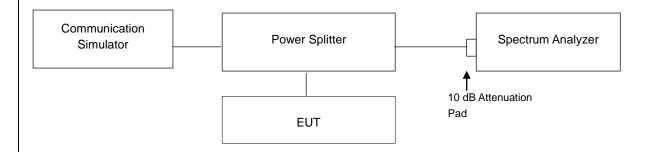


4.6 Peak to Average Ratio

4.6.1 Limits of Peak to Average Ratio Measurement

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

4.6.2 Test Setup



4.6.3 Test Procedures

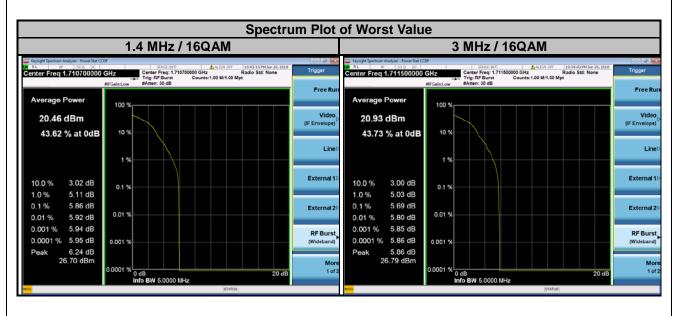
- 1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
- 2. Set the number of counts to a value that stabilizes the measured CCDF curve;
- 3. Record the maximum PAPR level associated with a probability of 0.1 %.



4.6.4 Test Results

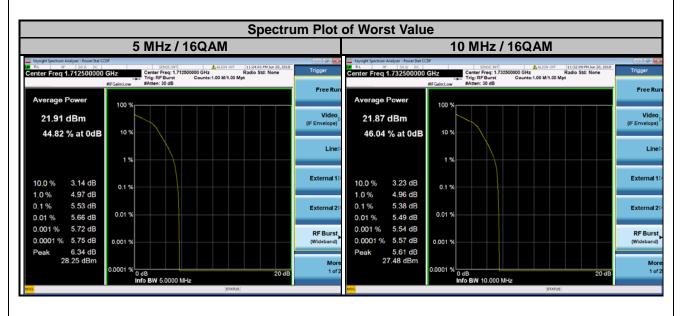
Cat-M1

LTE Band 4									
С	hannel Band	width: 1.4 MF	łz	Channel Bandwidth: 3 MHz					
Channel Frequency		Peak to Average Ratio (dB)		Channel	Frequency	Peak to Average Ratio (dB)			
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM		
19957	1710.7	4.92	5.86	19965	1711.5	4.81	5.69		
20175	1732.5	4.70	5.55	20175	1732.5	4.69	5.55		
20393	1754.3	4.62	5.43	20385	1753.5	4.53	5.39		



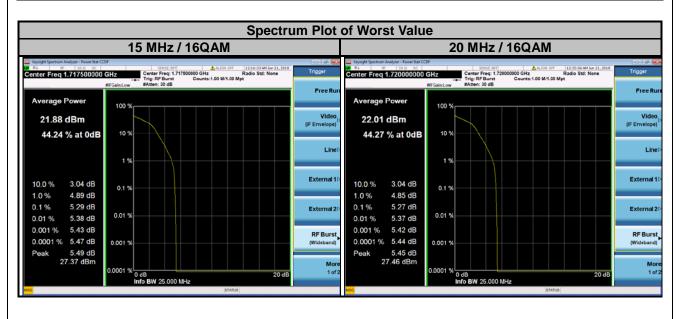


LTE Band 4										
(Channel Band	dwidth: 5 MH	z	Channel Bandwidth: 10 MHz						
Channel	Frequency	Peak to Average Ratio (dB)		Channel	Frequency	Peak to Average Ratio (dB)				
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM			
19975	1712.5	4.87	5.53	20000	1715.0	4.78	5.34			
20175	1732.5	4.72	5.27	20175	1732.5	4.67	5.38			
20375	1752.5	4.53	5.05	20350	1750.0	4.46	4.92			



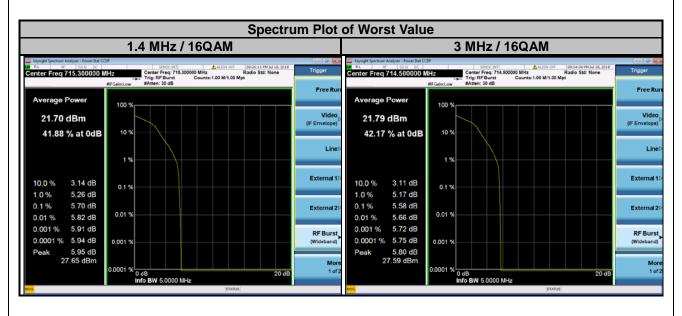


LTE Band 4										
C	hannel Band	width: 15 MH	lz	Channel Bandwidth: 20 MHz						
Channel	Frequency	Peak to Average Ratio (dB)		Channel	Frequency	Peak to Average Ratio (dB)				
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM			
20025	1717.5	4.73	5.29	20050	1720.0	4.74	5.27			
20175	1732.5	4.65	5.11	20175	1732.5	4.70	5.06			
20325	1747.5	4.49	4.95	20300	1745.0	4.51	5.09			



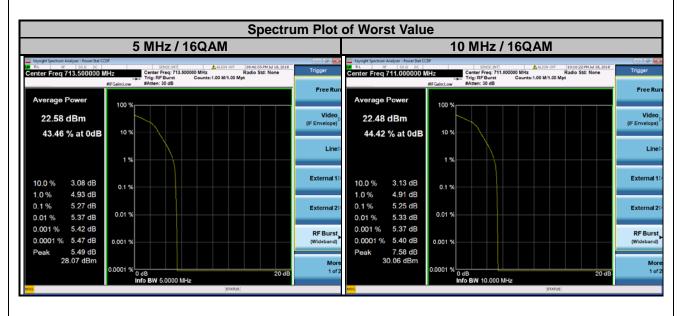


LTE Band 12									
С	hannel Band	width: 1.4 MF	łz	Channel Bandwidth: 3 MHz					
Channel	Frequency	Peak to Average Ratio (dB)		Channel	Frequency	Peak to Average Ratio (dB)			
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM		
23017	699.7	4.55	5.52	23025	700.5	4.49	5.51		
23095	707.5	4.62	5.64	23095	707.5	4.49	5.54		
23173	715.3	4.61	5.70	23165	714.5	4.60	5.58		



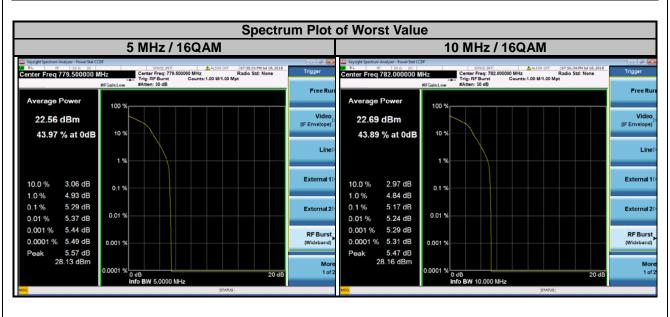


LTE Band 12										
(Channel Band	dwidth: 5 MH	z	Channel Bandwidth: 10 MHz						
Channel	Frequency	Peak to Average Ratio (dB)		Channel	Frequency	Peak to Average Ratio (dB)				
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM			
23035	701.5	4.52	5.02	23060	704.0	4.44	4.95			
23095	707.5	4.54	5.22	23095	707.5	4.47	5.10			
23155	713.5	4.65	5.27	23130	711.0	4.50	5.25			





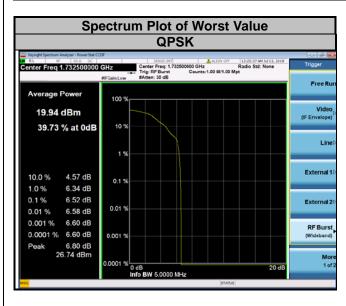
LTE Band 13									
(Channel Band	dwidth: 5 MH	Z	Channel Bandwidth: 10 MHz					
Channel	Frequency	Peak to Average Ratio (dB)		Channel	Frequency	Peak to Average Ratio (dB)			
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM		
23205	779.5	4.60	5.29		782.0	4.50			
23230	782.0	4.60	5.26	23230			5.17		
23255	784.5	4.60	5.28						





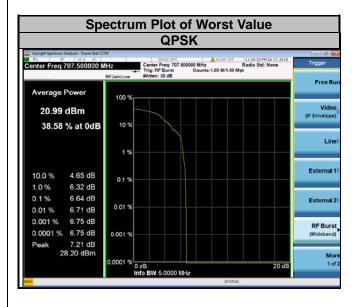
NB-IOT

Peak to Average Ratio (dB)								
LTE Band 4								
Channel Frequency (MHz) Modulation Sub-carrier spacing (kHz) CCDF					Limit			
20175	1732.5	BPSK	3.75	1.89				
20175	1732.5	QPSK	15	1.76	13.00			
20175	1732.5	QPSK	15	6.52				



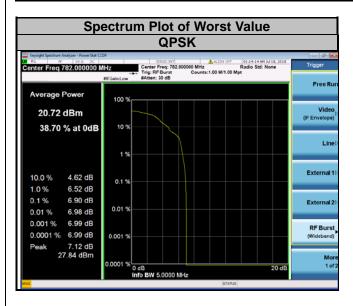


Peak to Average Ratio (dB)								
		LT	E Band 12					
Channel	Frequency (MHz)	Modulation	Sub-carrier spacing (kHz)	CCDF	Limit			
23095	707.5	BPSK	3.75	1.80				
23095	707.5	QPSK	15	1.63	13.00			
23095	707.5	QPSK	15	6.64				





Peak to Average Ratio (dB) LTE Band 13								
Channel Frequency Modulation Sub-carrier CCDE Limit								
23230	(MHz) 782	BPSK	spacing (kHz)	1.96				
23230	782	QPSK	15	3.12	13.00			
23230	782	QPSK	15	6.90				



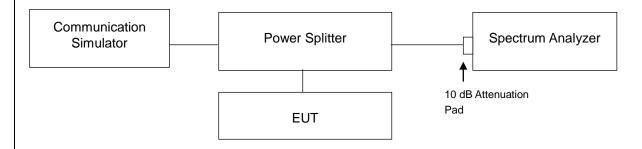


4.7 Conducted Spurious Emissions

4.7.1 Limits of Conducted Spurious Emissions Measurement

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log (P) dB. The limit of emission is equal to -13 dBm.

4.7.2 Test Setup



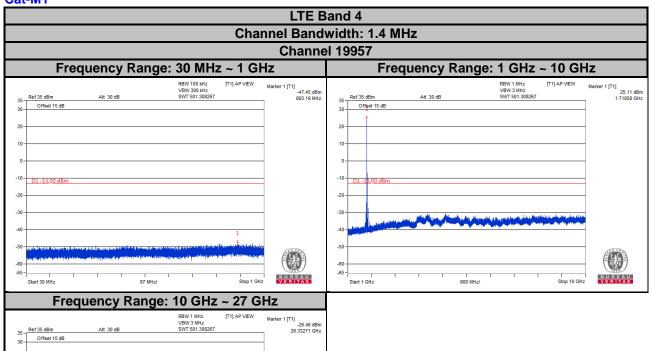
4.7.3 Test Procedure

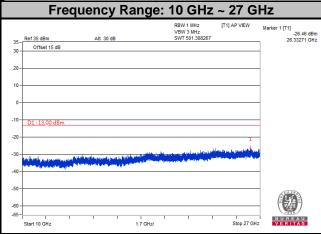
- a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- b. For LTE B4, measuring frequency range is from 30 MHz to 27 GHz. 20 dB attenuation pad is connected with spectrum. RBW = 100 kHz and VBW = 300 kHz is used for conducted emission measurement.
- c. For LTE B12/13, measuring frequency range is from 30 MHz to 1 GHz. 20 dB attenuation pad is connected with spectrum. RBW = 100 kHz and VBW = 300 kHz is used for conducted emission measurement.



