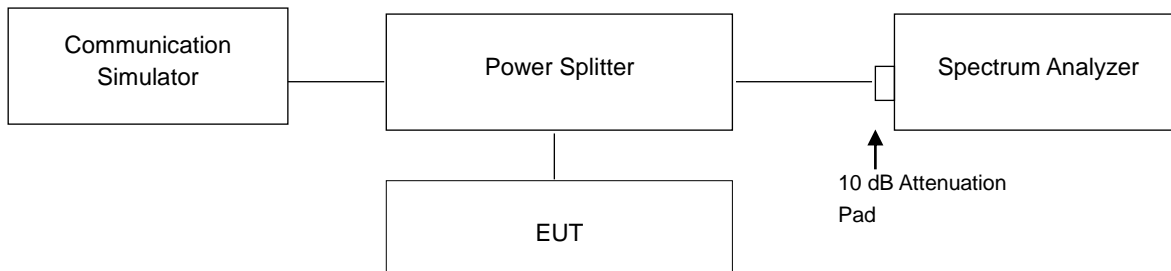


4.6 Peak to Average Ratio

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

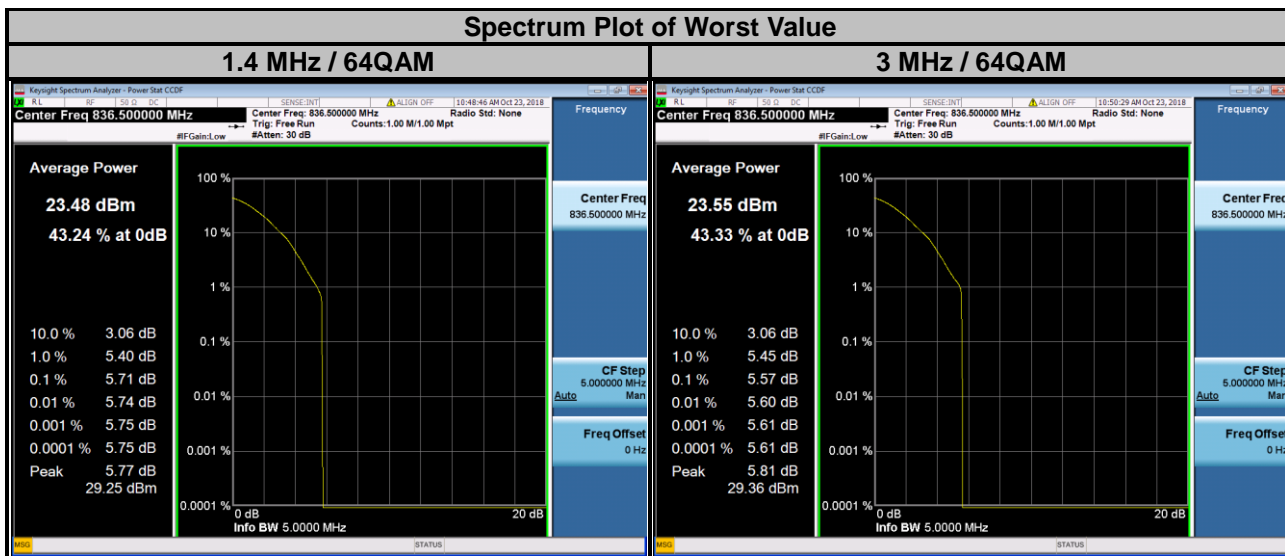
1. Set resolution/measurement bandwidth \geq signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1 %.

4.6.4 Test Results

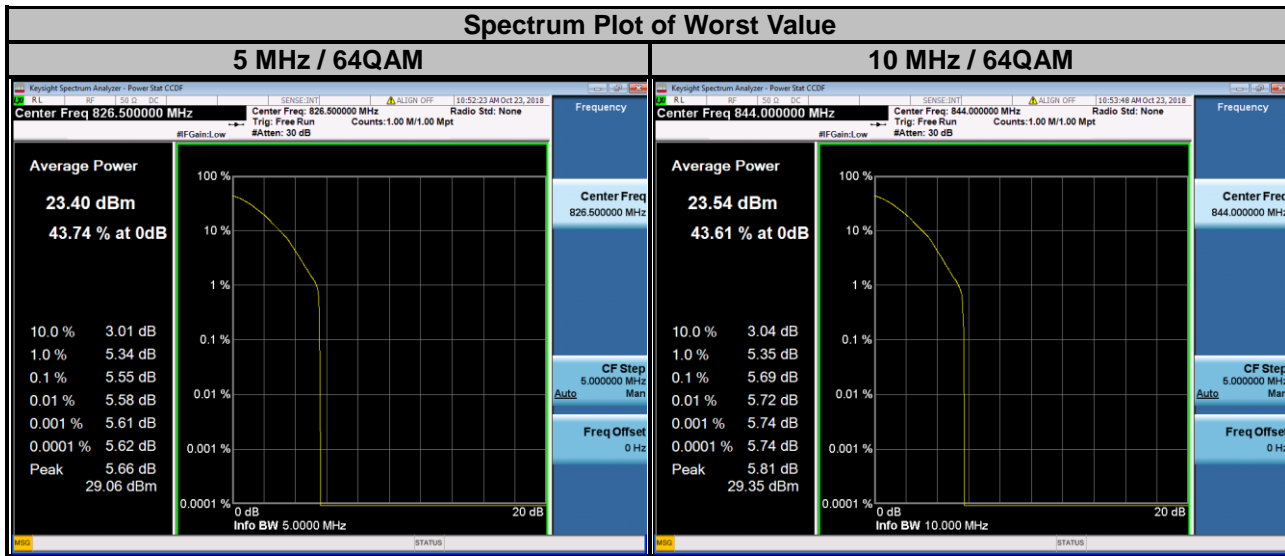
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)
		GSM	EDGE			
128	824.2	0.44	3.16	4132	826.4	3.04
189	836.4	0.48	3.16	4182	836.4	3.03
251	848.8	0.51	3.19	4233	846.6	2.99
Channel	Frequency (MHz)	Peak to Average Ratio (dB)				
		CDMA				
1013	824.70	3.30				
384	836.52	3.73				
777	848.31	3.99				



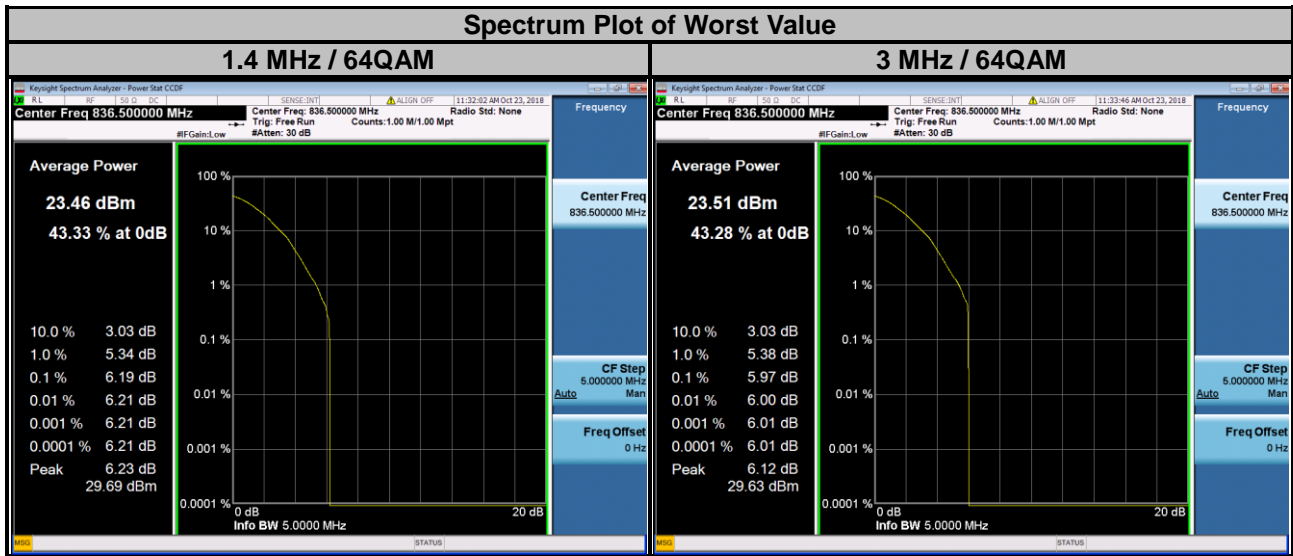
LTE Band 5									
Channel Bandwidth: 1.4 MHz					Channel Bandwidth: 3 MHz				
Channel	Frequency (MHz)	Peak to Average Ratio (dB)			Channel	Frequency (MHz)	Peak to Average Ratio (dB)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
20407	824.7	3.74	4.49	5.46	20415	825.5	3.55	4.40	5.50
20525	836.5	3.79	4.78	5.71	20525	836.5	3.60	4.44	5.57
20643	848.3	3.35	4.16	5.21	20635	847.5	3.43	4.15	5.25



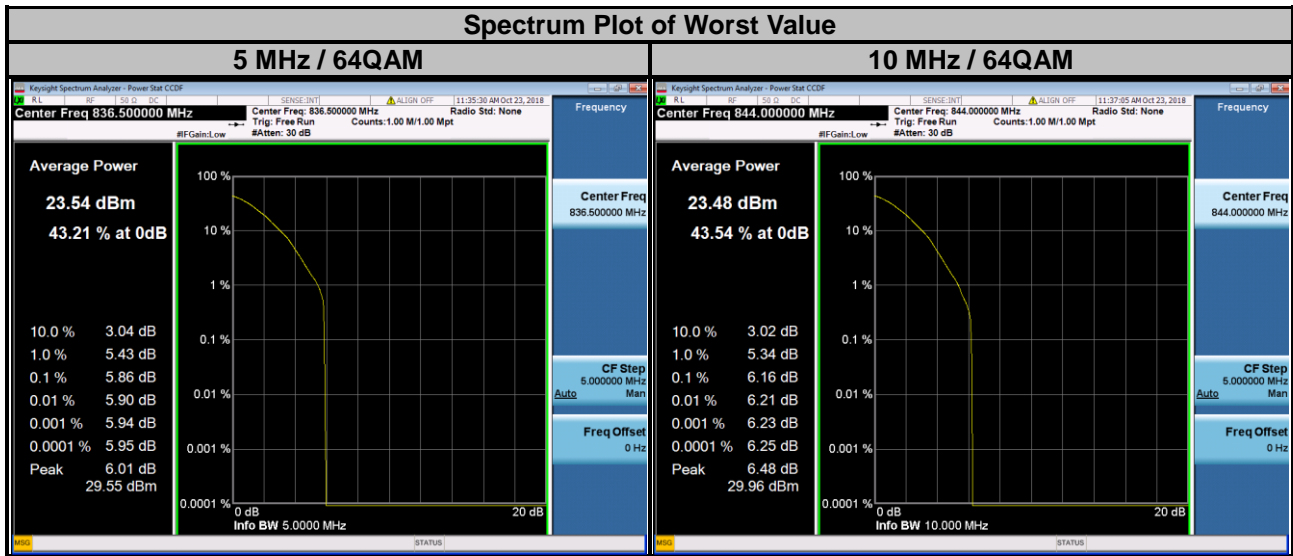
LTE Band 5									
Channel Bandwidth: 5 MHz					Channel Bandwidth: 10 MHz				
Channel	Frequency (MHz)	Peak to Average Ratio (dB)			Channel	Frequency (MHz)	Peak to Average Ratio (dB)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
20425	826.5	3.53	4.36	5.55	20450	829.0	3.48	4.27	5.43
20525	836.5	3.57	4.39	5.43	20525	836.5	3.34	4.09	5.21
20625	846.5	3.35	4.19	5.28	20600	844.0	3.48	4.54	5.69



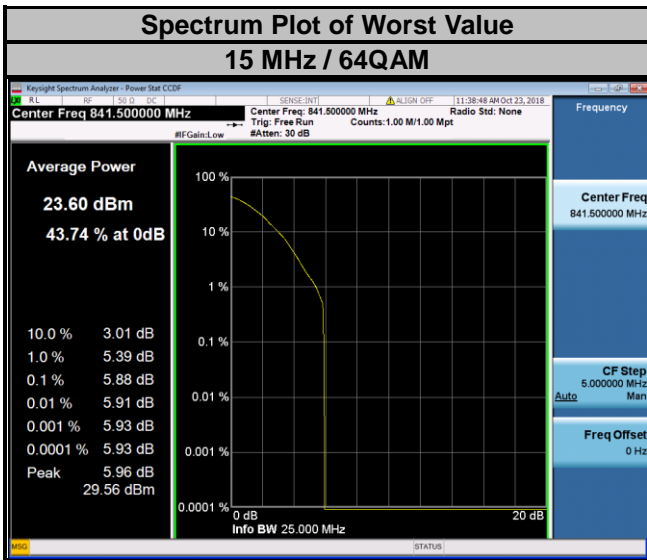
LTE Band 26									
Channel Bandwidth: 1.4 MHz					Channel Bandwidth: 3 MHz				
Channel	Frequency (MHz)	Peak to Average Ratio (dB)			Channel	Frequency (MHz)	Peak to Average Ratio (dB)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
26797	824.7	3.62	4.43	5.74	26805	825.5	3.49	4.36	5.71
26915	836.5	3.75	5.03	6.19	26915	836.5	3.58	4.91	5.97
27033	848.3	3.42	4.53	5.80	27025	847.5	3.54	4.71	5.90



LTE Band 26									
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	64QAM			QPSK	16QAM	64QAM
26815	826.5	3.50	4.41	5.70	26840	829.0	3.44	4.36	5.65
26915	836.5	3.57	4.80	5.86	26915	836.5	3.49	4.44	5.39
27015	846.5	3.53	4.61	5.77	26990	844.0	3.45	4.87	6.16



LTE Band 26				
Channel Bandwidth: 15 MHz				
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		
		QPSK	16QAM	64QAM
26865	831.5	3.40	4.27	5.70
26915	836.5	3.41	4.23	5.24
26965	841.5	3.43	4.70	5.88

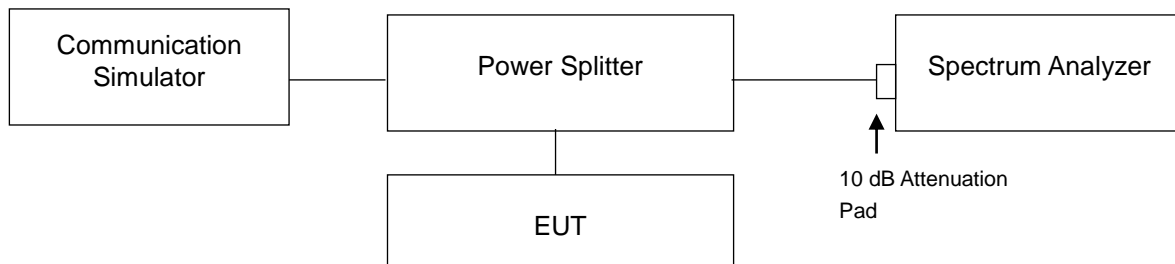


4.7 Conducted Spurious Emissions

4.7.1 Limits of Conducted Spurious Emissions Measurement

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

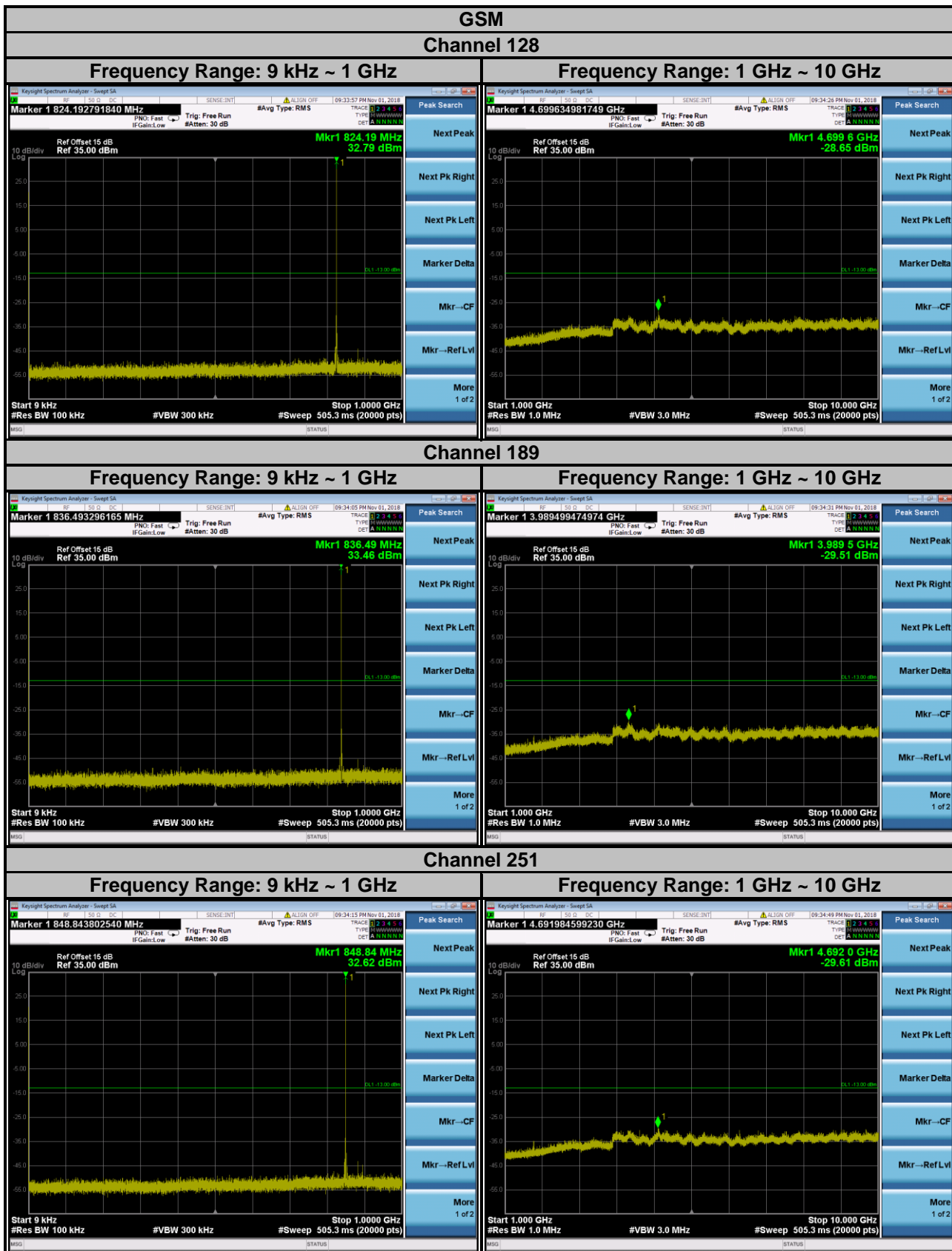
4.7.2 Test Setup



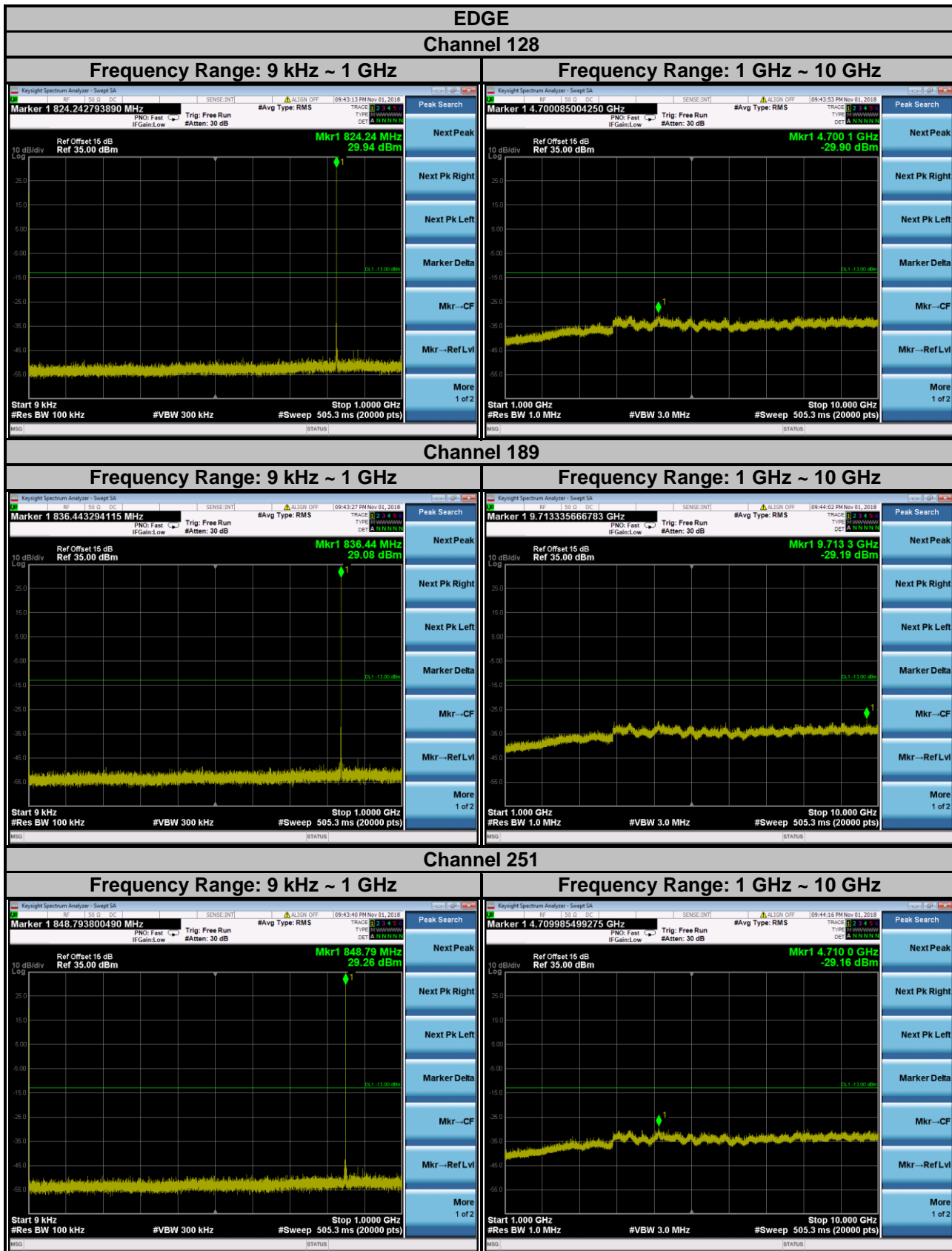
4.7.3 Test Procedure

- 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 10 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



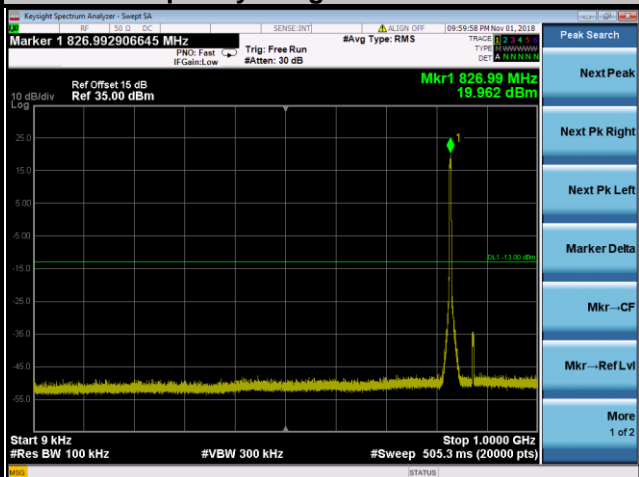
Note: The signal over the limit in 9 kHz is from spectrum analyzer.



