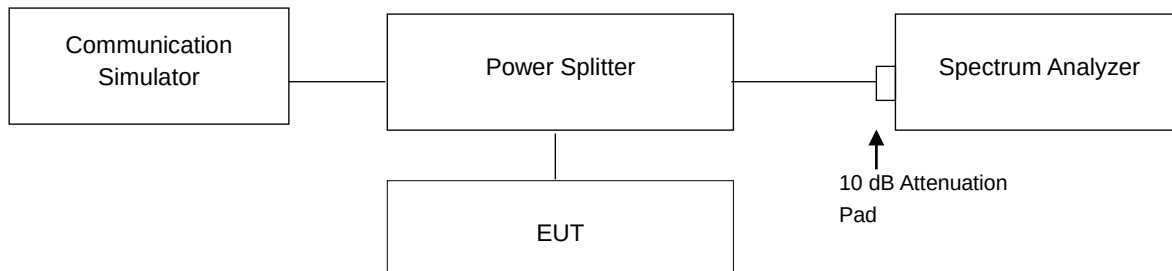


4.6 Peak to Average Ratio

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



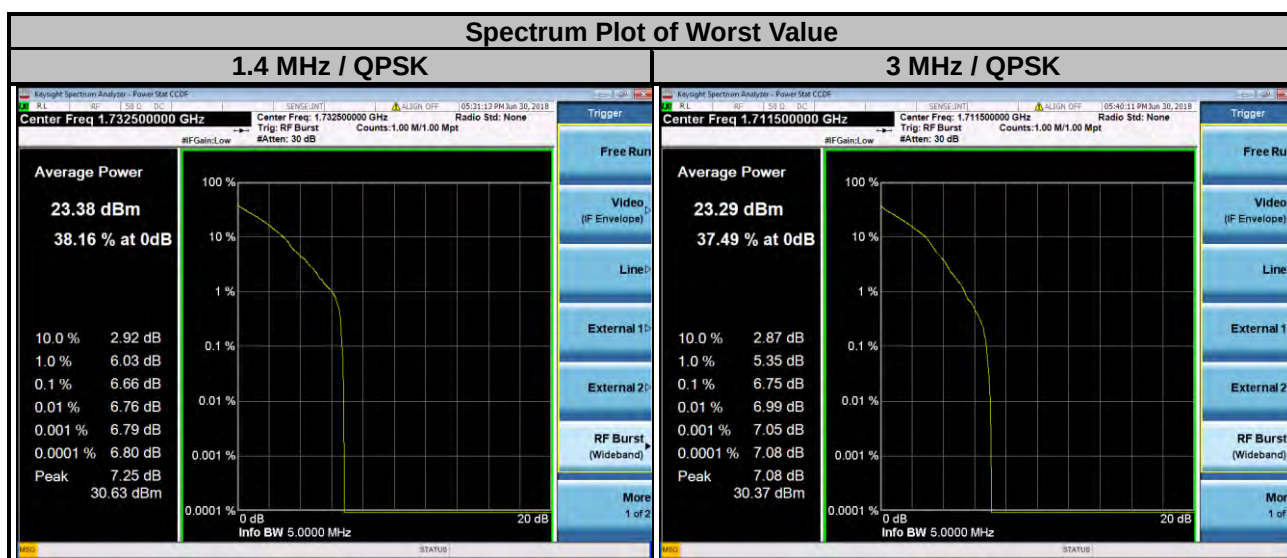
4.6.3 Test Procedures

1. Set resolution/measurement bandwidth $\geq$ 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 %.

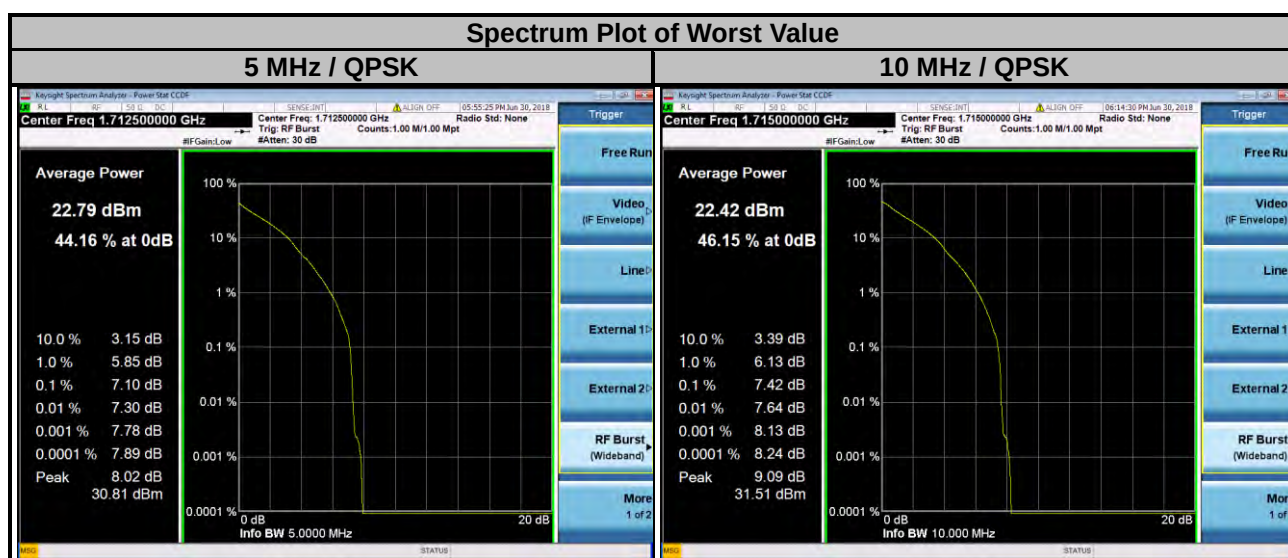
4.6.4 Test Results

Cat-M1

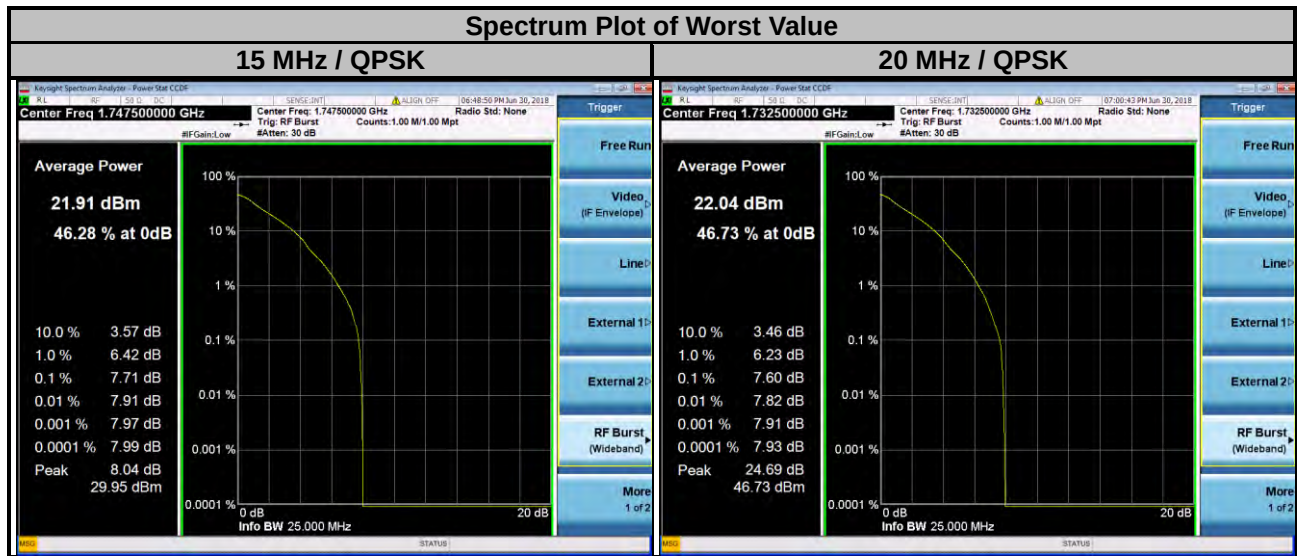
LTE Band 4							
Channel Bandwidth: 1.4 MHz				Channel Bandwidth: 3 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
19957	1710.7	6.25	6.62	19965	1711.5	6.75	6.69
20175	1732.5	6.66	6.58	20175	1732.5	6.75	6.63
20393	1754.3	6.50	6.49	20385	1753.5	6.63	6.59



LTE Band 4							
Channel Bandwidth: 5 MHz				Channel Bandwidth: 10 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
19975	1712.5	7.10	6.98	20000	1715.0	7.42	7.37
20175	1732.5	6.69	6.88	20175	1732.5	7.12	6.74
20375	1752.5	6.74	6.54	20350	1750.0	7.05	6.94



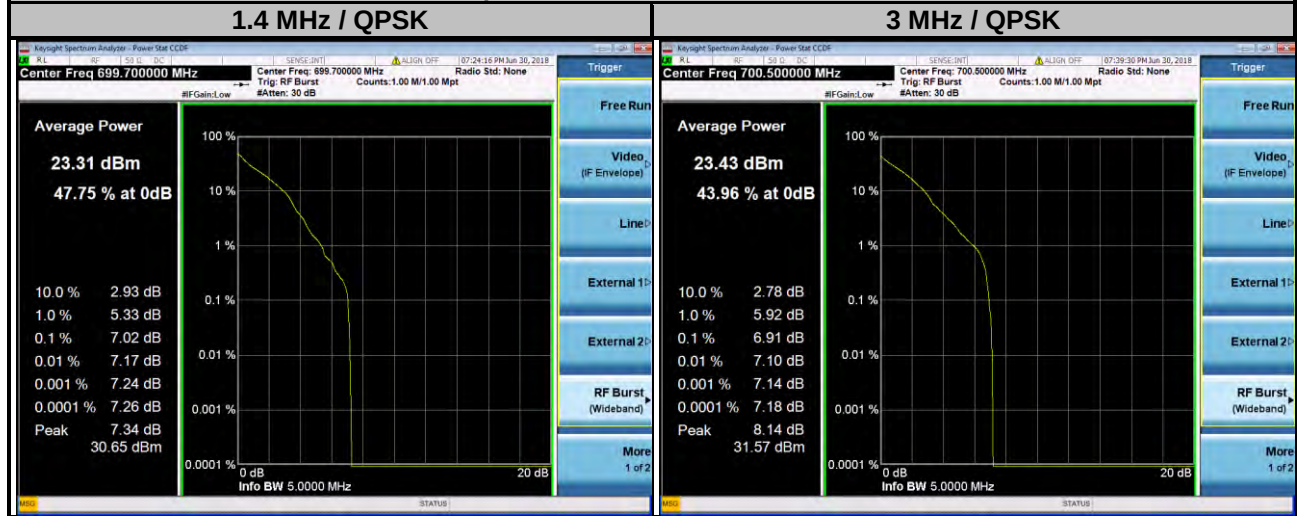
LTE Band 4							
Channel Bandwidth: 15 MHz				Channel Bandwidth: 20 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
20025	1717.5	7.37	7.09	20050	1720.0	7.26	6.85
20175	1732.5	7.16	7.10	20175	1732.5	7.60	7.44
20325	1747.5	7.71	7.42	20300	1745.0	6.97	7.02



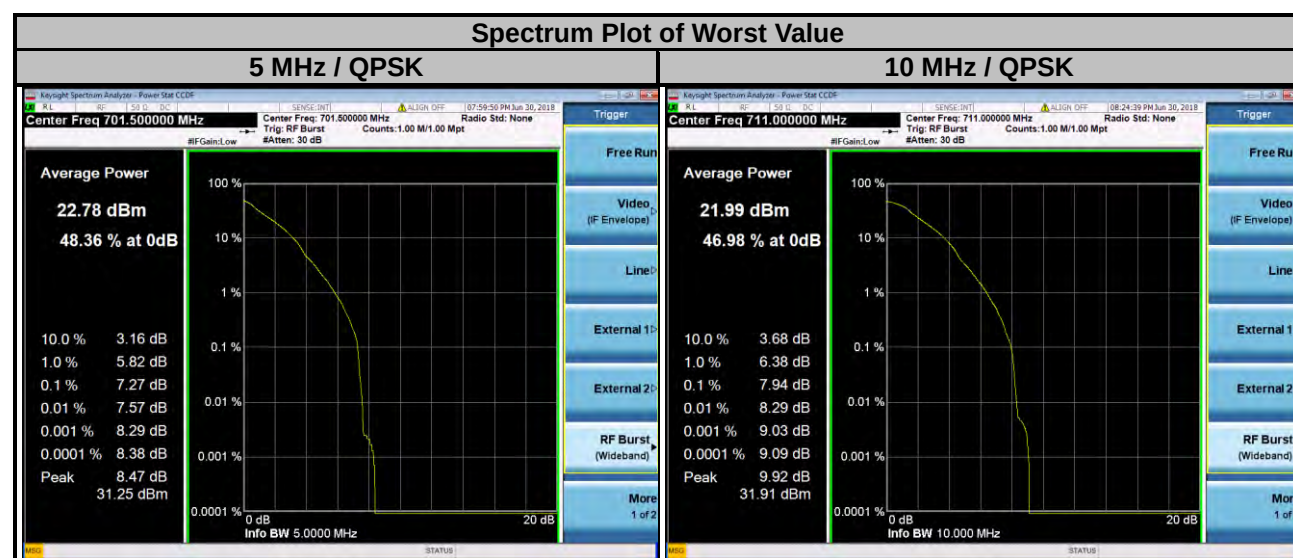
LTE Band 12

Channel Bandwidth: 1.4 MHz				Channel Bandwidth: 3 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
23017	699.7	7.02	6.30	23025	700.5	6.91	6.33
23095	707.5	6.77	6.30	23095	707.5	6.70	6.32
23173	715.3	6.72	6.26	23165	714.5	6.84	6.28

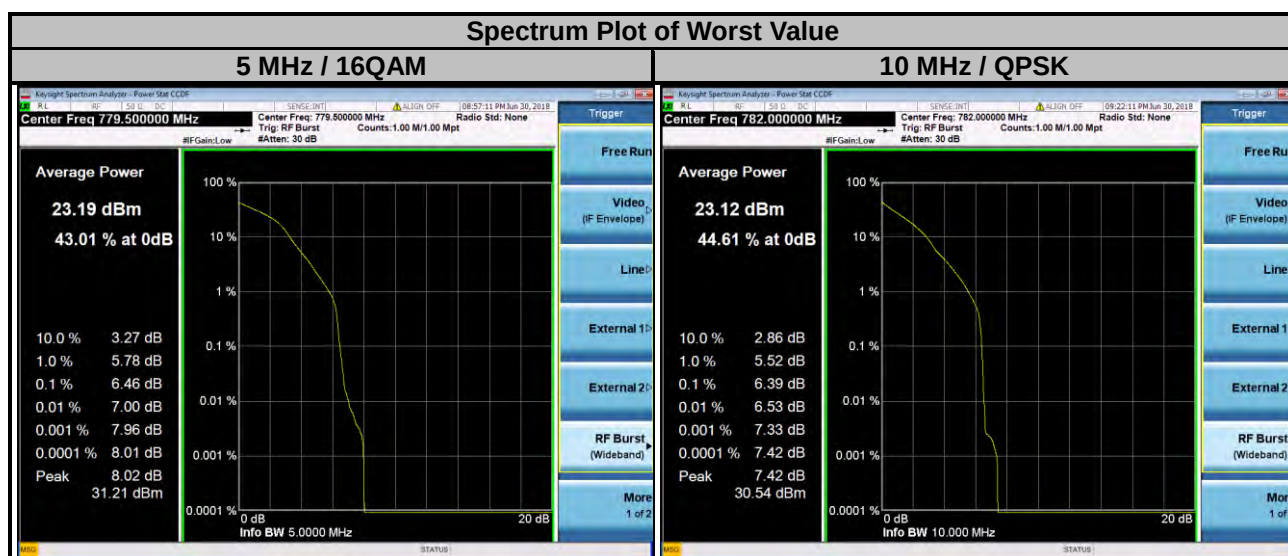
Spectrum Plot of Worst Value



LTE Band 12							
Channel Bandwidth: 5 MHz				Channel Bandwidth: 10 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
23035	701.5	7.27	7.07	23060	704.0	7.59	7.21
23095	707.5	7.05	7.05	23095	707.5	7.09	7.31
23155	713.5	6.47	7.06	23130	711.0	7.94	7.09



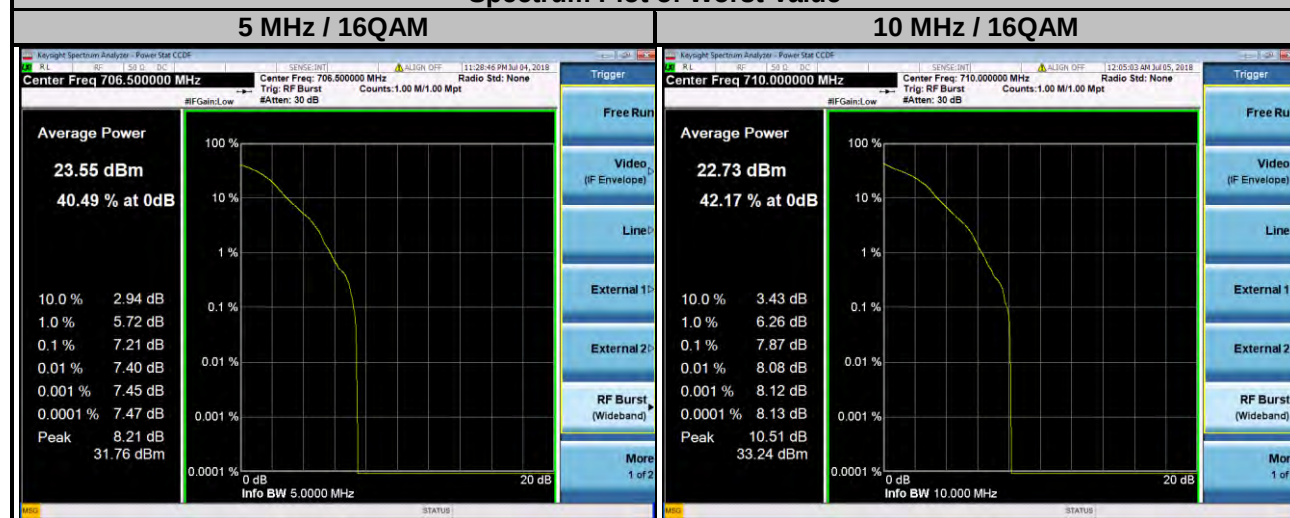
LTE Band 13							
Channel Bandwidth: 5 MHz				Channel Bandwidth: 10 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
23205	779.5	6.29	6.46	23230	782.0	6.39	6.32
23230	782.0	6.27	6.33				
23255	784.5	6.10	6.41				



LTE Band 17

Channel Bandwidth: 5 MHz				Channel Bandwidth: 10 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
23755	706.5	6.82	7.21	23780	709.0	6.68	7.18
23790	710.0	6.43	7.14	23790	710.0	6.81	7.87
23825	713.5	6.73	7.12	23800	711.0	6.47	7.12

Spectrum Plot of Worst Value



LTE Band 66

Channel Bandwidth: 1.4 MHz

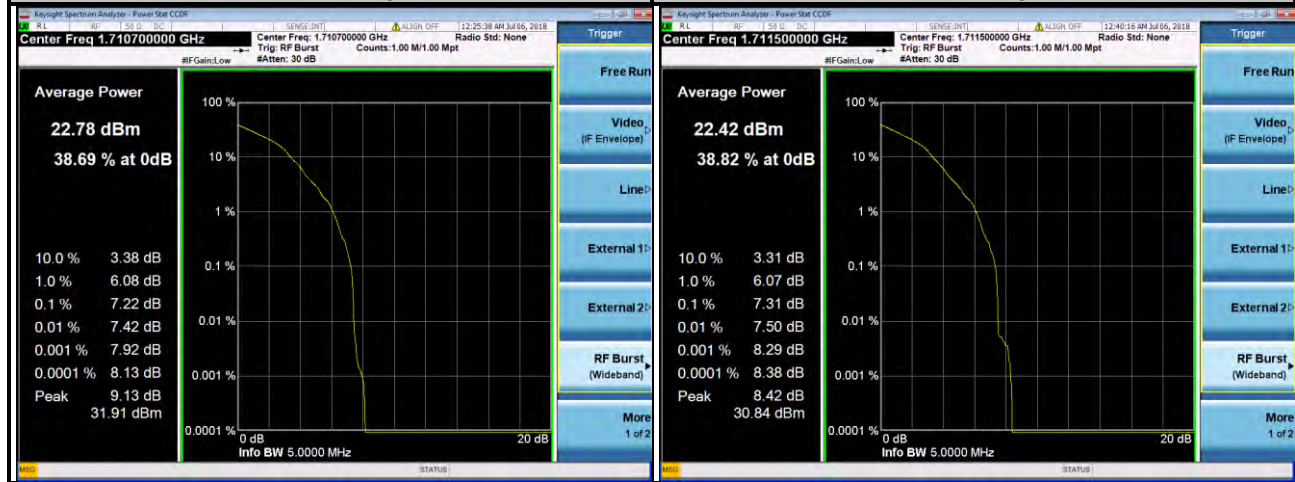
Channel Bandwidth: 3 MHz

Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
131979	1710.7	6.20	7.22	131987	1711.5	6.28	7.31
132322	1745.0	6.01	7.00	132322	1745.0	6.09	7.17
132665	1779.3	5.80	6.78	132657	1778.5	5.87	7.08

Spectrum Plot of Worst Value

1.4 MHz / 16QAM

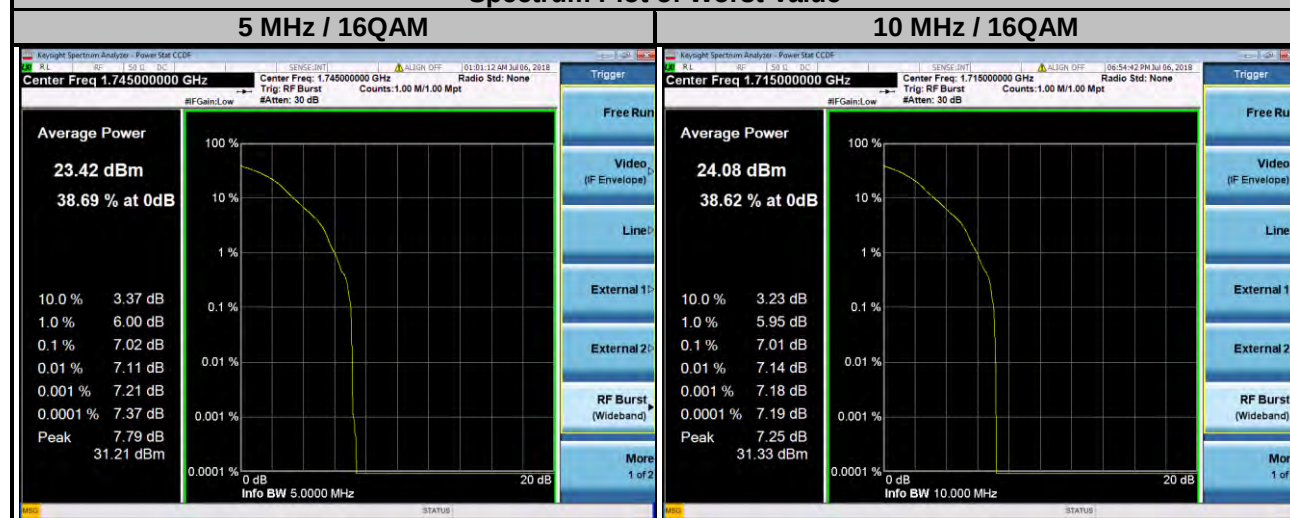
3 MHz / 16QAM



LTE Band 66

Channel Bandwidth: 5 MHz				Channel Bandwidth: 10 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
131997	1712.5	6.69	6.95	132022	1715.0	6.57	7.01
132322	1745.0	6.84	7.02	132322	1745.0	6.55	6.46
132647	1777.5	6.16	6.60	132622	1775.0	6.25	6.70

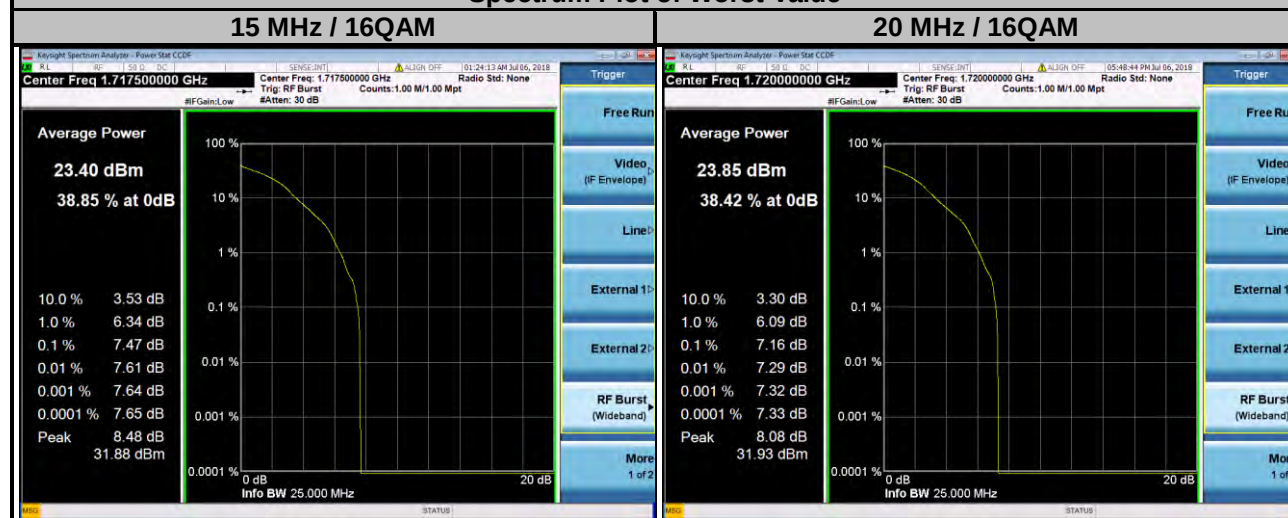
Spectrum Plot of Worst Value



LTE Band 66

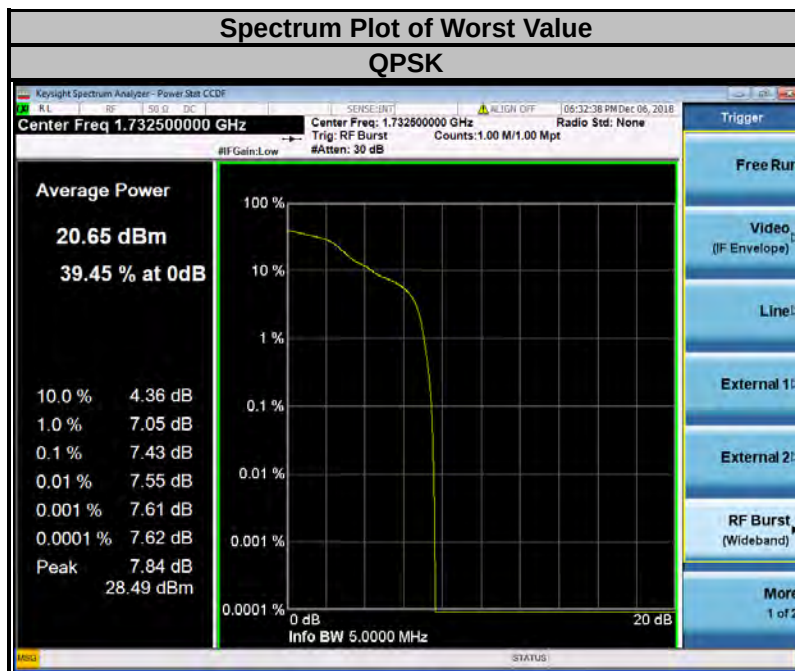
Channel Bandwidth: 15 MHz				Channel Bandwidth: 20 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
132047	1717.5	7.37	7.47	132072	1720.0	6.50	7.16
132322	1745.0	6.49	7.12	132322	1745.0	6.39	6.80
132597	1772.5	6.29	6.62	132572	1770.0	6.27	6.45

Spectrum Plot of Worst Value

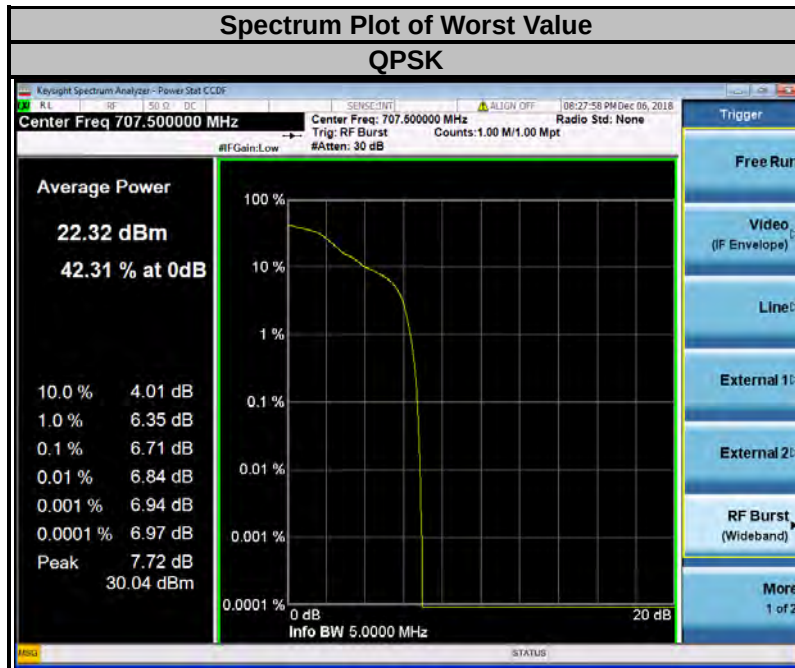


NB-IoT

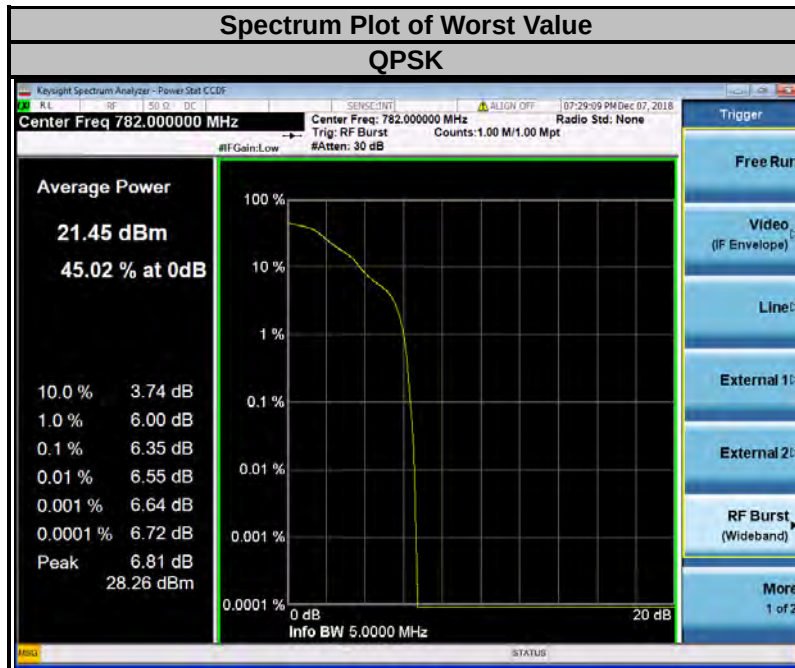
LTE Band 4					
Channel	Frequency (MHz)	Modulation	N _{tones}	Sub-carrier Spacing (kHz)	PAPR (dB)
20175	1732.5	BPSK	1@0	3.75	1.92
20175	1732.5	QPSK	1@0	15	4.33
20175	1732.5	QPSK	3@3	15	7.43



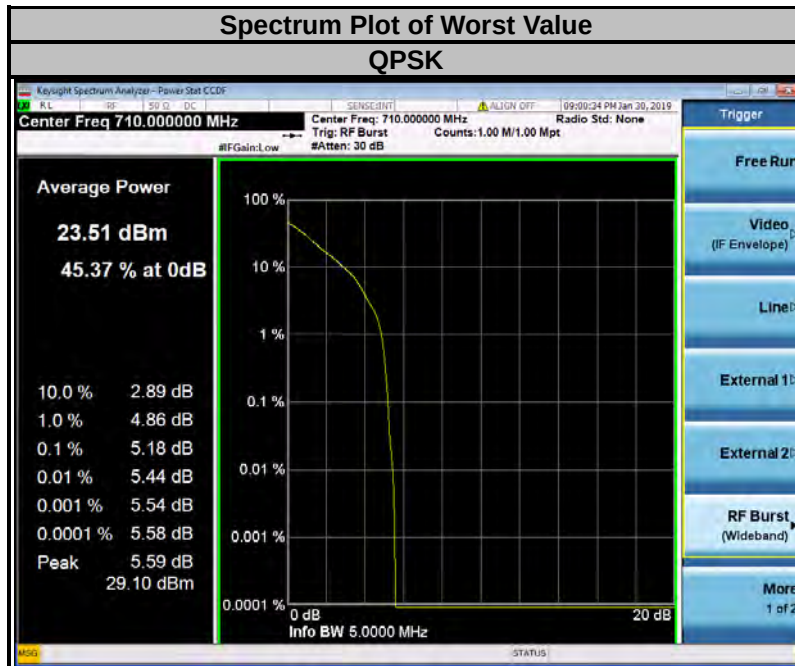
LTE Band 12					
Channel	Frequency (MHz)	Modulation	N _{tones}	Sub-carrier Spacing (kHz)	PAPR (dB)
23095	707.5	BPSK	1@0	3.75	1.74
23095	707.5	QPSK	1@0	15	3.92
23095	707.5	QPSK	3@3	15	6.71



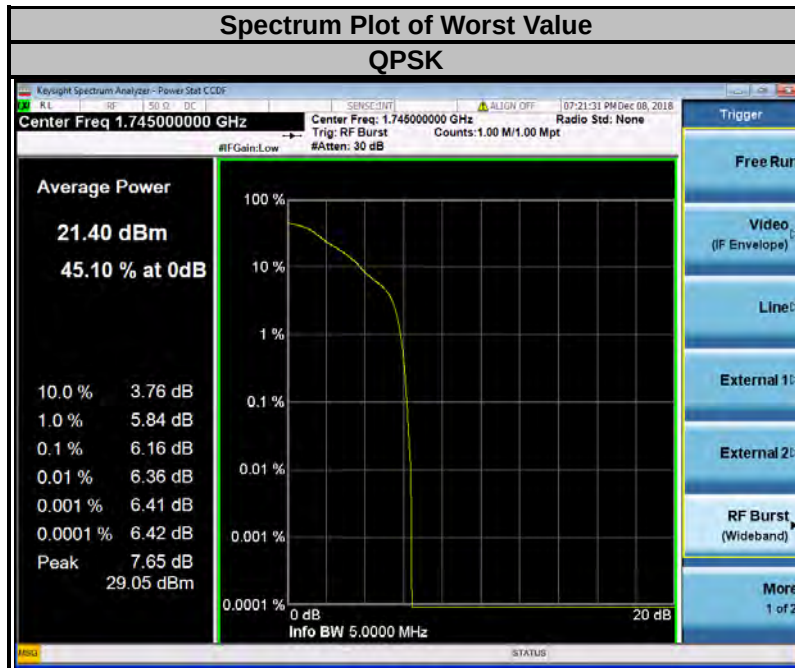
LTE Band 13					
Channel	Frequency (MHz)	Modulation	N _{tones}	Sub-carrier Spacing (kHz)	PAPR (dB)
23230	782	BPSK	1@0	3.75	1.59
23230	782	QPSK	1@0	15	2.71
23230	782	QPSK	3@3	15	6.35



LTE Band 17					
Channel	Frequency (MHz)	Modulation	N _{tones}	Sub-carrier Spacing (kHz)	PAPR (dB)
23731	704.1	BPSK	1@0	3.75	2.75
23790	710	QPSK	1@0	15	3.12
23849	715.9	QPSK	3@3	15	5.18



LTE Band 66					
Channel	Frequency (MHz)	Modulation	N _{tones}	Sub-carrier Spacing (kHz)	PAPR (dB)
132322	1745	BPSK	1@0	3.75	1.92
132322	1745	QPSK	1@0	15	4.42
132322	1745	QPSK	3@3	15	6.16



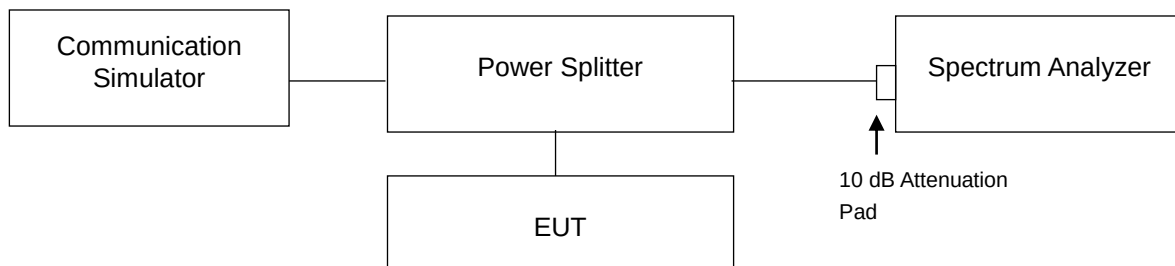
4.7 Conducted Spurious Emissions

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.

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.

4.7.2 Test Setup

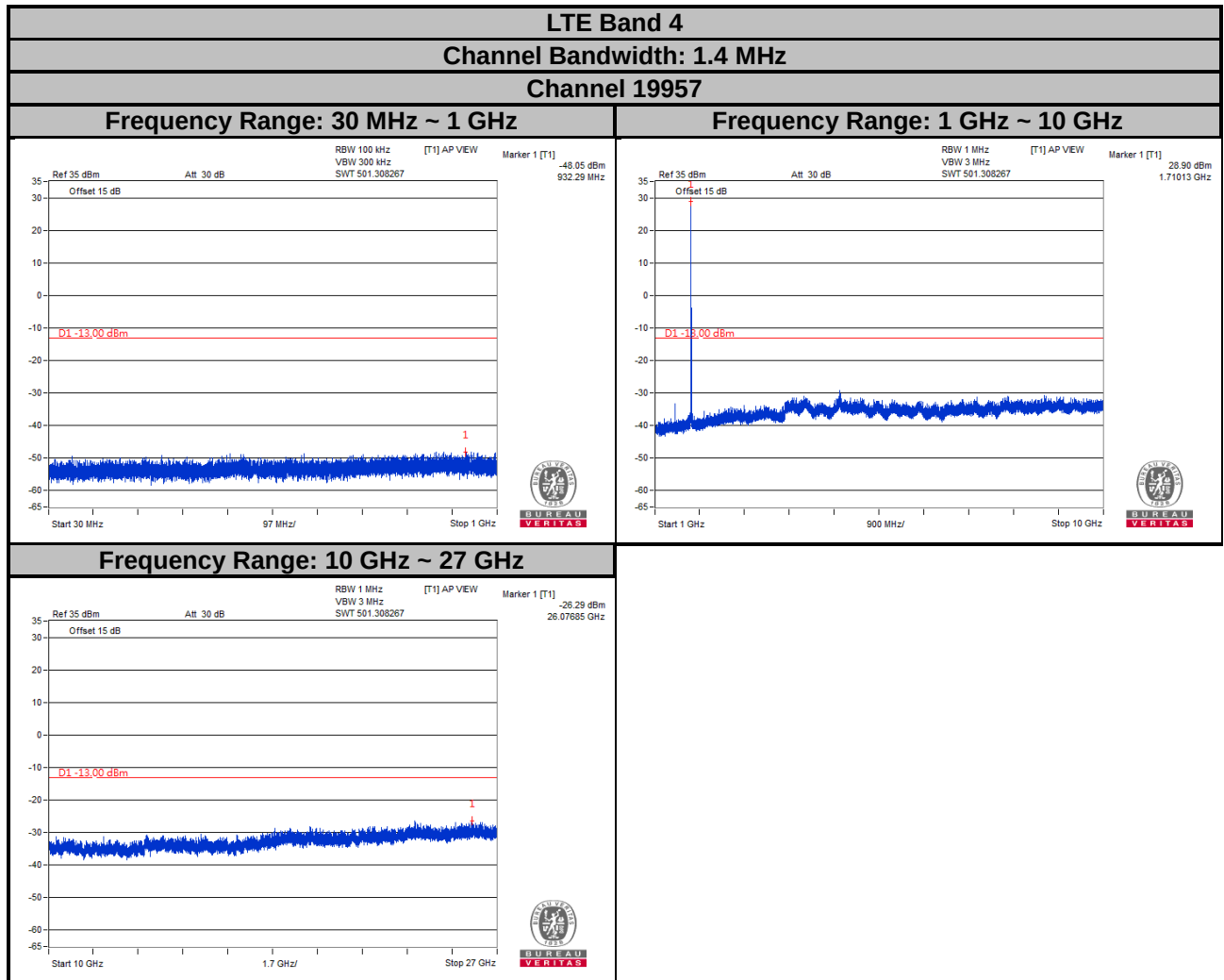


4.7.3 Test Procedure

- The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- Measuring frequency range is from 9 kHz to 1 GHz. 10 dB attenuation pad is connected with spectrum. RBW = 100 kHz and VBW = 300 kHz is used for conducted emission measurement.
- Measuring frequency range is from 1 GHz to 8 GHz / 18 GHz / 27 GHz. 10 dB attenuation pad is connected with spectrum. RBW = 1 MHz and VBW = 3 MHz is used for conducted emission measurement.

4.7.4 Test Results

Cat-M1



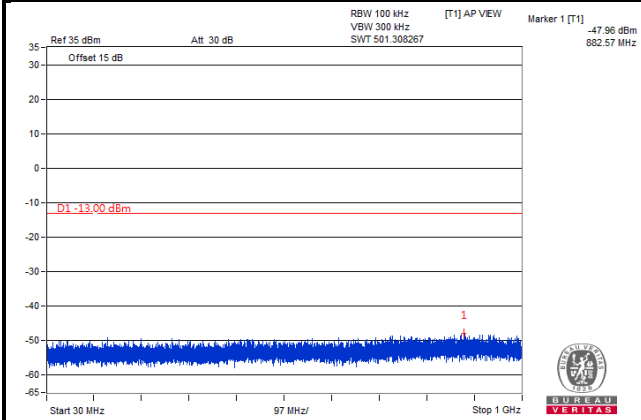
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 4

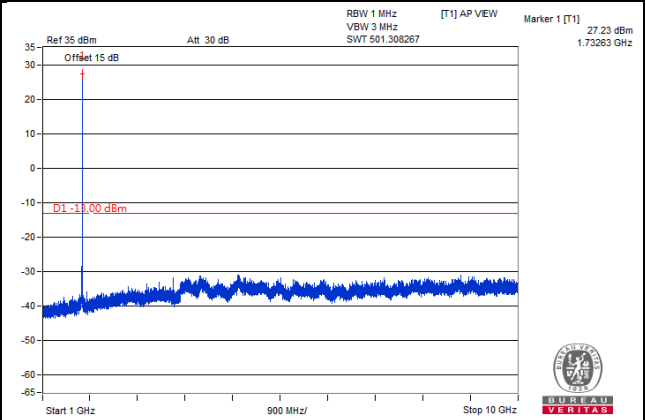
Channel Bandwidth: 1.4 MHz

Channel 20175

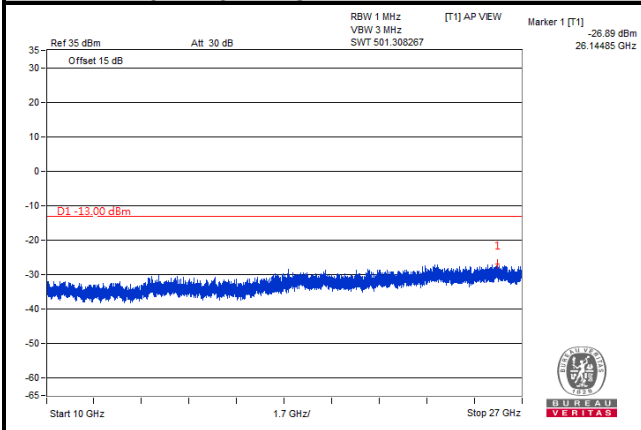
Frequency Range: 30 MHz ~ 1 GHz



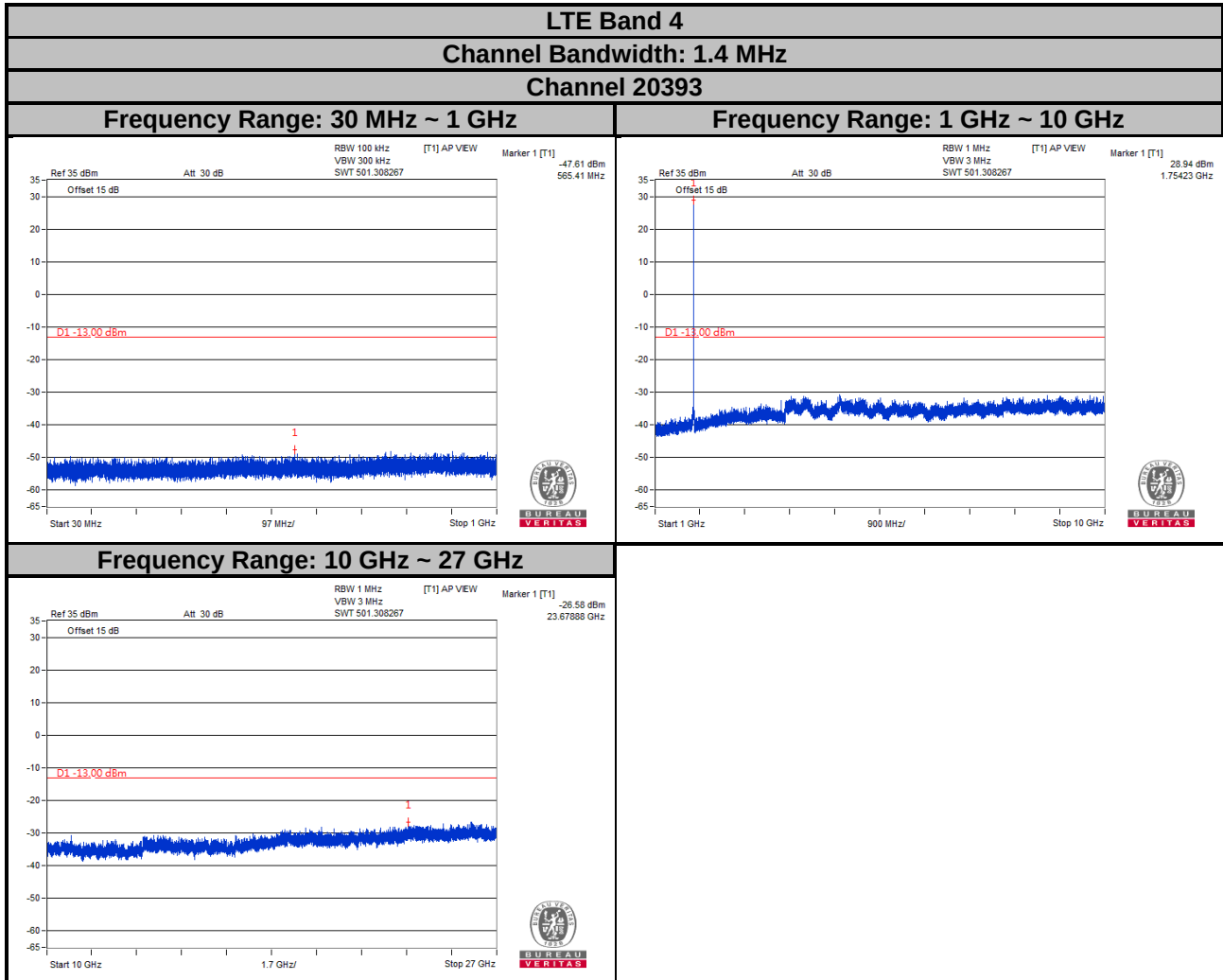
Frequency Range: 1 GHz ~ 10 GHz



Frequency Range: 10 GHz ~ 27 GHz



Note: The signal over the limit in 9 kHz is from spectrum analyzer.



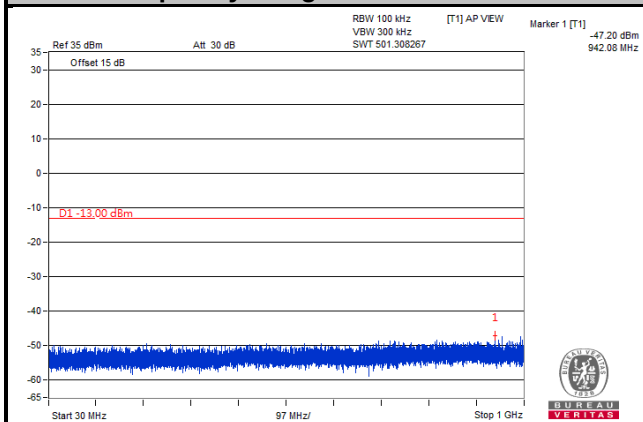
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 4

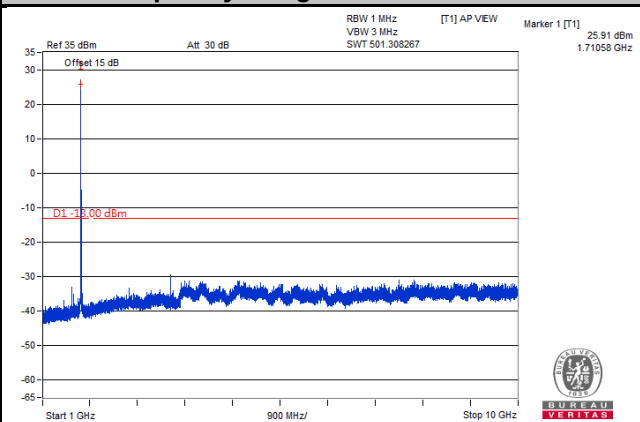
Channel Bandwidth: 3 MHz

Channel 19965

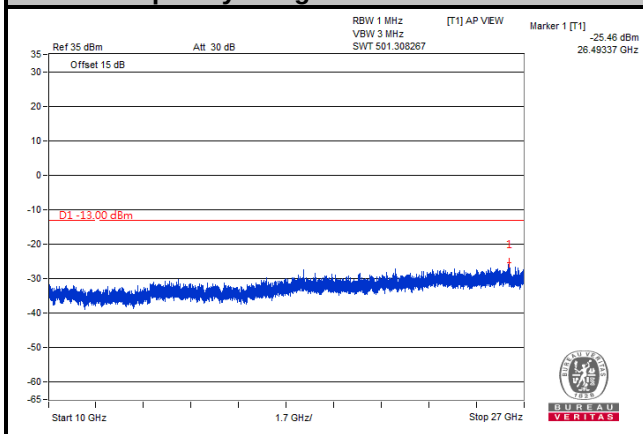
Frequency Range: 30 MHz ~ 1 GHz



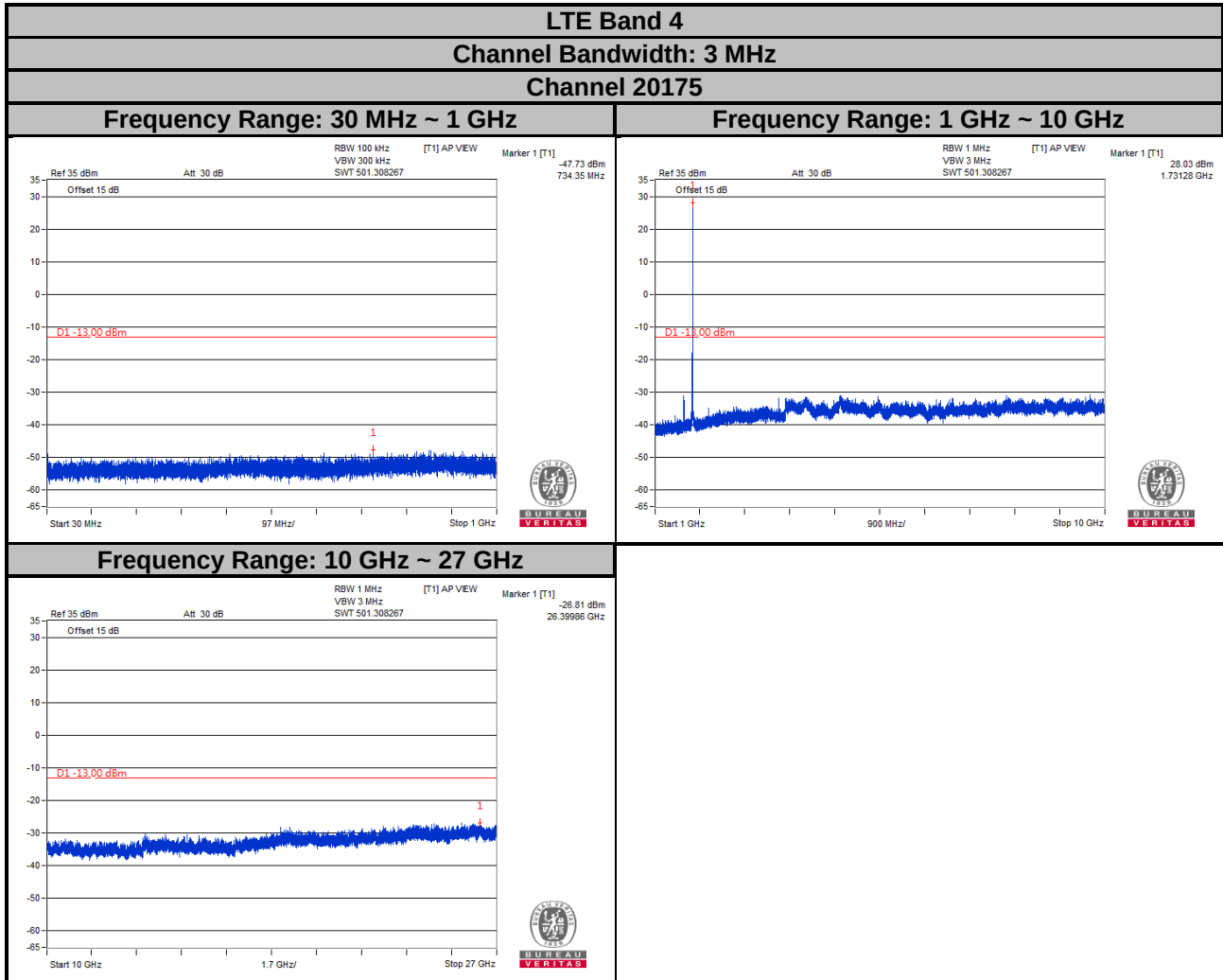
Frequency Range: 1 GHz ~ 10 GHz



Frequency Range: 10 GHz ~ 27 GHz



Note: The signal over the limit in 9 kHz is from spectrum analyzer.