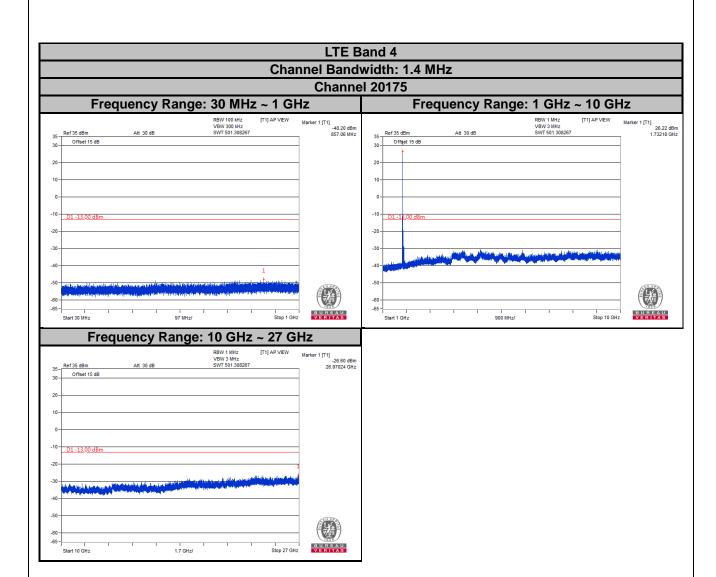
4.7.4 Test Results

Cat-M1

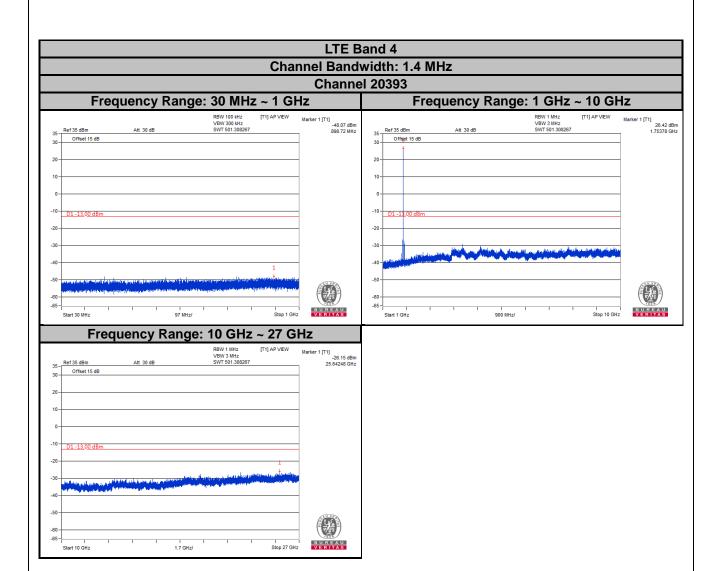




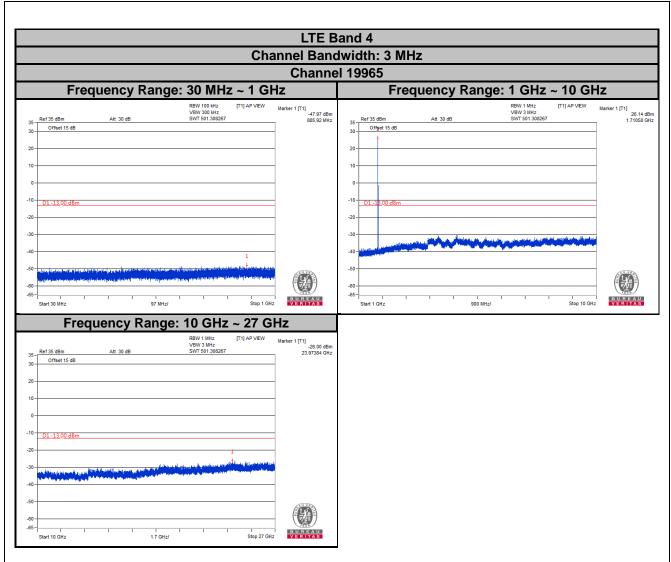




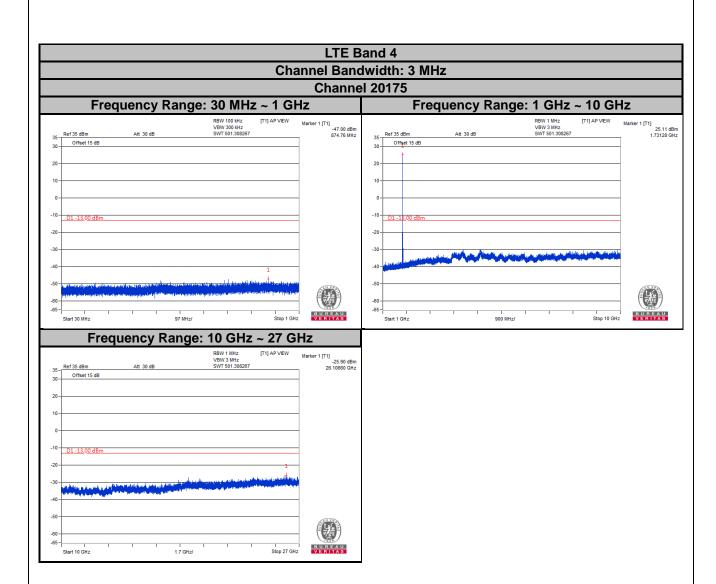




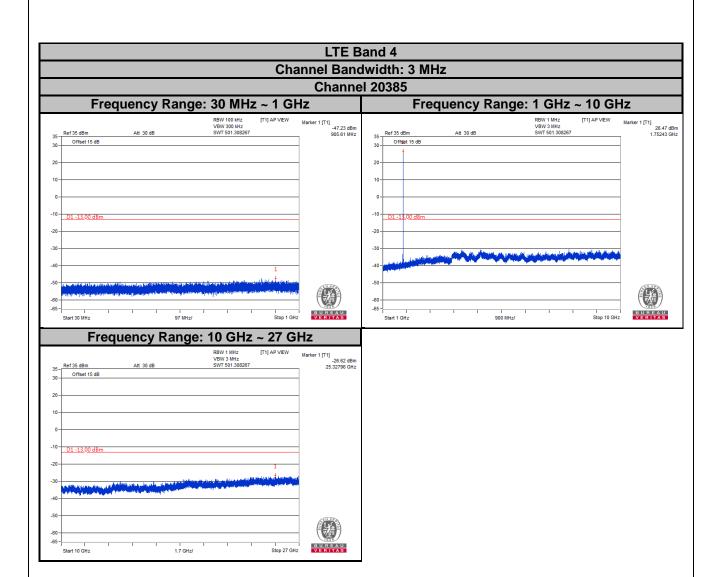




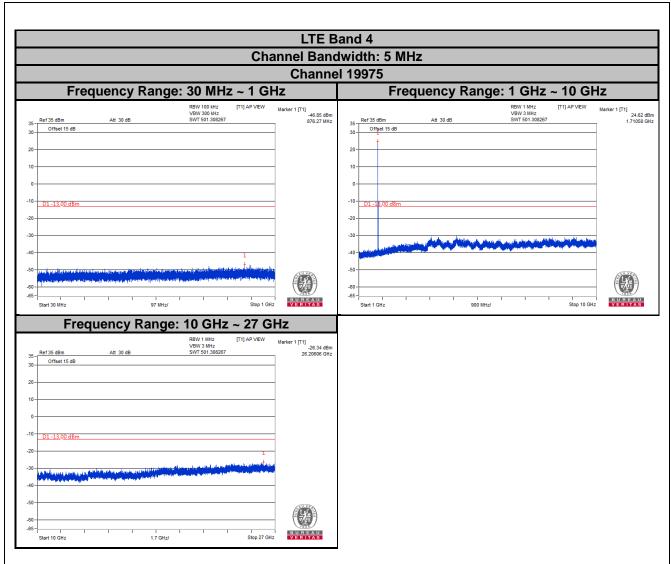




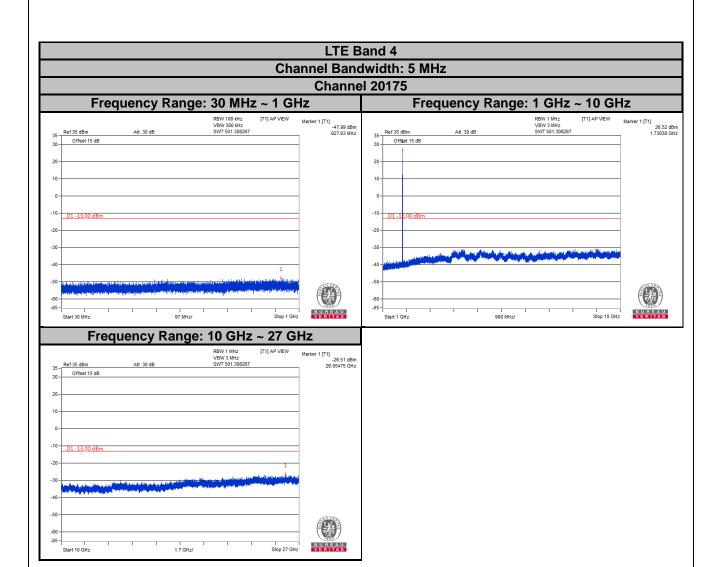




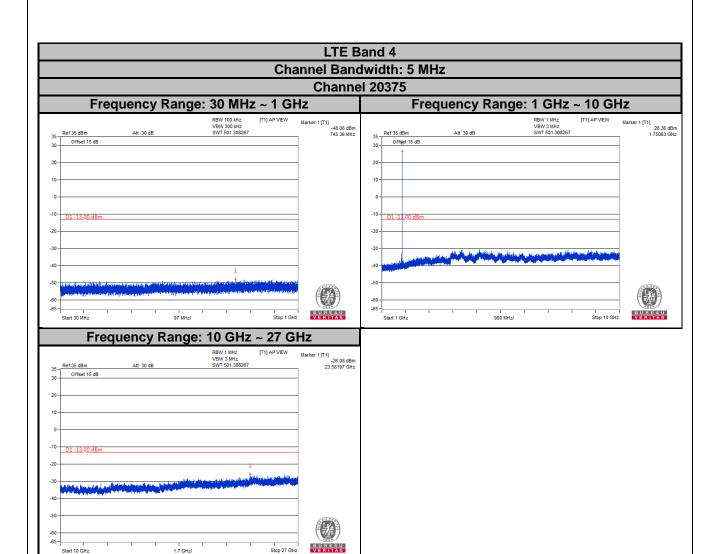




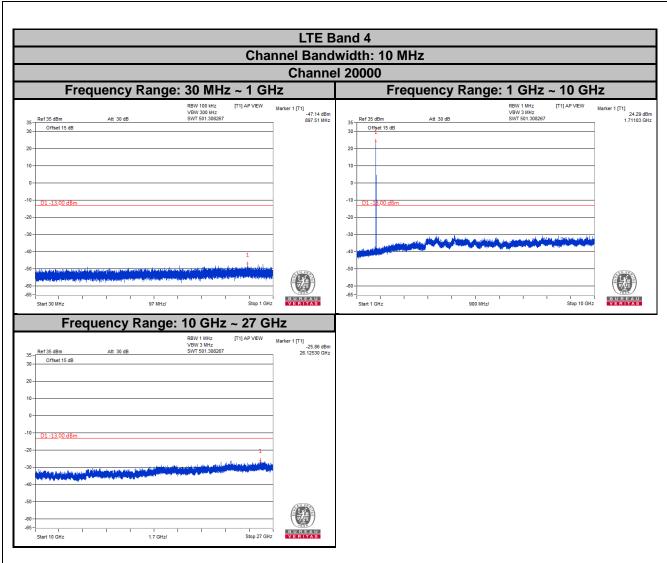




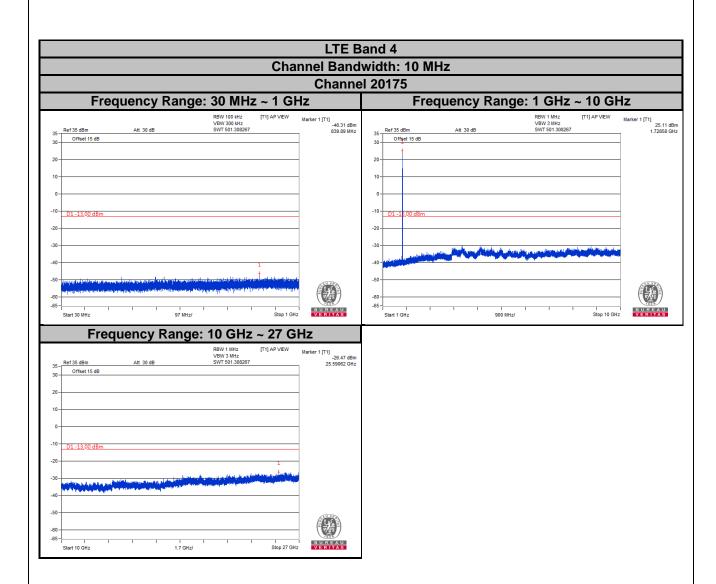




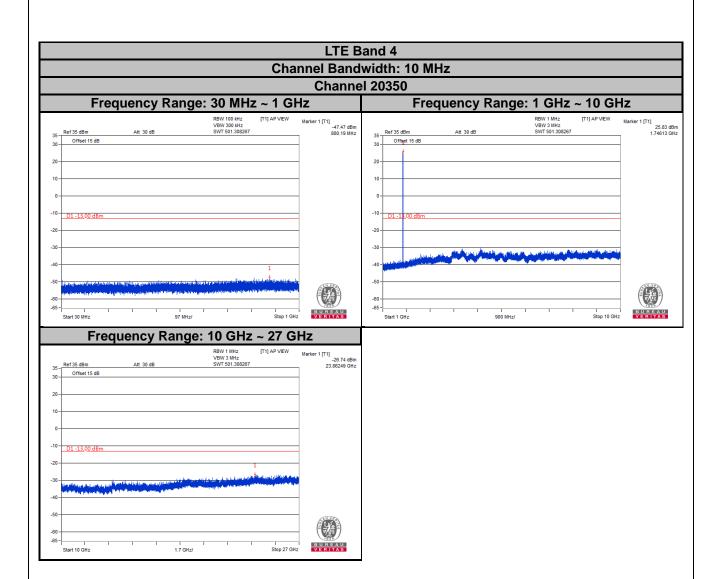




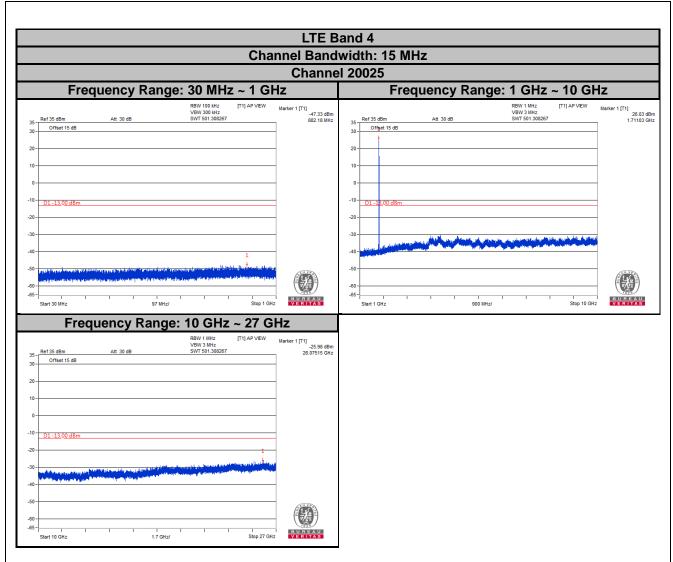




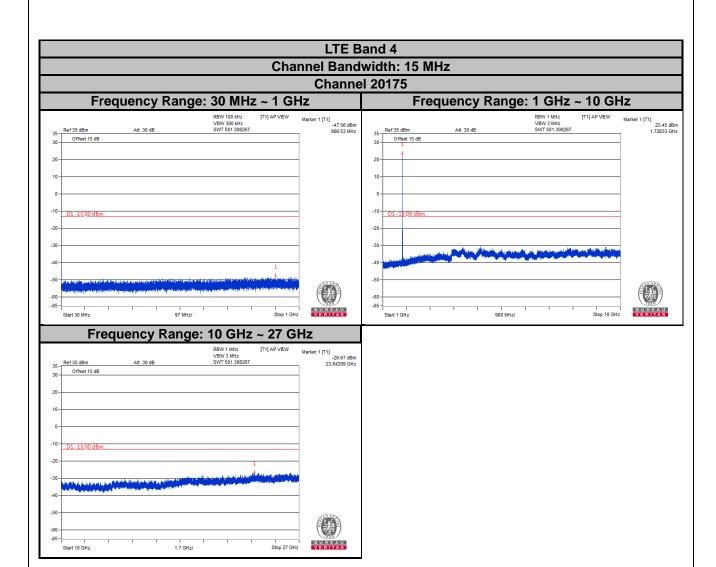




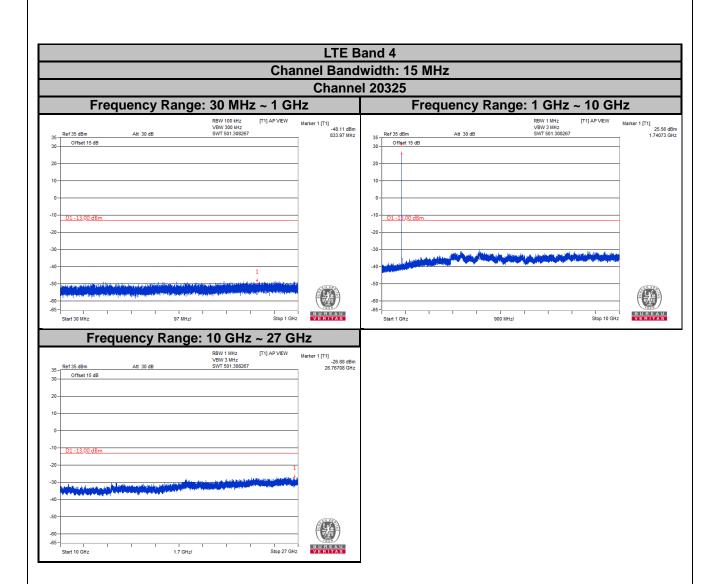




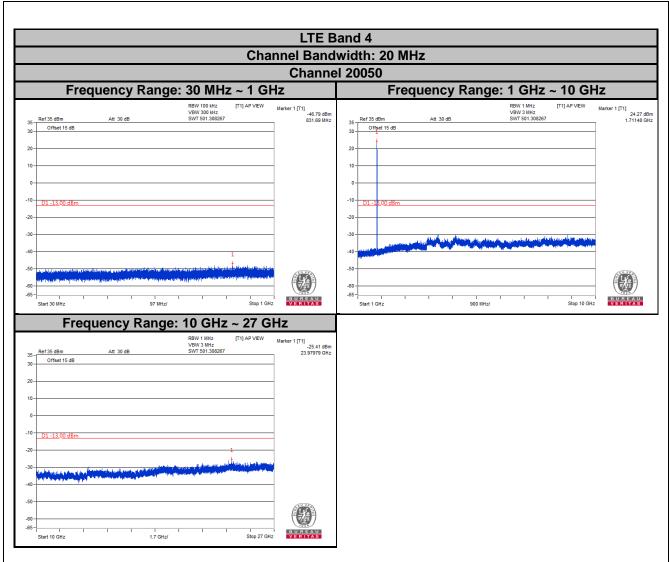




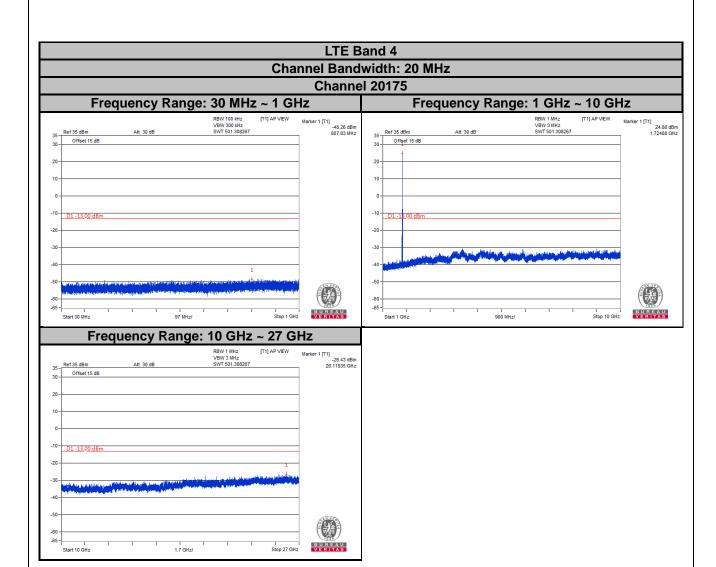




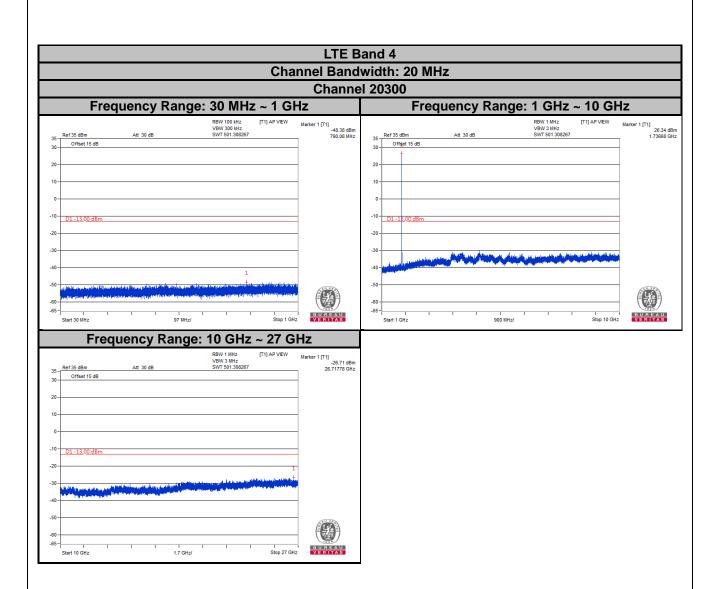