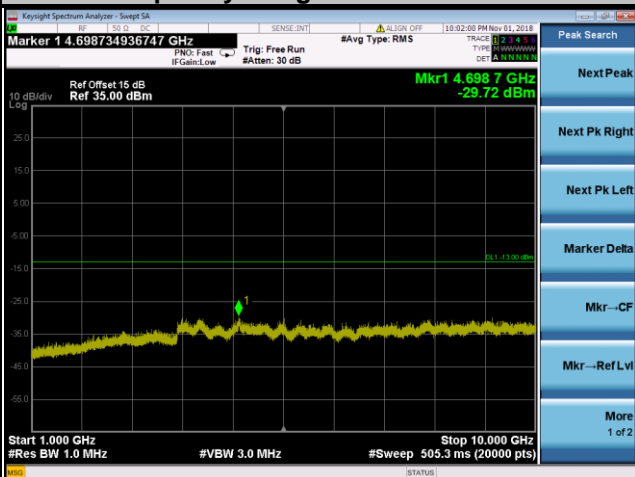
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

WCDMA Channel 4132

Frequency Range: 9 kHz ~ 1 GHz

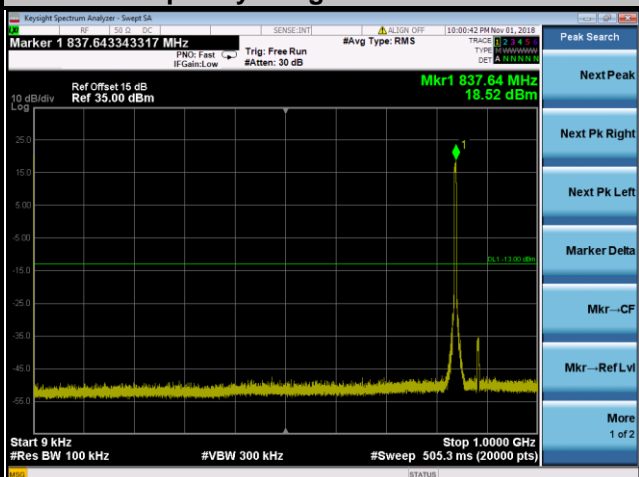


Frequency Range: 1 GHz ~ 10 GHz

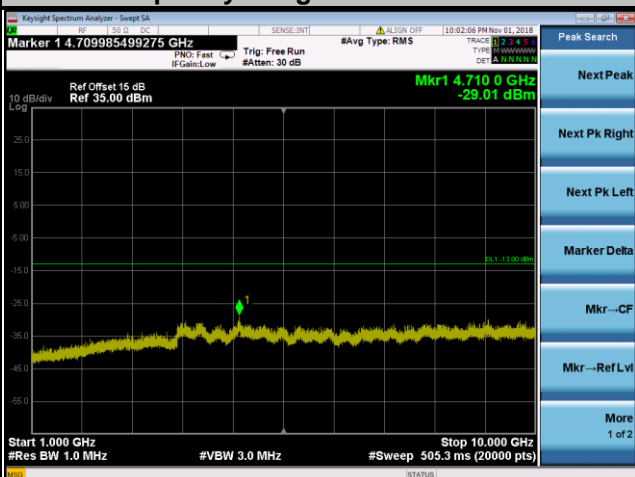


Channel 4182

Frequency Range: 9 kHz ~ 1 GHz

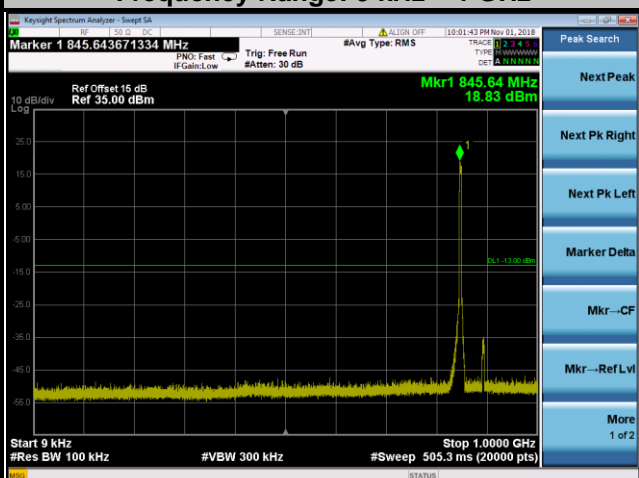


Frequency Range: 1 GHz ~ 10 GHz

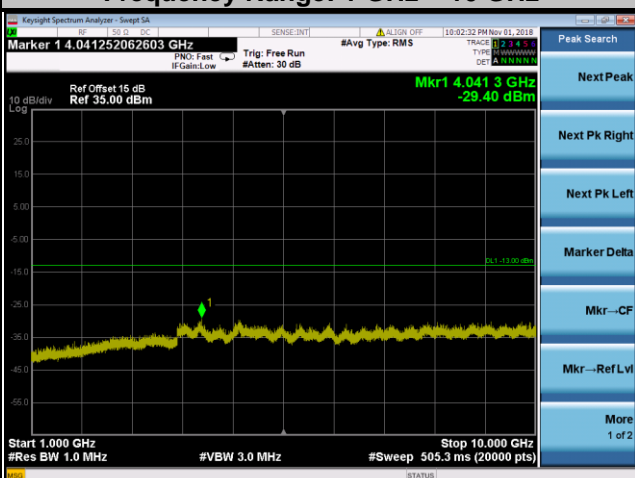


Channel 4233

Frequency Range: 9 kHz ~ 1 GHz



Frequency Range: 1 GHz ~ 10 GHz

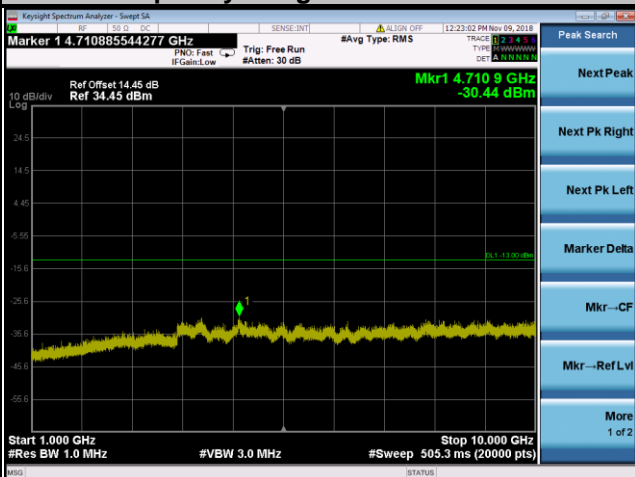
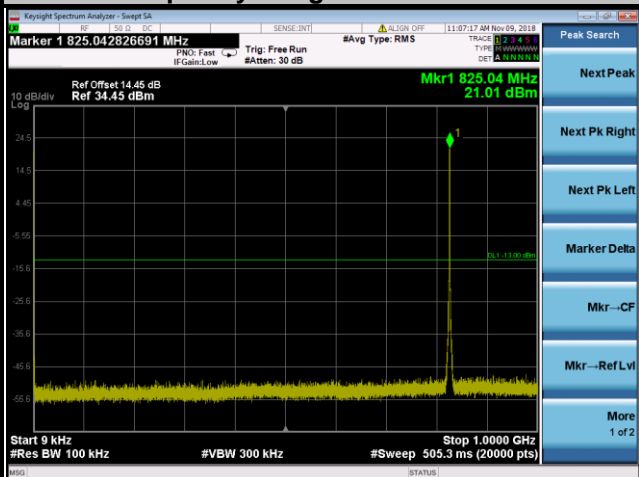


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

CDMA Channel 1013

Frequency Range: 9 kHz ~ 1 GHz

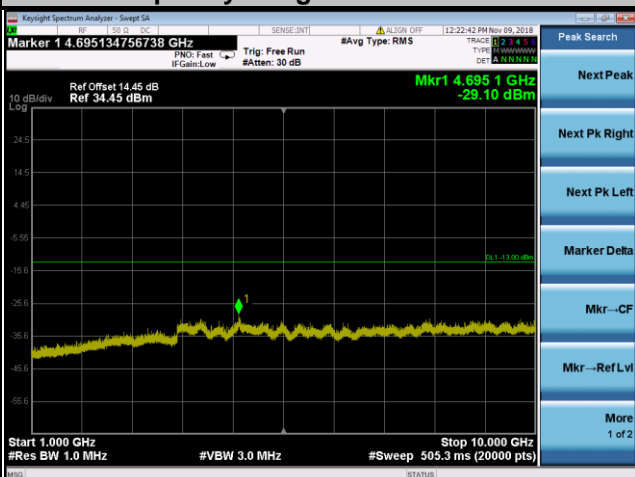
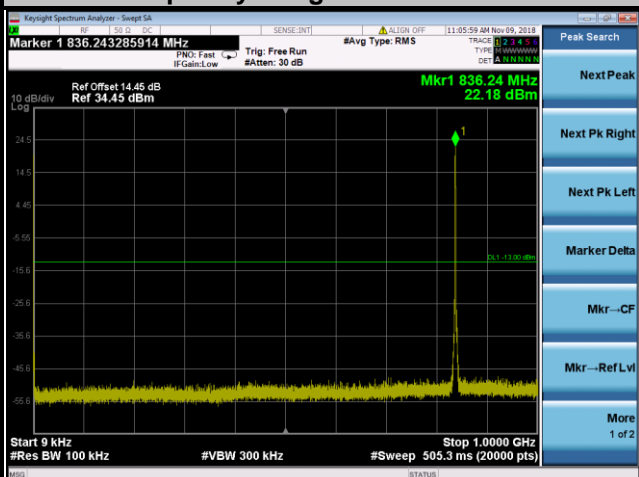
Frequency Range: 1 GHz ~ 10 GHz



Channel 384

Frequency Range: 9 kHz ~ 1 GHz

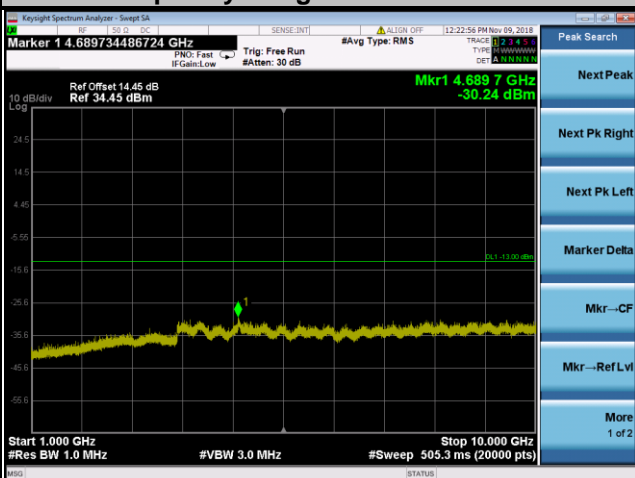
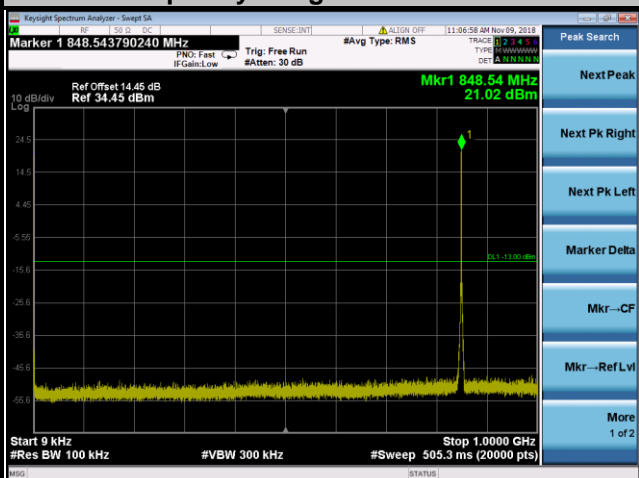
Frequency Range: 1 GHz ~ 10 GHz



Channel 777

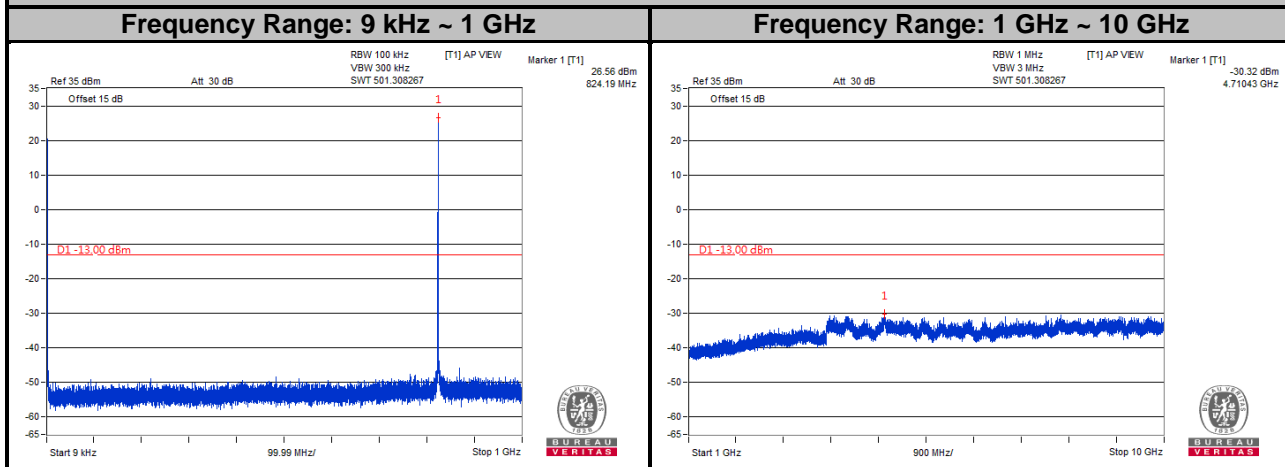
Frequency Range: 9 kHz ~ 1 GHz

Frequency Range: 1 GHz ~ 10 GHz

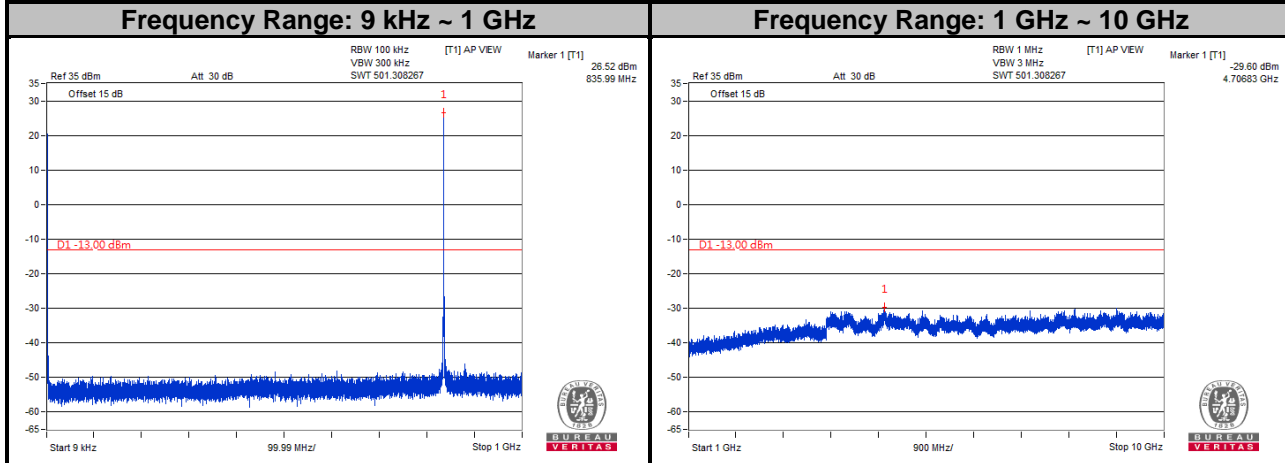


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

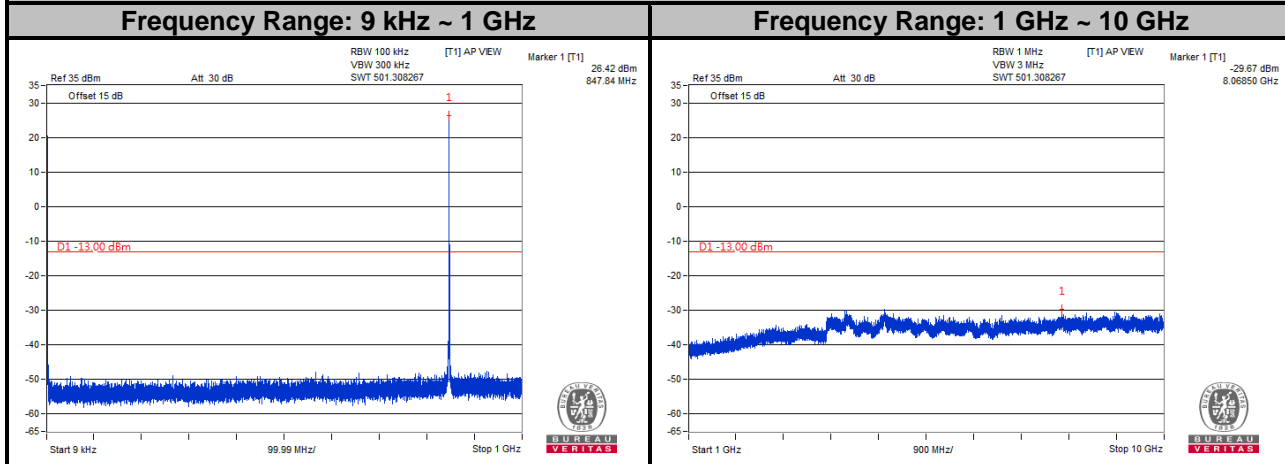
LTE Band 5
Channel Bandwidth: 1.4 MHz
Channel 20407



Channel 20525

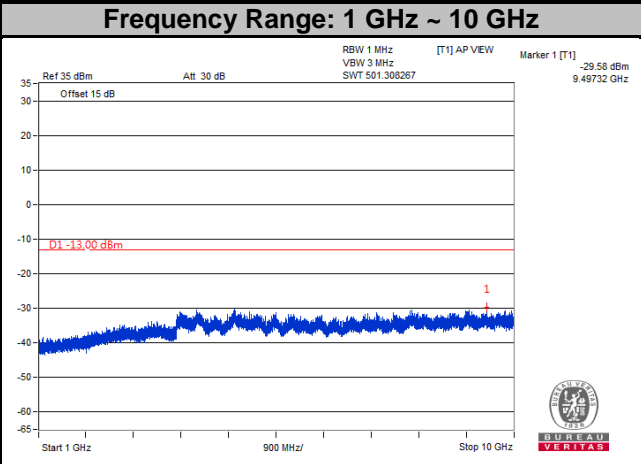
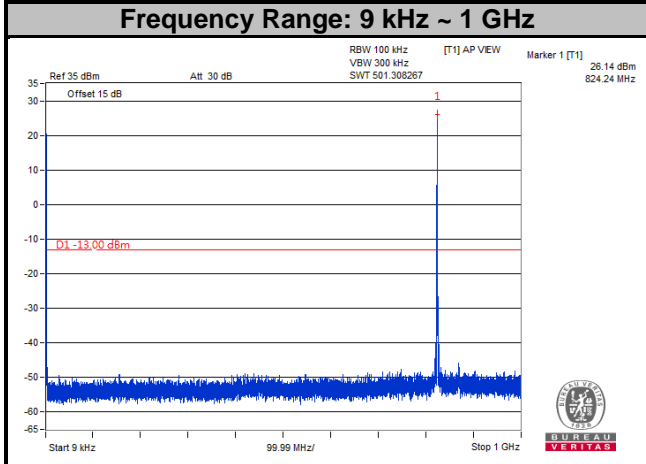


Channel 20643

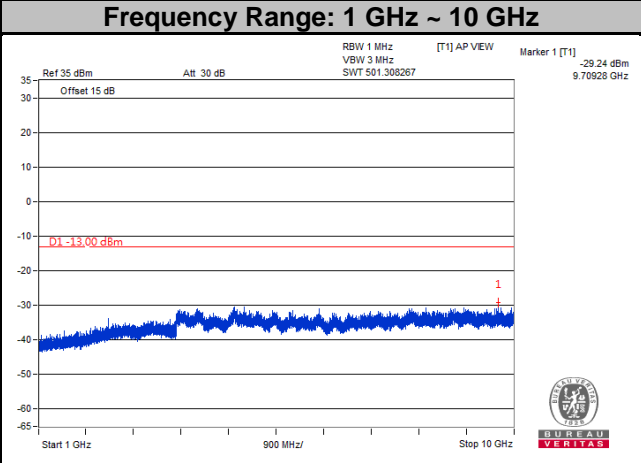
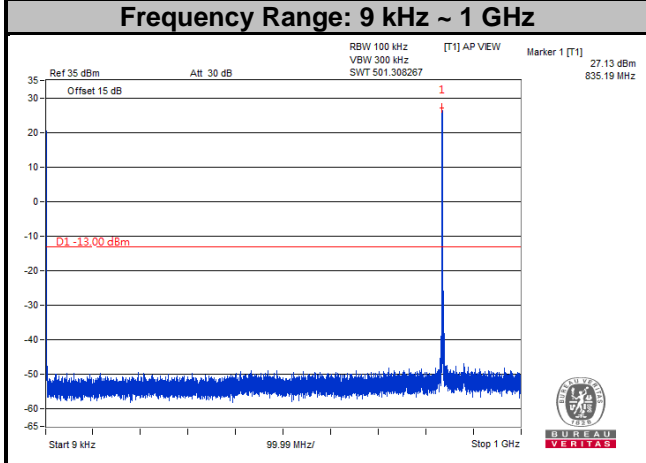


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

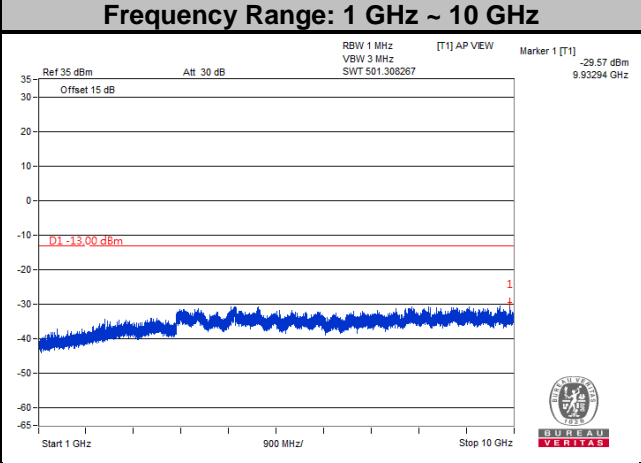
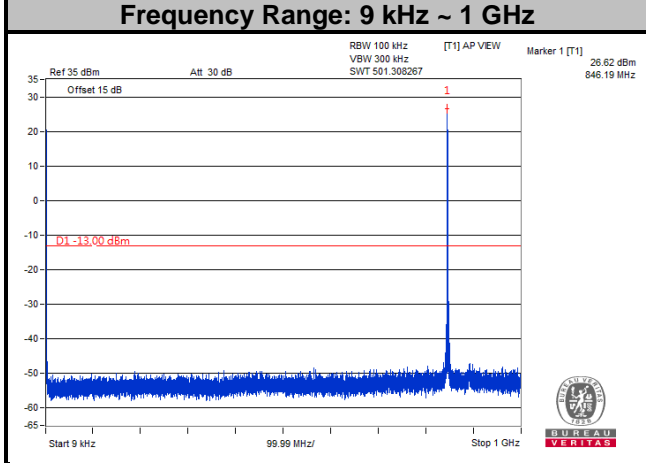
LTE Band 5
Channel Bandwidth: 3 MHz
Channel 20415



Channel 20525

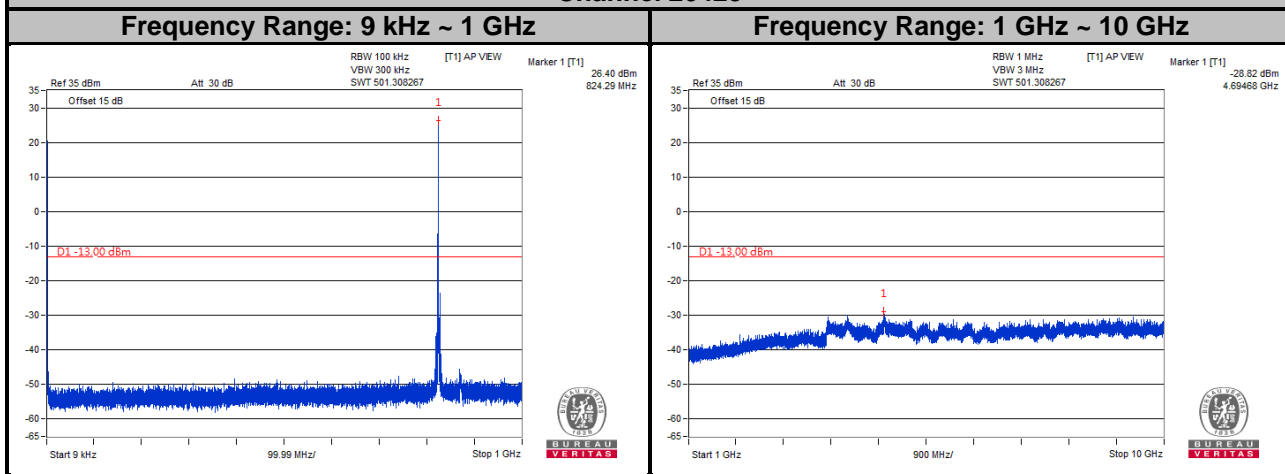


Channel 20635

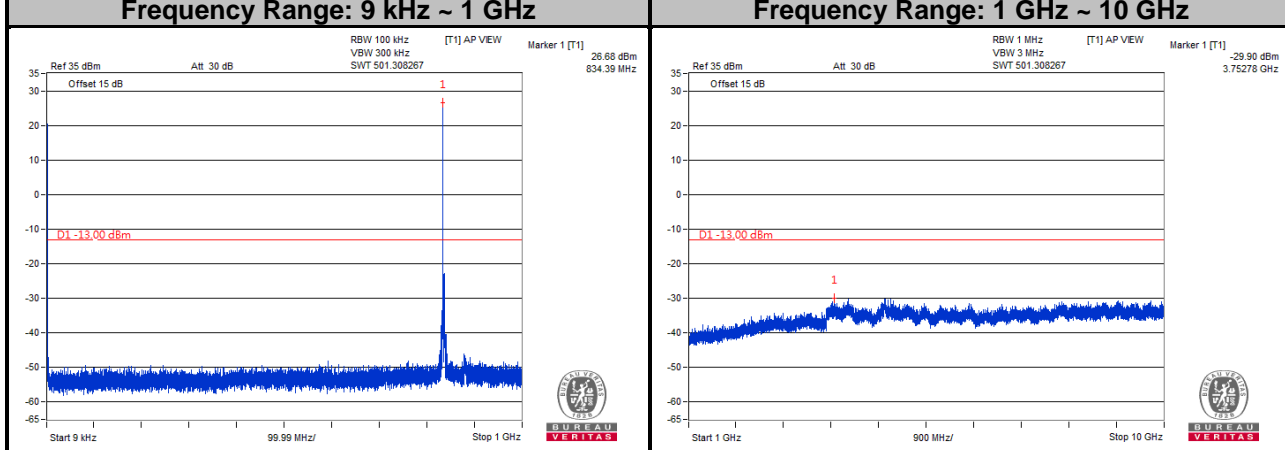


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

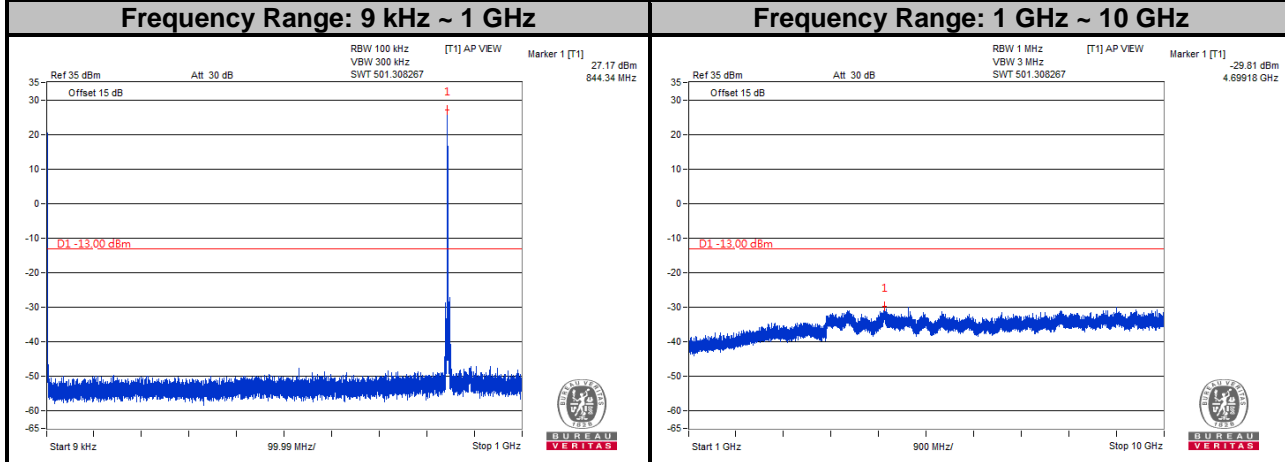
LTE Band 5
Channel Bandwidth: 5 MHz
Channel 20425



