

MEASUREMENT REPORT

FCC PART 15C / WLAN 802.11b/g/n

FCC ID: HD5-CT40PL1N

Applicant: Honeywell International Inc
Honeywell Safety and Productivity Solutions

Application Type: Class II Permissive Change

Product: Mobile Computer

Model No.: CT40P-L1N

Brand Name: Honeywell

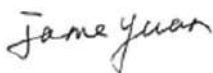
FCC Classification: Digital Transmission System (DTS)

FCC Rule Part(s): Part 15 Subpart C (Section 15.247)

Test Procedure(s): ANSI C63.10-2013

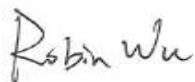
Test Date: December 18 ~ 29, 2020

Reviewed By:



Jame Yuan

Approved By:



Robin Wu



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.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2012RSU043-U1	Rev. 01	Initial Report	12-30-2020	Valid

Note: Model CT40P-L1N has got FCC ID HD5-CT40PL1N, now add new channel 12/13 (20M BW) and 10/11 (40M BW) by software upgrade, so we evaluated all RF testing for new channels in this report.

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1. GENERAL INFORMATION

1.1. Applicant

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

1.2. Manufacturer

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

1.3. Test 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 FCC: CN1166 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 FCC: CN1284
☐	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

2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name	Mobile Computer
Model No.	CT40P-L1N
Serial No.	20205B0AFA
Hardware Version	2.0
Software Version	OS.04.001-HON.03.002
Wi-Fi Specification	802.11a/b/g/n/ac
Bluetooth 1# Version	v5.0 dual mode
Bluetooth 2# Version	v5.1 single mode, LE only
NFC Working Frequency	13.56MHz
GSM Band (s)	GSM850 / PCS1900
WCDMA Band (s)	Band II / IV / V
CDMA2000 Band (s)	BC0 / BC1 / BC10
LTE Band (s)	FDD Band 2 / 4 / 5 / 7 / 12 / 13 / 17 / 25 / 26, 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.: CT50-BTSC Capacitance: 4020mAh/15.5Wh Rated Voltage: 3.85V

2.2. Product Specification Subjective to this Report

Frequency Range	802.11b/g/n-HT20: 2412 ~ 2472 MHz 802.11n-HT40: 2422 ~ 2462 MHz
Channel Number	802.11b/g/n-HT20: 13 802.11n-HT40: 9
Type of Modulation	802.11b: DSSS 802.11g/n: OFDM
Antenna Delivery	2*TX + 2*RX
Data Rate	802.11b: 1/2/5.5/11Mbps 802.11g: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 300Mbps

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

2.3. Working Frequencies for this report

802.11b/g/n-HT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz
04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz
10	2457 MHz	11	2462 MHz	12	2467 MHz
13	2472 MHz	--	--	--	--

802.11n-HT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz
06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	10	2457 MHz	11	2462 MHz

2.4. Description of Available Antennas

Antenna Type	Frequency Band (GHz)	Antenna Gain (dBi)	
		Ant 1	Ant 2
FPC Antenna	2.4 ~ 2.5	1.60	0.7

Note 1: SISO mode is only for Ant 1 port, MIMO mode only support 802.11n spec.

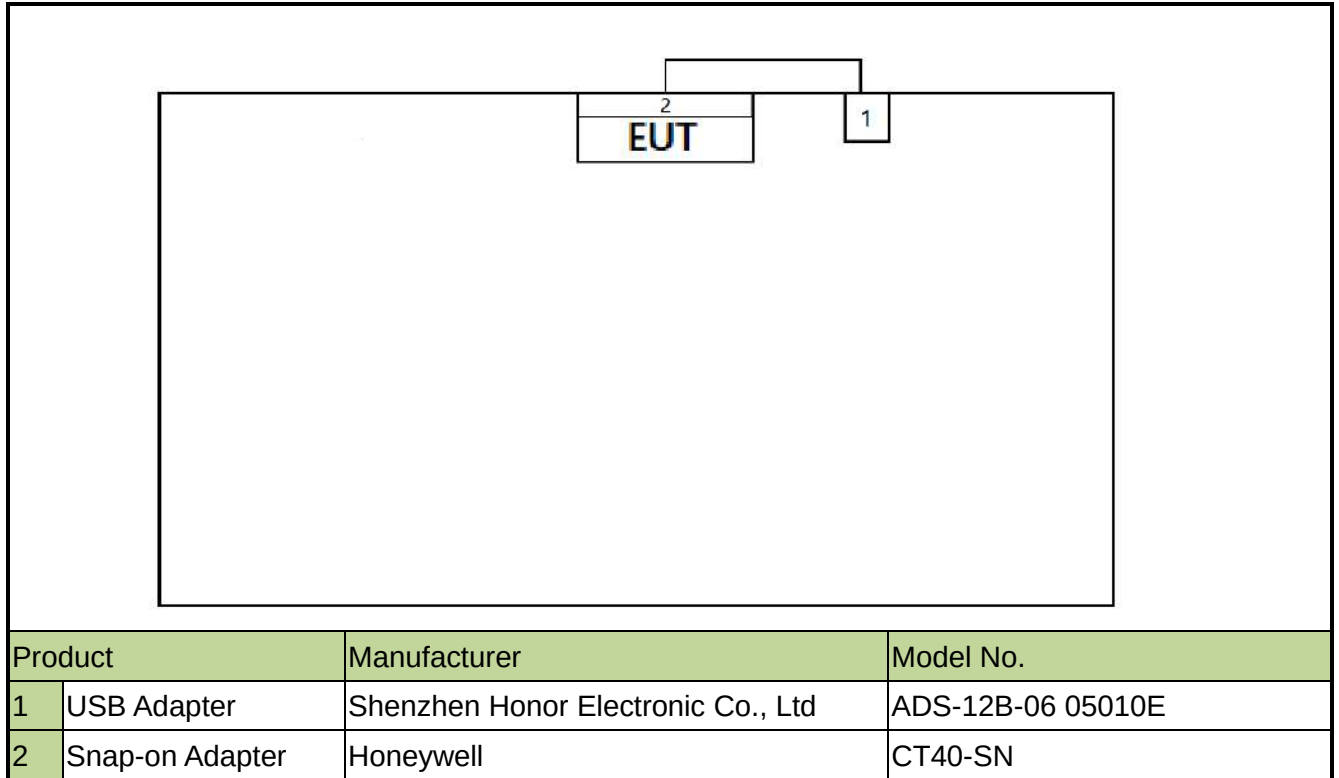
Note 2: For WLAN SISO/MIMO mode, the whole testing has assessed only MIMO mode by referring to the higher normal conducted power.

2.5. Test Mode

Test Mode	Mode 1: Transmit by 802.11b (1Mbps)
	Mode 2: Transmit by 802.11g (6Mbps)
	Mode 3: Transmit by 802.11n-HT20 (MCS0)
	Mode 4: Transmit by 802.11n-HT40 (MCS0)

2.6. Description of Test Configuration

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



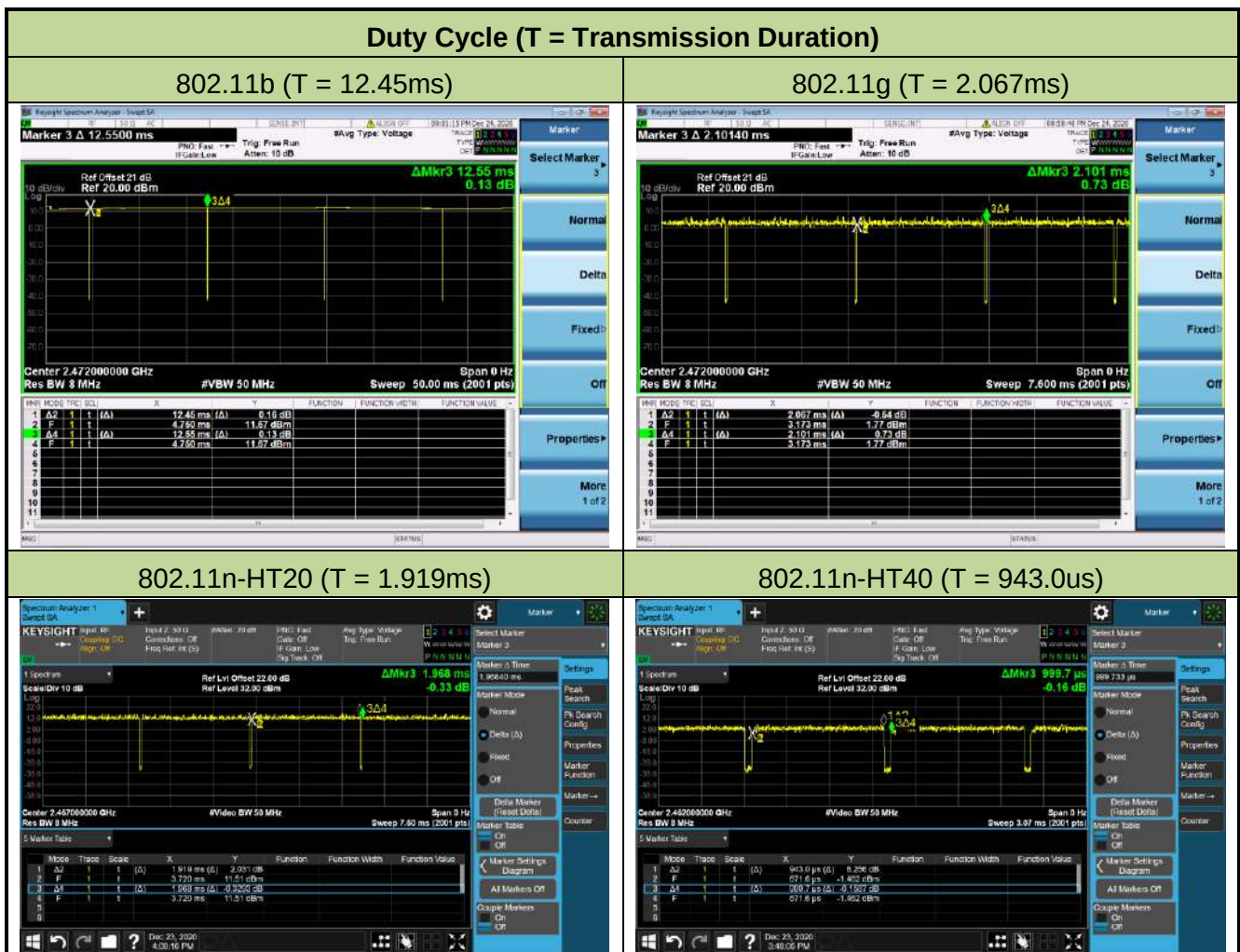
Note 1: The test utility software used during testing was “QRCT”, and the version was 3.0.268.0.

Note 2: Detail power setting refer to operation description.

2.7. Duty Cycle

2.4GHz WLAN (DTS) operation is possible in 20MHz channel bandwidths. The maximum achievable duty cycles for all modes were 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
802.11b	99.20%
802.11g	98.38%
802.11n-HT20	97.51%
802.11n-HT40	94.33%



2.8. EMI Suppression Device(s)/Modifications

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

2.9. Test Environment Condition

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

3. 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	2021/12/03

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	2021/12/14
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	2021/12/14
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	2021/12/08
Anechoic Chamber	RIKEN	Chamber-WZ-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	2021/12/03
Anechoic Chamber	RIKEN	SIP-AC1	MRTSUE06554	1 year	2021/12/24

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	2021/11/26
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06599	1 year	2021/11/26
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	2021/12/03
Anechoic Chamber	RIKEN	SIP-AC2	MRTSUE06781	1 year	2021/12/24

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	2021/11/26
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	2021/12/03
Anechoic Chamber	RIKEN	SIP-AC3	MRTSUE06782	1 year	2021/12/24

Conducted Test Equipment (WZ-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
Attenuator	MVE	20dB	MRTSUE06547	1 year	2021/05/20
Attenuator	MVE	6dB	MRTSUE06532	1 year	2021/05/20
Attenuator	MVE	10dB	MRTSUE06540	1 year	2021/05/20
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
Attenuator	MVE	20dB	MRTSUE06547	1 year	2021/05/20
Attenuator	MVE	6dB	MRTSUE06532	1 year	2021/05/20
Attenuator	MVE	10dB	MRTSUE06540	1 year	2021/05/20
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	2021/11/25

Software	Version	Function
EMI Software	V3	EMI Test Software

4. 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% ($U=2U_c(y)$): 9kHz~150kHz: 3.74dB 150kHz~30MHz: 3.44dB
Radiated Disturbance
Measurement Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 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% ($U=2U_c(y)$): 0.78dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.13dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.15dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 0.28%

5. TEST RESULT

5.1. Summary

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.247(a)(2)	6dB Bandwidth	$\geq 500\text{kHz}$	Conducted	Pass	Section 5.2
15.247(b)(3)	Output Power	$\leq 1\text{Watt}$		Pass	Section 5.3
15.247(e)	Power Spectral Density	$\leq 8\text{dBm} / 3\text{kHz}$		Pass	Section 5.4
15.247(d)	Band Edge / Out-of-Band Emissions	$\geq 20\text{dBc (Peak)}$		Pass	Section 5.5
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 5.6 & 5.7
15.207	AC Conducted Emissions 150kHz - 30MHz	$< \text{FCC 15.207 limits}$	Line Conducted	Pass	Section 5.8

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.

5.2. 6dB Bandwidth Measurement

5.2.1. Test Limit

The minimum 6dB bandwidth shall be at least 500 kHz.

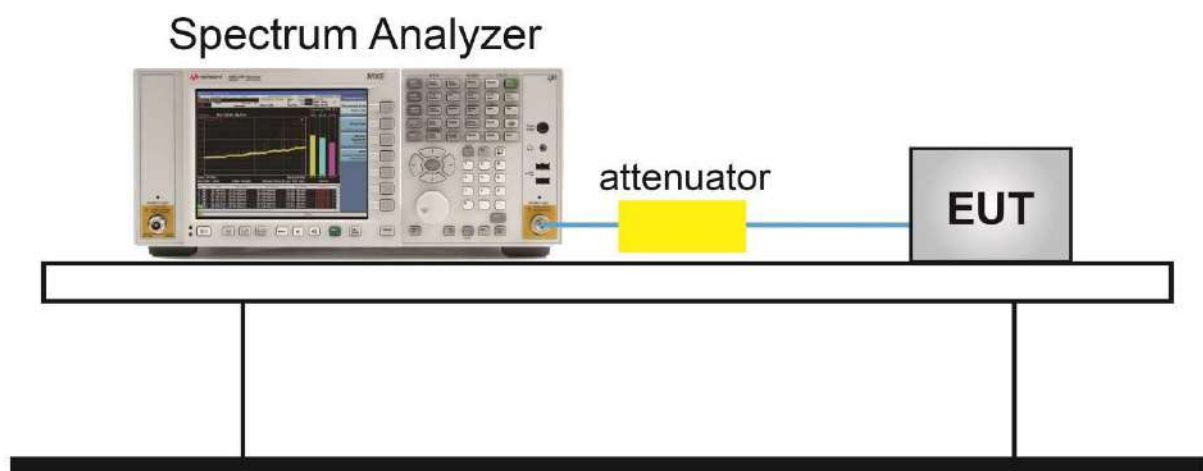
5.2.2. Test Procedure used

ANSI C63.10-2013 - Section 11.8

5.2.3. Test Setting

1. The Spectrum's automatic bandwidth measurement capability was used to perform the 6dB bandwidth measurement. The "X" dB bandwidth parameter was set to $X = 6$. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. Set RBW = 100 kHz
3. $VBW \geq 3 \times RBW$
4. Detector = Peak
5. Trace mode = Max hold
6. Sweep = Auto couple
7. Allow the trace was allowed to stabilize

5.2.4. Test Setup



5.2.5.Test Result

Product	Mobile Computer	Test Engineer	Amy Zhang
Test Site	WZ-TR3	Test Date	2020/12/24
Test Mode	SISO Mode - ANT 1		

Test Mode	Data Rate / MCS	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	1Mbps	12	2467	9.09	≥ 0.5	Pass
802.11b	1Mbps	13	2472	9.06	≥ 0.5	Pass
802.11g	6Mbps	12	2467	16.38	≥ 0.5	Pass
802.11g	6Mbps	13	2472	15.97	≥ 0.5	Pass

Product	Mobile Computer	Test Engineer	Amy Zhang
Test Site	WZ-TR3	Test Date	2020/12/23
Test Mode	MIMO Mode - ANT 1		

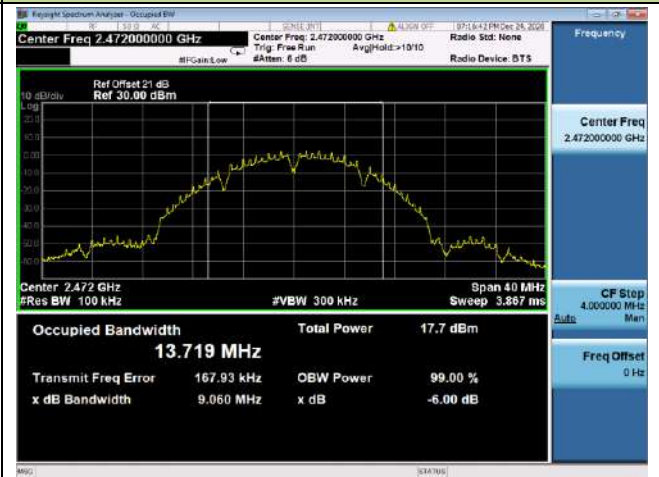
Test Mode	Data Rate / MCS	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11n-HT20	MCS0	12	2467	17.60	≥ 0.5	Pass
802.11n-HT20	MCS0	13	2472	17.36	≥ 0.5	Pass
802.11n-HT40	MCS0	10	2457	36.11	≥ 0.5	Pass
802.11n-HT40	MCS0	11	2462	35.78	≥ 0.5	Pass

802.11b

Channel 12 (2467MHz)



Channel 13 (2472MHz)

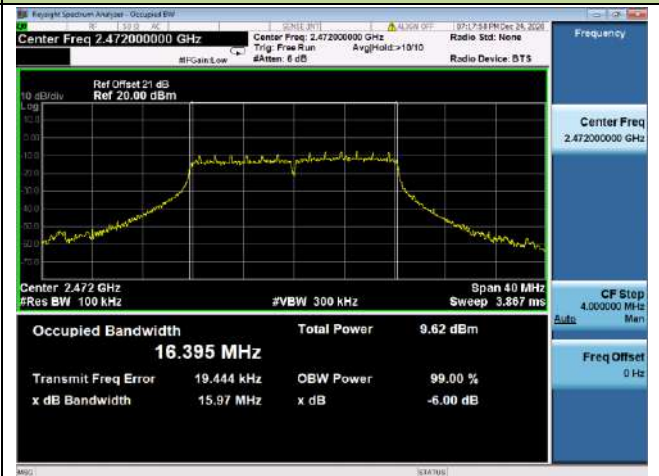


802.11g

Channel 12 (2467MHz)

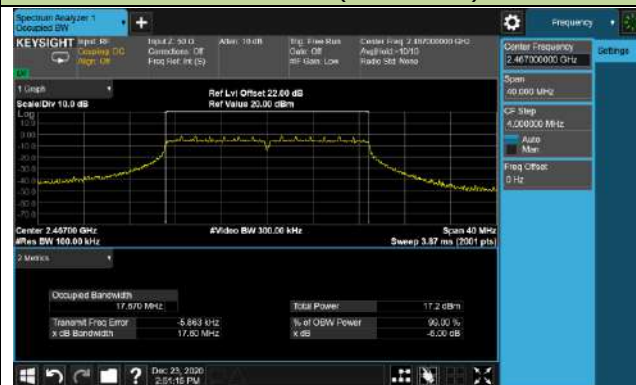


Channel 13 (2472MHz)



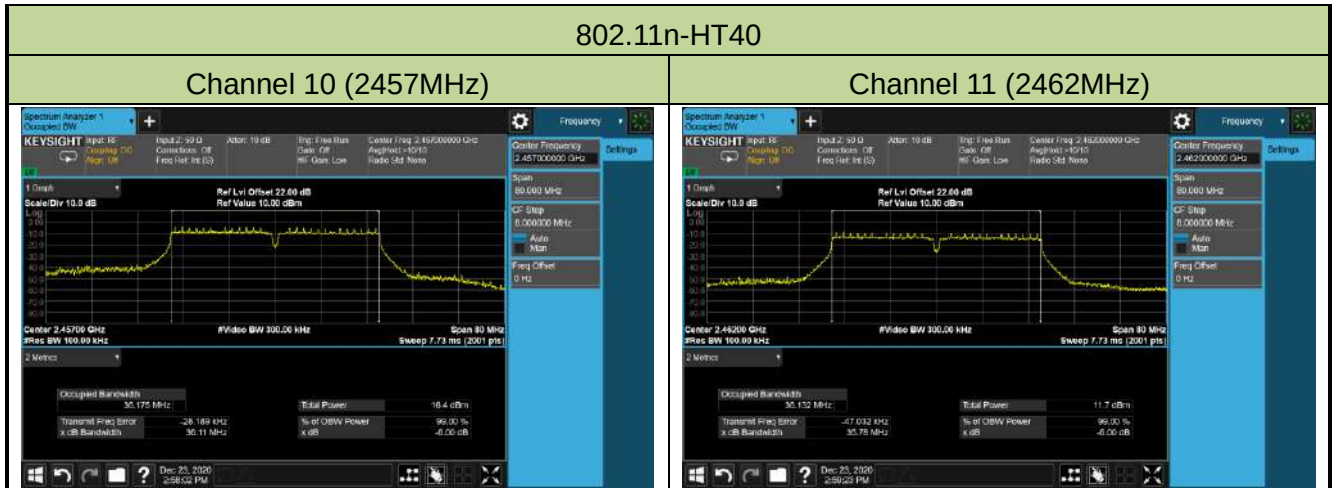
802.11n-HT20

Channel 12 (2467MHz)



Channel 13 (2472MHz)





5.3. Output Power Measurement

5.3.1. Test Limit

The maximum peak output power shall not exceed 1 Watt (30dBm).