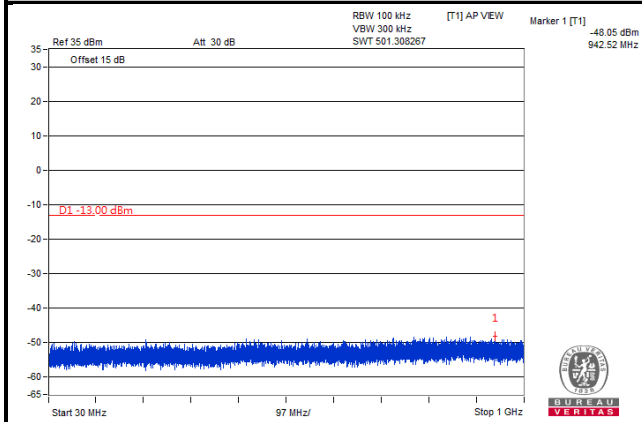
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 4

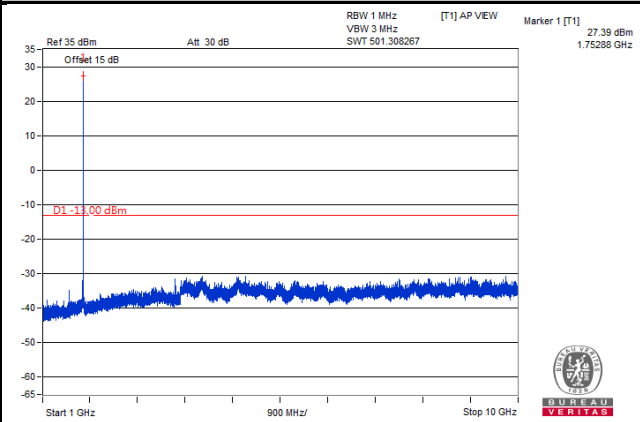
Channel Bandwidth: 3 MHz

Channel 20385

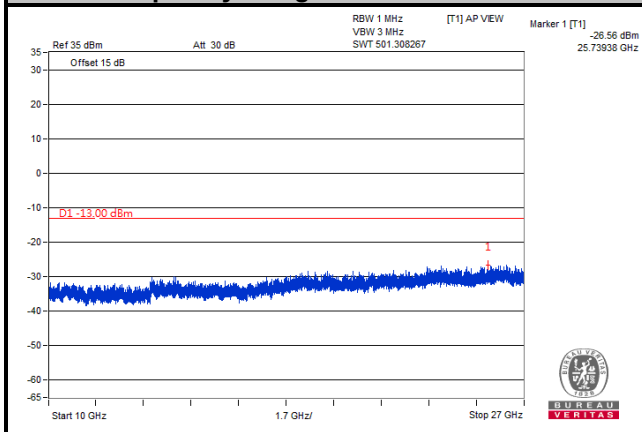
Frequency Range: 30 MHz ~ 1 GHz



Frequency Range: 1 GHz ~ 10 GHz



Frequency Range: 10 GHz ~ 27 GHz



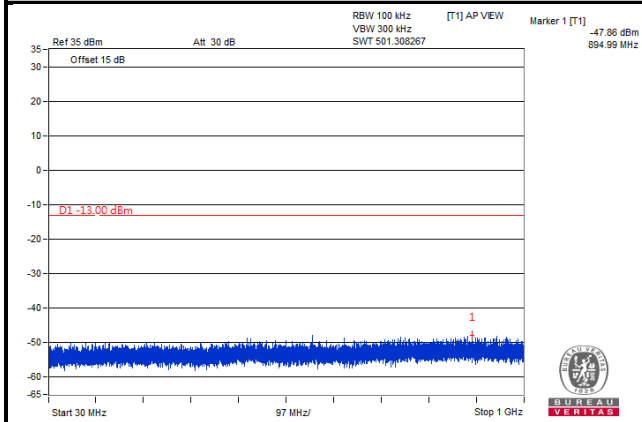
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 4

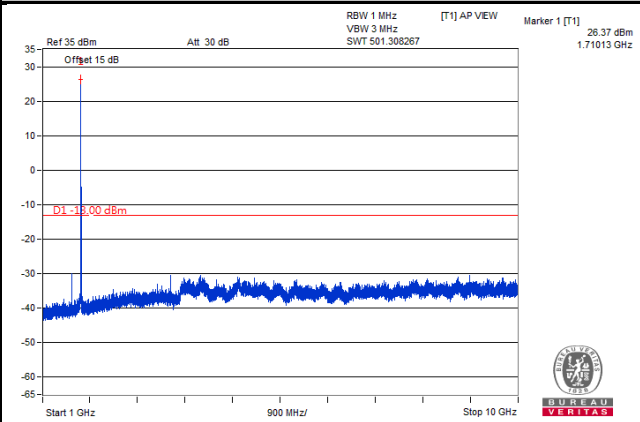
Channel Bandwidth: 5 MHz

Channel 19975

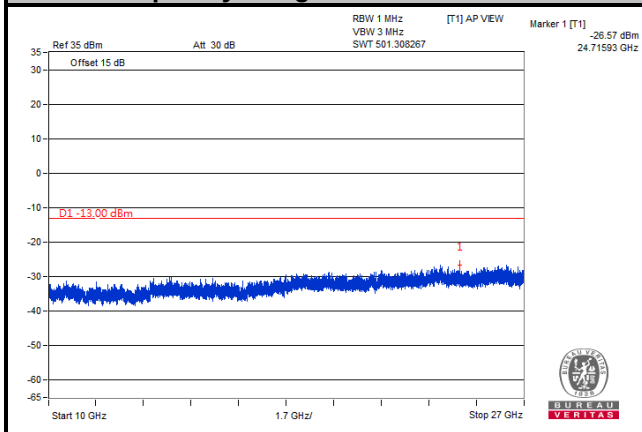
Frequency Range: 30 MHz ~ 1 GHz



Frequency Range: 1 GHz ~ 10 GHz



Frequency Range: 10 GHz ~ 27 GHz



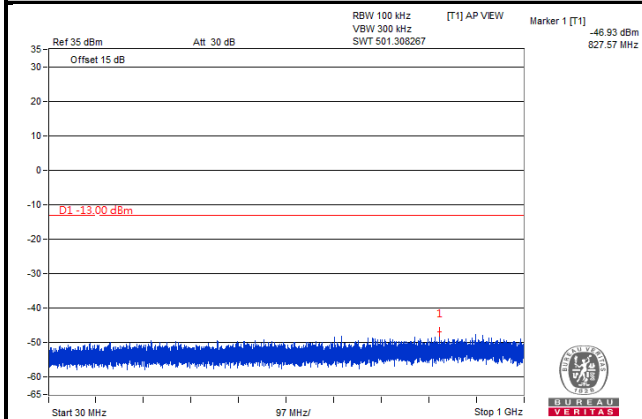
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 4

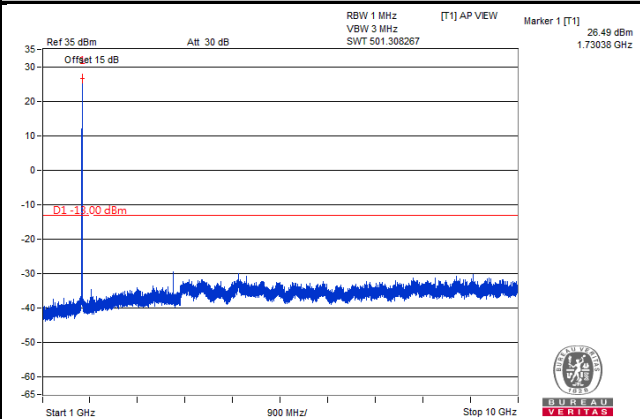
Channel Bandwidth: 5 MHz

Channel 20175

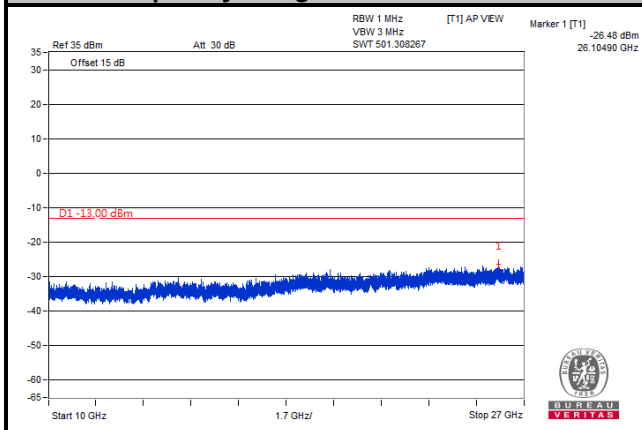
Frequency Range: 30 MHz ~ 1 GHz



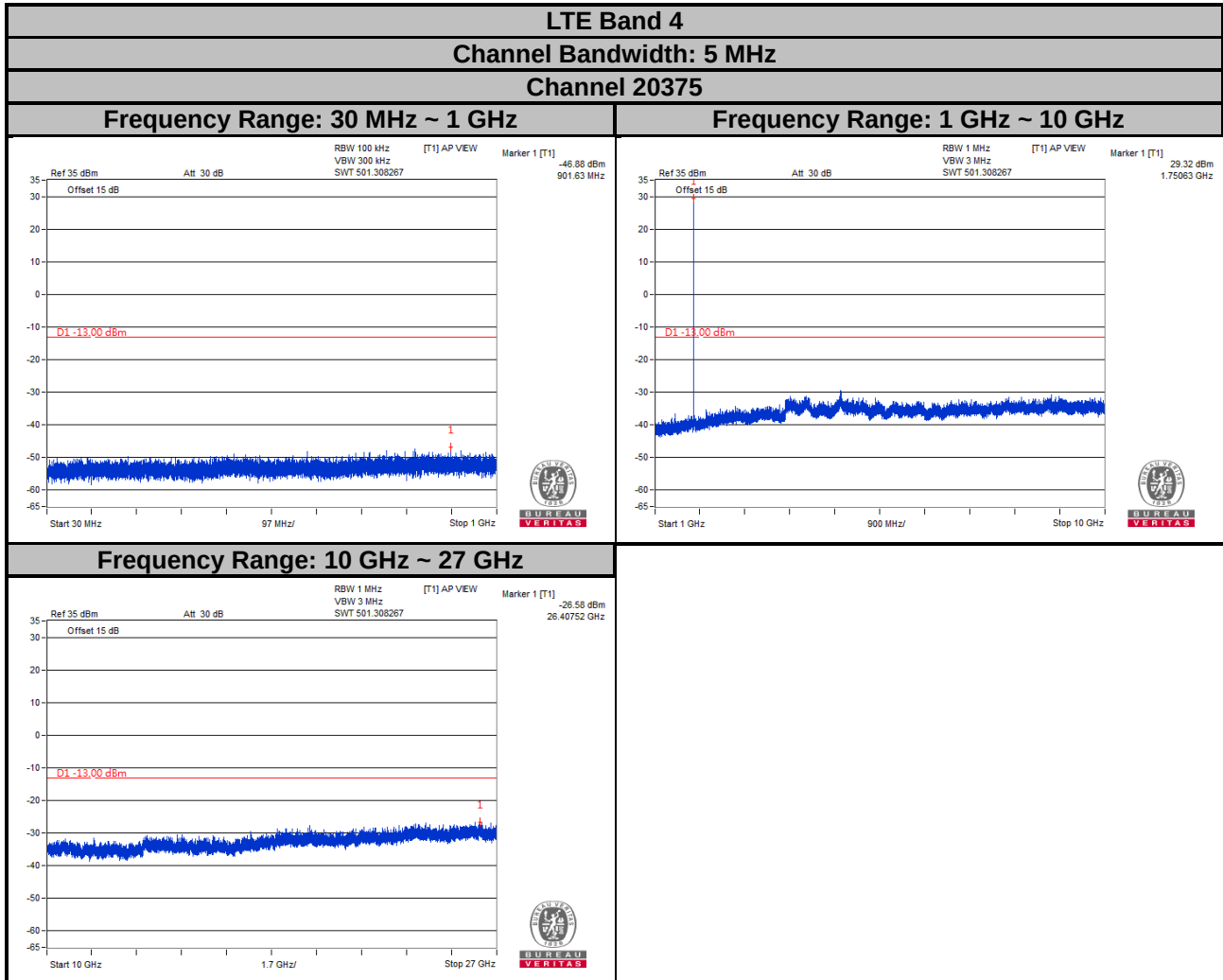
Frequency Range: 1 GHz ~ 10 GHz



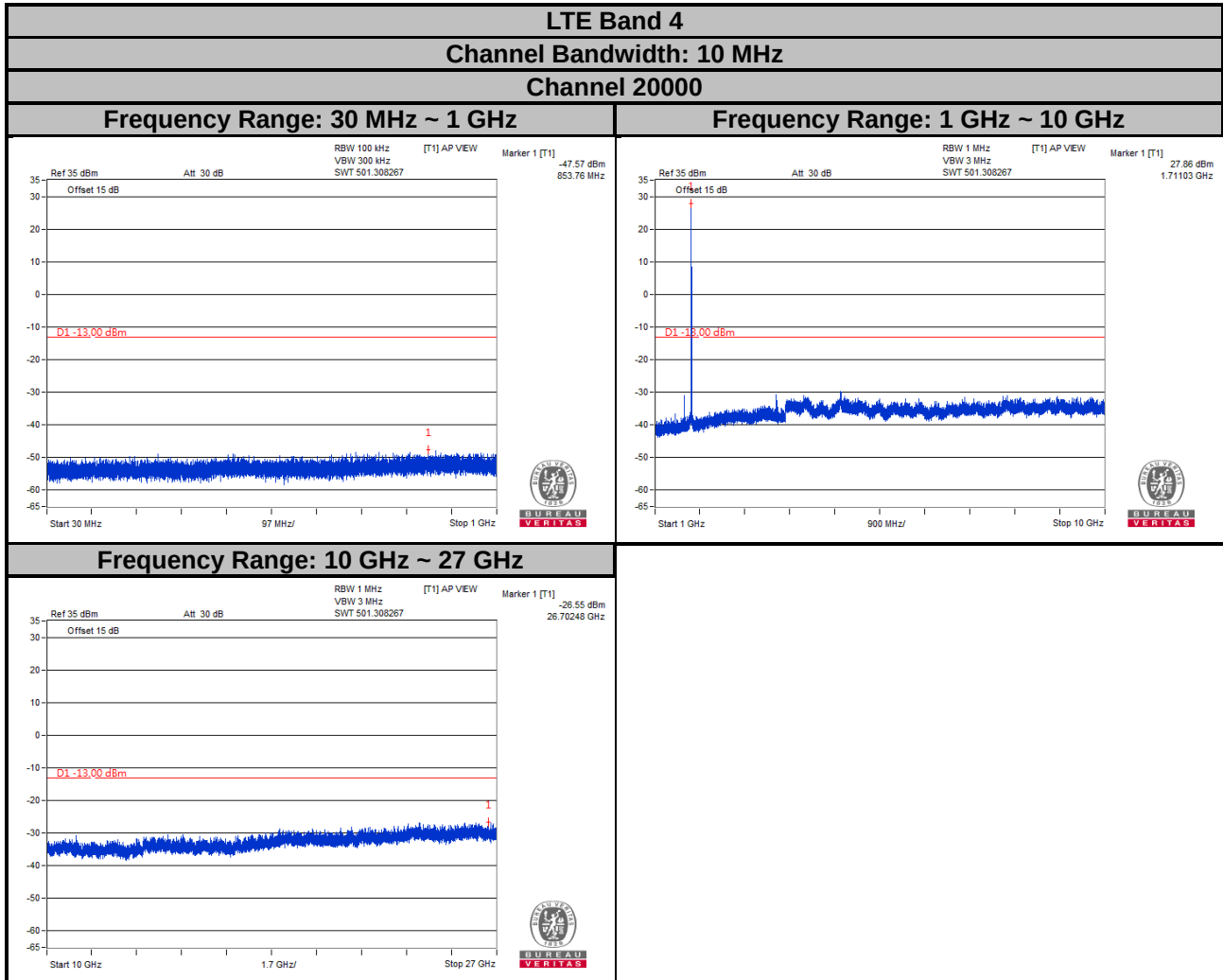
Frequency Range: 10 GHz ~ 27 GHz



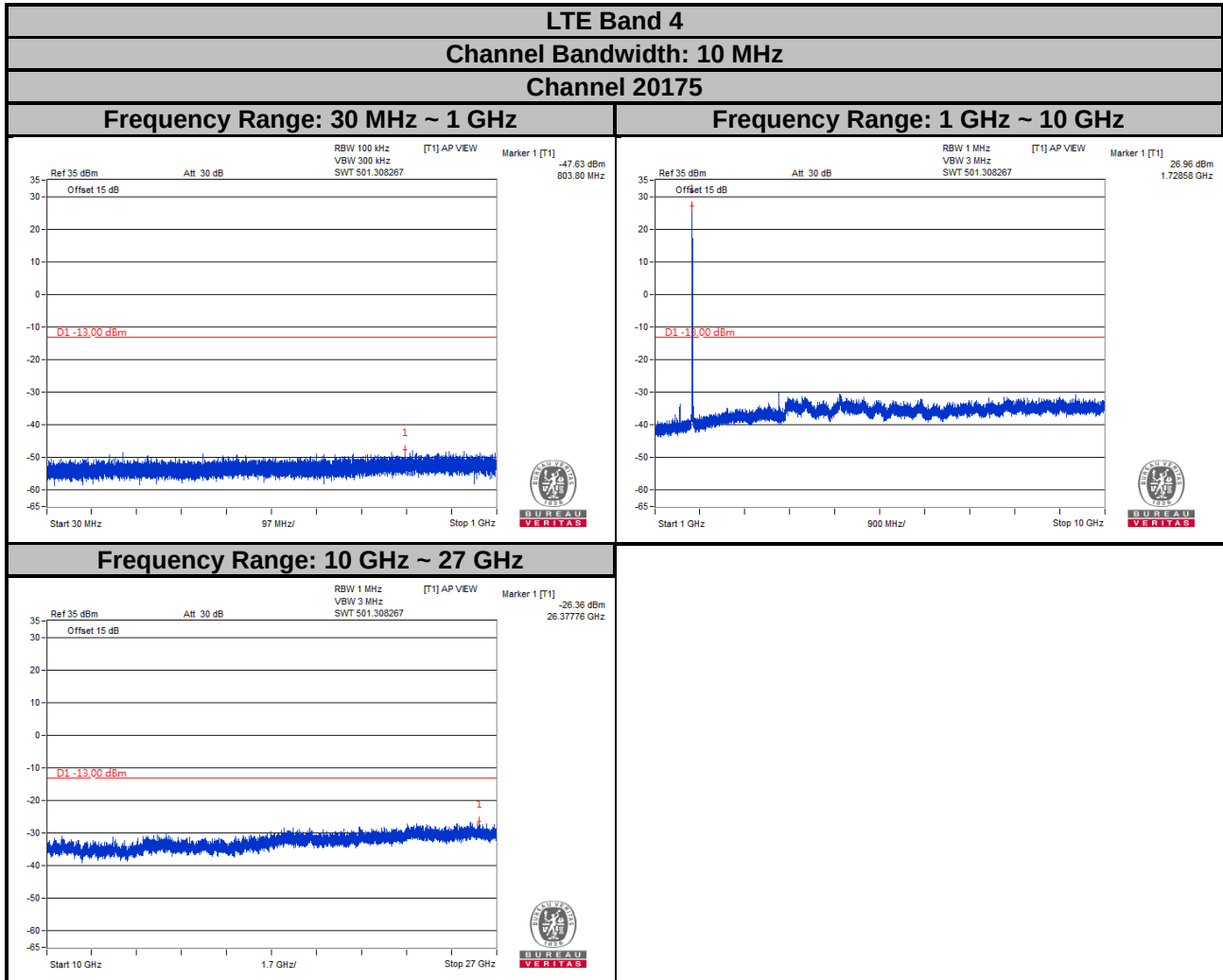
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



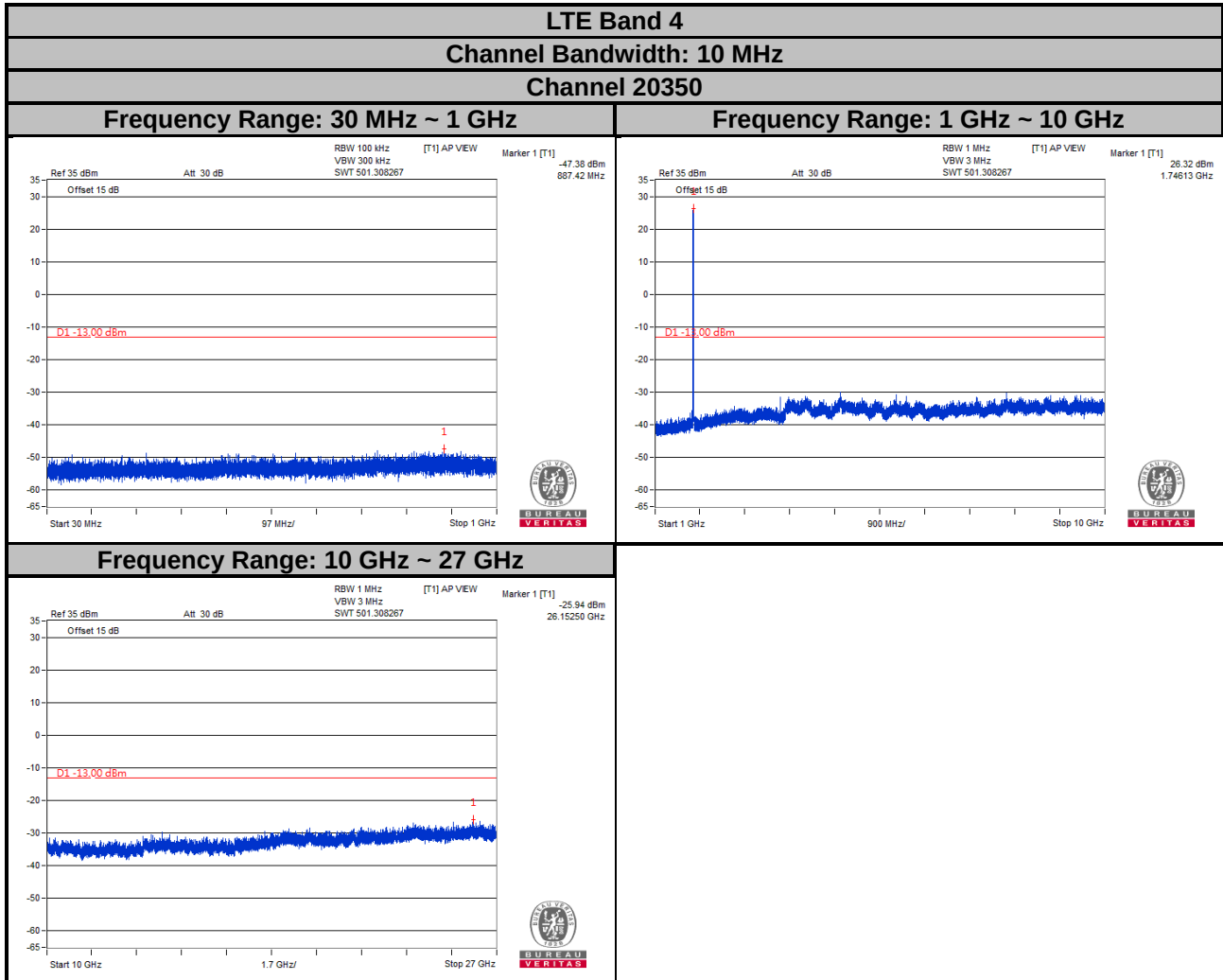
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



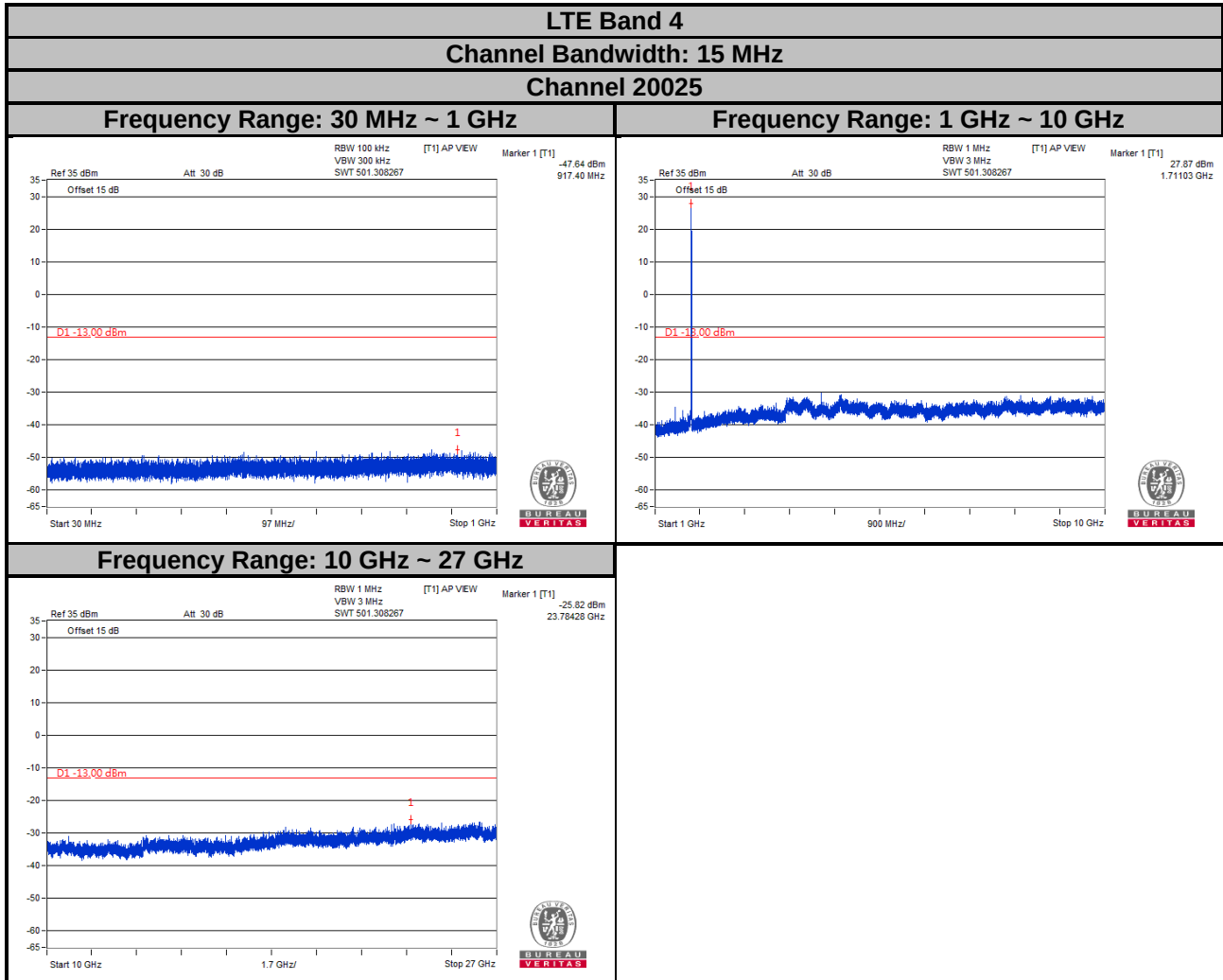
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



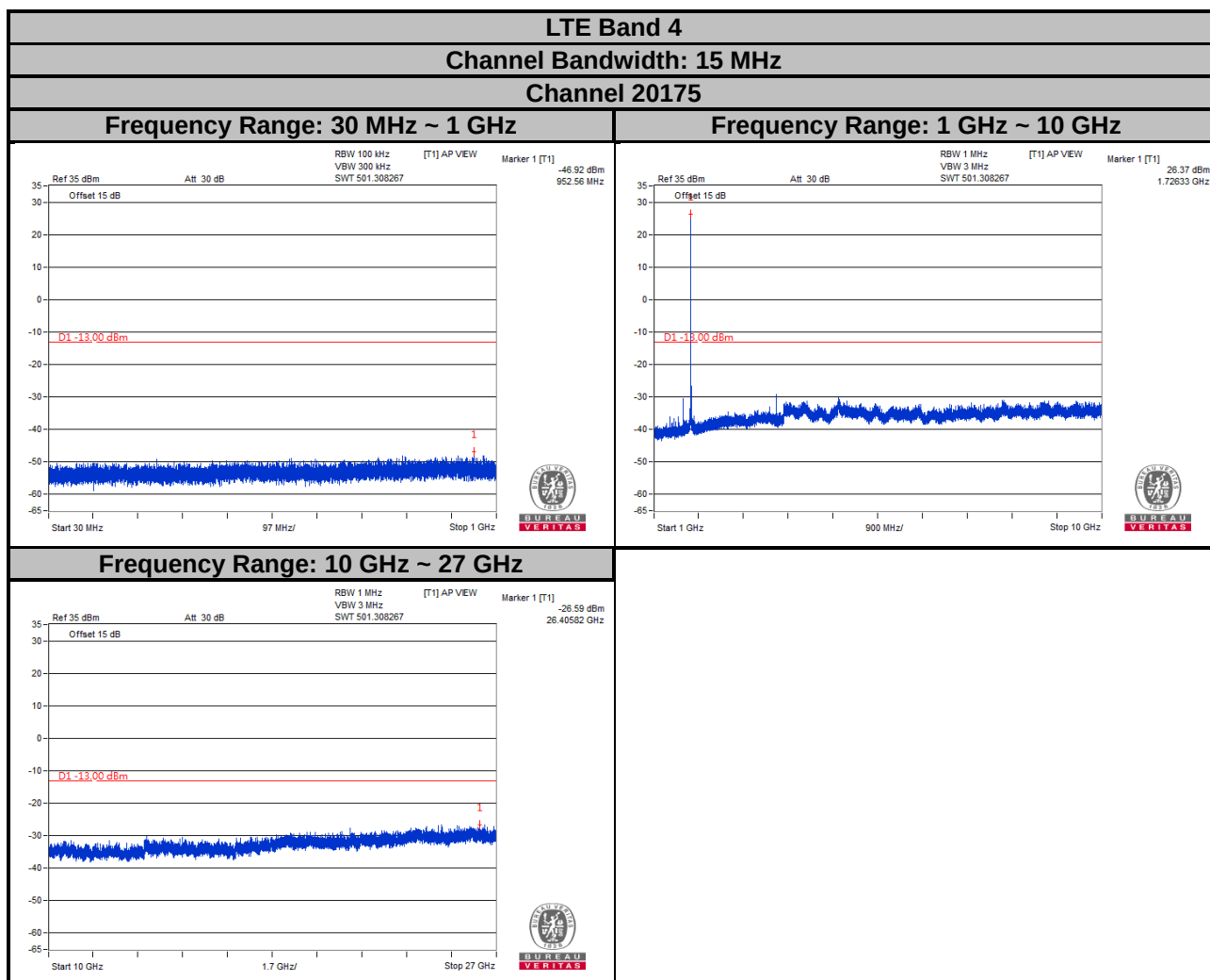
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



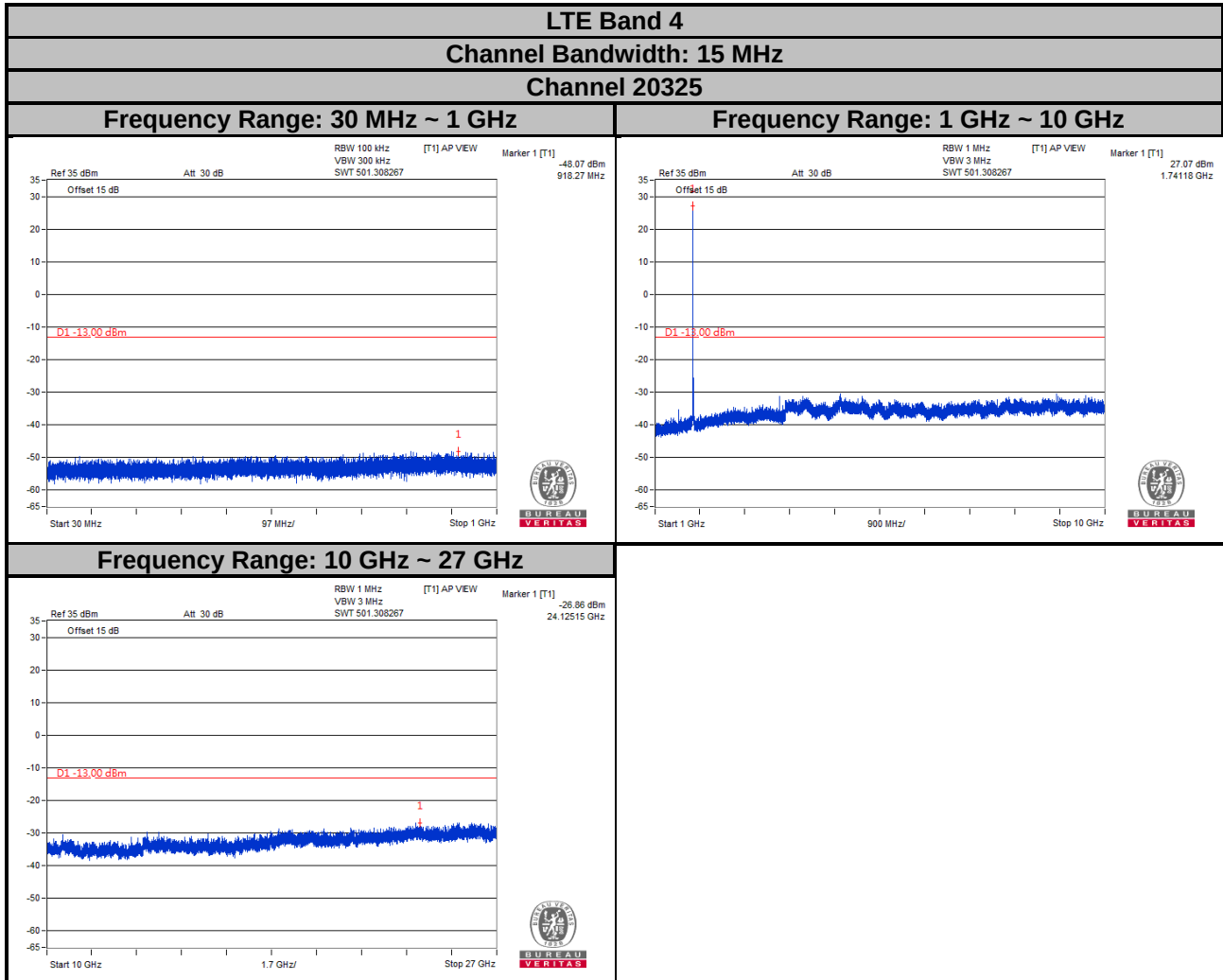
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



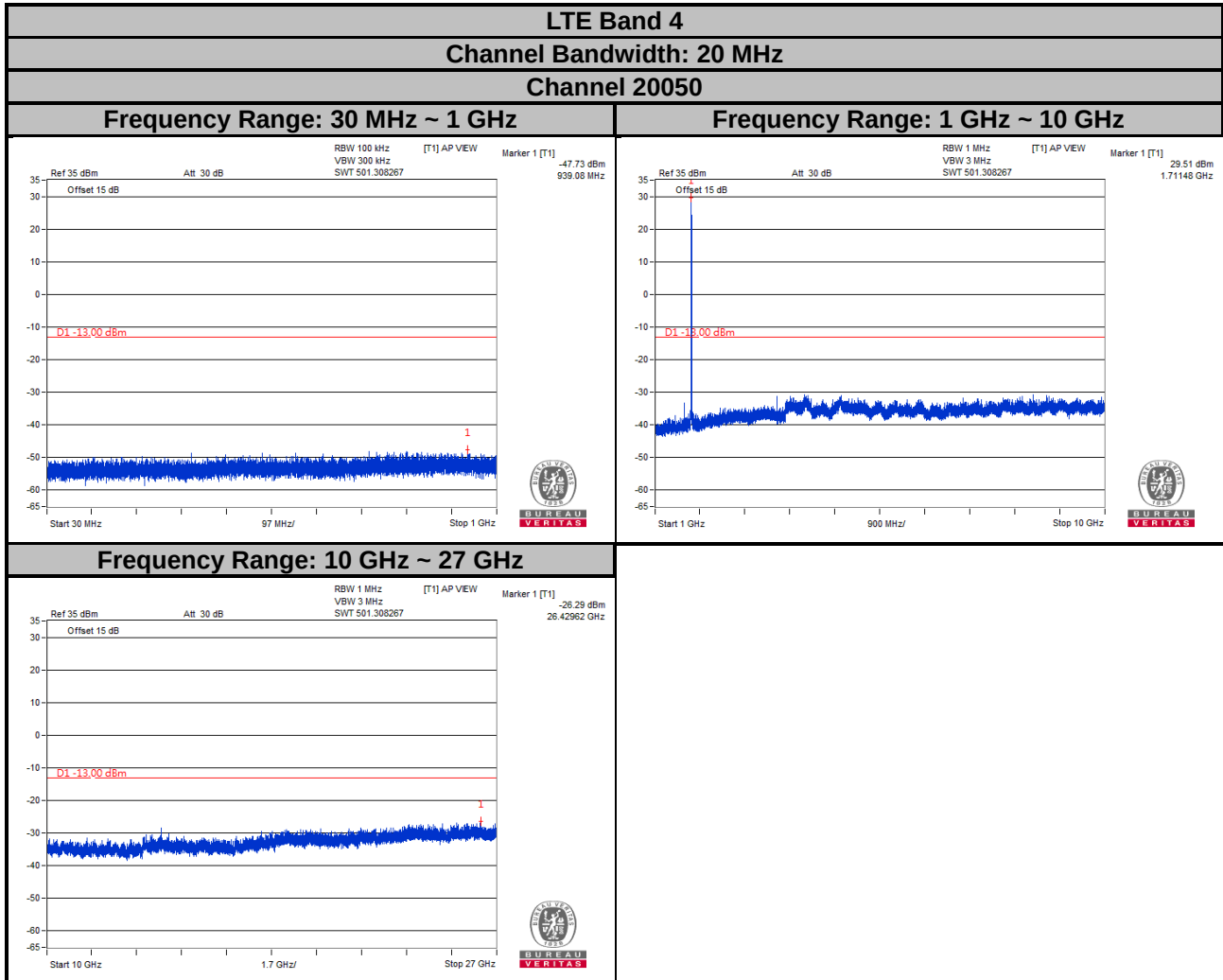
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



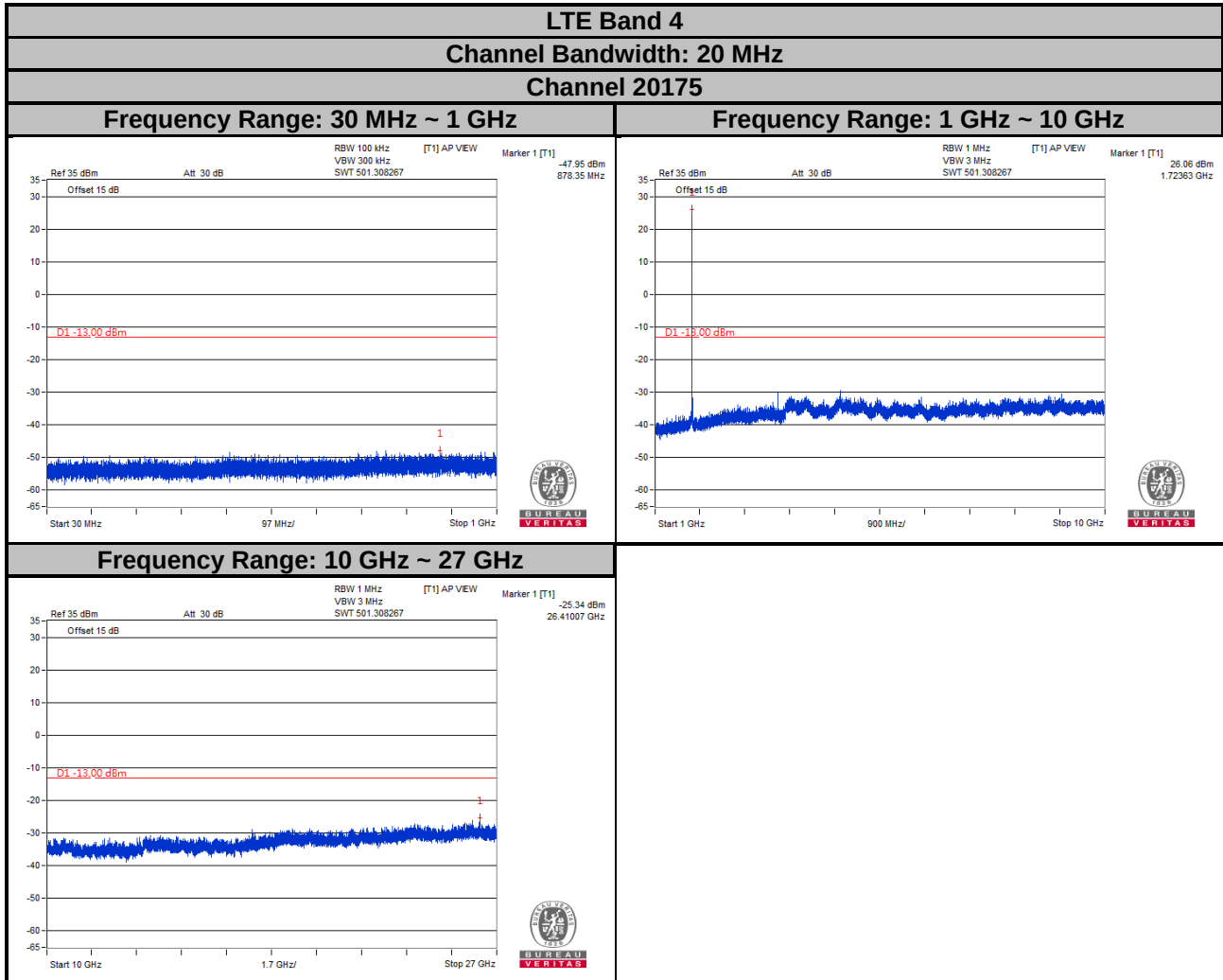
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



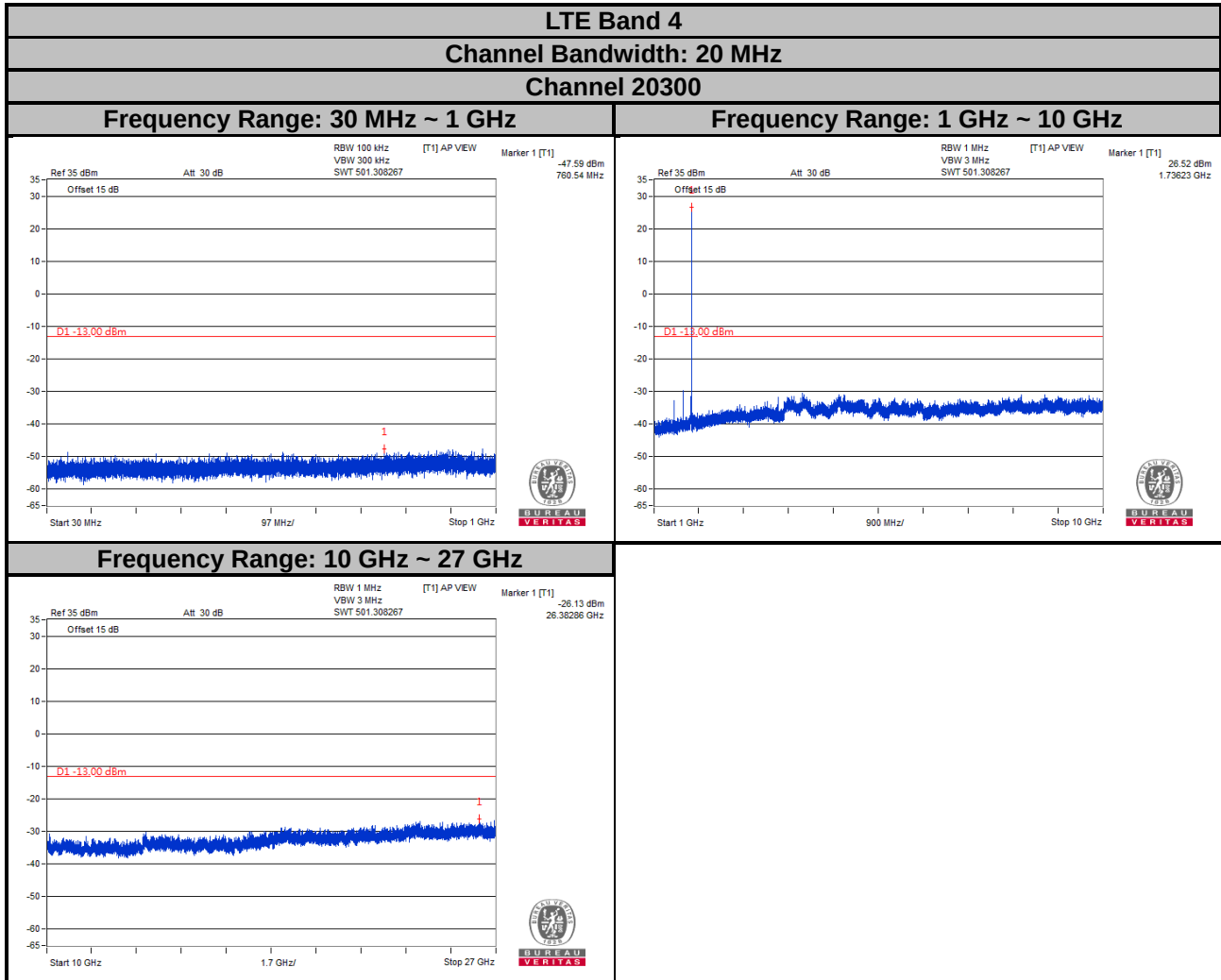
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



Note: The signal over the limit in 9 kHz is from spectrum analyzer.



Note: The signal over the limit in 9 kHz is from spectrum analyzer.



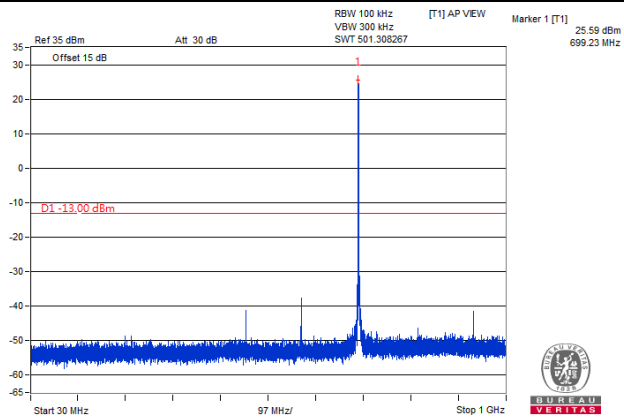
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 12

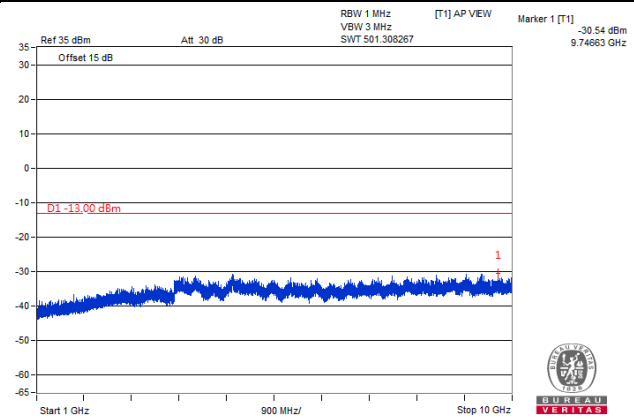
Channel Bandwidth: 1.4 MHz

Channel 23017

Frequency Range: 30 MHz ~ 1 GHz

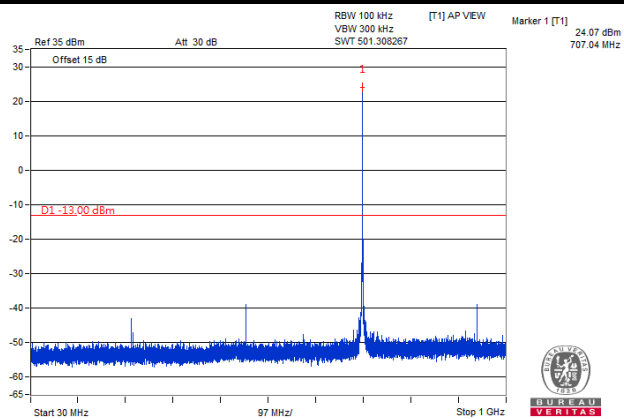


Frequency Range: 1 GHz ~ 10 GHz

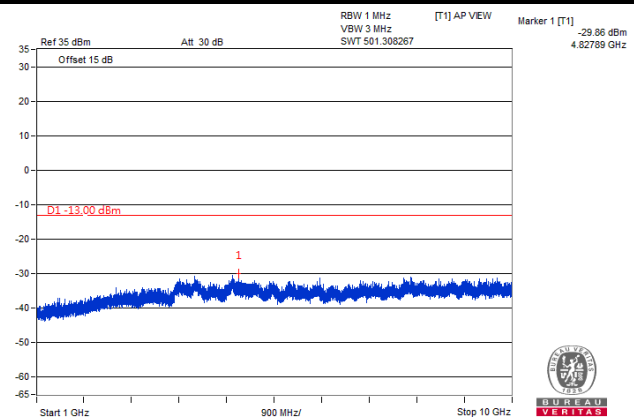


Channel 23095

Frequency Range: 30 MHz ~ 1 GHz

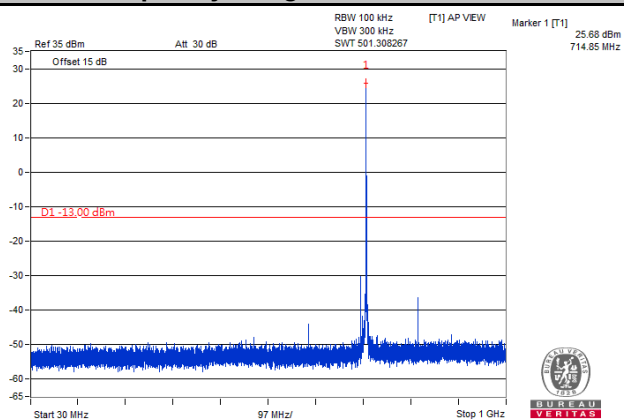


Frequency Range: 1 GHz ~ 10 GHz

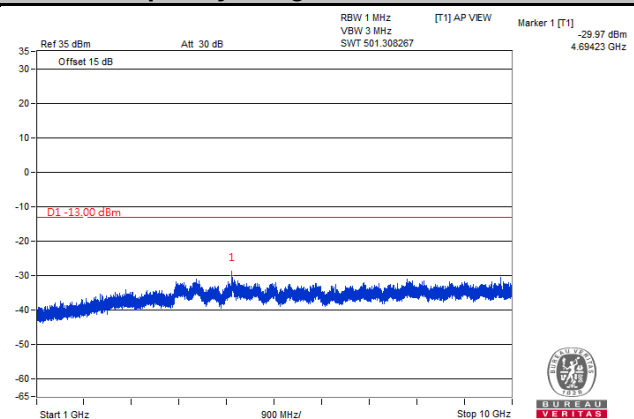


Channel 23173

Frequency Range: 30 MHz ~ 1 GHz



Frequency Range: 1 GHz ~ 10 GHz



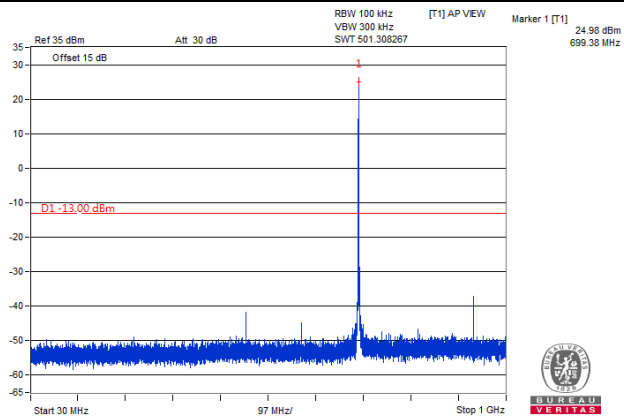
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 12

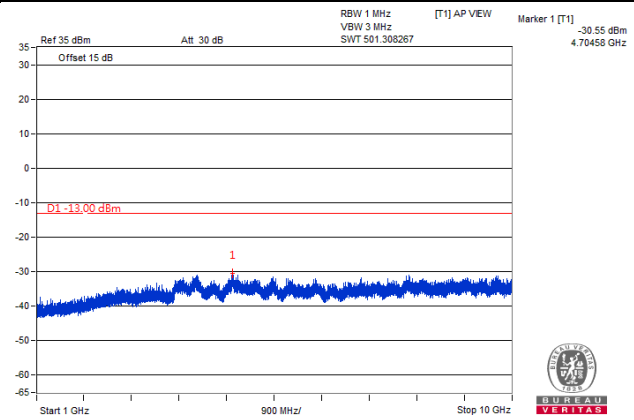
Channel Bandwidth: 3 MHz

Channel 23025

Frequency Range: 30 MHz ~ 1 GHz

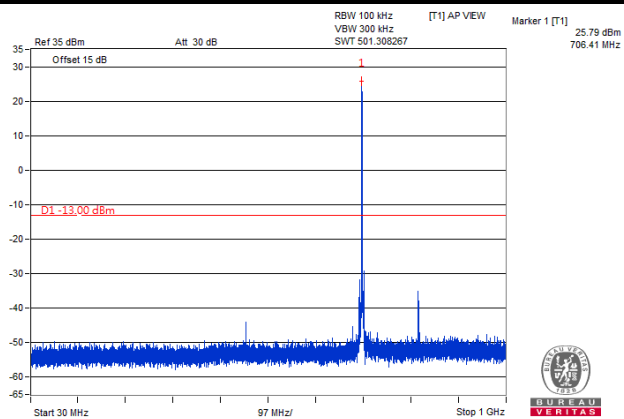


Frequency Range: 1 GHz ~ 10 GHz

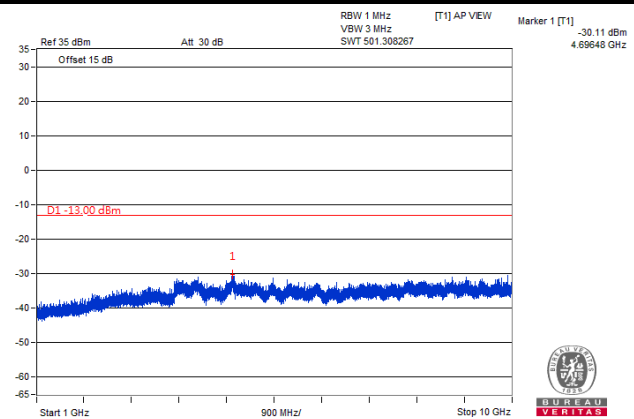


Channel 23095

Frequency Range: 30 MHz ~ 1 GHz

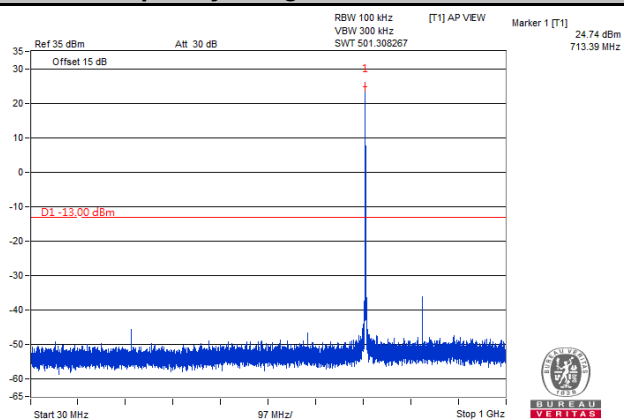


Frequency Range: 1 GHz ~ 10 GHz

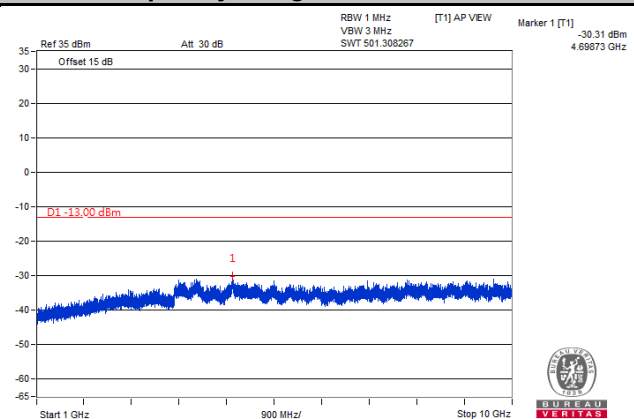


Channel 23165

Frequency Range: 30 MHz ~ 1 GHz



Frequency Range: 1 GHz ~ 10 GHz



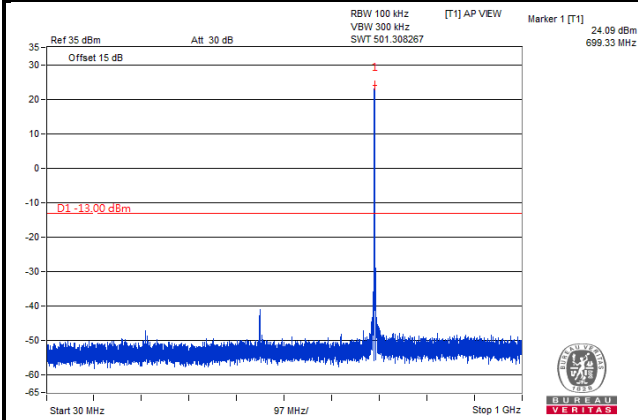
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 12

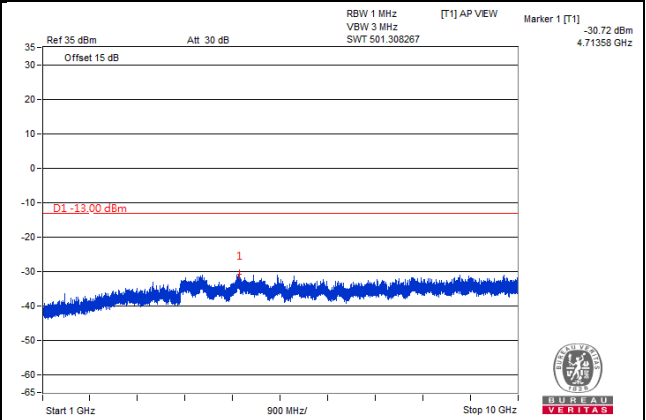
Channel Bandwidth: 5 MHz

Channel 23035

Frequency Range: 30 MHz ~ 1 GHz

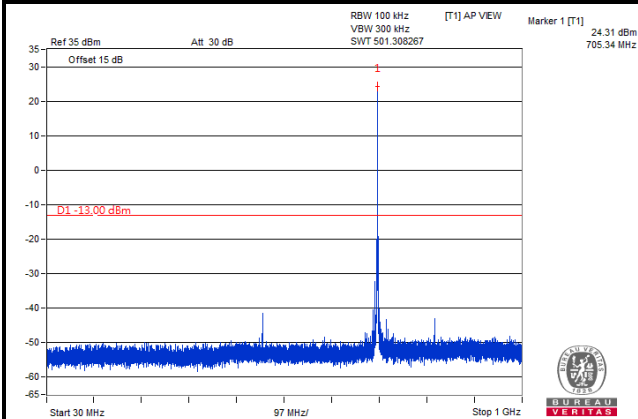


Frequency Range: 1 GHz ~ 10 GHz

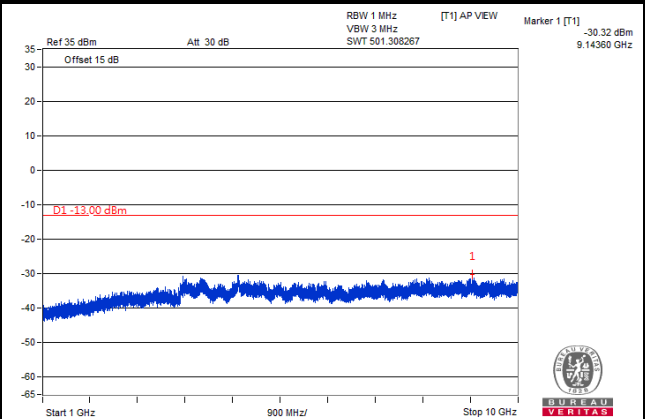


Channel 23095

Frequency Range: 30 MHz ~ 1 GHz

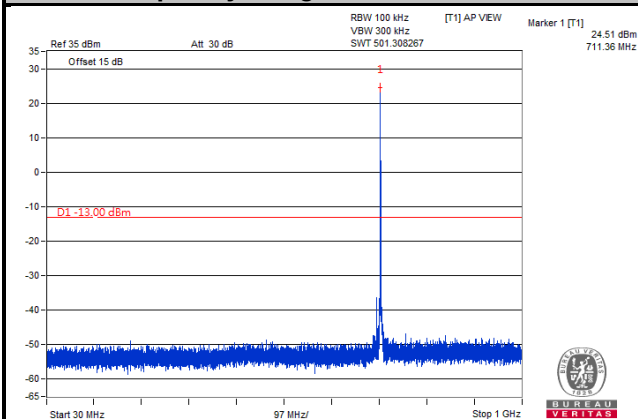


Frequency Range: 1 GHz ~ 10 GHz

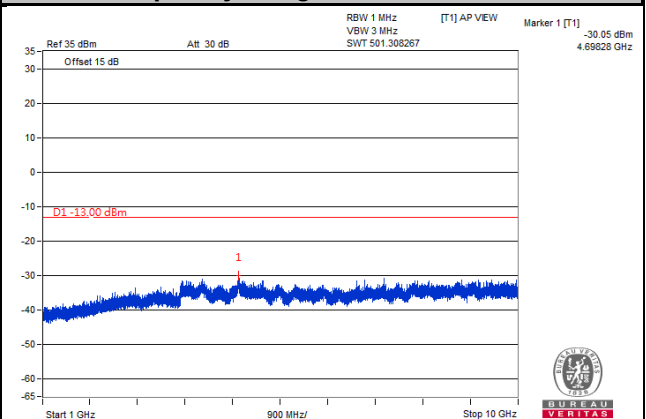


Channel 23155

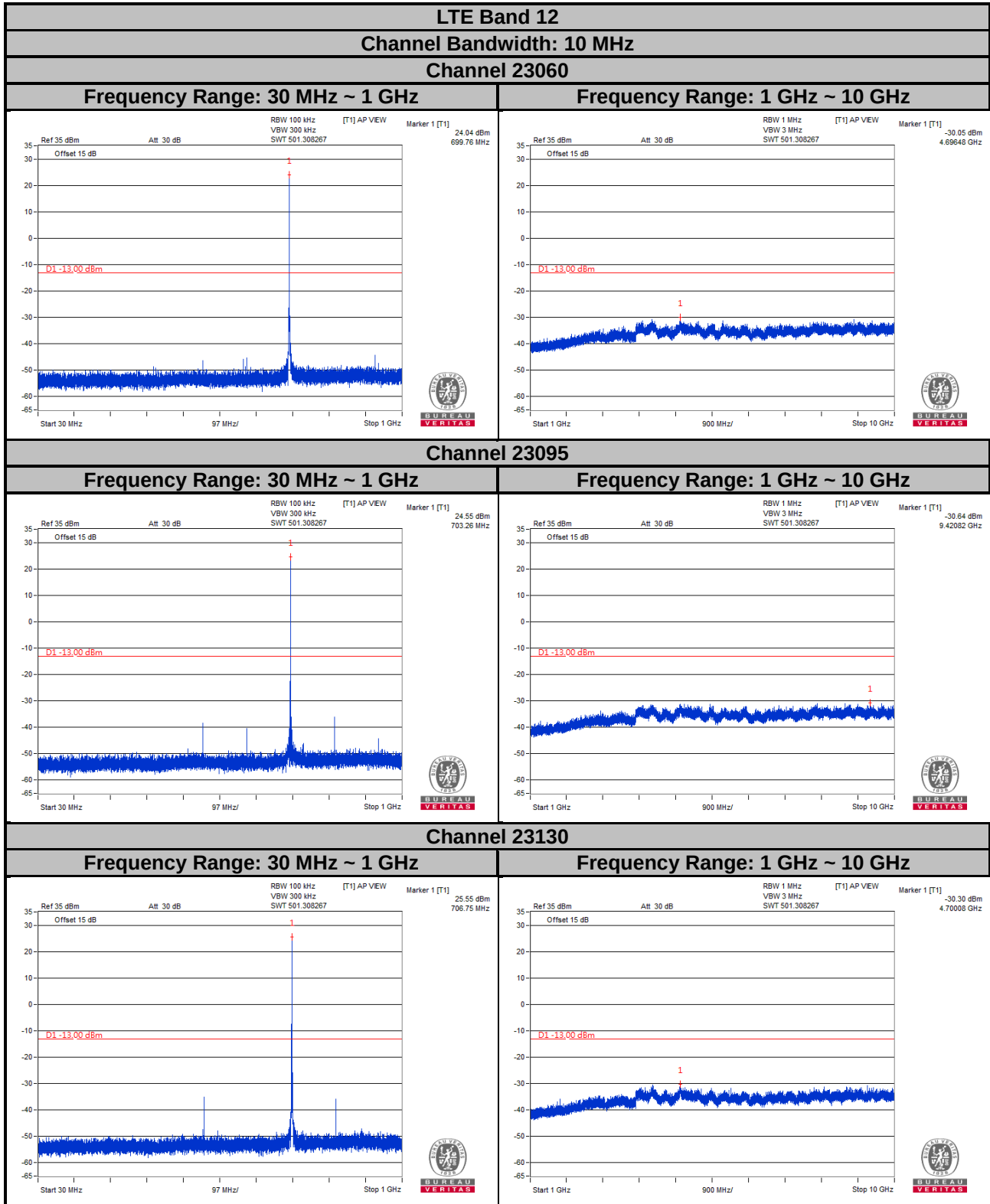
Frequency Range: 30 MHz ~ 1 GHz



Frequency Range: 1 GHz ~ 10 GHz



Note: The signal over the limit in 9 kHz is from spectrum analyzer.