Channel 20525

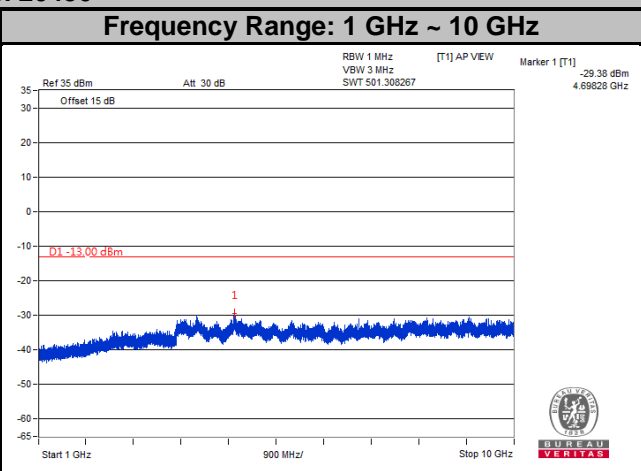
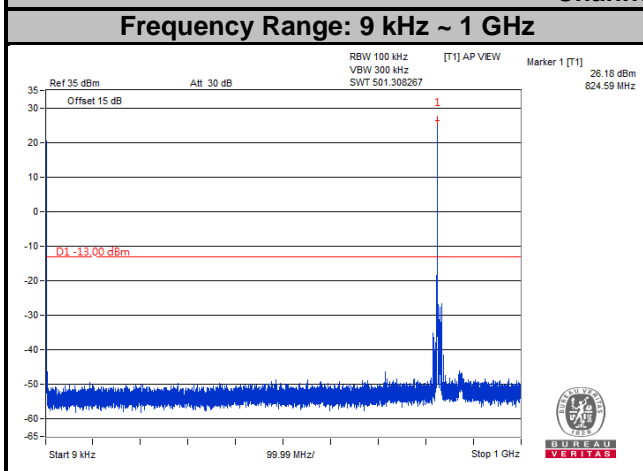


Channel 20625

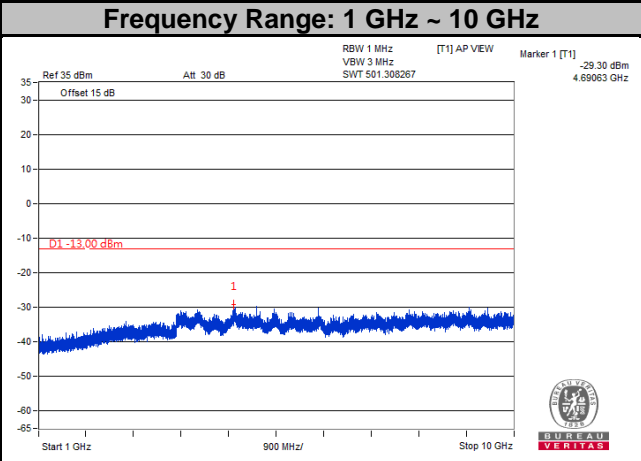
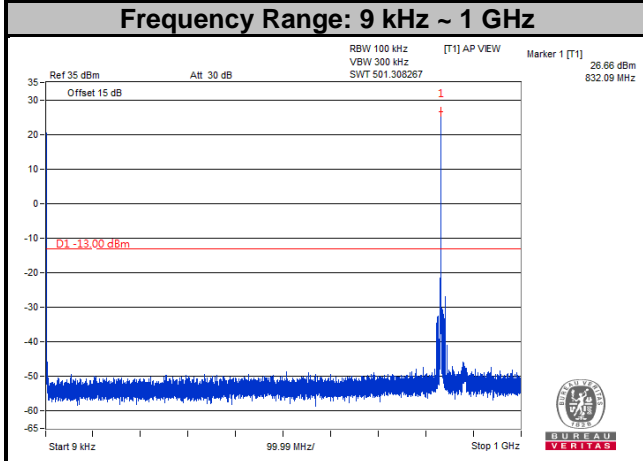


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

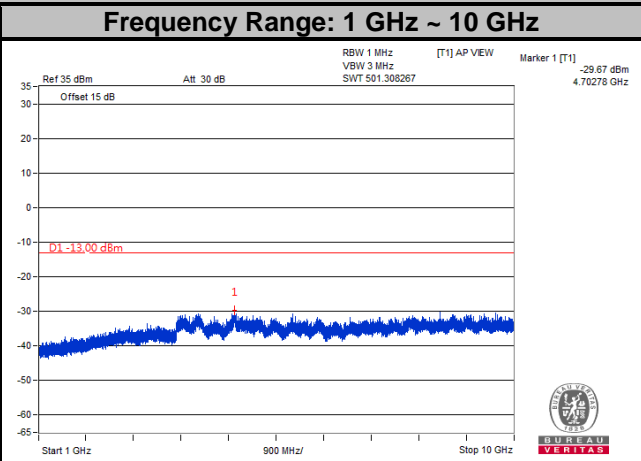
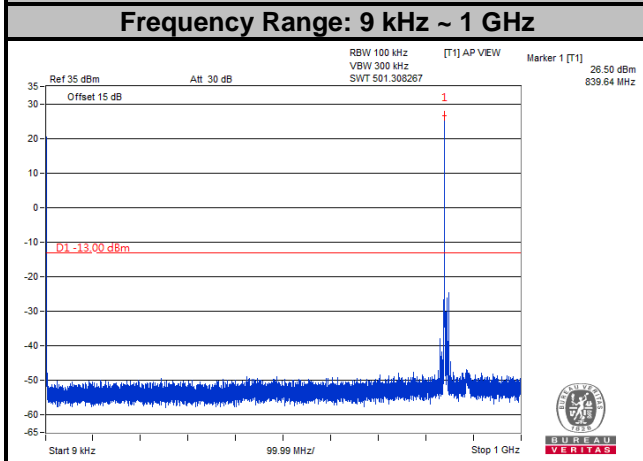
LTE Band 5
Channel Bandwidth: 10 MHz
Channel 20450



Channel 20525

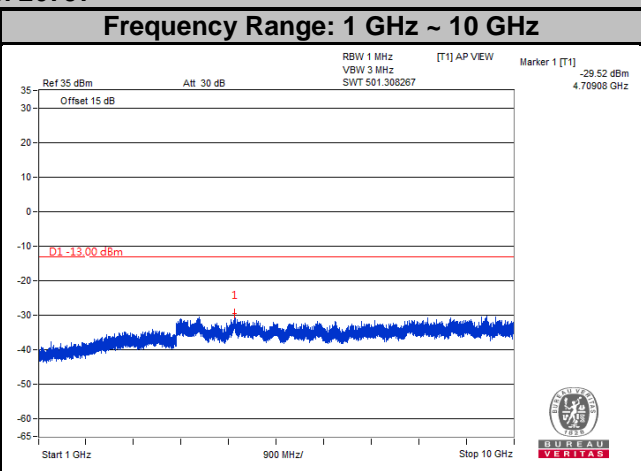
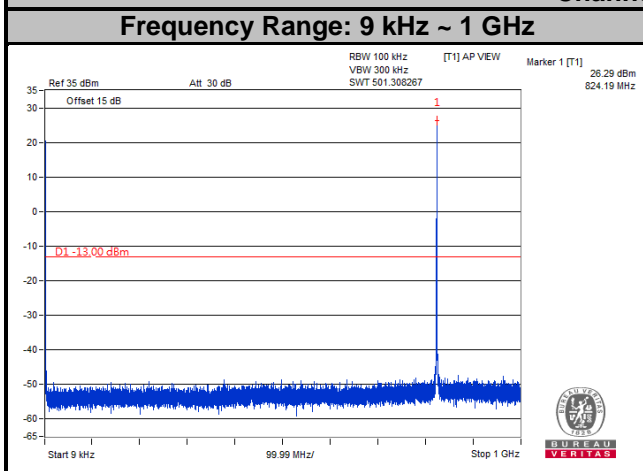


Channel 20600

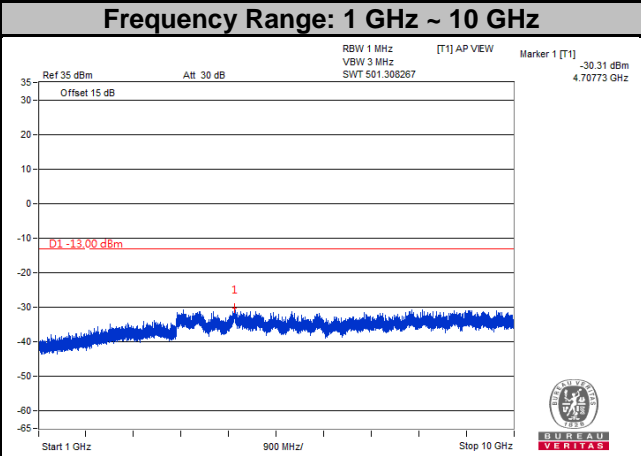
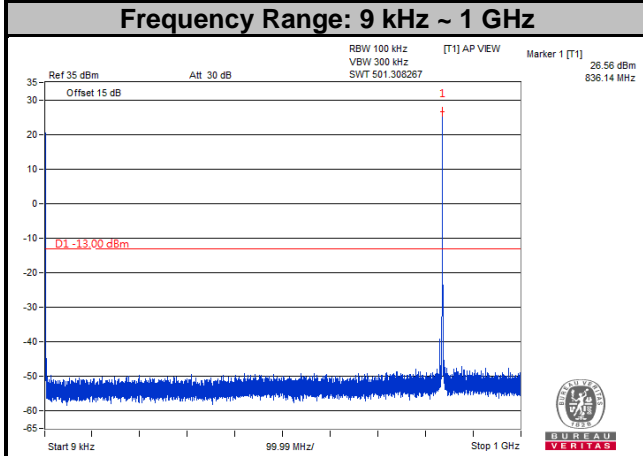


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

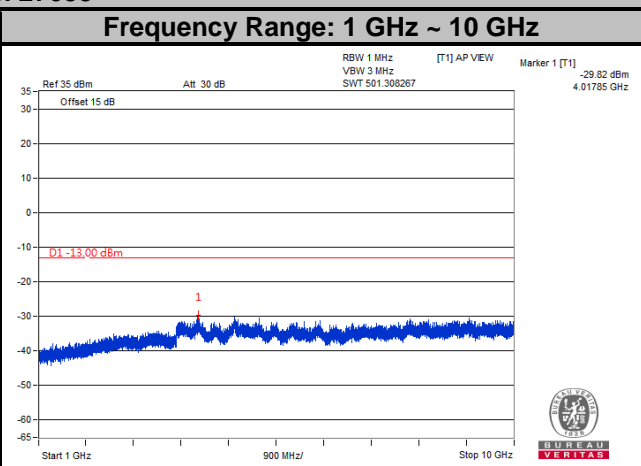
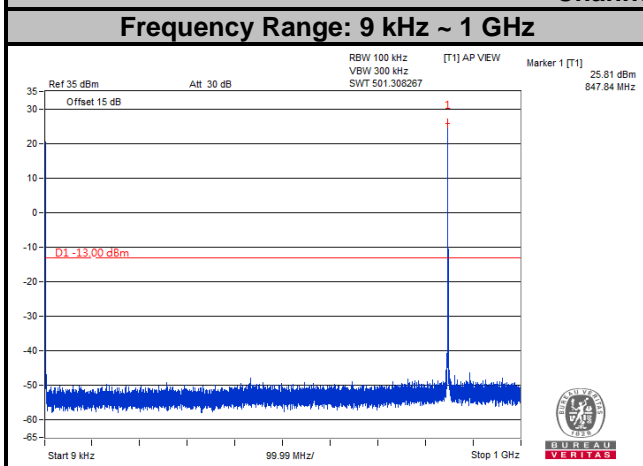
LTE Band 26
Channel Bandwidth: 1.4 MHz
Channel 26797



Channel 26915

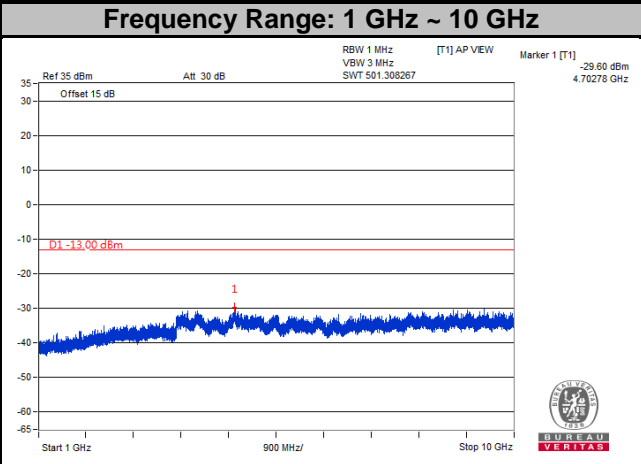
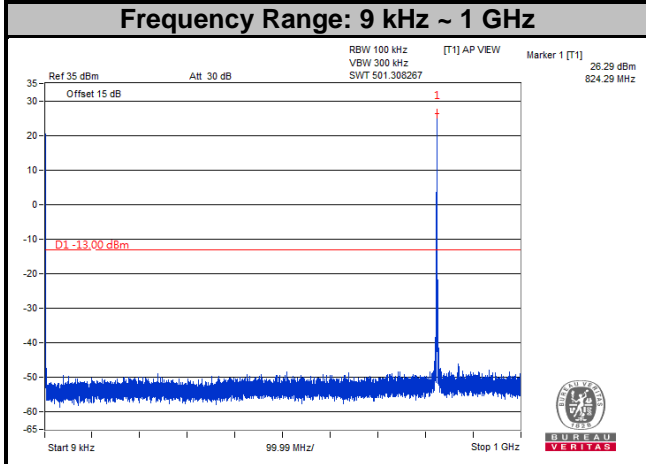


Channel 27033

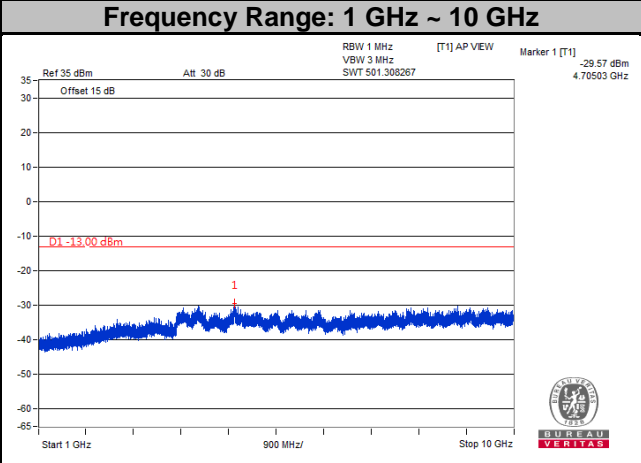
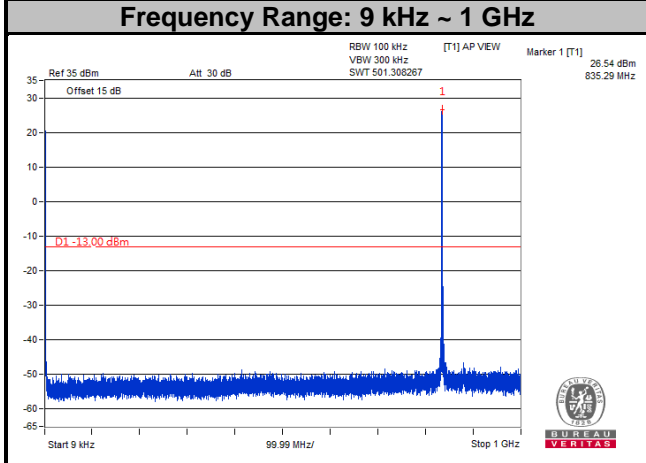


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

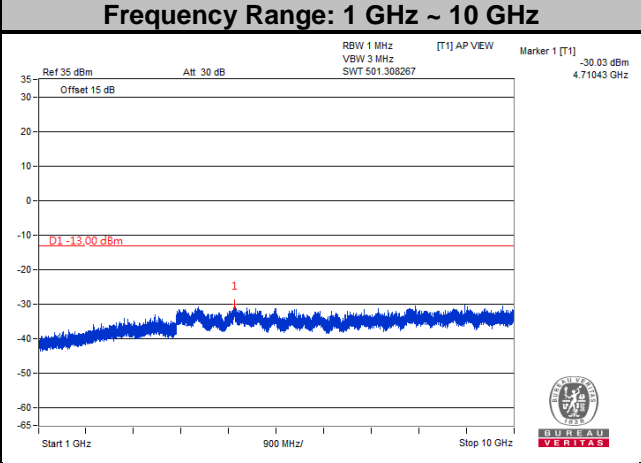
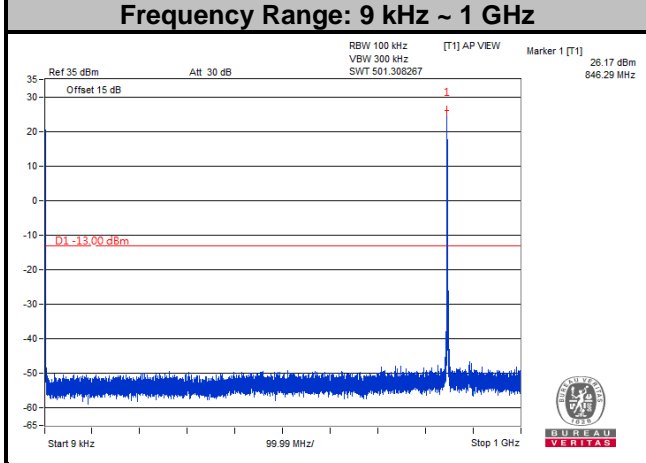
LTE Band 26
Channel Bandwidth: 3 MHz
Channel 26805



Channel 26915

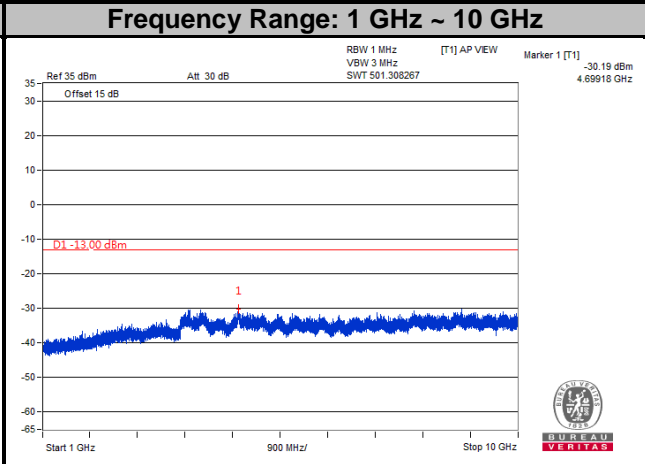
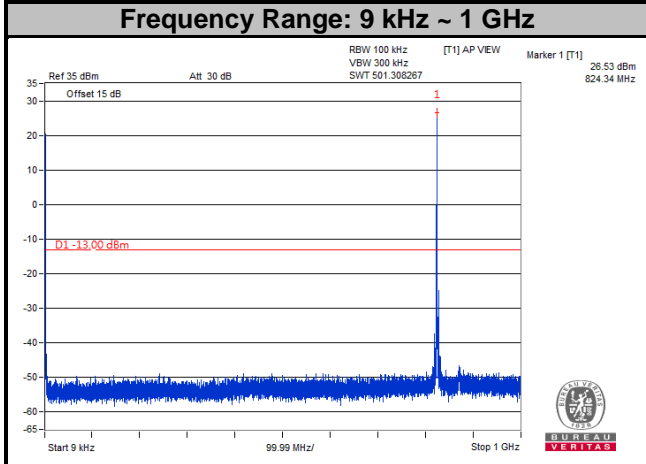


Channel 27025

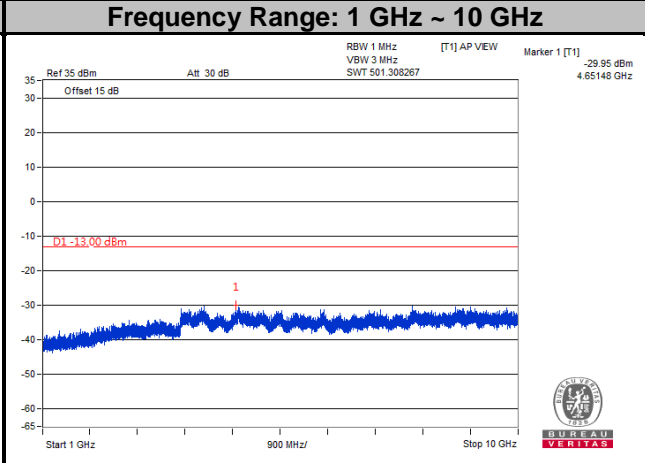
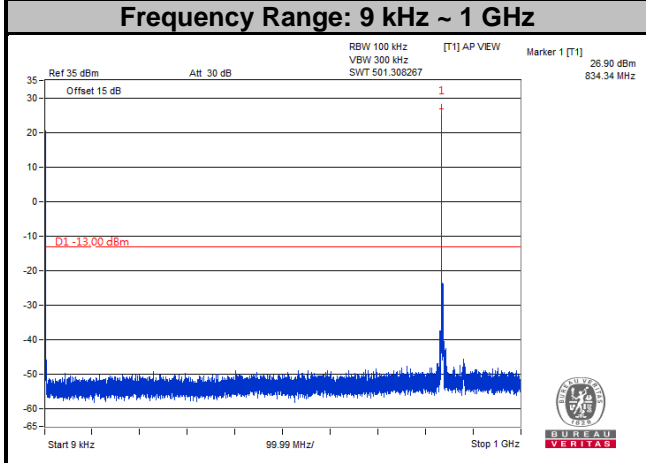


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

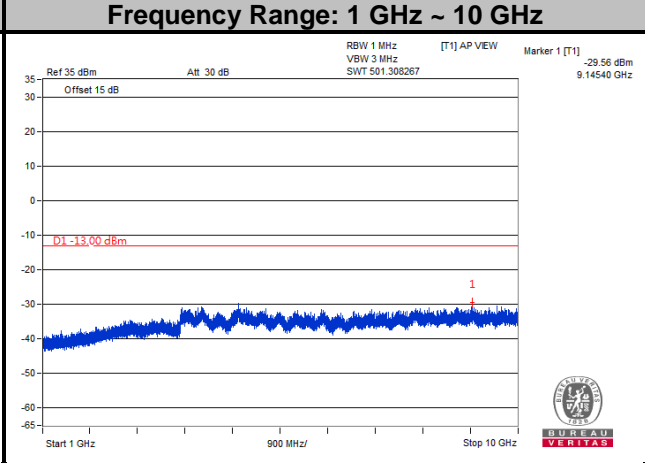
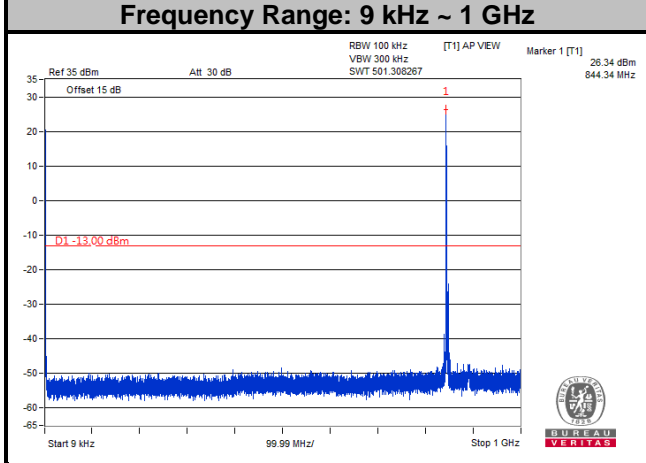
LTE Band 26
Channel Bandwidth: 5 MHz
Channel 26815



Channel 26915

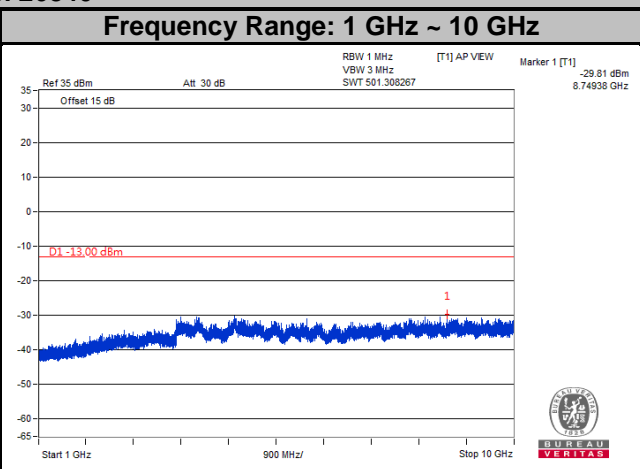
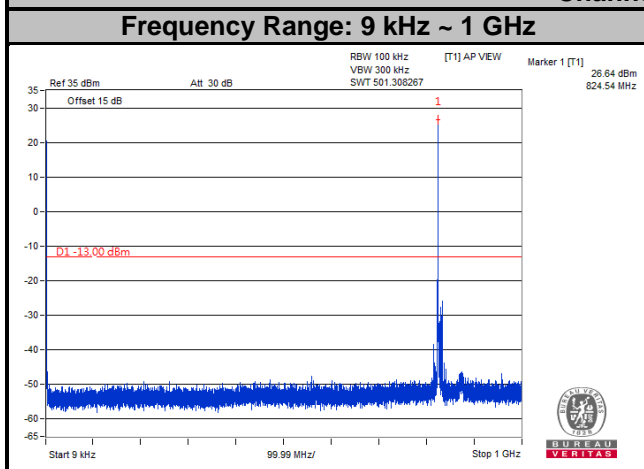