5.3.2. Test Procedure Used

ANSI C63.10-2013 Section 11.9.1.3 & ANSI C63.10-2013 Section 11.9.2.3

5.3.3. Test Setting

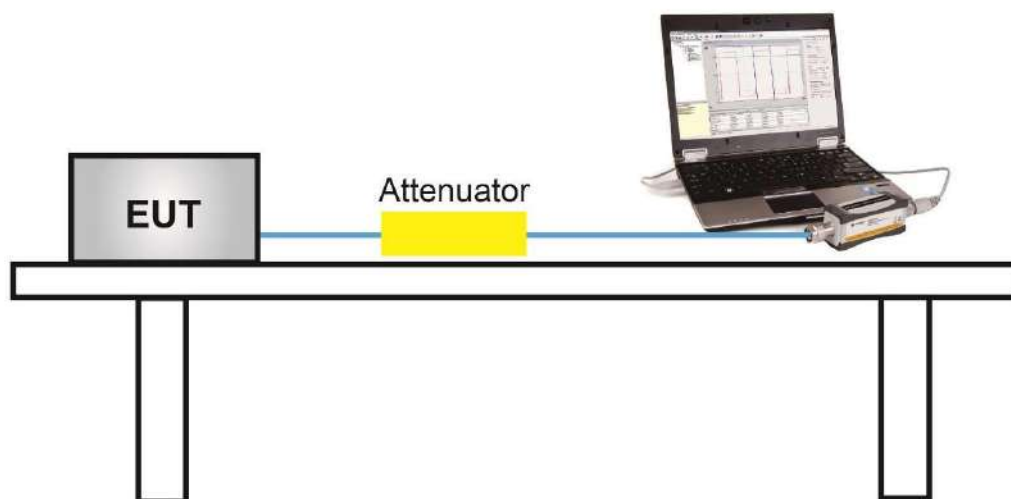
Method PKPM1 (Peak Power Measurement)

Peak power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The pulse sensor employs a VBW = 50MHz so this method was only used for signals whose DTS bandwidth was less than or equal to 50MHz.

Method AVGPM-G (Measurement using a gated RF average-reading power meter)

Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since this measurement is made only during the ON time of the transmitter, no duty cycle correction is required.

5.3.4. Test Setup



5.3.5.Test Result

Product	Mobile Computer	Test Engineer	Amy Zhang
Test Site	WZ-TR3	Test Date	2020/12/24
Test Mode	SISO Mode - ANT 1		

Test Result of Peak Output Power

Test Mode	Data Rate / MCS	Channel No.	Freq. (MHz)	Peak Power (dBm)	Limit (dBm)	Result
11b	1Mbps	12	2467	18.47	≤ 30.00	Pass
11b	1Mbps	13	2472	13.48	≤ 30.00	Pass
11g	6Mbps	12	2467	20.81	≤ 30.00	Pass
11g	6Mbps	13	2472	12.68	≤ 30.00	Pass

Test Result of Average Output Power (Reporting Only)

Test Mode	Data Rate / MCS	Channel No.	Freq. (MHz)	Average Power (dBm)	Limit (dBm)	Result
11b	1Mbps	12	2467	16.22	≤ 30.00	Pass
11b	1Mbps	13	2472	11.01	≤ 30.00	Pass
11g	6Mbps	12	2467	11.91	≤ 30.00	Pass
11g	6Mbps	13	2472	2.82	≤ 30.00	Pass

Product	Mobile Computer	Test Engineer	Amy Zhang
Test Site	WZ-TR3	Test Date	2020/12/24~2020/12/29
Test Mode	MIMO Mode - ANT 1 + 2		

Test Result of Peak Output Power

Test Mode	Data Rate / MCS	Channel No.	Freq. (MHz)	ANT 1 Peak Power (dBm)	ANT 2 Peak Power (dBm)	Total Peak Power (dBm)	Limit (dBm)	Result
11n-HT20	MCS0	12	2467	18.65	18.37	21.52	≤ 30.00	Pass
11n-HT20	MCS0	13	2472	9.96	9.71	12.85	≤ 30.00	Pass
11n-HT40	MCS0	10	2457	17.39	17.60	20.51	≤ 30.00	Pass
11n-HT40	MCS0	11	2462	14.04	13.78	16.92	≤ 30.00	Pass

Note: Total Peak Power (dBm) = $10 \cdot \log\{10^{(\text{ANT 1 Peak Power} / 10)} + 10^{(\text{ANT 2 Peak Power} / 10)}\}$ (dBm).

Test Result of Average Output Power (Reporting Only)

Test Mode	Data Rate / MCS	Channel No.	Freq. (MHz)	ANT 1 Average Power (dBm)	ANT 2 Average Power (dBm)	Total Average Power (dBm)	Limit (dBm)	Result
11n-HT20	MCS0	12	2467	8.65	8.89	11.78	≤ 30.00	Pass
11n-HT20	MCS0	13	2472	0.98	0.91	3.96	≤ 30.00	Pass
11n-HT40	MCS0	10	2457	7.32	7.43	10.39	≤ 30.00	Pass
11n-HT40	MCS0	11	2462	5.31	5.05	8.19	≤ 30.00	Pass

Note: Total Average Power (dBm) = $10 \cdot \log\{10^{(\text{ANT 1 Average Power} / 10)} + 10^{(\text{ANT 2 Average Power} / 10)}\}$ (dBm).

5.4. Power Spectral Density Measurement

5.4.1. Test Limit

The maximum permissible power spectral density is 8dBm in any 3 kHz band.

The same method of determining the conducted output power shall be used to determine the power spectral density.

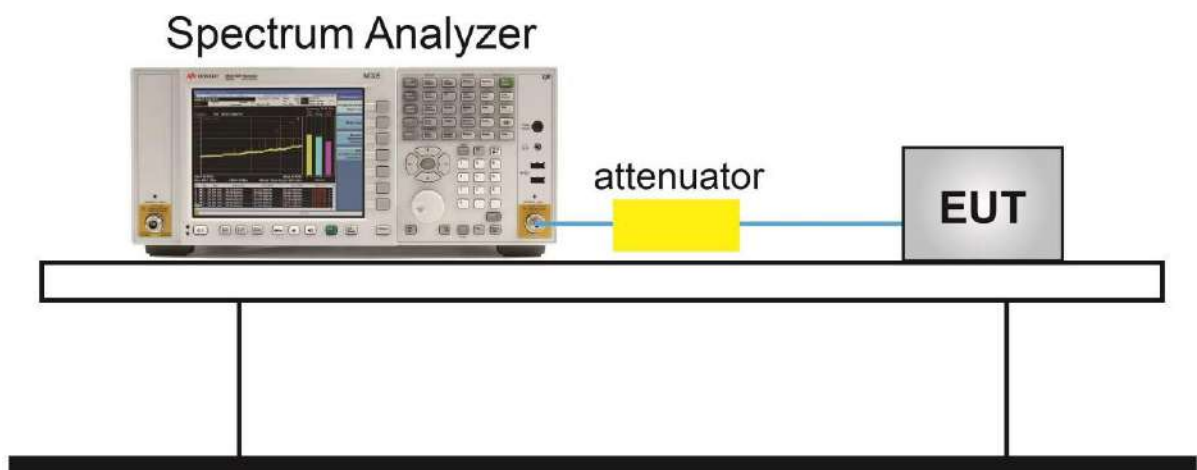
5.4.2. Test Procedure Used

ANSI C63.10-2013 - Section 11.10.2

5.4.3. Test Setting

1. Analyzer was set to the center frequency of the DTS channel under investigation
2. Span = 1.5 times the DTS channel bandwidth
3. RBW = 3kHz
4. VBW = 10kHz
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Trace was allowed to stabilize

5.4.4. Test Setup



5.4.5. Test Result

Product	Mobile Computer	Test Engineer	Amy Zhang
Test Site	WZ-TR3	Test Date	2020/12/24
Test Mode	SISO Mode - ANT 1		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Peak PSD (dBm / 3kHz)	Limit (dBm / 3kHz)	Result
11b	1Mbps	12	2467	7.90	≤ 8.00	Pass
11b	1Mbps	13	2472	0.69	≤ 8.00	Pass
11g	6Mbps	12	2467	-15.03	≤ 8.00	Pass
11g	6Mbps	13	2472	-24.14	≤ 8.00	Pass

Product	Mobile Computer	Test Engineer	Amy Zhang
Test Site	WZ-TR3	Test Date	2020/12/23 ~ 2020/12/24
Test Mode	MIMO Mode		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PKPSD (dBm / 3kHz)		Total PKPSD (dBm / 3kHz)	Limit (dBm / 3kHz)	Result
				ANT 1	ANT 2			
11n-HT20	MCS0	12	2467	-18.07	-17.30	-14.66	≤ 8.00	Pass
11n-HT20	MCS0	13	2472	-24.15	-25.42	-21.73	≤ 8.00	Pass
11n-HT40	MCS0	10	2457	-21.38	-21.72	-18.54	≤ 8.00	Pass
11n-HT40	MCS0	11	2462	-23.46	-23.78	-20.61	≤ 8.00	Pass

Note: Total PKPSD (dBm / 3kHz) = $10 \cdot \log\{10^{(\text{Ant 1 PKPSD}/10)} + 10^{(\text{Ant 2 PKPSD}/10)}\}$.

SISO Mode - 802.11b

Channel 12 (2467MHz)

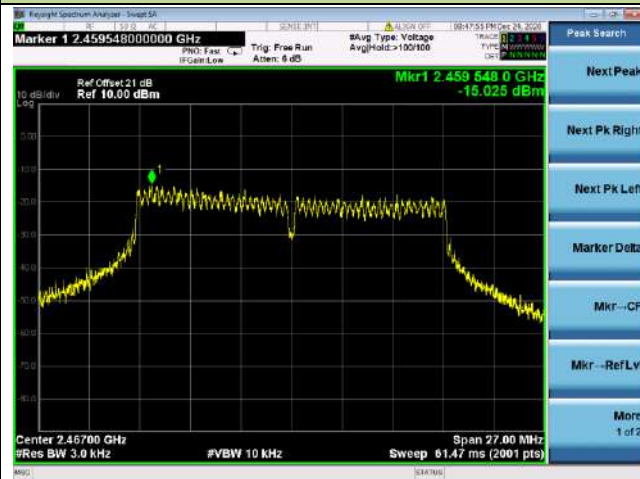


Channel 13 (2472MHz)



SISO Mode - 802.11g

Channel 12 (2467MHz)

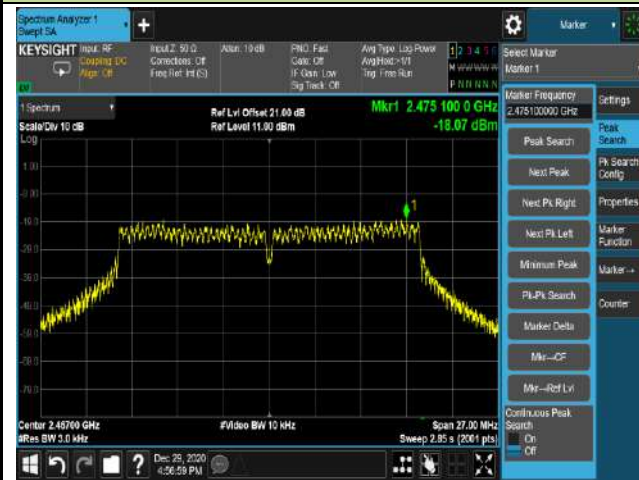


Channel 13 (2472MHz)



MIMO Mode Ant 1 - 802.11n-HT20

Channel 12 (2467MHz)

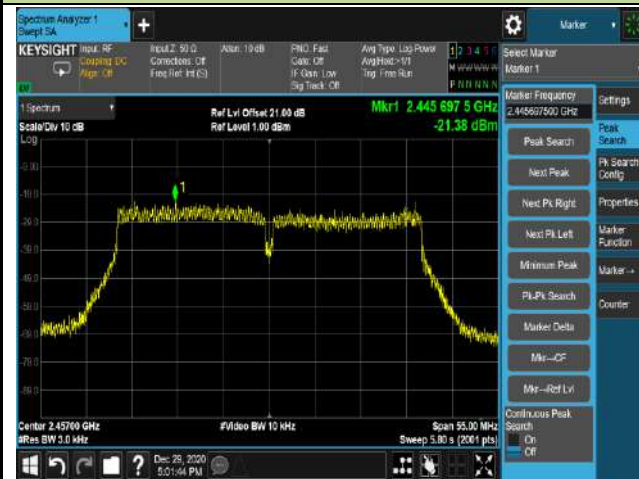


Channel 13 (2472MHz)



MIMO Mode Ant 0 - 802.11n-HT40

Channel 10 (2457MHz)



Channel 11 (2462MHz)

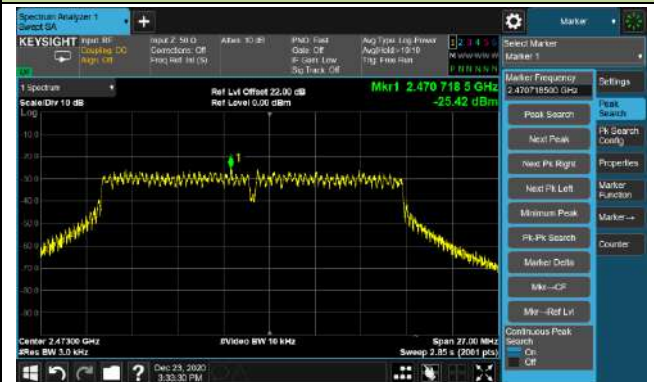


MIMO Mode Ant 2 - 802.11n-HT20

Channel 12 (2467MHz)

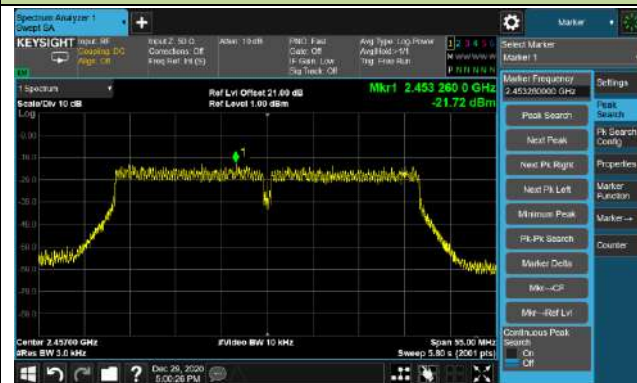


Channel 13 (2472MHz)



MIMO Mode Ant 1 - 802.11n-HT40

Channel 10 (2457MHz)



Channel 11 (2462MHz)



5.5. Conducted Band Edge and Out-of-Band Emissions

5.5.1. Test Limit

The limit for out-of-band spurious emissions at the band edge is 20dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100 kHz bandwidth per the PSD procedure.

5.5.2. Test Procedure Used

ANSI C63.10-2013 - Section 11.11

5.5.3. Test Setting

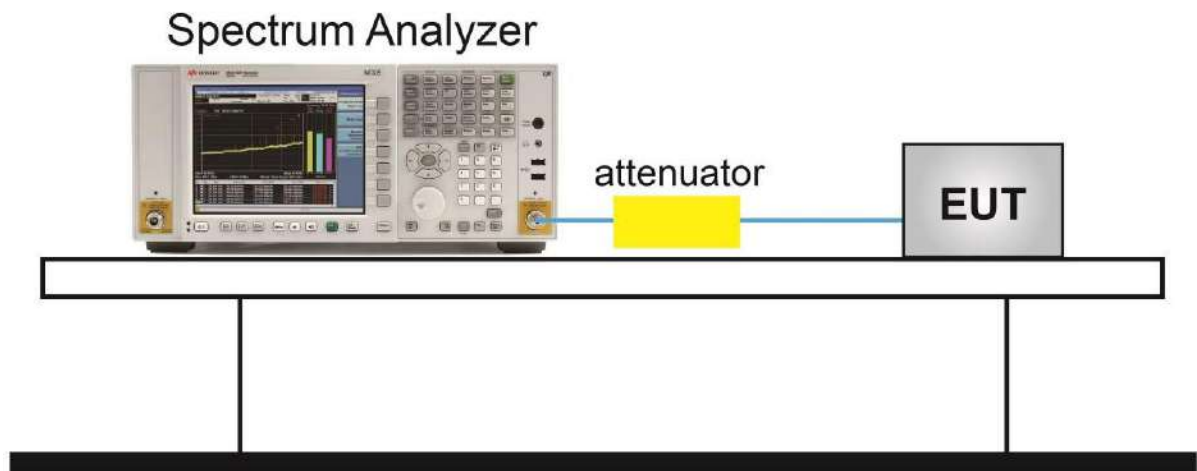
Reference level measurement

1. Set instrument center frequency to DTS channel center frequency
2. Set the span to ≥ 1.5 times the DTS bandwidth
3. Set the RBW = 100 kHz
4. Set the VBW $\geq 3 \times$ RBW
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Allow trace to fully stabilize

Emission level measurement

1. Set the center frequency and span to encompass frequency range to be measured
2. RBW = 100kHz
3. VBW = 300kHz
4. Detector = Peak
5. Trace mode = max hold
6. Sweep time = auto couple
7. The trace was allowed to stabilize

5.5.4. Test Setup



5.5.5.Test Result

Product	Mobile Computer	Test Engineer	Amy Zhang
Test Site	WZ-TR3	Test Date	2020/12/24
Test Mode	SISO Mode		

Test Mode	Data Rate / MCS	Channel No.	Frequency (MHz)	Limit	Result
802.11b	1Mbps	12	2467	20dBc	Pass
802.11b	1Mbps	13	2472	20dBc	Pass
802.11g	6Mbps	12	2467	20dBc	Pass
802.11g	6Mbps	13	2472	20dBc	Pass

Product	Mobile Computer	Test Engineer	Amy Zhang
Test Site	WZ-TR3	Test Date	2020/12/23 ~ 2020/12/24
Test Mode	MIMO Mode		

Test Mode	Data Rate / MCS	Channel No.	Frequency (MHz)	Limit	Result
802.11n-HT20	MCS0	12	2467	20dBc	Pass
802.11n-HT20	MCS0	13	2472	20dBc	Pass
802.11n-HT40	MCS0	10	2457	20dBc	Pass
802.11n-HT40	MCS0	11	2462	20dBc	Pass

SISO Mode - 802.11b Channel 12 (2467MHz)

100kHz PSD Reference Level



High Band Edge



Spurious Emission

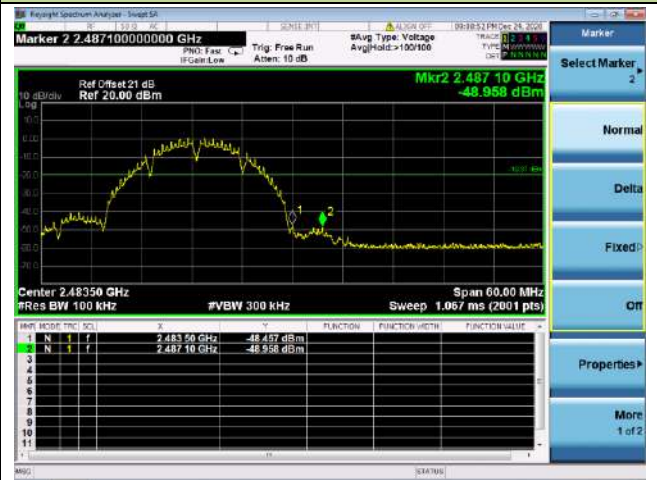


SISO Mode - 802.11b Channel 13 (2472MHz)

