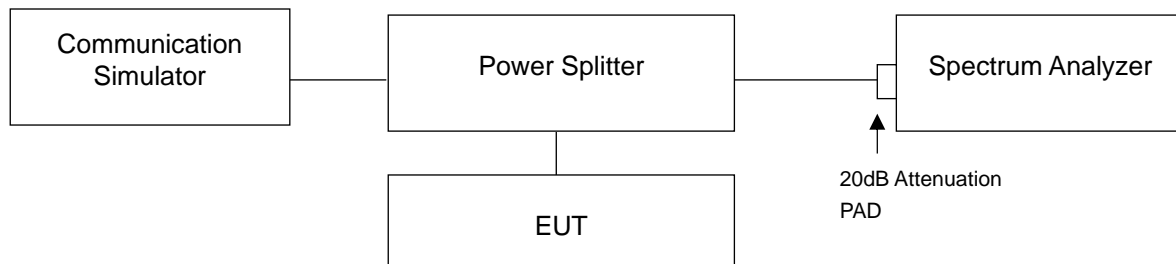


4.6 Peak to Average Ratio

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

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

4.6.4 Test Results

n2, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
370500	1852.5	4.04	3.79	5.56	5.63	8.46
376000	1880.0	4.01	3.77	5.68	5.70	8.32
381500	1907.5	4.10	3.69	5.40	5.49	8.16
n2, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
371000	1855.0	4.72	3.87	5.69	5.89	8.23
376000	1880.0	4.31	3.87	5.64	5.73	8.29
381000	1905.0	4.36	3.65	4.72	4.66	8.38
n2, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
371500	1857.5	4.68	3.95	5.55	5.72	8.71
376000	1880.0	4.29	3.64	5.26	5.46	8.75
380500	1902.5	4.25	3.47	4.40	4.35	8.46
n2, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
372000	1860.0	4.73	3.74	5.54	5.67	8.73
376000	1880.0	4.35	3.55	5.40	5.35	8.62
380000	1900.0	4.67	3.47	5.08	5.13	8.79

Spectrum Plot of Worst Value

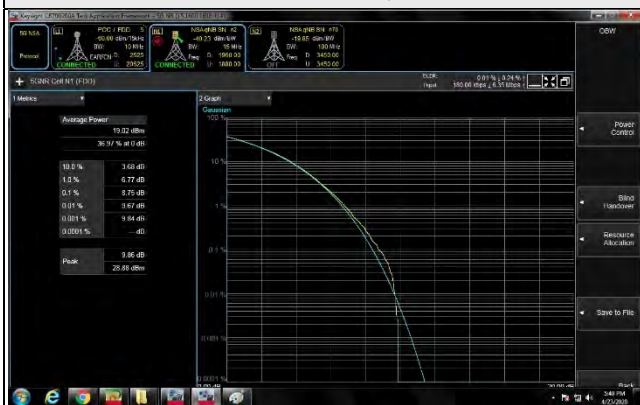
5MHz / 256QAM



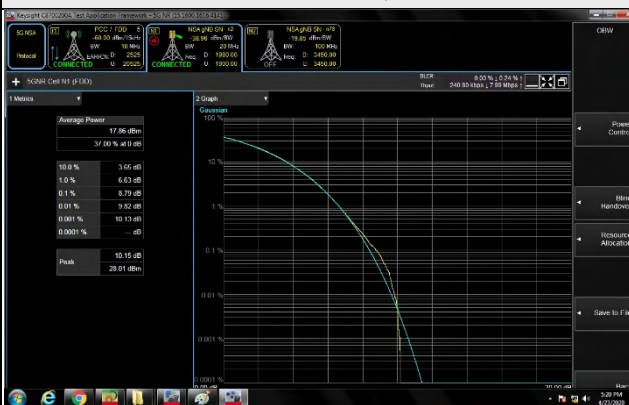
10MHz / 256QAM



15MHz / 256QAM



20MHz / 256QAM



LTE Band 5

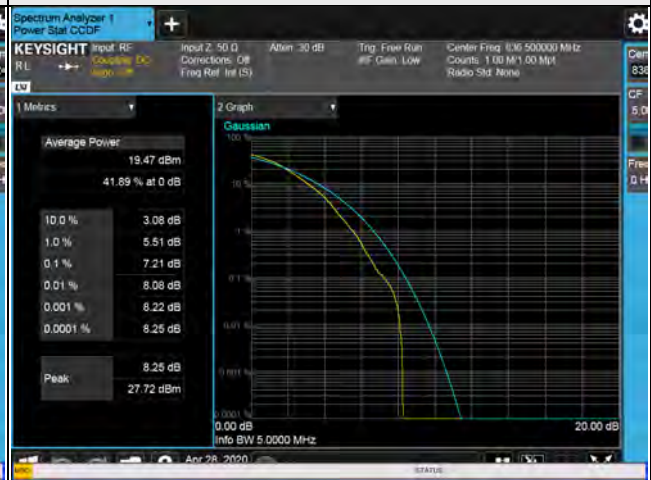
LTE Band 5, Channel Bandwidth 1.4MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
20407	824.7	7.59
20525	836.5	7.23
20643	848.3	7.07
LTE Band 5, Channel Bandwidth 3MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
20415	825.5	6.75
20525	836.5	7.21
20635	847.5	7.05
LTE Band 5, Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
20425	826.5	7.50
20525	836.5	7.23
20625	846.5	7.35
LTE Band 5, Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
20450	829.0	7.62
20525	836.5	7.45
20600	844.0	6.94

Spectrum Plot of Worst Value

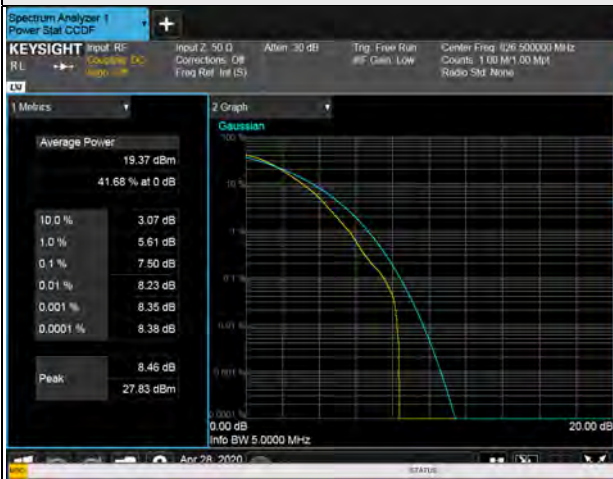
1.4MHz / 256QAM



3MHz / 256QAM



5MHz / 256QAM



10MHz / 256QAM

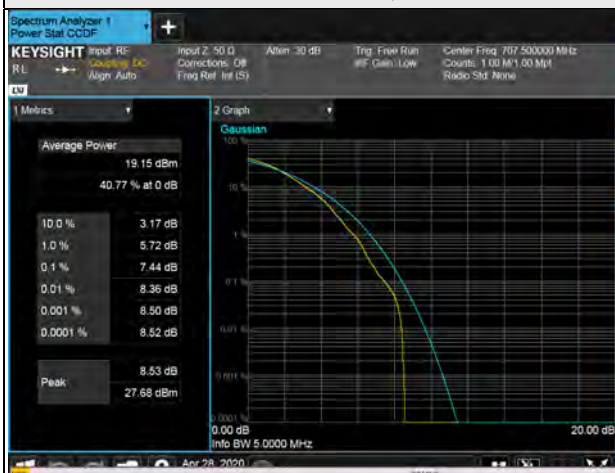


LTE Band 12

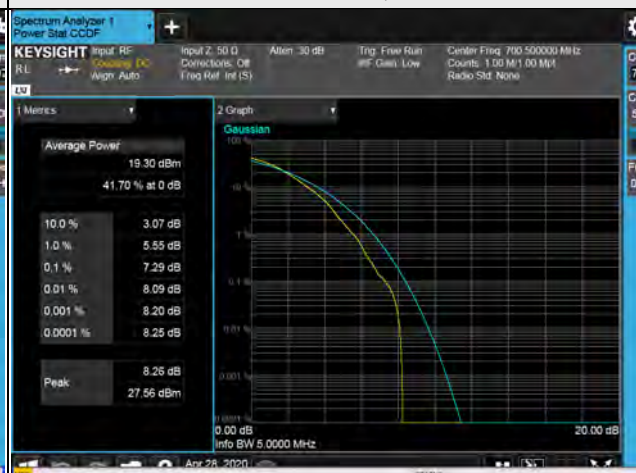
LTE Band 12, Channel Bandwidth 1.4MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
23017	699.7	6.98
23095	707.5	7.44
23173	715.3	6.79
LTE Band 12, Channel Bandwidth 3MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
23025	700.5	7.29
23095	707.5	6.90
23165	714.5	6.85
LTE Band 12, Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
23035	701.5	7.00
23095	707.5	6.88
23155	713.5	7.13
LTE Band 12, Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
23060	704.0	6.81
23095	707.5	7.04
23130	711.0	7.09

Spectrum Plot of Worst Value

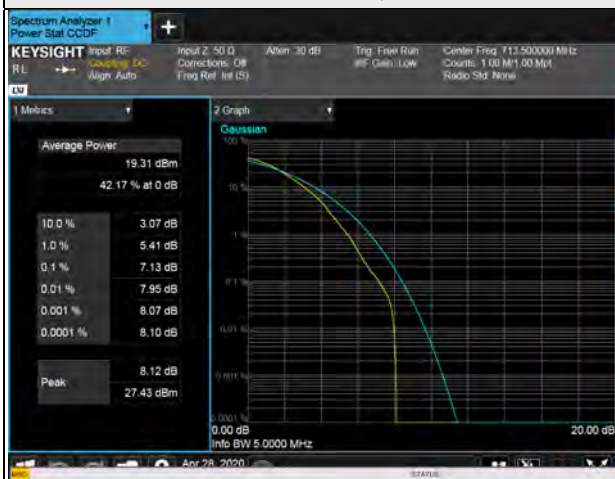
1.4MHz / 256QAM



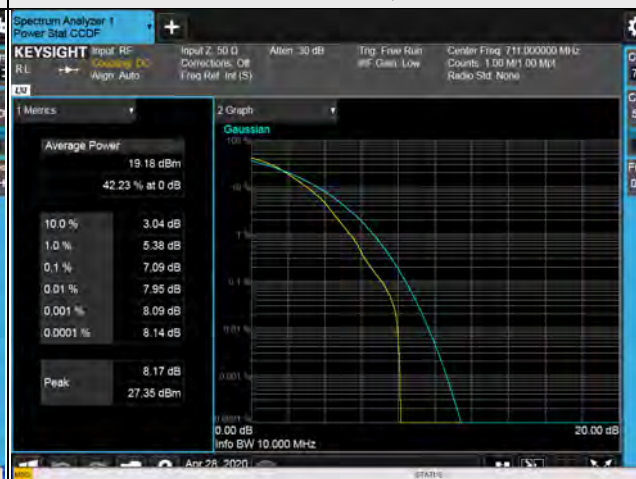
3MHz / 256QAM



5MHz / 256QAM

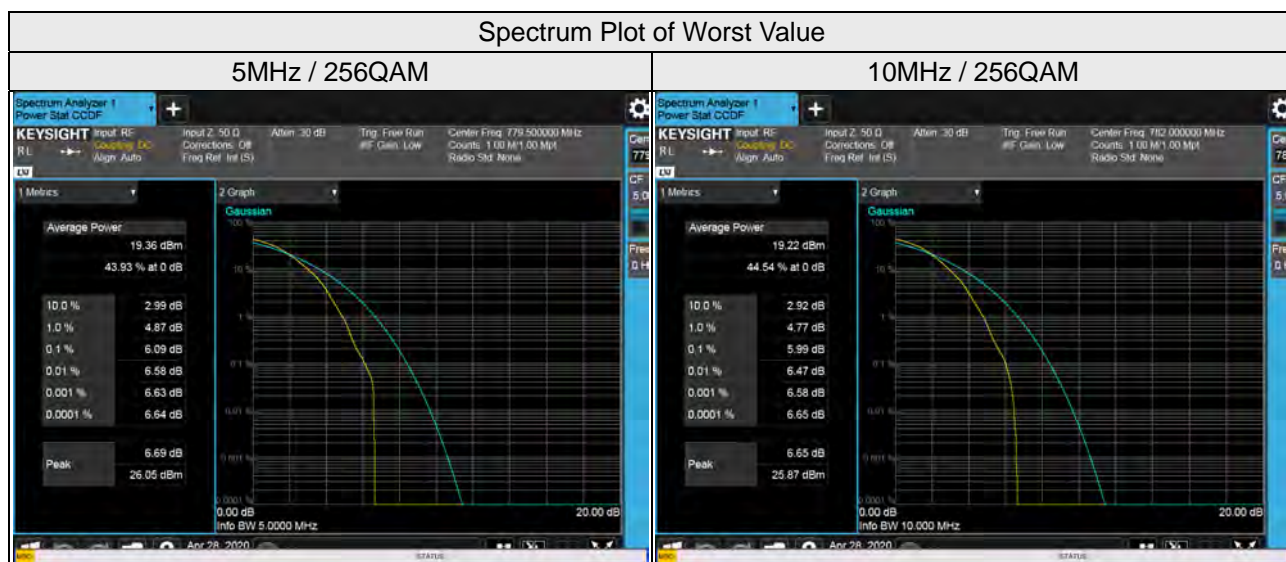


10MHz / 256QAM



LTE Band 13

LTE Band 13, Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
23205	779.5	6.09
23230	782.0	5.79
23255	784.5	5.97
LTE Band 13, Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
23230	782.0	5.99

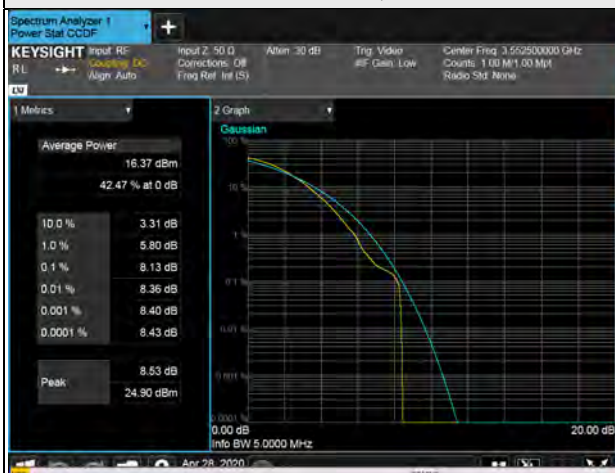


LTE Band 48

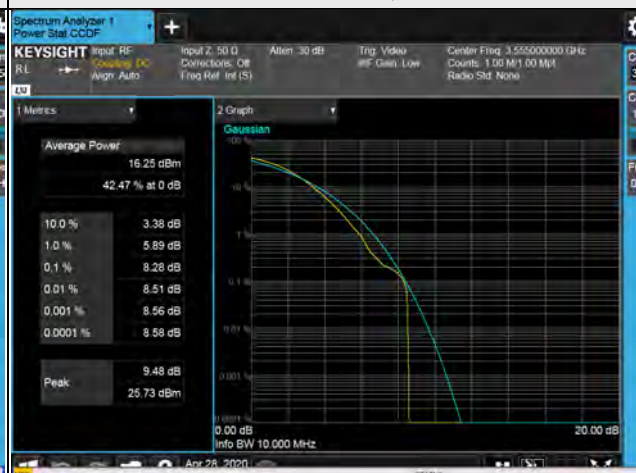
LTE Band 48, Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
55265	3552.5	8.13
55990	3625.0	7.89
56715	3697.5	7.72
LTE Band 48, Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
55290	3555.0	8.28
55990	3625.0	8.17
56690	3695.0	7.75
LTE Band 48, Channel Bandwidth 15MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
55315	3557.5	7.79
55990	3625.0	7.58
56665	3692.5	7.90
LTE Band 48, Channel Bandwidth 20MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
55340	3560.0	7.79
55990	3625.0	7.71
56640	3690.0	8.12

Spectrum Plot of Worst Value

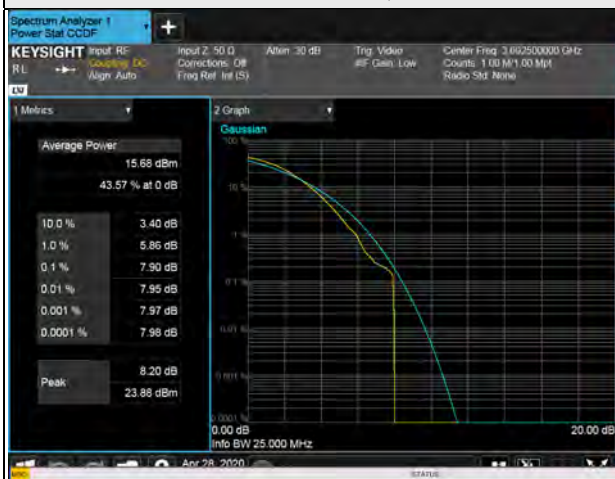
5MHz / 256QAM



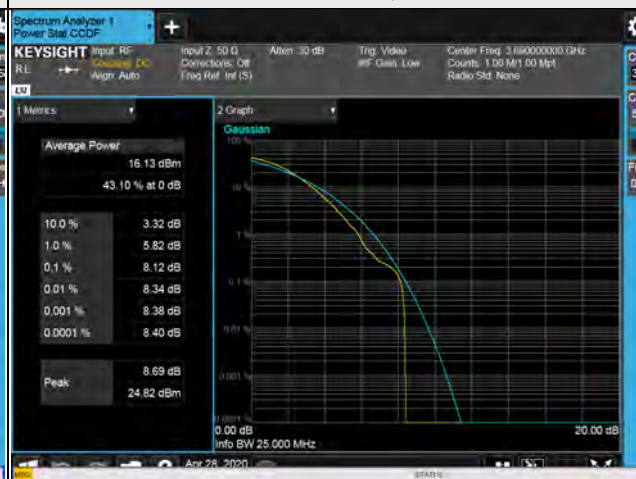
10MHz / 256QAM



15MHz / 256QAM



20MHz / 256QAM



LTE Band 66

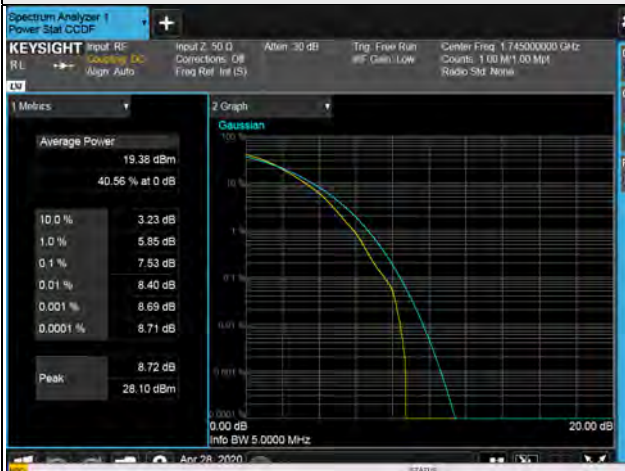
LTE Band 66, Channel Bandwidth 1.4MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
131979	1710.7	7.45
132322	1745.0	7.53
132665	1779.3	7.12
LTE Band 66, Channel Bandwidth 3MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
131987	1711.5	7.45
132322	1745.0	7.38
132657	1778.5	7.23
LTE Band 66, Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
131997	1712.5	7.54
132322	1745.0	6.55
132647	1777.5	6.48
LTE Band 66, Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
132022	1715.0	7.75
132322	1745.0	7.95
132622	1775.0	7.67
LTE Band 66, Channel Bandwidth 15MHz		
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
132047	1717.5	7.96
132322	1745.0	7.91
132597	1772.5	7.17

LTE Band 66, Channel Bandwidth 20MHz

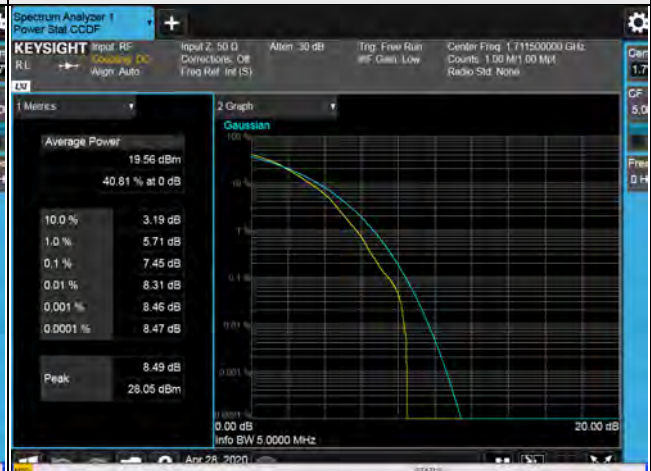
Channel	Frequency (MHz)	Peak To Average Ratio (dB)
		256QAM
132072	1720.0	7.58
132322	1745.0	7.61
132572	1770.0	7.20

Spectrum Plot of Worst Value

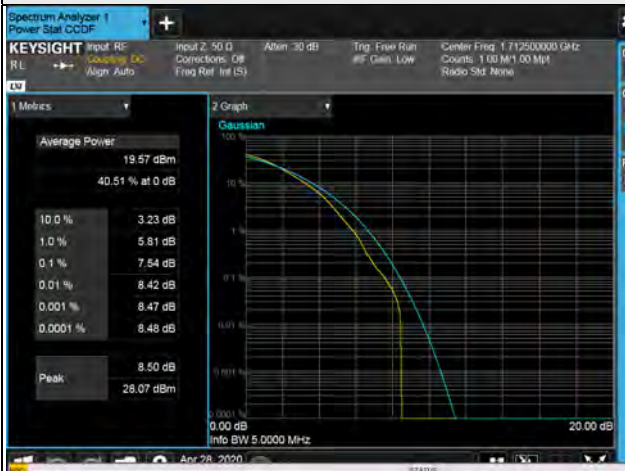
1.4MHz / 256QAM



3MHz / 256QAM



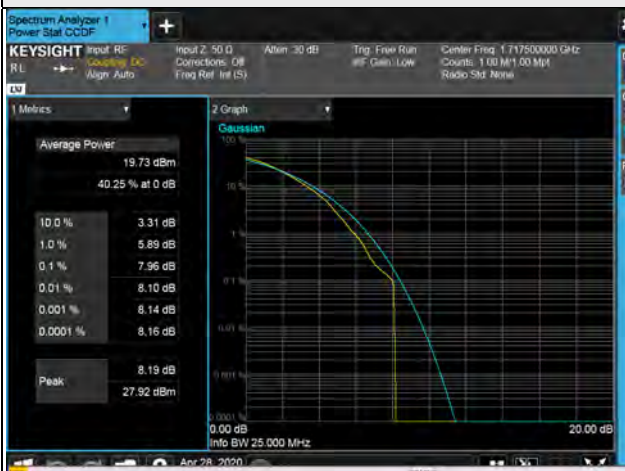
5MHz / 256QAM



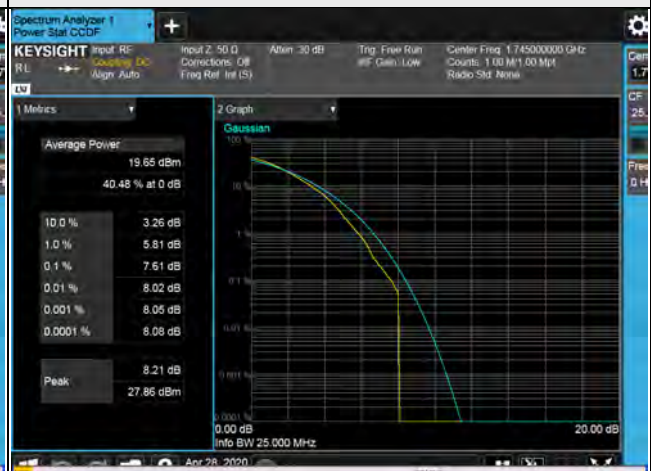
10MHz / 256QAM



15MHz / 256QAM



20MHz / 256QAM



4.7 Conducted Spurious Emissions

4.7.1 Limits of Conducted Spurious Emissions Measurement

For LTE Band 5

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

For LTE Band 12

According to FCC 27.53(g) for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater.

For LTE Band 13

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

According to FCC 27.53(f) 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

For LTE Band 30

In the FCC 27.53(a)(4)(iii), the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $70 + 10 \log(P)$ dB. The limit of emission is equal to -40 dBm.

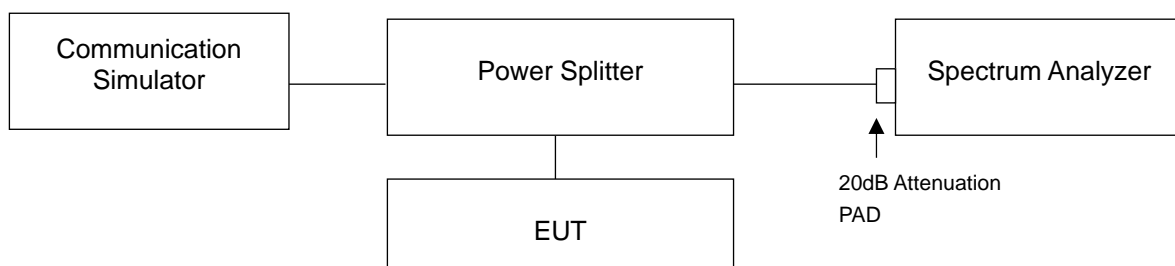
For LTE Band 48

Power of any emissions outside the Fundamental	Limit
Within 0-10MHz above the Assigned Channel	-13 dBm/MHz
Within 0-10MHz below the Assigned Channel	
Greater than 0-10MHz above the Assigned Channel	-25 dBm/MHz
Greater than 0-10MHz below the Assigned Channel	
Power of any emission below 3530MHz	-40 dBm/MHz
Power of any emission above 3720MHz	

For LTE Band 66

In the FCC 27.53(h), On any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm .

4.7.2 Test Setup



4.7.3 Test Procedure

- a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- b. Measuring frequency range is from 9kHz to 9GHz /10GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

For LTE Band 48

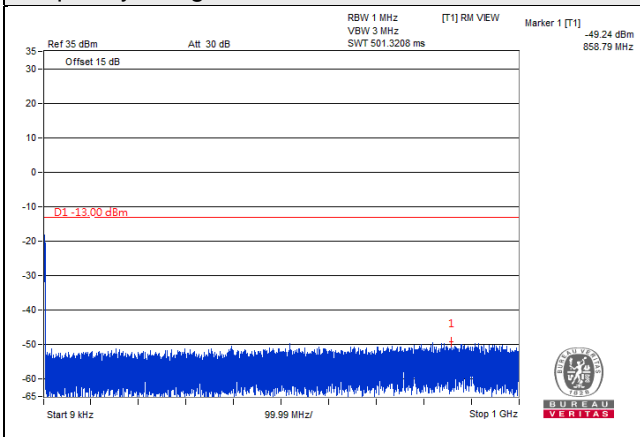
- a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- b. Measuring frequency range is from 9 kHz to 37 GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.
- c. Measuring frequency band edge, 20dB attenuation pad is connected with spectrum. 1% of the fundamental emission bandwidth is used for conducted emission measurement.
- d. For 5MHz channel BW mode, extend the 1% range from 1M to 2M above and below the channel edge and then reduce the limit further by $10 \log (1000/51)=13\text{dB}$ (i.e. total $-13 + -13=-26\text{dB}$) to compensate for the integration from 51k to 1M.