Channel 27015

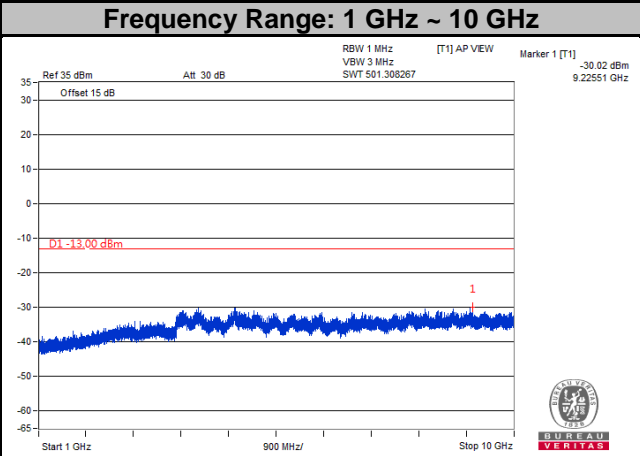
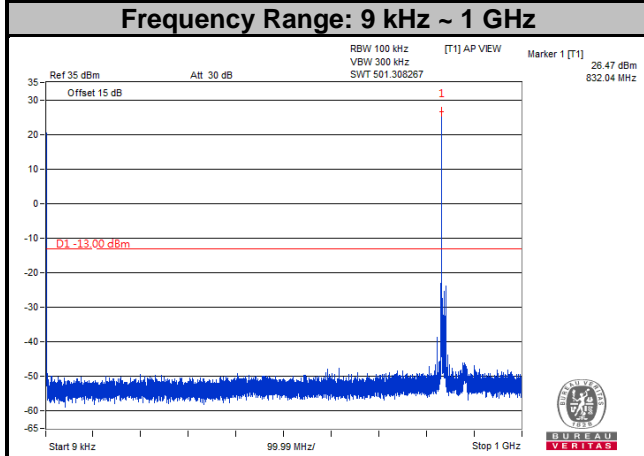


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

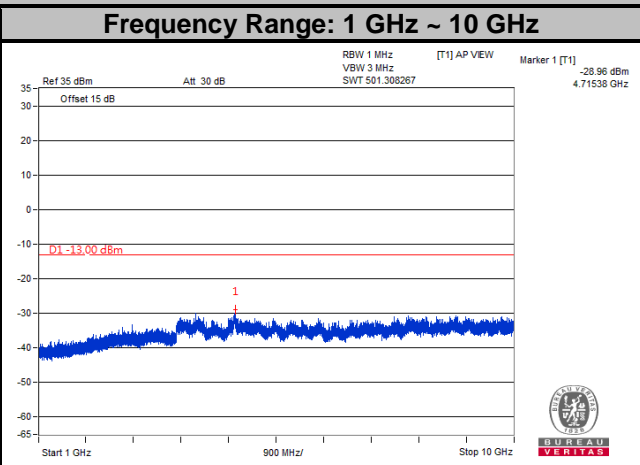
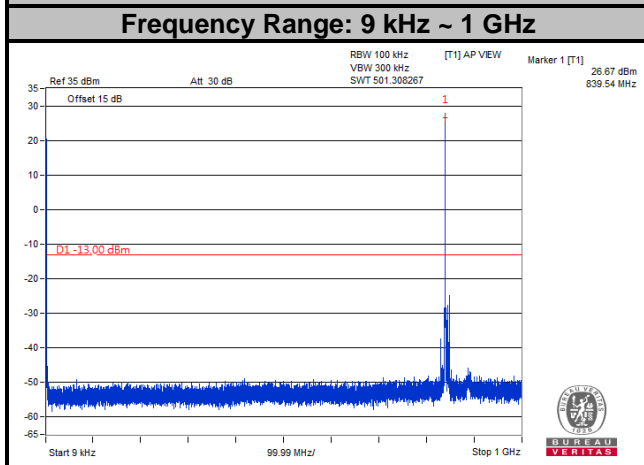
LTE Band 26
Channel Bandwidth: 10 MHz
Channel 26840



Channel 26915

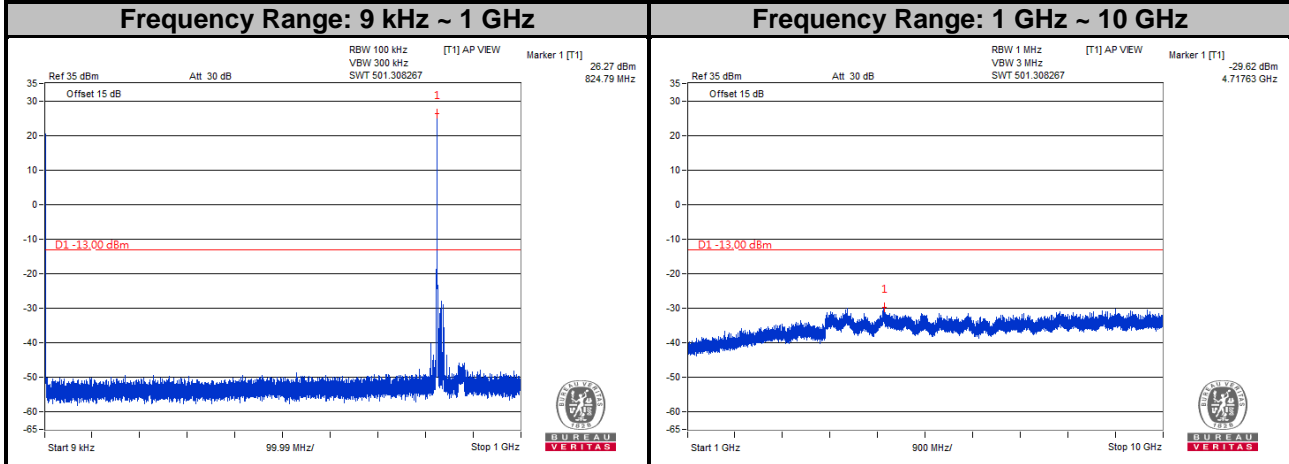


Channel 26990

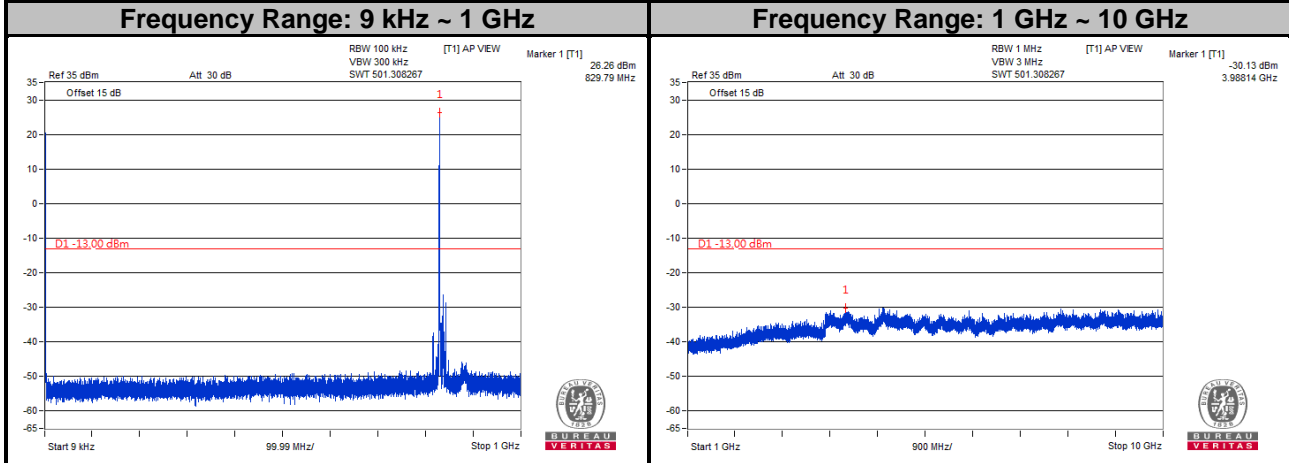


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

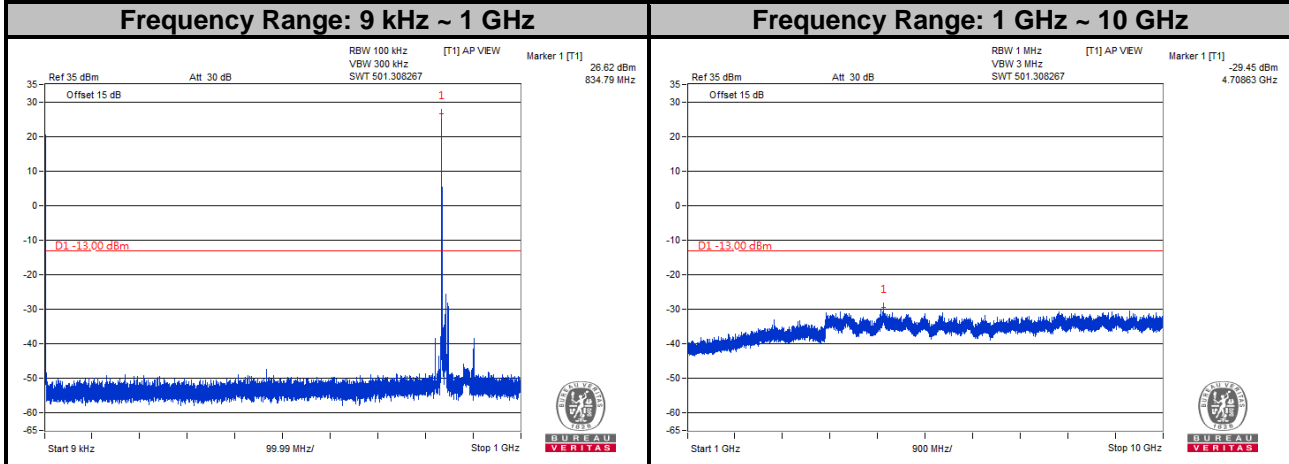
LTE Band 26
Channel Bandwidth: 15 MHz
Channel 26865



Channel 26915



Channel 26965



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

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

4.8.2 Test Procedure

- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) and/or 1.5 m (above 1 GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G
- c. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.R.P power - 2.15 dB.

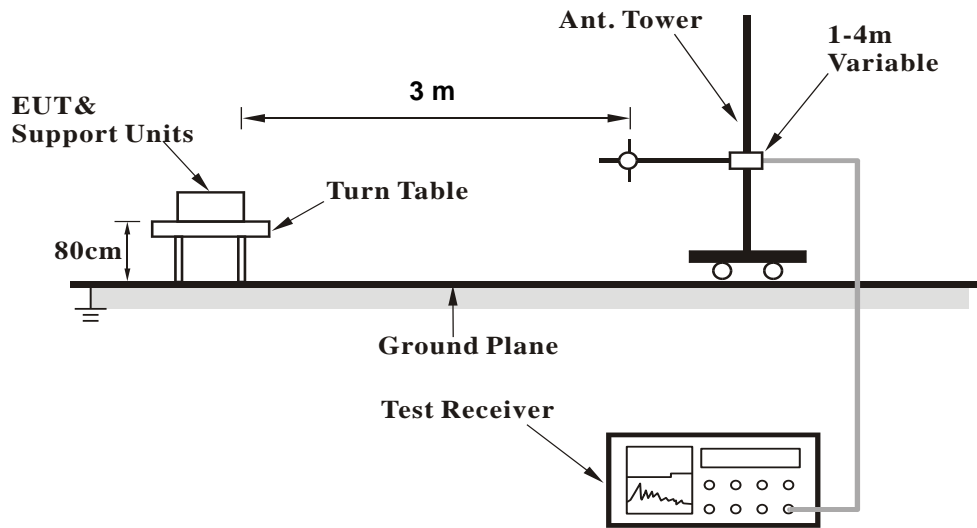
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz.

4.8.3 Deviation from Test Standard

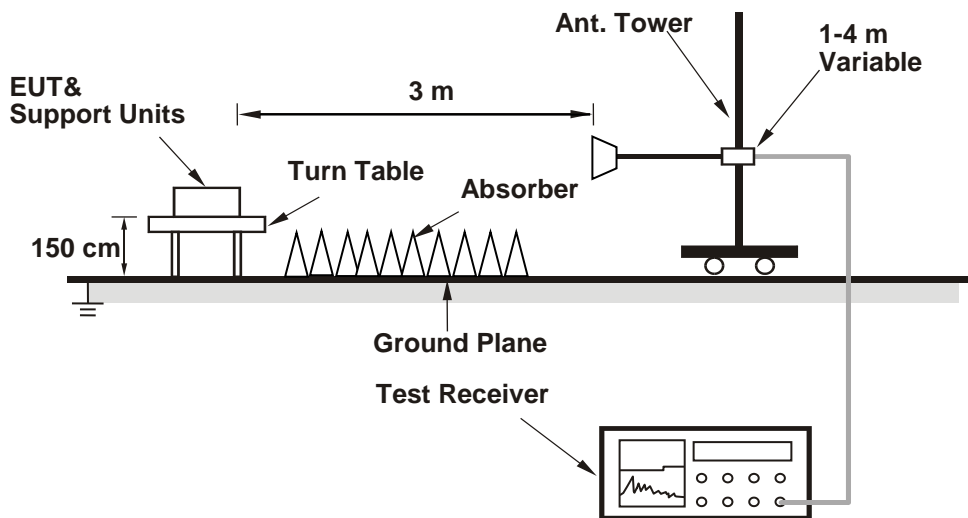
No deviation.

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

GSM:
Low Channel

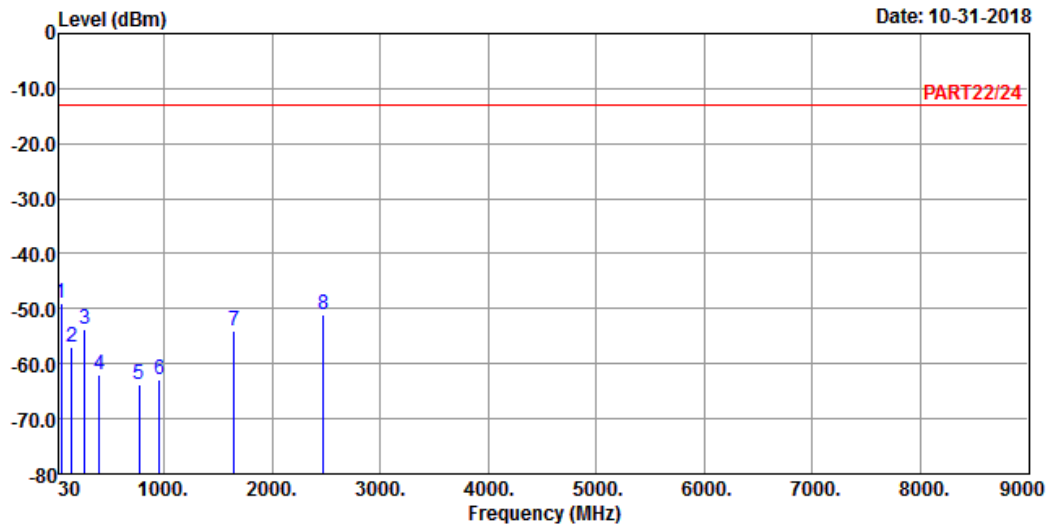


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 10-31-2018



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remak : GSM 850 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	44.55	-49.03	-47.04	-13.00	-36.03	-1.99	Peak
2	144.46	-57.10	-48.94	-13.00	-44.10	-8.16	Peak
3	268.62	-53.72	-47.35	-13.00	-40.72	-6.37	Peak
4	397.63	-62.13	-56.17	-13.00	-49.13	-5.96	Peak
5	770.11	-63.89	-64.71	-13.00	-50.89	0.82	Peak
6	954.41	-62.92	-64.89	-13.00	-49.92	1.97	Peak
7	1648.40	-54.11	-40.37	-13.00	-41.11	-13.74	Peak
8	2472.60	-51.03	-41.01	-13.00	-38.03	-10.02	Peak

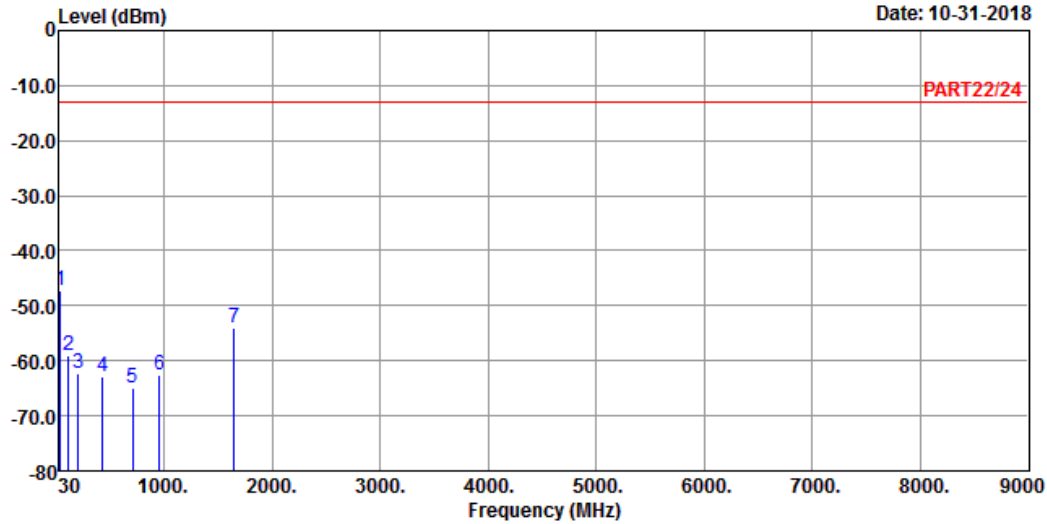


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : GSM 850 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	40.67	-47.13	-47.25	-13.00	-34.13	0.12	Peak
2	113.42	-59.09	-48.94	-13.00	-46.09	-10.15	Peak
3	204.60	-62.21	-54.38	-13.00	-49.21	-7.83	Peak
4	432.55	-62.76	-57.07	-13.00	-49.76	-5.69	Peak
5	707.06	-64.83	-64.87	-13.00	-51.83	0.04	Peak
6	953.44	-62.68	-64.62	-13.00	-49.68	1.94	Peak
7	1648.40	-53.98	-40.24	-13.00	-40.98	-13.74	Peak

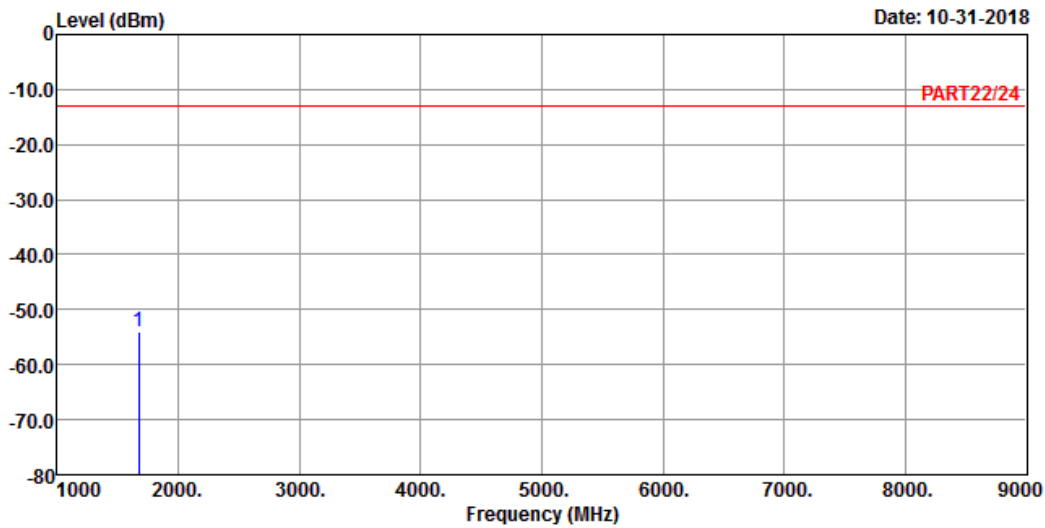
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : GSM 850 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 1672.80 -54.16 -40.26 -13.00 -41.16 -13.90 Peak

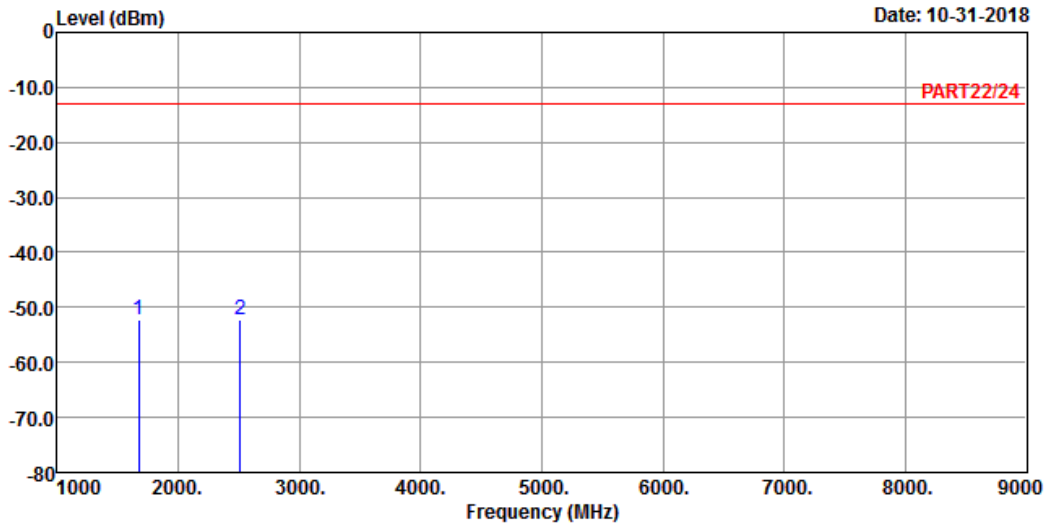


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : GSM 850 Link_M-CH
 Tested by: Thomas Wei

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1672.80	-52.18	-38.28	-13.00	-39.18	-13.90	Peak
2	2509.20	-52.11	-42.03	-13.00	-39.11	-10.08	Peak

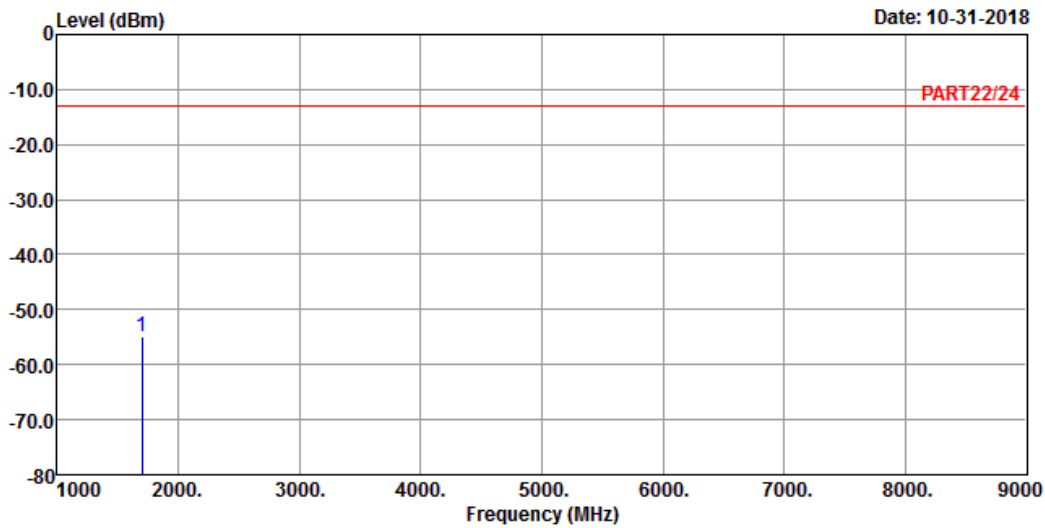
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : GSM 850 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 1697.60 -55.01 -40.96 -13.00 -42.01 -14.05 Peak

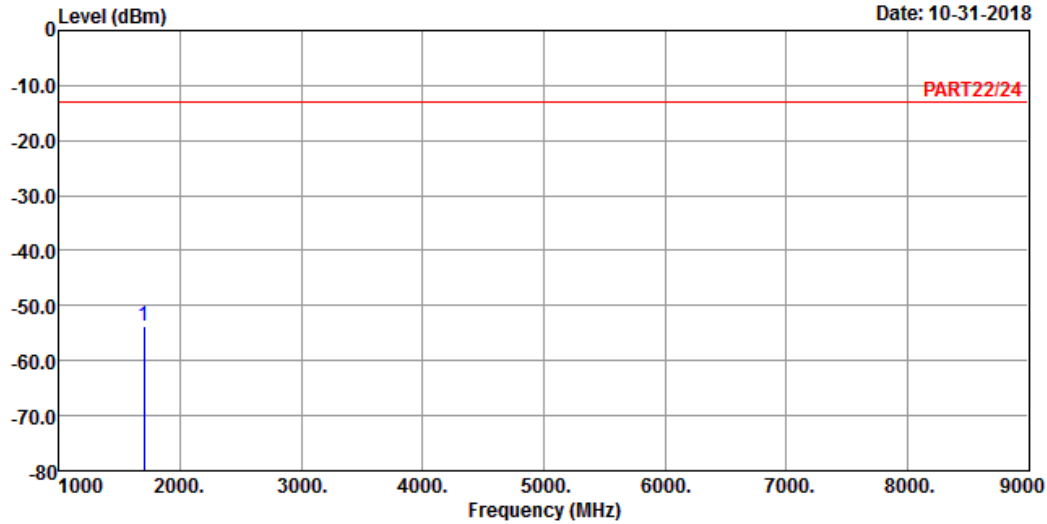


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : GSM 850 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 1697.60	-53.83	-39.78	-13.00	-40.83	-14.05	Peak

