MEASUREMENT REPORT

FCC PART 15.247 / Bluetooth

FCC ID:	HD5-EDA61K1
Applicant:	Honeywell International Inc Honeywell Safety and Productivity Solutions
Application Type:	Certification
Product:	Mobile Computer
Model No.:	EDA61K-1
Brand Name:	Honeywell
FCC Classification:	FCC Part 15 Spread Spectrum Transmitter (DSS)
FCC Rule Part(s):	Part 15 Subpart C (Section 15.247)
Test Procedure(s):	ANSI C63.10-2013
Test Date:	November 09 ~ 25, 2020

Reviewed By: (Jame Yuan)

Approved By: (Robin Wu)

ACCREDITED
TESTING LABORATORY
CERTIFICATE #3628.01

The test results relate only to the samples tested.
This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10-2013. Test results reported herein relate only to the item(s) tested.

Revision History

Report No.	Version	Description	Issue Date	Note
2010RSU078-U2	Rev. 01	Initial Report	11-25-2020	Valid

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Description Page

1. General Information

1.1. Applicant

Honeywell International Inc
Honeywell Safety and Productivity Solutions
9680 Old Bailes Road, Fort Mill, SC 29707 United States

1.2. Manufacturer

Honeywell International Inc
Honeywell Safety and Productivity Solutions
9680 Old Bailes Road, Fort Mill, SC 29707 United States

1.3. Testing Facility

☒	**Test Site – MRT Suzhou Laboratory**	
	Laboratory Location (Suzhou – Wuzhong)	
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China	
	Laboratory Location (Suzhou – SIP)	
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China	
	Laboratory Accreditations	
	A2LA: 3628.01	CNAS: L10551
	FCC: CN1166	ISED: CN0001
	VCCI: R-20025, G-20034, C-20020, T-20020	
☐	**Test Site – MRT Shenzhen Laboratory**	
	Laboratory Location (Shenzhen)	
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China	
	Laboratory Accreditations	
	A2LA: 3628.02	CNAS: L10551
	FCC: CN1284	ISED: CN0105
☐	**Test Site – MRT Taiwan Laboratory**	
	Laboratory Location (Taiwan)	
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)	
	Laboratory Accreditations	
	TAF: L3261-190725	
	FCC: 291082, TW3261	ISED: TW3261

2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name	Mobile Computer
Model No.	EDA61K-1
Serial No.	19252B5D57 (Conducted Sample), 19311B01EA (Radiated Sample)
Wi-Fi Specification	802.11a/b/g/n/ac
Bluetooth Version	v4.1 dual mode
NFC	13.56MHz
Satellite	GPS/GLONASS
GSM Operation Band (s)	GPRS/EDGE 850/1900
WCDMA Operation Band (s)	Band II/IV/V
CDMA2000 Operation Band (s)	BC0 / BC1
LTE Operation Band (s)	FDD Band 2/4/5/7/12/13/17/25, TDD Band 38/41
Accessories	
USB Adapter	Model No.: ADS-12B-06 05010E Input Power: 100 - 240V ~ 50/60Hz, Max. 0.3A Output Power: 5VDC 2.0A
Rechargeable Li-ion Battery	Model No.: CK65-BTSC Capacitance: 7000mAh/25.2Wh Rated Voltage: 3.6V

2.2. Product Specification Subjective to this Report

Operating Frequency	2402~2480MHz
Channel Number	79
Type of modulation	GFSK, Pi/4 DQPSK, 8DPSK
Data Rate	1Mbps (GFSK), 2Mbps (Pi/4 DQPSK), 3Mbps (8DPSK)
Antenna Type	FPC Antenna
Antenna Gain	3.30dBi

Note: For other features of this EUT, test report will be issued separately.

- 15.247(g): In accordance with the Bluetooth Industry Standard, the system is designed to comply with all of the regulations in Section 15.247 when the transmitter is presented with a continuous data (or information) system.
- 15.247(h): In accordance with the Bluetooth Industry Standard, the system does not coordinate its channels selection/ hopping sequence with other frequency hopping systems for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters.
- 15.247(h): The EUT employs Adaptive Frequency Hopping (AFH) which identifies sources of interference namely devices operating in 802.11 WLAN and excludes them from the list of available channels. The process of re-mapping reduces the number of test channels from 79 channels to a minimum number of 20 channels.

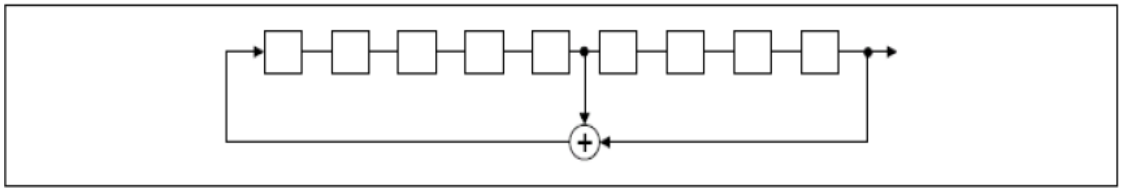
2.3. Operation Frequency / Channel List

Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2403 MHz	02	2404 MHz
03	2405 MHz	04	2406 MHz	05	2407 MHz
06	2408 MHz	07	2409 MHz	08	2410 MHz
09	2411 MHz	10	2412 MHz	11	2413 MHz
12	2414 MHz	13	2415 MHz	14	2416 MHz
15	2417 MHz	16	2418 MHz	17	2419 MHz
18	2420 MHz	19	2421 MHz	20	2422 MHz
21	2423 MHz	22	2424 MHz	23	2425 MHz
24	2426 MHz	25	2427 MHz	26	2428 MHz
27	2429 MHz	28	2430 MHz	29	2431 MHz
30	2432 MHz	31	2433 MHz	32	2434 MHz
33	2435 MHz	34	2436 MHz	35	2437 MHz
36	2438 MHz	37	2439 MHz	38	2440 MHz
39	2441 MHz	40	2442 MHz	41	2443 MHz
42	2444 MHz	43	2445 MHz	44	2446 MHz
45	2447 MHz	46	2448 MHz	47	2449 MHz
48	2450 MHz	49	2451 MHz	50	2452 MHz
51	2453 MHz	52	2454 MHz	53	2455 MHz
54	2456 MHz	55	2457 MHz	56	2458 MHz
57	2459 MHz	58	2460 MHz	59	2461 MHz
60	2462 MHz	61	2463 MHz	62	2464 MHz
63	2465 MHz	64	2466 MHz	65	2467 MHz
66	2468 MHz	67	2469 MHz	68	2470 MHz
69	2471 MHz	70	2472 MHz	71	2473 MHz
72	2474 MHz	73	2475 MHz	74	2476 MHz
75	2477 MHz	76	2478 MHz	77	2479 MHz
78	2480 MHz	--	--	--	--

2.4. Pseudorandom Frequency Hopping Sequence

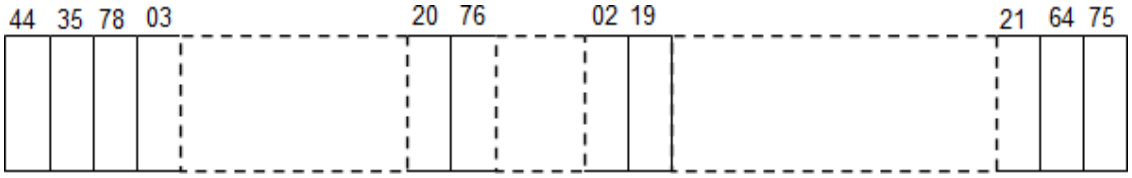
The pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONES, i.e. the shift register is initialized with nine ones.

- Number of shift register stages: 9
- Length of pseudo-random sequence: 2^9 - 1 = 511 bits
- Longest sequence of zeros: 8 (non-inverted signal)



Linear Feedback Shift Register for Generation of the PRBS sequence

An example of Pseudorandom Frequency Hopping Sequence as follow:



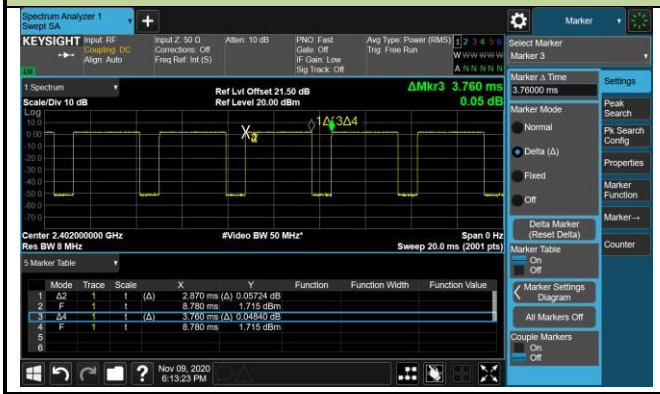
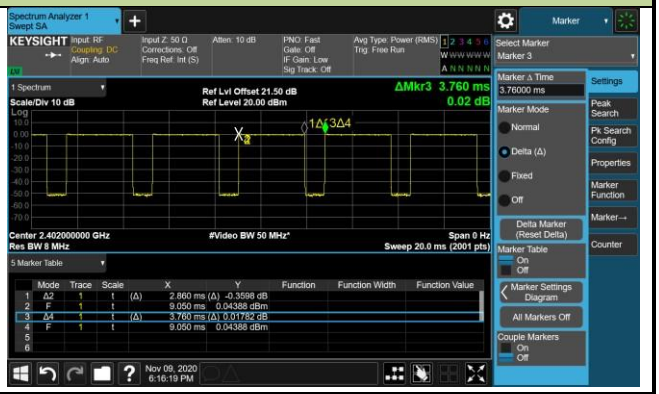
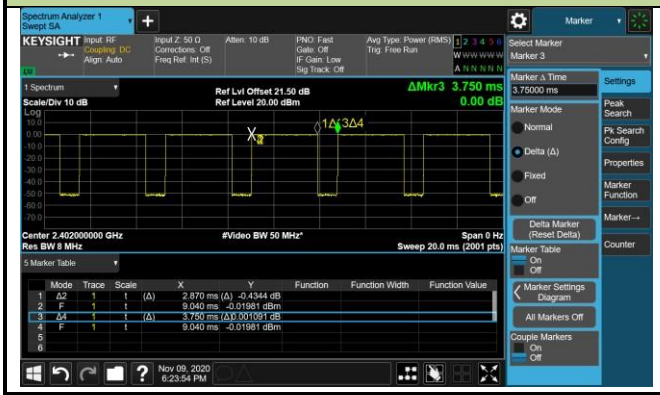
Each frequency used equally on the average by each transmitter.

The system receivers have input bandwidths that match the hopping channel bandwidths of their Corresponding transmitters and shift frequencies in synchronization with the transmitted signals.

2.5. Duty Cycle

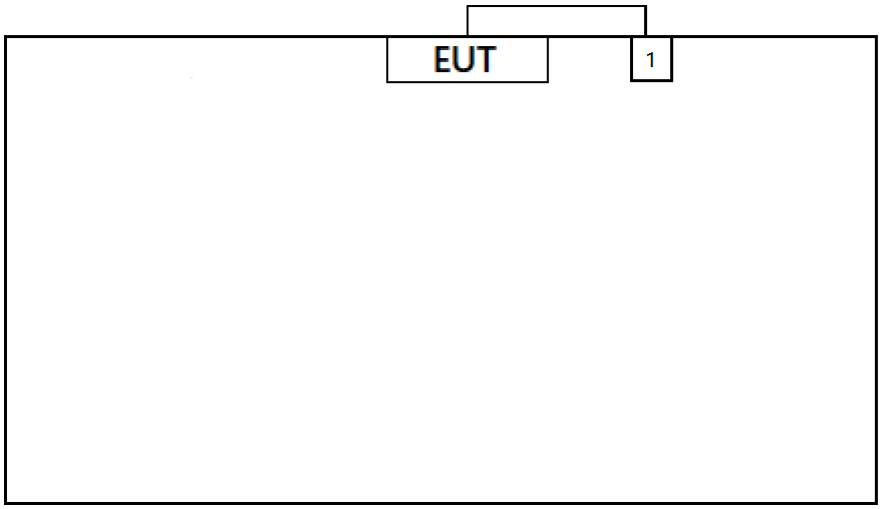
The maximum achievable duty cycle was determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

Test Mode	Duty Cycle
DH5	76.33%
2DH5	76.06%
3DH5	76.53%

Duty Cycle (T = Transmission Duration)	
DH5 (T = 3.760ms)	2DH5 (T = 3.760ms)
	
3DH5 (T = 3.750ms)	
	

2.6. Description of Test Configuration and Software

The device was tested per the guidance ANSI C63.10: 2013 that was used to reference the appropriate EUT setup for radiated spurious emissions and AC line conducted emission testing.



Product		Manufacturer	Model No.
1	Adapter	Shenzhen Honor Electronic Co., Ltd	ADS-12B-06 05010E

Note 1: The test utility software used during testing was “QRCT”, and the version was 3.0.268.0.

Note 2: Detail power setting refer to operation description.

2.7. EMI Suppression Device(s) / Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

2.8. Labeling Requirements

Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase. However, when the device is so small wherein placement of the label with specified statement is not practical, only the FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label and label location.

2.9. Test Environment Condition

Ambient Temperature	15 ~ 35 °C
Relative Humidity	20 ~ 75 %RH

3. ANTENNA REQUIREMENTS

Excerpt from §15.203 of the FCC Rules/Regulations:

"An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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 antenna of the device is **permanently attached.**
- There are no provisions for connection to an external antenna.

Conclusion:

The unit complies with the requirement of §15.203.

4. TEST EQUIPMENT CALIBRATION DATE

Conducted Emission - (WZ-SR2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06185	1 year	2021/01/18
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2021/09/09
Thermal Hygrometer	testo	608-H1	MRTSUE06404	1 year	2021/07/26
Shielding Room	MIX-BEP	Chamber-SR2	MRTSUE06215	N/A	N/A

Conducted Emission - (SIP-SR2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06613	1 year	2021/07/02
Two-Line V-Network	R&S	ENV216	MRTSUE06003	1 year	2021/09/09
Thermal Hygrometer	testo	608-H1	MRTSUE06621	1 year	2020/12/29

Radiated Emission - (WZ-AC1)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2021/01/18
PXA Signal Analyzer	Keysight	N9030B	MRTSUE06395	1 year	2021/08/30
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2021/08/08
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06023	1 year	2021/09/27
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06597	1 year	2020/12/17
Microwave System Amplifier	Agilent	83017A	MRTSUE06076	1 year	2021/11/14
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2021/06/11
Thermal Hygrometer	testo	608-H1	MRTSUE06403	1 year	2021/07/26
Anechoic Chamber	TDK	Chamber-AC1	MRTSUE06212	1 year	2021/04/30

Radiated Emission - (WZ-AC2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
MXE EMI Receiver	Keysight	N9038A	MRTSUE06125	1 year	2021/07/02
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2021/05/26
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2021/10/25
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06597	1 year	2020/12/17
Broadband Coaxial Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2021/11/14
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2021/06/11
Thermal Hygrometer	Minggao	ETH529	MRTSUE06170	1 year	2020/12/15
Anechoic Chamber	RIKEN	Chamber-AC2	MRTSUE06213	1 year	2021/04/30

Radiated Emission - (SIP-AC1)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06612	1 year	2021/07/02
EXA Signal Analyzer	Keysight	N9010B	MRTSUE06559	1 year	2021/07/23
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB9168	MRTSUE06645	1 year	2021/08/30
Double Ridged Horn Antenna	R&S	HF907	MRTSUE06610	1 year	2021/08/30
Preamplifier	EMCI	EMC051845SE	MRTSUE06600	1 year	2021/11/09
Thermal Hygrometer	testo	608-H1	MRTSUE06620	1 year	2020/12/29
Anechoic Chamber	RIKEN	SIP-AC1	MRTSUE06554	1 year	2020/12/25

Radiated Emission - (SIP-AC2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06613	1 year	2021/07/02
MXA Signal Analyzer	Keysight	N9020B	MRTSUE06604	1 year	2021/09/26
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB9168	MRTSUE06646	1 year	2021/08/30
Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06648	1 year	2020/12/17
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06599	1 year	2020/12/17
Preamplifier	EMCI	EMC051845SE	MRTSUE06644	1 year	2021/11/09
Preamplifier	EMCI	EMC184045SE	MRTSUE06602	1 year	2021/10/21
Thermal Hygrometer	testo	608-H1	MRTSUE06624	1 year	2020/12/29
Anechoic Chamber	RIKEN	SIP-AC2	MRTSUE06781	1 year	2020/12/25

Radiated Emission - (SIP-AC3)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06612	1 year	2021/07/02
EXA Signal Analyzer	Keysight	N9010B	MRTSUE06559	1 year	2021/07/23
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB9168	MRTSUE06647	1 year	2021/08/08
Double Ridged Horn Antenna	R&S	HF907	MRTSUE06611	1 year	2021/09/13
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06598	1 year	2020/12/17
Preamplifier	EMCI	EMC012645SE	MRTSUE06642	1 year	2021/01/16
Preamplifier	EMCI	EMC184045SE	MRTSUE06641	1 year	2021/01/16
Thermal Hygrometer	testo	608-H1	MRTSUE06622	1 year	2020/12/29
Anechoic Chamber	RIKEN	SIP-AC3	MRTSUE06782	1 year	2020/12/25

Conducted Test Equipment - (WZ-SIP-TR3)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2021/04/14
EXA Signal Analyzer	Keysight	N9010B	MRTSUE06607	1 year	2021/01/08
Signal Analyzer	R&S	FSV40	MRTSUE06218	1 year	2021/04/14
Power Meter	Agilent	U2021XA	MRTSUE06030	1 year	2021/10/22
USB wideband power sensor	Keysight	U2021XA	MRTSUE06446	1 year	2021/08/30
USB wideband power sensor	Keysight	U2021XA	MRTSUE06447	1 year	2021/08/08
Bluetooth Test Set	Anritsu	MT8852B-042	MRTSUE06389	1 year	2021/06/11
Audio Analyzer	Agilent	U8903B	MRTSUE06143	1 year	2021/06/11
Modulation Analyzer	HP	HP8901A	MRTSUE06098	1 year	2021/09/26
Wideband Radio Communication Tester	R&S	CMW 500	MRTSUE06243	1 year	2021/10/20
DC Power Supply	GWINSTEK	DPS-3303C	MRTSUE06064	N/A	N/A
Temperature & Humidity Chamber	BAOYT	BYH-150CL	MRTSUE06051	1 year	2021/10/21
Thermal Hygrometer	testo	608-H1	MRTSUE06401	1 year	2021/07/26

Conducted Test Equipment - (SIP-SR5)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Signal Analyzer	R&S	FSV40	MRTSUE06218	1 year	2021/04/14
PXA Signal Analyzer	Keysight	N9030B	MRTSUE06395	1 year	2021/08/30
USB wideband power sensor	Agilent	U2021XA	MRTSUE06595	1 year	2021/09/26
USB wideband power sensor	Agilent	U2021XA	MRTSUE06596	1 year	2021/09/26
Wideband Radio Communication Tester	R&S	CMW 500	MRTSUE06243	1 year	2021/10/20
Bluetooth Test Set	Anritsu	MT8852B-042	MRTSUE06389	1 year	2021/06/11
Temperature Chamber	BAOYT	BYG-408CS	MRTSUE06847	1 year	2021/03/31
Thermal Hygrometer	testo	622	MRTSUE06629	1 year	2020/12/30

Software	Version	Function
EMI Software	V3	EMI Test Software

5. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

AC Conducted Emission Measurement
Measurement Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 9kHz~150kHz: 3.74dB 150kHz~30MHz: 3.44dB
Radiated Disturbance
Measurement Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): Horizontal: 30MHz~300MHz: 5.04dB 300MHz~1GHz: 4.95dB 1GHz~40GHz: 6.40dB Vertical: 30MHz~300MHz: 5.24dB 300MHz~1GHz: 6.03dB 1GHz~40GHz: 6.40dB
Spurious Emissions, Conducted
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 0.78dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 1.13dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 0.28%

6. TEST RESULT

6.1. Summary

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.247(a)(1)	20dB Bandwidth	N/A	Conducted	Pass	Section 6.2
15.247(b)(1)	Peak Transmitter Output Power	<1 Watt if > 75 non-overlapping channels used		Pass	Section 6.3
15.24207(a)(1)	Channel Separation	> 2/3 of 20 dB BW for systems with Output Power < 125mW		Pass	Section 6.4
15.247(a)(1)(iii)	Number of Channels	> 15 Channels		Pass	Section 6.5
15.247(a)(1)(iii)	Time of Occupancy	< 0.4 sec in 31.6 sec period		Pass	Section 6.6
15.247(d)	Band Edge / Out-of-Band Emissions	Conducted ≥ 20dBc		Pass	Section 6.7 Section 6.8
15.205, 15.209	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209	Radiated	Pass	Section 6.9 Section 6.10
15.207	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits >	Line Conducted	Pass	Section 6.11

Notes:

1) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
2) All modes of operation and data rates were investigated. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst case emissions.

