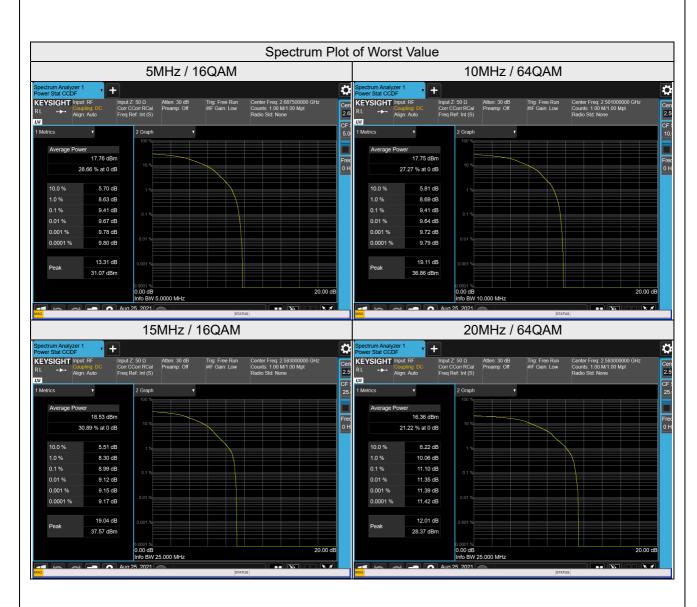




	LTE Band 4	41, Channel Bandwid	th 5MHz	
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
39675	2498.5	7.46	8.60	8.52
40620	2593.0	7.52	9.32	9.00
41565	2687.5	7.67	9.41	9.27
	LTE Band 4	1, Channel Bandwidt	h 10MHz	
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
39700	2501.0	7.09	9.04	9.41
40620	2593.0	7.52	9.39	8.59
41540	2685.0	7.49	8.45	9.27
	LTE Band 4	1, Channel Bandwidt	h 15MHz	
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
39725	2503.5	6.73	8.92	8.36
40620	2593.0	8.38	8.99	8.94
41515	2682.5	8.25	8.65	8.88
	LTE Band 4	1, Channel Bandwidt	h 20MHz	
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
39750	2506.0	8.47	10.60	8.78
40620	2593.0	6.95	9.38	11.10
41490	2680.0	6.23	8.58	8.36







## 4.7 Conducted Spurious Emissions

# 4.7.1 Limits of Conducted Spurious Emissions Measurement

### For WCDMA Band 4, LTE Band 4:

According to FCC 27.53(h), for operations in the 1695-1710MHz, 1710-1755MHz, 1755-1780 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log (P) dB.

#### For LTE Band 7. LTE Band 38. LTE Band 41:

According to FCC 27.53(m)(4), on any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least 55 + 10 log (P) dB. The emission limit equal to –25dBm.

### For LTE Band 12, LTE Band 17:

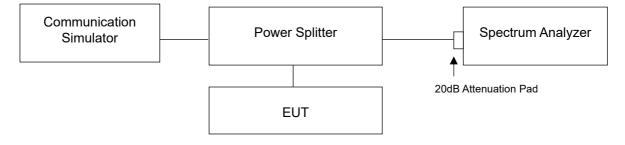
According to FCC 27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. The limit of emissions is equal to -13 dBm.

#### For LTE Band 13:

According to FCC 27.53(c)(2), for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P) dB$ . The limit of emissions is equal to -13 dBm.

According to FCC 27.53(f), for operations in the 775-788 MHz, emissions in the band 1559-1610MHz shall be limited to -70 dBW/MHz (EIRP). The limit of emissions is equal to -40 dBm.

## 4.7.2 Test Setup



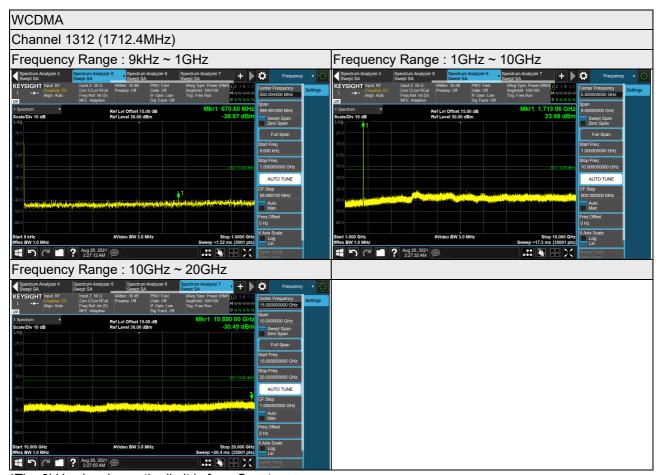


### 4.7.3 Test Procedure

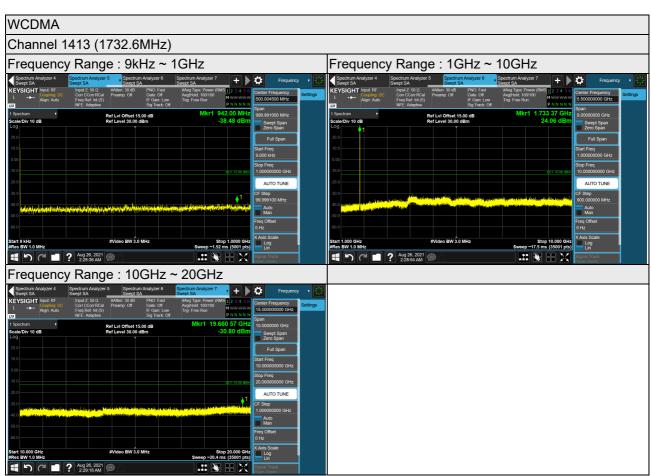
- a. All measurements were done at low, middle and high channels operational frequency range.
- b. Measuring frequency range is from 9kHz to 1GHz. 20dB attenuation pad is connected with spectrum. RBW=100kHz and VBW=300kHz are used for LTE Band 12, LTE Band 13 and LTE Band 17 conducted emission measurement.
- c. Measuring frequency range is from 9kHz to 1GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz are used for WCDMA / HSDPA / HSUPA, LTE Band 4, LTE Band 7, LTE Band 38 and LTE Band 41 conducted emission measurement.
- d. Measuring frequency range is from 1GHz to 8GHz / 18GHz / 20GHz / 26GHz / 27GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz are used for conducted emission measurement.



# 4.7.4 Test Results

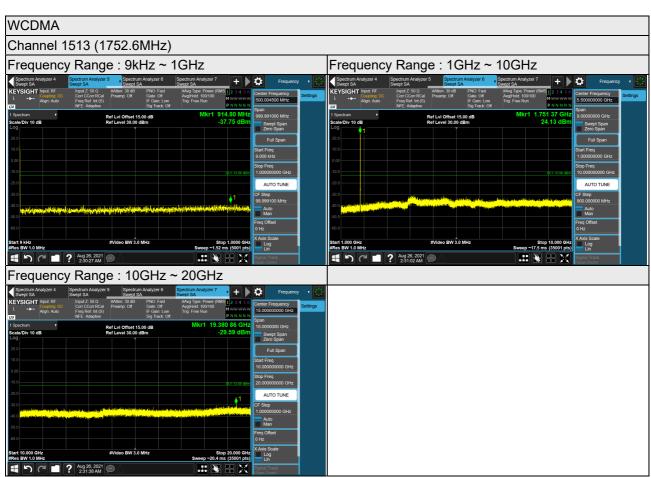






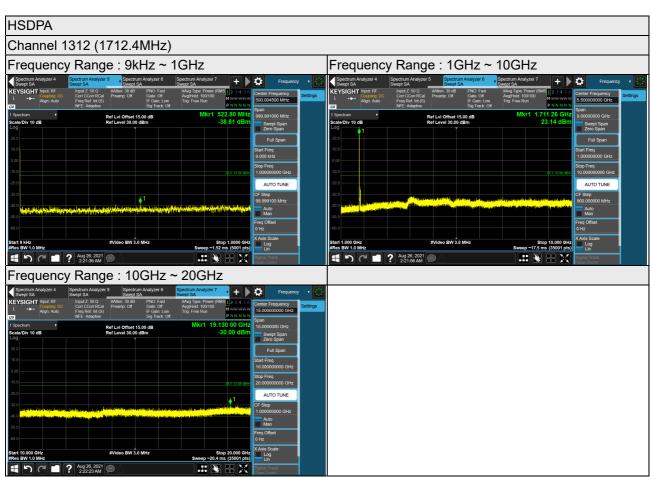
\*The 9kHz signal over the limit is from Spectrum.





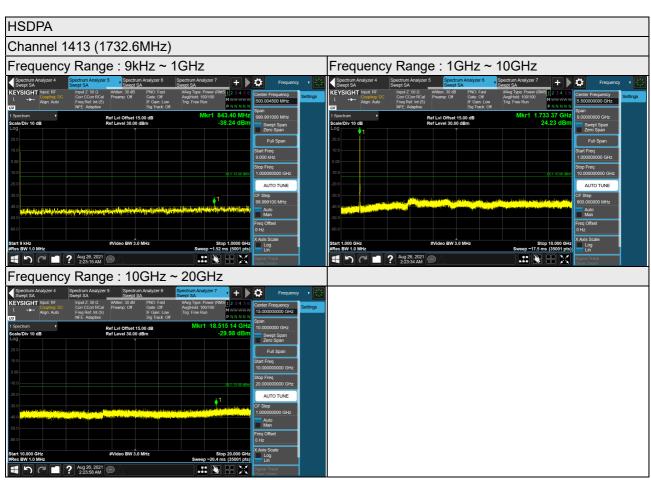
\*The 9kHz signal over the limit is from Spectrum.





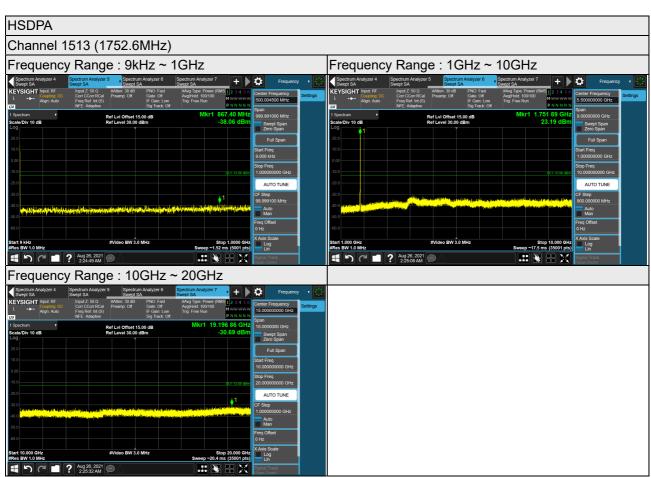
\*The 9kHz signal over the limit is from Spectrum.





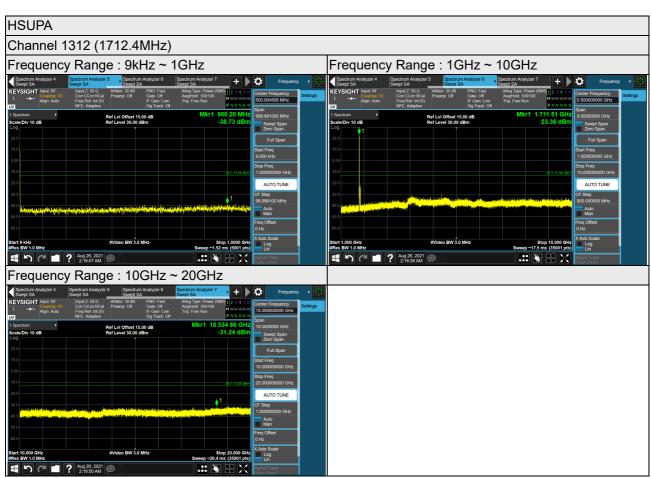
\*The 9kHz signal over the limit is from Spectrum.





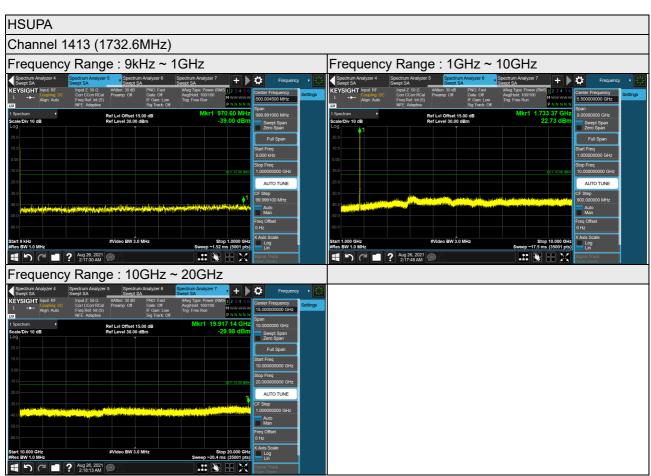
\*The 9kHz signal over the limit is from Spectrum.





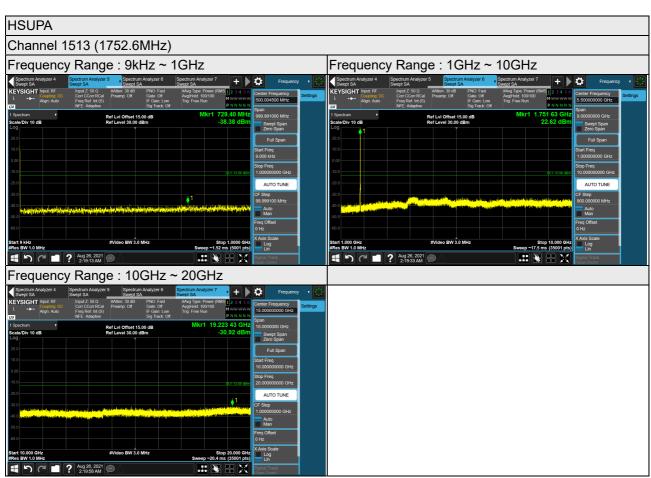
\*The 9kHz signal over the limit is from Spectrum.





\*The 9kHz signal over the limit is from Spectrum.





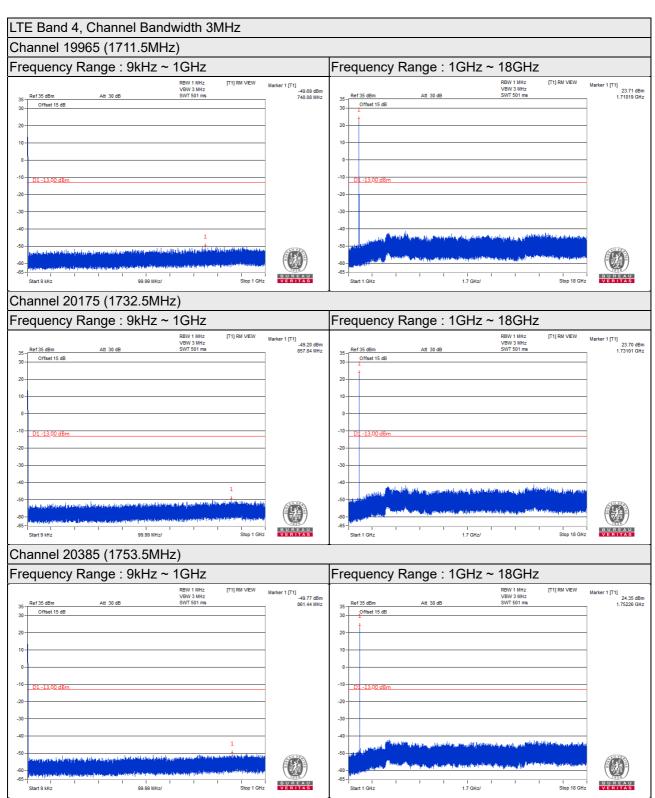
\*The 9kHz signal over the limit is from Spectrum.





