MEASUREMENT REPORT

FCC PART 15.247 Bluetooth-LE

FCC ID:	XMR2021SC20ALD
Applicant:	Quectel Wireless Solutions Co., Ltd
Application Type:	Certification
Product:	LTE Module
Model No.:	SC20-ALD
Brand Name:	Quectel
FCC Classification:	Digital Transmission System (DTS)
FCC Rule Part(s):	Part15 Subpart C (Section 15.247)
Test Procedure(s):	ANSI C63.10-2013, KDB 558074 D01v05r02
Test Date:	December 21 ~ 27, 2021

Reviewed By: Sunny Sun

Approved By: Robin Wu

Revision History

Report No.	Version	Description	Issue Date	Note
2112RSU025-U2	Rev. 01	Initial Report	01-13-2022	Valid

Note: The Model “SC20-ALD” is only different OS system with Model “SC20-ALD”, FCC ID “XMR2021SC20ALD”. This report is copied with MRT Report “2112RSU024-U2”.

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1. GENERAL INFORMATION

1.1. Applicant

Quectel Wireless Solutions Co., Ltd

Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233

1.2. Manufacturer

Quectel Wireless Solutions Co., Ltd

Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233

1.3. Testing Facility

<table>
<tr><td>☒</td><td colspan="5">Test Site – MRT Suzhou Laboratory</td></tr>
<tr><td></td><td colspan="5">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</td></tr>
<tr><td></td><td colspan="5">Laboratory Accreditations</td></tr>
<tr><td></td><td colspan="2">A2LA: 3628.01</td><td colspan="3">CNAS: L10551</td></tr>
<tr><td></td><td colspan="2">FCC: CN1166</td><td colspan="3">ISED: CN0001</td></tr>
<tr><td></td><td rowspan="2">VCCI:</td><td>☐R-20025</td><td>☐G-20034</td><td>☐C-20020</td><td>☐T-20020</td></tr>
<tr><td></td><td>☐R-20141</td><td>☐G-20134</td><td>☐C-20103</td><td>☐T-20104</td></tr>
<tr><td>☐</td><td colspan="5">Test Site – MRT Shenzhen Laboratory</td></tr>
<tr><td></td><td colspan="5">Laboratory Location (Shenzhen)
1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China</td></tr>
<tr><td></td><td colspan="5">Laboratory Accreditations</td></tr>
<tr><td></td><td colspan="2">A2LA: 3628.02</td><td colspan="3">CNAS: L10551</td></tr>
<tr><td></td><td colspan="2">FCC: CN1284</td><td colspan="3">ISED: CN0105</td></tr>
<tr><td>☐</td><td colspan="5">Test Site – MRT Taiwan Laboratory</td></tr>
<tr><td></td><td colspan="5">Laboratory Location (Taiwan)
No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)</td></tr>
<tr><td></td><td colspan="5">Laboratory Accreditations</td></tr>
<tr><td></td><td colspan="5">TAF: L3261-190725</td></tr>
<tr><td></td><td colspan="2">FCC: 291082, TW3261</td><td colspan="3">ISED: TW3261</td></tr>
</table>

1.4. Product Information

Product Name	LTE Module
Model No.	SC20-ALD
Serial No.	D1Y21L22E000063
Brand Name	Quectel
Operating Temperature	-35 ~ 75°C
Wi-Fi Specification	802.11a/b/g/n
Bluetooth Specification	V4.1 dual mode
E-UTRA Band	Band 2, 4, 5, 7, 12, 13, 25, 26
Note: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	

1.5. RF Specification

Frequency Range	2402~2480MHz
Channel Number	40
Type of Modulation	GFSK
Data Rate	1Mbps
Antenna Information	Dipole Antenna with gain 3.0 dBi

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

1.6. Working Frequencies for this report

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

2. TEST CONFIGURATION

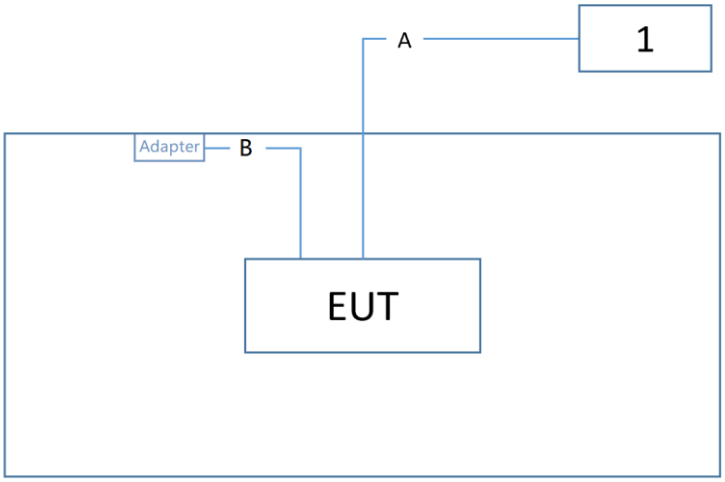
2.1. Test Mode

Test Mode	Mode 1: Transmit by BLE-1Mbps

2.2. Configuration of Test System

The measurement procedures and appropriate EUT setup described in the American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices (ANSI C63.10-2013) was used in the measurement.