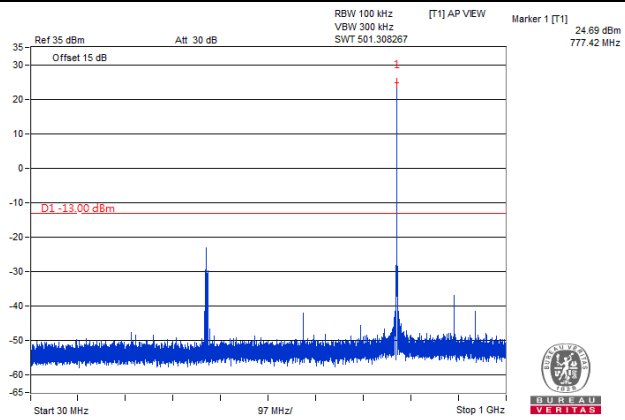
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 13

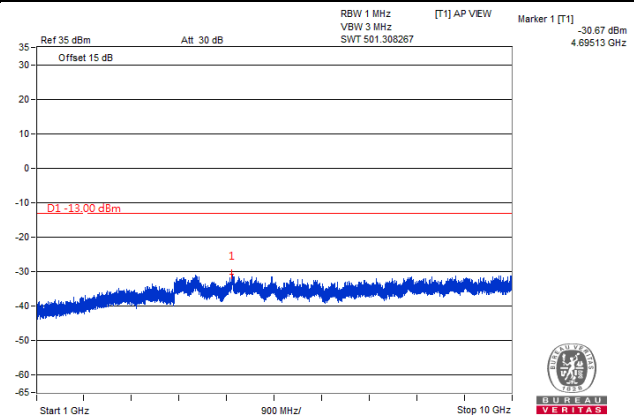
Channel Bandwidth: 5 MHz

Channel 23205

Frequency Range: 30 MHz ~ 1 GHz

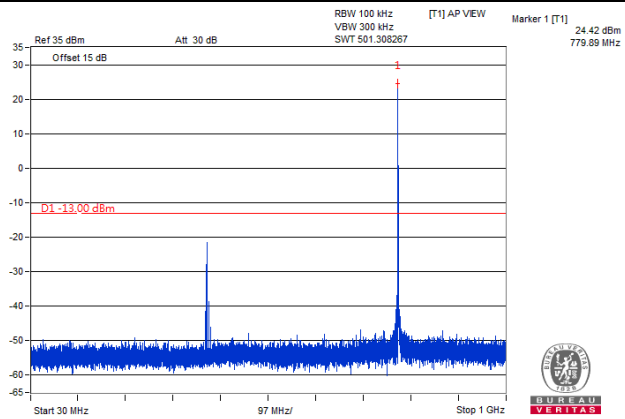


Frequency Range: 1 GHz ~ 10 GHz

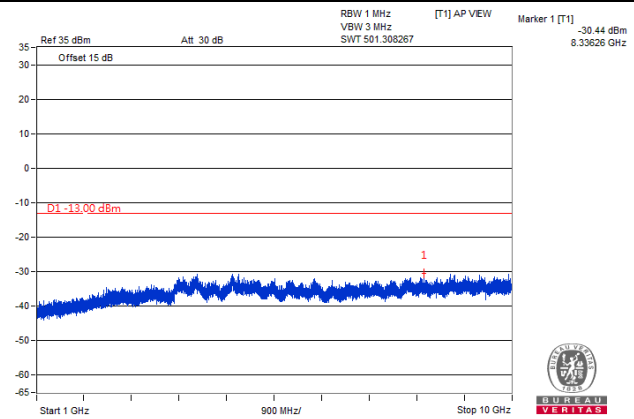


Channel 23230

Frequency Range: 30 MHz ~ 1 GHz

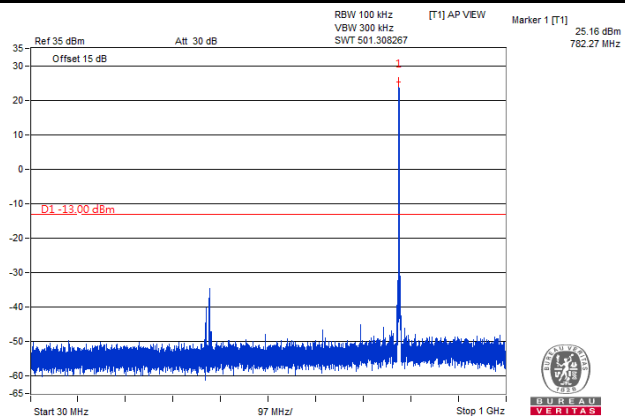


Frequency Range: 1 GHz ~ 10 GHz

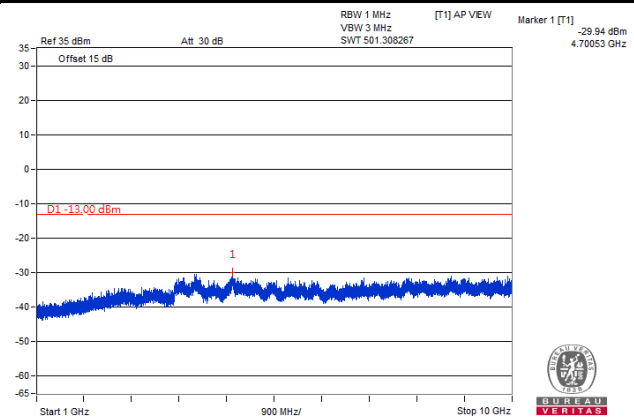


Channel 23255

Frequency Range: 30 MHz ~ 1 GHz



Frequency Range: 1 GHz ~ 10 GHz



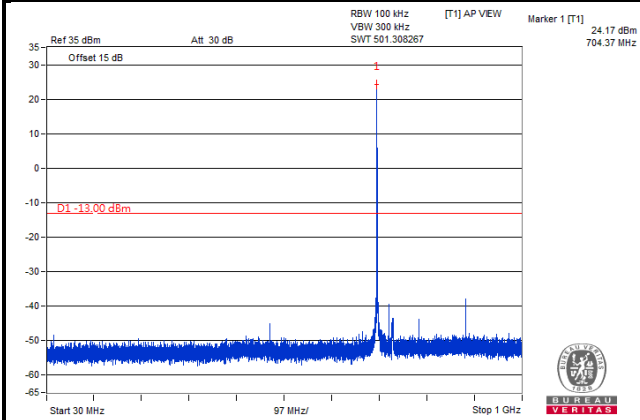
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 17

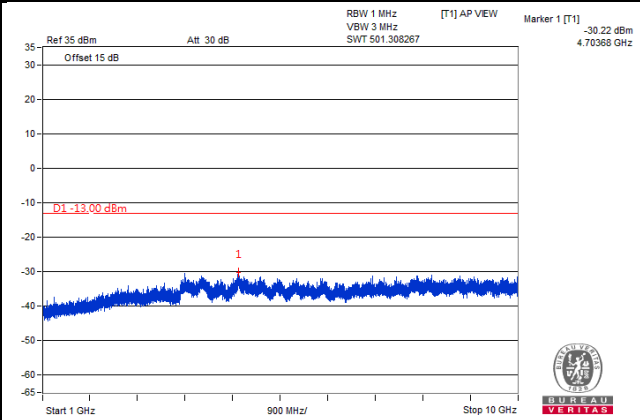
Channel Bandwidth: 5 MHz

Channel 23755

Frequency Range: 30 MHz ~ 1 GHz

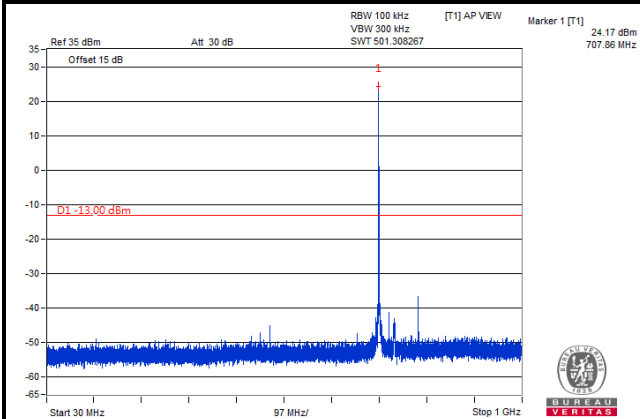


Frequency Range: 1 GHz ~ 10 GHz

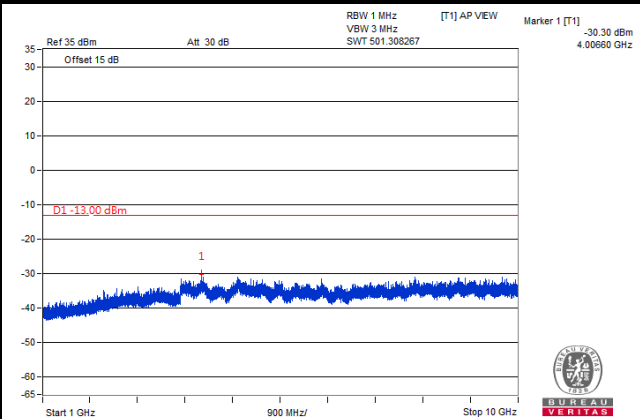


Channel 23790

Frequency Range: 30 MHz ~ 1 GHz

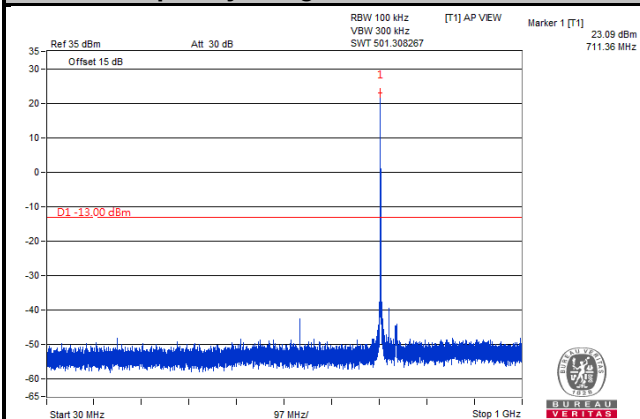


Frequency Range: 1 GHz ~ 10 GHz

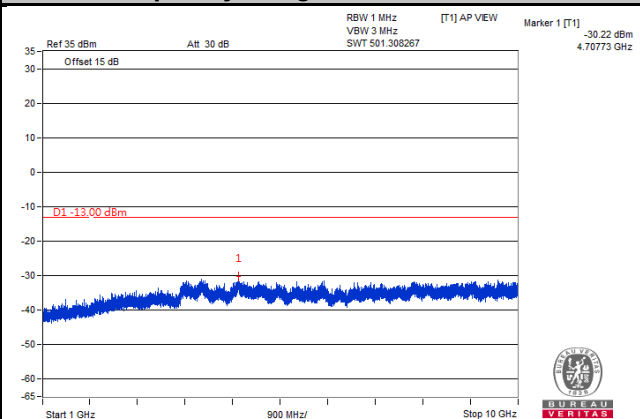


Channel 23825

Frequency Range: 30 MHz ~ 1 GHz



Frequency Range: 1 GHz ~ 10 GHz



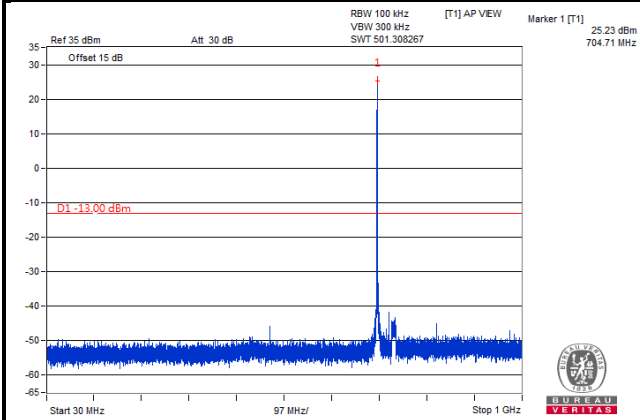
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 17

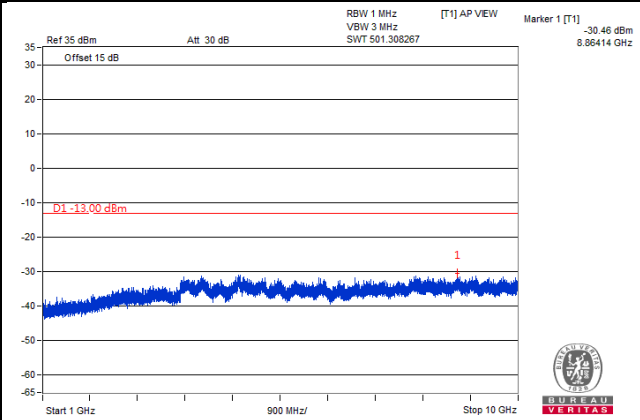
Channel Bandwidth: 10 MHz

Channel 23780

Frequency Range: 30 MHz ~ 1 GHz

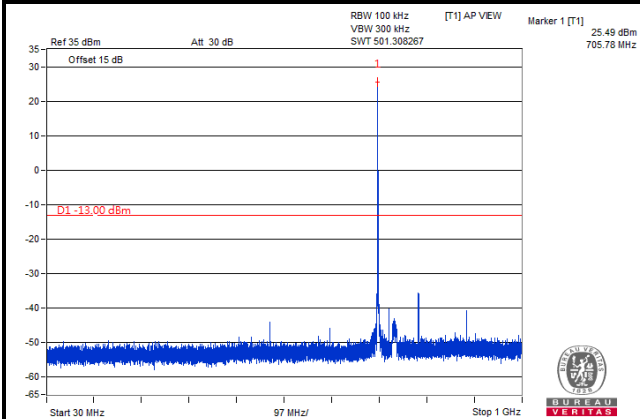


Frequency Range: 1 GHz ~ 10 GHz

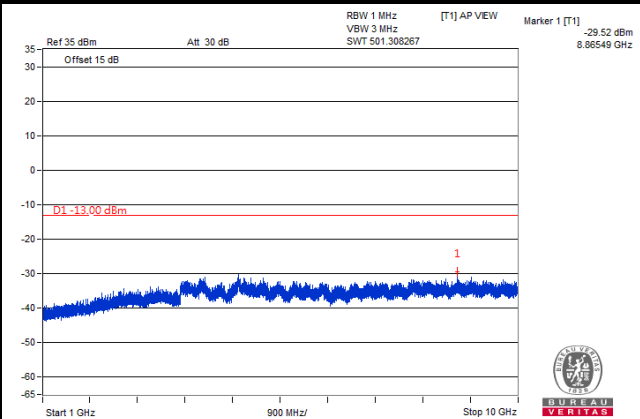


Channel 23790

Frequency Range: 30 MHz ~ 1 GHz

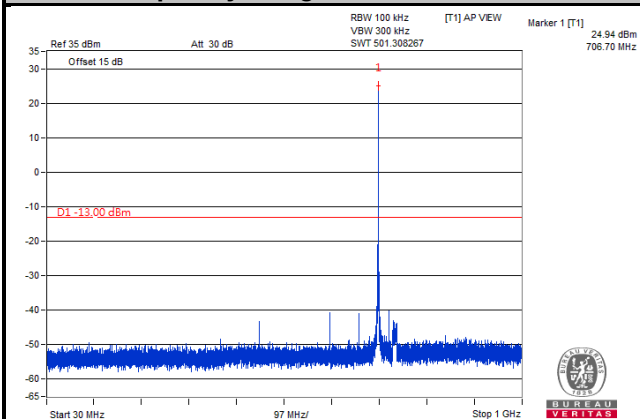


Frequency Range: 1 GHz ~ 10 GHz

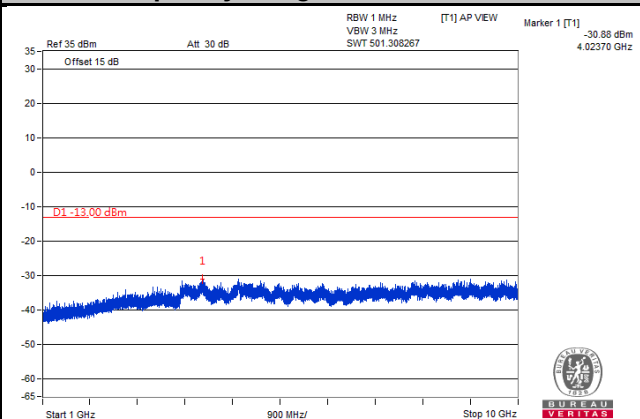


Channel 23800

Frequency Range: 30 MHz ~ 1 GHz



Frequency Range: 1 GHz ~ 10 GHz



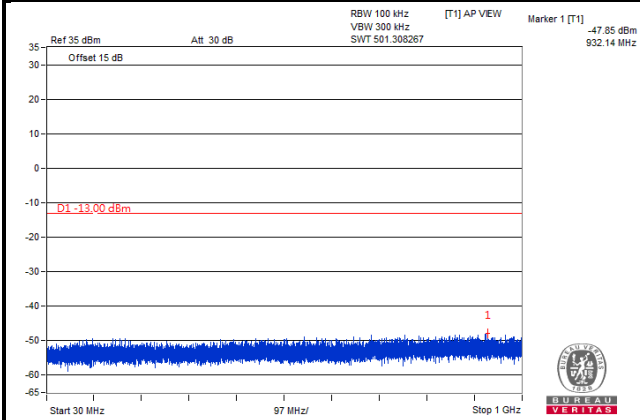
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 66

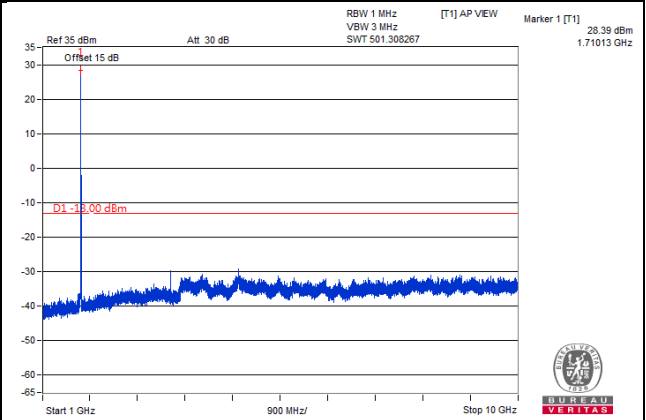
Channel Bandwidth: 1.4 MHz

Channel 131979

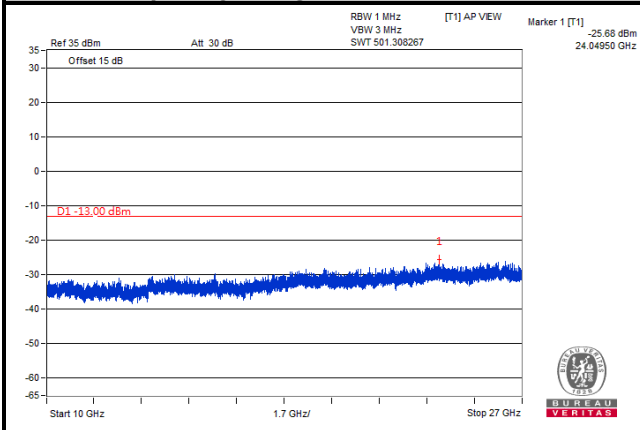
Frequency Range: 30 MHz ~ 1 GHz



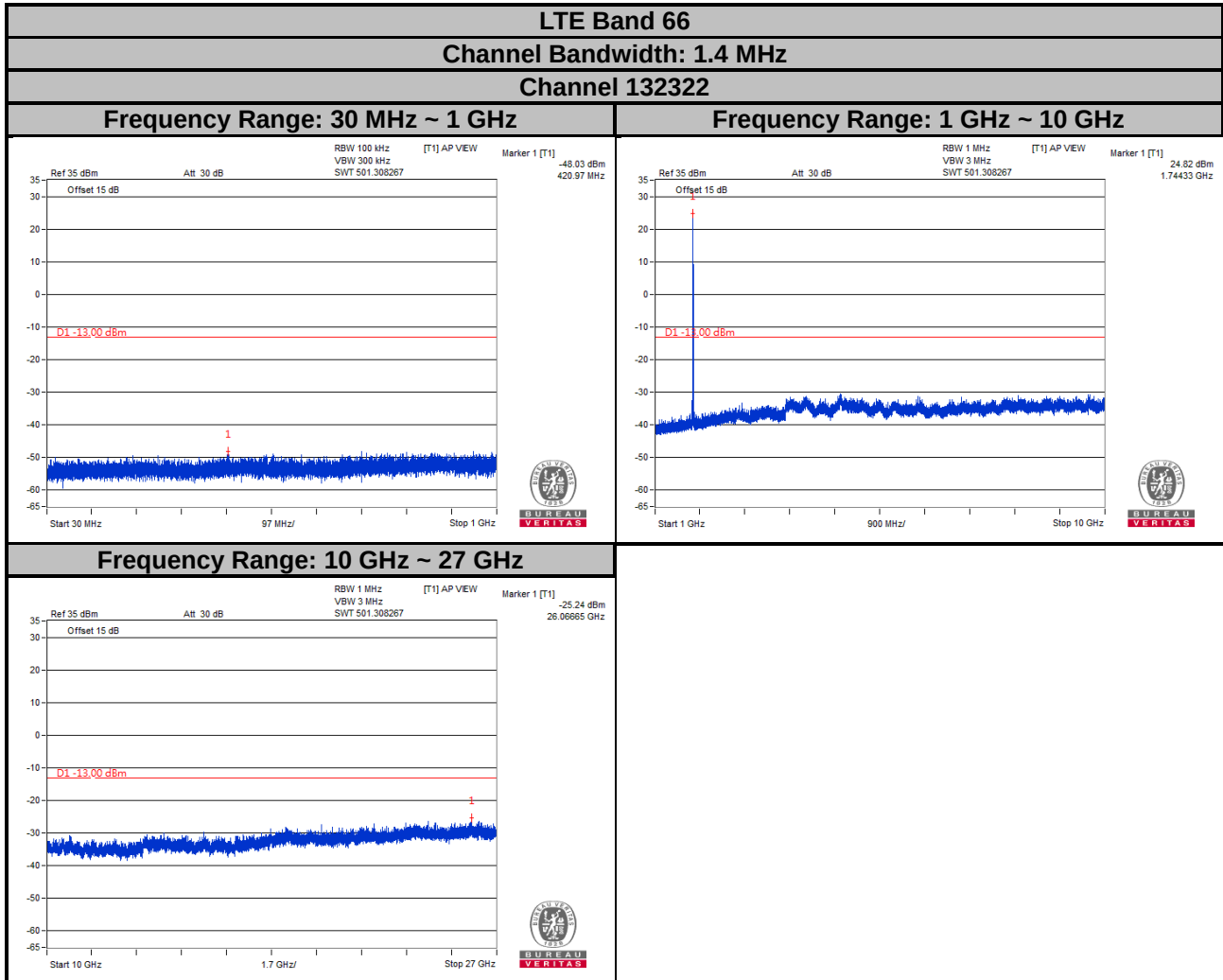
Frequency Range: 1 GHz ~ 10 GHz



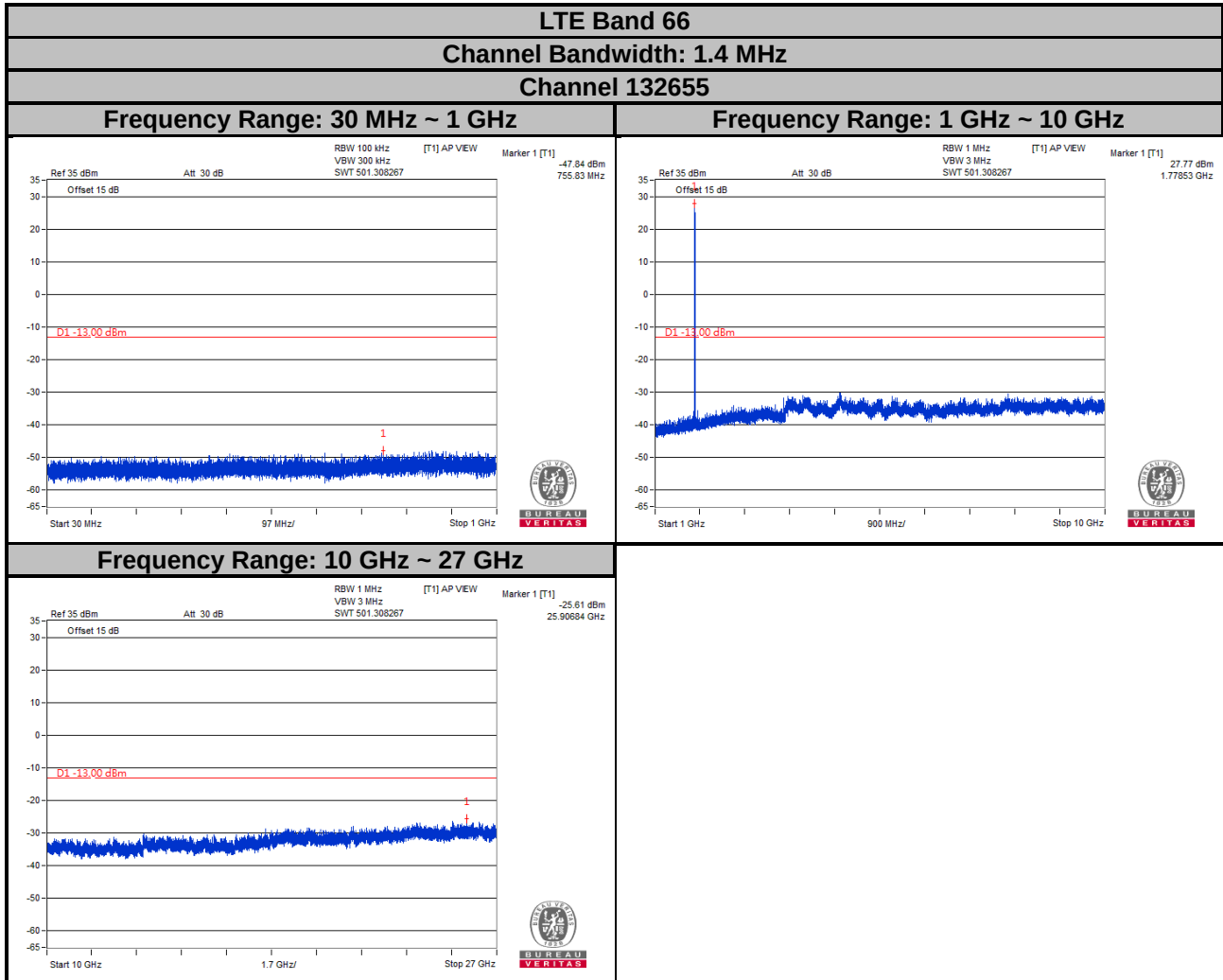
Frequency Range: 10 GHz ~ 27 GHz



Note: The signal over the limit in 9 kHz is from spectrum analyzer.



Note: The signal over the limit in 9 kHz is from spectrum analyzer.



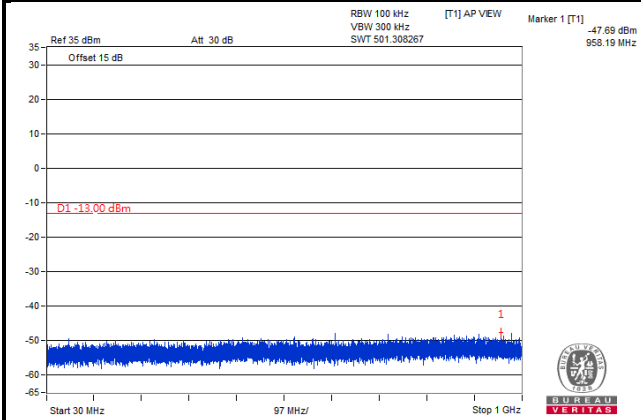
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 66

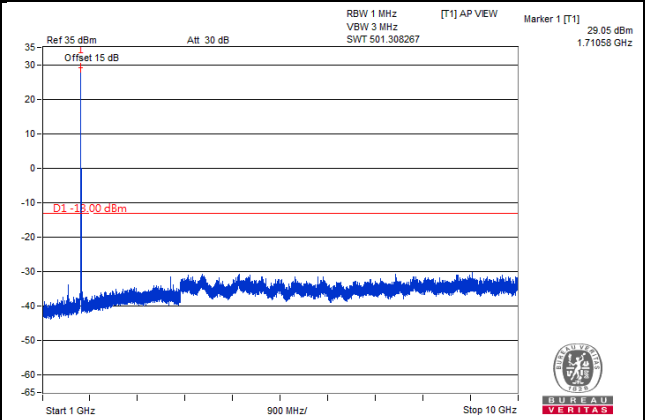
Channel Bandwidth: 3 MHz

Channel 131987

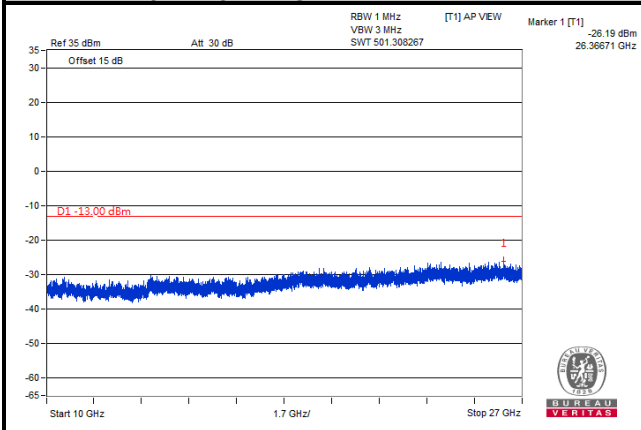
Frequency Range: 30 MHz ~ 1 GHz



Frequency Range: 1 GHz ~ 10 GHz



Frequency Range: 10 GHz ~ 27 GHz



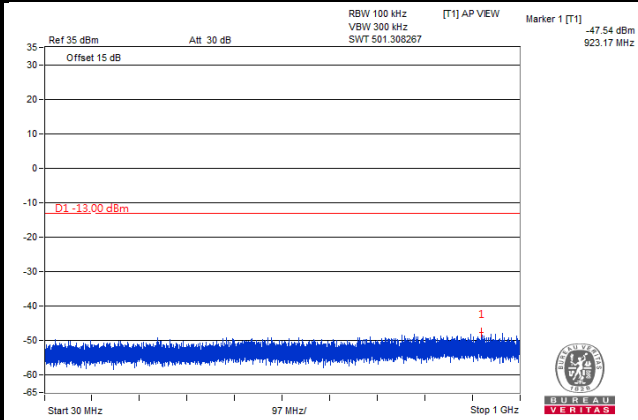
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 66

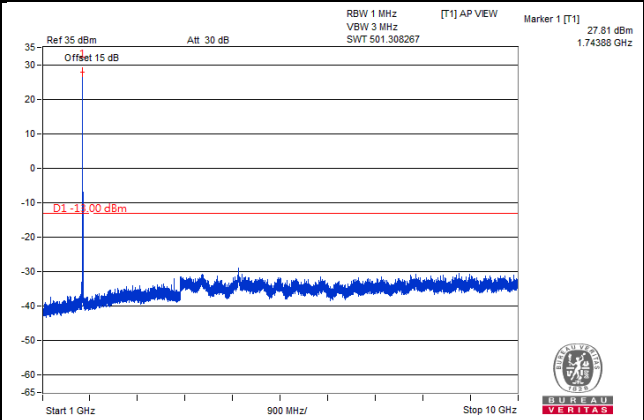
Channel Bandwidth: 3 MHz

Channel 132322

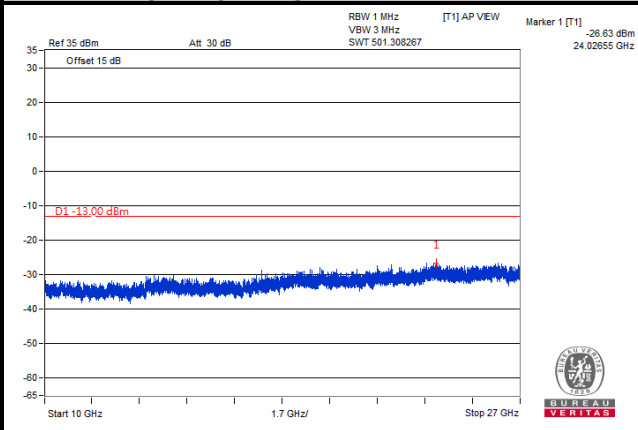
Frequency Range: 30 MHz ~ 1 GHz



Frequency Range: 1 GHz ~ 10 GHz



Frequency Range: 10 GHz ~ 27 GHz



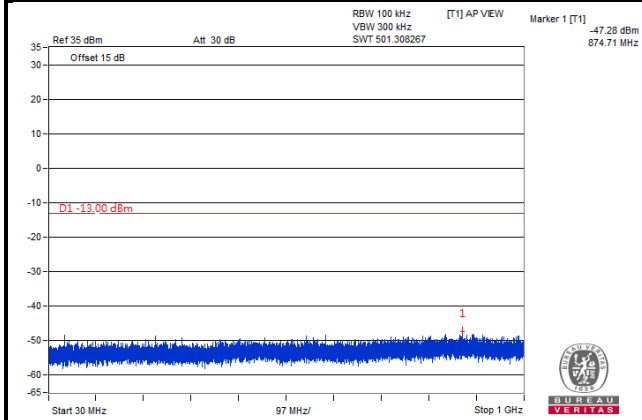
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 66

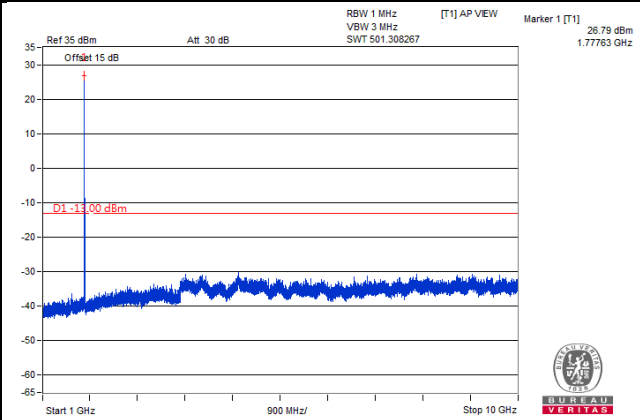
Channel Bandwidth: 3 MHz

Channel 132657

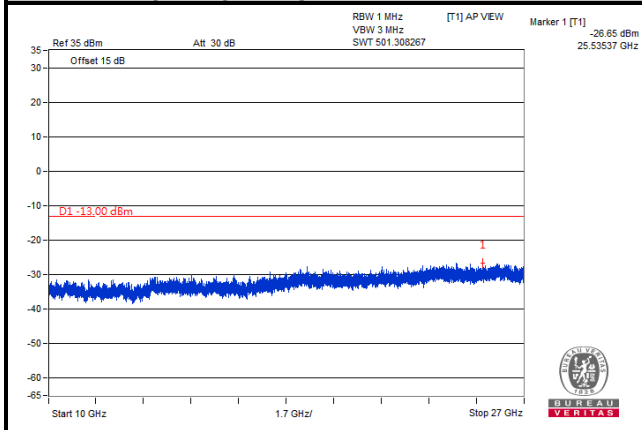
Frequency Range: 30 MHz ~ 1 GHz



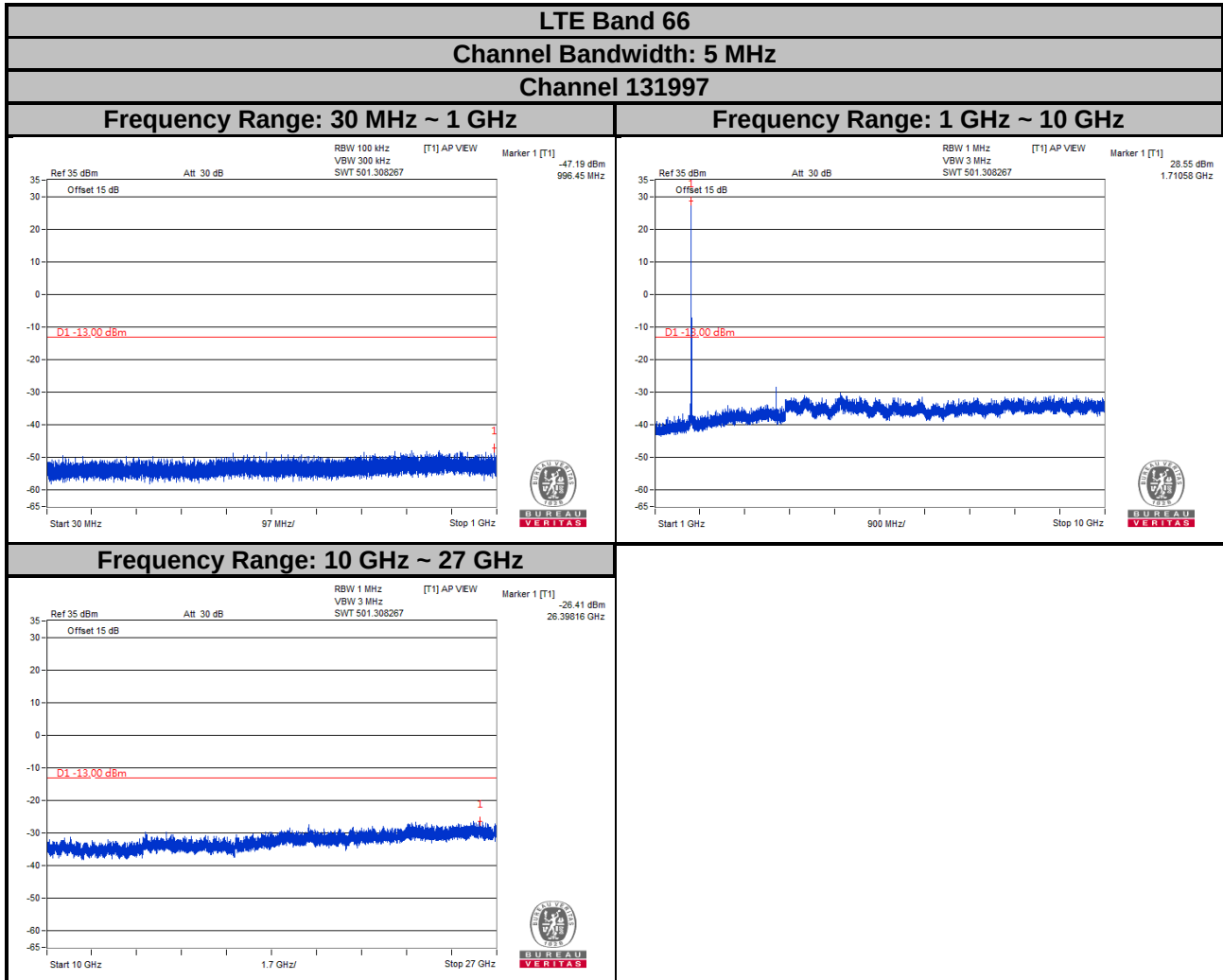
Frequency Range: 1 GHz ~ 10 GHz



Frequency Range: 10 GHz ~ 27 GHz



Note: The signal over the limit in 9 kHz is from spectrum analyzer.



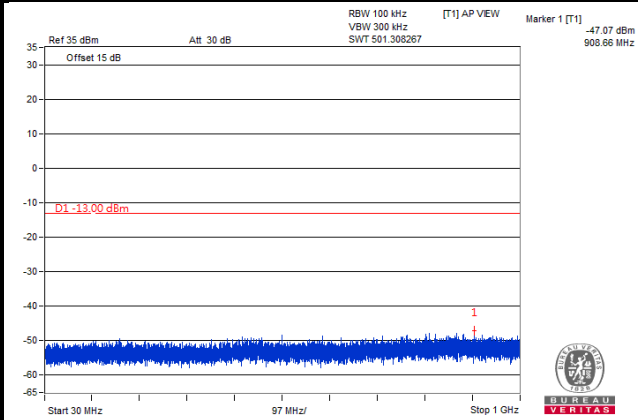
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 66

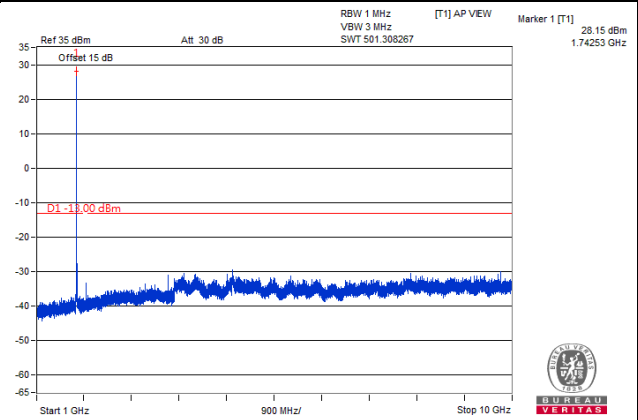
Channel Bandwidth: 5 MHz

Channel 132322

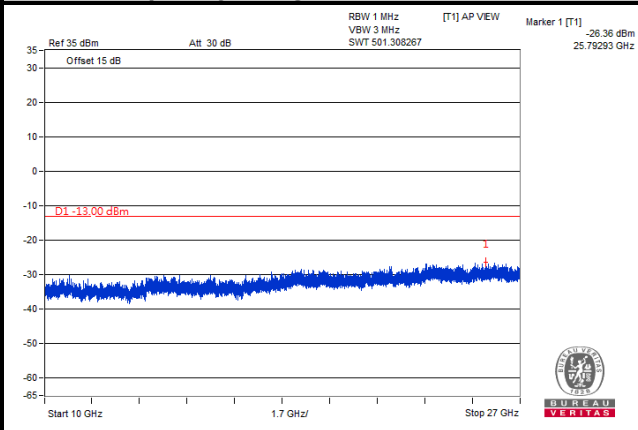
Frequency Range: 30 MHz ~ 1 GHz



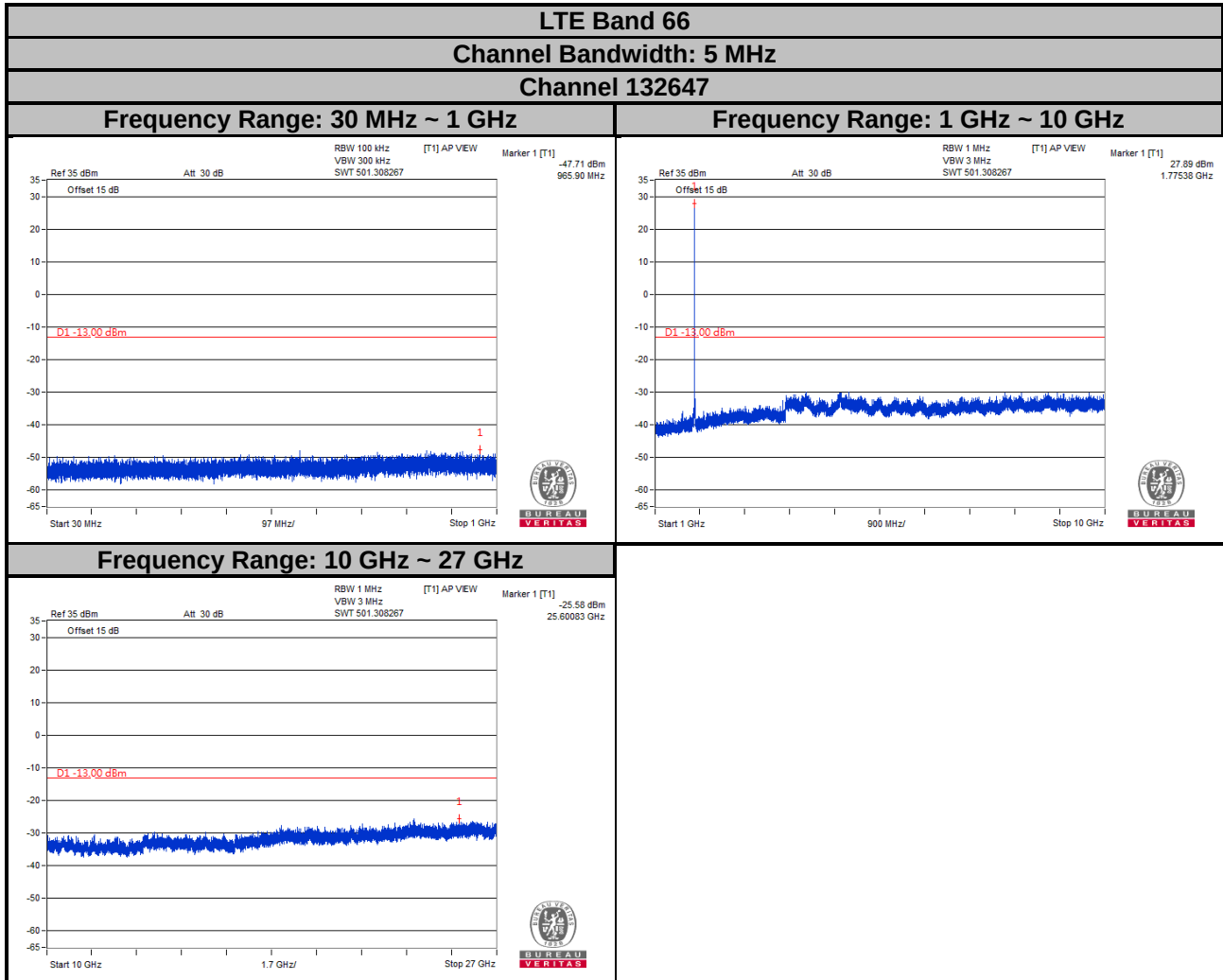
Frequency Range: 1 GHz ~ 10 GHz



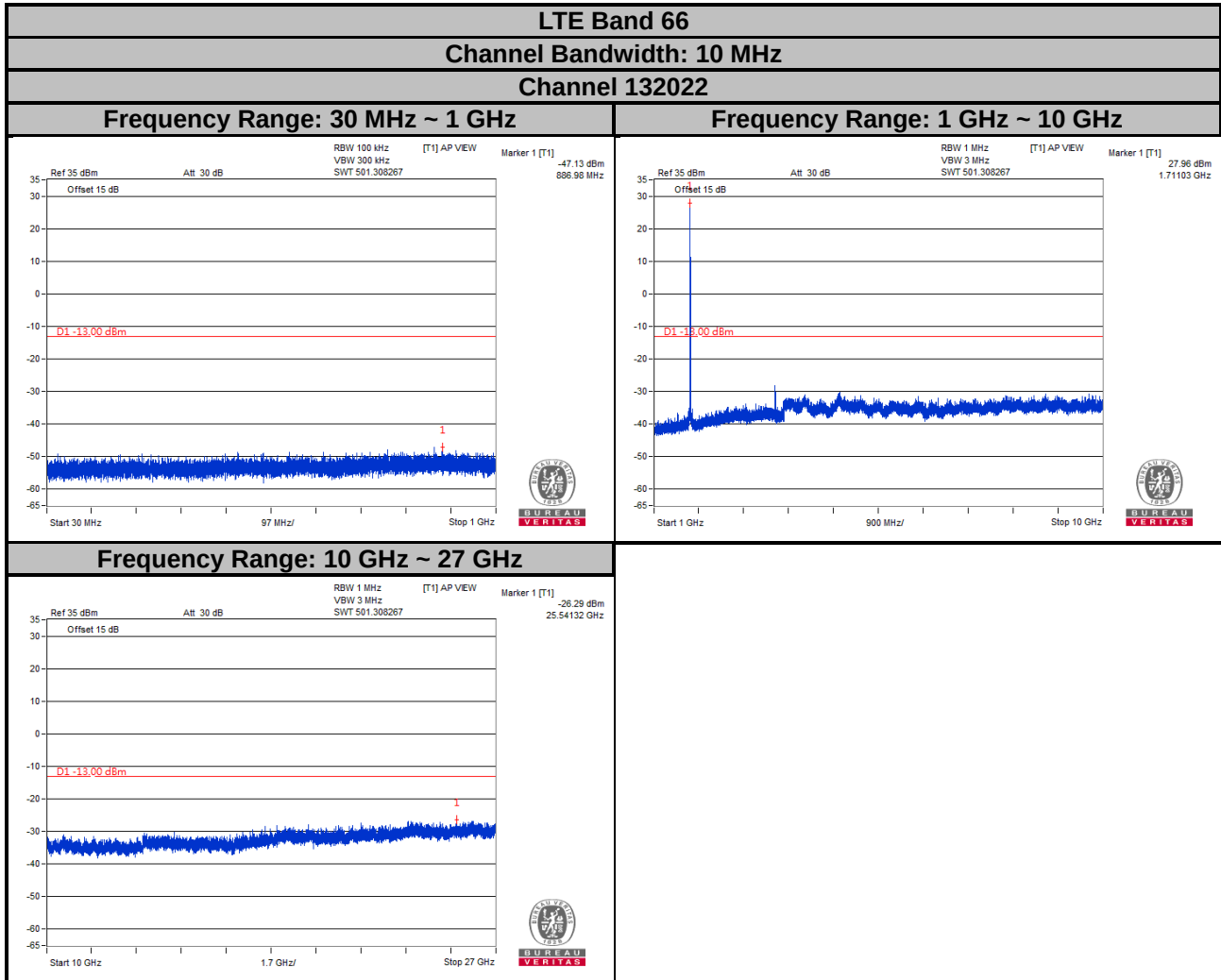
Frequency Range: 10 GHz ~ 27 GHz



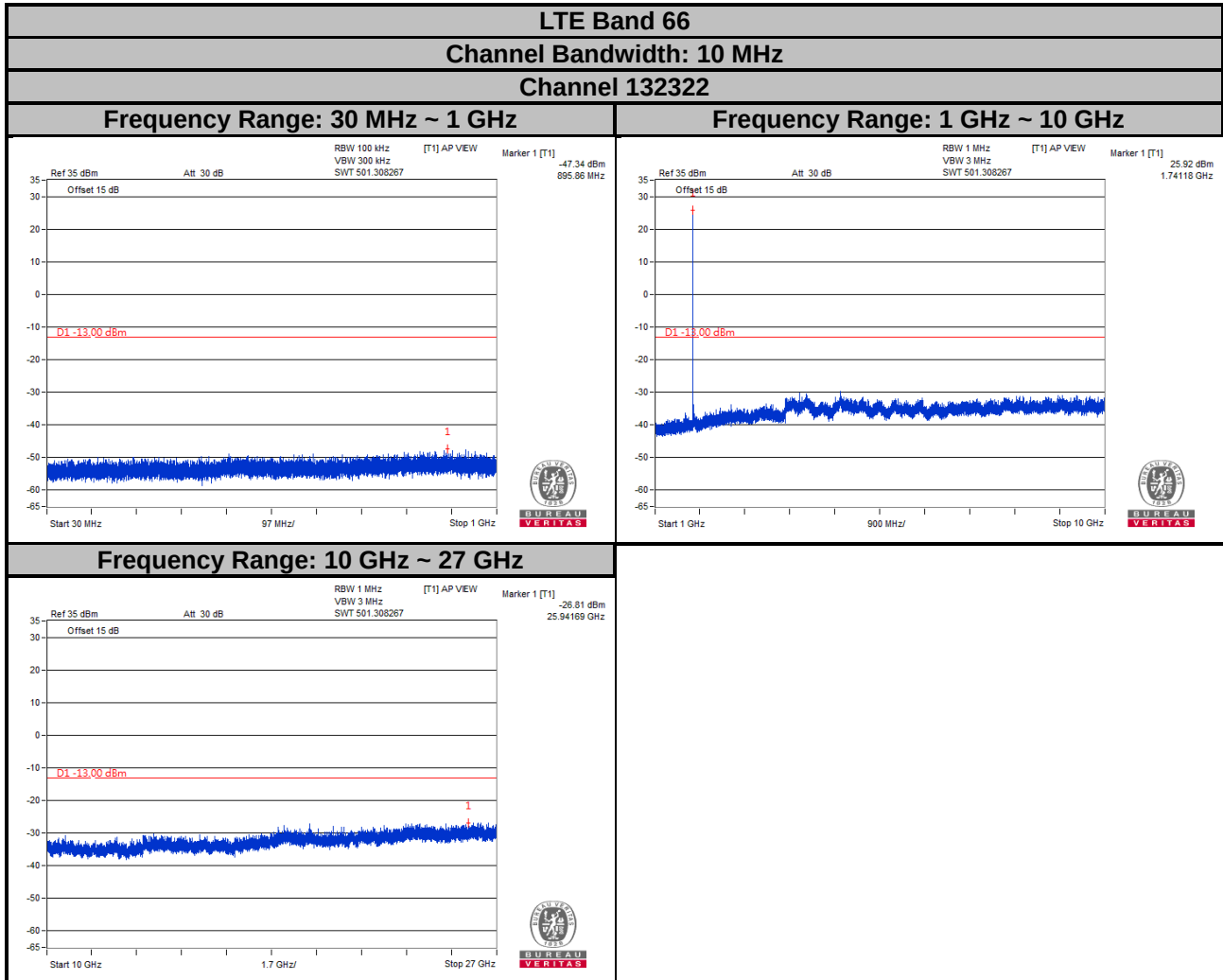
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