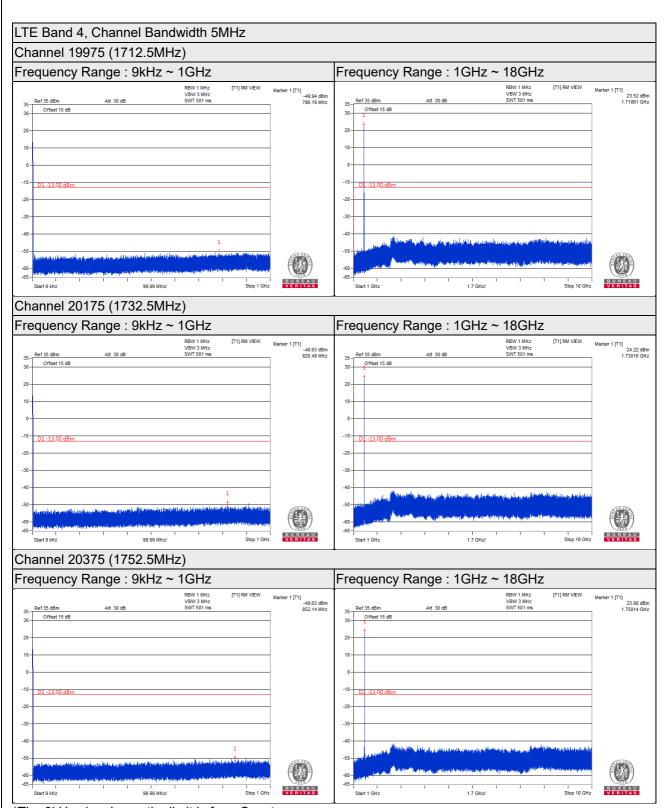
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





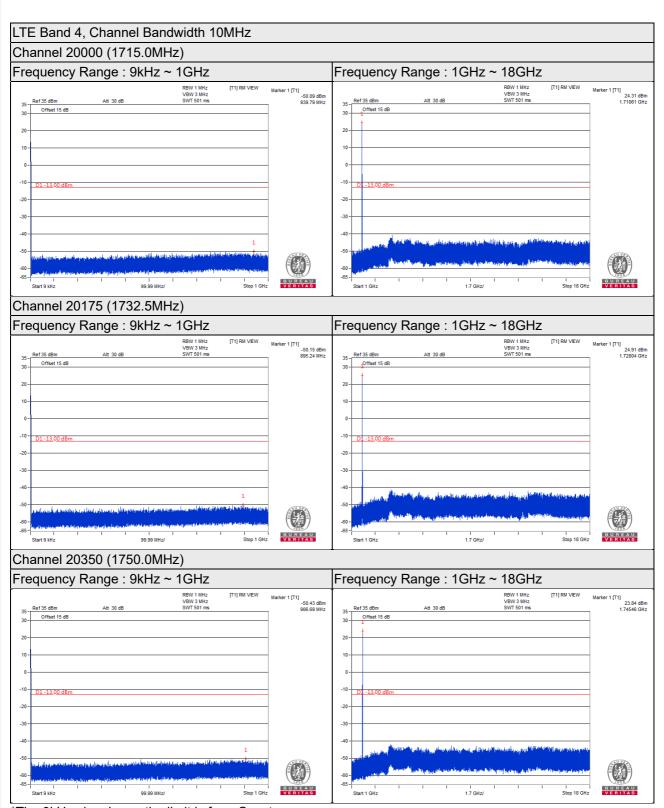
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



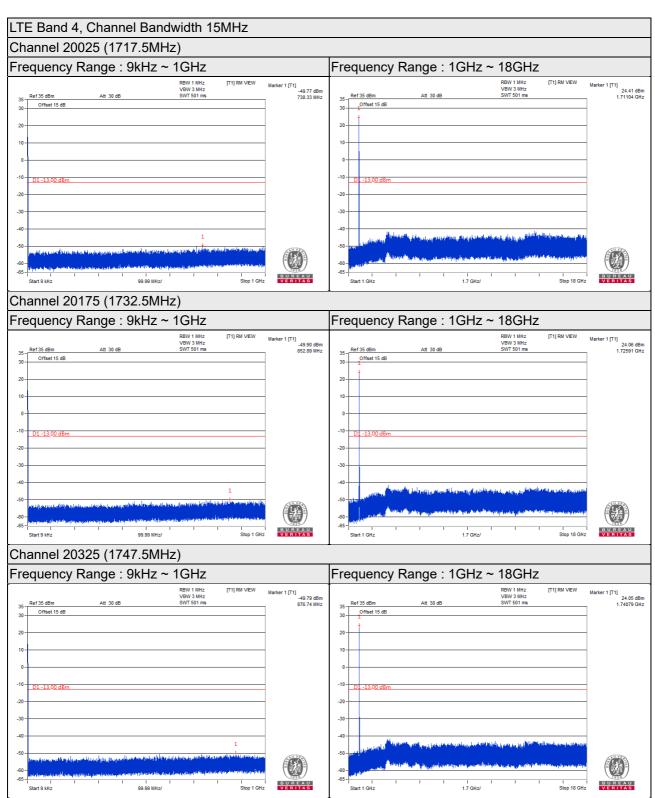


<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



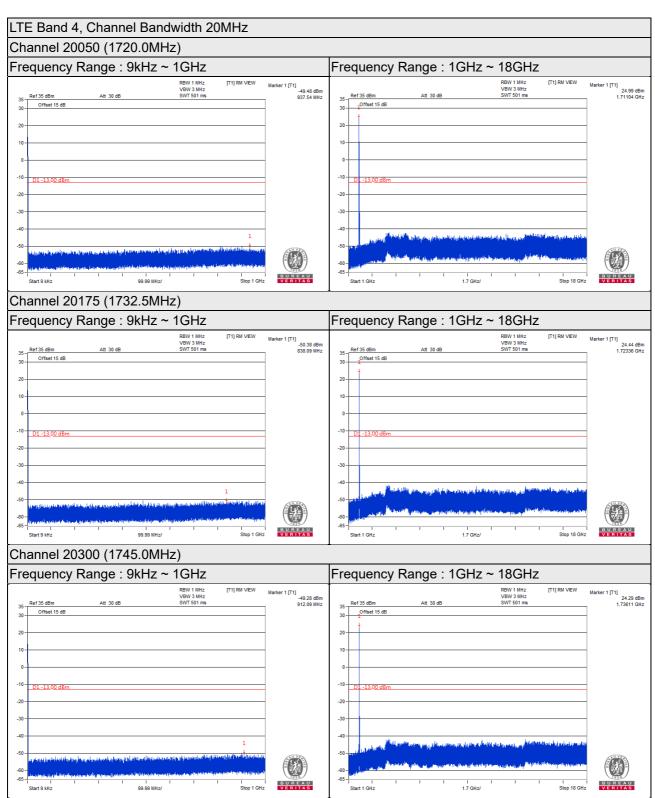




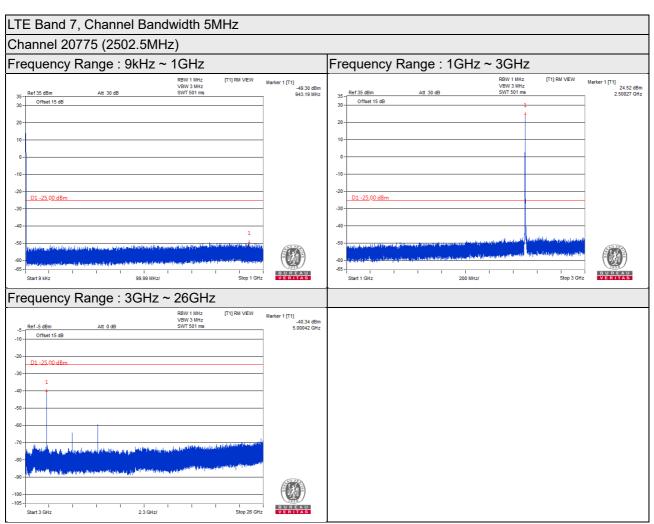


<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.

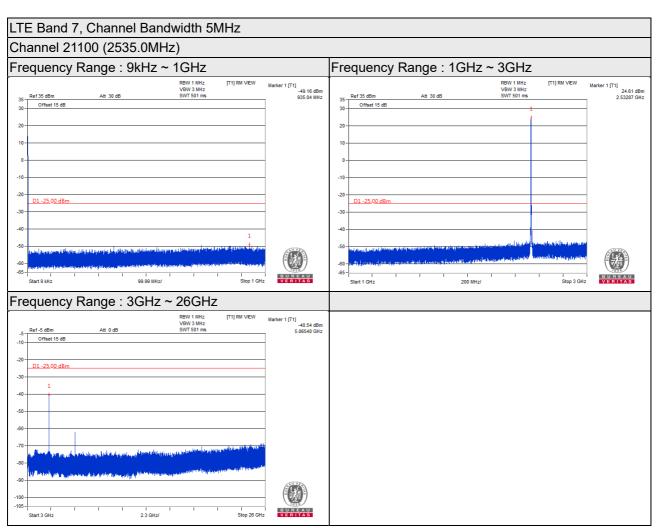






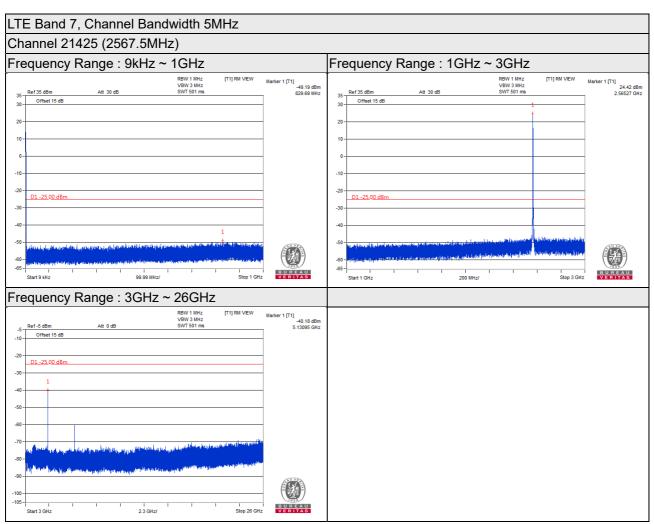




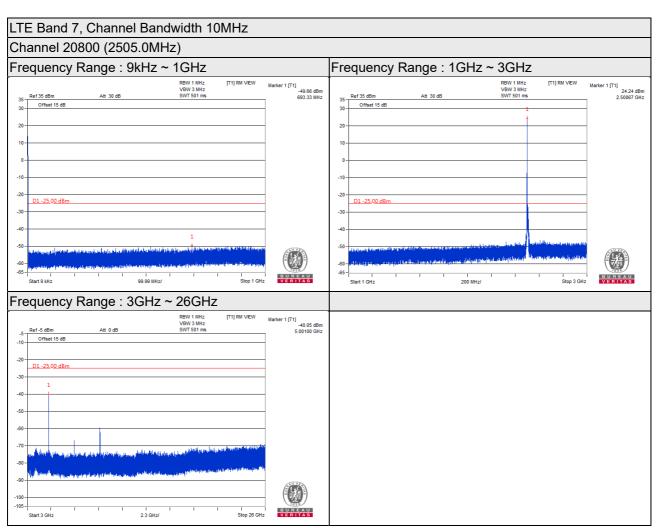


<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



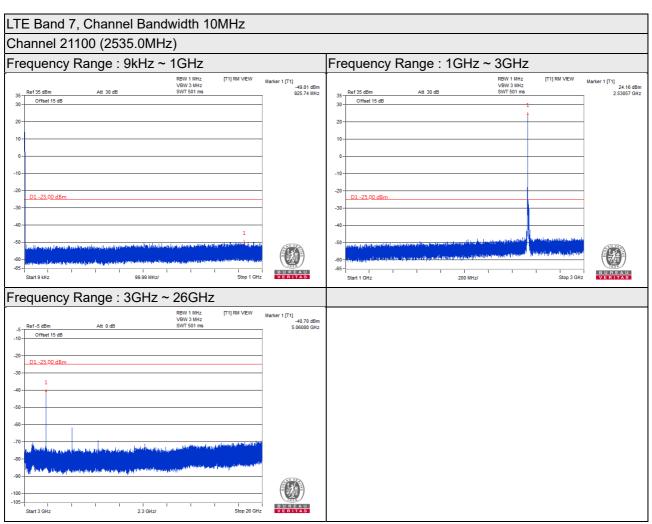






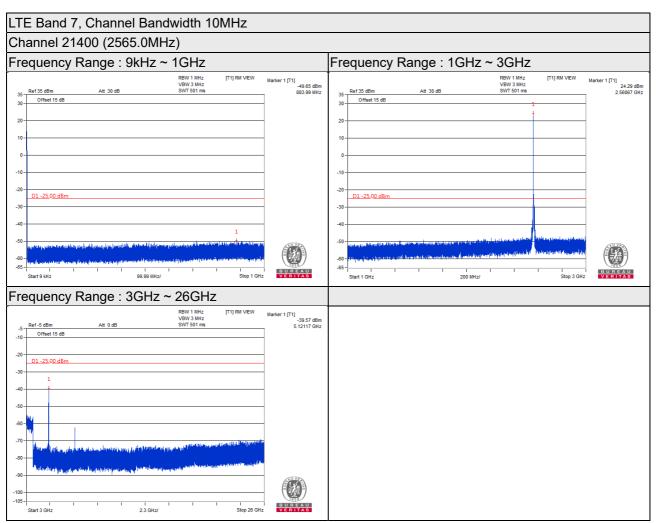
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



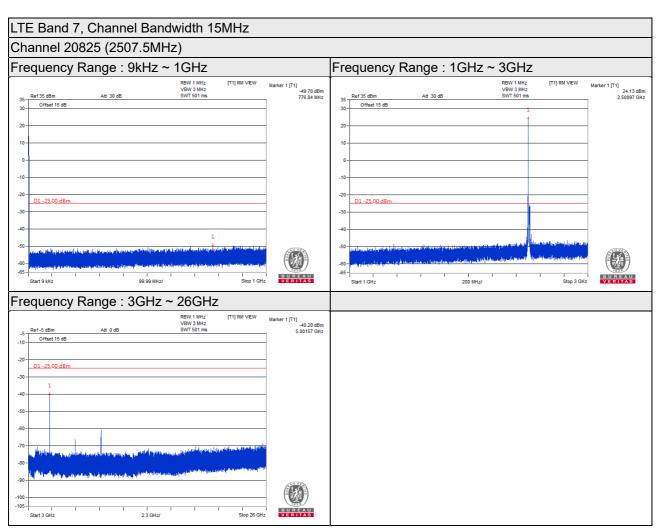


<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



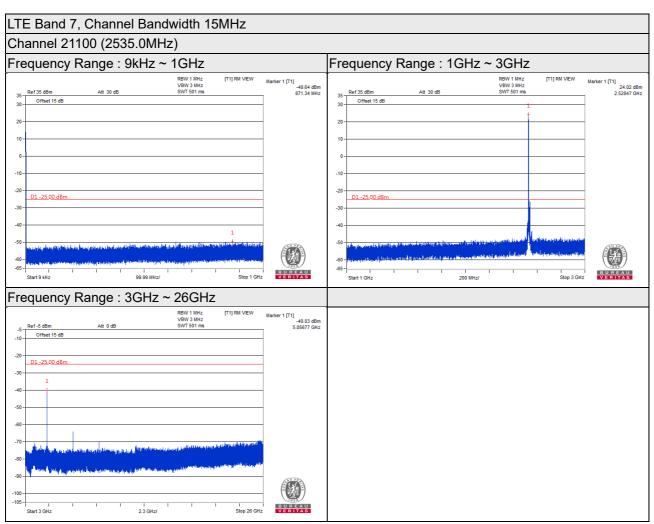




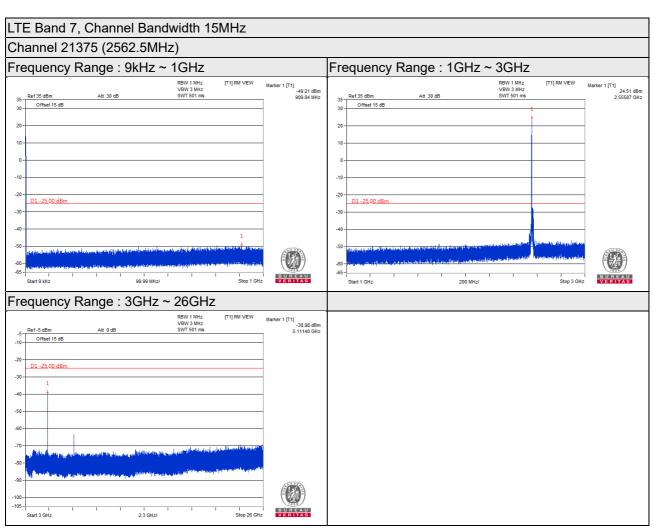


<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



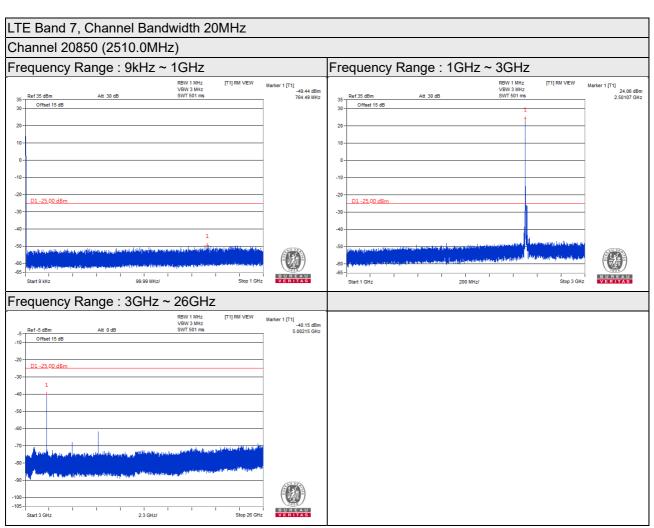






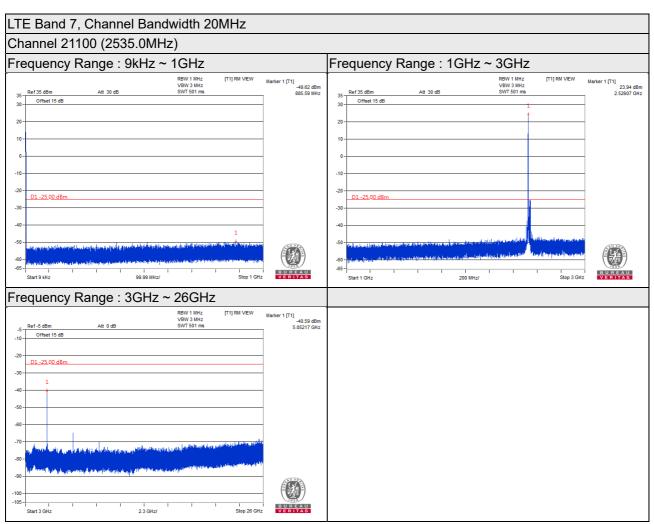
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



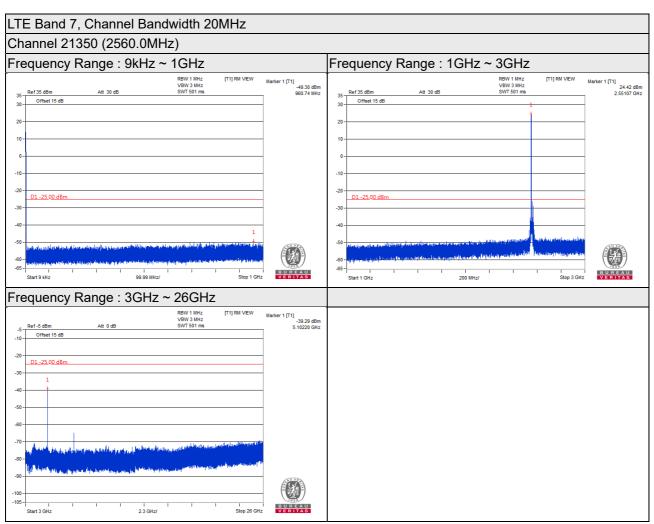


<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.

