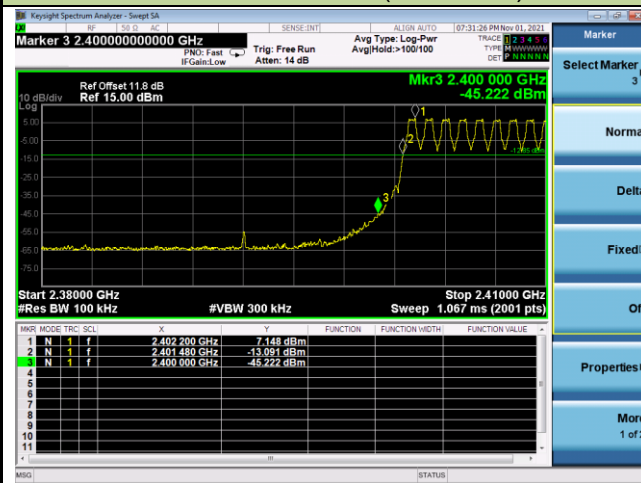
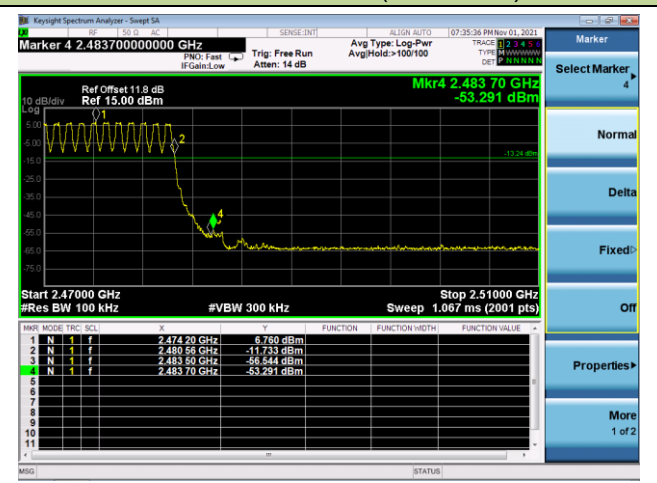


## Operation Frequency Range of 20dB Bandwidth within Hopping Mode

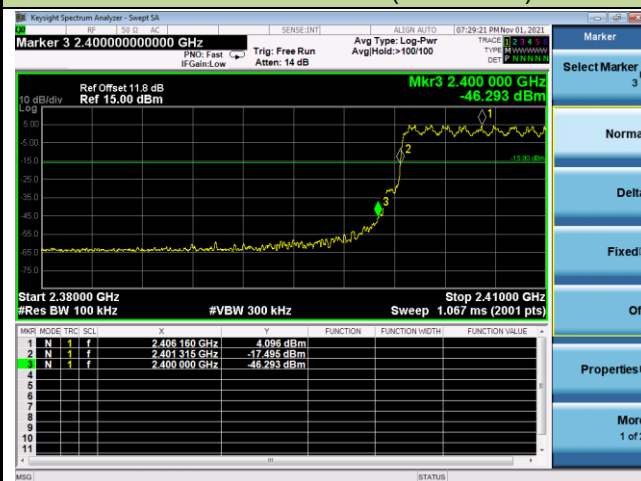
DH5 - Channel 00 (2402MHz)



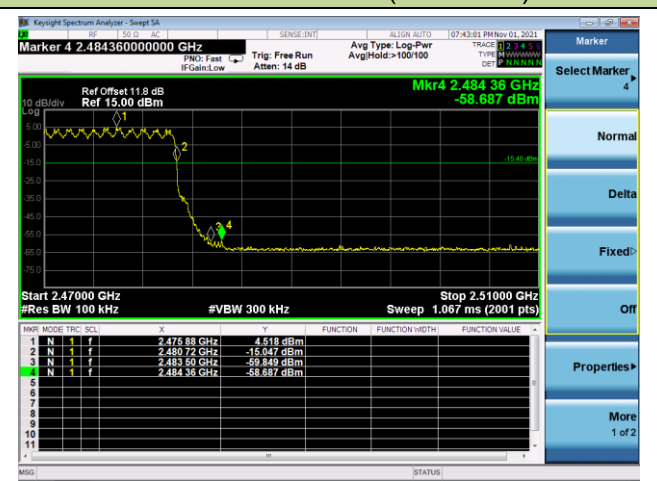
DH5 - Channel 78 (2480MHz)



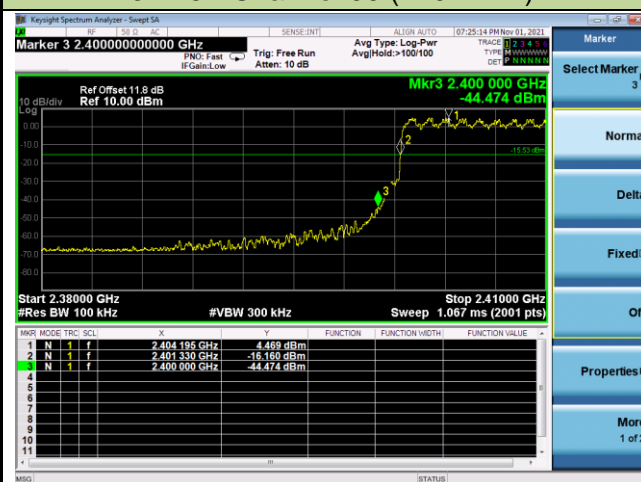
2DH5 - Channel 00 (2402MHz)



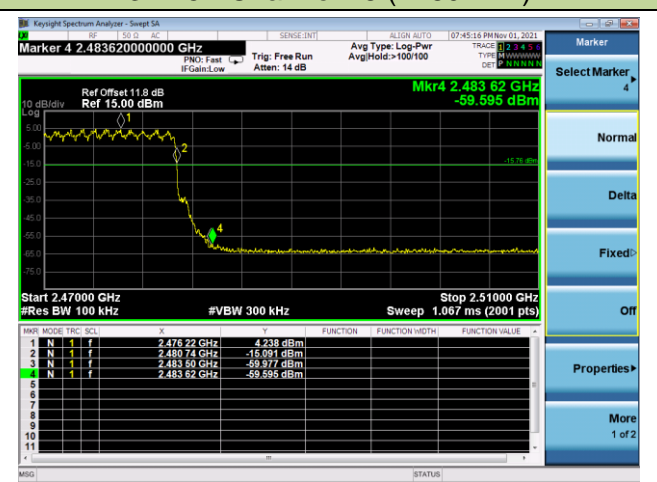
2DH5 - Channel 78 (2480MHz)



3DH5 - Channel 00 (2402MHz)



3DH5 - Channel 78 (2480MHz)



## **6.8. Conducted Spurious Emissions Measurement**

### **6.8.1. Test Limit**

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

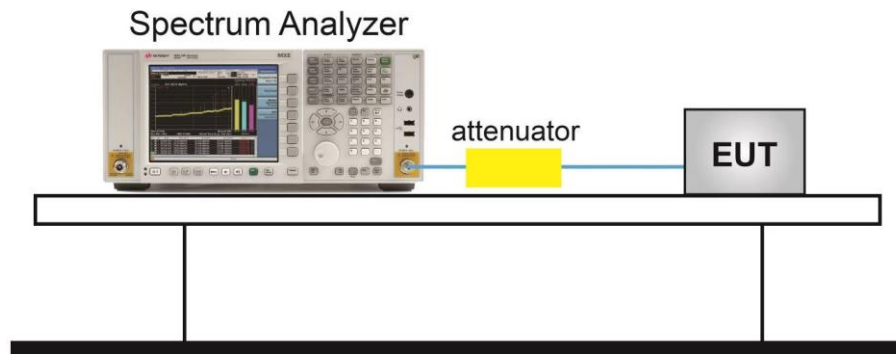
### **6.8.2. Test Procedure Used**

ANSI C63.10-2013 - Section 7.8.8.

### **6.8.3. Test Setting**

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

### 6.8.4. Test Setup



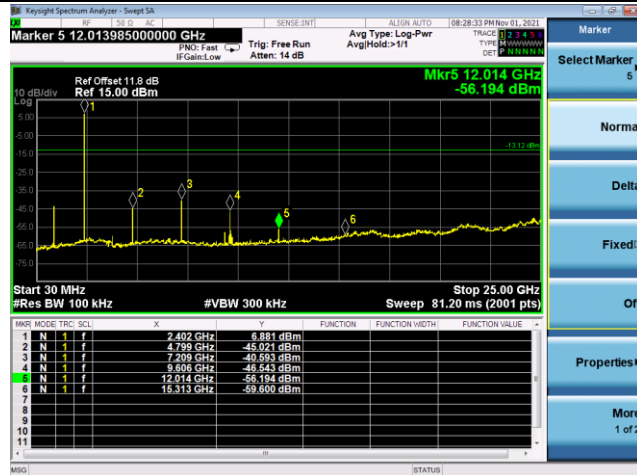
**6.8.5. Test Result**

Test Site	WZ-SR5	Test Engineer	Liz Yuan
Test Date	2021/11/01		

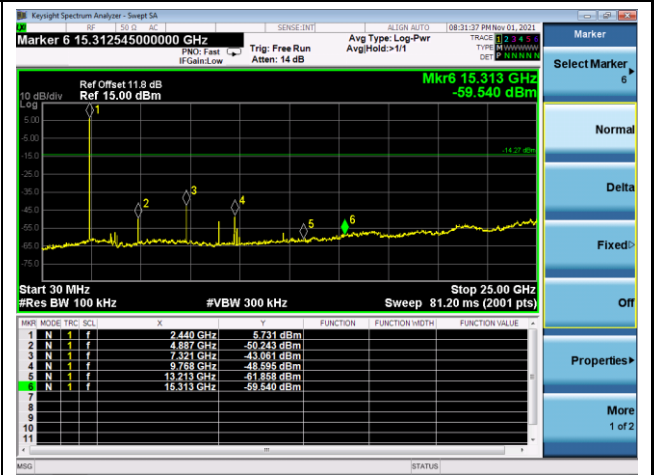
Test Mode	Channel No.	Frequency (MHz)	Limit (MHz)	Result
DH5	00	2402	20dBc	Pass
DH5	39	2441	20dBc	Pass
DH5	78	2480	20dBc	Pass
2DH5	00	2402	20dBc	Pass
2DH5	39	2441	20dBc	Pass
2DH5	78	2480	20dBc	Pass
3DH5	00	2402	20dBc	Pass
3DH5	39	2441	20dBc	Pass
3DH5	78	2480	20dBc	Pass

## DH5 Conducted Spurious Emissions

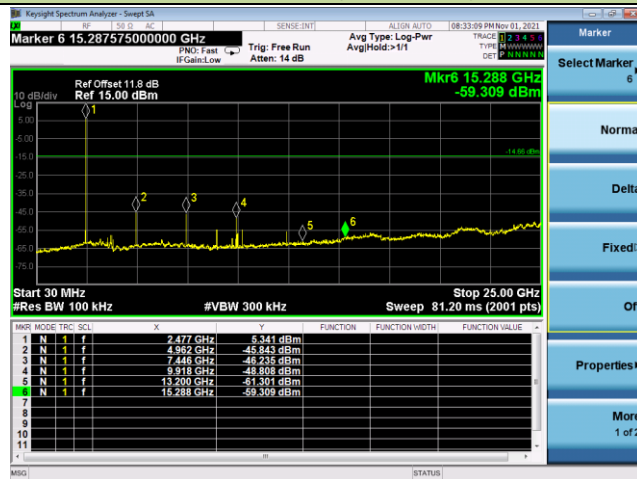
## Channel 00 (2402MHz)



## Channel 39 (2441MHz)

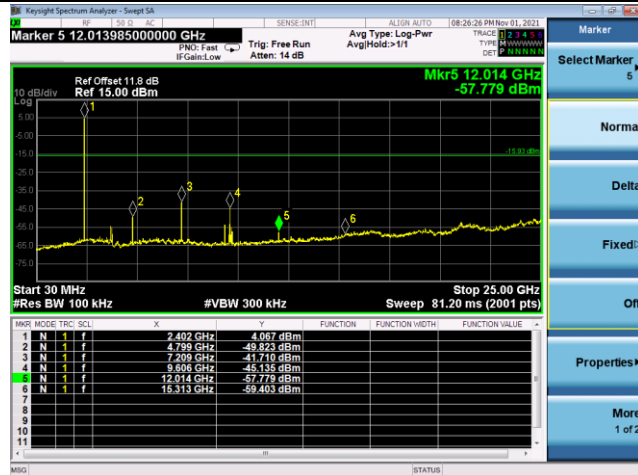


## Channel 78 (2480MHz)

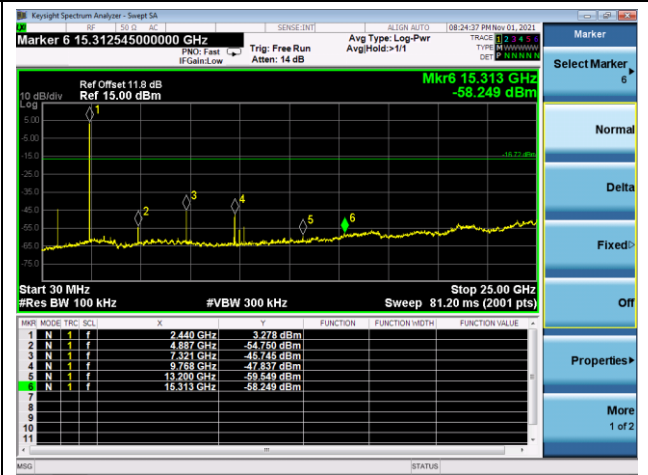


### 2DH5 Conducted Spurious Emissions

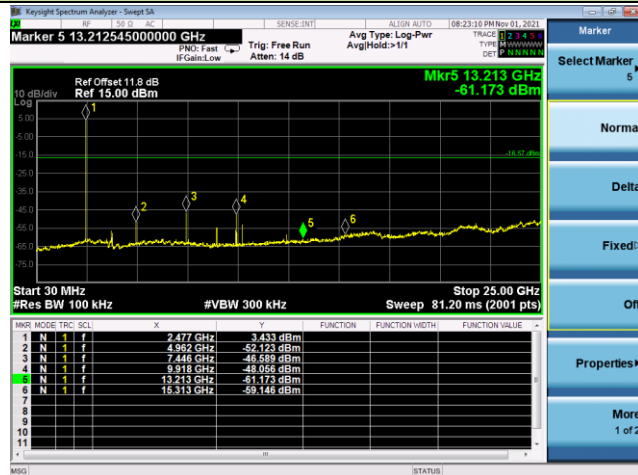
#### Channel 00 (2402MHz)