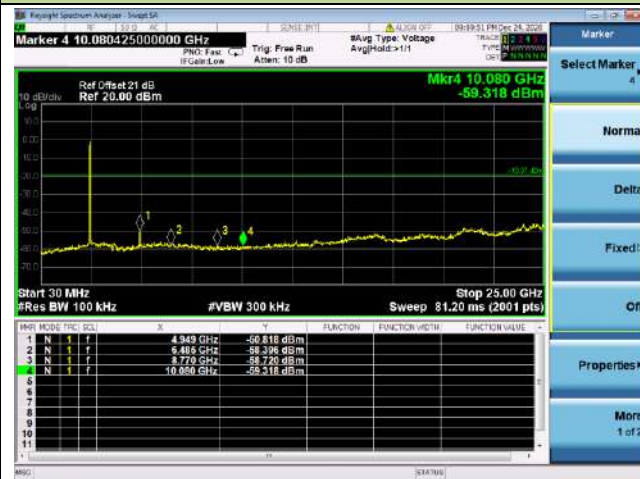
100kHz PSD Reference Level



High Band Edge

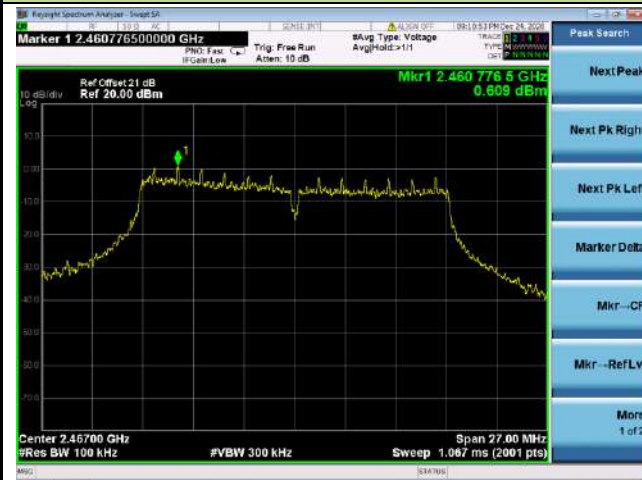


Spurious Emission



SISO Mode - 802.11g Channel 12 (2467MHz)

100kHz PSD Reference Level



High Band Edge



Spurious Emission

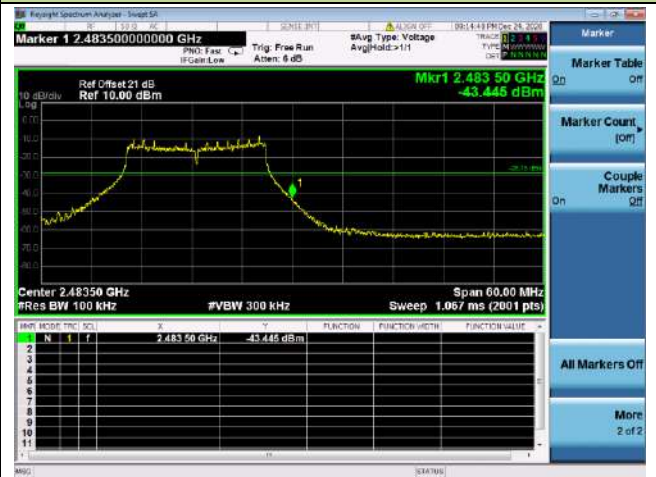


SISO Mode - 802.11g Channel 13 (2472MHz)

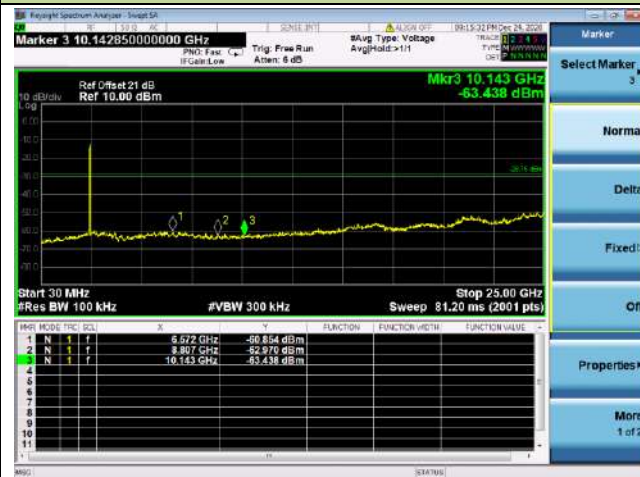
100kHz PSD Reference Level



High Band Edge



Spurious Emission

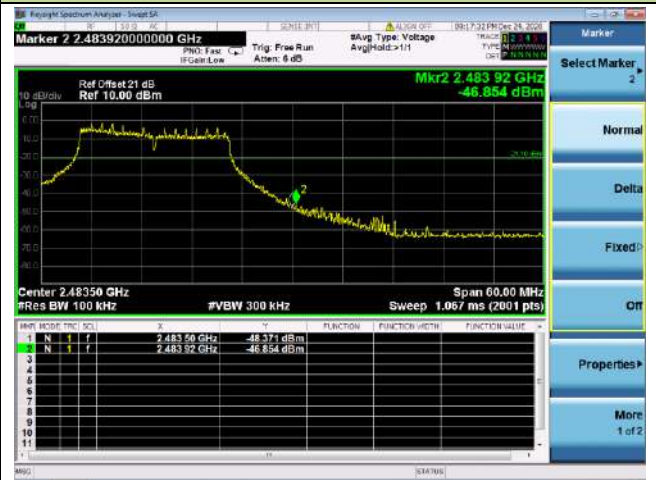


MIMO Mode Ant 1 - 802.11n-HT20 Channel 12 (2467MHz)

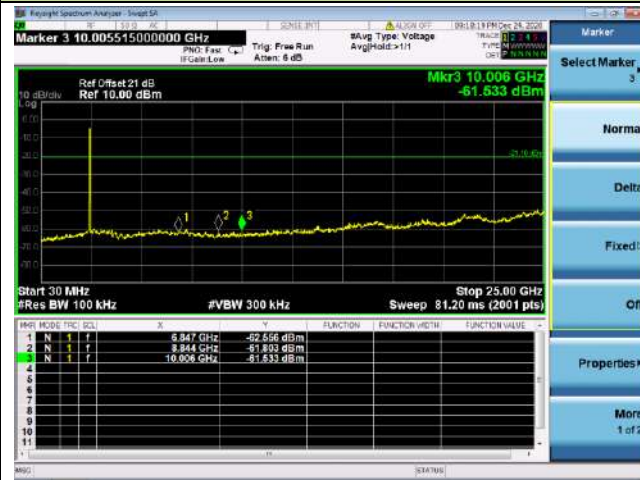
100kHz PSD Reference Level



High Band Edge



Spurious Emission

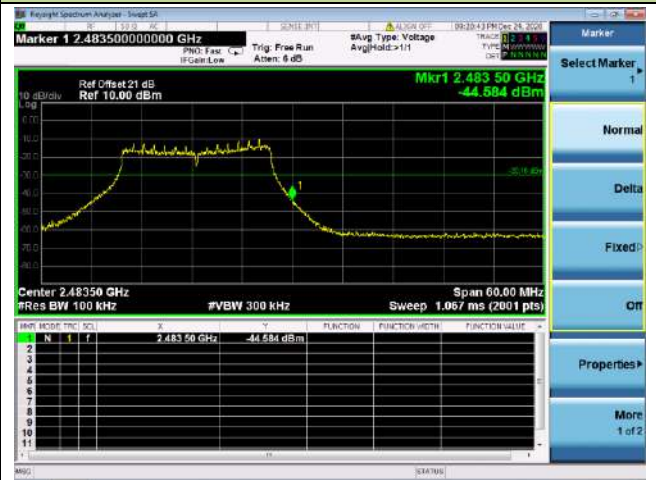


MIMO Mode Ant 1 - 802.11n-HT20 Channel 13 (2472MHz)

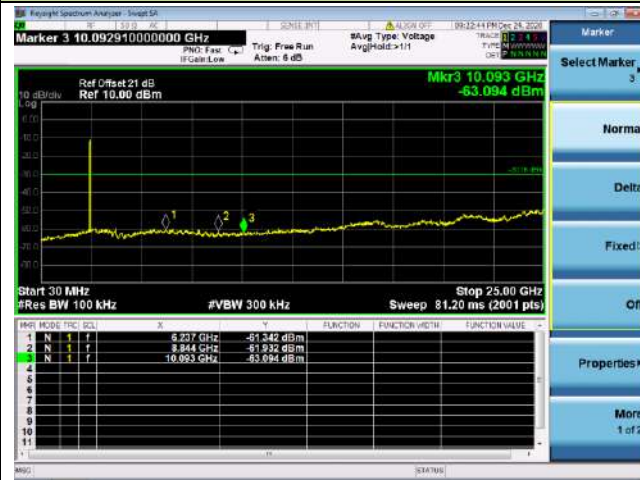
100kHz PSD Reference Level



High Band Edge



Spurious Emission



MIMO Mode Ant 1 - 802.11n-HT40 Channel 10 (2457MHz)

100kHz PSD Reference Level



High Band Edge



Spurious Emission



MIMO Mode Ant 1 - 802.11n-HT40 Channel 11 (2462MHz)

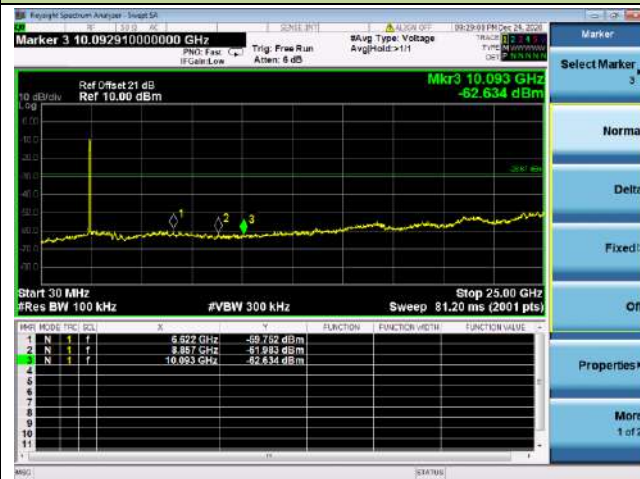
100kHz PSD Reference Level



High Band Edge



Spurious Emission



MIMO Mode Ant 2 - 802.11n-HT20 Channel 12 (2467MHz)

100kHz PSD Reference Level



High Band Edge



Spurious Emission



High Band Edge



The screenshot displays the Keysight Spectrum Analyzer interface. The main display shows a spectrum plot with a signal at 21.891 GHz and a level of -53.28 dBm. The plot is centered at 21.891 GHz with a resolution bandwidth (RBW) of 20 MHz. The frequency range is from 21.875 GHz to 21.907 GHz. The power level is -53.28 dBm. The plot shows a single peak at the specified frequency.

Key interface elements include:

- Top Panel:** Spectrum Analyzer v1, Select GA, Input 2: 50.0 GHz, Resolution BW: 20.0 MHz, Pre-Filter: Flat, Data Off, IF Gain: Low, Sweep Type: Off, Avg Type: Log Power, Peak Hold: Off, Ref Level: 19.00 dBm.
- Left Panel:** KEYSIGHT, Input 2: 50.0 GHz, Resolution BW: 20.0 MHz, Pre-Filter: Flat, Data Off, IF Gain: Low, Sweep Type: Off, Avg Type: Log Power, Peak Hold: Off, Ref Level: 19.00 dBm.
- Right Panel:** Select Marker, Marker 3, Marker Frequency: 21.89125000 GHz, Peak Search, PK Search Conf, Properties, Marker Function, Marker 1, Marker 2, Marker 3, Marker 4, Marker 5, Marker 6, Marker 7, Marker 8, Marker 9, Marker 10, Marker 11, Marker 12, Marker 13, Marker 14, Marker 15, Marker 16, Marker 17, Marker 18, Marker 19, Marker 20, Marker 21, Marker 22, Marker 23, Marker 24, Marker 25, Marker 26, Marker 27, Marker 28, Marker 29, Marker 30, Marker 31, Marker 32, Marker 33, Marker 34, Marker 35, Marker 36, Marker 37, Marker 38, Marker 39, Marker 40, Marker 41, Marker 42, Marker 43, Marker 44, Marker 45, Marker 46, Marker 47, Marker 48, Marker 49, Marker 50, Marker 51, Marker 52, Marker 53, Marker 54, Marker 55, Marker 56, Marker 57, Marker 58, Marker 59, Marker 60, Marker 61, Marker 62, Marker 63, Marker 64, Marker 65, Marker 66, Marker 67, Marker 68, Marker 69, Marker 70, Marker 71, Marker 72, Marker 73, Marker 74, Marker 75, Marker 76, Marker 77, Marker 78, Marker 79, Marker 80, Marker 81, Marker 82, Marker 83, Marker 84, Marker 85, Marker 86, Marker 87, Marker 88, Marker 89, Marker 90, Marker 91, Marker 92, Marker 93, Marker 94, Marker 95, Marker 96, Marker 97, Marker 98, Marker 99, Marker 100.
- Bottom Panel:** Start 20 MHz, Stop 25.00 GHz, Sweep 2.39 s (2001 pts), 5 Marker Table, Mode, Trace, Scale, X, Y, Function, Function Width, Function Value.

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	F	7.805 GHz	-57.58 dBm			
2	N	F	12.846 GHz	-55.45 dBm			
3	N	F	21.891 GHz	-53.28 dBm			

MIMO Mode Ant 2 - 802.11n-HT40 Channel 10 (2457MHz)

100kHz PSD Reference Level



High Band Edge



Spurious Emission



High Band Edge



The screenshot displays the Keysight Spectrum Analyzer software interface. The main window shows a frequency spectrum plot with a yellow trace. Three peaks are identified and labeled with green numbers 1, 2, and 3. The plot settings include a scale of 10 dB, a resolution bandwidth (RBW) of 50 MHz, and a video bandwidth (VBW) of 300 kHz. The frequency range is from 100 kHz to 250 MHz. The peak list table at the bottom provides detailed information for each marked peak.

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	7.572 GHz	-56.70 dBm		
2	N	1	f	15.936 GHz	-56.07 dBm		
3	N	1	f	17.509 GHz	-54.09 dBm		

5.6. Radiated Spurious Emission Measurement

5.6.1. 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 [uV/m]	Measured Distance [Meters]
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

5.6.2. Test Procedure Used

ANSI C63.10-2013 Section 6.3

ANSI C63.10-2013 Section 6.4

ANSI C63.10-2013 Section 6.5

ANSI C63.10-2013 Section 6.6

5.6.3. 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
> 1000MHz	1MHz

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

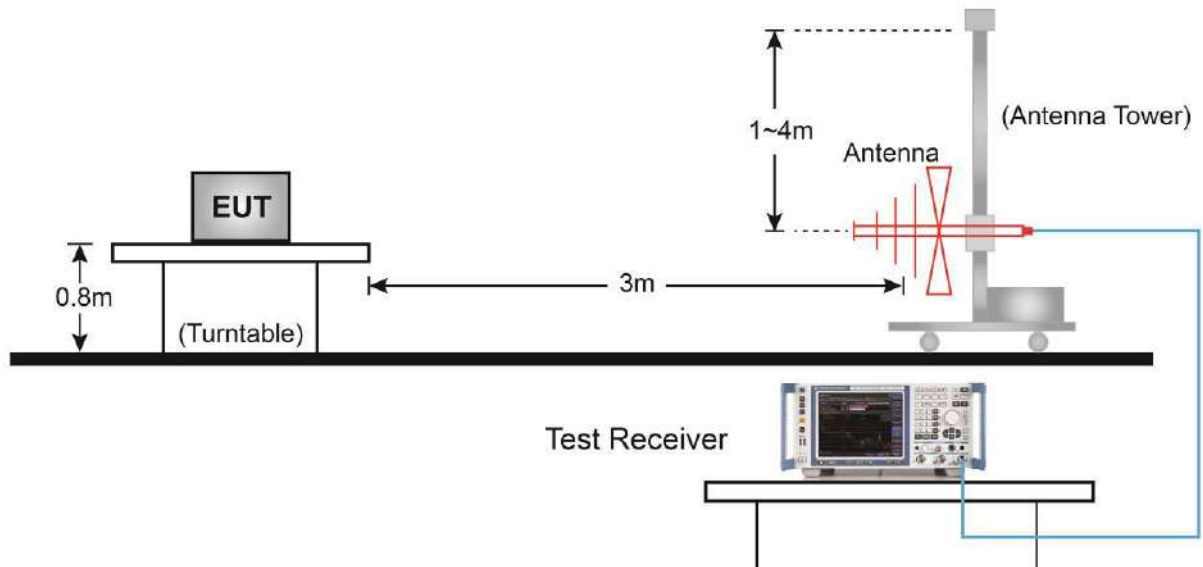
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

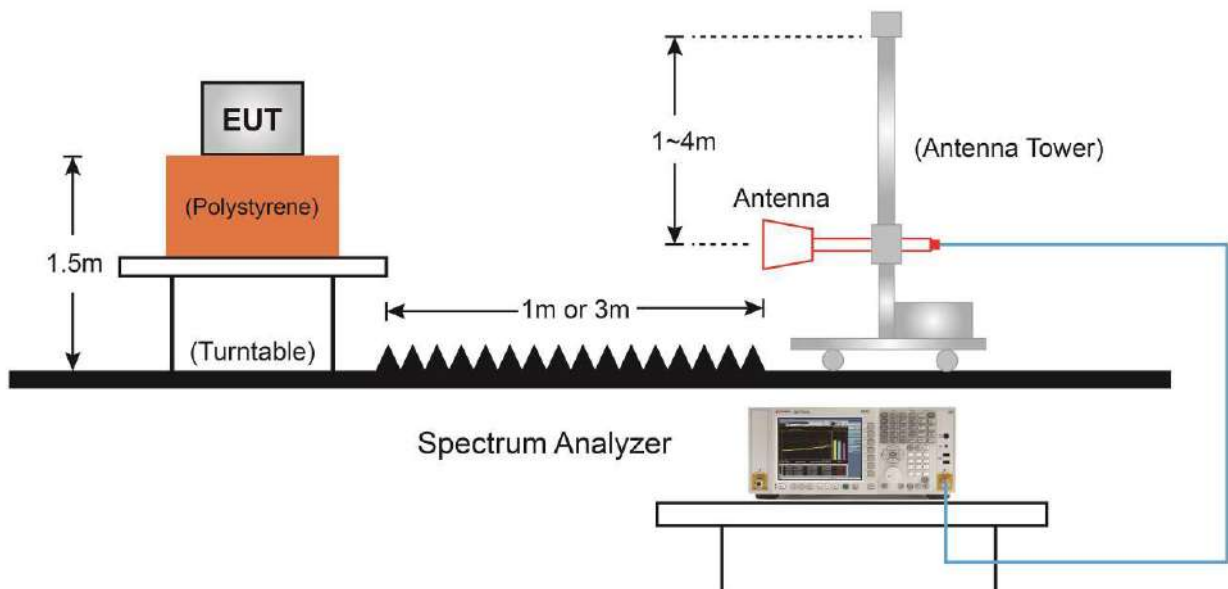
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
4.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

