

## 26dB Bandwidth

n71

n71, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
133100	665.5	4.808	4.801	4.793	4.832	4.806
136100	680.5	4.775	4.794	4.798	4.848	4.810
139100	695.5	4.798	4.812	4.795	4.837	4.808
n71, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
133600	668	9.502	9.499	9.504	9.506	9.508
136100	680.5	9.500	9.504	9.503	9.504	9.514
138600	693	9.503	9.501	9.506	9.507	9.496
n71, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
134100	670.5	14.25	14.25	14.24	14.25	14.24
136100	680.5	14.26	14.26	14.25	14.25	14.25
138100	690.5	14.25	14.23	14.23	14.24	14.23
n71, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
134600	673	19.00	19.01	19.01	19.00	19.01
136100	680.5	19.06	19.02	19.03	19.02	19.02
137600	688	19.01	19.02	18.99	19.01	19.01

### Spectrum Plot of Worst Value

**5MHz / 64QAM**



**10MHz / 256QAM**



**15MHz / QPSK**



**20MHz /  $\pi/2$  BPSK**



LTE Band 2, Channel Bandwidth 1.4MHz				
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		
		QPSK	16QAM	64QAM
18607	1850.7	1.212	1.212	1.217
18900	1880.0	1.212	1.215	1.217
19193	1909.3	1.214	1.215	1.218

LTE Band 2, Channel Bandwidth 3MHz				
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		
		QPSK	16QAM	64QAM
18615	1851.5	2.913	2.928	2.905
18900	1880.0	2.921	2.929	2.904
19185	1908.5	2.910	2.929	2.901

LTE Band 2, Channel Bandwidth 5MHz				
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		
		QPSK	16QAM	64QAM
18625	1852.5	4.799	4.798	4.831
18900	1880.0	4.818	4.798	4.829
19175	1907.5	4.798	4.811	4.822

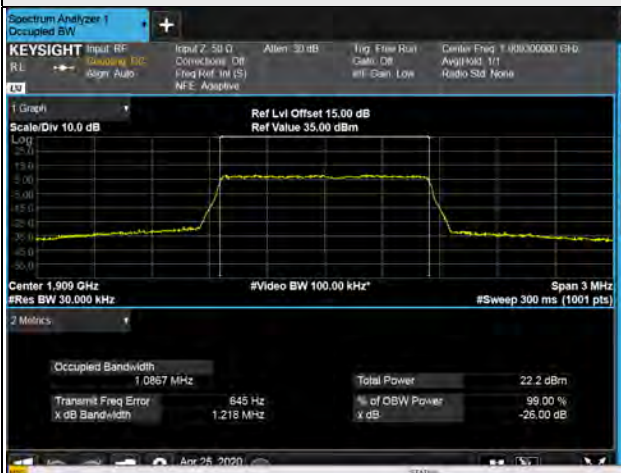
LTE Band 2, Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		
		QPSK	16QAM	64QAM
18650	1855.0	9.519	9.512	9.506
18900	1880.0	9.500	9.513	9.516
19150	1905.0	9.515	9.516	9.520

LTE Band 2, Channel Bandwidth 15MHz				
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		
		QPSK	16QAM	64QAM
18675	1857.5	14.26	14.29	14.26
18900	1880.0	14.25	14.26	14.24
19125	1902.5	14.33	14.33	14.29

LTE Band 2, Channel Bandwidth 20MHz				
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)		
		QPSK	16QAM	64QAM
18700	1860.0	19.02	19.03	19.03
18900	1880.0	19.04	19.04	19.04
19100	1900.0	26.78	19.17	19.13