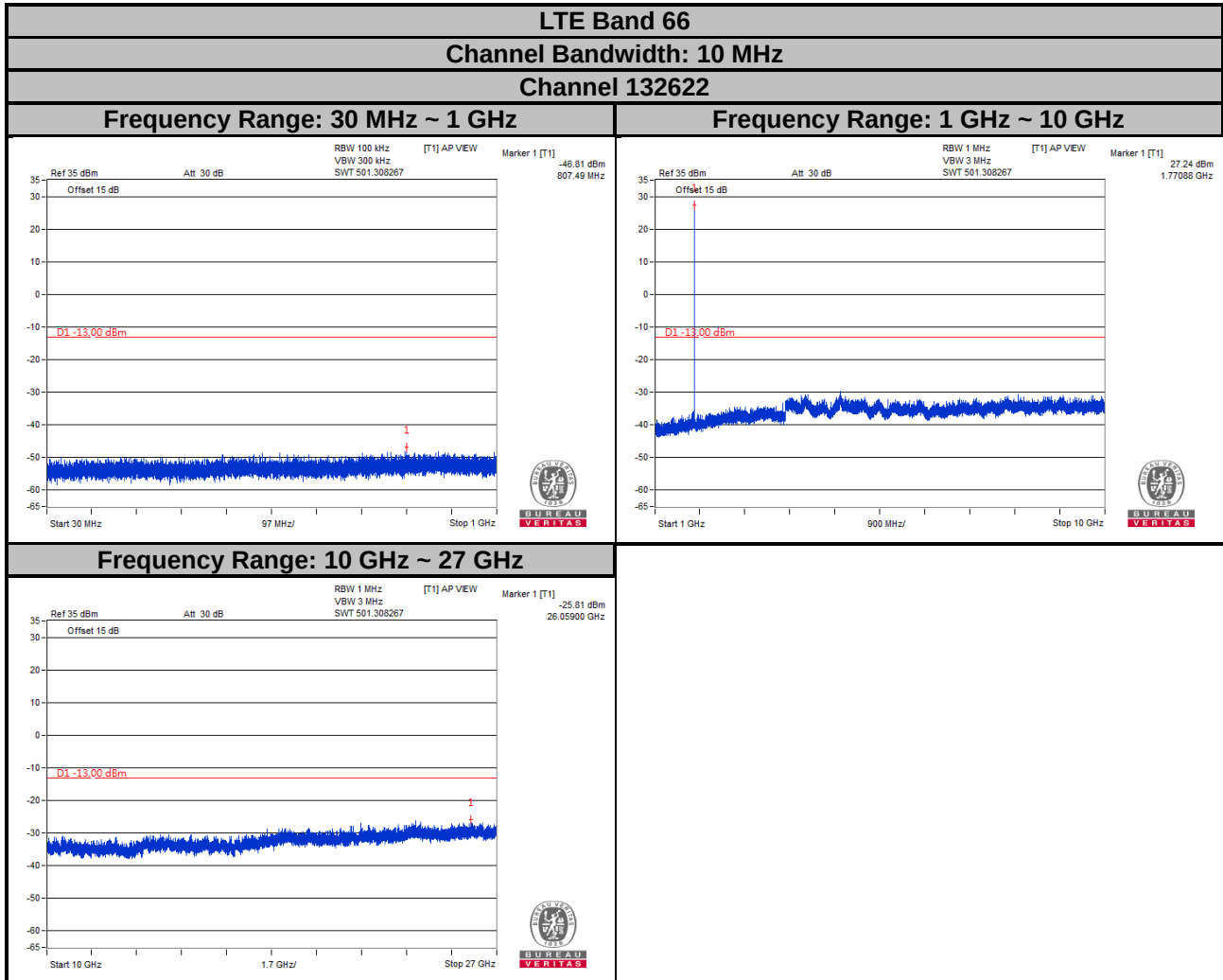
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



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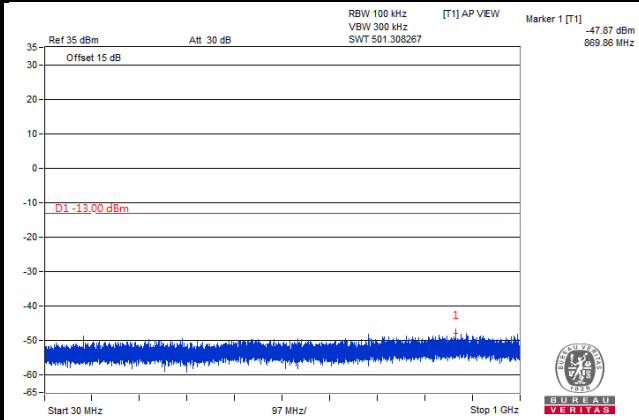
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 66

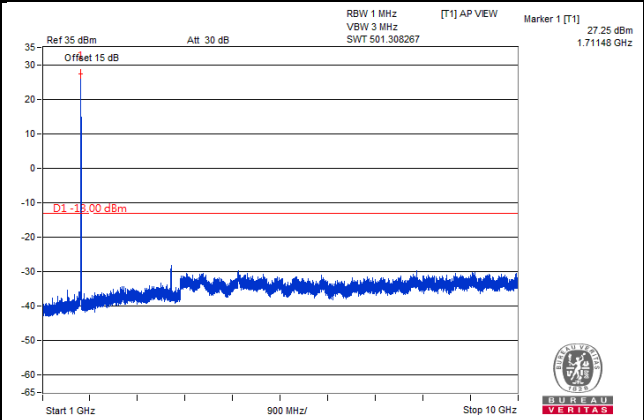
Channel Bandwidth: 15 MHz

Channel 132047

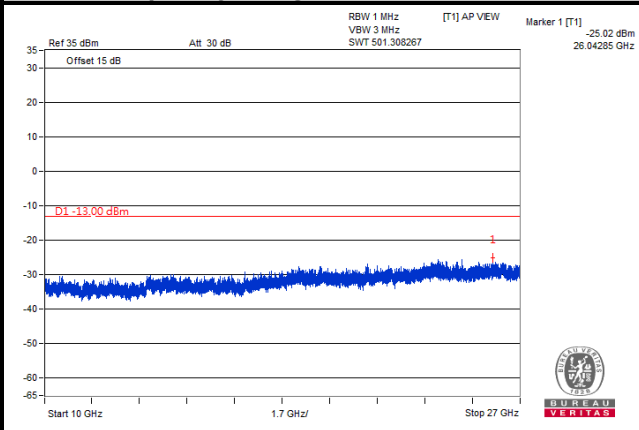
Frequency Range: 30 MHz ~ 1 GHz



Frequency Range: 1 GHz ~ 10 GHz



Frequency Range: 10 GHz ~ 27 GHz



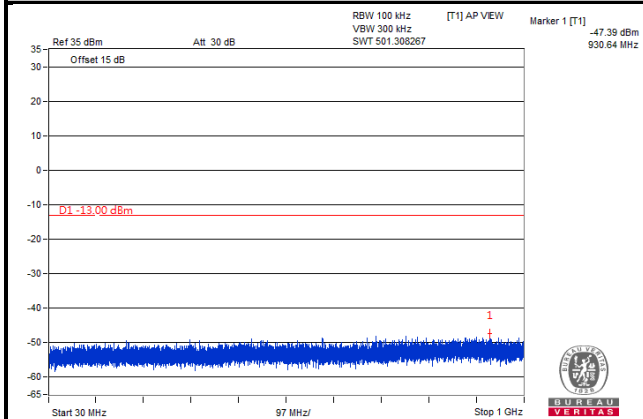
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 66

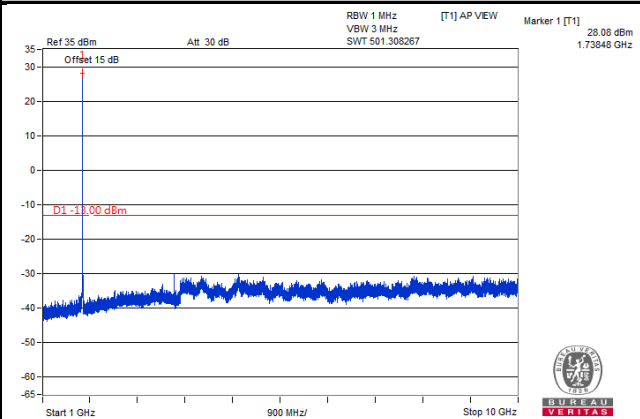
Channel Bandwidth: 15 MHz

Channel 132322

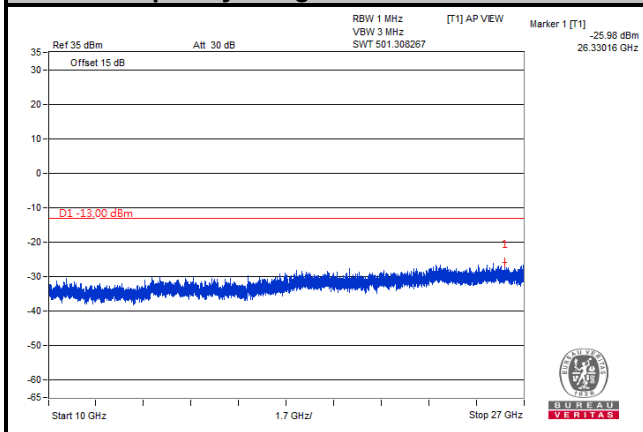
Frequency Range: 30 MHz ~ 1 GHz



Frequency Range: 1 GHz ~ 10 GHz



Frequency Range: 10 GHz ~ 27 GHz



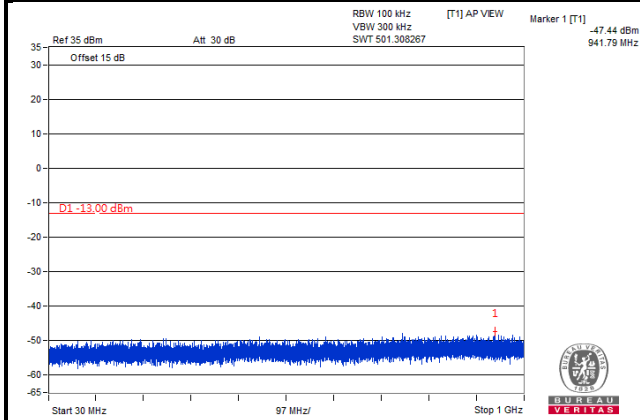
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 66

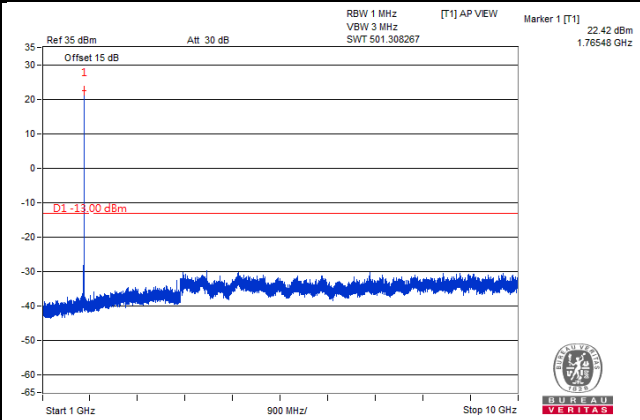
Channel Bandwidth: 15 MHz

Channel 132597

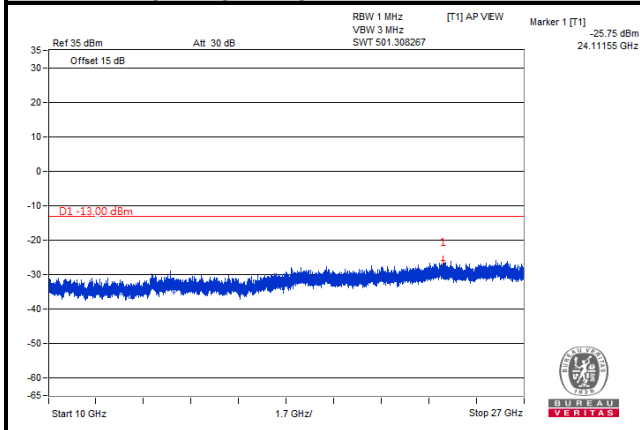
Frequency Range: 30 MHz ~ 1 GHz



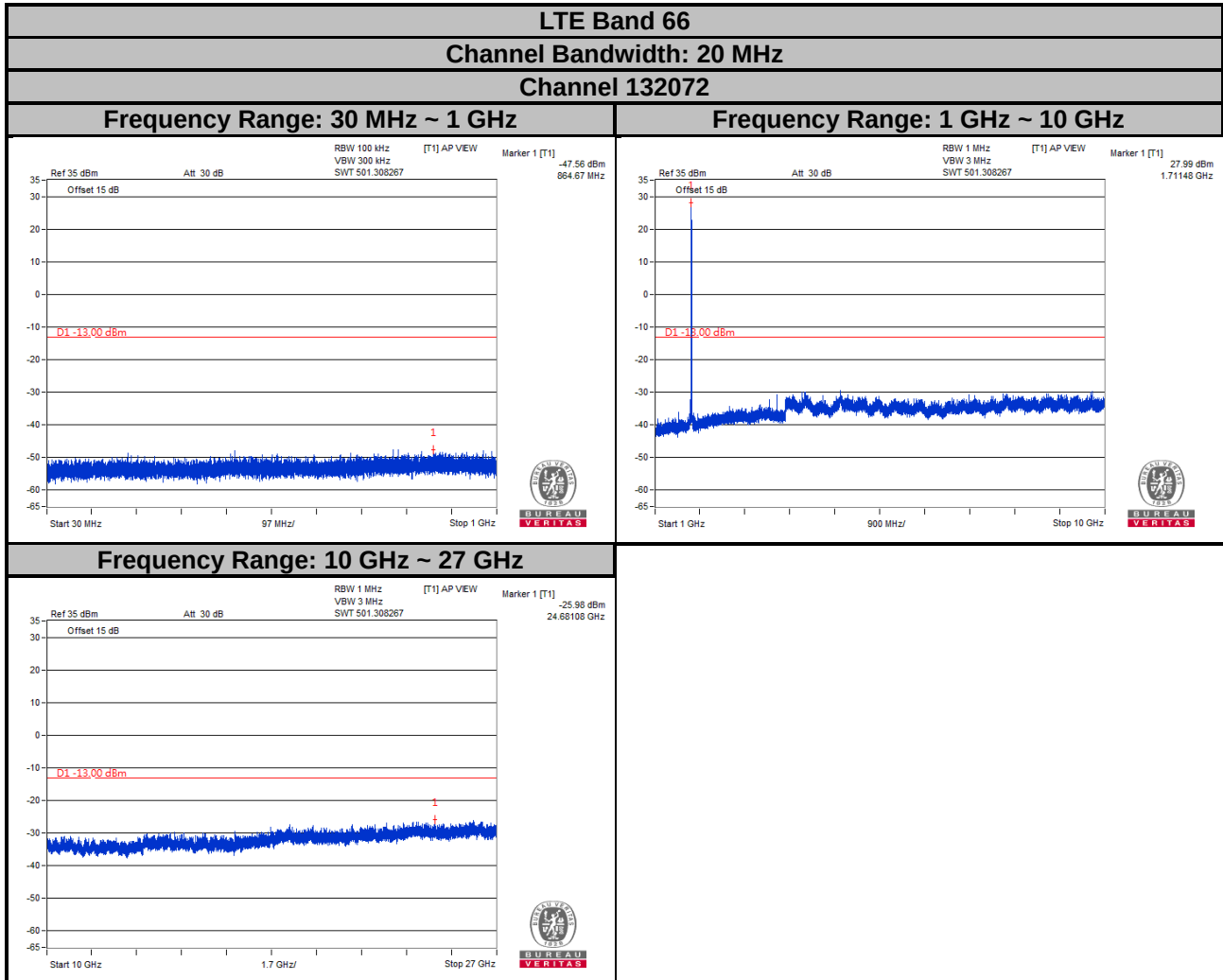
Frequency Range: 1 GHz ~ 10 GHz



Frequency Range: 10 GHz ~ 27 GHz



Note: The signal over the limit in 9 kHz is from spectrum analyzer.



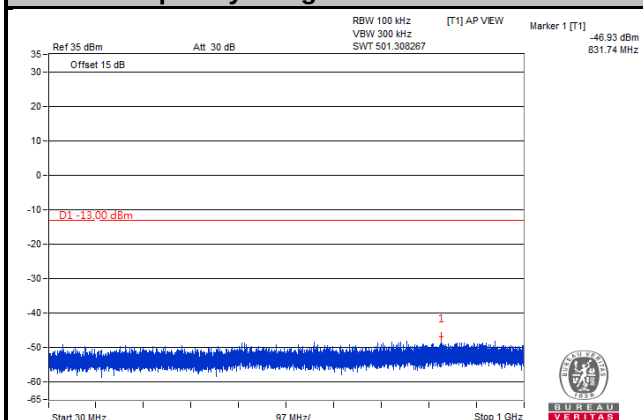
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 66

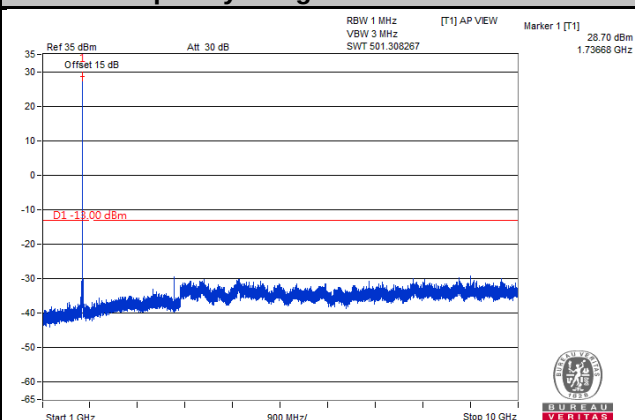
Channel Bandwidth: 20 MHz

Channel 132322

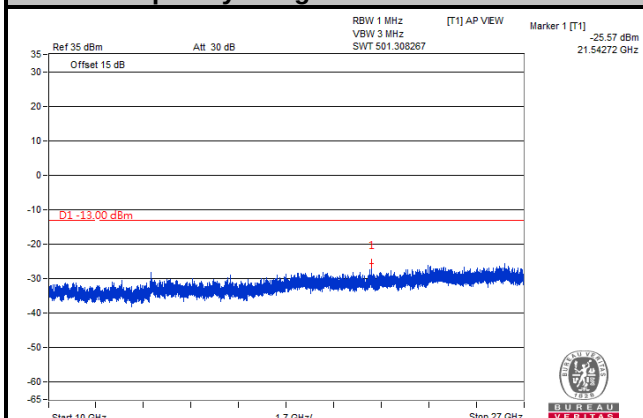
Frequency Range: 30 MHz ~ 1 GHz



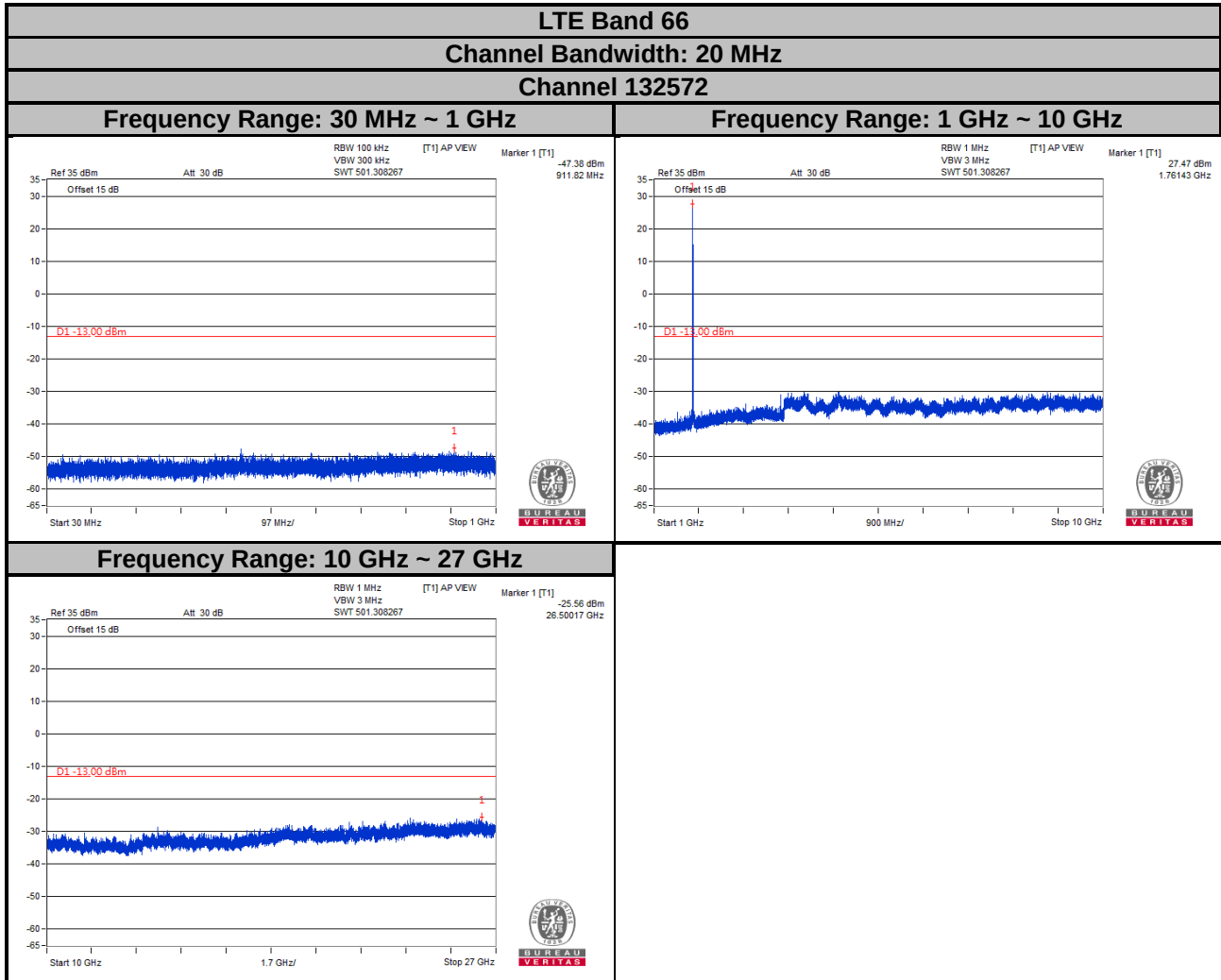
Frequency Range: 1 GHz ~ 10 GHz



Frequency Range: 10 GHz ~ 27 GHz

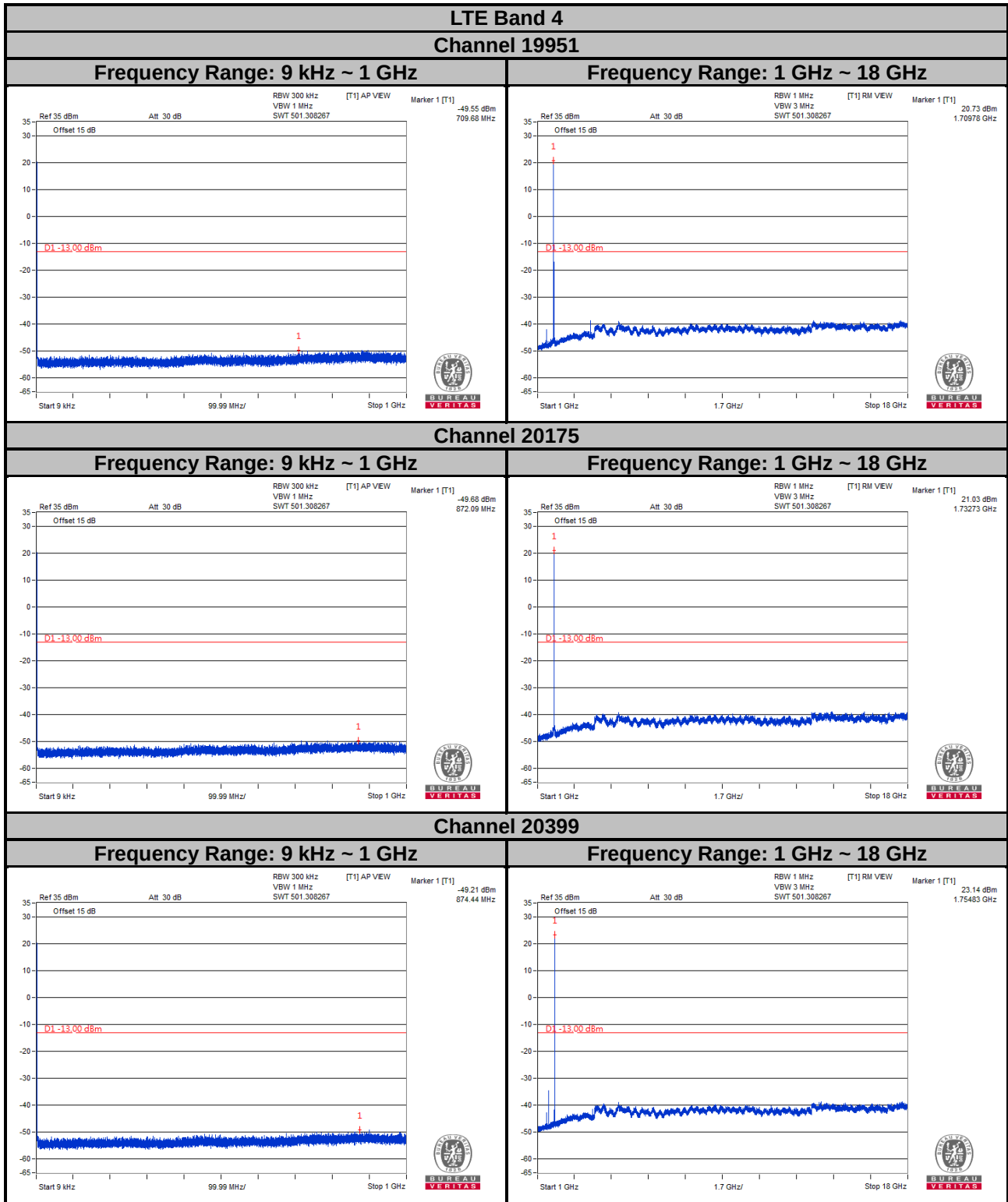


Note: The signal over the limit in 9 kHz is from spectrum analyzer.



Note: The signal over the limit in 9 kHz is from spectrum analyzer.

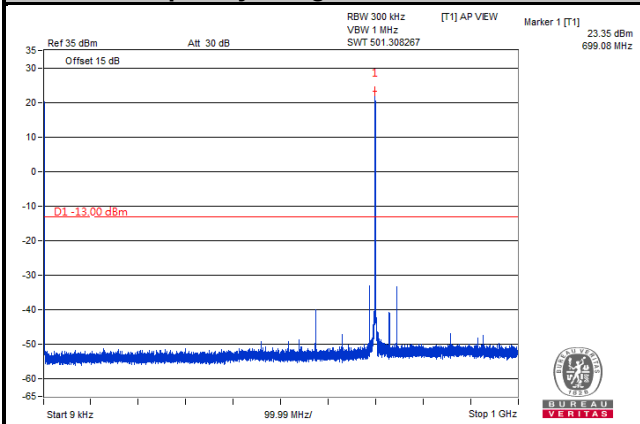
NB-IoT



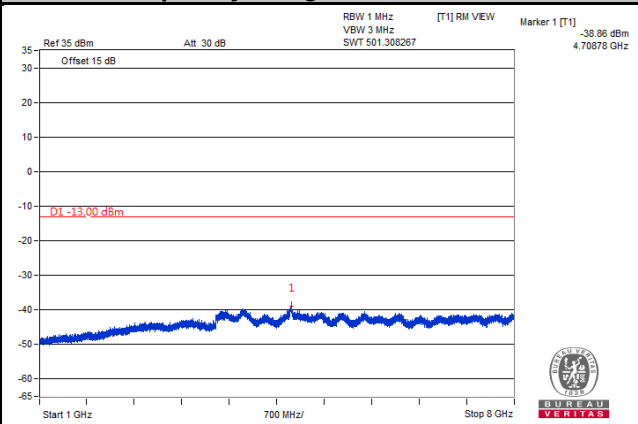
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 12
Channel 23011

Frequency Range: 9 kHz ~ 1 GHz

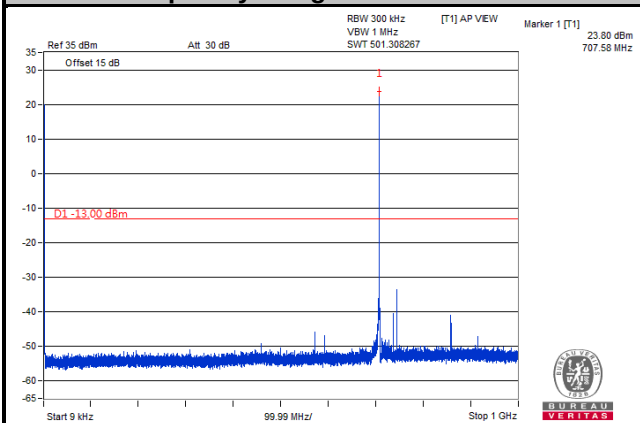


Frequency Range: 1 GHz ~ 8 GHz

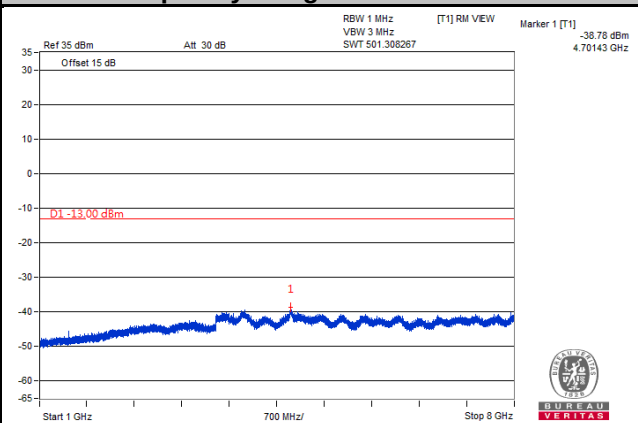


Channel 23095

Frequency Range: 9 kHz ~ 1 GHz

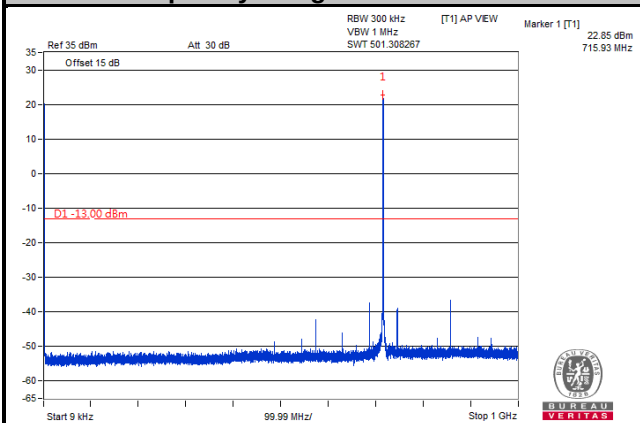


Frequency Range: 1 GHz ~ 8 GHz

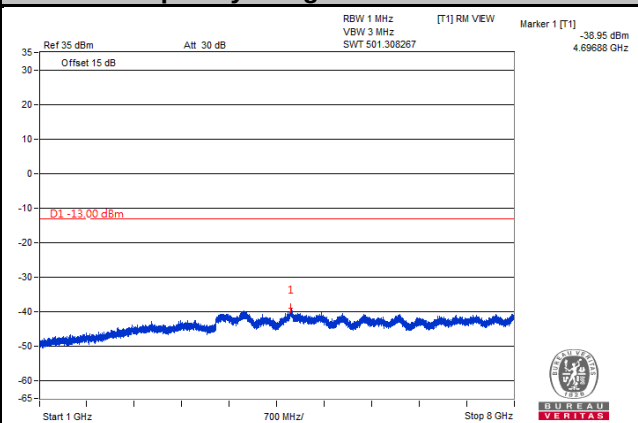


Channel 23179

Frequency Range: 9 kHz ~ 1 GHz



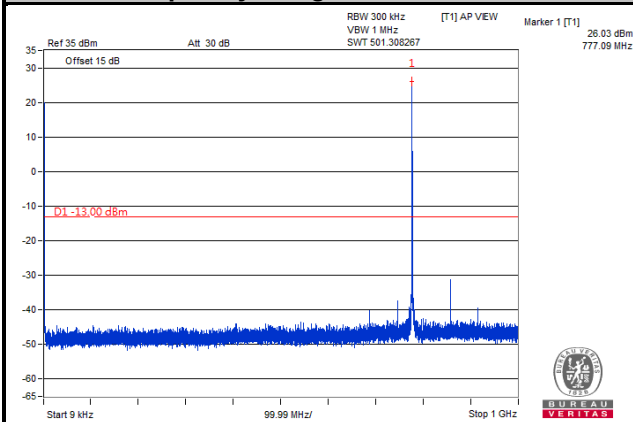
Frequency Range: 1 GHz ~ 8 GHz



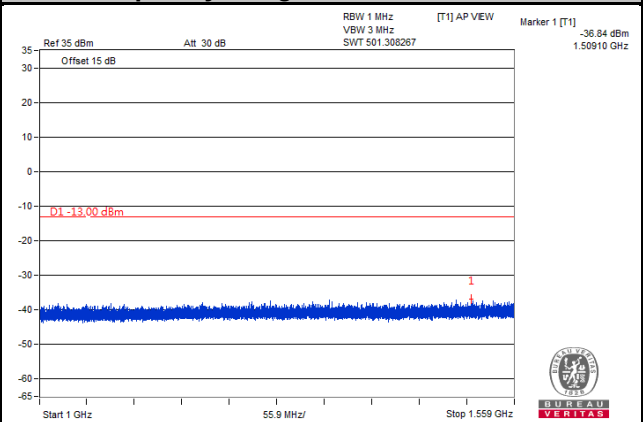
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 13
Channel 23181

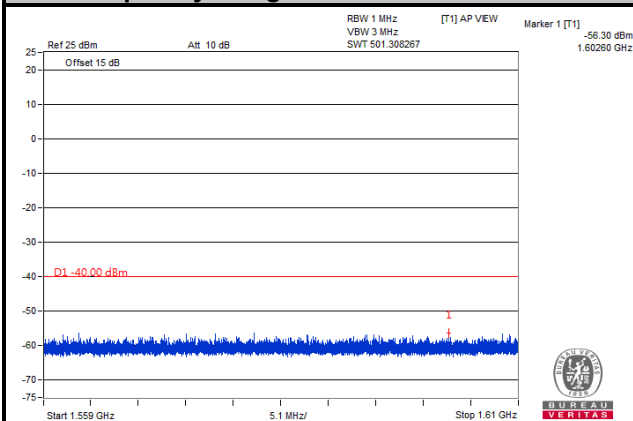
Frequency Range: 9 kHz ~ 1 GHz



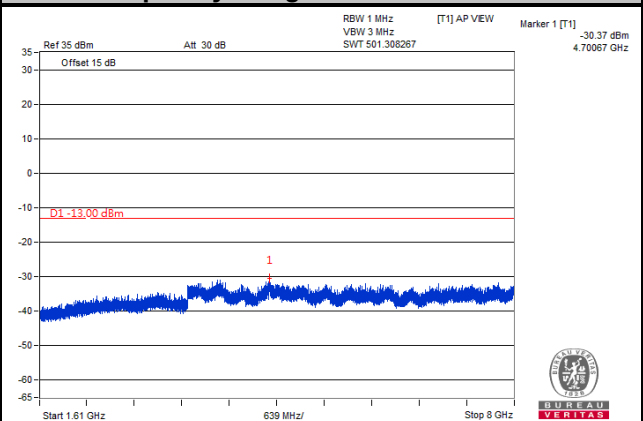
Frequency Range: 1 GHz ~ 1.559 GHz



Frequency Range: 1.559 kHz ~ 1.61 GHz



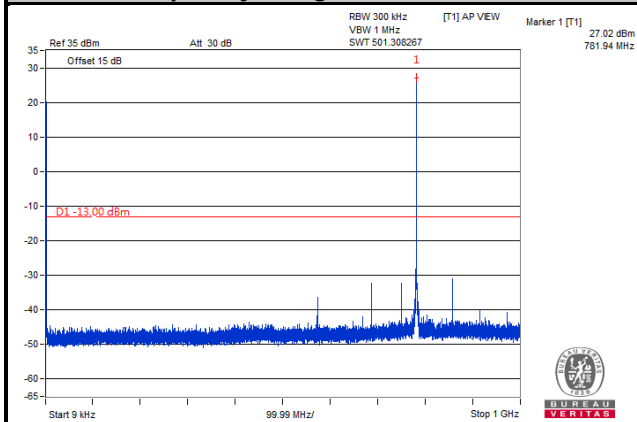
Frequency Range: 1.61 GHz ~ 8 GHz



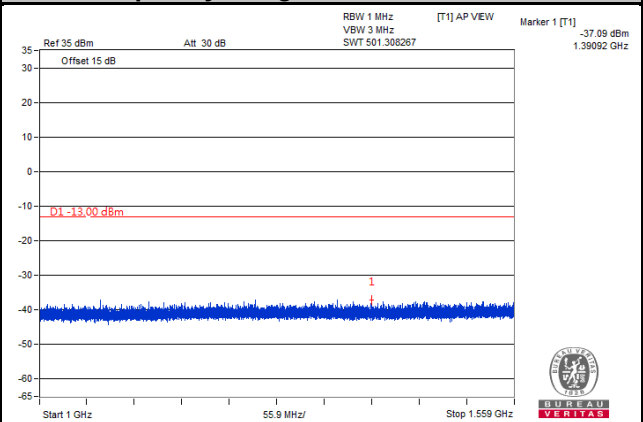
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 13
Channel 23230

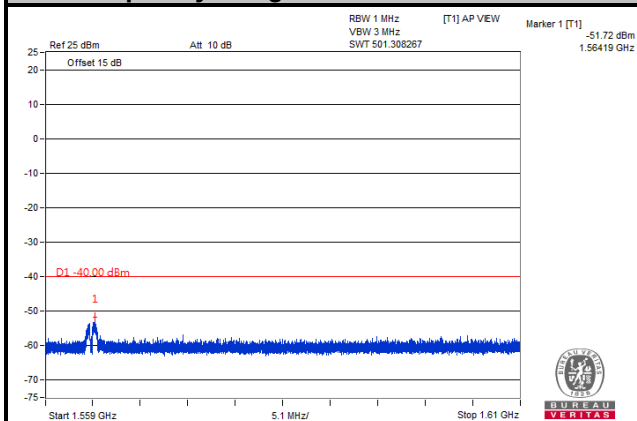
Frequency Range: 9 kHz ~ 1 GHz



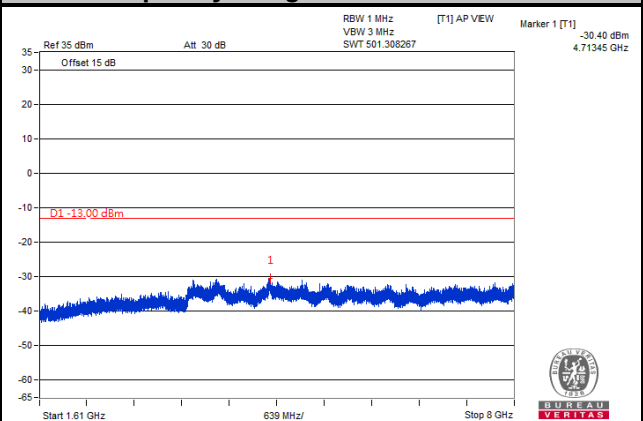
Frequency Range: 1 GHz ~ 1.559 GHz



Frequency Range: 1.559 kHz ~ 1.61 GHz



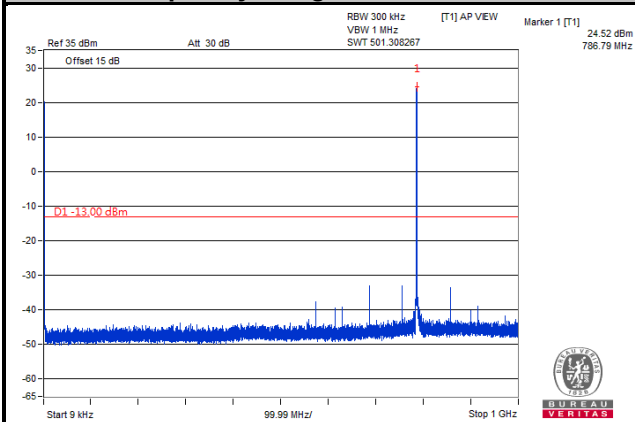
Frequency Range: 1.61 GHz ~ 8 GHz



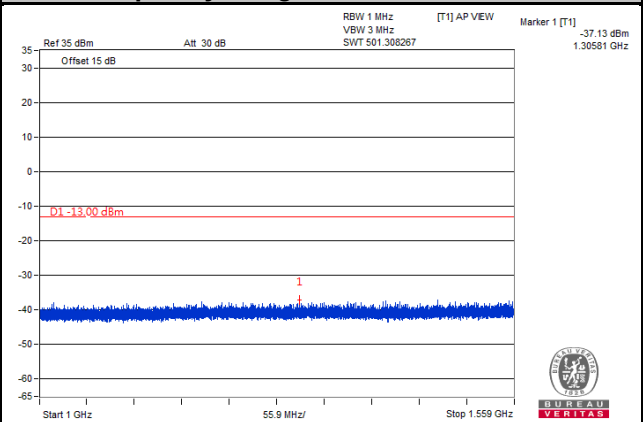
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 13
Channel 23279

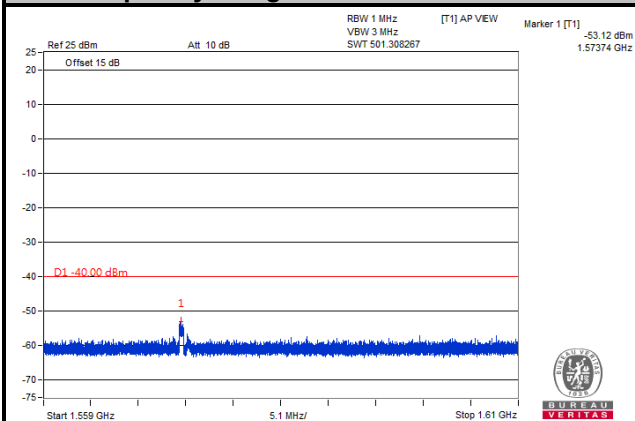
Frequency Range: 9 kHz ~ 1 GHz



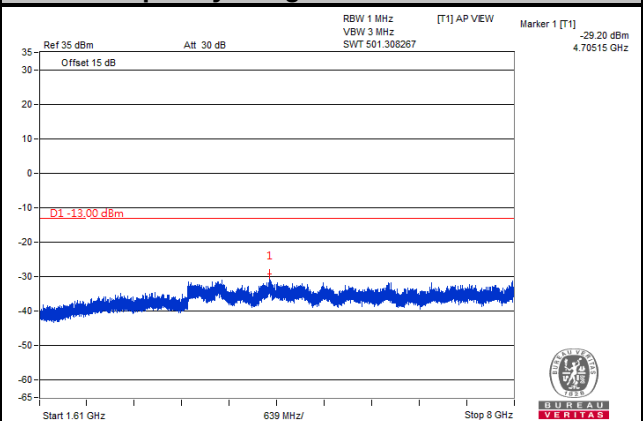
Frequency Range: 1 GHz ~ 1.559 GHz



Frequency Range: 1.559 kHz ~ 1.61 GHz



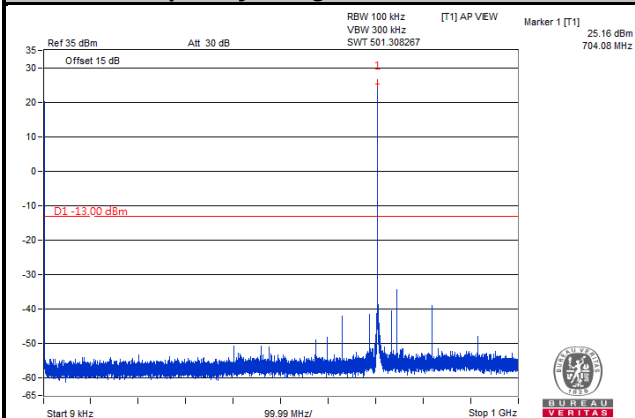
Frequency Range: 1.61 GHz ~ 8 GHz



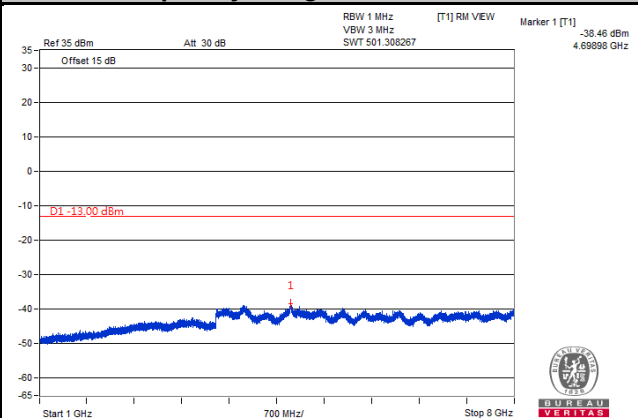
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 17
Channel 23731

Frequency Range: 9 kHz ~ 1 GHz

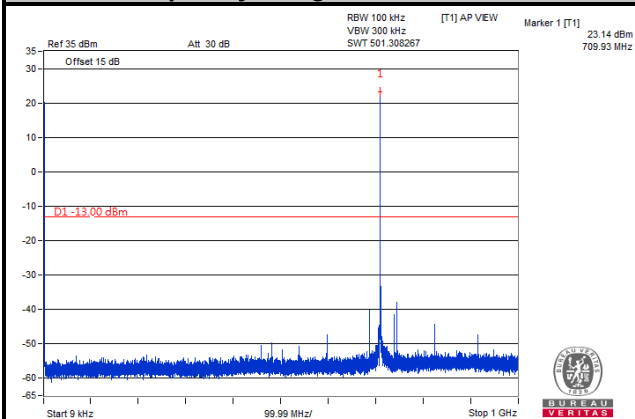


Frequency Range: 1 GHz ~ 8 GHz

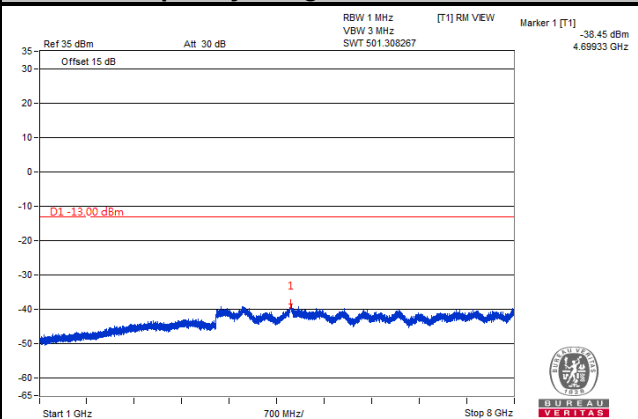


Channel 23790

Frequency Range: 9 kHz ~ 1 GHz

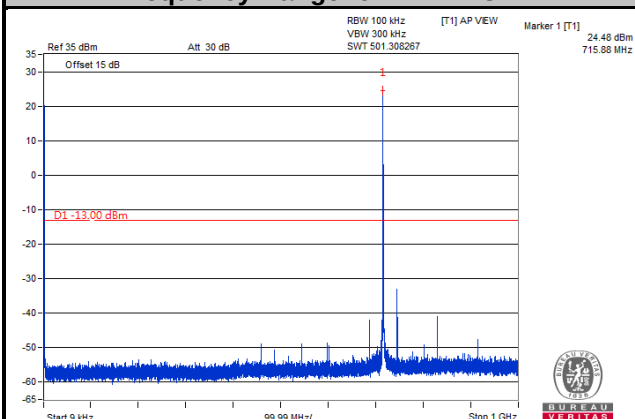


Frequency Range: 1 GHz ~ 8 GHz

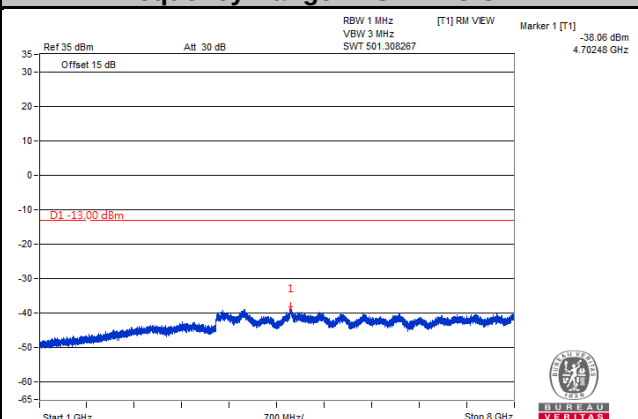


Channel 23849

Frequency Range: 9 kHz ~ 1 GHz



Frequency Range: 1 GHz ~ 8 GHz

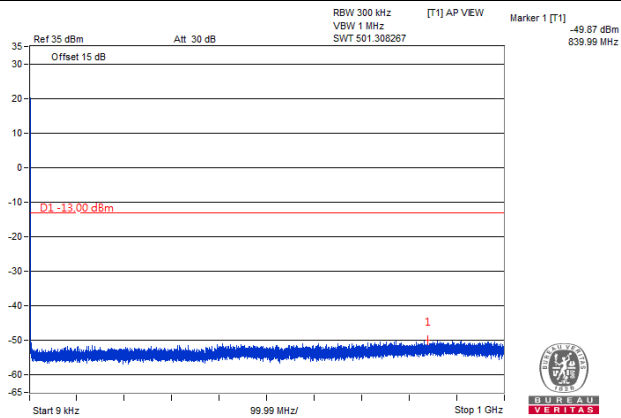


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

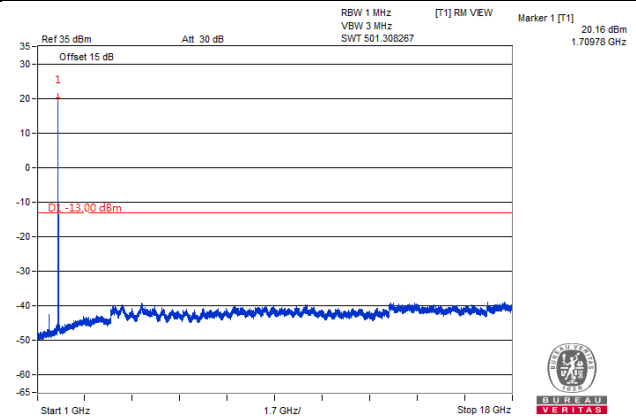
LTE Band 66

Channel 131973

Frequency Range: 9 kHz ~ 1 GHz

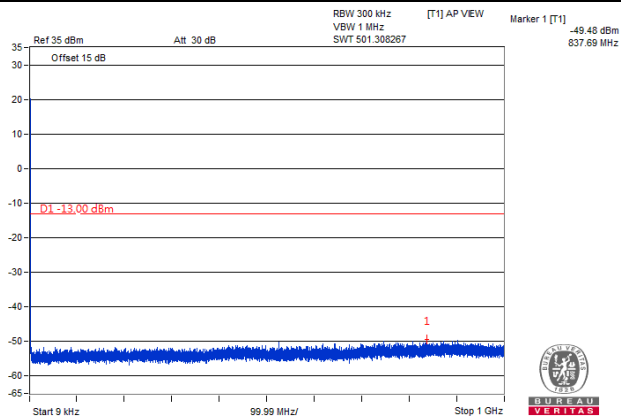


Frequency Range: 1 GHz ~ 18 GHz

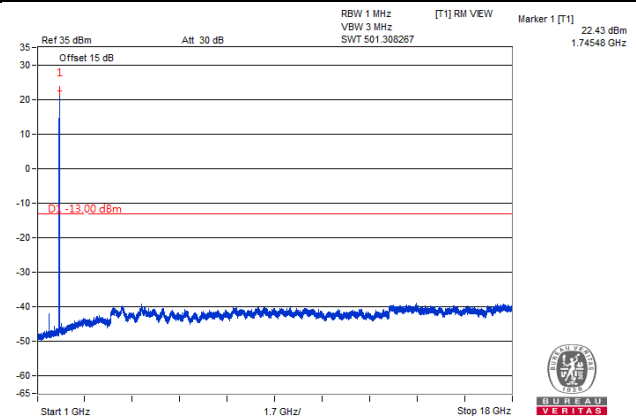


Channel 132322

Frequency Range: 9 kHz ~ 1 GHz

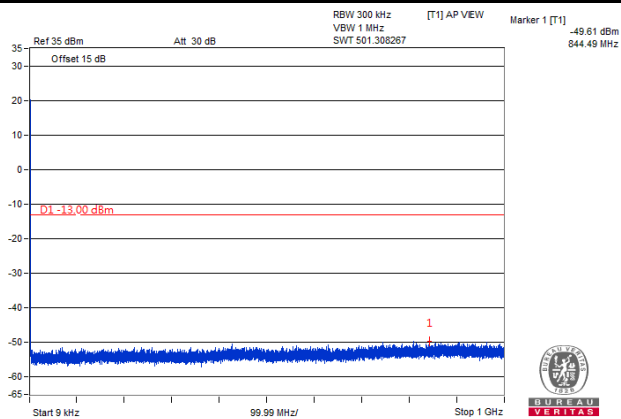


Frequency Range: 1 GHz ~ 18 GHz

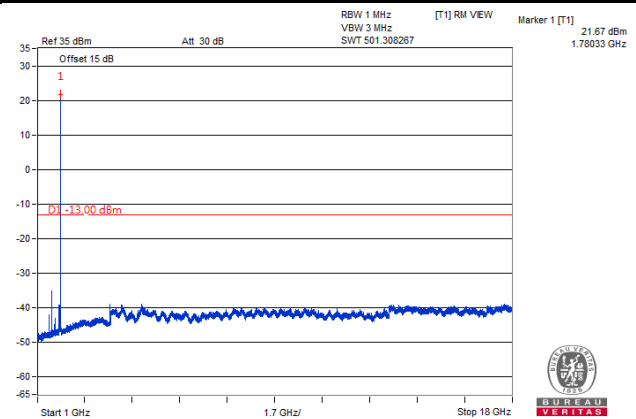


Channel 132671

Frequency Range: 9 kHz ~ 1 GHz



Frequency Range: 1 GHz ~ 18 GHz



Note: The signal over the limit in 9 kHz is from spectrum analyzer.

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. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, $E.R.P \text{ power} = E.I.R.P \text{ power} - 2.15 \text{ dB}$.

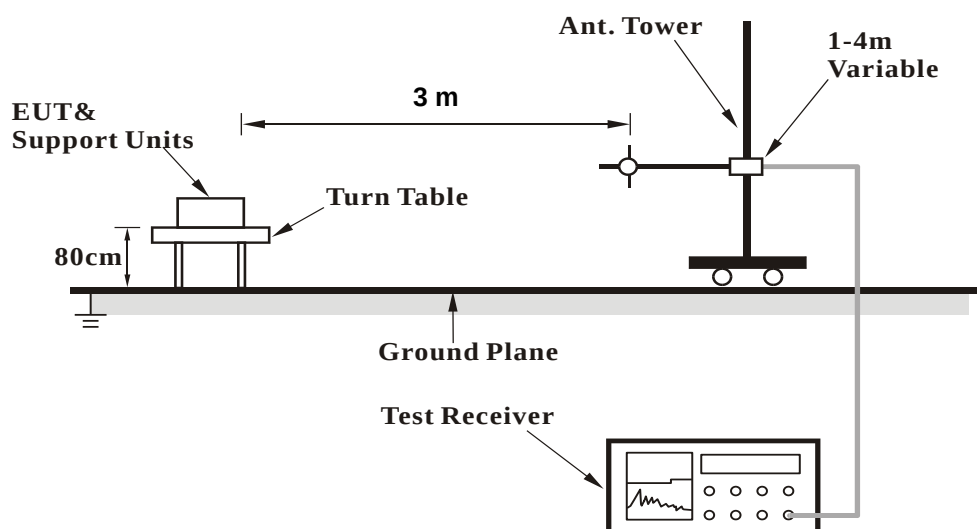
Note: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

4.8.3 Deviation from Test Standard

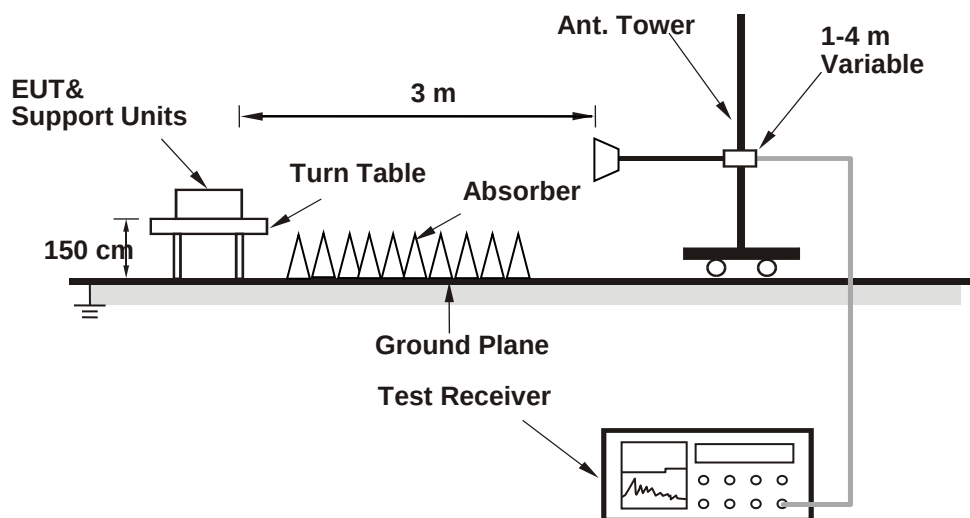
No deviation.

