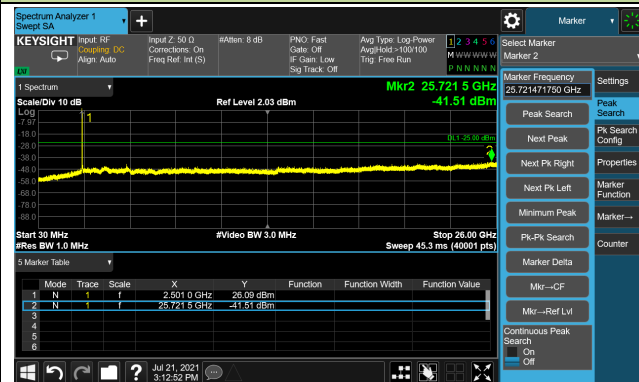
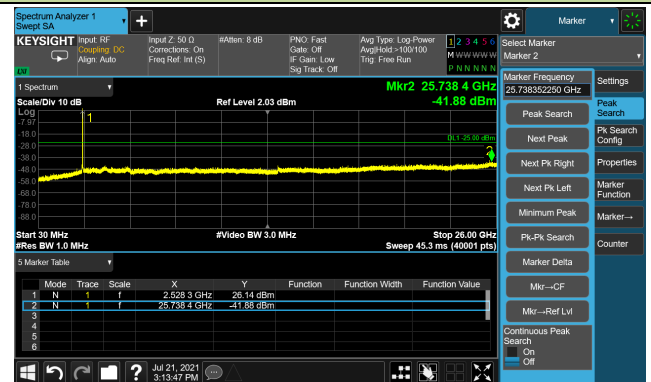


15MHz Channel Bandwidth

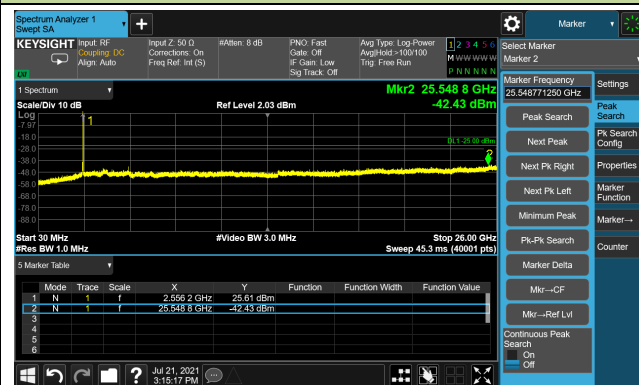
Channel 20825 (2507.5MHz)



Channel 21100 (2535MHz)

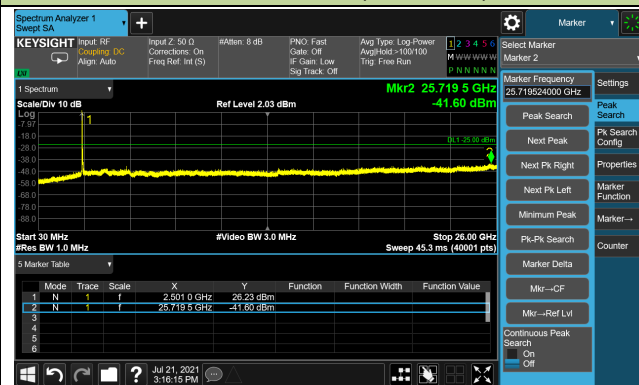


Channel 21375 (2562.5MHz)