### Spectrum Plot of Worst Value

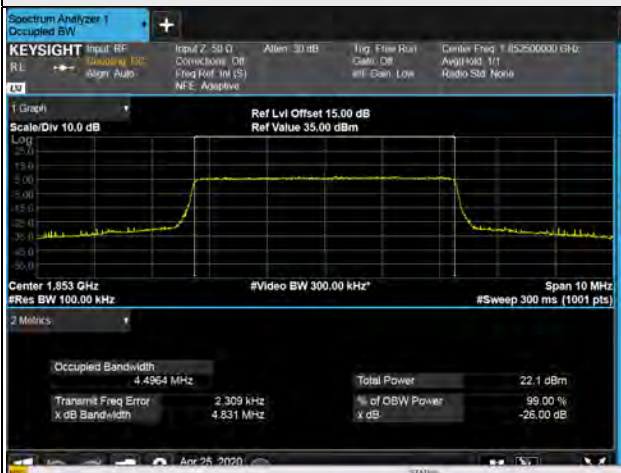
#### 1.4MHz / 64QAM



#### 3MHz / 16QAM



#### 5MHz / 64QAM



#### 10MHz / 64QAM



#### 15MHz / QPSK



#### 20MHz / QPSK



LTE Band 7

LTE Band 7, Channel Bandwidth 5MHz				
Channel	Frequency (MHz)	26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM
20775	2502.5	4.775	4.802	4.843
21100	2535.0	4.804	4.800	4.825
21425	2567.5	4.796	4.809	4.836
LTE Band 7, Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM
20800	2505.0	9.498	9.504	9.523
21100	2535.0	9.491	9.502	9.494
21400	2565.0	9.506	9.501	9.508
LTE Band 7, Channel Bandwidth 15MHz				
Channel	Frequency (MHz)	26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM
20825	2507.5	14.25	14.25	14.23
21100	2535.0	14.25	14.25	14.25
21375	2562.5	14.27	14.27	14.24
LTE Band 7, Channel Bandwidth 20MHz				
Channel	Frequency (MHz)	26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM
20850	2510.0	19.01	19.01	19.01
21100	2535.0	19.02	19.03	19.02
21350	2560.0	19.03	19.04	19.04

### Spectrum Plot of Worst Value

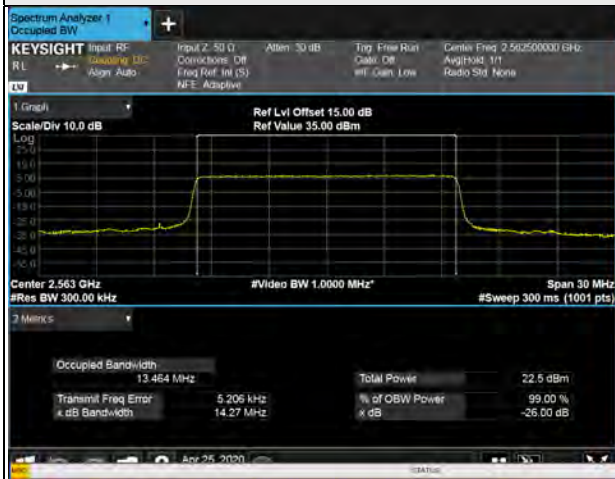
5MHz / 64QAM



10MHz / 64QAM



15MHz / QPSK



20MHz / 16QAM



LTE Band 66

LTE Band 66, Channel Bandwidth 1.4MHz				
Channel	Frequency (MHz)	26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM
131979	1710.7	1.215	1.212	1.219
132322	1745.0	1.217	1.214	1.216
132665	1779.3	1.213	1.216	1.217
LTE Band 66, Channel Bandwidth 3MHz				
Channel	Frequency (MHz)	26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM
131987	1711.5	2.918	2.938	2.901
132322	1745.0	2.918	2.918	2.905
132657	1778.5	2.925	2.939	2.908
LTE Band 66, Channel Bandwidth 5MHz				
Channel	Frequency (MHz)	26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM
131997	1712.5	4.799	4.799	4.848
132322	1745.0	4.799	4.797	4.805
132647	1777.5	4.798	4.800	4.822
LTE Band 66, Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM
132022	1715.0	9.496	9.503	9.511
132322	1745.0	9.501	9.512	9.513
132622	1775.0	9.505	9.496	9.520
LTE Band 66, Channel Bandwidth 15MHz				
Channel	Frequency (MHz)	26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM
132047	1717.5	14.24	14.25	14.23
132322	1745.0	14.25	14.25	14.25
132597	1772.5	14.28	14.28	14.28

LTE Band 66, Channel Bandwidth 20MHz

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM
132072	1720.0	19.03	19.03	19.01
132322	1745.0	19.04	19.05	19.05
132572	1770.0	19.21	19.19	19.15