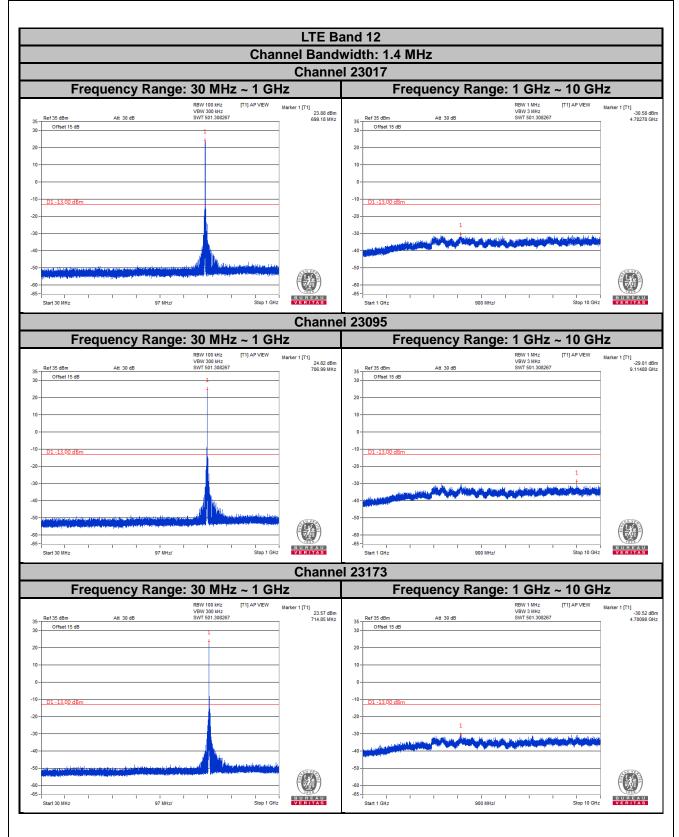








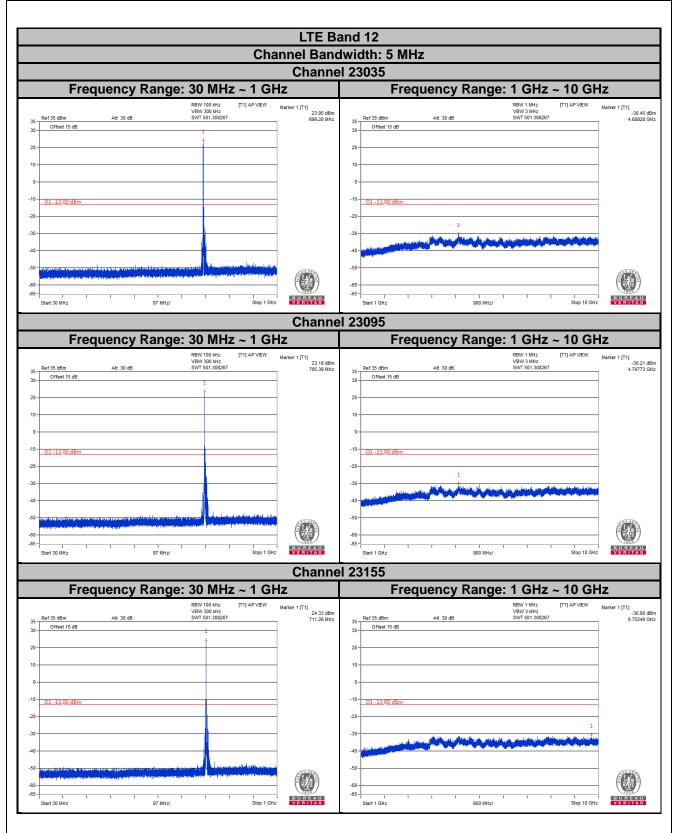




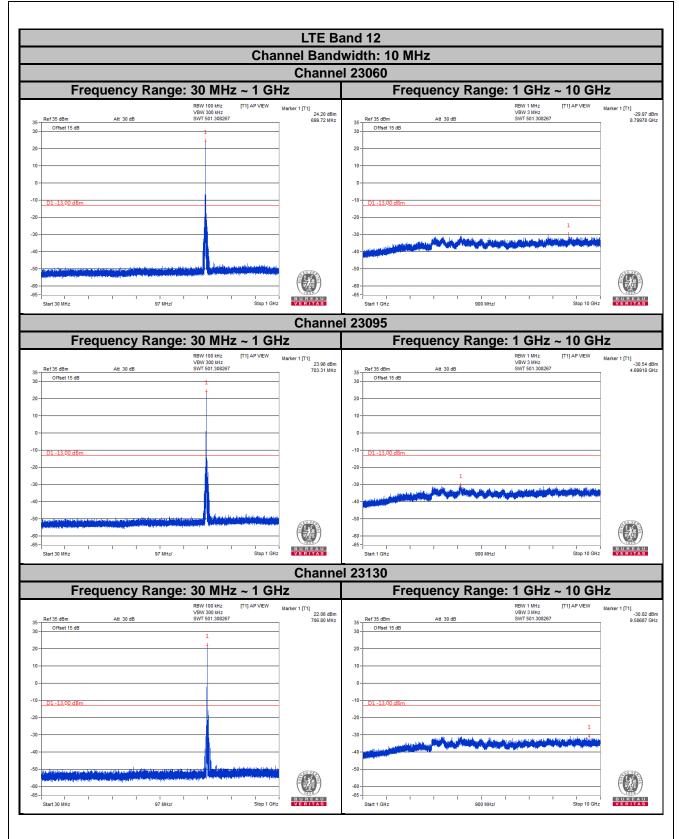




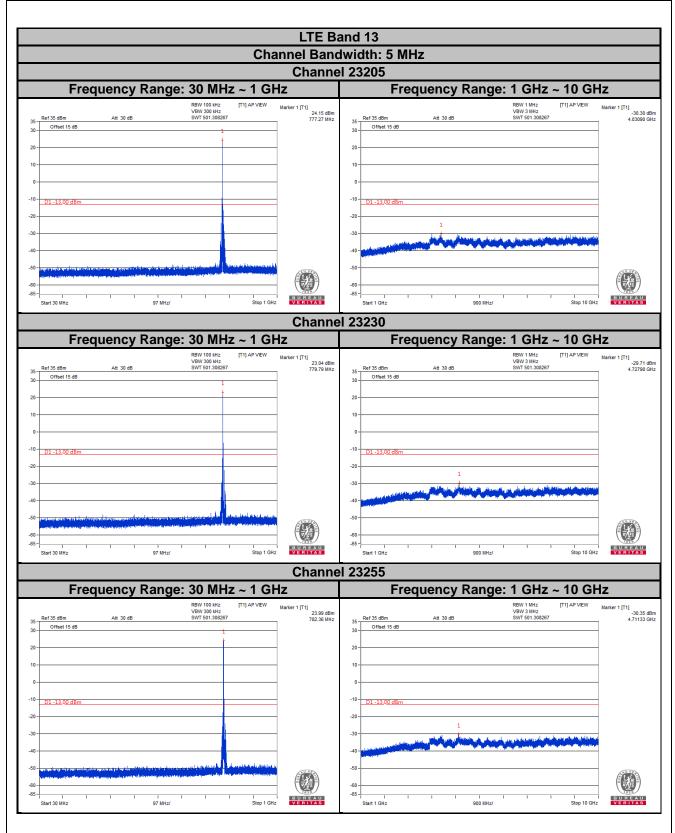




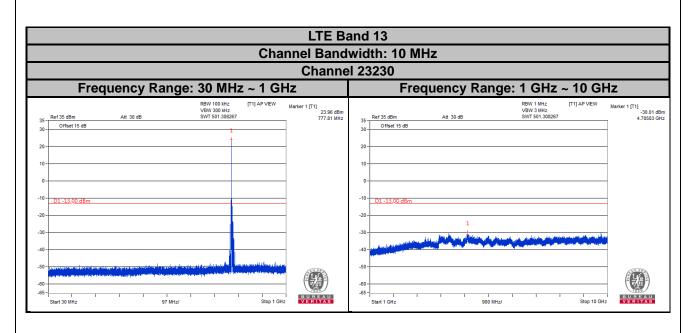




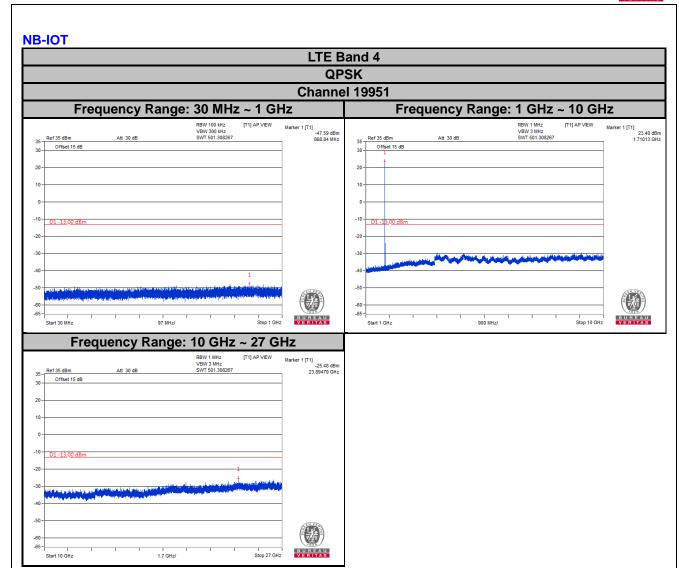




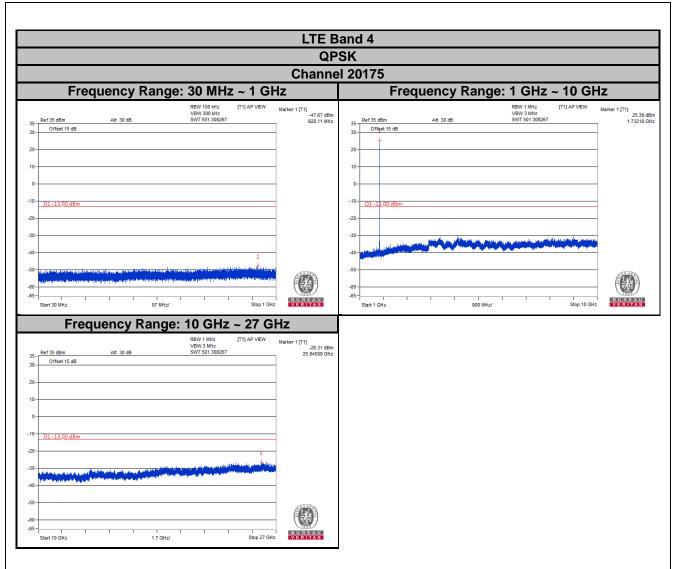




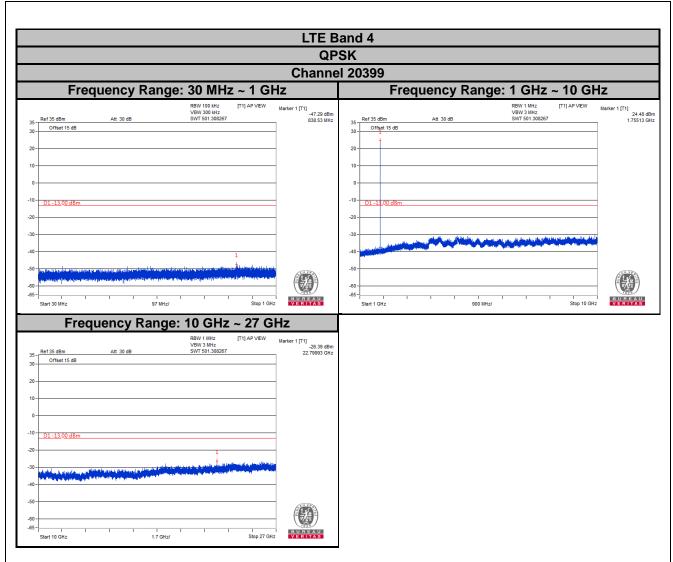




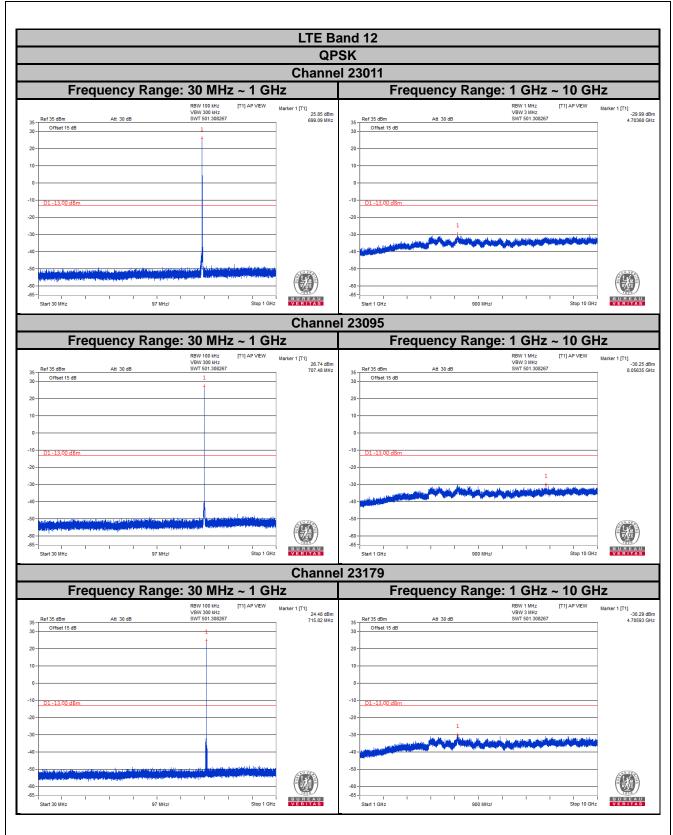


















4.8 Radiated Emission Measurement

4.8.1 Limits of Radiated Emission Measurement

- a. The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log (P) dB. The limit of emission is equal to -13 dBm.
- b. For operations in the 775-788 MHz, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz. The limit of emissions is equal to -40 dBm.

