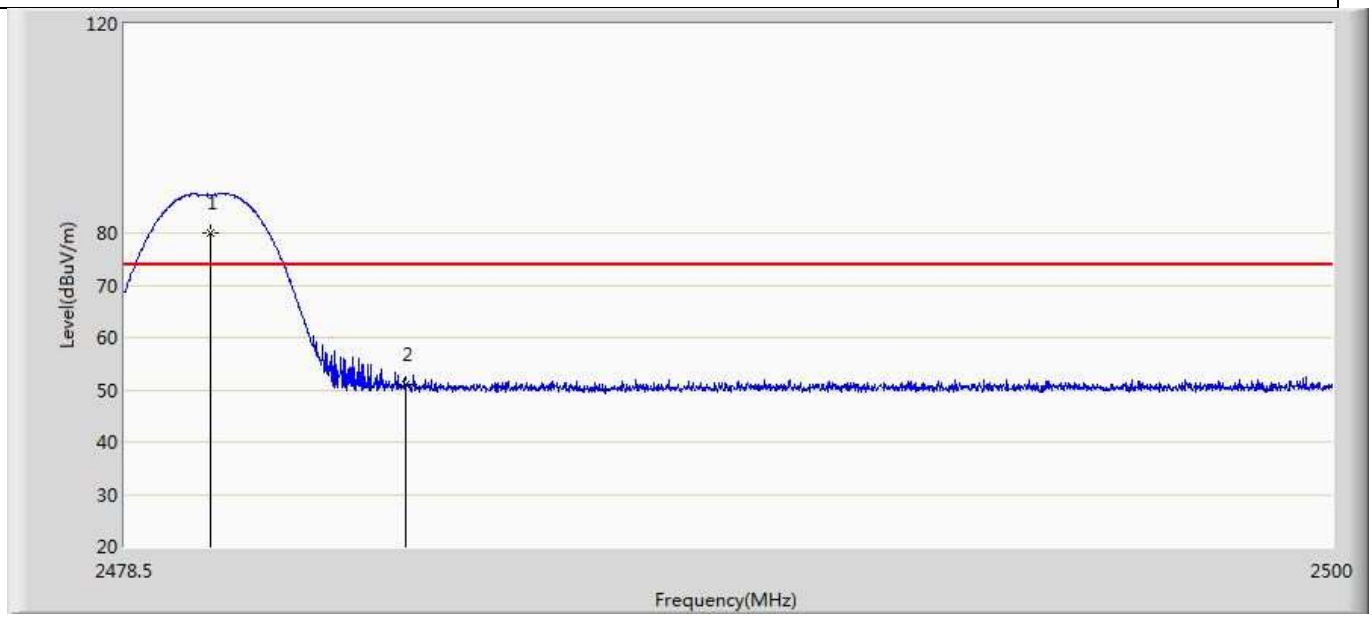
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.102	84.857	49.558	10.857	74.000	35.299	PK
2		2483.500	50.738	15.440	N/A	N/A	35.297	PK

Profile: 2032061R	Page No.: 20
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 4: 2480MHz	