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

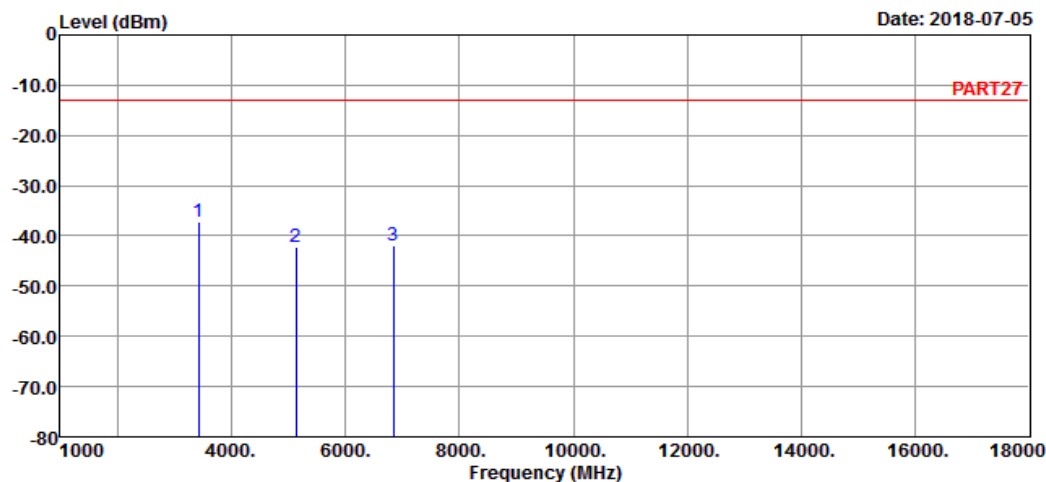
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

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

Tested by: Thomas Wei

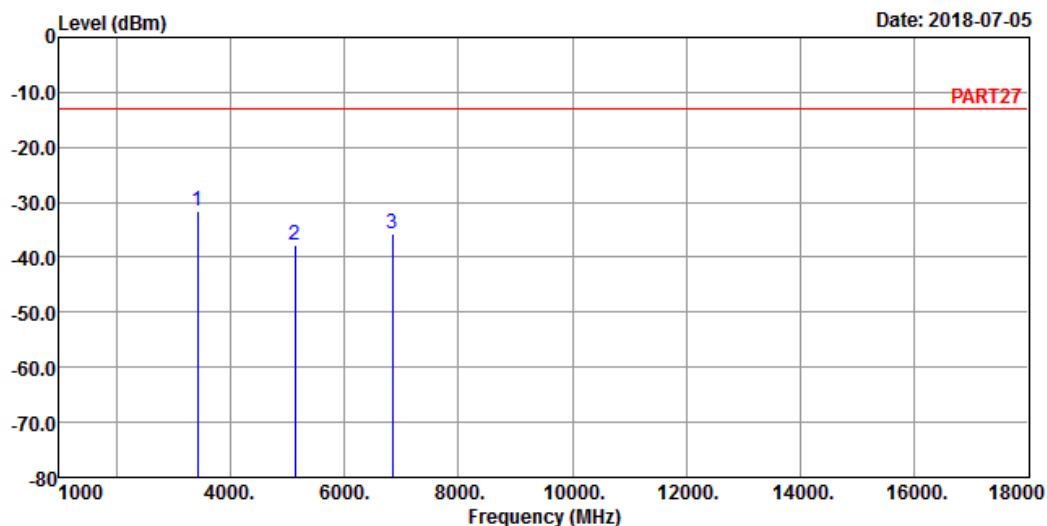
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3421.40	-37.26	-28.92	-13.00	-24.26	-8.34	Peak
2	5132.10	-42.16	-40.42	-13.00	-29.16	-1.74	Peak
3	6842.80	-41.83	-44.14	-13.00	-28.83	2.31	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 4 QPSK_1.4M Link_L-CH
Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3421.40	-31.72	-23.38	-13.00	-18.72	-8.34	Peak
2	5132.10	-37.70	-35.96	-13.00	-24.70	-1.74	Peak
3	6842.80	-35.62	-37.93	-13.00	-22.62	2.31	Peak

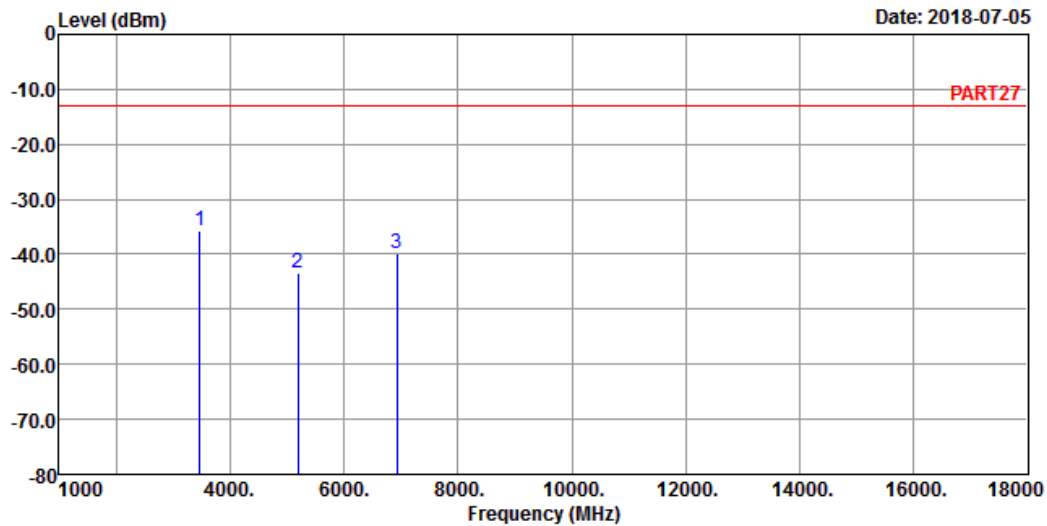
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : Cat-M1 Band 4 QPSK_1.4M Link_M-CH
 Tested by: Thomas Wei

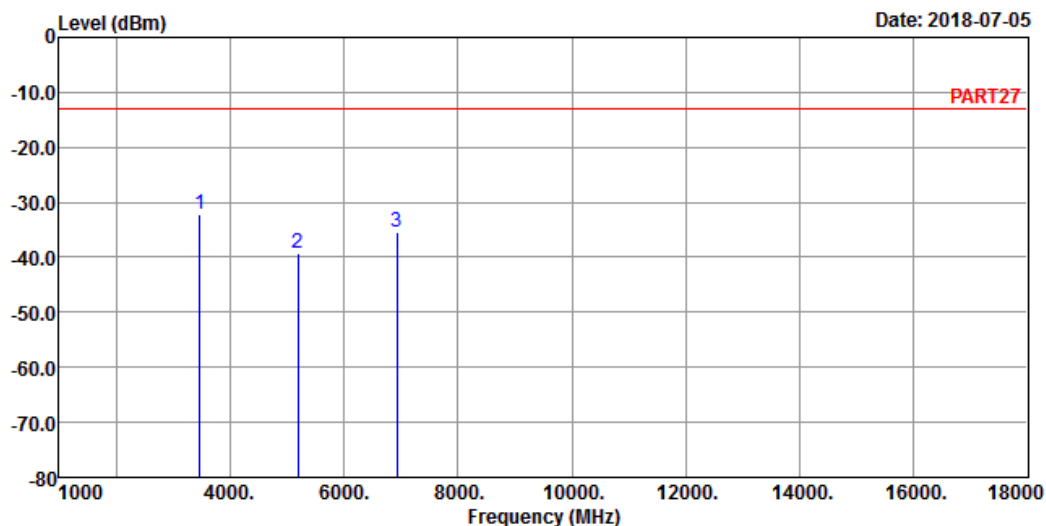
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3465.00	-35.77	-27.89	-13.00	-22.77	-7.88	Peak
2	5197.50	-43.44	-41.37	-13.00	-30.44	-2.07	Peak
3	6930.00	-39.98	-42.67	-13.00	-26.98	2.69	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5

Condition: PART27 VERTICAL

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

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3465.00	-32.18	-24.30	-13.00	-19.18	-7.88	Peak
2	5197.50	-39.36	-37.29	-13.00	-26.36	-2.07	Peak
3	6930.00	-35.45	-38.14	-13.00	-22.45	2.69	Peak

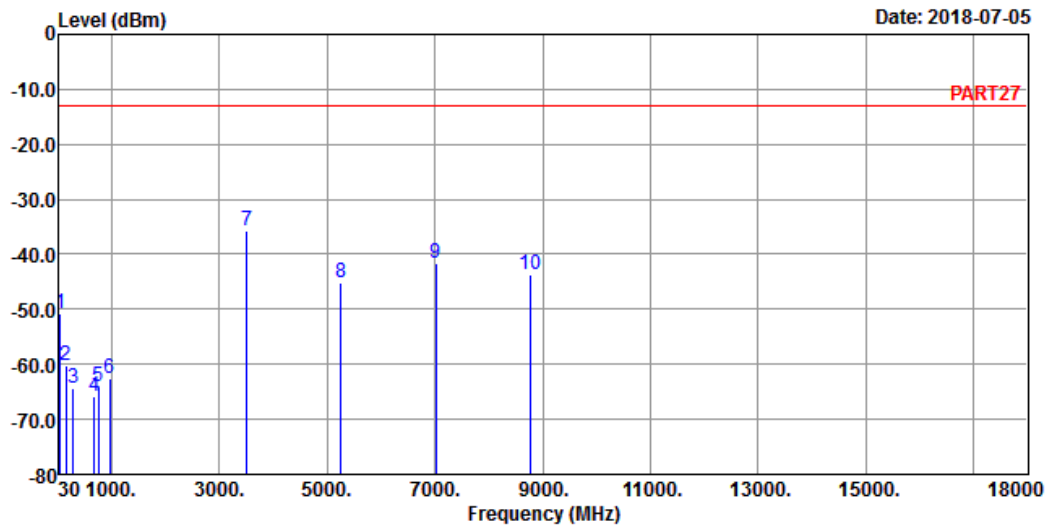
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 4 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	44.55	-50.66	-48.67	-13.00	-37.66	-1.99	Peak
2	161.92	-60.22	-55.24	-13.00	-47.22	-4.98	Peak
3	296.75	-64.33	-57.38	-13.00	-51.33	-6.95	Peak
4	683.78	-65.76	-65.40	-13.00	-52.76	-0.36	Peak
5	763.32	-63.98	-64.82	-13.00	-50.98	0.84	Peak
6	965.08	-62.66	-65.01	-13.00	-49.66	2.35	Peak
7 pp	3508.60	-35.83	-28.38	-13.00	-22.83	-7.45	Peak
8	5262.90	-45.12	-42.60	-13.00	-32.12	-2.52	Peak
9	7017.20	-41.70	-44.89	-13.00	-28.70	3.19	Peak
10	8771.50	-43.71	-48.44	-13.00	-30.71	4.73	Peak

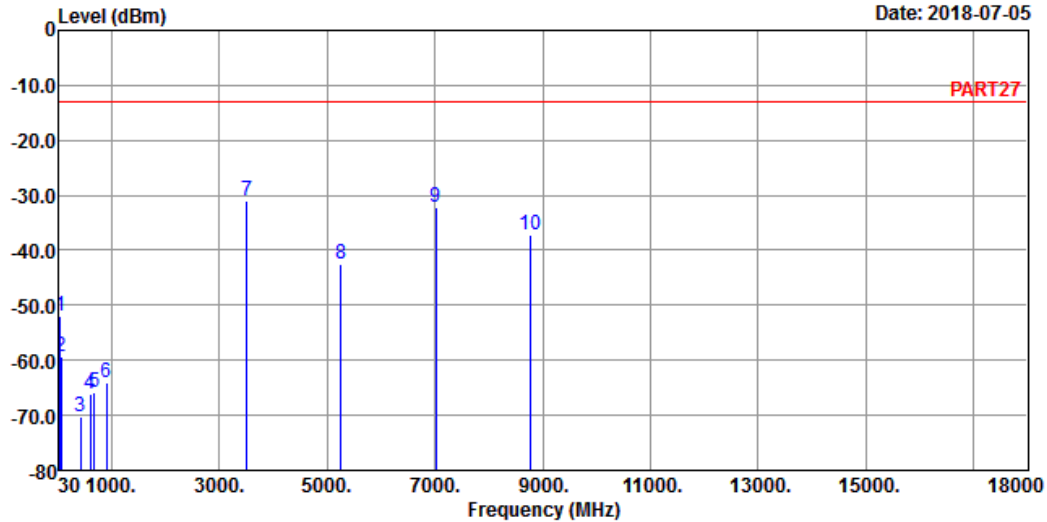


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2018-07-05



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 4 QPSK_1.4M Link_H-CH
Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	43.58	-51.92	-50.45	-13.00	-38.92	-1.47	Peak
2	68.80	-59.27	-50.95	-13.00	-46.27	-8.32	Peak
3	425.76	-70.36	-64.62	-13.00	-57.36	-5.74	Peak
4	612.00	-66.14	-65.36	-13.00	-53.14	-0.78	Peak
5	676.99	-65.73	-65.27	-13.00	-52.73	-0.46	Peak
6	901.06	-64.11	-64.71	-13.00	-51.11	0.60	Peak
7 pp	3508.60	-31.00	-23.55	-13.00	-18.00	-7.45	Peak
8	5262.90	-42.51	-39.99	-13.00	-29.51	-2.52	Peak
9	7017.20	-32.15	-35.34	-13.00	-19.15	3.19	Peak
10	8771.50	-37.09	-41.82	-13.00	-24.09	4.73	Peak

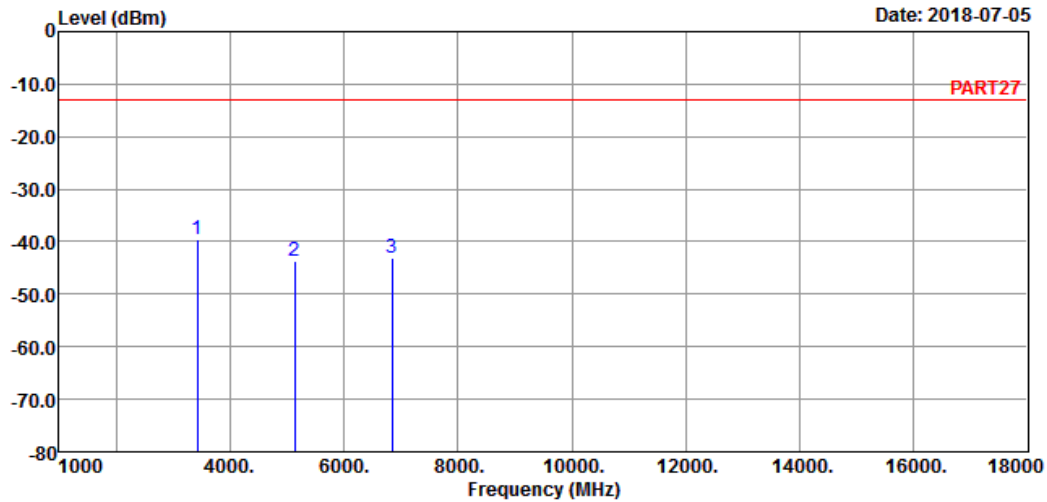
Channel Bandwidth: 5 MHz / QPSK
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 4 QPSK_5M Link_L-CH
Tested by: Thomas Wei

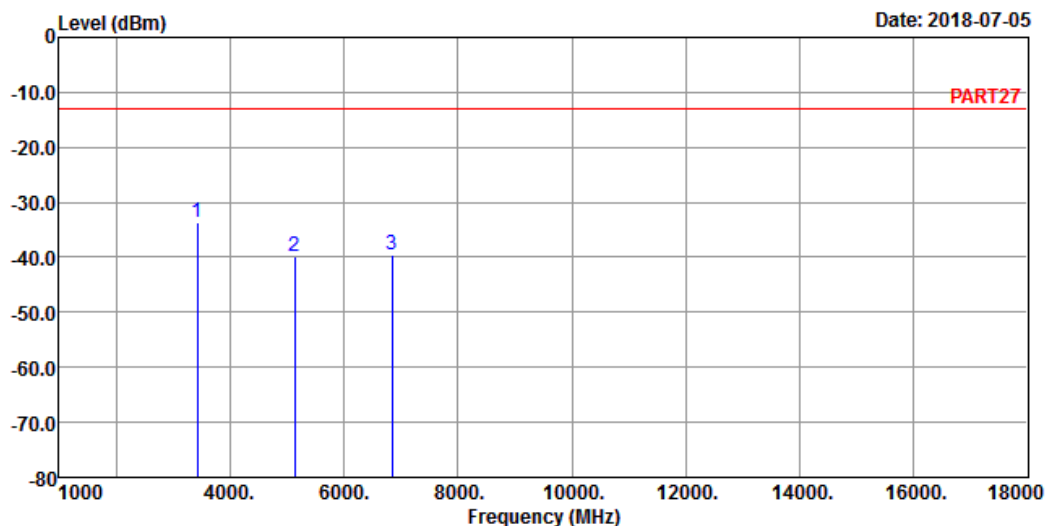
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3425.00	-39.52	-31.18	-13.00	-26.52	-8.34	Peak
2	5137.50	-43.69	-41.95	-13.00	-30.69	-1.74	Peak
3	6850.00	-42.99	-45.30	-13.00	-29.99	2.31	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 4 QPSK_5M Link_L-CH
 Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3425.00	-33.69	-25.35	-13.00	-20.69	-8.34	Peak
2	5137.50	-39.98	-38.24	-13.00	-26.98	-1.74	Peak
3	6850.00	-39.63	-41.94	-13.00	-26.63	2.31	Peak

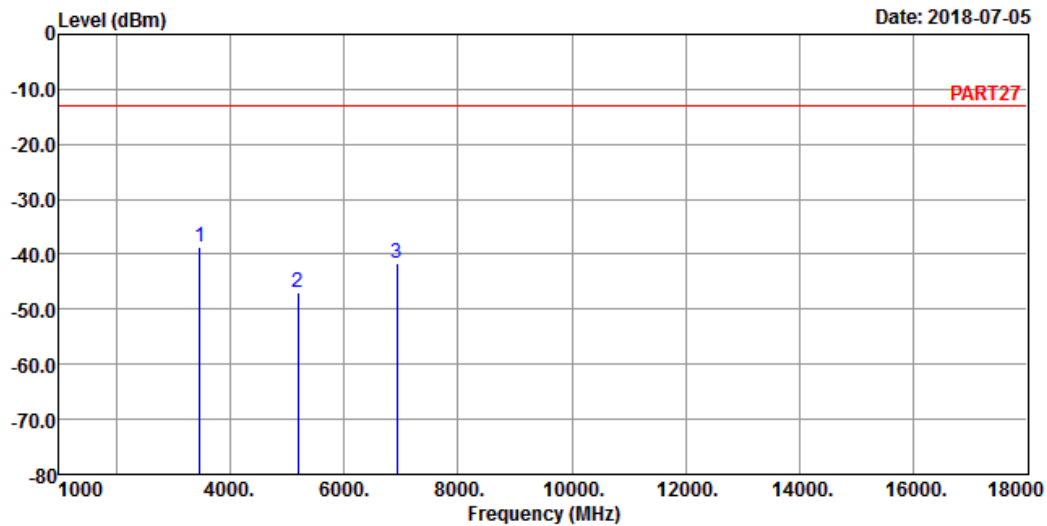
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



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	-38.62	-30.74	-13.00	-25.62	-7.88	Peak
2	5197.50	-46.85	-44.78	-13.00	-33.85	-2.07	Peak
3	6930.00	-41.52	-44.21	-13.00	-28.52	2.69	Peak

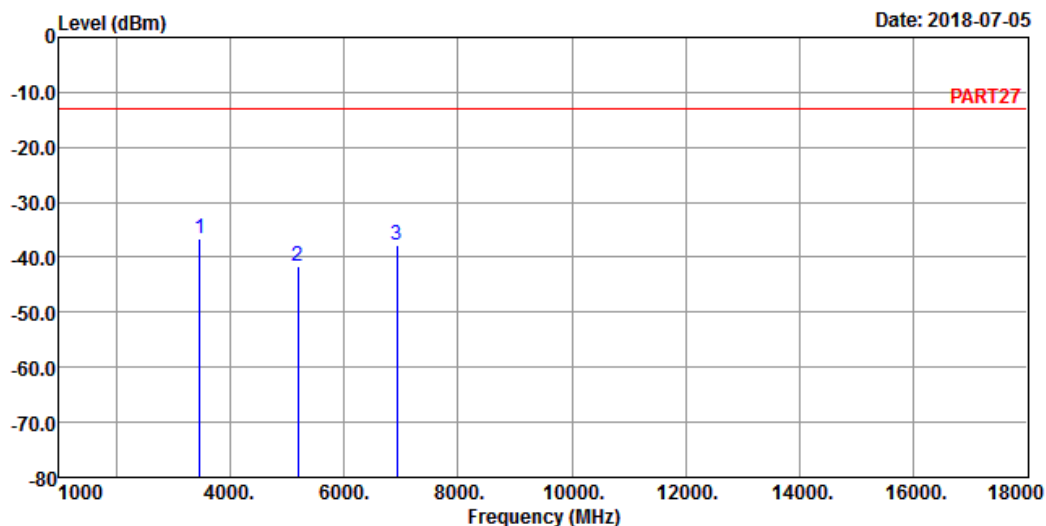


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : Cat-M1 Band 4 QPSK_5M Link_M-CH

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3465.00	-36.52	-28.64	-13.00	-23.52	-7.88	Peak
2	5197.50	-41.52	-39.45	-13.00	-28.52	-2.07	Peak
3	6930.00	-37.65	-40.34	-13.00	-24.65	2.69	Peak

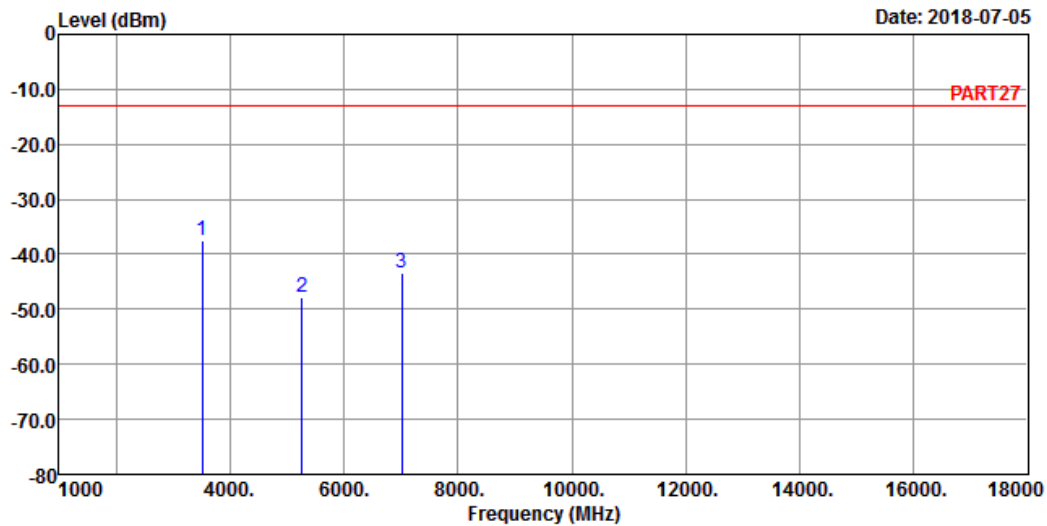
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



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
1 pp	3505.00	-37.52	-30.07	-13.00	-24.52	-7.45 Peak
2	5257.50	-47.96	-45.44	-13.00	-34.96	-2.52 Peak
3	7010.00	-43.52	-46.71	-13.00	-30.52	3.19 Peak

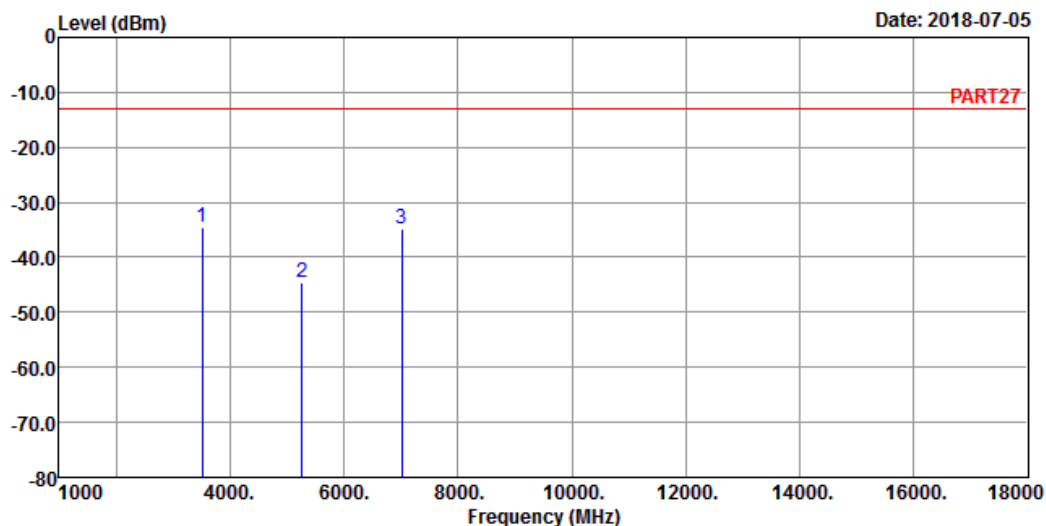


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : Cat-M1 Band 4 QPSK_5M Link_H-CH

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3505.00	-34.52	-27.07	-13.00	-21.52	-7.45	Peak
2	5257.50	-44.63	-42.11	-13.00	-31.63	-2.52	Peak
3	7010.00	-34.69	-37.88	-13.00	-21.69	3.19	Peak

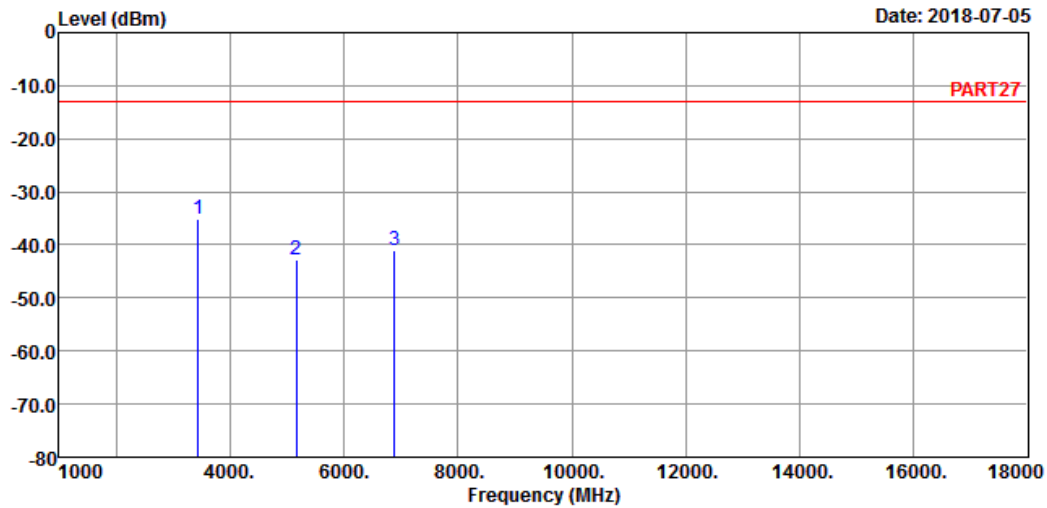
Channel Bandwidth: 20 MHz / QPSK
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 4 QPSK_20M Link_L-CH
Tested by: Thomas Wei

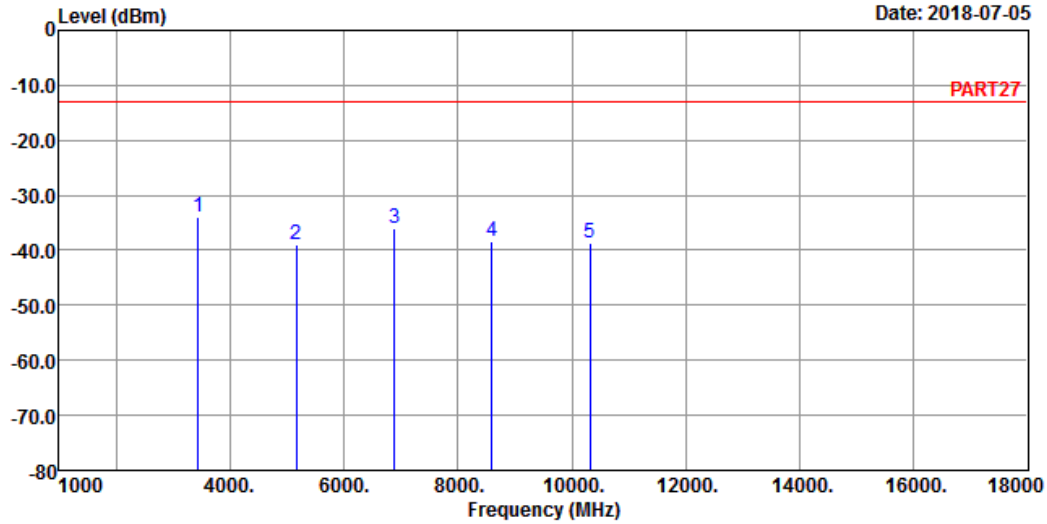
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3440.00	-35.25	-27.03	-13.00	-22.25	-8.22	Peak
2	5160.00	-42.85	-40.94	-13.00	-29.85	-1.91	Peak
3	6880.00	-41.02	-43.50	-13.00	-28.02	2.48	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 4 QPSK_20M Link_L-CH
Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3440.00	-33.85	-25.63	-13.00	-20.85	-8.22	Peak
2	5160.00	-38.91	-37.00	-13.00	-25.91	-1.91	Peak
3	6880.00	-36.00	-38.48	-13.00	-23.00	2.48	Peak
4	8600.00	-38.32	-42.93	-13.00	-25.32	4.61	Peak
5	10320.00	-38.53	-44.45	-13.00	-25.53	5.92	Peak

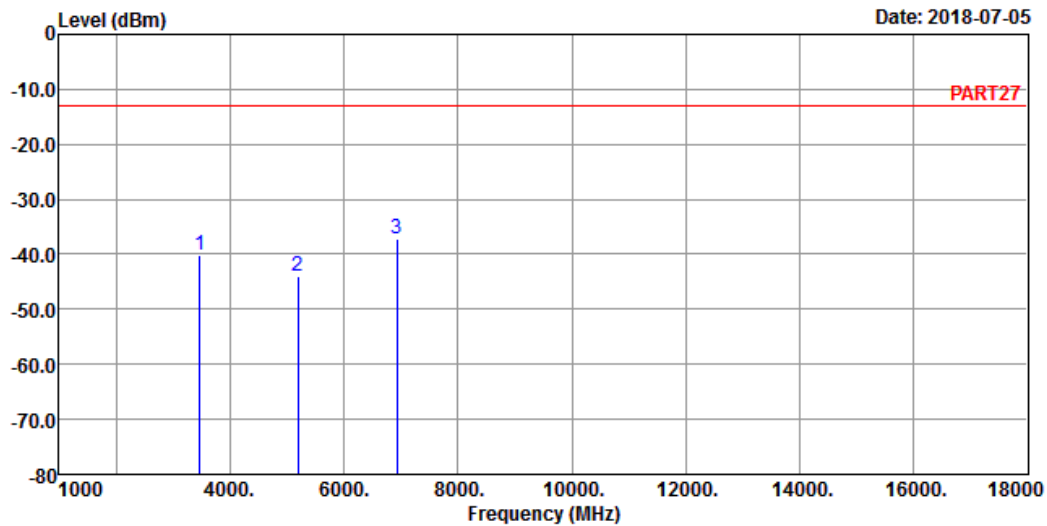
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 4 QPSK_20M Link_M-CH
 Tested by: Thomas Wei

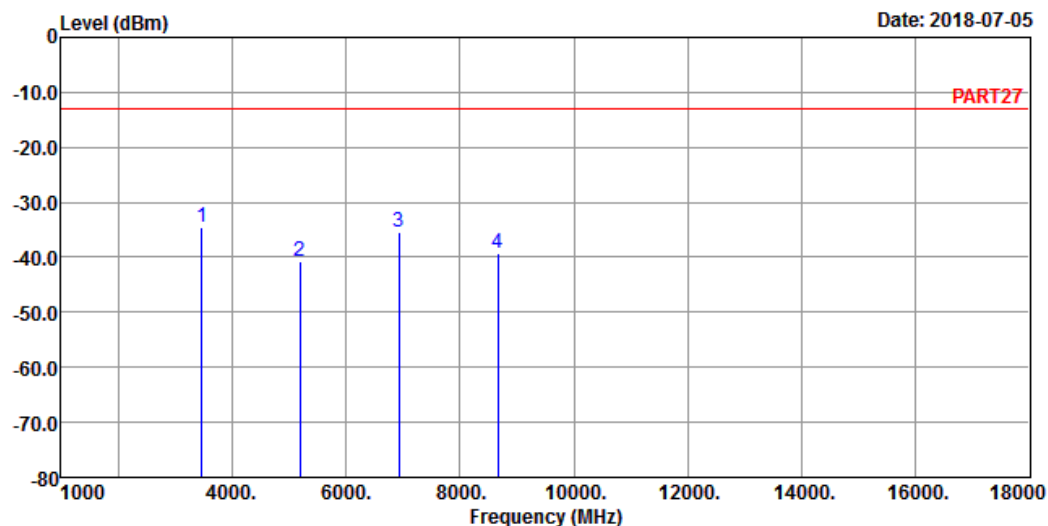
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3465.00	-40.07	-32.19	-13.00	-27.07	-7.88	Peak
2	5197.50	-43.91	-41.84	-13.00	-30.91	-2.07	Peak
3 pp	6930.00	-37.33	-40.02	-13.00	-24.33	2.69	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 4 QPSK_20M Link_M-CH
 Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3465.00	-34.50	-26.62	-13.00	-21.50	-7.88	Peak
2	5197.50	-40.71	-38.64	-13.00	-27.71	-2.07	Peak
3	6930.00	-35.45	-38.14	-13.00	-22.45	2.69	Peak
4	8662.50	-39.27	-44.01	-13.00	-26.27	4.74	Peak

High Channel

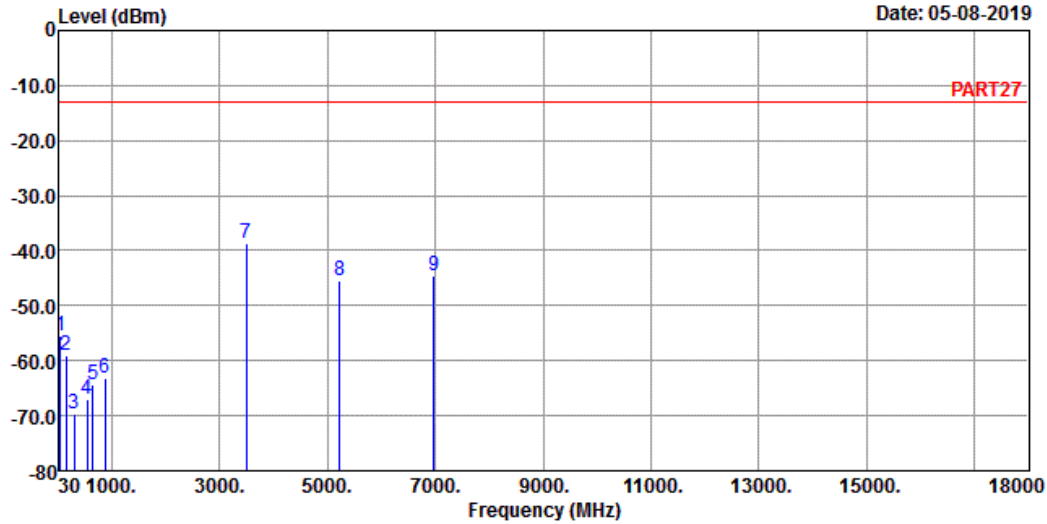


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 05-08-2019



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : CAT M1 Band 4 QPSK_20M Link_H-CH

Tested by: Getaz Yang

	Freq	Level	Read	Limit	Over	
	MHz	dBm	Level	Line	Factor	Limit Remark
			dBm	dBm	dB	dB
1	46.49	-55.58	-52.58	-13.00	-3.00	-42.58 Peak
2	160.95	-58.95	-54.04	-13.00	-4.91	-45.95 Peak
3	303.54	-69.54	-62.59	-13.00	-6.95	-56.54 Peak
4	545.07	-67.15	-64.13	-13.00	-3.02	-54.15 Peak
5	650.80	-64.34	-63.47	-13.00	-0.87	-51.34 Peak
6	883.60	-63.21	-63.69	-13.00	0.48	-50.21 Peak
7 pp	3490.00	-38.65	-31.00	-13.00	-7.65	-25.65 Peak
8	5235.00	-45.33	-42.92	-13.00	-2.41	-32.33 Peak
9	6980.00	-44.46	-47.52	-13.00	3.06	-31.46 Peak

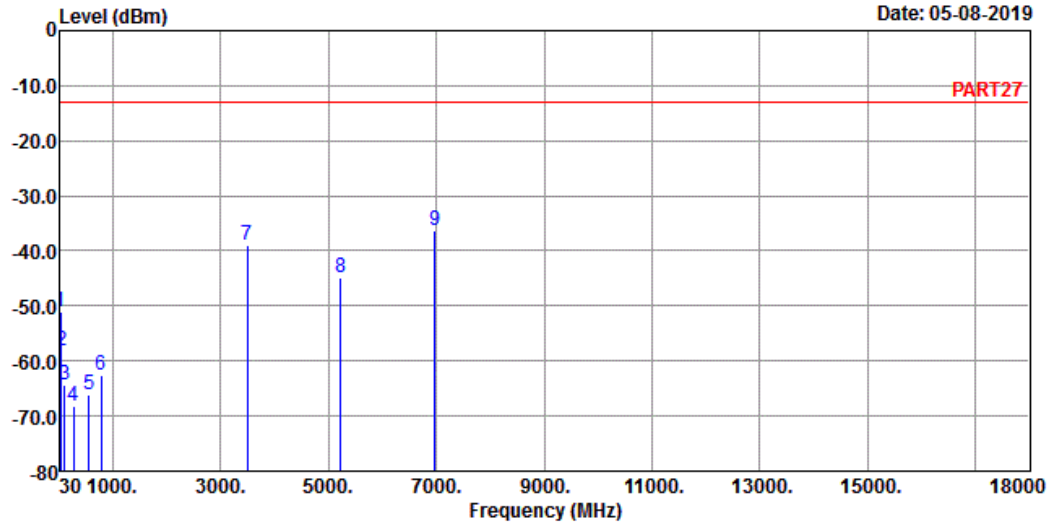


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 05-08-2019



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : CAT M1 Band 4 QPSK_20M Link_H-CH

Tested by: Getaz Yang

	Freq	Level	Read Level	Limit	Over	
	MHz	dBm	dBm	dBm	Factor	Limit Remark
1	30.97	-51.07	-50.96	-13.00	-0.11	-38.07 Peak
2	54.25	-58.27	-52.20	-13.00	-6.07	-45.27 Peak
3	112.45	-64.28	-54.08	-13.00	-10.20	-51.28 Peak
4	279.29	-68.12	-61.53	-13.00	-6.59	-55.12 Peak
5	560.59	-66.14	-63.73	-13.00	-2.41	-53.14 Peak
6	790.48	-62.59	-63.35	-13.00	0.76	-49.59 Peak
7	3490.00	-38.83	-31.18	-13.00	-7.65	-25.83 Peak
8	5235.00	-44.74	-42.33	-13.00	-2.41	-31.74 Peak
9 pp	6980.00	-36.28	-39.34	-13.00	3.06	-23.28 Peak

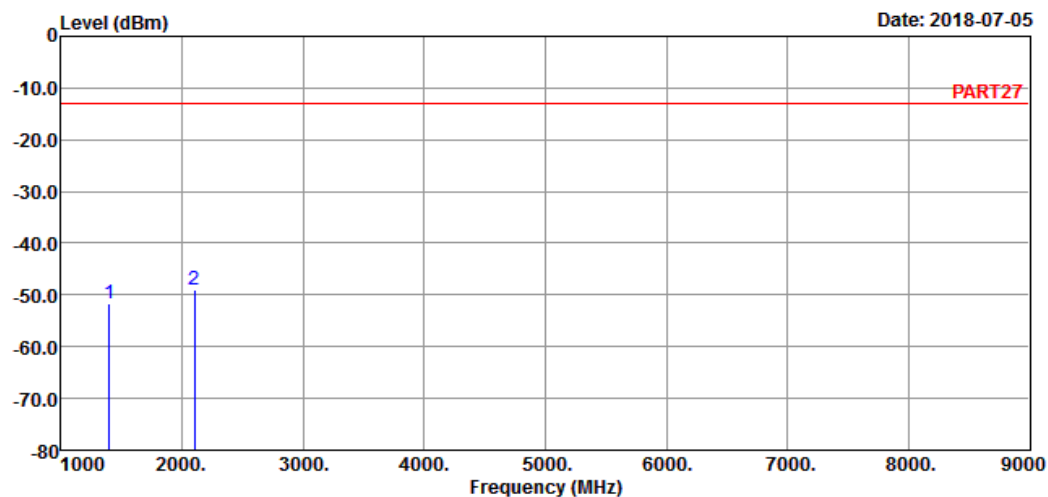
LTE Band 12
Channel Bandwidth: 1.4 MHz / QPSK
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 12 QPSK_1.4M Link_L-CH
Tested by: Jisyong Wang

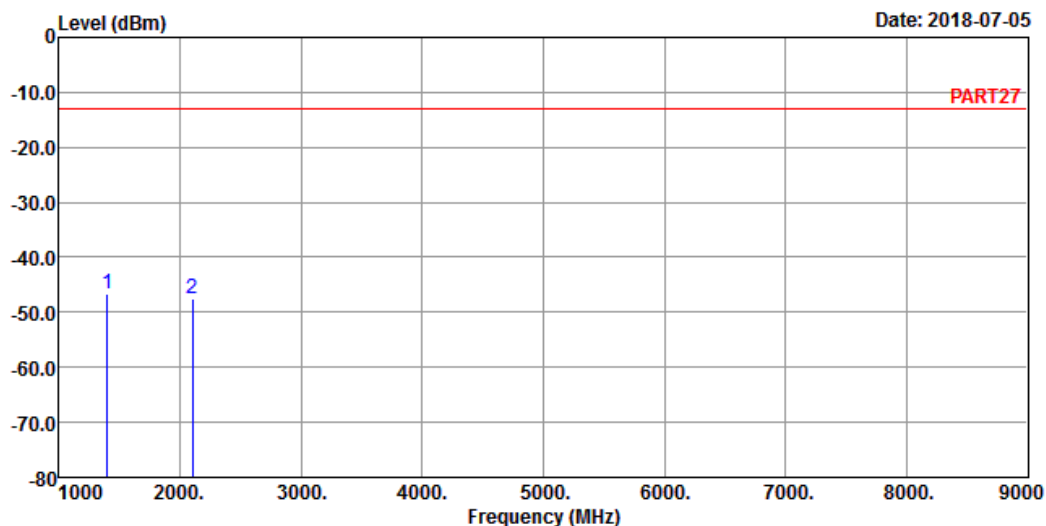
		Read	Limit	Over			
Freq	Level	Level	Line	Limit	Factor	Remark	
MHz	dBm	dBm	dBm	dB	dB		
1	1399.40	-51.52	-39.67	-13.00	-38.52	-11.85	Peak
2 pp	2099.10	-49.03	-38.87	-13.00	-36.03	-10.16	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 12 QPSK_1.4M 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	1399.40	-46.74	-34.89	-13.00	-33.74	-11.85	Peak
2	2099.10	-47.52	-37.36	-13.00	-34.52	-10.16	Peak

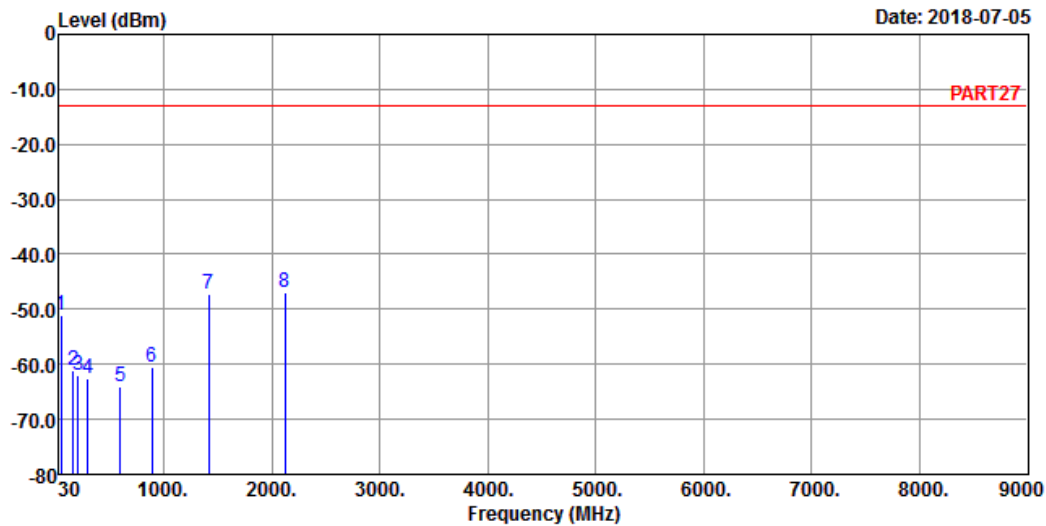
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : Cat-M1 Band 12 QPSK_1.4M Link_M-CH
 Tested by: Jisyoung Wang

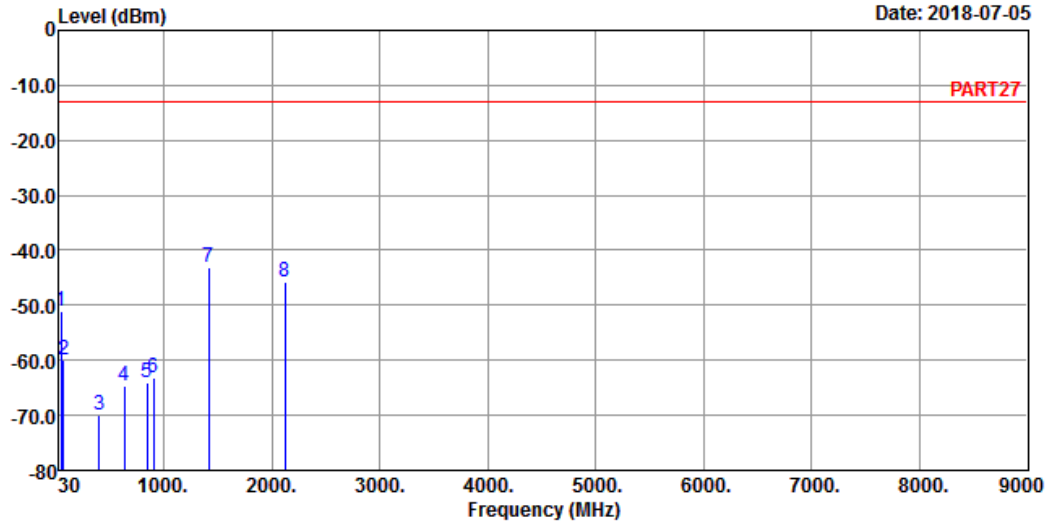
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	44.55	-51.10	-49.11	-13.00	-38.10	-1.99	Peak
2	161.92	-61.19	-56.21	-13.00	-48.19	-4.98	Peak
3	208.48	-61.96	-54.29	-13.00	-48.96	-7.67	Peak
4	297.72	-62.64	-55.67	-13.00	-49.64	-6.97	Peak
5	593.57	-64.00	-62.96	-13.00	-51.00	-1.04	Peak
6	885.54	-60.56	-61.05	-13.00	-47.56	0.49	Peak
7	1415.00	-47.25	-35.17	-13.00	-34.25	-12.08	Peak
8 pp	2122.50	-46.85	-36.98	-13.00	-33.85	-9.87	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 12 QPSK_1.4M Link_M-CH
Tested by: Jisyong Wang

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	44.55	-51.18	-49.19	-13.00	-38.18	-1.99	Peak
2	68.80	-59.95	-51.63	-13.00	-46.95	-8.32	Peak
3	398.60	-69.96	-64.01	-13.00	-56.96	-5.95	Peak
4	633.34	-64.64	-63.80	-13.00	-51.64	-0.84	Peak
5	844.80	-64.02	-64.36	-13.00	-51.02	0.34	Peak
6	903.97	-63.31	-63.98	-13.00	-50.31	0.67	Peak
7 pp	1415.00	-43.13	-31.05	-13.00	-30.13	-12.08	Peak
8	2122.50	-45.85	-35.98	-13.00	-32.85	-9.87	Peak

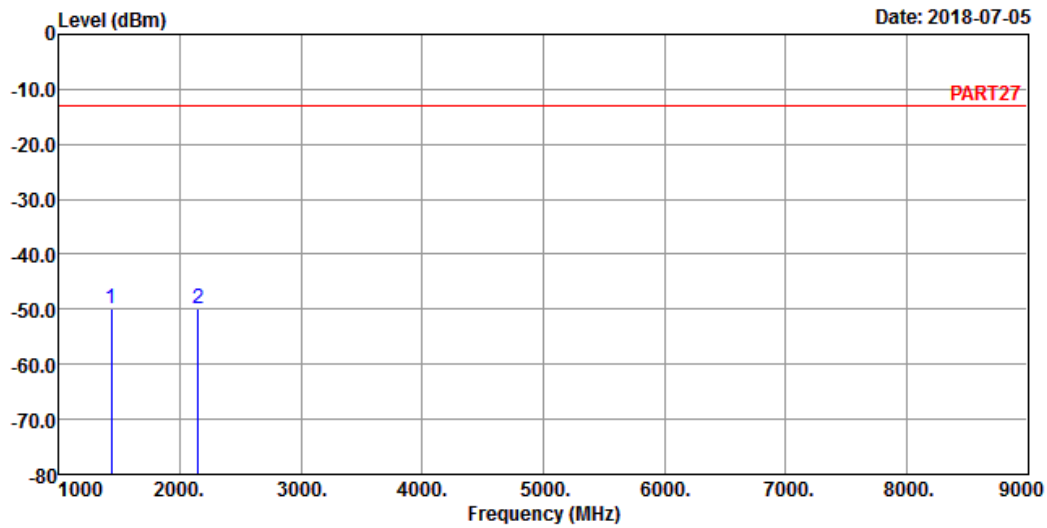
High Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 12 QPSK_1.4M Link_H-CH
Tested by: Jisyong Wang

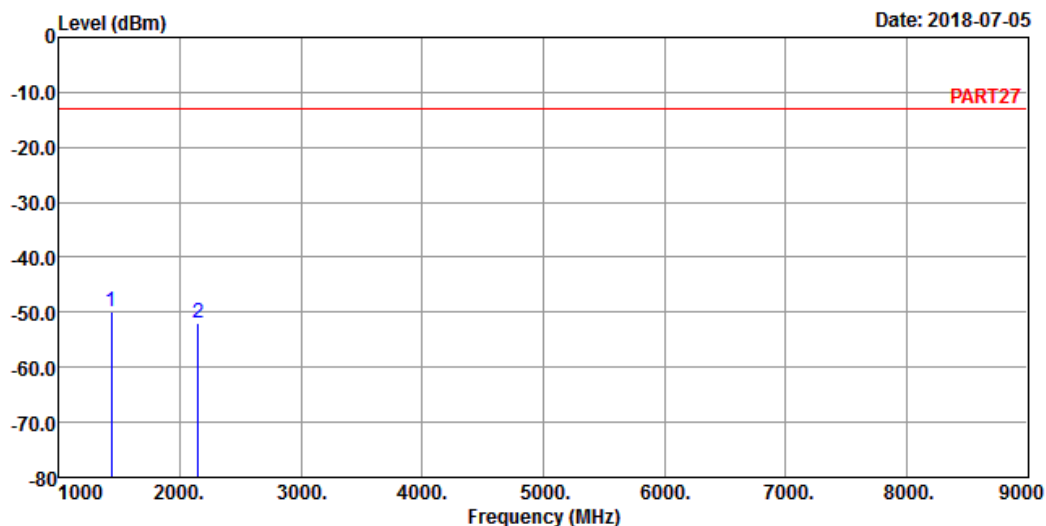
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1430.60	-50.02	-37.71	-13.00	-37.02	-12.31	Peak
2 pp	2145.90	-49.85	-40.38	-13.00	-36.85	-9.47	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 12 QPSK_1.4M 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	1430.60	-49.85	-37.54	-13.00	-36.85	-12.31	Peak
2	2145.98	-51.85	-42.38	-13.00	-38.85	-9.47	Peak

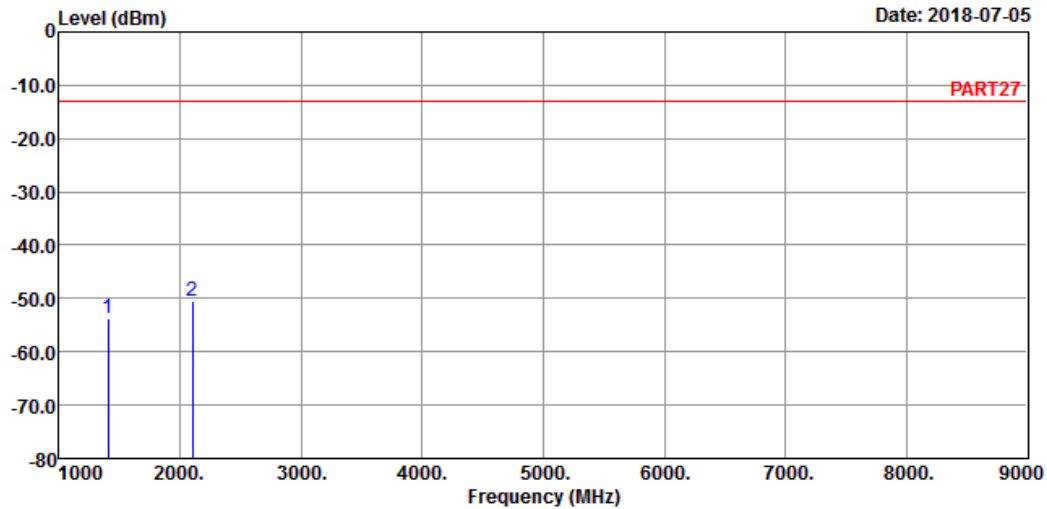
Channel Bandwidth: 5 MHz / QPSK
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 12 QPSK_5M Link_L-CH
Tested by: Jisyong Wang

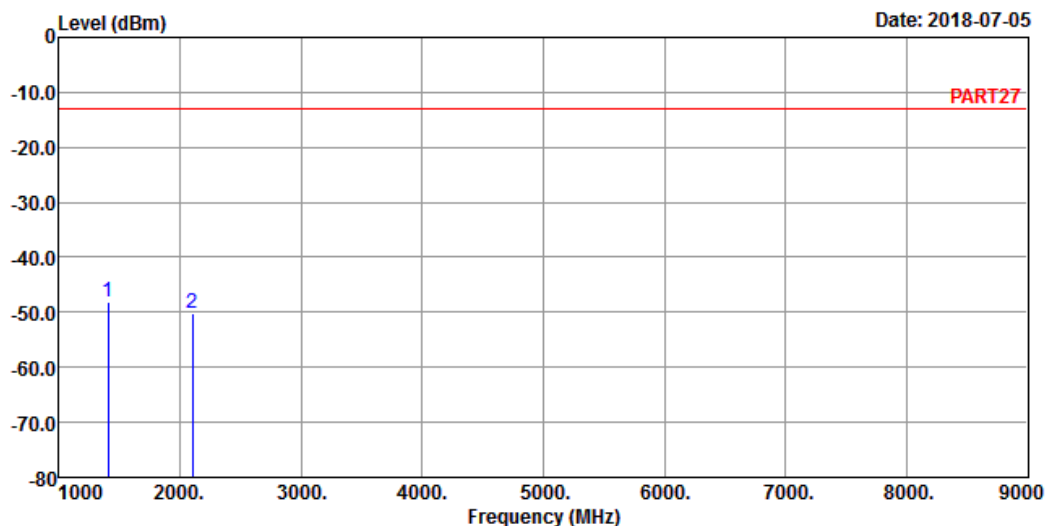
			Read	Limit	Over		
Freq	Level	Level	Line	Limit	Factor	Remark	
MHz	dBm	dBm	dBm	dB	dB		
1	1403.00	-53.63	-41.72	-13.00	-40.63	-11.91	Peak
2 pp	2104.50	-50.52	-40.36	-13.00	-37.52	-10.16	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 12 QPSK_5M 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	1403.00	-48.02	-36.11	-13.00	-35.02	-11.91	Peak
2	2104.50	-50.18	-40.02	-13.00	-37.18	-10.16	Peak

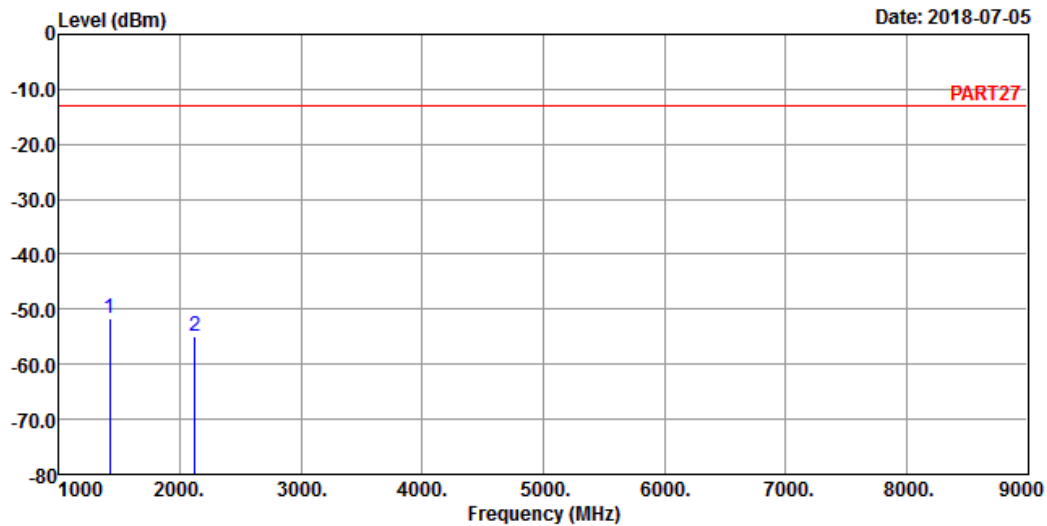
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : Cat-M1 Band 12 QPSK_5M Link_M-CH
 Tested by: Jisyong Wang

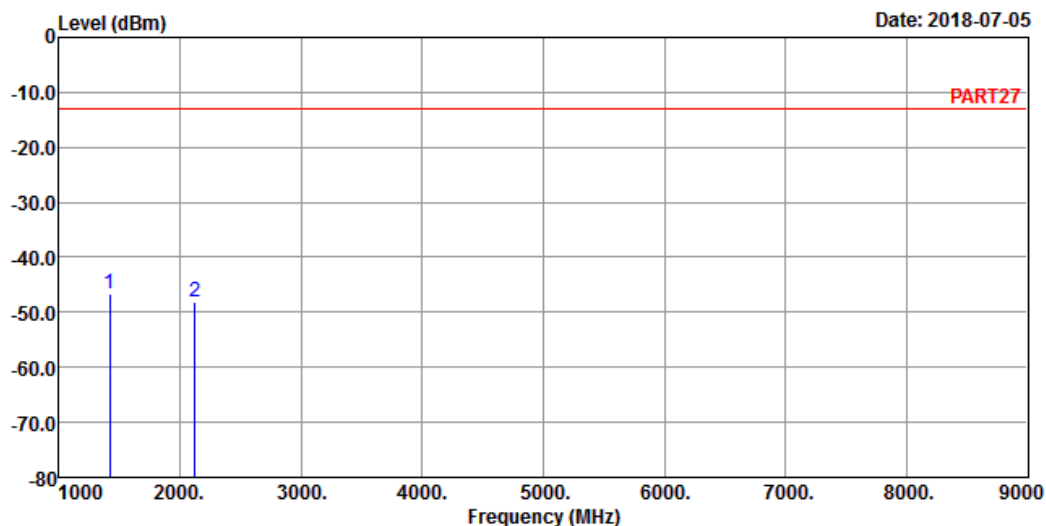
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1415.00	-51.60	-39.52	-13.00	-38.60	-12.08	Peak
2	2122.50	-54.96	-45.09	-13.00	-41.96	-9.87	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 12 QPSK_5M 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	-46.71	-34.63	-13.00	-33.71	-12.08	Peak
2	2122.50	-48.12	-38.25	-13.00	-35.12	-9.87	Peak