5.6.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



5.6.5. Test Result

Product	Mobile Computer	Test Engineer	Hyde Yu
Test Site	WZ-AC1	Test Date	2020/12/20
Test Mode	SISO Mode - 802.11b	Test Channel	13
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
	4281.0	37.1	2.6	39.7	74.0	-34.3	Peak	Horizontal
	5071.5	37.5	4.5	42.0	74.0	-32.0	Peak	Horizontal
*	5564.5	36.9	5.1	42.0	74.0	-32.0	Peak	Horizontal
*	7154.0	34.2	11.7	45.9	74.0	-28.1	Peak	Horizontal
	4153.5	36.7	2.1	38.8	74.0	-35.2	Peak	Vertical
	4833.5	36.4	4.2	40.6	74.0	-33.4	Peak	Vertical
*	5760.0	36.9	5.7	42.6	74.0	-31.4	Peak	Vertical
*	6295.5	36.6	7.4	44.0	74.0	-30.0	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	Hyde Yu
Test Site	WZ-AC1	Test Date	2020/12/20
Test Mode	SISO Mode - 802.11g	Test Channel	13
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
	3992.0	36.3	1.3	37.6	74.0	-36.4	Peak	Horizontal
	4842.0	36.2	4.1	40.3	74.0	-33.7	Peak	Horizontal
*	5836.5	35.7	5.9	41.6	74.0	-32.4	Peak	Horizontal
*	6916.0	34.9	10.0	44.9	74.0	-29.1	Peak	Horizontal
	3983.5	38.8	1.2	40.0	74.0	-34.0	Peak	Vertical
	4825.0	35.4	4.3	39.7	74.0	-34.3	Peak	Vertical
*	6168.0	34.6	7.1	41.7	74.0	-32.3	Peak	Vertical
*	6890.5	34.1	10.0	44.1	74.0	-29.9	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	Hyde Yu
Test Site	WZ-AC1	Test Date	2020/12/20
Test Mode	MIMO Mode - 802.11n-HT20	Test Channel	13
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
	4196.0	36.4	2.3	38.7	74.0	-35.3	Peak	Horizontal
	4791.0	36.5	4.2	40.7	74.0	-33.3	Peak	Horizontal
*	6244.5	35.9	7.1	43.0	74.0	-31.0	Peak	Horizontal
*	7052.0	33.0	11.3	44.3	74.0	-29.7	Peak	Horizontal
	4026.0	37.2	1.6	38.8	74.0	-35.2	Peak	Vertical
	4791.0	36.0	4.2	40.2	74.0	-33.8	Peak	Vertical
*	6074.5	34.5	7.3	41.8	74.0	-32.2	Peak	Vertical
*	7077.5	33.5	11.3	44.8	74.0	-29.2	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	Hyde Yu
Test Site	WZ-AC1	Test Date	2020/12/20
Test Mode	MIMO Mode - 802.11n-HT40	Test Channel	11
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
	4077.0	37.1	1.8	38.9	74.0	-35.1	Peak	Horizontal
	4825.0	36.3	4.3	40.6	74.0	-33.4	Peak	Horizontal
*	5955.5	35.2	6.4	41.6	74.0	-32.4	Peak	Horizontal
*	6839.5	34.1	9.7	43.8	74.0	-30.2	Peak	Horizontal
	4017.5	37.5	1.7	39.2	74.0	-34.8	Peak	Vertical
	4808.0	36.4	4.1	40.5	74.0	-33.5	Peak	Vertical
*	6015.0	34.7	7.0	41.7	74.0	-32.3	Peak	Vertical
*	7120.0	33.7	11.8	45.5	74.0	-28.5	Peak	Vertical

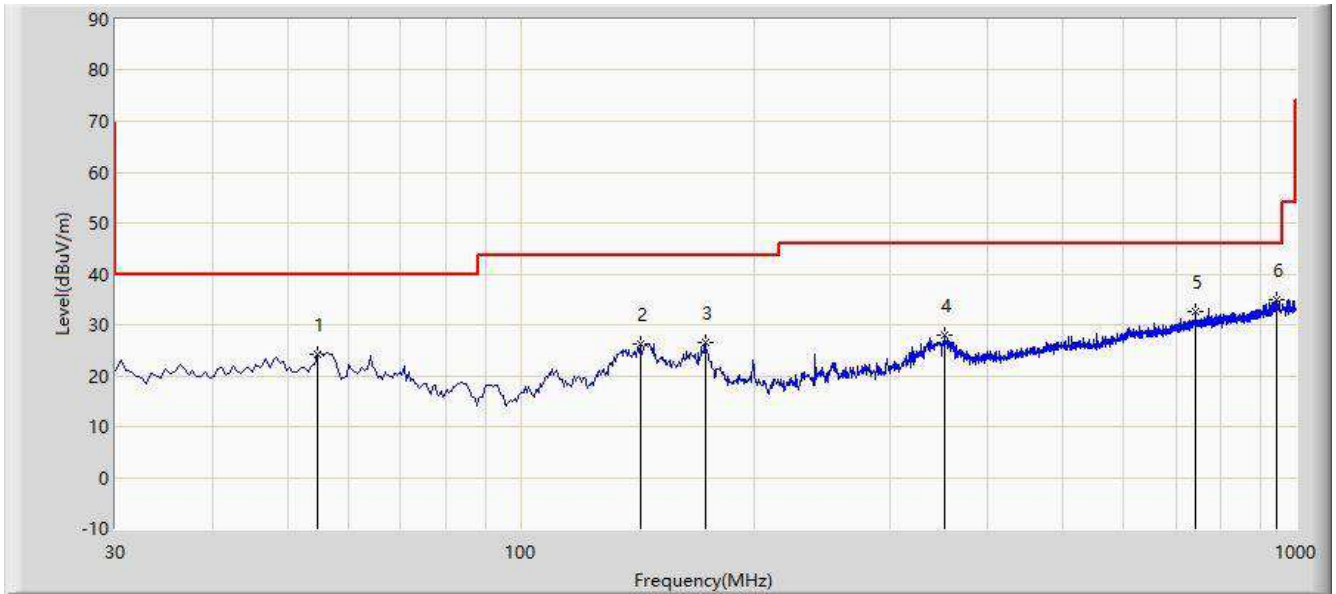
Note 1: "*" means test frequency didn't fall into restricted band.

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

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

The Result of Radiated Emission below 1GHz:

Site: WZ-AC1	Time: 2020/12/24 - 21:58
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: WZ-AC1_VULB 9168 _30-1000MHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2472MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			54.735	24.265	6.259	-15.735	40.000	18.006	PK
2			142.520	26.110	8.315	-17.390	43.500	17.795	PK
3			173.075	26.608	9.248	-16.892	43.500	17.360	PK
4			352.040	28.044	8.188	-17.956	46.000	19.856	PK
5			742.465	32.479	4.163	-13.521	46.000	28.316	PK
6		*	946.165	35.022	4.324	-10.978	46.000	30.698	PK

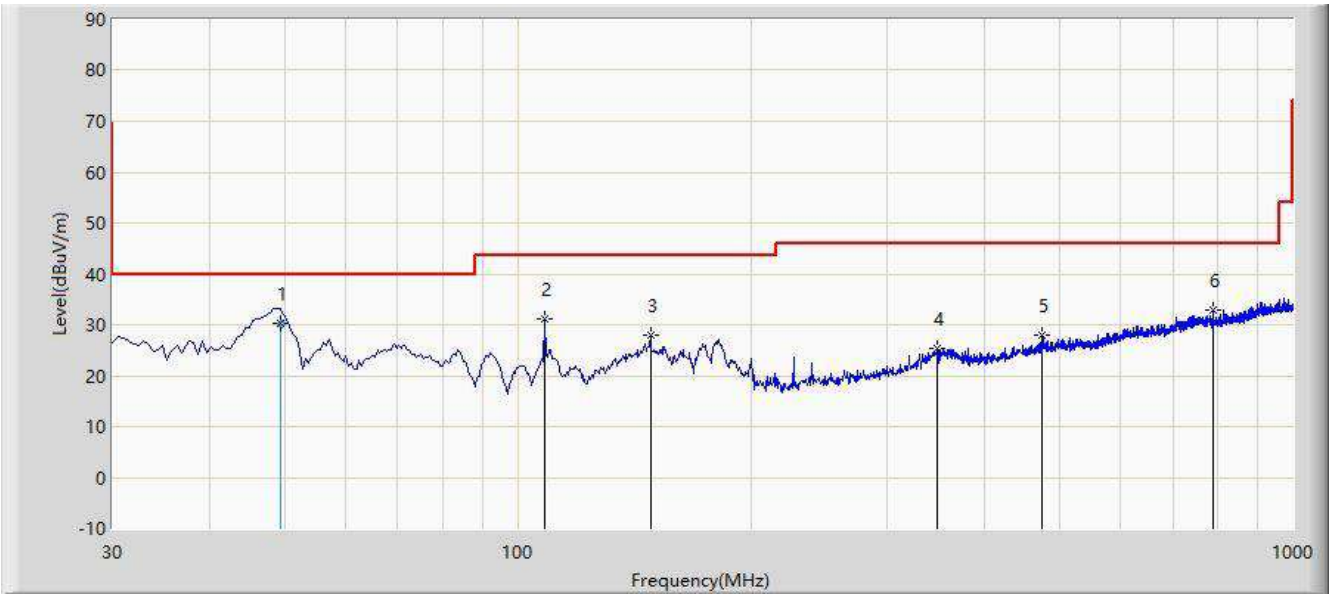
Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

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: WZ-AC1	Time: 2020/12/24 - 22:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: WZ-AC1_VULB 9168 _30-1000MHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2472MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	49.400	30.322	12.260	-9.678	40.000	18.062	QP
2			108.570	31.188	16.349	-12.312	43.500	14.839	PK
3			148.340	27.837	9.650	-15.663	43.500	18.187	PK
4			347.675	25.332	5.541	-20.668	46.000	19.790	PK
5			475.230	27.882	4.688	-18.118	46.000	23.194	PK
6			790.480	32.823	4.110	-13.177	46.000	28.713	PK

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + 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.

5.7. Radiated Restricted Band Edge Measurement

5.7.1. 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 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
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

5.7.2.Test Procedure Used

ANSI C63.10-2013 Section 6.3 & 6.6 & 11.13

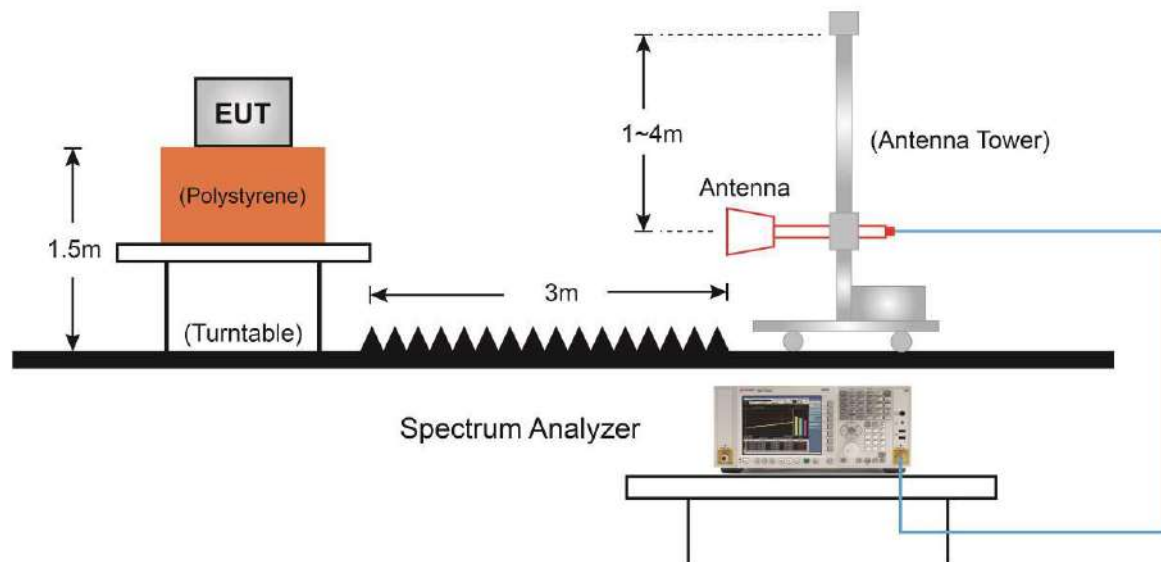
5.7.3.Test Setting

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

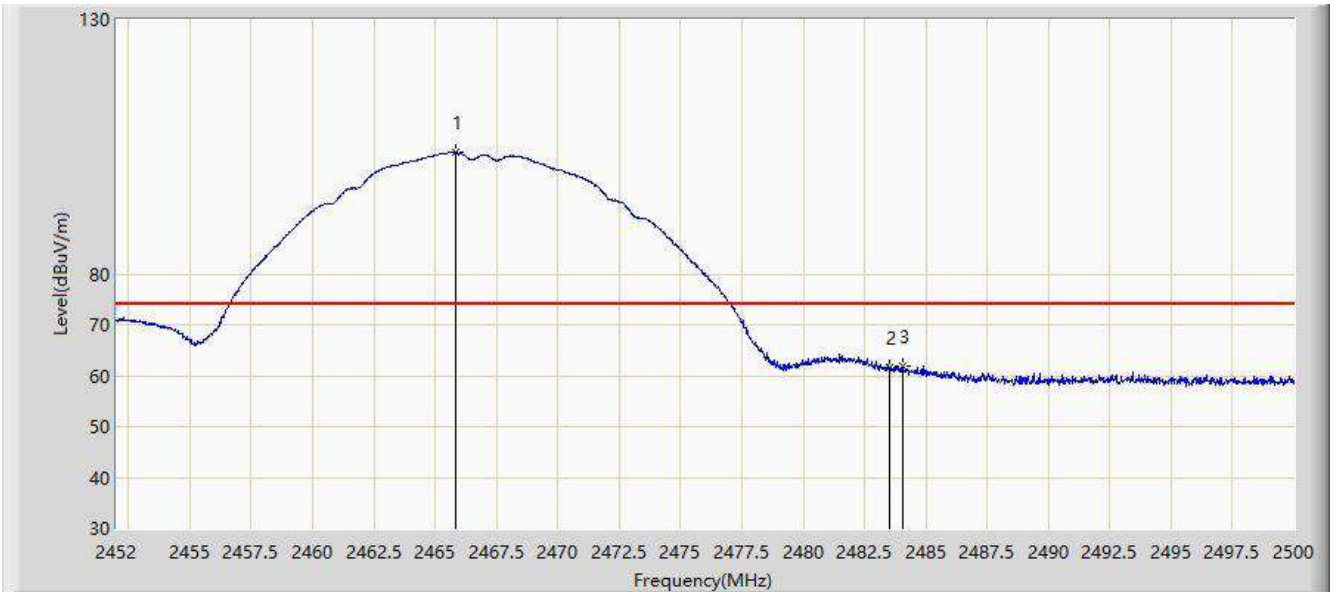
Average Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW $\geq 1/T$
4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

5.7.4. Test Setup

5.7.5.Test Result

Site: WZ-AC2	Time: 2020/12/19 - 15:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2467MHz Ant 1	

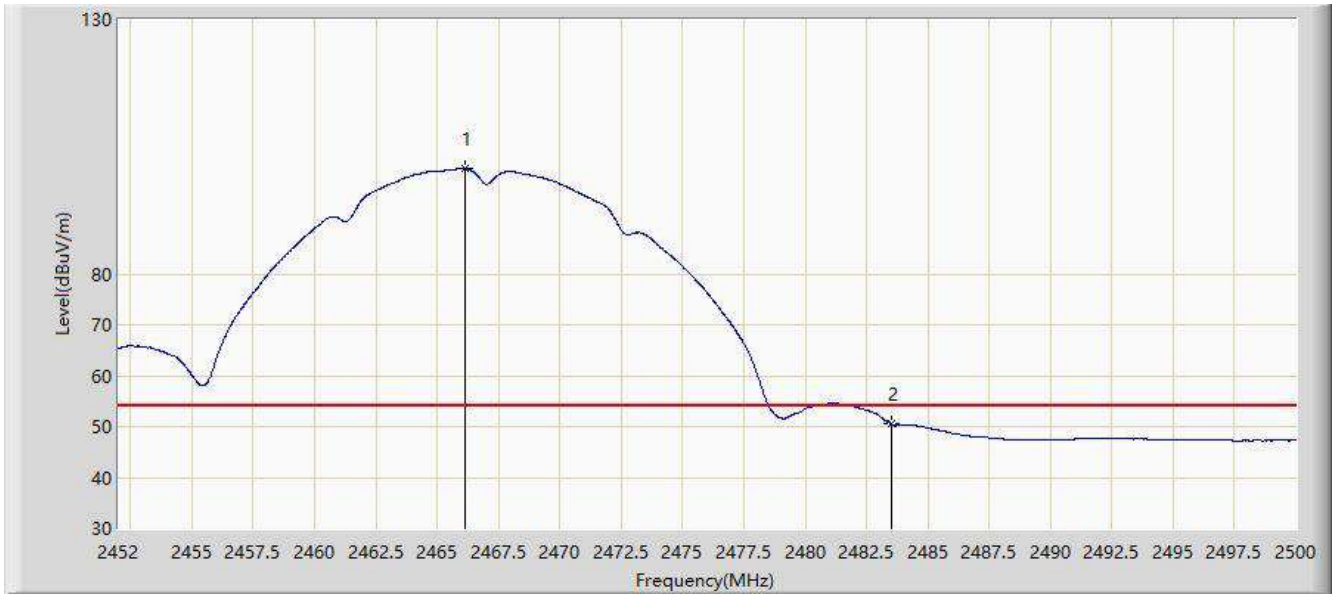


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2465.848	103.786	71.251	N/A	N/A	32.535	PK
2			2483.500	61.491	28.790	-12.509	74.000	32.701	PK
3			2484.088	61.856	29.147	-12.144	74.000	32.709	PK

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

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

Site: WZ-AC2	Time: 2020/12/19 - 15:31
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2467MHz Ant 1	

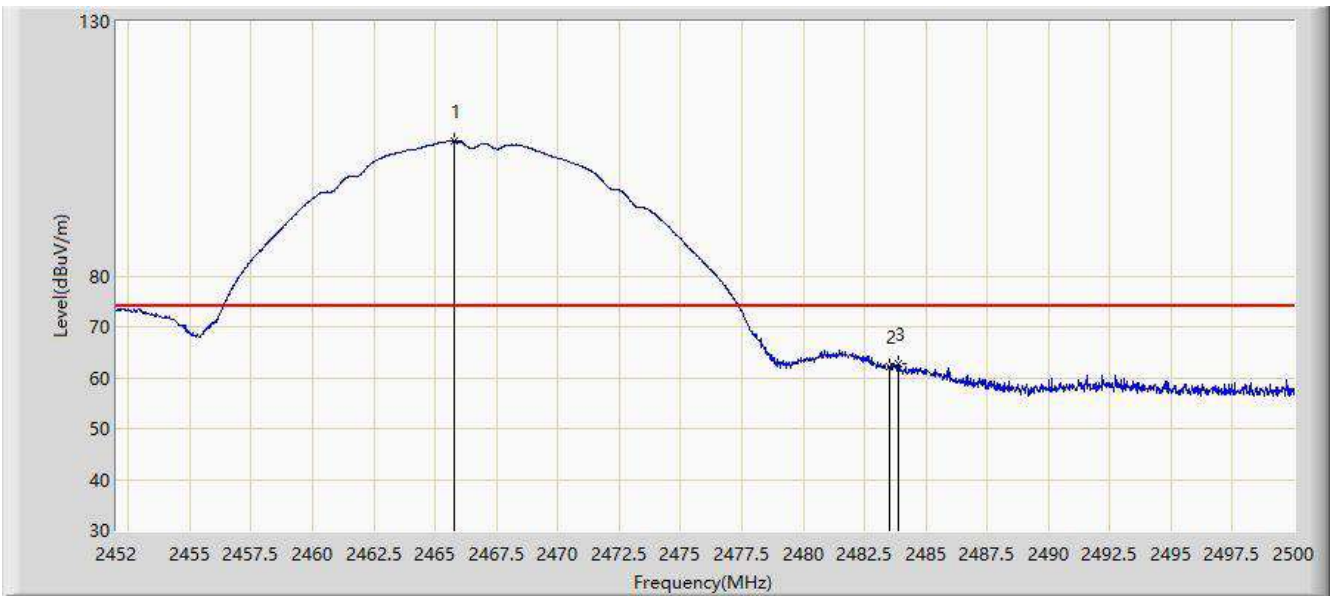


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2466.160	100.671	68.139	N/A	N/A	32.533	AV
2			2483.500	50.504	17.803	-3.496	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/19 - 15:28
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2467MHz Ant 1	

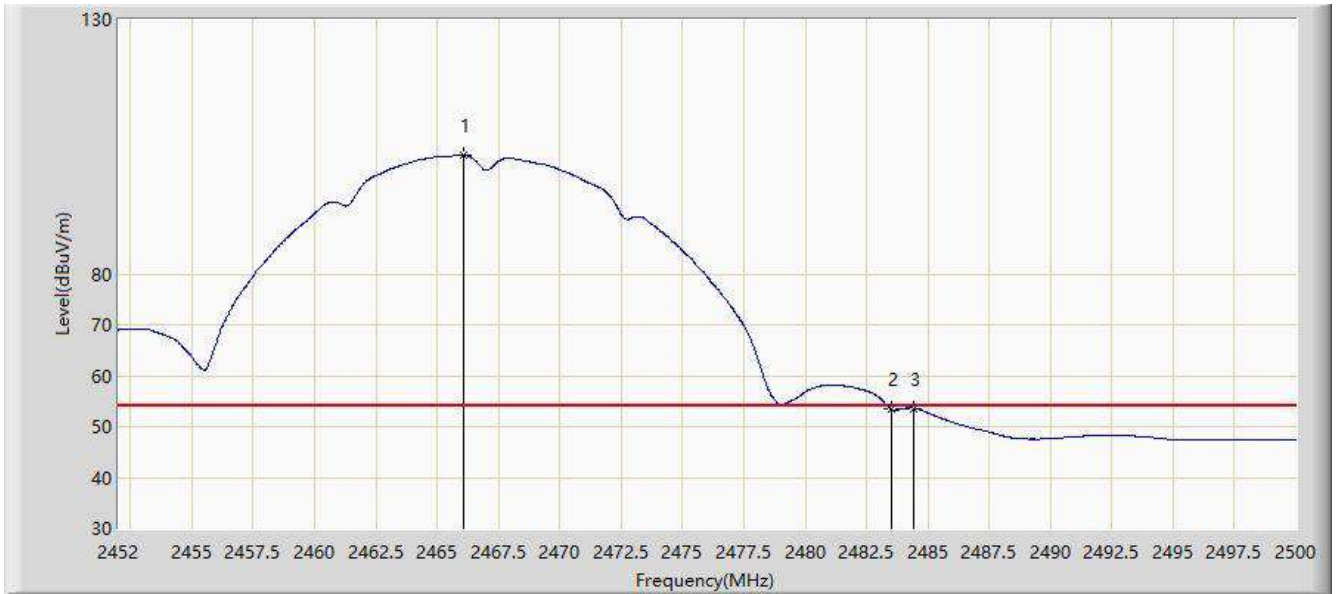


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2465.776	106.445	73.909	N/A	N/A	32.536	PK
2			2483.500	62.184	29.483	-11.816	74.000	32.701	PK
3			2483.872	62.824	30.118	-11.176	74.000	32.706	PK