### Spectrum Plot of Worst Value

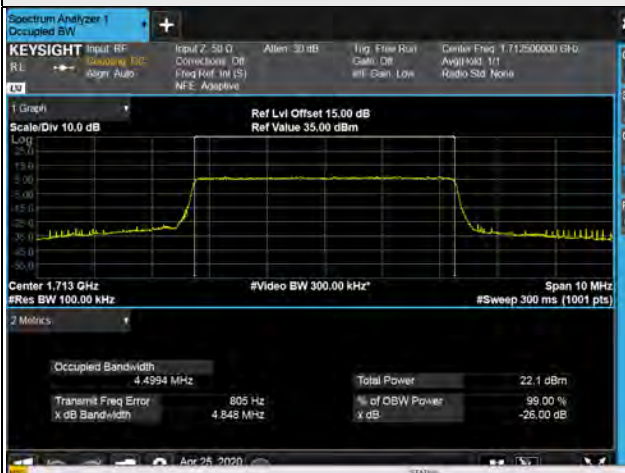
1.4MHz / 64QAM



3MHz / 16QAM



5MHz / 64QAM



10MHz / 64QAM



15MHz / QPSK



20MHz / QPSK



## 4.5 Band Edge Measurement

### 4.5.1 Limits of Band Edge Measurement

For LTE Band 2

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. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

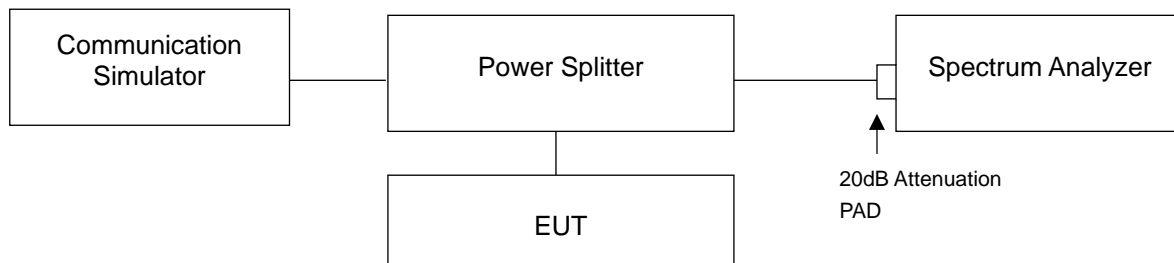
For LTE Band 7

According to FCC 27.53(m)(4) specified that power of any emission outside of the channel edge must be attenuated below the transmitting power (P) by a factor shall be not less than  $40 + 10 \log(P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log(P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log(P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth. In addition, the attenuation factor shall not be less that  $43 + 10 \log(P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log(P)$  dB at or below 2490.5 MHz. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed.

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.