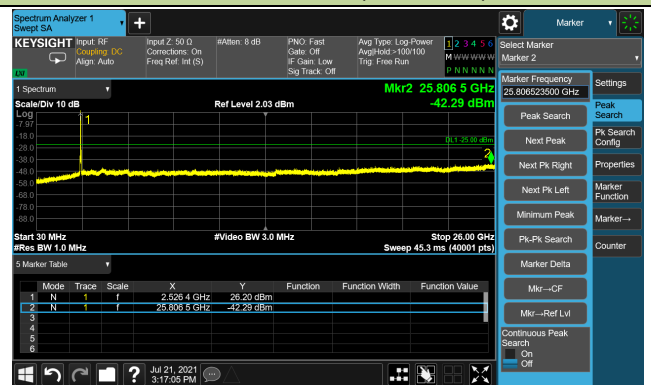


20MHz Channel Bandwidth

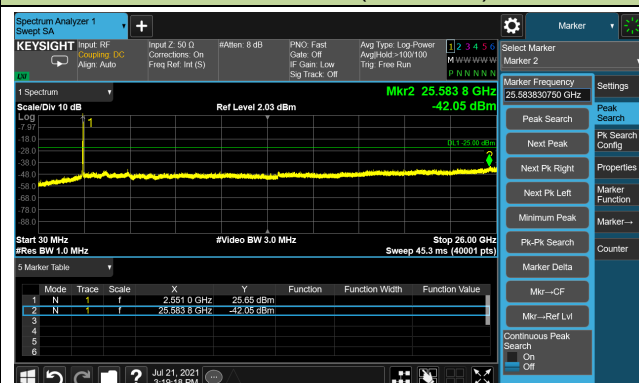
Channel 20850 (2510MHz)



Channel 21100 (2535MHz)



Channel 21350 (2560MHz)



5.8. Radiated Spurious Emission Measurement

5.8.1. Test Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm.

For Band 7, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $55 + 10 \log(P)$ dB. The emission limit equal to -25dBm.

$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$; where D is the measurement distance in meters. The emission limit equal to 82.3dB μ V/m or 70.3dB μ V/m.