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

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

Site: WZ-AC2	Time: 2020/12/19 - 15:28
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2467MHz Ant 1	

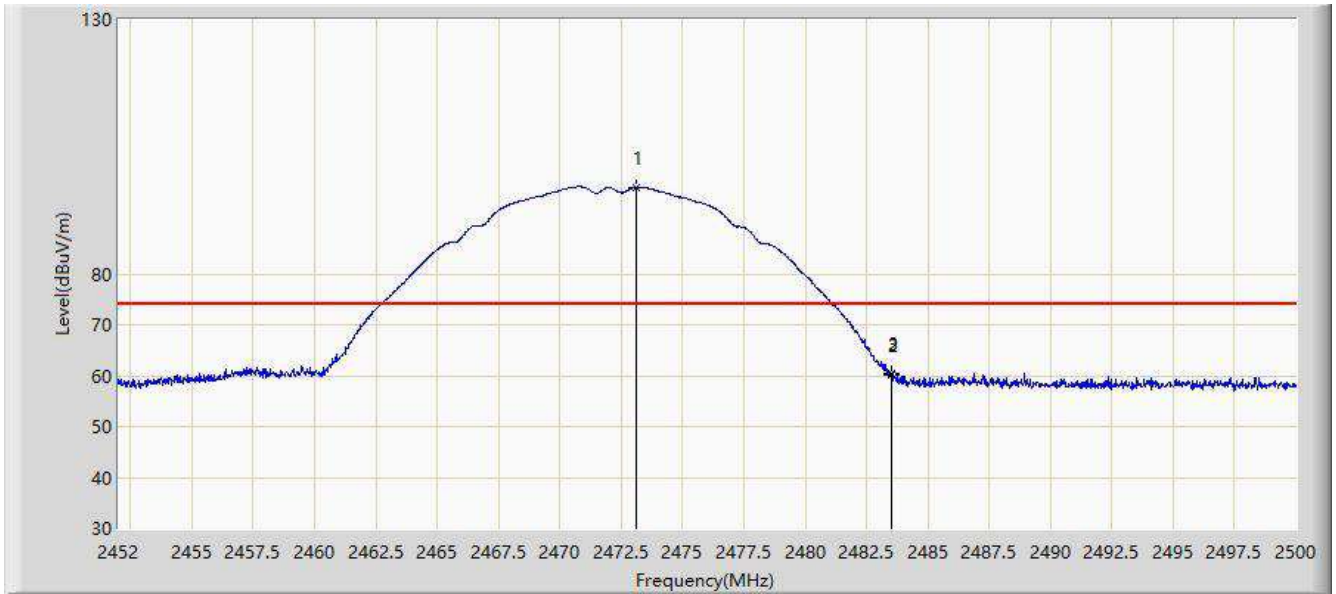


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2466.088	103.291	70.758	N/A	N/A	32.533	AV
2			2483.500	53.456	20.755	-0.544	54.000	32.701	AV
3			2484.448	53.560	20.846	-0.440	54.000	32.714	AV

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

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

Site: WZ-AC2	Time: 2020/12/19 - 15:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2472MHz Ant 1	

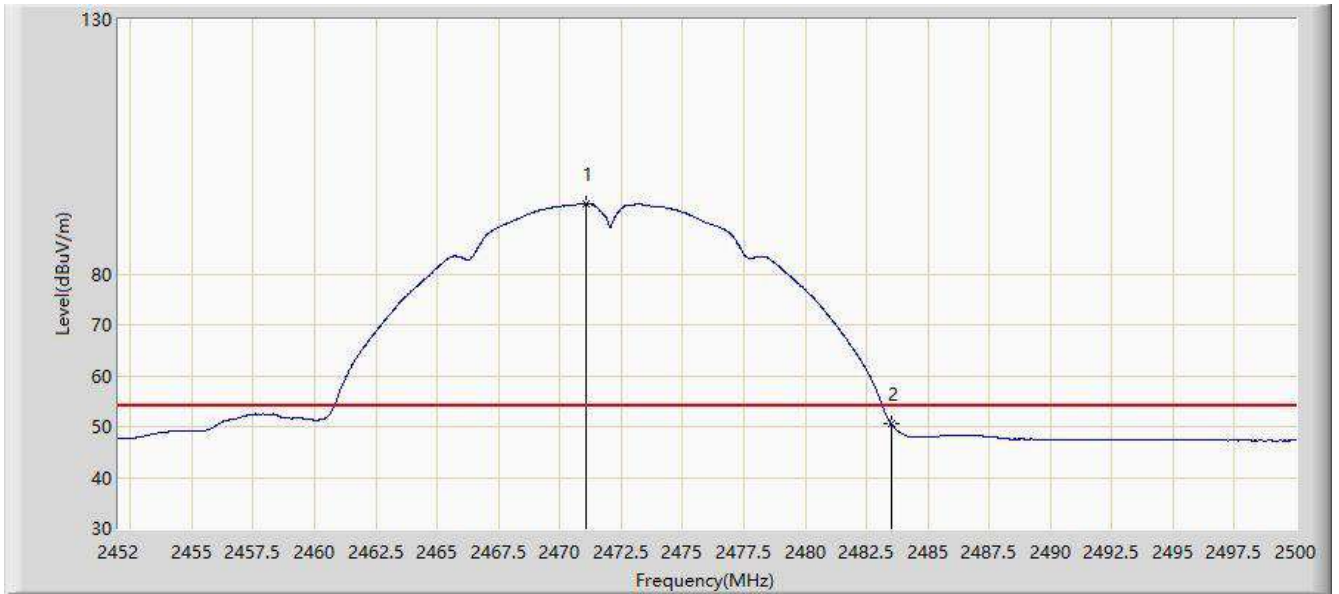


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2473.096	96.995	64.443	N/A	N/A	32.552	PK
2			2483.500	60.046	27.345	-13.954	74.000	32.701	PK
3			2483.536	60.462	27.761	-13.538	74.000	32.701	PK

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

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

Site: WZ-AC2	Time: 2020/12/19 - 15:40
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2472MHz Ant 1	

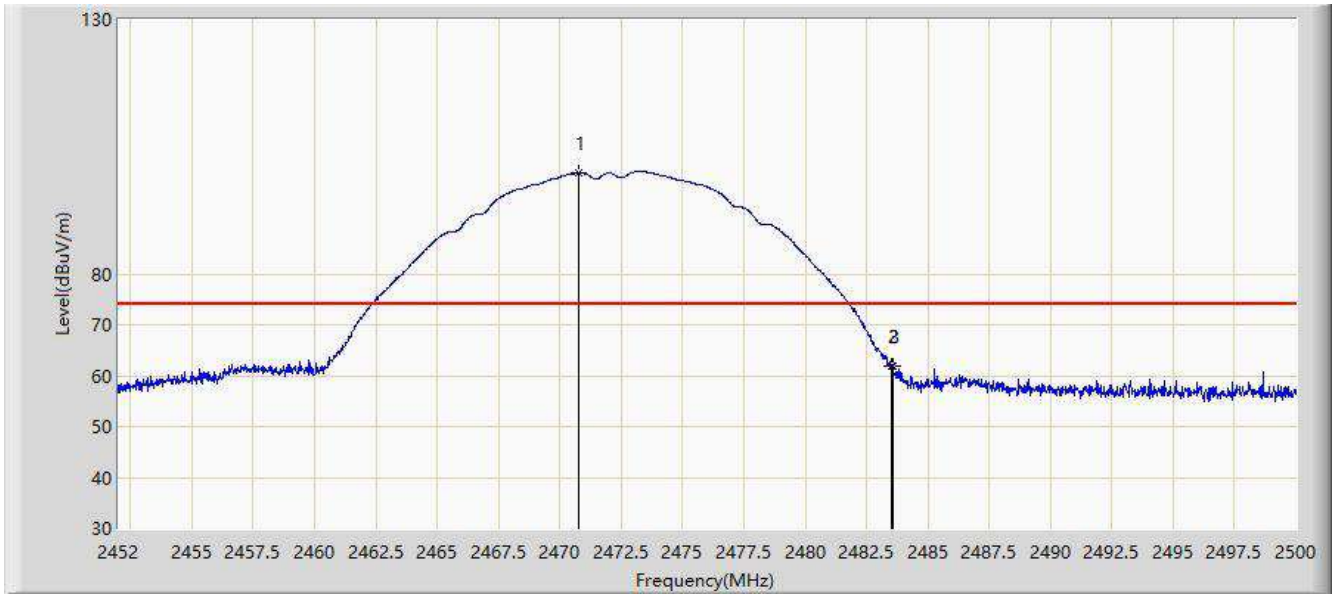


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2471.080	93.859	61.336	N/A	N/A	32.523	AV
2			2483.500	50.584	17.883	-3.416	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/19 - 15:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2472MHz Ant 1	

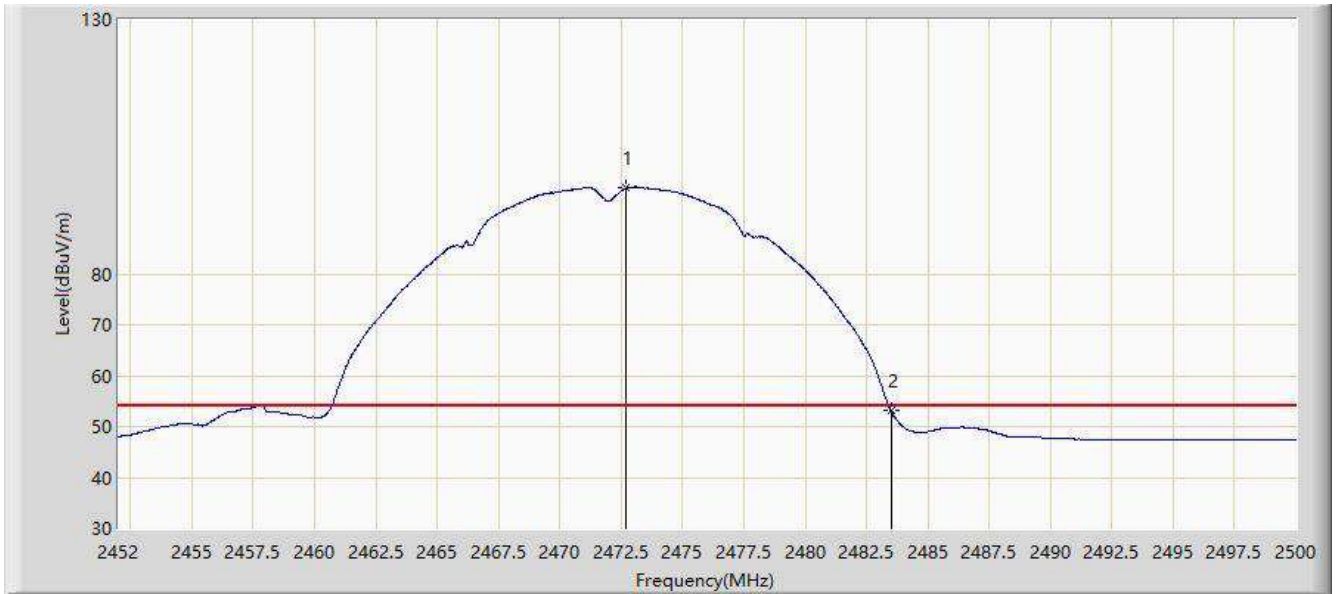


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2470.792	99.793	67.274	N/A	N/A	32.519	PK
2			2483.500	61.975	29.274	-12.025	74.000	32.701	PK
3			2483.560	62.023	29.322	-11.977	74.000	32.701	PK

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

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

Site: WZ-AC2	Time: 2020/12/19 - 15:37
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2472MHz Ant 1	

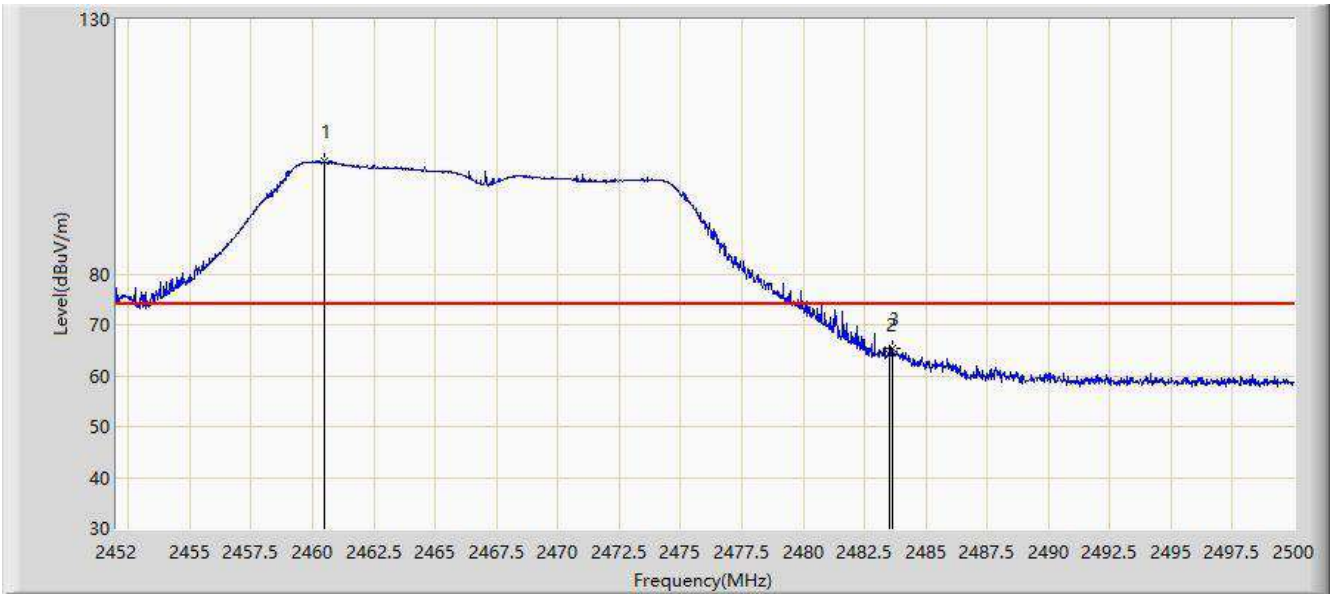


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2472.712	96.950	64.403	N/A	N/A	32.547	AV
2			2483.500	53.133	20.432	-0.867	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/19 - 16:01
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11g at Channel 2467MHz Ant 1	

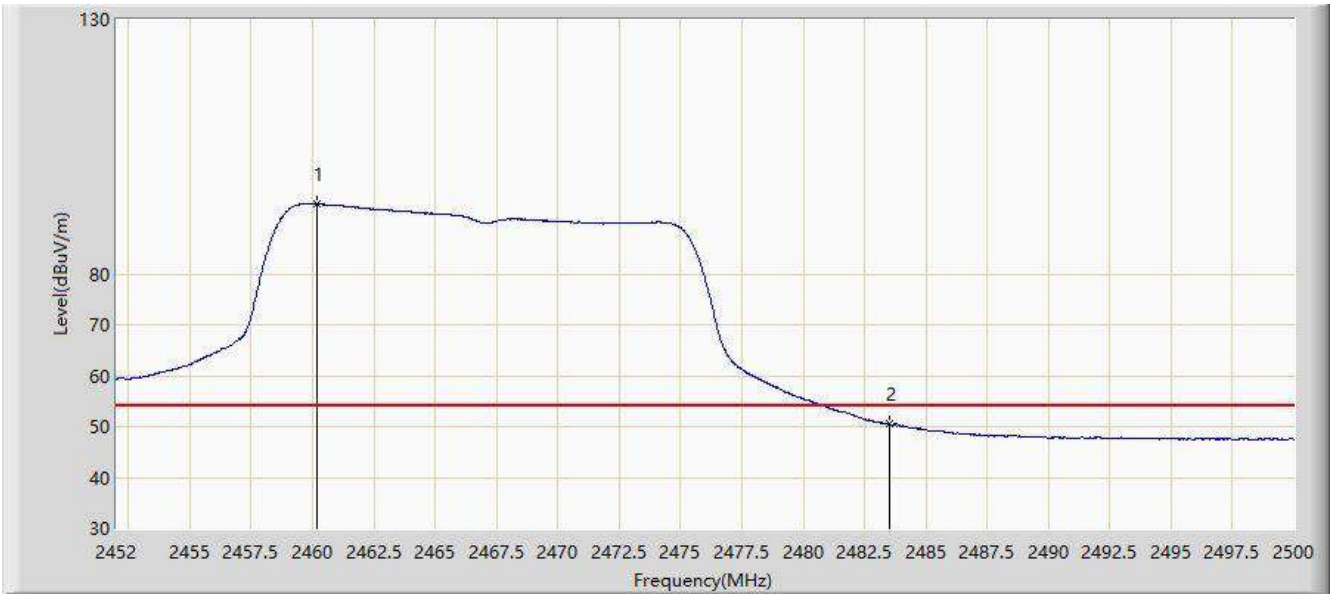


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.496	102.226	69.642	N/A	N/A	32.584	PK
2			2483.500	64.270	31.569	-9.730	74.000	32.701	PK
3			2483.632	65.269	32.567	-8.731	74.000	32.702	PK

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

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

Site: WZ-AC2	Time: 2020/12/19 - 16:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11g at Channel 2467MHz Ant 1	

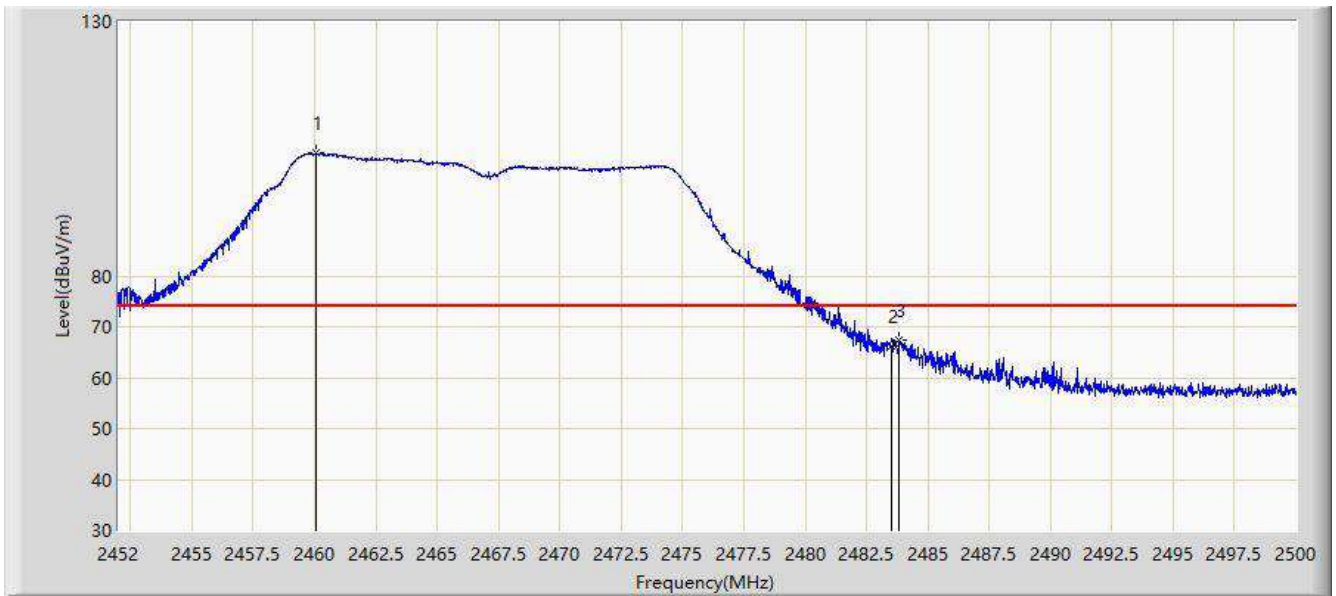


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.184	93.712	61.125	N/A	N/A	32.587	AV
2			2483.500	50.480	17.779	-3.520	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/19 - 16:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11g at Channel 2467MHz Ant 1	