4.7.4 Test Results

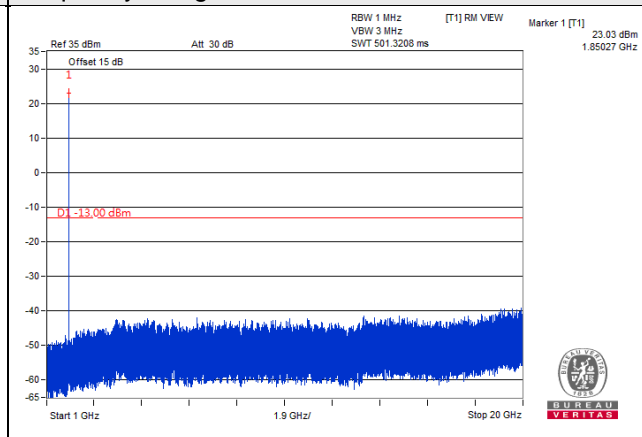
n2, Channel Bandwidth 5MHz

Channel 370500 (1852.50MHz)

Frequency Range : 9kHz~1GHz

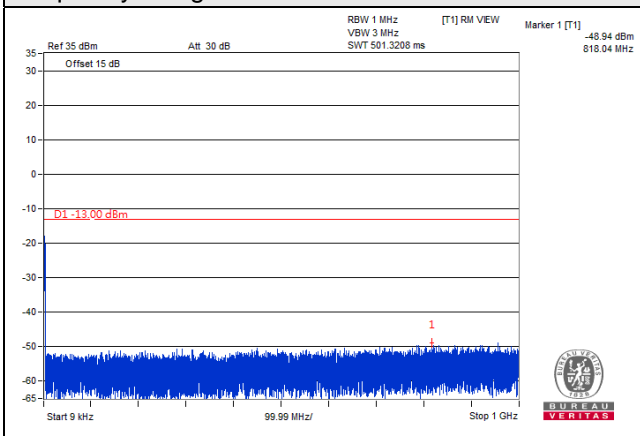


Frequency Range : 1GHz~20GHz

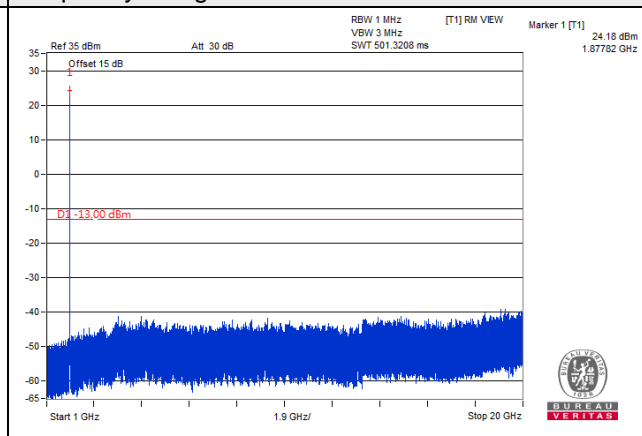


Channel 376000 (1880.00MHz)

Frequency Range : 9kHz~1GHz

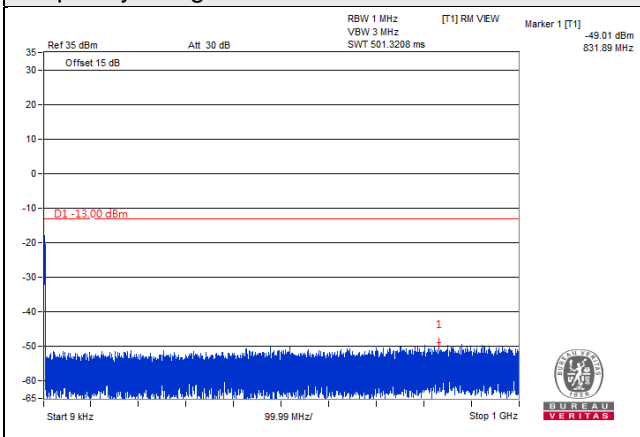


Frequency Range : 1GHz~20GHz

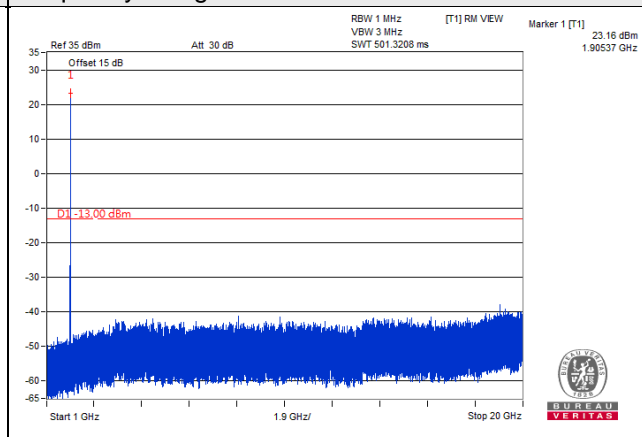


Channel 381500 (1907.50MHz)

Frequency Range : 9kHz~1GHz



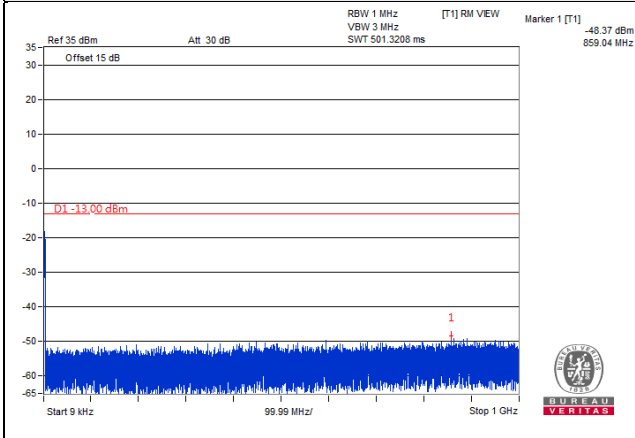
Frequency Range : 1GHz~20GHz



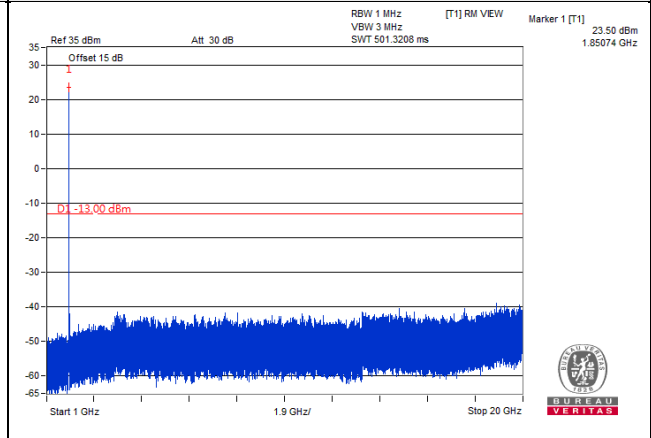
n2, Channel Bandwidth 10MHz

Channel 371000 (1855.00MHz)

Frequency Range : 9kHz~1GHz

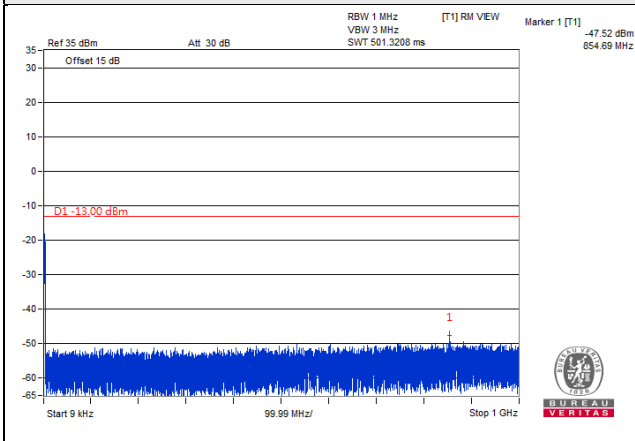


Frequency Range : 1GHz~20GHz

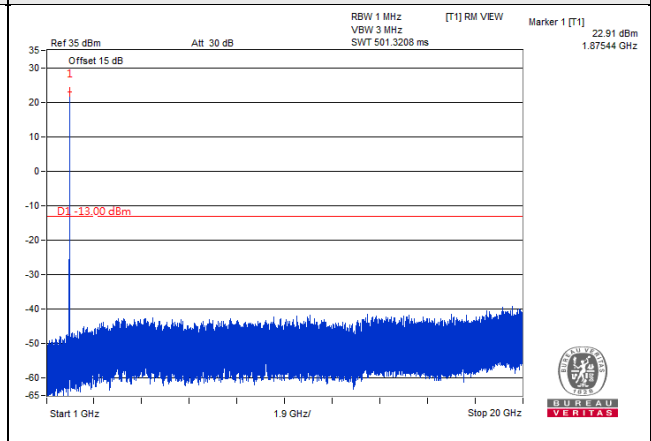


Channel 376000 (1880.00MHz)

Frequency Range : 9kHz~1GHz

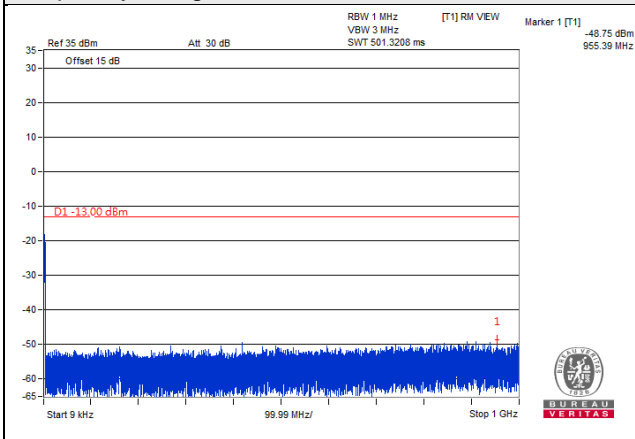


Frequency Range : 1GHz~20GHz

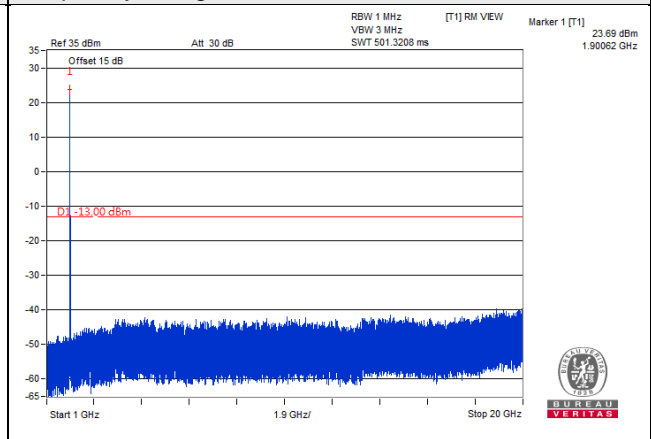


Channel 381000 (1905.00MHz)

Frequency Range : 9kHz~1GHz



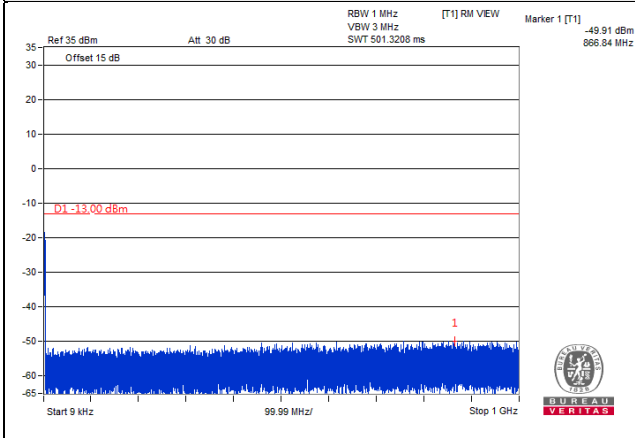
Frequency Range : 1GHz~20GHz



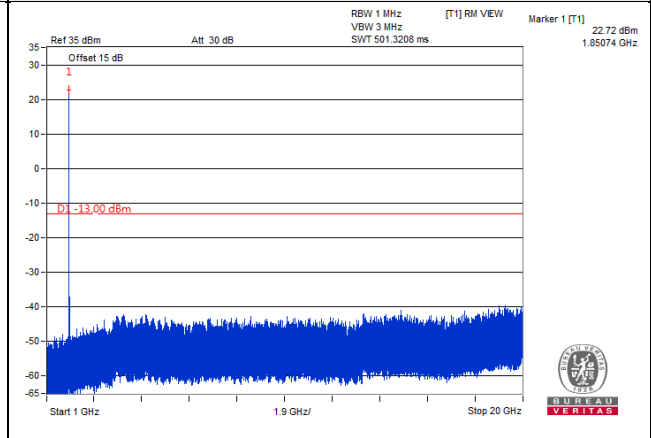
n2, Channel Bandwidth 15MHz

Channel 371500 (1857.50MHz)

Frequency Range : 9kHz~1GHz

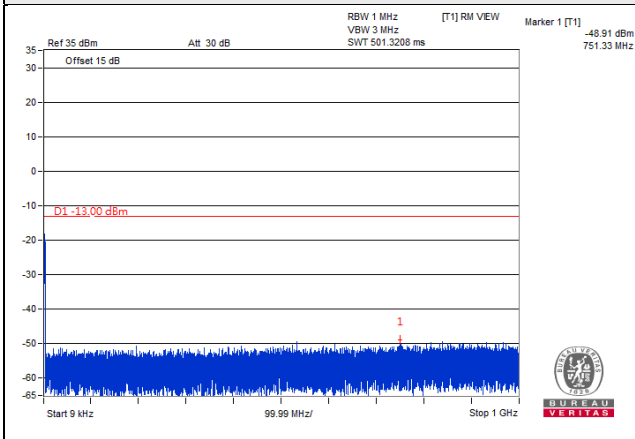


Frequency Range : 1GHz~20GHz

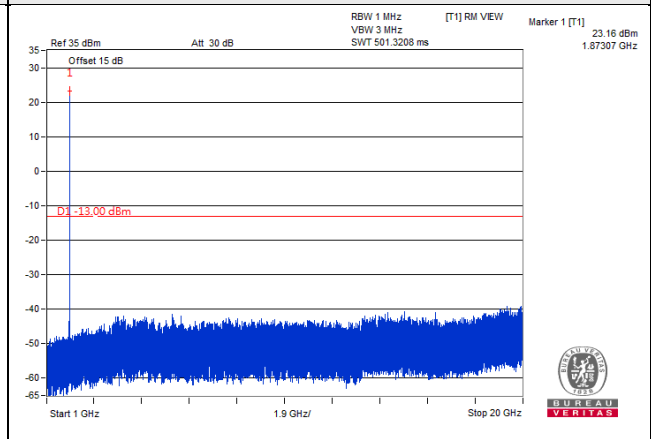


Channel 376000 (1880.00MHz)

Frequency Range : 9kHz~1GHz

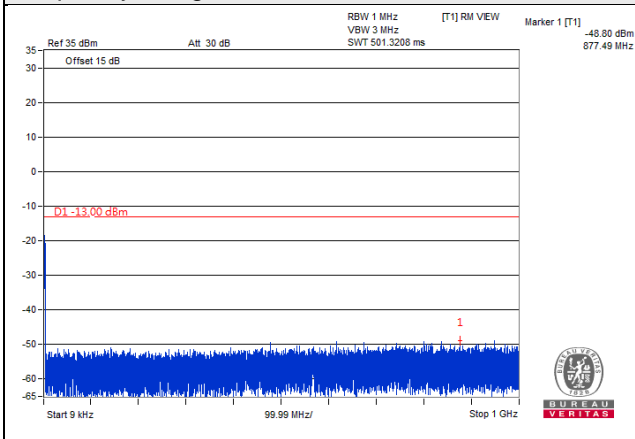


Frequency Range : 1GHz~20GHz

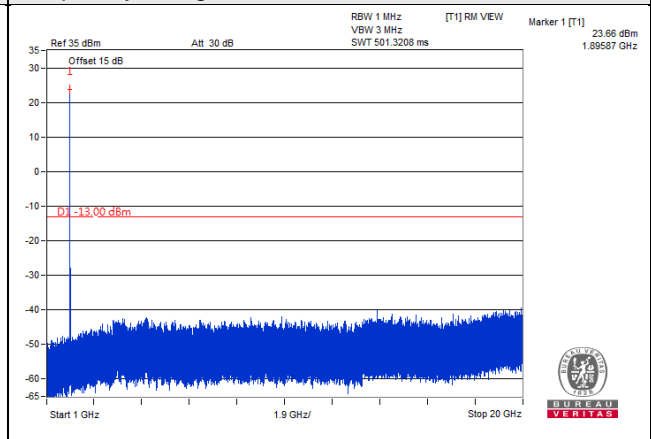


Channel 380500 (1902.50MHz)

Frequency Range : 9kHz~1GHz



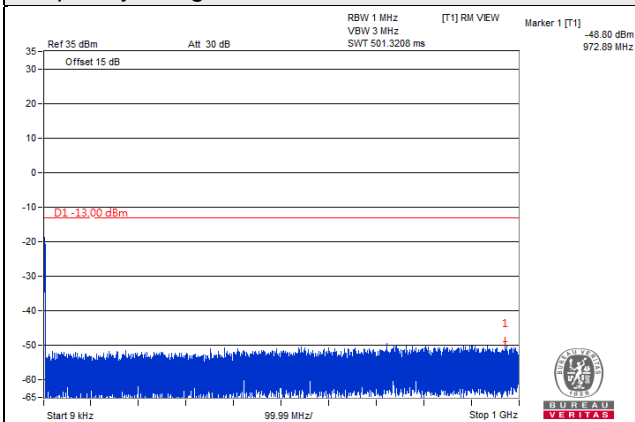
Frequency Range : 1GHz~20GHz



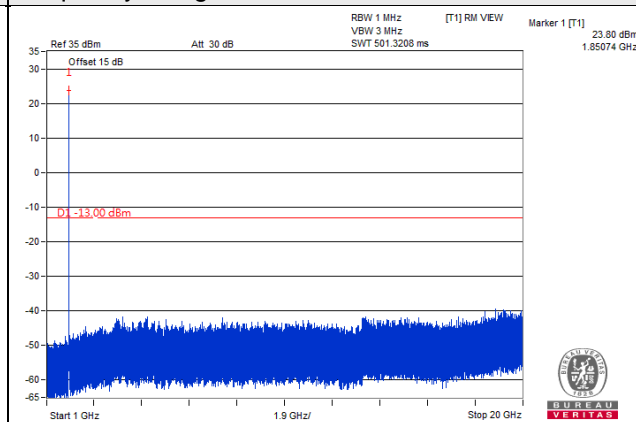
n2, Channel Bandwidth 20MHz

Channel 372000 (1860.00MHz)

Frequency Range : 9kHz~1GHz

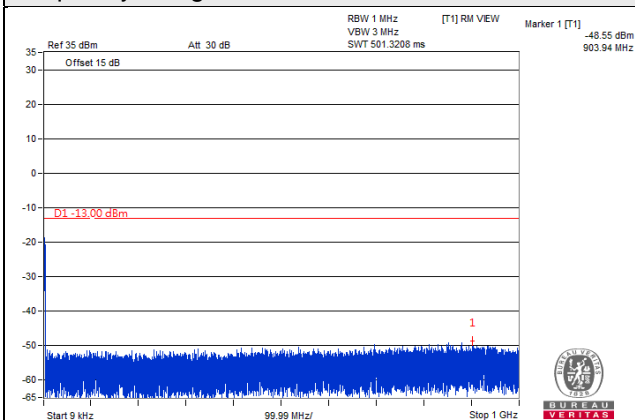


Frequency Range : 1GHz~20GHz

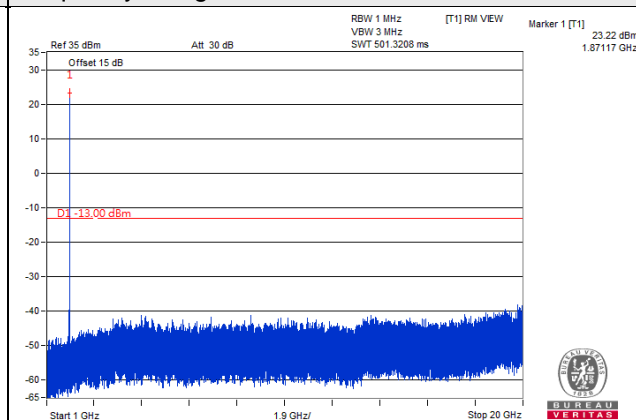


Channel 376000 (1880.00MHz)

Frequency Range : 9kHz~1GHz

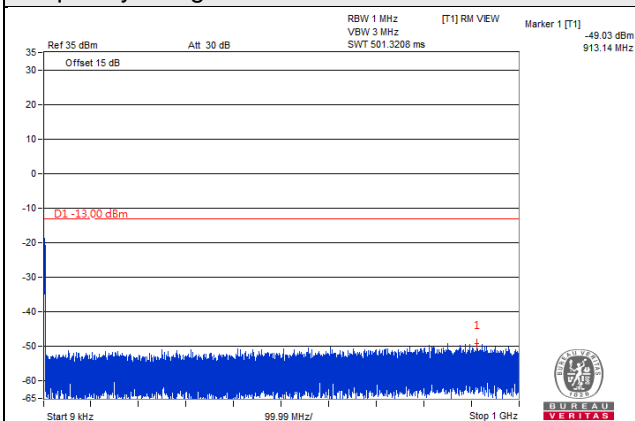


Frequency Range : 1GHz~20GHz

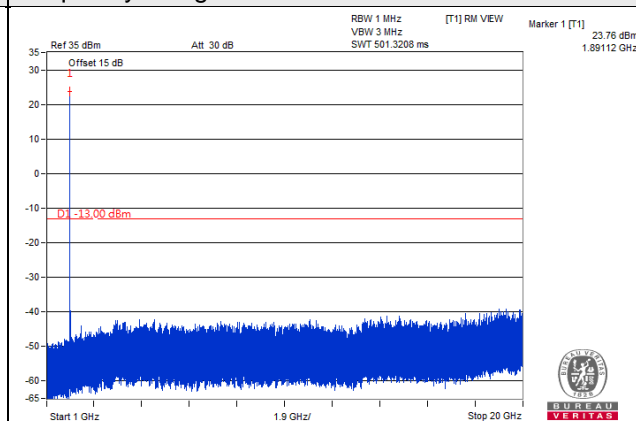


Channel 380000 (1900.00MHz)

Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~20GHz

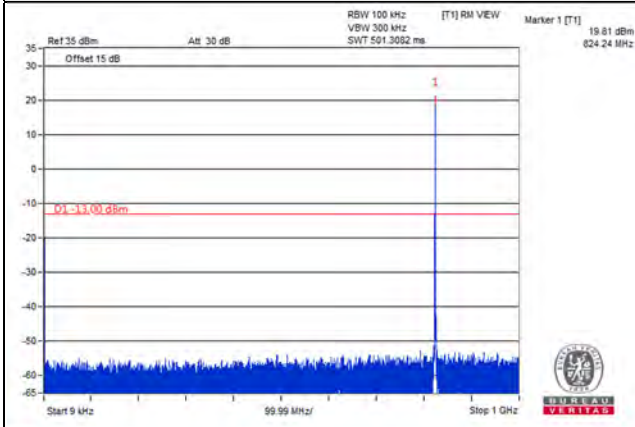


*The 9kHz signal over the limit is from Spectrum.

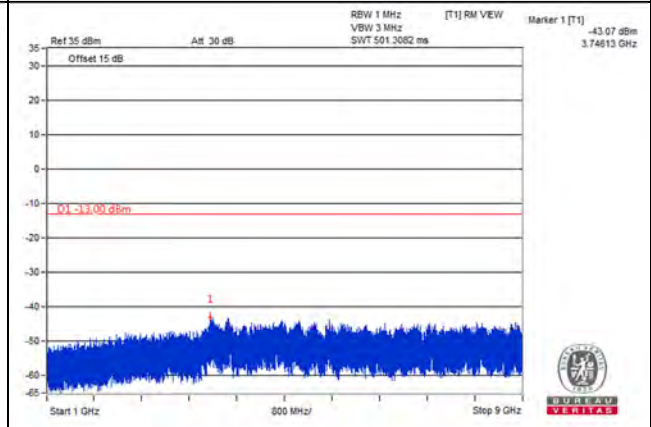
LTE Band 5, Channel Bandwidth 1.4MHz

Channel 20407 (824.7MHz)

Frequency Range : 9kHz~1GHz

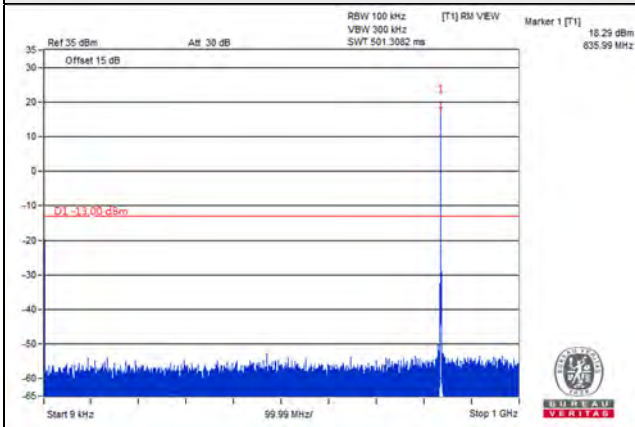


Frequency Range : 1GHz~9GHz

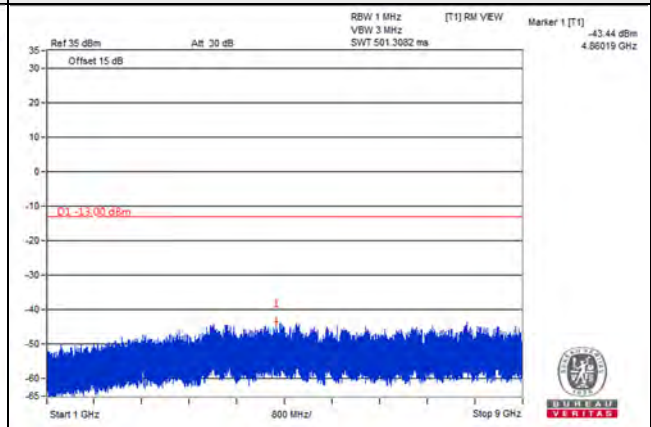


Channel 20525 (836.5MHz)

Frequency Range : 9kHz~1GHz

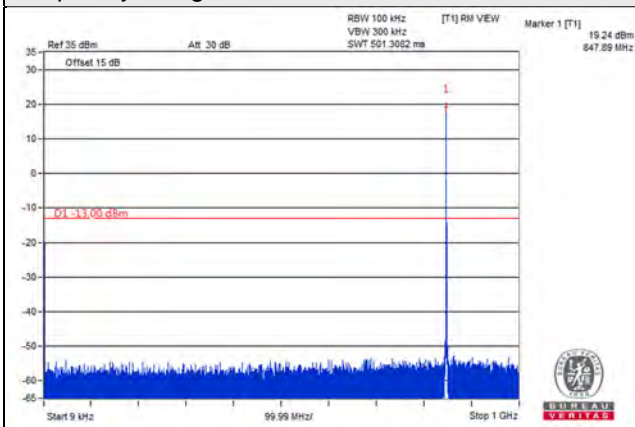


Frequency Range : 1GHz~9GHz

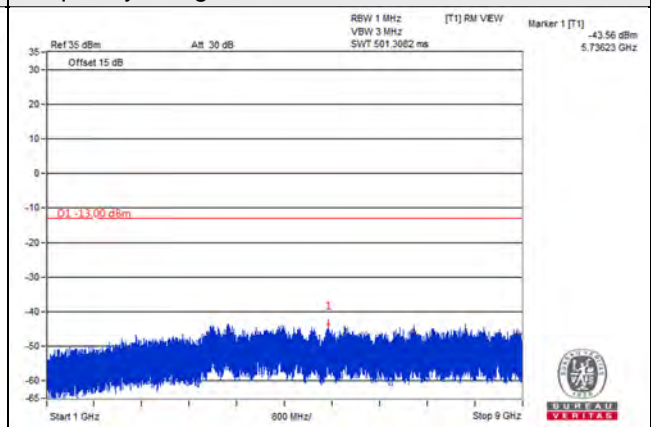


Channel 20643 (848.3MHz)

Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~9GHz

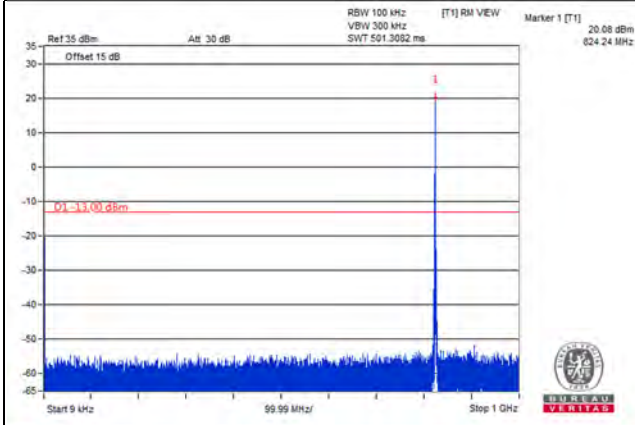


*The 9kHz signal over the limit is from Spectrum.

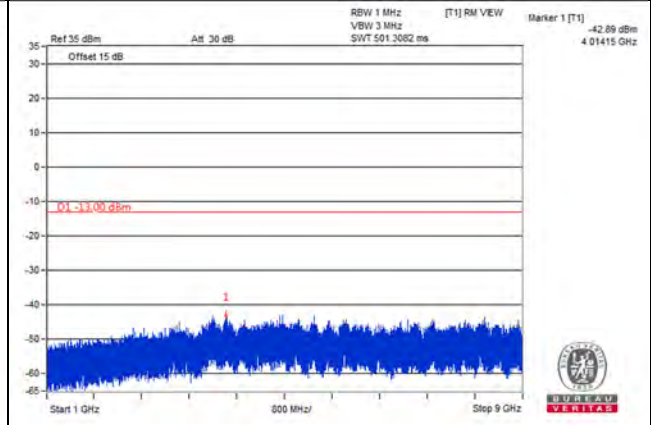
LTE Band 5, Channel Bandwidth 3MHz

Channel 20415 (825.5MHz)

Frequency Range : 9kHz~1GHz

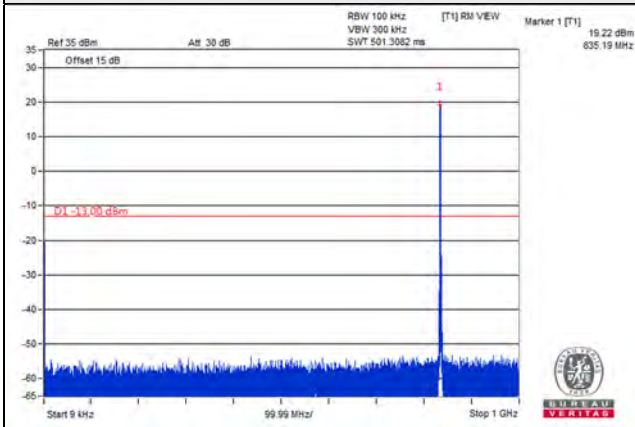


Frequency Range : 1GHz~9GHz

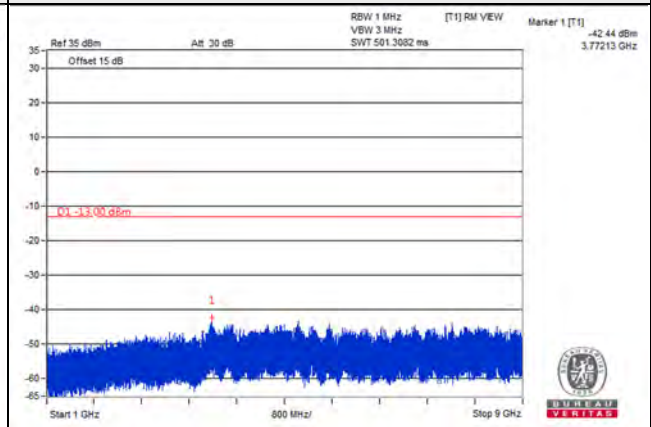


Channel 20525 (836.5MHz)

Frequency Range : 9kHz~1GHz

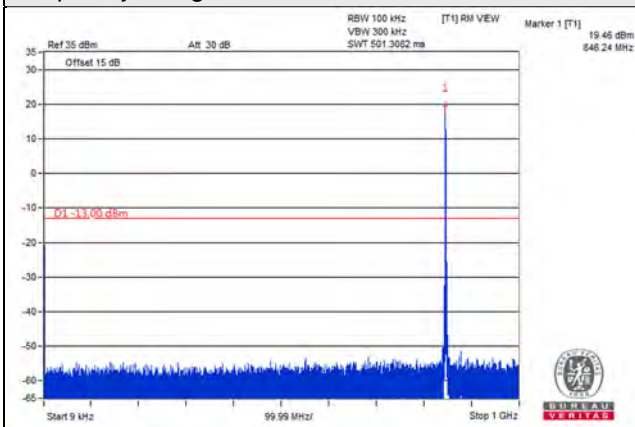


Frequency Range : 1GHz~9GHz

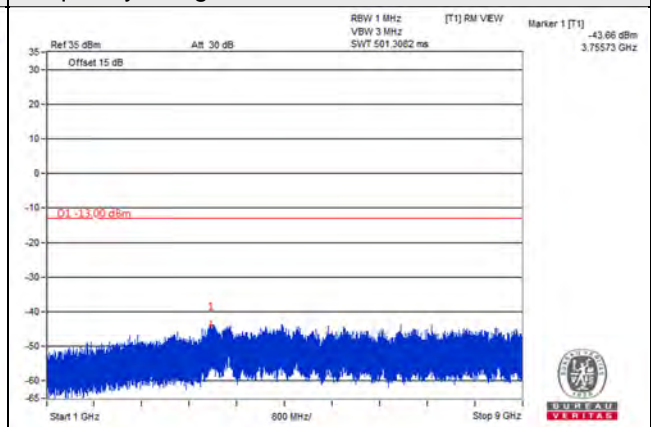


Channel 20635 (847.5MHz)

Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~9GHz

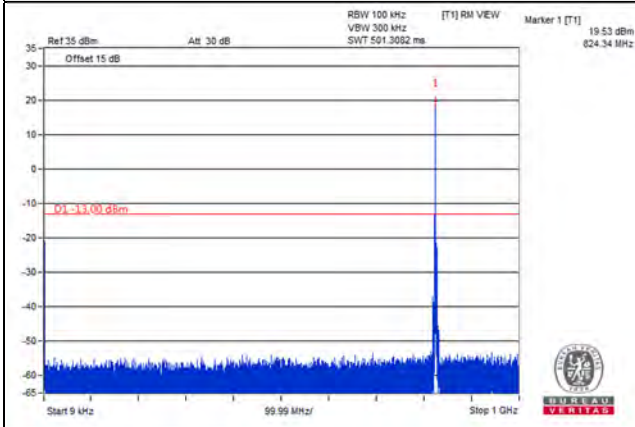


*The 9kHz signal over the limit is from Spectrum.