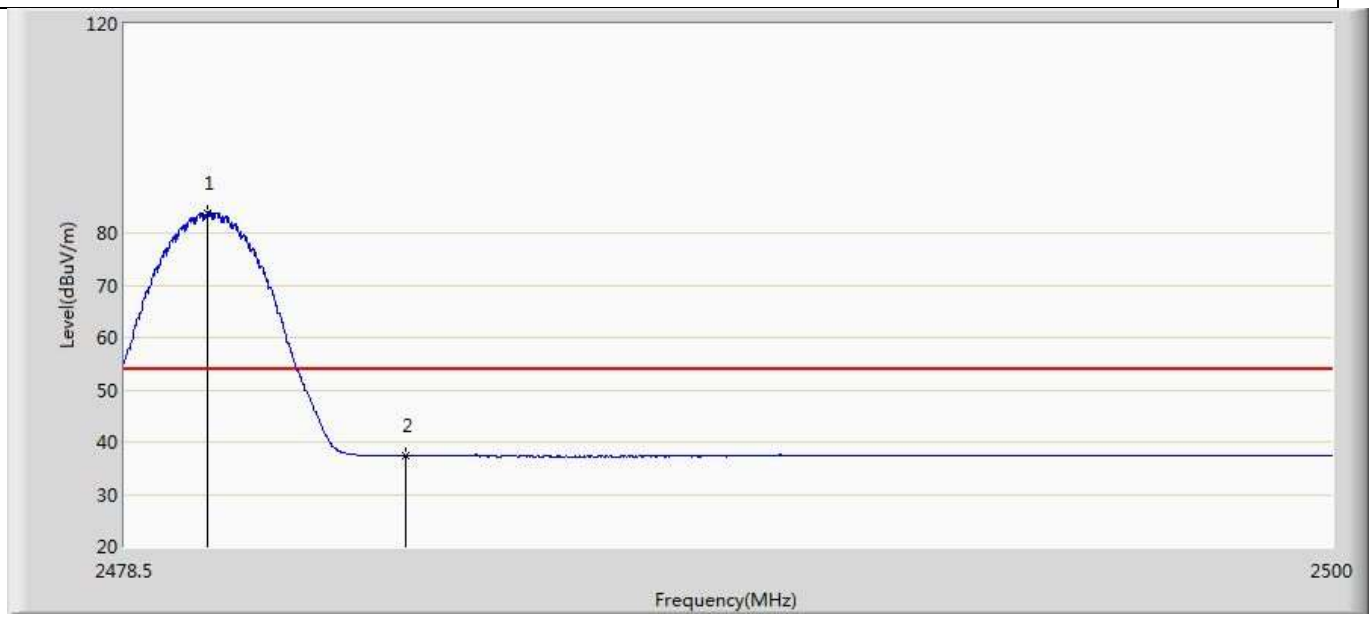
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.027	80.081	44.782	26.081	54.000	35.299	AV
2		2483.500	37.302	2.004	N/A	N/A	35.297	AV

Profile: 2032061R	Page No.: 21
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 4: 2480MHz	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.027	80.081	44.782	6.081	74.000	35.299	PK
2		2483.500	50.978	15.680	N/A	N/A	35.297	PK

Profile: 2032061R	Page No.: 22
Engineer: Neil	
Site: AC5	Time: 2020/03/17 - 19:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: AC 120V/60Hz
Note: Mode 4: 2480MHz	



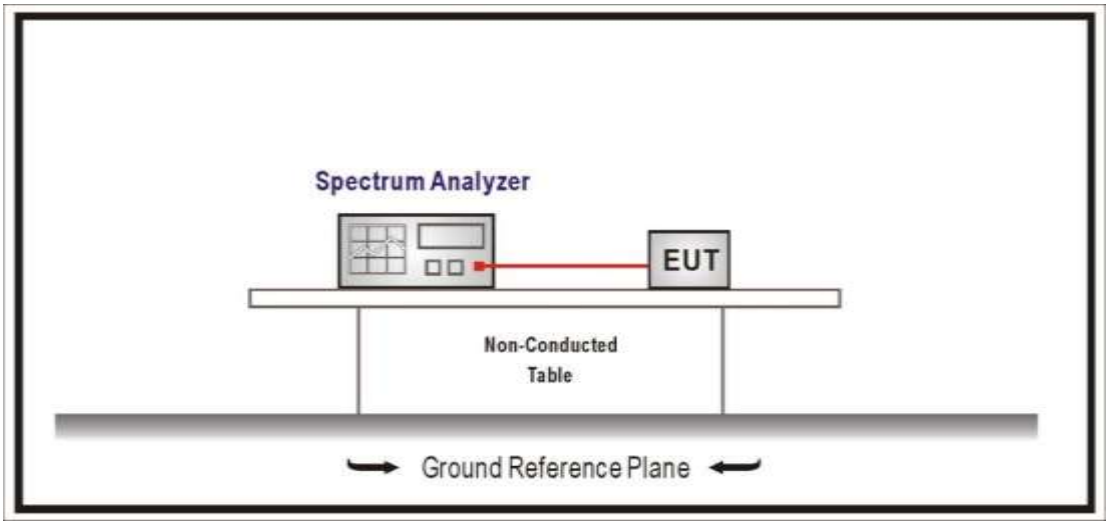
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.973	83.888	48.589	29.888	54.000	35.299	AV
2		2483.500	37.409	2.111	N/A	N/A	35.297	AV