Connection Diagram



Cable Type		Cable Description
A	USB Cable	Shielding, 1m
B	Power Cable	Non shielded, 1.1m

Product		Manufacturer	Model No.
1	Notebook	HP	TPN-I125

2.3. Test Software

The test utility software used during testing was “QRCT.exe”, and the version was 3.0.268.0. Power parameter value refers to operation description.

2.4. 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."

Conclusion:

The unit complies with the requirement of §15.203.

4. TEST EQUIPMENT CALIBRATION DATE

Radiated Emission (WZ-AC1)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2022/01/04
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2022/10/28
Bilog Period Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2022/08/05
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06023	1 year	2022/9/16
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06597	1 year	2022/12/01
Microwave System Amplifier	Agilent	83017A	MRTSUE06076	1 year	2022/11/12
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2022/06/10
Thermal Hygrometer	testo	608-H1	MRTSUE06403	1 year	2022/06/28
Anechoic Chamber	TDK	Chamber-AC1	MRTSUE06212	1 year	2022/04/29

Radiated Emission (WZ-AC2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
MXE EMI Receiver	Keysight	N9038A	MRTSUE06125	1 year	2022/06/24
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2022/10/28
Bilog Period Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2022/05/24
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2022/10/21
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06597	1 year	2022/12/01
Broadband Coaxial Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2022/11/12
Thermal Hygrometer	Minggao	ETH529	MRTSUE06170	1 year	2022/12/01
Anechoic Chamber	RIKEN	Chamber-AC2	MRTSUE06213	1 year	2022/04/29

Conducted Test Equipment (WZ-TR3)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2022/04/13
EXA Signal Analyzer	Keysight	N9010B	MRTSUE06607	1 year	2022/01/06
Power Meter	Agilent	U2021XA	MRTSUE06030	1 year	2022/10/10
USB wideband power sensor	Keysight	U2021XA	MRTSUE06446	1 year	2022/06/08
USB wideband power sensor	Keysight	U2021XA	MRTSUE06447	1 year	2022/06/08
Bluetooth Test Set	Anritsu	MT8852B-042	MRTSUE06389	1 year	2022/06/08
Modulation Analyzer	HP	HP8901A	MRTSUE06098	1 year	2022/09/12
DC Power Supply	GWINSTEK	DPS-3303C	MRTSUE06064	N/A	N/A
Temperature & Humidity Chamber	BAOYT	BYH-150CL	MRTSUE06051	1 year	2022/10/10
Thermal Hygrometer	testo	608-H1	MRTSUE06401	1 year	2022/06/28

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.

Radiated Disturbance
Measurement Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): Horizontal: 9KHz~300MHz: 5.04dB 300MHz~1GHz: 4.95dB 1GHz~6GHz: 6.40dB Vertical: 9KHz~300MHz: 5.24dB 300MHz~1GHz: 6.03dB 1GHz~40GHz: 6.40dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 1.13dB

6. TEST RESULT

6.1. Summary

FCC Part Section(s)	Test Description	Test Condition	Test Result	Reference
15.247(b)(1)	Output Power	Conducted	Pass	Section 6.2
15.205, 15.209	General Field Strength (Restricted Bands and Radiated Emission)	Radiated	Pass	Section 6.3, 6.4

Notes:

1) The test results shown in the following sections represent the worst-case emissions.
2) 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.

6.2. Output Power Measurement

6.2.1.Test Limit

The maximum out power shall be less 1 Watt (30dBm) and the E.I.R.P shall not exceed 4 Watt (36dBm).

The conducted output power limit specified in paragraph FCC Part 15.247(b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs FCC Part 15.247(b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