5.8.2. Test Procedure

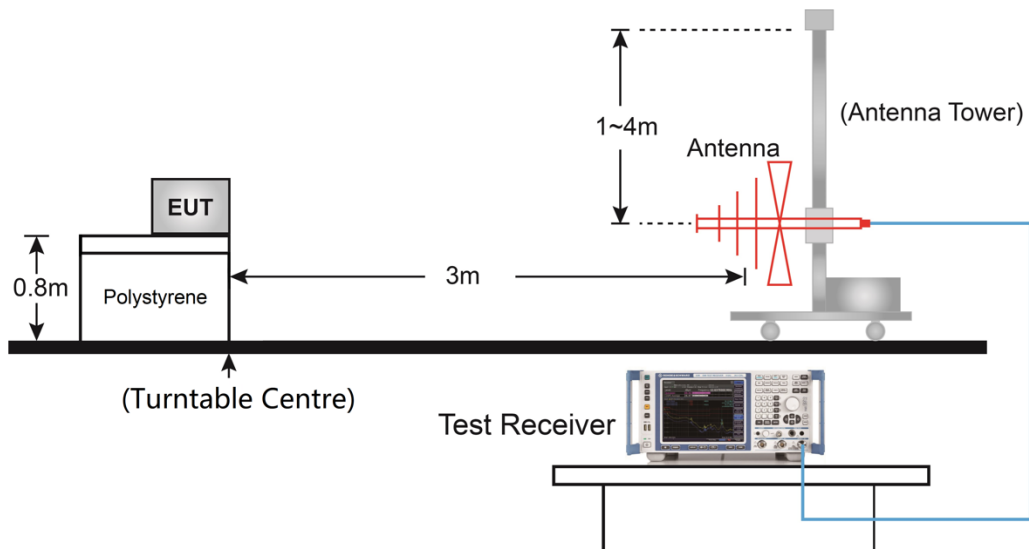
ANSI C63.26-2015 - Section 5.2.7 & 5.5

5.8.3. Test Setting

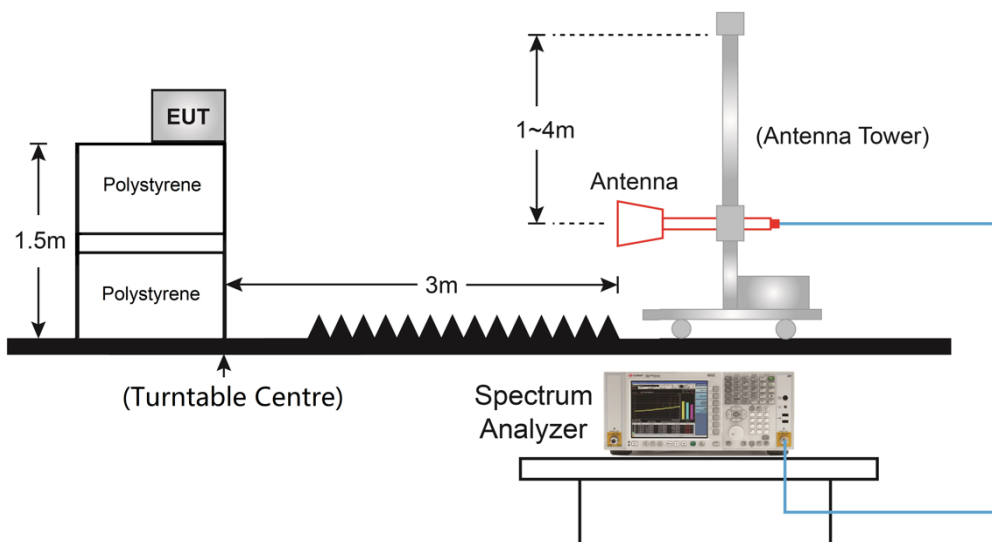
1. RBW = 1MHz
2. VBW $\geq 3 \times$ RBW
3. Sweep time $\geq 10 \times$ (number of points in sweep) $\times$ (transmission symbol period)
4. Detector = Peak
5. Trace mode = max hold
6. The trace was allowed to stabilize

5.8.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



5.8.5. Test Result

Product	LTE Module	Test Site	SIP-AC1
Test Engineer	White Wang	Test Date	2021/07/24
Test Band	LTE Band 2_1RB_QPSK		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
5547.5	61.8	-9.8	52.0	82.3	-30.3	Peak	Horizontal
7400.5	59.4	-7.6	51.8	82.3	-30.5	Peak	Horizontal
7400.5	66.9	-7.6	59.3	82.3	-23.0	Peak	Vertical
9253.5	69.5	-5.7	63.8	82.3	-18.5	Peak	Vertical
Middle Channel							
5641.0	61.8	-9.8	52.0	82.3	-30.3	Peak	Horizontal
9398.0	57.3	-5.9	51.4	82.3	-30.9	Peak	Horizontal
7519.5	62.8	-7.3	55.5	82.3	-26.8	Peak	Vertical
9398.0	68.5	-5.9	62.6	82.3	-19.7	Peak	Vertical
High Channel							
7638.5	58.4	-6.9	51.5	82.3	-30.8	Peak	Horizontal
9542.5	54.7	-5.5	49.2	82.3	-33.1	Peak	Horizontal
7638.5	63.9	-6.9	57.0	82.3	-25.3	Peak	Vertical
9542.5	64.3	-5.5	58.8	82.3	-23.5	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).							
Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)							

Product	LTE Module	Test Site	SIP-AC1
Test Engineer	White Wang	Test Date	2021/07/24
Test Band	LTE Band 4_1RB_QPSK		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
6839.5	53.2	-8.3	44.9	82.3	-37.4	Peak	Horizontal
8548.0	60.8	-6.1	54.7	82.3	-27.6	Peak	Horizontal
5131.0	58.4	-10.3	48.1	82.3	-34.2	Peak	Vertical
8548.0	69.3	-6.1	63.2	82.3	-19.1	Peak	Vertical
Middle Channel							
6924.5	57.0	-8.2	48.8	82.3	-33.5	Peak	Horizontal
8658.5	61.6	-6.0	55.6	82.3	-26.7	Peak	Horizontal
6924.5	61.5	-8.2	53.3	82.3	-29.0	Peak	Vertical
8658.5	73.1	-6.0	67.1	82.3	-15.2	Peak	Vertical
High Channel							
7018.0	56.3	-7.9	48.4	82.3	-33.9	Peak	Horizontal
8769.0	62.0	-6.1	55.9	82.3	-26.4	Peak	Horizontal
7018.0	60.6	-7.9	52.7	82.3	-29.6	Peak	Vertical
8769.0	69.1	-6.1	63.0	82.3	-19.3	Peak	Vertical