4.8.2 Test Procedure

- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) and/or 1.5 m (above 1 GHz) 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 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G.
- c. EIRP = Output power level of S.G TX cable loss + Antenna gain of substitution horn.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.R.P power 2.15 dB.

Note: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

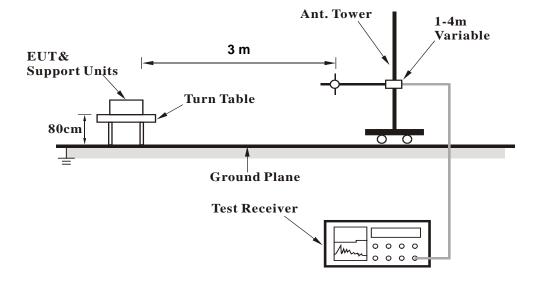
4.8.3 Deviation from Test Standard

No deviation.

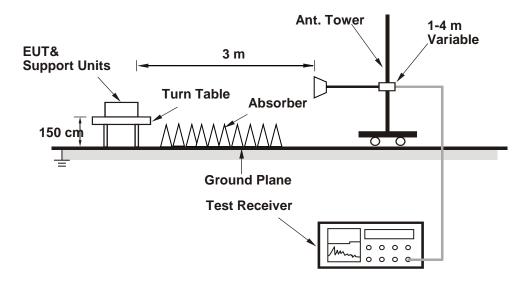


4.8.4 Test Setup

<Radiated Emission below or equal 1 GHz>



<Radiated Emission above 1 GHz>



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



4.8.5 Test Results

Cat-M1

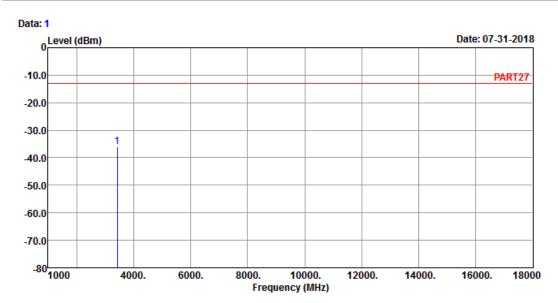
LTE Band 4

Channel Bandwidth: 1.4 MHz / QPSK

Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_1.4M Link_L-CH

Tested by: Thomas Wei

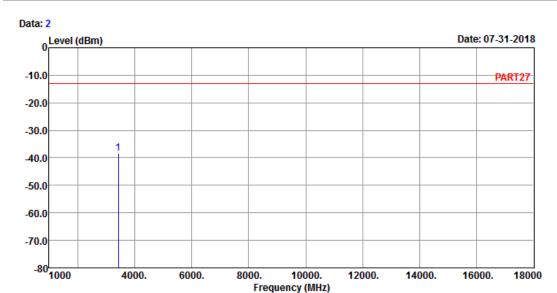
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

1 pp 3421.40 -35.87 -27.53 -13.00 -22.87 -8.34 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_1.4M Link_L-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

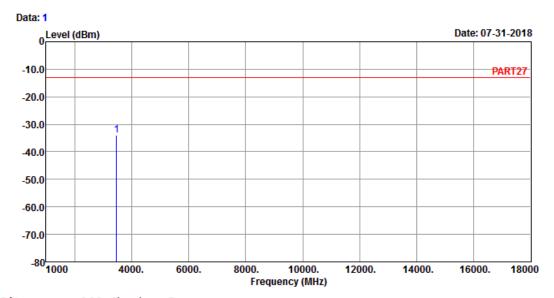
1 pp 3421.40 -38.30 -29.96 -13.00 -25.30 -8.34 Peak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_1.4M Link_M-CH

Tested by: Thomas Wei

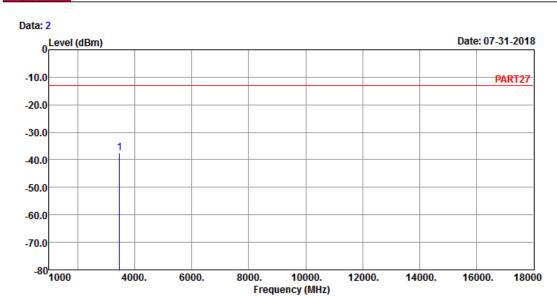
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB dB

1 pp 3465.00 -33.91 -26.03 -13.00 -20.91 -7.88 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_1.4M Link_M-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

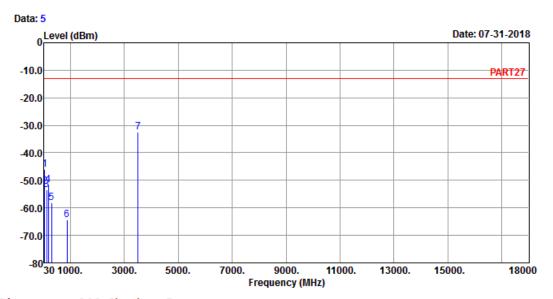
1 pp 3465.00 -37.54 -29.66 -13.00 -24.54 -7.88 Peak



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

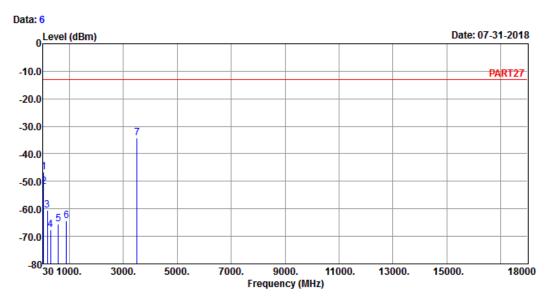
Remak : CAT M1 Band 4 QPSK_1.4M Link_H-CH

Tested by: Thomas Wei

Read Limit 0ver Line Limit Factor Remark Freq Level Level MHz dBm dBm dBm 44.55 -45.94 -43.95 -13.00 -32.94 -1.99 Peak 53.28 -52.17 -46.36 -13.00 -39.17 -5.81 Peak 128.94 -53.45 -44.64 -13.00 -40.45 -8.81 Peak 3 191.02 -51.57 -44.39 -13.00 -38.57 -7.18 Peak 302.57 -58.14 -51.17 -13.00 -45.14 -6.97 Peak 883.60 -64.26 -64.74 -13.00 -51.26 0.48 Peak 7 pp 3508.60 -32.46 -25.01 -13.00 -19.46 -7.45 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_1.4M Link_H-CH

Tested by: Thomas Wei

			Read	Limit	0ver		
	Freq	Level	Level	Line	Limit	Factor	Remark
_							
	MHz	dBm	dBm	dBm	dB	dB	
1	43.58	-46.51	-45.04	-13.00	-33.51	-1.47	Peak
2	52.31	-52.08	-46.54	-13.00	-39.08	-5.54	Peak
3	190.05	-60.53	-53.44	-13.00	-47.53	-7.09	Peak
4	305.48	-67.57	-60.65	-13.00	-54.57	-6.92	Peak
5	592.60	-65.46	-64.38	-13.00	-52.46	-1.08	Peak
6	886.51	-64.38	-64.88	-13.00	-51.38	0.50	Peak
7 pp	3508.60	-34.26	-26.81	-13.00	-21.26	-7.45	Peak

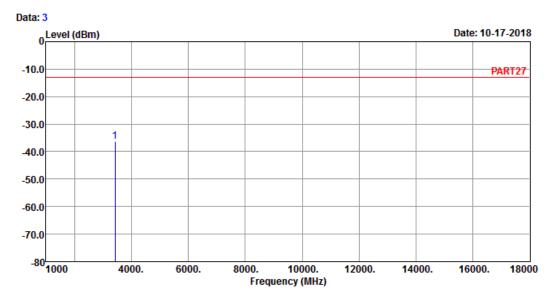


Channel Bandwidth: 3 MHz / QPSK

Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

k : CAT M1 Band 4 QPSK_3M Link_L-CH

Tested by: Thomas Wei

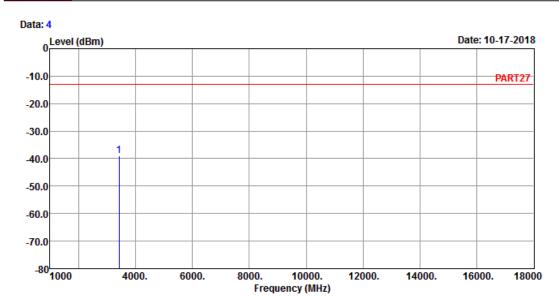
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3423.00 -36.23 -27.89 -13.00 -23.23 -8.34 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_3M Link_L-CH

Tested by: Thomas Wei

Read Limit Over

Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

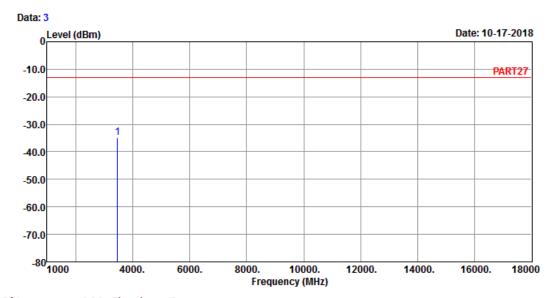
1 pp 3423.00 -38.85 -30.51 -13.00 -25.85 -8.34 Peak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_3M Link_M-CH

Tested by: Thomas Wei

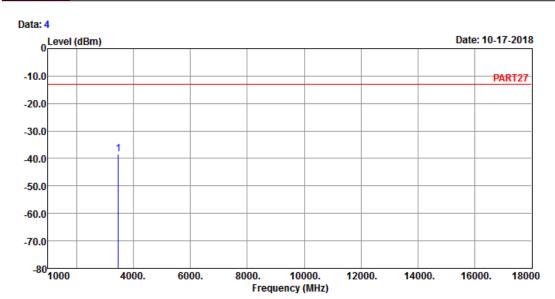
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3465.00 -34.85 -26.97 -13.00 -21.85 -7.88 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_3M Link_M-CH

Tested by: Thomas Wei

Read Limit Over Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

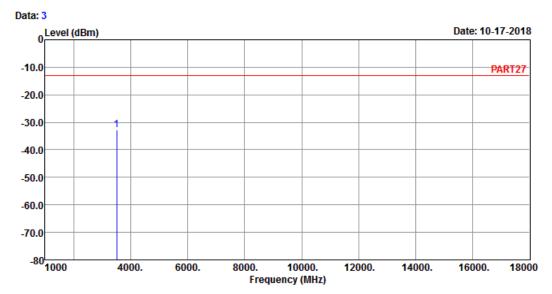
1 pp 3465.00 -38.26 -30.38 -13.00 -25.26 -7.88 Peak



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_3M Link_H-CH

Tested by: Thomas Wei

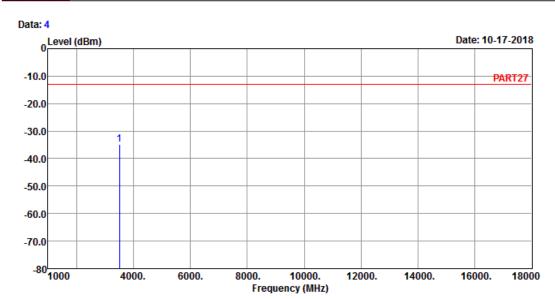
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3507.00 -32.85 -25.40 -13.00 -19.85 -7.45 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_3M Link_H-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

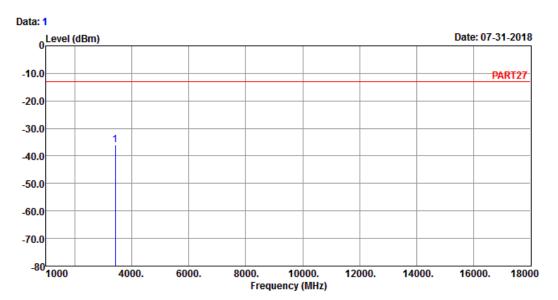
1 pp 3507.00 -34.96 -27.51 -13.00 -21.96 -7.45 Peak



Channel Bandwidth: 5 MHz / QPSK Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_5M Link_L-CH

Tested by: Thomas Wei

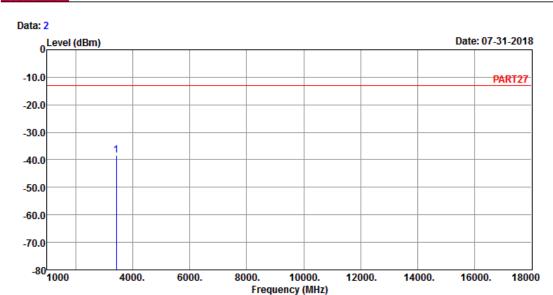
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB dB

1 pp 3425.00 -36.12 -27.78 -13.00 -23.12 -8.34 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_5M Link_L-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

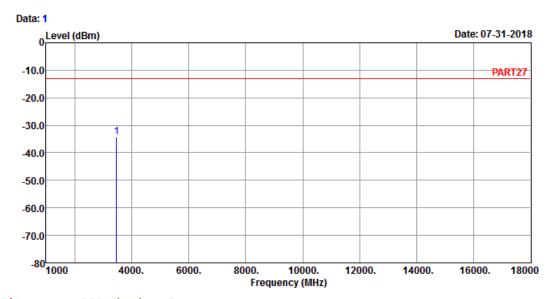
1 pp 3425.00 -38.49 -30.15 -13.00 -25.49 -8.34 Peak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_5M Link_M-CH