### 4.5.2 Test Setup



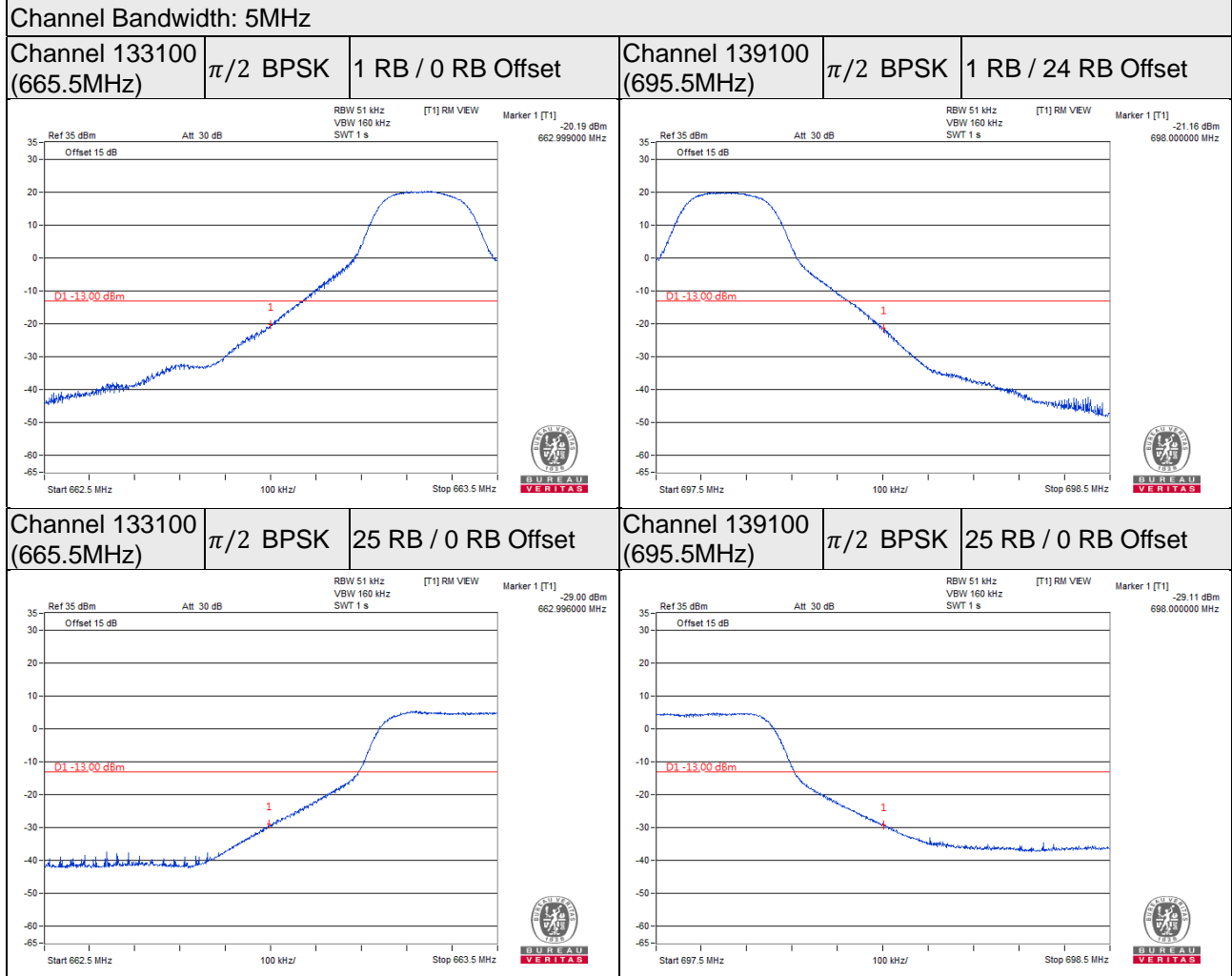
### 4.5.3 Test Procedures

- All measurements were done at low and high operational frequency range.
- The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 51kHz and VB of the spectrum is 160kHz (Channel Bandwidth 5MHz).
- The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (Channel Bandwidth 10MHz).
- The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 150kHz and VB of the spectrum is 470kHz (Channel Bandwidth 15MHz).
- The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 200kHz and VB of the spectrum is 1MHz (Channel Bandwidth 20MHz).
- Record the max trace plot into the test report.

### 4.5.4 Test Results

n71

Band edge:



Channel Bandwidth: 10MHz

Channel 133600  
(668.0MHz)

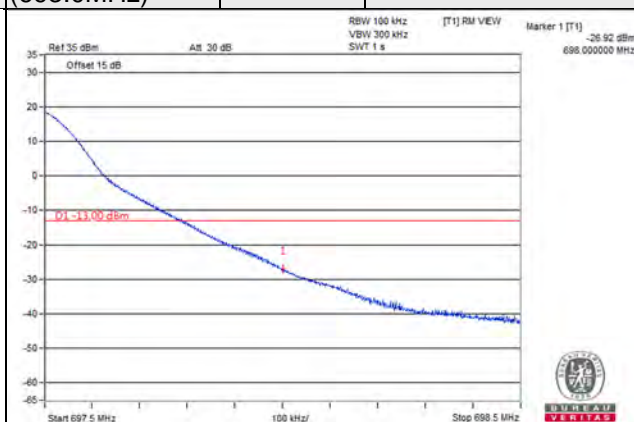
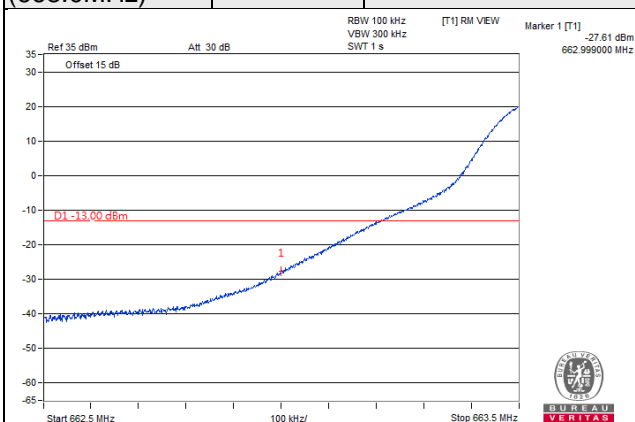
$\pi/2$  BPSK