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

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

Product	LTE Module	Test Site	SIP-AC1
Test Engineer	White Wang	Test Date	2021/07/24
Test Band	LTE Band 66_1RB_QPSK		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
6839.5	55.1	-8.3	46.8	82.3	-37.4	Peak	Horizontal
8548.0	59.4	-6.1	53.3	82.3	-27.6	Peak	Horizontal
6839.5	57.2	-8.3	48.9	82.3	-34.2	Peak	Vertical
8548.0	70.3	-6.1	64.2	82.3	-19.1	Peak	Vertical
Middle Channel							
6975.5	54.3	-8.1	46.2	82.3	-36.1	Peak	Horizontal
8726.5	61.5	-5.8	55.7	82.3	-26.6	Peak	Horizontal
6975.5	59.3	-8.1	51.2	82.3	-31.1	Peak	Vertical
8726.5	74.0	-5.8	68.2	82.3	-14.1	Peak	Vertical
High Channel							
7111.5	60.0	-7.8	52.2	82.3	-30.1	Peak	Horizontal
8896.5	62.3	-6.0	56.3	82.3	-26.0	Peak	Horizontal
7111.5	64.8	-7.8	57.0	82.3	-25.3	Peak	Vertical
8896.5	69.2	-6.0	63.2	82.3	-19.1	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).							
Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)							

Product	LTE Module	Test Site	SIP-AC1
Test Engineer	White Wang	Test Date	2021/07/24
Test Band	LTE Band 5_1RB_QPSK		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level(dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
119.7	16.2	15.6	31.8	82.3	-50.5	Peak	Horizontal
869.5	21.5	28.3	49.8	82.3	-32.5	Peak	Horizontal
67.8	22.0	15.7	37.7	82.3	-44.6	Peak	Vertical
869.5	23.9	28.3	52.2	82.3	-30.1	Peak	Vertical
1646.0	75.1	-20.0	55.1	82.3	-27.2	Peak	Horizontal
4629.5	53.4	-10.9	42.5	82.3	-39.8	Peak	Horizontal
1646.0	64.7	-20.0	44.7	82.3	-37.6	Peak	Vertical
6219.0	52.4	-9.1	43.3	82.3	-39.0	Peak	Vertical
Middle Channel							
359.8	10.4	19.5	29.9	82.3	-52.4	Peak	Horizontal
881.7	21.5	28.4	49.9	82.3	-32.4	Peak	Horizontal
67.8	24.4	15.7	40.1	82.3	-42.2	Peak	Vertical
881.2	21.5	28.3	49.8	82.3	-32.5	Peak	Vertical
1671.5	73.3	-19.9	53.4	82.3	-28.9	Peak	Horizontal
7145.5	52.2	-7.5	44.7	82.3	-37.6	Peak	Horizontal
1671.5	73.3	-19.9	53.4	82.3	-28.9	Peak	Vertical
8301.5	51.6	-5.9	45.7	82.3	-36.6	Peak	Vertical
High Channel							
135.7	13.6	17.0	30.6	82.3	-51.7	Peak	Horizontal
893.3	22.2	28.8	51.0	82.3	-31.3	Peak	Horizontal
67.8	24.0	15.7	39.7	82.3	-42.6	Peak	Vertical
892.8	20.8	28.8	49.6	82.3	-32.7	Peak	Vertical
1697.0	70.0	-19.9	50.1	82.3	-32.2	Peak	Horizontal
3388.5	57.8	-13.3	44.5	82.3	-37.8	Peak	Horizontal
1697.0	58.3	-19.9	38.4	82.3	-43.9	Peak	Vertical
3796.5	53.2	-12.1	41.1	82.3	-41.2	Peak	Vertical