6.2.2.Test Procedure Used

ANSI C63.10-2013 - Section 11.9.1.3 PKPM1 Peak-reading power meter method

ANSI C63.10-2013 - Section 11.9.2.3.2 Method AVGPM-G

6.2.3.Test Setting

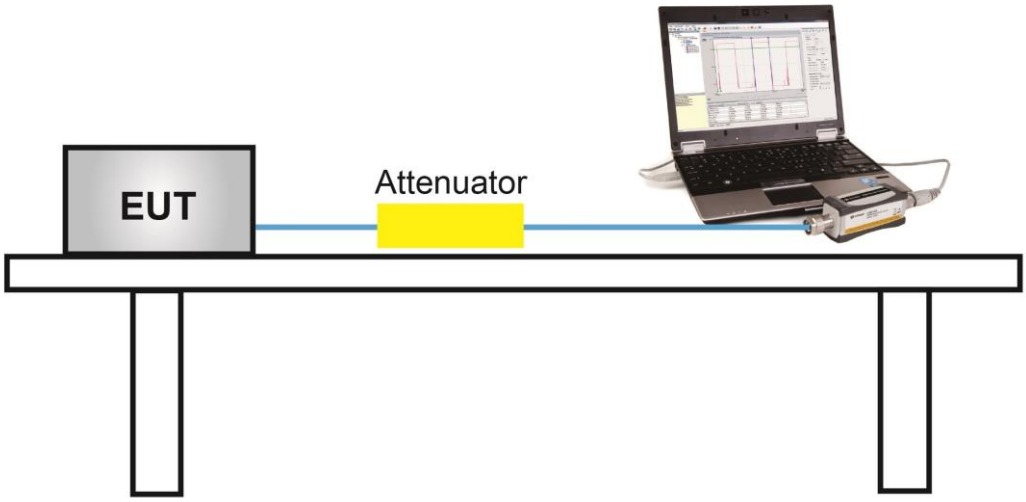
Method PKPM1 (Peak power measurement)

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.

6.2.4.Test Setup



6.2.5.Test Result

Test Site	WZ-TR3	Test Engineer	Jeff Yang
Test Date	2021/12/21		

Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Result
Peak Output Power						
BLE	1	39	2480	2.50	≤ 30.00	Pass
Average Output Power						
BLE	1	39	2480	2.28	≤ 30.00	Pass

6.3. Radiated Spurious Emission Measurement

6.3.1.Test Limit

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

6.3.2.Test Procedure Used

ANSI C63.10 Section 6.3, 6.4, 6.5, 6.6

6.3.3.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 = 10 Hz.

If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.