Note:
1. Measured Level = Reading Level + Factor.
2. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
3. As the radiated emission was performed, so conducted emission was not tested.

4.6 DTS Bandwidth	**VERDICT: PASS**

4.6.1 **Limit**	
Standard	FCC Part 15 Subpart C Paragraph 15.247 (a)(2)
Systems using digital modulation techniques operate in the2400-2483.5 MHz .The minimum 6 dB bandwidth shall be at least 500 kHz	

4.6.2 **Test Setup**



4.6.3 **Test Procedure**

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

4.6.4 **Test Data**

Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (MHz)	6dB Occupied Bandwidth (MHz)	Limit (kHz)	Result
1	00	2402	1.0788	0.7058	>500	Pass
	19	2440	1.0774	0.7005	>500	Pass
	39	2480	1.0759	0.7022	>500	Pass
2	00	2402	2.0799	1.144	>500	Pass
	19	2440	2.0827	1.155	>500	Pass
	39	2480	2.0817	1.141	>500	Pass
3	00	2402	1.0663	0.6959	>500	Pass
	19	2440	1.0696	0.6977	>500	Pass
	39	2480	1.0683	0.6962	>500	Pass
4	00	2402	1.0587	0.6107	>500	Pass
	19	2440	1.0622	0.6114	>500	Pass
	39	2480	1.0619	0.6108	>500	Pass

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

Mode 4 CH00 (2402MHz)

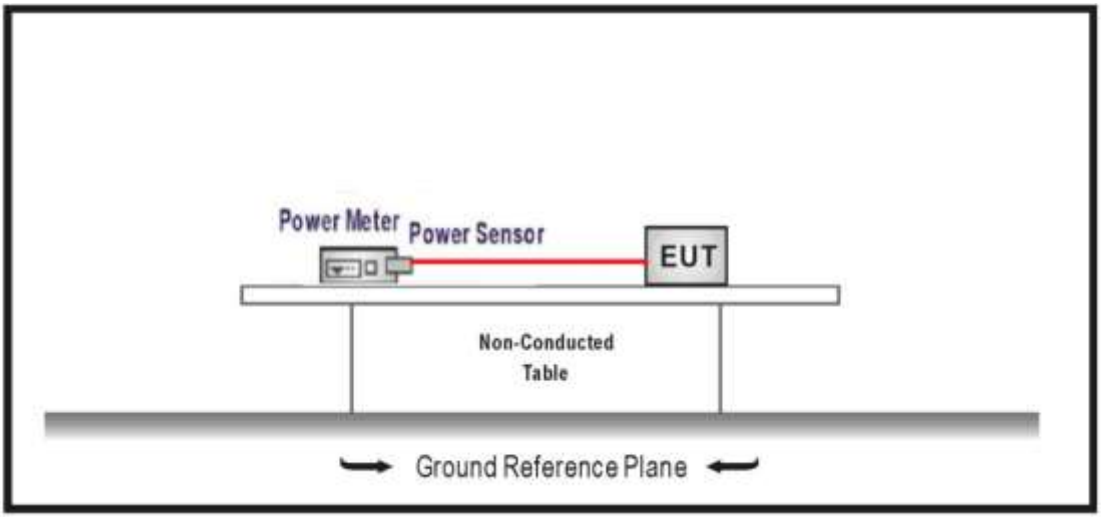
4.7 Fundamental emission output power — VERDICT: PASS