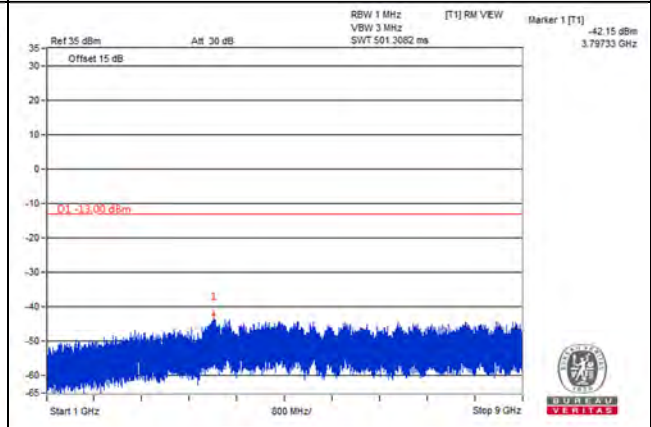
LTE Band 5, Channel Bandwidth 5MHz

Channel 20425 (826.5MHz)

Frequency Range : 9kHz~1GHz

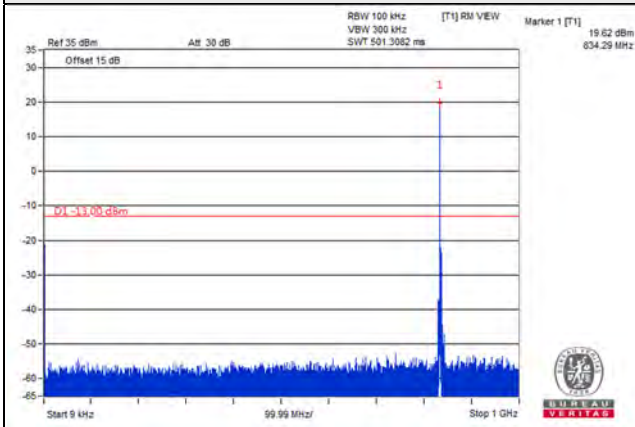


Frequency Range : 1GHz~9GHz

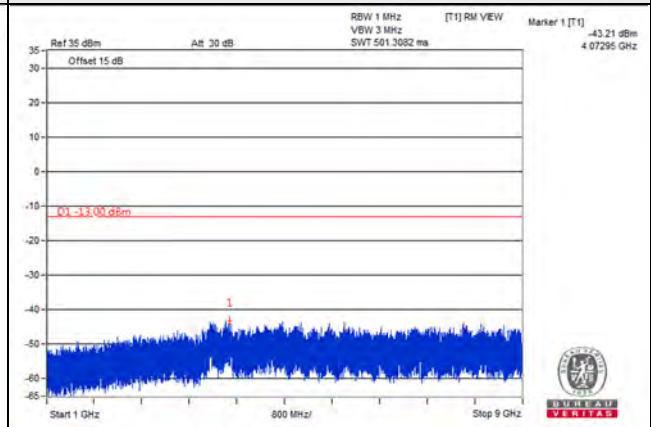


Channel 20525 (836.5MHz)

Frequency Range : 9kHz~1GHz

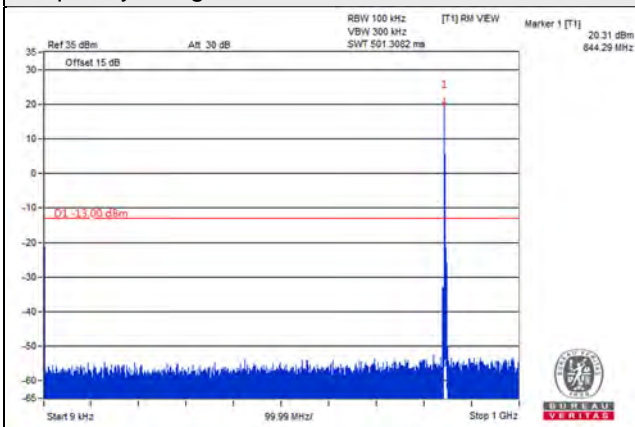


Frequency Range : 1GHz~9GHz

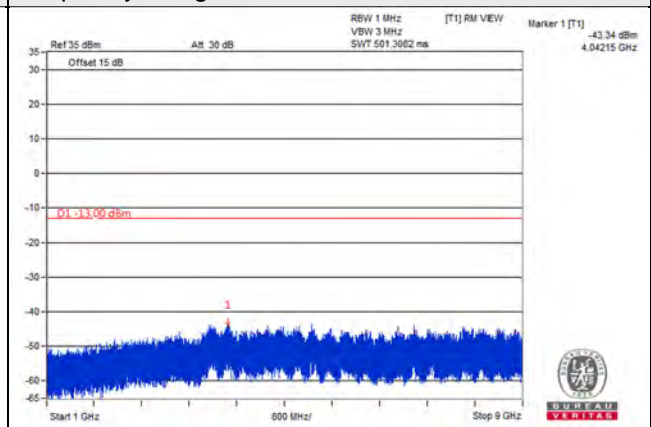


Channel 20625 (846.5MHz)

Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~9GHz

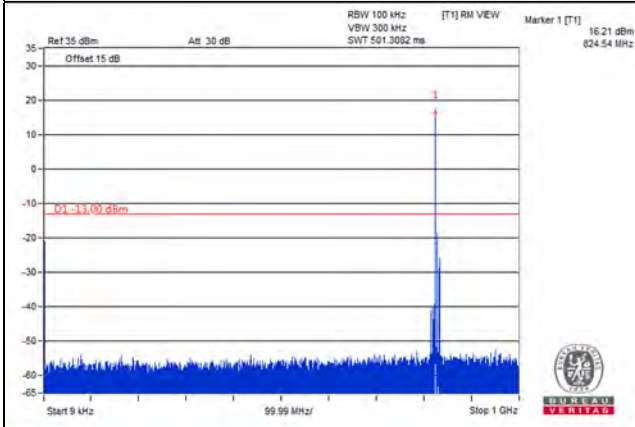


*The 9kHz signal over the limit is from Spectrum.

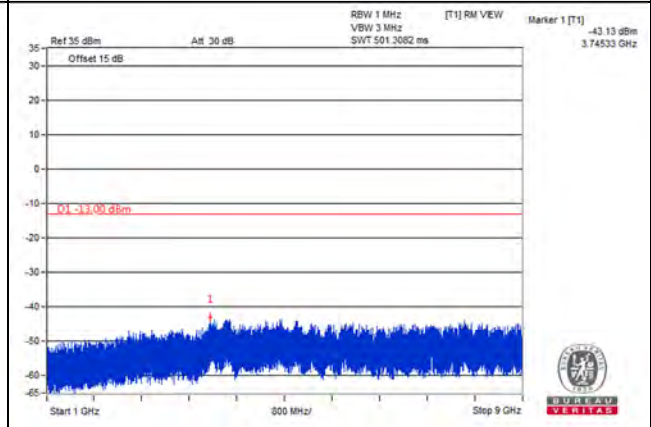
LTE Band 5, Channel Bandwidth 10MHz

Channel 20450 (829.0MHz)

Frequency Range : 9kHz~1GHz

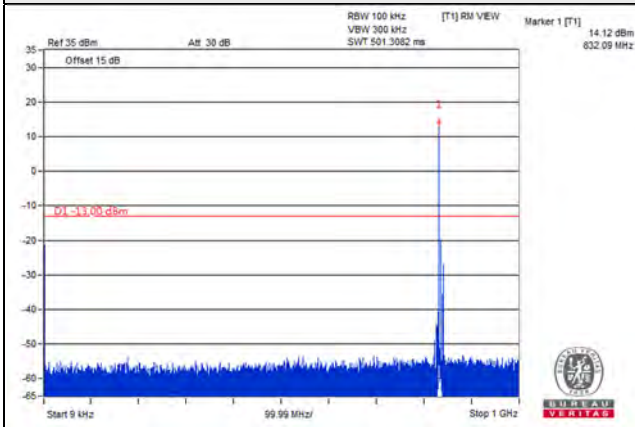


Frequency Range : 1GHz~9GHz

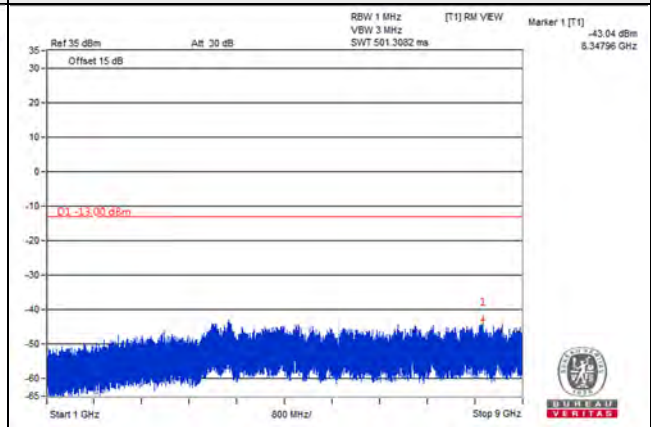


Channel 20525 (836.5MHz)

Frequency Range : 9kHz~1GHz

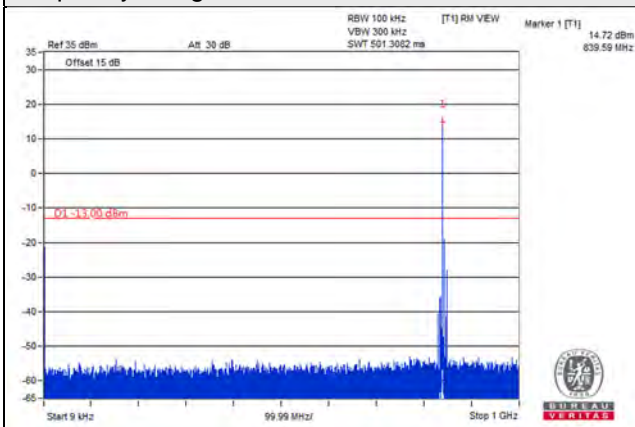


Frequency Range : 1GHz~9GHz

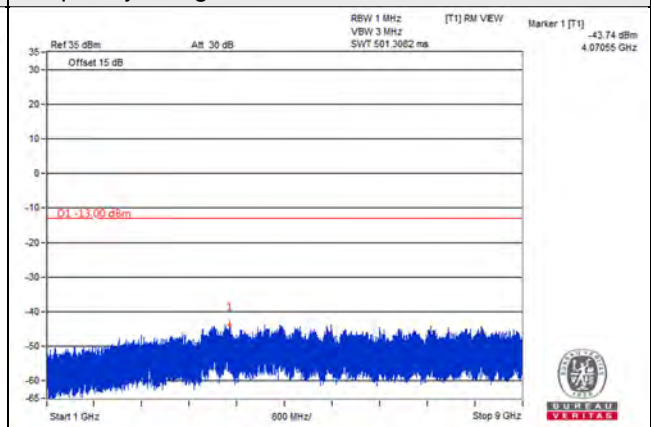


Channel 20600 (844.0MHz)

Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~9GHz



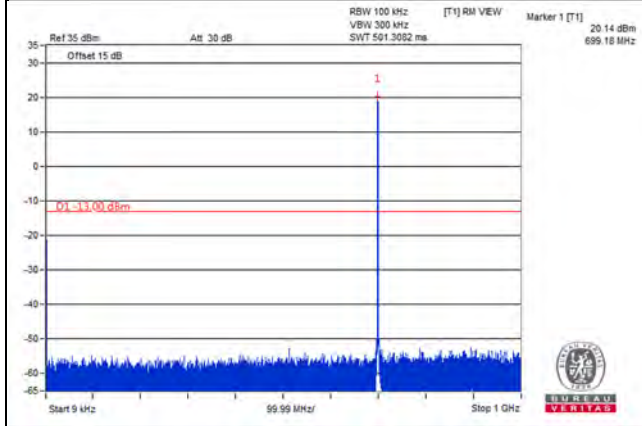
*The 9kHz signal over the limit is from Spectrum.

LTE Band 12

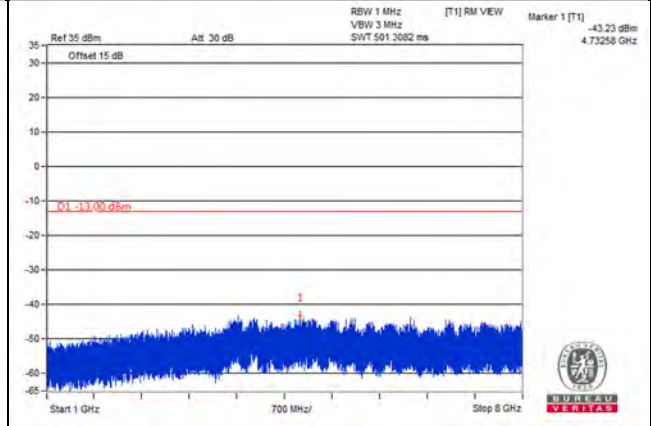
Channel Band width: 1.4MHz

Channel 23017 (699.7MHz)

Frequency Range : 9kHz~1GHz

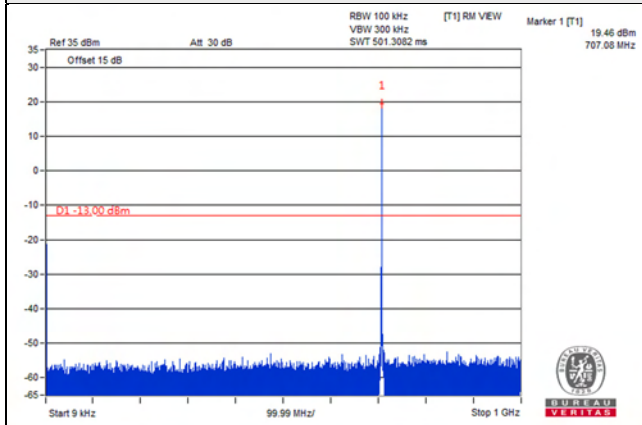


Frequency Range : 1GHz~8GHz

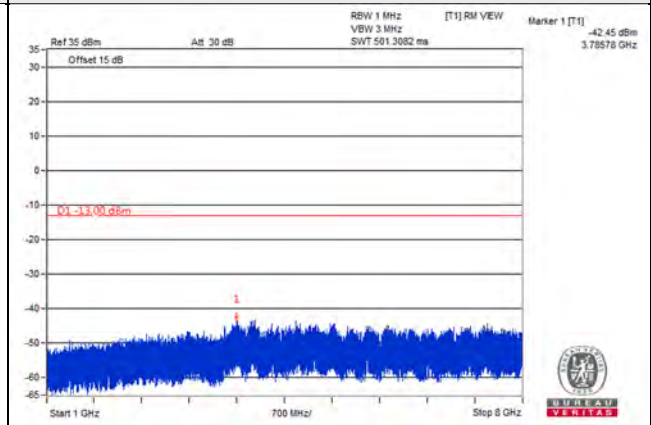


Channel 23095 (707.5MHz)

Frequency Range : 9kHz~1GHz

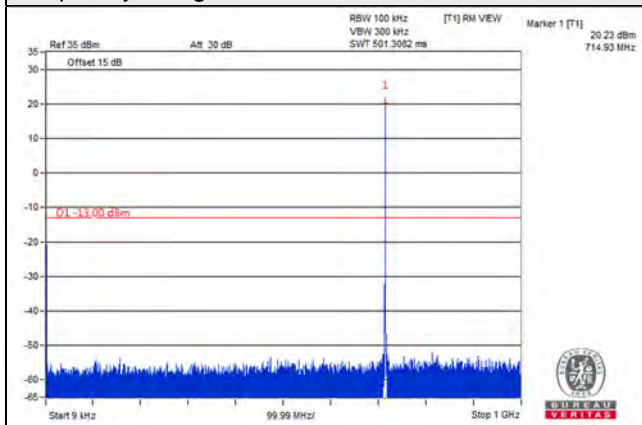


Frequency Range : 1GHz~8GHz

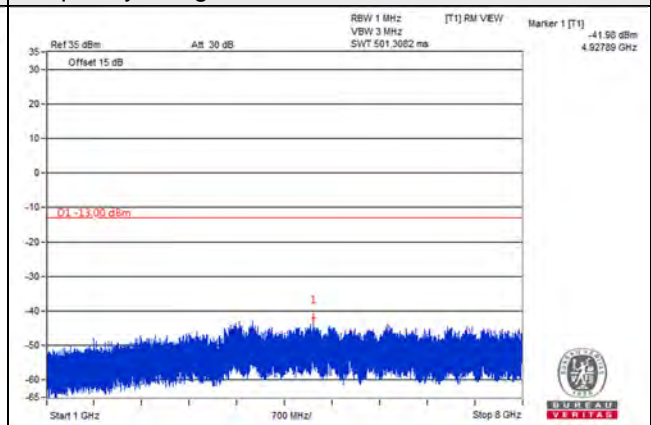


Channel 23173 (715.3MHz)

Frequency Range : 9kHz~1GHz



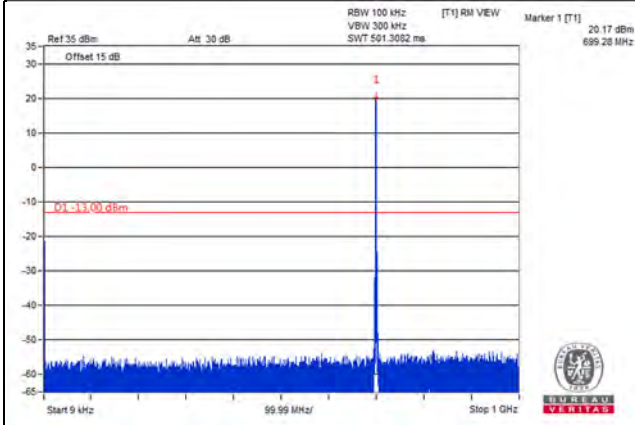
Frequency Range : 1GHz~8GHz



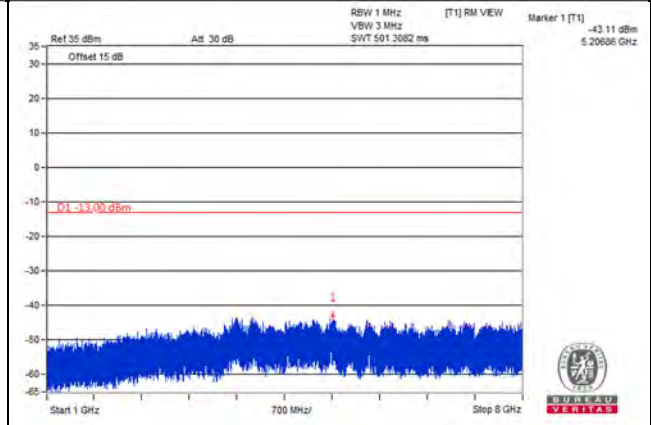
Channel Band width: 3MHz

Channel 23025 (700.5MHz)

Frequency Range : 9kHz~1GHz

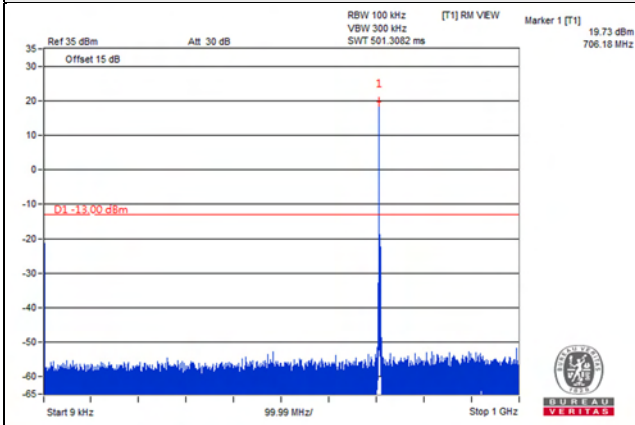


Frequency Range : 1GHz~8GHz

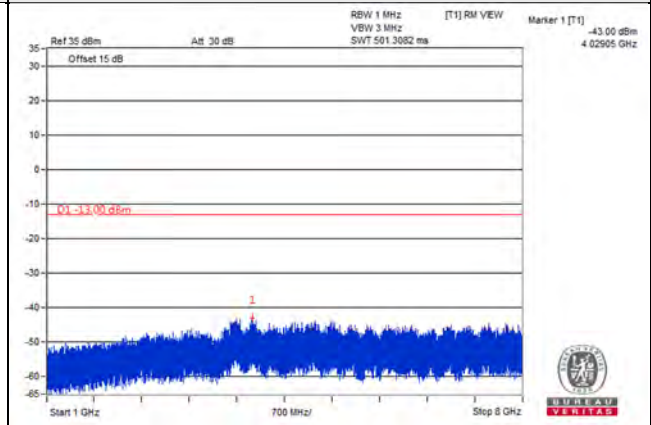


Channel 23095 (707.5MHz)

Frequency Range : 9kHz~1GHz

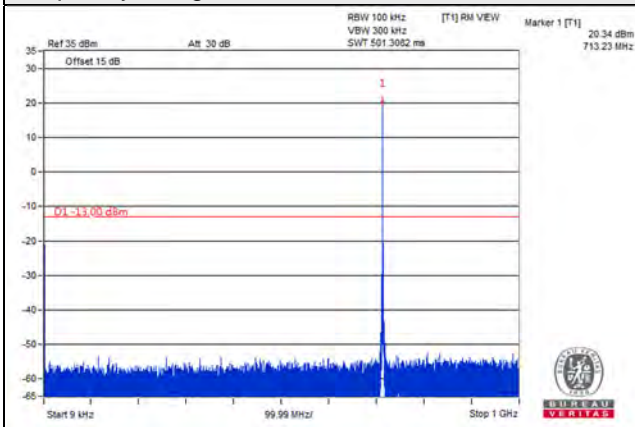


Frequency Range : 1GHz~8GHz

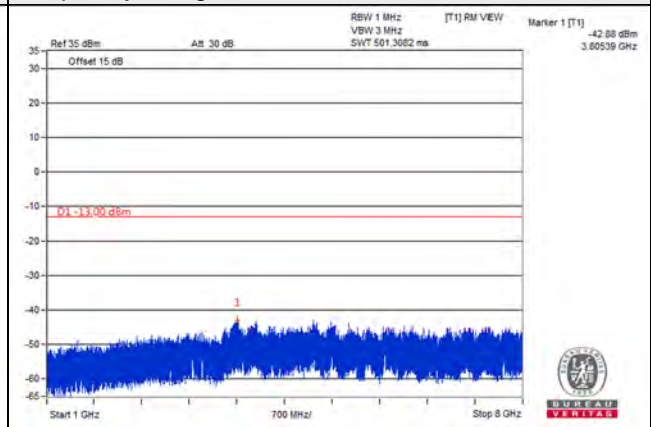


Channel 23165 (714.5MHz)

Frequency Range : 9kHz~1GHz



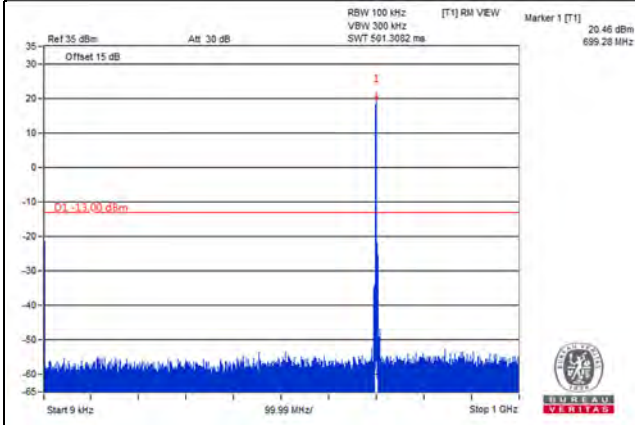
Frequency Range : 1GHz~8GHz



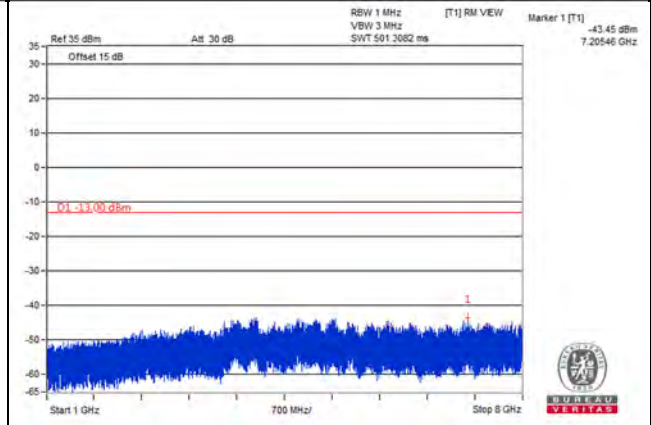
Channel Band width: 5MHz

Channel 23035 (701.5MHz)

Frequency Range : 9kHz~1GHz

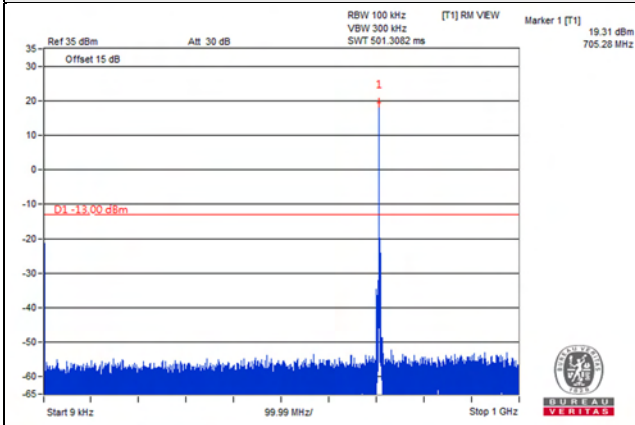


Frequency Range : 1GHz~8GHz

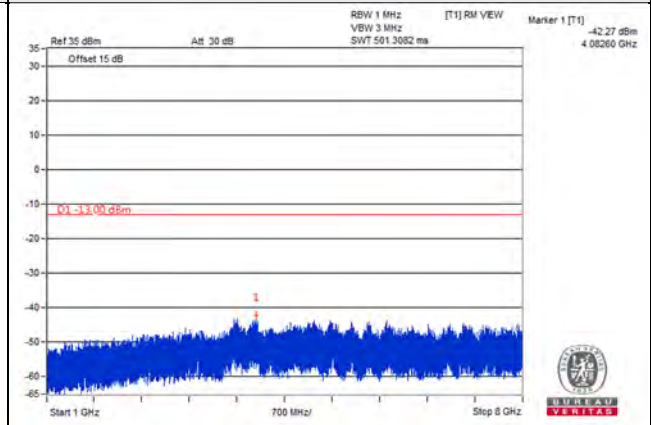


Channel 23095 (707.5MHz)

Frequency Range : 9kHz~1GHz

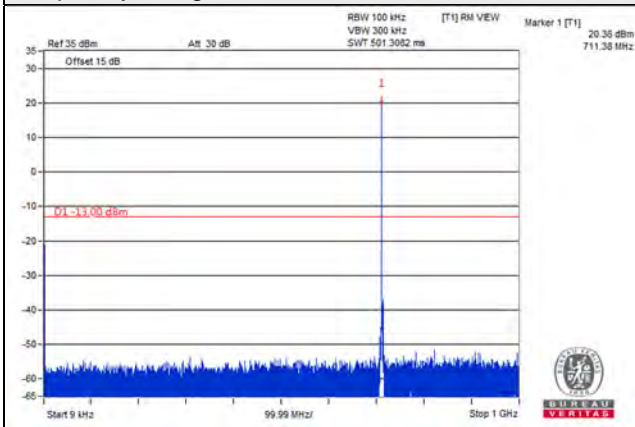


Frequency Range : 1GHz~8GHz

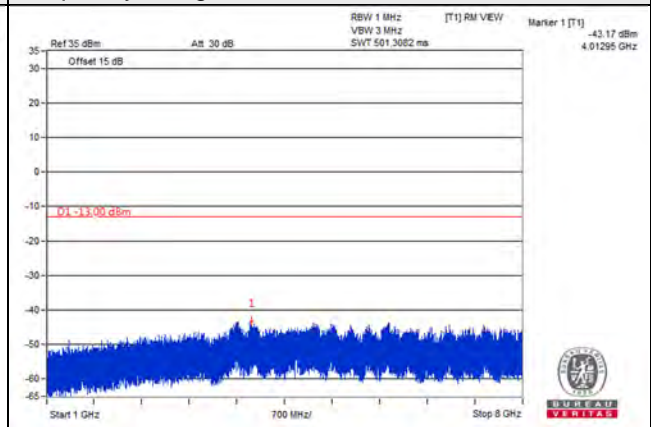


Channel 23155 (713.5MHz)

Frequency Range : 9kHz~1GHz



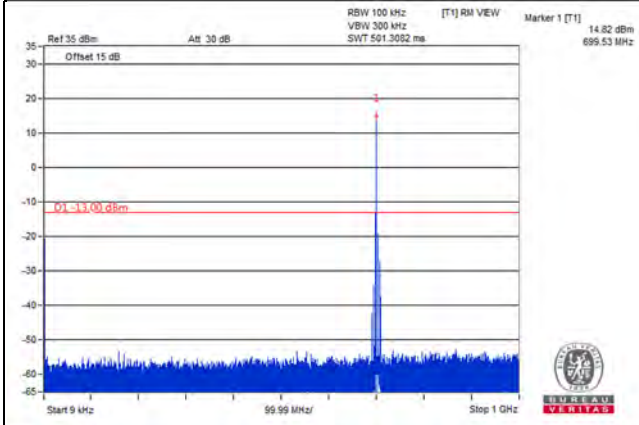
Frequency Range : 1GHz~8GHz



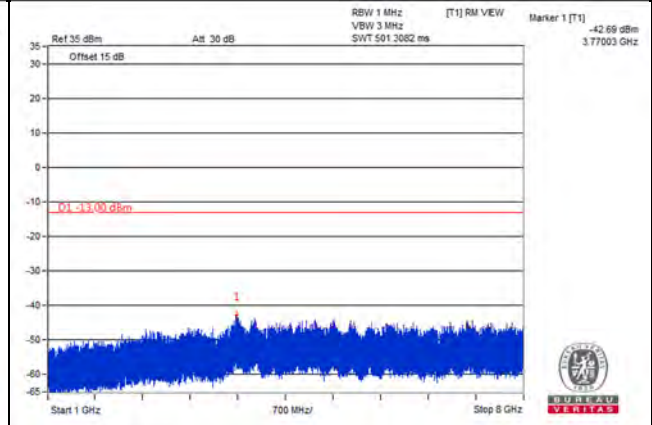
Channel Band width: 10MHz

Channel 23060 (704MHz)

Frequency Range : 9kHz~1GHz

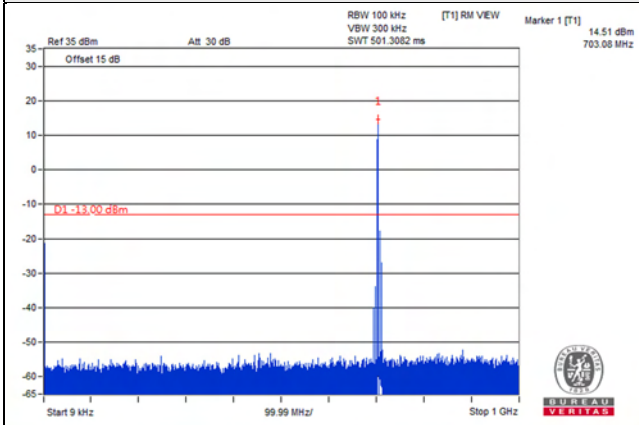


Frequency Range : 1GHz~8GHz

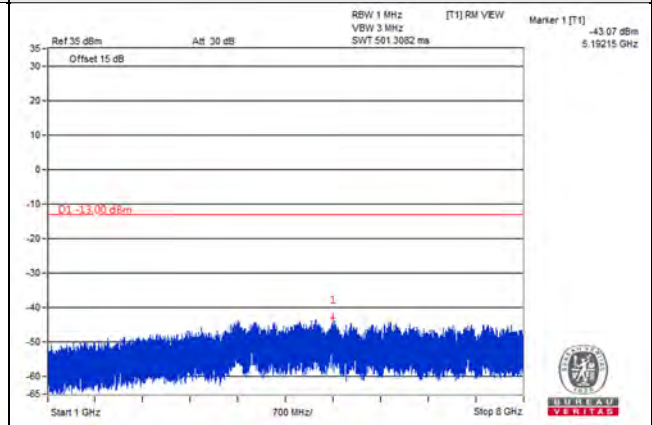


Channel 23095 (707.5MHz)