4. Detector = Peak

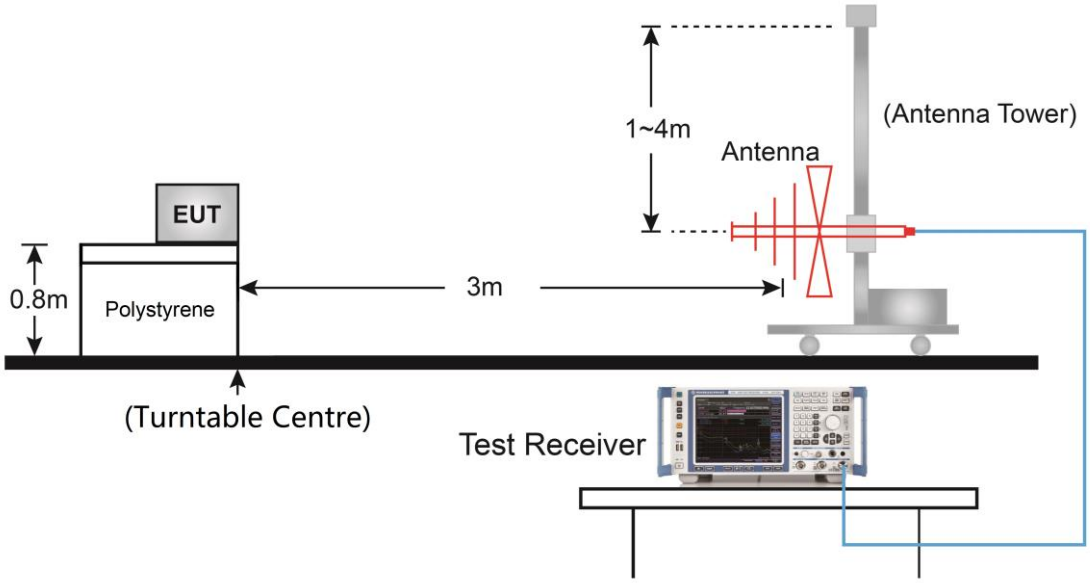
5. Sweep time = auto

6. Trace mode = max hold

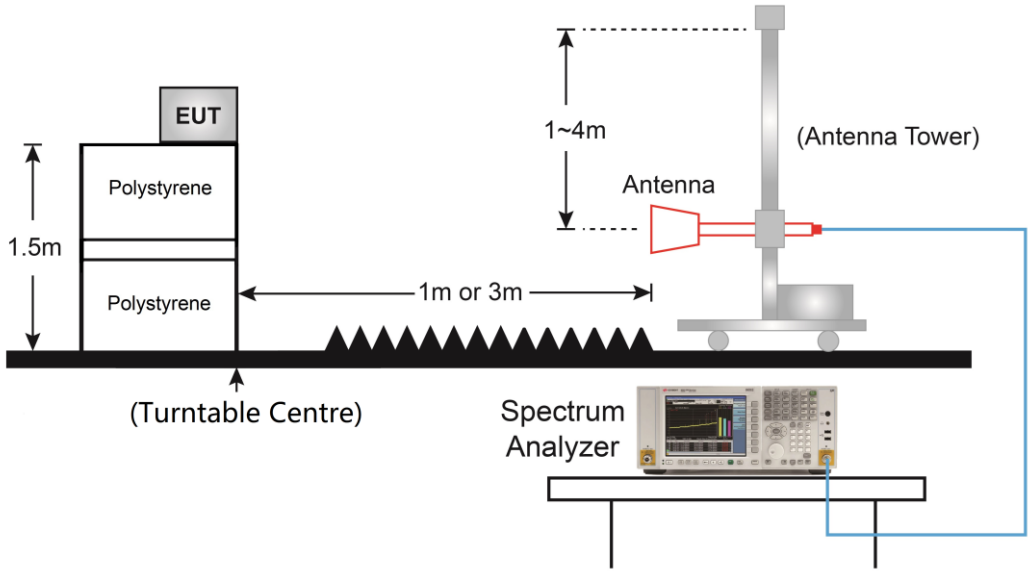
7. Trace was allowed to stabilize

6.3.4.Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



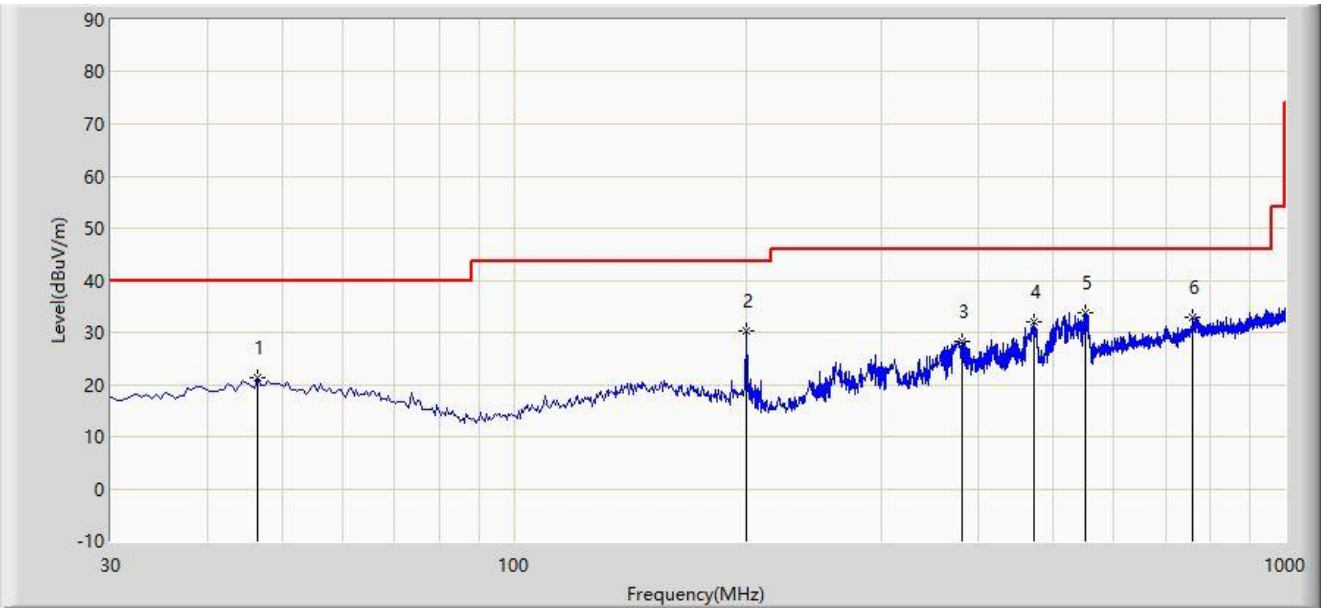
6.3.5.Test Result

Test Site	WZ-AC2	Test Engineer	Bob Zhang
Test Date	2021/12/26	Test Channel	39
Test Mode	BLE-1Mbps		
Note	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.		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
3745.5	34.2	0.1	34.3	74.0	-39.7	Peak	Horizontal
4009.0	33.2	0.7	33.9	74.0	-40.1	Peak	Horizontal
4816.5	32.6	3.9	36.5	74.0	-37.5	Peak	Horizontal
3779.5	33.3	0.1	33.4	74.0	-40.6	Peak	Vertical
4060.0	34.2	0.8	35.0	74.0	-39.0	Peak	Vertical
4748.5	31.3	3.7	35.0	74.0	-39.0	Peak	Vertical
Note: 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: 2021/12/27 - 17:42
Limit: FCC_Part15.209_RSE(3m)	Engineer: Kin Xia
Probe: WZ-AC1_VULB 9168 _30-1000MHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by BLE 1Mbps at Channel 2480MHz	