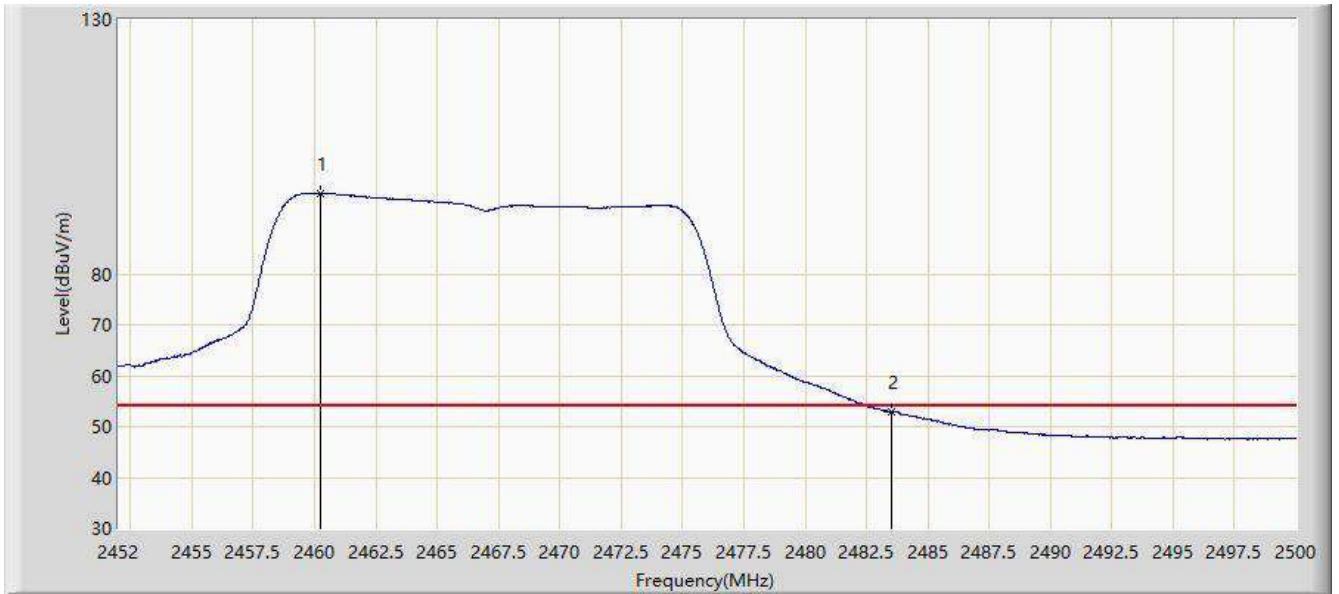


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.064	104.072	71.484	N/A	N/A	32.588	PK
2			2483.500	66.359	33.658	-7.641	74.000	32.701	PK
3			2483.824	67.456	34.751	-6.544	74.000	32.705	PK

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

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

Site: WZ-AC2	Time: 2020/12/19 - 15:57
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11g at Channel 2467MHz Ant 1	

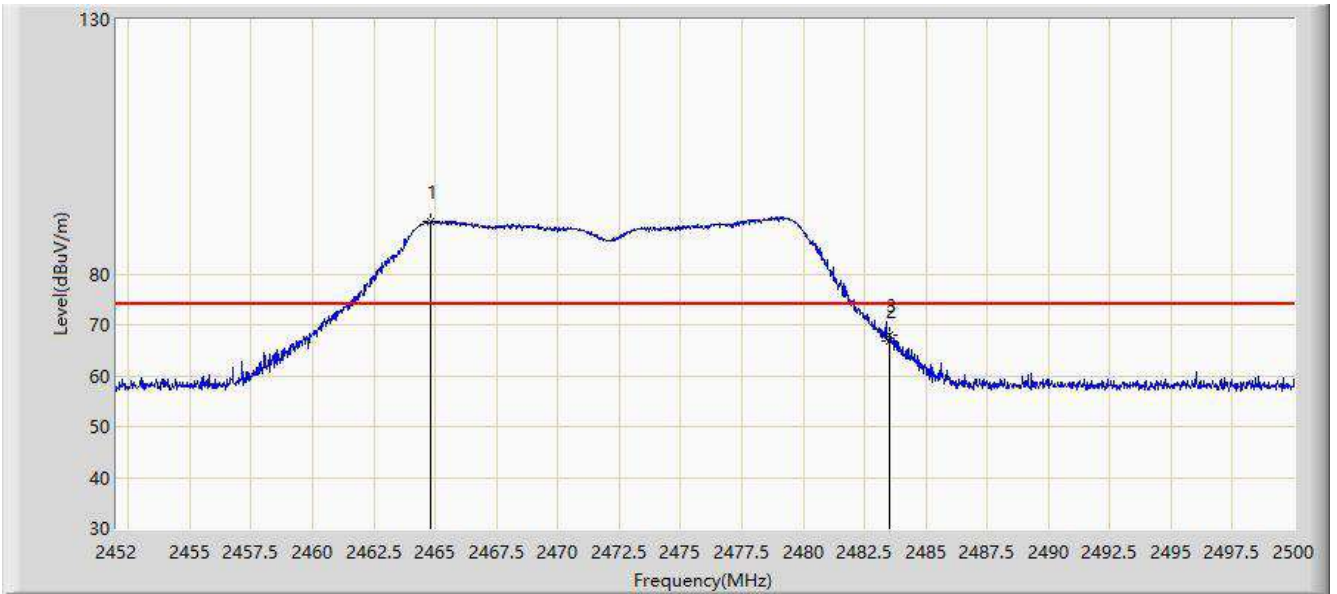


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.256	95.850	63.263	N/A	N/A	32.586	AV
2			2483.500	53.007	20.306	-0.993	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/19 - 16:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11g at Channel 2472MHz Ant 1	

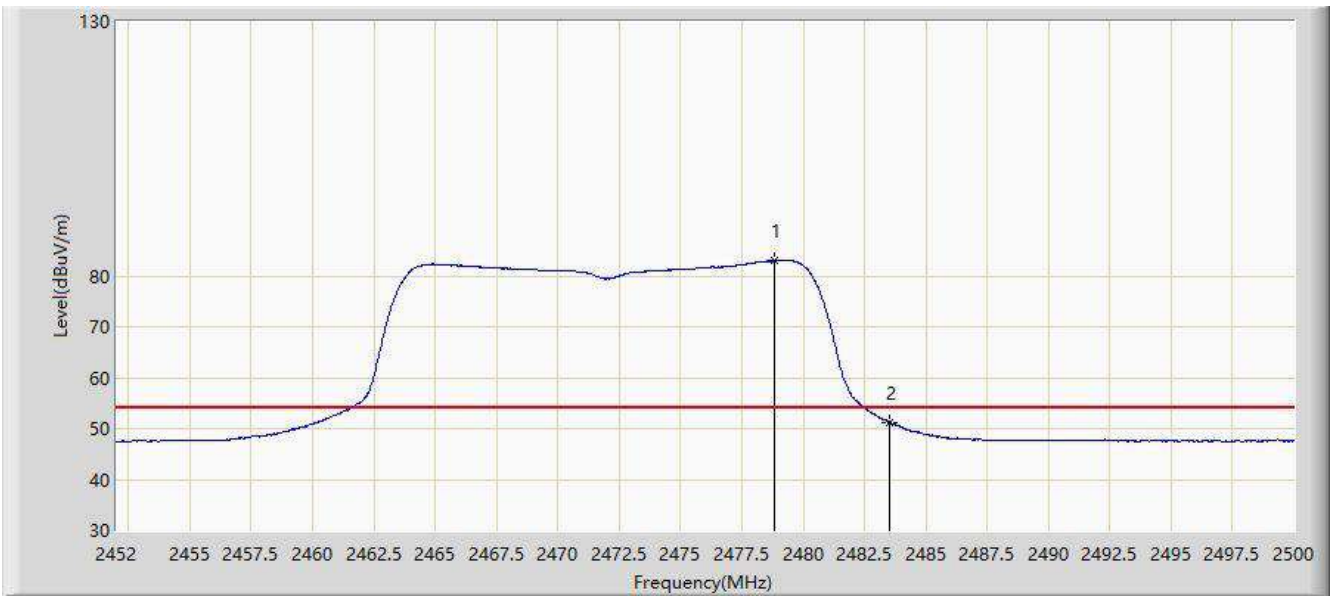


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.816	90.410	57.866	N/A	N/A	32.545	PK
2			2483.500	66.869	34.168	-7.131	74.000	32.701	PK
3			2483.536	68.095	35.394	-5.905	74.000	32.701	PK

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

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

Site: WZ-AC2	Time: 2020/12/19 - 16:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11g at Channel 2472MHz Ant 1	

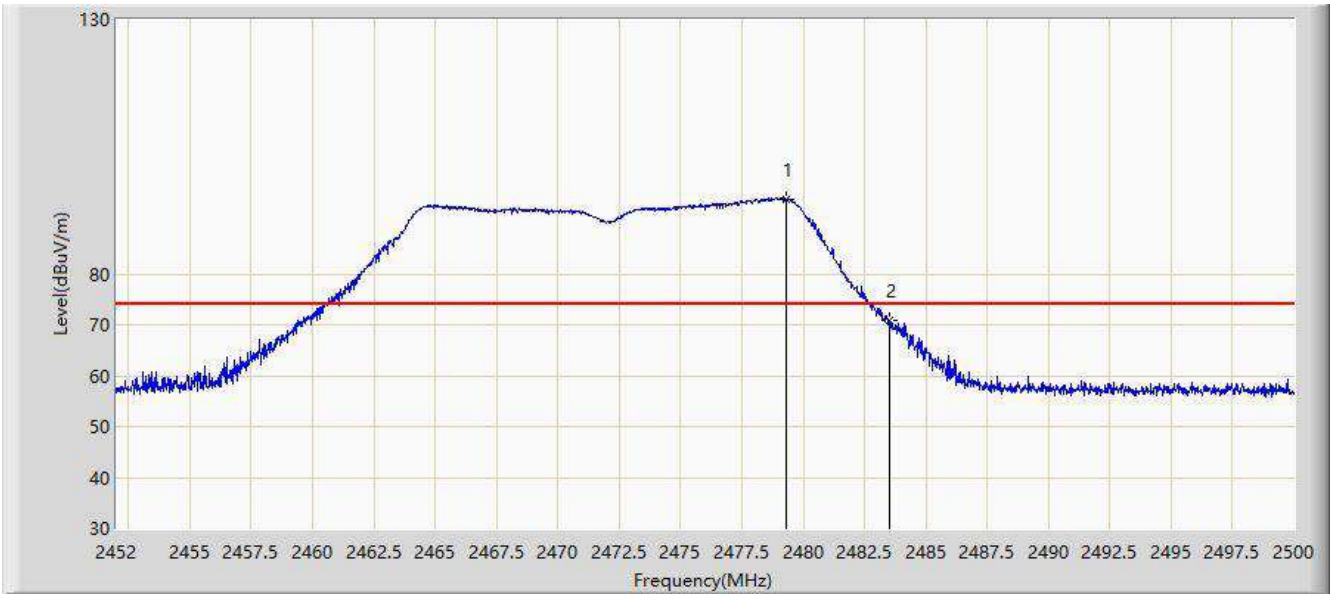


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2478.808	82.953	50.318	N/A	N/A	32.635	AV
2			2483.500	51.289	18.588	-2.711	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/19 - 16:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11g at Channel 2472MHz Ant 1	

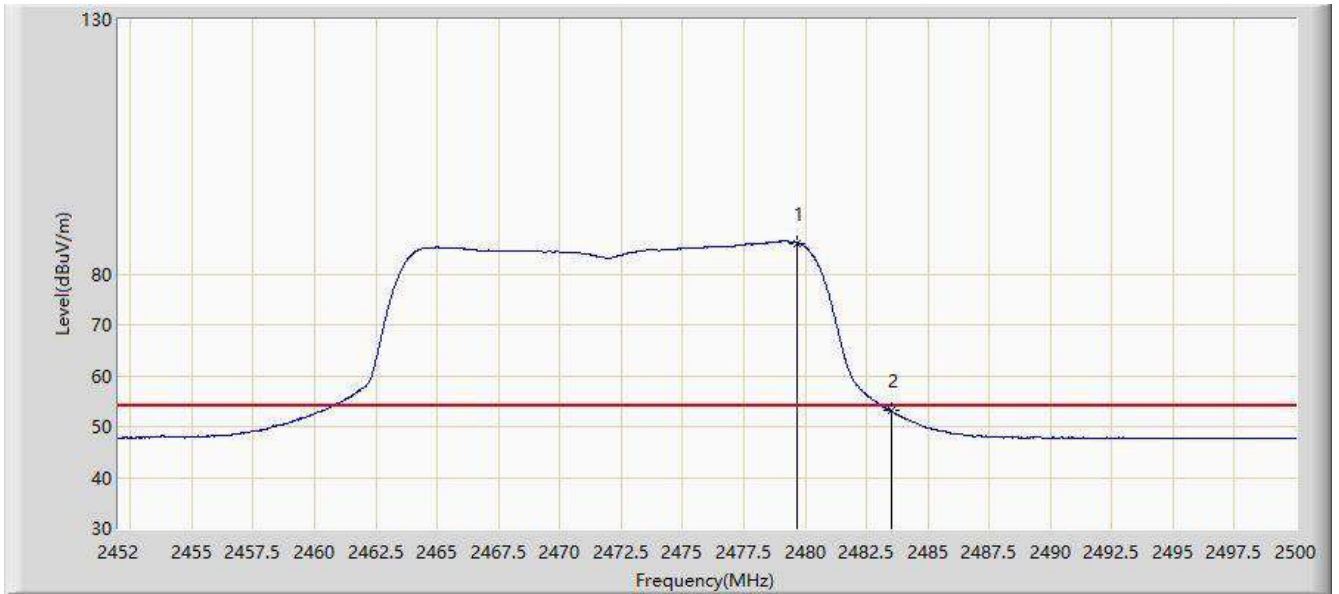


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.336	94.765	62.123	N/A	N/A	32.643	PK
2			2483.500	70.872	38.171	-3.128	74.000	32.701	PK

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

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

Site: WZ-AC2	Time: 2020/12/19 - 16:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11g at Channel 2472MHz Ant 1	

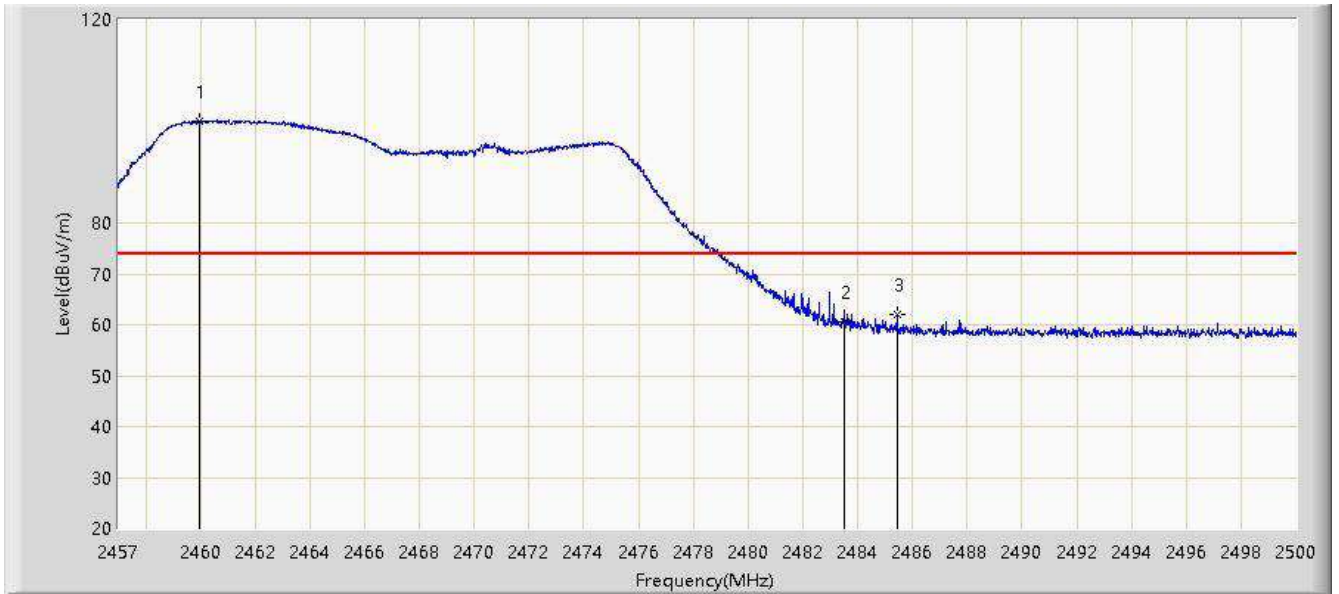


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.672	86.065	53.418	N/A	N/A	32.647	AV
2			2483.500	53.122	20.421	-0.878	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/28 - 23:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Buter Shi
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT20 at Channel 2467MHz Ant 1 + 2	

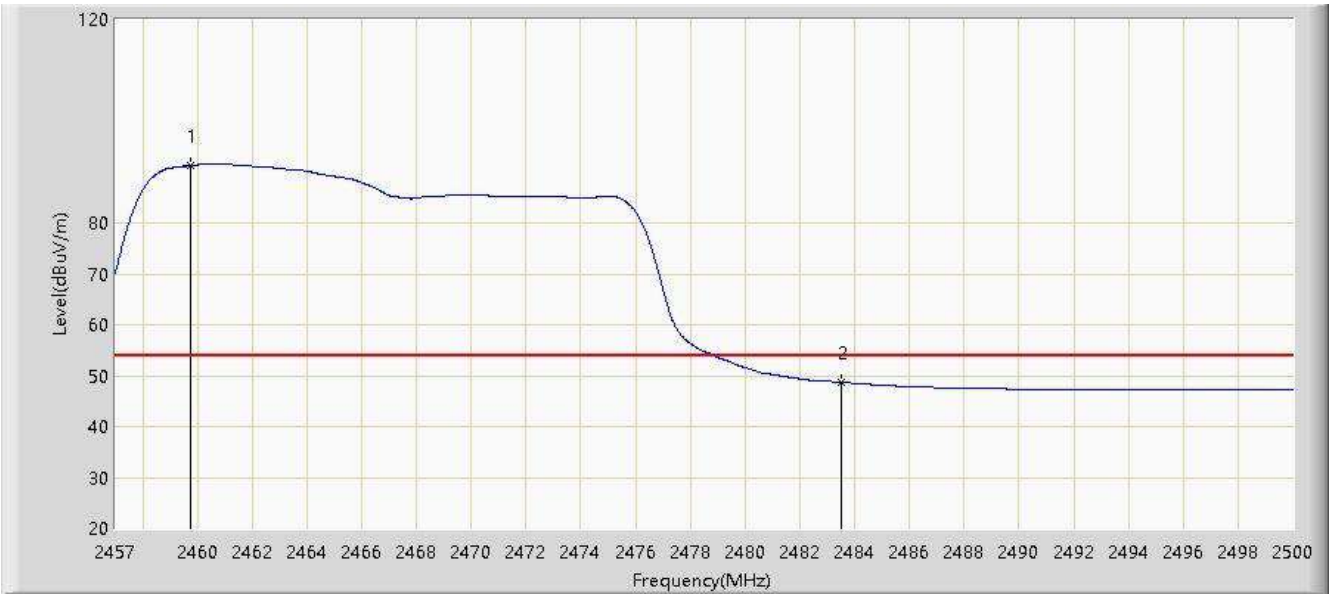


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.989	99.995	67.406	N/A	N/A	32.590	PK
2			2483.500	60.552	27.851	-13.448	74.000	32.701	PK
3			2485.445	62.033	29.305	-11.967	74.000	32.728	PK

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

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

Site: WZ-AC2	Time: 2020/12/28 - 23:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Buter Shi
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT20 at Channel 2467MHz Ant 1 + 2	