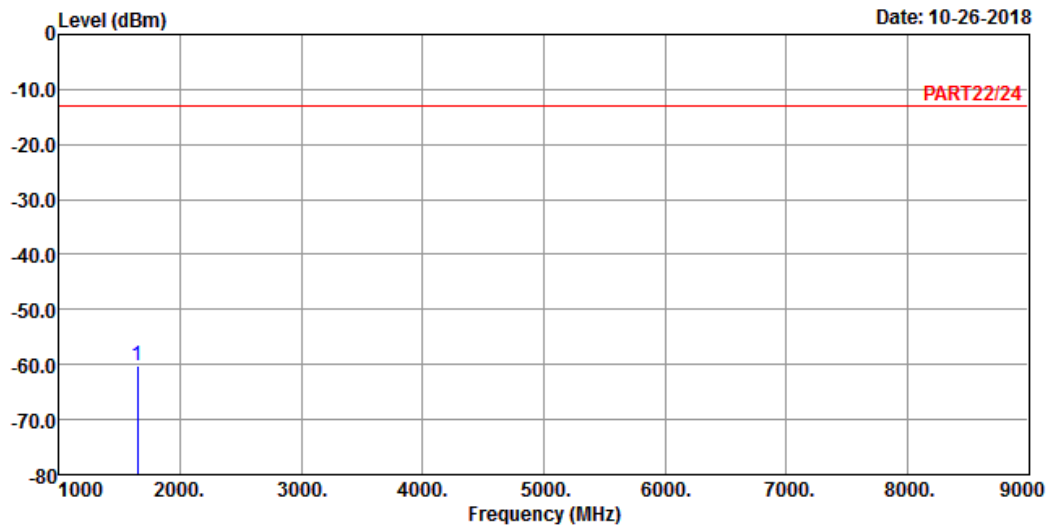
EDGE:
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remark : EDGE 850 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 1648.40 -60.15 -46.41 -13.00 -47.15 -13.74 Peak

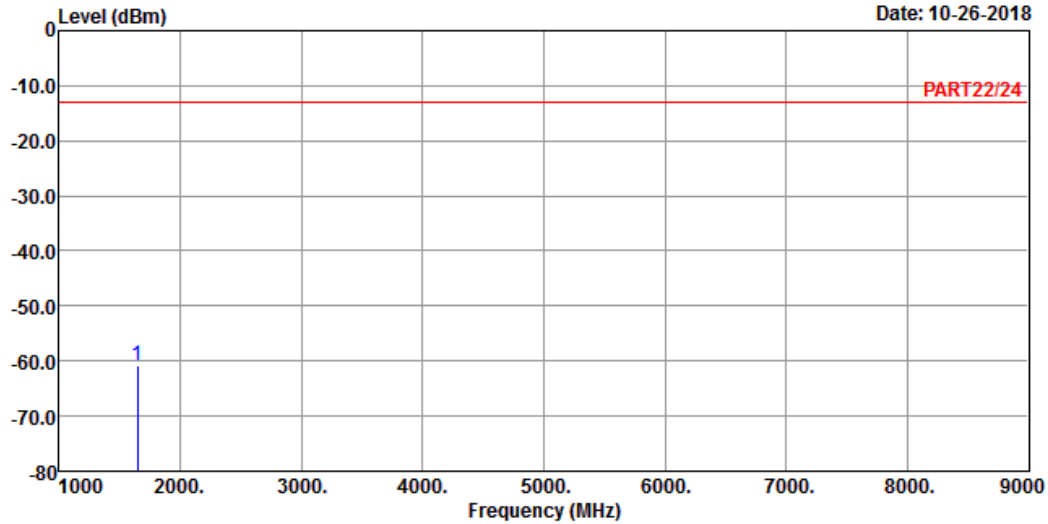


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-26-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : EDGE 850 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 1648.40	-60.74	-47.00	-13.00	-47.74	-13.74	Peak

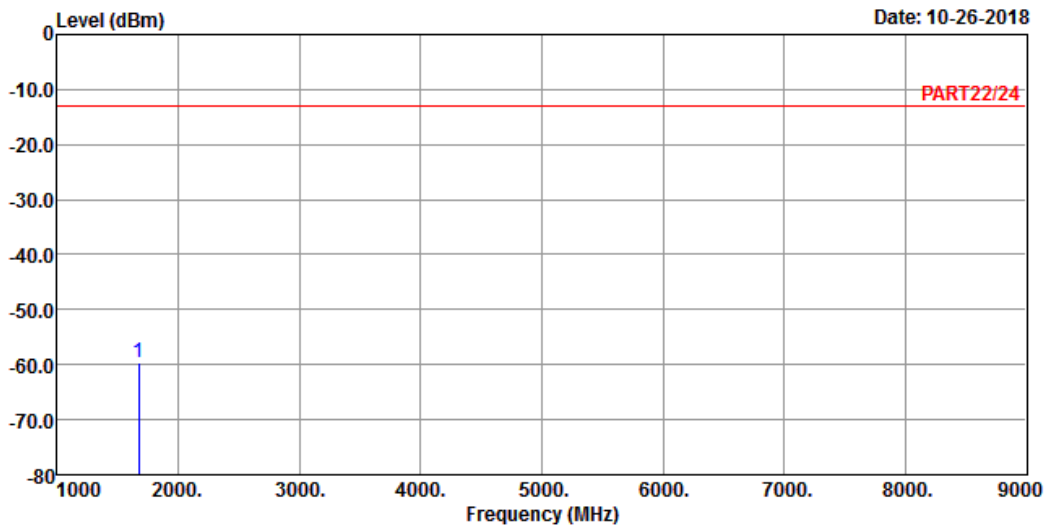
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remark : EDGE 850 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 1672.80 -59.60 -45.70 -13.00 -46.60 -13.90 Peak

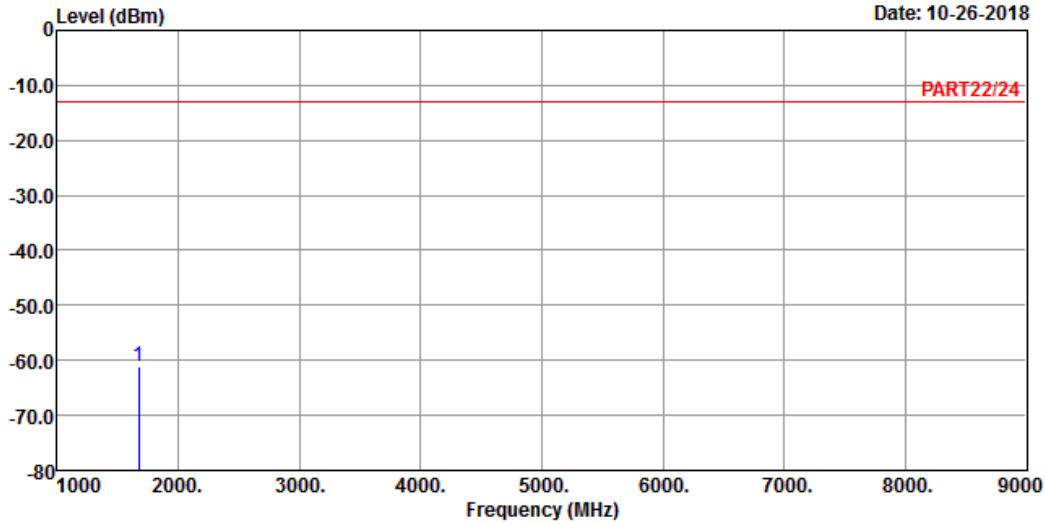


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-26-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : EDGE 850 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 1672.80	-61.05	-47.15	-13.00	-48.05	-13.90	Peak

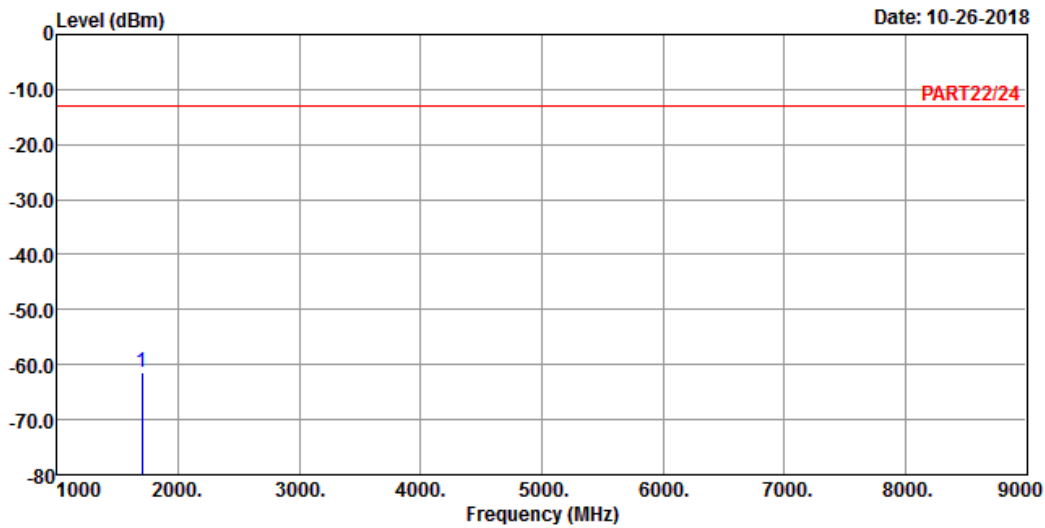
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remark : EDGE 850 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 1697.60 -61.30 -47.25 -13.00 -48.30 -14.05 Peak

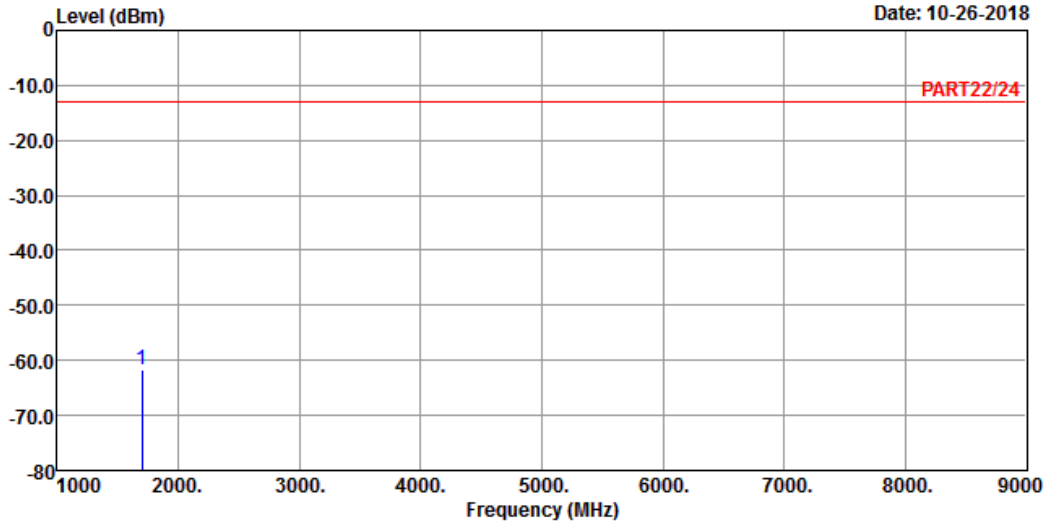


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-26-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : EDGE 850 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 1697.60	-61.58	-47.53	-13.00	-48.58	-14.05	Peak

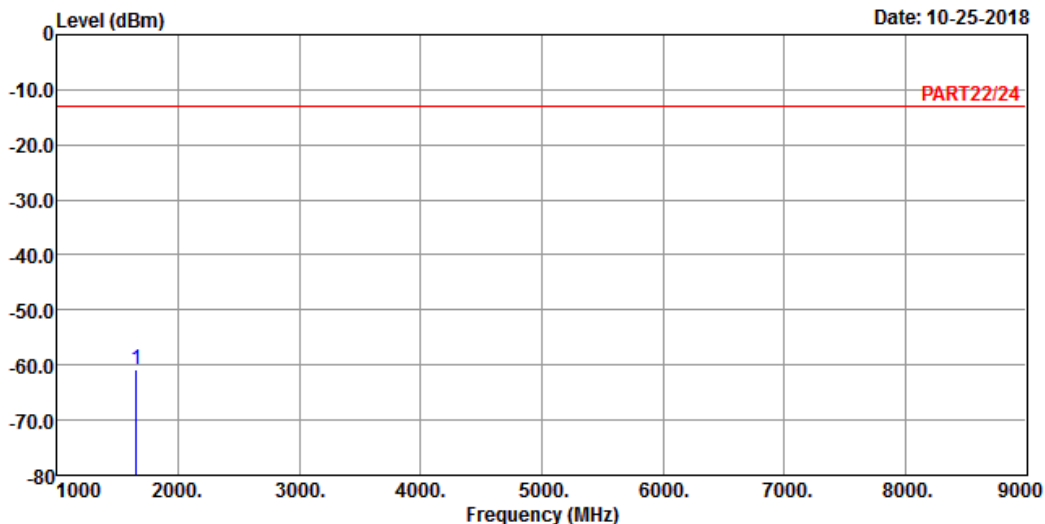
WCDMA:
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remark : WCDMA Band V 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 1652.80 -60.94 -47.17 -13.00 -47.94 -13.77 Peak

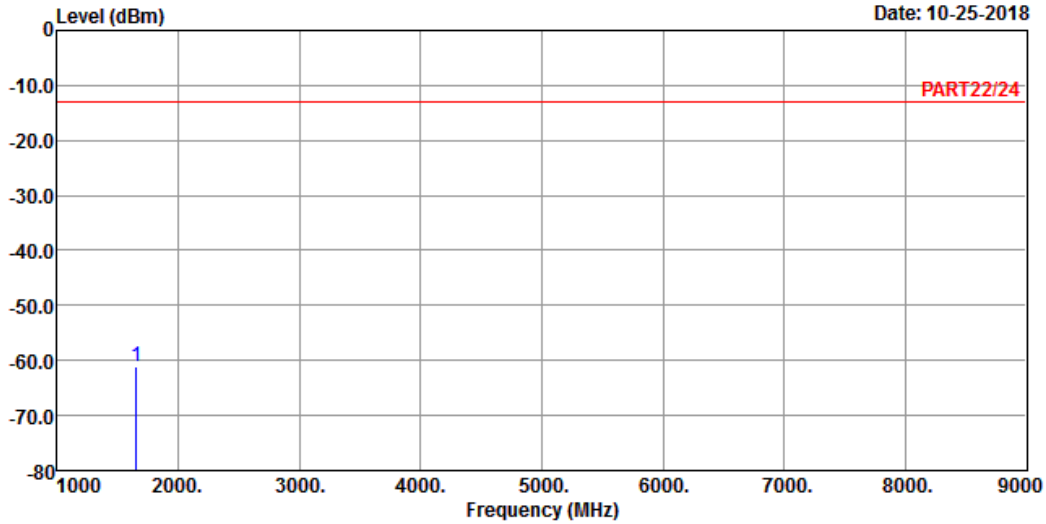


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-25-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : WCDMA Band V 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 1652.80	-61.06	-47.29	-13.00	-48.06	-13.77	Peak

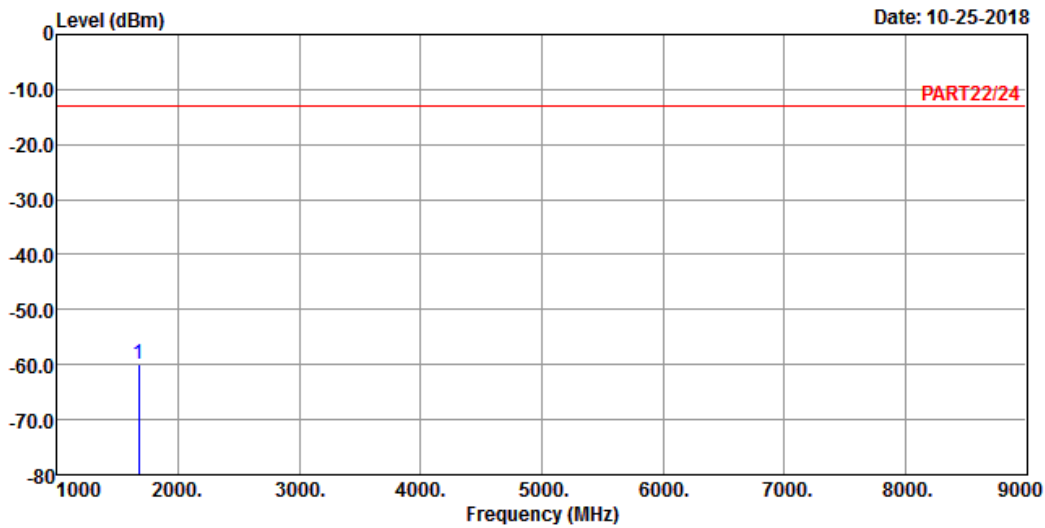
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remark : WCDMA Band V 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 1672.80	-60.07	-46.17	-13.00	-47.07	-13.90	Peak

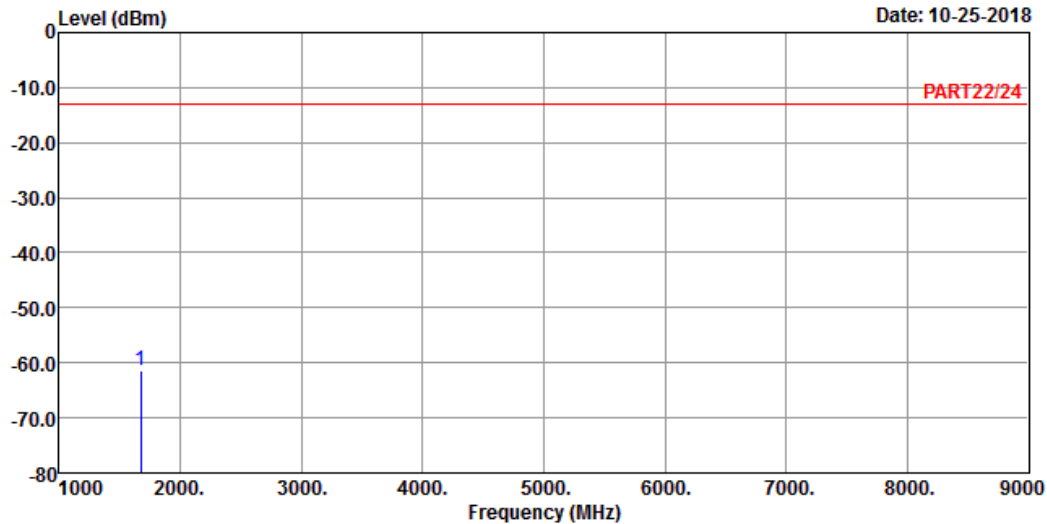


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-25-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : WCDMA Band V 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 1672.80	-61.28	-47.38	-13.00	-48.28	-13.90	Peak

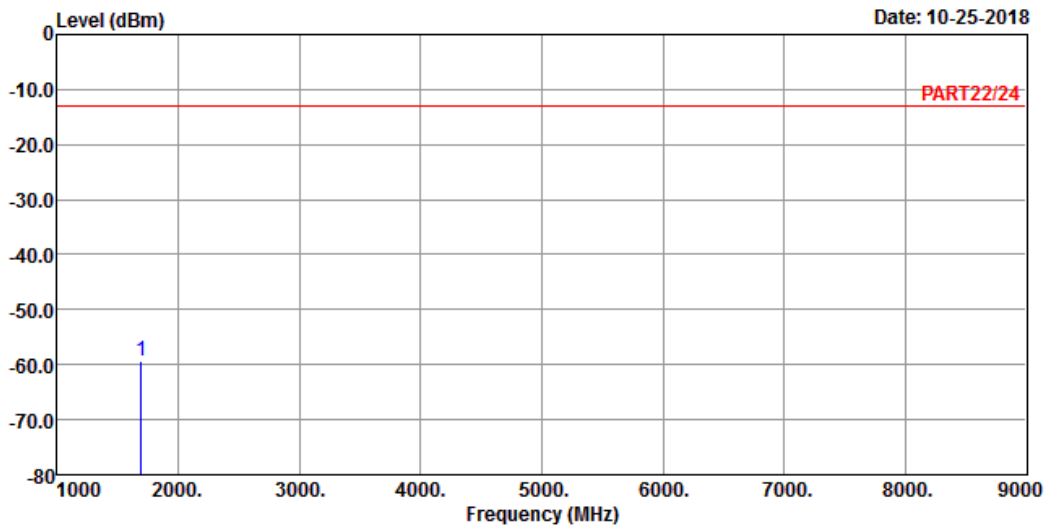
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remark : WCDMA Band V 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 1693.20 -59.41 -45.39 -13.00 -46.41 -14.02 Peak

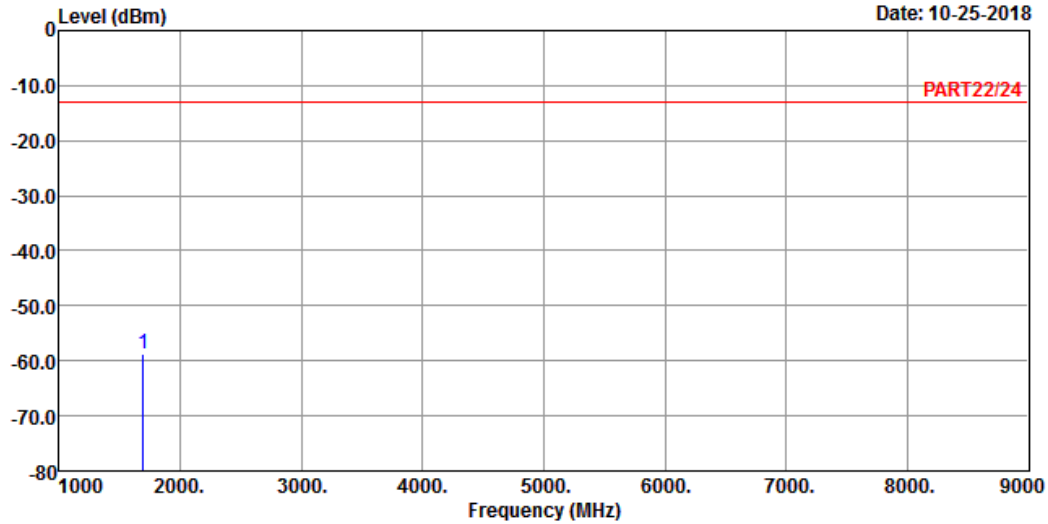


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-25-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : WCDMA Band V 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 1693.20	-58.67	-44.65	-13.00	-45.67	-14.02	Peak

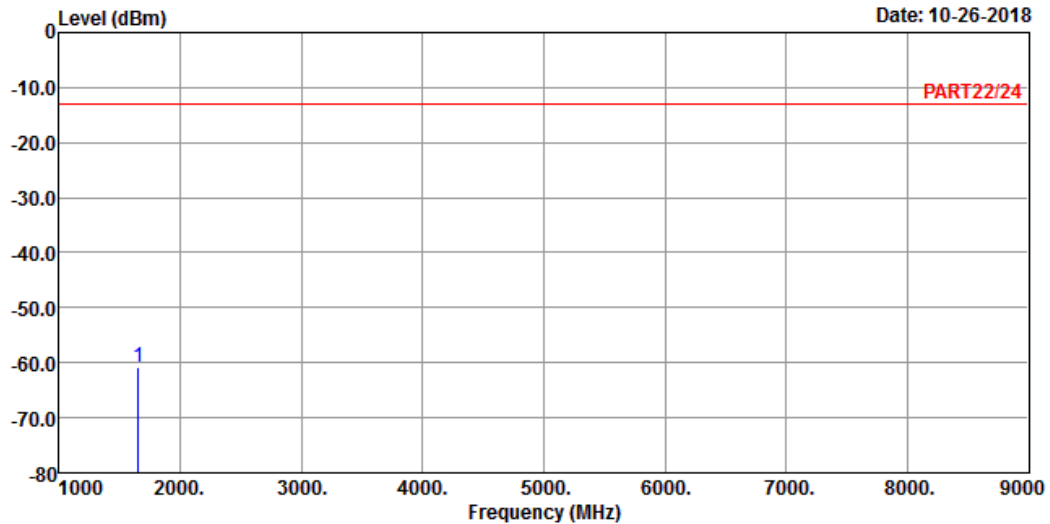
CDMA:
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remark : CDMA BC0 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 1649.40 -60.88 -47.14 -13.00 -47.88 -13.74 Peak

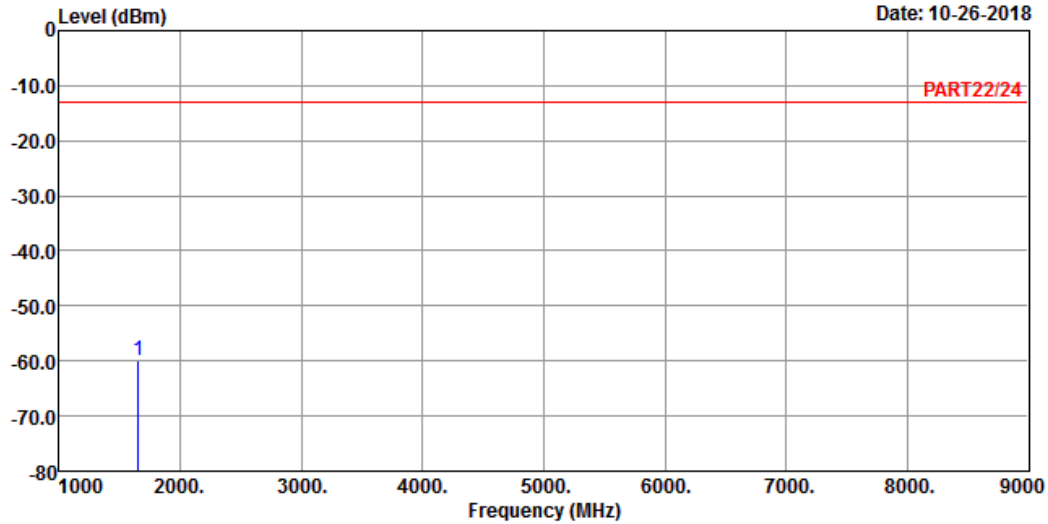


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-26-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : CDMA BC0 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 1649.40	-60.06	-46.32	-13.00	-47.06	-13.74	Peak