4.7.1 Limit

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

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

4.7.2 Test Setup



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

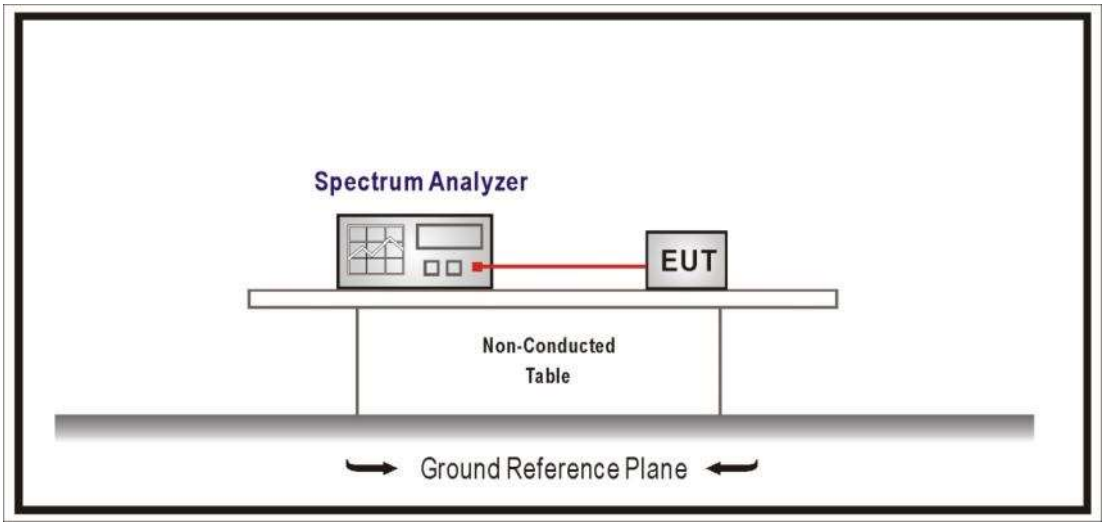
4.7.4 **Test Data**

Mode	Channel	Test Frequency (MHz)	Power Output (dBm)	Limit (dBm)	Result
Mode 1	00	2402	0.52	≤30	Pass
	19	2440	0.24	≤30	Pass
	39	2480	-0.11	≤30	Pass
Mode 2	00	2402	1.66	≤30	Pass
	19	2440	1.21	≤30	Pass
	39	2480	1.30	≤30	Pass
Mode 3	00	2402	0.58	≤30	Pass
	19	2440	0.19	≤30	Pass
	39	2480	-0.06	≤30	Pass
Mode 4	00	2402	0.64	≤30	Pass
	19	2440	0.31	≤30	Pass
	39	2480	0.19	≤30	Pass

4.8 Power Density	**VERDICT: PASS**

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

4.8.2 **Test Setup**



4.8.3 **Test Procedure**

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

4.8.4 Test Data

Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)	Total Measurement PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
Mode 1	00	2402	-16.731	-16.731	≤8	Pass
	19	2440	-17.211	-17.211	≤8	Pass
	39	2480	-17.240	-17.240	≤8	Pass
Mode 2	00	2402	-19.268	-19.268	≤8	Pass
	19	2440	-19.581	-19.581	≤8	Pass
	39	2480	-19.886	-19.886	≤8	Pass
Mode 3	00	2402	-7.816	-7.816	≤8	Pass
	19	2440	-8.160	-8.160	≤8	Pass
	39	2480	-8.240	-8.240	≤8	Pass
Mode 4	00	2402	-7.811	-7.811	≤8	Pass
	19	2440	-8.093	-8.093	≤8	Pass
	39	2480	-8.158	-8.158	≤8	Pass

Remark: The worst data as below:

Mode 4 CH00(2402MHz)

4.9 Antenna Requirement	**VERDICT: PASS**

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

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

4.10 Test setup photo and EUT Photo	VERDICT: PASS

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

The End