Tested by: Thomas Wei

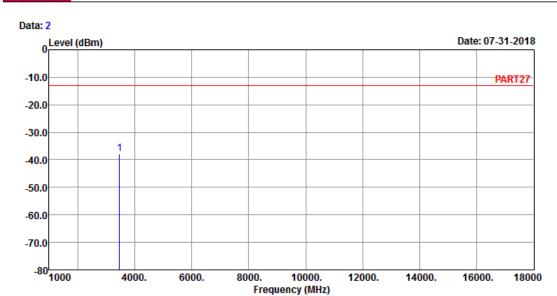
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3465.00 -34.33 -26.45 -13.00 -21.33 -7.88 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_5M Link_M-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

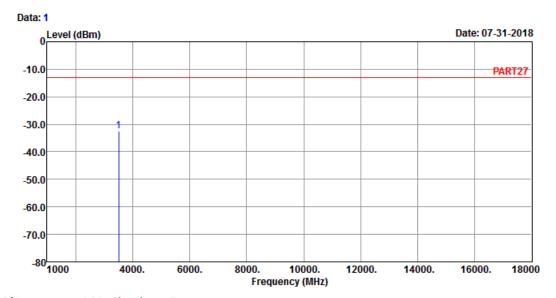
1 pp 3465.00 -37.67 -29.79 -13.00 -24.67 -7.88 Peak



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_5M Link_H-CH

Tested by: Thomas Wei

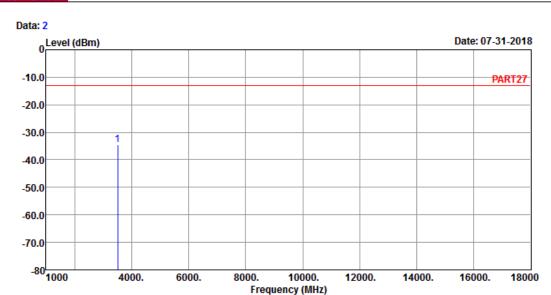
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB dB

1 pp 3505.00 -32.58 -25.13 -13.00 -19.58 -7.45 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_5M Link_H-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3505.00 -34.48 -27.03 -13.00 -21.48 -7.45 Peak

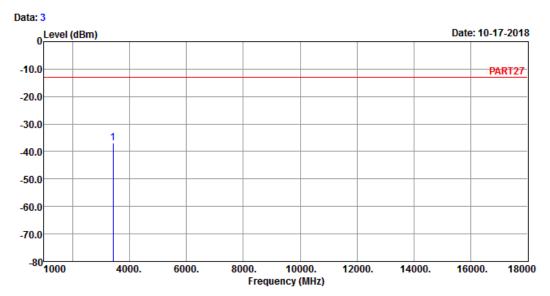


Channel Bandwidth: 10 MHz / QPSK

Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

mak : CAT M1 Band 4 QPSK_10M Link_L-CH

Tested by: Thomas Wei

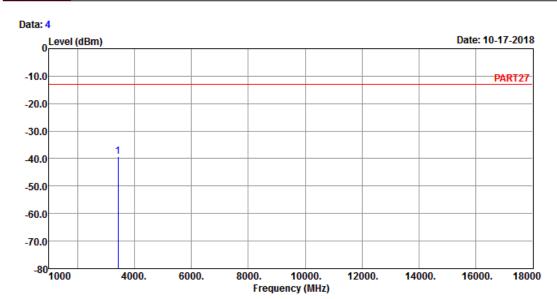
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3430.00 -36.95 -28.61 -13.00 -23.95 -8.34 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_10M Link_L-CH

Tested by: Thomas Wei

Read Limit Over Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

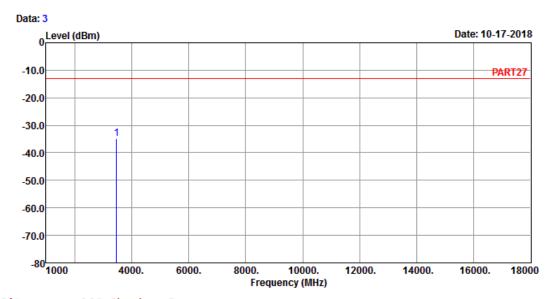
1 pp 3430.00 -39.25 -30.91 -13.00 -26.25 -8.34 Peak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_10M Link_M-CH

Tested by: Thomas Wei

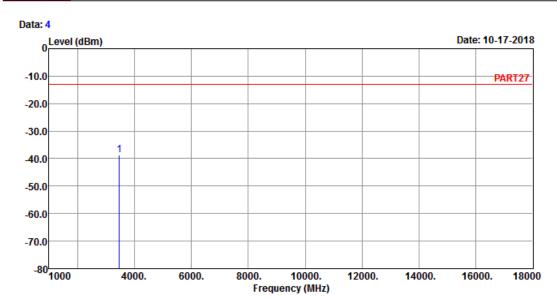
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3465.00 -34.85 -26.97 -13.00 -21.85 -7.88 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_10M Link_M-CH

Tested by: Thomas Wei

Read Limit Over Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

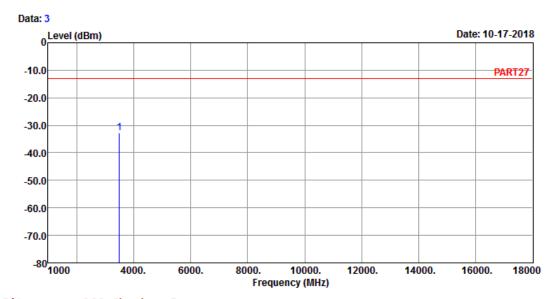
1 pp 3465.00 -38.62 -30.74 -13.00 -25.62 -7.88 Peak



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_10M Link_H-CH

Tested by: Thomas Wei

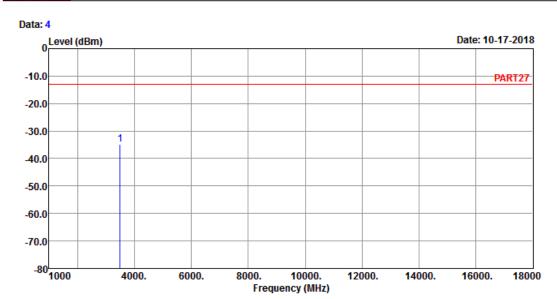
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3500.00 -32.85 -25.32 -13.00 -19.85 -7.53 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_10M Link_H-CH

Tested by: Thomas Wei

Read Limit Over Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

1 pp 3500.00 -34.98 -27.45 -13.00 -21.98 -7.53 Peak

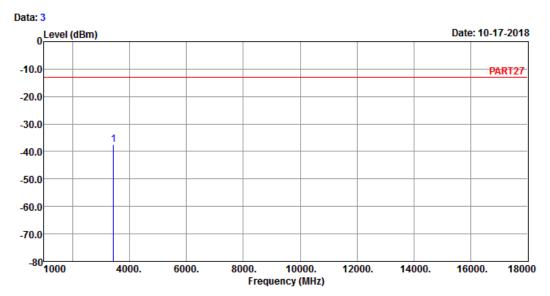


Channel Bandwidth: 15 MHz / QPSK

Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

emak : CAT M1 Band 4 QPSK_15M Link_L-CH

Tested by: Thomas Wei

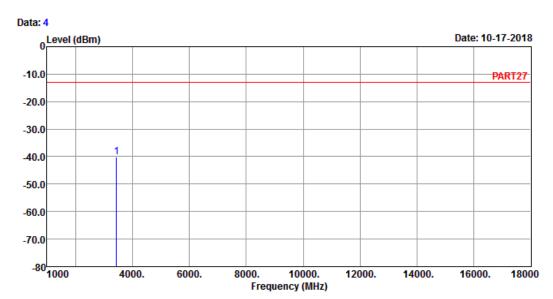
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3435.00 -37.52 -29.30 -13.00 -24.52 -8.22 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_15M Link_L-CH

Tested by: Thomas Wei

Read Limit Over Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

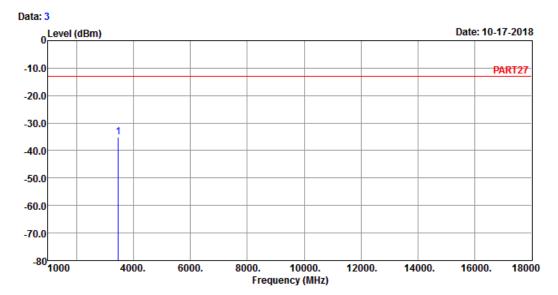
1 pp 3435.00 -40.01 -31.79 -13.00 -27.01 -8.22 Peak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_10M Link_M-CH

Tested by: Thomas Wei

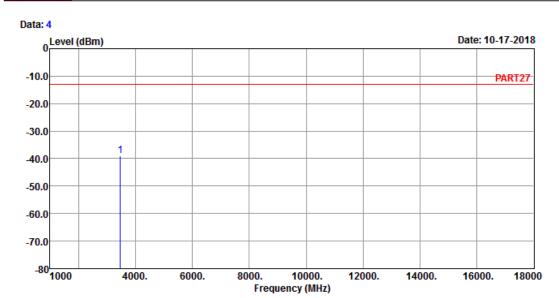
Read Limit Over Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

1 pp 3465.00 -35.25 -27.37 -13.00 -22.25 -7.88 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_10M Link_M-CH

Tested by: Thomas Wei

Read Limit Over

Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

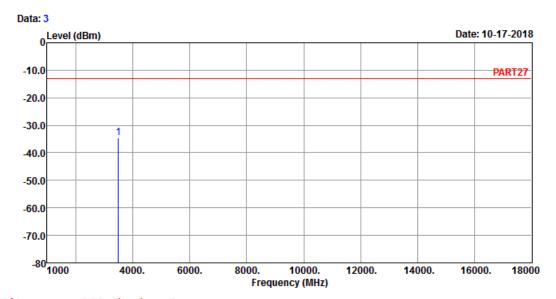
1 pp 3465.00 -39.01 -31.13 -13.00 -26.01 -7.88 Peak



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_15M Link_H-CH

Tested by: Thomas Wei

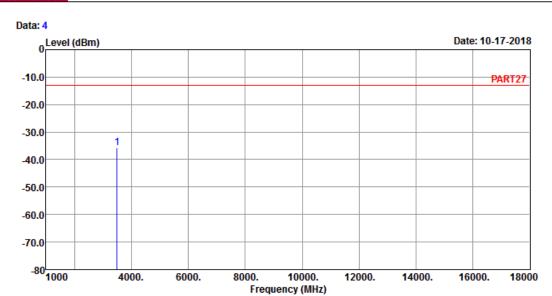
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB dB

1 pp 3495.00 -34.52 -26.99 -13.00 -21.52 -7.53 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_15M Link_H-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

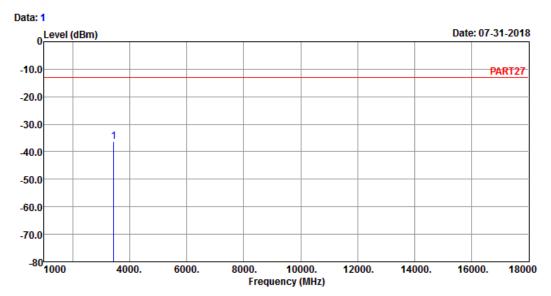
1 pp 3495.00 -35.62 -28.09 -13.00 -22.62 -7.53 Peak



Channel Bandwidth: 20 MHz / QPSK Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_20M Link_L-CH

Tested by: Thomas Wei

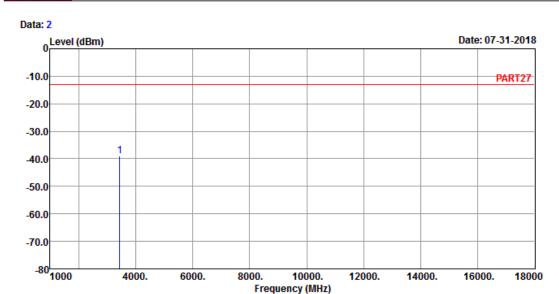
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3440.00 -36.30 -28.08 -13.00 -23.30 -8.22 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_20M Link_L-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

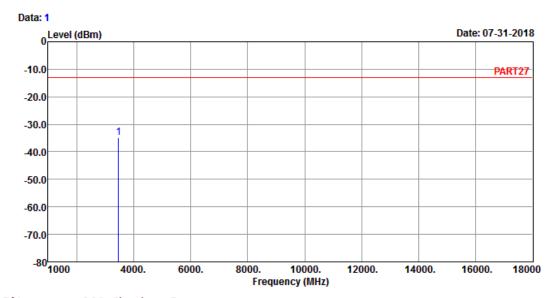
1 pp 3440.00 -38.99 -30.77 -13.00 -25.99 -8.22 Peak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_20M Link_M-CH

Tested by: Thomas Wei

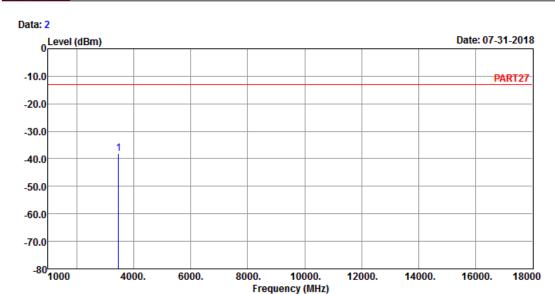
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3465.00 -34.78 -26.90 -13.00 -21.78 -7.88 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_20M Link_M-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

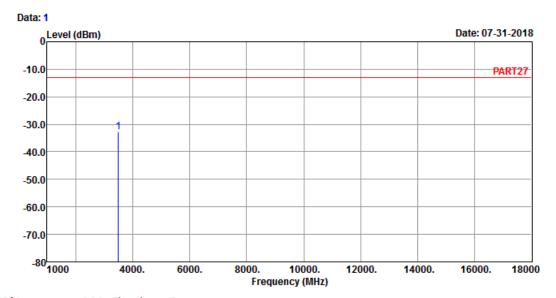
1 pp 3465.00 -38.08 -30.20 -13.00 -25.08 -7.88 Peak



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_20M Link_H-CH

Tested by: Thomas Wei

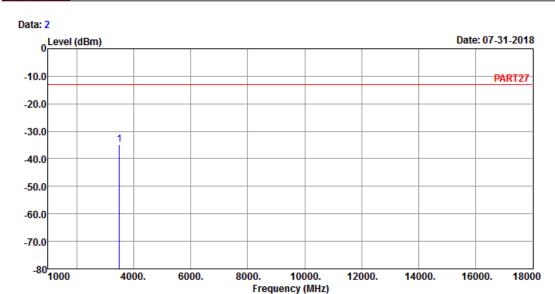
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3490.00 -32.68 -25.03 -13.00 -19.68 -7.65 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_20M Link_H-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 3490.00 -34.85 -27.20 -13.00 -21.85 -7.65 Peak