6.2. 20dB Bandwidth Measurement

6.2.1. Test Limit

N/A

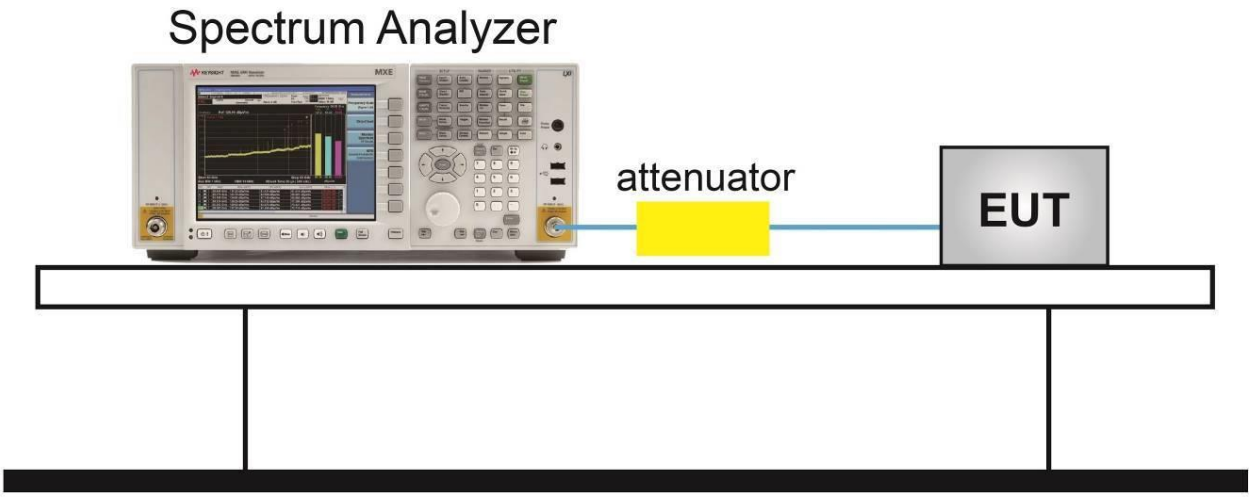
6.2.2. Test Procedure Used

ANSI C63.10-2013 - Section 6.9.2

6.2.3. Test Setting

1. Set RBW ≥ 1% to 5% of the OBW
2. VBW = Approximately three times RBW
3. Span = Approximately 2 to 5 times the OBW, centered on a hopping channel
4. Detector = Peak
5. Trace mode = Max hold
6. Sweep = Auto couple
7. Allow the trace to stabilize
8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

6.2.4. Test Setup

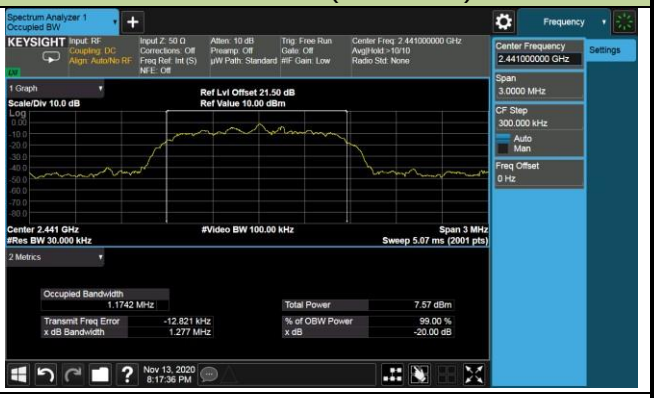


6.2.5. Test Result

Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	SIP-TR3	Test Date	2020/11/13

Test Mode	Channel No.	Frequency (MHz)	20dB Bandwidth (kHz)	Result
DH5	00	2402	947.7	Pass
DH5	39	2441	948.9	Pass
DH5	78	2480	949.3	Pass
2DH5	00	2402	1281.0	Pass
2DH5	39	2441	1277.0	Pass
2DH5	78	2480	1279.0	Pass
3DH5	00	2402	1288.0	Pass
3DH5	39	2441	1284.0	Pass
3DH5	78	2480	1285.0	Pass

DH5 20dB Bandwidth	
Channel 00 (2402MHz)	Channel 39 (2441MHz)
	
Channel 78 (2480MHz)	
	

2DH5 20dB Bandwidth	
Channel 00 (2402MHz)	Channel 39 (2441MHz)
	
Channel 78 (2480MHz)	
	

3DH5 20dB Bandwidth	
Channel 00 (2402MHz)	Channel 39 (2441MHz)
	
Channel 78 (2480MHz)	
	

6.3. Output Power Measurement

6.3.1. Test Limit

The maximum out power permissible output power is 1 Watt for all frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels.

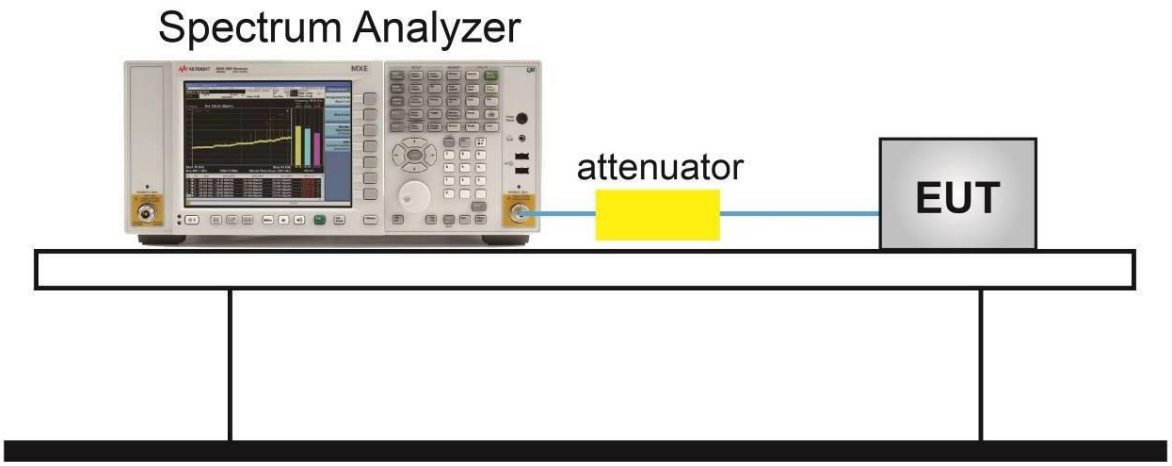
6.3.2. Test Procedure Used

ANSI C63.10-2013 - Section 7.8.5

6.3.3. Test Setting

1. Set RBW ≥ the 20 dB bandwidth of the emission being measured.
2. VBW ≥ RBW
3. Span = approximately five times the 20dB bandwidth, centered on a hopping channel
4. Detector = Peak
5. Trace mode = Max hold
6. Sweep = Auto couple
7. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power (don’t forget added the external attenuation and cable loss)

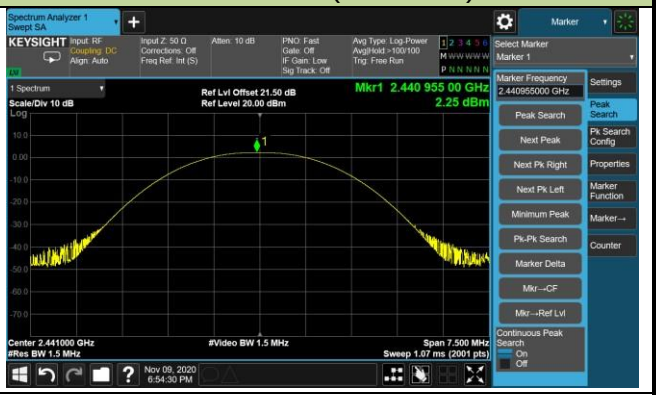
6.3.4. Test Setup



6.3.5. Test Result

Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	SIP-TR3	Test Date	2020/11/09

Test Mode	Channel No.	Frequency (MHz)	Peak Power (dBm)	Power Limit (dBm)
DH5	00	2402	1.93	≤ 30.00
DH5	39	2441	2.25	≤ 30.00
DH5	78	2480	1.04	≤ 30.00
2DH5	00	2402	1.79	≤ 30.00
2DH5	39	2441	2.11	≤ 30.00
2DH5	78	2480	0.90	≤ 30.00
3DH5	00	2402	2.08	≤ 30.00
3DH5	39	2441	2.39	≤ 30.00
3DH5	78	2480	1.17	≤ 30.00

DH5 Output Power	
Channel 00 (2402MHz)	Channel 39 (2441MHz)
	
Channel 78 (2480MHz)	
	

2DH5 Output Power	
Channel 00 (2402MHz)	Channel 39 (2441MHz)
	
Channel 78 (2480MHz)	
	

3DH5 Output Power	
Channel 00 (2402MHz)	Channel 39 (2441MHz)
	
Channel 78 (2480MHz)	
	

6.4. Carrier Frequency Separation Measurement

6.4.1. Test Limit

The minimum permissible channel separation for this system is 2/3 the value of the 20dB BW.

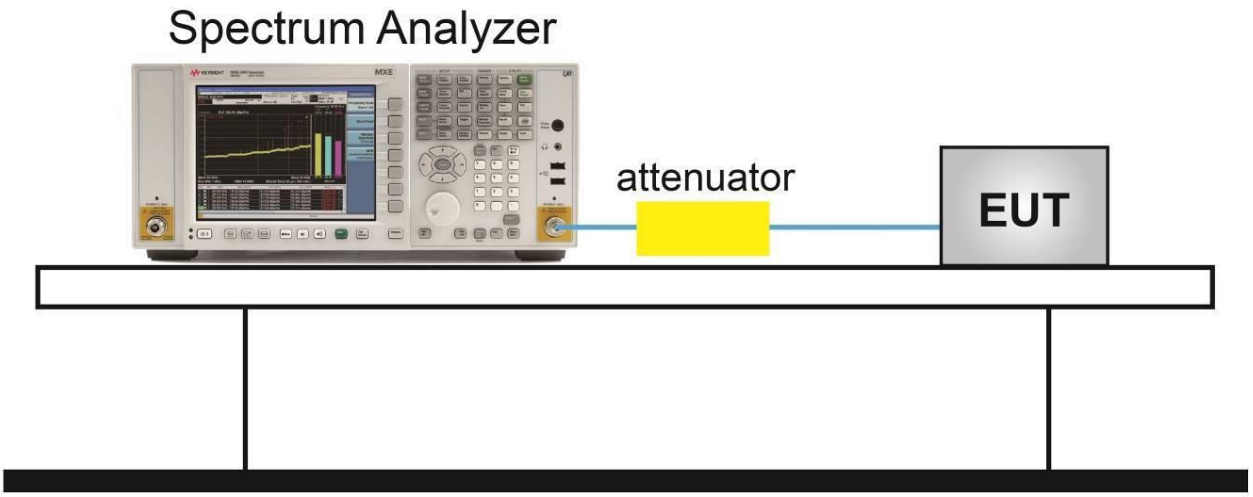
6.4.2. Test Procedure Used

ANSI C63.10-2013 - Section 7.8.2

6.4.3. Test Setting

1. Span = Wide enough to capture the peaks of two adjacent channels.
2. Start with the RBW set to approximately 30% of the channel spacing; adjust as necessary to best identify the center of each individual channel.
3. VBW ≥ RBW
4. Sweep time = Auto couple
5. Detector = Peak
6. Trace mode = Max hold
7. Allowed the trace to stabilize
8. Use the marker-delta function to determine the separation between the peaks of the adjacent channels.

6.4.4. Test Setup



6.4.5. Test Result

Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	SIP-TR3	Test Date	2020/11/24 ~ 2020/11/25

Test Mode	Channel No.	Frequency (MHz)	Carrier Frequency Separation (kHz)	Limit (kHz)	Result
DH5	00	2402	1000	≥ 631.8	Pass
DH5	39	2441	1000	≥ 632.6	Pass
DH5	78	2480	1000	≥ 632.9	Pass
2DH5	00	2402	1000	≥ 854.0	Pass
2DH5	39	2441	1000	≥ 851.3	Pass
2DH5	78	2480	1000	≥ 852.7	Pass
3DH5	00	2402	1000	≥ 858.7	Pass
3DH5	39	2441	1000	≥ 856.0	Pass
3DH5	78	2480	1000	≥ 856.7	Pass

Note: The Limit is 2/3 the value of the 20dB BW.

DH5 Carrier Frequency Separation	
Channel 00 (2402MHz)	Channel 39 (2441MHz)
	
Channel 78 (2480MHz)	
	

2DH5 Carrier Frequency Separation	
Channel 00 (2402MHz)	Channel 39 (2441MHz)
	
Channel 78 (2480MHz)	
	

3DH5 Carrier Frequency Separation	
Channel 00 (2402MHz)	Channel 39 (2441MHz)
	
Channel 78 (2480MHz)	
	

6.5. Number of Hopping Channels Measurement

6.5.1. Test Limit

This frequency hopping system must employ a minimum of 15 hopping channels.

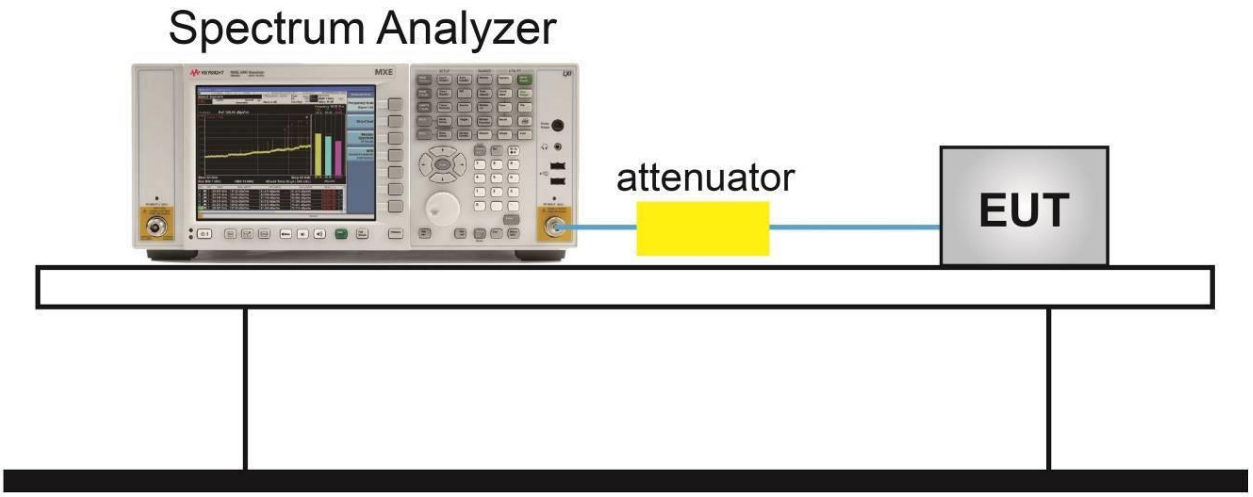
6.5.2. Test Procedure Used

ANSI C63.10-2013 - Section 7.8.3

6.5.3. Test Setting

1. Span = The frequency band of operation. Depending on the number of channels the device supports, it may be necessary to divide the frequency range of operation across multiple spans, to allow the individual channels to be clearly seen.
2. RBW: To identify clearly the individual channels, set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller.
3. VBW ≥ RBW
4. Sweep time = Auto couple
5. Detector = Peak
6. Trace mode = Max hold
7. Allow the trace to stabilize

6.5.4. Test Setup



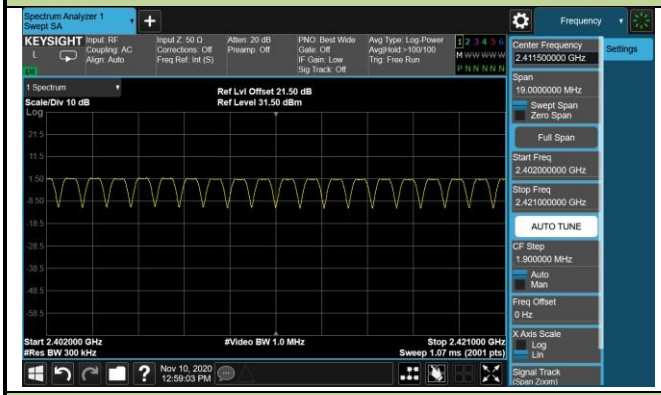
6.5.5. Test Result

Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	SIP-TR3	Test Date	2020/11/10

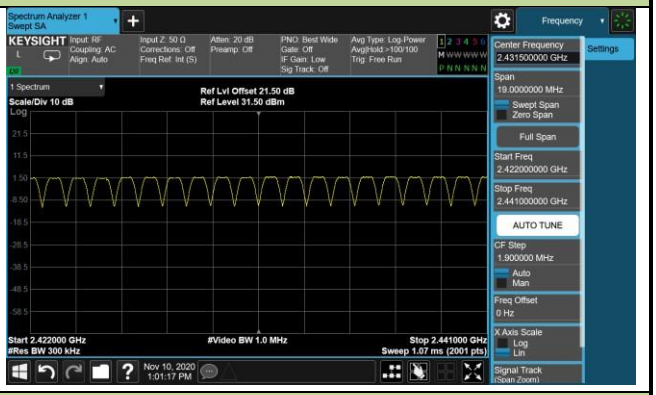
Test Mode (Hopping)	Channel Numbers	Frequency (MHz)	Limit (Hopping Channels)	Result
DH5	79	2402 ~ 2480	≥ 15	Pass
2DH5	79	2402 ~ 2480	≥ 15	Pass
3DH5	79	2402 ~ 2480	≥ 15	Pass

DH5 Number of Hopping Channels

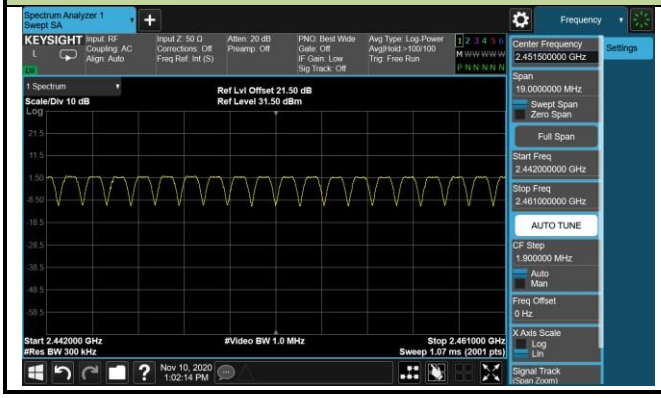
2402 ~ 2421MHz



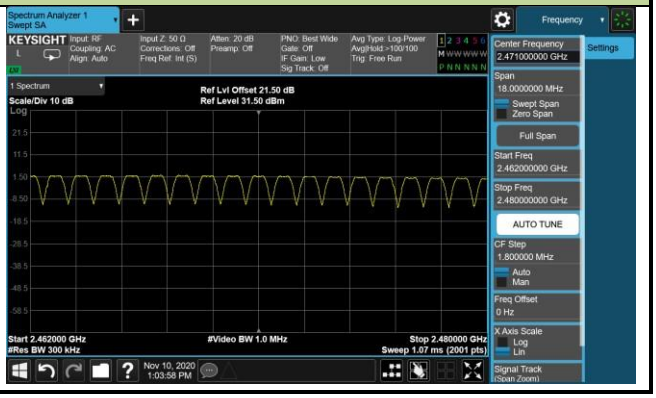
2422 ~ 2441MHz

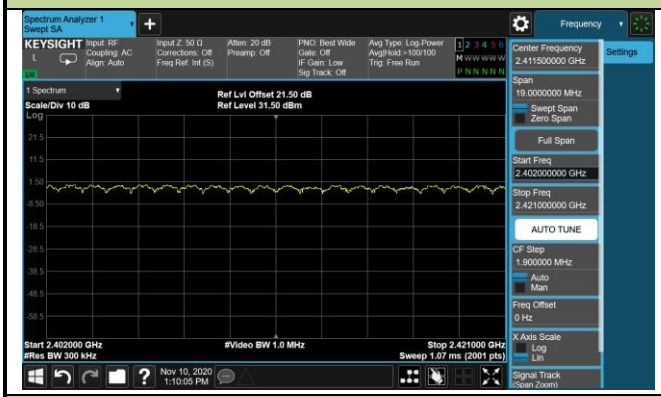
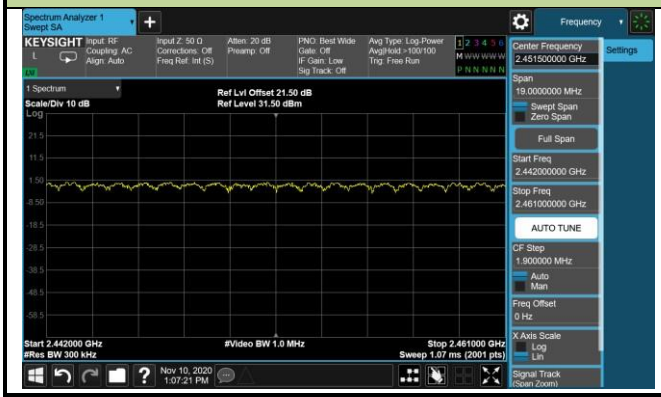
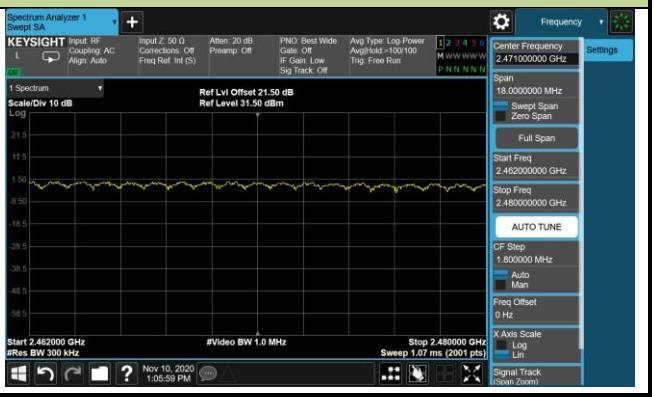