Frequency Range : 9kHz~1GHz

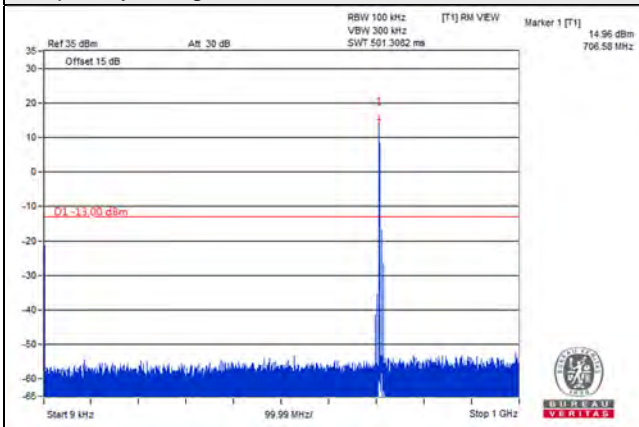


Frequency Range : 1GHz~8GHz

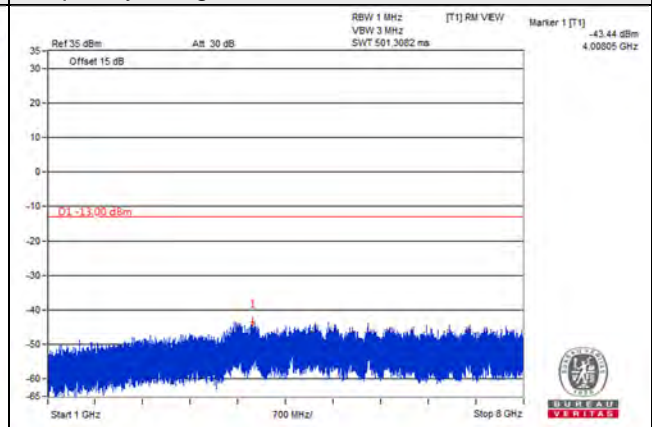


Channel 23130 (711MHz)

Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~8GHz

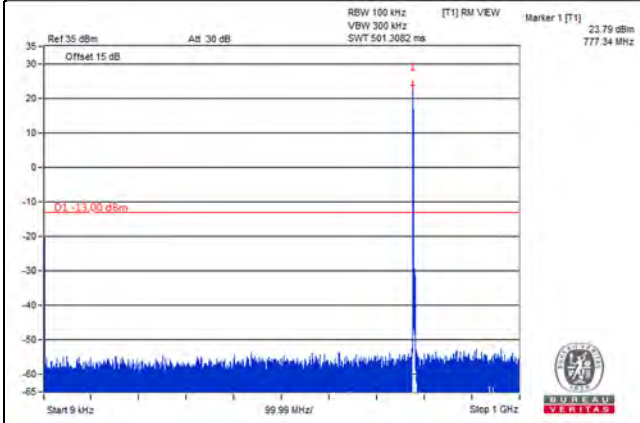


LTE Band 13

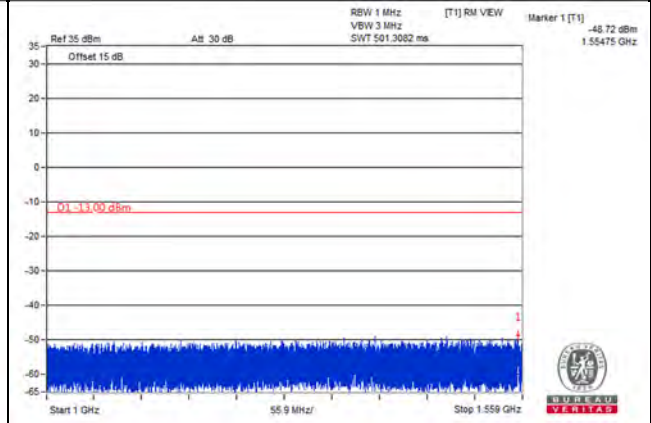
Channel Bandwidth: 5MHz

Channel 23205 (779.5MHz)

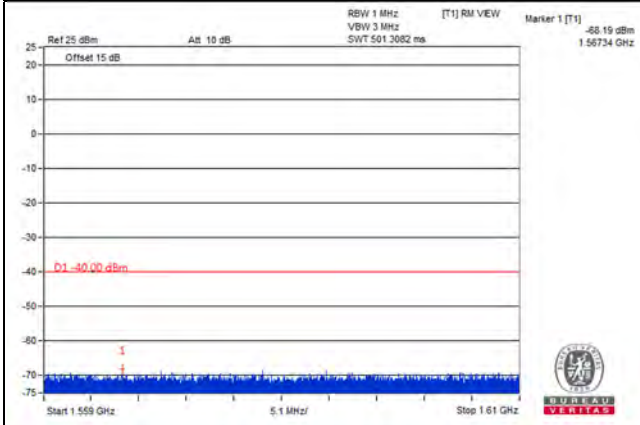
Frequency Range : 9kHz~1GHz



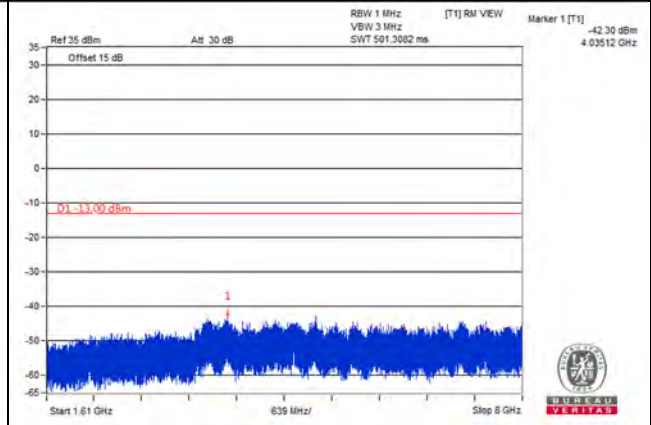
Frequency Range : 1GHz~1.559GHz



Frequency Range : 1.559GHz~1.61GHz



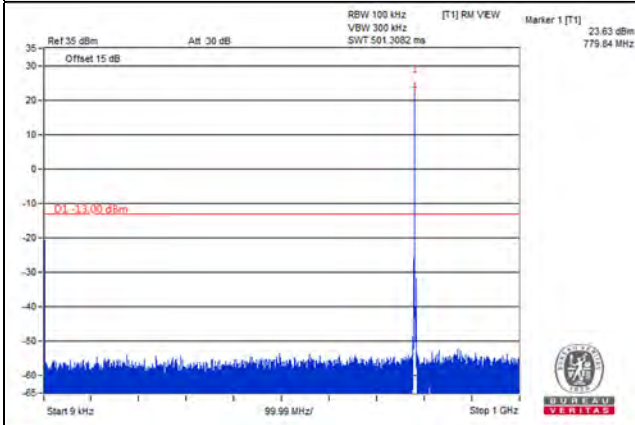
Frequency Range : 1.61GHz~8GHz



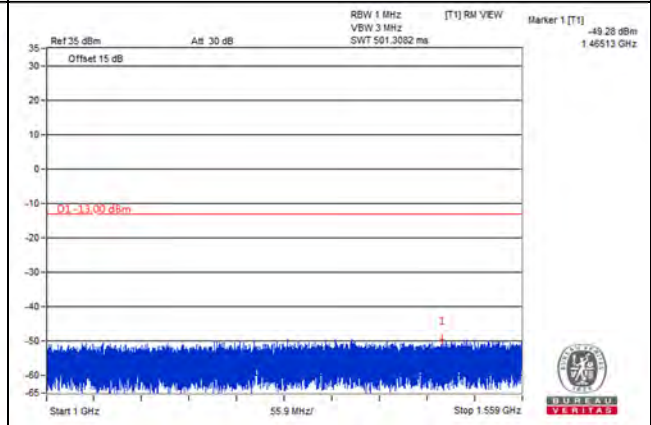
Channel Bandwidth: 5MHz

Channel 23230 (782.0MHz)

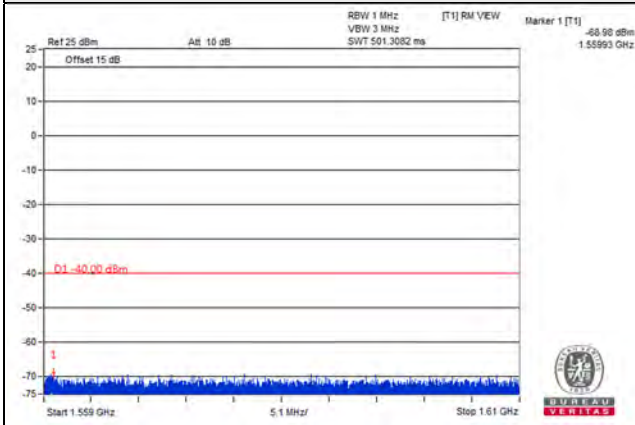
Frequency Range : 9kHz~1GHz



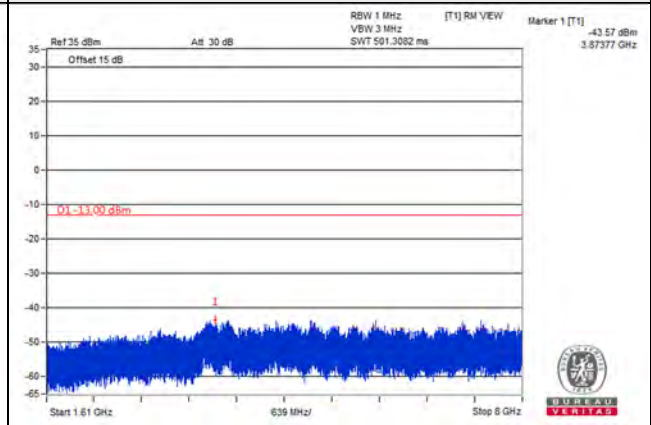
Frequency Range : 1GHz~1.559GHz



Frequency Range : 1.559GHz~1.61GHz



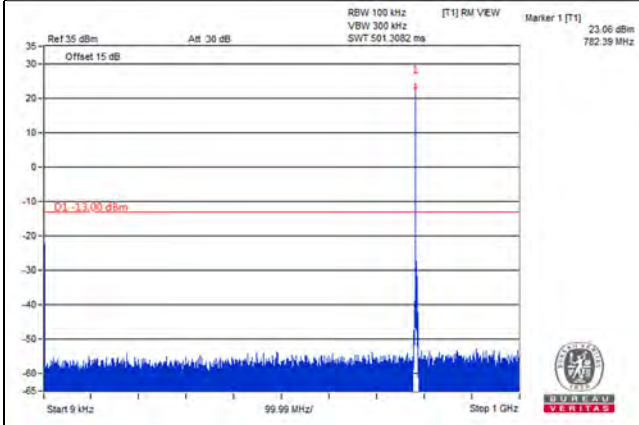
Frequency Range : 1.61GHz~8GHz



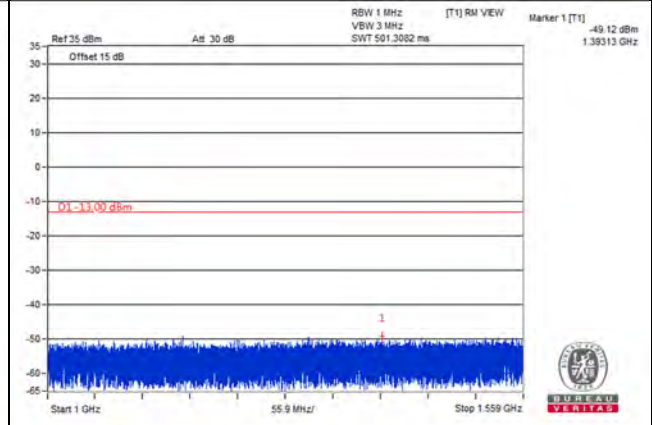
Channel Bandwidth: 5MHz

Channel 23255 (784.5MHz)

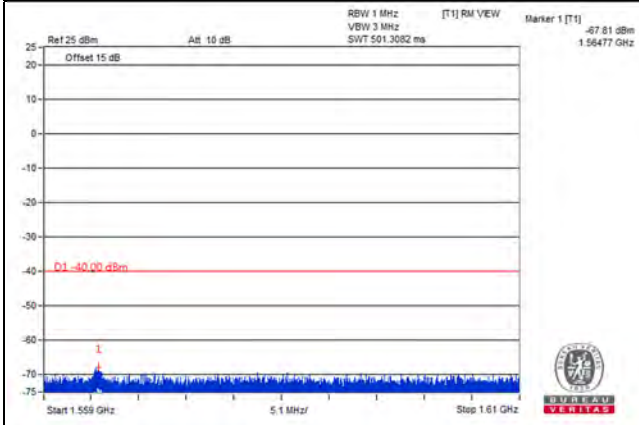
Frequency Range : 9kHz~1GHz



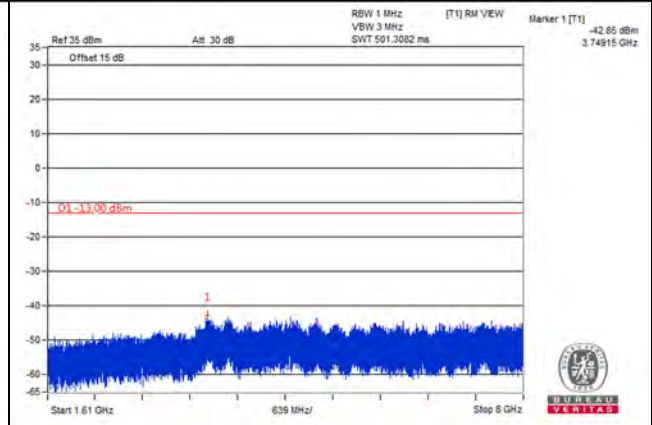
Frequency Range : 1GHz~1.559GHz



Frequency Range : 1.559GHz~1.61GHz



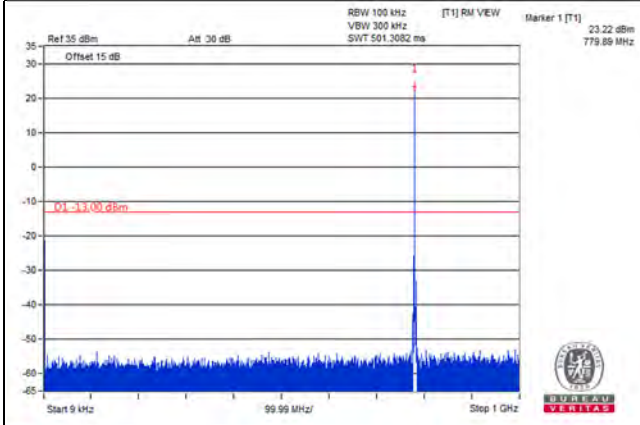
Frequency Range : 1.61GHz~8GHz



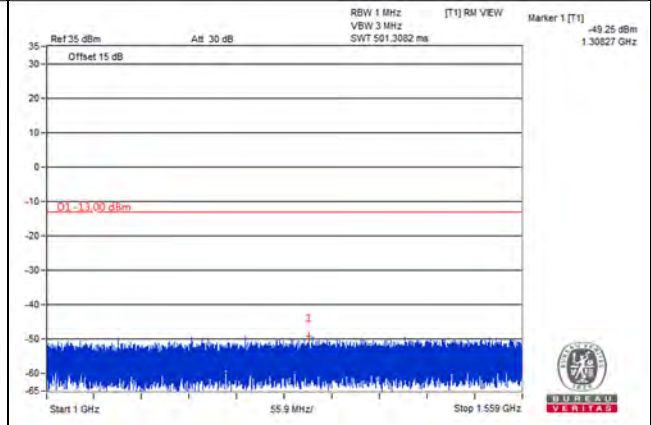
Channel Bandwidth: 10MHz

Channel 23230 (782.0MHz)

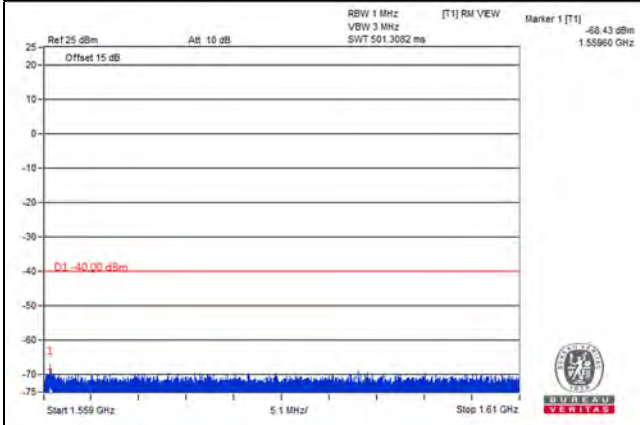
Frequency Range : 9kHz~1GHz



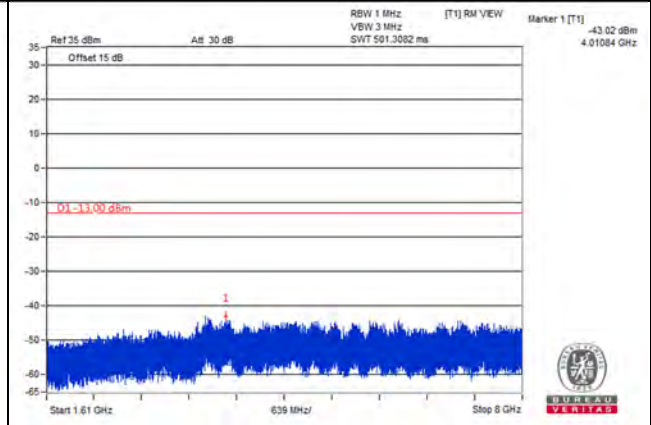
Frequency Range : 1GHz~1.559GHz



Frequency Range : 1.559GHz~1.61GHz



Frequency Range : 1.61GHz~8GHz

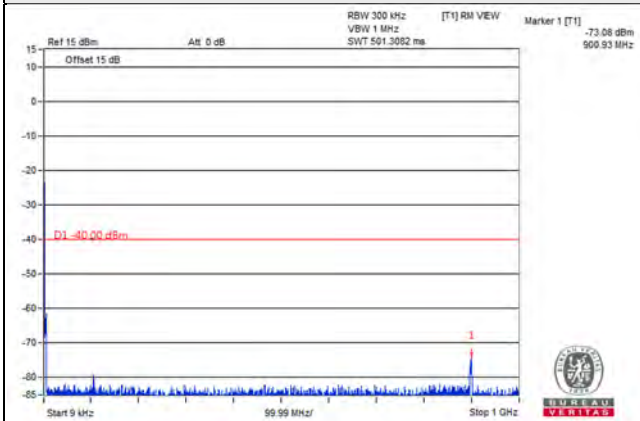


LTE Band 30

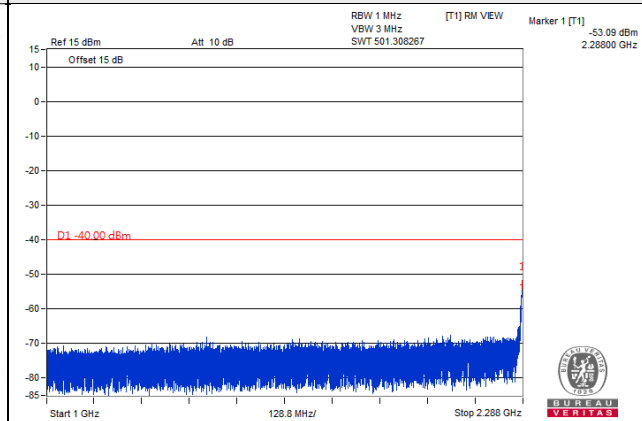
Channel Band width: 5MHz

Channel 27685 (2307.5MHz)

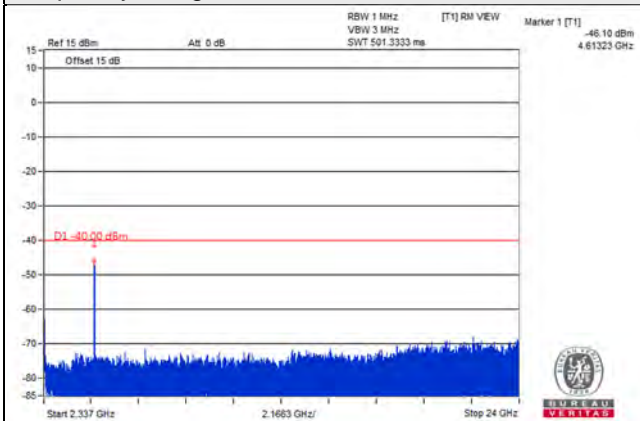
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~2.288GHz



Frequency Range : 2.337GHz~24GHz

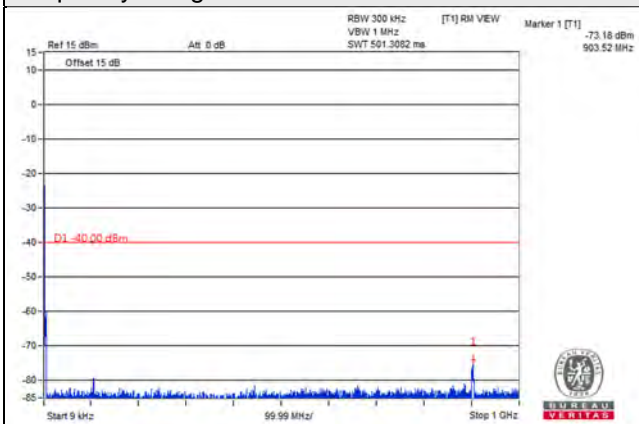


*The 9kHz signal over the limit is from Spectrum.

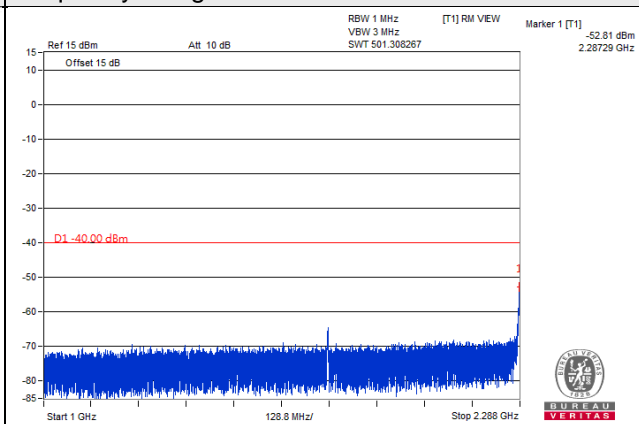
Channel Band width: 5MHz

Channel 27710 (2310.0MHz)

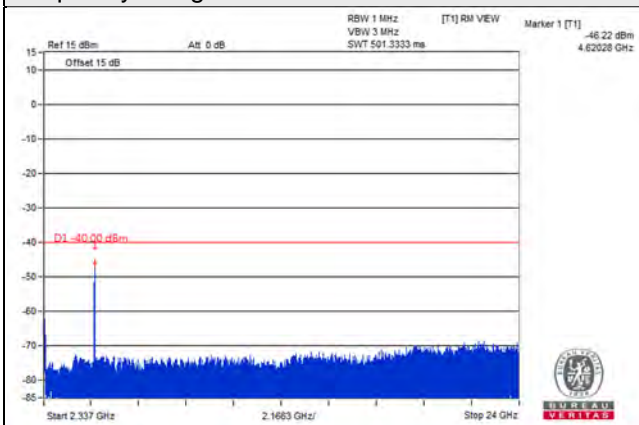
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~2.288GHz



Frequency Range : 2.337GHz~24GHz

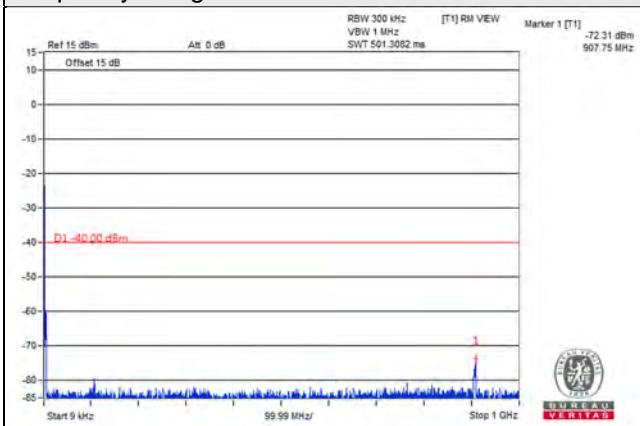


*The 9kHz signal over the limit is from Spectrum.

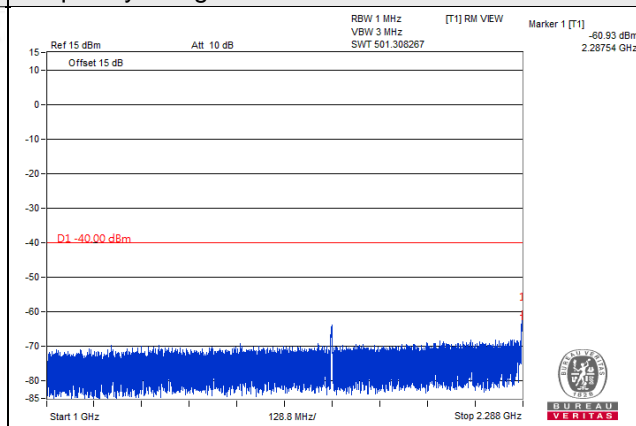
Channel Band width: 5MHz

Channel 27735 (2312.5MHz)

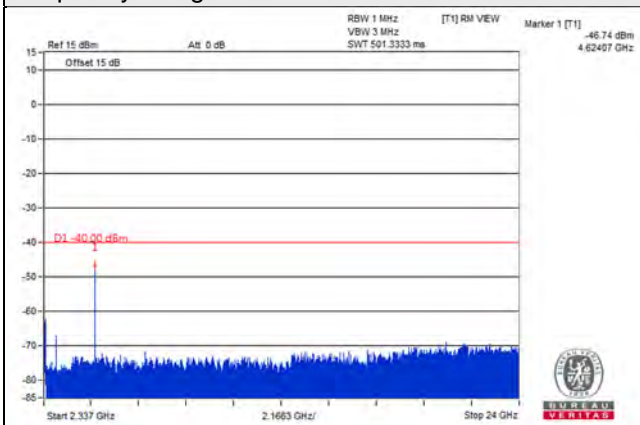
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~2.288GHz



Frequency Range : 2.337GHz~24GHz

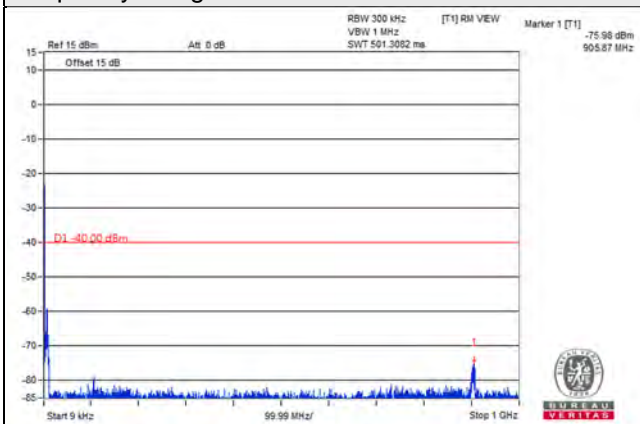


*The 9kHz signal over the limit is from Spectrum.