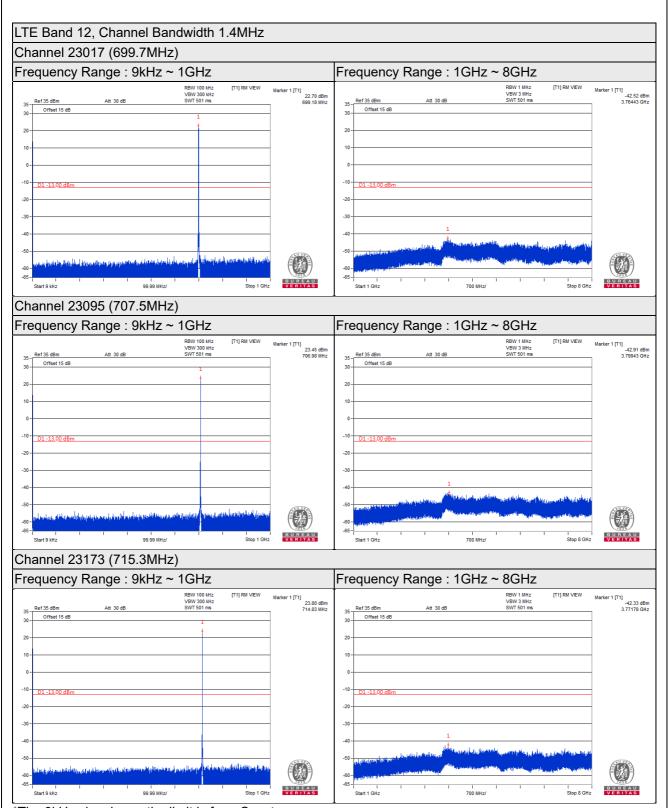












<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





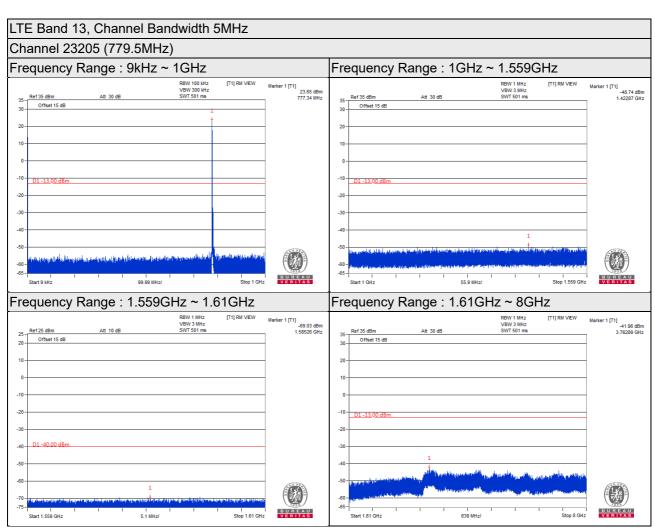
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





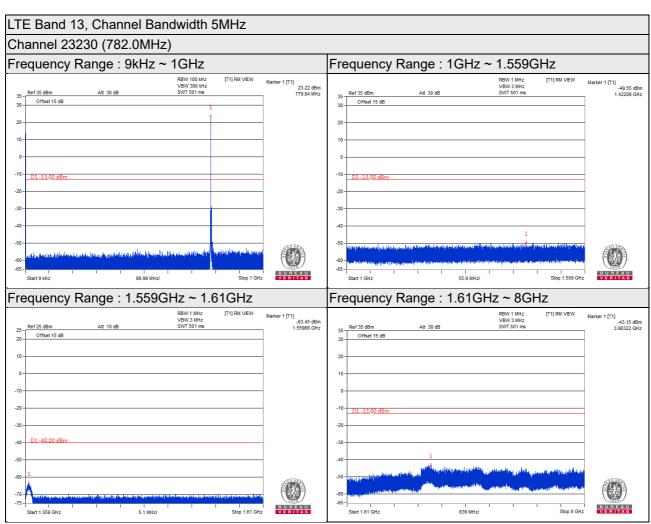
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





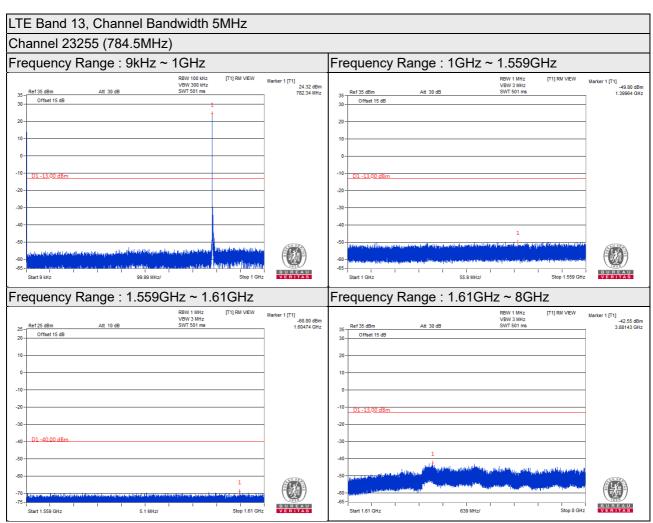
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





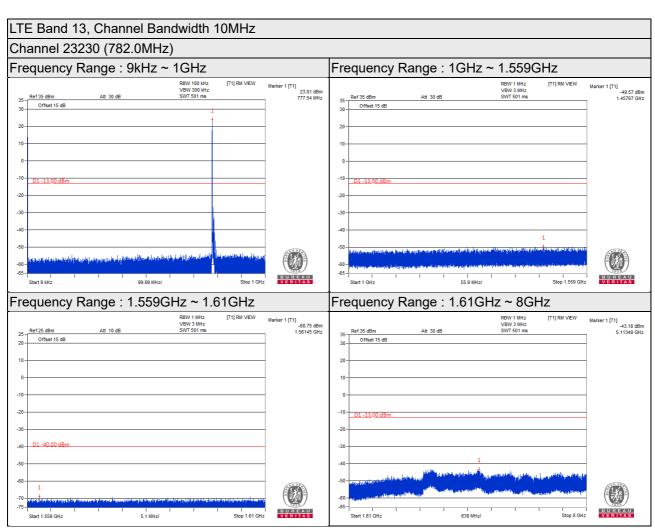
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





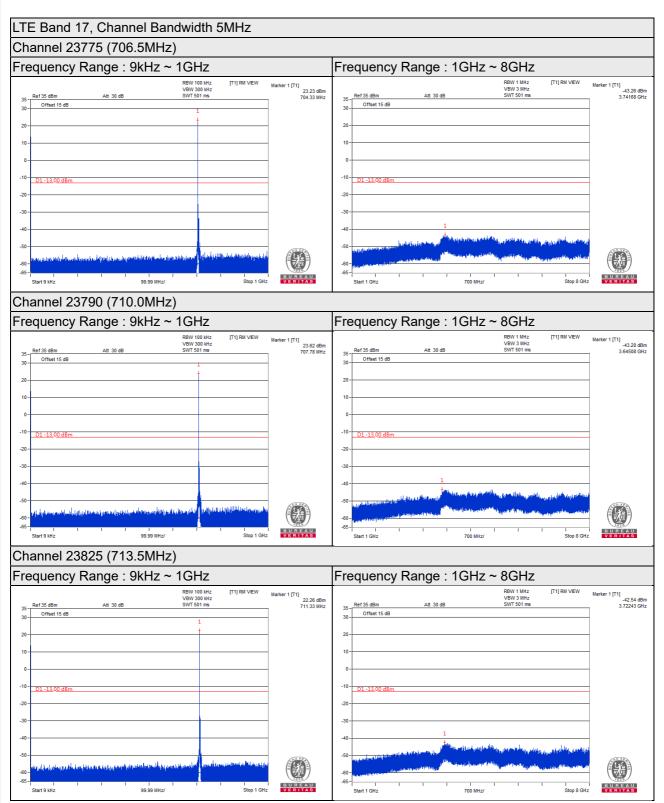
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





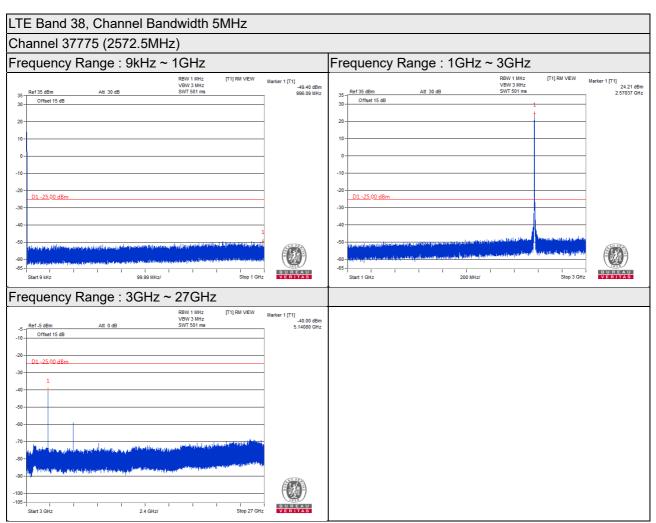
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



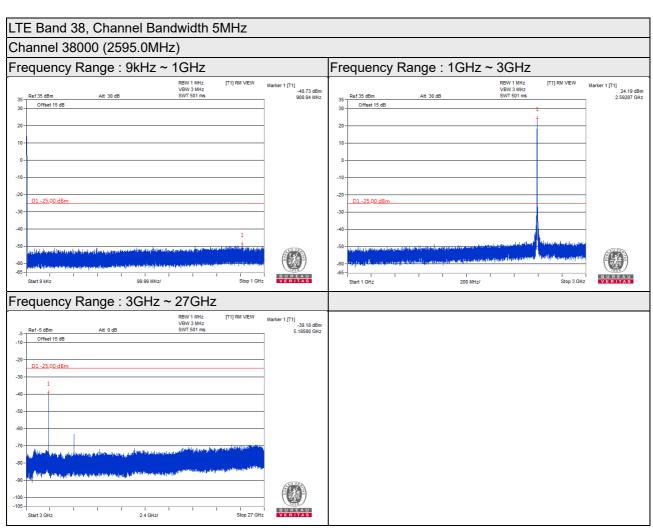


<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



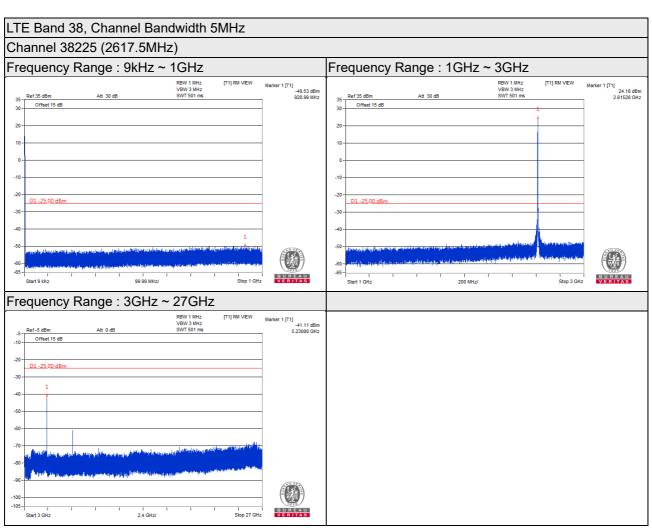






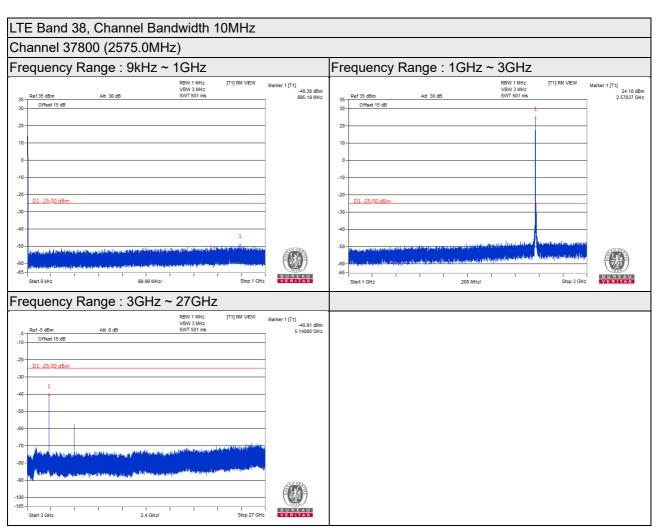
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





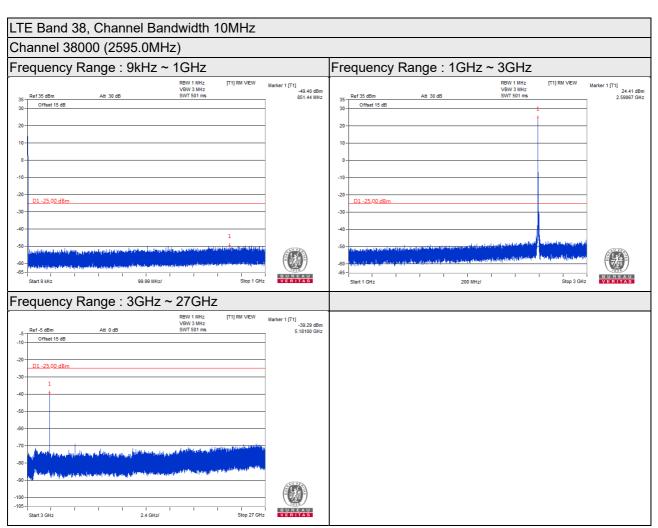
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





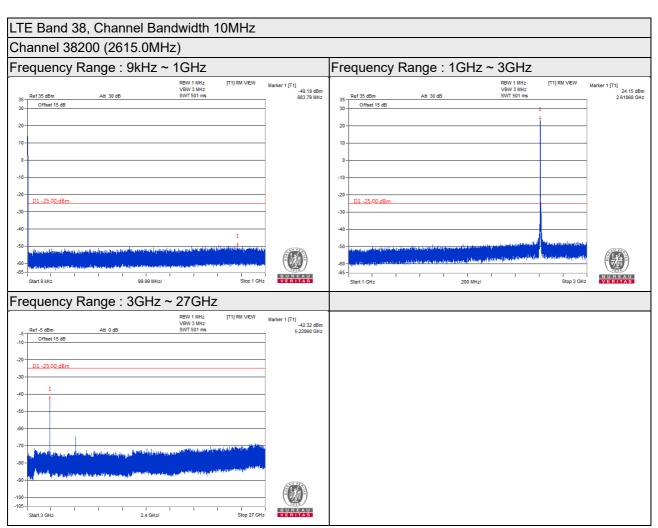
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