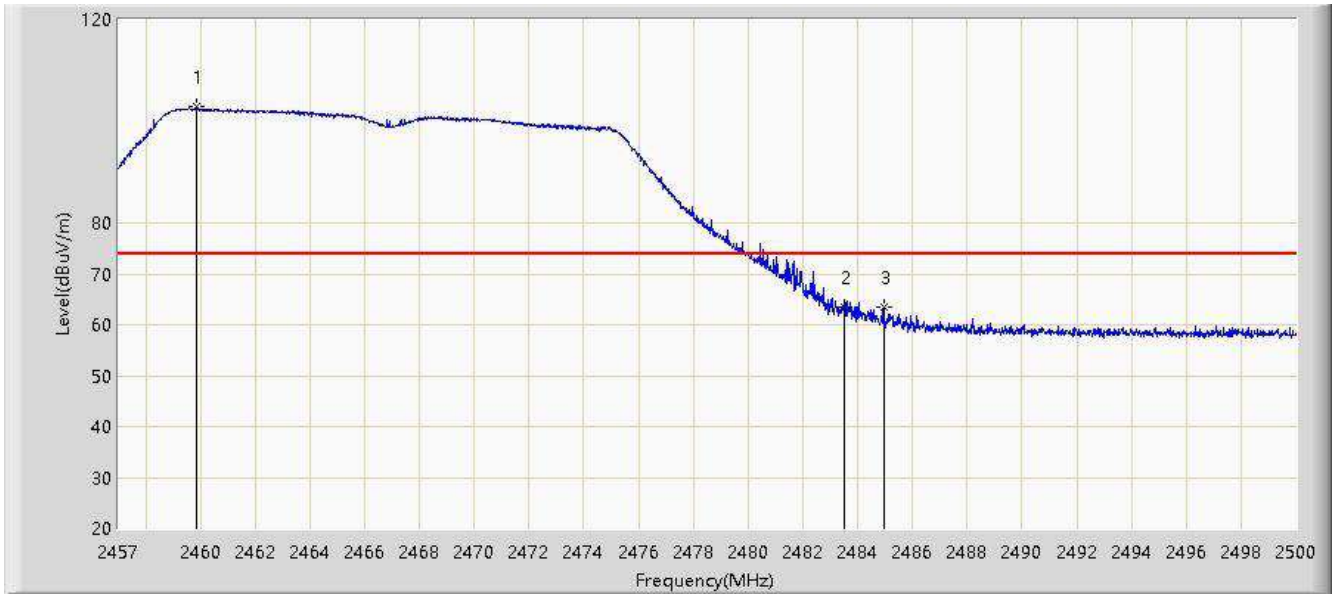


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.773	91.284	58.693	N/A	N/A	32.591	AV
2			2483.500	48.700	15.999	-5.300	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/28 - 23:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Buter Shi
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT20 at Channel 2467MHz Ant 1 + 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.881	102.933	70.343	N/A	N/A	32.591	PK
2			2483.500	63.465	30.764	-10.535	74.000	32.701	PK
3			2484.950	63.593	30.872	-10.407	74.000	32.721	PK

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

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

Site: WZ-AC2	Time: 2020/12/28 - 23:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Buter Shi
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT20 at Channel 2467MHz Ant 1 + 2	

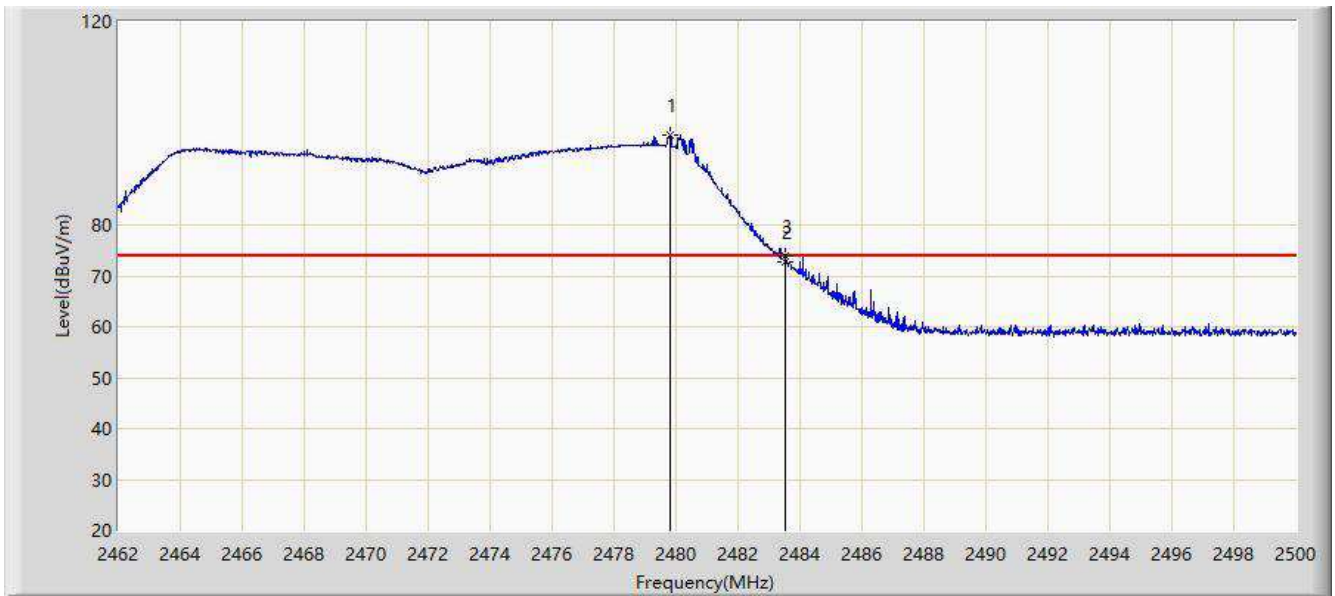


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2458.741	94.437	61.835	N/A	N/A	32.602	AV
2			2483.500	49.561	16.860	-4.439	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/18 - 20:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT20 at Channel 2472MHz Ant 1 + 2	

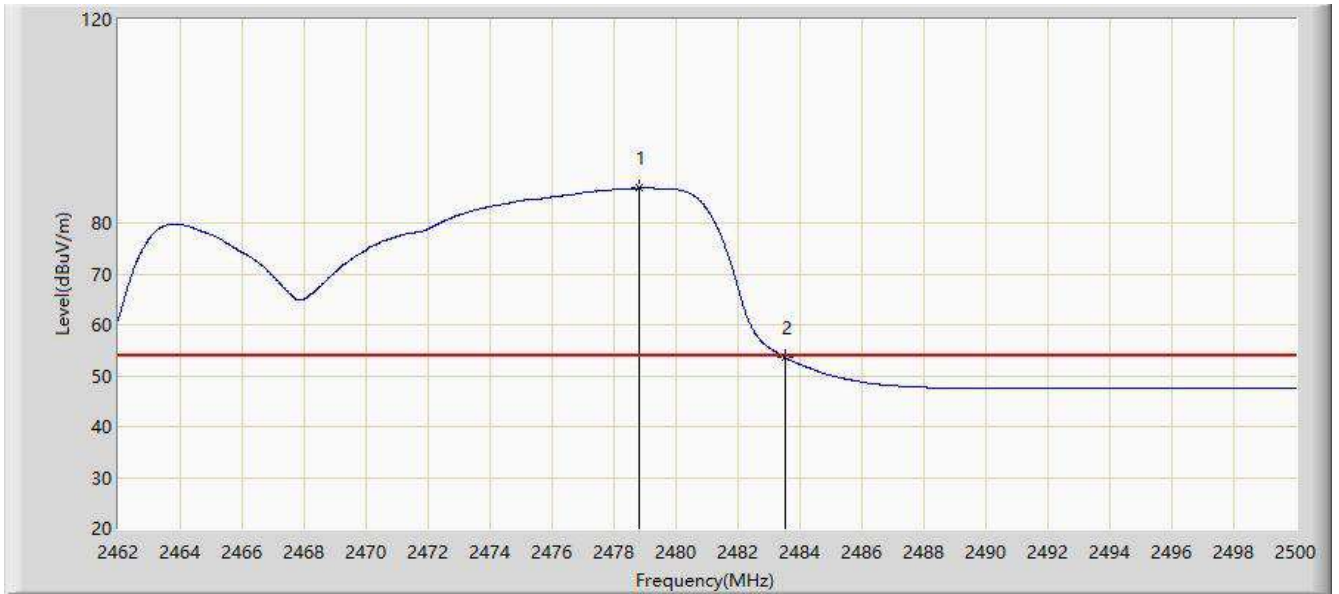


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.803	97.546	64.897	N/A	N/A	32.649	PK
2			2483.500	72.835	40.134	-1.165	74.000	32.701	PK
3			2483.546	73.964	41.263	-0.036	74.000	32.701	PK

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

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

Site: WZ-AC2	Time: 2020/12/18 - 21:02
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT20 at Channel 2472MHz Ant 1 + 2	

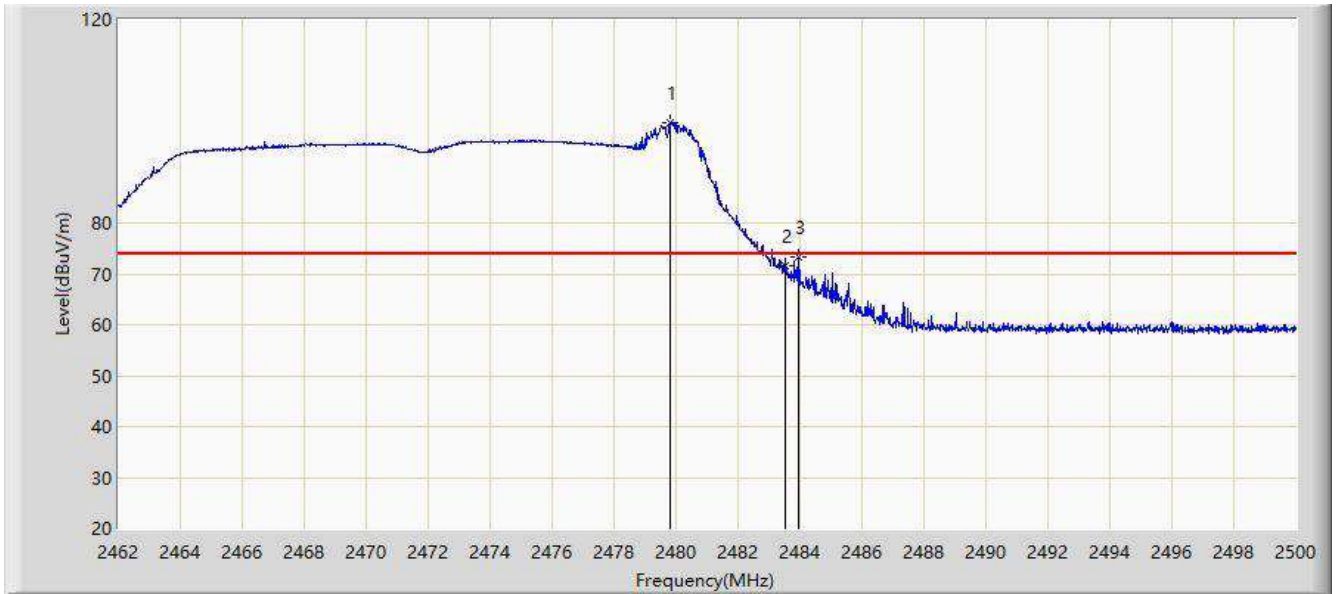


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2478.815	86.827	54.192	N/A	N/A	32.635	AV
2			2483.500	53.660	20.959	-0.340	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/18 - 20:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT20 at Channel 2472MHz Ant 1 + 2	

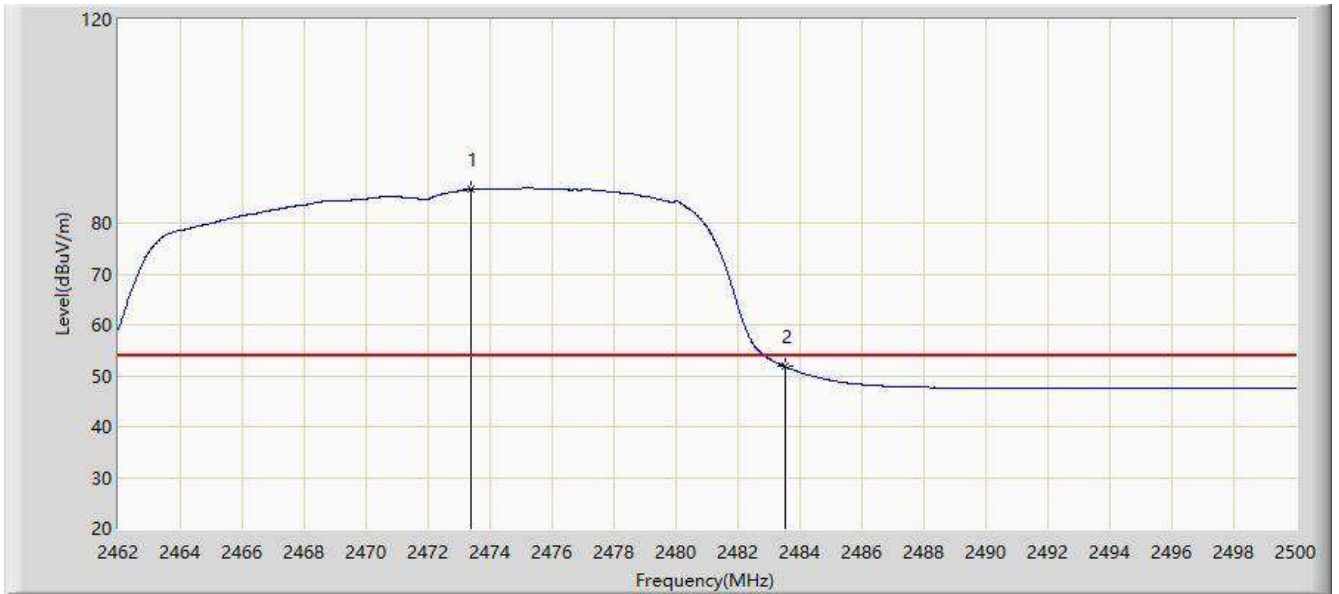


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.803	99.686	67.037	N/A	N/A	32.649	PK
2			2483.500	71.466	38.765	-2.534	74.000	32.701	PK
3			2483.945	73.233	40.526	-0.767	74.000	32.707	PK

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

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

Site: WZ-AC2	Time: 2020/12/18 - 20:58
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT20 at Channel 2472MHz Ant 1 + 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2473.381	86.630	54.073	N/A	N/A	32.557	AV
2			2483.500	51.833	19.132	-2.167	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/28 - 23:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Buter Shi
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT40 at Channel 2457MHz Ant 1 + 2	

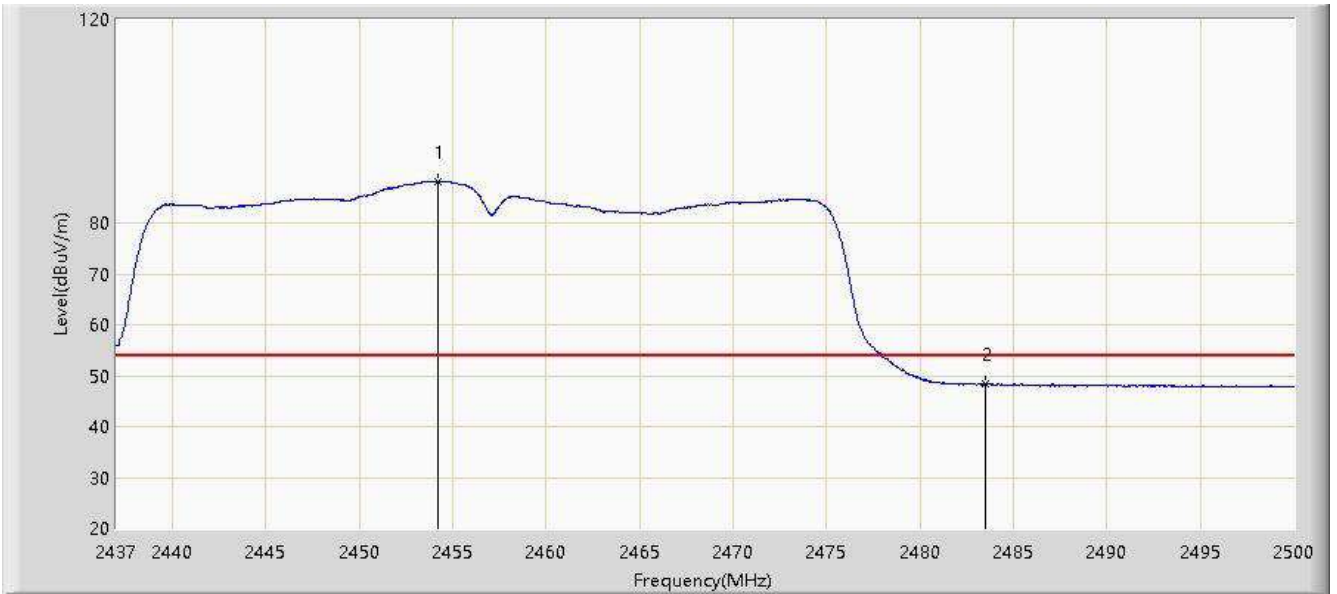


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2453.096	96.326	63.667	N/A	N/A	32.659	PK
2			2483.500	58.711	26.010	-15.289	74.000	32.701	PK
3			2486.644	59.890	27.146	-14.110	74.000	32.744	PK

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

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

Site: WZ-AC2	Time: 2020/12/28 - 23:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Buter Shi
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT40 at Channel 2457MHz Ant 1 + 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2454.230	88.215	55.568	N/A	N/A	32.647	AV
2			2483.500	48.398	15.697	-5.602	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/28 - 23:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Buter Shi
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT40 at Channel 2457MHz Ant 1 + 2	

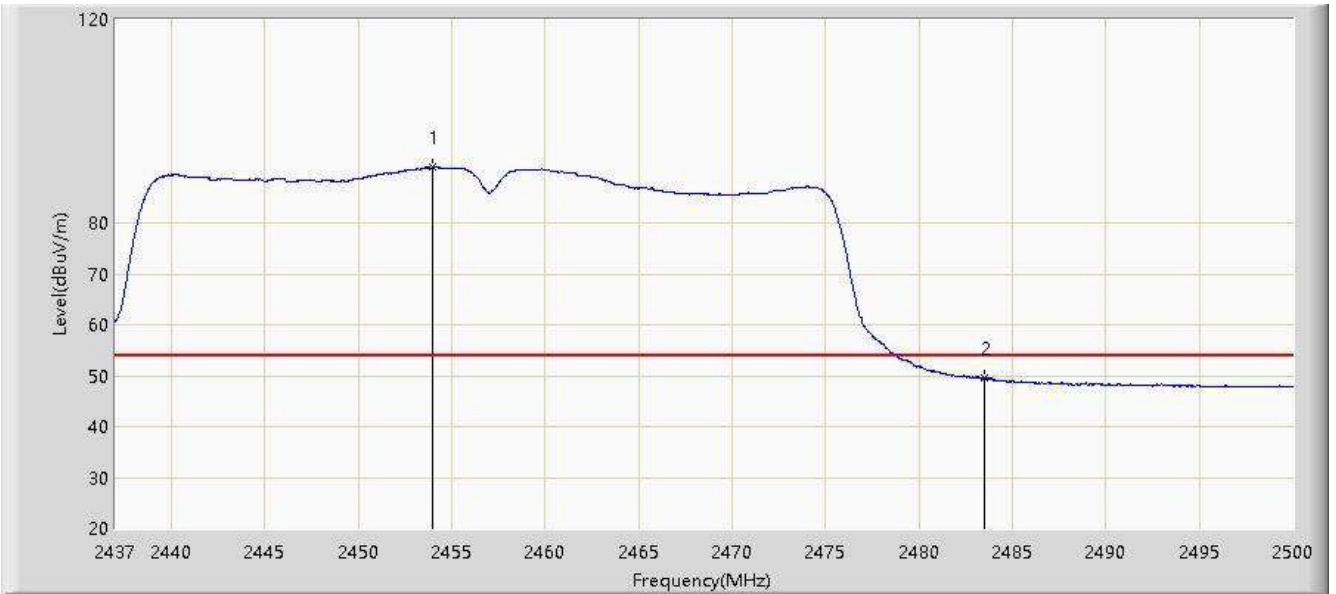


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2454.451	99.062	66.417	N/A	N/A	32.645	PK
2			2483.500	60.175	27.474	-13.825	74.000	32.701	PK
3			2484.975	61.959	29.238	-12.041	74.000	32.721	PK

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

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

Site: WZ-AC2	Time: 2020/12/28 - 23:52
Limit: FCC_Part15.209_RE(3m)	Engineer: Buter Shi
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT40 at Channel 2457MHz Ant 1 + 2	