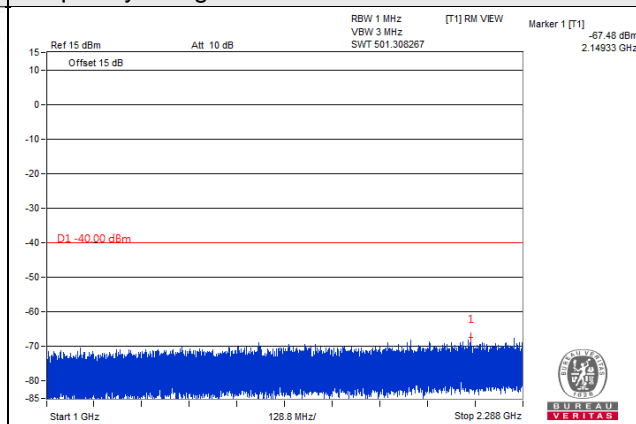
Channel Band width: 10MHz

Channel 27710 (2310.0MHz)

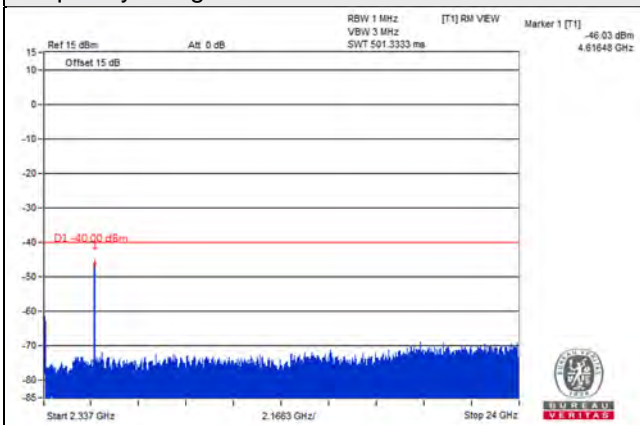
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~2.288GHz



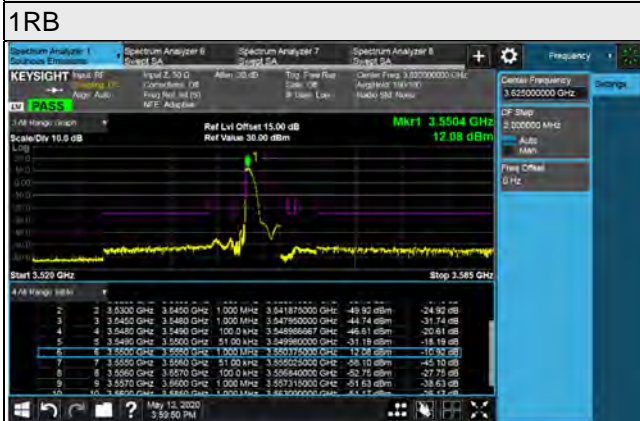
Frequency Range : 2.337GHz~24GHz



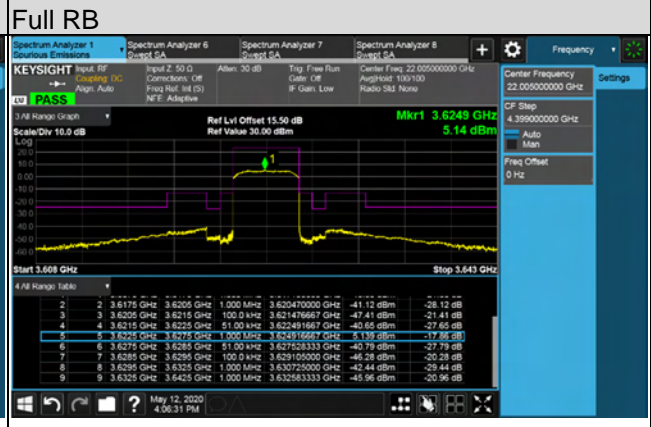
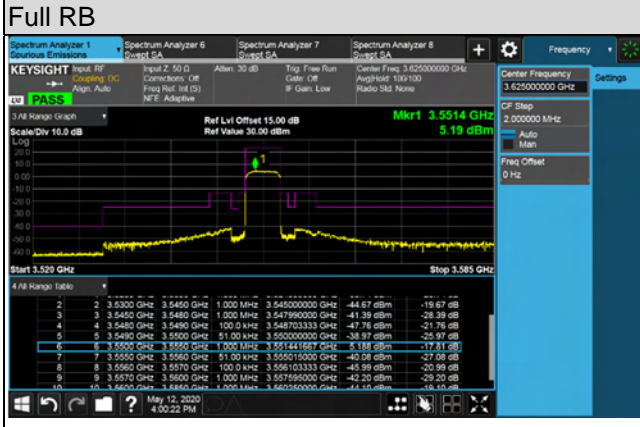
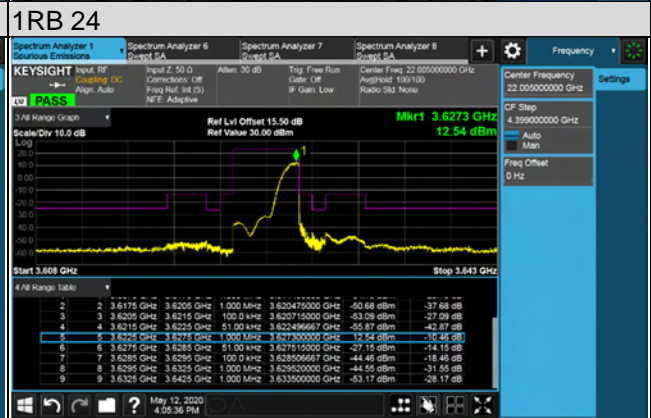
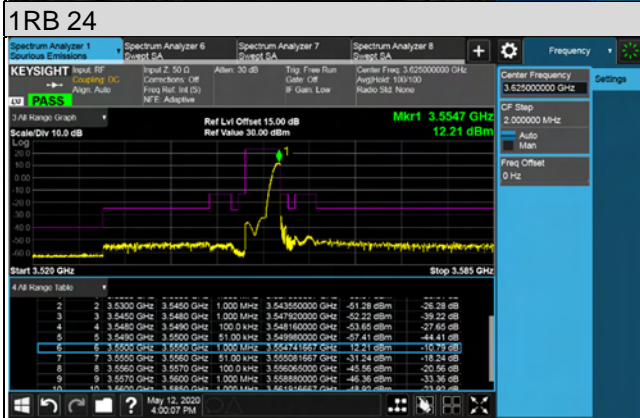
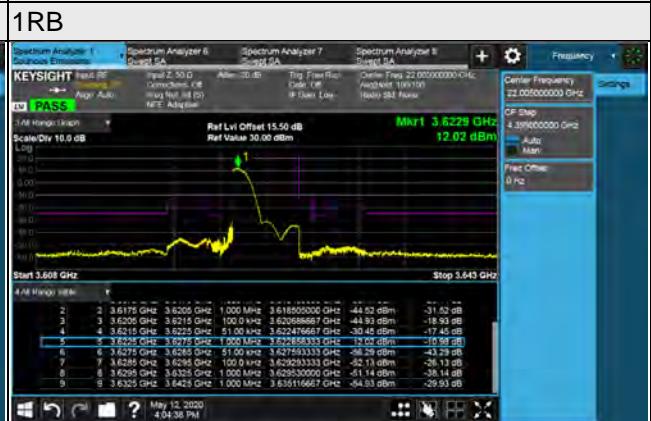
*The 9kHz signal over the limit is from Spectrum.

LTE Band 48, Channel Bandwidth 5MHz

Channel 52625 (3552.5MHz)



Channel 55990 (3625.0MHz)



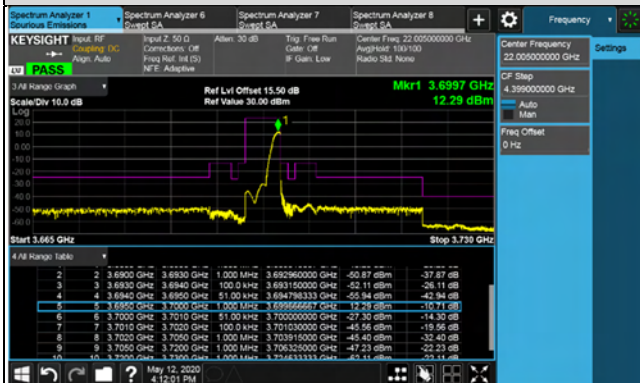
LTE Band 48, Channel Bandwidth 5MHz

Channel 56715 (3697.5MHz)

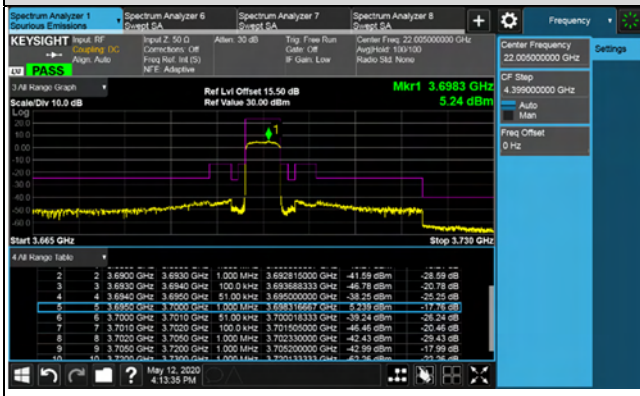
1RB



1RB 24



Full RB



LTE Band 48, Channel Bandwidth 5MHz

Channel 55265 (3552.5MHz)

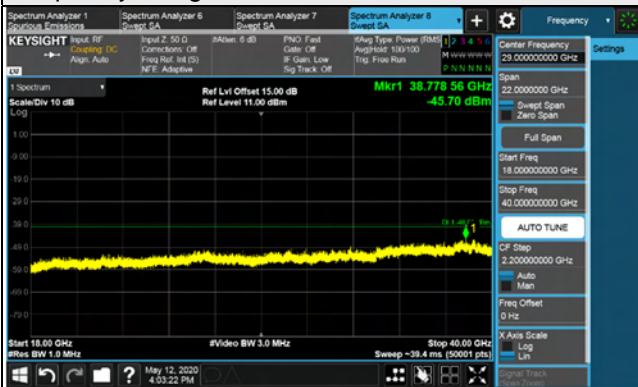
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz



Frequency Range : 18GHz~40GHz



LTE Band 48, Channel Bandwidth 5MHz

Channel 55990 (3625.0MHz)

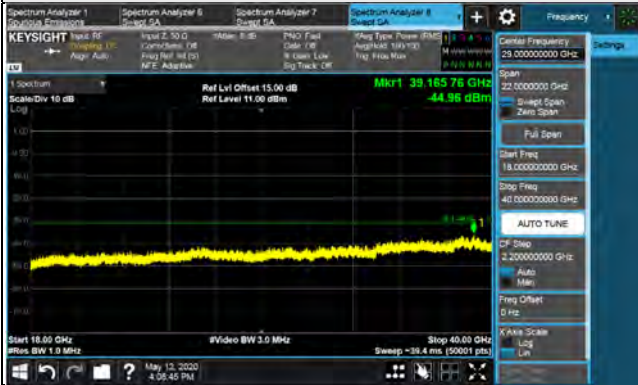
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz



Frequency Range : 18GHz~40GHz



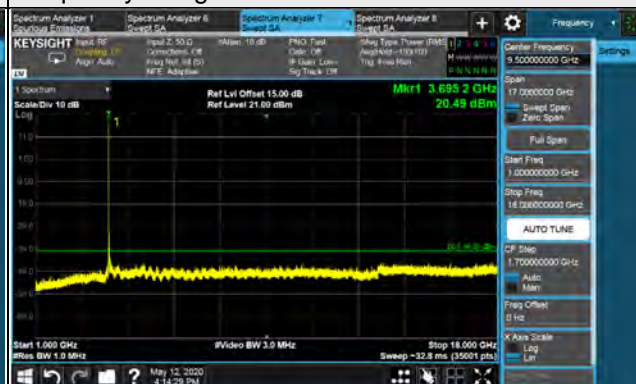
LTE Band 48, Channel Bandwidth 5MHz

Channel 56715 (3697.50MHz)

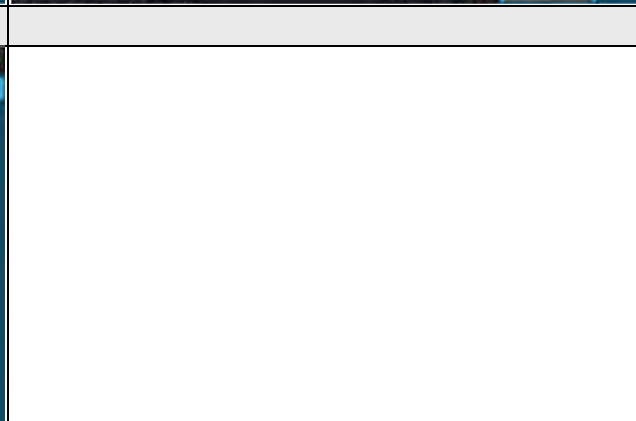
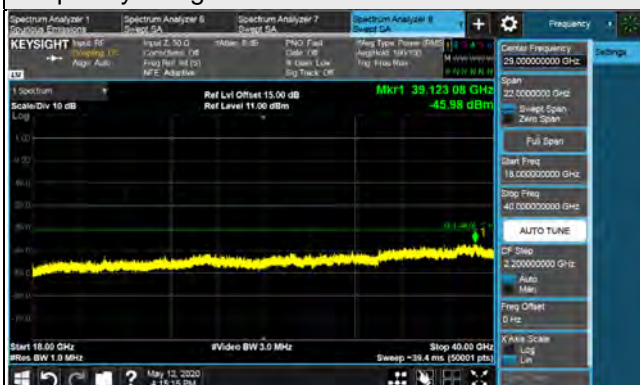
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz

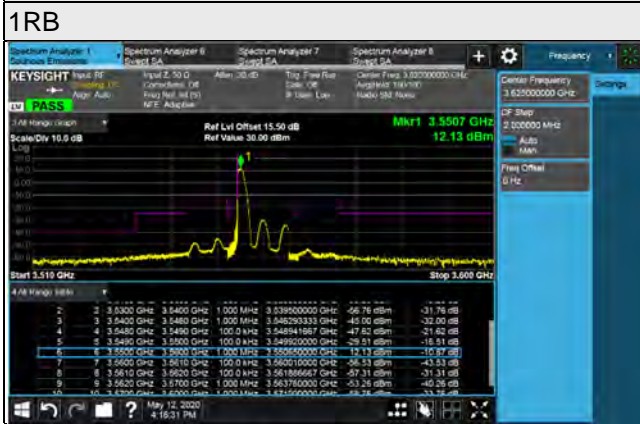


Frequency Range : 18GHz~40GHz

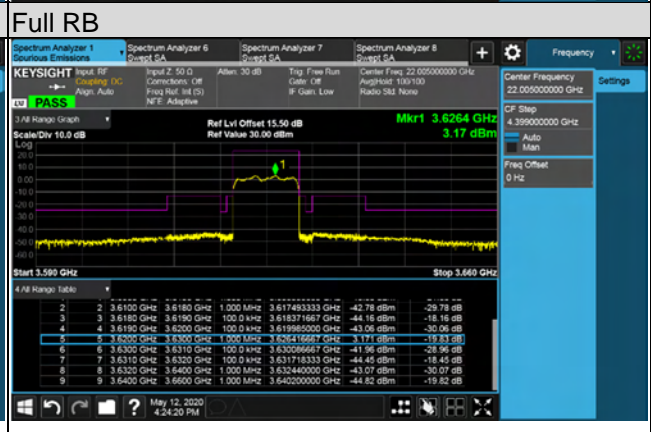
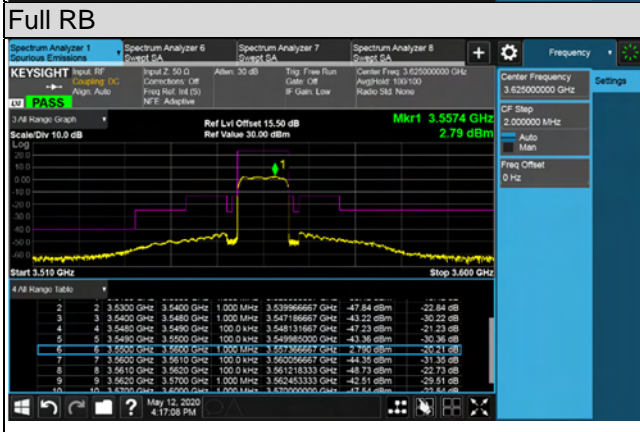
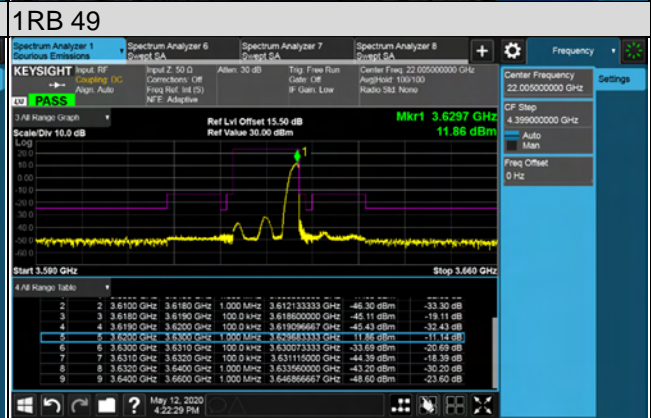
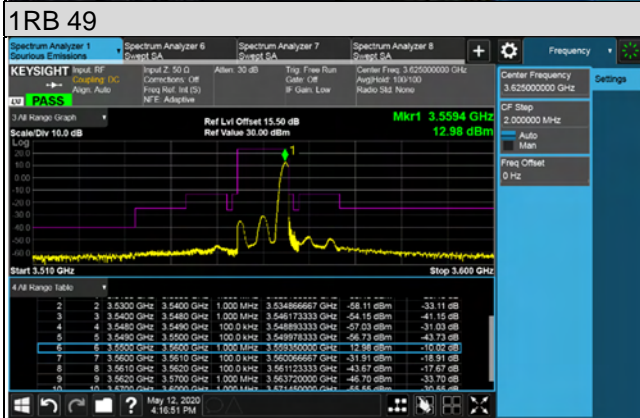
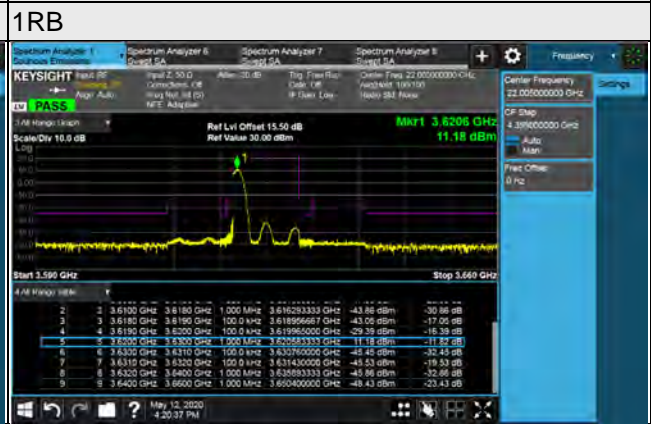


LTE Band 48, Channel Bandwidth 10MHz

Channel 55290 (3555.0MHz)



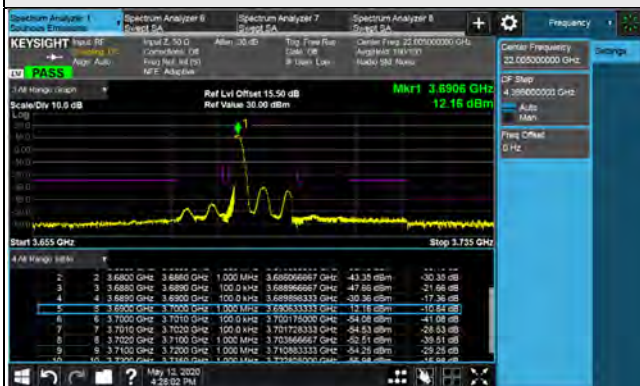
Channel 55990 (3625.0MHz)



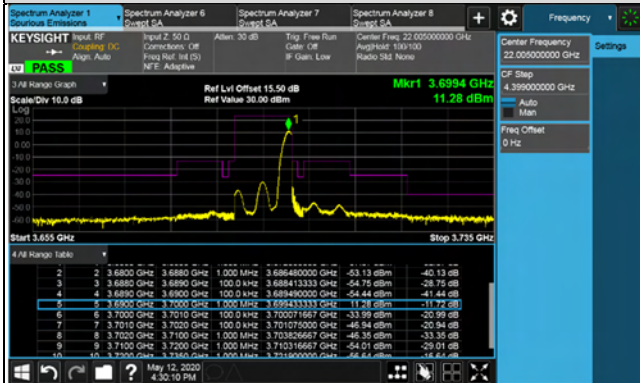
LTE Band 48, Channel Bandwidth 10MHz

Channel 56690 (3695.0MHz)

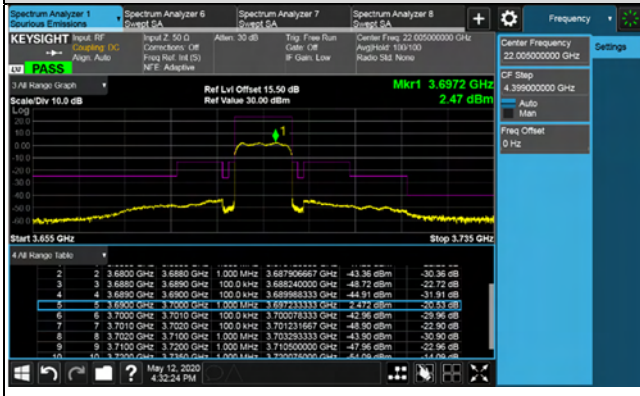
1RB



1RB 49



Full RB



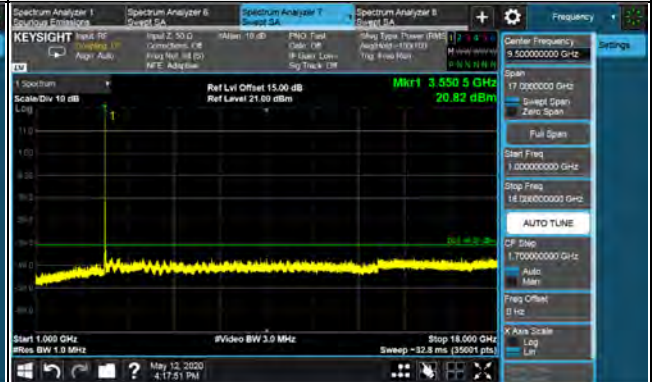
LTE Band 48, Channel Bandwidth 10MHz

Channel 55290 (3555.0MHz)

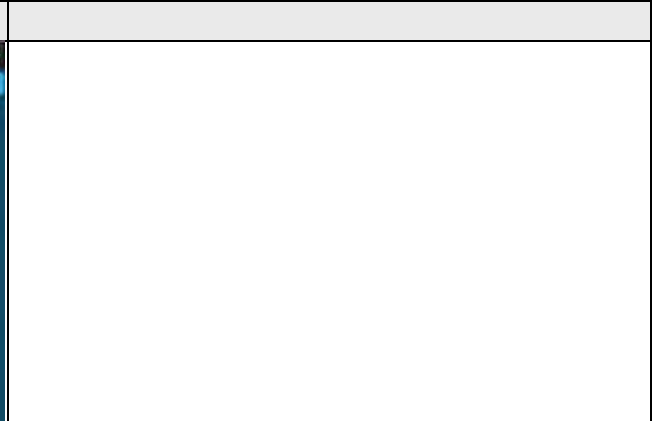
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz



Frequency Range : 18GHz~40GHz



LTE Band 48, Channel Bandwidth 10MHz

Channel 55990 (3625.00MHz)

Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz



Frequency Range : 18GHz~40GHz



LTE Band 48, Channel Bandwidth 10MHz

Channel 56690 (3695.0MHz)

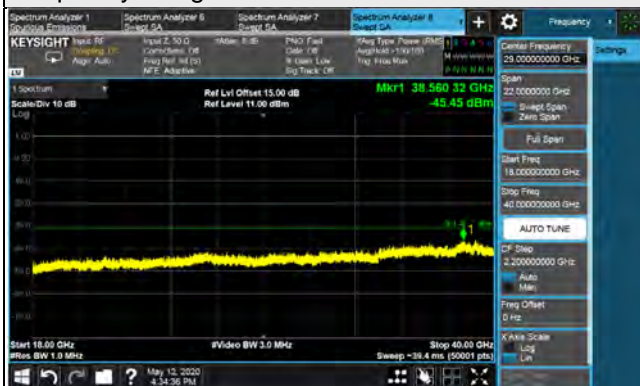
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz

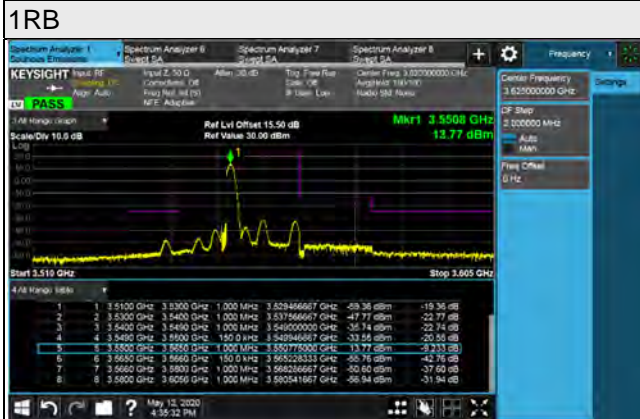


Frequency Range : 18GHz~40GHz

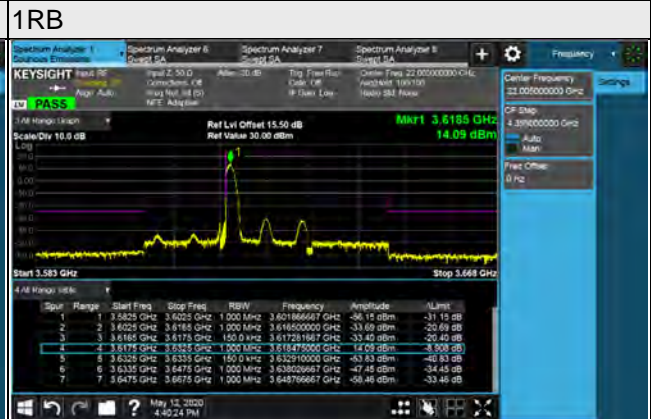


LTE Band 48, Channel Bandwidth 15MHz

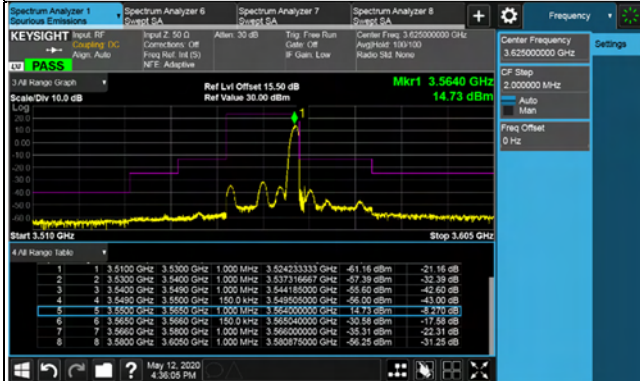
Channel 55315 (3557.50MHz)



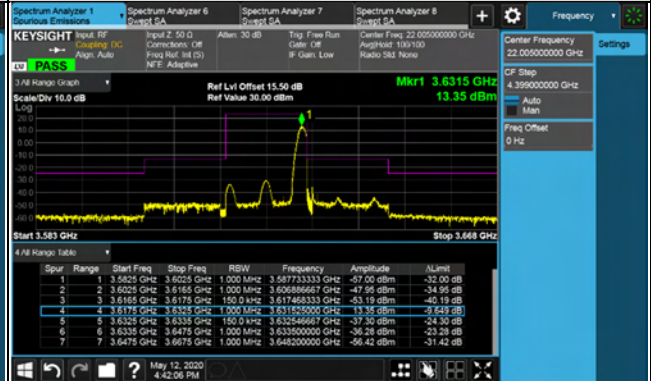
Channel 55990 (3625.0MHz)



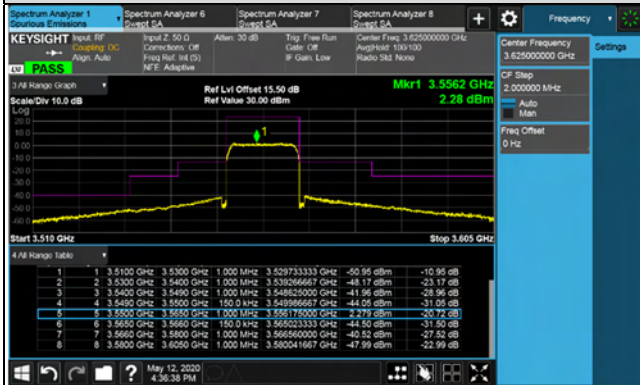
1RB 74



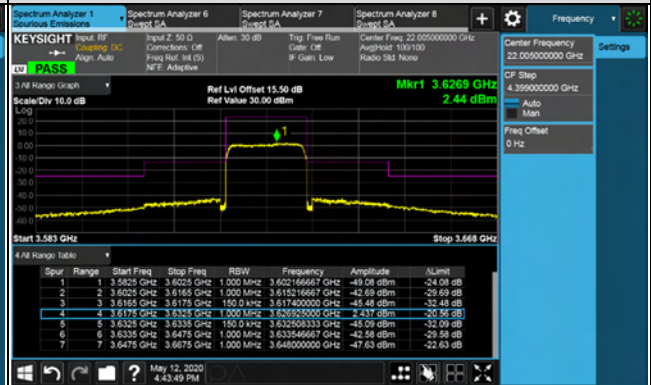
1RB 74



Full RB



Full RB



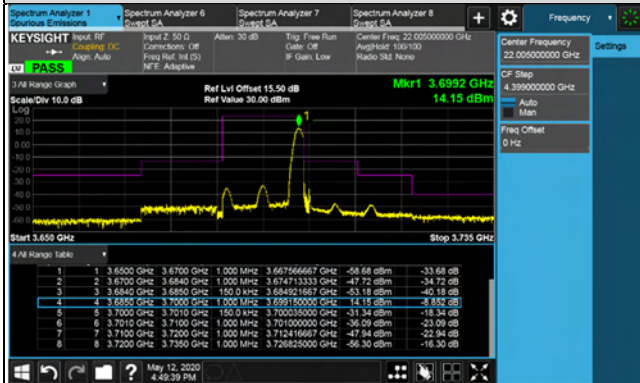
LTE Band 48, Channel Bandwidth 15MHz

Channel 56665 (3692.5MHz)

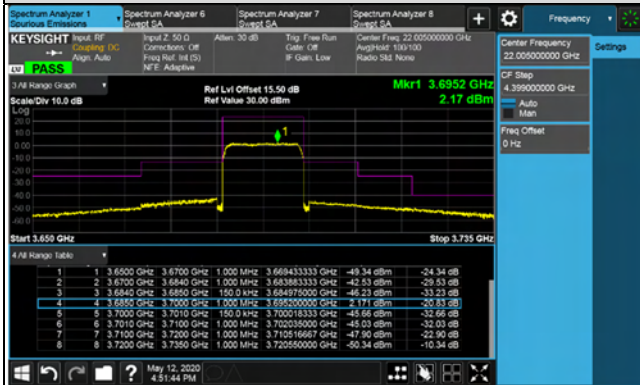
1RB



1RB 74



Full RB



LTE Band 48, Channel Bandwidth 15MHz

Channel 55315 (3557.50MHz)

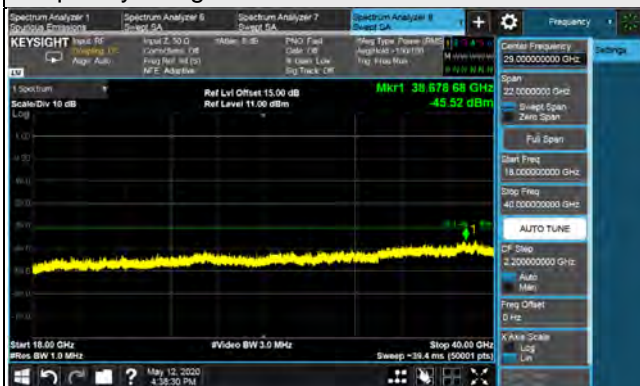
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz



Frequency Range : 18GHz~40GHz



LTE Band 48, Channel Bandwidth 15MHz

Channel 55990 (3625.0MHz)

Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz



Frequency Range : 18GHz~40GHz



LTE Band 48, Channel Bandwidth 15MHz

Channel 56665 (3692.50MHz)

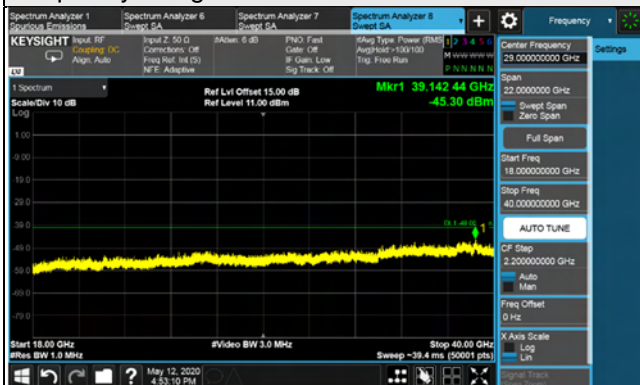
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz