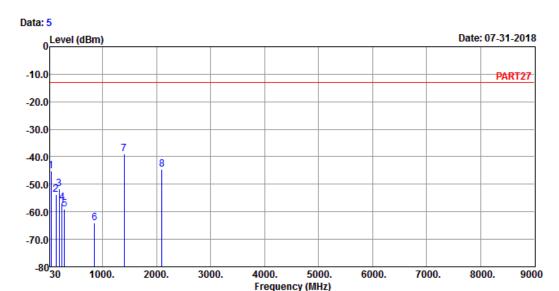
LTE Band 12

Channel Bandwidth: 1.4 MHz / QPSK

Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

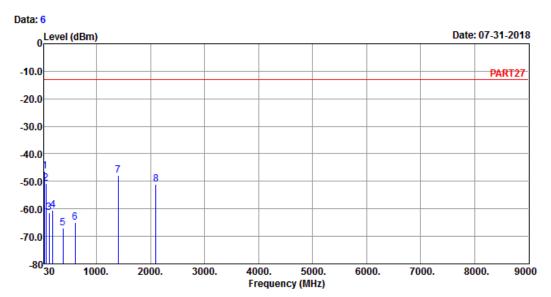
Remak : Cat-M1 Band 12 QPSK_1.4M Link_L-CH

Tested by: Thomas Wei

Read Limit 0ver Line Limit Factor Remark MHz dB dΒ dBm dBm dBm 1 44.55 -45.07 -43.08 -13.00 -32.07 -1.99 Peak 2 137.67 -53.83 -45.17 -13.00 -40.83 -8.66 Peak 3 193.93 -51.78 -44.32 -13.00 -38.78 -7.46 Peak 253.10 -56.59 -50.54 -13.00 -43.59 -6.05 Peak 296.75 -58.90 -51.95 -13.00 -45.90 -6.95 Peak 853.53 -64.10 -64.41 -13.00 -51.10 0.31 Peak 1399.40 -38.97 -27.12 -13.00 -25.97 -11.85 Peak 2099.10 -44.45 -34.29 -13.00 -31.45 -10.16 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_1.4M Link_L-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

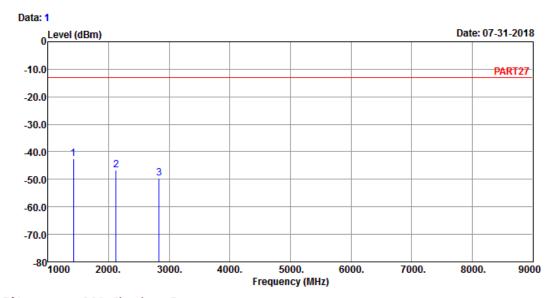
1 pp	42.61	-46.39	-45.45	-13.00	-33.39	-0.94 P	eak
2	59.10	-50.85	-43.45	-13.00	-37.85	-7.40 P	eak
3	122.15	-61.29	-51.67	-13.00	-48.29	-9.62 P	eak
4	189.08	-60.56	-53.44	-13.00	-47.56	-7.12 P	eak
5	376.29	-67.10	-61.02	-13.00	-54.10	-6.08 P	eak
6	601.33	-64.84	-64.08	-13.00	-51.84	-0.76 P	eak
7	1399.40	-47.70	-35.85	-13.00	-34.70	-11.85 P	eak
8	2099.10	-51.13	-40.97	-13.00	-38.13	-10.16 P	eak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_1.4M Link_M-CH

Tested by: Thomas Wei

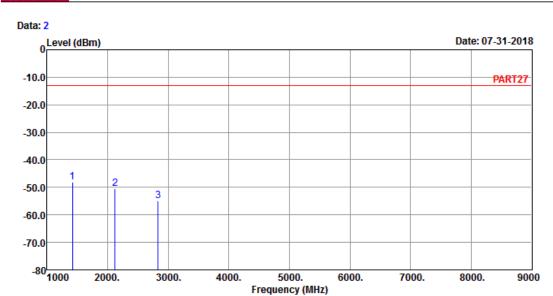
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 1415.00 -42.41 -30.33 -13.00 -29.41 -12.08 Peak 2 2122.50 -46.70 -36.83 -13.00 -33.70 -9.87 Peak 3 2830.00 -49.54 -41.06 -13.00 -36.54 -8.48 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_1.4M Link_M-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

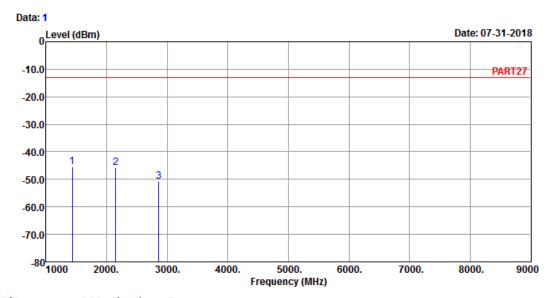
1 pp 1415.00 -48.11 -36.03 -13.00 -35.11 -12.08 Peak 2 2122.50 -50.38 -40.51 -13.00 -37.38 -9.87 Peak 3 2830.00 -54.91 -46.43 -13.00 -41.91 -8.48 Peak



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_1.4M Link_H-CH

Tested by: Thomas Wei

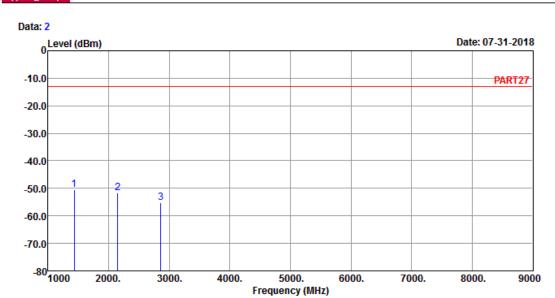
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 1430.60 -45.53 -33.22 -13.00 -32.53 -12.31 Peak 2 2145.90 -45.83 -36.36 -13.00 -32.83 -9.47 Peak 3 2861.20 -50.68 -42.25 -13.00 -37.68 -8.43 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_1.4M Link_H-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB dB

1 pp 1430.60 -50.61 -38.30 -13.00 -37.61 -12.31 Peak 2 2145.90 -51.59 -42.12 -13.00 -38.59 -9.47 Peak 3 2861.20 -55.09 -46.66 -13.00 -42.09 -8.43 Peak

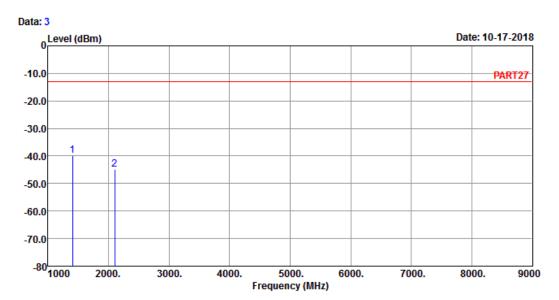


Channel Bandwidth: 3 MHz / QPSK

Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_3M Link_L-CH

Tested by: Thomas Wei

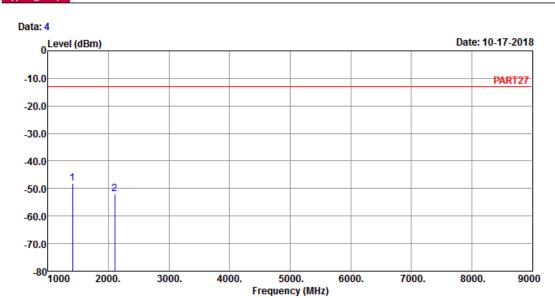
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB dB

1 pp 1401.00 -39.99 -28.08 -13.00 -26.99 -11.91 Peak 2 2101.50 -44.85 -34.69 -13.00 -31.85 -10.16 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_3M Link_L-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

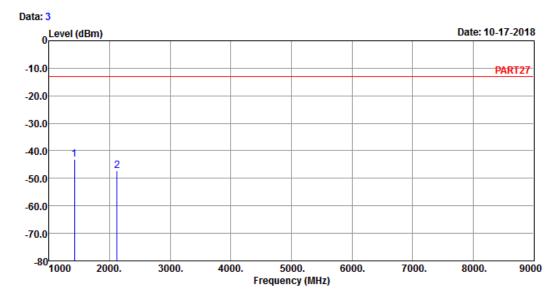
1 pp 1401.00 -48.23 -36.32 -13.00 -35.23 -11.91 Peak 2 2101.50 -51.85 -41.69 -13.00 -38.85 -10.16 Peak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_3M Link_M-CH

Tested by: Thomas Wei

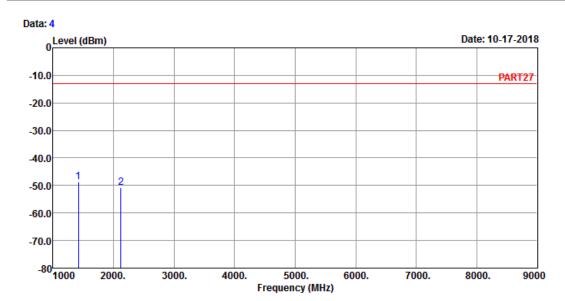
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB dB

1 pp 1415.00 -42.98 -30.90 -13.00 -29.98 -12.08 Peak 2 2122.50 -47.23 -37.36 -13.00 -34.23 -9.87 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_3M Link_M-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

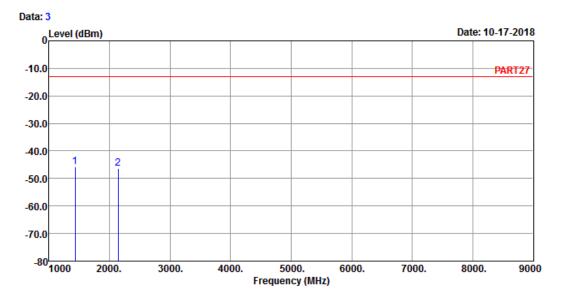
1 pp 1415.00 -48.85 -36.77 -13.00 -35.85 -12.08 Peak 2 2122.50 -50.79 -40.92 -13.00 -37.79 -9.87 Peak



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_3M Link_H-CH

Tested by: Thomas Wei

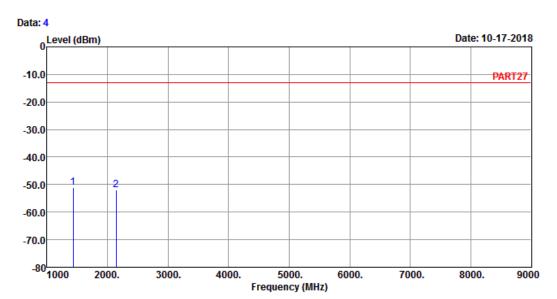
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 1429.00 -45.85 -33.60 -13.00 -32.85 -12.25 Peak 2 2143.50 -46.23 -36.76 -13.00 -33.23 -9.47 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_3M Link_H-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

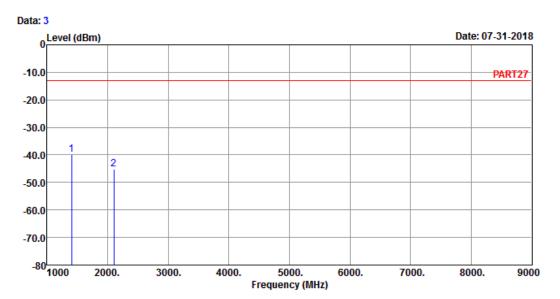
1 pp 1429.00 -50.98 -38.73 -13.00 -37.98 -12.25 Peak 2 2143.50 -51.85 -42.38 -13.00 -38.85 -9.47 Peak



Channel Bandwidth: 5 MHz / QPSK Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_5M Link_L-CH

Tested by: Thomas Wei

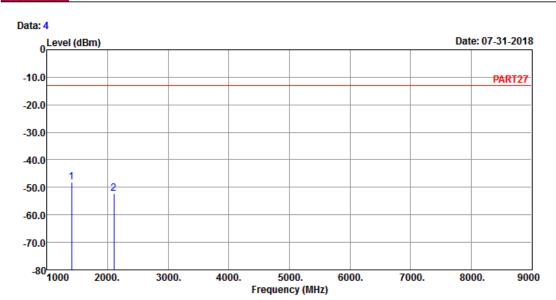
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB dB

1 pp 1403.00 -39.85 -27.94 -13.00 -26.85 -11.91 Peak 2 2104.50 -45.12 -34.96 -13.00 -32.12 -10.16 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_5M Link_L-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

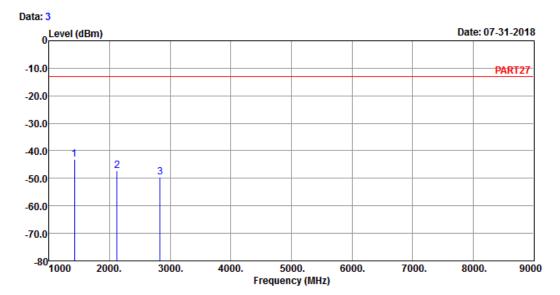
1 pp 1403.00 -48.21 -36.30 -13.00 -35.21 -11.91 Peak 2 2104.50 -52.13 -41.97 -13.00 -39.13 -10.16 Peak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_5M Link_M-CH

Tested by: Thomas Wei

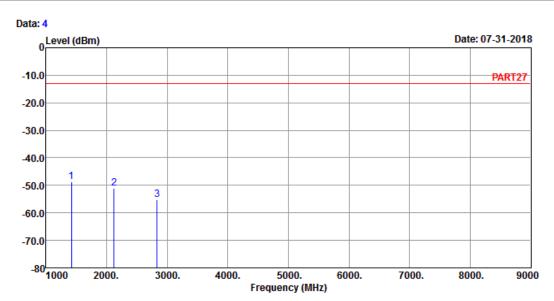
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 1415.00 -42.98 -30.90 -13.00 -29.98 -12.08 Peak 2 2122.50 -47.12 -37.25 -13.00 -34.12 -9.87 Peak 3 2830.00 -49.52 -41.04 -13.00 -36.52 -8.48 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_5M Link_M-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

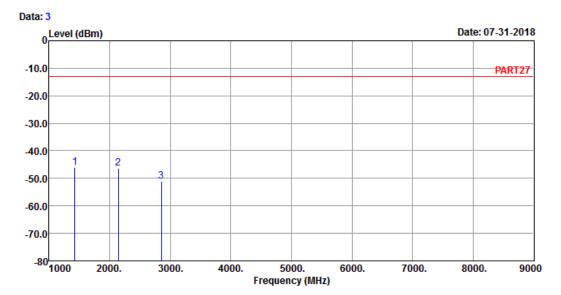
1 pp 1415.00 -48.85 -36.77 -13.00 -35.85 -12.08 Peak 2 2122.50 -51.01 -41.14 -13.00 -38.01 -9.87 Peak 3 2830.00 -55.23 -46.75 -13.00 -42.23 -8.48 Peak



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_5M Link_H-CH

Tested by: Thomas Wei

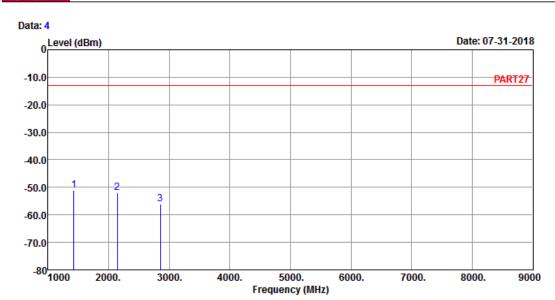
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 1427.00 -45.98 -33.73 -13.00 -32.98 -12.25 Peak 2 2140.50 -46.21 -36.64 -13.00 -33.21 -9.57 Peak 3 2854.00 -51.11 -42.67 -13.00 -38.11 -8.44 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_5M Link_H-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 1427.00 -51.13 -38.88 -13.00 -38.13 -12.25 Peak 2 2140.50 -51.98 -42.41 -13.00 -38.98 -9.57 Peak 3 2854.00 -56.12 -47.68 -13.00 -43.12 -8.44 Peak