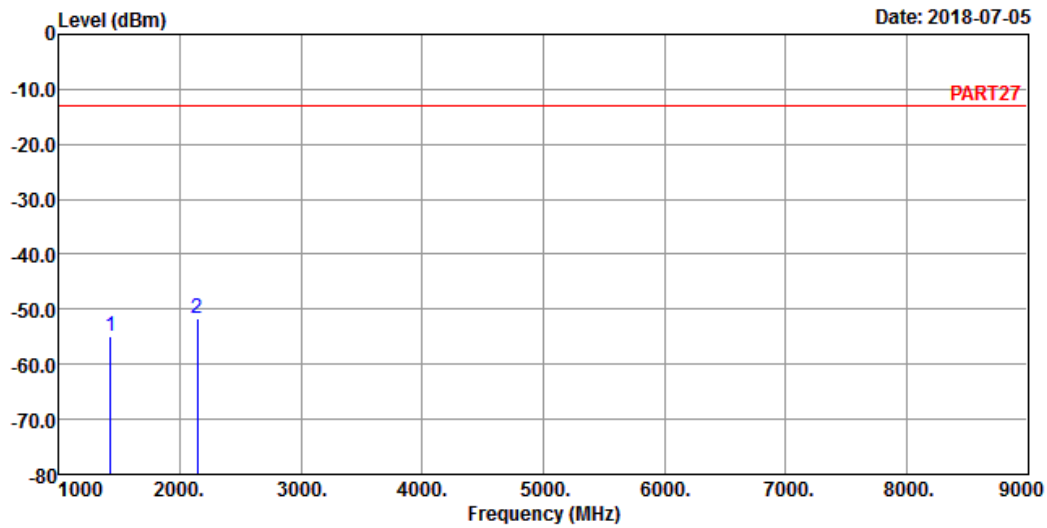
High Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 12 QPSK_5M Link_H-CH
Tested by: Jisyong Wang

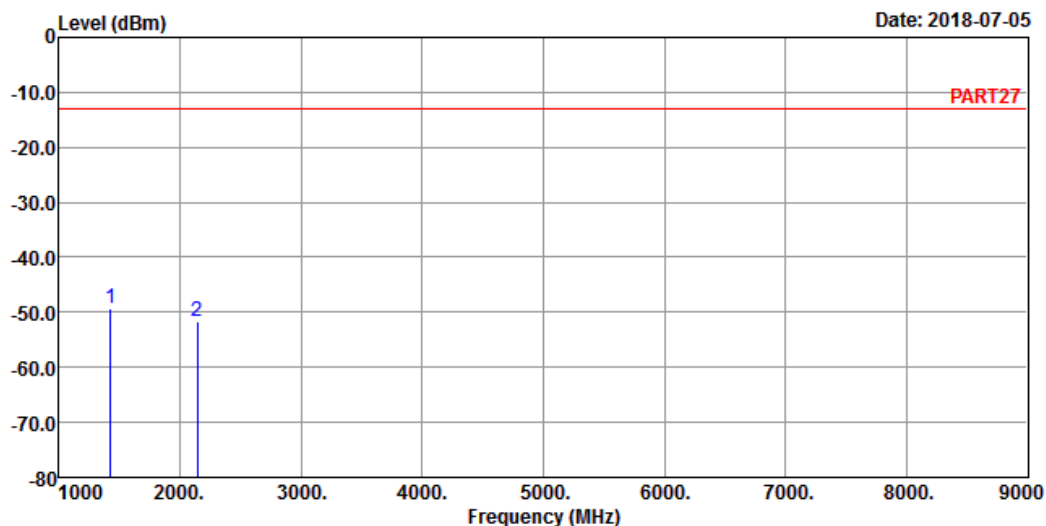
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1427.00	-54.77	-42.52	-13.00	-41.77	-12.25	Peak
2 pp	2140.50	-51.56	-41.99	-13.00	-38.56	-9.57	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_5M 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	1427.00	-49.27	-37.02	-13.00	-36.27	-12.25	Peak
2	2140.50	-51.58	-42.01	-13.00	-38.58	-9.57	Peak

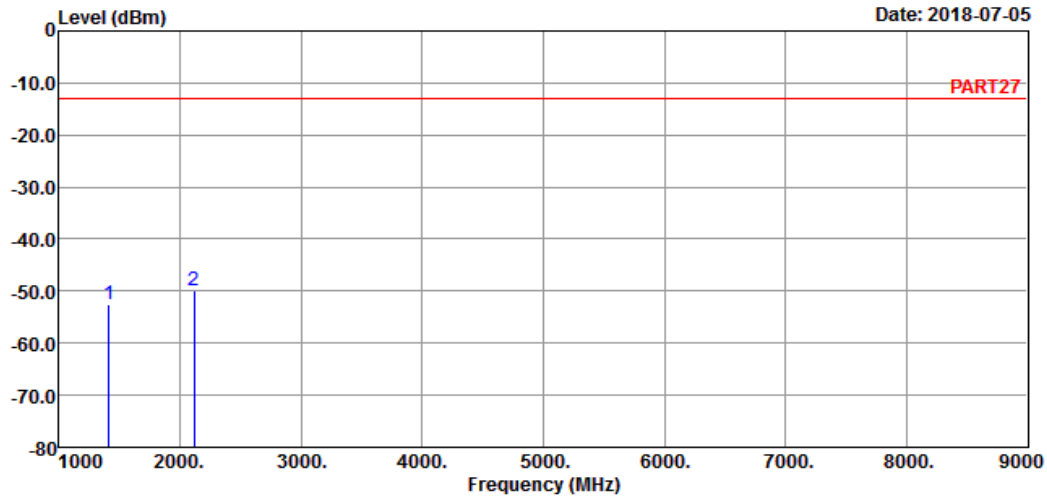
Channel Bandwidth: 10 MHz / QPSK
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 12 QPSK_10M Link_L-CH
Tested by: Jisyong Wang

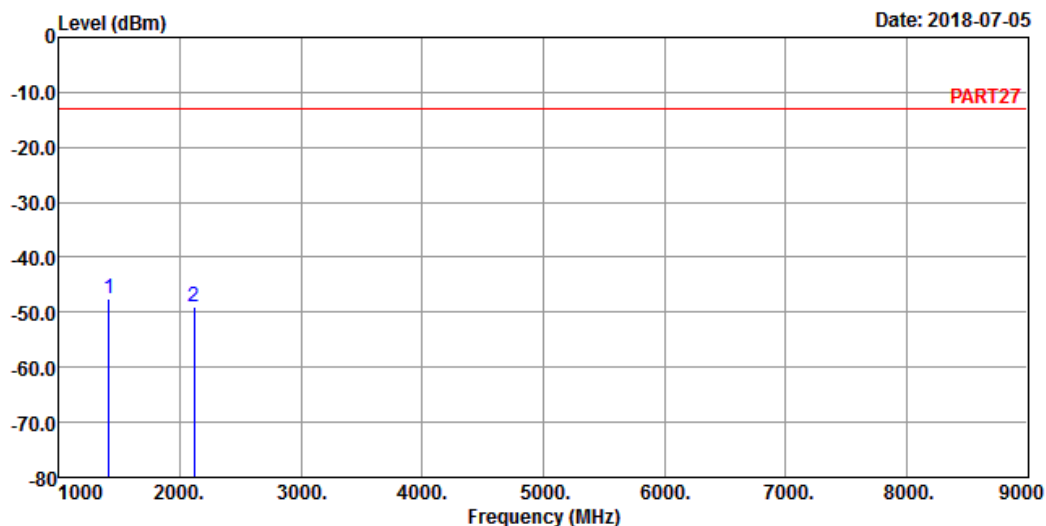
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1408.00	-52.69	-40.73	-13.00	-39.69	-11.96	Peak
2 pp	2112.00	-49.93	-39.97	-13.00	-36.93	-9.96	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 12 QPSK_10M 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	1408.00	-47.60	-35.64	-13.00	-34.60	-11.96	Peak
2	2112.00	-48.90	-38.94	-13.00	-35.90	-9.96	Peak

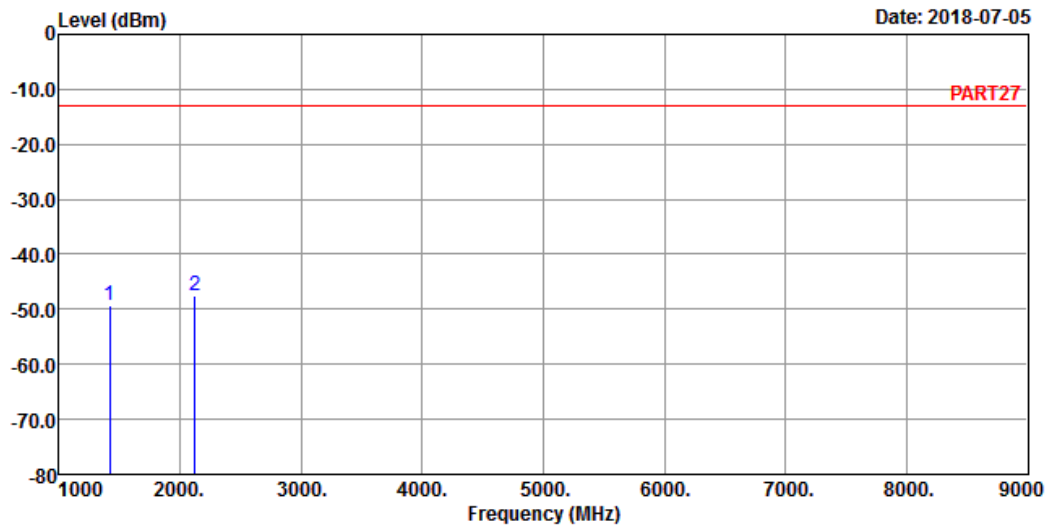
Middle Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 12 QPSK_10M Link_M-CH
Tested by: Jisyong Wang

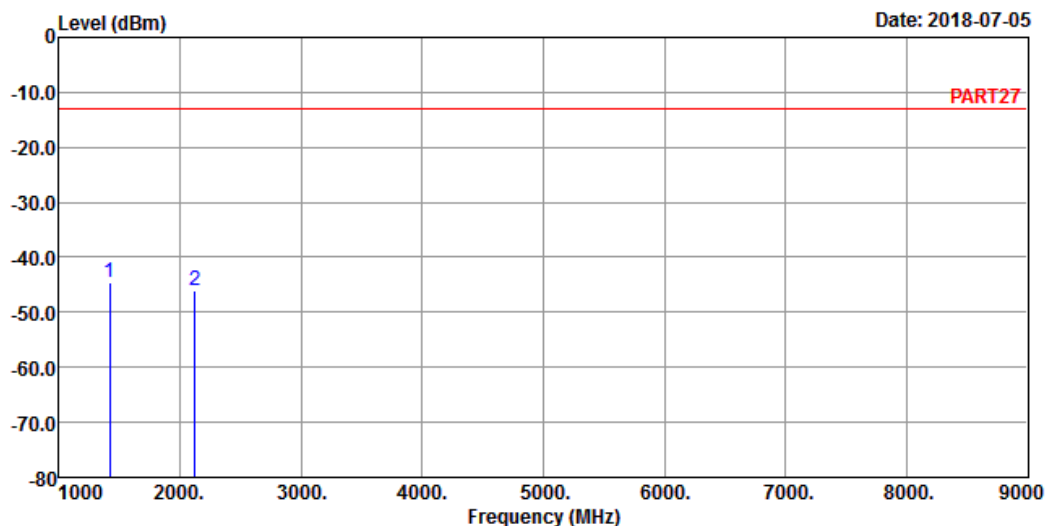
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1415.00	-49.21	-37.13	-13.00	-36.21	-12.08	Peak
2 pp	2122.50	-47.53	-37.66	-13.00	-34.53	-9.87	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : Cat-M1 Band 12 QPSK_10M 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	-44.60	-32.52	-13.00	-31.60	-12.08	Peak
2	2122.50	-46.19	-36.32	-13.00	-33.19	-9.87	Peak

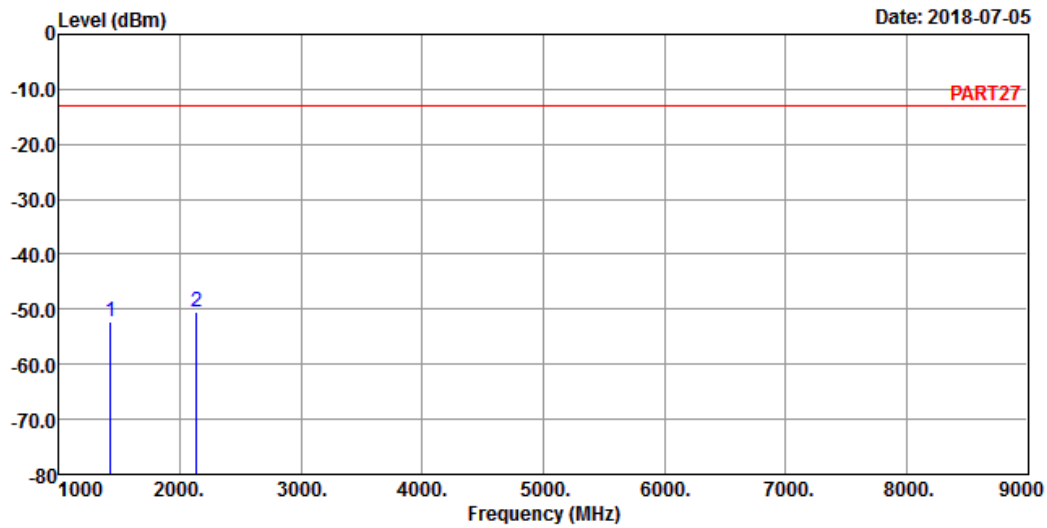
High Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 12 QPSK_10M Link_H-CH
Tested by: Jisyong Wang

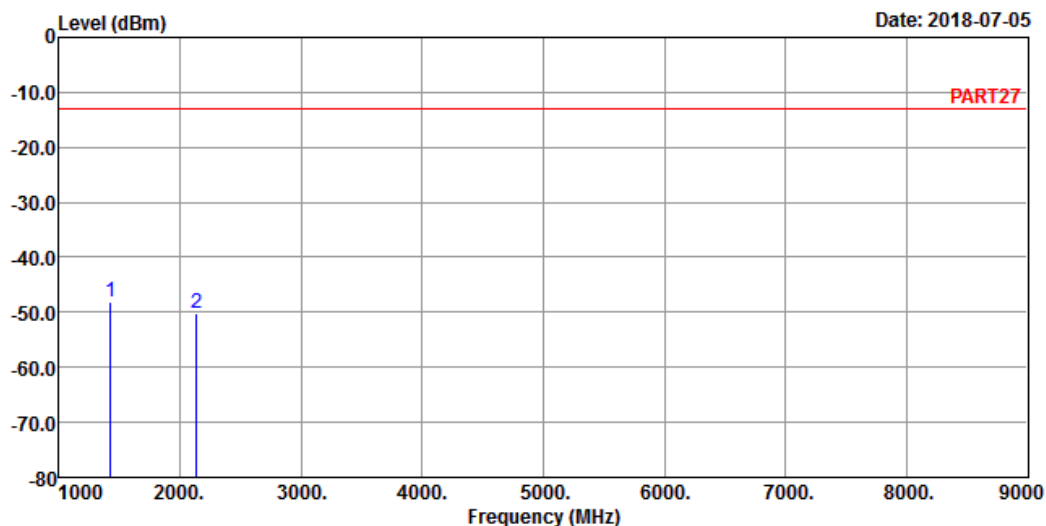
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1422.00	-52.29	-40.10	-13.00	-39.29	-12.19	Peak
2 pp	2133.00	-50.58	-40.91	-13.00	-37.58	-9.67	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 12 QPSK_10M 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	1422.00	-48.01	-35.82	-13.00	-35.01	-12.19	Peak
2	2133.00	-50.24	-40.57	-13.00	-37.24	-9.67	Peak

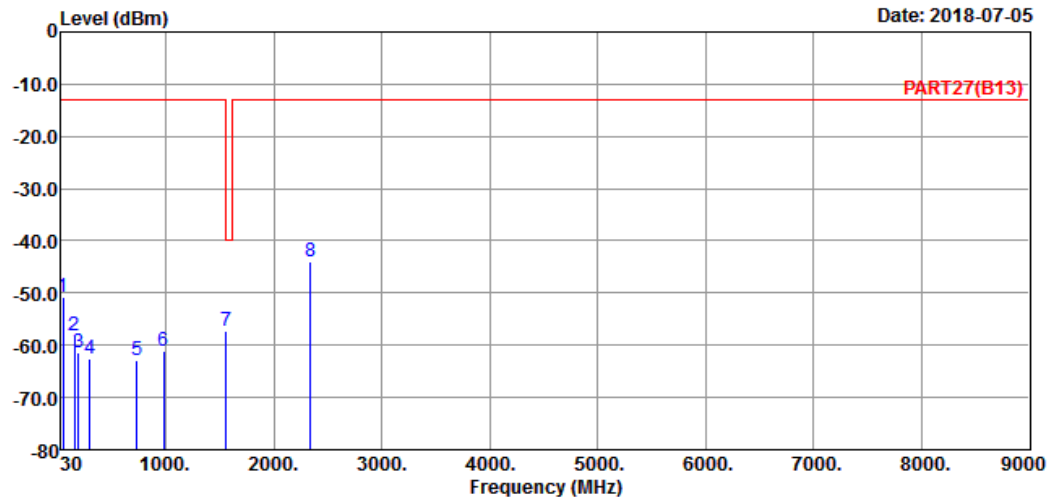
LTE Band 13_1 RB
Channel Bandwidth: 5 MHz / QPSK
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition: PART27(B13) HORIZONTAL
Remak : CAT M1 Band 13 QPSK_5M Link_L-CH
Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	44.55	-50.66	-48.67	-13.00	-37.66	-1.99	Peak
2	154.16	-58.25	-51.77	-13.00	-45.25	-6.48	Peak
3	190.05	-61.35	-54.26	-13.00	-48.35	-7.09	Peak
4	292.87	-62.47	-55.60	-13.00	-49.47	-6.87	Peak
5	729.37	-62.97	-63.45	-13.00	-49.97	0.48	Peak
6	982.54	-61.13	-64.09	-13.00	-48.13	2.96	Peak
7 pp	1559.00	-57.35	-44.03	-40.00	-17.35	-13.32	Peak
8	2338.50	-43.88	-34.50	-13.00	-30.88	-9.38	Peak

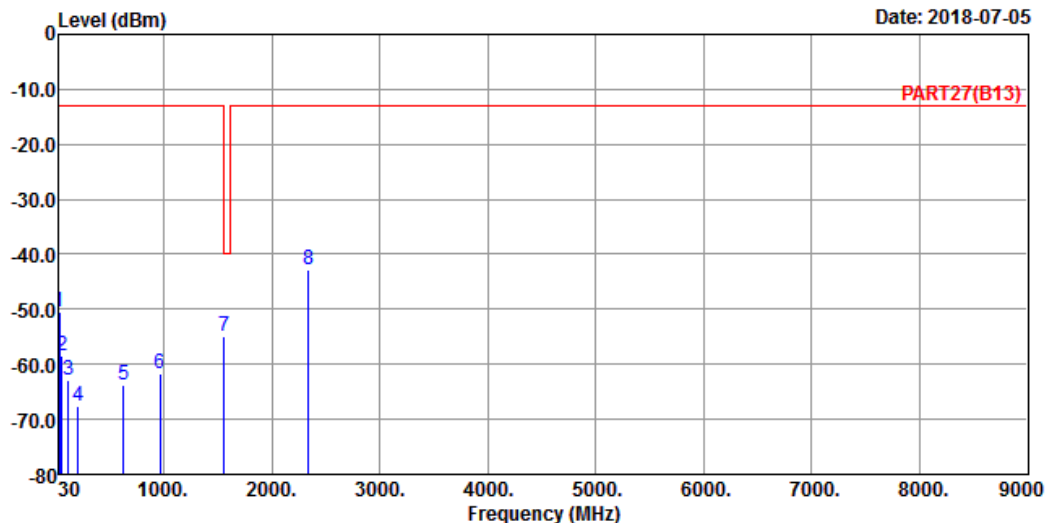


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2018-07-05



Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

Remak : CAT M1 Band 13 QPSK_5M Link_L-CH

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	30.97	-50.55	-50.44	-13.00	-37.55	-0.11	Peak
2	54.25	-58.52	-52.45	-13.00	-45.52	-6.07	Peak
3	112.45	-62.83	-52.63	-13.00	-49.83	-10.20	Peak
4	207.51	-67.46	-59.75	-13.00	-54.46	-7.71	Peak
5	626.55	-63.69	-62.87	-13.00	-50.69	-0.82	Peak
6	962.17	-61.56	-63.80	-13.00	-48.56	2.24	Peak
7 pp	1559.00	-54.81	-41.49	-40.00	-14.81	-13.32	Peak
8	2338.50	-42.92	-33.54	-13.00	-29.92	-9.38	Peak

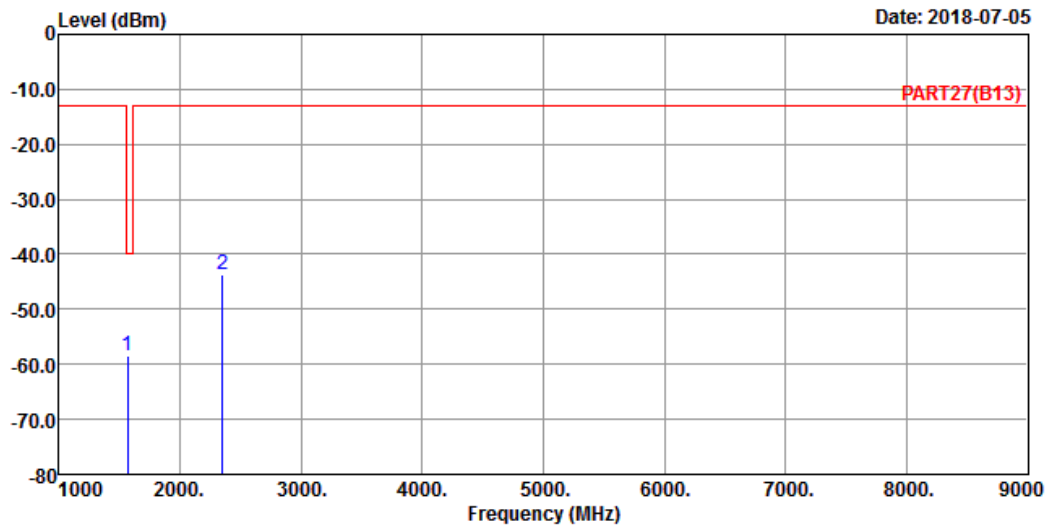
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27(B13) HORIZONTAL
Remak : Cat-M1 Band 13 QPSK_5M Link_M-CH
Tested by: Thomas Wei

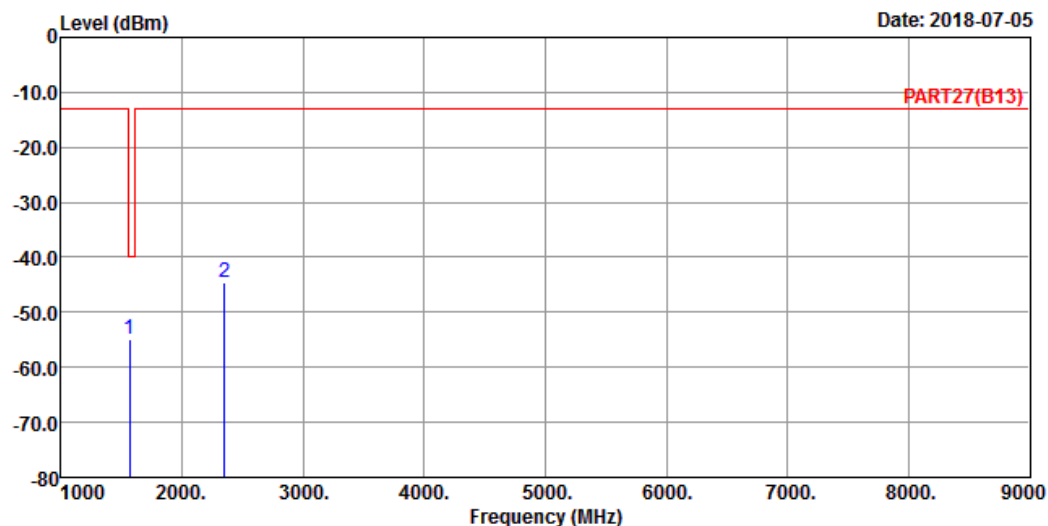
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1564.00	-58.49	-45.15	-40.00	-18.49	-13.34	Peak
2	2346.00	-43.82	-34.38	-13.00	-30.82	-9.44	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

Remak : Cat-M1 Band 13 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	1564.00	-54.80	-41.46	-40.00	-14.80	-13.34	Peak
2	2346.00	-44.66	-35.22	-13.00	-31.66	-9.44	Peak

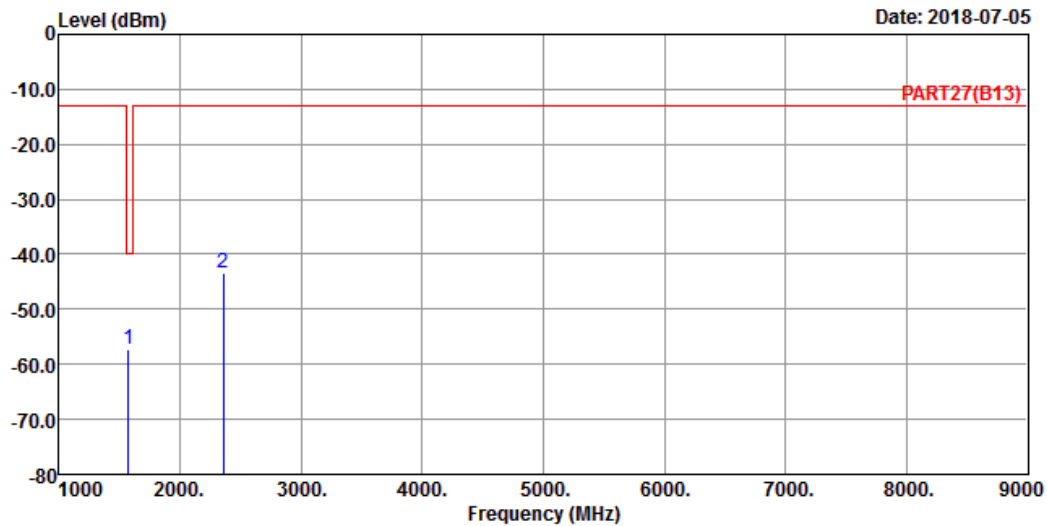
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART27(B13) HORIZONTAL
 Remak : Cat-M1 Band 13 QPSK_5M Link_H-CH
 Tested by: Thomas Wei

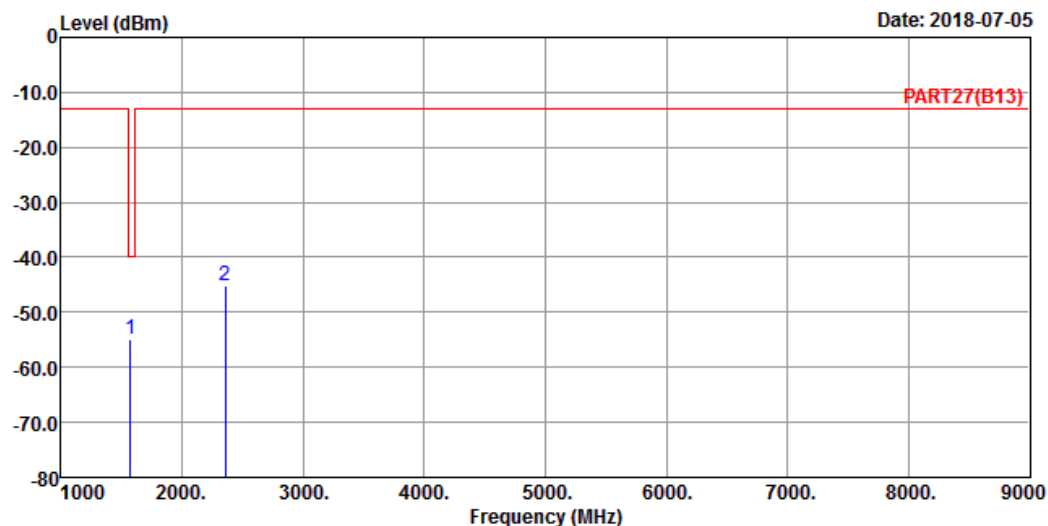
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1569.00	-57.35	-44.00	-40.00	-17.35	-13.35	Peak
2	2353.50	-43.30	-33.79	-13.00	-30.30	-9.51	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



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	dBm	dB	dB	
1 pp	1569.00	-54.88	-41.53	-40.00	-14.88	-13.35	Peak
2	2353.50	-45.11	-35.60	-13.00	-32.11	-9.51	Peak

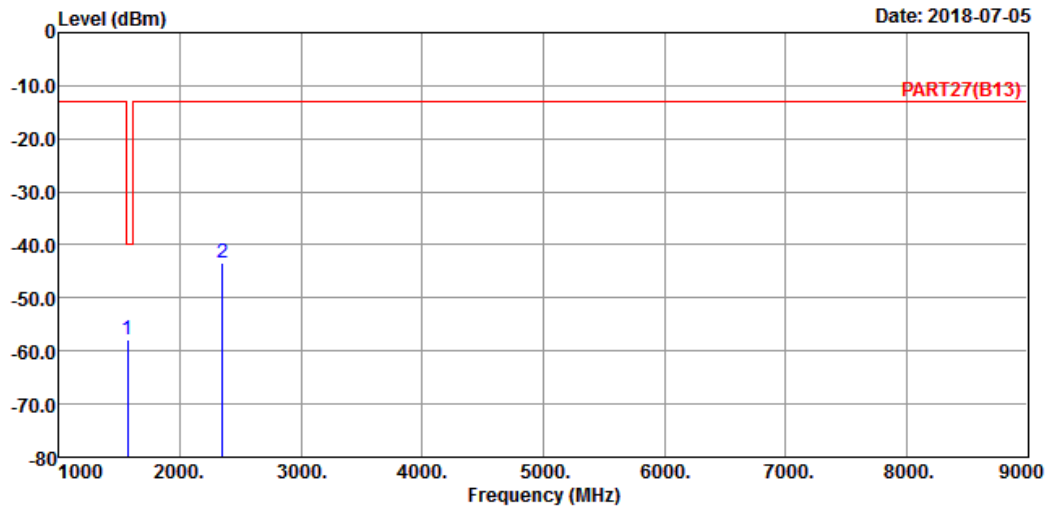
Channel Bandwidth: 10 MHz / QPSK
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27(B13) HORIZONTAL
Remak : Cat-M1 Band 13 QPSK_10M Link_M-CH
Tested by: Thomas Wei

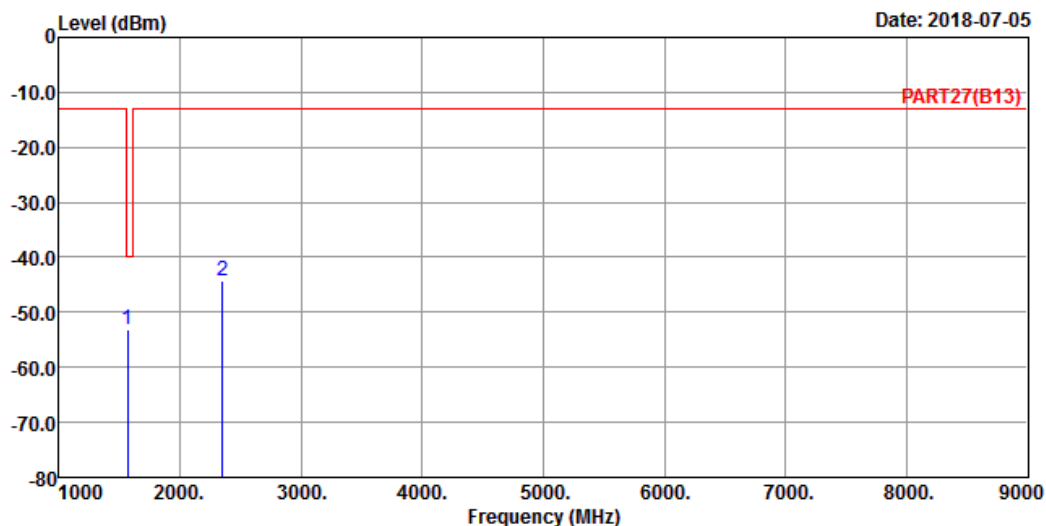
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	pp 1564.00	-57.99	-44.65	-40.00	-17.99	-13.34	Peak
2	2346.00	-43.48	-34.04	-13.00	-30.48	-9.44	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



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	
1 pp	1564.00	-53.24	-39.90	-40.00	-13.24	-13.34	Peak
2	2346.00	-44.17	-34.73	-13.00	-31.17	-9.44	Peak

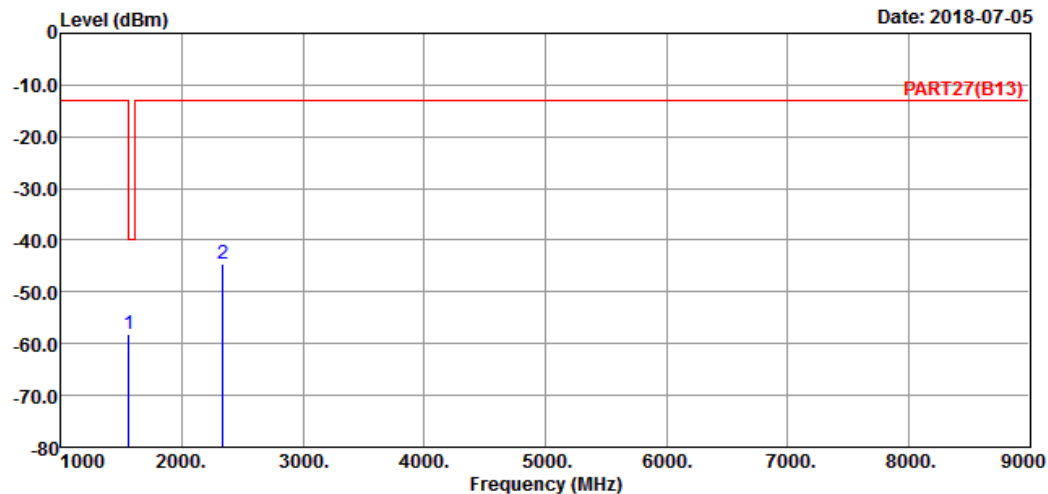
LTE Band 13_Full RB
Channel Bandwidth: 5 MHz / QPSK
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



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	dBm	dB	dB	
1	pp 1559.00	-58.11	-44.79	-40.00	-18.11	-13.32	Peak
2	2338.50	-44.59	-35.21	-13.00	-31.59	-9.38	Peak

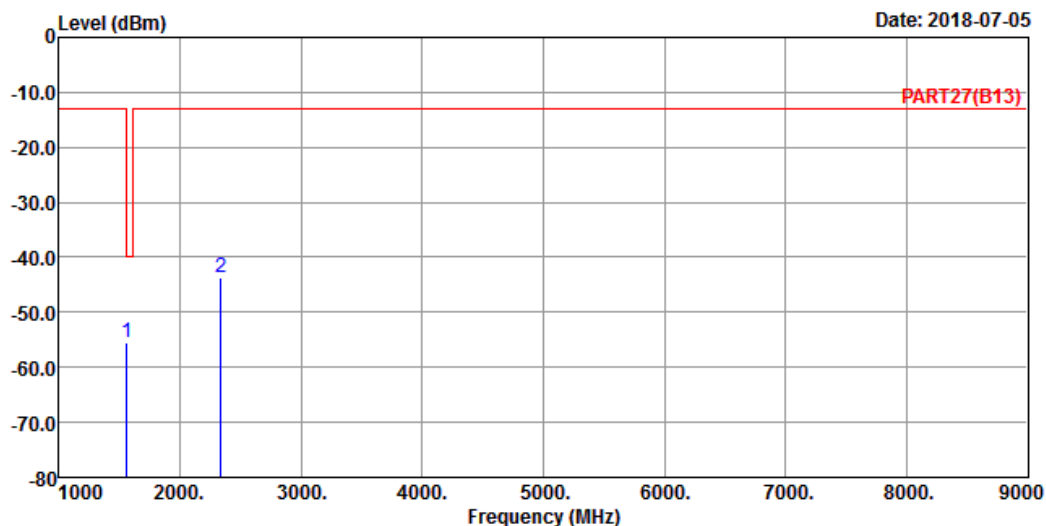


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

Remak : Cat-M1 Band 13 QPSK_5M Link_L-CH

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1559.00	-55.37	-42.05	-40.00	-15.37	-13.32	Peak
2	2338.50	-43.58	-34.20	-13.00	-30.58	-9.38	Peak

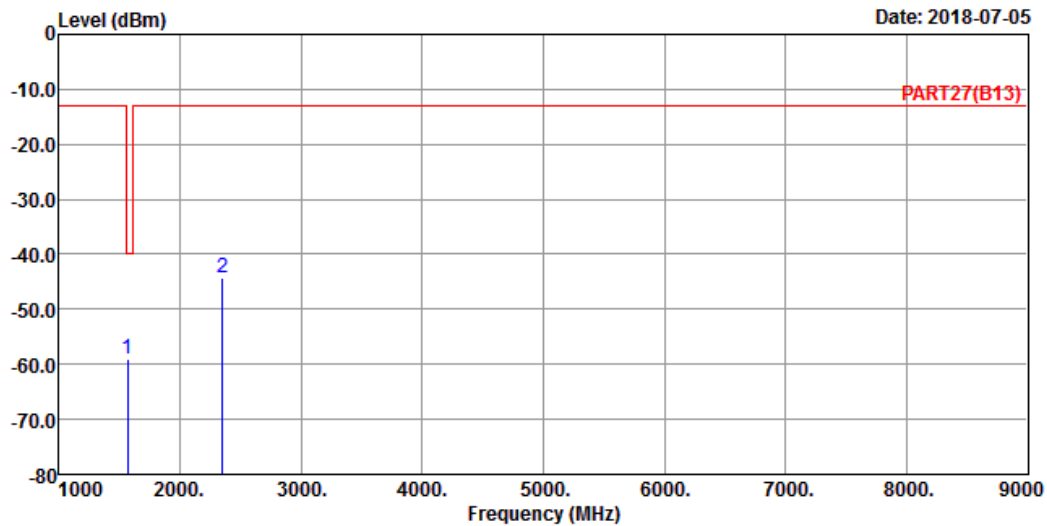
Middle Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27(B13) HORIZONTAL
Remak : Cat-M1 Band 13 QPSK_5M Link_M-CH
Tested by: Thomas Wei

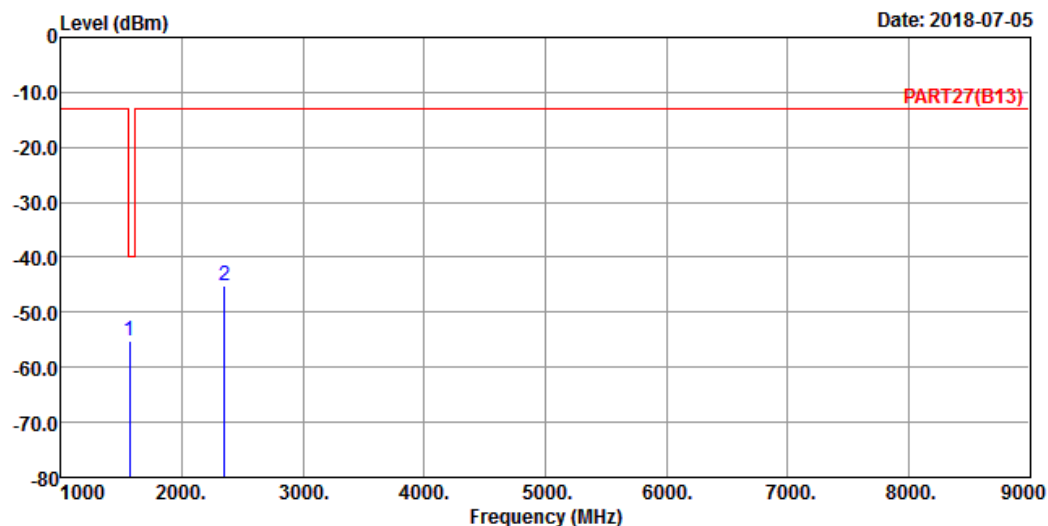
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1564.00	-59.01	-45.67	-40.00	-19.01	-13.34	Peak
2	2346.00	-44.16	-34.72	-13.00	-31.16	-9.44	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

Remak : Cat-M1 Band 13 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	1564.00	-55.23	-41.89	-40.00	-15.23	-13.34	Peak
2	2346.00	-45.06	-35.62	-13.00	-32.06	-9.44	Peak

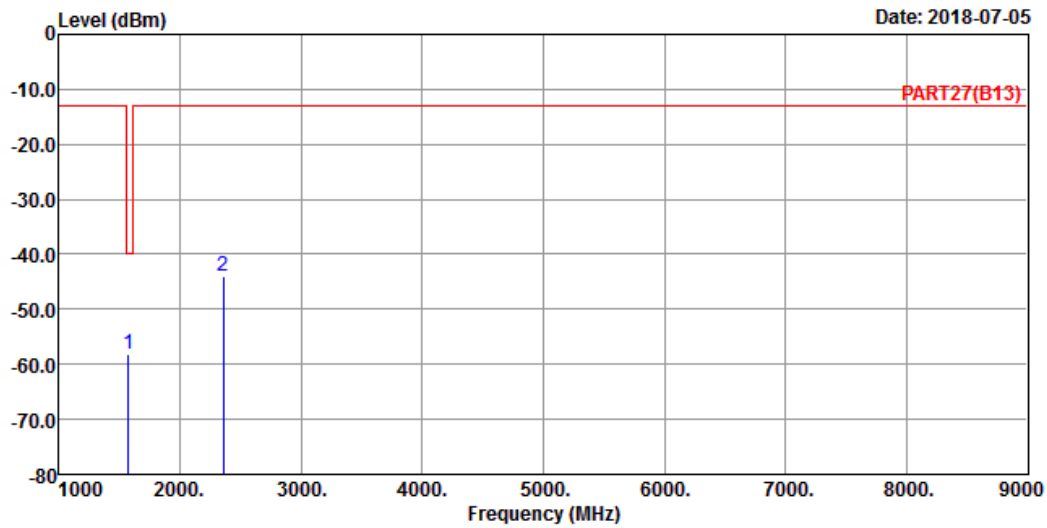
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27(B13) HORIZONTAL
Remak : Cat-M1 Band 13 QPSK_5M Link_H-CH
Tested by: Thomas Wei

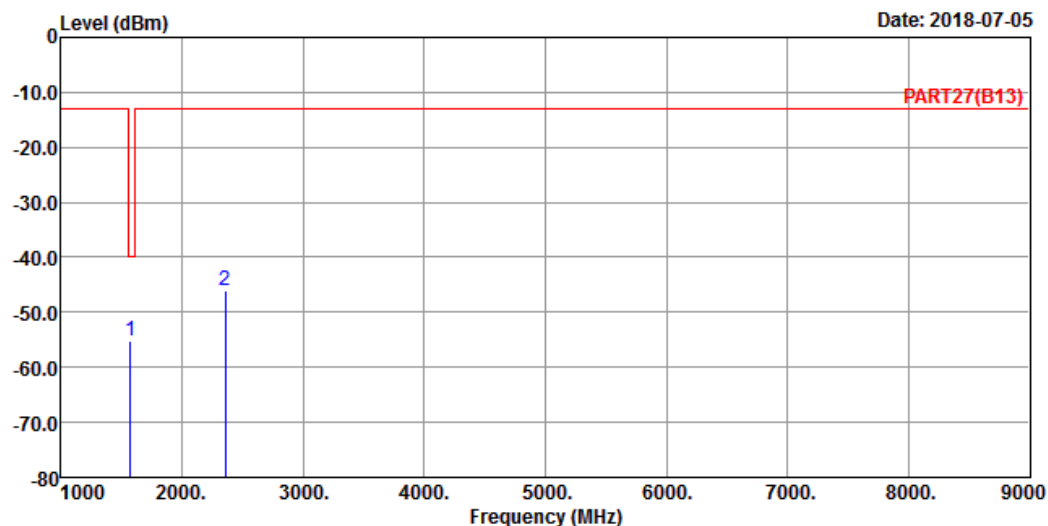
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1569.00	-58.01	-44.66	-40.00	-18.01	-13.35	Peak
2	2353.50	-44.01	-34.50	-13.00	-31.01	-9.51	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



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	dBm	dB	dB		
1 pp	1569.00	-55.31	-41.96	-40.00	-15.31	-13.35	Peak
2	2353.50	-45.99	-36.48	-13.00	-32.99	-9.51	Peak

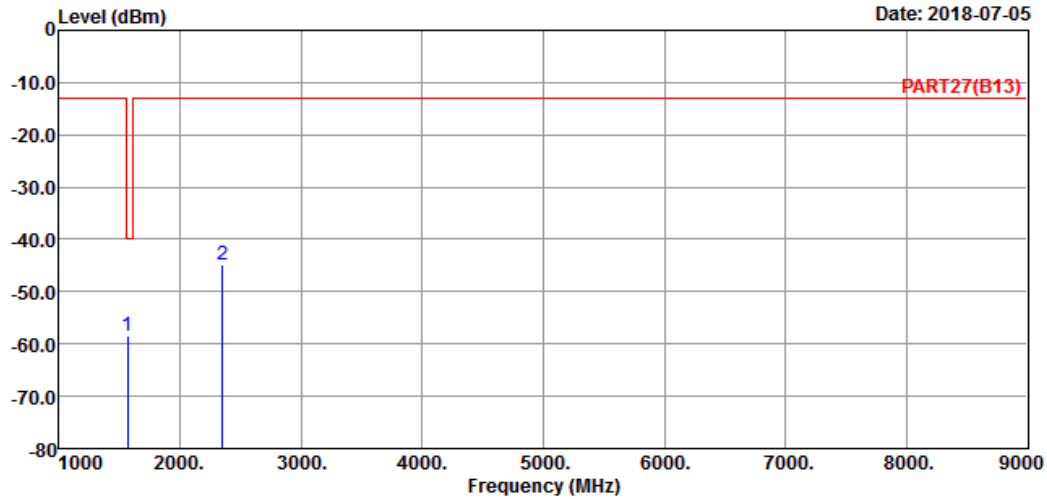
Channel Bandwidth: 10 MHz / QPSK
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



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	Level	Line	Limit	Factor	Remark
MHz	dBm	dBm	dBm	dB	dB	dB	
1 pp	1564.00	-58.48	-45.14	-40.00	-18.48	-13.34	Peak
2	2346.00	-44.75	-35.31	-13.00	-31.75	-9.44	Peak

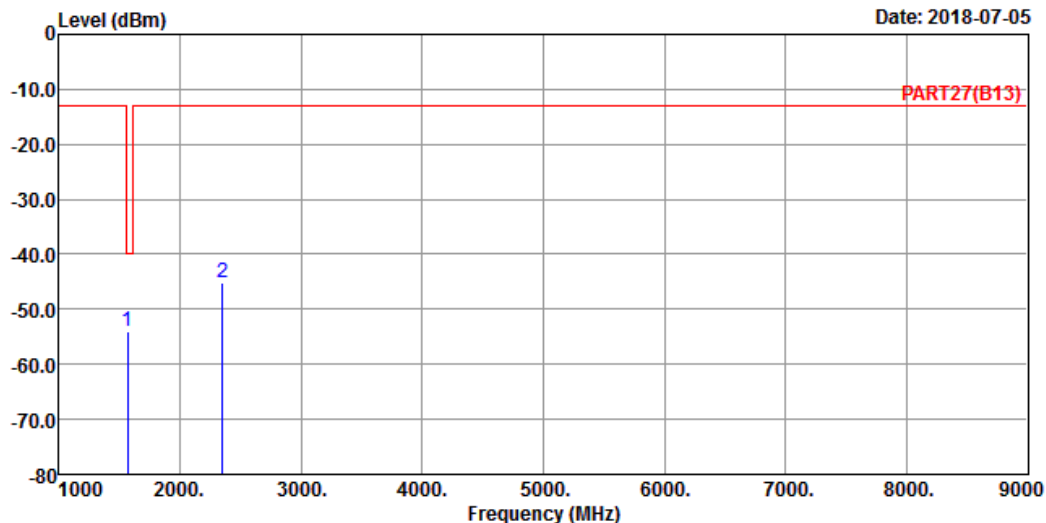


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



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	
1 pp	1564.00	-54.02	-40.68	-40.00	-14.02	-13.34	Peak
2	2346.00	-45.22	-35.78	-13.00	-32.22	-9.44	Peak

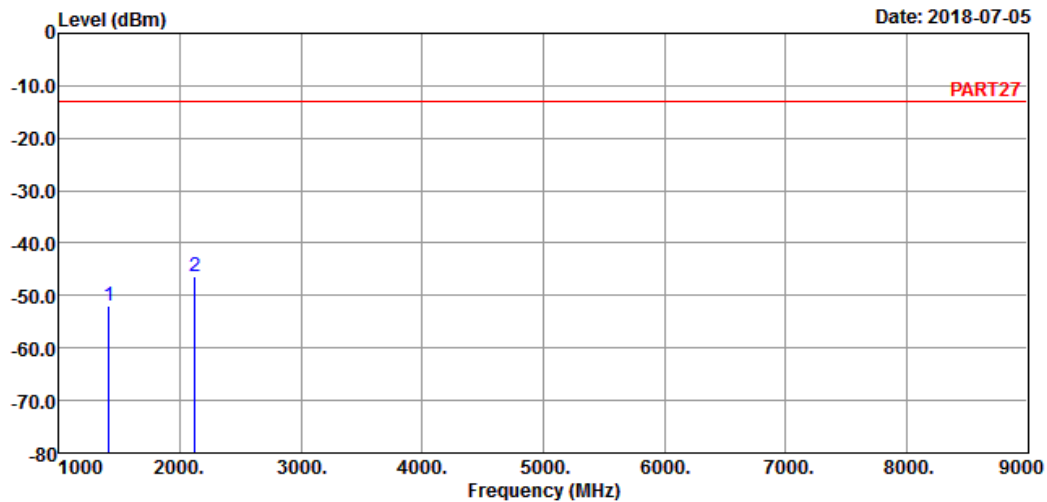
LTE Band 17
Channel Bandwidth: 5 MHz / QPSK
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 17 QPSK_5M Link_L-CH
Tested by: Jisyong Wang

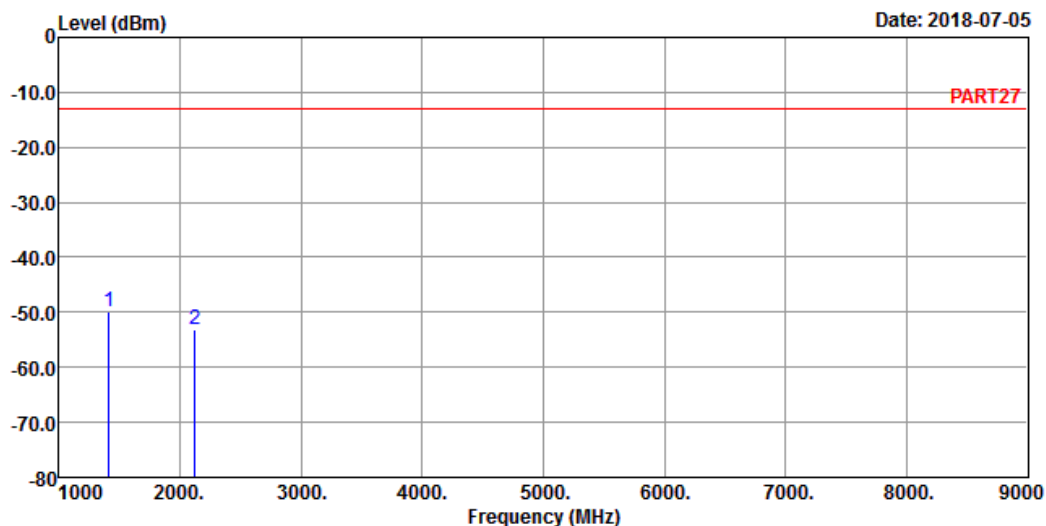
	Freq	Level	Read	Limit	Over	Factor	Remark
			Level	Line	Limit		
	MHz	dBm	dBm	dBm	dB	dB	
1	1413.00	-52.01	-39.99	-13.00	-39.01	-12.02	Peak
2 pp	2119.50	-46.31	-36.44	-13.00	-33.31	-9.87	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 17 QPSK_5M 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	1413.00	-50.03	-38.01	-13.00	-37.03	-12.02	Peak
2	2119.50	-53.05	-43.18	-13.00	-40.05	-9.87	Peak

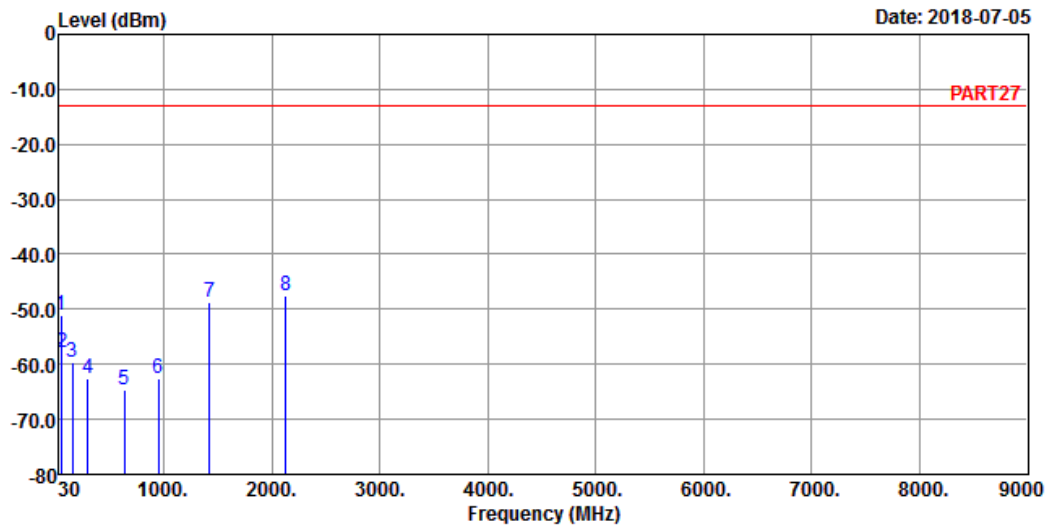
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 17 QPSK_10M Link_M-CH
Tested by: Jisyoung Wang

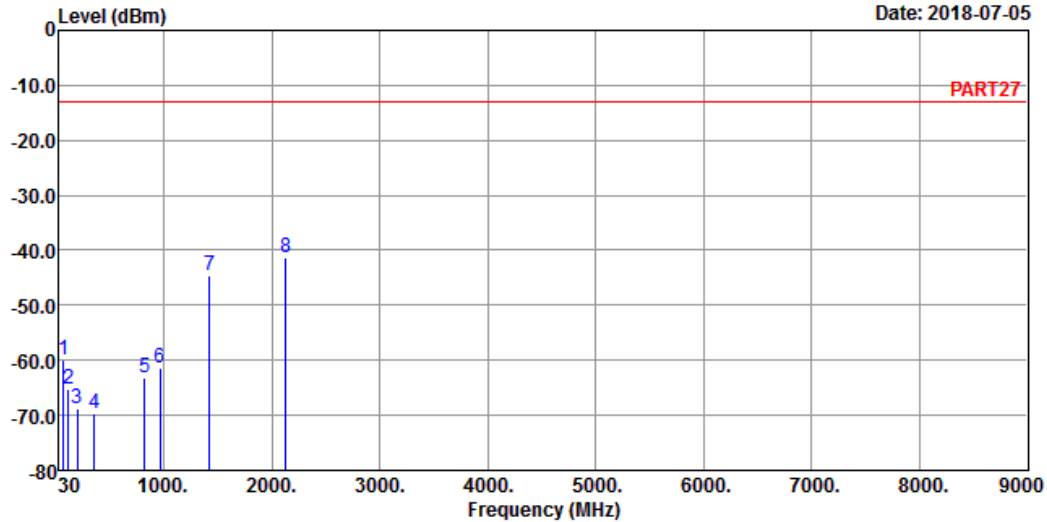
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	44.55	-51.10	-49.11	-13.00	-38.10	-1.99	Peak
2	54.25	-57.96	-51.89	-13.00	-44.96	-6.07	Peak
3	153.19	-59.50	-52.74	-13.00	-46.50	-6.76	Peak
4	297.72	-62.64	-55.67	-13.00	-49.64	-6.97	Peak
5	632.37	-64.69	-63.85	-13.00	-51.69	-0.84	Peak
6	952.47	-62.68	-64.58	-13.00	-49.68	1.90	Peak
7	1420.00	-48.85	-36.71	-13.00	-35.85	-12.14	Peak
8 pp	2130.00	-47.65	-37.88	-13.00	-34.65	-9.77	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 17 QPSK_10M Link_M-CH
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	69.77	-60.05	-51.65	-13.00	-47.05	-8.40	Peak
2	112.45	-65.35	-55.15	-13.00	-52.35	-10.20	Peak
3	194.90	-68.64	-61.09	-13.00	-55.64	-7.55	Peak
4	355.92	-69.59	-63.39	-13.00	-56.59	-6.20	Peak
5	821.52	-63.11	-63.65	-13.00	-50.11	0.54	Peak
6	966.05	-61.29	-63.67	-13.00	-48.29	2.38	Peak
7	1420.00	-44.48	-32.34	-13.00	-31.48	-12.14	Peak
8 pp	2130.00	-41.40	-31.63	-13.00	-28.40	-9.77	Peak

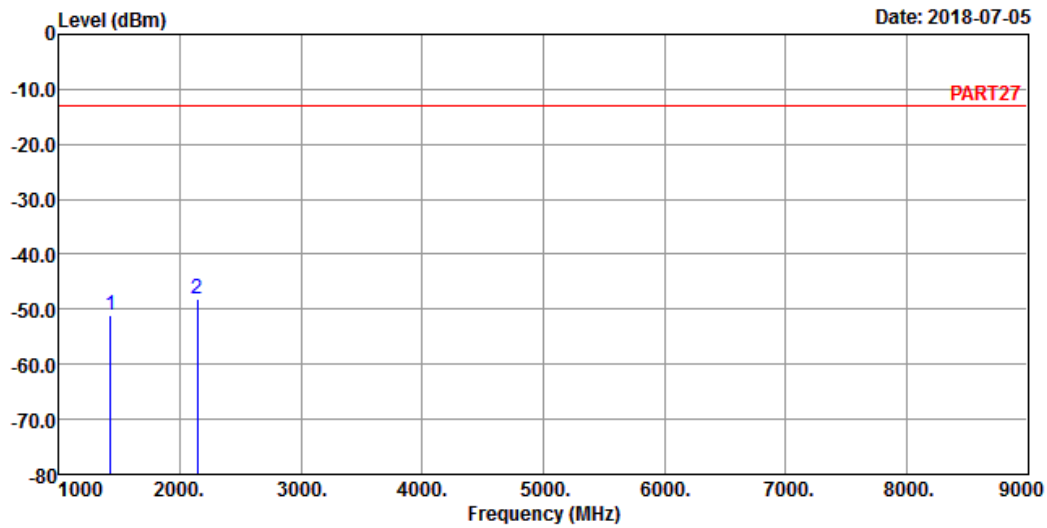
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : Cat-M1 Band 17 QPSK_5M Link_H-CH
 Tested by: Jisyong Wang