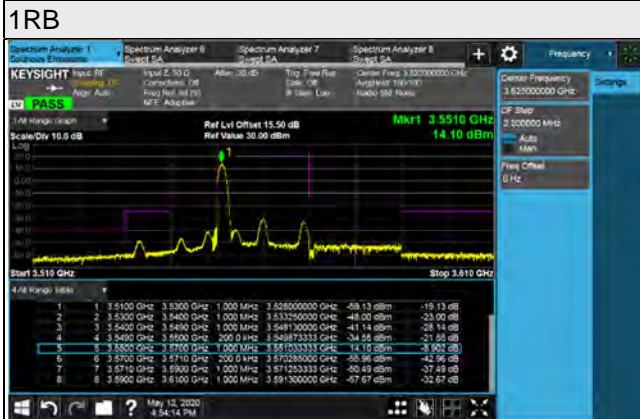


Frequency Range : 18GHz~40GHz

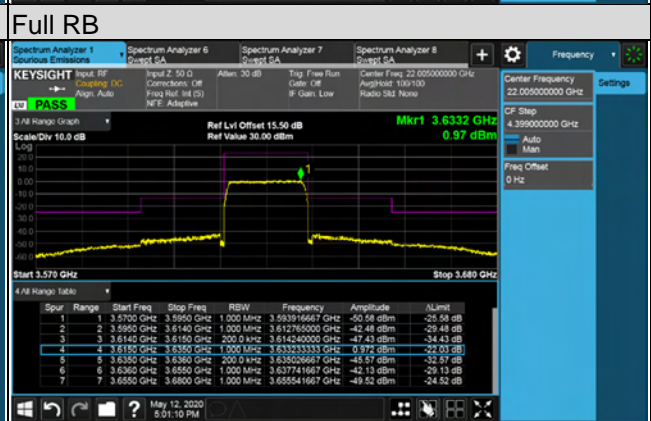
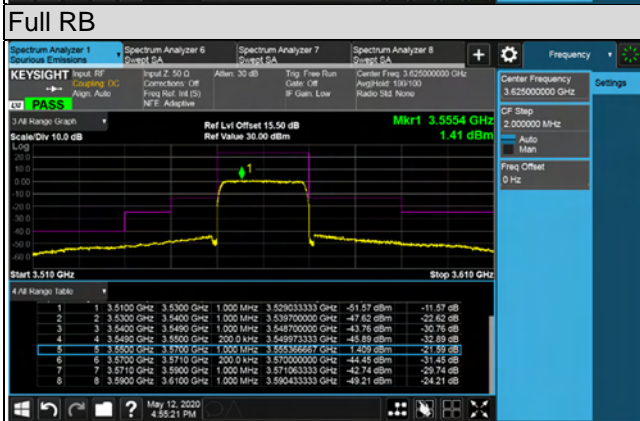
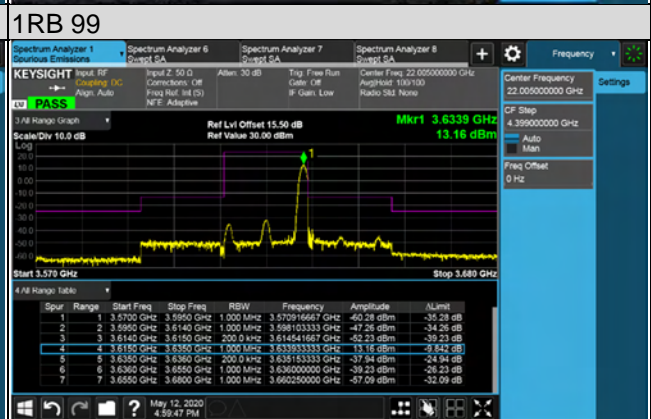
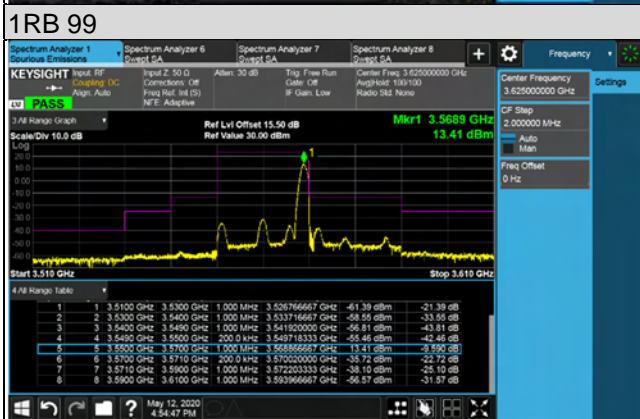
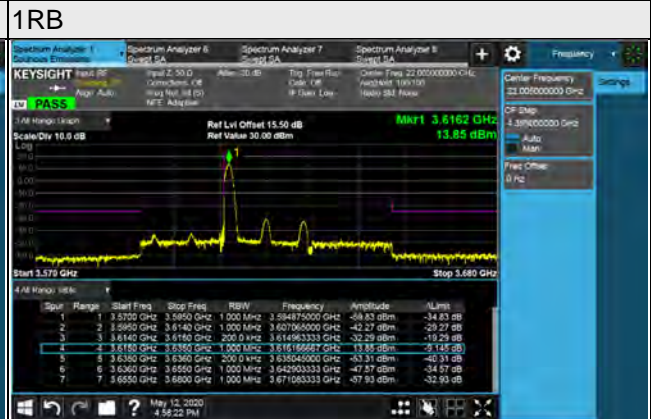


LTE Band 48, Channel Bandwidth 20MHz

Channel 55340 (3560.0MHz)



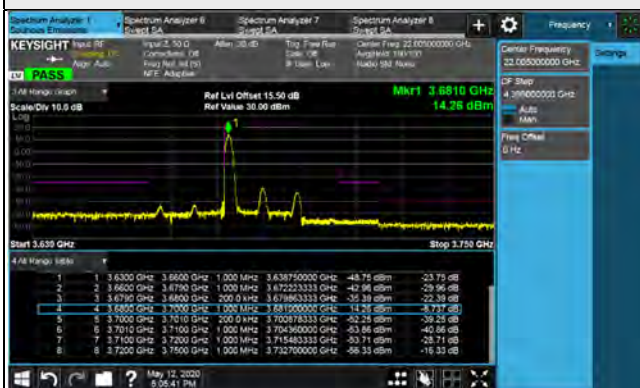
Channel 55990 (3625.0MHz)



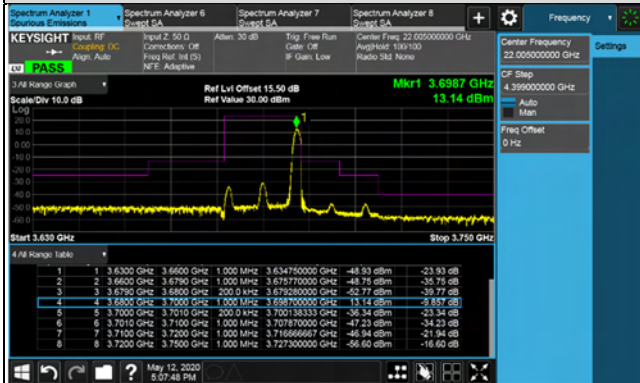
LTE Band 48, Channel Bandwidth 20MHz

Channel 56640 (3690.0MHz)

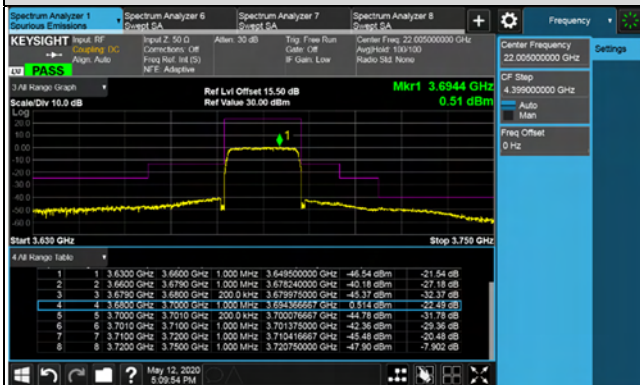
1RB



1RB 99



Full RB



LTE Band 48, Channel Bandwidth 20MHz

Channel 55340 (3560.0MHz)

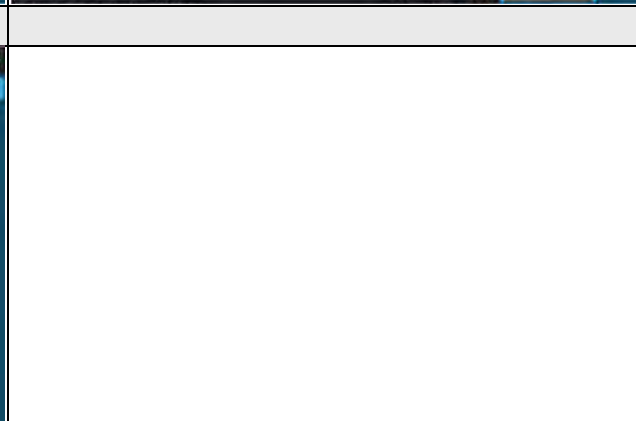
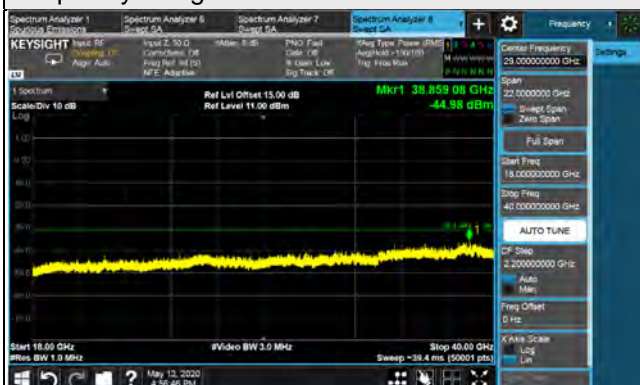
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz



Frequency Range : 18GHz~40GHz



LTE Band 48, Channel Bandwidth 20MHz

Channel 55990 (3625.0MHz)

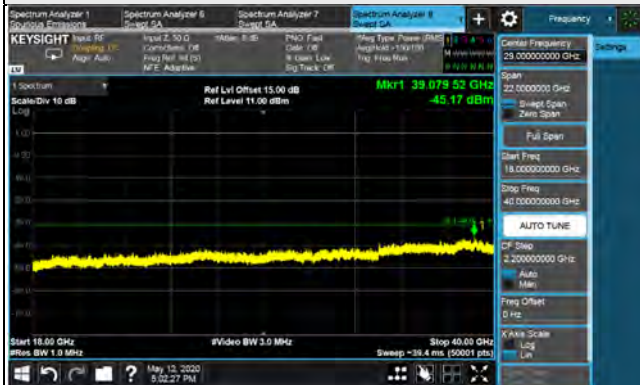
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz



Frequency Range : 18GHz~40GHz



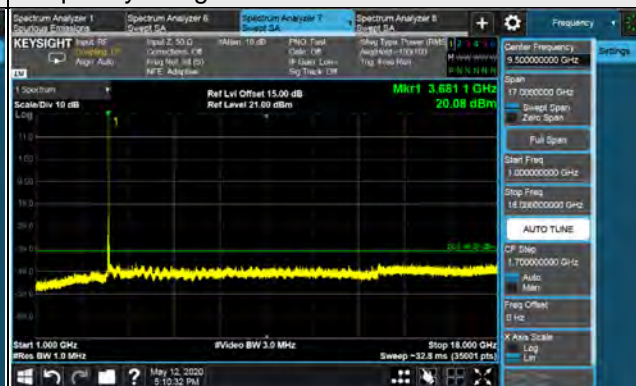
LTE Band 48, Channel Bandwidth 20MHz

Channel 56640 (3690.0MHz)

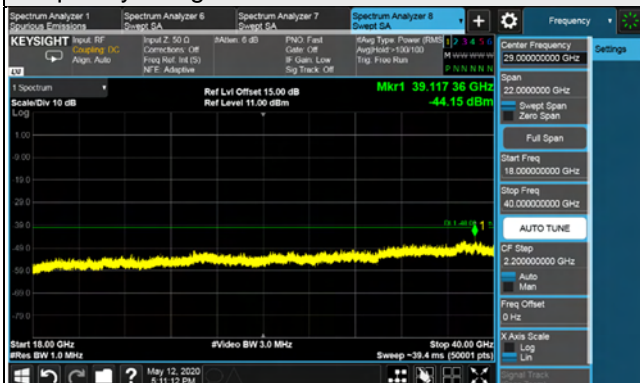
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz



Frequency Range : 18GHz~40GHz

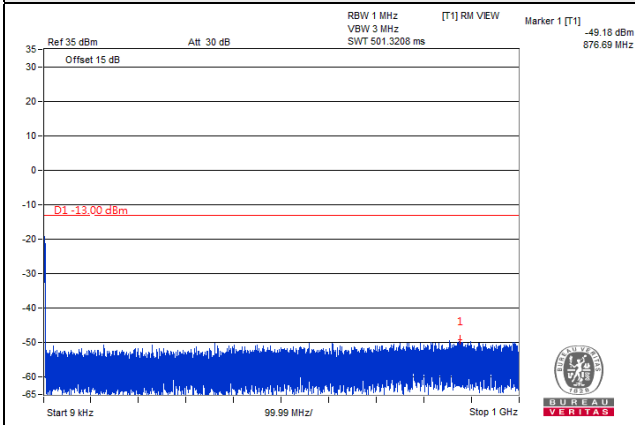


LTE Band 66

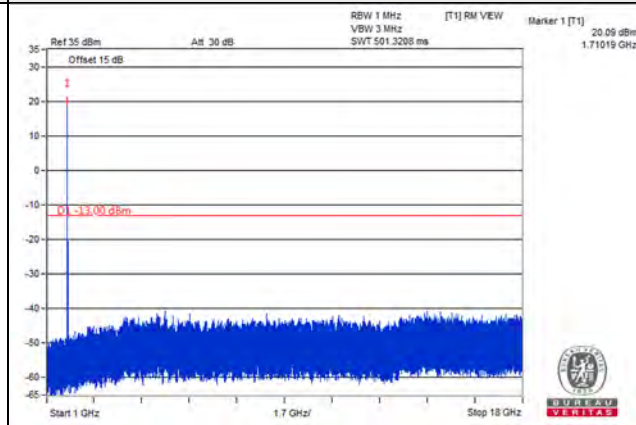
Channel Bandwidth: 1.4MHz

Channel 131979 (1710.7MHz)

Frequency Range : 9kHz~1GHz

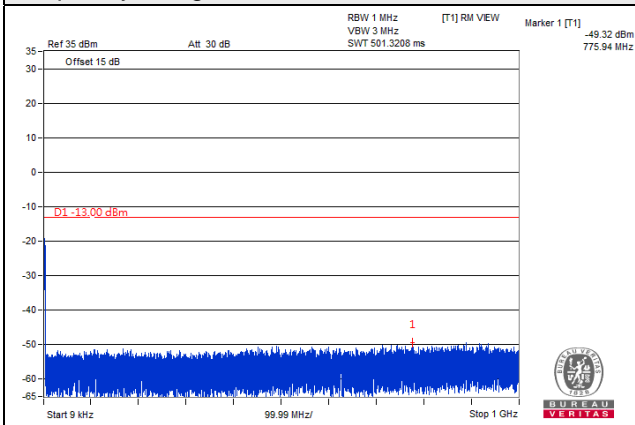


Frequency Range : 1GHz~18GHz

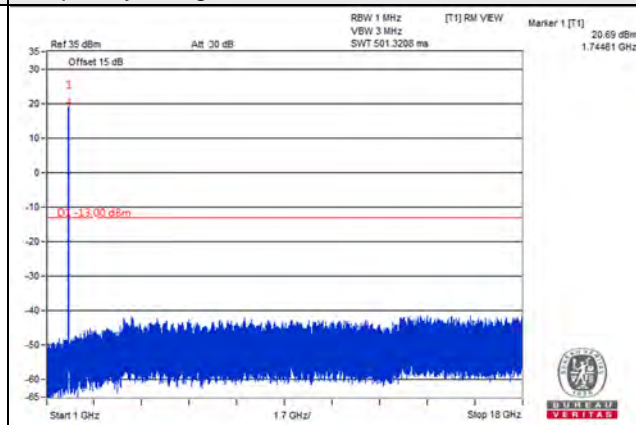


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz~1GHz

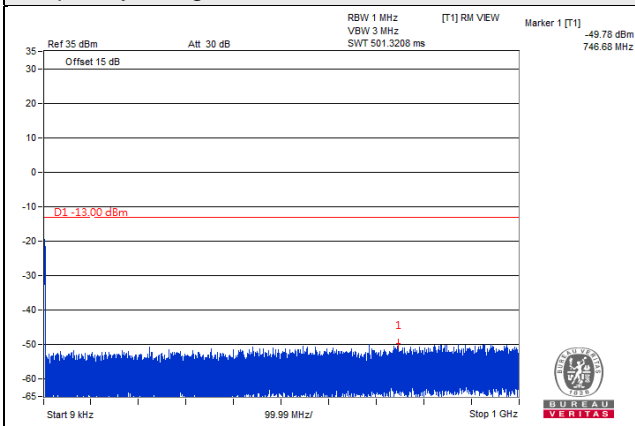


Frequency Range : 1GHz~18GHz

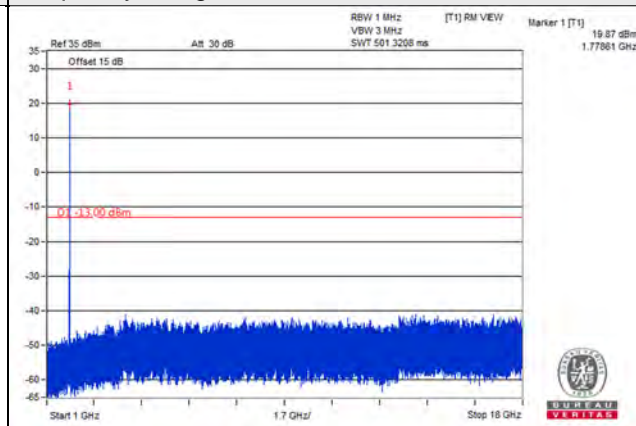


Channel 132665 (1779.3MHz)

Frequency Range : 9kHz~1GHz



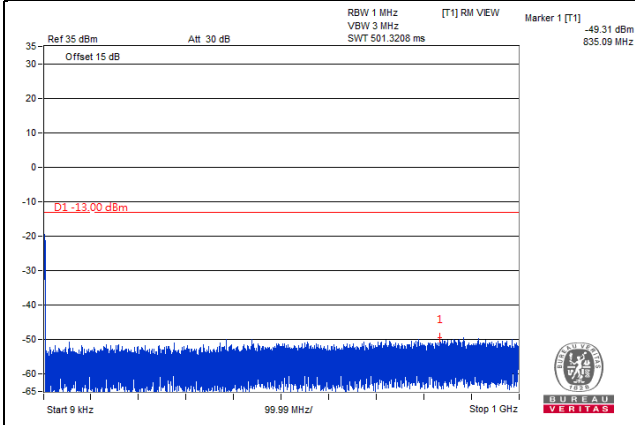
Frequency Range : 1GHz~18GHz



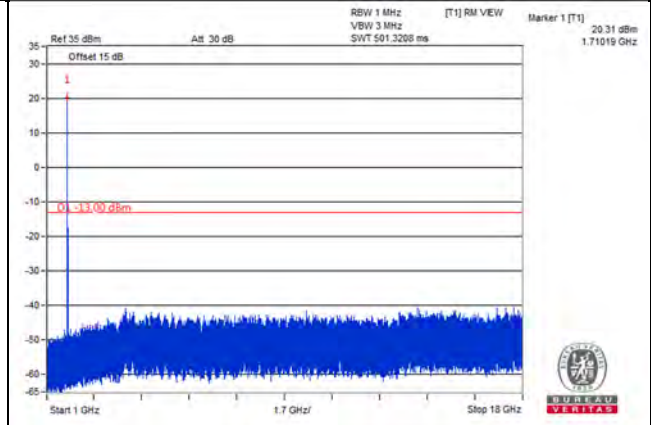
Channel Bandwidth: 3MHz

Channel 131987 (1711.5MHz)

Frequency Range : 9kHz~1GHz

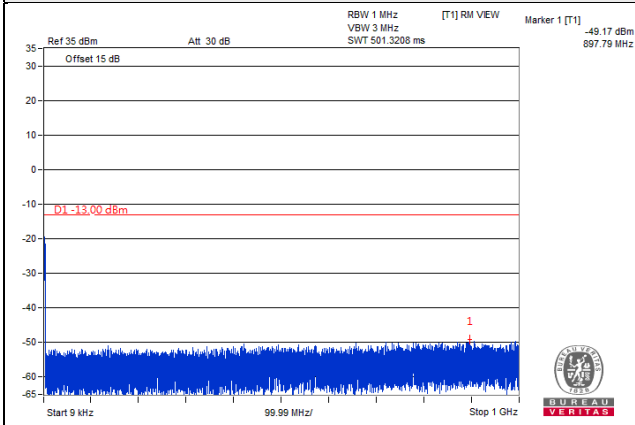


Frequency Range : 1GHz~18GHz

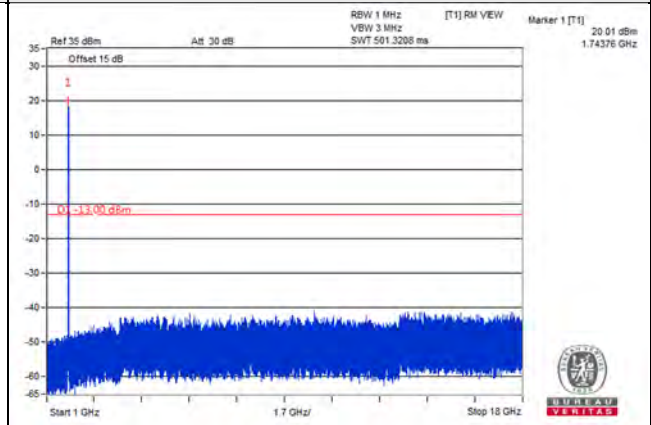


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz~1GHz

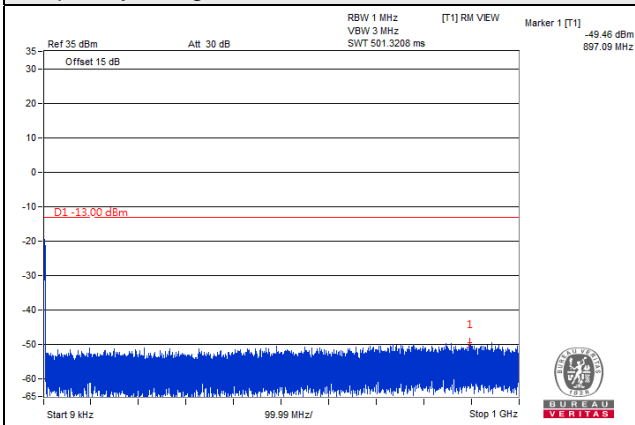


Frequency Range : 1GHz~18GHz

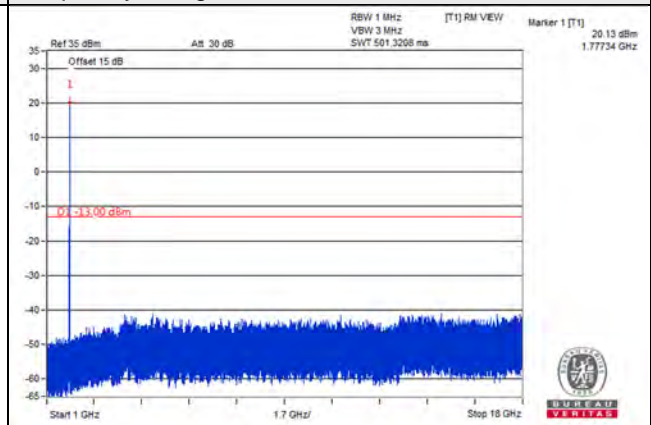


Channel 132657 (1778.5MHz)

Frequency Range : 9kHz~1GHz



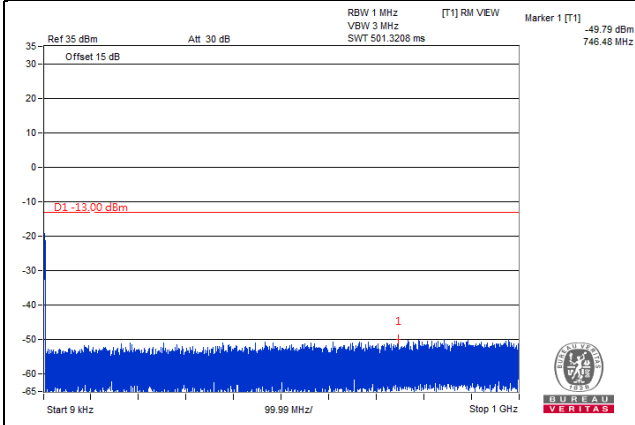
Frequency Range : 1GHz~18GHz



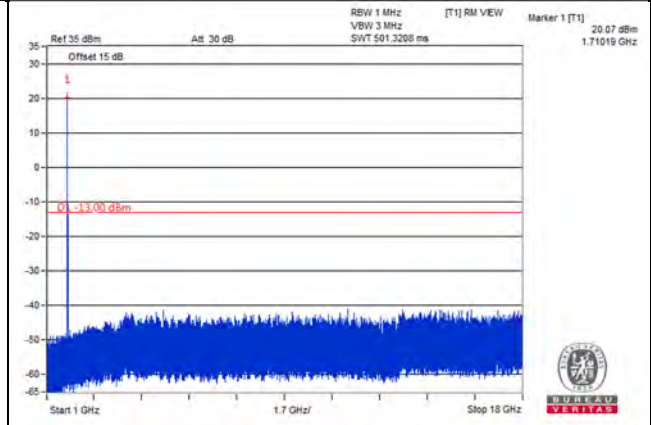
Channel Bandwidth: 5MHz

Channel 131997 (1712.5MHz)

Frequency Range : 9kHz~1GHz

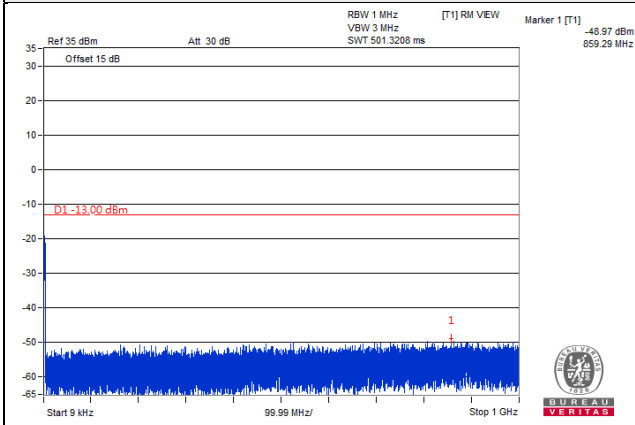


Frequency Range : 1GHz~18GHz

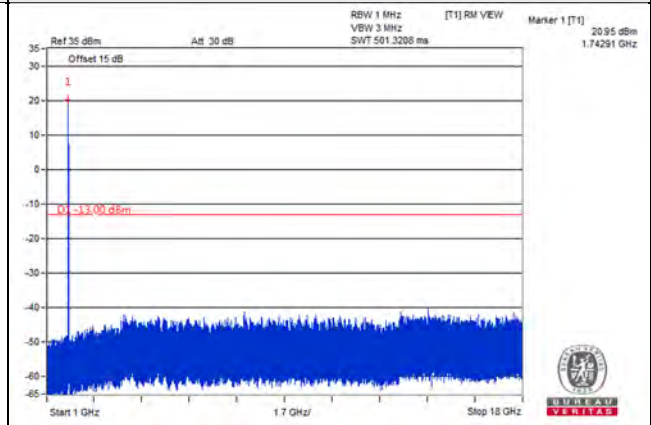


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz~1GHz

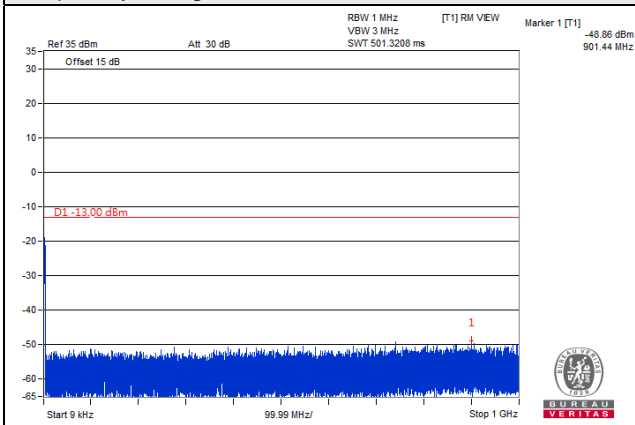


Frequency Range : 1GHz~18GHz

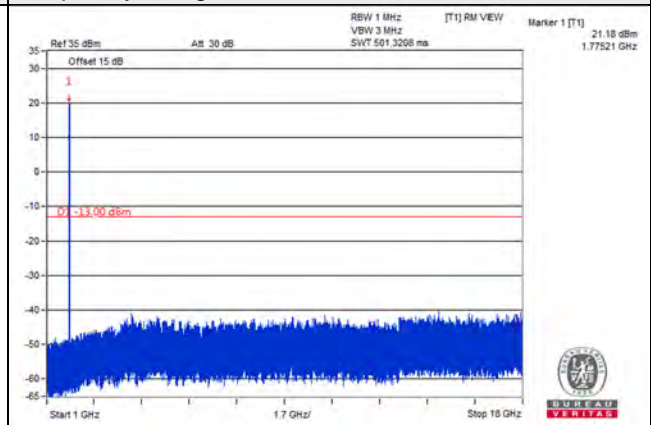


Channel 132647 (1777.5MHz)

Frequency Range : 9kHz~1GHz



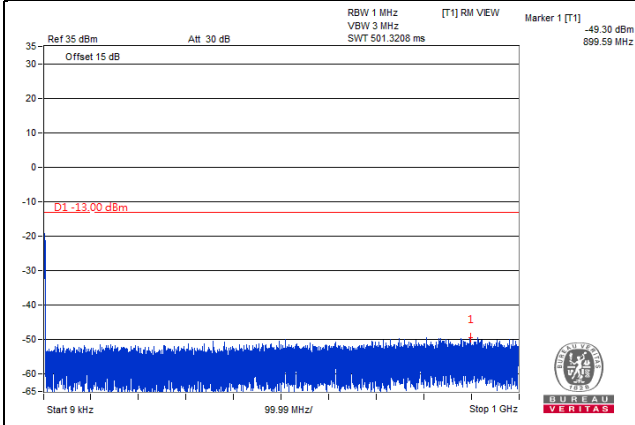
Frequency Range : 1GHz~18GHz



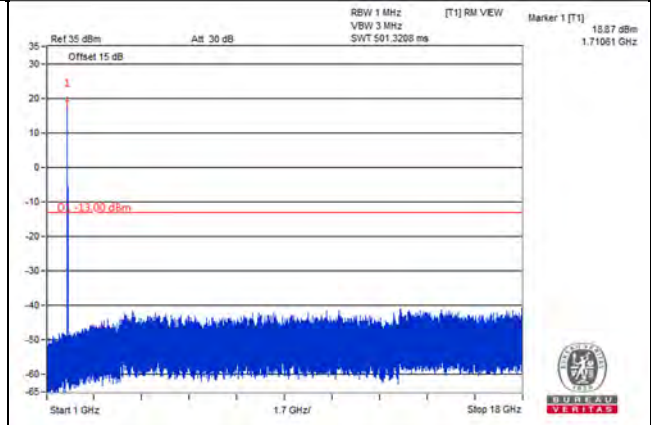
Channel Bandwidth: 10MHz

Channel 132022 (1715.0MHz)