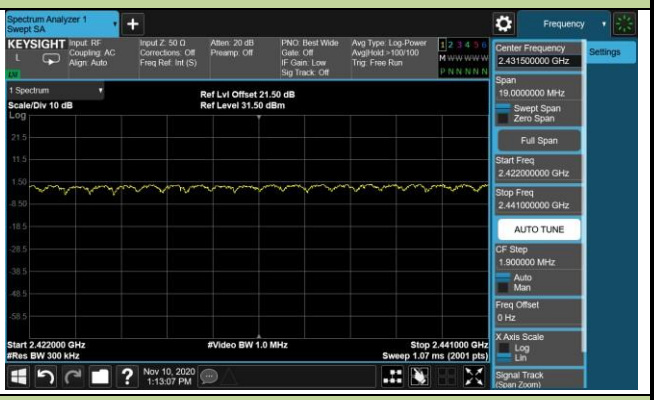
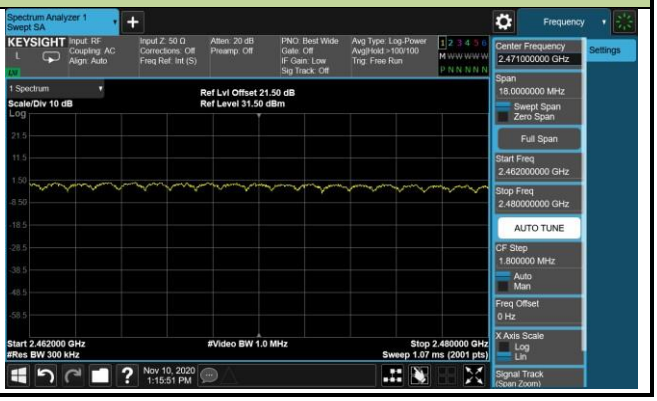
2442 ~ 2461MHz



2462 ~ 2480MHz



2DH5 Number of Hopping Channels	
2402 ~ 2421MHz	2422 ~ 2441MHz
	
2442 ~ 2461MHz	2462 ~ 2480MHz
	

3DH5 Number of Hopping Channels	
2402 ~ 2421MHz	2422 ~ 2441MHz
	
2442 ~ 2461MHz	2462 ~ 2480MHz
	

6.6. Time of Occupancy Measurement

6.6.1. Test Limit

The maximum permissible time of occupancy is 400ms within a period of 400ms multiplied by the number of hopping channels employed.

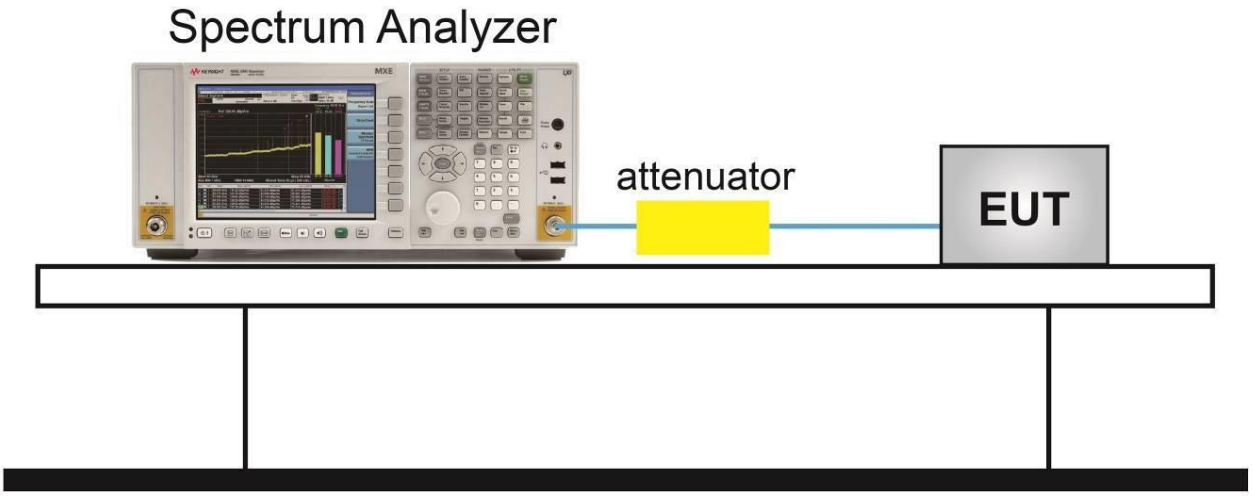
6.6.2. Test Procedure Used

ANSI C63.10-2013 - Section 7.8.4

6.6.3. Test Setting

1. Span = Zero span, centered on a hopping channel.
2. RBW shall be ≤ channel spacing and where possible RBW should be set >> 1 / T, where T is the expected dwell time per channel.
3. VBW ≥ RBW
4. Sweep time = As necessary to capture the entire dwell time per hopping channel
5. Detector = Peak
6. Trace mode = Free run
7. Use the marker-delta function to determine the transmit time per hop. If this value varies with different modes of operation (data rate, modulation format, number of hopping channels, etc.), then repeat this test for each variation in transmit time. An oscilloscope may be used instead of a spectrum analyzer. The EUT shall show compliance with the appropriate regulatory limit for the number of hopping channels. A plot of the data shall be included in the test report.

6.6.4. Test Setup



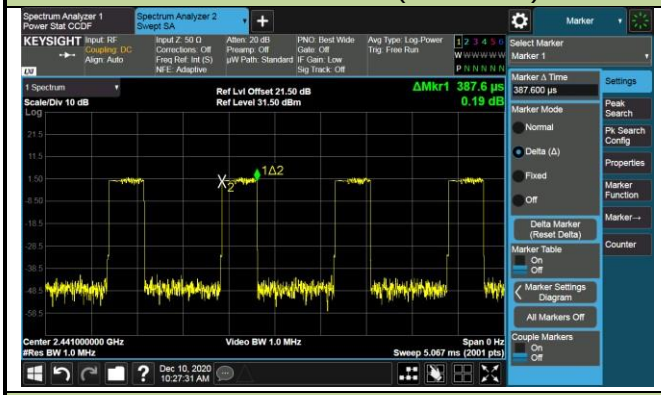
6.6.5. Test Result

Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	SIP-TR3	Test Date	2020/11/10~2020/12/10

Test Mode	Channel No.	Frequency (MHz)	Hops Over Occupancy Time (Hops)	Packet Transfer Time (ms)	Time of Occupancy (ms)	Limit (ms)	Result
3DH1	39	2441	320	0.388	123.2	≤ 400	Pass
3DH3	39	2441	160	1.635	261.6	≤ 400	Pass
3DH5	39	2441	107	2.885	308.7	≤ 400	Pass

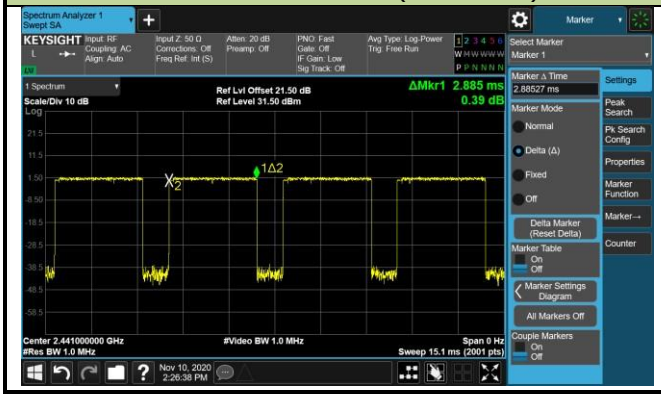
Packet Transfer Time

3DH1 - Channel 39 (2441MHz)



3DH3 - Channel 39 (2441MHz)

3DH5 - Channel 39 (2441MHz)



Note 1: According the Bluetooth Standard Specification, the nominal hop rate is 1600 hops/s. All Bluetooth unit participating in the piconet are time and hop synchronized to the channel.

Hops Over Occupancy Time in 31.6s for 3DH1 = 1600 / 2 / 79 * 31.6 = 320.

Hops Over Occupancy Time in 31.6s for 3DH3 = 1600 / 4 / 79 * 31.6 = 160.

Hops Over Occupancy Time in 31.6s for 3DH5 = 1600 / 6 / 79 * 31.6 = 107.

Note 2: Time of Occupancy = Packet Transfer Time * Hops Over Occupancy Time in 31.6s.

6.7. Band-edge Compliance Measurement

6.7.1. Test Limit

The maximum permissible emission level is 20dBc. Any emissions were lying outside of the emission bandwidth and in authorized band edges to a field strength limit specified in Section 15.209 of the Title 47 CFR.

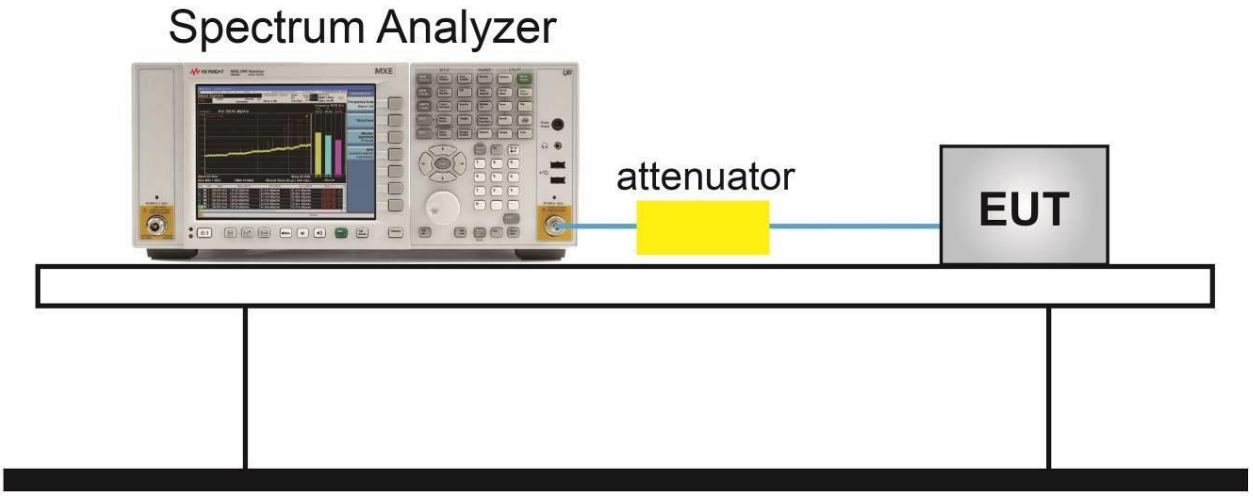
6.7.2. Test Procedure Used

ANSI C63.10-2013 - Section 6.10.4

6.7.3. Test Setting

1. Span = Wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation.
2. RBW = 100kHz
3. VBW = 300kHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Allow the trace to stabilize. Set the marker on the emission at the band edge, or on the highest modulation product outside of the band, if this level is greater than that at the band edge. Enable the marker-delta function, than use the marker-to-peak function to move the marker to the peak of the in-band emission.

6.7.4. Test Setup



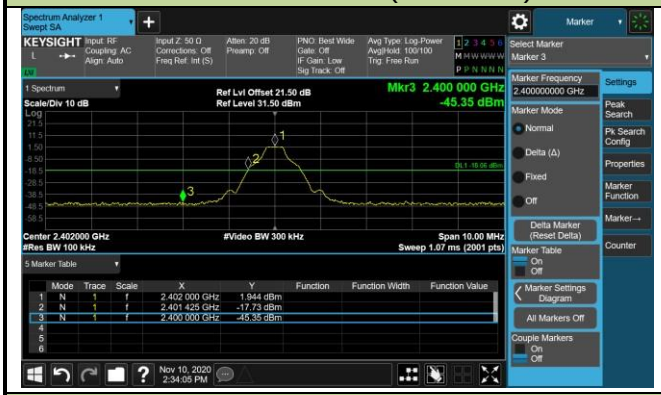
6.7.5. Test Result

Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	SIP-TR3	Test Date	2020/11/10

Test Mode	Channel No.	Frequency (MHz)	Limit	Result
DH5	00	2402	20dBc	Pass
DH5	78	2480	20dBc	Pass
2DH5	00	2402	20dBc	Pass
2DH5	78	2480	20dBc	Pass
3DH5	00	2402	20dBc	Pass
3DH5	78	2480	20dBc	Pass

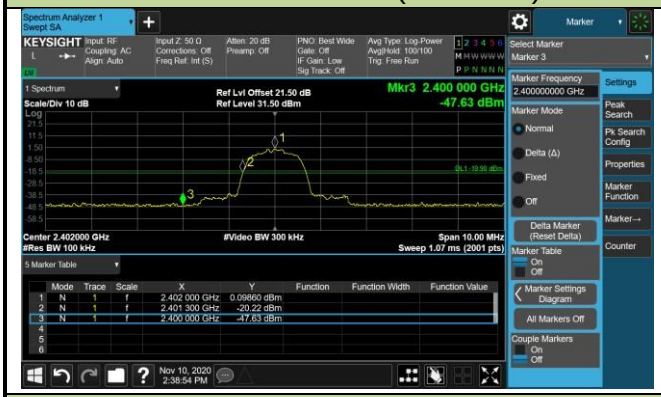
Band-edge Compliance

DH5 - Channel 00 (2402MHz)



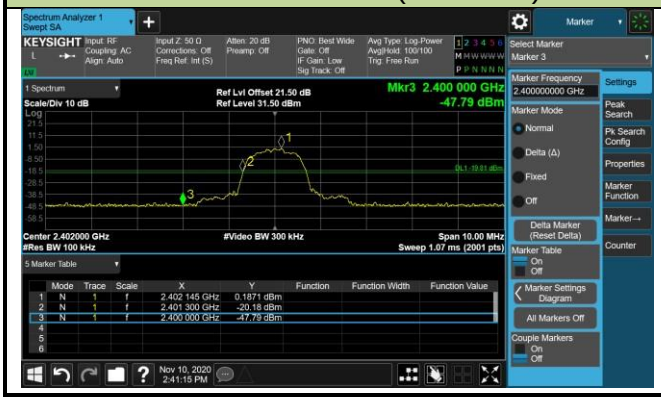
DH5 - Channel 78 (2480MHz)

2DH5 - Channel 00 (2402MHz)

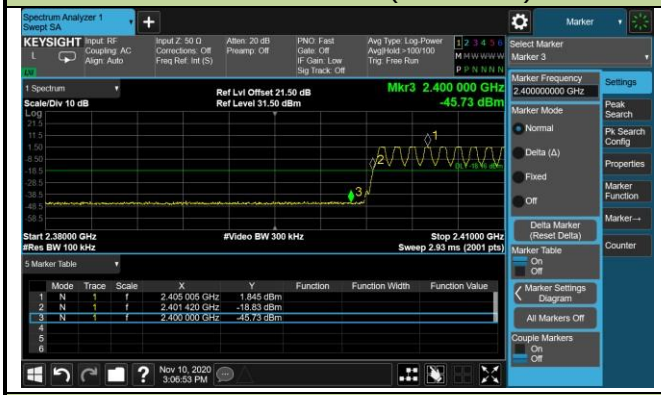
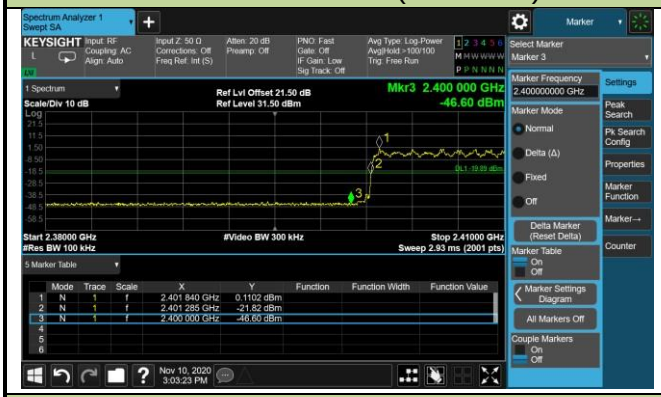
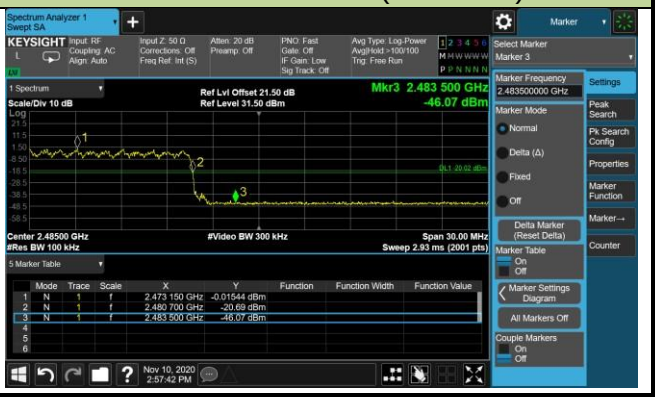


2DH5 - Channel 78 (2480MHz)

3DH5 - Channel 00 (2402MHz)



3DH5 - Channel 78 (2480MHz)

Operation Frequency Range of 20dB Bandwidth within Hopping Mode	
DH5 - Channel 00 (2402MHz)	DH5 - Channel 78 (2480MHz)
	
2DH5 - Channel 00 (2402MHz)	2DH5 - Channel 78 (2480MHz)
	
3DH5 - Channel 00 (2402MHz)	3DH5 - Channel 78 (2480MHz)
	

6.8. Conducted Spurious Emissions Measurement

6.8.1. Test Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

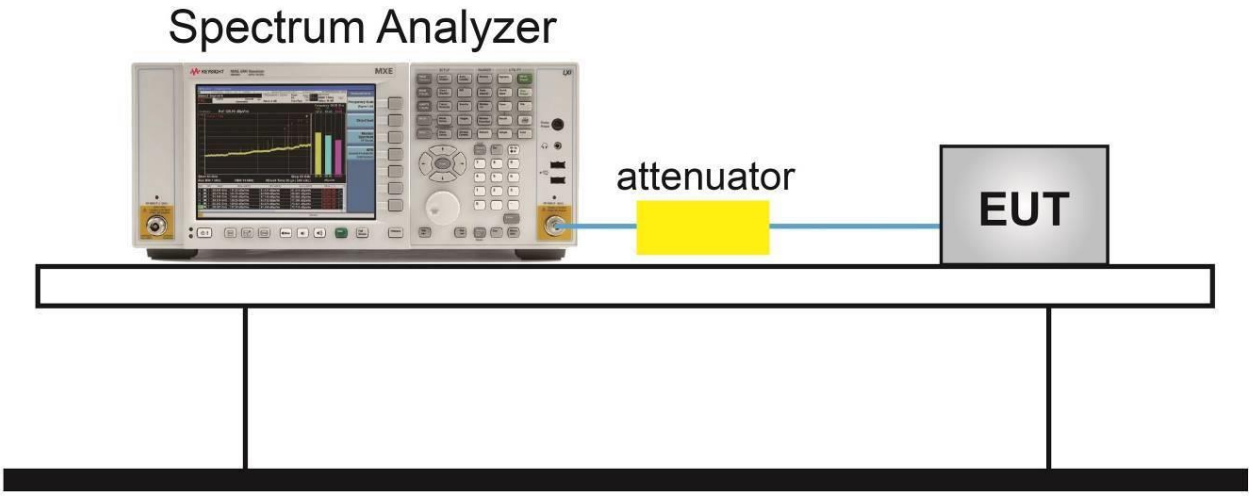
6.8.2. Test Procedure Used

ANSI C63.10-2013 - Section 7.8.8

6.8.3. Test Setting

1. Span = Wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
2. RBW = 100kHz
3. VBW = 300kHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize
8. Set the marker on the peak of any spurious emission recorded. The level displayed must comply with the limit specified in this section.