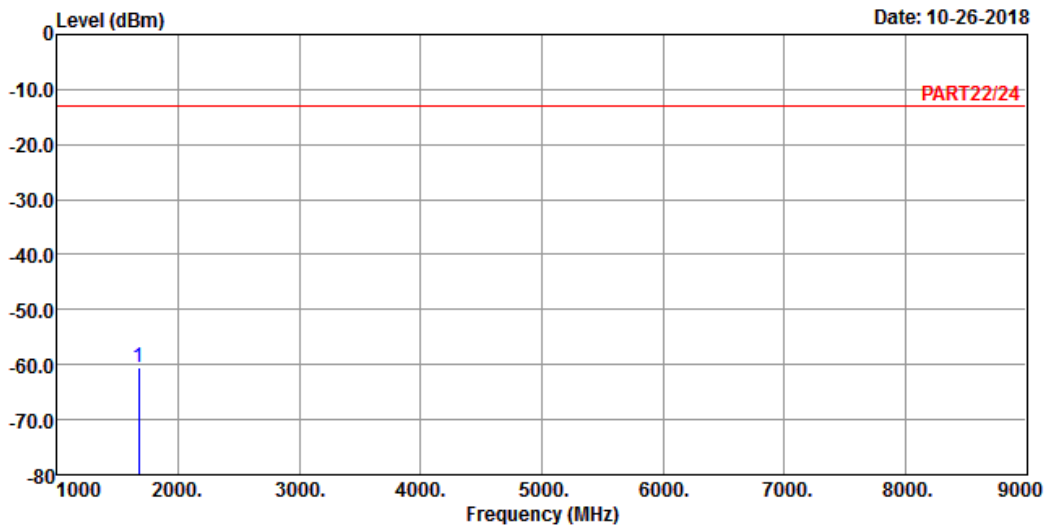
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remark : CDMA BC0 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 1673.04 -60.43 -46.53 -13.00 -47.43 -13.90 Peak

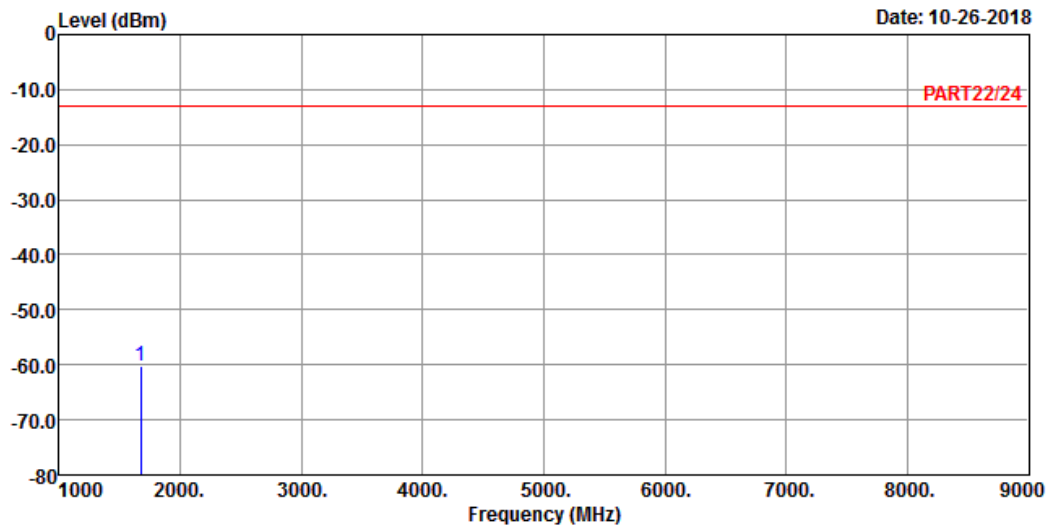


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-26-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : CDMA BC0 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 1673.04	-60.30	-46.40	-13.00	-47.30	-13.90	Peak

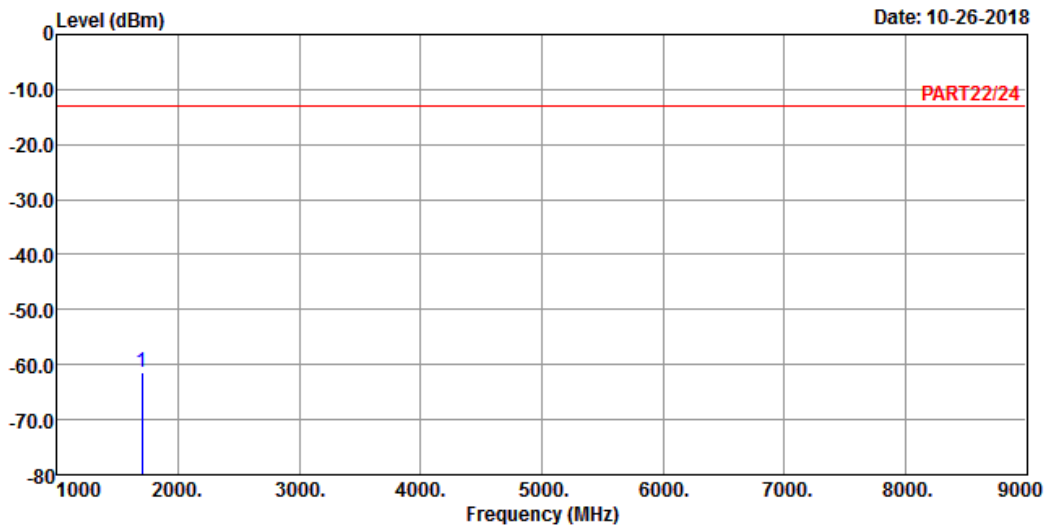
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remark : CDMA BC0 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 1696.62 -61.28 -47.26 -13.00 -48.28 -14.02 Peak

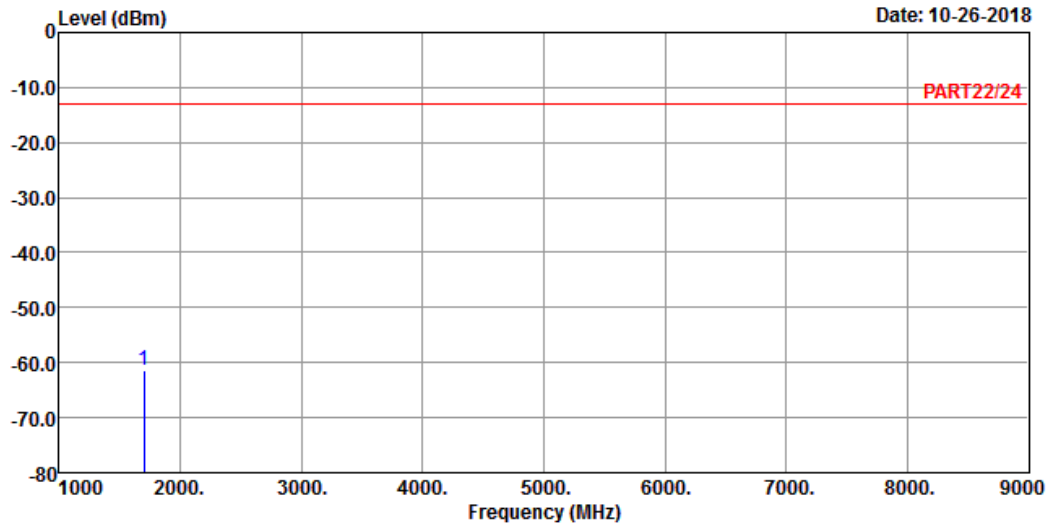


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-26-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : CDMA BC0 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 1696.62	-61.27	-47.25	-13.00	-48.27	-14.02	Peak

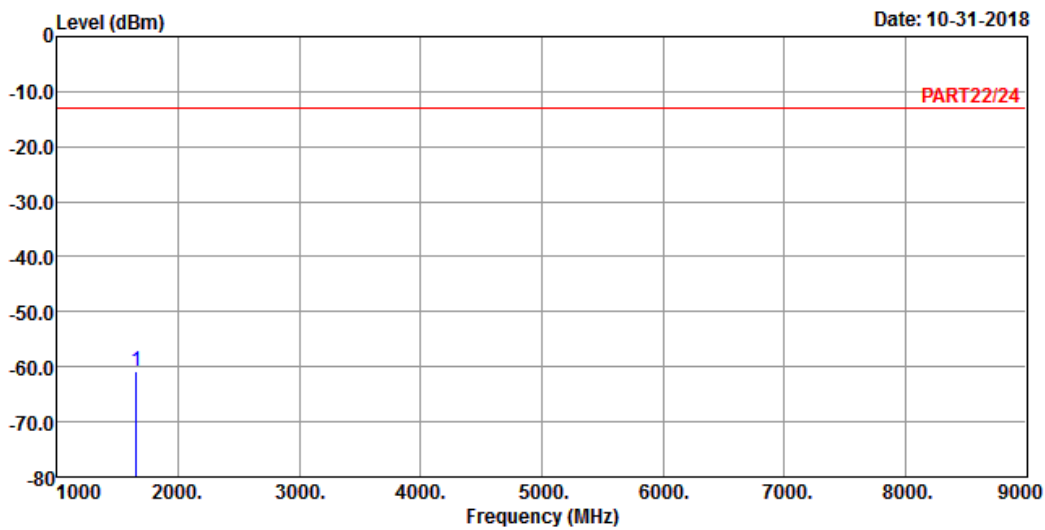
LTE Band 5
 Channel Bandwidth: 1.4 MHz / QPSK
 Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 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 1649.40	-60.70	-46.96	-13.00	-47.70	-13.74	Peak

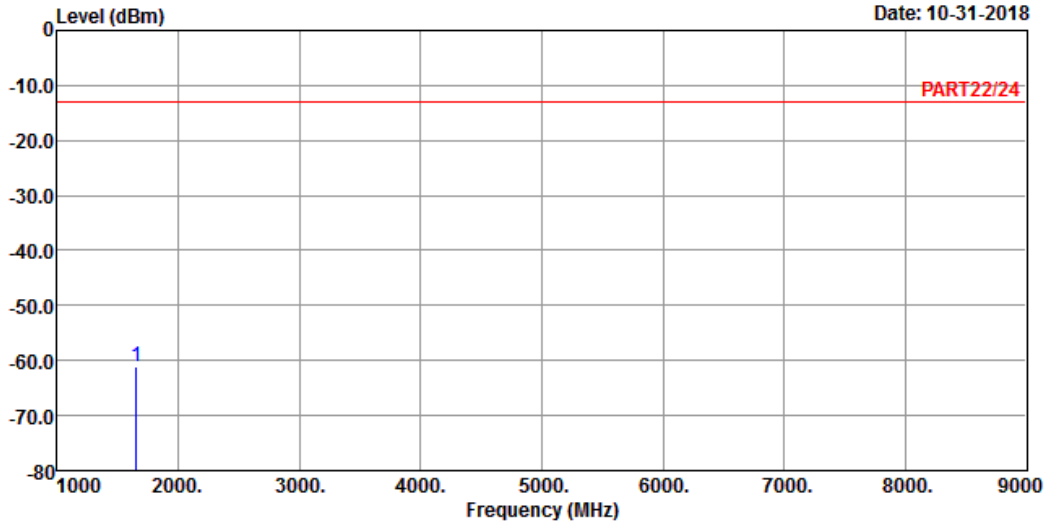


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 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 1649.40	-61.20	-47.46	-13.00	-48.20	-13.74	Peak

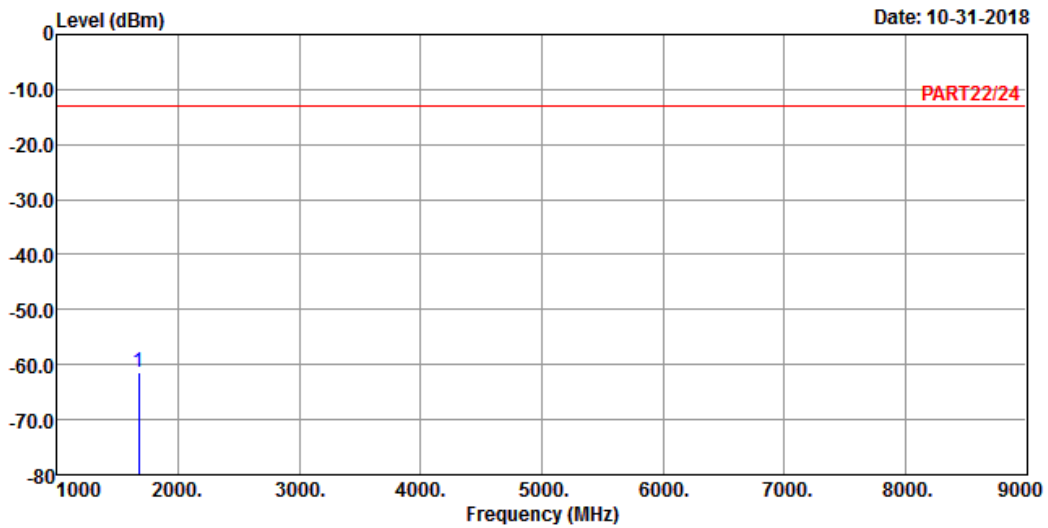
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 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 1673.00 -61.33 -47.43 -13.00 -48.33 -13.90 Peak

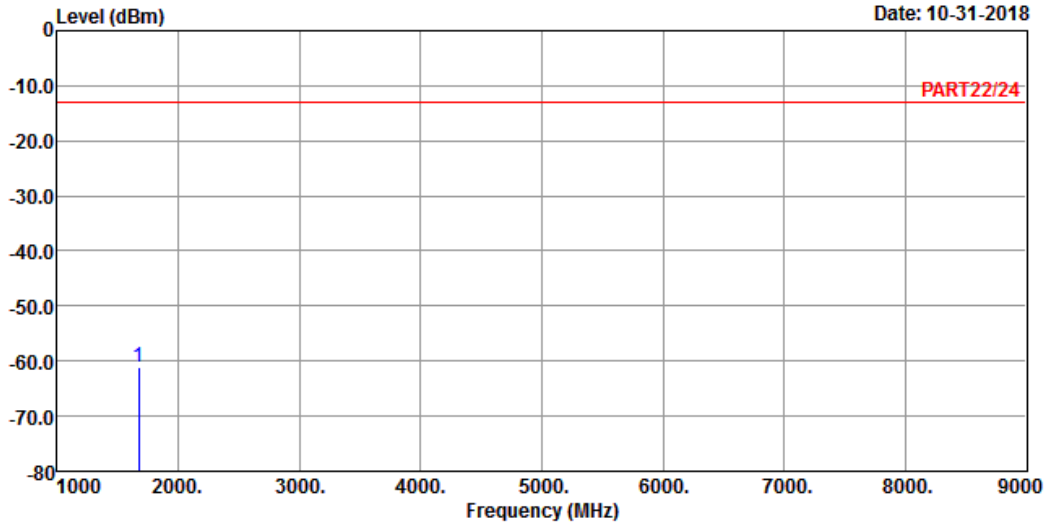


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 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 1673.00	-61.13	-47.23	-13.00	-48.13	-13.90	Peak

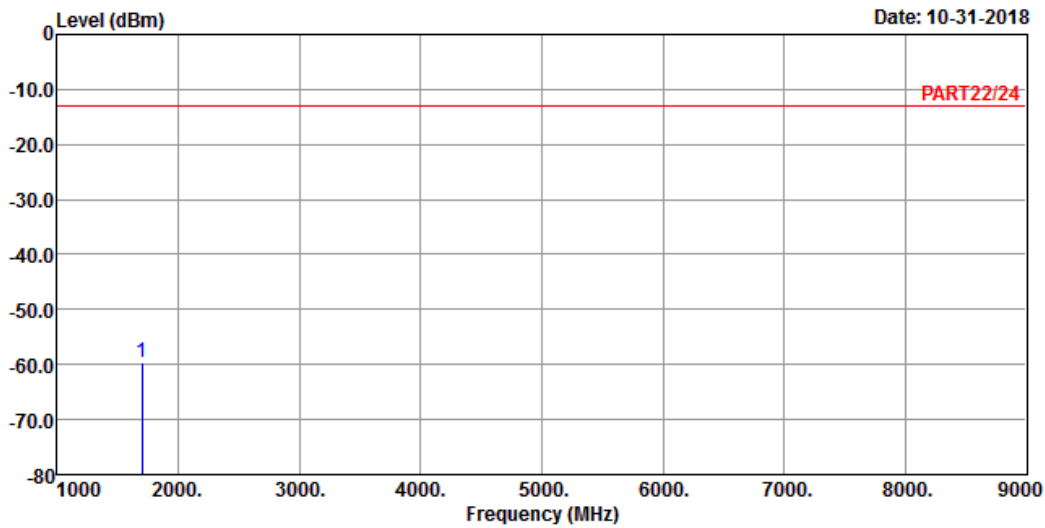
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 QPSK_1.4M Link_H-CH
 Tested by: Thomas Wei

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

1 pp 1696.60 -59.64 -45.62 -13.00 -46.64 -14.02 Peak

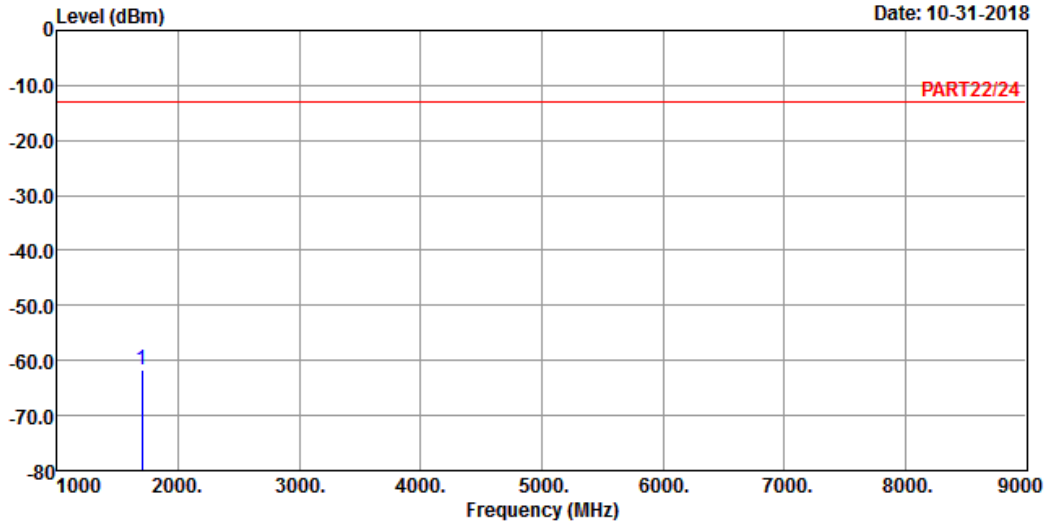


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 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 pp 1696.60	-61.68	-47.66	-13.00	-48.68	-14.02	Peak

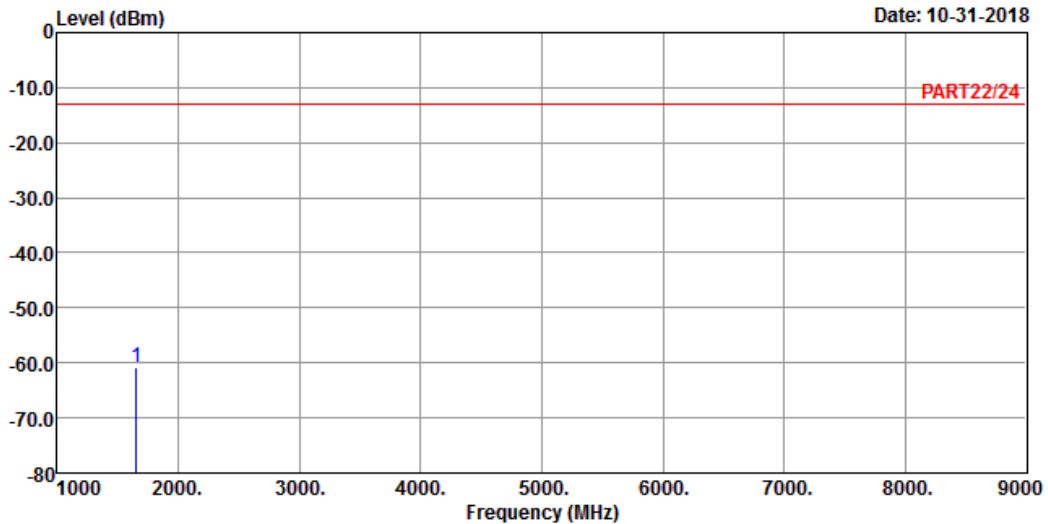
Channel Bandwidth: 5 MHz / QPSK
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remak : LTE Band 5 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 1653.00 -60.67 -46.90 -13.00 -47.67 -13.77 Peak

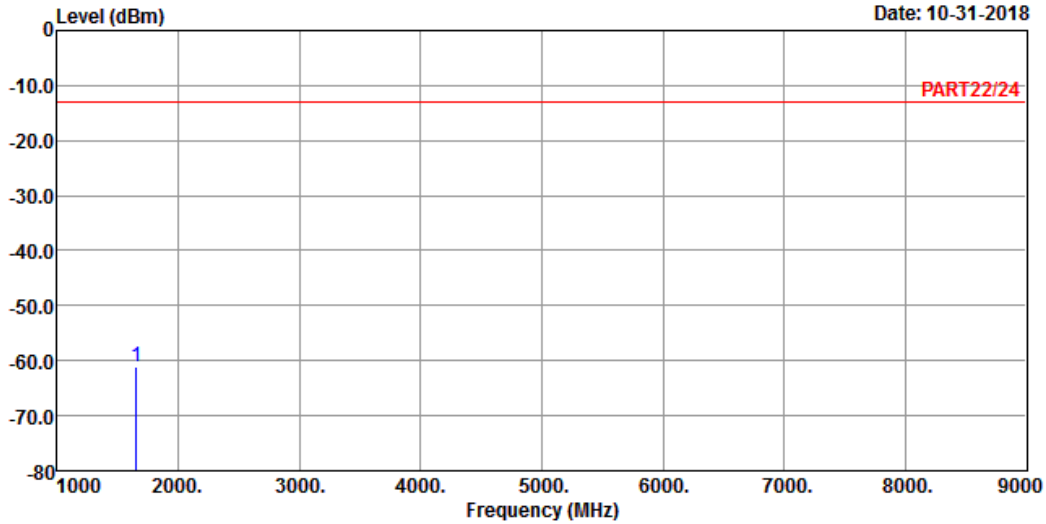


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : LTE Band 5 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 1653.00	-61.12	-47.35	-13.00	-48.12	-13.77	Peak

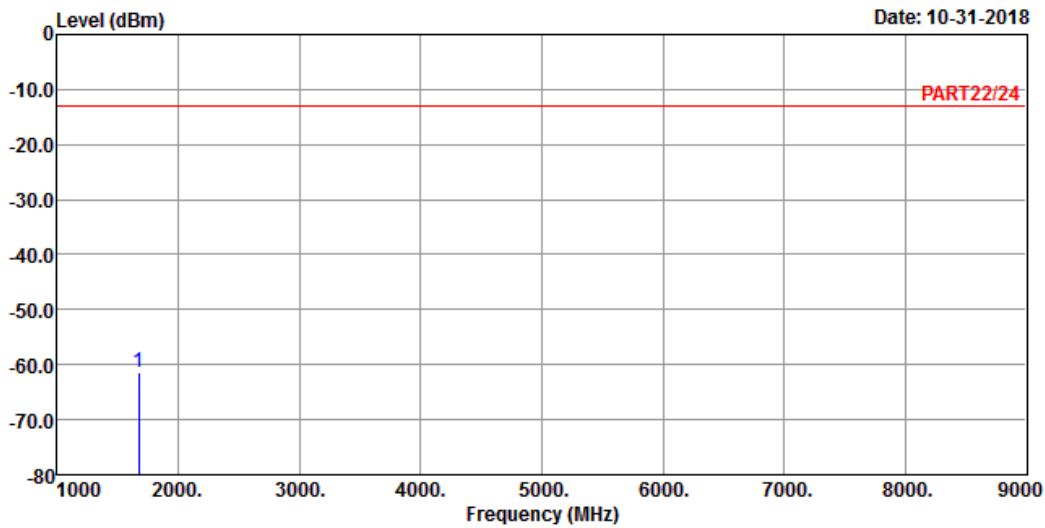
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 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 1673.00 -61.37 -47.47 -13.00 -48.37 -13.90 Peak

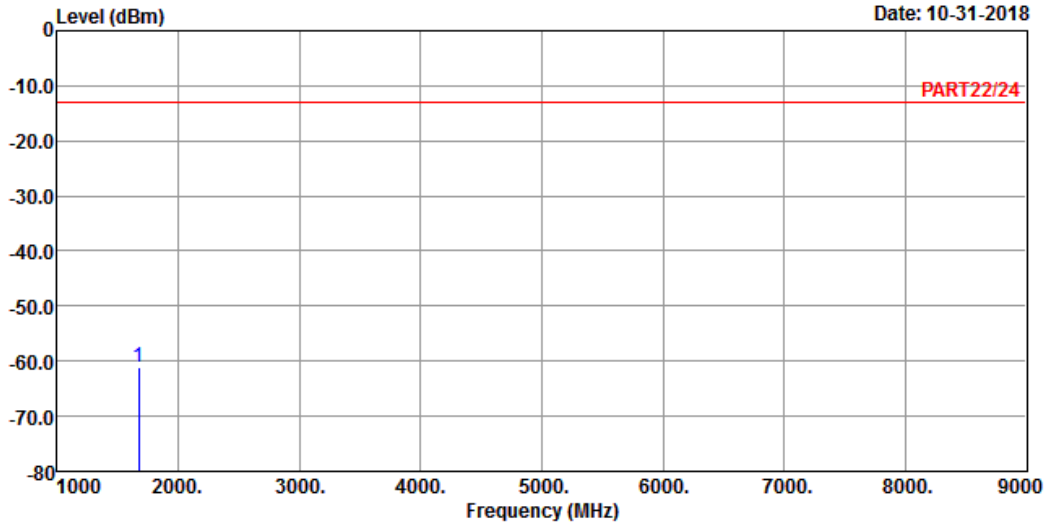


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : LTE Band 5 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 1673.00	-61.18	-47.28	-13.00	-48.18	-13.90	Peak