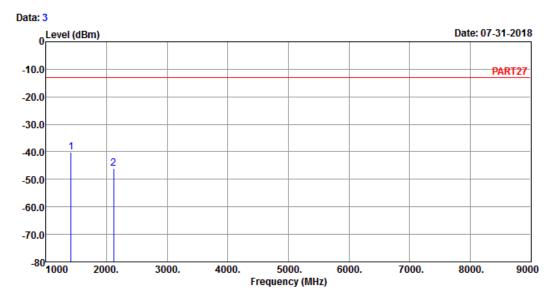


Channel Bandwidth: 10 MHz / QPSK

Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

emak : Cat-M1 Band 12 QPSK_10M Link_L-CH

Tested by: Thomas Wei

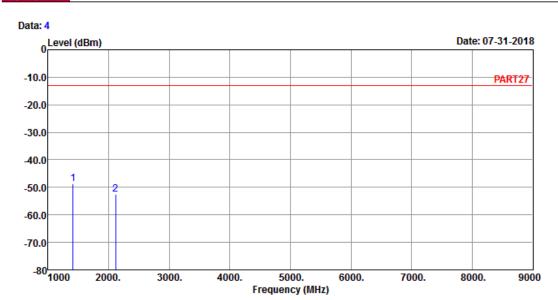
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 1408.00 -40.12 -28.16 -13.00 -27.12 -11.96 Peak 2 2112.00 -45.98 -36.02 -13.00 -32.98 -9.96 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_10M Link_L-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

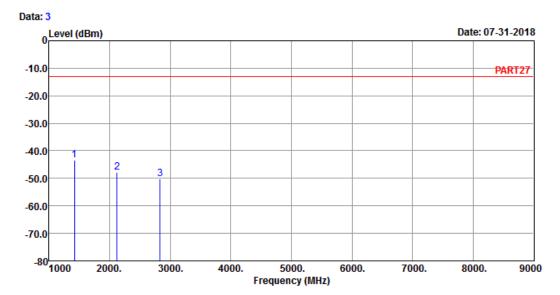
1 pp 1408.00 -48.65 -36.69 -13.00 -35.65 -11.96 Peak 2 2112.00 -52.65 -42.69 -13.00 -39.65 -9.96 Peak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_10M Link_M-CH

Tested by: Thomas Wei

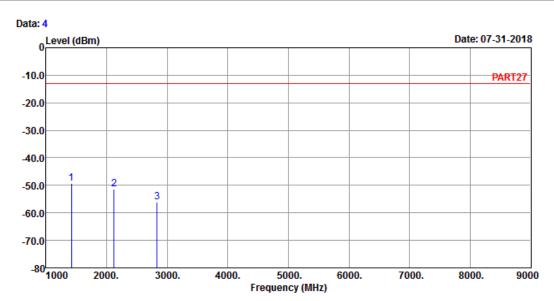
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 1415.00 -43.52 -31.44 -13.00 -30.52 -12.08 Peak 2 2122.50 -47.85 -37.98 -13.00 -34.85 -9.87 Peak 3 2830.00 -50.23 -41.75 -13.00 -37.23 -8.48 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_10M Link_M-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

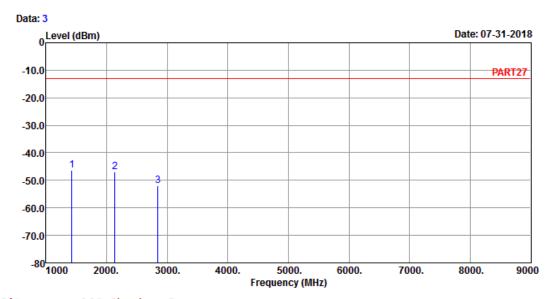
1 pp 1415.00 -49.21 -37.13 -13.00 -36.21 -12.08 Peak 2 2122.50 -51.36 -41.49 -13.00 -38.36 -9.87 Peak 3 2830.00 -55.98 -47.50 -13.00 -42.98 -8.48 Peak



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_10M Link_H-CH

Tested by: Thomas Wei

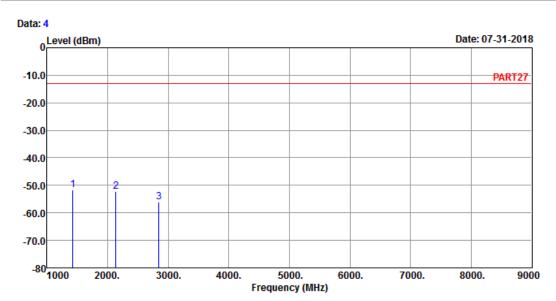
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 1422.00 -46.25 -34.06 -13.00 -33.25 -12.19 Peak 2 2133.00 -46.98 -37.31 -13.00 -33.98 -9.67 Peak 3 2844.00 -51.85 -43.39 -13.00 -38.85 -8.46 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_10M Link_H-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 1422.00 -51.65 -39.46 -13.00 -38.65 -12.19 Peak 2 2133.00 -52.25 -42.58 -13.00 -39.25 -9.67 Peak 3 2844.00 -56.21 -47.75 -13.00 -43.21 -8.46 Peak



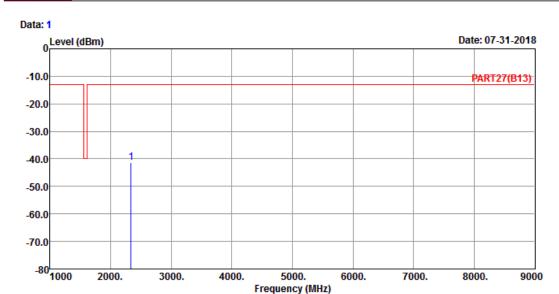
LTE Band 13

Channel Bandwidth: 5 MHz / QPSK

Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART27(B13) HORIZONTAL

Remak : CAT M1 Band 13 QPSK_5M Link_L-CH

Tested by: Thomas Wei

Read Limit Over

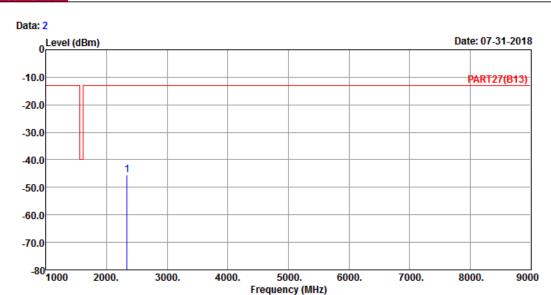
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

1 pp 2338.50 -41.44 -32.06 -13.00 -28.44 -9.38 Peak







Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

Remak : CAT M1 Band 13 QPSK_5M Link_L-CH

Tested by: Thomas Wei

Read Limit Over Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

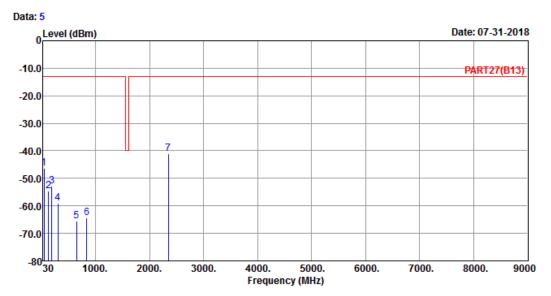
1 pp 2338.50 -45.38 -36.00 -13.00 -32.38 -9.38 Peak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART27(B13) HORIZONTAL

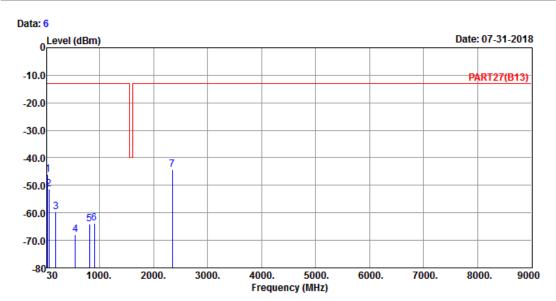
Remak : CAT M1 Band 13 QPSK_5M Link_M-CH

Tested by: Thomas Wei

0ver Read Limit Line Limit Factor Remark Freq Level Level MHz dBm dBm dBm 44.55 -46.27 -44.28 -13.00 -33.27 -1.99 Peak 2 127.97 -54.65 -45.73 -13.00 -41.65 -8.92 Peak 187.14 -52.76 -45.58 -13.00 -39.76 -7.18 Peak 3 303.54 -58.91 -51.96 -13.00 -45.91 -6.95 Peak 645.95 -65.58 -64.71 -13.00 -52.58 -0.87 Peak 833.16 -64.42 -64.86 -13.00 -51.42 0.44 Peak 7 pp 2346.00 -40.91 -31.47 -13.00 -27.91 -9.44 Peak







Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

Remak : CAT M1 Band 13 QPSK_5M Link_M-CH

Tested by: Thomas Wei

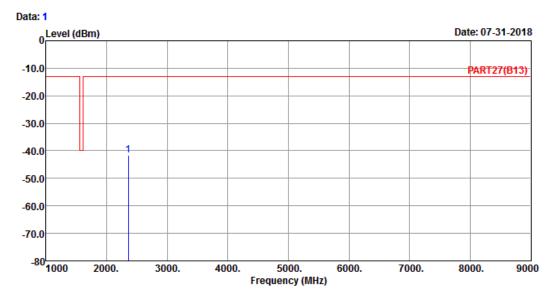
			Read	Limit	0ver		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	42.61	-46.20	-45.26	-13.00	-33.20	-0.94	Peak
2	61.04	-51.38	-43.64	-13.00	-38.38	-7.74	Peak
3	188.11	-59.78	-52.63	-13.00	-46.78	-7.15	Peak
4	547.98	-67.87	-64.95	-13.00	-54.87	-2.92	Peak
5	813.76	-64.17	-64.78	-13.00	-51.17	0.61	Peak
6	902.03	-63.89	-64.51	-13.00	-50.89	0.62	Peak
7 pp	2346.00	-44.40	-34.96	-13.00	-31.40	-9.44	Peak



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART27(B13) HORIZONTAL

Remak : CAT M1 Band 13 QPSK_5M Link_H-CH

Tested by: Thomas Wei

Read Limit Over

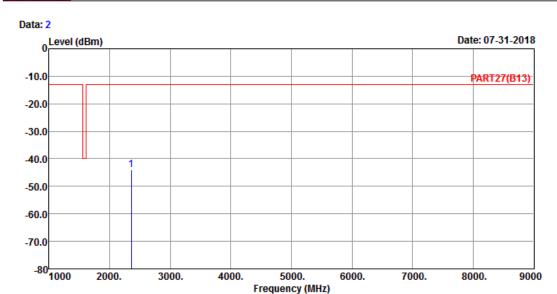
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB dB

1 pp 2353.50 -41.48 -31.97 -13.00 -28.48 -9.51 Peak







Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

Remak : CAT M1 Band 13 QPSK_5M Link_H-CH

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

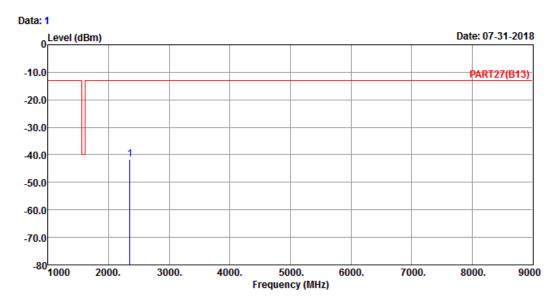
1 pp 2353.50 -43.86 -34.35 -13.00 -30.86 -9.51 Peak



Channel Bandwidth: 10 MHz / QPSK Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART27(B13) HORIZONTAL

Remak : Cat-M1 Band 13 QPSK_10M Link_M-CH

Tested by: Thomas Wei

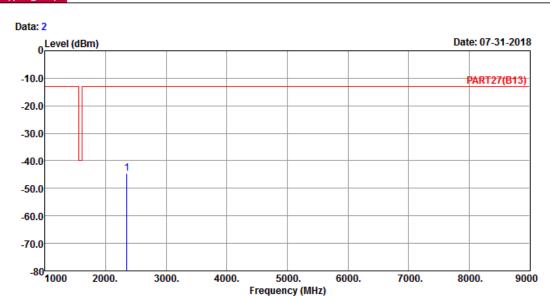
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 2346.00 -41.59 -32.15 -13.00 -28.59 -9.44 Peak







Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

Remak : Cat-M1 Band 13 QPSK_10M Link_M-CH

Tested by: Thomas Wei

Read Limit Over

Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB dB

1 pp 2346.00 -44.72 -35.28 -13.00 -31.72 -9.44 Peak

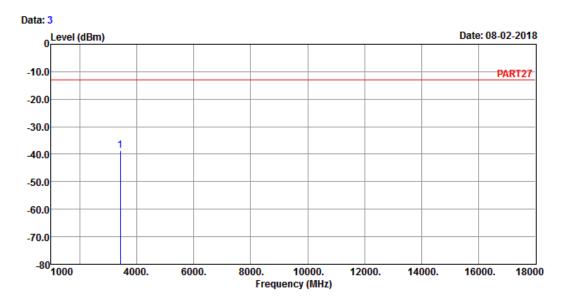


NB-IOT

LTE Band 4 Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : NB-IOT Band 4 Stand-alone_Link_L-Ch

Tested by: Jisyong Wang

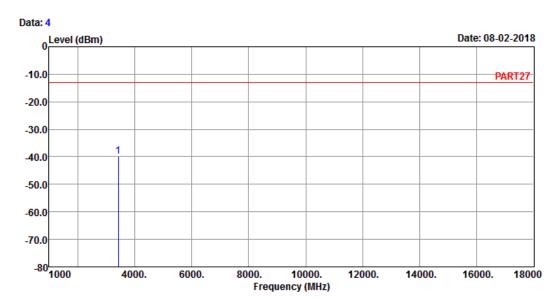
Read Limit Over Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

1 pp 3420.20 -38.65 -30.20 -13.00 -25.65 -8.45 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : NB-IOT Band 4 Stand-alone_Link_L-Ch

Tested by: Jisyong Wang

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

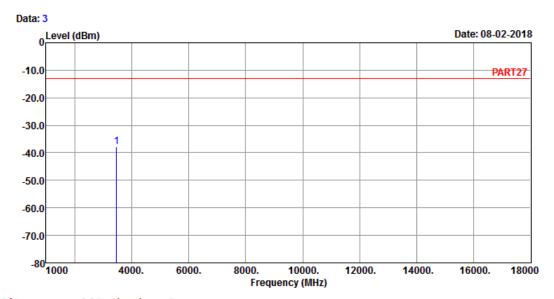
1 pp 3420.20 -39.85 -31.40 -13.00 -26.85 -8.45 Peak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : NB-IOT Band 4 Stand-alone_Link_M-Ch

Tested by: Jisyong Wang

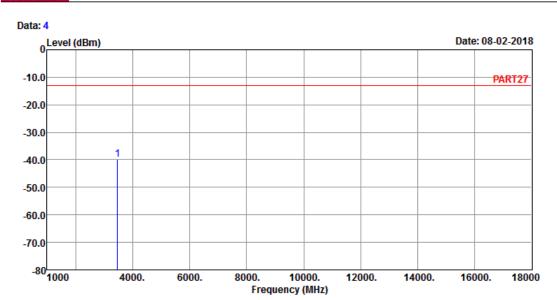
Read Limit Over Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