#### Channel 39 (2441MHz)

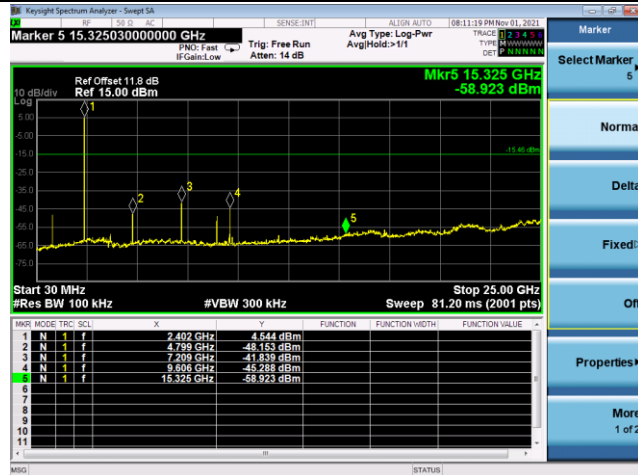


#### Channel 78 (2480MHz)

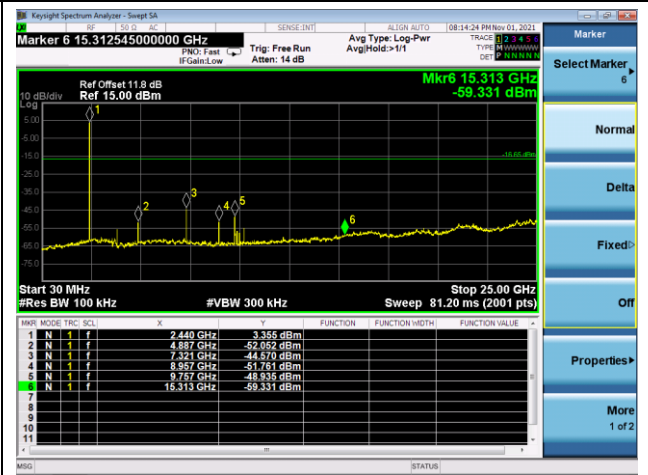


### 3DH5 Conducted Spurious Emissions

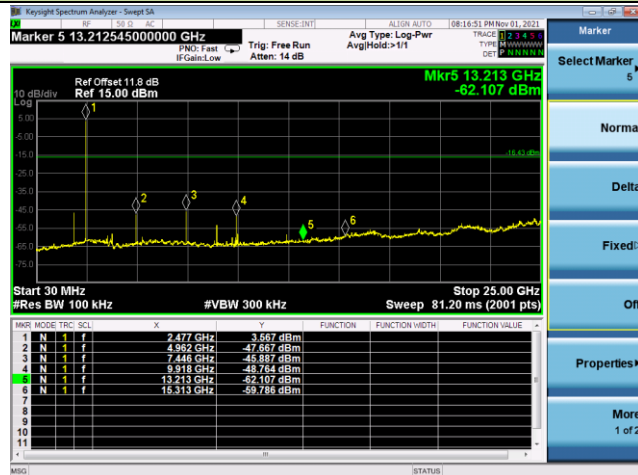
#### Channel 00 (2402MHz)



#### Channel 39 (2441MHz)



#### Channel 78 (2480MHz)



## 6.9. Radiated Spurious Emission Measurement

### 6.9.1. Test Limit

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

<p><b>FCC Part 15 Subpart C Paragraph 15.209</b></p>			FC C Par t 15 Su bpa rt C Par agr aph 15. 20 9 & RS S- Ge n Sec tio n 8.9
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
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### 6.9.2. Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

### 6.9.3. Test Setting

**Table 1 - RBW as a function of frequency**

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

**Quasi-Peak Measurements below 1GHz**

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

**Peak Measurements above 1GHz**

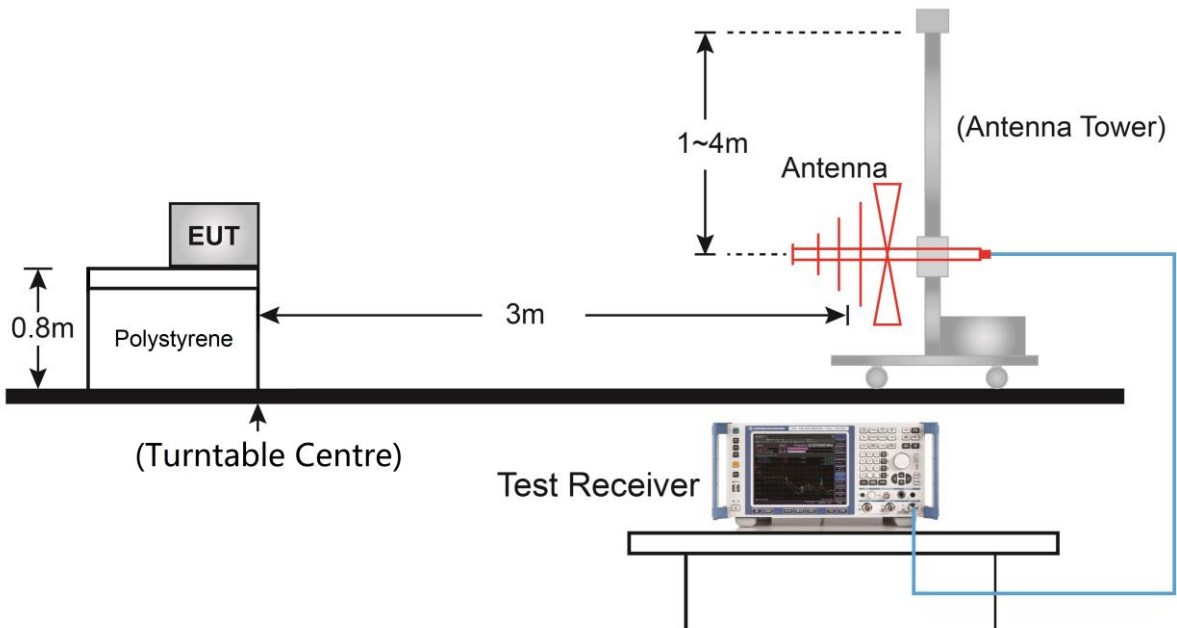
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

**Average Measurements above 1GHz (Method VB)**

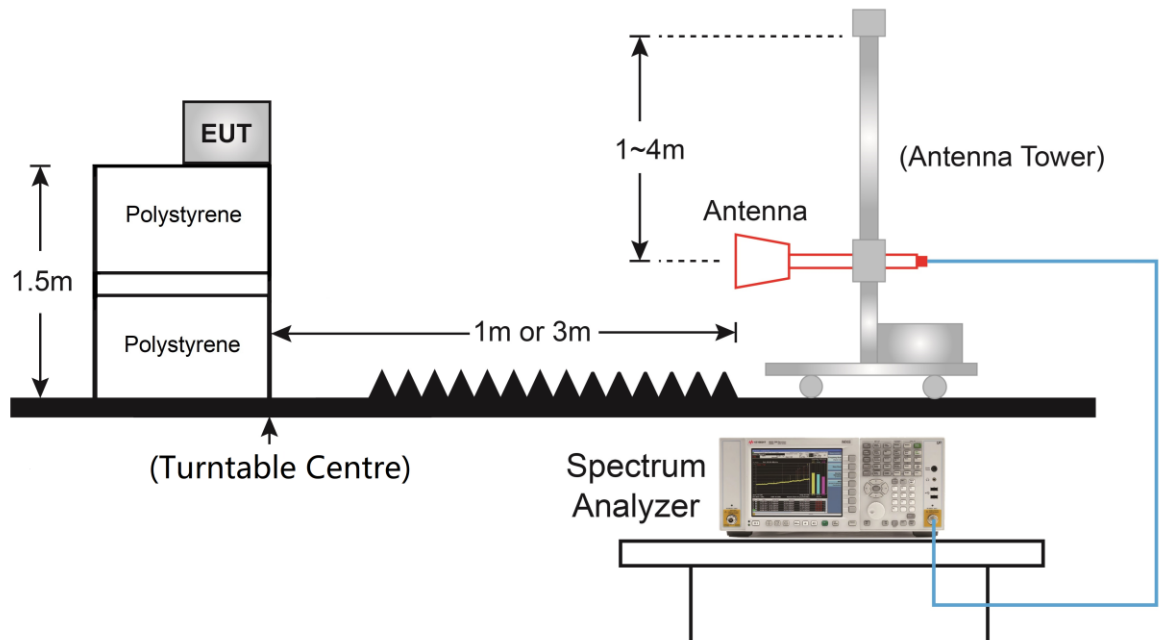
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle  $\geq 98\%$ , set VBW = 10 Hz.  
If the EUT duty cycle is  $< 98\%$ , set VBW  $\geq 1/T$ . T is the minimum transmission duration.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

### 6.9.4. Test Setup

#### Below 1GHz Test Setup:



#### Above 1GHz Test Setup:



### 6.9.5. Test Result

Test Site	SIP-AC3	Test Engineer	Kyrie Xie
Test Date	2021/10/26	Test Mode:	DH5
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.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
00	4238.5	49.6	-9.6	40.0	74.0	-34.0	Peak	Horizontal
	4808.0	55.1	-9.3	45.8	74.0	-28.2	Peak	Horizontal
	11157.5	48.5	-3.3	45.2	74.0	-28.8	Peak	Horizontal
	4808.0	52.6	-9.3	43.3	74.0	-30.7	Peak	Vertical
	7613.0	49.3	-5.9	43.4	74.0	-30.6	Peak	Vertical
	12313.5	48.5	-2.8	45.7	74.0	-28.3	Peak	Vertical
39	4884.5	53.4	-9.3	44.1	74.0	-29.9	Peak	Horizontal
	11004.5	47.5	-3.2	44.3	74.0	-29.7	Peak	Horizontal
	11880.0	48.8	-3.7	45.1	74.0	-28.9	Peak	Horizontal
	4255.5	50.4	-9.6	40.8	74.0	-33.2	Peak	Vertical
	4884.5	51.0	-9.3	41.7	74.0	-32.3	Peak	Vertical
	12058.5	48.3	-3.4	44.9	74.0	-29.1	Peak	Vertical
78	4961.0	57.4	-9.3	48.1	74.0	-25.9	Peak	Horizontal
	7443.0	52.8	-6.4	46.4	74.0	-27.6	Peak	Horizontal
	11999.0	48.0	-3.0	45.0	74.0	-29.0	Peak	Horizontal
	4961.0	53.8	-9.3	44.5	74.0	-29.5	Peak	Vertical
	7579.0	48.5	-6.1	42.4	74.0	-31.6	Peak	Vertical
	11778.0	48.0	-3.4	44.6	74.0	-29.4	Peak	Vertical

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Test Site	SIP-AC3	Test Engineer	Kyrie Xie
Test Date	2021/10/26	Test Mode:	2DH5
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.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
00	4808.0	53.5	-9.3	44.2	74.0	-29.8	Peak	Horizontal
	7681.0	48.3	-5.9	42.4	74.0	-31.6	Peak	Horizontal
	11999.0	47.8	-3.0	44.8	74.0	-29.2	Peak	Horizontal
	4060.0	49.4	-9.8	39.6	74.0	-34.4	Peak	Vertical
	7647.0	49.0	-5.9	43.1	74.0	-30.9	Peak	Vertical
	11897.0	48.1	-3.2	44.9	74.0	-29.1	Peak	Vertical
39	4884.5	51.1	-9.3	41.8	74.0	-32.2	Peak	Horizontal
	7613.0	49.5	-5.9	43.6	74.0	-30.4	Peak	Horizontal
	12058.5	48.3	-3.4	44.9	74.0	-29.1	Peak	Horizontal
	4961.0	50.2	-9.3	40.9	74.0	-33.1	Peak	Vertical
	8242.0	48.4	-5.0	43.4	74.0	-30.6	Peak	Vertical
	12271.0	48.5	-3.3	45.2	74.0	-28.8	Peak	Vertical
78	4961.0	57.2	-9.3	47.9	74.0	-26.1	Peak	Horizontal
	7443.0	51.0	-6.4	44.6	74.0	-29.4	Peak	Horizontal
	8437.5	48.7	-4.6	44.1	74.0	-29.9	Peak	Horizontal
	4961.0	50.2	-9.3	40.9	74.0	-33.1	Peak	Vertical
	7349.5	49.5	-6.4	43.1	74.0	-30.9	Peak	Vertical
	12526.0	47.8	-2.3	45.5	74.0	-28.5	Peak	Vertical

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Test Site	SIP-AC3	Test Engineer	Kyrie Xie
Test Date	2021/10/26	Test Mode:	3DH5
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.		

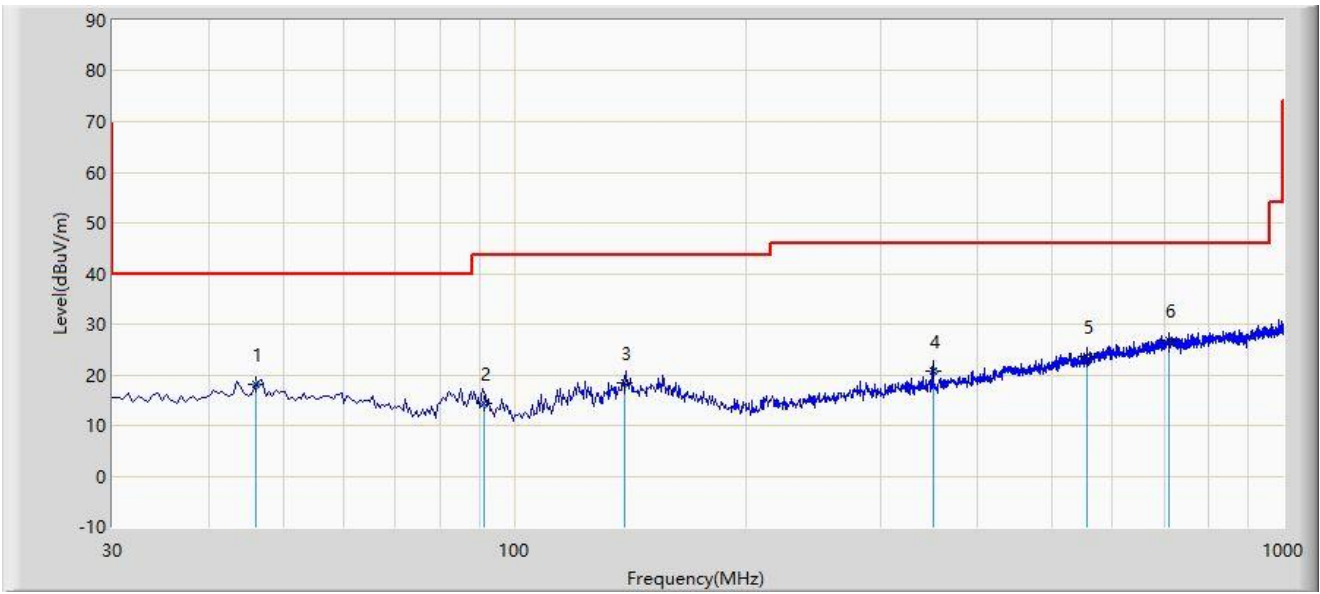
Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
00	4808.0	52.5	-9.3	43.2	74.0	-30.8	Peak	Horizontal
	7706.5	48.7	-6.1	42.6	74.0	-31.4	Peak	Horizontal
	11701.5	48.5	-3.6	44.9	74.0	-29.1	Peak	Horizontal
	4808.0	49.5	-9.3	40.2	74.0	-33.8	Peak	Vertical
	7426.0	48.8	-6.3	42.5	74.0	-31.5	Peak	Vertical
	11659.0	47.6	-3.4	44.2	74.0	-29.8	Peak	Vertical
39	4884.5	50.9	-9.3	41.6	74.0	-32.4	Peak	Horizontal
	7324.0	51.9	-6.4	45.5	74.0	-28.5	Peak	Horizontal
	12339.0	48.0	-3.0	45.0	74.0	-29.0	Peak	Horizontal
	4884.5	50.4	-9.3	41.1	74.0	-32.9	Peak	Vertical
	7324.0	50.4	-6.4	44.0	74.0	-30.0	Peak	Vertical
	11234.0	48.5	-3.6	44.9	74.0	-29.1	Peak	Vertical
78	4961.0	55.7	-9.3	46.4	74.0	-27.6	Peak	Horizontal
	7443.0	51.4	-6.4	45.0	74.0	-29.0	Peak	Horizontal
	11982.0	48.2	-3.1	45.1	74.0	-28.9	Peak	Horizontal
	4961.0	51.4	-9.3	42.1	74.0	-31.9	Peak	Vertical
	7689.5	49.0	-6.0	43.0	74.0	-31.0	Peak	Vertical
	12245.5	49.3	-3.1	46.2	74.0	-27.8	Peak	Vertical