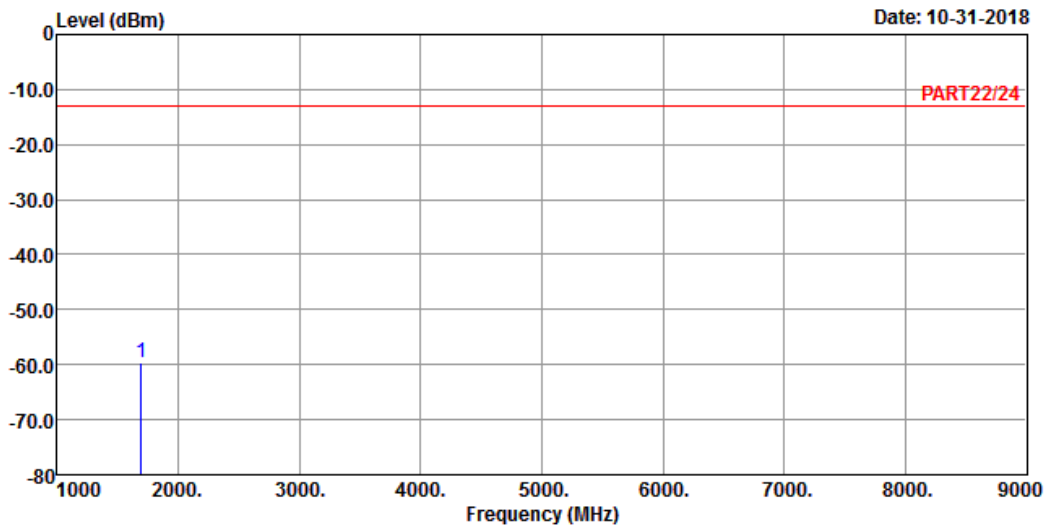
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 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 1693.00 -59.55 -45.53 -13.00 -46.55 -14.02 Peak

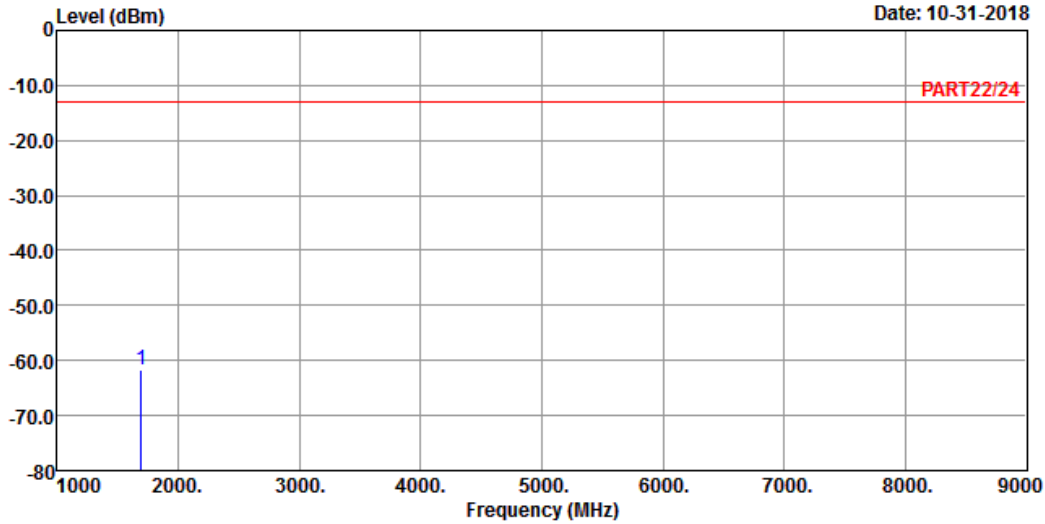


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 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 1693.00	-61.63	-47.61	-13.00	-48.63	-14.02	Peak

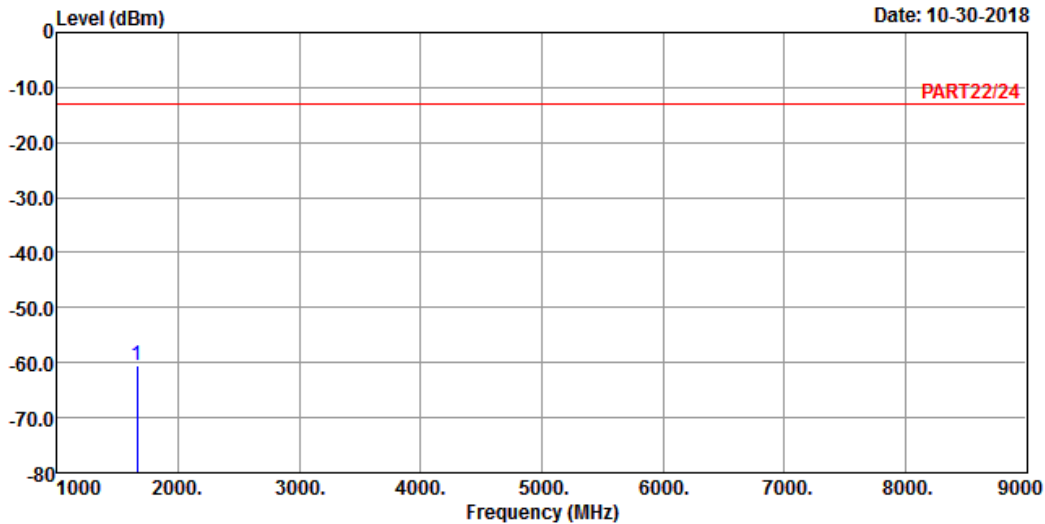
Channel Bandwidth: 10 MHz / QPSK
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remak : LTE Band 5 QPSK_10M 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 1658.00 -60.56 -46.76 -13.00 -47.56 -13.80 Peak

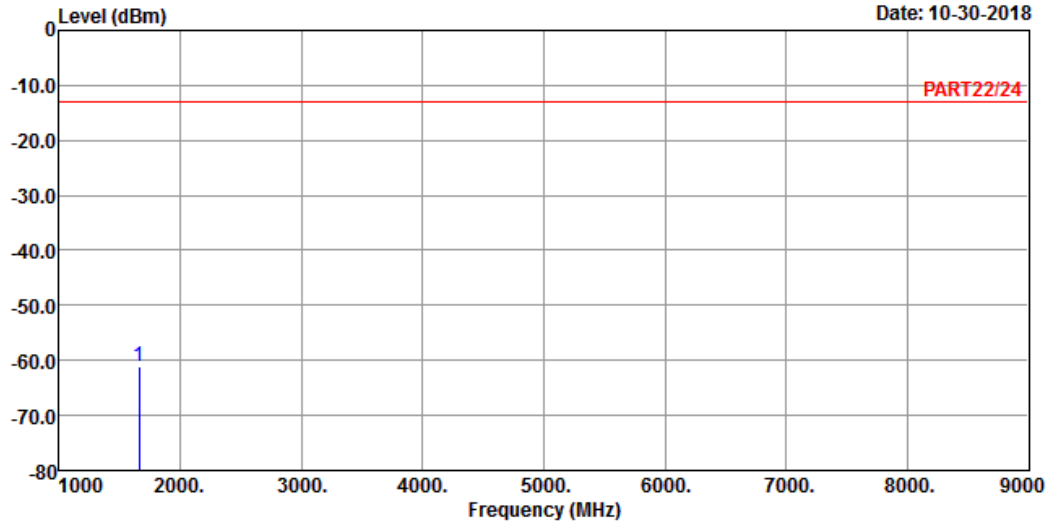


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-30-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 QPSK_10M 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 1658.00	-61.00	-47.20	-13.00	-48.00	-13.80	Peak

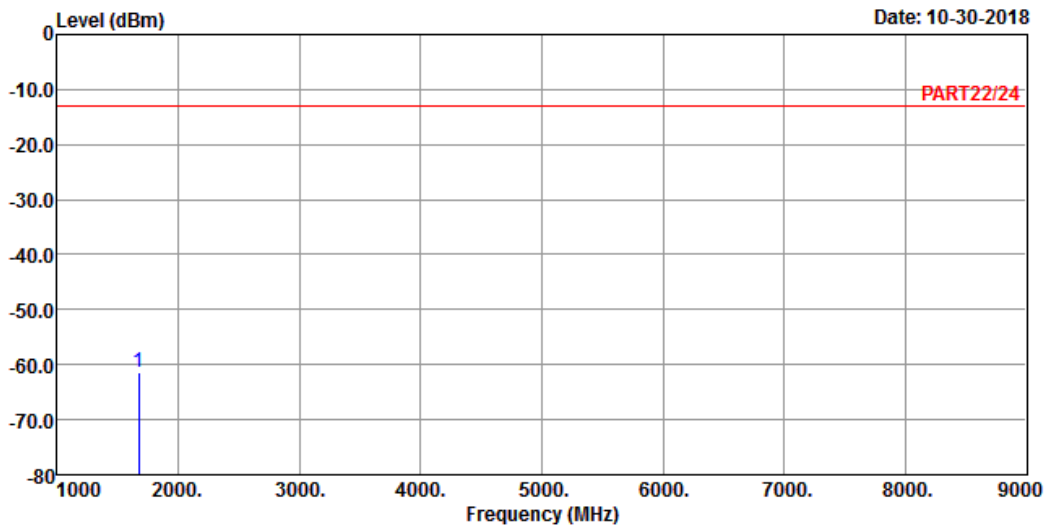
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 QPSK_10M 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 1673.00 -61.39 -47.49 -13.00 -48.39 -13.90 Peak

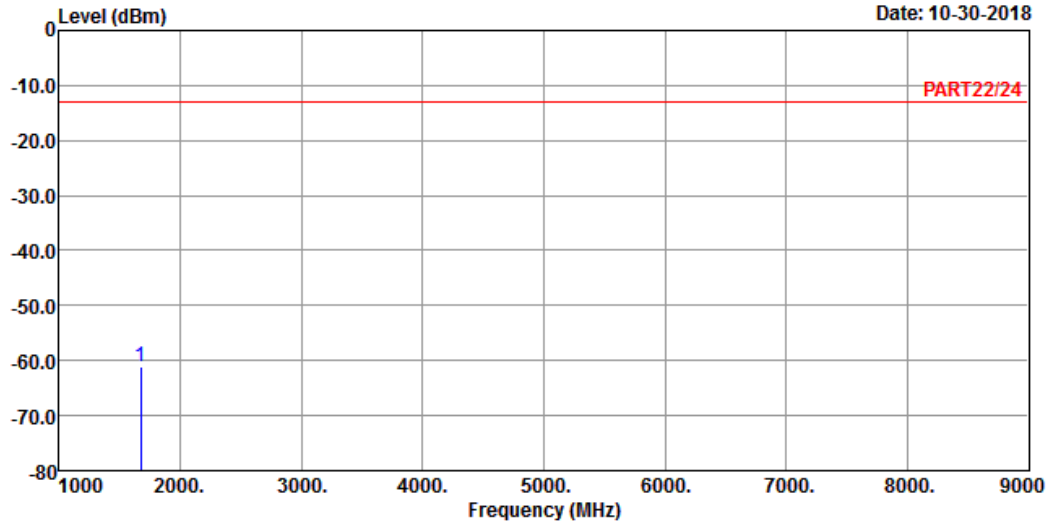


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-30-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : LTE Band 5 QPSK_10M 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 1673.00	-61.10	-47.20	-13.00	-48.10	-13.90	Peak

High Channel

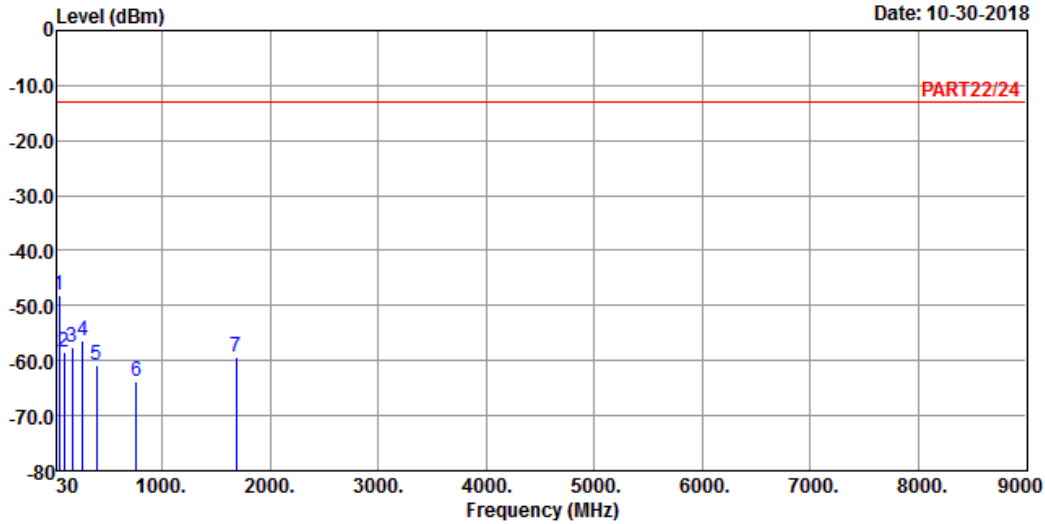


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 10-30-2018



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 QPSK_10M Link_H-CH
 Tested by: Thomas Wei

	Read	Limit	Over				
Freq	Level	Level	Line	Limit	Factor	Remark	
MHz	dBm	dBm	dBm	dB	dB		
1 pp	44.55	-48.20	-46.21	-13.00	-35.20	-1.99	Peak
2	95.96	-58.33	-47.55	-13.00	-45.33	-10.78	Peak
3	170.65	-57.45	-51.75	-13.00	-44.45	-5.70	Peak
4	266.68	-56.46	-50.13	-13.00	-43.46	-6.33	Peak
5	392.78	-60.85	-54.86	-13.00	-47.85	-5.99	Peak
6	761.38	-63.87	-64.72	-13.00	-50.87	0.85	Peak
7	1688.00	-59.28	-45.29	-13.00	-46.28	-13.99	Peak

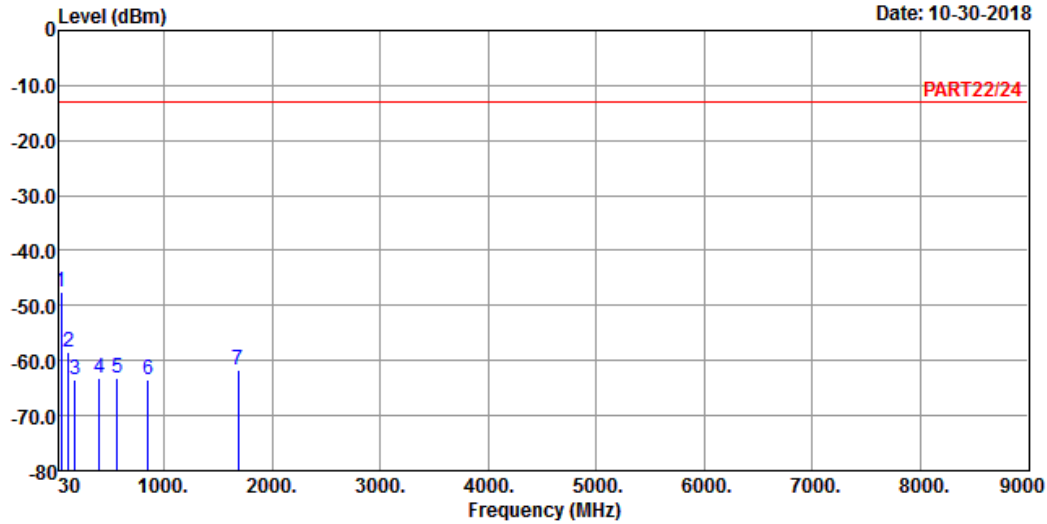


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 10-30-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 QPSK_10M 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	44.55	-47.64	-45.65	-13.00	-34.64	-1.99	Peak
2	113.42	-58.34	-48.19	-13.00	-45.34	-10.15	Peak
3	178.41	-63.34	-56.28	-13.00	-50.34	-7.06	Peak
4	403.45	-63.10	-57.18	-13.00	-50.10	-5.92	Peak
5	569.32	-63.19	-61.15	-13.00	-50.19	-2.04	Peak
6	848.68	-63.53	-63.83	-13.00	-50.53	0.30	Peak
7	1688.00	-61.58	-47.59	-13.00	-48.58	-13.99	Peak

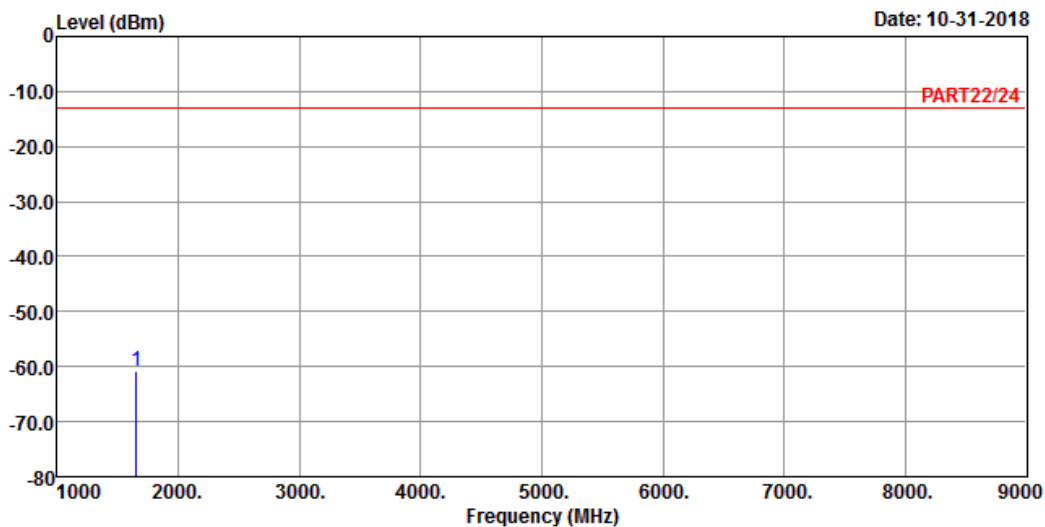
LTE Band 26
 Channel Bandwidth: 1.4 MHz / QPSK
 Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remark : LTE Band 26 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 1649.40	-60.83	-47.09	-13.00	-47.83	-13.74	Peak

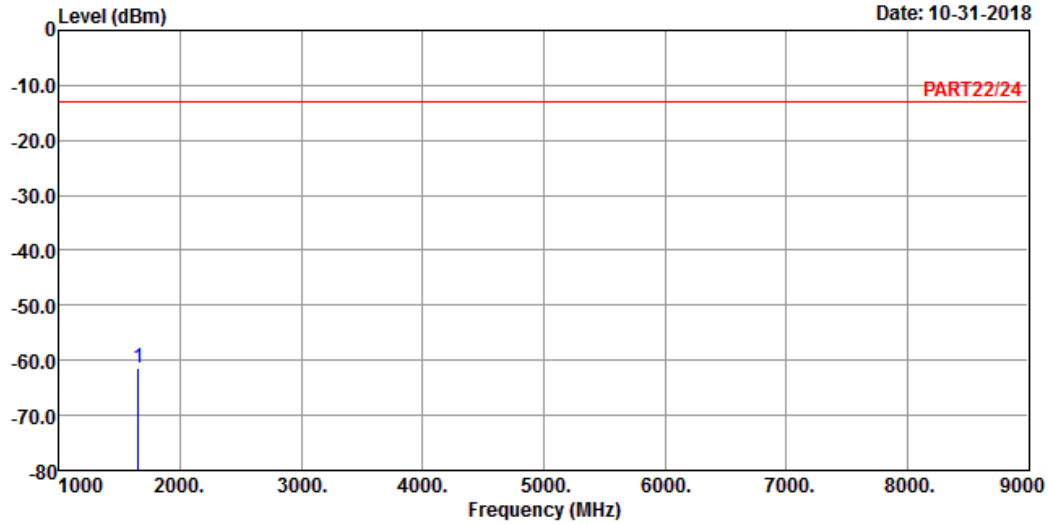


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : LTE Band 26 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 1649.40	-61.37	-47.63	-13.00	-48.37	-13.74	Peak

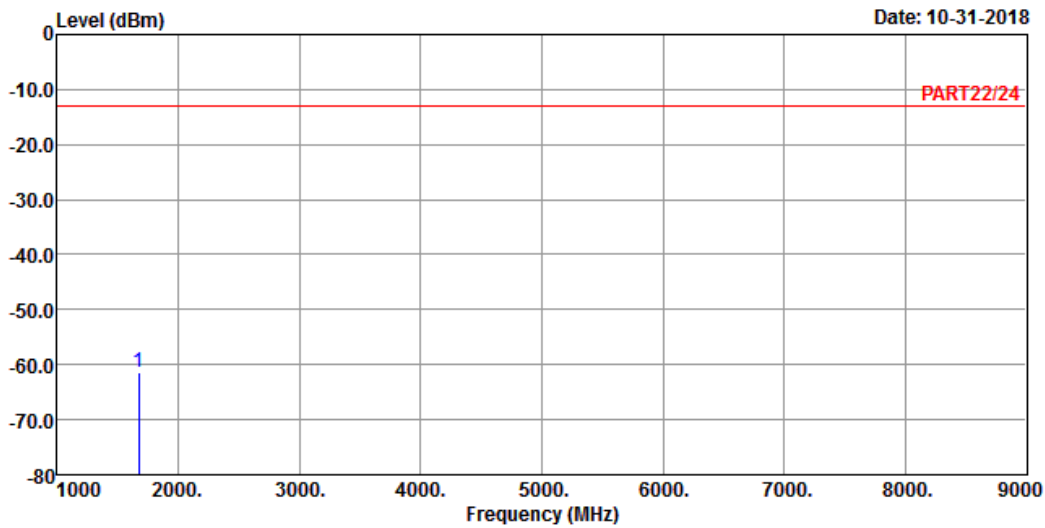
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 26 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 1673.00 -61.48 -47.58 -13.00 -48.48 -13.90 Peak

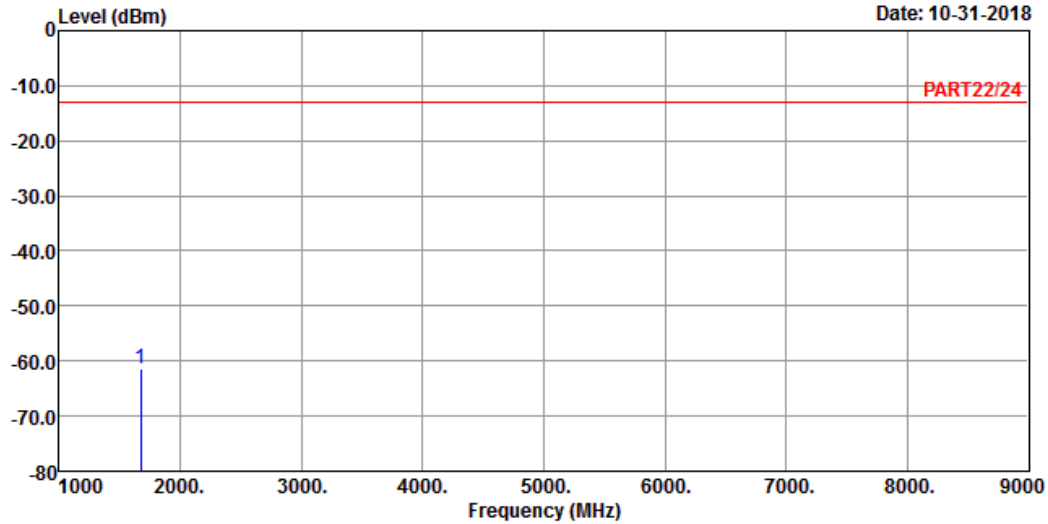


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 26 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 1673.00	-61.32	-47.42	-13.00	-48.32	-13.90	Peak

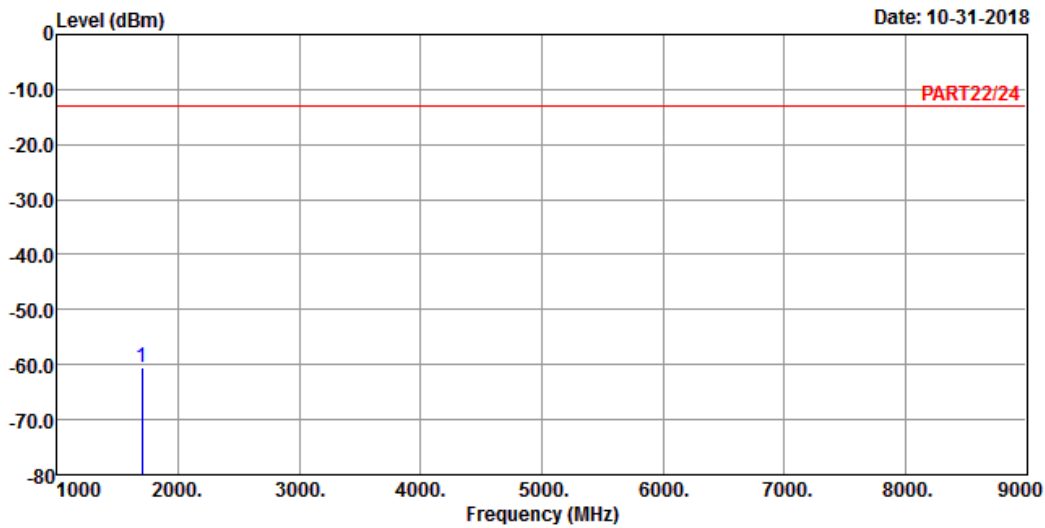
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 26 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 pp 1696.60 -60.60 -46.58 -13.00 -47.60 -14.02 Peak