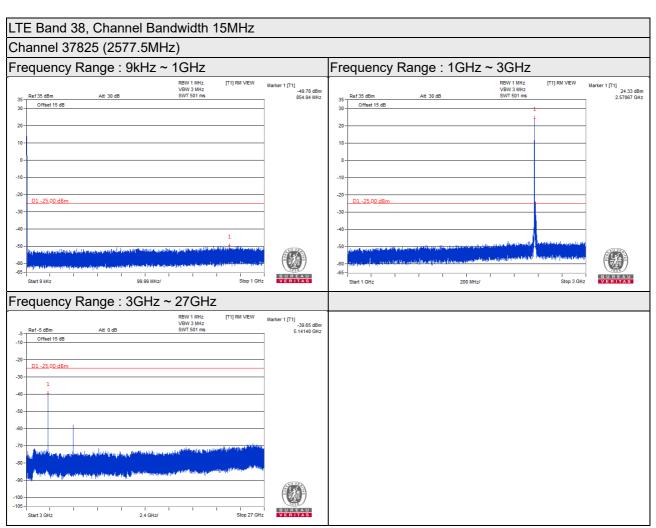
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



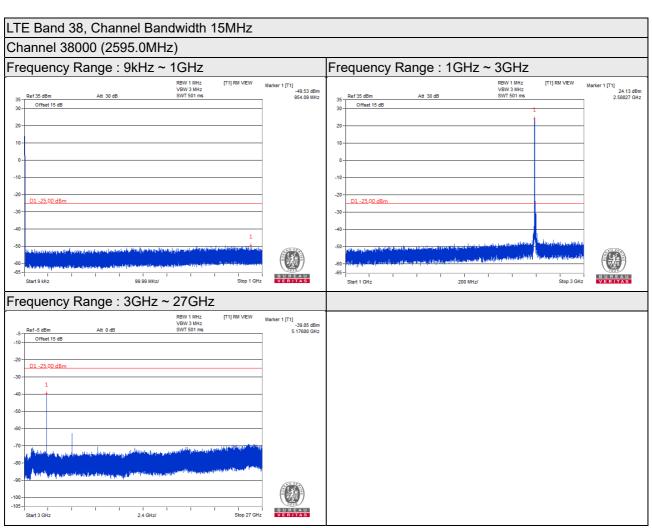


<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



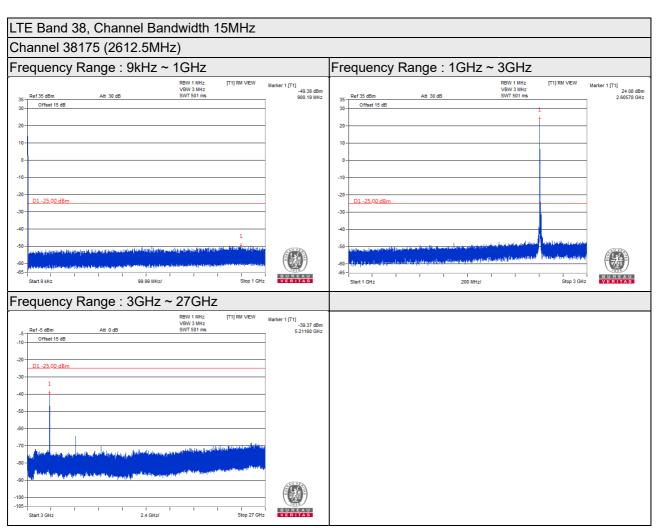






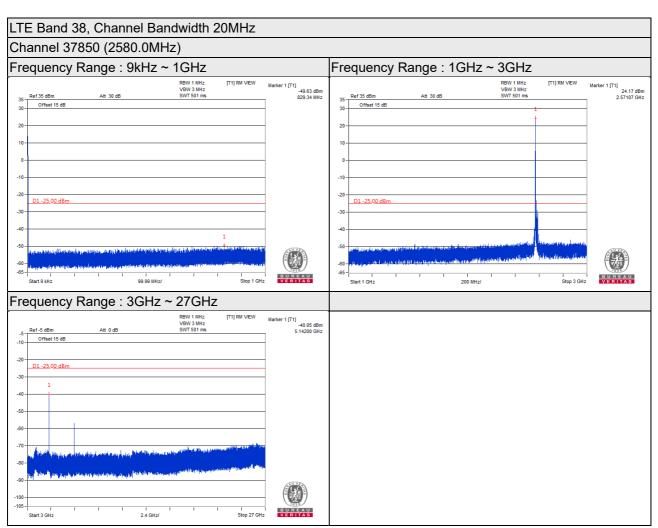
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





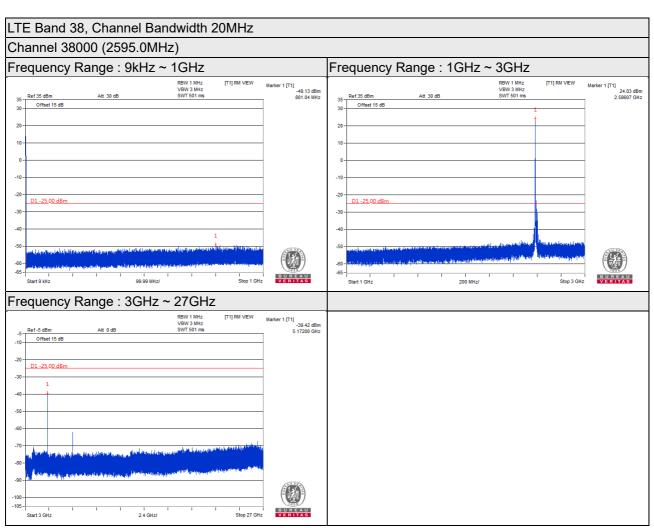
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.





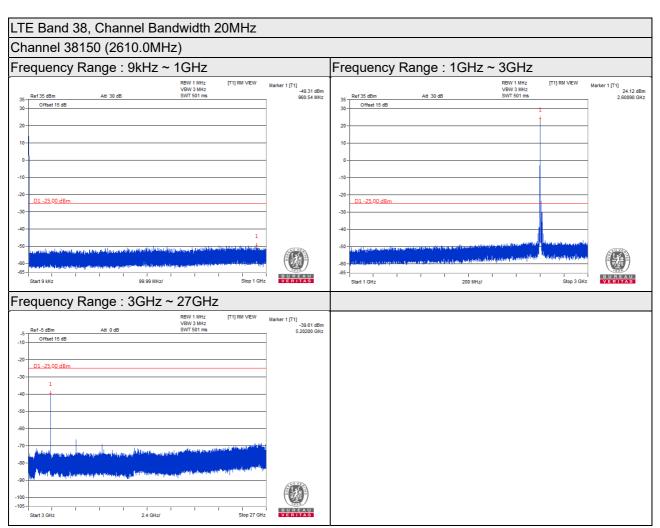
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



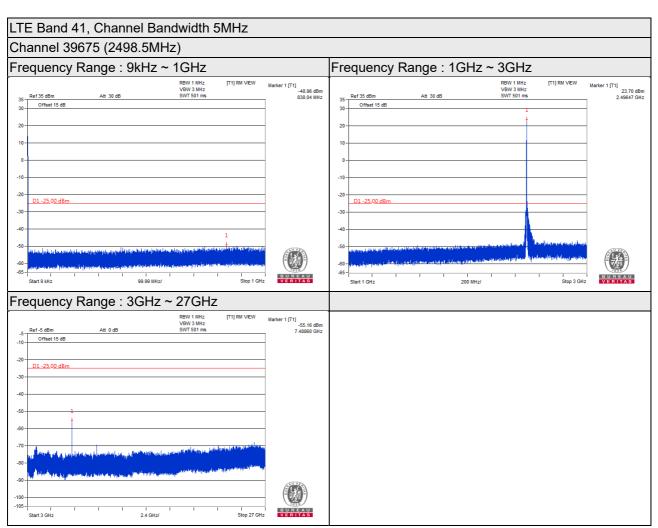


<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



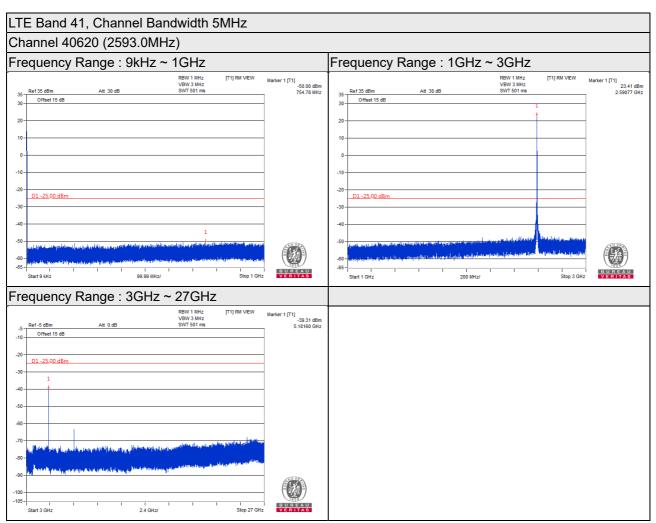




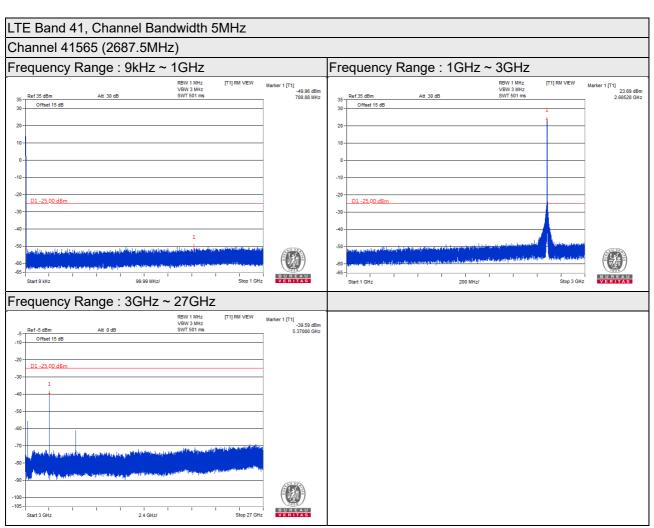


<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



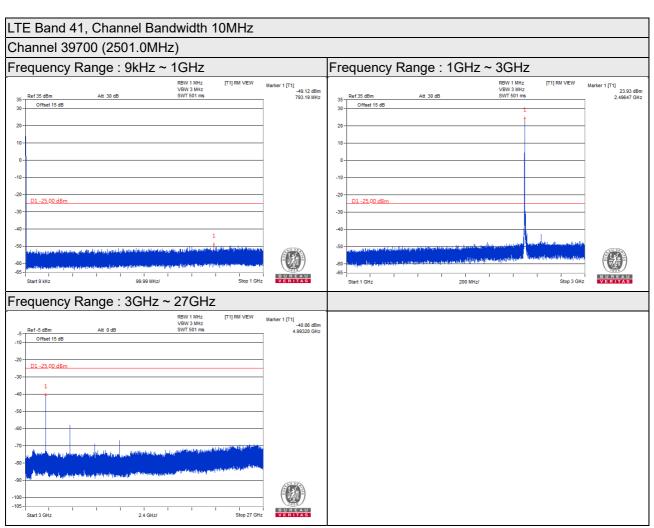






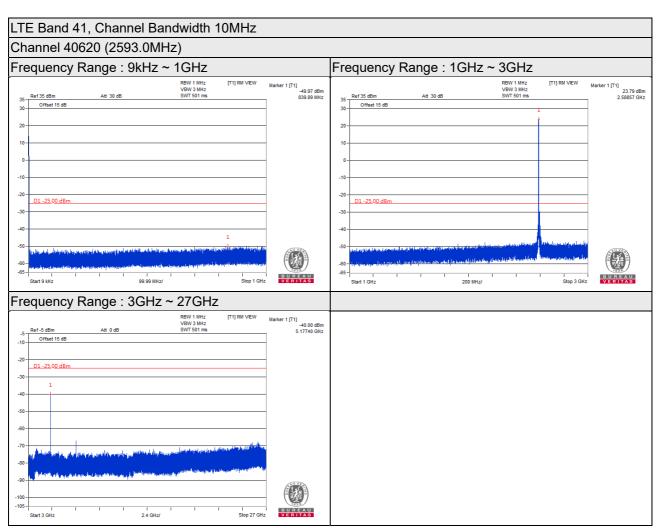
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



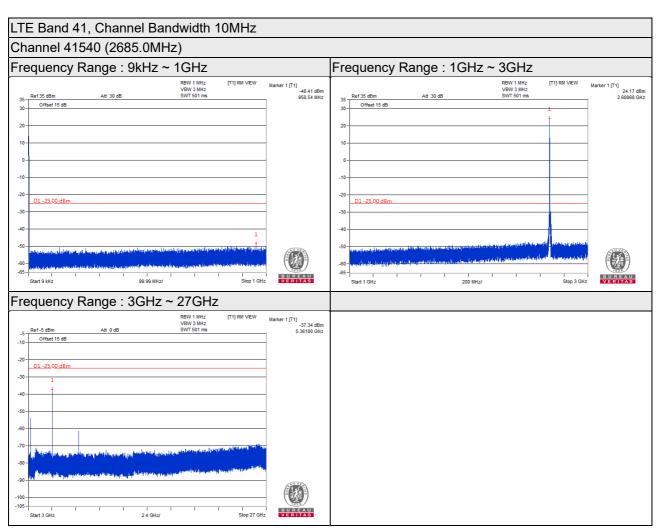


<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



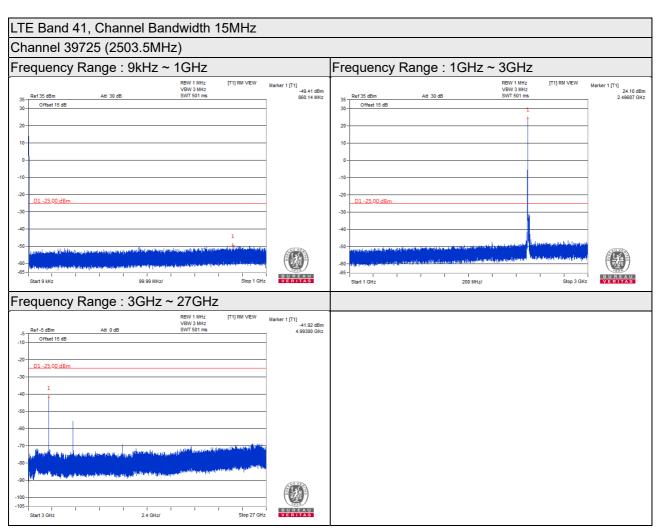






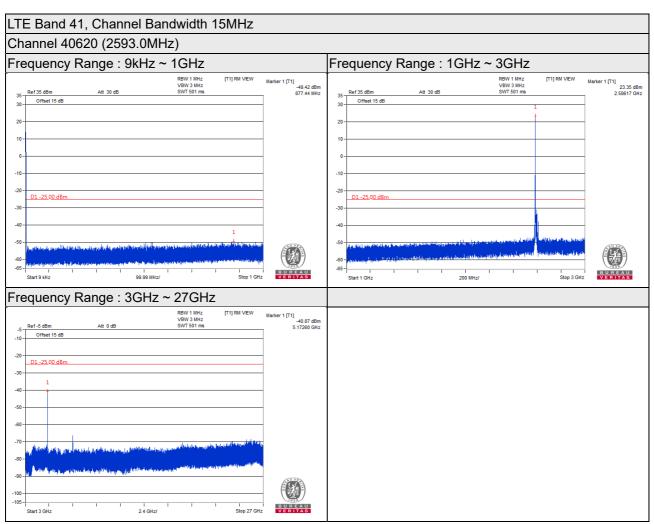
<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



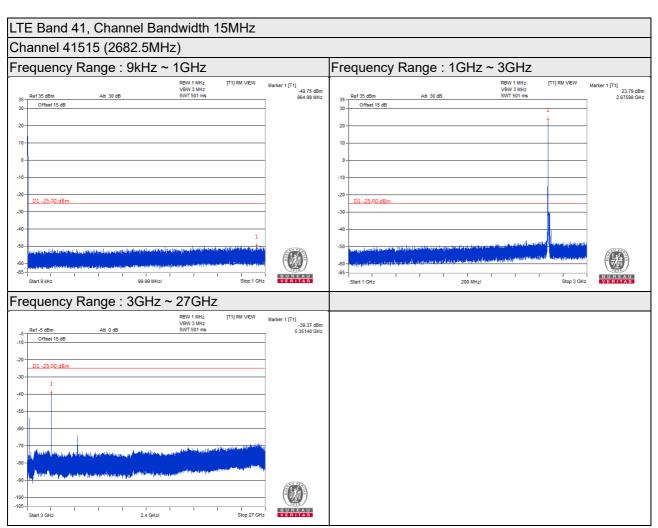


<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.