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

**The Result of Radiated Emission below 1GHz:**

Site: SIP-AC1	Time: 2021/10/27 - 00:23
Limit: FCC_Part15.209_RSE(3m)	Engineer: Kyrie Xie
Probe: SIP-AC1_VULB 9168 _30-1000MHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2402MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1			46.185	18.002	0.150	-21.998	40.000	17.852	QP
2			91.400	14.242	2.147	-29.258	43.500	12.095	QP
3			139.154	18.511	1.050	-24.989	43.500	17.461	QP
4			350.256	20.772	1.540	-25.228	46.000	19.232	QP
5			556.540	23.675	0.154	-22.325	46.000	23.521	QP
6		*	710.154	26.867	0.150	-19.133	46.000	26.717	QP

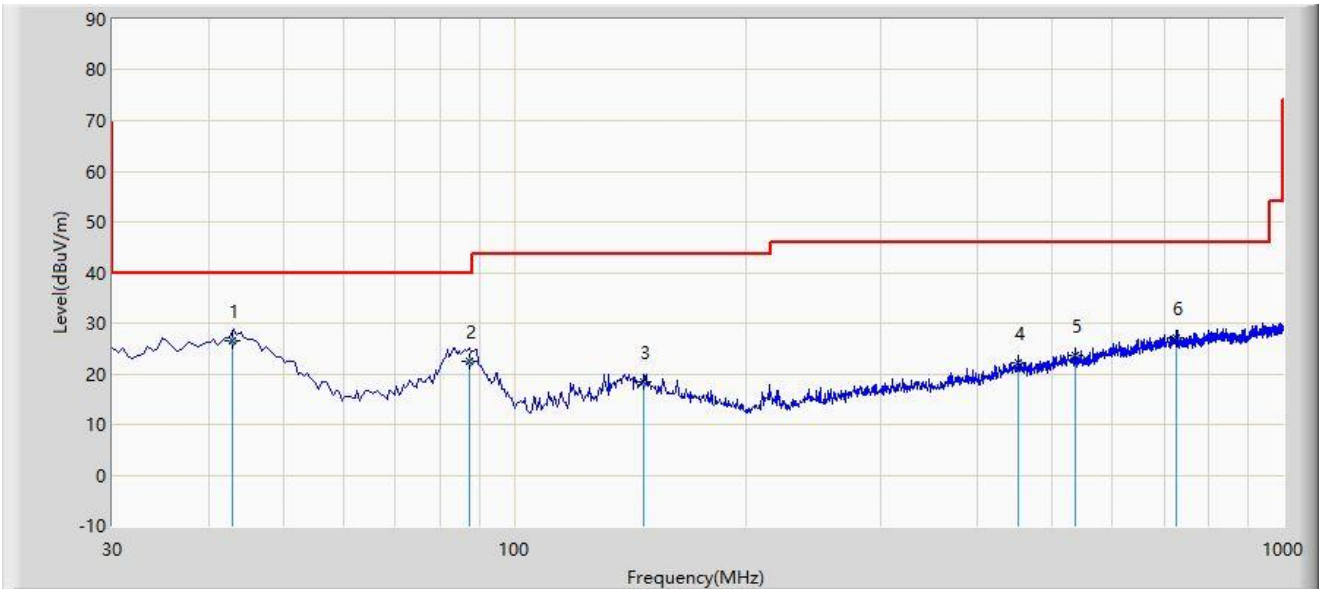
Note 1: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m)

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: SIP-AC1	Time: 2021/10/27 - 00:25
Limit: FCC_Part15.209_RSE(3m)	Engineer: Kyrie Xie
Probe: SIP-AC1_VULB 9168 _30-1000MHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2402MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		*	43.045	26.435	8.700	-13.565	40.000	17.734	QP
2			87.540	22.577	10.478	-17.423	40.000	12.099	QP
3			147.540	18.420	0.234	-25.080	43.500	18.186	QP
4			452.540	22.246	0.134	-23.754	46.000	22.112	QP
5			537.540	23.707	0.145	-22.293	46.000	23.562	QP
6			727.540	27.133	0.452	-18.867	46.000	26.681	QP

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.



## 6.10. Radiated Restricted Band Edge Measurement

### 6.10.1. Test Limit

#### For 15.205 requirement:

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

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 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 - 156.525	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	( <sup>2</sup> )
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

### 6.10.2. Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

### 6.10.3. Test Setting

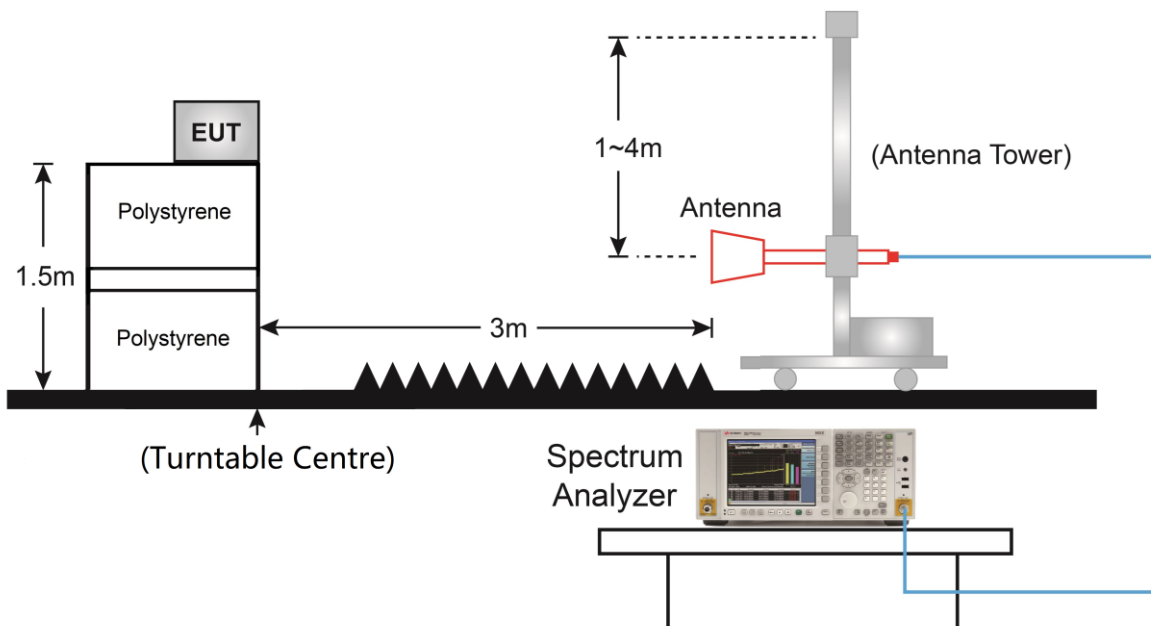
#### Peak Field Strength Measurements

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

### Average Measurements above 1GHz (Method VB)

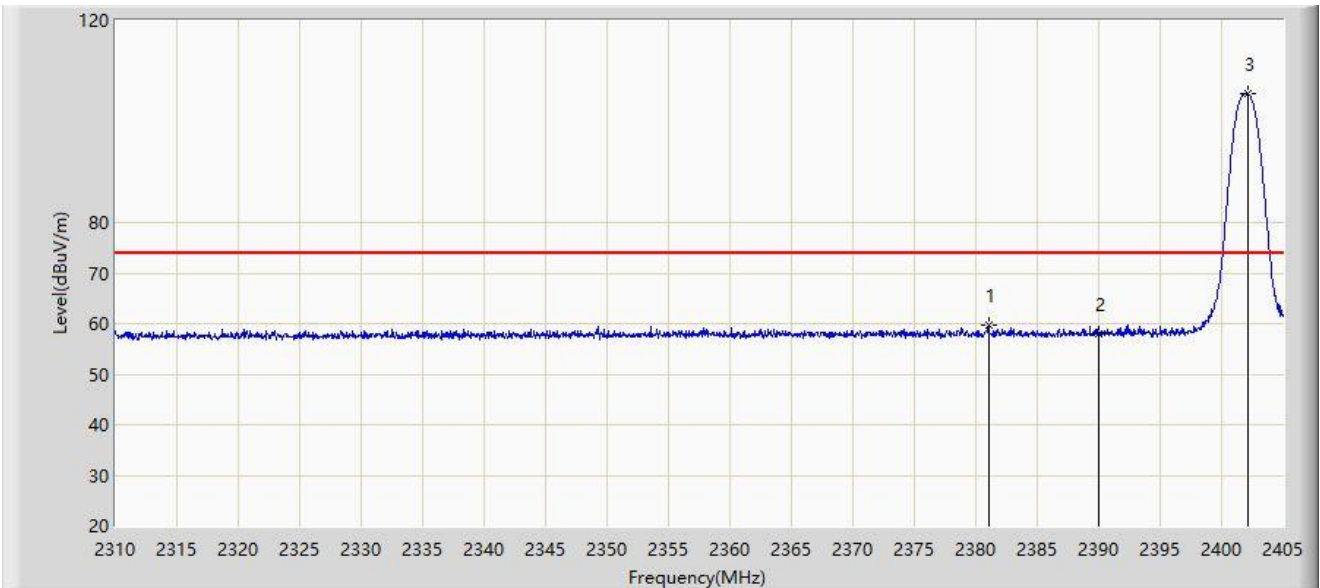
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle  $\geq 98\%$ , set VBW = 10 Hz.  
If the EUT duty cycle is  $< 98\%$ , set VBW  $\geq 1/T$ . T is the minimum transmission duration.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

#### 6.10.4.Test Setup



### 6.10.5. Test Result

Site: SIP-AC3	Time: 2021/10/26 - 20:57
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2402MHz	

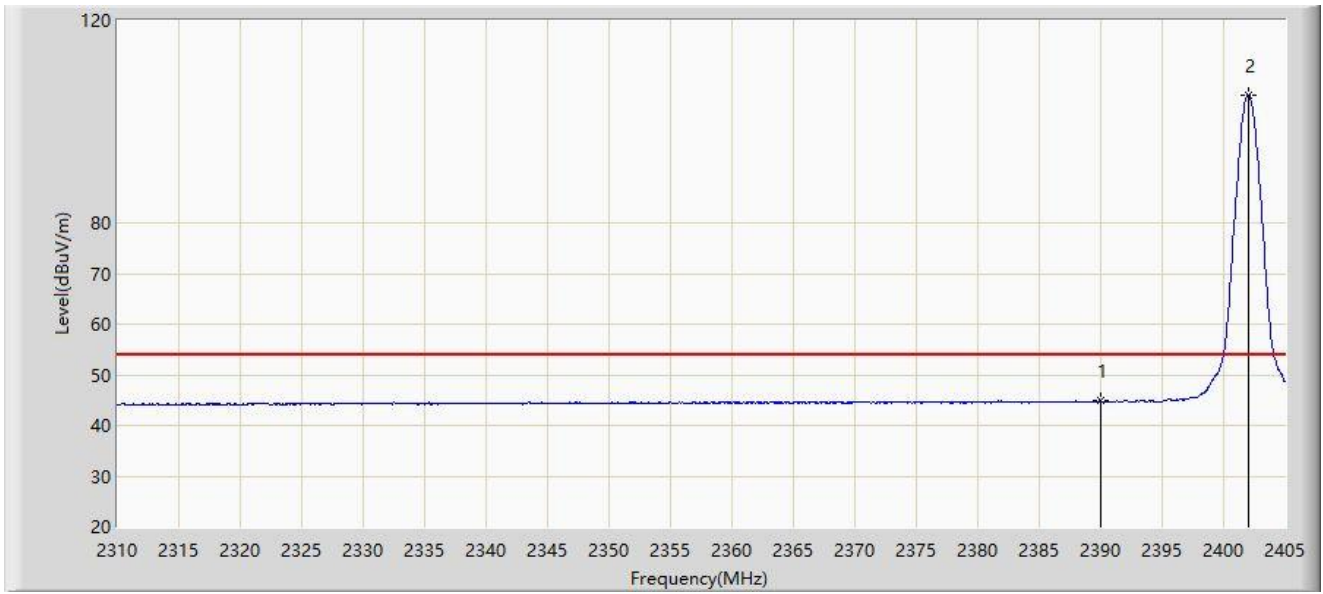


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1			2381.012	59.767	27.882	-14.233	74.000	31.884	PK
2			2390.000	58.089	26.150	-15.911	74.000	31.939	PK
3		*	2402.150	105.472	73.449	N/A	N/A	32.023	PK

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

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

Site: SIP-AC3	Time: 2021/10/26 - 21:04
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2402MHz	