6.8.4. Test Setup



6.8.5. Test Result

Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	SIP-TR3	Test Date	2020/11/13

Test Mode	Channel No.	Frequency (MHz)	Limit (MHz)	Result
DH5	00	2402	20dBc	Pass
DH5	39	2441	20dBc	Pass
DH5	78	2480	20dBc	Pass
2DH5	00	2402	20dBc	Pass
2DH5	39	2441	20dBc	Pass
2DH5	78	2480	20dBc	Pass
3DH5	00	2402	20dBc	Pass
3DH5	39	2441	20dBc	Pass
3DH5	78	2480	20dBc	Pass

DH5 Conducted Spurious Emissions	
Channel 00 (2402MHz)	Channel 39 (2441MHz)
	
Channel 78 (2480MHz)	
	

2DH5 Conducted Spurious Emissions	
Channel 00 (2402MHz)	Channel 39 (2441MHz)
	
Channel 78 (2480MHz)	
	

3DH5 Conducted Spurious Emissions	
Channel 00 (2402MHz)	Channel 39 (2441MHz)
	
Channel 78 (2480MHz)	
	

6.9. Radiated Spurious Emission Measurement

6.9.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency (MHz)	Field Strength (μV/m)	Measured Distance (m)
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.9.2. Test Procedure Used

ANSI C63.10-2013 - Section 6.3 & 6.4 & 6.5 & 6.6

6.9.3. Test Setting

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = As specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = Auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize

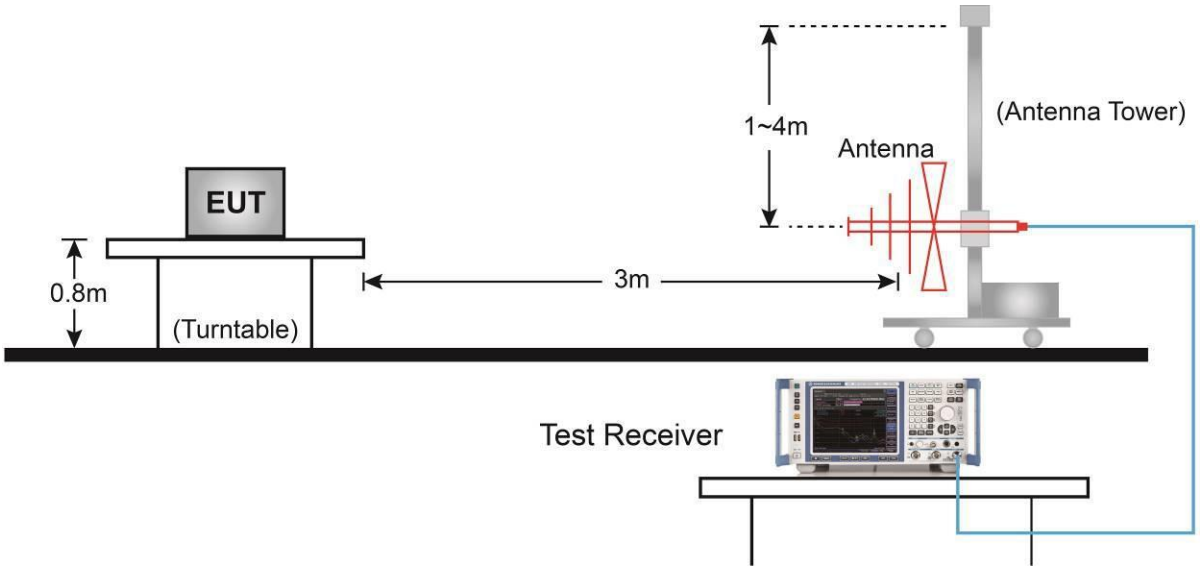
Average Measurements above 1GHz (Method VB)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle ≥ 98%, set VBW = 10Hz

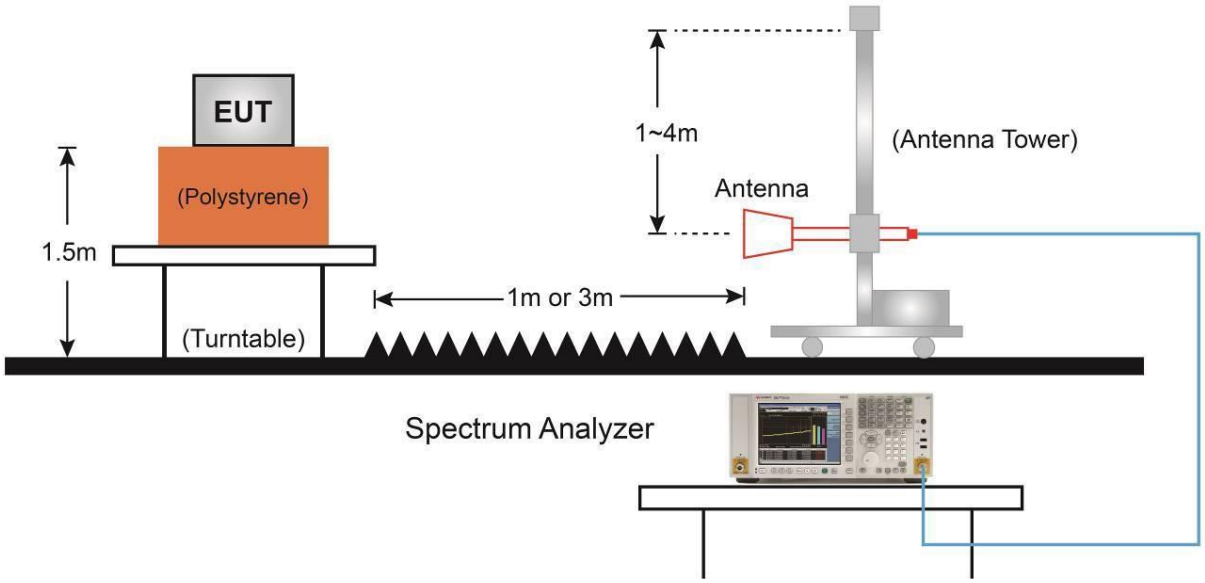
   If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration
4. Detector = Peak
5. Sweep time = Auto
6. Trace mode = Max hold
7. Trace was allowed to stabilize

6.9.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



6.9.5. Test Result

Product	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12
Test Mode	DH5	Test Channel	00
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11055.5	50.0	-3.5	46.5	74.0	-27.5	Peak	Horizontal
	12194.5	50.4	-3.3	47.1	74.0	-26.9	Peak	Horizontal
*	14991.0	48.3	2.2	50.5	74.0	-23.5	Peak	Horizontal
*	16572.0	48.4	4.5	52.9	74.0	-21.1	Peak	Horizontal
	10741.0	49.9	-3.0	46.9	74.0	-27.1	Peak	Vertical
	12109.5	50.3	-3.1	47.2	74.0	-26.8	Peak	Vertical
*	14897.5	49.2	2.3	51.5	74.0	-22.5	Peak	Vertical
*	16827.0	47.7	4.8	52.5	74.0	-21.5	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12
Test Mode	DH5	Test Channel	39
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11081.0	50.4	-3.2	47.2	74.0	-26.8	Peak	Horizontal
	11557.0	51.0	-3.8	47.2	74.0	-26.8	Peak	Horizontal
*	14880.5	48.0	2.3	50.3	74.0	-23.7	Peak	Horizontal
*	16563.5	47.8	4.5	52.3	74.0	-21.7	Peak	Horizontal
	11021.5	50.4	-3.4	47.0	74.0	-27.0	Peak	Vertical
	11616.5	50.7	-3.8	46.9	74.0	-27.1	Peak	Vertical
*	13971.0	48.6	0.8	49.4	74.0	-24.6	Peak	Vertical
*	16589.0	48.5	4.2	52.7	74.0	-21.3	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12
Test Mode	DH5	Test Channel	78
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	10792.0	50.2	-3.2	47.0	74.0	-27.0	Peak	Horizontal
	12305.0	51.2	-3.0	48.2	74.0	-25.8	Peak	Horizontal
*	14166.5	48.8	1.0	49.8	74.0	-24.2	Peak	Horizontal
*	17371.0	48.0	5.5	53.5	74.0	-20.5	Peak	Horizontal
	10783.5	50.5	-3.4	47.1	74.0	-26.9	Peak	Vertical
	11557.0	51.2	-3.8	47.4	74.0	-26.6	Peak	Vertical
*	14209.0	48.9	1.0	49.9	74.0	-24.1	Peak	Vertical
*	16801.5	48.1	4.7	52.8	74.0	-21.2	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12
Test Mode	2DH5	Test Channel	00
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11038.5	50.6	-3.5	47.1	74.0	-26.9	Peak	Horizontal
	11778.0	50.1	-3.4	46.7	74.0	-27.3	Peak	Horizontal
*	14243.0	48.9	1.3	50.2	74.0	-23.8	Peak	Horizontal
*	16453.0	48.0	4.3	52.3	74.0	-21.7	Peak	Horizontal
	10911.0	49.9	-3.1	46.8	74.0	-27.2	Peak	Vertical
	11616.5	50.8	-3.8	47.0	74.0	-27.0	Peak	Vertical
*	14192.0	48.8	1.0	49.8	74.0	-24.2	Peak	Vertical
*	16546.5	48.2	4.3	52.5	74.0	-21.5	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12
Test Mode	2DH5	Test Channel	39
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11166.0	51.0	-3.6	47.4	74.0	-26.6	Peak	Horizontal
	11727.0	51.1	-3.7	47.4	74.0	-26.6	Peak	Horizontal
*	14804.0	48.8	2.5	51.3	74.0	-22.7	Peak	Horizontal
*	16869.5	47.8	4.9	52.7	74.0	-21.3	Peak	Horizontal
	11064.0	50.0	-3.3	46.7	74.0	-27.3	Peak	Vertical
	12313.5	50.3	-3.1	47.2	74.0	-26.8	Peak	Vertical
*	13622.5	49.3	-0.7	48.6	74.0	-25.4	Peak	Vertical
*	16572.0	48.0	4.5	52.5	74.0	-21.5	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12
Test Mode	2DH5	Test Channel	78
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11370.0	51.2	-3.6	47.6	74.0	-26.4	Peak	Horizontal
	12092.5	50.4	-3.3	47.1	74.0	-26.9	Peak	Horizontal
*	14243.0	49.0	1.3	50.3	74.0	-23.7	Peak	Horizontal
*	17294.5	48.2	4.7	52.9	74.0	-21.1	Peak	Horizontal
	11242.5	51.2	-3.8	47.4	74.0	-26.6	Peak	Vertical
	11659.0	50.5	-3.2	47.3	74.0	-26.7	Peak	Vertical
*	14923.0	48.0	2.7	50.7	74.0	-23.3	Peak	Vertical
*	16776.0	47.6	5.1	52.7	74.0	-21.3	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12
Test Mode	3DH5	Test Channel	00
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	10970.5	50.0	-3.2	46.8	74.0	-27.2	Peak	Horizontal
	11990.5	50.4	-3.2	47.2	74.0	-26.8	Peak	Horizontal
*	13988.0	49.1	0.6	49.7	74.0	-24.3	Peak	Horizontal
*	17294.5	48.4	4.7	53.1	74.0	-20.9	Peak	Horizontal
	11072.5	50.3	-3.3	47.0	74.0	-27.0	Peak	Vertical
	11701.5	50.5	-3.6	46.9	74.0	-27.1	Peak	Vertical
*	14880.5	48.0	2.3	50.3	74.0	-23.7	Peak	Vertical
*	17362.5	48.4	5.0	53.4	74.0	-20.6	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12
Test Mode	3DH5	Test Channel	39
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11336.0	50.9	-3.9	47.0	74.0	-27.0	Peak	Horizontal
	11795.0	51.0	-3.9	47.1	74.0	-26.9	Peak	Horizontal
*	13945.5	48.9	0.4	49.3	74.0	-24.7	Peak	Horizontal
*	17388.0	47.9	5.0	52.9	74.0	-21.1	Peak	Horizontal
	11055.5	50.3	-3.5	46.8	74.0	-27.2	Peak	Vertical
	12186.0	50.9	-3.3	47.6	74.0	-26.4	Peak	Vertical
*	14311.0	49.1	1.5	50.6	74.0	-23.4	Peak	Vertical
*	16878.0	47.9	5.0	52.9	74.0	-21.1	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/12
Test Mode	3DH5	Test Channel	78
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	11489.0	50.1	-3.1	47.0	74.0	-27.0	Peak	Horizontal
	12143.5	50.3	-3.5	46.8	74.0	-27.2	Peak	Horizontal
*	14294.0	48.3	1.7	50.0	74.0	-24.0	Peak	Horizontal
*	17192.5	48.3	4.6	52.9	74.0	-21.1	Peak	Horizontal
	11608.0	51.6	-3.6	48.0	74.0	-26.0	Peak	Vertical
	12203.0	50.3	-3.2	47.1	74.0	-26.9	Peak	Vertical
*	14923.0	48.3	2.7	51.0	74.0	-23.0	Peak	Vertical
*	16776.0	47.5	5.1	52.6	74.0	-21.4	Peak	Vertical

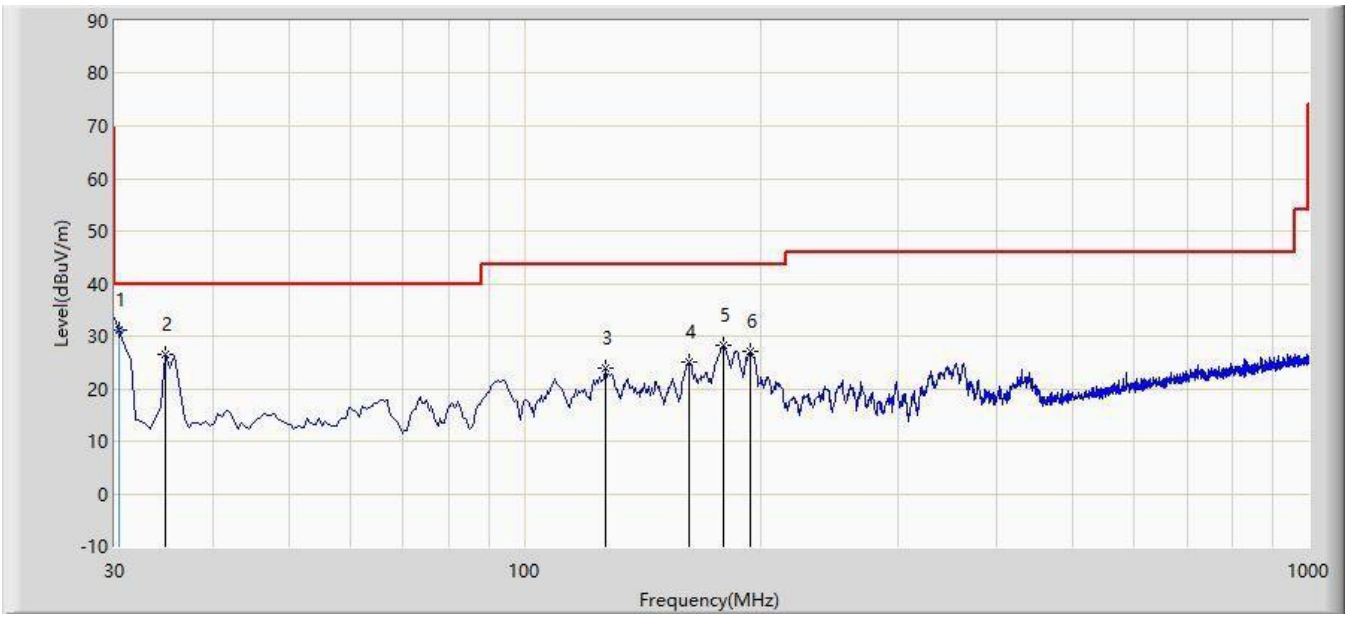
Note 1: “*” means test frequency didn't fall into restricted band.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The Result of Radiated Emission below 1GHz:

Site: SIP-AC3	Time: 2020/11/24 - 20:43
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_VULB 9168 _20-2000MHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 Mode at Channel 2480MHz	



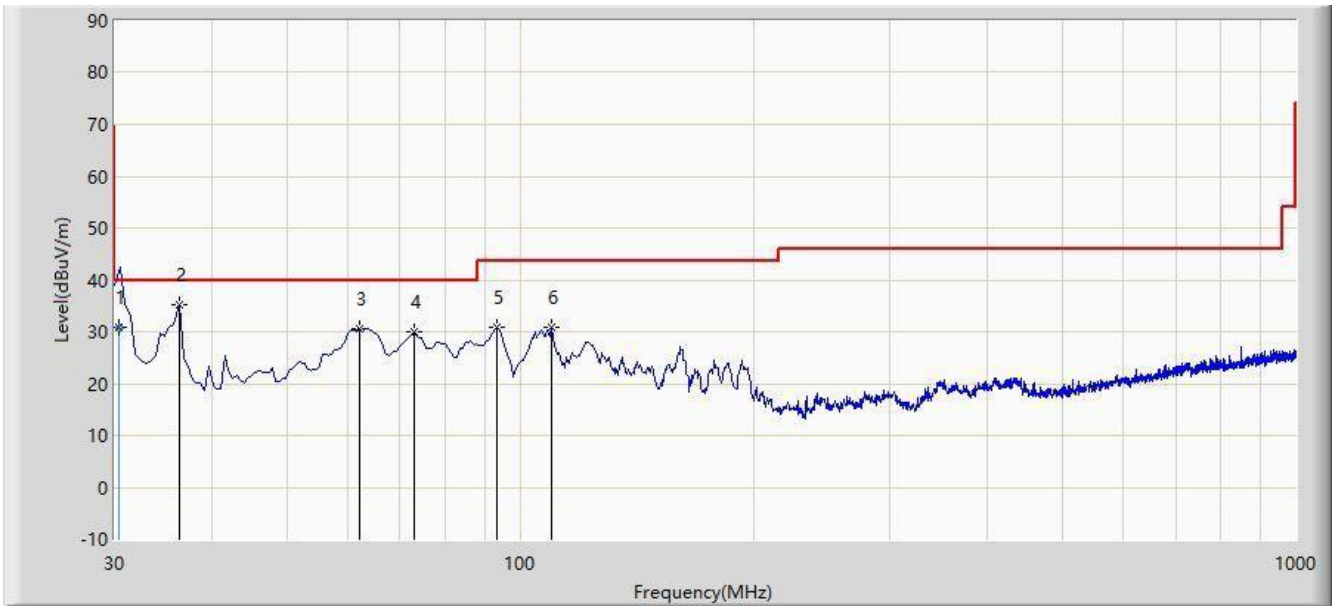
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	30.450	31.235	17.680	-8.765	40.000	13.555	QP
2			34.850	26.636	12.856	-13.364	40.000	13.780	PK
3			127.000	23.846	10.552	-19.654	43.500	13.294	PK
4			161.920	25.210	10.497	-18.290	43.500	14.713	PK
5			179.380	28.234	15.660	-15.266	43.500	12.574	PK
6			194.415	27.167	16.122	-16.333	43.500	11.045	PK

Note 1: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site: SIP-AC3	Time: 2020/11/21 - 12:59
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_VULB 9168 _20-2000MHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 Mode at Channel 2480MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor	Type
1			30.336	30.849	17.300	-9.151	40.000	13.549	QP
2		*	36.305	35.078	21.150	-4.922	40.000	13.928	PK
3			62.010	30.538	17.708	-9.462	40.000	12.830	PK
4			73.165	29.922	19.077	-10.078	40.000	10.845	PK
5			93.535	30.797	20.530	-12.703	43.500	10.268	PK
6			110.025	30.952	19.190	-12.548	43.500	11.762	PK

Note 1: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

6.10. Radiated Restricted Band Edge Measurement

6.10.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1] 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
8.41425 - 8.41475	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	([2])
13.36 - 13.41	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency (MHz)	Field Strength (μV/m)	Measured Distance (m)
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.10.2. Test Procedure Used