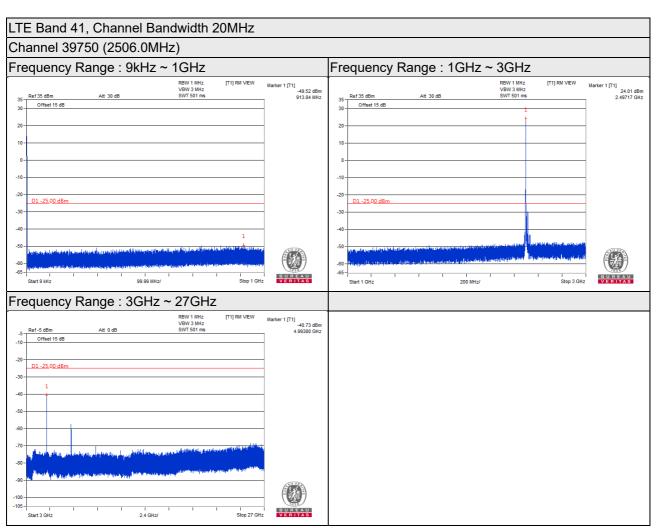




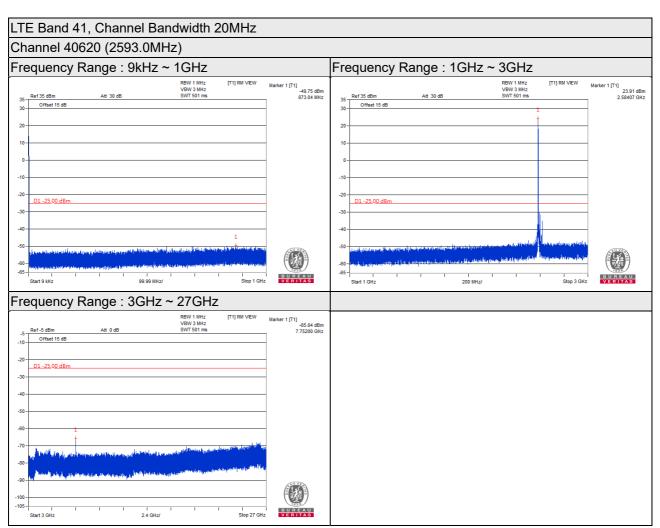


<sup>\*</sup>The 9kHz signal over the limit is from Spectrum.

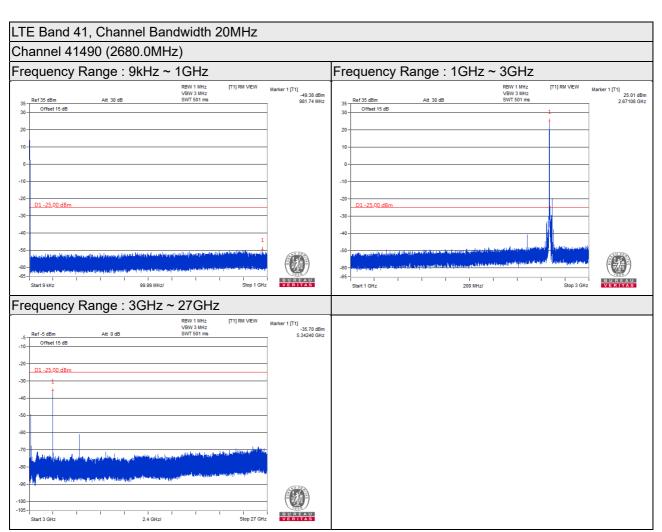














#### 4.8 Radiated Emission Measurement

## 4.8.1 Limits of Radiated Emission Measurement

#### For WCDMA Band 4, LTE Band 4:

According to FCC 27.53(h), for operations in the 1695-1710MHz, 1710-1755MHz, 1755-1780 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log (P) dB.

## For LTE Band 7, LTE Band 38, LTE Band 41:

According to FCC 27.53(m)(4),on any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least 55 + 10 log (P) dB. The emission limit equal to –25dBm.

#### For LTE Band 12, LTE Band 17:

According to FCC 27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. The limit of emissions is equal to -13 dBm.

#### For LTE Band 13:

According to FCC 27.53(c)(2), for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P) dB$ . The limit of emissions is equal to -13 dBm.

According to FCC 27.53(f), for operations in the 775-788 MHz, emissions in the band 1559-1610MHz shall be limited to -70 dBW/MHz (EIRP). The limit of emissions is equal to -40 dBm.



#### 4.8.2 Test Procedure

- a. In the semi-anechoic chamber, EUT placed on the 0.8m(below or equal 1GHz) and/or 1.5m(above 1GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.
- d. Following C63.26 section 5.5 and 5.2.7 EIRP (dBm) = E (dB $\mu$ V/m) + 20log(D) 104.8; where D is the measurement distance (in the far field region) in m. ERP (dBm) = E (dB $\mu$ V/m) + 20log(D) 104.8 2.15; where D is the measurement distance (in the far field region) in m.

#### Note:

- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.
- 2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz: The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

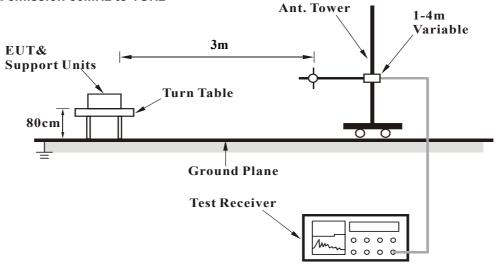
#### 4.8.3 Deviation from Test Standard

No	deviation.	

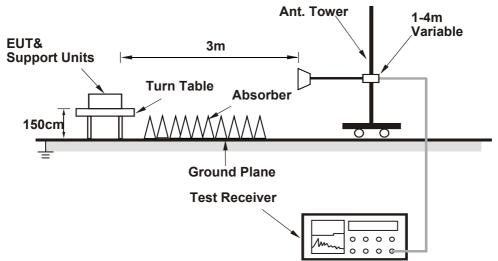


## 4.8.4 Test Setup

## For radiated emission 30MHz to 1GHz



## For radiated emission above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

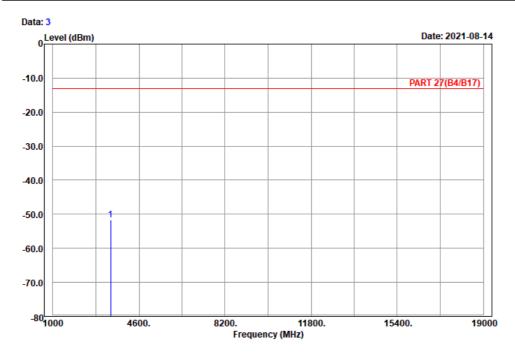


## 4.8.5 Test Results

Test Mode A
WCDMA
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B4/B17) Horizontal

Remark : Band IV\_Link\_L-Ch Tested by: Charles Hsiao

Read Limit Over
Freq Level Level Factor Line Limit Remark

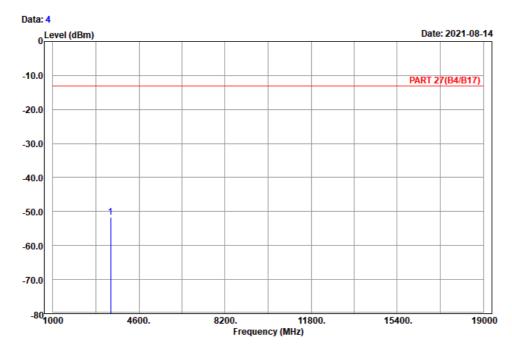
MHz dBm dBm dB dBm dB

1 pp 3424.80 -51.62 -65.99 14.37 -13.00 -38.62 Peak





# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical

Remark : Band IV\_Link\_L-Ch Tested by: Charles Hsiao

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

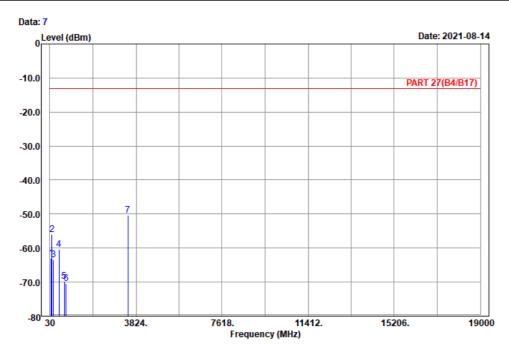
1 pp 3424.80 -51.67 -66.04 14.37 -13.00 -38.67 Peak



## **Mid Channel**



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

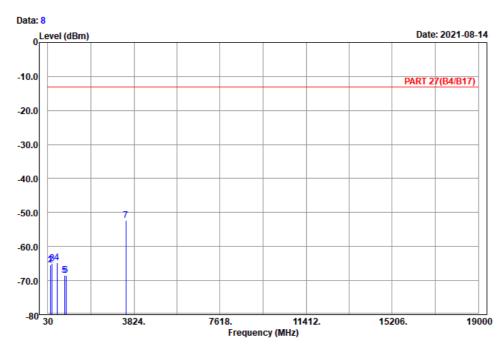
Condition: PART 27(B4/B17) Horizontal

Remark : Band IV\_Link\_M-Ch Tested by: Charles Hsiao

			Read		Limit	0ver				
	Freq	Level	Level	Factor	Line	Limit	Remark			
_										
	MHz	dBm	dBm	dB	dBm	dB				
1	81.57	-63.01	-51.35	-11.66	-13.00	-50.01	Peak			
2	127.47	-56.00	-48.17	-7.83	-13.00	-43.00	Peak			
3	180.12	-63.53	-57.95	-5.58	-13.00	-50.53	Peak			
4	427.40	-60.30	-56.94	-3.36	-13.00	-47.30	Peak			
5	661.90	-69.80	-69.61	-0.19	-13.00	-56.80	Peak			
6	754.30	-70.51	-69.52	-0.99	-13.00	-57.51	Peak			
7 pp	3465.20	-50.29	-64.63	14.34	-13.00	-37.29	Peak			







Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical

Remark : Band IV\_Link\_M-Ch Tested by: Charles Hsiao

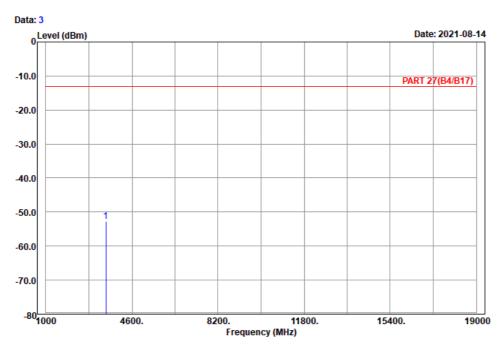
			Read			0ver				
	Freq	Level	Level	Factor	Line	Limit	Remark			
_										
	MHz	dBm	dBm	dB	dBm	dB				
1	135.57	-65.37	-57.70	-7.67	-13.00	-52.37	Peak			
2	156.09	-65.30	-57.52	-7.78	-13.00	-52.30	Peak			
3	216.84	-65.06	-59.11	-5.95	-13.00	-52.06	Peak			
4	428.80	-64.70	-61.32	-3.38	-13.00	-51.70	Peak			
5	771.80	-68.45	-68.61	0.16	-13.00	-55.45	Peak			
6	823.60	-68.46	-70.21	1.75	-13.00	-55.46	Peak			
7 pp	3465.20	-52.38	-66.72	14.34	-13.00	-39.38	Peak			



# **High Channel**



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B4/B17) Horizontal

Remark : Band IV\_Link\_H-Ch Tested by: Charles Hsiao

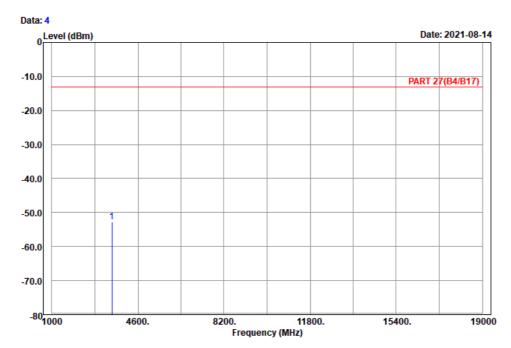
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 3505.20 -52.86 -67.14 14.28 -13.00 -39.86 Peak







Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical

Remark : Band IV\_Link\_H-Ch Tested by: Charles Hsiao

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

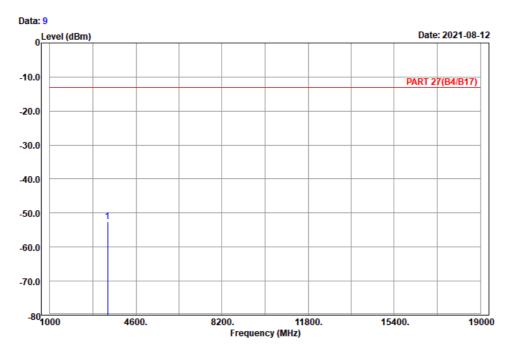
1 pp 3505.20 -52.74 -67.02 14.28 -13.00 -39.74 Peak



# LTE Band 4, Channel Bandwidth 1.4MHz Low Channel



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B4/B17) Horizontal

Remark : LTE\_Band 4\_Link\_L-Ch

Tested by: Karl Lee

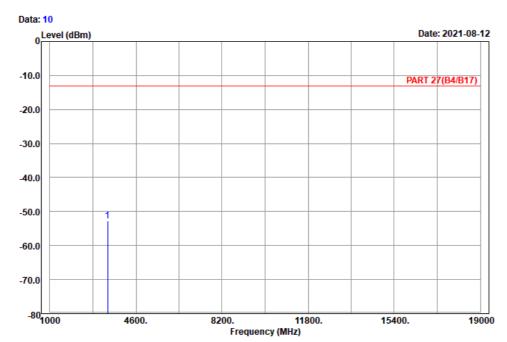
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dB dB dBm dB

1 pp 3421.40 -52.63 -67.00 14.37 -13.00 -39.63 Peak







Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical Remark : LTE\_Band 4\_Link\_L-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

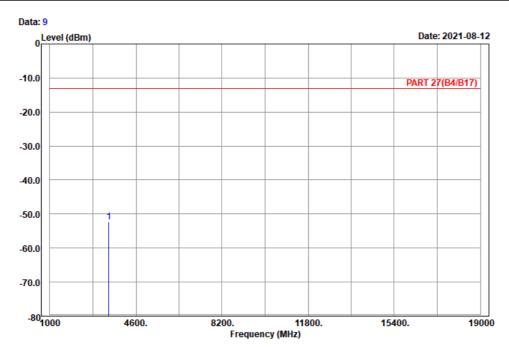
1 pp 3421.40 -52.76 -67.13 14.37 -13.00 -39.76 Peak



### **Mid Channel**



## Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B4/B17) Horizontal Remark : LTE\_Band 4\_Link\_M-Ch

Tested by: Karl Lee

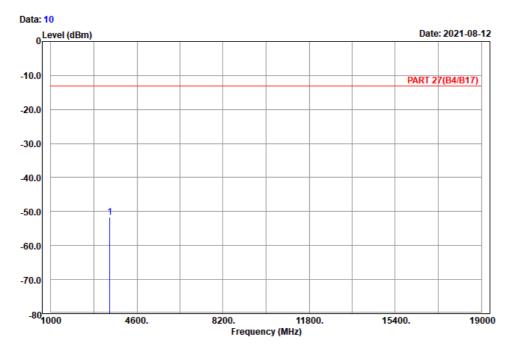
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 3465.00 -52.41 -66.75 14.34 -13.00 -39.41 Peak







Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical Remark : LTE\_Band 4\_Link\_M-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

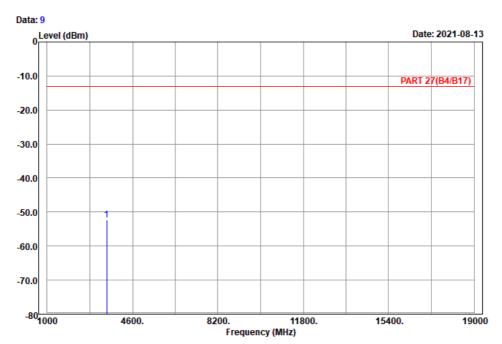
1 pp 3465.00 -51.58 -65.92 14.34 -13.00 -38.58 Peak



# **High Channel**



## Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B4/B17) Horizontal

Remark : LTE\_Band 4\_Link\_H-Ch

Tested by: Karl Lee

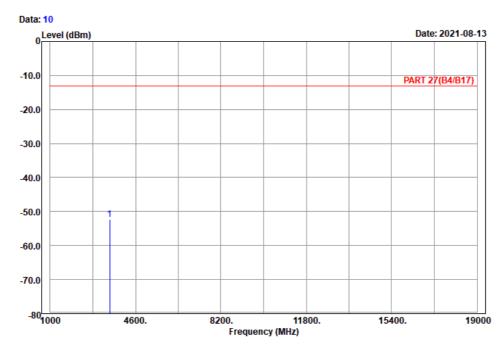
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3508.60 -52.23 -66.51 -13.00 -39.23 14.28 Peak







Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical Remark : LTE\_Band 4\_Link\_H-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

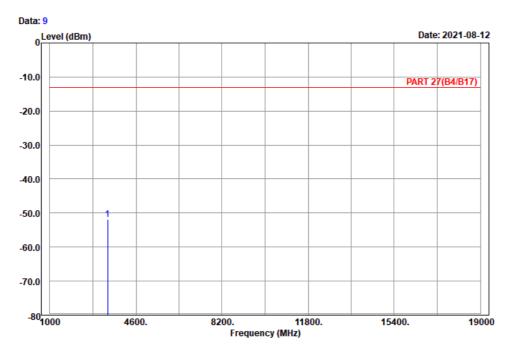
1 pp 3508.60 -52.33 -66.61 -13.00 -39.33 14.28 Peak