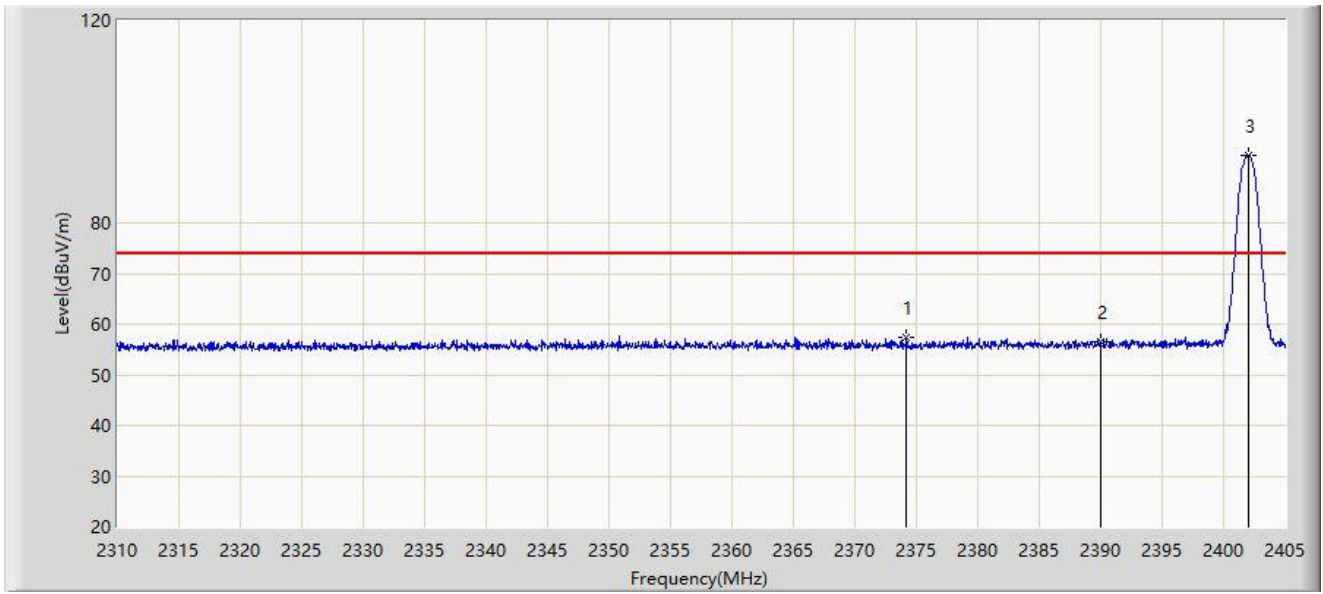


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1			2390.000	44.828	12.889	-9.172	54.000	31.939	AV
2		*	2402.008	105.193	73.171	N/A	N/A	32.022	AV

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

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

Site: SIP-AC3	Time: 2021/10/26 - 21:06
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2402MHz	

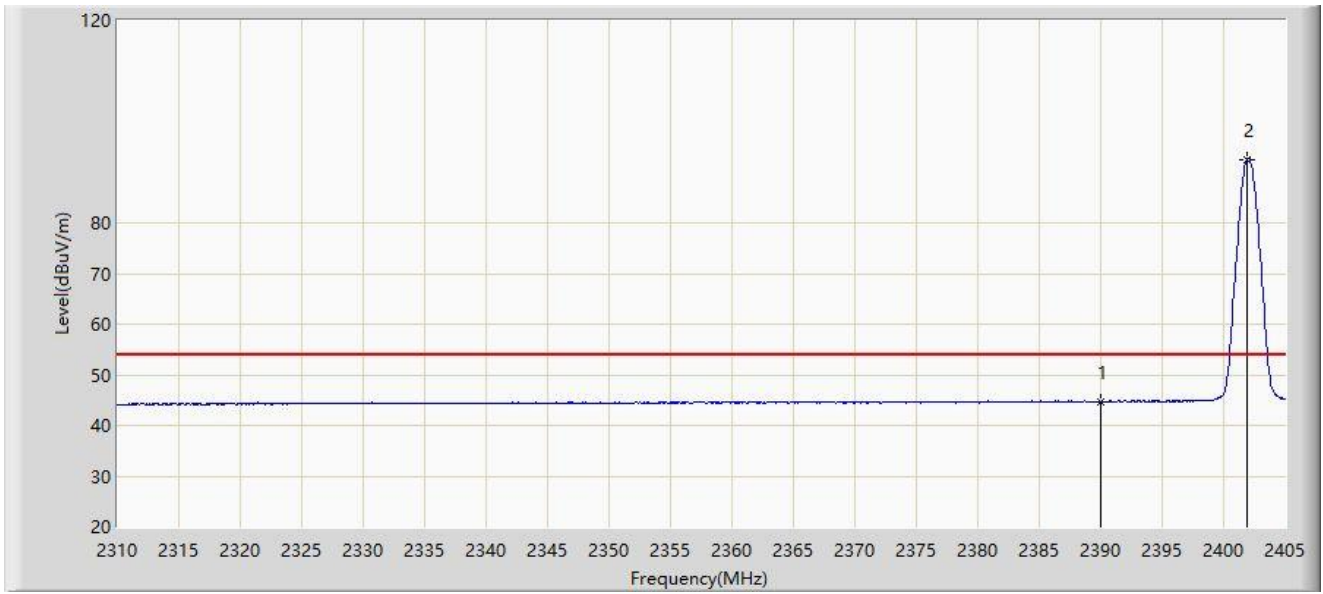


No	Flag	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1			2374.220	57.391	25.528	-16.609	74.000	31.862	PK
2			2390.000	56.545	24.606	-17.455	74.000	31.939	PK
3		*	2402.008	93.277	61.255	N/A	N/A	32.022	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m)

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

Site: SIP-AC3	Time: 2021/10/26 - 21:08
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2402MHz	

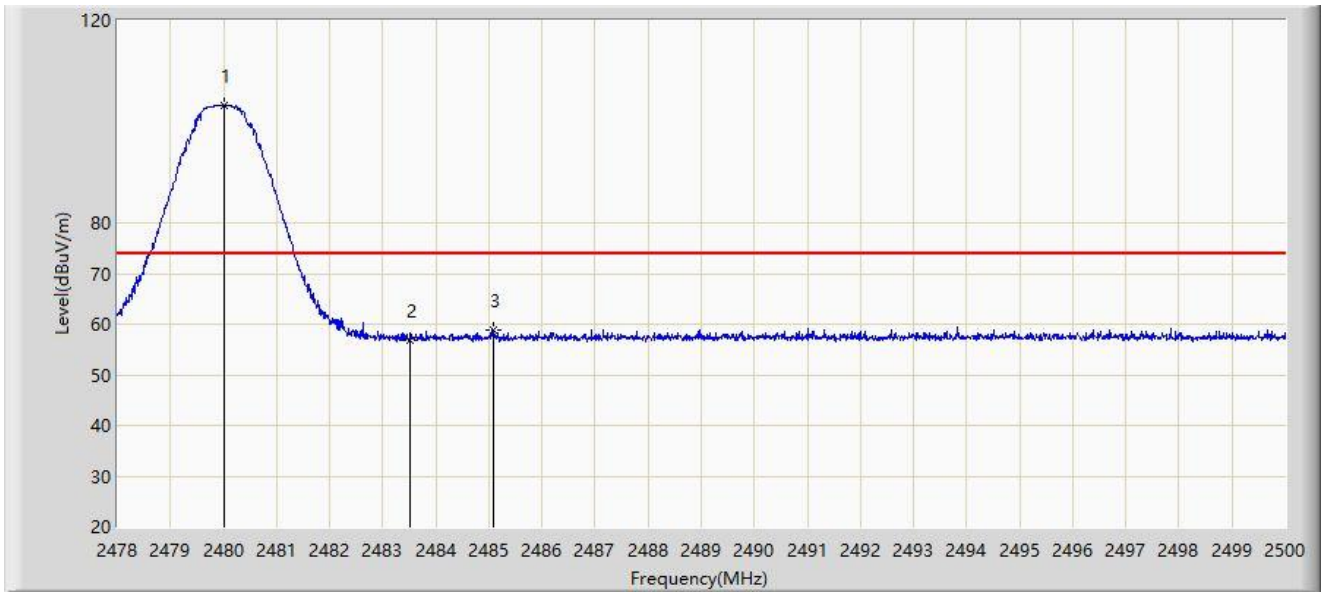


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1			2390.000	44.694	12.755	-9.306	54.000	31.939	AV
2		*	2401.913	92.598	60.577	N/A	N/A	32.022	AV

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

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

Site: SIP-AC3	Time: 2021/10/26 - 21:09
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2480MHz	



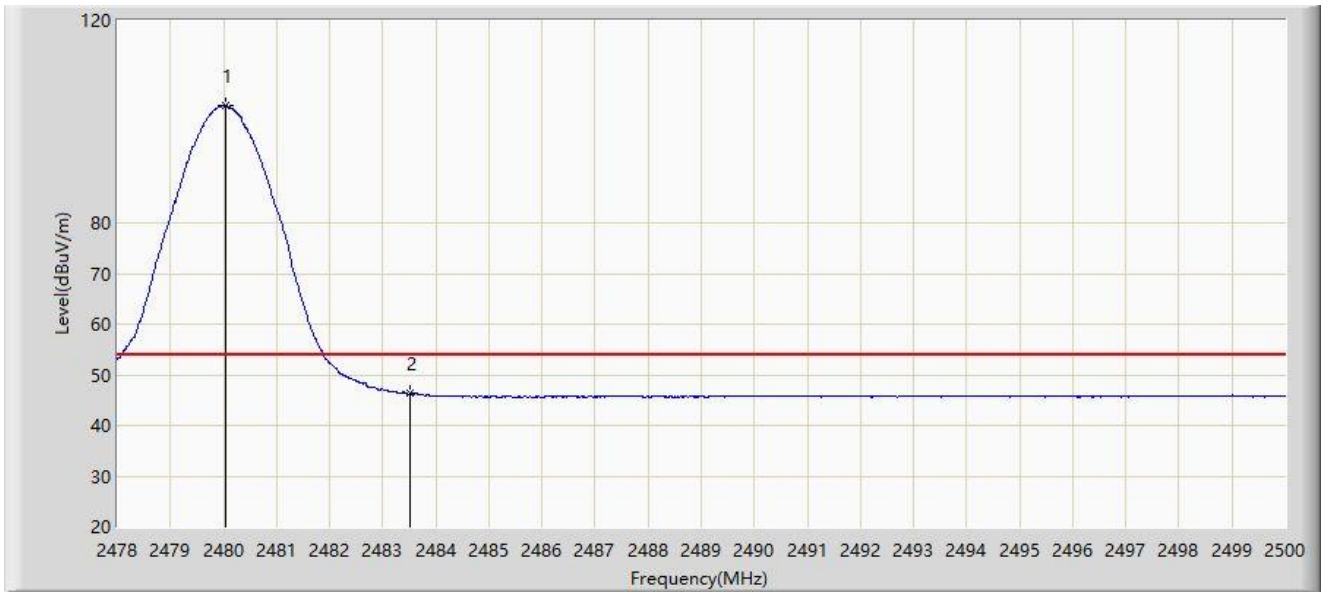
No	Flag	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1		*	2480.002	103.180	70.882	N/A	N/A	32.297	PK
2			2483.500	56.903	24.588	-17.097	74.000	32.315	PK
3			2485.095	58.922	26.599	-15.078	74.000	32.323	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m)

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



Site: SIP-AC3	Time: 2021/10/26 - 21:21
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2480MHz	

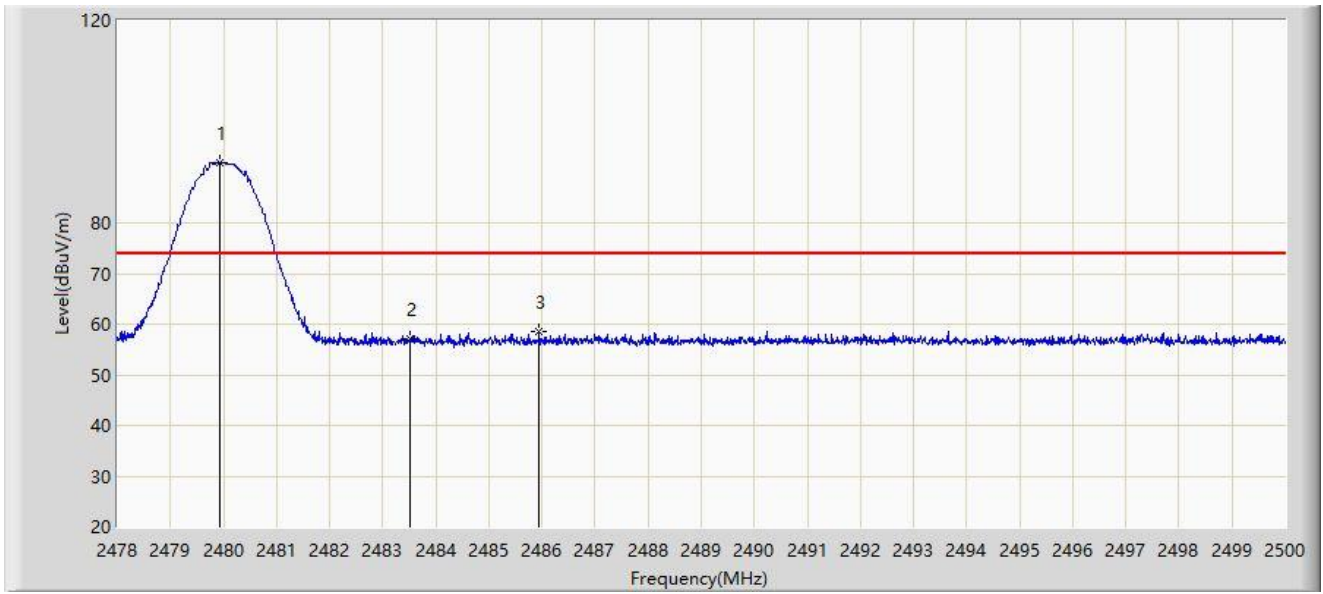


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1		*	2480.046	103.078	70.780	N/A	N/A	32.297	AV
2			2483.500	46.335	14.020	-7.665	54.000	32.315	AV

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

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

Site: SIP-AC3	Time: 2021/10/26 - 21:24
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2480MHz	