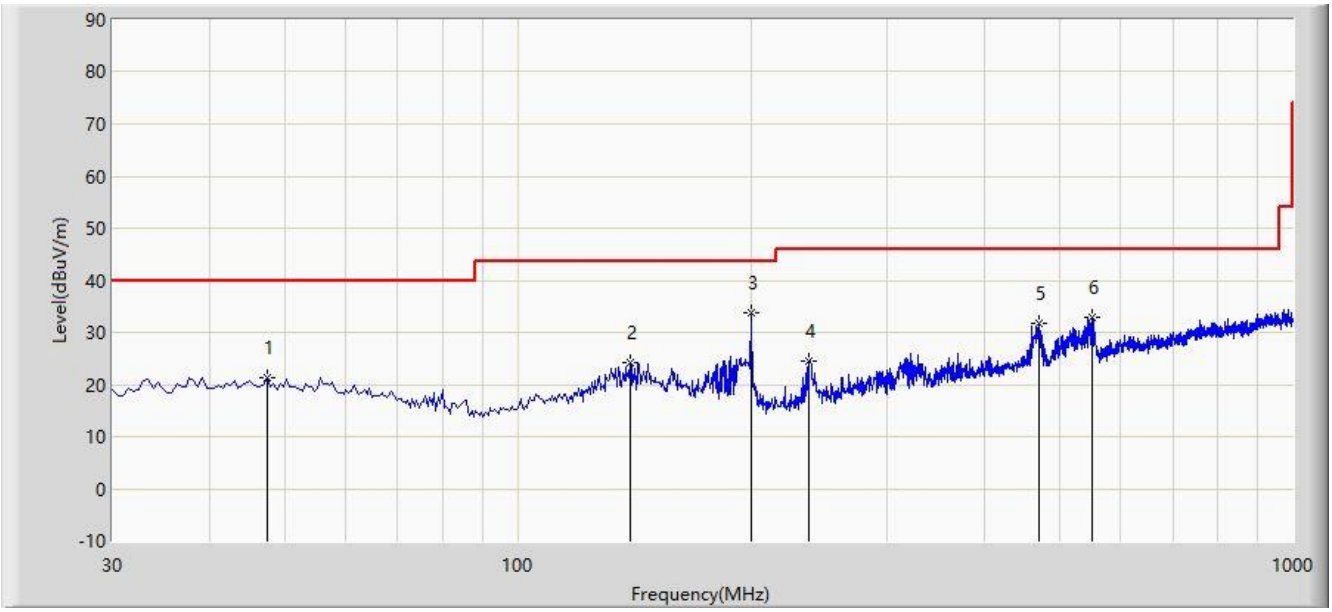
No	Flag	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1			46.490	21.187	2.394	-18.813	40.000	18.793	PK
2			199.750	30.314	16.002	-13.186	43.500	14.312	PK
3			381.625	28.400	8.049	-17.600	46.000	20.351	PK
4			472.805	31.993	9.366	-14.007	46.000	22.627	PK
5		*	551.860	33.643	9.666	-12.357	46.000	23.977	PK
6			759.925	32.937	4.813	-13.063	46.000	28.124	PK

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

Factor (dB/m) = 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: 2021/12/27 - 17:47
Limit: FCC_Part15.209_RSE(3m)	Engineer: Kin Xia
Probe: WZ-AC1_VULB 9168 _30-1000MHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by BLE 1Mbps at Channel 2480MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1			47.460	21.347	2.567	-18.653	40.000	18.780	PK
2			139.610	24.151	6.735	-19.349	43.500	17.416	PK
3		*	199.750	33.677	19.365	-9.823	43.500	14.312	PK
4			237.580	24.437	8.758	-21.563	46.000	15.679	PK
5			470.865	31.699	9.101	-14.301	46.000	22.598	PK
6			550.890	32.760	8.795	-13.240	46.000	23.965	PK

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

Factor (dB/m) = 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.