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

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

Product	LTE Module	Test Site	SIP-AC1
Test Engineer	White Wang	Test Date	2021/07/24
Test Band	LTE Band 7_1RB_QPSK		

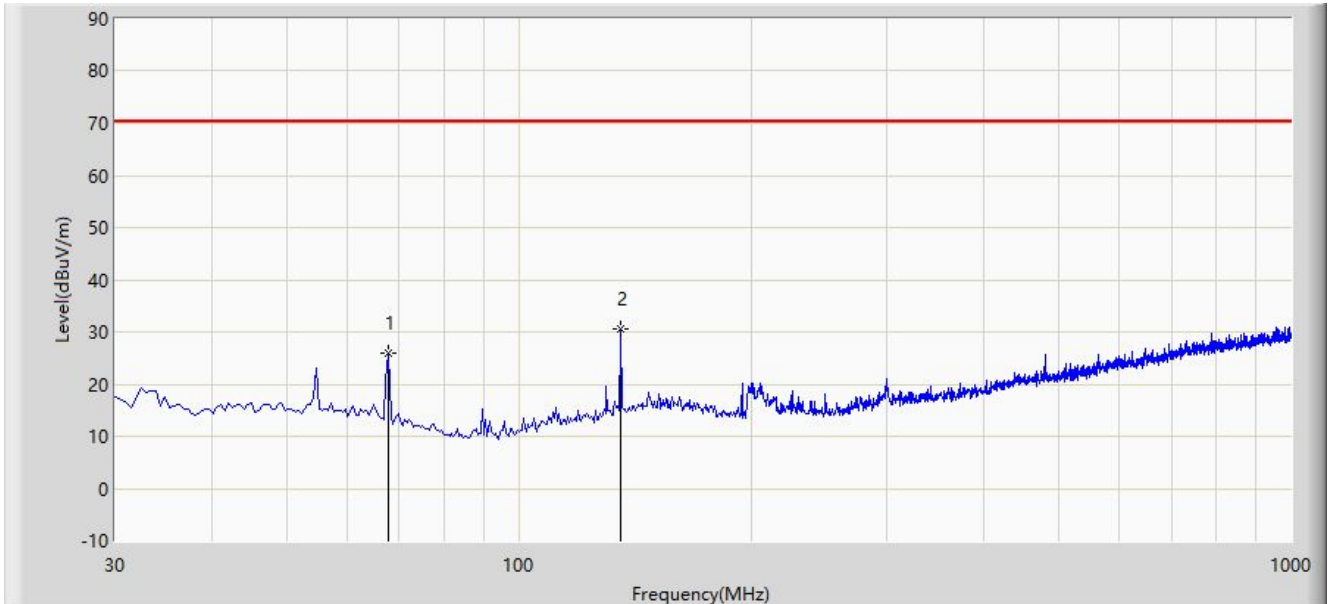
Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level(dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
7502.5	58.4	-7.4	51.0	70.3	-19.3	Peak	Horizontal
10001.5	54.0	-5.1	48.9	70.3	-21.4	Peak	Horizontal
7502.5	63.9	-7.4	56.5	70.3	-13.8	Peak	Vertical
10001.5	57.8	-5.1	52.7	70.3	-17.6	Peak	Vertical
Middle Channel							
7596.0	58.3	-7.2	51.1	70.3	-19.2	Peak	Horizontal
16861.0	47.4	4.2	51.6	70.3	-18.7	Peak	Horizontal
7596.0	66.0	-7.2	58.8	70.3	-11.5	Peak	Vertical
10129.0	60.6	-5.3	55.3	70.3	-15.0	Peak	Vertical
High Channel							
7698.0	57.4	-6.9	50.5	70.3	-19.8	Peak	Horizontal
17796.0	46.2	6.1	52.3	70.3	-18.0	Peak	Horizontal
7698.0	64.4	-6.9	57.5	70.3	-12.8	Peak	Vertical
10265.0	61.4	-5.3	56.1	70.3	-14.2	Peak	Vertical

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

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

The Worst Case of Radiated Emission below 1GHz:

Site: SIP-AC1	Time: 2021/07/24 - 14:30
Limit: FCC_Part 27_RSE (3m)_General	Engineer: White Wang
Probe: WZ-AC1_VULB 9168 _30-1000MHz	Polarity: Horizontal
EUT: LTE Module	Power: By USB



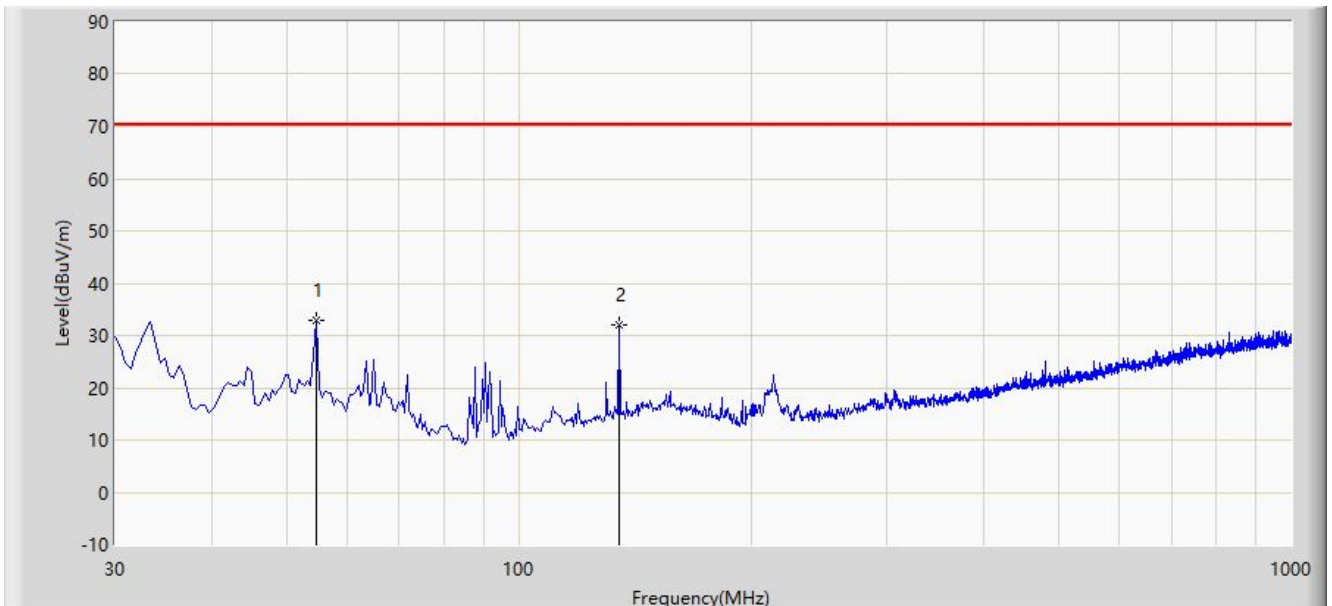
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1			67.830	26.051	10.365	-44.249	70.300	15.686	PK
2		*	135.730	30.524	13.486	-39.776	70.300	17.038	PK

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

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

Note 2: The amplitude of radiated emissions (frequency range from 18GHz to 27GHz) 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: 2021/07/24 - 14:32
Limit: FCC_Part 27_RSE (3m)_General	Engineer: White Wang
Probe: WZ-AC1_VULB 9168 _30-1000MHz	Polarity: Horizontal
EUT: LTE Module	Power: By USB



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		*	54.735	32.979	15.568	-37.321	70.300	17.411	PK
2			134.760	32.114	15.164	-38.186	70.300	16.950	PK

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

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

Note 2: The amplitude of radiated emissions (frequency range from 18GHz to 27GHz) 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. CONCLUSION

The data collected relate only the item(s) tested and show that unit is compliance with FCC Rules.

Appendix A - Test Setup Photograph

Refer to "2107RSU045-UT" file.

Appendix B - EUT Photograph

Refer to "2107RSU045-UE" file.