Frequency Range : 9kHz~1GHz

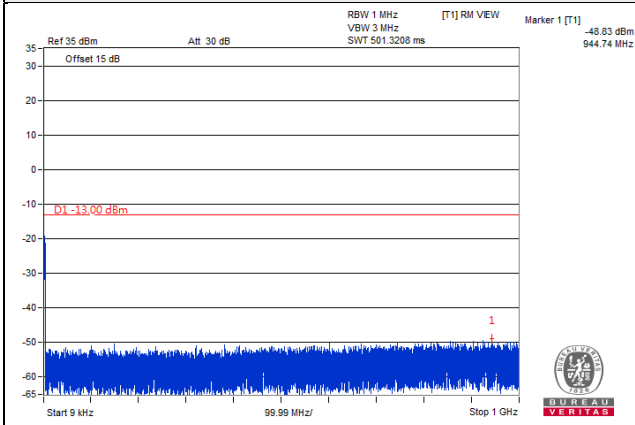


Frequency Range : 1GHz~18GHz

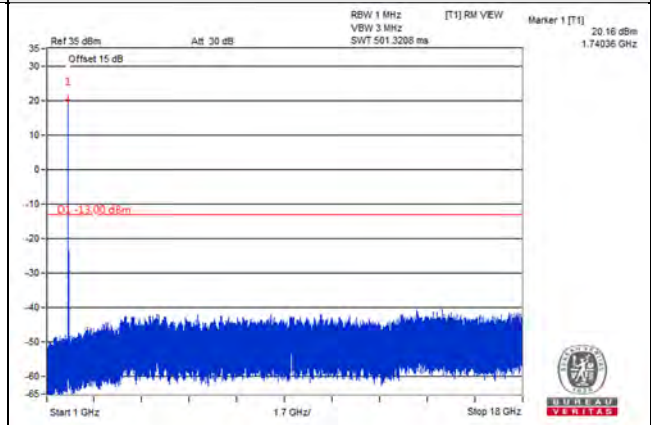


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz~1GHz

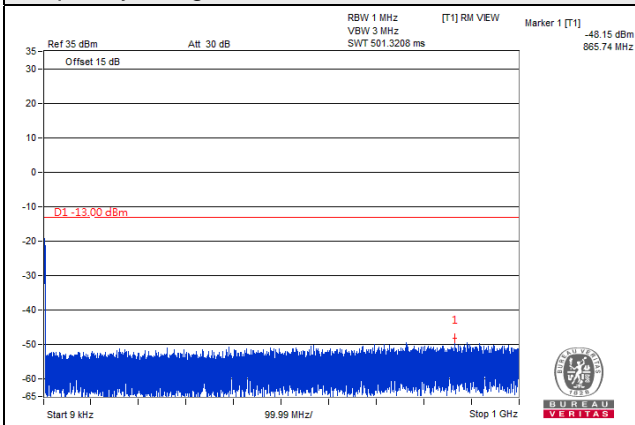


Frequency Range : 1GHz~18GHz

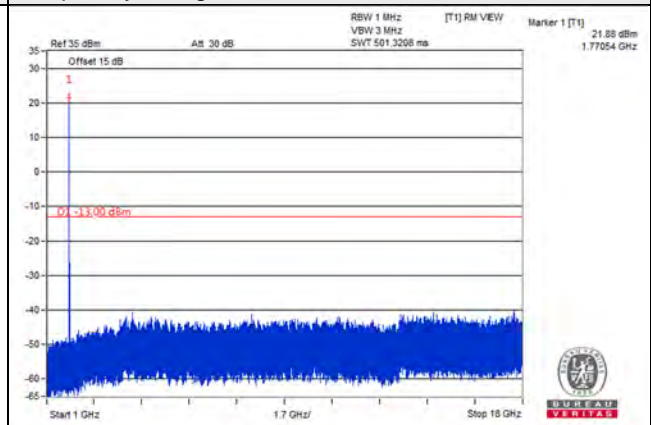


Channel 132622 (1775.0MHz)

Frequency Range : 9kHz~1GHz



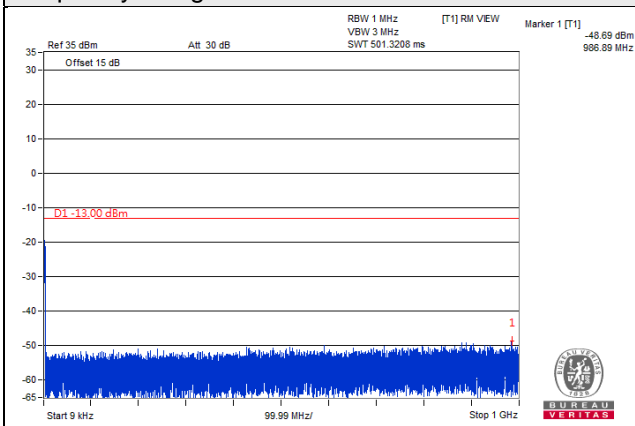
Frequency Range : 1GHz~18GHz



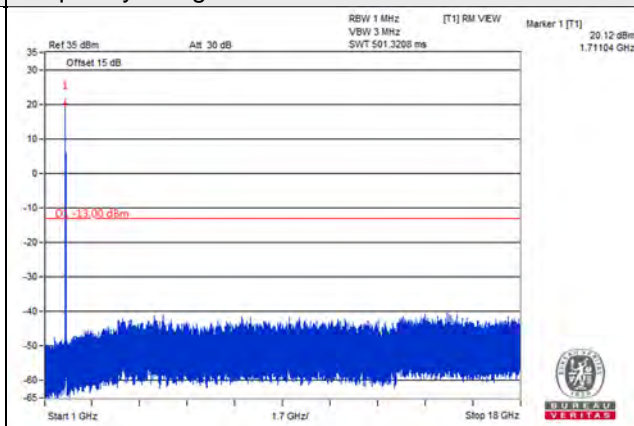
Channel Bandwidth: 15MHz

Channel 132047 (1717.5MHz)

Frequency Range : 9kHz~1GHz

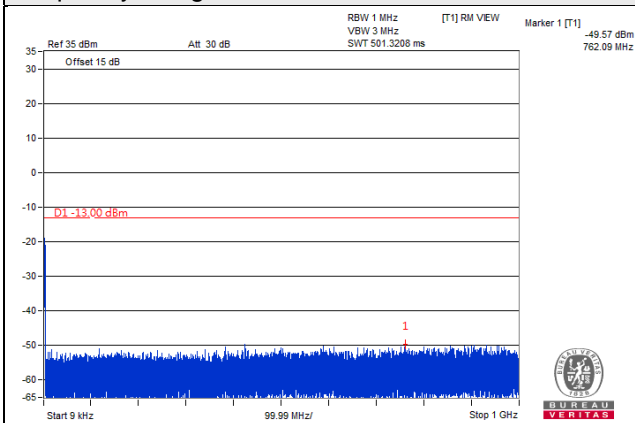


Frequency Range : 1GHz~18GHz

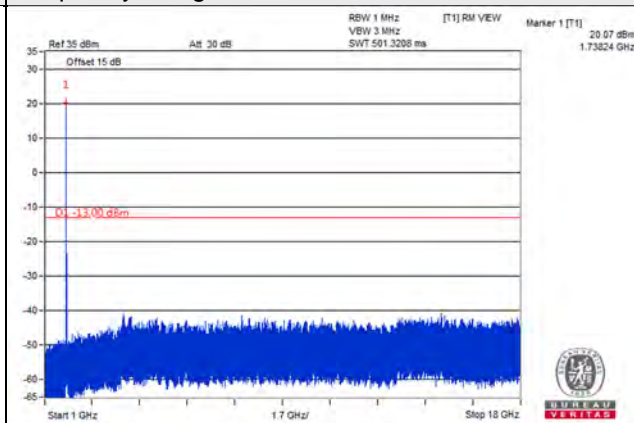


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz~1GHz

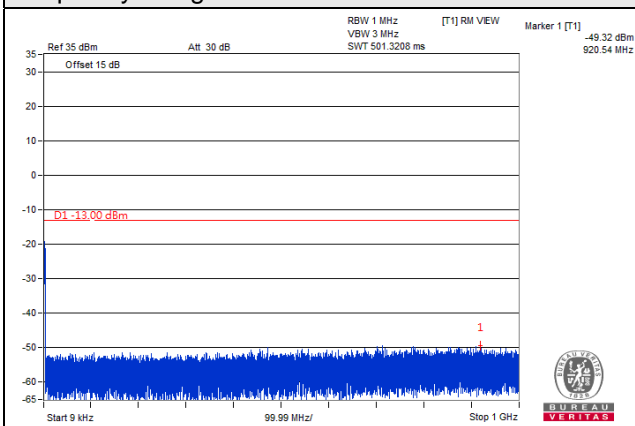


Frequency Range : 1GHz~18GHz

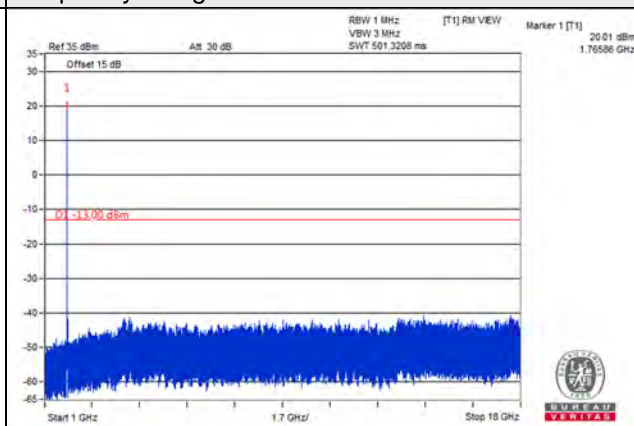


Channel 132597 (1772.5MHz)

Frequency Range : 9kHz~1GHz



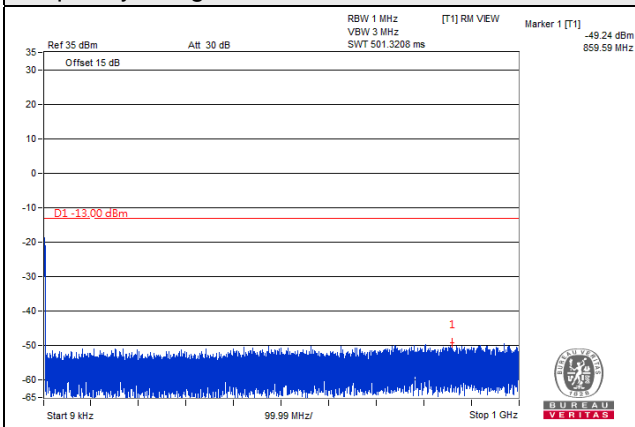
Frequency Range : 1GHz~18GHz



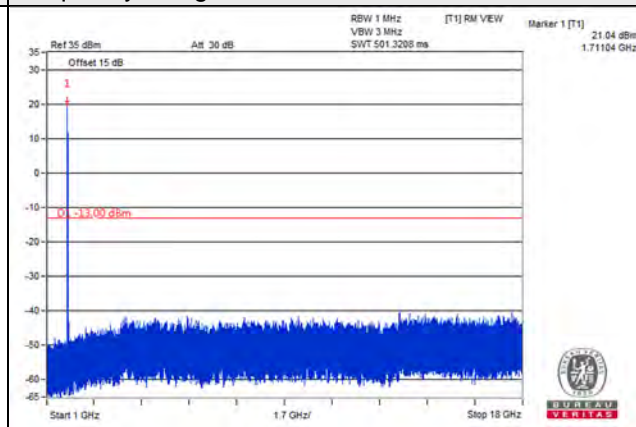
Channel Bandwidth: 20MHz

Channel 132072 (1720.0MHz)

Frequency Range : 9kHz~1GHz

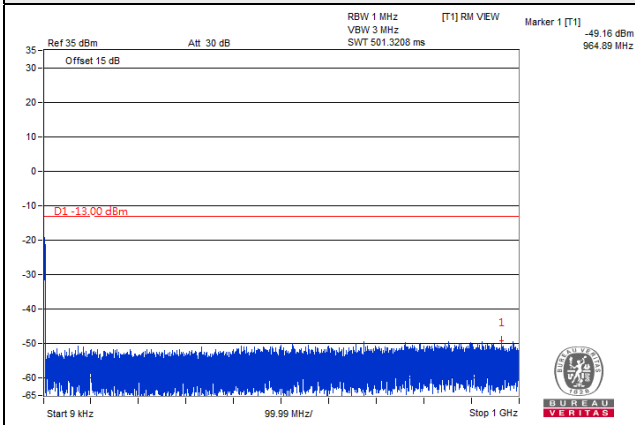


Frequency Range : 1GHz~18GHz

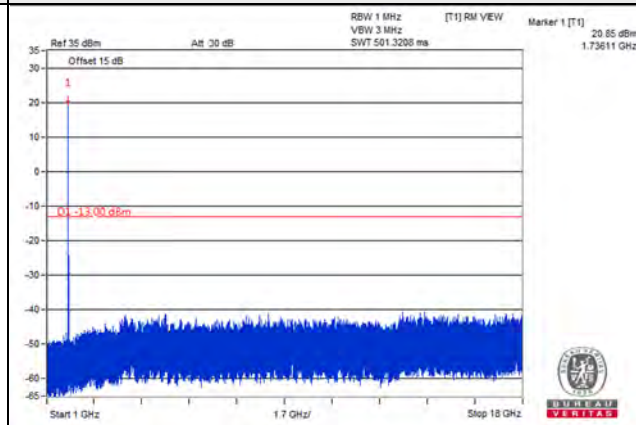


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz~1GHz

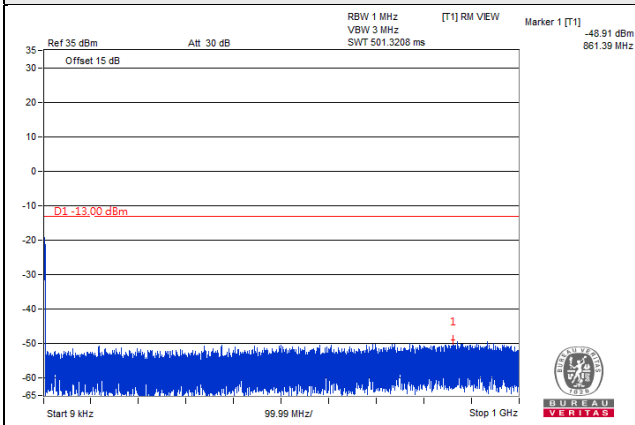


Frequency Range : 1GHz~18GHz

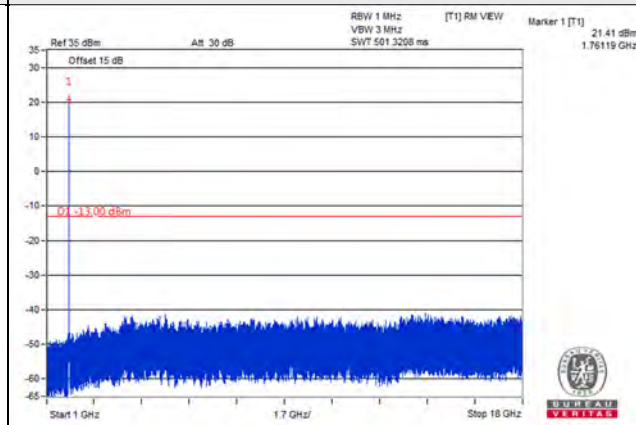


Channel 132572 (1770.0MHz)

Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz



4.8 Radiated Emission Measurement

4.8.1 Limits of Radiated Emission Measurement

For n2, LTE Band 5:

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

For LTE Band 12:

According to FCC 27.53(g) for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater.

For LTE Band 13:

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

According to FCC 27.53(f) 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

For LTE Band 30:

In the FCC 27.53(a)(4)(iii), the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $70 + 10 \log(P)$ dB. The limit of emission is equal to -40 dBm.

For LTE Band 48:

The power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz .

For LTE Band 66:

According to FCC 27.53(h) for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log(P)$ dB.

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 0.8m (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 1m to 4m 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. $\text{EIRP} = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$.
- d. $\text{E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power} = \text{E.I.R.P power} - 2.15\text{dBi}$.

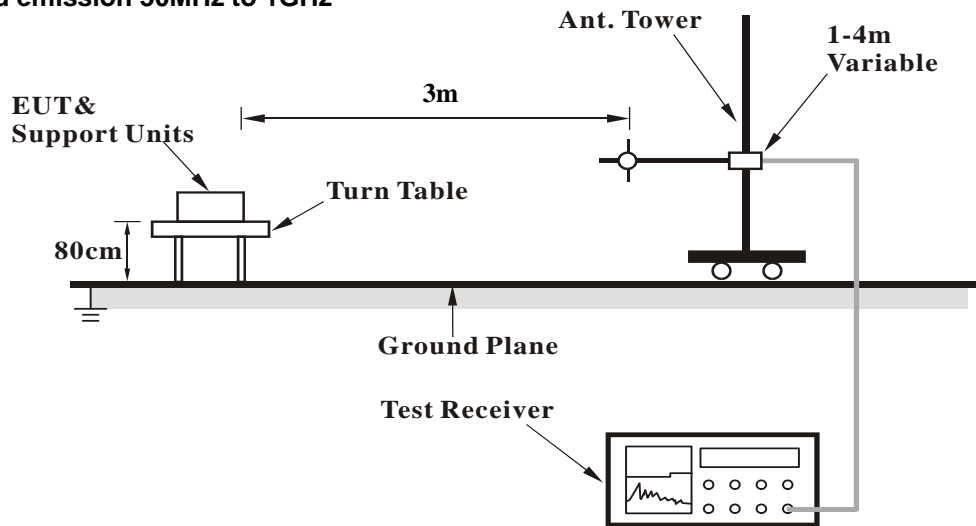
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

4.8.3 Deviation from Test Standard

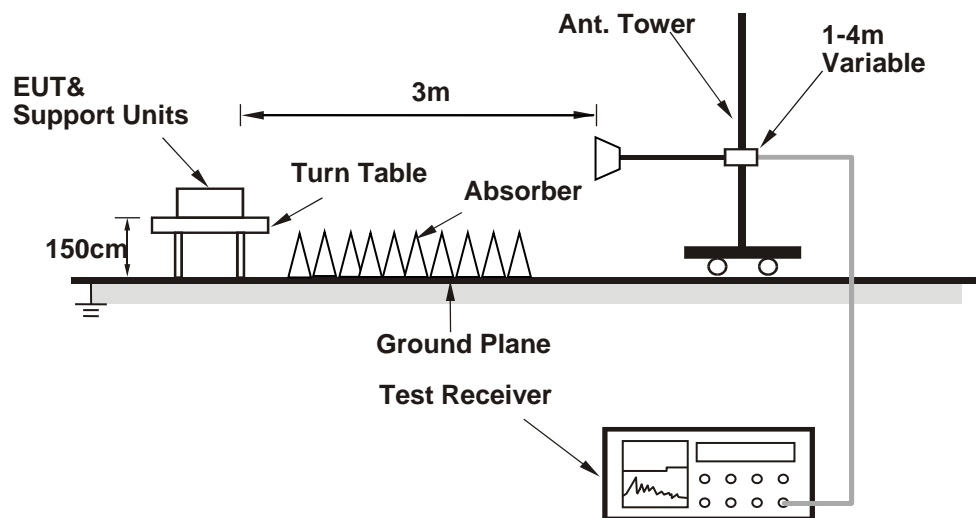
No deviation.

4.8.4 Test Setup

For radiated emission 30MHz to 1GHz



For radiated emission above 1GHz



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

4.8.5 Test Results

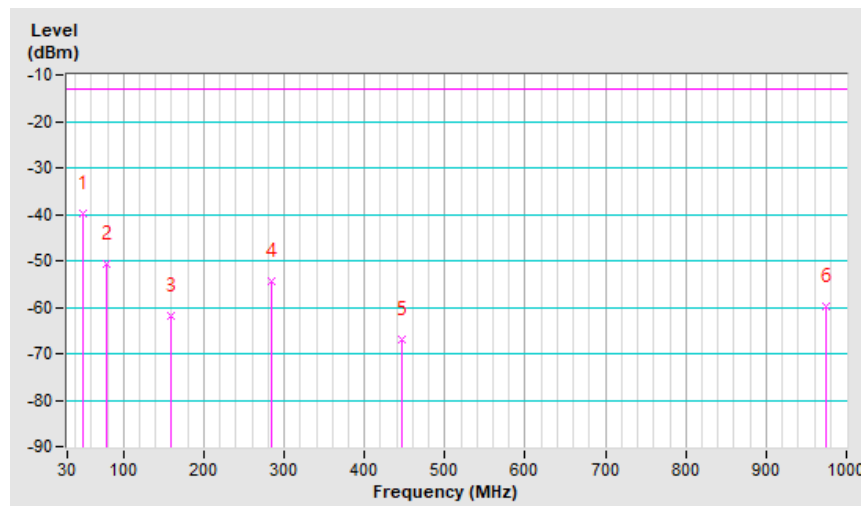
Below 1GHz

n2, Channel Bandwidth: 5MHz

Mode	TX channel 370500 (1852.50MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

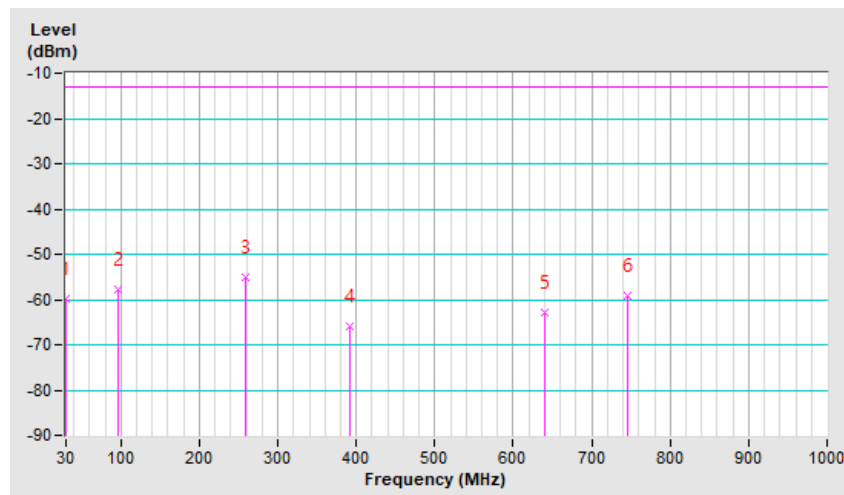
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.40	-39.3	-31.4	-8.3	-39.7	-13.0	-26.7
2	79.47	-45.9	-51.4	0.6	-50.8	-13.0	-37.8
3	159.01	-56.8	-59.1	-2.8	-61.9	-13.0	-48.9
4	285.11	-50.5	-52.8	-1.6	-54.4	-13.0	-41.4
5	446.13	-67.1	-70.5	3.4	-67.1	-13.0	-54.1
6	973.81	-68.8	-63.5	3.6	-59.9	-13.0	-46.9



Mode	TX channel 370500 (1852.50MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	30.00	-50.0	-40.5	-19.4	-59.9	-13.0	-46.9
2	96.93	-49.8	-56.6	-1.2	-57.8	-13.0	-44.8
3	257.95	-55.5	-53.4	-1.6	-55.0	-13.0	-42.0
4	390.84	-65.3	-69.3	3.4	-65.9	-13.0	-52.9
5	641.10	-67.9	-66.4	3.6	-62.8	-13.0	-49.8
6	745.86	-66.1	-62.9	3.8	-59.1	-13.0	-46.1

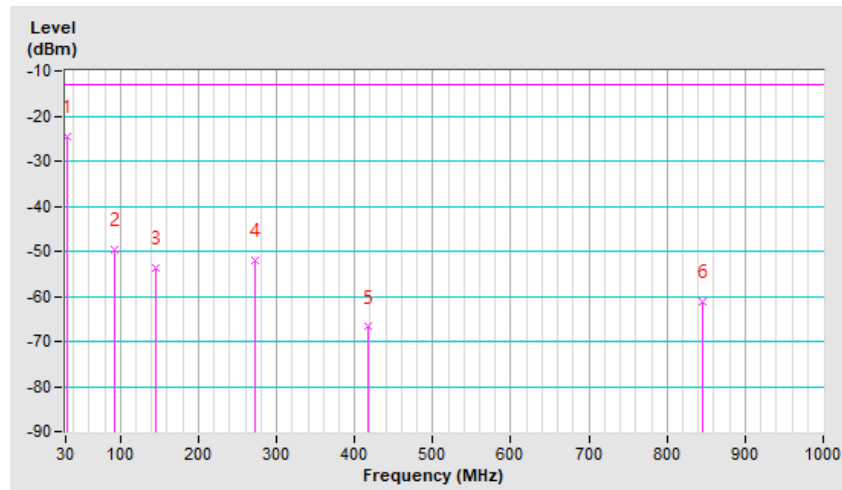


n2, Channel Bandwidth: 20MHz

Mode	TX channel 376000 (1880.00MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

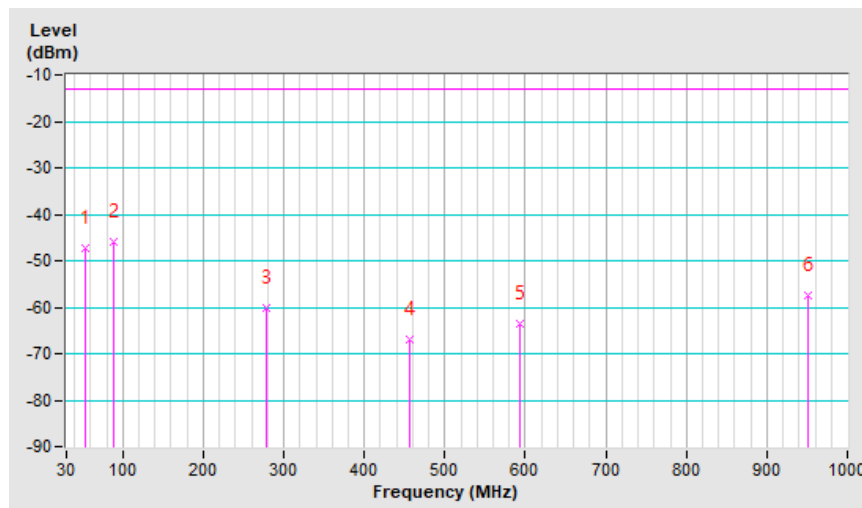
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	31.94	-28.0	-6.3	-18.3	-24.6	-13.0	-11.6
2	92.08	-40.9	-48.9	-0.6	-49.5	-13.0	-36.5
3	145.43	-48.9	-50.7	-3.1	-53.8	-13.0	-40.8
4	273.47	-47.5	-50.3	-1.6	-51.9	-13.0	-38.9
5	417.03	-66.7	-70.2	3.4	-66.8	-13.0	-53.8
6	844.80	-68.0	-64.9	3.6	-61.3	-13.0	-48.3



Mode	TX channel 376000 (1880.00MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	54.25	-40.4	-41.5	-5.7	-47.2	-13.0	-34.2
2	89.17	-39.7	-45.9	-0.1	-46.0	-13.0	-33.0
3	278.32	-63.4	-58.5	-1.6	-60.1	-13.0	-47.1
4	456.80	-66.7	-70.4	3.5	-66.9	-13.0	-53.9
5	593.57	-66.5	-67.1	3.7	-63.4	-13.0	-50.4
6	950.53	-66.7	-61.1	3.7	-57.4	-13.0	-44.4



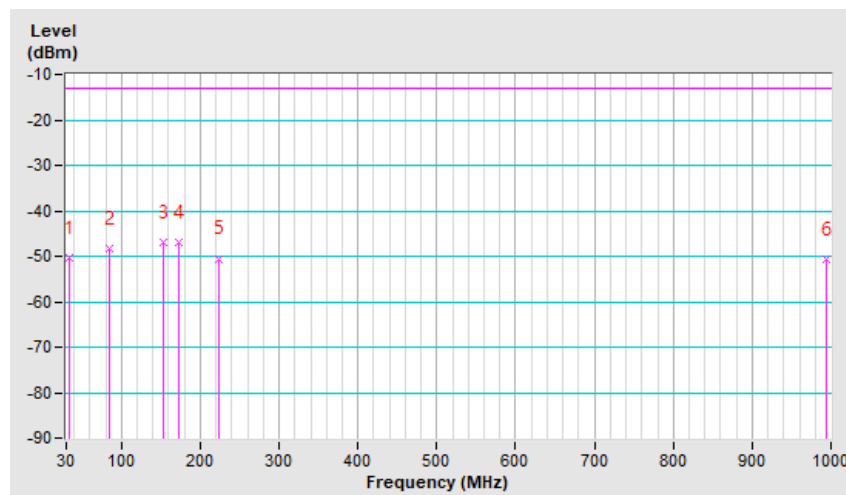
LTE Band 5, Channel Bandwidth: 10MHz

Mode	TX channel 20600 (844.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	34.85	-51.5	-49.6	-0.9	-50.5	-13.0	-37.5
2	84.32	-40.1	-46.9	-1.4	-48.3	-13.0	-35.3
3	153.19	-40.6	-45.2	-1.8	-47.0	-13.0	-34.0
4	172.59	-37.5	-45.0	-2.0	-47.0	-13.0	-34.0
5	223.03	-40.2	-48.4	-2.1	-50.5	-13.0	-37.5
6	993.21	-57.5	-46.7	-4.0	-50.7	-13.0	-37.7

Remarks:

- ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
- Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.

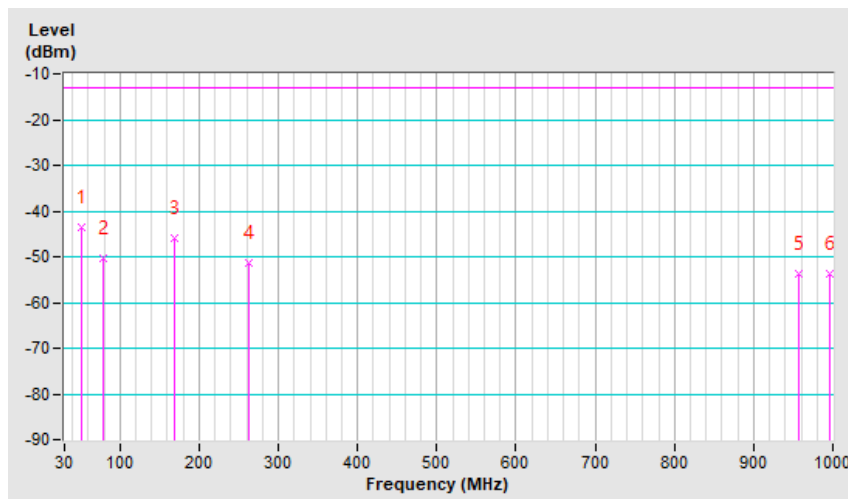


Mode	TX channel 20600 (844.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	51.34	-34.4	-42.6	-1.1	-43.7	-13.0	-30.7
2	78.50	-42.9	-48.9	-1.4	-50.3	-13.0	-37.3
3	168.71	-40.6	-44.0	-2.0	-46.0	-13.0	-33.0
4	262.80	-50.1	-49.1	-2.2	-51.3	-13.0	-38.3
5	957.32	-60.9	-50.1	-3.7	-53.8	-13.0	-40.8
6	996.12	-61.8	-49.8	-4.0	-53.8	-13.0	-40.8

Remarks:

- ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
- Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.