6.4. Radiated Restricted Band Edge Measurement

6.4.1.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 Limits		
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

6.4.2.Test Procedure Used

ANSI C63.10 Section 6.3, 6.6

6.4.3.Test Setting

Peak Field Strength Measurements

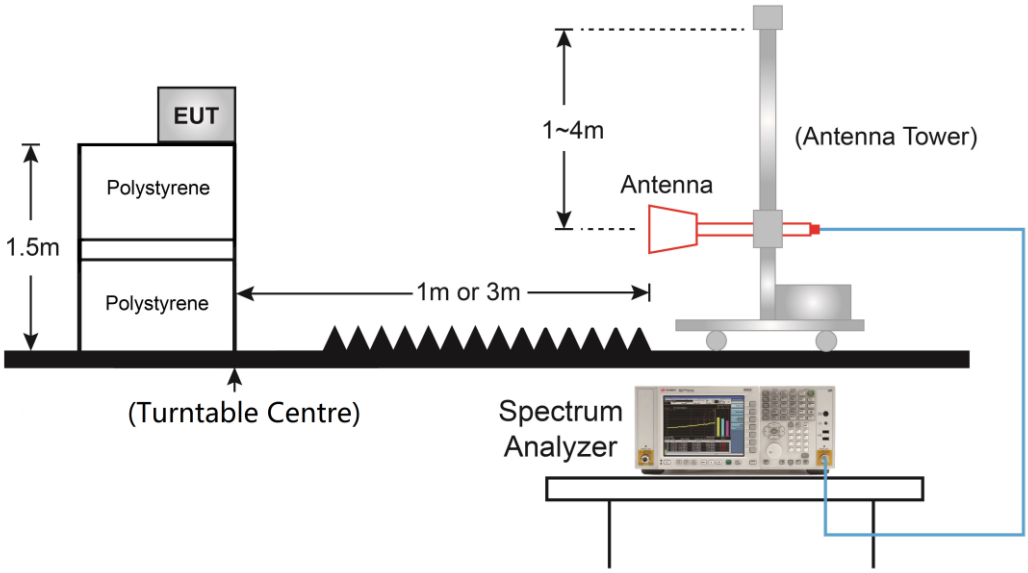
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

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 = 10 Hz.

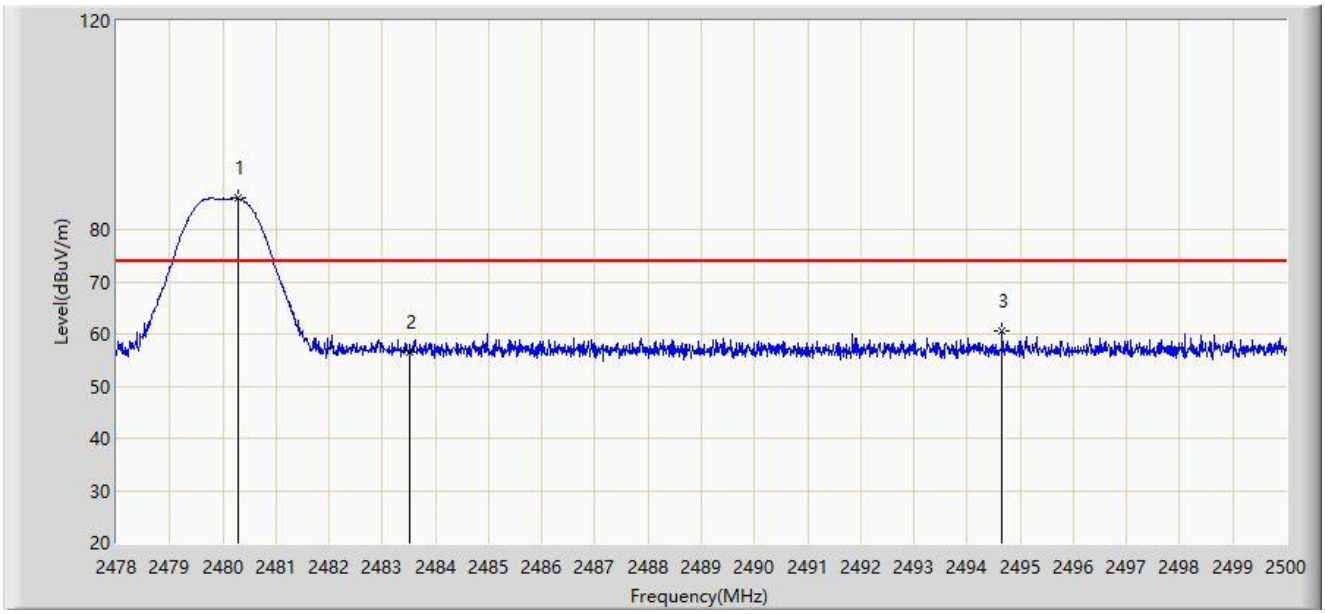
   If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

6.4.4.Test Setup



6.4.5.Test Result

Site: WZ-AC2	Time: 2021/12/26 - 15:17
Limit: FCC_Part15.209_RSE(3m)	Engineer: Tommy Tang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by BLE at Channel 2480MHz	