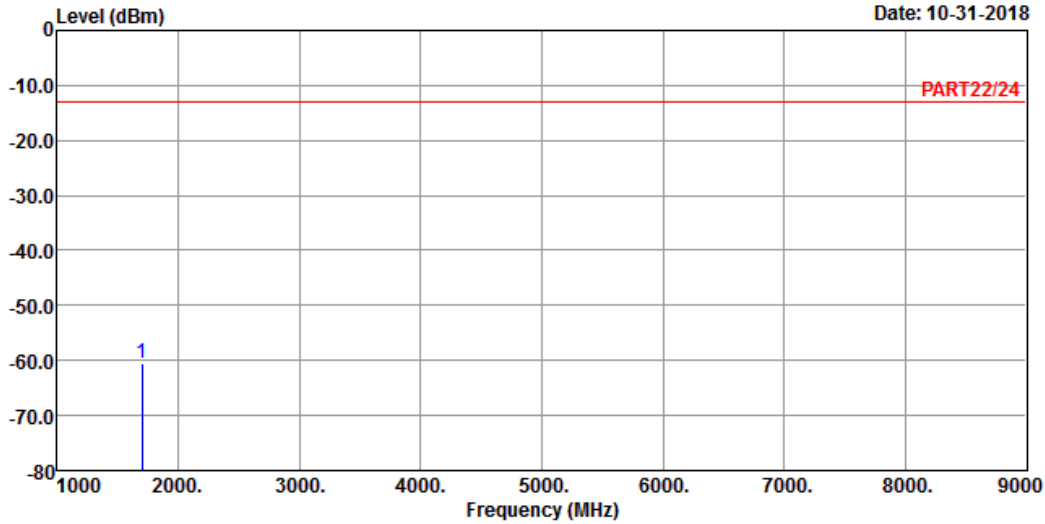


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 26 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 pp 1696.60	-60.56	-46.54	-13.00	-47.56	-14.02	Peak

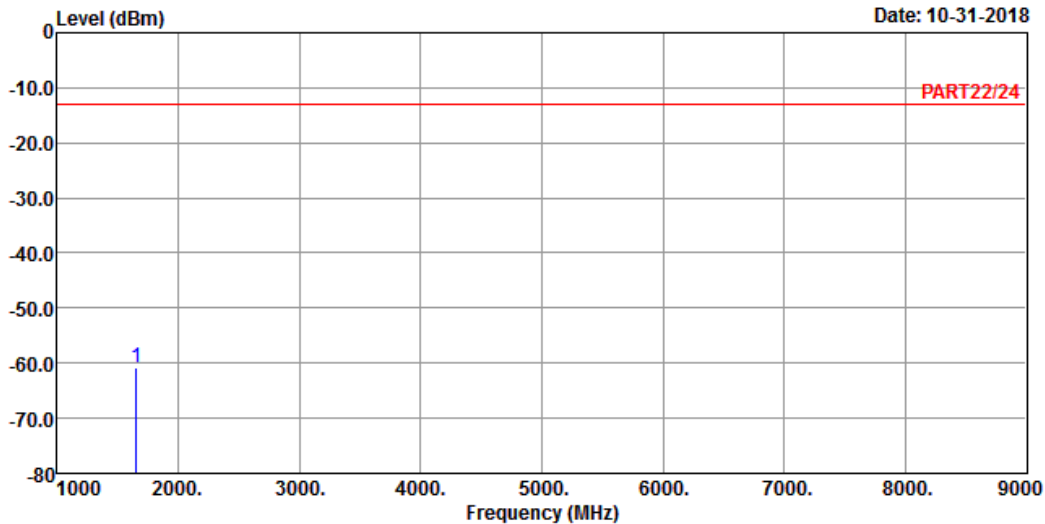
Channel Bandwidth: 5 MHz / QPSK
 Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 26 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 1653.00 -60.68 -46.91 -13.00 -47.68 -13.77 Peak

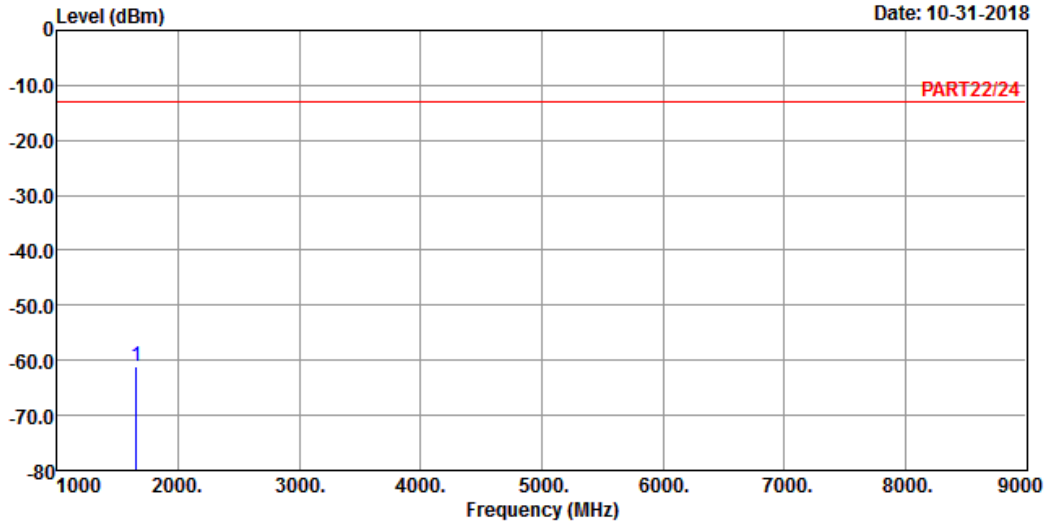


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 26 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 1653.00	-61.11	-47.34	-13.00	-48.11	-13.77	Peak

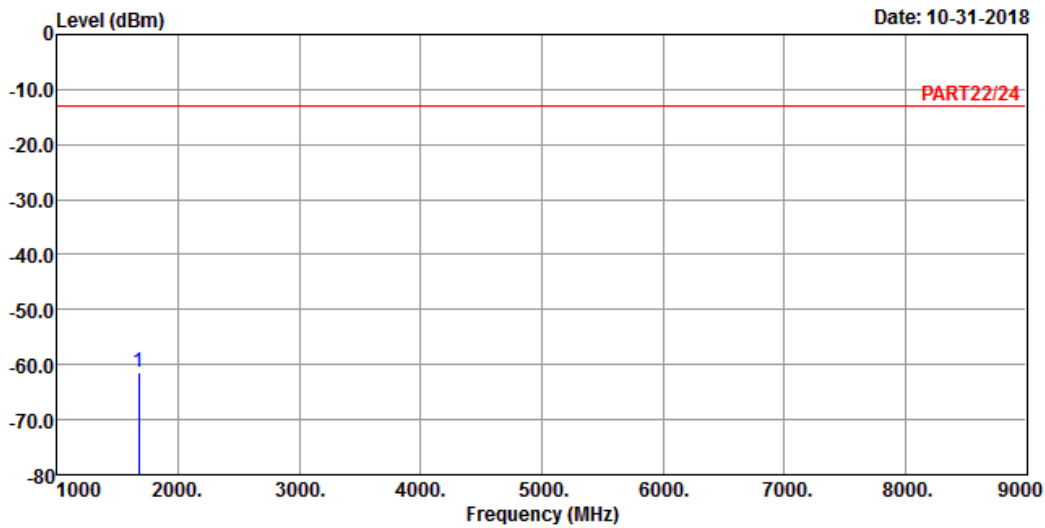
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 26 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 1673.00 -61.39 -47.49 -13.00 -48.39 -13.90 Peak

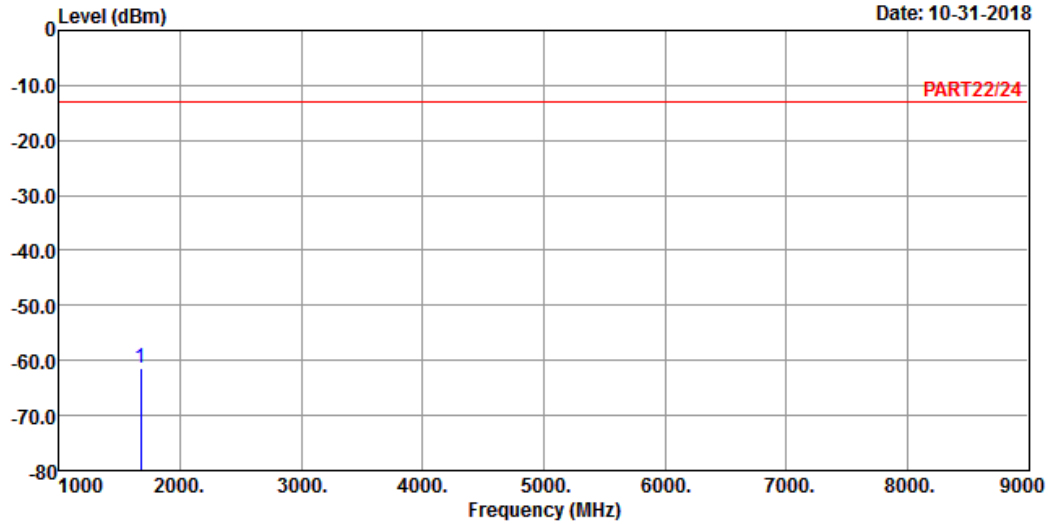


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 26 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 1673.00	-61.48	-47.58	-13.00	-48.48	-13.90	Peak

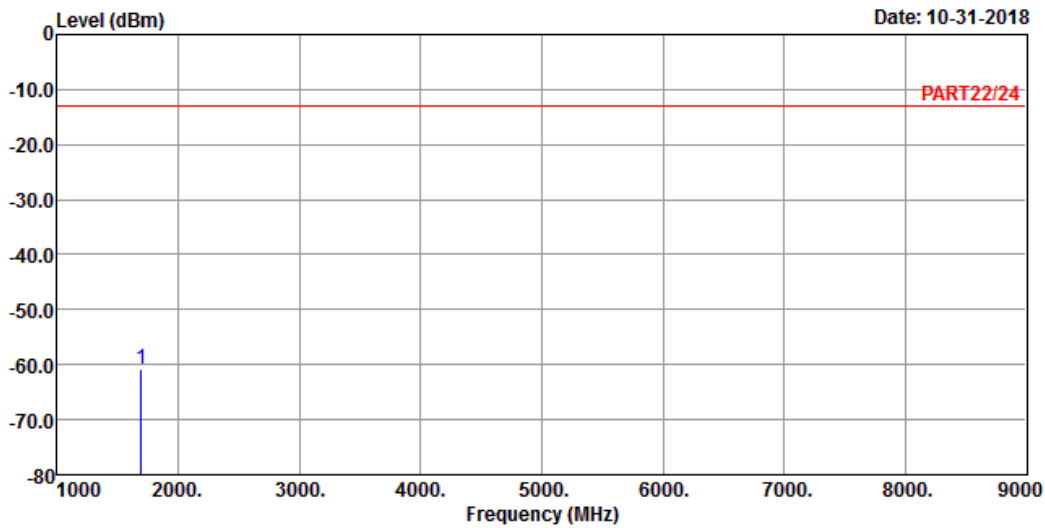
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 26 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 1693.00 -60.78 -46.76 -13.00 -47.78 -14.02 Peak

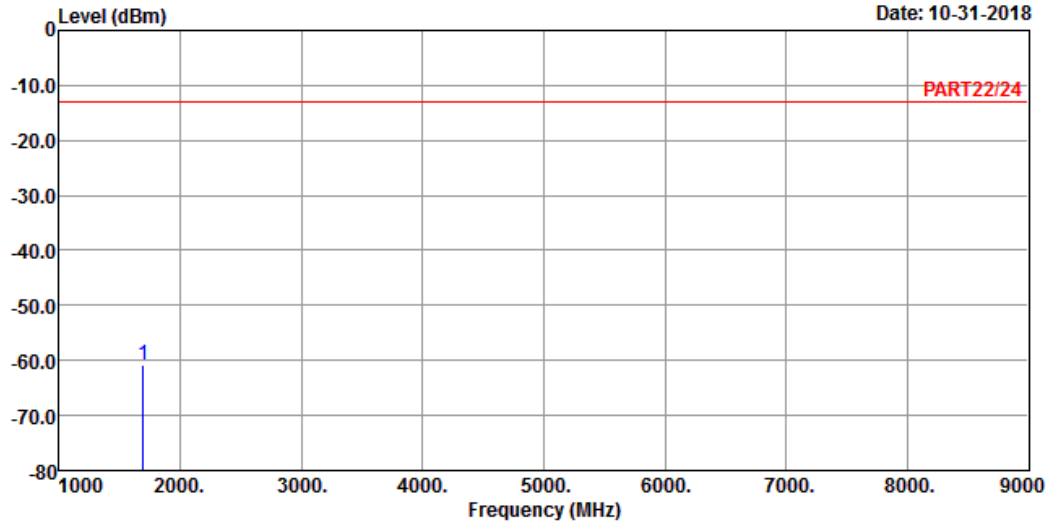


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-31-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 26 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 1693.00	-60.69	-46.67	-13.00	-47.69	-14.02	Peak

Channel Bandwidth: 15 MHz / QPSK
Low Channel

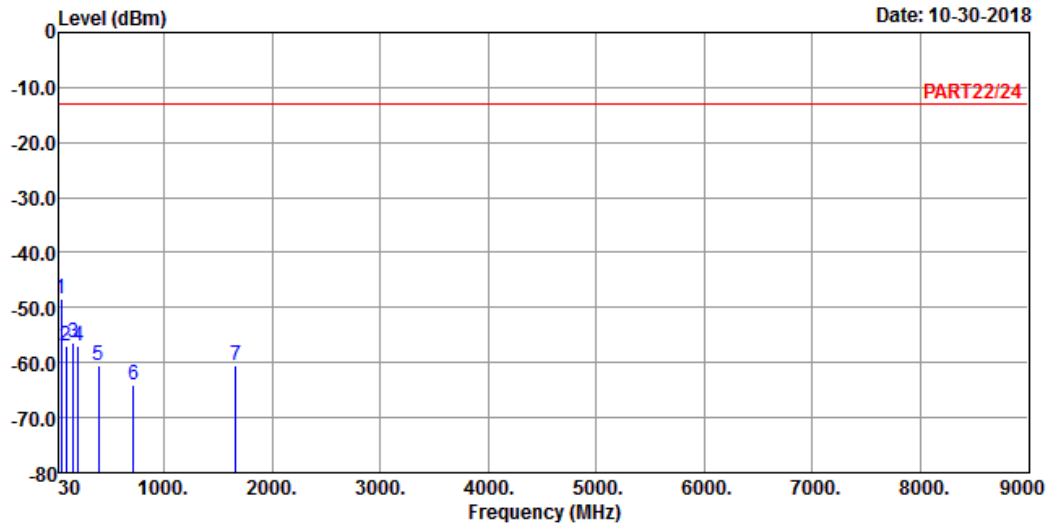


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 10-30-2018



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remak : LTE Band 26 QPSK_15M 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	44.55	-48.29	-46.30	-13.00	-35.29	-1.99	Peak
2	94.99	-57.06	-46.22	-13.00	-44.06	-10.84	Peak
3	161.92	-56.34	-51.36	-13.00	-43.34	-4.98	Peak
4	201.69	-57.06	-49.12	-13.00	-44.06	-7.94	Peak
5	392.78	-60.60	-54.61	-13.00	-47.60	-5.99	Peak
6	719.67	-64.18	-64.46	-13.00	-51.18	0.28	Peak
7	1663.00	-60.61	-46.78	-13.00	-47.61	-13.83	Peak

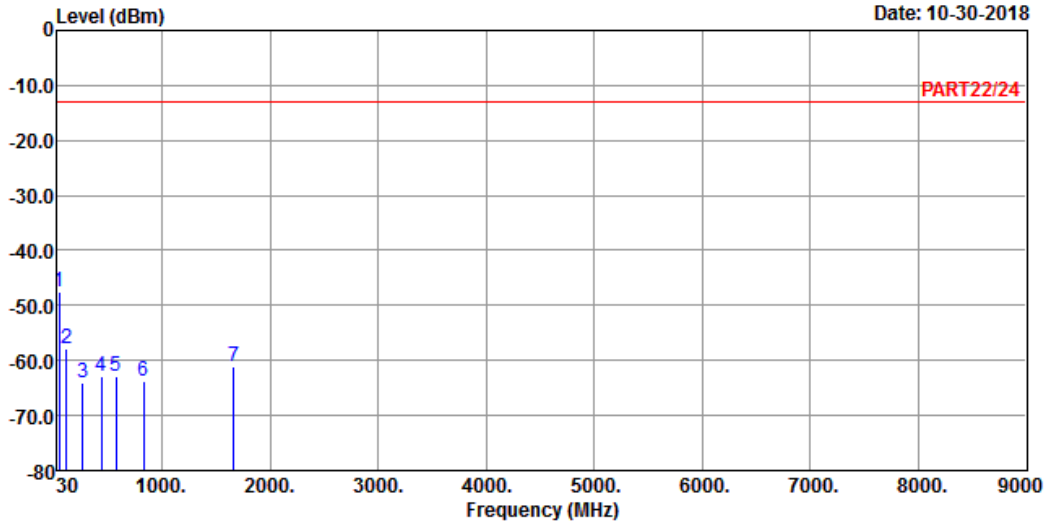


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 10-30-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 26 QPSK_15M Link_L-CH
 Tested by: Thomas Wei

	Read	Limit	Over				
Freq	Level	Level	Line	Limit	Factor	Remark	
MHz	dBm	dBm	dBm	dB	dB		
1 pp	43.58	-47.59	-46.12	-13.00	-34.59	-1.47	Peak
2	113.42	-57.94	-47.79	-13.00	-44.94	-10.15	Peak
3	264.74	-63.95	-57.66	-13.00	-50.95	-6.29	Peak
4	434.49	-62.98	-57.31	-13.00	-49.98	-5.67	Peak
5	576.11	-63.00	-61.24	-13.00	-50.00	-1.76	Peak
6	828.31	-63.66	-64.14	-13.00	-50.66	0.48	Peak
7	1663.00	-60.98	-47.15	-13.00	-47.98	-13.83	Peak

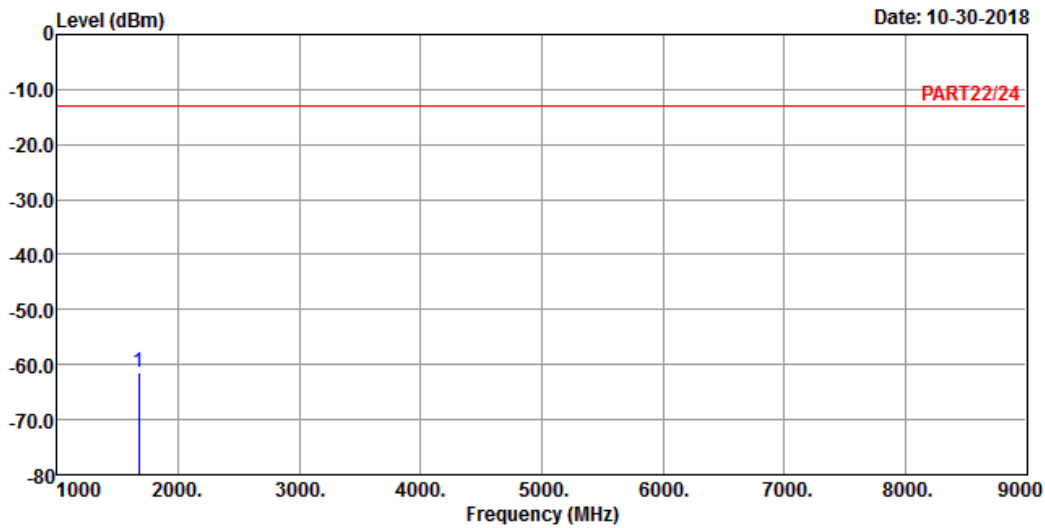
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 26 QPSK_15M 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 1673.00 -61.33 -47.43 -13.00 -48.33 -13.90 Peak

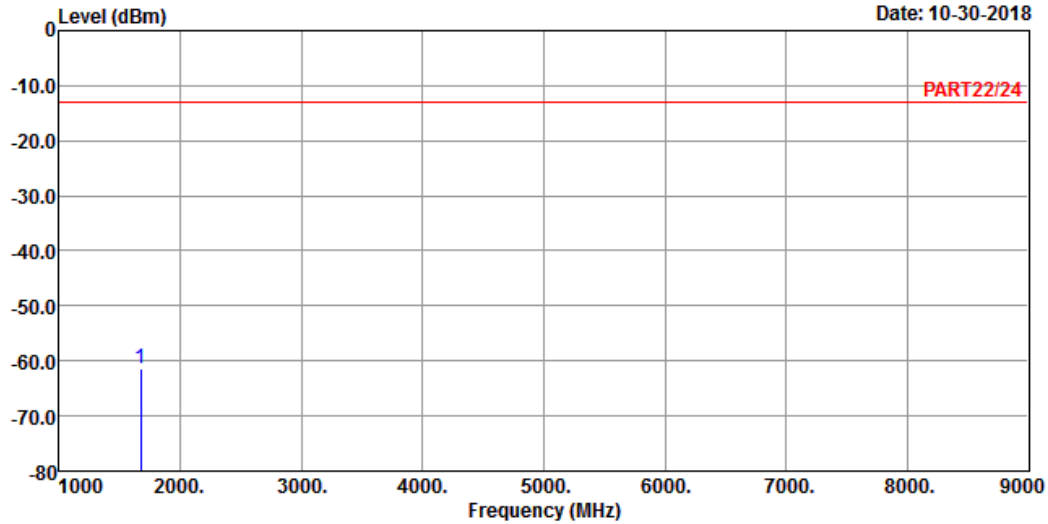


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-30-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 26 QPSK_15M 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 1673.00	-61.53	-47.63	-13.00	-48.53	-13.90	Peak

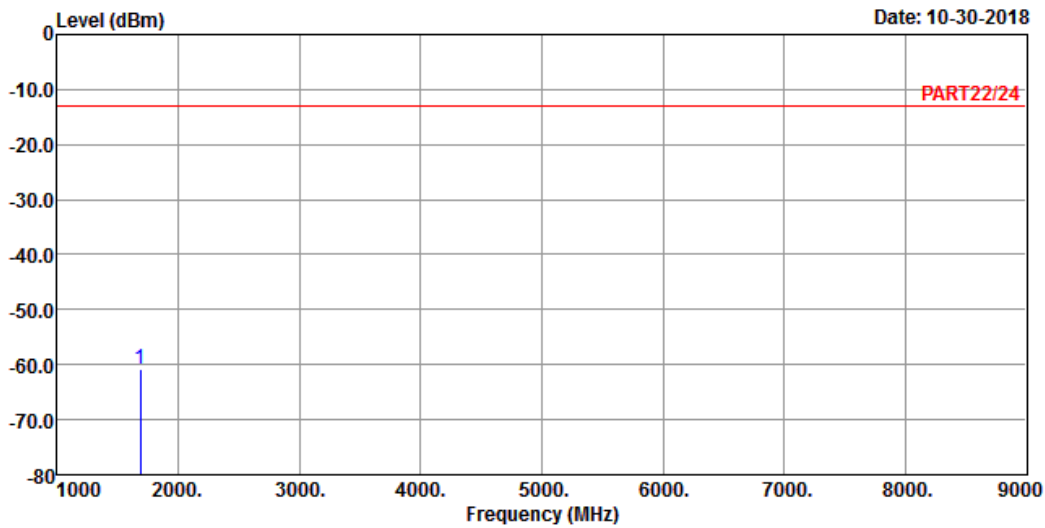
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 1



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 26 QPSK_15M 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 1683.00 -60.84 -46.88 -13.00 -47.84 -13.96 Peak

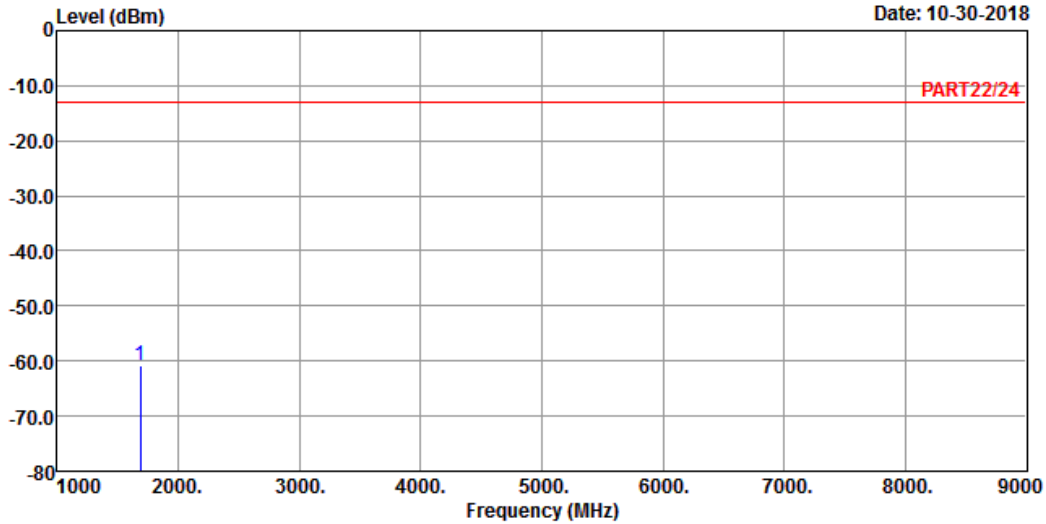


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 2

Date: 10-30-2018



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 26 QPSK_15M 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 1683.00	-60.77	-46.81	-13.00	-47.77	-13.96	Peak

5 Pictures of Test Arrangements

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

Appendix – Information on the Testing Laboratories

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

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

Linko EMC/RF Lab

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

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.

--- END ---