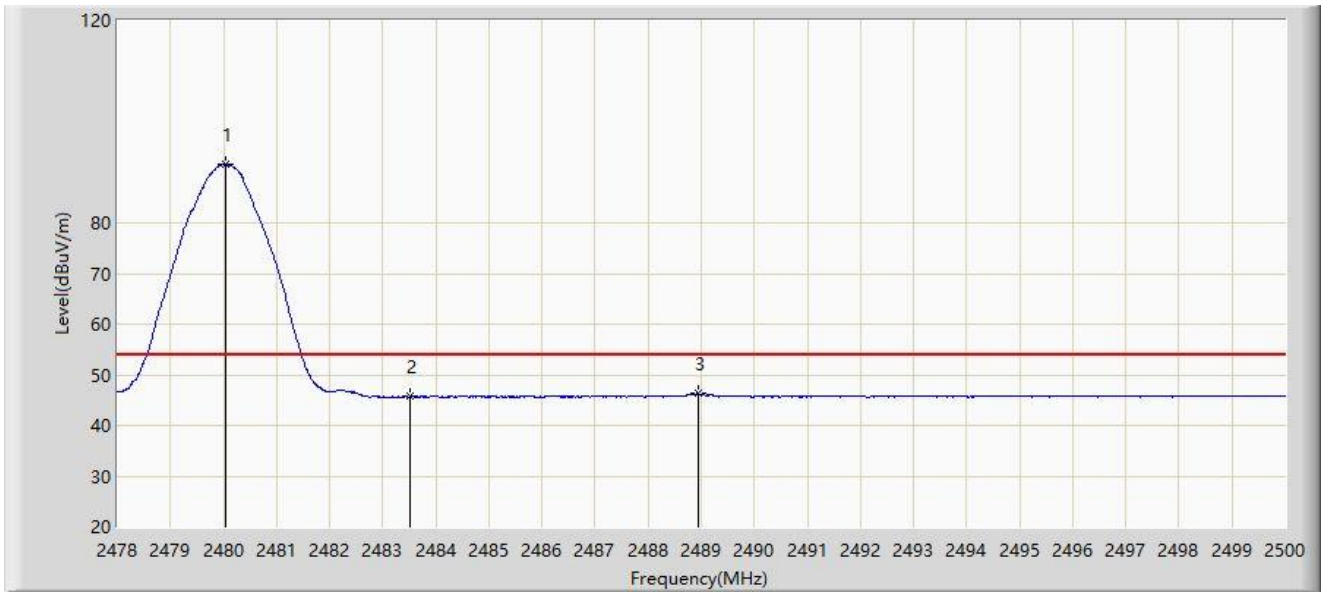


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1		*	2479.936	91.939	59.642	N/A	N/A	32.297	PK
2			2483.500	57.215	24.900	-16.785	74.000	32.315	PK
3			2485.953	58.546	26.219	-15.454	74.000	32.328	PK

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

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

Site: SIP-AC3	Time: 2021/10/26 - 21:26
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2480MHz	

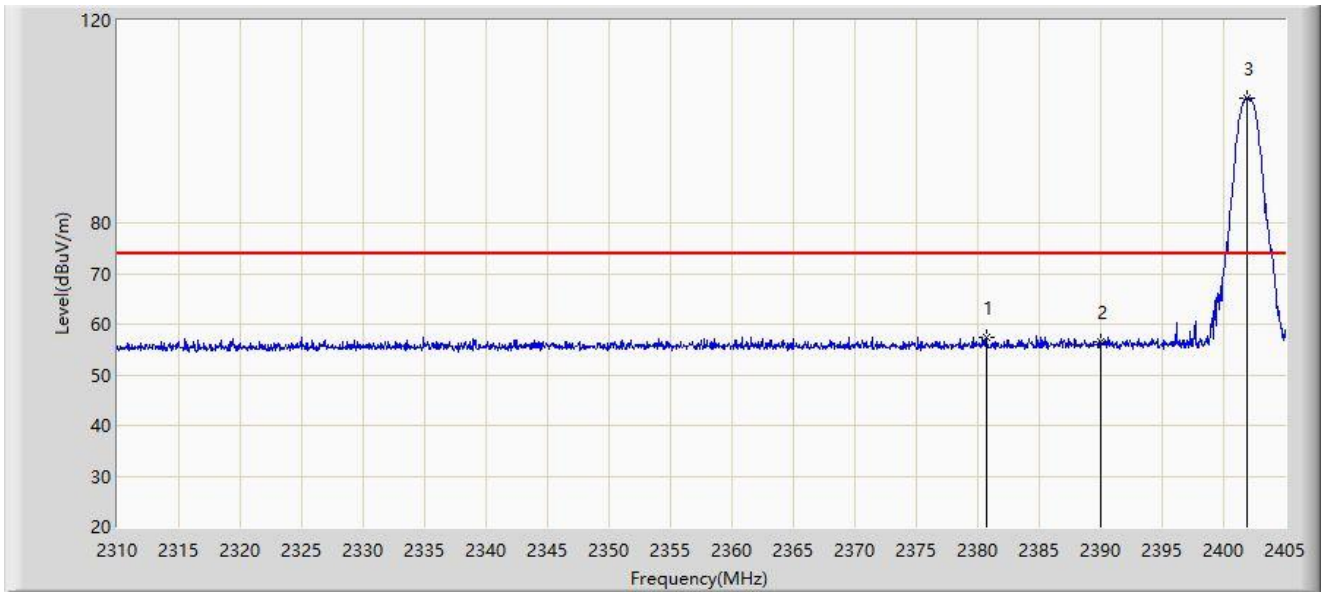


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		*	2480.046	91.541	59.243	N/A	N/A	32.297	AV
2			2483.500	45.687	13.372	-8.313	54.000	32.315	AV
3			2488.934	46.278	13.936	-7.722	54.000	32.343	AV

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

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

Site: SIP-AC3	Time: 2021/10/26 - 21:30
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at Channel 2402MHz	

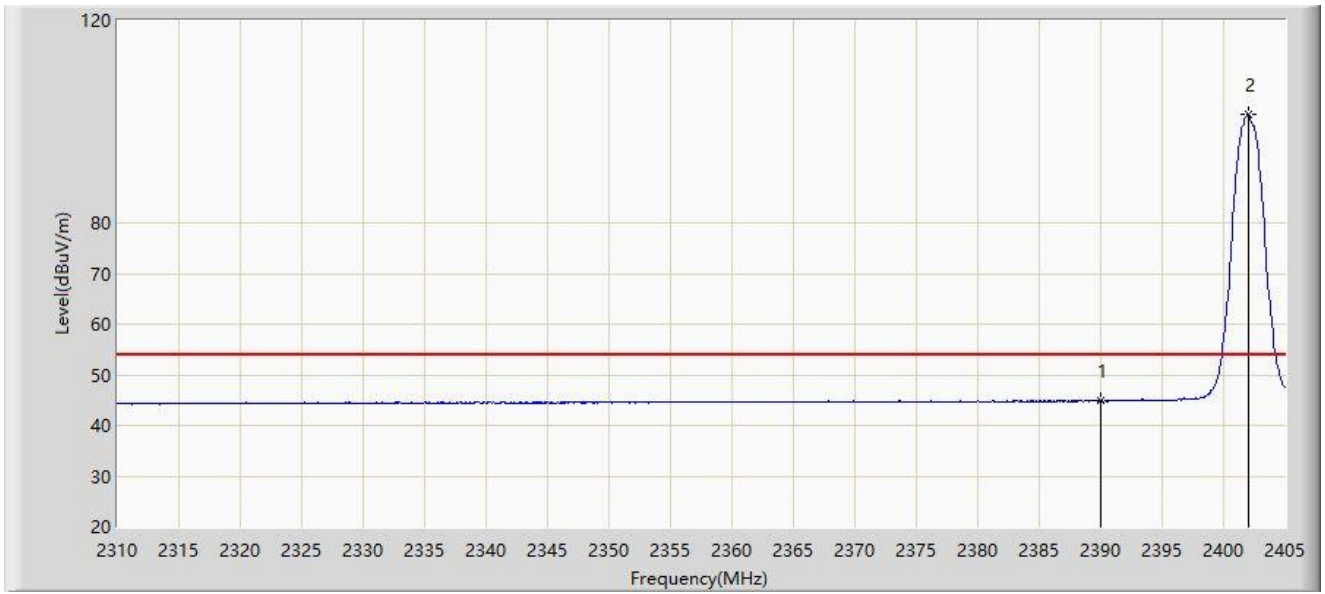


No	Flag	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1			2380.680	57.468	25.585	-16.532	74.000	31.883	PK
2			2390.000	56.426	24.487	-17.574	74.000	31.939	PK
3		*	2401.960	104.654	72.632	N/A	N/A	32.022	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m)

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

Site: SIP-AC3	Time: 2021/10/26 - 21:33
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at Channel 2402MHz	

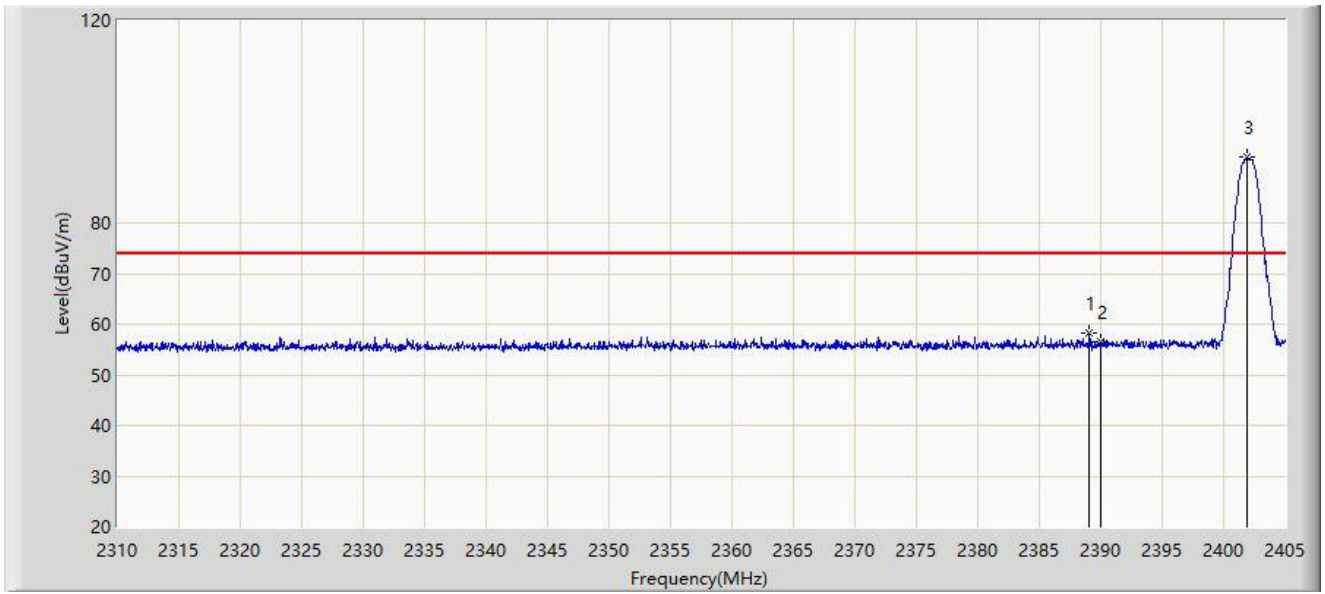


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1			2390.000	44.860	12.921	-9.140	54.000	31.939	AV
2		*	2402.008	101.364	69.342	N/A	N/A	32.022	AV

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

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

Site: SIP-AC3	Time: 2021/10/26 - 21:36
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at Channel 2402MHz	

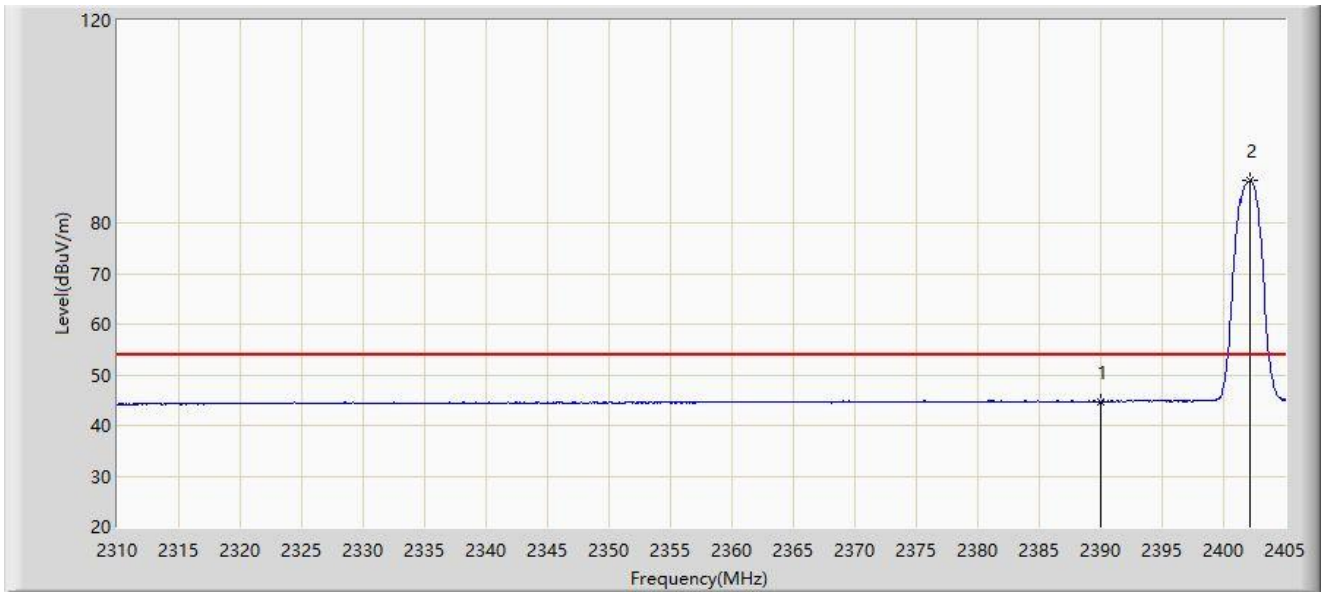


No	Flag	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1			2389.040	58.180	26.247	-15.820	74.000	31.933	PK
2			2390.000	56.565	24.626	-17.435	74.000	31.939	PK
3		*	2401.865	92.954	60.933	N/A	N/A	32.021	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m)

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

Site: SIP-AC3	Time: 2021/10/26 - 21:39
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at Channel 2402MHz	