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1427.00	-51.14	-38.89	-13.00	-38.14	-12.25	Peak
2 pp	2140.50	-48.02	-38.45	-13.00	-35.02	-9.57	Peak

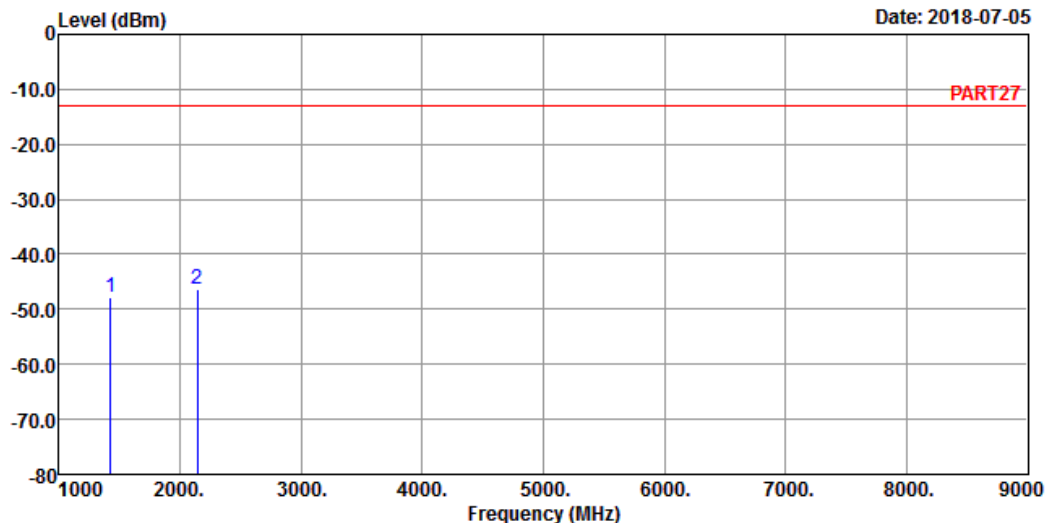


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : Cat-M1 Band 17 QPSK_5M Link_H-CH

Tested by: Jisyong Wang

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1427.00	-47.85	-35.60	-13.00	-34.85	-12.25	Peak
2 pp	2140.50	-46.25	-36.68	-13.00	-33.25	-9.57	Peak

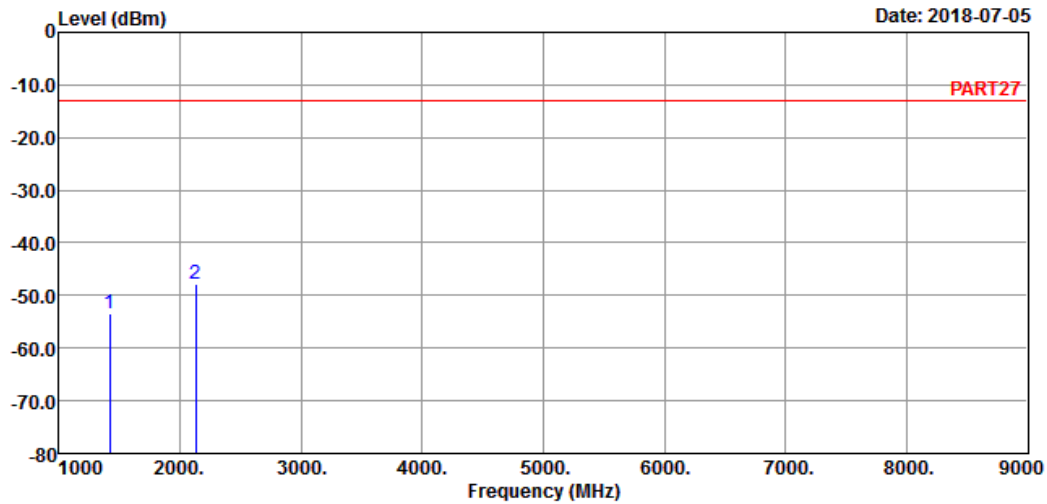
Channel Bandwidth: 10 MHz / QPSK
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 17 QPSK_10M Link_L-CH
Tested by: Jisyong Wang

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1418.00	-53.37	-41.23	-13.00	-40.37	-12.14	Peak
2 pp	2127.00	-47.95	-38.18	-13.00	-34.95	-9.77	Peak

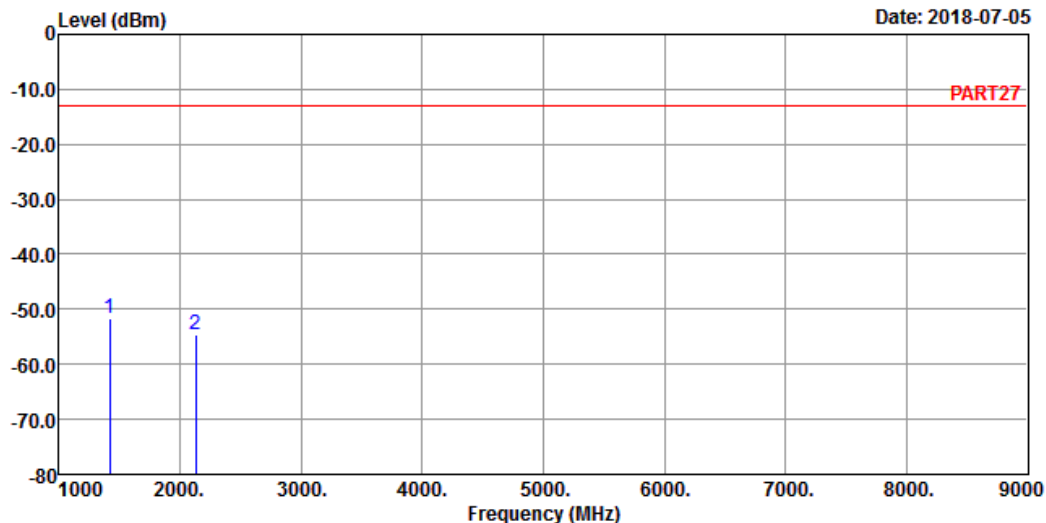


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 2018-07-05



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : Cat-M1 Band 17 QPSK_10M 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	1418.00	-51.53	-39.39	-13.00	-38.53	-12.14	Peak
2	2127.00	-54.52	-44.75	-13.00	-41.52	-9.77	Peak

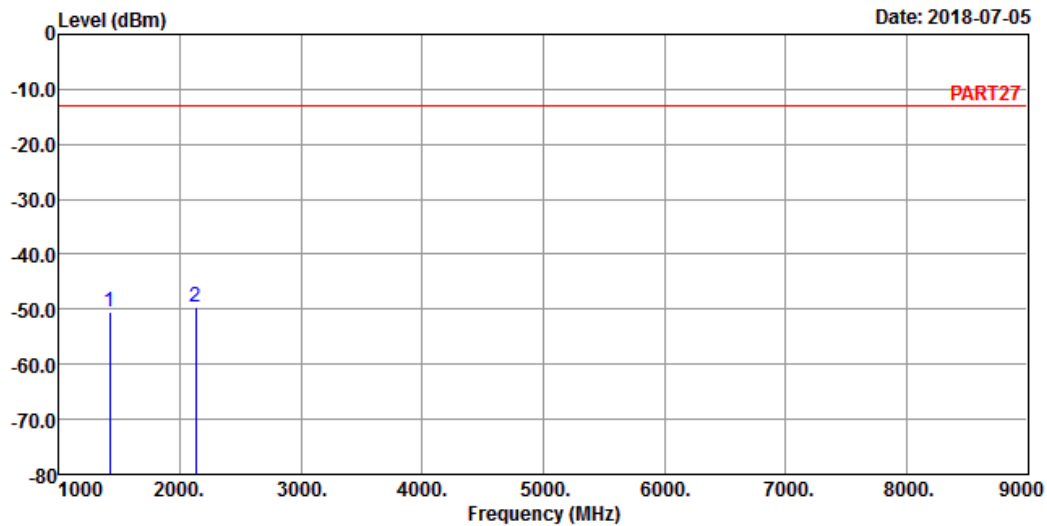
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : Cat-M1 Band 17 QPSK_10M Link_M-CH
 Tested by: Jisyong Wang

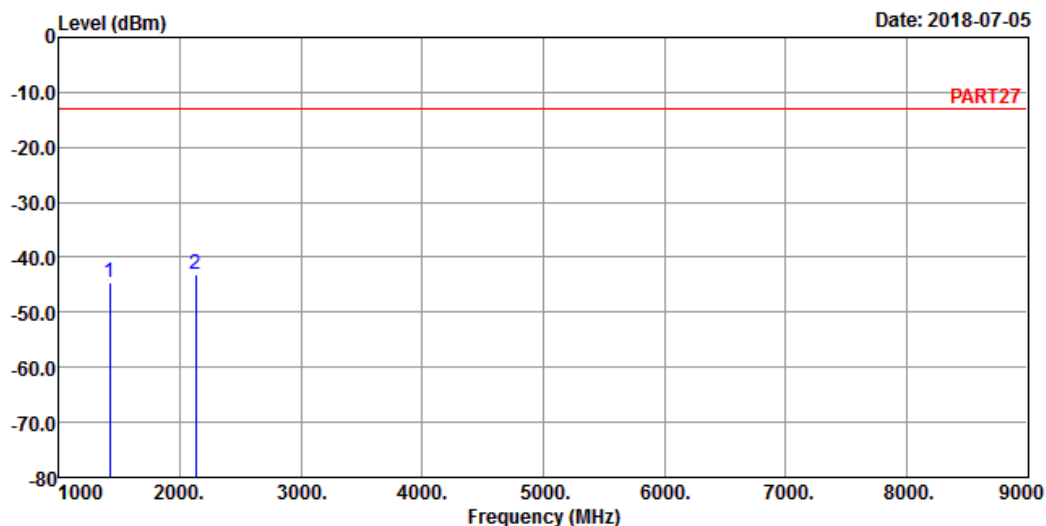
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1420.00	-50.45	-38.31	-13.00	-37.45	-12.14	Peak
2 pp	2130.00	-49.56	-39.79	-13.00	-36.56	-9.77	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : Cat-M1 Band 17 QPSK_10M Link_M-CH

Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1420.00	-44.48	-32.34	-13.00	-31.48	-12.14	Peak
2 pp	2130.00	-43.01	-33.24	-13.00	-30.01	-9.77	Peak

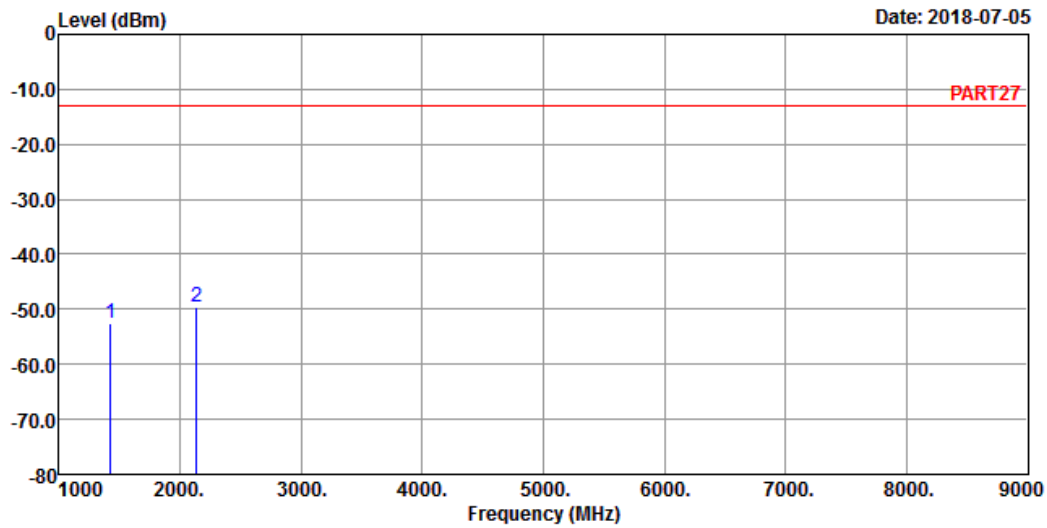
High Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 17 QPSK_10M Link_H-CH
Tested by: Jisyong Wang

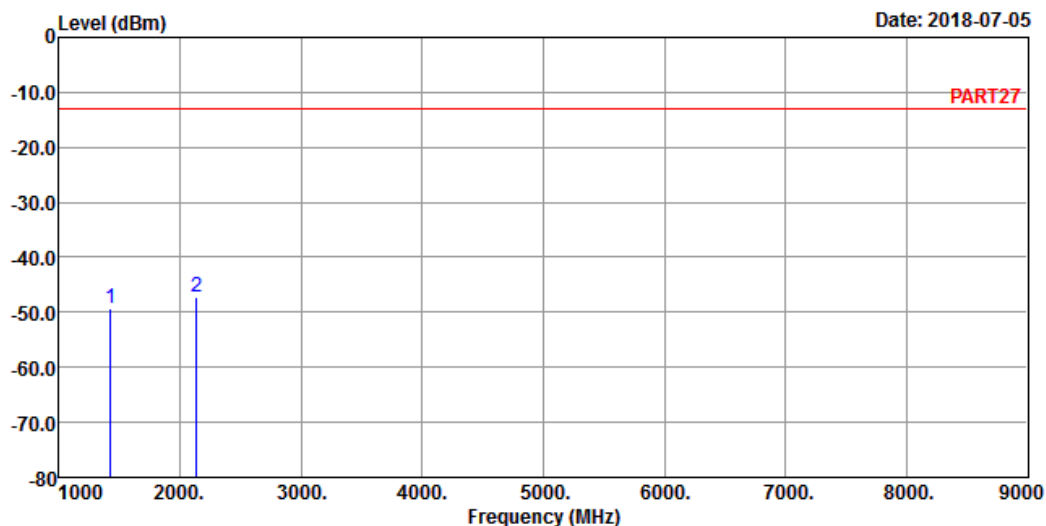
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1422.00	-52.52	-40.33	-13.00	-39.52	-12.19	Peak
2 pp	2133.00	-49.62	-39.95	-13.00	-36.62	-9.67	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : Cat-M1 Band 17 QPSK_10M Link_H-CH

Tested by: Jisyong Wang

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1422.00	-49.38	-37.19	-13.00	-36.38	-12.19	Peak
2 pp	2133.00	-47.12	-37.45	-13.00	-34.12	-9.67	Peak

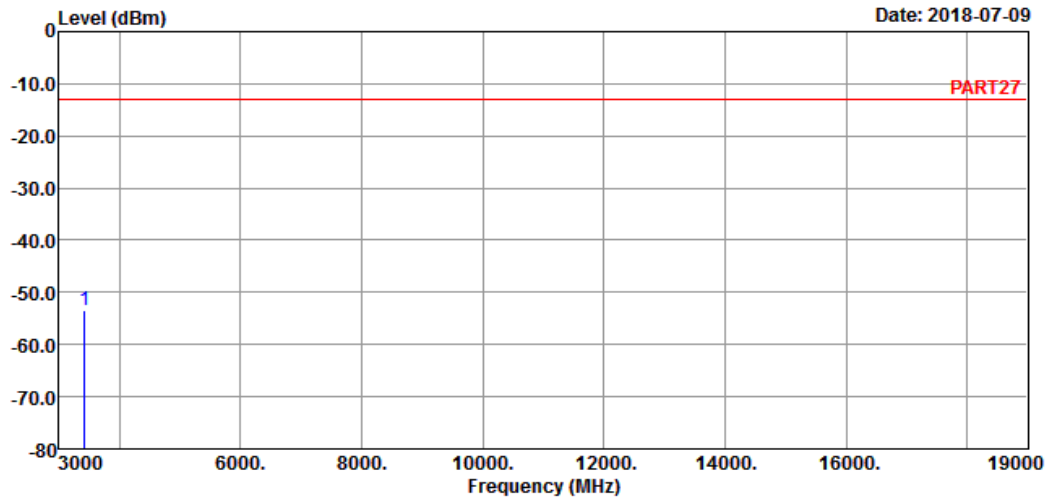
LTE Band 66:
Channel Bandwidth: 1.4 MHz / QPSK
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 66 QPSK_1.4M_L-CH Link
Tested by: Jisyong Wang

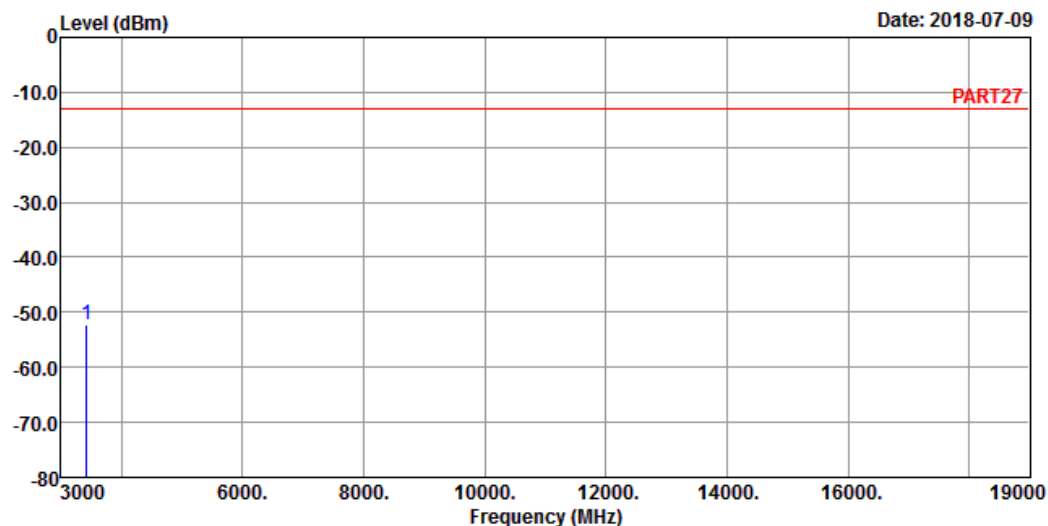
Freq	Level	Read	Limit	Over	Factor	Remark
		Level	Line	Limit		
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3421.40	-53.52	-45.18	-13.00	-40.52	-8.34	Peak



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 66 QPSK_1.4M_L-CH Link
Tested by: Jisyong Wang

Freq	Level	Read	Limit	Over	Factor	Remark
		Level	Line	Limit		
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3421.40	-52.14	-43.80	-13.00	-39.14	-8.34	Peak

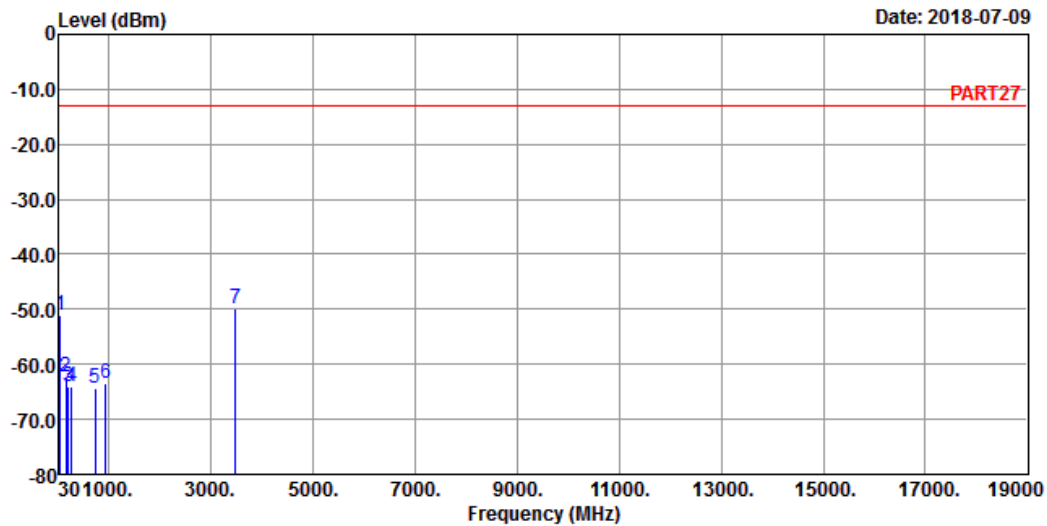
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 66 QPSK_1.4M_M-CH Link
Tested by: Jisyong Wang

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	45.52	-51.15	-48.65	-13.00	-38.15	-2.50	Peak
2	159.98	-62.37	-57.53	-13.00	-49.37	-4.84	Peak
3	207.51	-64.03	-56.32	-13.00	-51.03	-7.71	Peak
4	274.44	-64.03	-57.54	-13.00	-51.03	-6.49	Peak
5	727.43	-64.33	-64.77	-13.00	-51.33	0.44	Peak
6	933.07	-63.42	-64.81	-13.00	-50.42	1.39	Peak
7 pp	3490.00	-50.01	-42.36	-13.00	-37.01	-7.65	Peak

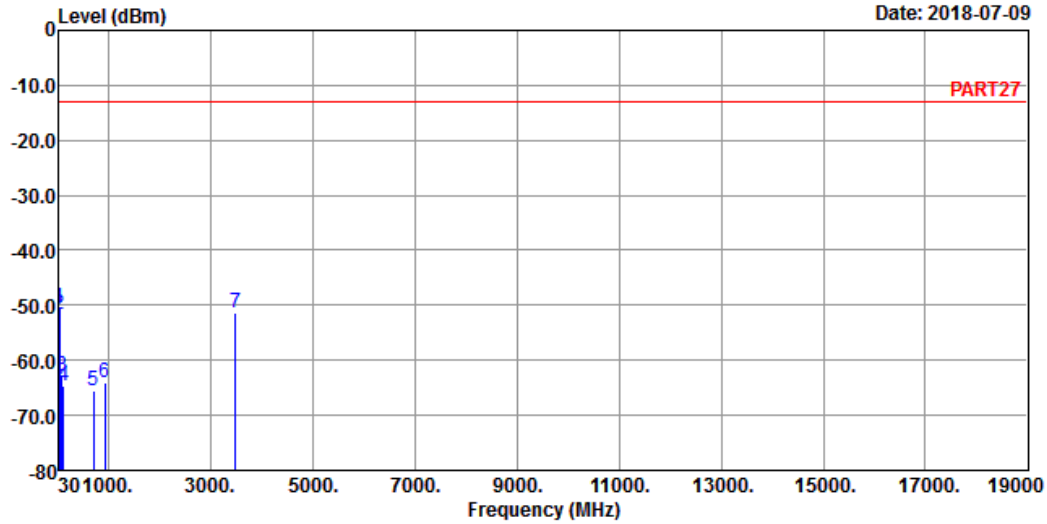


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2018-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 66 QPSK_1.4M_M-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	30.97	-50.55	-50.44	-13.00	-37.55	-0.11	Peak
2	42.61	-51.60	-50.66	-13.00	-38.60	-0.94	Peak
3	78.50	-62.83	-52.40	-13.00	-49.83	-10.43	Peak
4	113.42	-64.63	-54.48	-13.00	-51.63	-10.15	Peak
5	705.12	-65.48	-65.48	-13.00	-52.48	0.00	Peak
6	930.16	-64.04	-65.36	-13.00	-51.04	1.32	Peak
7	3490.00	-51.25	-43.60	-13.00	-38.25	-7.65	Peak

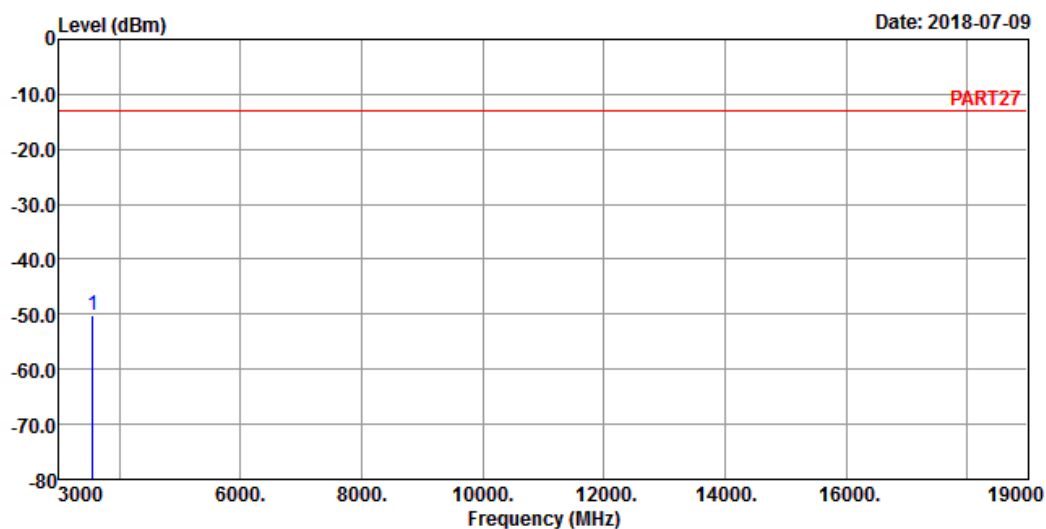
High Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 66 QPSK_1.4M_H-CH Link
Tested by: Jisyong Wang

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

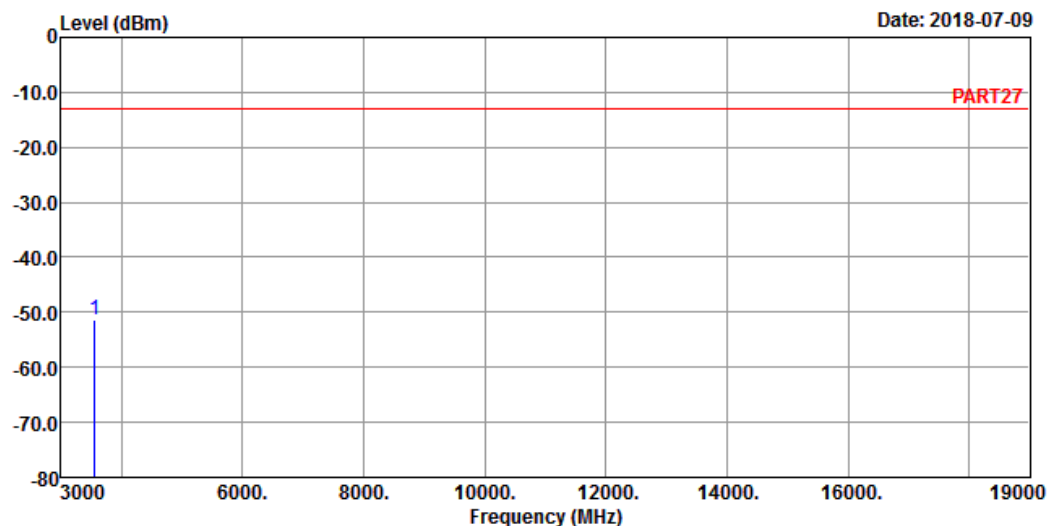
1 pp 3558.60 -50.12 -43.05 -13.00 -37.12 -7.07 Peak



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 66 QPSK_1.4M_H-CH Link
Tested by: Jisyong Wang

		Read	Limit	Over		
Freq	Level	Level	Line	Limit	Factor	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3558.60	-51.25	-44.18	-13.00	-38.25	-7.07	Peak

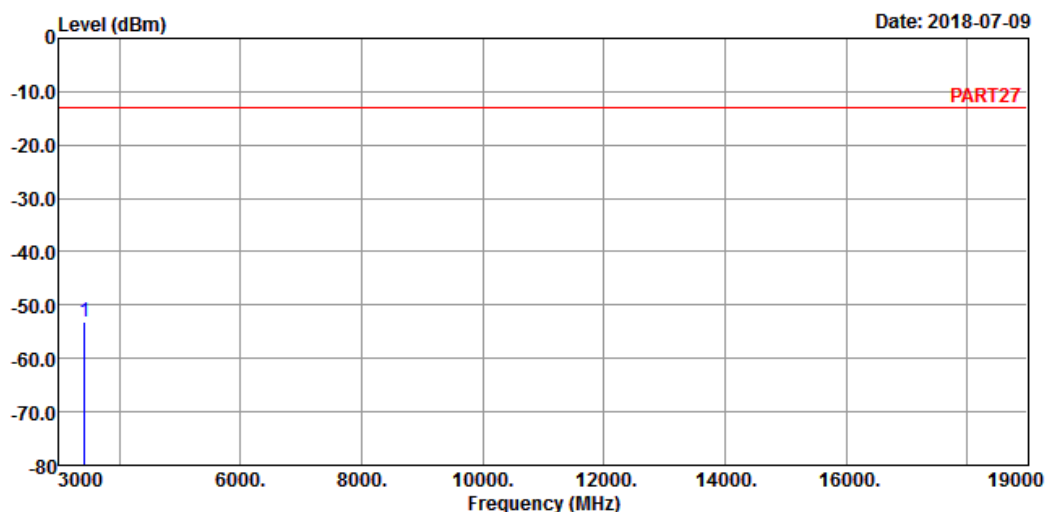
Channel Bandwidth: 5 MHz / QPSK
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 66 QPSK_5M_L-CH Link
Tested by: Jisyong Wang

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

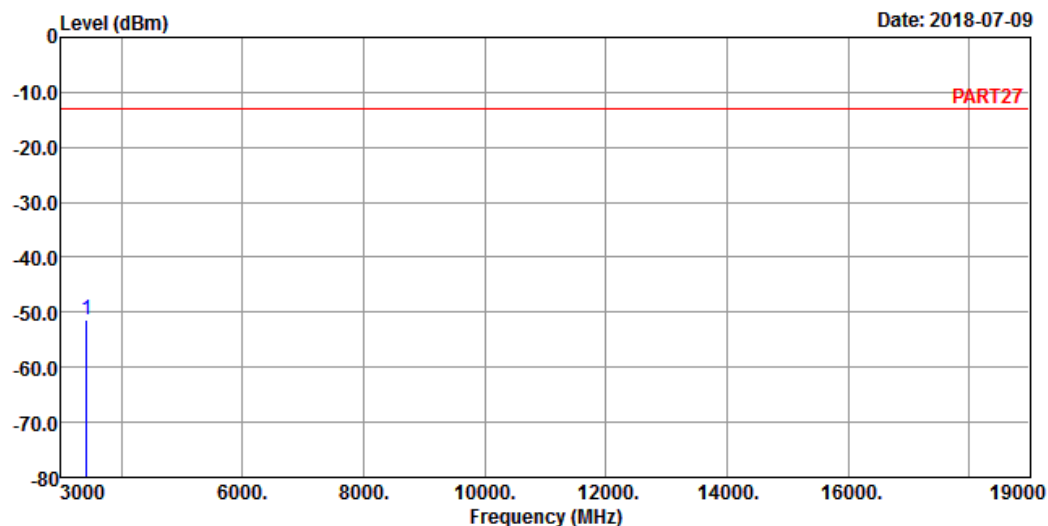
1 pp 3425.00 -53.25 -44.91 -13.00 -40.25 -8.34 Peak



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 66 QPSK_5M_L-CH Link
Tested by: Jisyong Wang

		Read	Limit	Over		
Freq	Level	Level	Line	Limit	Factor	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3425.00	-51.48	-43.14	-13.00	-38.48	-8.34	Peak

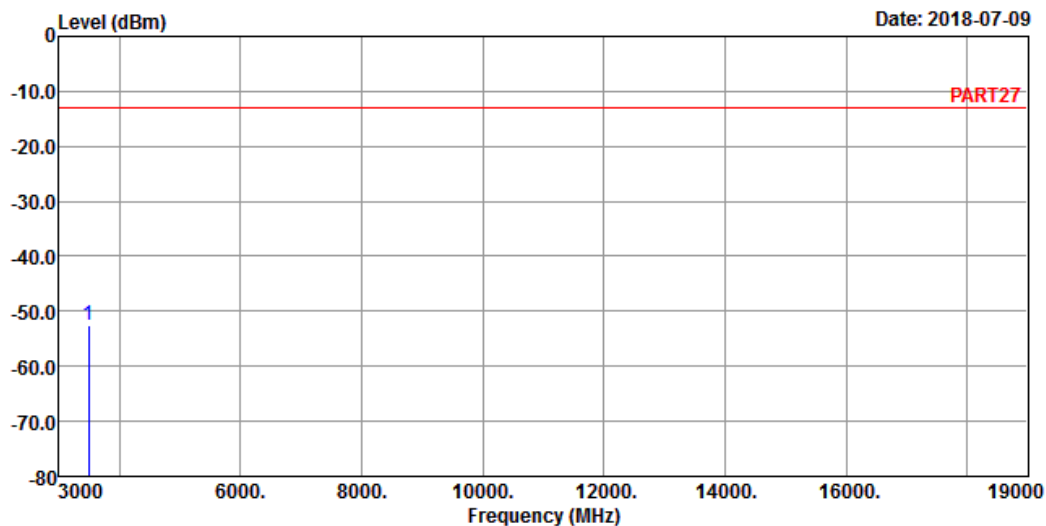
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : Cat-M1 Band 66 QPSK_5M_M-CH Link
 Tested by: Jisyong Wang

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

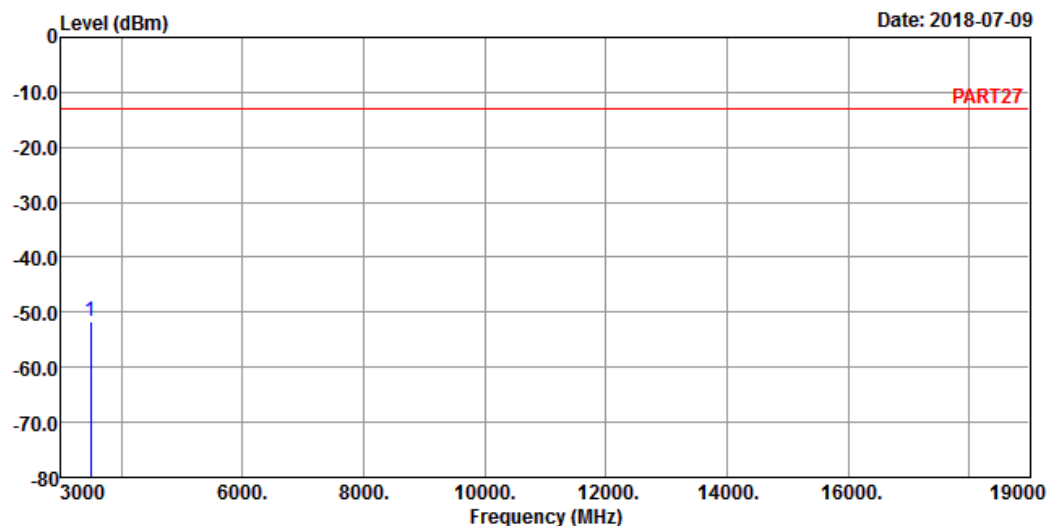
1 pp 3490.00 -52.58 -44.93 -13.00 -39.58 -7.65 Peak



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : Cat-M1 Band 66 QPSK_5M_M-CH Link

Tested by: Jisyong Wang

		Read	Limit	Over		
Freq	Level	Level	Line	Limit	Factor	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3490.00	-51.65	-44.00	-13.00	-38.65	-7.65	Peak

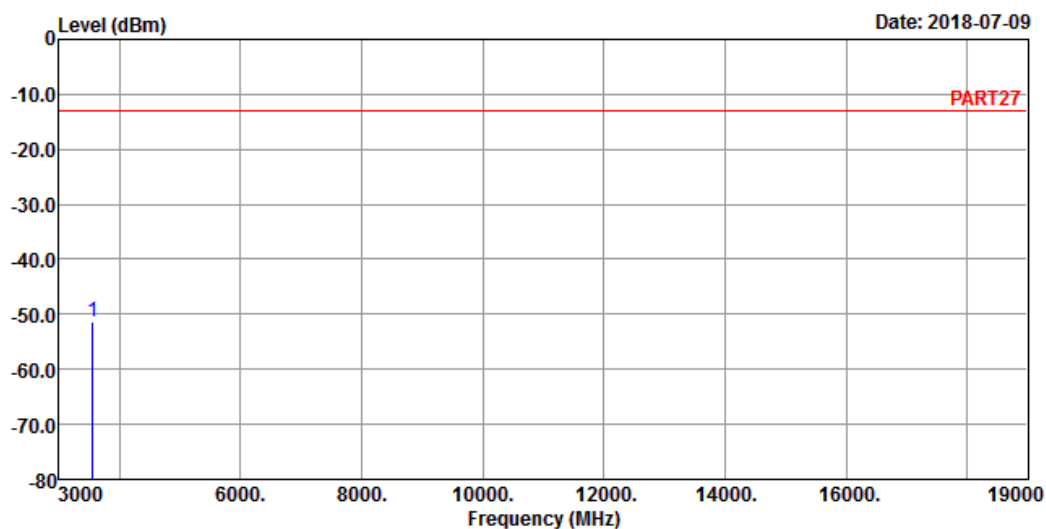
High Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 66 QPSK_5M_H-CH Link
Tested by: Jisyong Wang

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

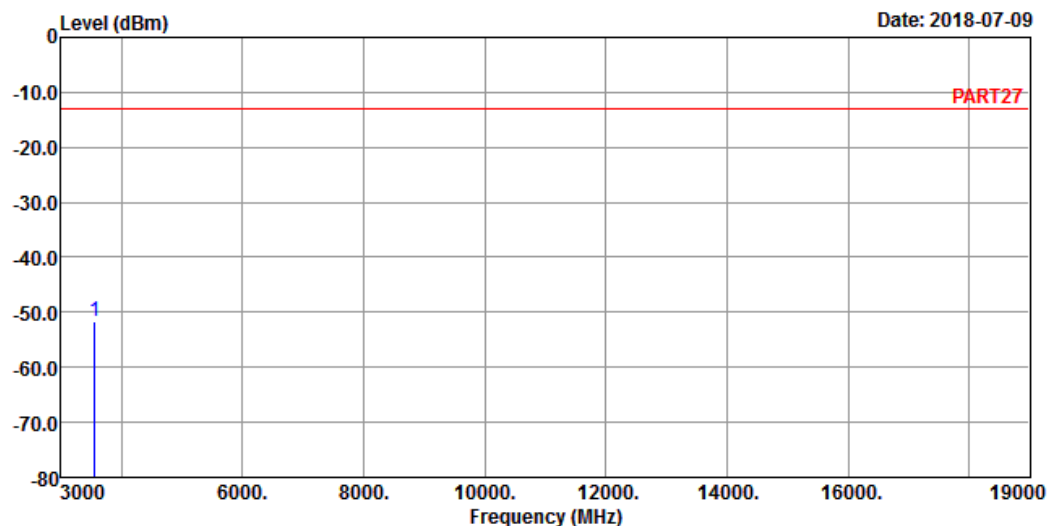
1 pp 3555.00 -51.23 -44.08 -13.00 -38.23 -7.15 Peak



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : Cat-M1 Band 66 QPSK_5M_H-CH Link

Tested by: Jisyong Wang

Freq	Level	Read	Limit	Over	Factor	Remark
		Level	Line	Limit		
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3555.00	-51.69	-44.54	-13.00	-38.69	-7.15	Peak

Channel Bandwidth: 20 MHz / QPSK
Low Channel

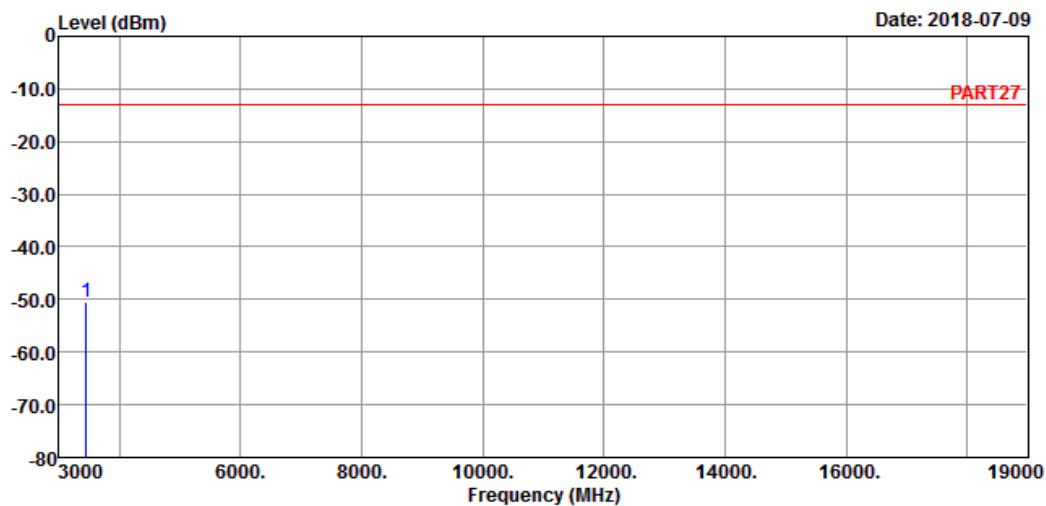


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2018-07-09



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 66 QPSK_20M_L-CH Link
Tested by: Jisyong Wang

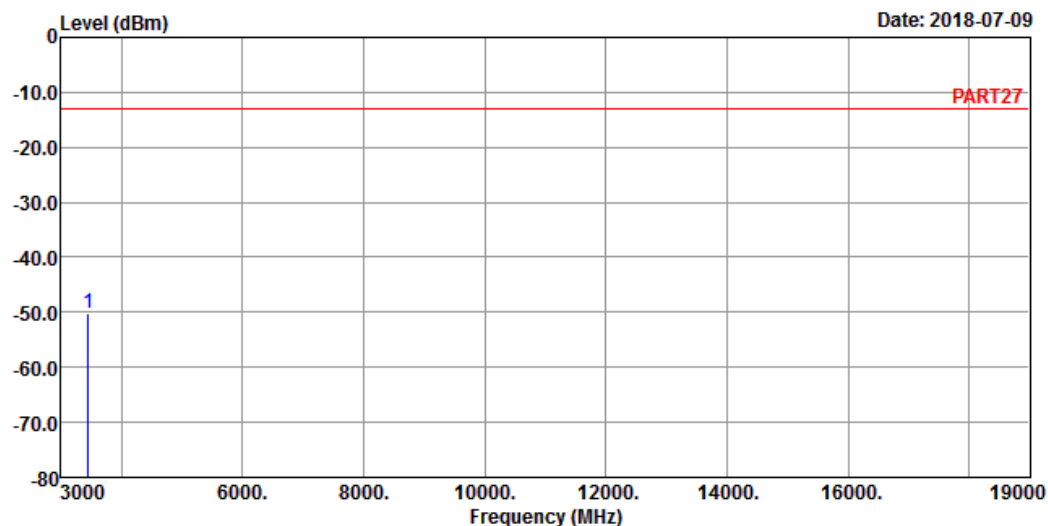
		Read	Limit	Over		
Freq	Level	Level	Line	Limit	Factor	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3440.00	-50.41	-42.19	-13.00	-37.41	-8.22	Peak



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 66 QPSK_20M_L-CH Link
Tested by: Jisyong Wang

		Read	Limit	Over		
Freq	Level	Level	Line	Limit	Factor	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3440.00	-50.23	-42.01	-13.00	-37.23	-8.22	Peak

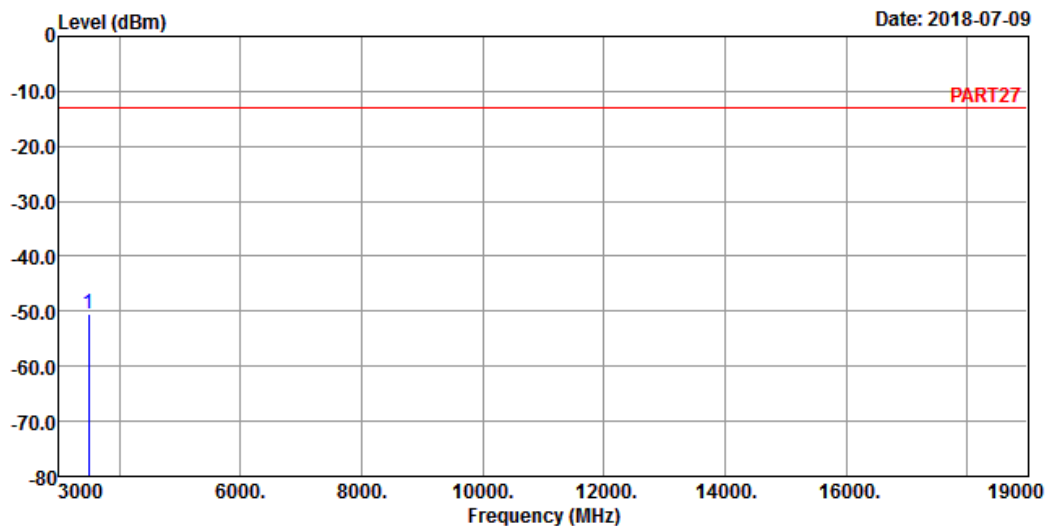
Middle Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 66 QPSK_20M_M-CH Link
Tested by: Jisyong Wang

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

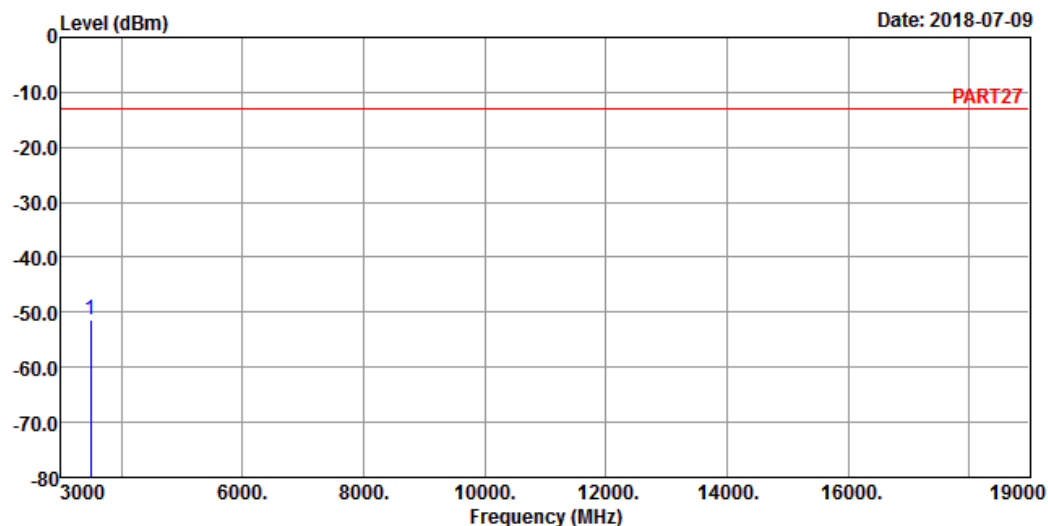
1 pp 3490.00 -50.41 -42.76 -13.00 -37.41 -7.65 Peak



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 66 QPSK_20M_M-CH Link
Tested by: Jisyong Wang

		Read	Limit	Over		
Freq	Level	Level	Line	Limit	Factor	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3490.00	-51.23	-43.58	-13.00	-38.23	-7.65	Peak

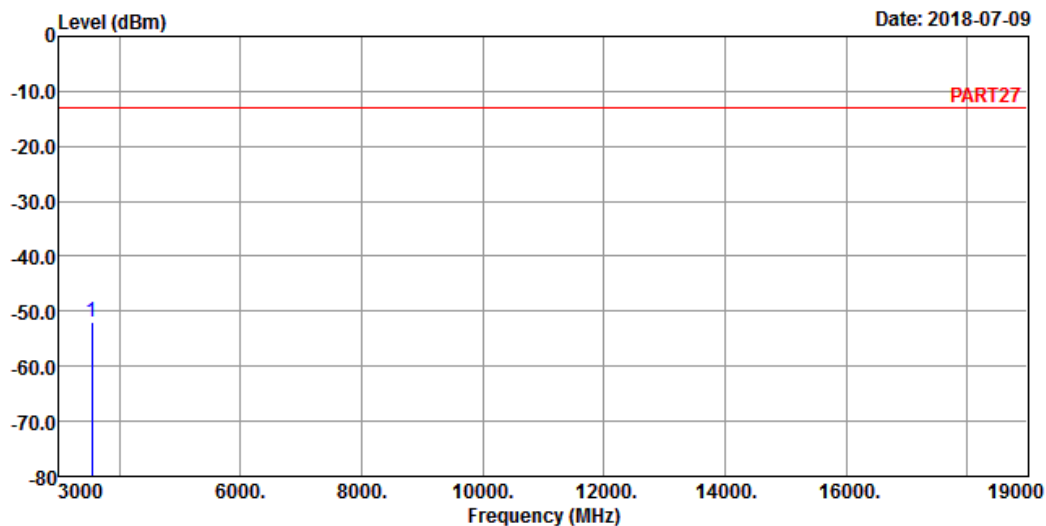
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : Cat-M1 Band 66 QPSK_20M_H-CH Link
 Tested by: Jisyong Wang

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

1 pp 3540.00 -51.99 -44.77 -13.00 -38.99 -7.22 Peak

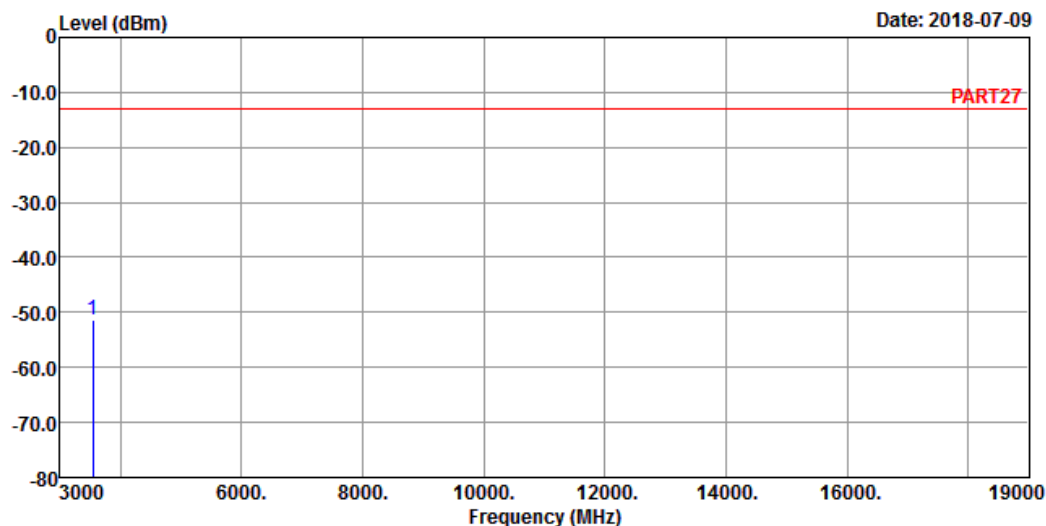


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2018-07-09



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : Cat-M1 Band 66 QPSK_20M_H-CH Link

Tested by: Jisyong Wang

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

1 pp 3540.00 -51.25 -44.03 -13.00 -38.25 -7.22 Peak

NB-IoT
LTE Band 4
Low Channel

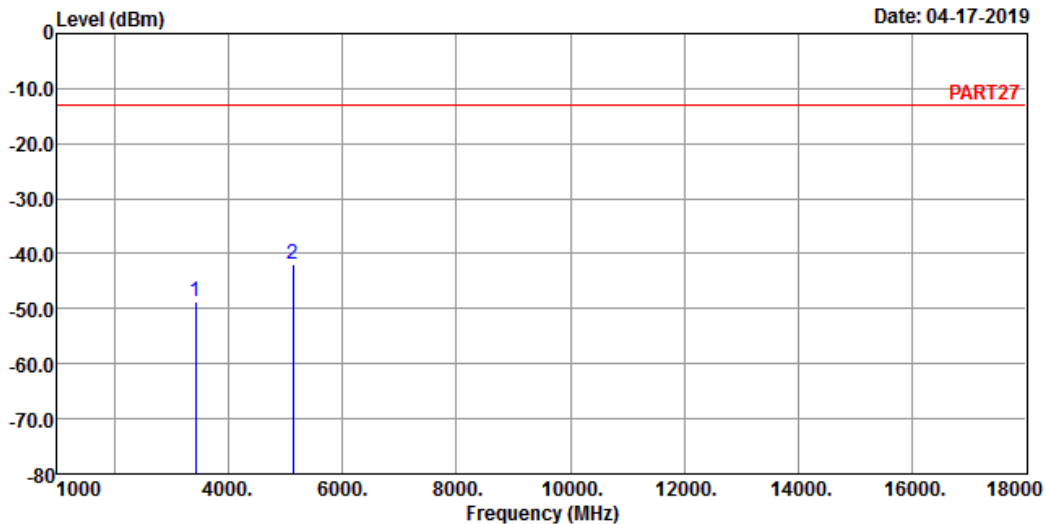


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 04-17-2019



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : NB-IOT Band 4 Stand-alone_Link_L-Ch
Tested by: Thomas Wei

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3420.20	-48.73	-40.28	-13.00	-8.45	-35.73	Peak
2 pp	5130.30	-41.78	-40.04	-13.00	-1.74	-28.78	Peak

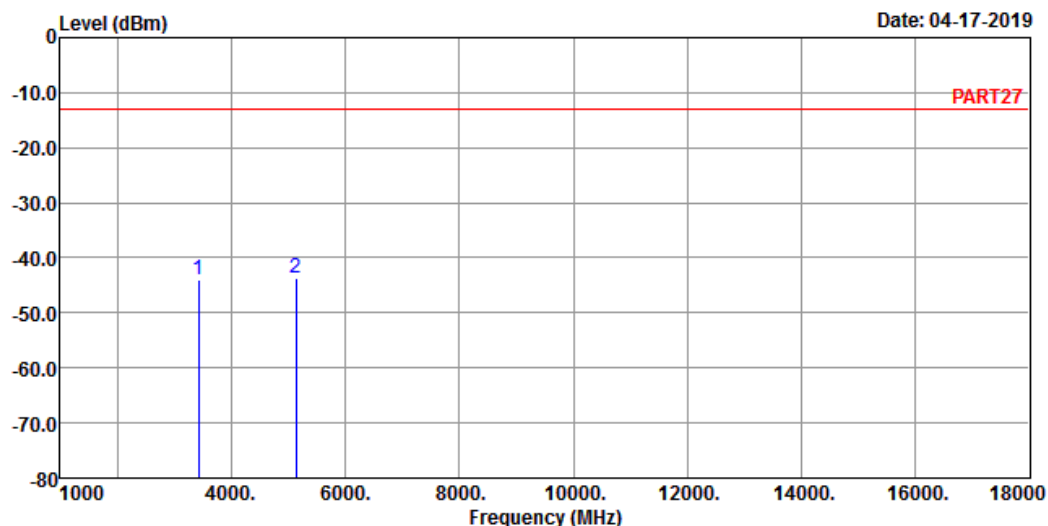


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 04-17-2019



Site : 966 Chamber 5

Condition: PART27 VERTICAL

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

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3420.20	-43.85	-35.40	-13.00	-8.45	-30.85	Peak
2 pp	5130.30	-43.61	-41.87	-13.00	-1.74	-30.61	Peak

Middle Channel

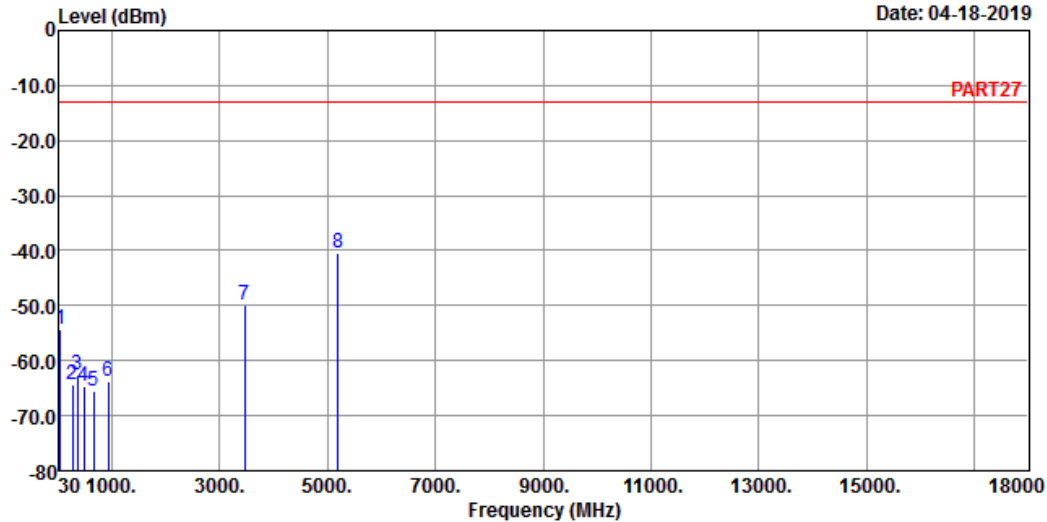


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 04-18-2019



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

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

Tested by: Thomas Wei

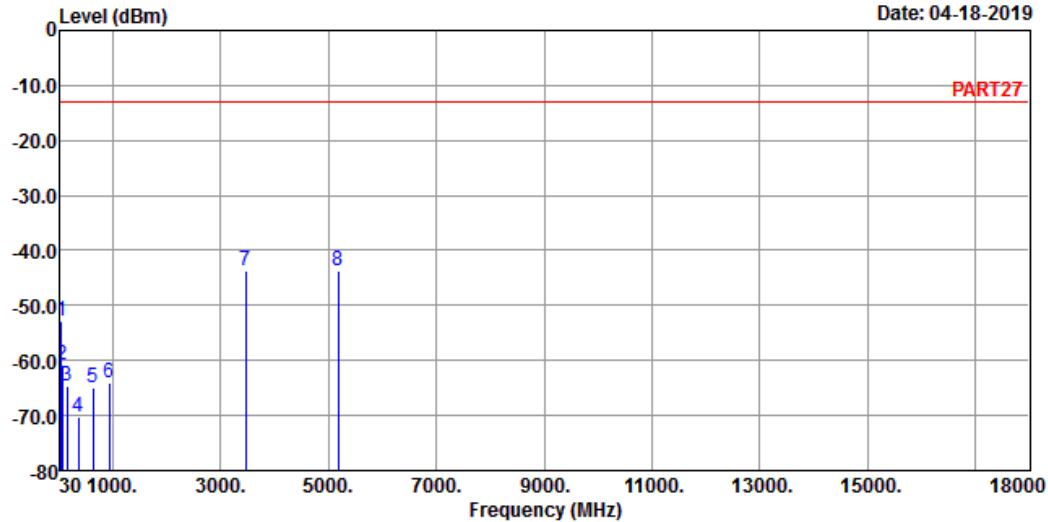
	Freq	Level	Read Level	Limit	Over	
	MHz	dBm	dBm	dBm	Factor	Limit Remark
					dB	dB
1	43.58	-54.46	-52.99	-13.00	-1.47	-41.46 Peak
2	282.20	-64.36	-57.71	-13.00	-6.65	-51.36 Peak
3	360.77	-62.53	-56.35	-13.00	-6.18	-49.53 Peak
4	481.05	-64.53	-59.56	-13.00	-4.97	-51.53 Peak
5	671.17	-65.59	-65.04	-13.00	-0.55	-52.59 Peak
6	933.07	-63.71	-65.10	-13.00	1.39	-50.71 Peak
7	3465.00	-49.81	-41.93	-13.00	-7.88	-36.81 Peak
8 pp	5205.00	-40.43	-38.25	-13.00	-2.18	-27.43 Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5