# LTE Band 4, Channel Bandwidth 5MHz Low Channel



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B4/B17) Horizontal

Remark : LTE\_Band 4\_Link\_L-Ch

Tested by: Karl Lee

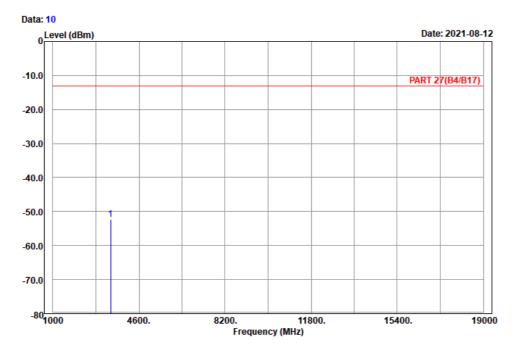
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 3425.00 -51.84 -66.21 14.37 -13.00 -38.84 Peak







Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical Remark : LTE\_Band 4\_Link\_L-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

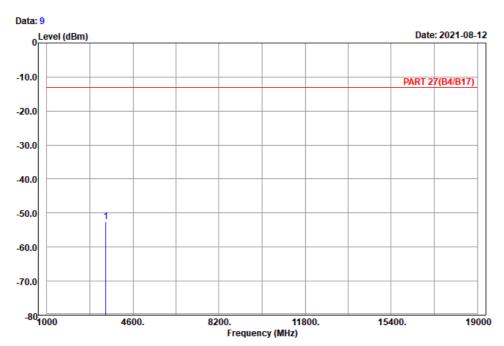
1 pp 3425.00 -52.32 -66.69 14.37 -13.00 -39.32 Peak



### **Mid Channel**



## Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B4/B17) Horizontal Remark : LTE\_Band 4\_Link\_M-Ch

Tested by: Karl Lee

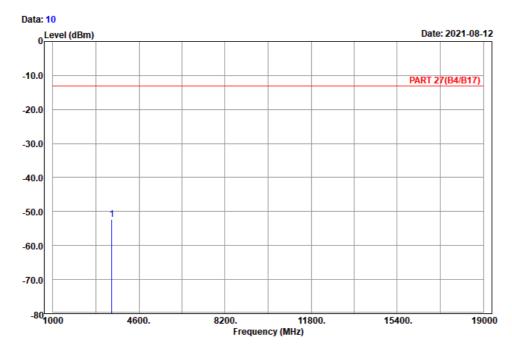
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 3465.00 -52.50 -66.84 14.34 -13.00 -39.50 Peak







Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical Remark : LTE\_Band 4\_Link\_M-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

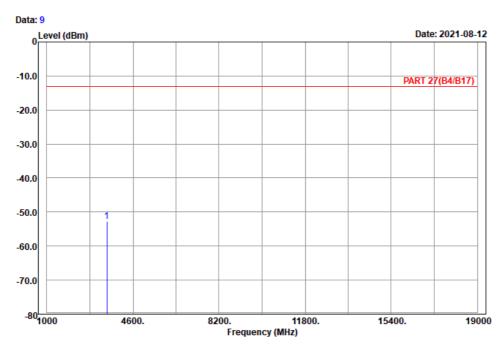
1 pp 3465.00 -52.22 -66.56 14.34 -13.00 -39.22 Peak



# **High Channel**



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B4/B17) Horizontal Remark : LTE\_Band 4\_Link\_H-Ch

Tested by: Karl Lee

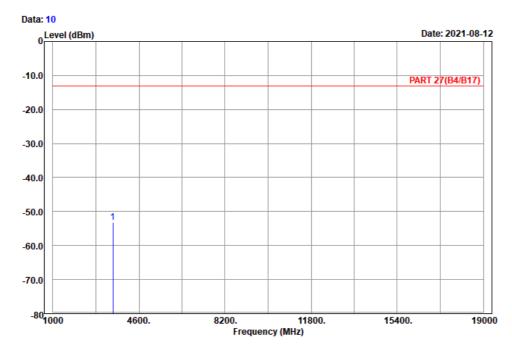
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 3505.00 -52.72 -67.00 14.28 -13.00 -39.72 Peak







Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical Remark : LTE\_Band 4\_Link\_H-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

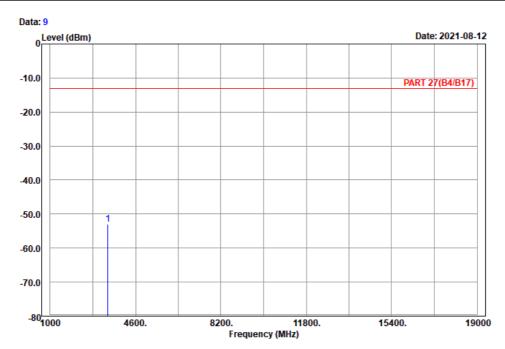
1 pp 3505.00 -53.17 -67.45 14.28 -13.00 -40.17 Peak



# LTE Band 4, Channel Bandwidth 20MHz Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B4/B17) Horizontal

Remark : LTE\_Band 4\_Link\_L-Ch

Tested by: Karl Lee

Read Limit Over

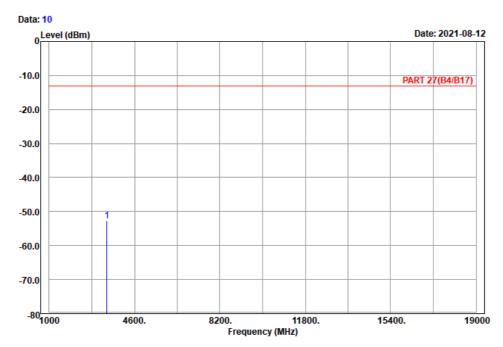
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB dB

1 pp 3440.00 -52.86 -67.21 -13.00 -39.86 14.35 Peak







Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical Remark : LTE\_Band 4\_Link\_L-Ch

Tested by: Karl Lee

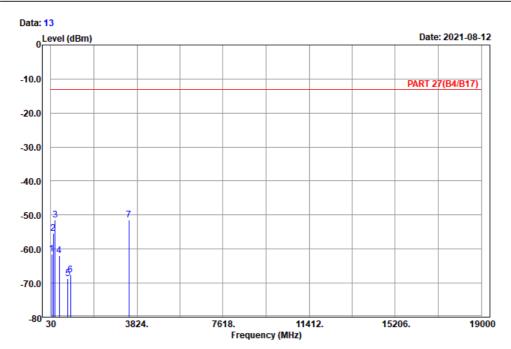
1 pp 3440.00 -52.84 -67.19 -13.00 -39.84 14.35 Peak



### **Mid Channel**



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

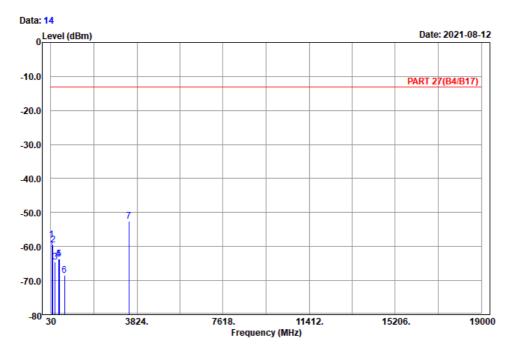
Condition: PART 27(B4/B17) Horizontal Remark : LTE\_Band 4\_Link\_M-Ch

Tested by: Karl Lee

	Freq Leve		Read l Level Factor		Limit Line		Remark
_	MHz	dBm	dBm	dB	dBm	dB	
1	77.25	-61.38	-49.36	-12.02	-13.00	-48.38	Peak
2	130.98	-55.43	-47.78	-7.65	-13.00	-42.43	Peak
3	220.62	-51.52	-45.62	-5.90	-13.00	-38.52	Peak
4	405.00	-61.94	-59.07	-2.87	-13.00	-48.94	Peak
5	784.40	-68.74	-69.73	0.99	-13.00	-55.74	Peak
6	902.70	-67.53	-70.55	3.02	-13.00	-54.53	Peak
7 pp	3465.00	-51.45	-65.79	14.34	-13.00	-38.45	Peak







Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical Remark : LTE\_Band 4\_Link\_M-Ch

Tested by: Karl Lee

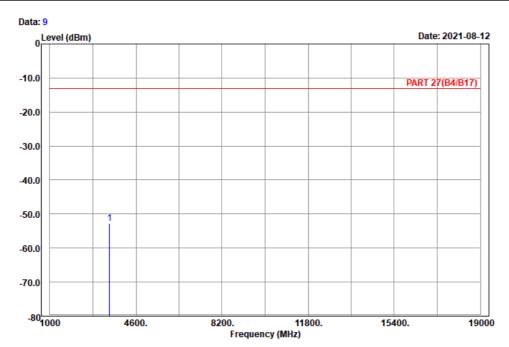
	Freq	Level		Factor			Remark
-	MHz	dBm	dBm	dB	dBm	dB	
1	66.18	-58.06	-44.82	-13.24	-13.00	-45.06	Peak
2	128.28	-59.56	-51.79	-7.77	-13.00	-46.56	Peak
3	215.22	-64.52	-58.54	-5.98	-13.00	-51.52	Peak
4	376.30	-63.63	-59.65	-3.98	-13.00	-50.63	Peak
5	408.50	-63.72	-60.79	-2.93	-13.00	-50.72	Peak
6	624.80	-68.50	-68.65	0.15	-13.00	-55.50	Peak
7 nn	3465.00	-52.49	-66.83	14.34	-13.00	-39.49	Peak



# **High Channel**



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B4/B17) Horizontal Remark : LTE\_Band 4\_Link\_H-Ch

Tested by: Karl Lee

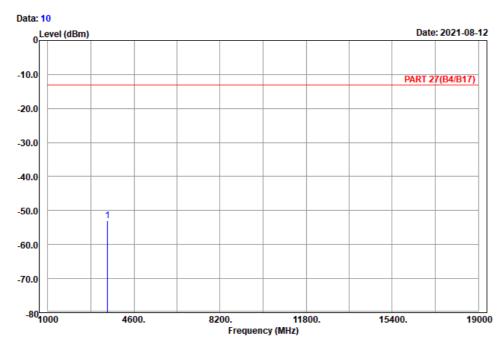
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 3490.00 -52.83 -67.14 14.31 -13.00 -39.83 Peak







Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical Remark : LTE\_Band 4\_Link\_H-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

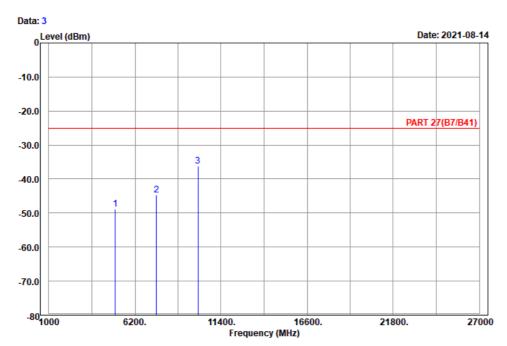
1 pp 3490.00 -53.06 -67.37 14.31 -13.00 -40.06 Peak



# LTE Band 7, Channel Bandwidth 5MHz Low Channel



## Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B7/B41) Horizontal

Remark : LTE\_Band 7\_Link\_L-Ch

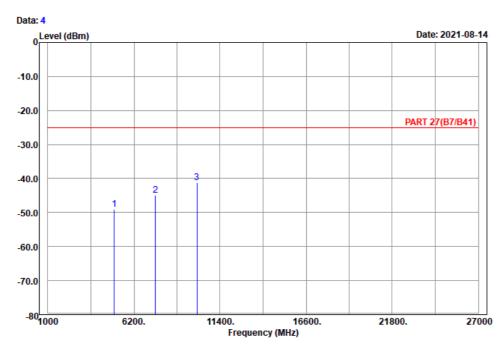
Tested by: Karl Lee

Freq	Level		Factor	Limit Line		Remark
MHz	dBm	dBm	dB	dBm	dB	

1 5005.00 -48.92 -68.50 19.58 -25.00 -23.92 Peak 2 7507.50 -44.59 -67.27 22.68 -25.00 -19.59 Peak 3 pp 10010.00 -36.19 -62.44 26.25 -25.00 -11.19 Peak







Site : 966 chamber 1

Condition: PART 27(B7/B41) Vertical Remark : LTE\_Band 7\_Link\_L-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

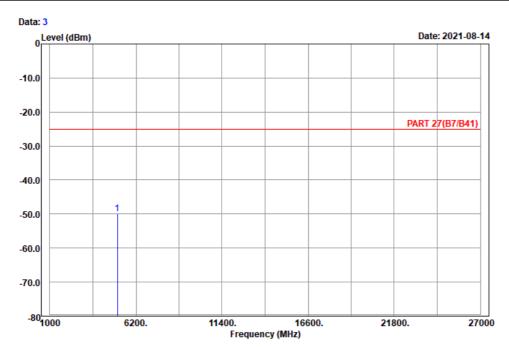
1 5005.00 -49.15 -68.73 19.58 -25.00 -24.15 Peak 2 7507.50 -44.83 -67.51 22.68 -25.00 -19.83 Peak 3 pp 10010.00 -41.15 -67.40 26.25 -25.00 -16.15 Peak



### **Mid Channel**



## Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B7/B41) Horizontal Remark : LTE\_Band 7\_Link\_M-Ch

Tested by: Karl Lee

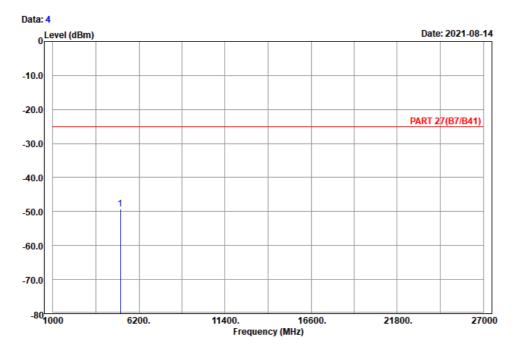
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 5070.00 -49.98 -69.37 19.39 -25.00 -24.98 Peak







Site : 966 chamber 1

Condition: PART 27(B7/B41) Vertical Remark : LTE\_Band 7\_Link\_M-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

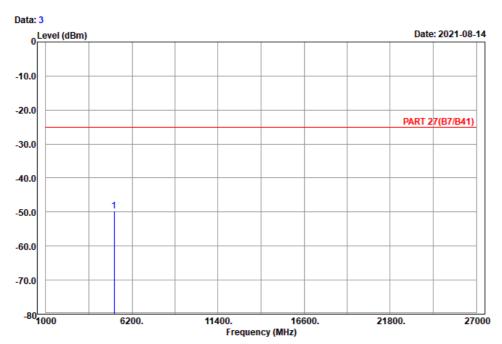
1 pp 5070.00 -49.23 -68.62 19.39 -25.00 -24.23 Peak



# **High Channel**



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

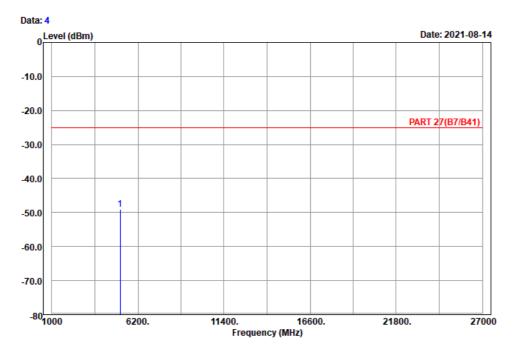
Condition: PART 27(B7/B41) Horizontal Remark : LTE\_Band 7\_Link\_H-Ch

Tested by: Karl Lee

1 pp 5135.00 -49.80 -69.61 19.81 -25.00 -24.80 Peak







Site : 966 chamber 1

Condition: PART 27(B7/B41) Vertical Remark : LTE\_Band 7\_Link\_H-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

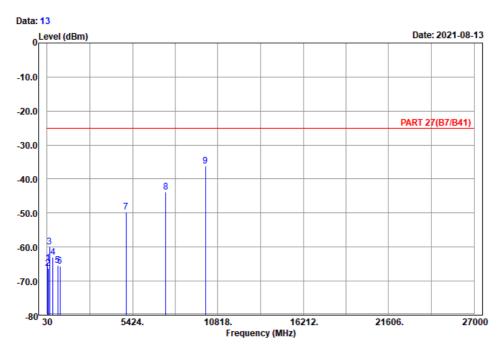
1 pp 5135.00 -49.08 -68.89 19.81 -25.00 -24.08 Peak