ANSI C63.10-2013 - Section 6.3 & 6.6 & 6.10

6.10.3. Test Setting

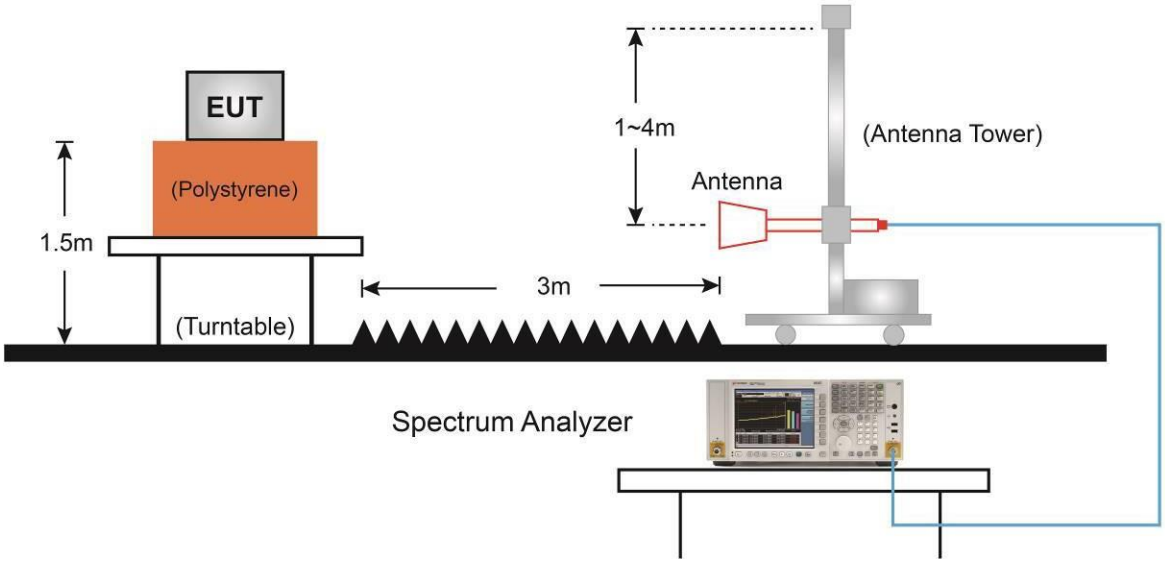
Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

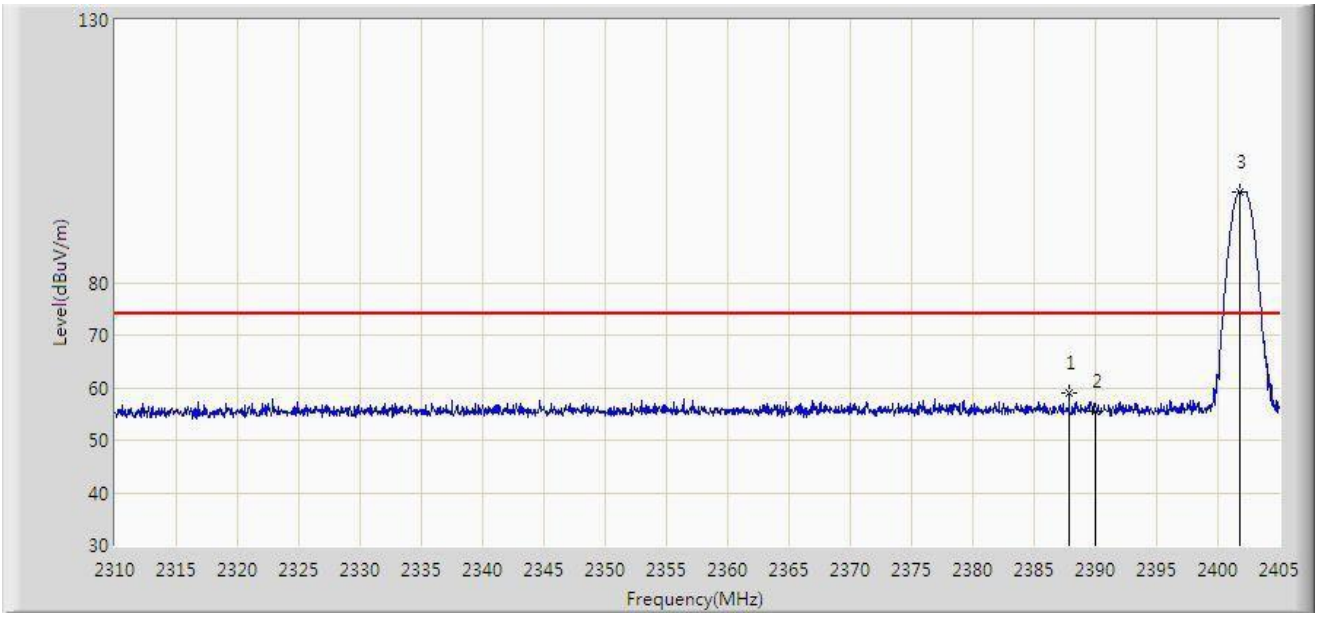
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle ≥ 98%, set VBW = 10Hz
4. If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration
5. Detector = Peak
6. Sweep time = Auto
7. Trace mode = Max hold
8. Trace was allowed to stabilize

6.10.4. Test Setup



6.10.5. Test Result

Site: SIP-AC3	Time: 2020/11/10 - 16:22
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-DH5 at channel 2402MHz	

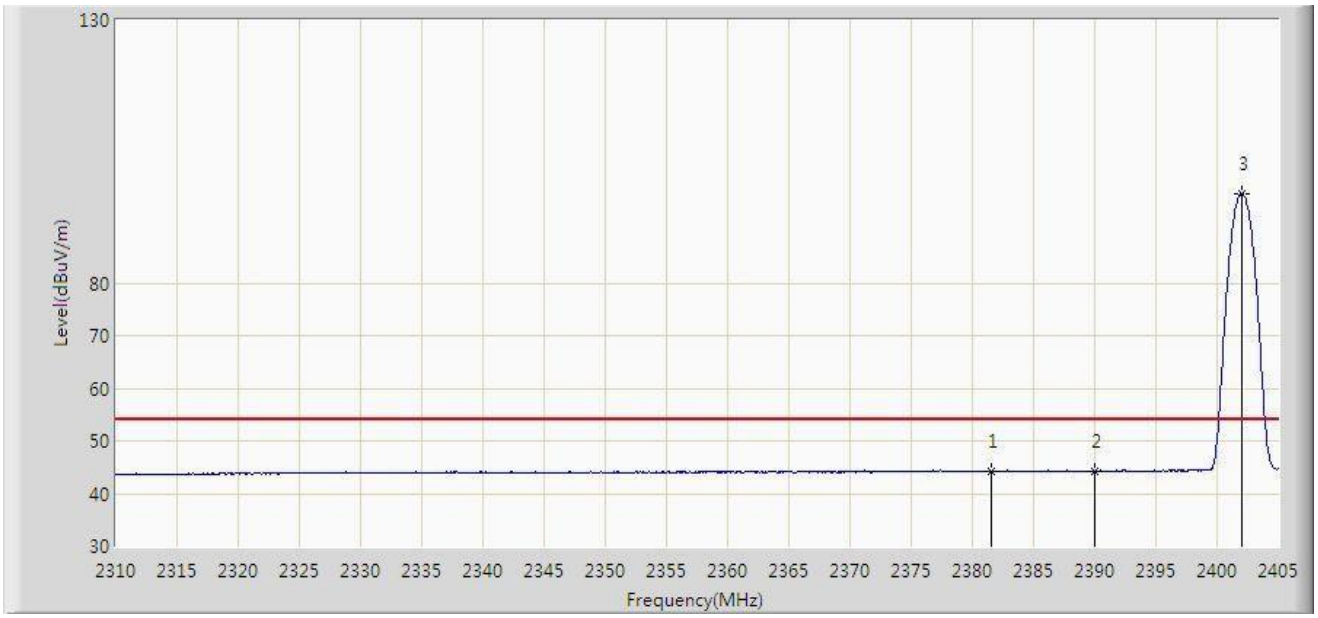


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2387.853	59.095	27.543	-14.905	74.000	31.552	PK
2			2390.000	55.424	23.880	-18.576	74.000	31.544	PK
3		*	2401.770	97.291	65.646	N/A	N/A	31.645	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 16:30
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-DH5 at channel 2402MHz	

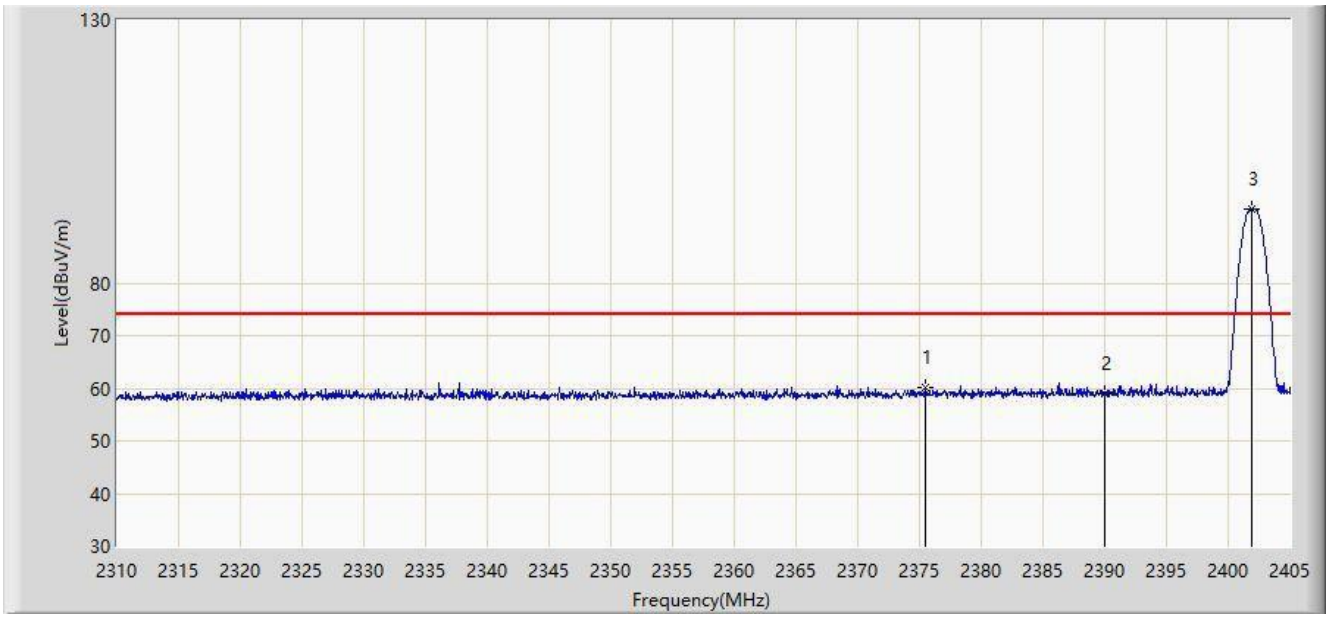


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2381.583	44.269	12.693	-9.731	54.000	31.575	AV
2			2390.000	44.254	12.710	-9.746	54.000	31.544	AV
3		*	2402.008	97.007	65.359	N/A	N/A	31.648	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/12/10 - 16:31
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-DH5 at channel 2402MHz	

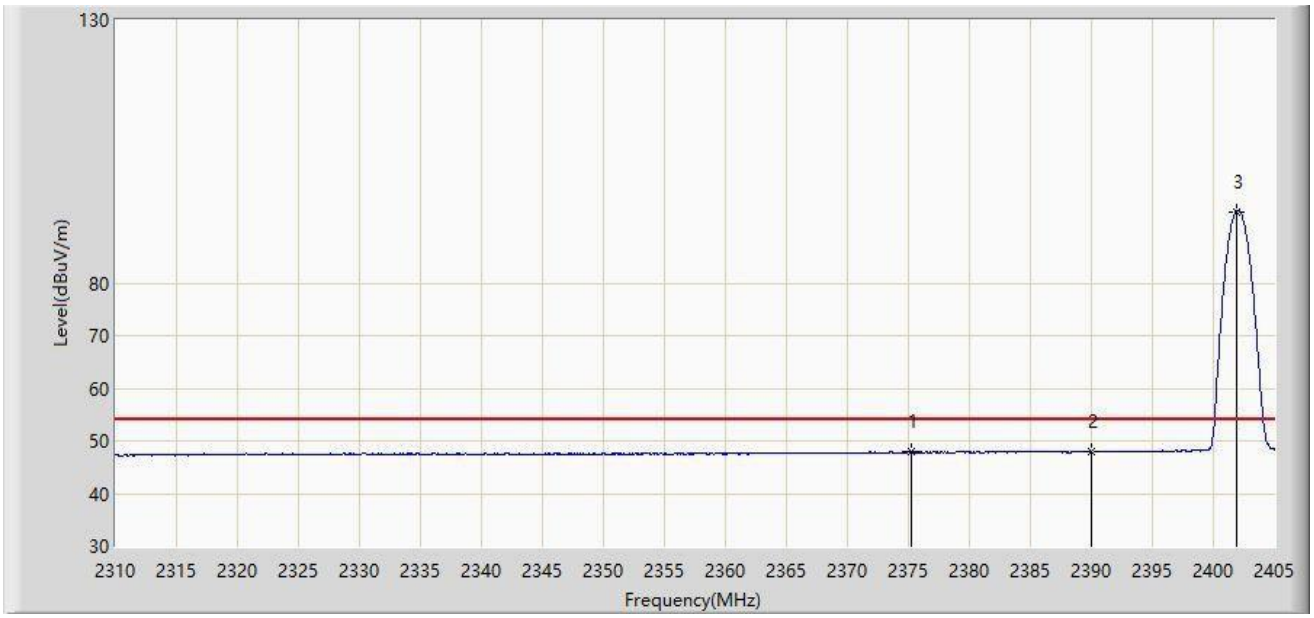


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2375.502	60.286	28.704	-13.714	74.000	31.583	PK
2			2390.000	58.966	27.422	-15.034	74.000	31.544	PK
3		*	2401.865	94.157	62.511	N/A	N/A	31.646	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/12/10 - 16:33
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-DH5 at channel 2402MHz	

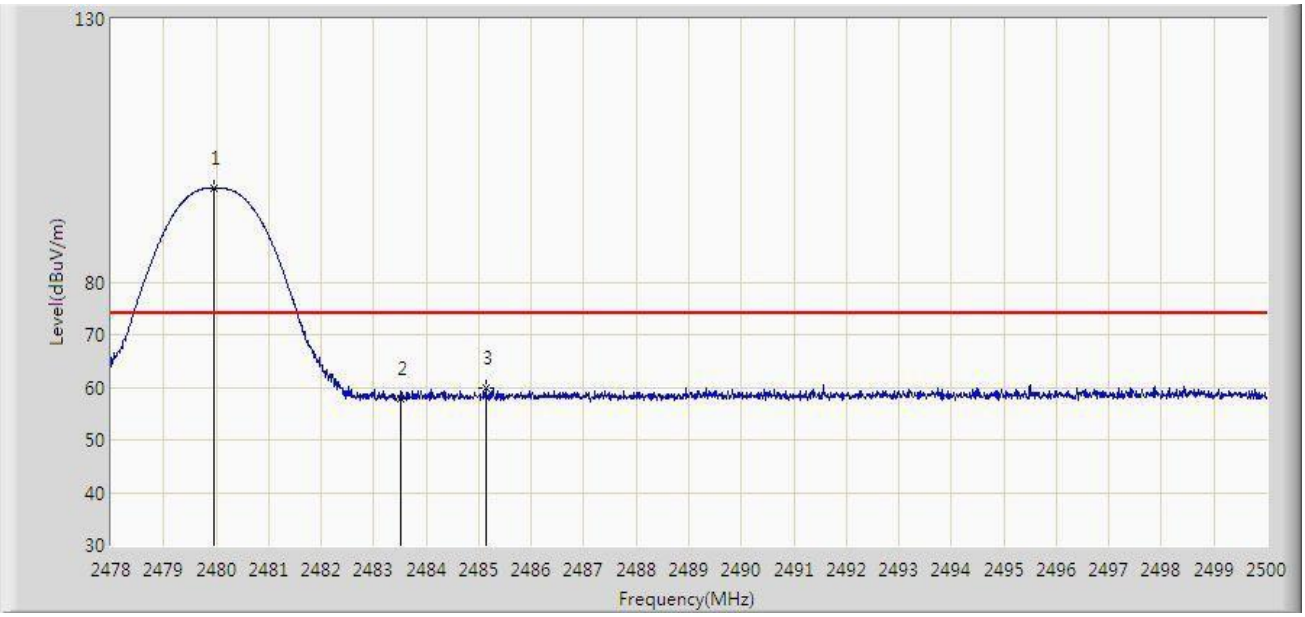


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2375.265	47.917	16.337	-6.083	54.000	31.580	AV
2			2390.000	47.918	16.374	-6.082	54.000	31.544	AV
3		*	2401.865	93.572	61.926	N/A	N/A	31.646	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 16:36
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-DH5 at channel 2480MHz	

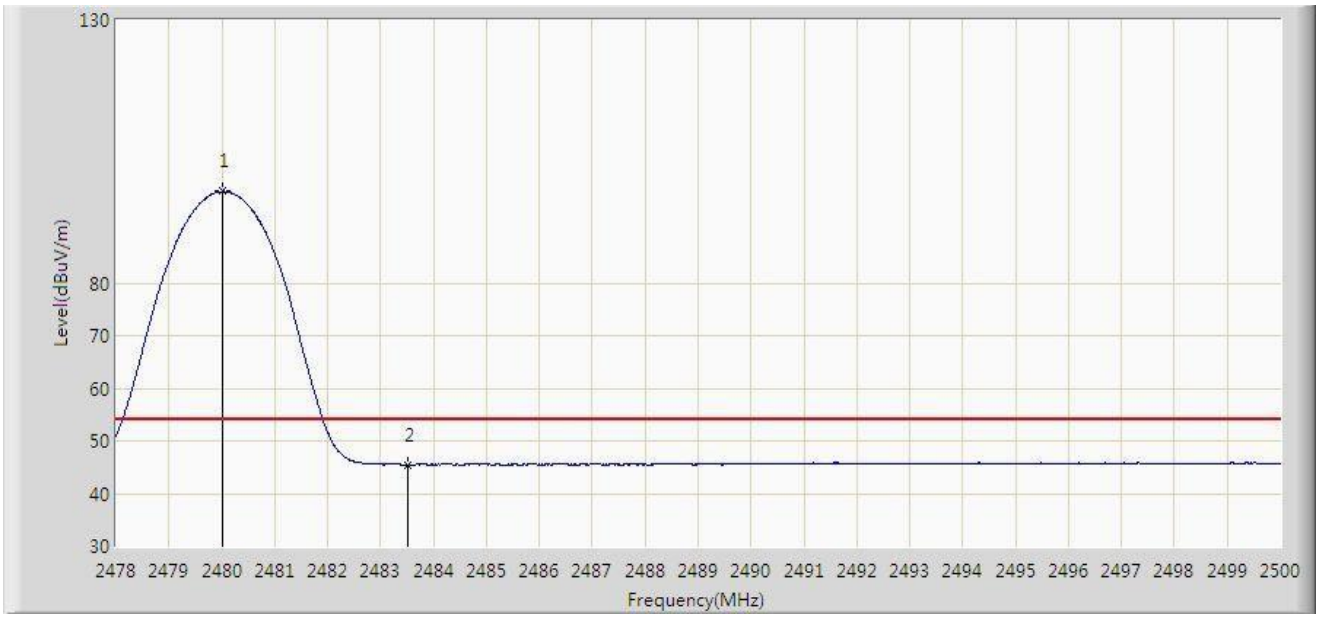


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.969	97.732	65.602	N/A	N/A	32.130	PK
2			2483.500	57.965	25.767	-16.035	74.000	32.197	PK
3			2485.139	59.902	27.673	-14.098	74.000	32.229	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 16:40
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-DH5 at channel 2480MHz	