Condition: PART27 VERTICAL

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

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	43.58	-52.97	-51.50	-13.00	-1.47	-39.97	Peak
2	68.80	-60.95	-52.63	-13.00	-8.32	-47.95	Peak
3	159.98	-64.51	-59.67	-13.00	-4.84	-51.51	Peak
4	360.77	-70.14	-63.96	-13.00	-6.18	-57.14	Peak
5	640.13	-64.95	-64.09	-13.00	-0.86	-51.95	Peak
6	935.98	-64.10	-65.56	-13.00	1.46	-51.10	Peak
7 pp	3465.00	-43.55	-35.67	-13.00	-7.88	-30.55	Peak
8	5190.00	-43.84	-41.77	-13.00	-2.07	-30.84	Peak

High Channel

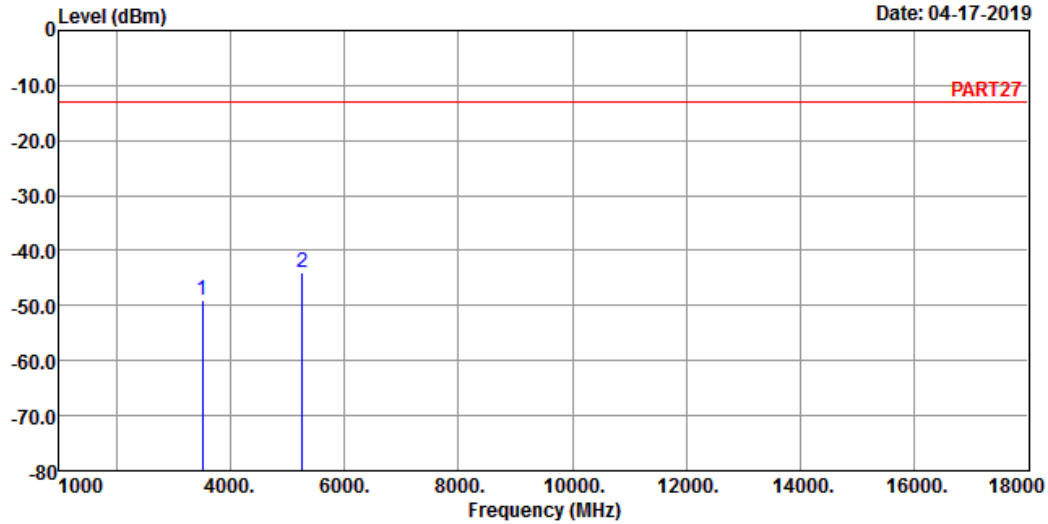


Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3

Date: 04-17-2019



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

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

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit	Over	
	MHz	dBm	dBm	dBm	dB	Limit Remark
1	3509.80	-49.11	-41.66	-13.00	-7.45	-36.11 Peak
2 pp	5264.70	-43.89	-41.37	-13.00	-2.52	-30.89 Peak

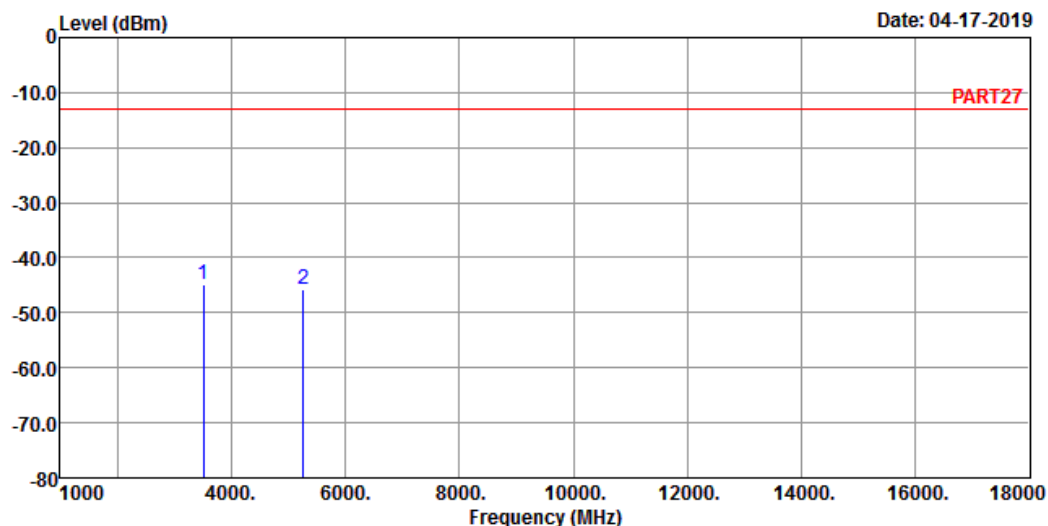


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 04-17-2019



Site : 966 Chamber 5

Condition: PART27 VERTICAL

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

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3509.80	-44.95	-37.50	-13.00	-7.45	-31.95	Peak
2	5264.70	-45.66	-43.14	-13.00	-2.52	-32.66	Peak

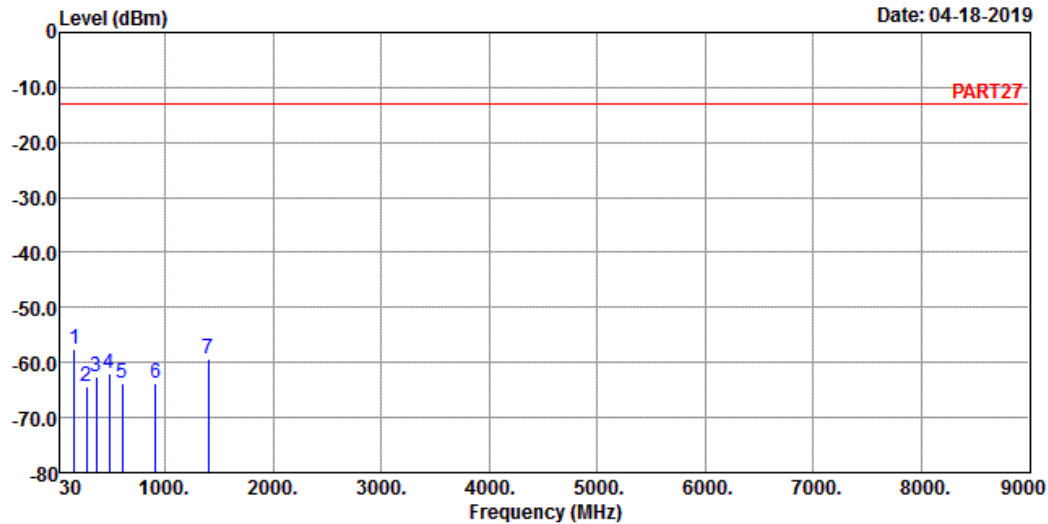
LTE Band 12
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : NB-IOT Band 12 Stand-alone_Link_L-Ch
Tested by: Thomas Wei

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	161.92	-57.55	-52.57	-13.00	-4.98	-44.55	Peak
2	273.47	-64.31	-57.84	-13.00	-6.47	-51.31	Peak
3	360.77	-62.51	-56.33	-13.00	-6.18	-49.51	Peak
4	480.08	-62.12	-57.13	-13.00	-4.99	-49.12	Peak
5	601.33	-63.91	-63.15	-13.00	-0.76	-50.91	Peak
6	908.82	-63.79	-64.58	-13.00	0.79	-50.79	Peak
7	1398.20	-59.21	-47.36	-13.00	-11.85	-46.21	Peak

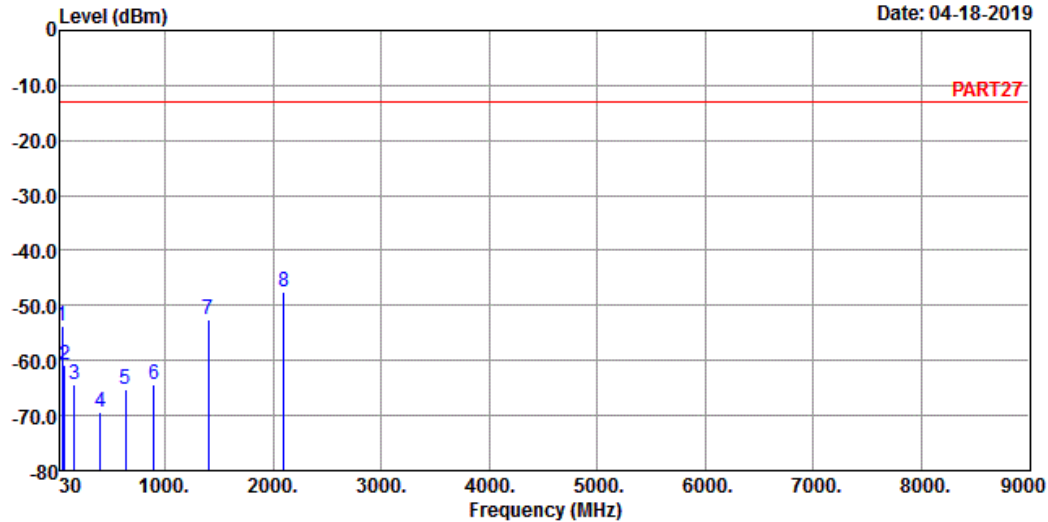


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 04-18-2019



Site : 966 Chamber 5

Condition: PART27 VERTICAL

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

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	43.58	-53.64	-52.17	-13.00	-1.47	-40.64	Peak
2	68.80	-60.86	-52.54	-13.00	-8.32	-47.86	Peak
3	159.98	-64.46	-59.62	-13.00	-4.84	-51.46	Peak
4	397.63	-69.52	-63.56	-13.00	-5.96	-56.52	Peak
5	631.40	-65.22	-64.38	-13.00	-0.84	-52.22	Peak
6	900.09	-64.23	-64.80	-13.00	0.57	-51.23	Peak
7	1398.20	-52.44	-40.59	-13.00	-11.85	-39.44	Peak
8 pp	2097.30	-47.60	-37.35	-13.00	-10.25	-34.60	Peak

Middle Channel

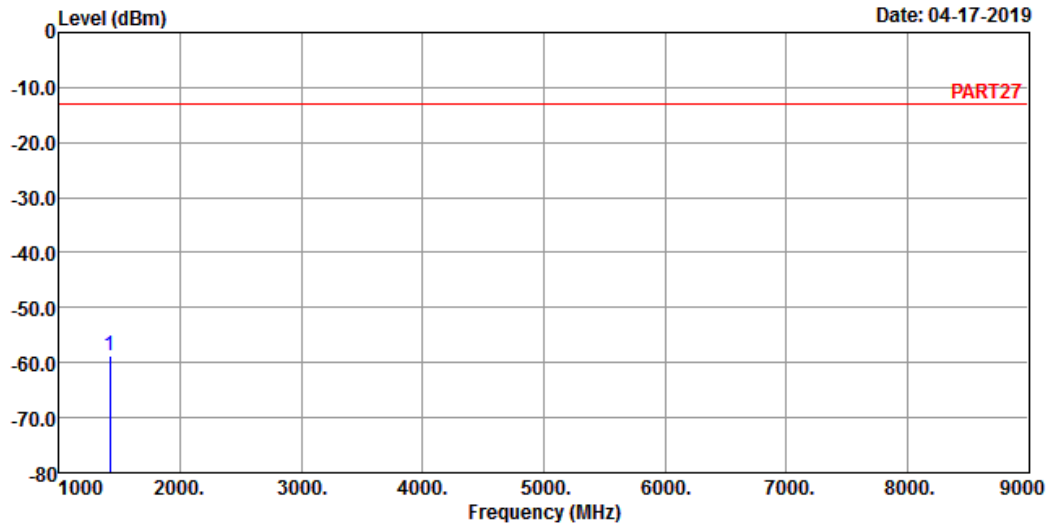


Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3

Date: 04-17-2019



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

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

Tested by: Thomas Wei

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

1 pp 1415.00 -58.76 -46.68 -13.00 -12.08 -45.76 Peak

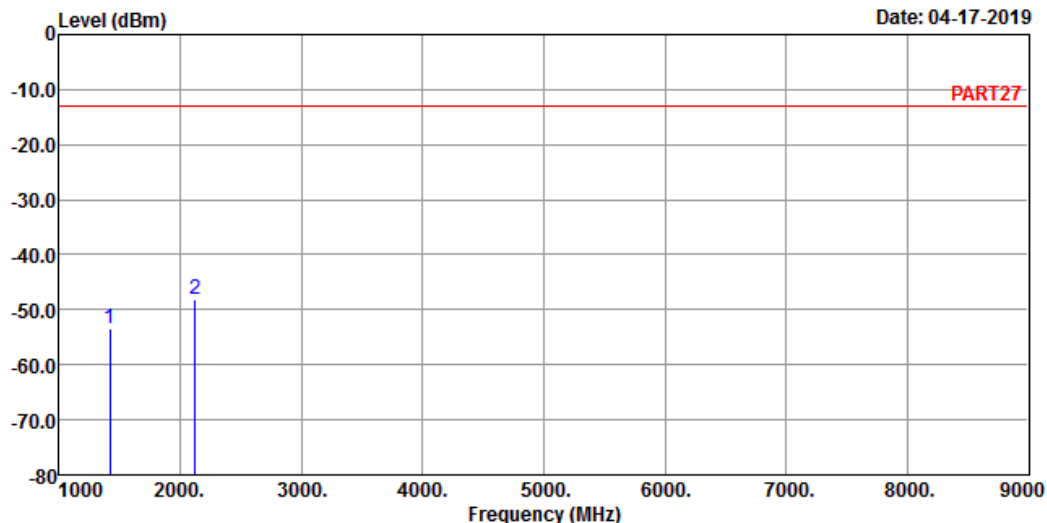


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 04-17-2019



Site : 966 Chamber 5

Condition: PART27 VERTICAL

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

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1415.00	-53.38	-41.30	-13.00	-12.08	-40.38	Peak
2 pp	2122.50	-48.26	-38.39	-13.00	-9.87	-35.26	Peak

High Channel

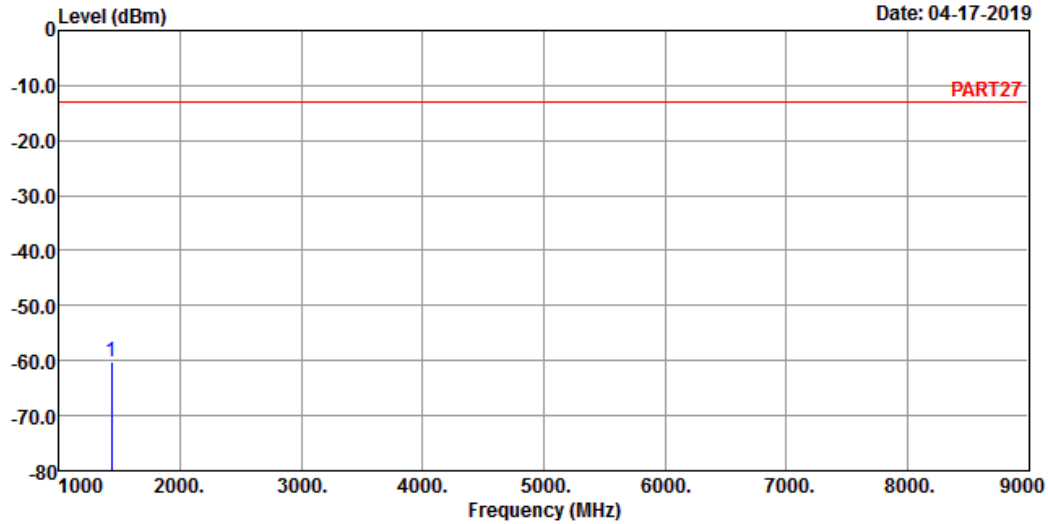


Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3

Date: 04-17-2019



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

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

Tested by: Thomas Wei

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

1 pp 1431.80 -60.14 -47.83 -13.00 -12.31 -47.14 Peak

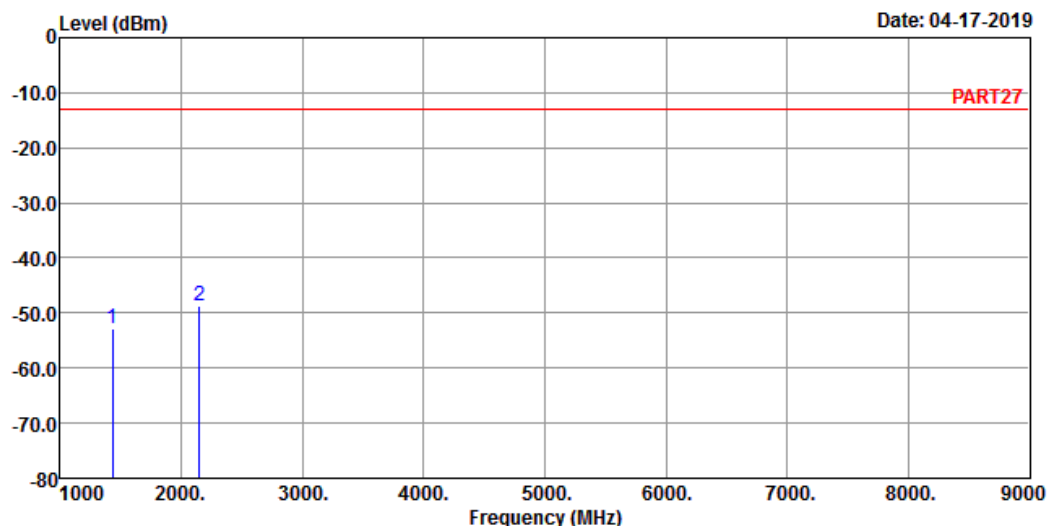


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 04-17-2019



Site : 966 Chamber 5

Condition: PART27 VERTICAL

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

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1431.80	-52.88	-40.57	-13.00	-12.31	-39.88	Peak
2 pp	2147.70	-48.79	-39.32	-13.00	-9.47	-35.79	Peak

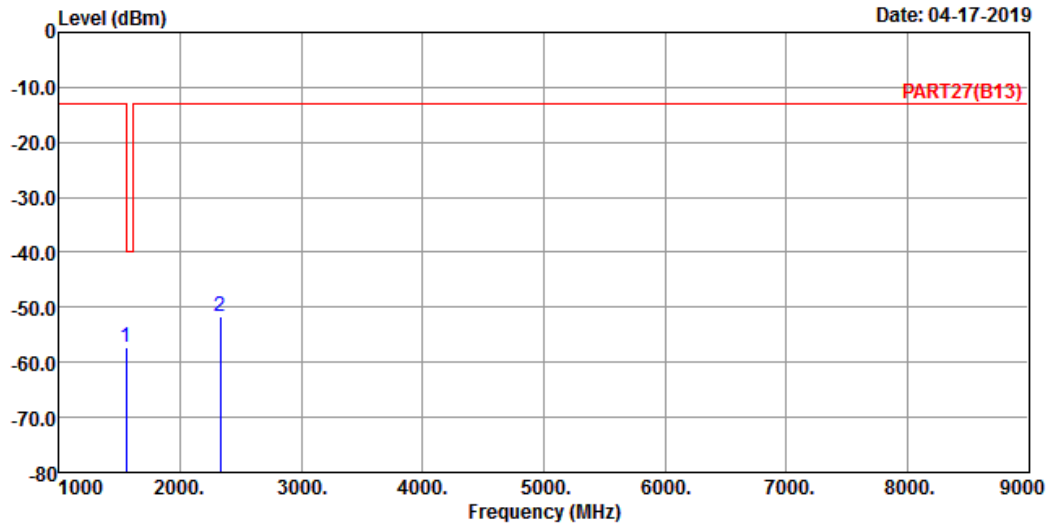
LTE Band 13
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27(B13) HORIZONTAL
Remak : NB-IOT Band 13 Stand-alone_Link_L-Ch
Tested by: Thomas Wei

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1554.20	-57.32	-44.01	-13.00	-13.31	-44.32	Peak
2 pp	2331.30	-51.68	-42.36	-13.00	-9.32	-38.68	Peak

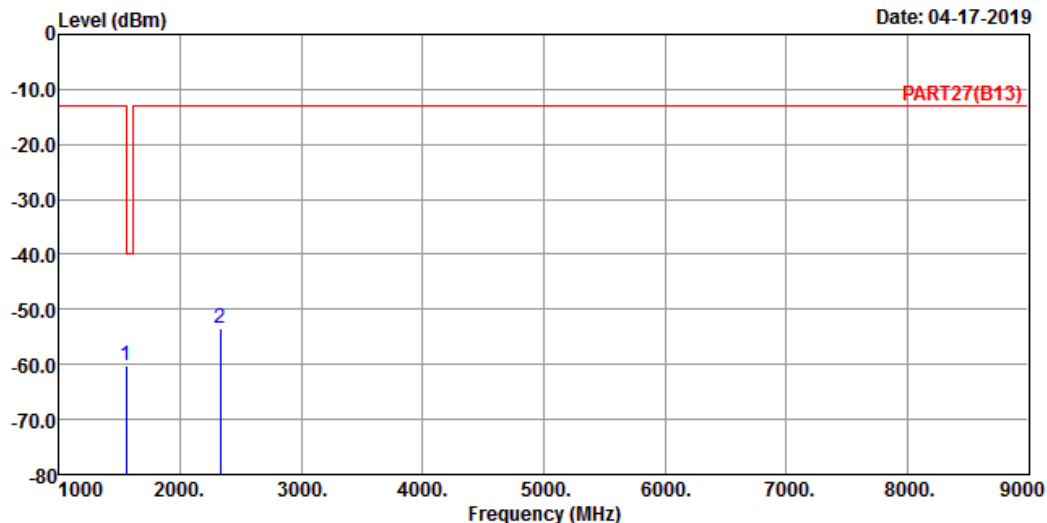


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 04-17-2019



Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

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

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1554.20	-60.35	-47.04	-13.00	-13.31	-47.35	Peak
2 pp	2331.30	-53.55	-44.23	-13.00	-9.32	-40.55	Peak

Middle Channel

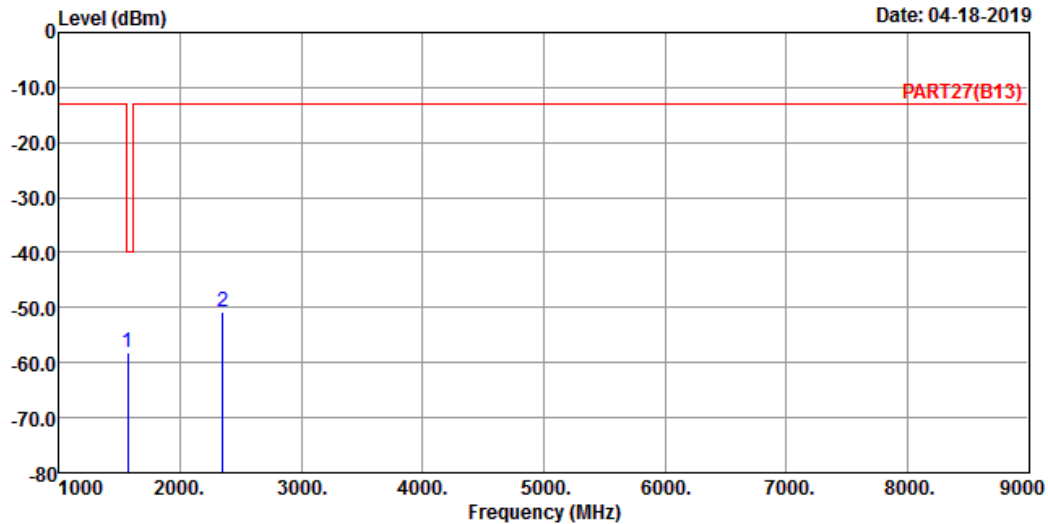


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 04-18-2019



Site : 966 Chamber 5

Condition: PART27(B13) HORIZONTAL

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

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit	Over	
	MHz	dBm	dBm	dBm	dB	Limit Remark
1 pp	1564.00	-58.19	-44.85	-40.00	-13.34	-18.19 Peak
2	2346.00	-50.77	-41.33	-13.00	-9.44	-37.77 Peak

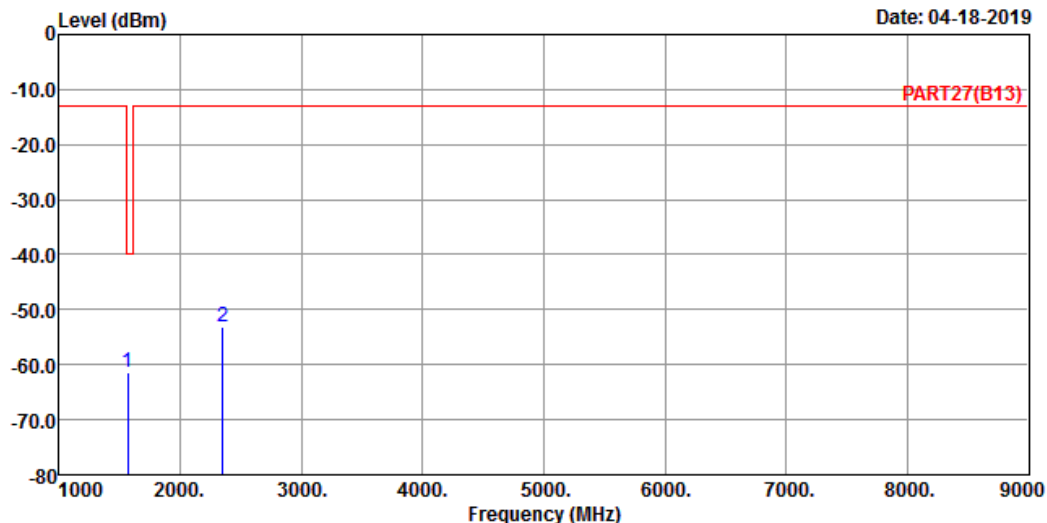


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 04-18-2019



Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

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

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1564.00	-61.50	-48.16	-40.00	-13.34	-21.50	Peak
2	2346.00	-53.07	-43.63	-13.00	-9.44	-40.07	Peak

High Channel

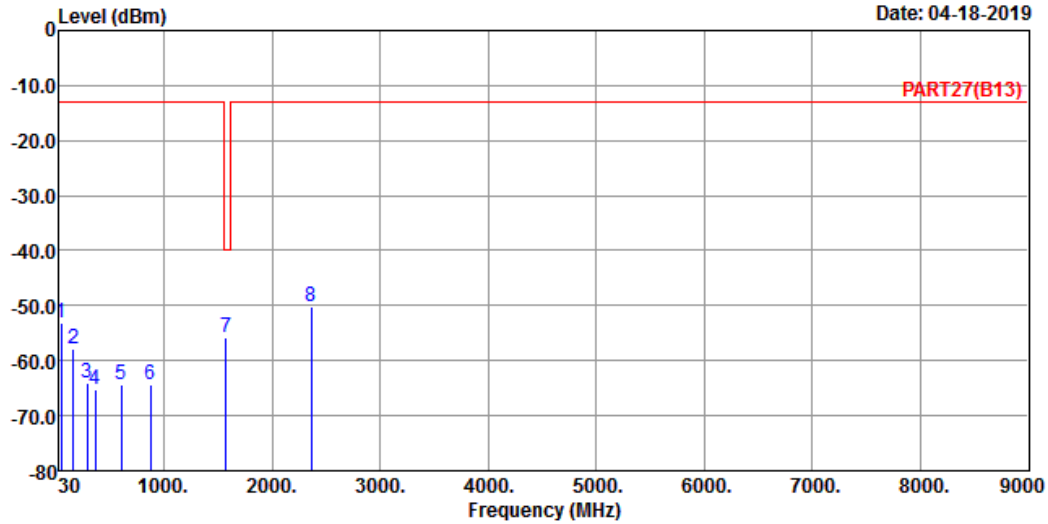


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 04-18-2019



Site : 966 Chamber 5

Condition: PART27(B13) HORIZONTAL

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

Tested by: Thomas Wei

	Freq	Level	Read	Limit	Over	
	MHz	dBm	Level	Line	Factor	Limit Remark
			dBm	dBm	dB	
1	43.58	-53.24	-51.77	-13.00	-1.47	-40.24 Peak
2	160.95	-57.80	-52.89	-13.00	-4.91	-44.80 Peak
3	286.08	-64.18	-57.45	-13.00	-6.73	-51.18 Peak
4	360.77	-65.16	-58.98	-13.00	-6.18	-52.16 Peak
5	601.33	-64.40	-63.64	-13.00	-0.76	-51.40 Peak
6	875.84	-64.33	-64.77	-13.00	0.44	-51.33 Peak
7 pp	1573.80	-55.91	-42.55	-40.00	-13.36	-15.91 Peak
8	2360.70	-50.16	-40.59	-13.00	-9.57	-37.16 Peak

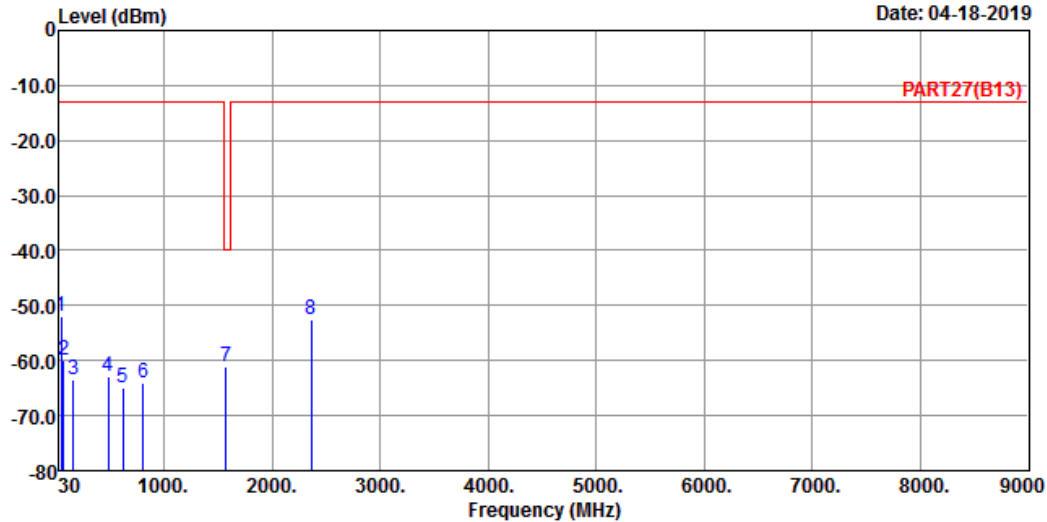


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 04-18-2019



Site : 966 Chamber 5

Condition: PART27(B13) VERTICAL

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

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit	Over	
	MHz	dBm	dBm	dBm	Factor	Limit Remark
1	44.55	-52.00	-50.01	-13.00	-1.99	-39.00 Peak
2	68.80	-59.95	-51.63	-13.00	-8.32	-46.95 Peak
3	159.98	-63.59	-58.75	-13.00	-4.84	-50.59 Peak
4	481.05	-62.97	-58.00	-13.00	-4.97	-49.97 Peak
5	618.79	-64.94	-64.14	-13.00	-0.80	-51.94 Peak
6	808.91	-64.14	-64.80	-13.00	0.66	-51.14 Peak
7 pp	1573.80	-61.13	-47.77	-40.00	-13.36	-21.13 Peak
8	2360.70	-52.60	-43.03	-13.00	-9.57	-39.60 Peak

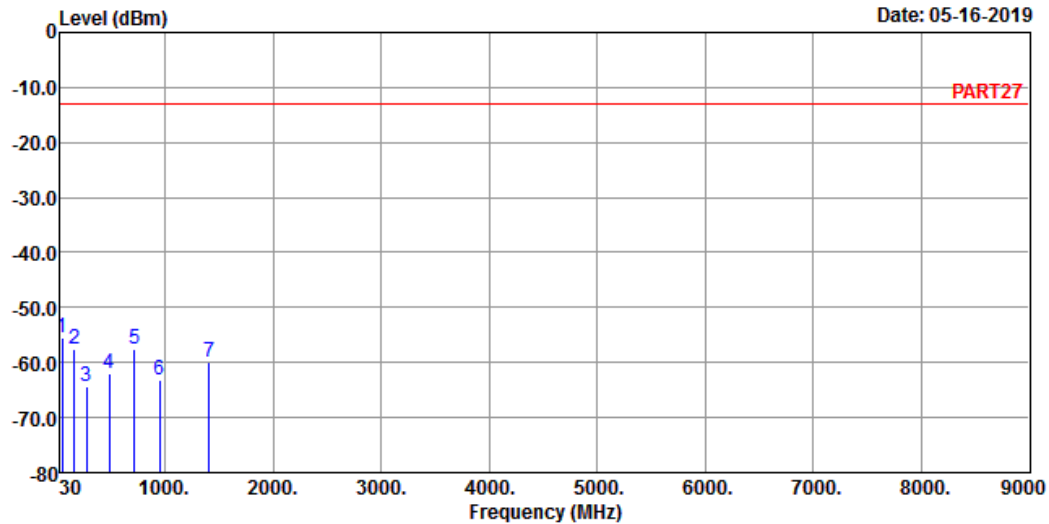
LTE Band 17
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : NB-IOT Band 17 Stand-alone_Link_L-Ch
Tested by: Getaz Yang

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	43.58	-55.49	-54.02	-13.00	-1.47	-42.49	Peak
2	161.92	-57.55	-52.57	-13.00	-4.98	-44.55	Peak
3	273.47	-64.31	-57.84	-13.00	-6.47	-51.31	Peak
4	480.08	-62.12	-57.13	-13.00	-4.99	-49.12	Peak
5	716.76	-57.70	-57.93	-13.00	0.23	-44.70	Peak
6	951.50	-63.30	-65.17	-13.00	1.87	-50.30	Peak
7	1408.20	-59.96	-48.00	-13.00	-11.96	-46.96	Peak

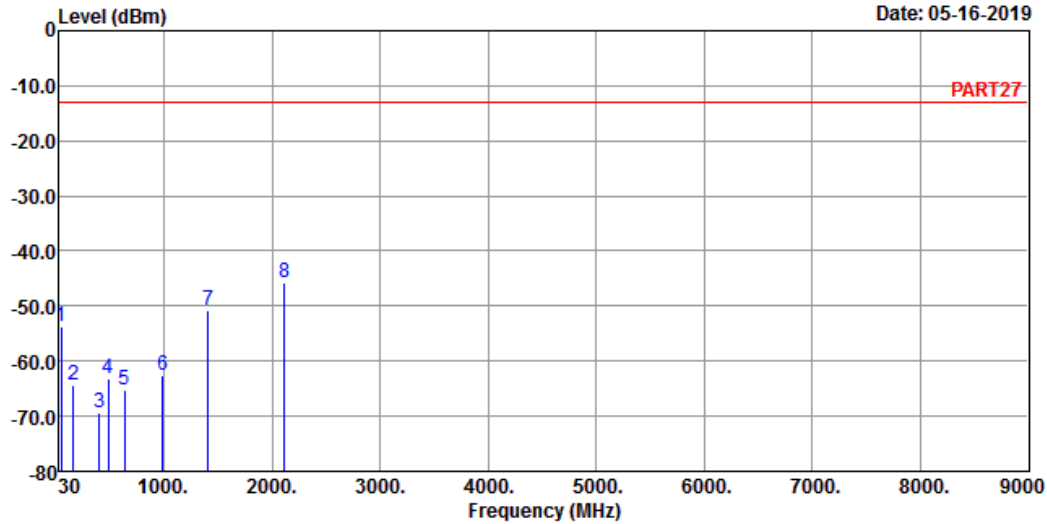


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 05-16-2019



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : NB-IOT Band 17 Stand-alone_Link_L-Ch

Tested by: Getaz Yang

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	43.58	-53.64	-52.17	-13.00	-1.47	-40.64	Peak
2	159.98	-64.46	-59.62	-13.00	-4.84	-51.46	Peak
3	397.63	-69.52	-63.56	-13.00	-5.96	-56.52	Peak
4	481.05	-63.28	-58.31	-13.00	-4.97	-50.28	Peak
5	631.40	-65.22	-64.38	-13.00	-0.84	-52.22	Peak
6	987.39	-62.46	-65.59	-13.00	3.13	-49.46	Peak
7	1408.20	-50.88	-38.92	-13.00	-11.96	-37.88	Peak
8 pp	2112.30	-45.86	-35.90	-13.00	-9.96	-32.86	Peak

Middle Channel

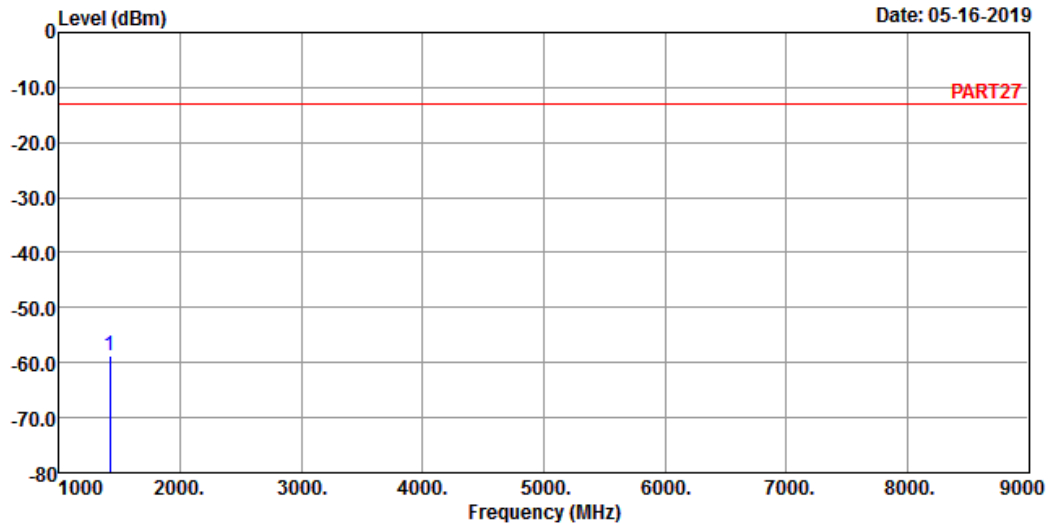


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 05-16-2019



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : NB-IOT Band 17 Stand-alone_Link_M-Ch

Tested by: Getaz Yang

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

1 pp 1420.00 -58.77 -46.63 -13.00 -12.14 -45.77 Peak

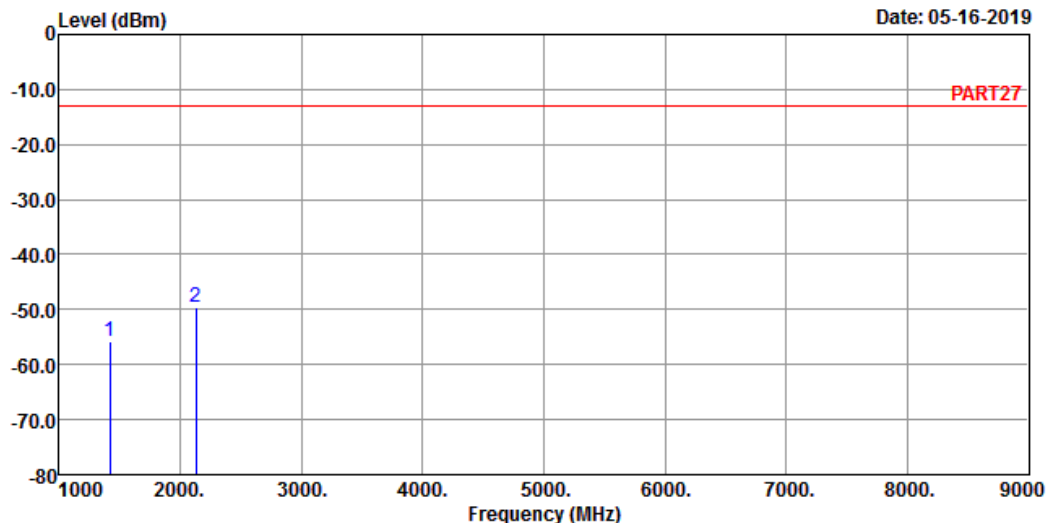


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 05-16-2019



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : NB-IOT Band 17 Stand-alone_Link_M-Ch

Tested by: Getaz Yang

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1420.00	-55.91	-43.77	-13.00	-12.14	-42.91	Peak
2 pp	2130.00	-49.62	-39.85	-13.00	-9.77	-36.62	Peak

High Channel

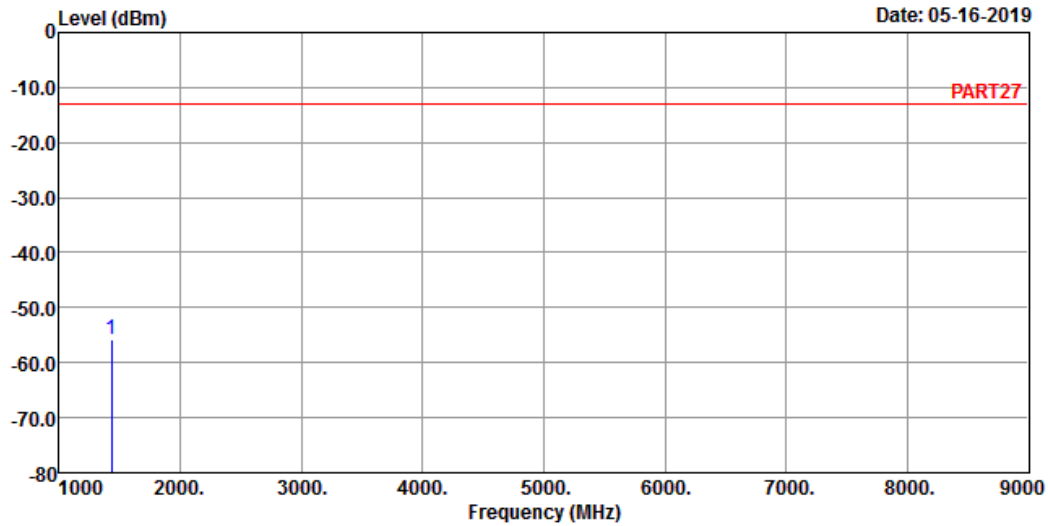


Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3

Date: 05-16-2019



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : NB-IOT Band 17 Stand-alone_Link_H-Ch

Tested by: Getaz Yang

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

1 pp 1431.80 -55.84 -43.53 -13.00 -12.31 -42.84 Peak

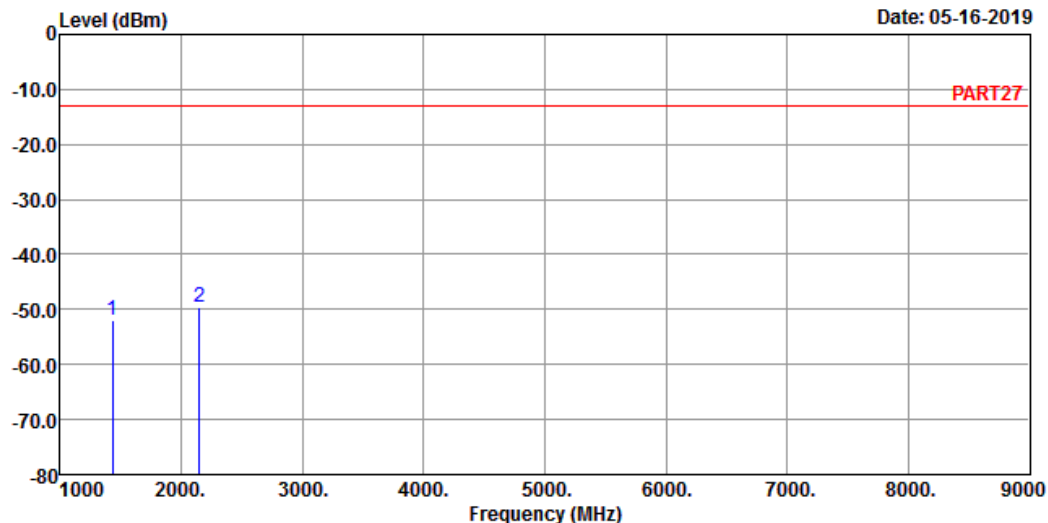


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 05-16-2019



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : NB-IOT Band 17 Stand-alone_Link_H-Ch

Tested by: Getaz Yang

			Read	Limit		Over	
	Freq	Level	Level	Line	Factor	Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1431.80	-51.88	-39.57	-13.00	-12.31	-38.88	Peak
2	2147.70	-49.51	-40.04	-13.00	-9.47	-36.51	Peak

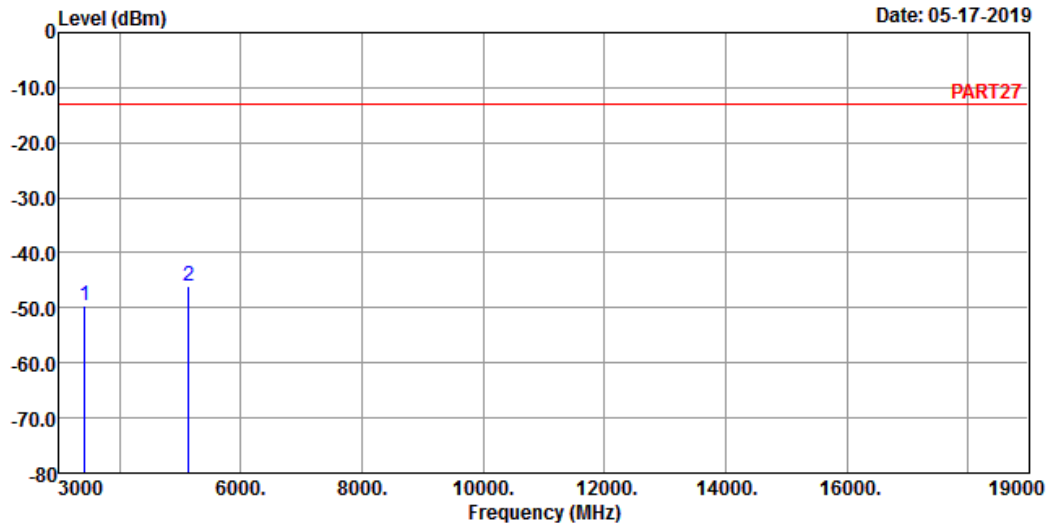
LTE Band 66:
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : NB-IOT Band 66 Stand-alone_Link_L-Ch
Tested by: Thomas Wei

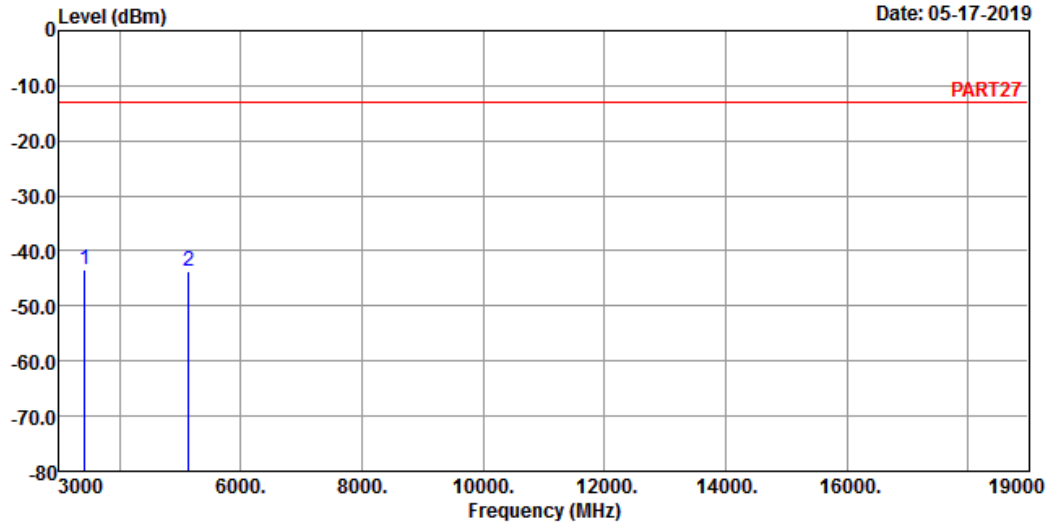
	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3420.20	-49.58	-41.13	-13.00	-8.45	-36.58	Peak
2 pp	5130.30	-46.01	-44.27	-13.00	-1.74	-33.01	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : NB-IOT Band 66 Stand-alone_Link_L-Ch

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3420.20	-43.37	-34.92	-13.00	-8.45	-30.37	Peak
2	5130.30	-43.59	-41.85	-13.00	-1.74	-30.59	Peak

Middle Channel

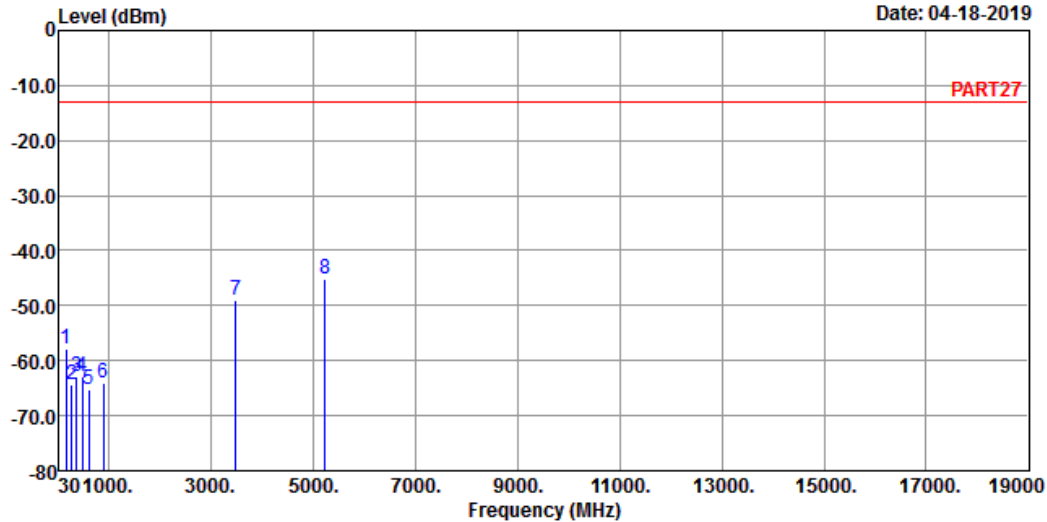


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 04-18-2019



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : NB-IOT Band 66 Stand-alone_Link_M-Ch

Tested by: Thomas Wei

	Freq	Level	Read	Limit	Over	
	MHz	dBm	Level	Line	Factor	Limit Remark
			dBm	dBm	dB	dB
1	161.92	-57.88	-52.90	-13.00	-4.98	-44.88 Peak
2	276.38	-64.44	-57.91	-13.00	-6.53	-51.44 Peak
3	360.77	-62.87	-56.69	-13.00	-6.18	-49.87 Peak
4	480.08	-62.92	-57.93	-13.00	-4.99	-49.92 Peak
5	607.15	-65.19	-64.42	-13.00	-0.77	-52.19 Peak
6	890.39	-63.93	-64.45	-13.00	0.52	-50.93 Peak
7	3490.00	-49.13	-41.48	-13.00	-7.65	-36.13 Peak
8 pp	5235.00	-45.25	-42.84	-13.00	-2.41	-32.25 Peak

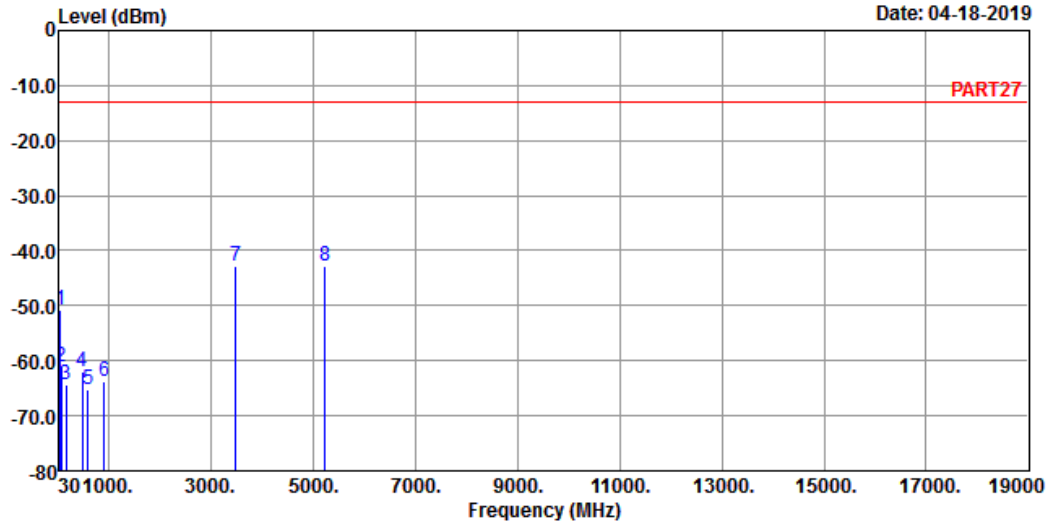


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 04-18-2019



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : NB-IOT Band 66 Stand-alone_Link_M-Ch

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	43.58	-50.66	-49.19	-13.00	-1.47	-37.66	Peak
2	66.86	-61.14	-52.96	-13.00	-8.18	-48.14	Peak
3	160.95	-64.28	-59.37	-13.00	-4.91	-51.28	Peak
4	480.08	-62.10	-57.11	-13.00	-4.99	-49.10	Peak
5	596.48	-65.24	-64.33	-13.00	-0.91	-52.24	Peak
6	902.03	-63.81	-64.43	-13.00	0.62	-50.81	Peak
7 pp	3490.00	-42.69	-35.04	-13.00	-7.65	-29.69	Peak
8	5235.00	-42.80	-40.39	-13.00	-2.41	-29.80	Peak

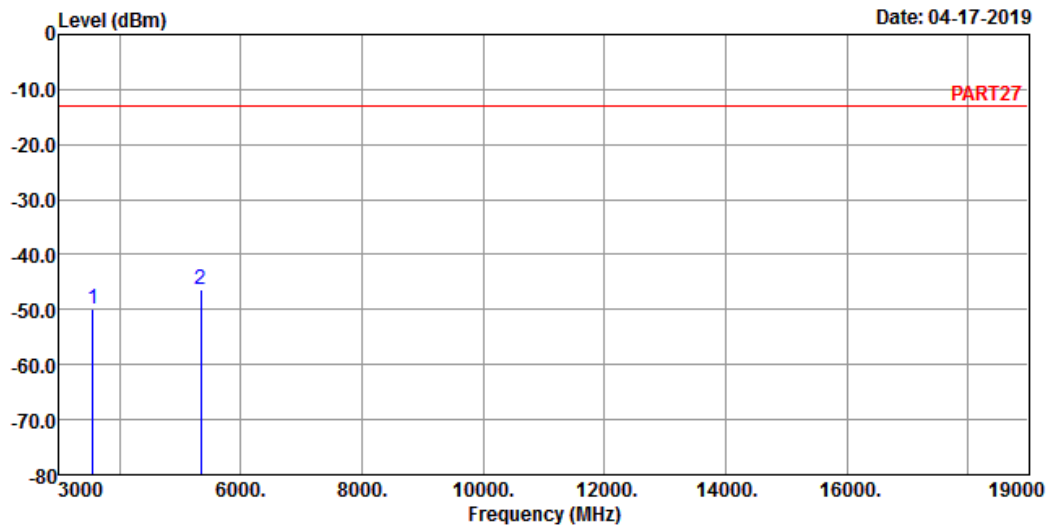
High Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : NB-IOT Band 66 Stand-alone_Link_H-Ch
Tested by: Thomas Wei

			Read	Limit		Over	
	Freq	Level	Level	Line	Factor	Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3559.80	-49.79	-42.72	-13.00	-7.07	-36.79	Peak
2 pp	5339.70	-46.28	-43.65	-13.00	-2.63	-33.28	Peak

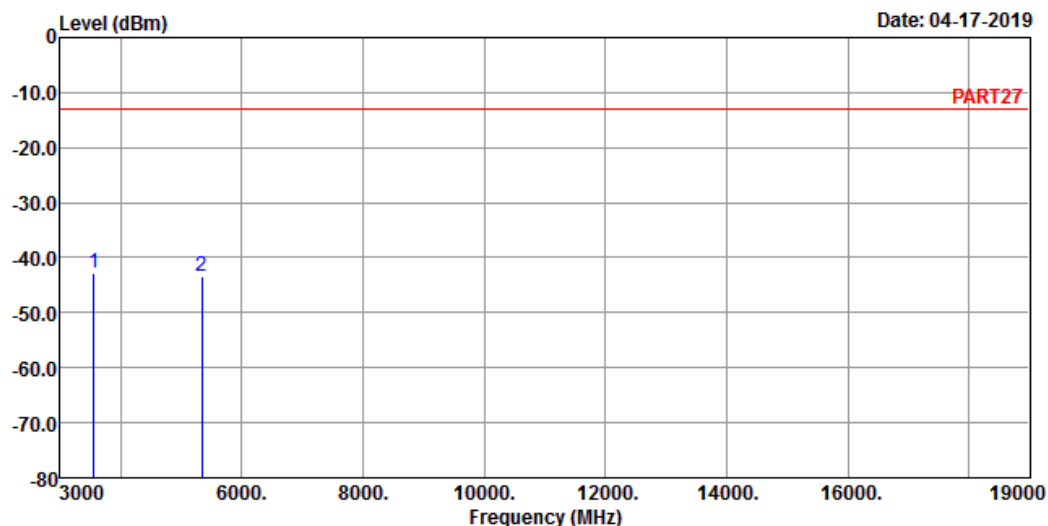


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 04-17-2019



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : NB-IOT Band 66 Stand-alone_Link_H-Ch

Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3559.80	-42.81	-35.74	-13.00	-7.07	-29.81	Peak
2	5339.70	-43.36	-40.73	-13.00	-2.63	-30.36	Peak

5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – Information of 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:

Lin Kou EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-3-6668565

Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab

Tel: 886-3-3183232

Fax: 886-3-3270892

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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