# LTE Band 7, Channel Bandwidth 20MHz Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B7/B41) Horizontal

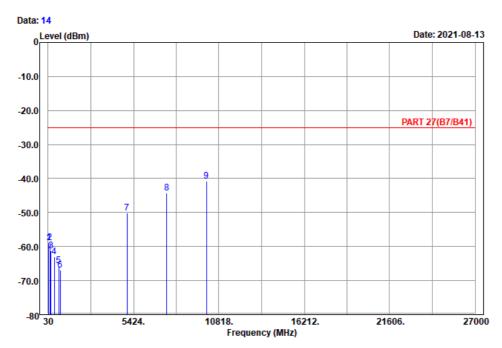
Remark : LTE\_Band 7\_Link\_L-Ch

Tested by: Karl Lee

_	3 cec	i by. Kai	T FEE						
				Read	Limit	0ver			
		Freq	Level	Level	Line	Limit	Factor	Remark	
		MHz	dBm	dBm	dBm	dB	dB		
1	1	66.45	-64.64	-51.54	-25.00	-39.64	-13.10	Peak	
2	2	94.53	-66.33	-55.93	-25.00	-41.33	-10.40	Peak	
3	3	177.42	-59.87	-53.99	-25.00	-34.87	-5.88	Peak	
4	4	395.90	-63.05	-60.10	-25.00	-38.05	-2.95	Peak	
	5	708.10	-65.45	-64.93	-25.00	-40.45	-0.52	Peak	
•	5	832.00	-65.61	-67.26	-25.00	-40.61	1.65	Peak	
7	7	5020.00	-49.78	-68.86	-25.00	-24.78	19.08	Peak	
8	3	7530.00	-43.72	-66.57	-25.00	-18.72	22.85	Peak	
9	9 рр	10040.00	-36.14	-62.41	-25.00	-11.14	26.27	Peak	







: 966 chamber 1

Condition: PART 27(B7/B41) Vertical Remark : LTE\_Band 7\_Link\_L-Ch Tested by: Karl Lee

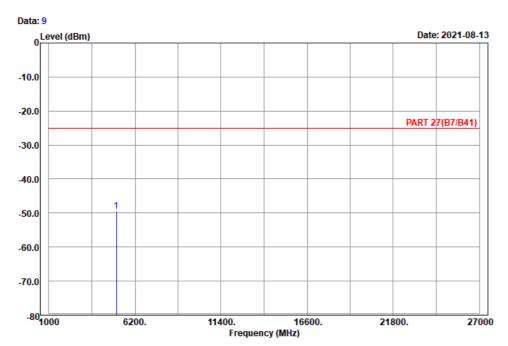
ested by: Kari Lee									
			Read	Limit	0ver				
	Freq	Level	Level	Line	Limit	Factor	Remark		
	MHz	dBm	dBm	dBm	dB	dB			
1	54.57	-58.84	-44.78	-25.00	-33.84	-14.06	Peak		
2	125.85	-58.95	-51.06	-25.00	-33.95	-7.89	Peak		
3	207.39	-61.34	-55.26	-25.00	-36.34	-6.08	Peak		
4	415.50	-62.99	-59.91	-25.00	-37.99	-3.08	Peak		
5	701.80	-65.69	-65.28	-25.00	-40.69	-0.41	Peak		
6	785.80	-66.99	-68.04	-25.00	-41.99	1.05	Peak		
7	5020.00	-50.09	-69.17	-25.00	-25.09	19.08	Peak		
8	7530.00	-44.26	-67.11	-25.00	-19.26	22.85	Peak		
9 pp	10040.00	-40.66	-66.93	-25.00	-15.66	26.27	Peak		



### **Mid Channel**



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B7/B41) Horizontal Remark : LTE\_Band 7\_Link\_M-Ch

Tested by: Karl Lee

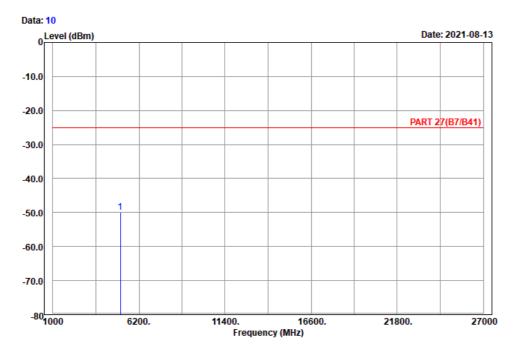
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 5070.00 -49.54 -68.93 19.39 -25.00 -24.54 Peak







Site : 966 chamber 1

Condition: PART 27(B7/B41) Vertical Remark : LTE\_Band 7\_Link\_M-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

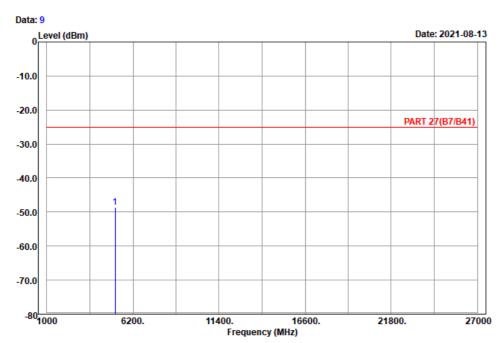
1 pp 5070.00 -49.87 -69.26 19.39 -25.00 -24.87 Peak



# **High Channel**



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B7/B41) Horizontal Remark : LTE\_Band 7\_Link\_H-Ch

Tested by: Karl Lee

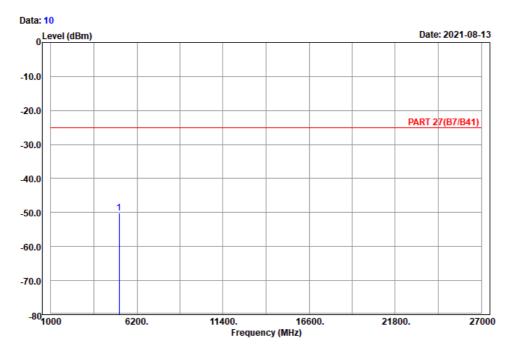
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 5120.00 -48.62 -68.33 19.71 -25.00 -23.62 Peak







Site : 966 chamber 1

Condition: PART 27(B7/B41) Vertical Remark : LTE\_Band 7\_Link\_H-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

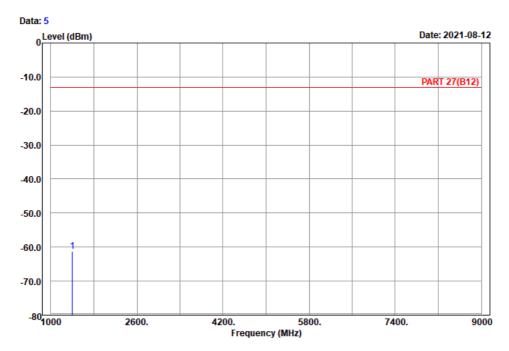
1 pp 5120.00 -50.14 -69.85 19.71 -25.00 -25.14 Peak



# LTE Band 12, Channel Bandwidth 1.4MHz Low Channel



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B12) Horizontal Remark : LTE\_Band 12\_Link\_L-Ch

Tested by: Harry Hsueh

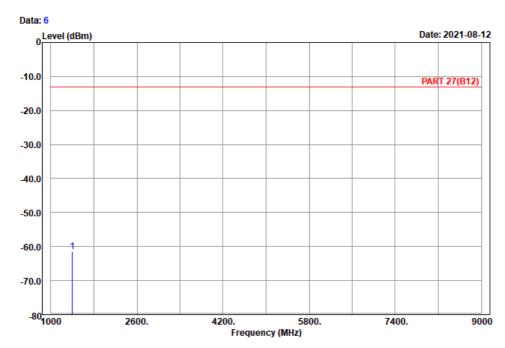
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 1399.40 -61.31 -67.41 6.10 -13.00 -48.31 Peak







Site : 966 chamber 1

Condition: PART 27(B12) Vertical Remark : LTE\_Band 12\_Link\_L-Ch

Tested by: Harry Hsueh

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

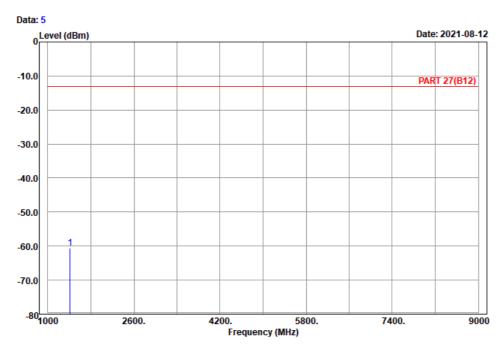
1 pp 1399.40 -61.57 -67.67 6.10 -13.00 -48.57 Peak



### **Mid Channel**



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B12) Horizontal Remark : LTE\_Band 12\_Link\_M-Ch

Tested by: Harry Hsueh

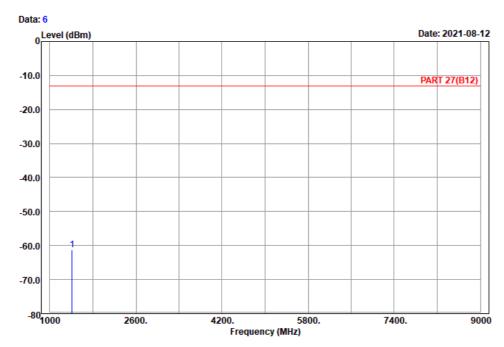
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 1415.00 -60.50 -66.86 6.36 -13.00 -47.50 Peak







Site : 966 chamber 1

Condition: PART 27(B12) Vertical Remark : LTE\_Band 12\_Link\_M-Ch

Tested by: Harry Hsueh

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

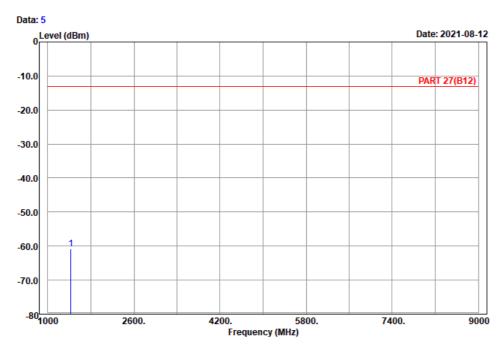
1 pp 1415.00 -61.34 -67.70 6.36 -13.00 -48.34 Peak



### **High Channel**



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B12) Horizontal Remark : LTE\_Band 12\_Link\_H-Ch

Tested by: Harry Hsueh

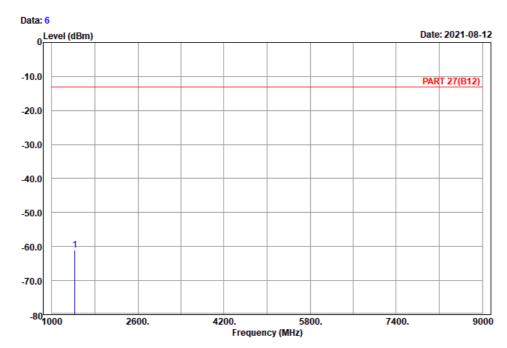
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 1430.60 -60.80 -67.04 6.24 -13.00 -47.80 Peak







Site : 966 chamber 1

Condition: PART 27(B12) Vertical Remark : LTE\_Band 12\_Link\_H-Ch

Tested by: Harry Hsueh

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

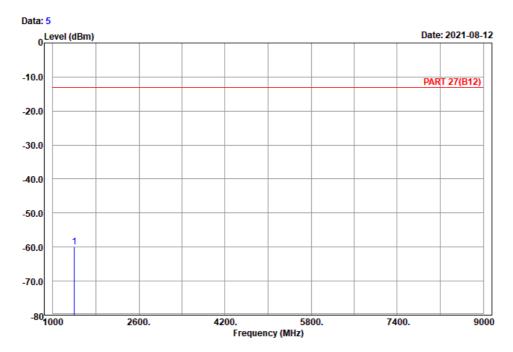
1 pp 1430.60 -61.01 -67.25 6.24 -13.00 -48.01 Peak



# LTE Band 12, Channel Bandwidth 5MHz Low Channel



### Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B12) Horizontal Remark : LTE\_Band 12\_Link\_L-Ch

Tested by: Harry Hsueh

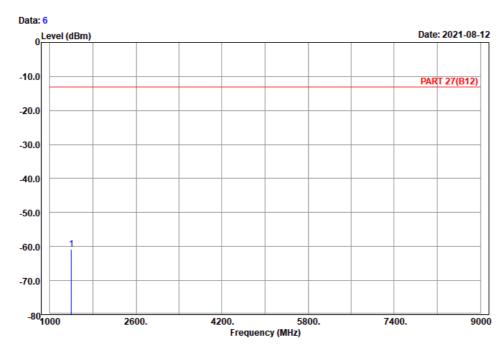
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 1403.00 -59.94 -66.04 6.10 -13.00 -46.94 Peak







Site : 966 chamber 1

Condition: PART 27(B12) Vertical Remark : LTE\_Band 12\_Link\_L-Ch

Tested by: Harry Hsueh

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

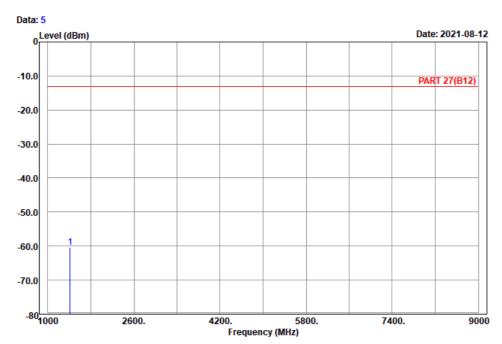
1 pp 1403.00 -60.79 -66.89 6.10 -13.00 -47.79 Peak



#### **Mid Channel**



### Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B12) Horizontal Remark : LTE\_Band 12\_Link\_M-Ch

Tested by: Harry Hsueh

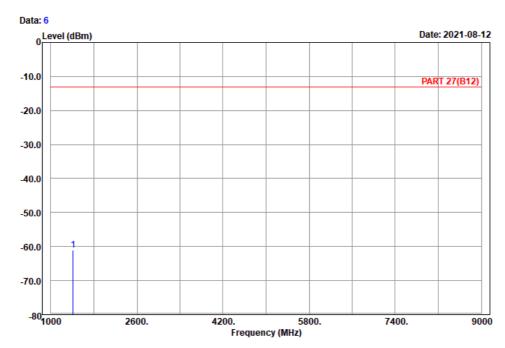
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 1415.00 -60.47 -66.83 6.36 -13.00 -47.47 Peak







Site : 966 chamber 1

Condition: PART 27(B12) Vertical Remark : LTE\_Band 12\_Link\_M-Ch

Tested by: Harry Hsueh

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

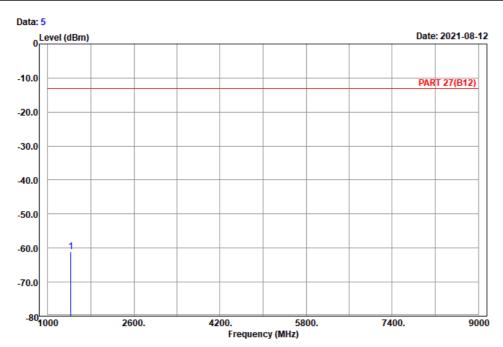
1 pp 1415.00 -61.05 -67.41 6.36 -13.00 -48.05 Peak



## **High Channel**



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B12) Horizontal Remark : LTE\_Band 12\_Link\_H-Ch

Tested by: Harry Hsueh

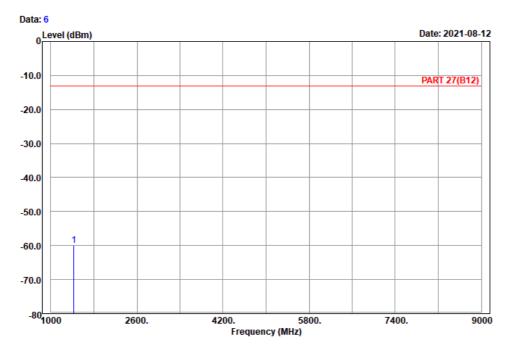
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 1427.00 -60.96 -67.20 6.24 -13.00 -47.96 Peak







Site : 966 chamber 1

Condition: PART 27(B12) Vertical Remark : LTE\_Band 12\_Link\_H-Ch

Tested by: Harry Hsueh

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

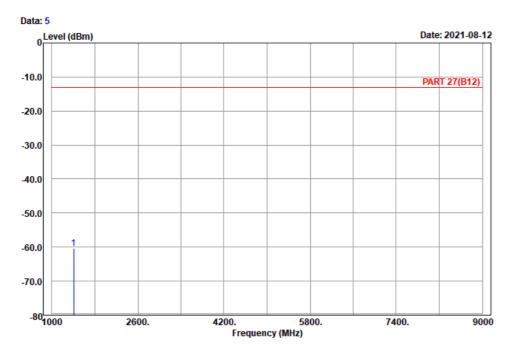
1 pp 1427.00 -59.90 -66.14 6.24 -13.00 -46.90 Peak



# LTE Band 12, Channel Bandwidth 10MHz Low Channel



### Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B12) Horizontal Remark : LTE\_Band 12\_Link\_L-Ch

Tested by: Harry Hsueh

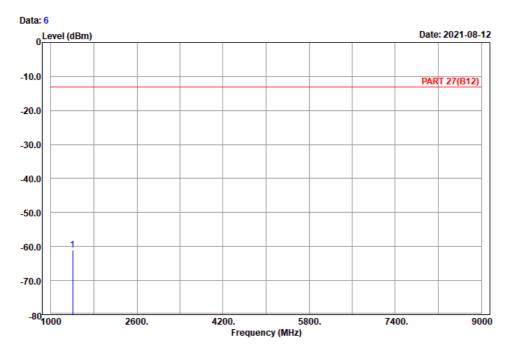
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 1408.00 -60.39 -66.75 6.36 -13.00 -47.39 Peak