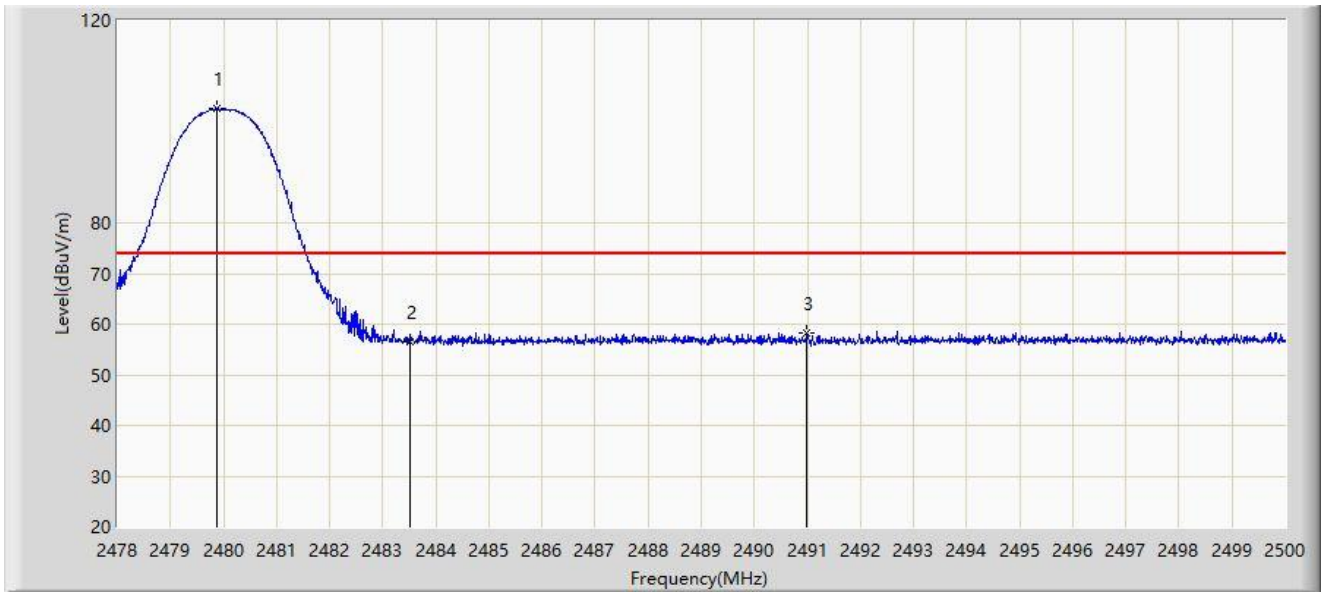


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1			2390.000	44.734	12.795	-9.266	54.000	31.939	AV
2		*	2402.150	88.377	56.354	N/A	N/A	32.023	AV

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

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

Site: SIP-AC3	Time: 2021/10/26 - 21:42
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at Channel 2480MHz	



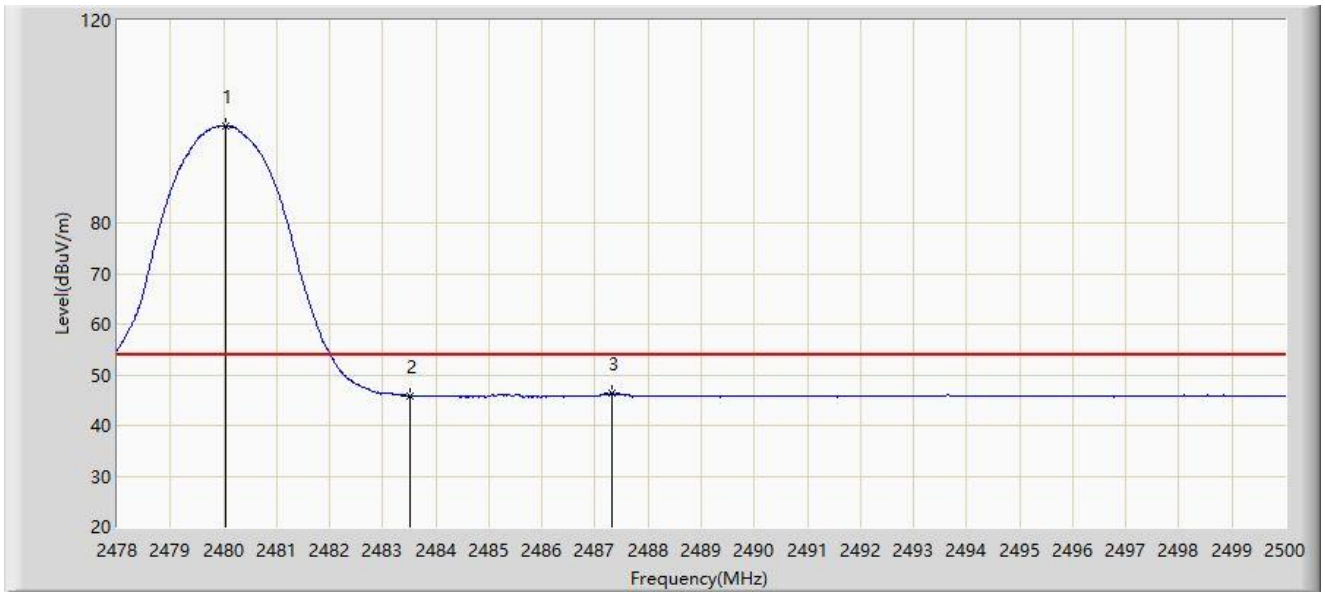
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		*	2479.870	102.498	70.201	N/A	N/A	32.297	PK
2			2483.500	56.599	24.284	-17.401	74.000	32.315	PK
3			2490.991	58.360	26.007	-15.640	74.000	32.352	PK

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

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



Site: SIP-AC3	Time: 2021/10/26 - 21:44
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at Channel 2480MHz	

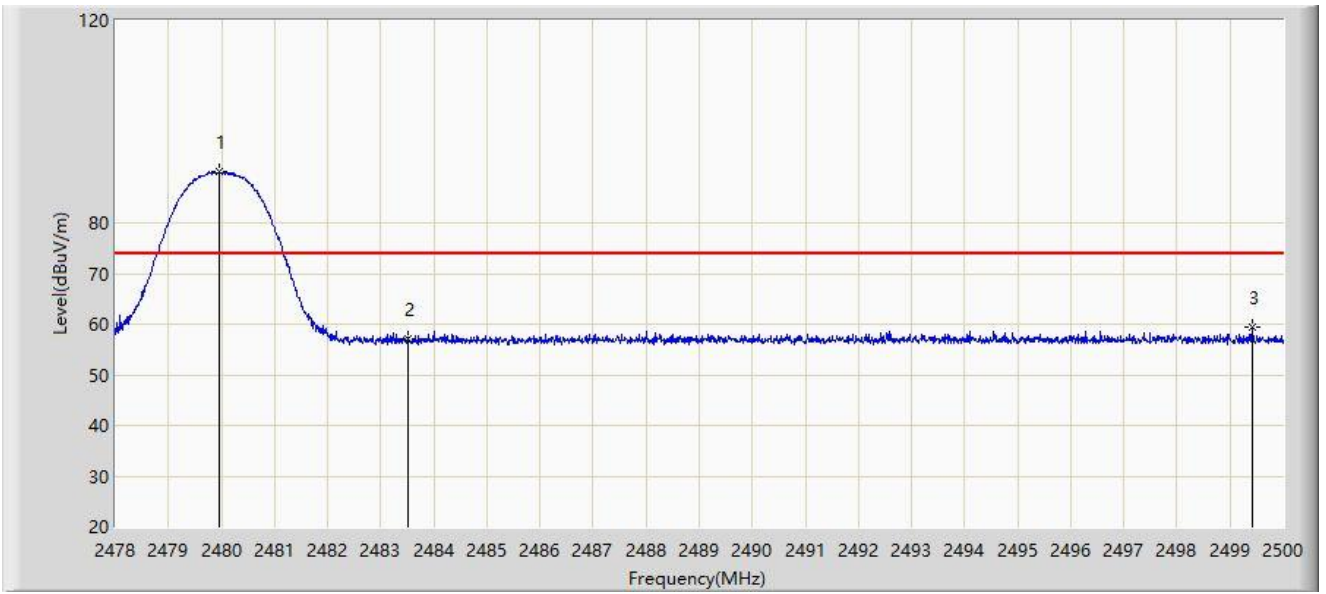


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		*	2480.046	99.069	66.771	N/A	N/A	32.297	AV
2			2483.500	45.776	13.461	-8.224	54.000	32.315	AV
3			2487.328	46.266	13.932	-7.734	54.000	32.334	AV

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

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

Site: SIP-AC3	Time: 2021/10/26 - 21:50
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at Channel 2480MHz	

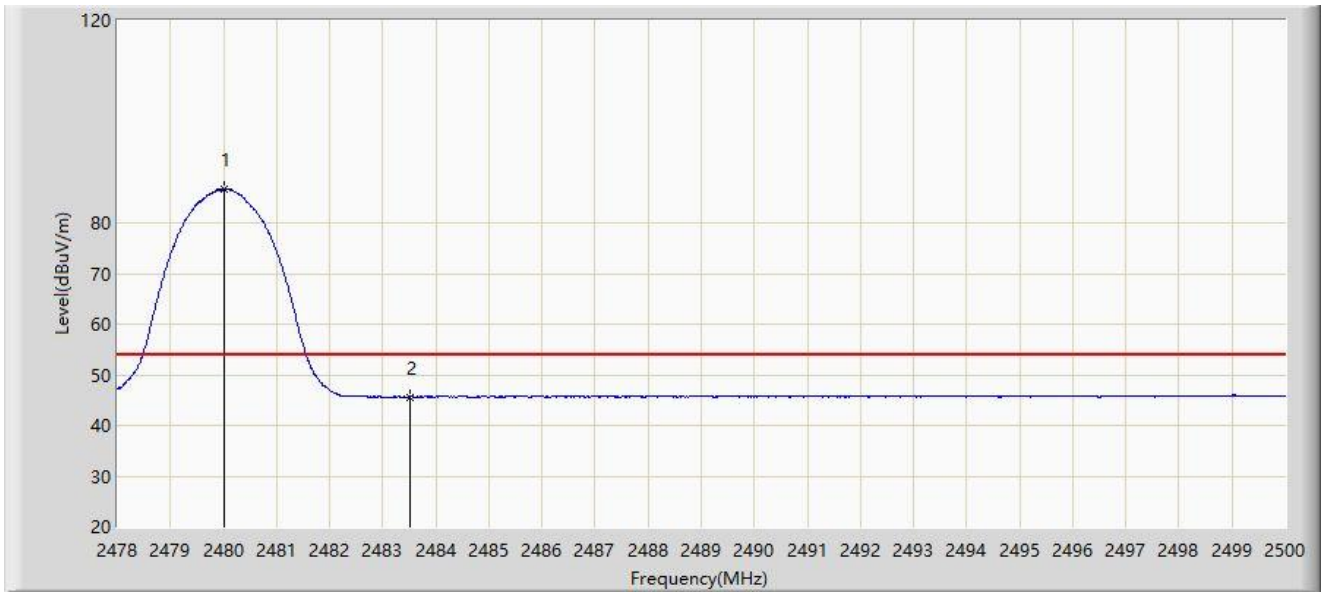


No	Flag	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1		*	2479.958	90.081	57.784	N/A	N/A	32.297	PK
2			2483.500	57.127	24.812	-16.873	74.000	32.315	PK
3			2499.417	59.372	26.986	-14.628	74.000	32.386	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m)

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

Site: SIP-AC3	Time: 2021/10/26 - 21:53
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at Channel 2480MHz	

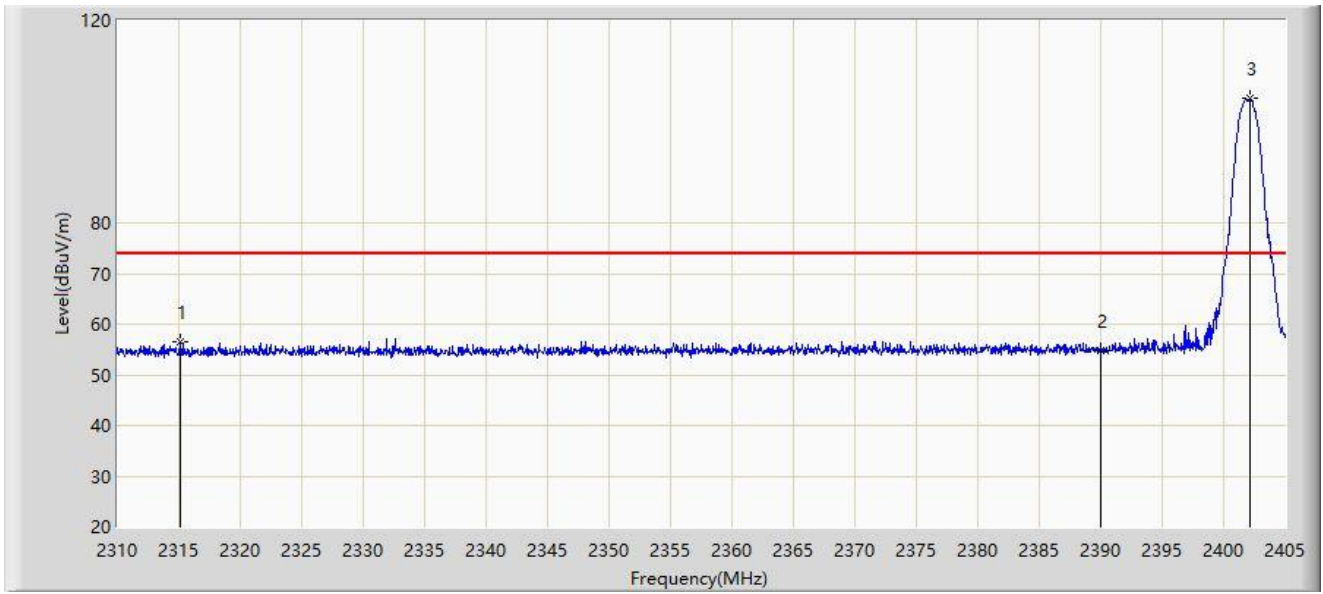


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1		*	2480.024	86.634	54.336	N/A	N/A	32.297	AV
2			2483.500	45.651	13.336	-8.349	54.000	32.315	AV

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

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

Site: SIP-AC3	Time: 2021/10/26 - 22:14
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at Channel 2402MHz	