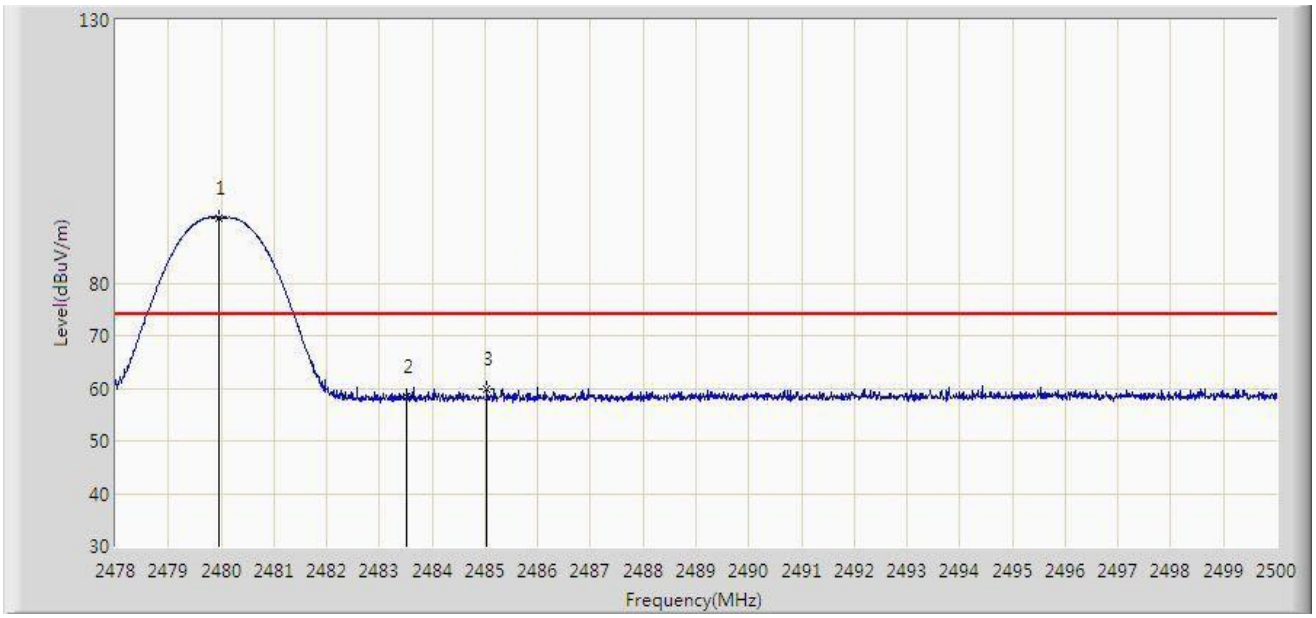


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.002	97.392	65.262	N/A	N/A	32.131	AV
2			2483.500	45.394	13.196	-8.606	54.000	32.197	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 16:41
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-DH5 at channel 2480MHz	

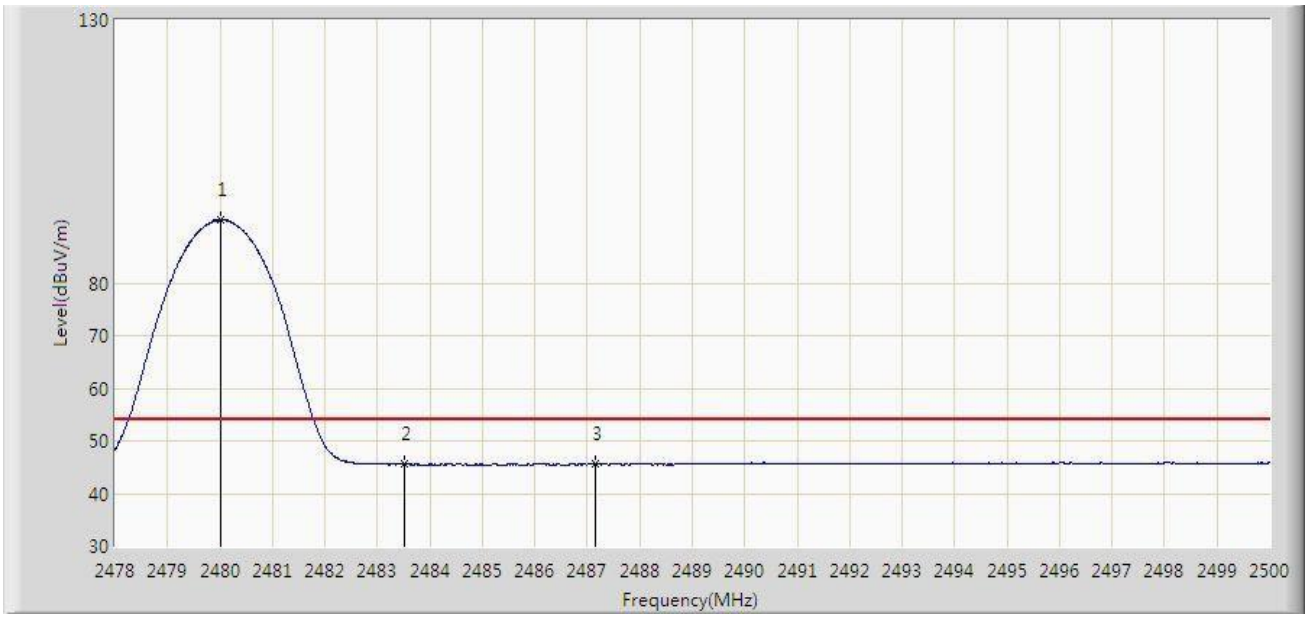


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.969	92.455	60.325	N/A	N/A	32.130	PK
2			2483.500	58.485	26.287	-15.515	74.000	32.197	PK
3			2485.040	59.932	27.704	-14.068	74.000	32.228	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 16:44
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-DH5 at channel 2480MHz	

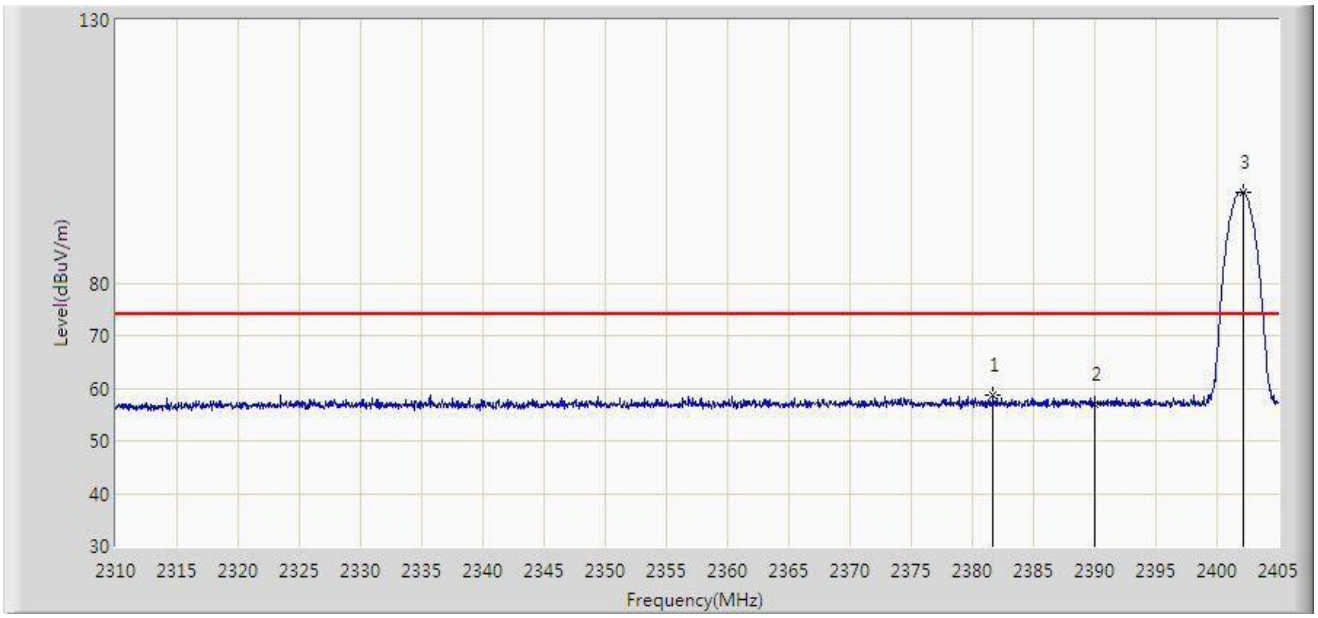


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.002	91.936	59.806	N/A	N/A	32.131	AV
2			2483.500	45.551	13.353	-8.449	54.000	32.197	AV
3			2487.141	45.697	13.429	-8.303	54.000	32.268	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 16:45
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-2DH5 at channel 2402MHz	

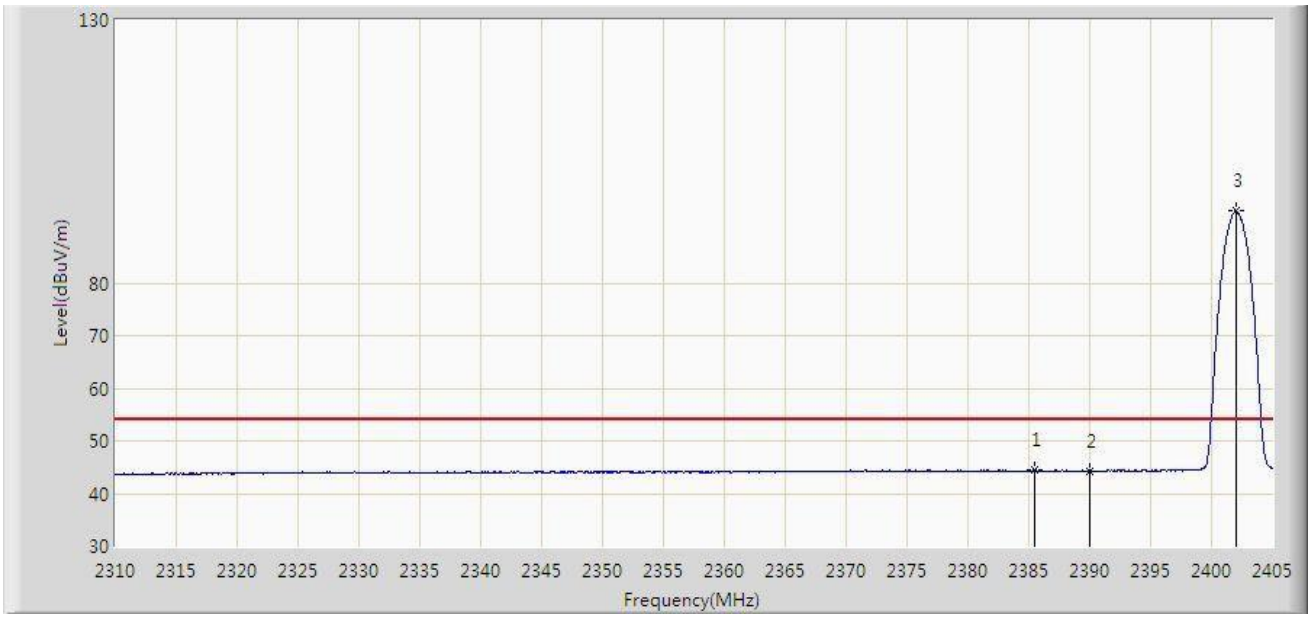


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2381.677	58.830	27.255	-15.170	74.000	31.575	PK
2			2390.000	56.854	25.310	-17.146	74.000	31.544	PK
3		*	2402.150	97.339	65.689	N/A	N/A	31.650	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 16:49
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-2DH5 at channel 2402MHz	

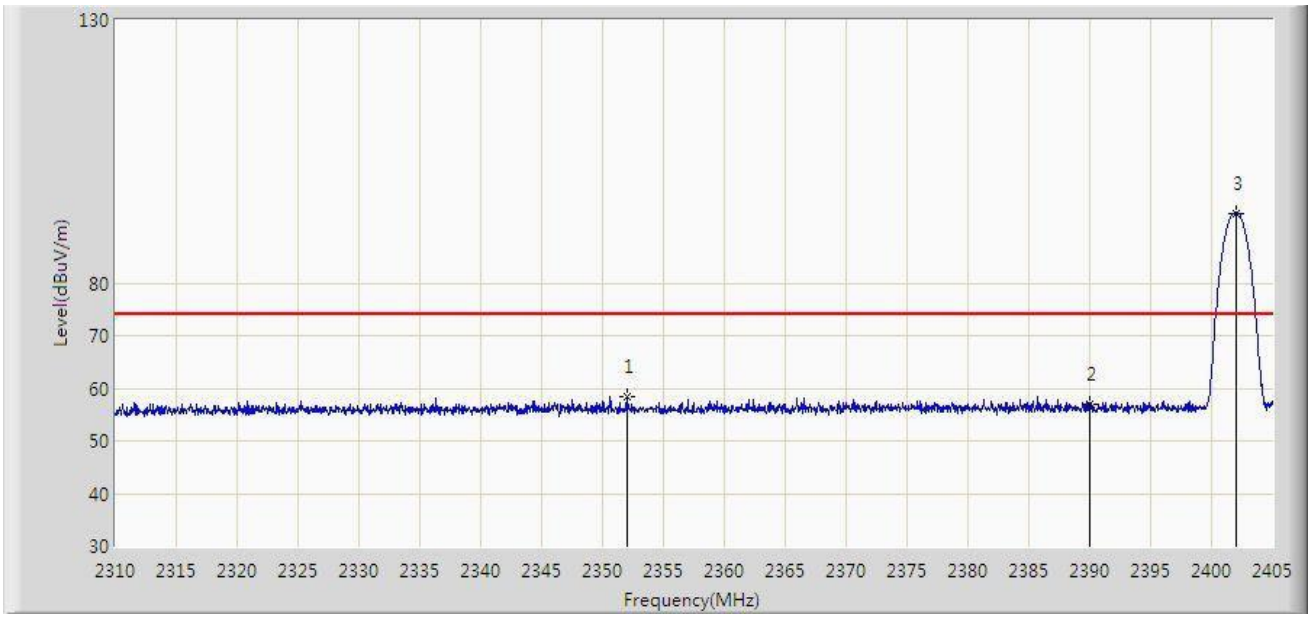


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2385.525	44.452	12.891	-9.548	54.000	31.561	AV
2			2390.000	44.244	12.700	-9.756	54.000	31.544	AV
3		*	2402.008	93.653	62.005	N/A	N/A	31.648	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 16:52
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-2DH5 at channel 2402MHz	

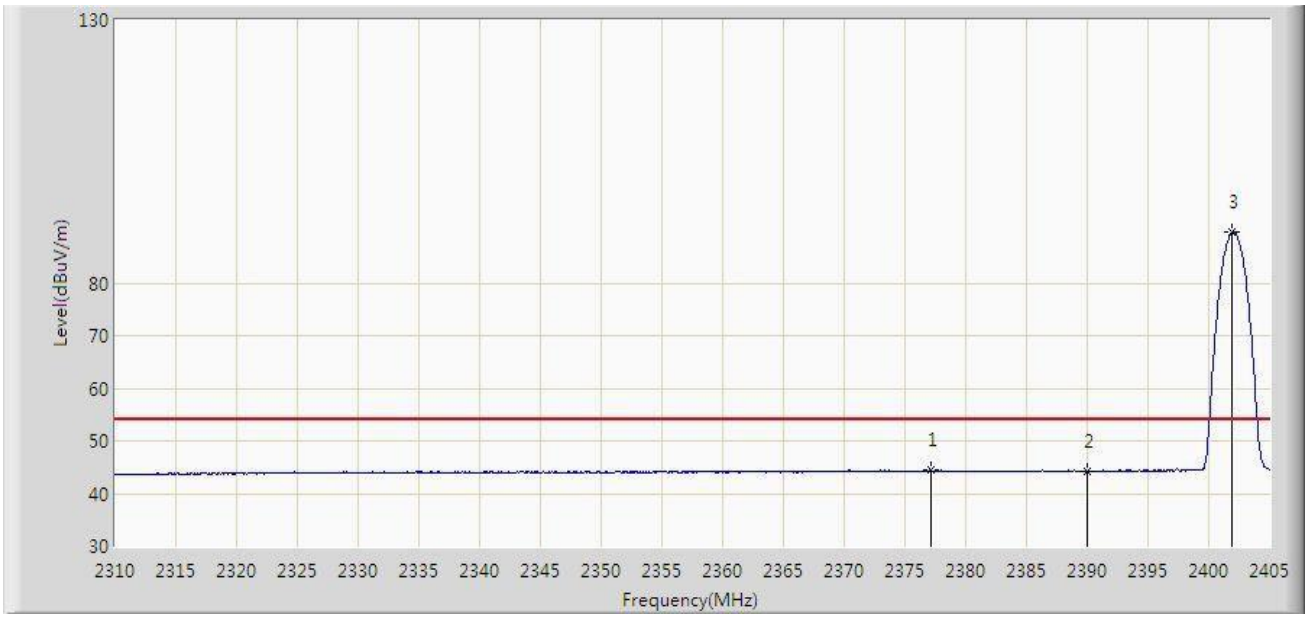


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2351.990	58.427	26.983	-15.573	74.000	31.444	PK
2			2390.000	56.908	25.364	-17.092	74.000	31.544	PK
3		*	2402.008	93.237	61.589	N/A	N/A	31.648	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 16:55
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-2DH5 at channel 2402MHz	

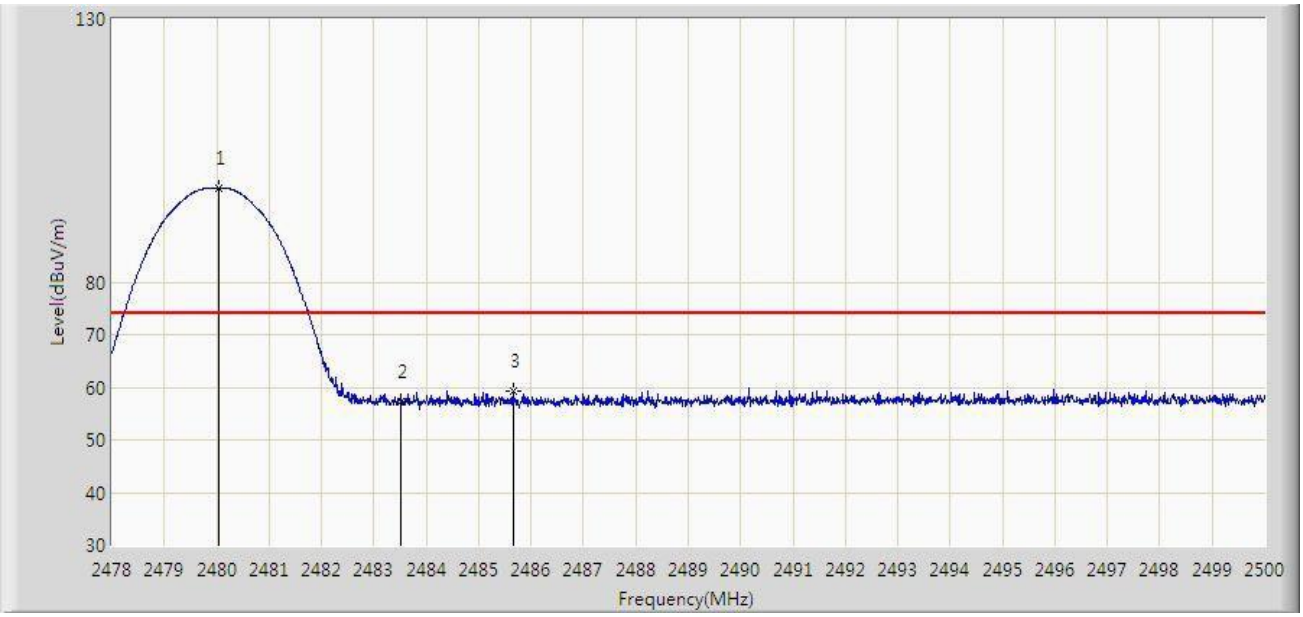


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2377.117	44.463	12.870	-9.537	54.000	31.592	AV
2			2390.000	44.207	12.663	-9.793	54.000	31.544	AV
3		*	2401.865	89.575	57.929	N/A	N/A	31.646	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 16:56
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-2DH5 at channel 2480MHz	