Site : 966 chamber 1

Condition: PART 27(B12) Vertical Remark : LTE\_Band 12\_Link\_L-Ch

Tested by: Harry Hsueh

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

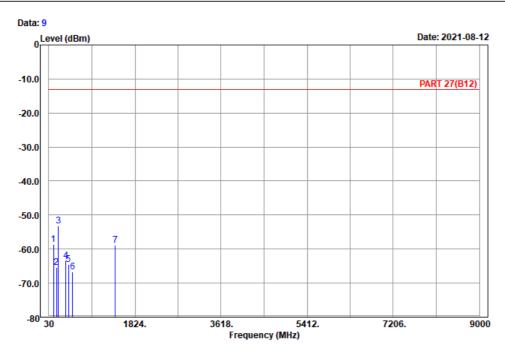
1 pp 1408.00 -60.94 -67.30 6.36 -13.00 -47.94 Peak



#### **Mid Channel**



### Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

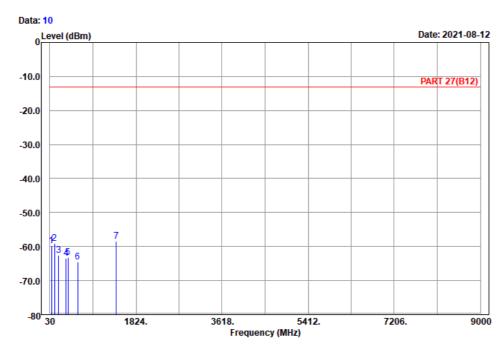
Condition: PART 27(B12) Horizontal Remark : LTE\_Band 12\_Link\_M-Ch

Tested by: Harry Hsueh

			Read		Limit	0ver	
	Freq	Level	Level	Factor	Line	Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	124.23	-58.71	-50.70	-8.01	-13.00	-45.71	Peak
2	191.46	-65.38	-59.60	-5.78	-13.00	-52.38	Peak
3 рр	225.75	-53.29	-47.46	-5.83	-13.00	-40.29	Peak
4	385.40	-63.34	-59.82	-3.52	-13.00	-50.34	Peak
5	437.20	-64.55	-60.98	-3.57	-13.00	-51.55	Peak
6	525.40	-66.72	-63.28	-3.44	-13.00	-53.72	Peak
7	1415.00	-58.86	-65.22	6.36	-13.00	-45.86	Peak







Site : 966 chamber 1

Condition: PART 27(B12) Vertical Remark : LTE\_Band 12\_Link\_M-Ch

Tested by: Harry Hsueh

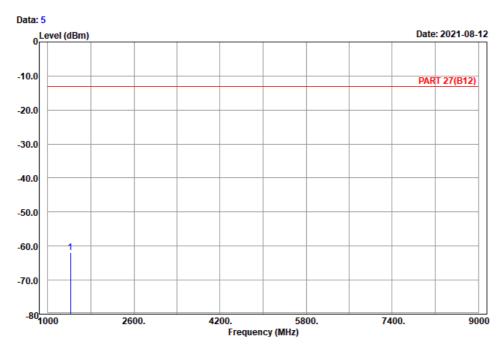
	Freq	Level		Factor		Over Limit	Remark
-	MHz	dBm	dBm	dB	dBm	dB	
1	62.94	-59.66	-46.01	-13.65	-13.00	-46.66	Peak
2	126.93	-59.04	-51.21	-7.83	-13.00	-46.04	Peak
3	211.44	-62.59	-56.56	-6.03	-13.00	-49.59	Peak
4	370.70	-63.48	-59.19	-4.29	-13.00	-50.48	Peak
5	411.30	-63.22	-60.22	-3.00	-13.00	-50.22	Peak
6	611.50	-64.42	-64.73	0.31	-13.00	-51.42	Peak
7 nn	1415.00	-58.46	-64.82	6.36	-13.00	-45.46	Peak



## **High Channel**



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B12) Horizontal Remark : LTE\_Band 12\_Link\_H-Ch

Tested by: Harry Hsueh

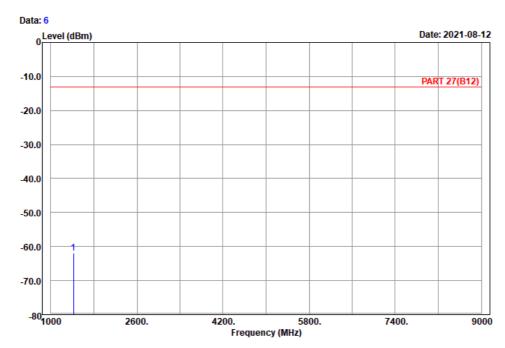
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 1422.00 -62.00 -68.36 6.36 -13.00 -49.00 Peak







Site : 966 chamber 1

Condition: PART 27(B12) Vertical Remark : LTE\_Band 12\_Link\_H-Ch

Tested by: Harry Hsueh

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

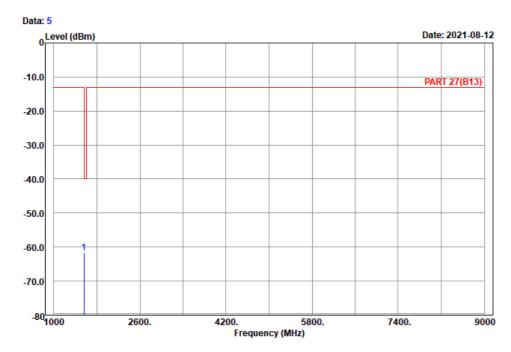
1 pp 1422.00 -61.80 -68.16 6.36 -13.00 -48.80 Peak



# LTE Band 13, Channel Bandwidth 5MHz Low Channel



### Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

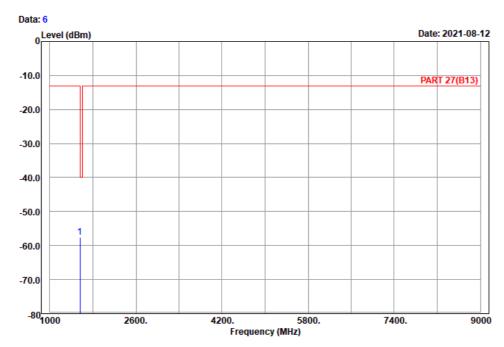
Condition: PART 27(B13) Horizontal Remark : LTE\_Band 13\_Link\_L-Ch

Tested by: Karl Lee

1 pp 1559.00 -61.78 -68.64 6.86 -40.00 -21.78 Peak







Site : 966 chamber 1

Condition: PART 27(B13) Vertical Remark : LTE\_Band 13\_Link\_L-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

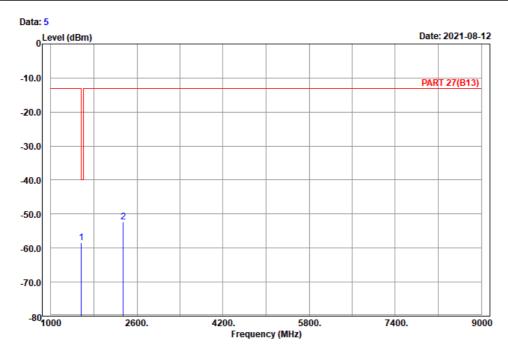
1 pp 1559.00 -57.49 -64.35 6.86 -40.00 -17.49 Peak



#### **Mid Channel**



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B13) Horizontal Remark : LTE\_Band 13\_Link\_M-Ch

Tested by: Karl Lee

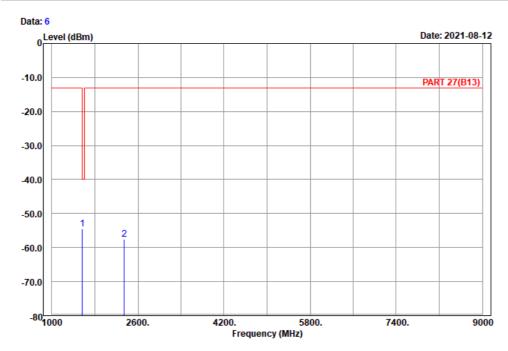
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 1564.00 -58.46 -65.32 6.86 -40.00 -18.46 Peak 2 2346.00 -52.24 -63.18 10.94 -13.00 -39.24 Peak







Site : 966 chamber 1

Condition: PART 27(B13) Vertical Remark : LTE\_Band 13\_Link\_M-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

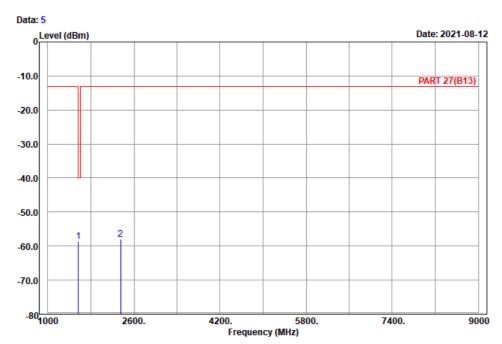
1 pp 1564.00 -54.51 -61.37 6.86 -40.00 -14.51 Peak 2 2346.00 -57.48 -68.42 10.94 -13.00 -44.48 Peak



### **High Channel**



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B13) Horizontal Remark : LTE\_Band 13\_Link\_H-Ch

Tested by: Karl Lee

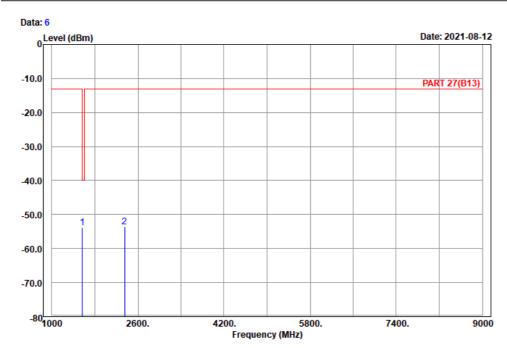
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 1569.00 -58.66 -65.70 7.04 -40.00 -18.66 Peak 2 2353.50 -58.00 -68.94 10.94 -13.00 -45.00 Peak







Site : 966 chamber 1

Condition: PART 27(B13) Vertical Remark : LTE\_Band 13\_Link\_H-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

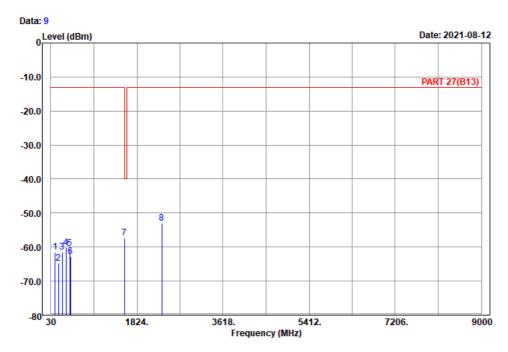
1 pp 1569.00 -53.87 -60.91 7.04 -40.00 -13.87 Peak 2 2353.50 -53.58 -64.52 10.94 -13.00 -40.58 Peak



# LTE Band 13, Channel Bandwidth 10MHz Mid Channel



### Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

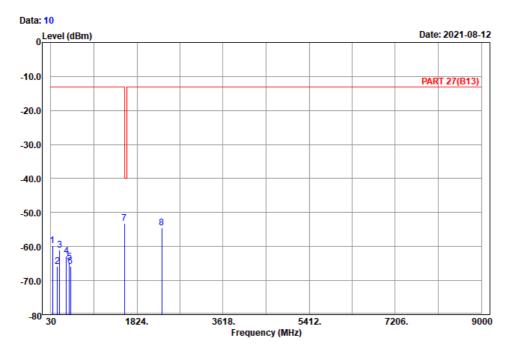
Condition: PART 27(B13) Horizontal Remark : LTE\_Band 13\_Link\_M-Ch

Tested by: Karl Lee

			Read		Limit	0ver	
	Freq	Level	Level	Factor	Line	Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	120.72	-61.44	-53.25	-8.19	-13.00	-48.44	Peak
2	189.30	-64.69	-58.97	-5.72	-13.00	-51.69	Peak
3	267.60	-61.53	-55.86	-5.67	-13.00	-48.53	Peak
4	348.30	-60.13	-54.73	-5.40	-13.00	-47.13	Peak
5	421.80	-60.45	-57.22	-3.23	-13.00	-47.45	Peak
6	438.60	-62.88	-59.29	-3.59	-13.00	-49.88	Peak
7 pp	1564.00	-57.38	-64.24	6.86	-40.00	-17.38	Peak
8	2346.00	-53.07	-64.01	10.94	-13.00	-40.07	Peak







: 966 chamber 1

Condition: PART 27(B13) Vertical Remark : LTE\_Band 13\_Link\_M-Ch Tested by: Karl Lee

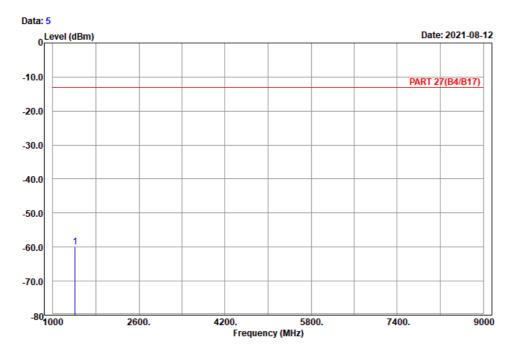
ested by. Rail Lee								
			Read		Limit			
	Freq	Level	Level	Factor	Line	Limit	Remark	
-								
	MHz	dBm	dBm	dB	dBm	dB		
1	62 94	-59 66	-46 91	-13.65	-13 00	-46 66	Poak	
_								
2	169.05	-65.81	-59.01	-6.80	-13.00	-52.81	Peak	
3	214.14	-60.94	-54.95	-5.99	-13.00	-47.94	Peak	
4	352.50	-62.69	-57.42	-5.27	-13.00	-49.69	Peak	
5	414.10	-64.42	-61.36	-3.06	-13.00	-51.42	Peak	
6	435.80	-65.78	-62.25	-3.53	-13.00	-52.78	Peak	
7 pp	1564.00	-53.20	-60.06	6.86	-40.00	-13.20	Peak	
8	2346.00	-54.44	-65.38	10.94	-13.00	-41.44	Peak	



## LTE Band 17, Channel Bandwidth 5MHz Low Channel



### Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B4/B17) Horizontal

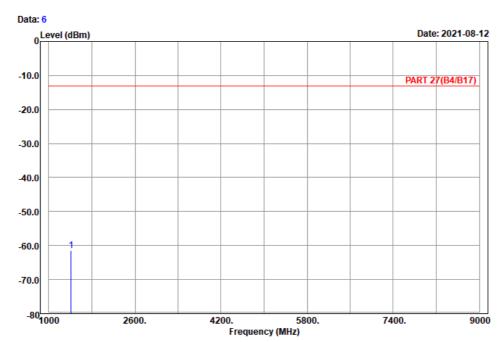
Remark : LTE\_Band 17\_Link\_L-Ch

Tested by: Karl Lee

1 pp 1413.00 -59.96 -66.32 6.36 -13.00 -46.96 Peak







Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical Remark : LTE\_Band 17\_Link\_L-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

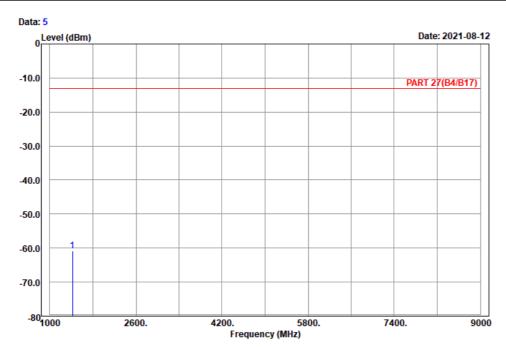
1 pp 1413.00 -61.46 -67.82 6.36 -13.00 -48.46 Peak



#### **Mid Channel**



### Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 1

Condition: PART 27(B4/B17) Horizontal Remark : LTE\_Band 17\_Link\_M-Ch

Tested by: Karl Lee

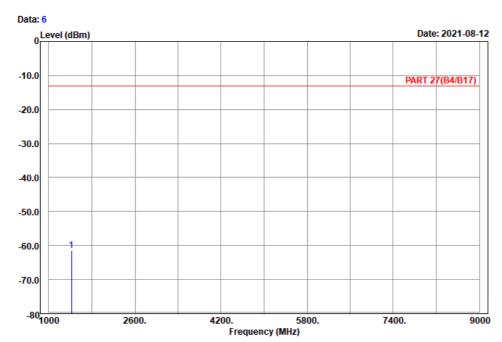
Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 1420.00 -60.76 -67.12 6.36 -13.00 -47.76 Peak







Site : 966 chamber 1

Condition: PART 27(B4/B17) Vertical Remark : LTE\_Band 17\_Link\_M-Ch

Tested by: Karl Lee

Read Limit Over
Freq Level Level Factor Line Limit Remark

MHz dBm dBm dB dBm dB

1 pp 1420.00 -61.46 -67.82 6.36 -13.00 -48.46 Peak