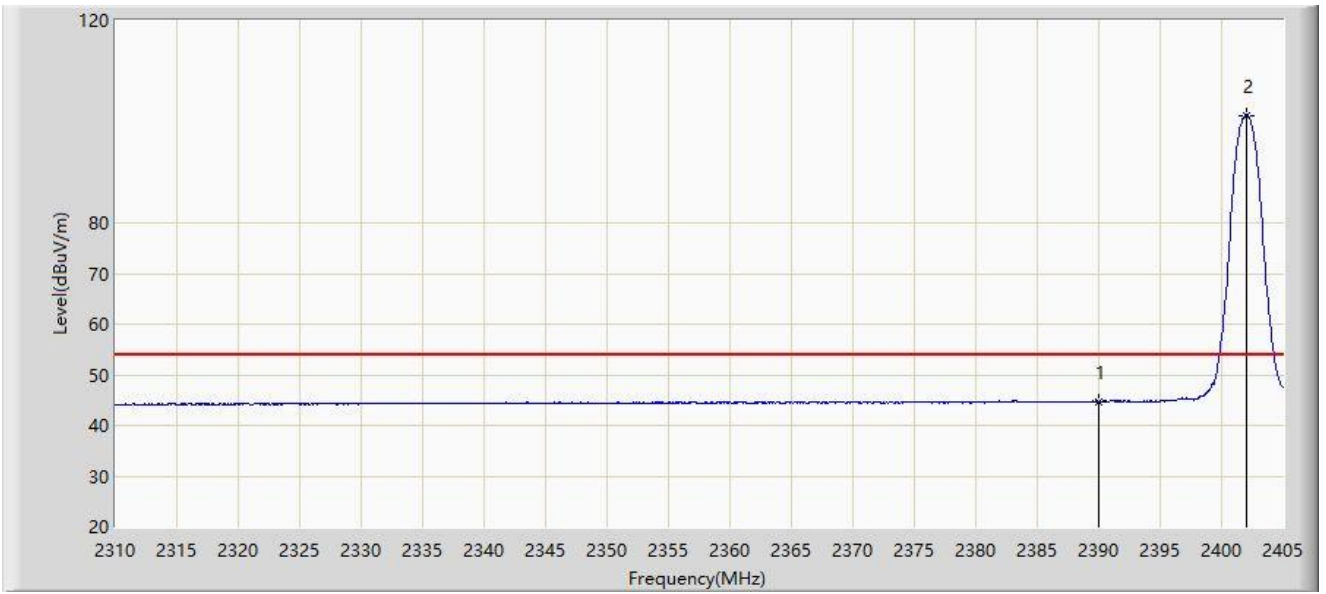


No	Flag	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1			2315.177	56.586	24.855	-17.414	74.000	31.730	PK
2			2390.000	54.811	22.872	-19.189	74.000	31.939	PK
3		*	2402.150	104.601	72.578	N/A	N/A	32.023	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m)

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

Site: SIP-AC3	Time: 2021/10/26 - 22:16
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at Channel 2402MHz	

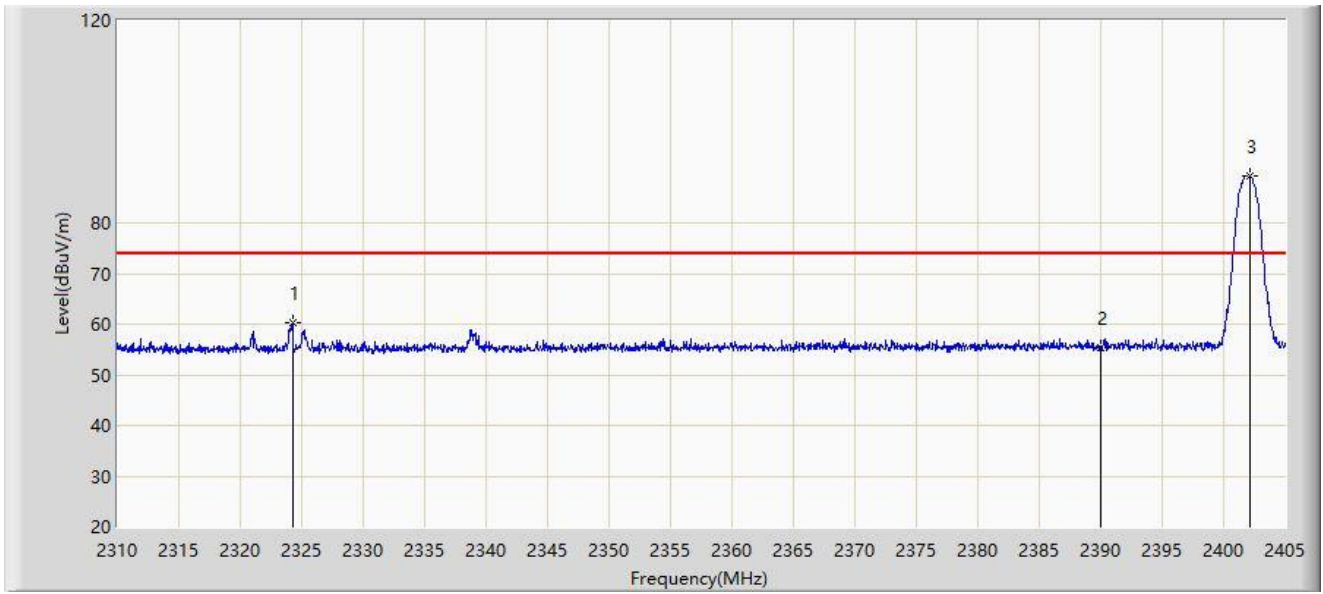


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1			2390.000	44.711	12.772	-9.289	54.000	31.939	AV
2		*	2402.008	101.246	69.224	N/A	N/A	32.022	AV

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

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

Site: SIP-AC3	Time: 2021/10/26 - 22:17
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at Channel 2402MHz	

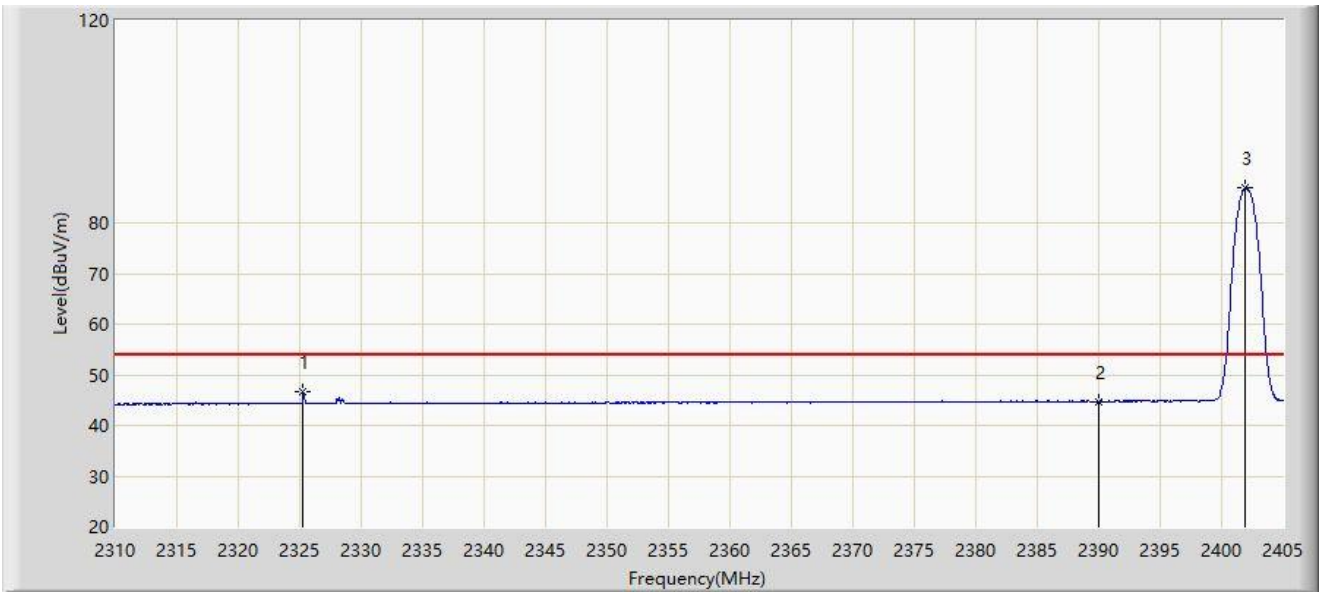


No	Flag	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1			2324.250	60.392	28.613	-13.608	74.000	31.778	PK
2			2390.000	55.225	23.286	-18.775	74.000	31.939	PK
3		*	2402.103	89.412	57.389	N/A	N/A	32.023	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m)

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

Site: SIP-AC3	Time: 2021/10/26 - 22:20
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at Channel 2402MHz	

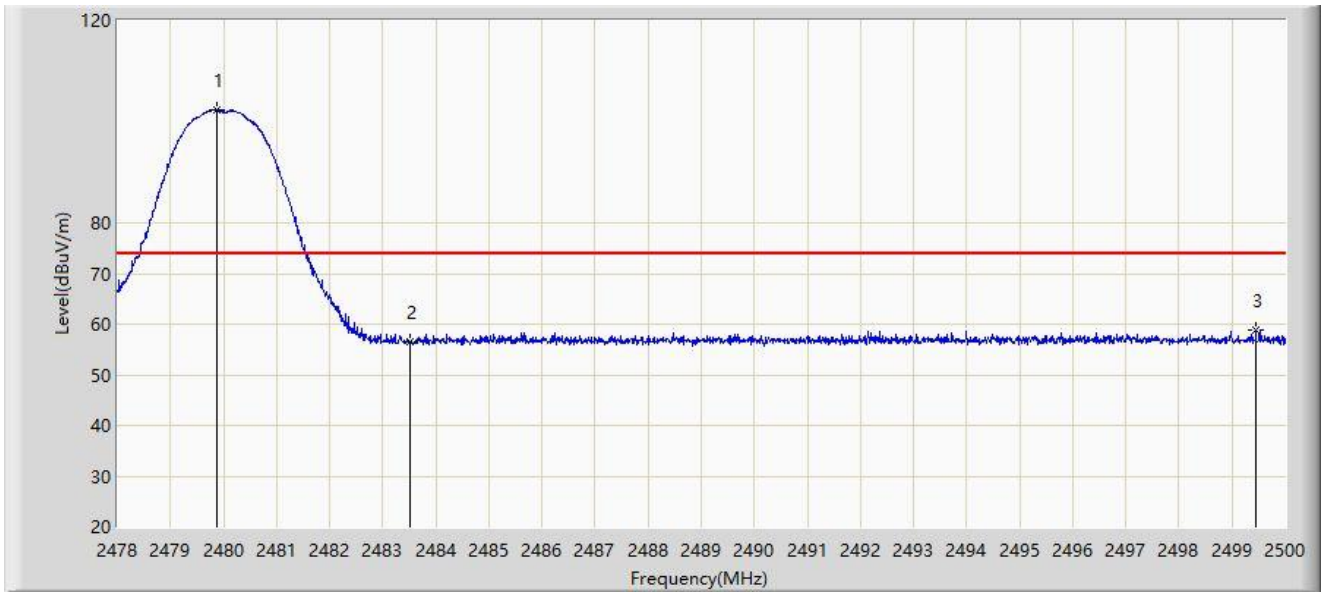


No	Flag	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1			2325.295	46.570	14.786	-7.430	54.000	31.784	AV
2			2390.000	44.763	12.824	-9.237	54.000	31.939	AV
3		*	2401.960	86.988	54.966	N/A	N/A	32.022	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m)

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

Site: SIP-AC3	Time: 2021/10/26 - 22:22
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at Channel 2480MHz	



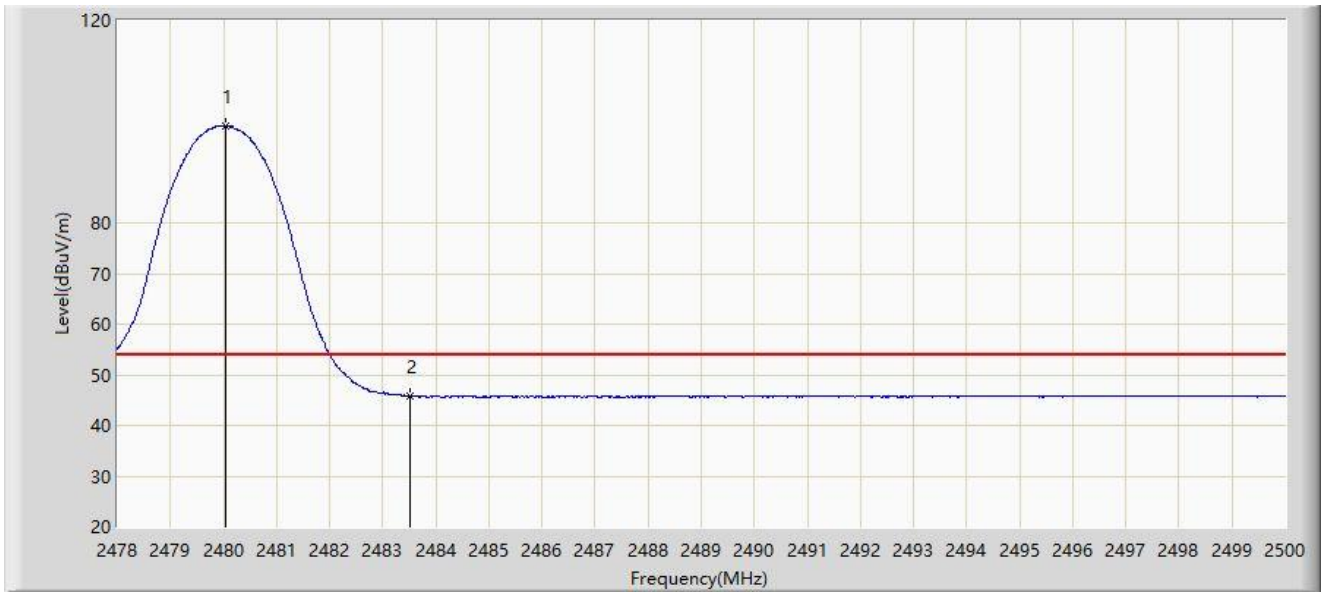
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		*	2479.870	102.317	70.020	N/A	N/A	32.297	PK
2			2483.500	56.427	24.112	-17.573	74.000	32.315	PK
3			2499.450	58.861	26.475	-15.139	74.000	32.386	PK

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

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



Site: SIP-AC3	Time: 2021/10/26 - 22:26
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at Channel 2480MHz	