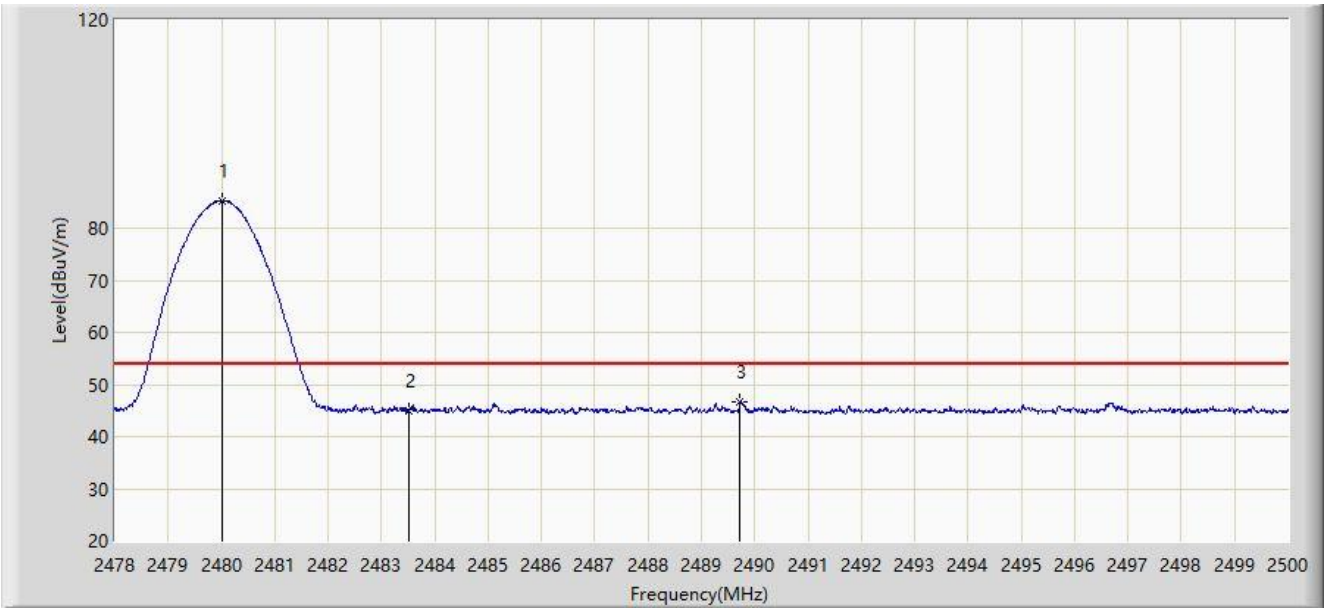


No	Flag	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		*	2480.277	86.001	54.082	N/A	N/A	31.919	PK
2			2483.500	56.564	24.652	-17.436	74.000	31.912	PK
3			2494.665	60.618	28.715	-13.382	74.000	31.902	PK

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

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

Site: WZ-AC2	Time: 2021/12/26 - 15:21
Limit: FCC_Part15.209_RSE(3m)	Engineer: Tommy Tang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by BLE at Channel 2480MHz	