1 pp 3465.00 -37.65 -29.77 -13.00 -24.65 -7.88 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : NB-IOT Band 4 Stand-alone_Link_M-Ch

Tested by: Jisyong Wang

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

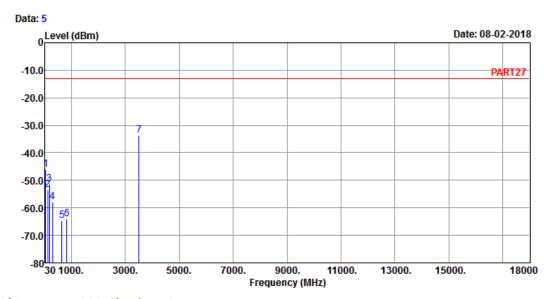
1 pp 3465.00 -39.99 -32.11 -13.00 -26.99 -7.88 Peak



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

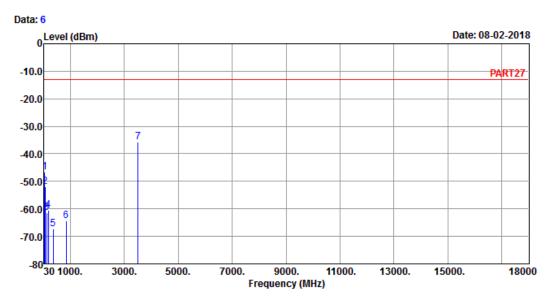
Remak : NB-IOT Band 4 Stand-alone_Link_H-Ch

Tested by: Jisyong Wang

Read Limit 0ver Line Limit Factor Remark Freq Level Level MHz dBm dBm dBm 44.55 -45.94 -43.95 -13.00 -32.94 -1.99 Peak 2 128.94 -53.45 -44.64 -13.00 -40.45 -8.81 Peak 188.11 -51.30 -44.15 -13.00 -38.30 -7.15 Peak 3 298.69 -57.86 -50.87 -13.00 -44.86 -6.99 Peak 652.74 -64.51 -63.67 -13.00 -51.51 -0.84 Peak 826.37 -64.06 -64.56 -13.00 -51.06 0.50 Peak 7 pp 3509.80 -33.52 -26.07 -13.00 -20.52 -7.45 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : NB-IOT Band 4 Stand-alone_Link_H-Ch

Tested by: Jisyong Wang

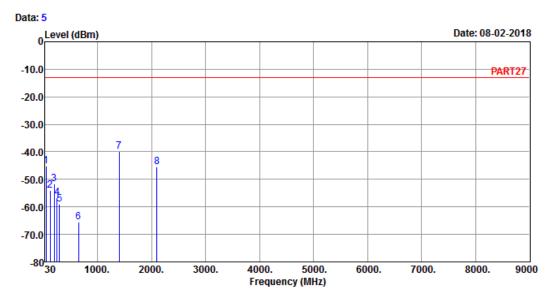
			Read	Limit	0ver		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	43.58	-46.51	-45.04	-13.00	-33.51	-1.47	Peak
2	60.07	-52.09	-44.43	-13.00	-39.09	-7.66	Peak
3	122.15	-61.42	-51.80	-13.00	-48.42	-9.62	Peak
4	190.05	-60.53	-53.44	-13.00	-47.53	-7.09	Peak
5	362.71	-67.39	-61.23	-13.00	-54.39	-6.16	Peak
6	842.86	-64.40	-64.75	-13.00	-51.40	0.35	Peak
7 pp	3509.80	-35.65	-28.20	-13.00	-22.65	-7.45	Peak



LTE Band 12 Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

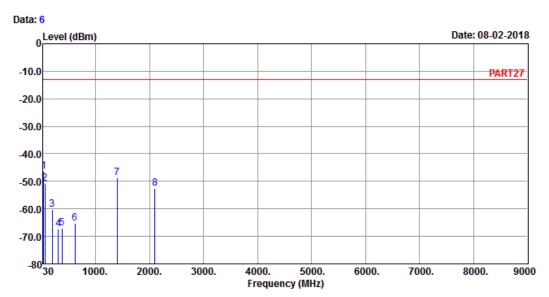
Remak : NB-IOT Band 12 Stand-alone_Link_L-Ch

Tested by: Jisyong Wang

0ver Read Limit Line Limit Factor Remark Freq Level Level MHz dBm dBm dBm dB dB 44.55 -45.07 -43.08 -13.00 -32.07 -1.99 Peak 123.12 -53.98 -44.48 -13.00 -40.98 -9.50 Peak 3 193.93 -51.78 -44.32 -13.00 -38.78 -7.46 Peak 4 253.10 -56.59 -50.54 -13.00 -43.59 -6.05 Peak 5 296.75 -58.90 -51.95 -13.00 -45.90 -6.95 Peak 6 646.92 -65.39 -64.51 -13.00 -52.39 -0.88 Peak 7 pp 1398.20 -39.99 -28.14 -13.00 -26.99 -11.85 Peak 2097.30 -45.52 -35.27 -13.00 -32.52 -10.25 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : NB-IOT Band 12 Stand-alone_Link_L-Ch

Tested by: Jisyong Wang

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

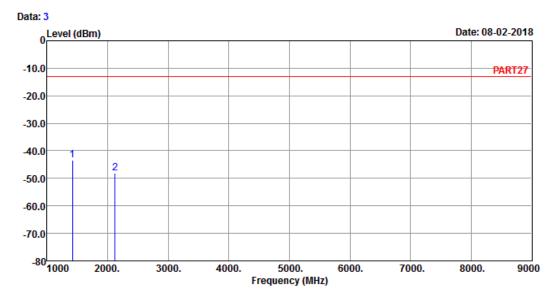
1 pp	42.61	-46.39	-45.45	-13.00	-33.39	-0.94	Peak
2	59.10	-50.85	-43.45	-13.00	-37.85	-7.40	Peak
3	193.93	-60.22	-52.76	-13.00	-47.22	-7.46	Peak
4	307.42	-67.18	-60.29	-13.00	-54.18	-6.89	Peak
5	376.29	-67.10	-61.02	-13.00	-54.10	-6.08	Peak
6	618.79	-65.34	-64.54	-13.00	-52.34	-0.80	Peak
7	1398.20	-48.62	-36.77	-13.00	-35.62	-11.85	Peak
8	2097.30	-52.69	-42.44	-13.00	-39.69	-10.25	Peak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : NB-IOT Band 12 Stand-alone_Link_M-Ch

Tested by: Jisyong Wang

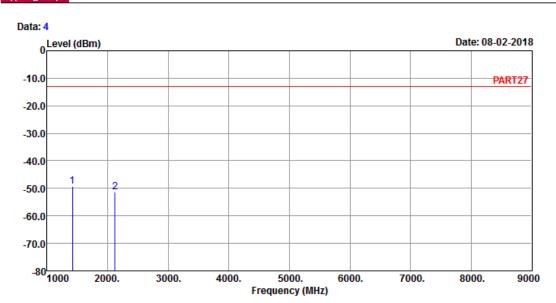
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 1415.00 -43.52 -31.44 -13.00 -30.52 -12.08 Peak 2 2122.50 -47.99 -38.12 -13.00 -34.99 -9.87 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : NB-IOT Band 12 Stand-alone_Link_M-Ch

Tested by: Jisyong Wang

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

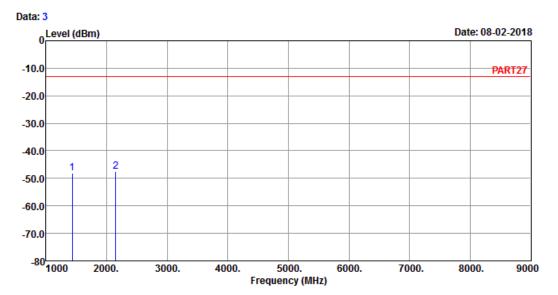
1 pp 1415.00 -49.25 -37.17 -13.00 -36.25 -12.08 Peak 2 2122.50 -51.26 -41.39 -13.00 -38.26 -9.87 Peak



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition: PART27 HORIZONTAL

Remak : NB-IOT Band 12 Stand-alone_Link_H-Ch

Tested by: Jisyong Wang

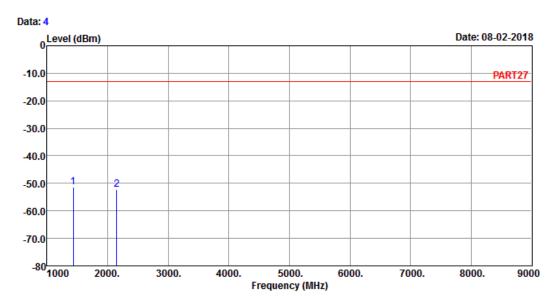
Read Limit Over Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB

1 1431.80 -48.25 -35.94 -13.00 -35.25 -12.31 Peak 2 pp 2147.70 -47.62 -38.15 -13.00 -34.62 -9.47 Peak







Site : 966 Chamber 5 Condition: PART27 VERTICAL

Remak : NB-IOT Band 12 Stand-alone_Link_H-Ch

Tested by: Jisyong Wang

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

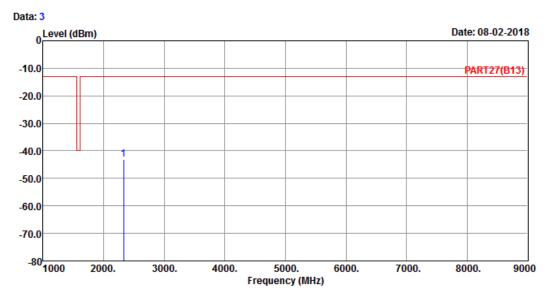
1 pp 1431.80 -51.25 -38.94 -13.00 -38.25 -12.31 Peak 2 2147.70 -52.36 -42.89 -13.00 -39.36 -9.47 Peak



LTE Band 13 Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART27(B13) HORIZONTAL

Remak : NB-IOT Band 13 Stand-alone_Link_L-Ch

Tested by: Thomas Wei

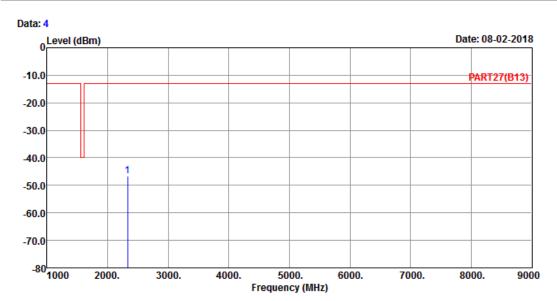
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dB dB dB

1 pp 2331.30 -43.02 -33.70 -13.00 -30.02 -9.32 Peak







Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

Remak : NB-IOT Band 13 Stand-alone_Link_L-Ch

Tested by: Thomas Wei

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

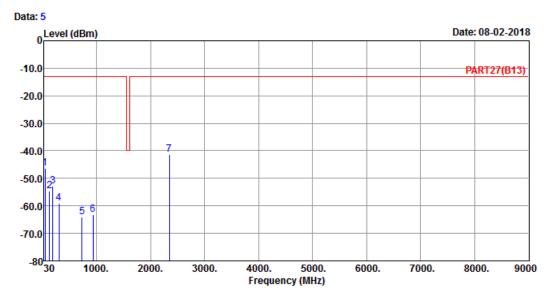
1 pp 2331.30 -46.52 -37.20 -13.00 -33.52 -9.32 Peak



Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



: 966 Chamber 5

Condition: PART27(B13) HORIZONTAL

: NB-IOT Band 13 Stand-alone_Link_M-Ch

Tested by: Jisyong Wang

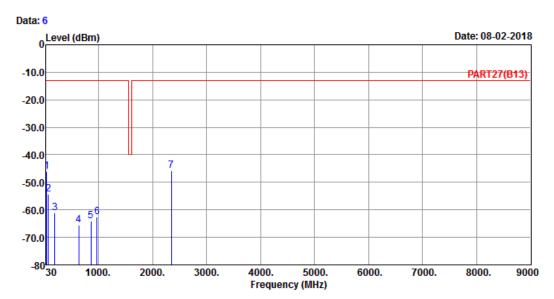
2

3

0ver Read Limit Line Limit Factor Remark Freq Level Level MHz dBm dBm dBm 44.55 -46.27 -44.28 -13.00 -33.27 -1.99 Peak 127.97 -54.65 -45.73 -13.00 -41.65 -8.92 Peak 187.14 -52.76 -45.58 -13.00 -39.76 -7.18 Peak 303.54 -58.91 -51.96 -13.00 -45.91 -6.95 Peak 731.31 -63.98 -64.50 -13.00 -50.98 0.52 Peak 933.07 -63.18 -64.57 -13.00 -50.18 1.39 Peak 7 pp 2346.00 -41.25 -31.81 -13.00 -28.25 -9.44 Peak







Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

Remak : NB-IOT Band 13 Stand-alone_Link_M-Ch

Tested by: Jisyong Wang

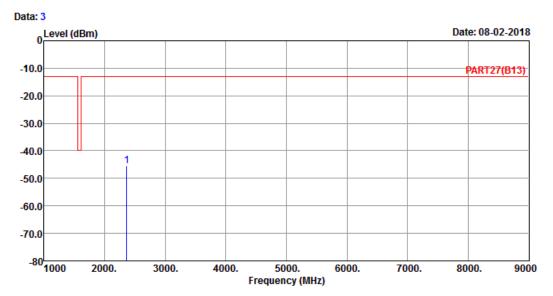
	Freq	Level		Limit Line		Factor	Remark	
	MHz	dBm	dBm	dBm	dB	dB		
1	42.61	-46.20	-45.26	-13.00	-33.20	-0.94	Peak	
2	68.80	-54.26	-45.94	-13.00	-41.26	-8.32	Peak	
3	191.99	-61.11	-53.83	-13.00	-48.11	-7.28	Peak	
4	630.43	-65.53	-64.70	-13.00	-52.53	-0.83	Peak	
5	862.26	-64.03	-64.39	-13.00	-51.03	0.36	Peak	
6	967.99	-62.57	-65.02	-13.00	-49.57	2.45	Peak	
7 r	p 2346.00	-45.65	-36.21	-13.00	-32.65	-9.44	Peak	



High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART27(B13) HORIZONTAL

Remak : NB-IOT Band 13 Stand-alone_Link_H-Ch

Tested by: Jisyong Wang

Read Limit Over

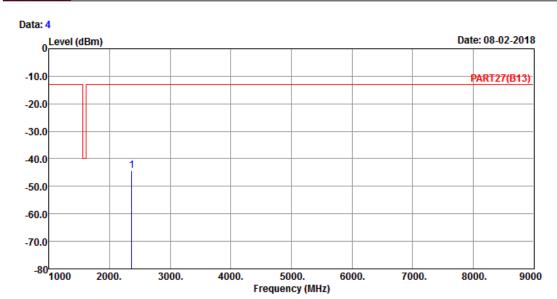
Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 2360.70 -45.36 -35.79 -13.00 -32.36 -9.57 Peak







Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

Remak : NB-IOT Band 13 Stand-alone_Link_H-Ch

Tested by: Jisyong Wang

Read Limit Over

Freq Level Level Line Limit Factor Remark

MHz dBm dBm dBm dB dB

1 pp 2360.70 -44.26 -34.69 -13.00 -31.26 -9.57 Peak



5 Pictures of Test Arrangements						
Please refer to the attached file (Test Setup Photo).						



Appendix - Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-2-26052180 Fax: 886-2-26051924 Tel: 886-3-6668565 Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety

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Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

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