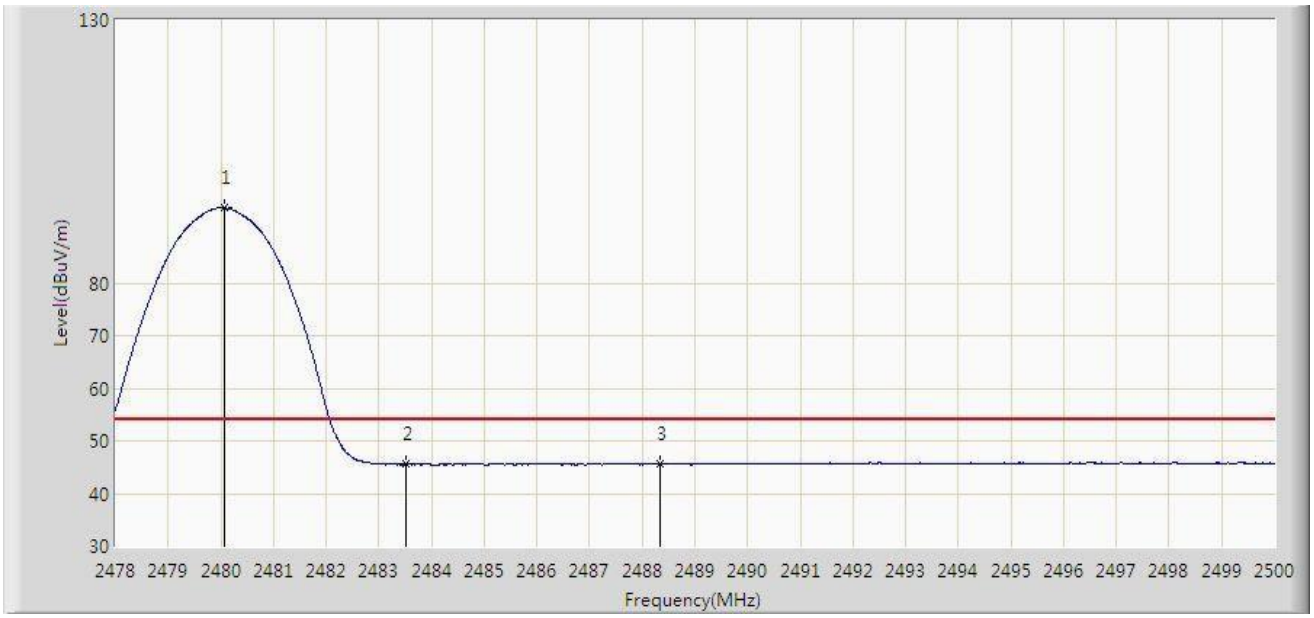


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.035	97.865	65.734	N/A	N/A	32.131	PK
2			2483.500	57.368	25.170	-16.632	74.000	32.197	PK
3			2485.656	59.149	26.910	-14.851	74.000	32.239	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 17:03
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-2DH5 at channel 2480MHz	

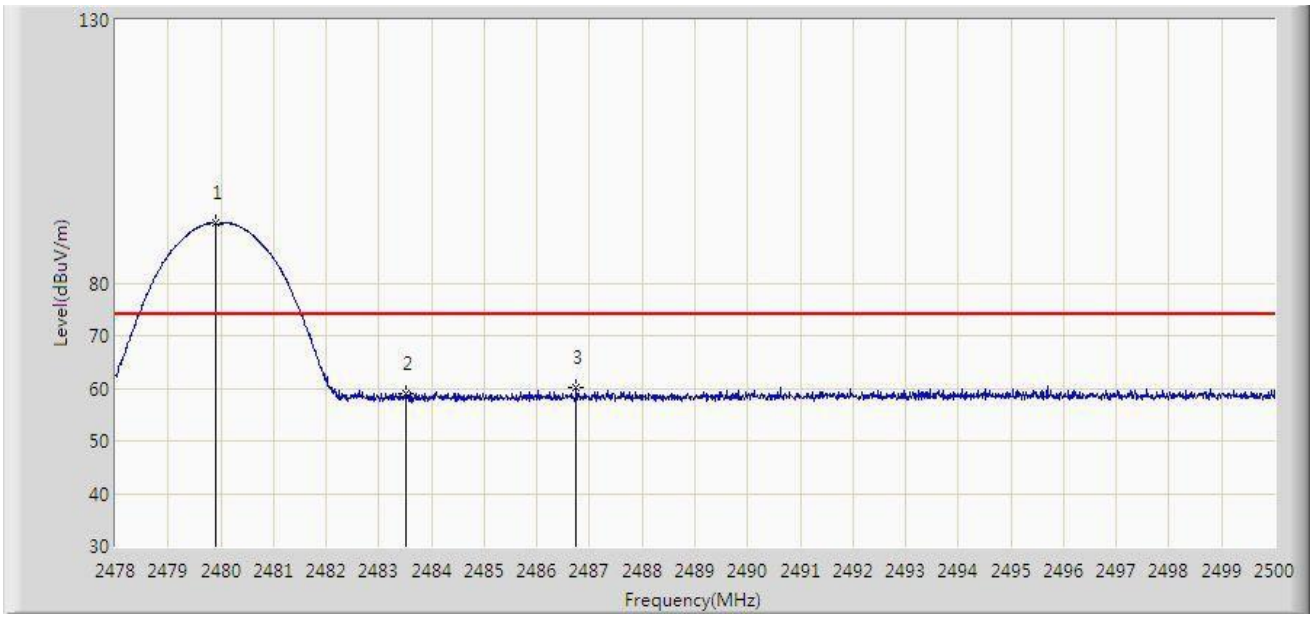


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.079	94.250	62.118	N/A	N/A	32.132	AV
2			2483.500	45.552	13.354	-8.448	54.000	32.197	AV
3			2488.340	45.686	13.395	-8.314	54.000	32.291	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 17:04
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-2DH5 at channel 2480MHz	

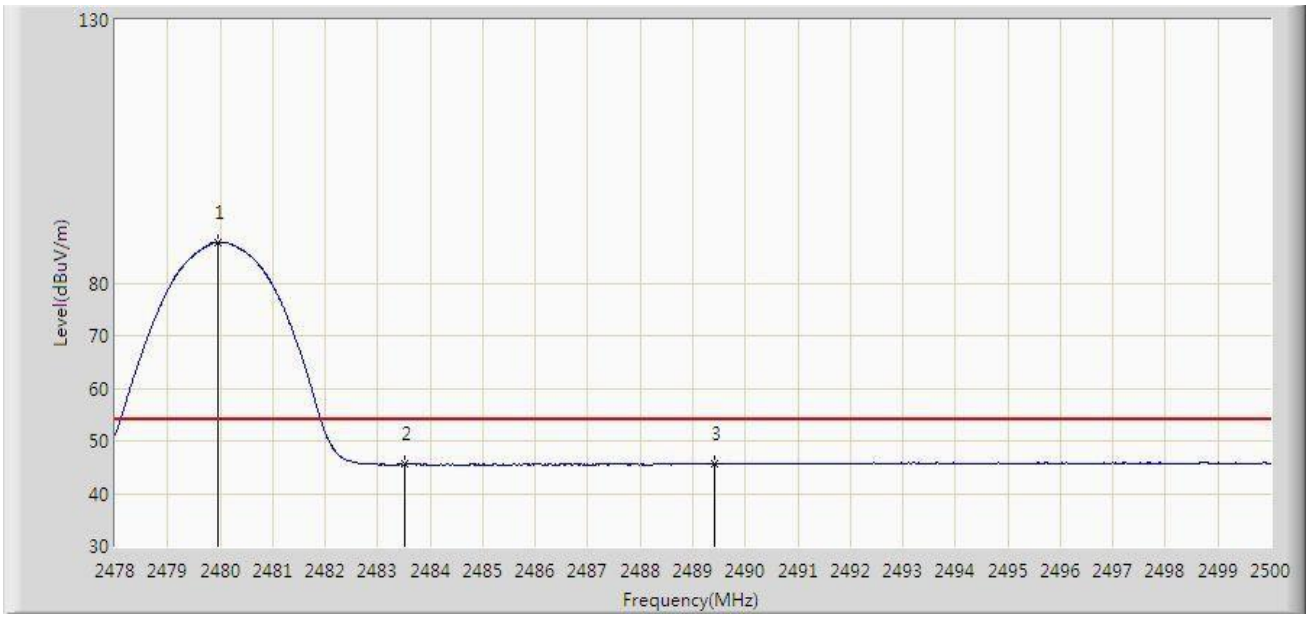


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.892	91.346	59.218	N/A	N/A	32.128	PK
2			2483.500	58.868	26.670	-15.132	74.000	32.197	PK
3			2486.745	60.030	27.770	-13.970	74.000	32.261	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 17:08
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-2DH5 at channel 2480MHz	

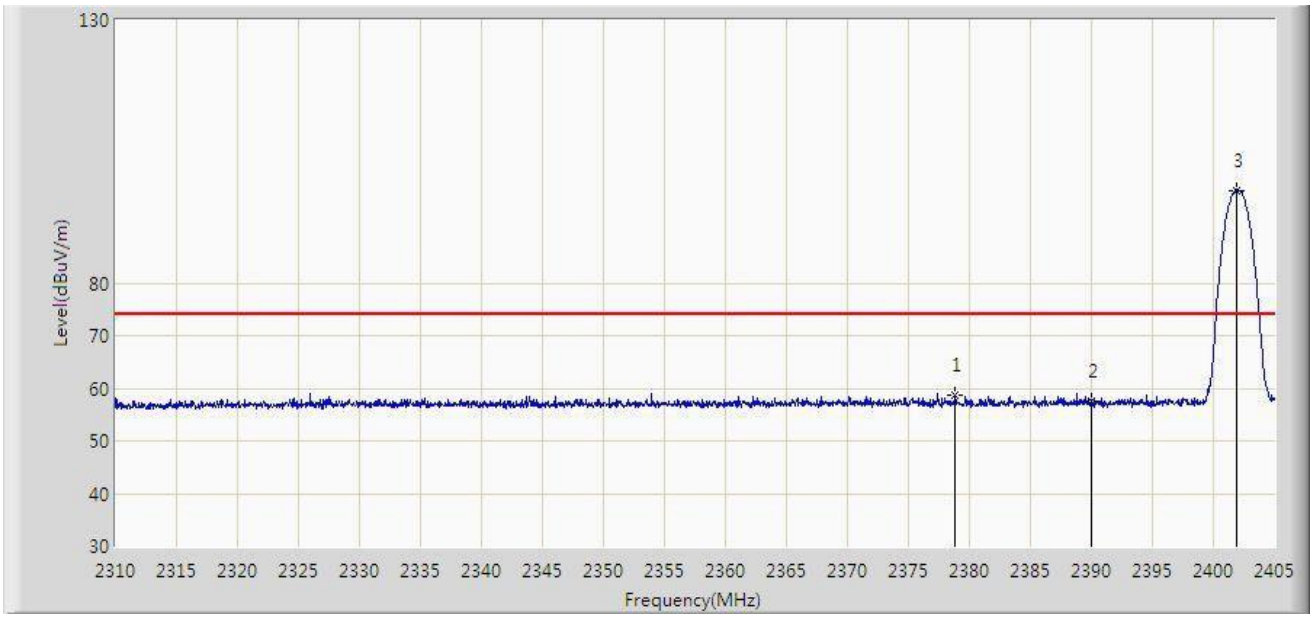


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.969	87.738	55.608	N/A	N/A	32.130	AV
2			2483.500	45.550	13.352	-8.450	54.000	32.197	AV
3			2489.418	45.718	13.406	-8.282	54.000	32.312	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 17:09
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-3DH5 at channel 2402MHz	

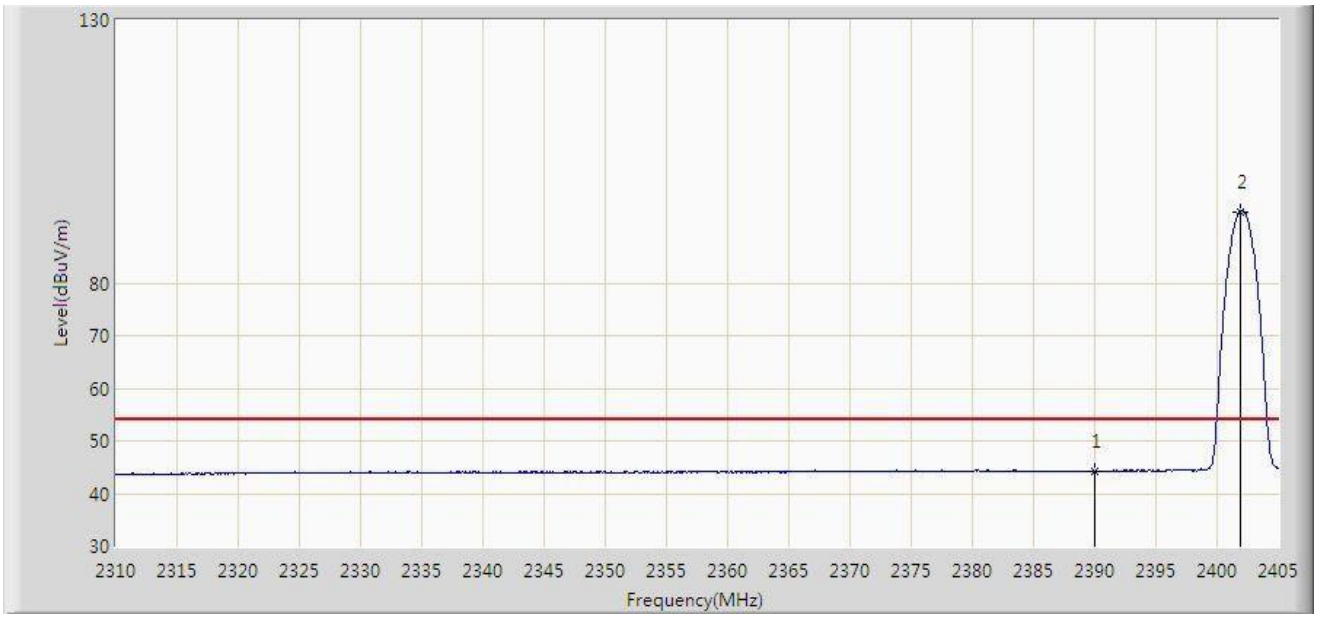


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2378.827	58.784	27.198	-15.216	74.000	31.586	PK
2			2390.000	57.580	26.036	-16.420	74.000	31.544	PK
3		*	2401.865	97.555	65.909	N/A	N/A	31.646	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 17:14
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-3DH5 at channel 2402MHz	

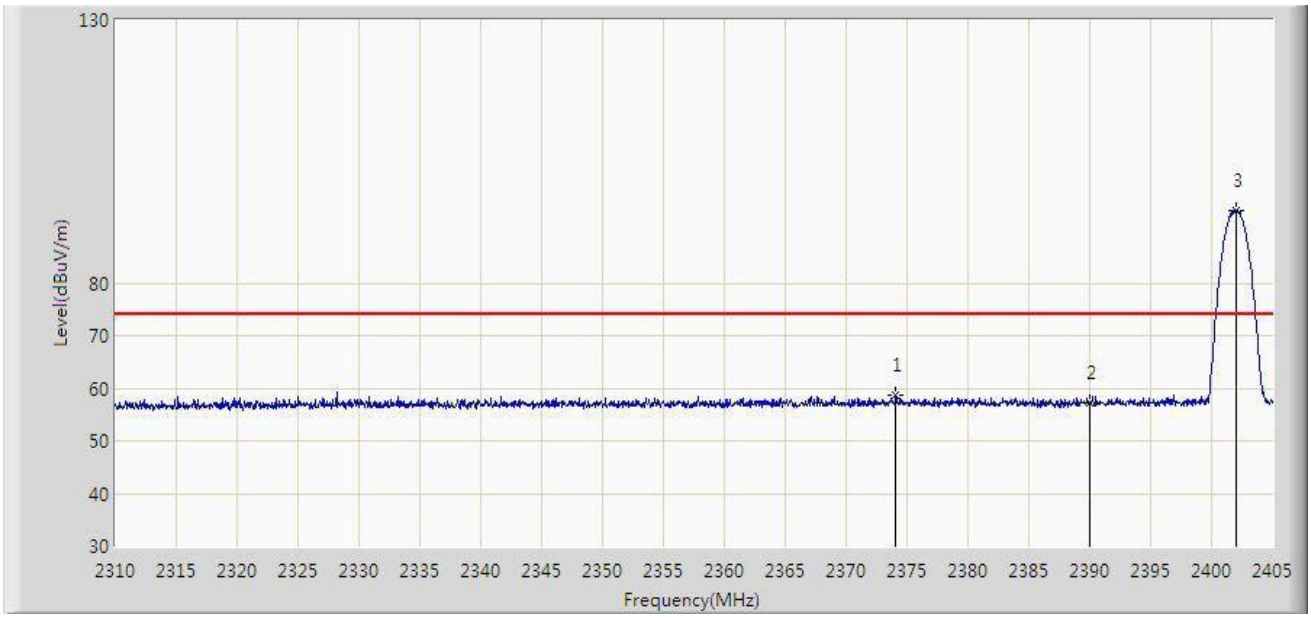


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	44.227	12.683	-9.773	54.000	31.544	AV
2		*	2401.865	93.584	61.938	N/A	N/A	31.646	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 17:17
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-3DH5 at channel 2402MHz	

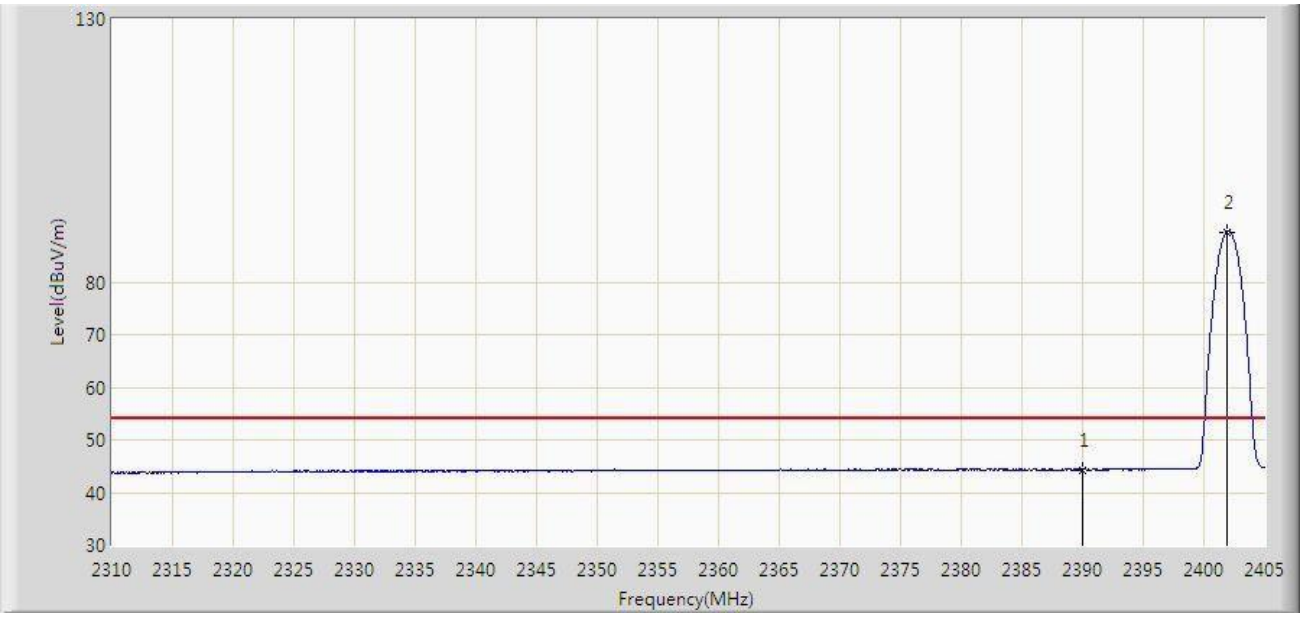


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2374.077	58.611	27.039	-15.389	74.000	31.572	PK
2			2390.000	57.175	25.631	-16.825	74.000	31.544	PK
3		*	2402.055	93.862	62.213	N/A	N/A	31.649	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 17:21
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-3DH5 at channel 2402MHz	