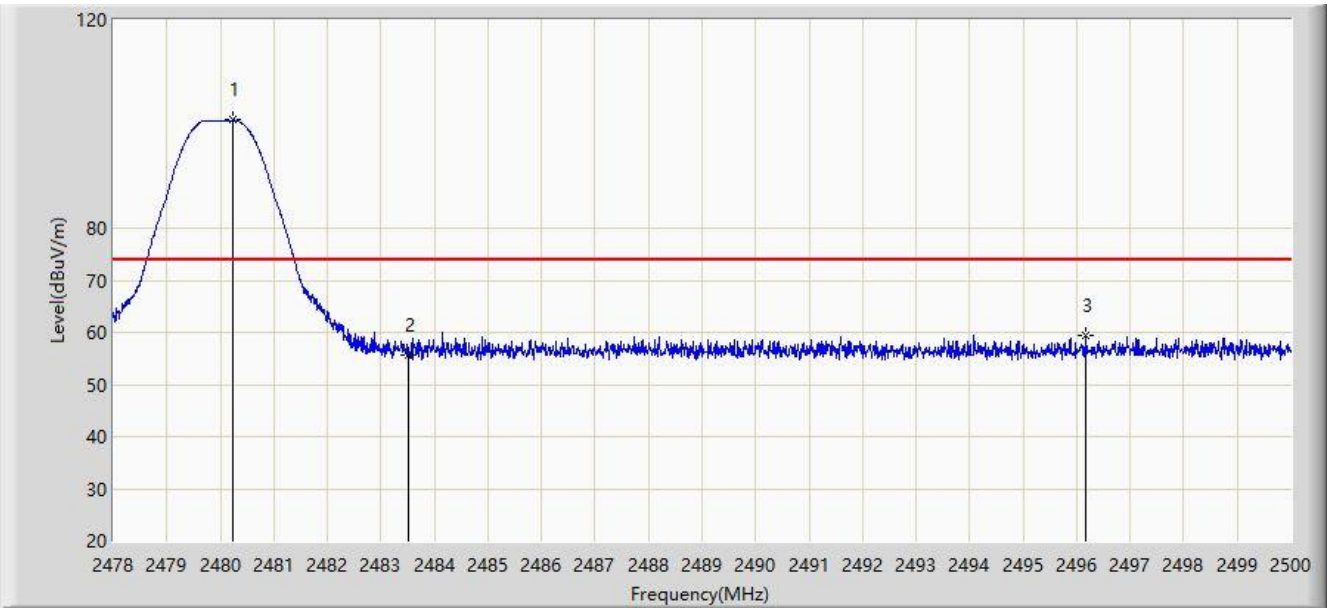


No	Flag	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		*	2480.024	85.309	53.390	N/A	N/A	31.919	AV
2			2483.500	44.865	12.953	-9.135	54.000	31.912	AV
3			2489.726	46.590	14.691	-7.410	54.000	31.898	AV

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

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

Site: WZ-AC2	Time: 2021/12/26 - 15:18
Limit: FCC_Part15.209_RSE(3m)	Engineer: Tommy Tang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by BLE at Channel 2480MHz	

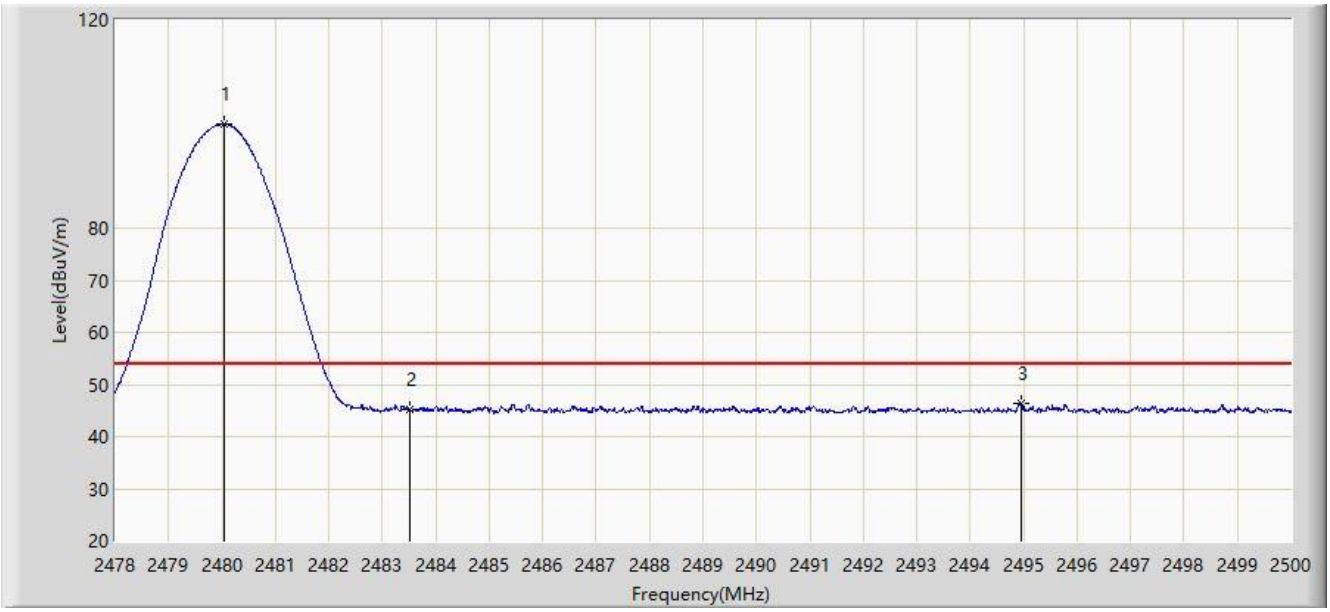


No	Flag	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		*	2480.244	100.742	68.823	N/A	N/A	31.919	PK
2			2483.500	55.743	23.831	-18.257	74.000	31.912	PK
3			2496.172	59.329	27.421	-14.671	74.000	31.908	PK

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

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

Site: WZ-AC2	Time: 2021/12/26 - 15:22
Limit: FCC_Part15.209_RSE(3m)	Engineer: Tommy Tang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by BLE at Channel 2480MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		*	2480.046	99.959	68.040	N/A	N/A	31.919	AV
2			2483.500	45.231	13.319	-8.769	54.000	31.912	AV
3			2494.962	46.282	14.378	-7.718	54.000	31.904	AV

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

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

Appendix A - Test Setup Photograph

Refer to “2112RSU025-UT” file.

Appendix B - EUT Photograph

Refer to “ 2112RSU025-UE” file.

The End