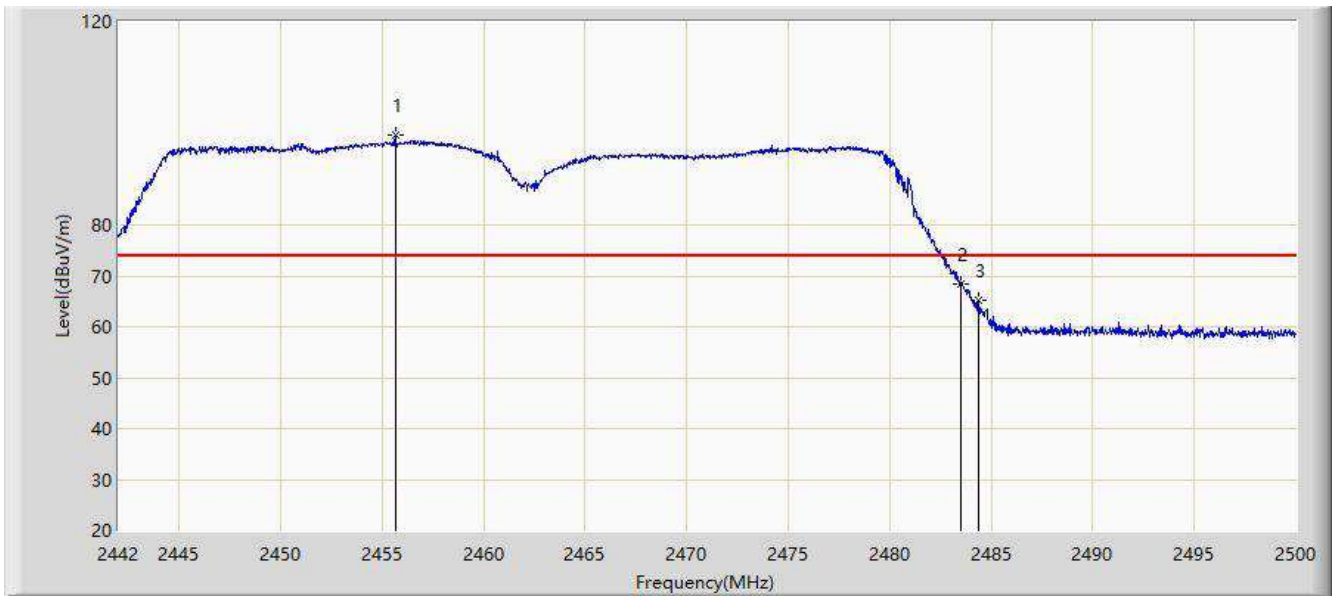


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2454.010	90.975	58.326	N/A	N/A	32.649	AV
2			2483.500	49.504	16.803	-4.496	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/18 - 21:45
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT40 at Channel 2462MHz Ant 1 + 2	

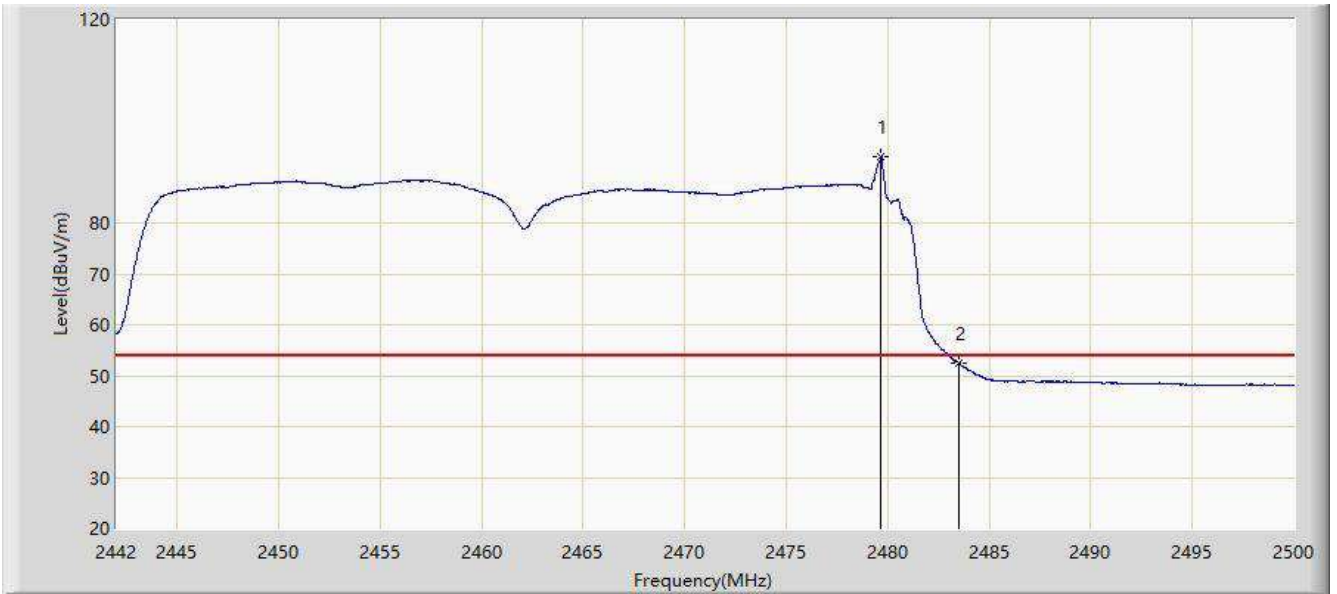


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2455.630	97.697	65.064	N/A	N/A	32.633	PK
2			2483.500	68.330	35.629	-5.670	74.000	32.701	PK
3			2484.398	65.347	32.634	-8.653	74.000	32.713	PK

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

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

Site: WZ-AC2	Time: 2020/12/18 - 21:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT40 at Channel 2462MHz Ant 1 + 2	

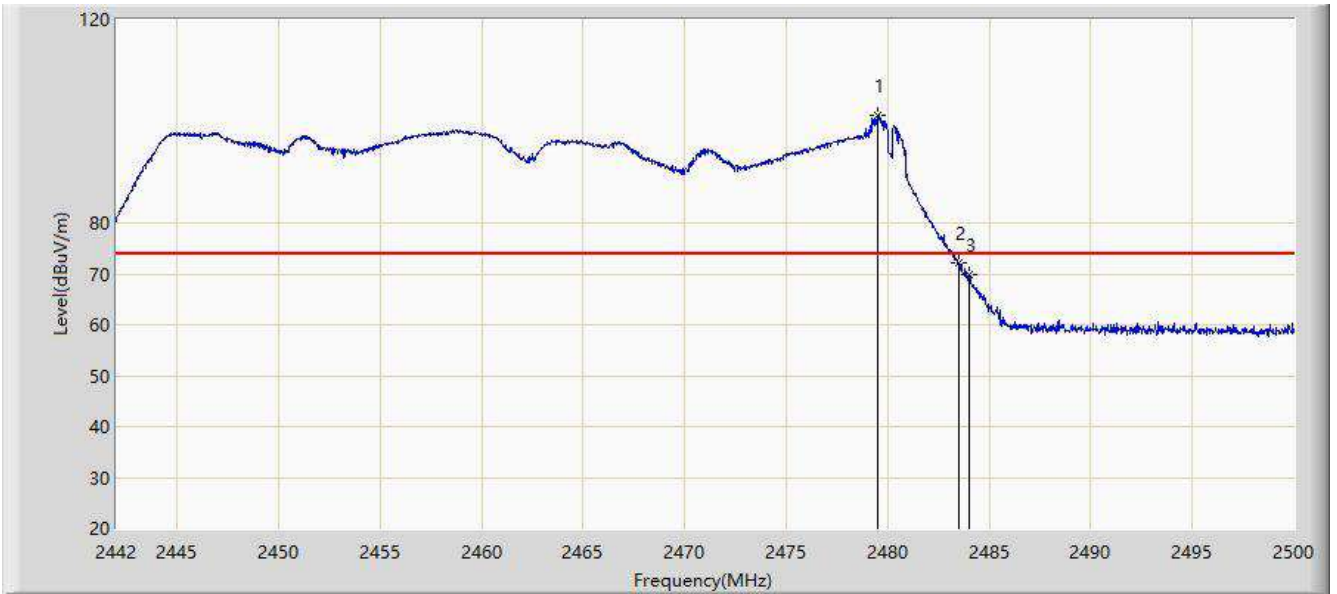


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.671	92.930	60.283	N/A	N/A	32.647	AV
2			2483.500	52.527	19.826	-1.473	54.000	32.701	AV

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

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

Site: WZ-AC2	Time: 2020/12/18 - 21:43
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT40 at Channel 2462MHz Ant 1 + 2	

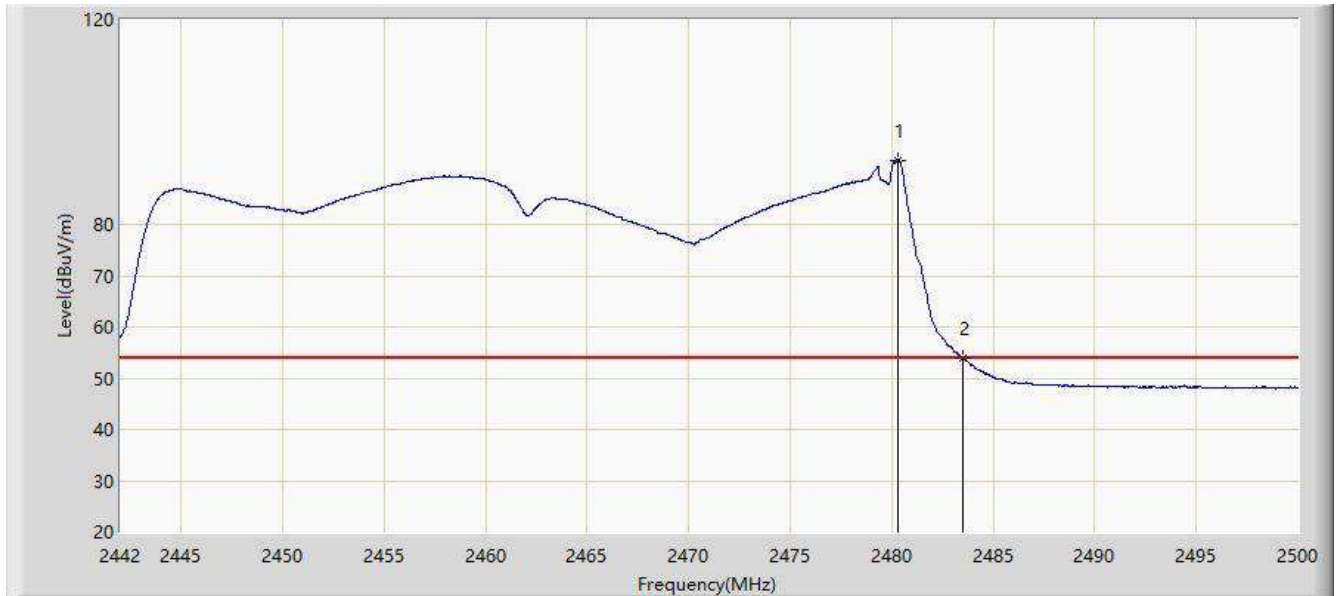


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.497	101.206	68.561	N/A	N/A	32.645	PK
2			2483.500	72.179	39.478	-1.821	74.000	32.701	PK
3			2484.021	69.727	37.019	-4.273	74.000	32.708	PK

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

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

Site: WZ-AC2	Time: 2020/12/18 - 21:42
Limit: FCC_Part15.209_RE(3m)	Engineer: Jason Gao
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11n-HT40 at Channel 2462MHz Ant 1 + 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.309	92.601	59.945	N/A	N/A	32.656	AV
2			2483.500	53.886	21.185	-0.114	54.000	32.701	AV

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

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

5.8. AC Conducted Emissions Measurement

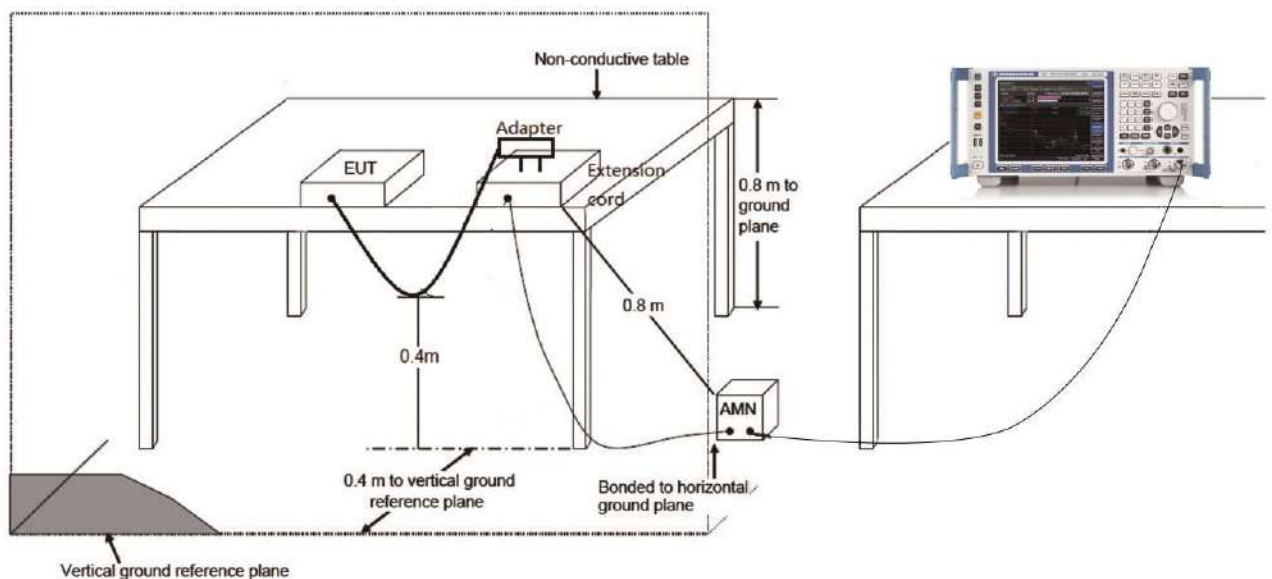
5.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
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.

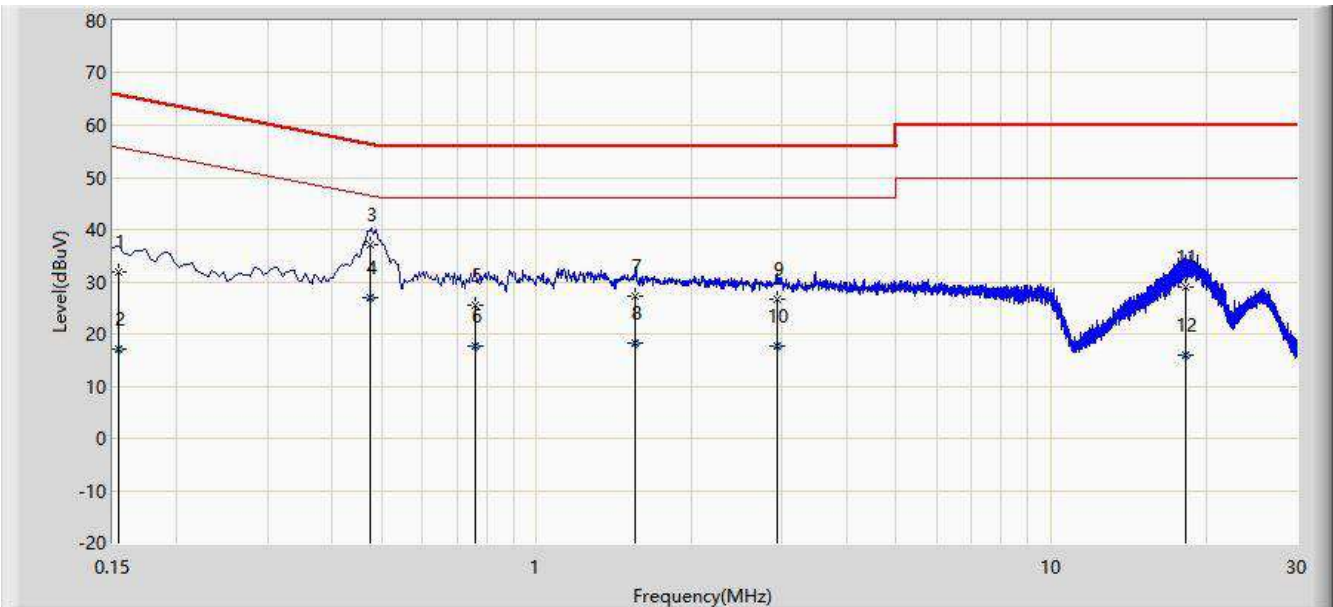
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

5.8.2. Test Setup



5.8.3.Test Result

Site: WZ-SR2	Time: 2020/12/25 - 19:53
Limit: FCC_Part15.207_CE_AC Power	Engineer: Buter Shi
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at channel 2462MHz	

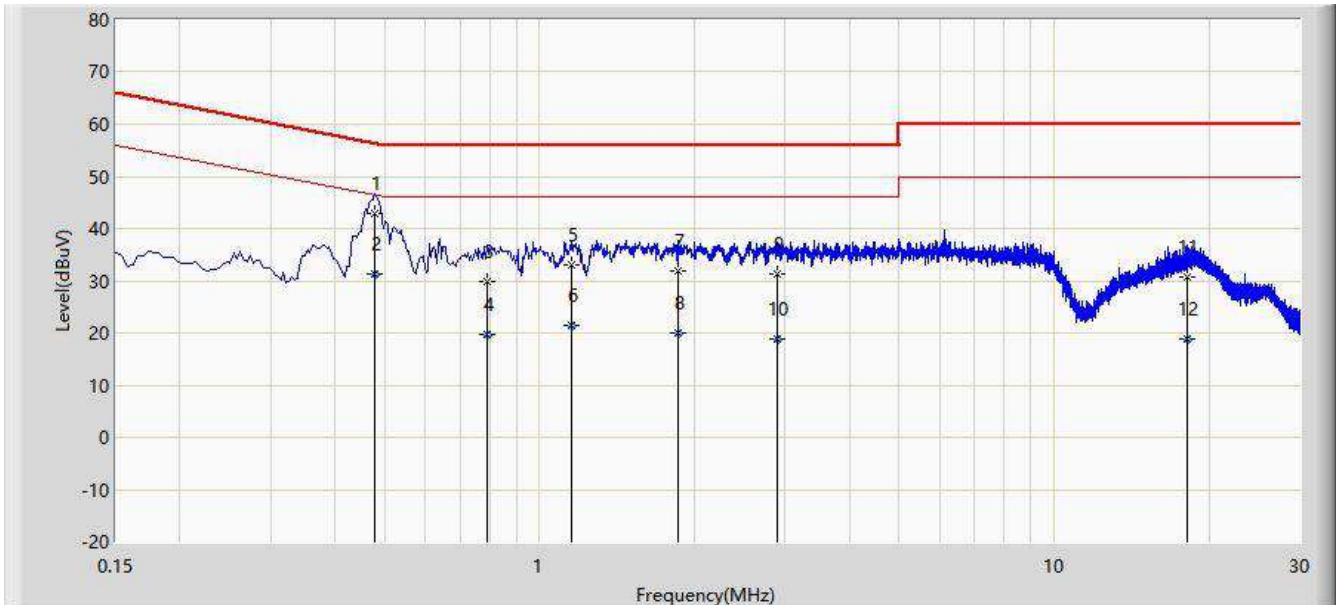


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.154	31.944	22.333	-33.837	65.781	9.611	QP
2			0.154	17.132	7.521	-38.650	55.781	9.611	AV
3		*	0.474	37.140	27.447	-19.308	56.448	9.692	QP
4			0.474	26.994	17.302	-19.454	46.448	9.692	AV
5			0.762	25.481	15.751	-30.519	56.000	9.730	QP
6			0.762	17.581	7.851	-28.419	46.000	9.730	AV
7			1.554	27.266	17.506	-28.734	56.000	9.760	QP
8			1.554	18.161	8.401	-27.839	46.000	9.760	AV
9			2.942	26.741	16.949	-29.259	56.000	9.792	QP
10			2.942	17.684	7.892	-28.316	46.000	9.792	AV
11			18.278	29.054	18.743	-30.946	60.000	10.311	QP
12			18.278	16.076	5.764	-33.924	50.000	10.311	AV

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

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

Site: WZ-SR2	Time: 2020/12/25 - 20:02
Limit: FCC_Part15.207_CE_AC Power	Engineer: Buter Shi
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.478	43.012	33.327	-13.362	56.374	9.684	QP
2			0.478	31.249	21.565	-15.125	46.374	9.684	AV
3			0.790	29.869	20.149	-26.131	56.000	9.720	QP
4			0.790	19.598	9.878	-26.402	46.000	9.720	AV
5			1.150	32.996	23.255	-23.004	56.000	9.741	QP
6			1.150	21.361	11.620	-24.639	46.000	9.741	AV
7			1.854	31.903	22.145	-24.097	56.000	9.759	QP
8			1.854	20.125	10.367	-25.875	46.000	9.759	AV
9			2.902	31.340	21.552	-24.660	56.000	9.788	QP
10			2.902	18.951	9.163	-27.049	46.000	9.788	AV
11			18.130	30.608	20.360	-29.392	60.000	10.247	QP
12			18.130	18.763	8.515	-31.237	50.000	10.247	AV

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

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

6. 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 - Test Setup Photograph

Refer to “2012RSU043-UT” file.