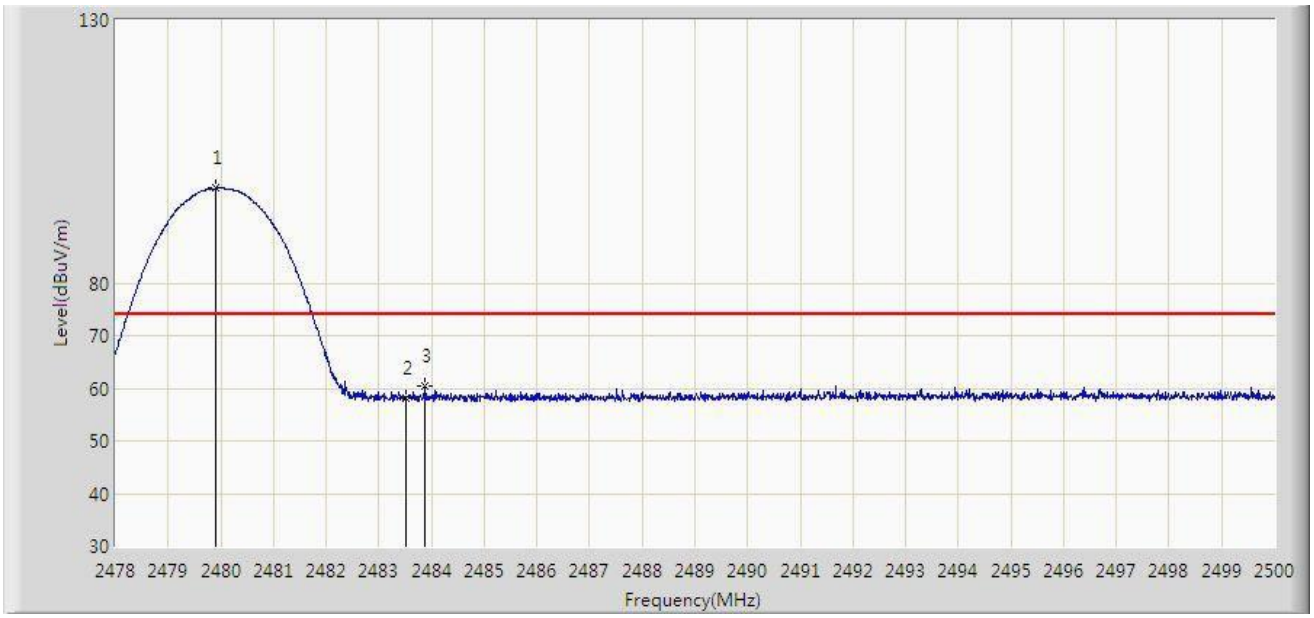


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	44.341	12.797	-9.659	54.000	31.544	AV
2		*	2401.913	89.540	57.893	N/A	N/A	31.647	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 17:24
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-3DH5 at channel 2480MHz	

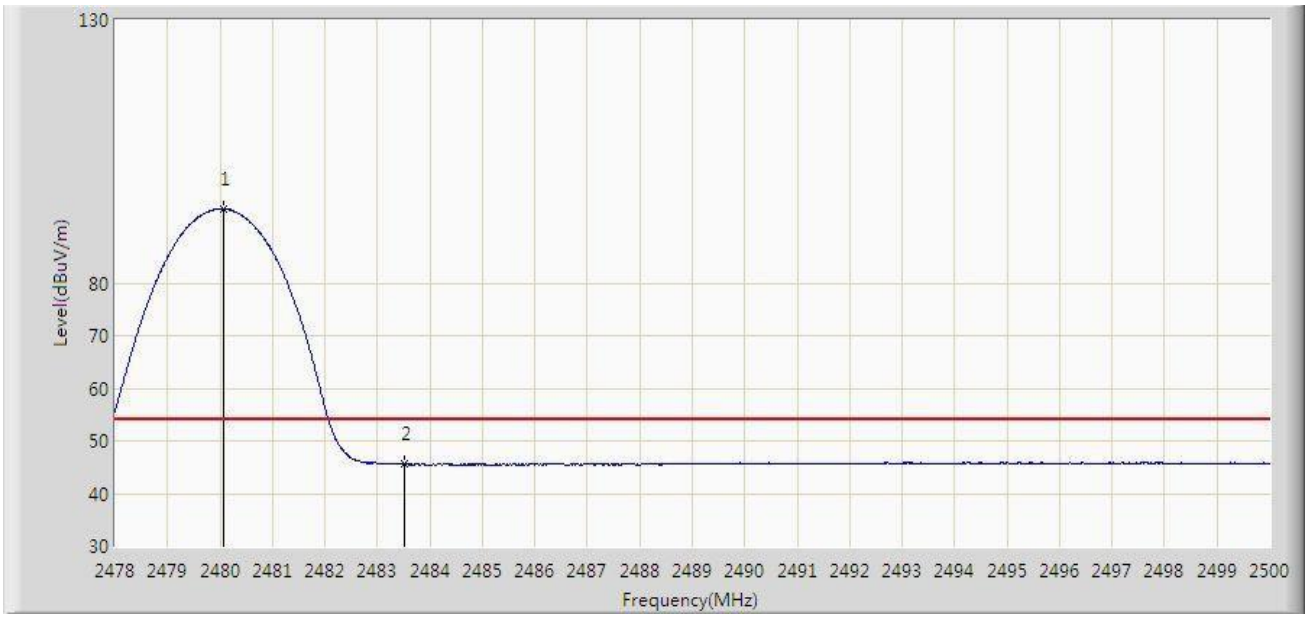


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.903	97.977	65.849	N/A	N/A	32.128	PK
2			2483.500	57.982	25.784	-16.018	74.000	32.197	PK
3			2483.885	60.291	28.086	-13.709	74.000	32.205	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 17:28
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-3DH5 at channel 2480MHz	

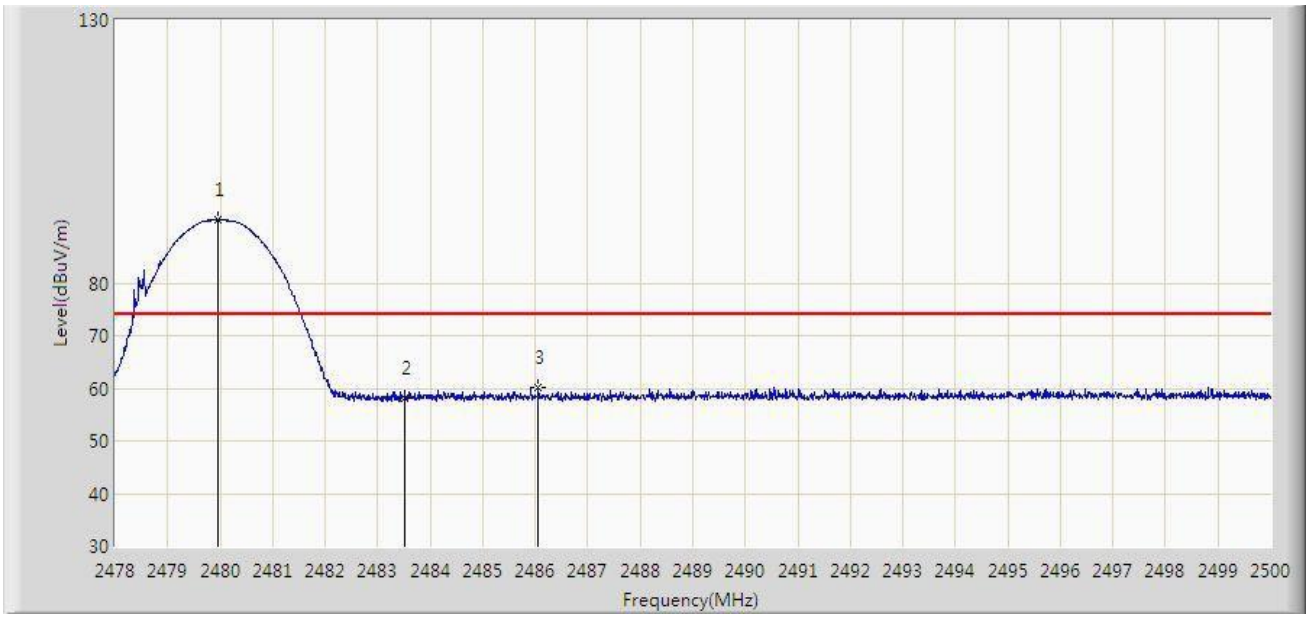


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.079	94.068	61.936	N/A	N/A	32.132	AV
2			2483.500	45.561	13.363	-8.439	54.000	32.197	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 17:28
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-3DH5 at channel 2480MHz	

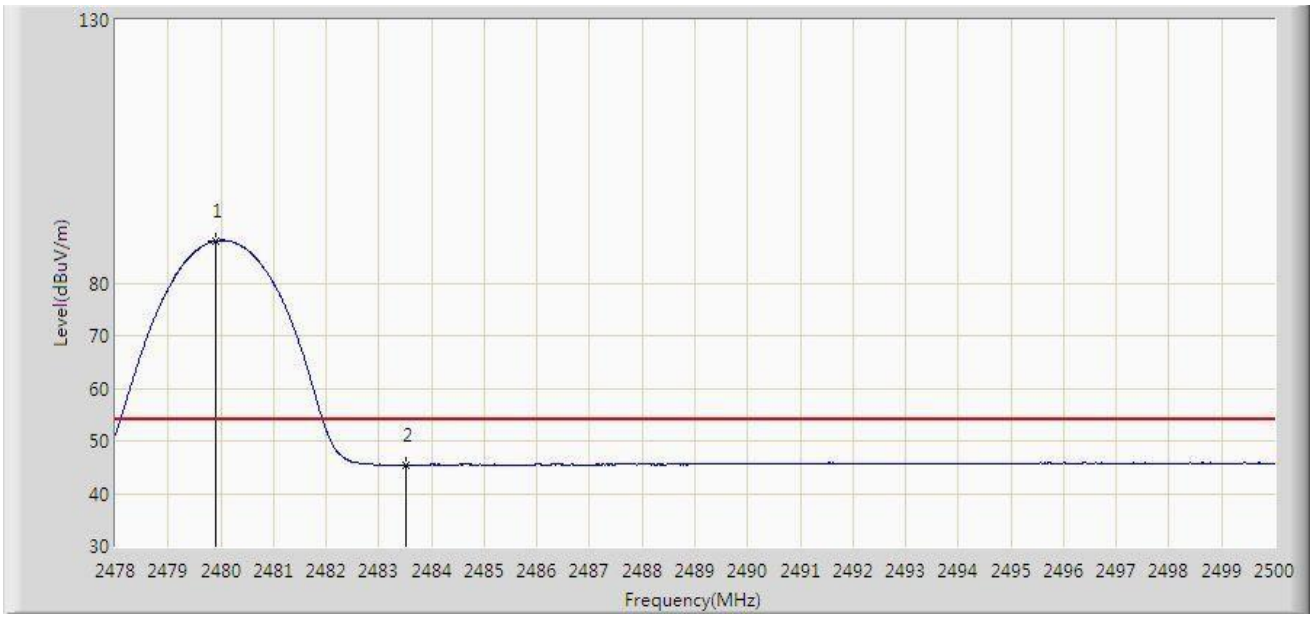


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.969	92.069	59.939	N/A	N/A	32.130	PK
2			2483.500	58.111	25.913	-15.889	74.000	32.197	PK
3			2486.063	60.125	27.878	-13.875	74.000	32.248	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Time: 2020/11/10 - 17:33
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by BT-3DH5 at channel 2480MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.903	88.017	55.889	N/A	N/A	32.128	AV
2			2483.500	45.362	13.164	-8.638	54.000	32.197	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

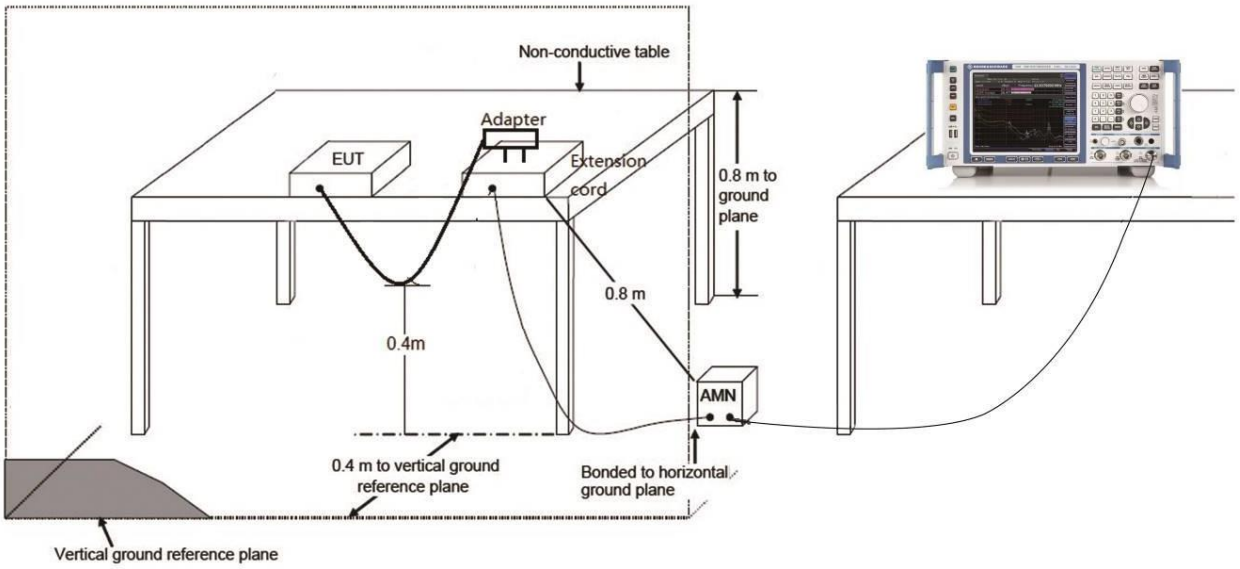
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

6.11. AC Conducted Emissions Measurement

6.11.1. Test Limit

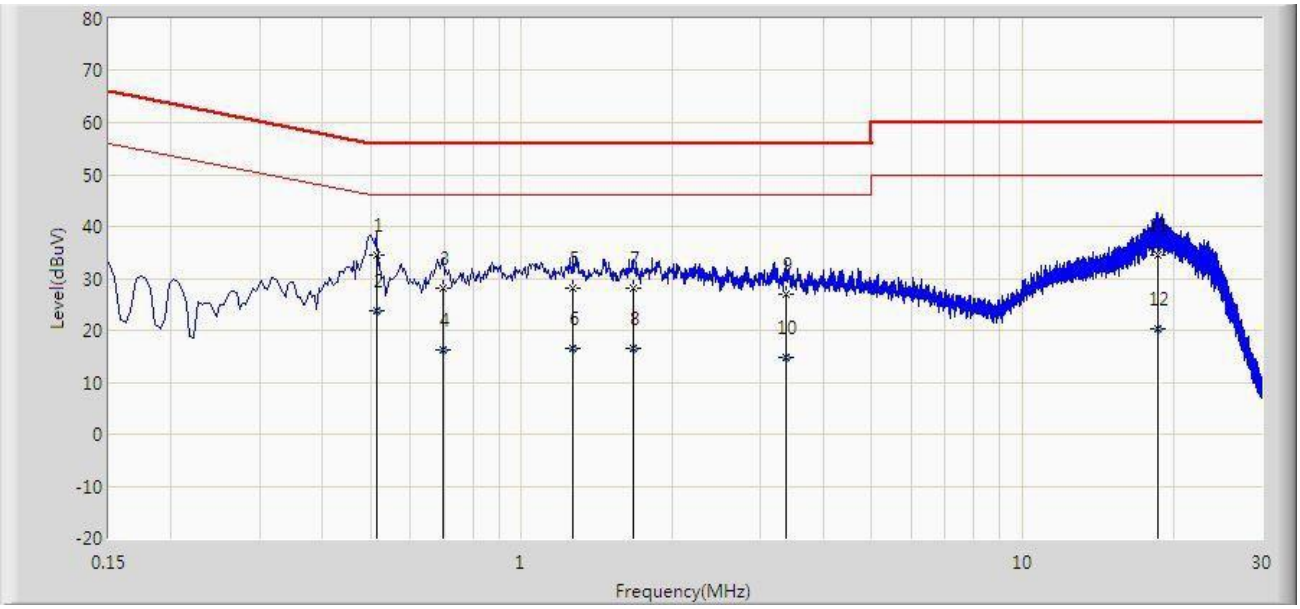
FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBμV)	Average (dBμV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50
Note 1: The lower limit shall apply at the transition frequencies. Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.		

6.11.2. Test Setup



6.11.3. Test Result

Site: SIP-SR2	Time: 2020/11/20 - 14:34
Limit: FCC_Part15.207_CE_AC Power	Engineer: Kyrie Xie
Probe: ENV216_101684_Filter On	Polarity: Line
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2402MHz	

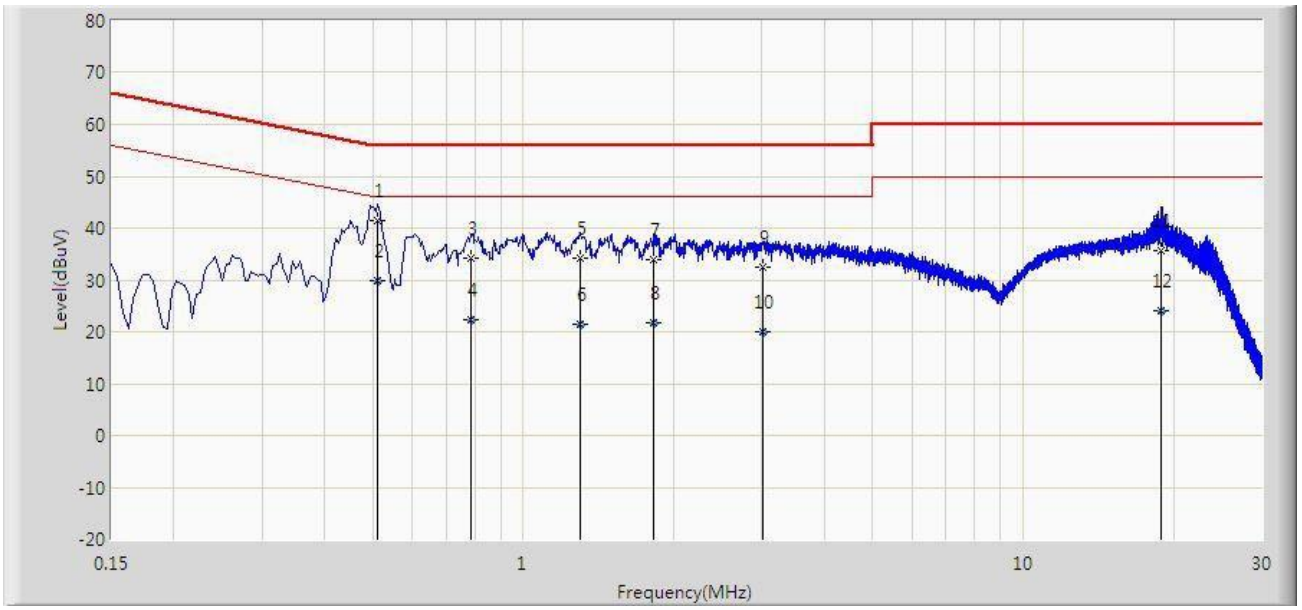


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.514	34.466	24.295	-21.534	56.000	10.170	QP
2			0.514	23.657	13.487	-22.343	46.000	10.170	AV
3			0.698	28.199	18.112	-27.801	56.000	10.088	QP
4			0.698	16.275	6.187	-29.725	46.000	10.088	AV
5			1.266	28.161	18.219	-27.839	56.000	9.943	QP
6			1.266	16.458	6.515	-29.542	46.000	9.943	AV
7			1.670	28.029	18.095	-27.971	56.000	9.934	QP
8			1.670	16.462	6.528	-29.538	46.000	9.934	AV
9			3.378	26.951	17.058	-29.049	56.000	9.892	QP
10			3.378	14.887	4.994	-31.113	46.000	9.892	AV
11			18.674	34.530	24.465	-25.470	60.000	10.065	QP
12			18.674	20.329	10.264	-29.671	50.000	10.065	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

Site: SIP-SR2	Time: 2020/11/20 - 14:38
Limit: FCC_Part15.207_CE_AC Power	Engineer: Kyrie Xie
Probe: ENV216_101684_Filter On	Polarity: Neutral
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2402MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.510	41.585	31.387	-14.415	56.000	10.199	QP
2			0.510	29.825	19.626	-16.175	46.000	10.199	AV
3			0.786	34.298	24.235	-21.702	56.000	10.064	QP
4			0.786	22.331	12.267	-23.669	46.000	10.064	AV
5			1.298	34.290	24.340	-21.710	56.000	9.950	QP
6			1.298	21.569	11.618	-24.431	46.000	9.950	AV
7			1.826	33.826	23.876	-22.174	56.000	9.951	QP
8			1.826	21.603	11.652	-24.397	46.000	9.951	AV
9			3.022	32.413	22.484	-23.587	56.000	9.929	QP
10			3.022	19.918	9.989	-26.082	46.000	9.929	AV
11			18.902	35.696	25.579	-24.304	60.000	10.117	QP
12			18.902	23.995	13.878	-26.005	50.000	10.117	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

7. CONCLUSION

The data collected relate only the item(s) tested and show that the device is in compliance with Part 15C of the FCC rules.

The End

Appendix A - Test Setup Photograph

Refer to “2010RSU078-UT” file.

Appendix B - EUT Photograph

Refer to “2010RSU078-UE” file.