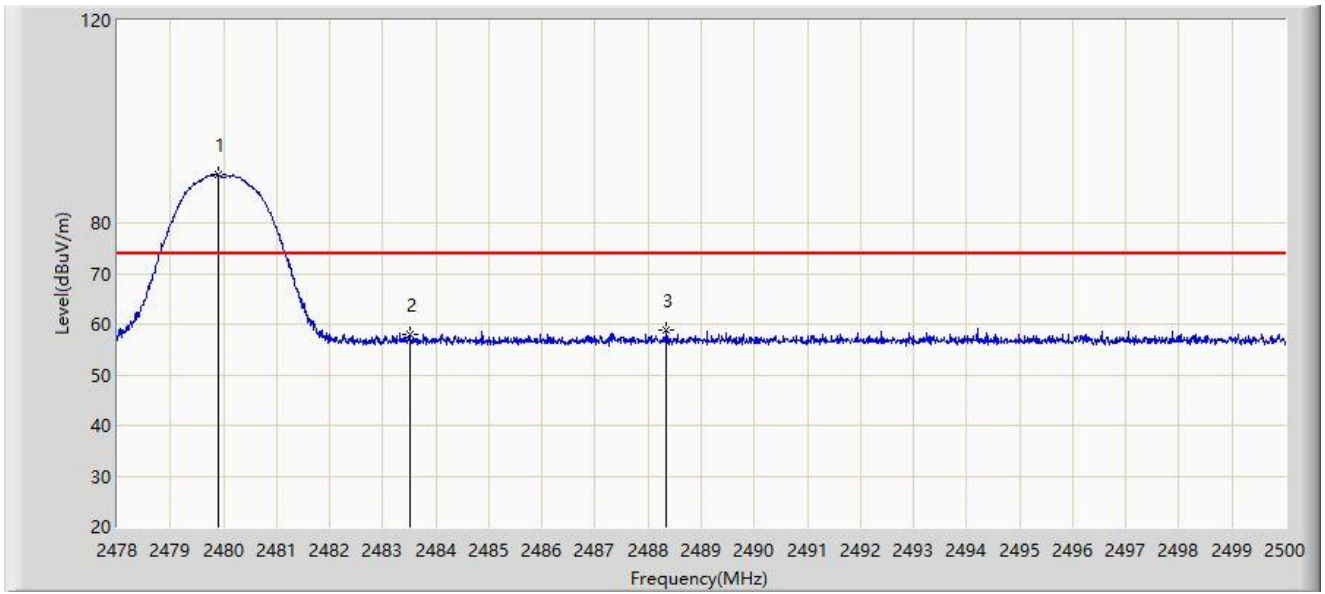


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1		*	2480.046	99.172	66.874	N/A	N/A	32.297	AV
2			2483.500	45.783	13.468	-8.217	54.000	32.315	AV

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

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

Site: SIP-AC3	Time: 2021/10/26 - 22:28
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at Channel 2480MHz	

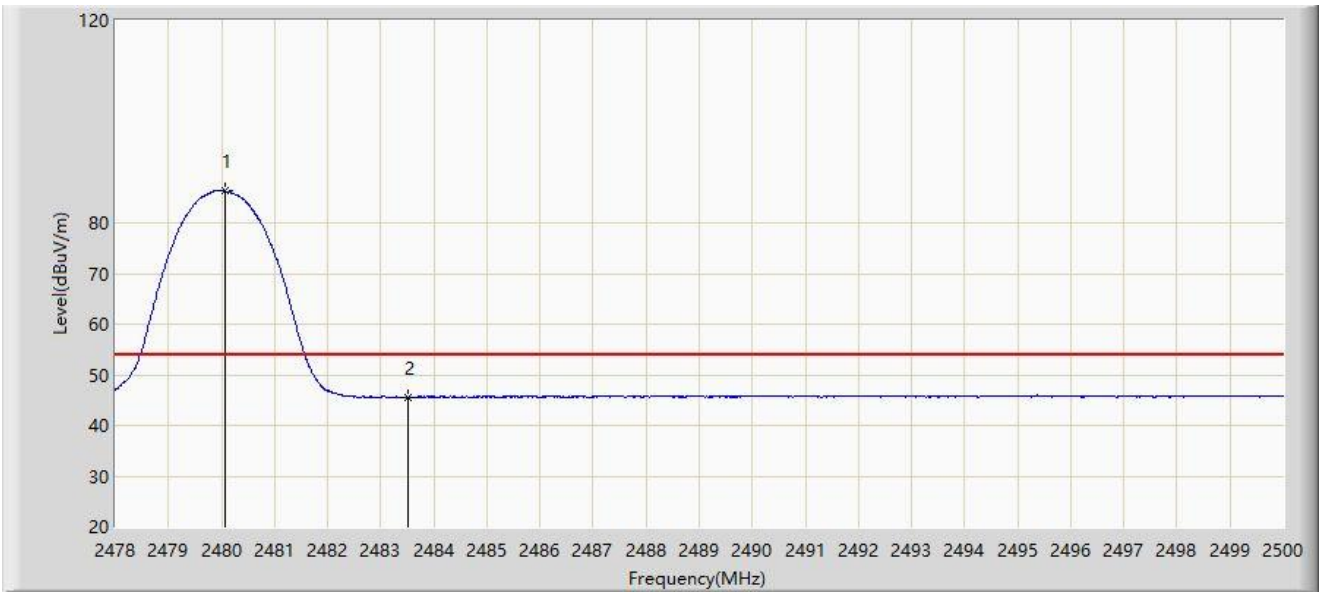


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1		*	2479.903	89.440	57.143	N/A	N/A	32.297	PK
2			2483.500	57.832	25.517	-16.168	74.000	32.315	PK
3			2488.351	58.799	26.459	-15.201	74.000	32.340	PK

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

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

Site: SIP-AC3	Time: 2021/10/26 - 22:30
Limit: FCC_Part15_Band Edge(3m)	Engineer: Kyrie Xie
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at Channel 2480MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1		*	2480.079	86.346	54.048	N/A	N/A	32.298	AV
2			2483.500	45.627	13.312	-8.373	54.000	32.315	AV

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

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

## 6.11. AC Conducted Emissions Measurement

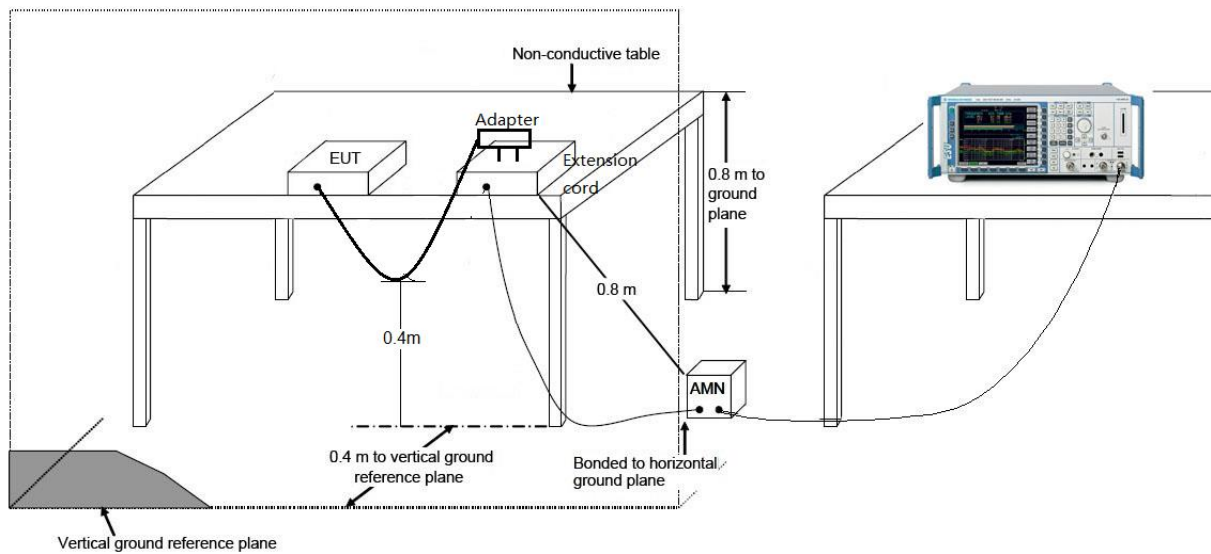
### 6.11.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dB $\mu$ V)	Average (dB $\mu$ V)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

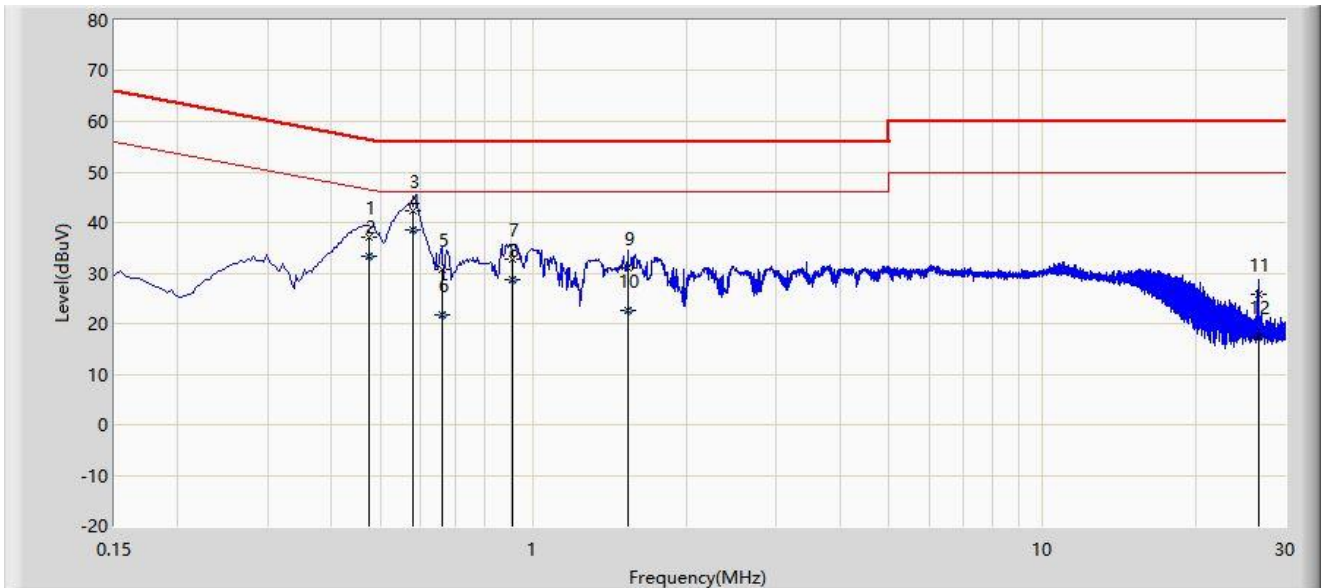
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

### 6.11.2. Test Setup



### 6.11.3. Test Result

Site: WZ-SR2	Time: 2021/11/04 - 09:44
Limit: FCC_Part15.207_CE_AC Power	Engineer: Helen Han
Probe: ENV216_101683_Filter Off_E	Polarity: Line
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2402MHz	

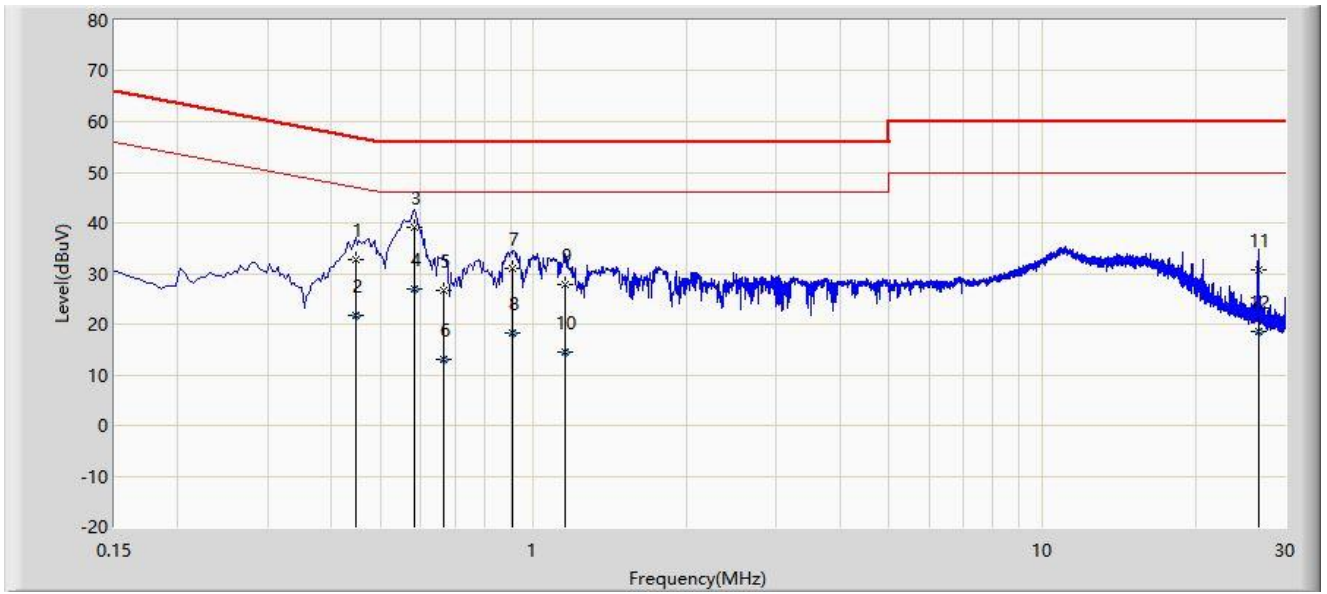


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV)	Factor (dB)	Type
1			0.474	36.970	26.958	-19.473	56.444	10.013	QP
2			0.474	33.327	23.314	-13.117	46.444	10.013	AV
3			0.578	42.283	32.259	-13.717	56.000	10.024	QP
4		*	0.578	38.620	28.596	-7.380	46.000	10.024	AV
5			0.662	30.627	20.593	-25.373	56.000	10.034	QP
6			0.662	21.747	11.713	-24.253	46.000	10.034	AV
7			0.906	32.894	22.828	-23.106	56.000	10.067	QP
8			0.906	28.757	18.690	-17.243	46.000	10.067	AV
9			1.534	31.051	20.923	-24.949	56.000	10.128	QP
10			1.534	22.602	12.474	-23.398	46.000	10.128	AV
11			26.666	25.733	8.473	-34.267	60.000	17.259	QP
12			26.666	17.428	0.169	-32.572	50.000	17.259	AV

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

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

Site: WZ-SR2	Time: 2021/11/04 - 10:18
Limit: FCC_Part15.207_CE_AC Power	Engineer: Helen Han
Probe: ENV216_101683_Filter Off_E	Polarity: Neutral
EUT: LTE Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2402MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV)	Factor (dB)	Type
1			0.446	32.852	22.806	-24.098	56.949	10.046	QP
2			0.446	21.775	11.729	-25.175	46.949	10.046	AV
3		*	0.582	38.986	28.929	-17.014	56.000	10.057	QP
4			0.582	27.039	16.982	-18.961	46.000	10.057	AV
5			0.666	26.602	16.537	-29.398	56.000	10.065	QP
6			0.666	13.153	3.088	-32.847	46.000	10.065	AV
7			0.906	31.048	20.958	-24.952	56.000	10.090	QP
8			0.906	18.218	8.128	-27.782	46.000	10.090	AV
9			1.150	27.745	17.629	-28.255	56.000	10.115	QP
10			1.150	14.402	4.286	-31.598	46.000	10.115	AV
11			26.666	30.622	13.459	-29.378	60.000	17.163	QP
12			26.666	18.412	1.249	-31.588	50.000	17.163	AV

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

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

## 7. CONCLUSION

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

————— The End —————

## **Appendix A - Test Setup Photograph**

Refer to "2110RSU013-UT" file.



## **Appendix B - EUT Photograph**

Refer to " 2110RSU013-UE" file.