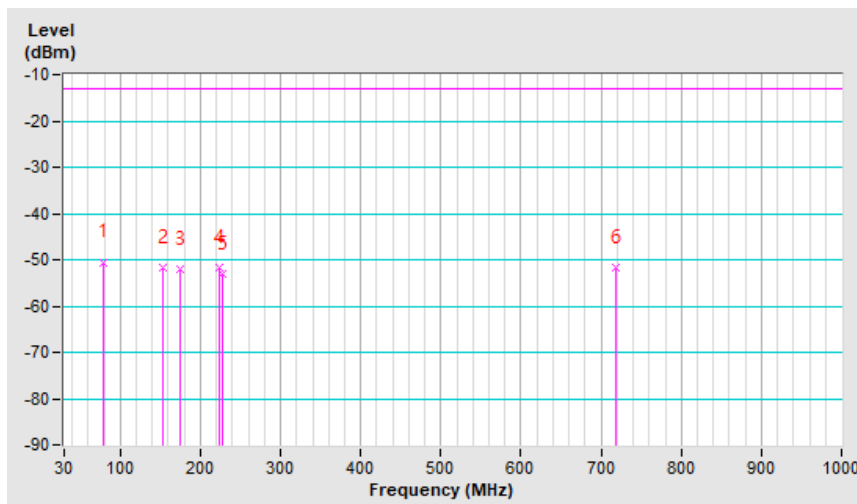
LTE Band 12, Channel Bandwidth: 10MHz

Mode	TX channel 23130 (711MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	78.50	-43.2	-49.1	-1.4	-50.5	-13.0	-37.5
2	154.16	-45.3	-50.0	-1.8	-51.8	-13.0	-38.8
3	175.50	-42.1	-49.9	-2.0	-51.9	-13.0	-38.9
4	224.00	-41.4	-49.6	-2.1	-51.7	-13.0	-38.7
5	227.88	-43.0	-50.9	-2.1	-53.0	-13.0	-40.0
6	717.73	-52.6	-48.3	-3.3	-51.6	-13.0	-38.6

Remarks:

- ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
- Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.

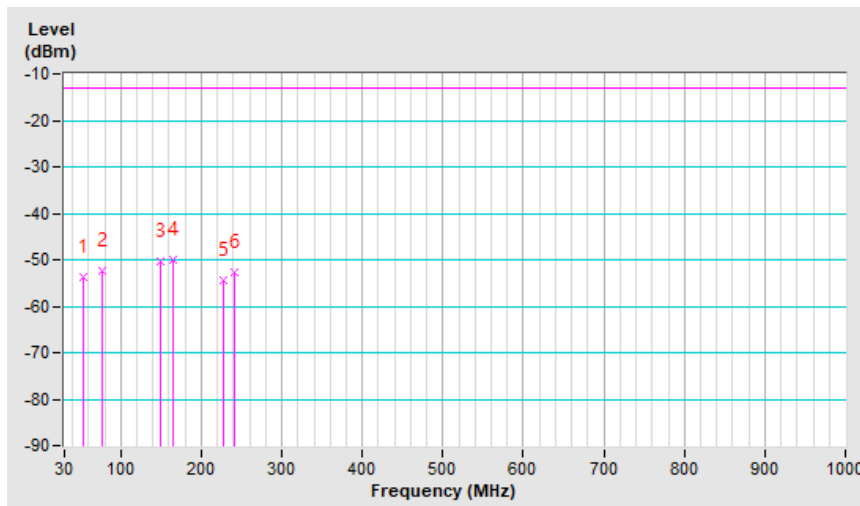


Mode	TX channel 23130 (711MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	53.28	-44.5	-52.5	-1.1	-53.6	-13.0	-40.6
2	76.56	-44.6	-51.1	-1.4	-52.5	-13.0	-39.5
3	148.34	-46.1	-48.7	-1.7	-50.4	-13.0	-37.4
4	165.80	-44.5	-48.1	-1.9	-50.0	-13.0	-37.0
5	226.91	-48.5	-52.4	-2.1	-54.5	-13.0	-41.5
6	240.49	-48.9	-50.6	-2.1	-52.7	-13.0	-39.7

Remarks:

- ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
- Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.



LTE Band 13, Channel Bandwidth: 10MHz

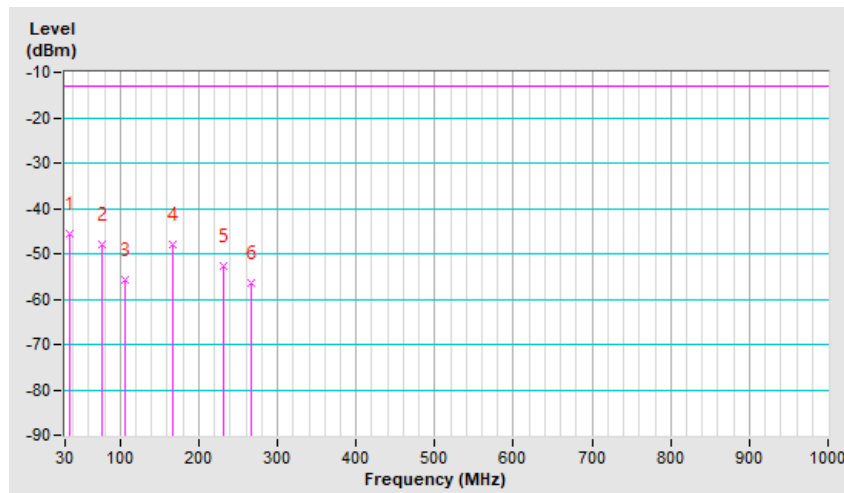
Mode	TX channel 23230 (782.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	35.82	-46.9	-44.5	-1.0	-45.5	-13.0	-32.5
2	77.53	-40.7	-46.7	-1.4	-48.1	-13.0	-35.1
3	105.66	-45.5	-54.0	-1.7	-55.7	-13.0	-42.7
4	167.74	-39.2	-46.1	-2.0	-48.1	-13.0	-35.1
5	230.79	-42.8	-50.6	-2.2	-52.8	-13.0	-39.8
6	265.71	-49.8	-54.2	-2.2	-56.4	-13.0	-43.4

Remarks:

- ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
- Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.

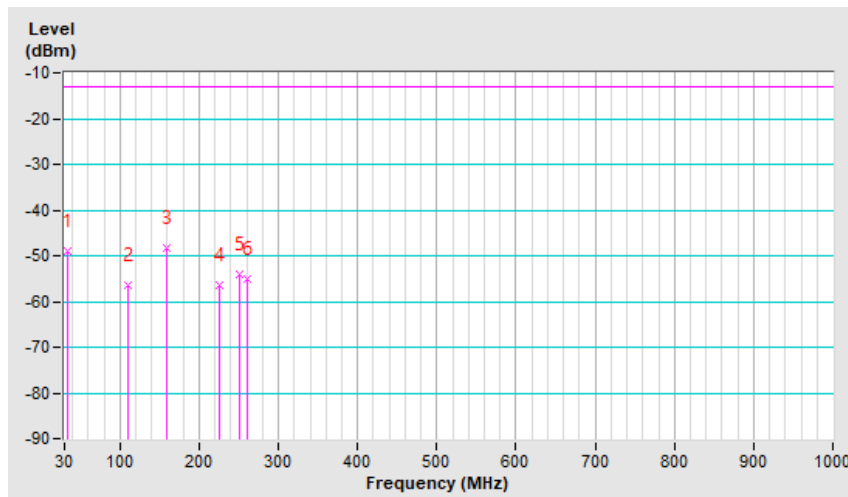


Mode	TX channel 23230 (782.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	33.88	-36.4	-48.2	-0.9	-49.1	-13.0	-36.1
2	109.54	-46.2	-54.9	-1.7	-56.6	-13.0	-43.6
3	159.01	-43.1	-46.4	-1.8	-48.2	-13.0	-35.2
4	225.94	-50.5	-54.5	-2.1	-56.6	-13.0	-43.6
5	251.16	-51.9	-51.8	-2.2	-54.0	-13.0	-41.0
6	260.86	-53.9	-52.8	-2.2	-55.0	-13.0	-42.0

Remarks:

- ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
- Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.

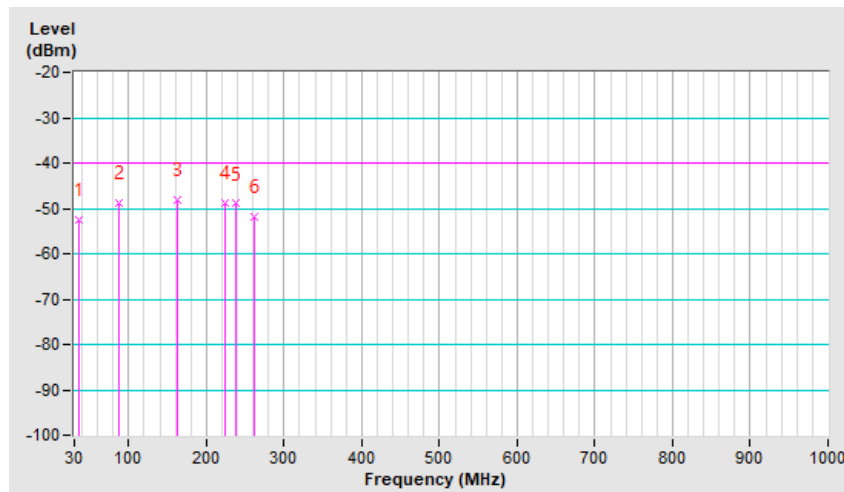


LTE Band 30, Channel Bandwidth: 5MHz

Mode	TX channel 27685 (2307.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

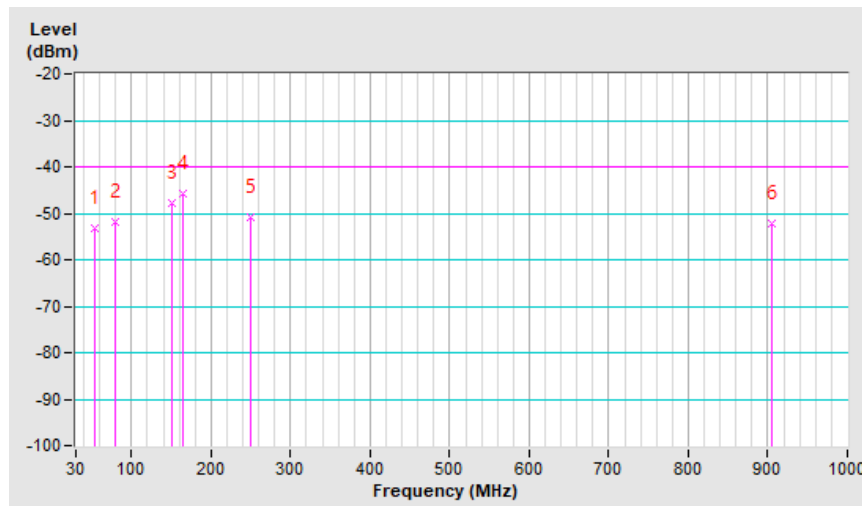
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	35.82	-55.9	-51.4	-1.0	-52.4	-40.0	-12.4
2	87.23	-41.6	-47.3	-1.5	-48.8	-40.0	-8.8
3	162.89	-42.3	-46.2	-1.9	-48.1	-40.0	-8.1
4	224.00	-40.6	-46.7	-2.1	-48.8	-40.0	-8.8
5	238.55	-42.1	-46.9	-2.1	-49.0	-40.0	-9.0
6	260.86	-47.3	-49.8	-2.2	-52.0	-40.0	-12.0



Mode	TX channel 27685 (2307.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	53.28	-46.2	-52.0	-1.1	-53.1	-40.0	-13.1
2	79.47	-47.1	-50.6	-1.4	-52.0	-40.0	-12.0
3	151.25	-45.8	-46.1	-1.7	-47.8	-40.0	-7.8
4	164.83	-42.7	-44.0	-1.9	-45.9	-40.0	-5.9
5	250.19	-51.0	-48.8	-2.2	-51.0	-40.0	-11.0
6	905.91	-60.4	-48.4	-3.7	-52.1	-40.0	-12.1

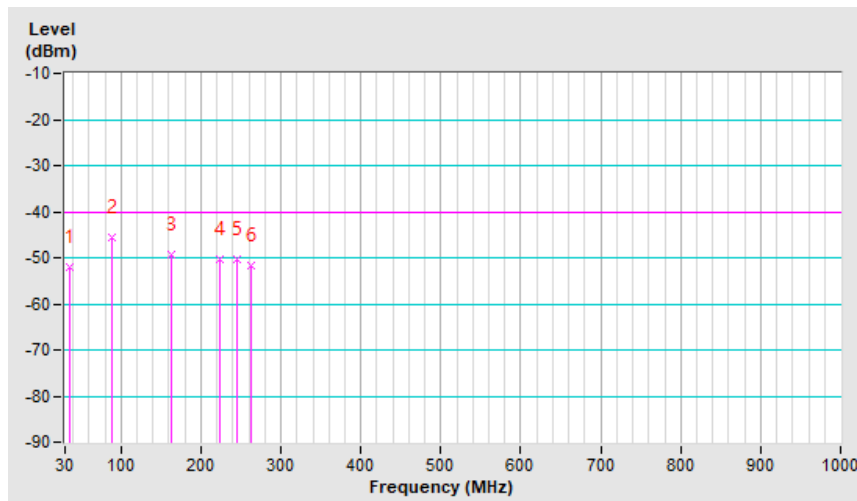


LTE Band 48, Channel Bandwidth: 20MHz

Mode	TX channel 55990 (3625.00MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

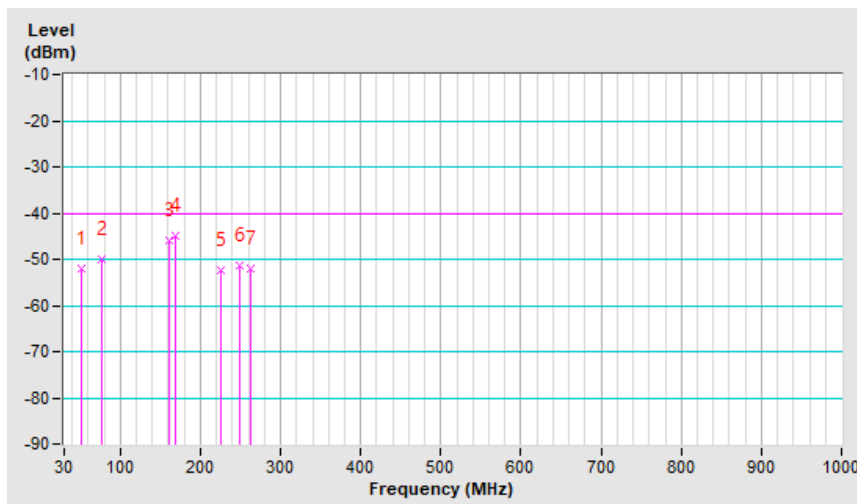
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	35.82	-55.7	-51.2	-1.0	-52.2	-40.0	-12.2
2	88.20	-37.9	-44.0	-1.5	-45.5	-40.0	-5.5
3	163.86	-43.1	-47.3	-1.9	-49.2	-40.0	-9.2
4	224.00	-42.1	-48.2	-2.1	-50.3	-40.0	-10.3
5	244.37	-43.3	-48.2	-2.1	-50.3	-40.0	-10.3
6	262.80	-46.9	-49.4	-2.2	-51.6	-40.0	-11.6



Mode	TX channel 55990 (3625.00MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	52.31	-45.0	-50.9	-1.1	-52.0	-40.0	-12.0
2	76.56	-44.2	-48.5	-1.4	-49.9	-40.0	-9.9
3	160.95	-42.8	-43.9	-1.9	-45.8	-40.0	-5.8
4	169.68	-41.7	-42.9	-2.0	-44.9	-40.0	-4.9
5	225.94	-48.3	-50.2	-2.1	-52.3	-40.0	-12.3
6	249.22	-51.3	-49.3	-2.2	-51.5	-40.0	-11.5

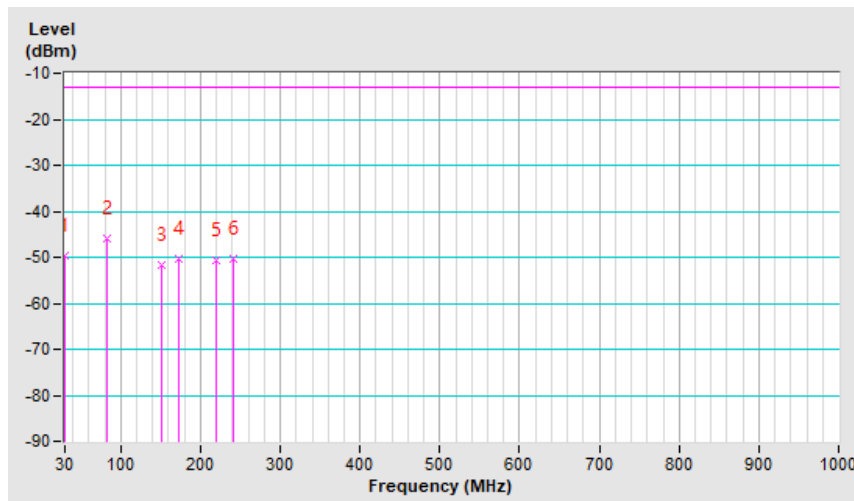


LTE Band 66, Channel Bandwidth: 20MHz

Mode	TX channel 132322 (1745.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

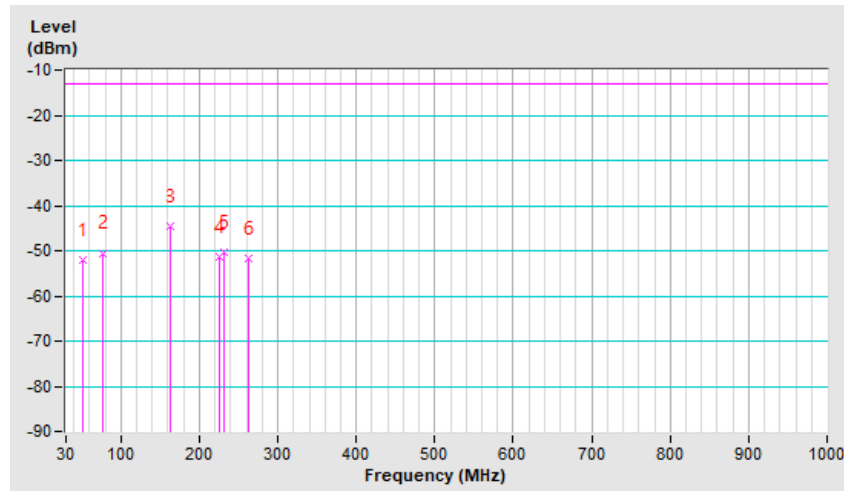
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	30.00	-53.7	-48.9	-0.8	-49.7	-13.0	-36.7
2	83.35	-40.2	-44.5	-1.4	-45.9	-13.0	-32.9
3	150.28	-47.0	-50.0	-1.7	-51.7	-13.0	-38.7
4	173.56	-43.0	-48.4	-2.0	-50.4	-13.0	-37.4
5	220.12	-42.6	-48.6	-2.1	-50.7	-13.0	-37.7
6	241.46	-43.3	-48.1	-2.1	-50.2	-13.0	-37.2



Mode	TX channel 132322 (1745.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	52.31	-45.1	-51.0	-1.1	-52.1	-13.0	-39.1
2	76.56	-44.8	-49.1	-1.4	-50.5	-13.0	-37.5
3	163.86	-41.4	-42.6	-1.9	-44.5	-13.0	-31.5
4	225.94	-47.2	-49.1	-2.1	-51.2	-13.0	-38.2
5	231.76	-47.6	-48.2	-2.2	-50.4	-13.0	-37.4
6	261.83	-52.8	-49.5	-2.2	-51.7	-13.0	-38.7



Above 1GHz
n2, Channel Bandwidth 5MHz

Mode	TX channel 370500 (1852.50MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3705.00	-61.5	-53.0	1.4	-51.6	-13.0	-38.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3705.00	-58.7	-50.5	1.4	-49.1	-13.0	-36.1

Mode	TX channel 376000 (1880.00MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00	-61.1	-52.6	1.3	-51.3	-13.0	-38.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00	-58.8	-50.5	1.3	-49.2	-13.0	-36.2

Mode	TX channel 381500 (1907.50MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3815.00	-61.7	-53.4	1.4	-52.0	-13.0	-39.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3815.00	-59.3	-51.1	1.4	-49.7	-13.0	-36.7

n2, Channel Bandwidth 10MHz

Mode	TX channel 371000 (1855.00MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3710.00	-61.0	-52.5	1.4	-51.1	-13.0	-38.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3710.00	-58.7	-50.5	1.4	-49.1	-13.0	-36.1

Mode	TX channel 376000 (1880.00MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00	-61.5	-53.0	1.3	-51.7	-13.0	-38.7
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00	-59.3	-51.0	1.3	-49.7	-13.0	-36.7

Mode	TX channel 381000 (1905.00MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3810.00	-61.6	-53.2	1.3	-51.9	-13.0	-38.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3810.00	-58.8	-50.5	1.3	-49.2	-13.0	-36.2

n2, Channel Bandwidth 15MHz

Mode	TX channel 371500 (1857.50MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3715.00	-61.1	-52.6	1.4	-51.2	-13.0	-38.2

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3715.00	-59.1	-50.9	1.4	-49.5	-13.0	-36.5

Mode	TX channel 376000 (1880.00MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00	-61.2	-52.7	1.3	-51.4	-13.0	-38.4

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00	-58.7	-50.4	1.3	-49.1	-13.0	-36.1

Mode	TX channel 380500 (1902.50MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3805.00	-61.4	-53.0	1.3	-51.7	-13.0	-38.7

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3805.00	-59.0	-50.8	1.3	-49.5	-13.0	-36.5

n2, Channel Bandwidth 20MHz

Mode	TX channel 372000 (1860.00MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3720.00	-61.3	-52.8	1.4	-51.4	-13.0	-38.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3720.00	-59.1	-50.9	1.4	-49.5	-13.0	-36.5

Mode	TX channel 376000 (1880.00MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00	-61.2	-52.7	1.3	-51.4	-13.0	-38.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3760.00	-58.9	-50.6	1.3	-49.3	-13.0	-36.3

Mode	TX channel 380000 (1900.00MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3800.00	-61.0	-52.6	1.3	-51.3	-13.0	-38.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3800.00	-58.9	-50.7	1.3	-49.4	-13.0	-36.4

LTE Band 5, Channel Bandwidth: 1.4MHz

Mode	TX channel 20407 (824.7MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1649.40	-65.2	-57.5	0.9	-56.6	-13.0	-43.6

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1649.40	-63.6	-56.4	0.9	-55.5	-13.0	-42.5

Mode	TX channel 20525 (836.5MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1673.00	-65.2	-57.5	0.8	-56.7	-13.0	-43.7

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1673.00	-63.8	-56.4	0.8	-55.6	-13.0	-42.6

Mode	TX channel 20643 (848.3MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1696.60	-65.0	-57.5	0.7	-56.8	-13.0	-43.8

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1696.60	-63.6	-56.3	0.7	-55.6	-13.0	-42.6

Remarks:

- ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
- Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.

LTE Band 5, Channel Bandwidth: 5MHz

Mode	TX channel 20425 (826.5MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1653.00	-65.5	-57.8	0.9	-56.9	-13.0	-43.9

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1653.00	-63.5	-56.3	0.9	-55.4	-13.0	-42.4

Mode	TX channel 20525 (836.5MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1673.00	-65.5	-57.8	0.8	-57.0	-13.0	-44.0

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1673.00	-63.6	-56.3	0.8	-55.5	-13.0	-42.5

Mode	TX channel 20625 (846.5MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1693.00	-65.3	-57.8	0.7	-57.1	-13.0	-44.1

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1693.00	-63.4	-56.1	0.7	-55.4	-13.0	-42.4

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.

LTE Band 5, Channel Bandwidth: 10MHz

Mode	TX channel 20450 (829.0MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1658.00	-64.8	-57.2	0.9	-56.3	-13.0	-43.3

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1658.00	-63.4	-56.1	0.9	-55.2	-13.0	-42.2

Mode	TX channel 20525 (836.5MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1673.00	-64.7	-57.0	0.8	-56.2	-13.0	-43.2

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1673.00	-63.1	-55.8	0.8	-55.0	-13.0	-42.0

Mode	TX channel 20600 (844.0MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1688.00	-64.2	-56.6	0.7	-55.9	-13.0	-42.9

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1688.00	-62.8	-55.5	0.7	-54.8	-13.0	-41.8

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.

LTE Band 12, Channel Bandwidth: 1.4MHz

Mode	TX channel 23017 (699.7MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1399.40	-65.0	-58.8	0.9	-57.9	-13.0	-44.9

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1399.40	-62.0	-56.9	0.9	-56.0	-13.0	-43.0

Mode	TX channel 23095 (707.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1415.00	-65.2	-58.7	0.9	-57.8	-13.0	-44.8

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1415.00	-62.1	-56.8	0.9	-55.9	-13.0	-42.9

Mode	TX channel 23173 (715.3MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1430.60	-65.8	-59.0	1.0	-58.0	-13.0	-45.0

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1430.60	-62.6	-57.1	1.0	-56.1	-13.0	-43.1

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.

LTE Band 12, Channel Bandwidth: 5MHz

Mode	TX channel 23035 (701.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1403.00	-65.0	-58.6	0.9	-57.7	-13.0	-44.7

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1403.00	-61.6	-56.5	0.9	-55.6	-13.0	-42.6

Mode	TX channel 23095 (707.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1415.00	-65.0	-58.4	0.9	-57.5	-13.0	-44.5

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1415.00	-61.9	-56.5	0.9	-55.6	-13.0	-42.6

Mode	TX channel 23155 (713.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1427.00	-65.8	-59.1	1.0	-58.1	-13.0	-45.1

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1427.00	-62.5	-57.0	1.0	-56.0	-13.0	-43.0

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.

LTE Band 12, Channel Bandwidth: 10MHz

Mode	TX channel 23060 (704MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1408.00	-64.8	-58.4	0.9	-57.5	-13.0	-44.5

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1408.00	-61.4	-56.2	0.9	-55.3	-13.0	-42.3

Mode	TX channel 23095 (707.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1415.00	-65.0	-58.4	0.9	-57.5	-13.0	-44.5

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1415.00	-61.5	-56.1	0.9	-55.2	-13.0	-42.2

Mode	TX channel 23130 (711MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1422.00	-64.8	-58.2	1.0	-57.2	-13.0	-44.2

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1422.00	-61.5	-56.1	1.0	-55.1	-13.0	-42.1

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.

LTE Band 13, Channel Bandwidth: 5MHz

Mode	TX channel 23205 (779.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1559.00	-64.8	-57.0	1.3	-55.7	-40.0	-15.7

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1559.00	-62.1	-55.3	1.3	-54.0	-40.0	-14.0

Mode	TX channel 23230 (782.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1564.00	-65.2	-57.3	1.2	-56.1	-40.0	-16.1

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1564.00	-62.0	-55.1	1.2	-53.9	-40.0	-13.9

Mode	TX channel 23255 (784.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1569.00	-64.8	-57.0	1.2	-55.8	-40.0	-15.8

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1569.00	-62.2	-55.3	1.2	-54.1	-40.0	-14.1

Remarks:

- ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
- Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.

LTE Band 13, Channel Bandwidth: 10MHz

Mode	TX channel 23230 (782.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1564.00	-64.5	-56.7	1.2	-55.5	-40.0	-15.5

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1564.00	-61.6	-54.7	1.2	-53.5	-40.0	-13.5

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB) + 2.15dB.

LTE Band 30, Channel Bandwidth: 5MHz

Mode	TX channel 27685 (2307.5MHz)	Frequency Range	1GHz ~ 25GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4615.00	-62.4	-52.0	1.0	-51.0	-40.0	-11.0

Antenna Polarity & Test Distance: Vertical at 3 m

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4615.00	-60.5	-50.3	1.0	-49.3	-40.0	-9.3

Mode	TX channel 27710 (2310.0MHz)	Frequency Range	1GHz ~ 25GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4620.00	-62.3	-51.9	1.0	-50.9	-40.0	-10.9

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4620.00	-60.7	-50.4	1.0	-49.4	-40.0	-9.4

Mode	TX channel 27735 (2312.5MHz)	Frequency Range	1GHz ~ 25GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4625.00	-62.6	-52.2	1.1	-51.1	-40.0	-11.1

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4625.00	-61.0	-50.8	1.1	-49.7	-40.0	-9.7

LTE Band 30, Channel Bandwidth: 10MHz

Mode	TX channel 27710 (2310.0MHz)	Frequency Range	1GHz ~ 25GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4620.00	-62.6	-52.2	1.0	-51.2	-40.0	-11.2

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4620.00	-60.8	-50.5	1.0	-49.5	-40.0	-9.5

LTE Band 48, Channel Bandwidth 5MHz

Mode	TX channel 55265 (3552.5MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	7105.00	-63.2	-45.1	0.7	-44.4	-40.0	-4.4

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	7105.00	-61.4	-43.7	0.7	-43.0	-40.0	-3.0

Mode	TX channel 55990 (3625.0MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	7250.00	-63.2	-45.4	0.9	-44.5	-40.0	-4.5

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	7250.00	-61.3	-43.4	0.9	-42.5	-40.0	-2.5

Mode	TX channel 56715 (3697.5MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	7395.00	-64.1	-45.5	0.9	-44.6	-40.0	-4.6

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	7395.00	-61.1	-43.4	0.9	-42.5	-40.0	-2.5

LTE Band 48, Channel Bandwidth 20MHz

Mode	TX channel 55340 (3560.0MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	7120.00	-63.5	-45.5	0.7	-44.8	-40.0	-4.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	7120.00	-60.9	-43.2	0.7	-42.5	-40.0	-2.5

Mode	TX channel 55990 (3625.00MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	7250.00	-63.0	-45.2	0.9	-44.3	-40.0	-4.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	7250.00	-60.8	-42.9	0.9	-42.0	-40.0	-2.0

Mode	TX channel 56640 (3690.00MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	7380.00	-62.9	-44.4	0.9	-43.5	-40.0	-3.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	7380.00	-61.4	-43.7	0.9	-42.8	-40.0	-2.8

LTE Band 66, Channel Bandwidth: 1.4MHz

Mode	TX channel 131979 (1710.7MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3421.40	-63.7	-55.1	1.3	-53.8	-13.0	-40.8

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3421.40	-62.4	-54.3	1.3	-53.0	-13.0	-40.0

Mode	TX channel 132322 (1745.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3490.00	-64.2	-56.0	1.5	-54.5	-13.0	-41.5

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3490.00	-62.4	-54.8	1.5	-53.3	-13.0	-40.3

Mode	TX channel 132665 (1779.3MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3558.60	-64.5	-56.0	1.4	-54.6	-13.0	-41.6

Antenna Polarity & Test Distance: Vertical at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3558.60	-61.7	-53.9	1.4	-52.5	-13.0	-39.5

LTE Band 66, Channel Bandwidth: 5MHz

Mode	TX channel 131997 (1712.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3425.00	-64.8	-56.2	1.3	-54.9	-13.0	-41.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3425.00	-62.0	-53.9	1.3	-52.6	-13.0	-39.6

Mode	TX channel 132322 (1745.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3490.00	-64.1	-55.9	1.5	-54.4	-13.0	-41.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3490.00	-62.1	-54.5	1.5	-53.0	-13.0	-40.0

Mode	TX channel 132647 (1777.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3555.00	-63.3	-54.9	1.4	-53.5	-13.0	-40.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3555.00	-62.1	-54.3	1.4	-52.9	-13.0	-39.9

LTE Band 66, Channel Bandwidth: 20MHz

Mode	TX channel 132072 (1720.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3440.00	-63.7	-55.2	1.3	-53.9	-13.0	-40.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3440.00	-62.0	-54.0	1.3	-52.7	-13.0	-39.7

Mode	TX channel 132322 (1745.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3490.00	-63.0	-54.8	1.5	-53.3	-13.0	-40.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3490.00	-61.3	-53.7	1.5	-52.2	-13.0	-39.2

Mode	TX channel 132572 (1770.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3540.00	-63.0	-54.6	1.4	-53.2	-13.0	-40.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	3540.00	-61.6	-53.8	1.4	-52.4	-13.0	-39.4

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 and approved according to ISO/IEC 17025.

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

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