1 RB / 0 RB Offset

Channel 138600  
(693.0MHz)

$\pi/2$  BPSK

1 RB / 49 RB Offset



Channel 133600  
(668.0MHz)

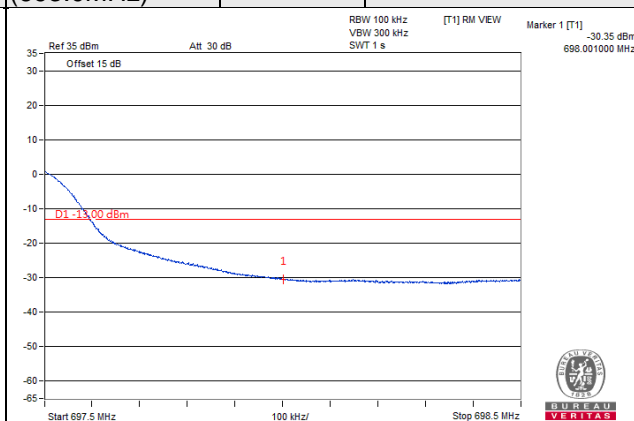
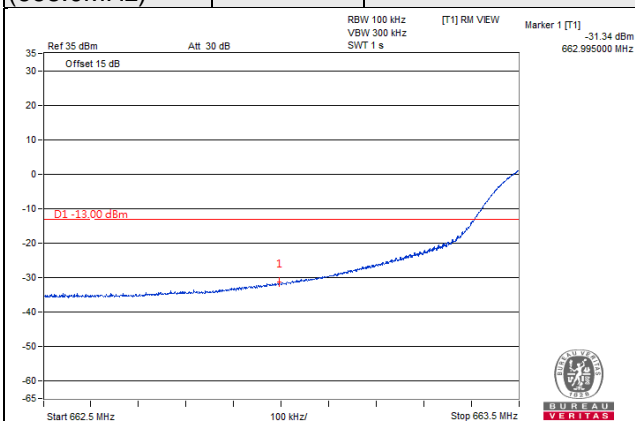
$\pi/2$  BPSK

50 RB / 0 RB Offse

Channel 138600  
(693.0MHz)

$\pi/2$  BPSK

50 RB / 0 RB Offset



Channel Bandwidth: 15MHz

Channel 134100  
(670.5MHz)

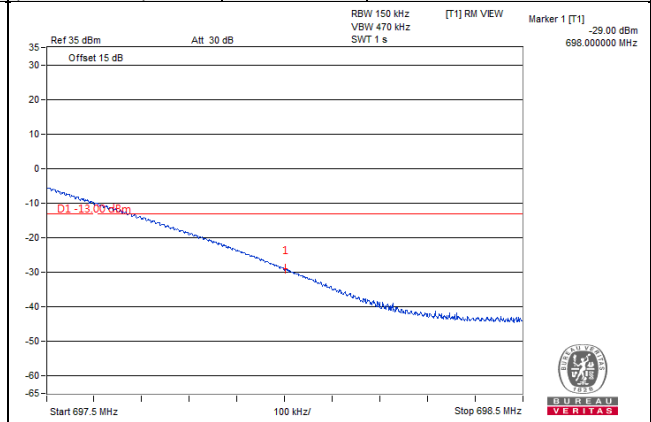
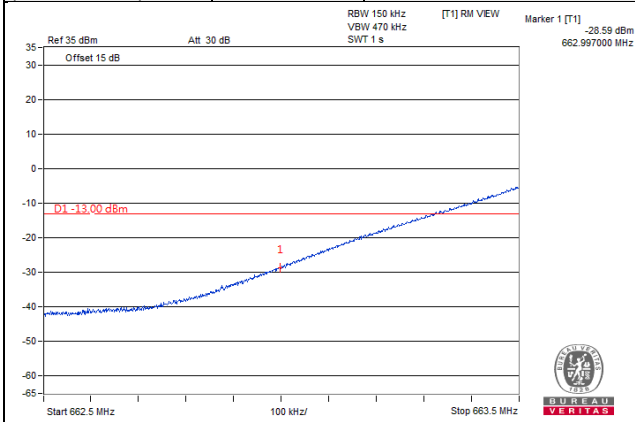
$\pi/2$  BPSK

1 RB / 0 RB Offset

Channel 138100  
(690.5MHz)

$\pi/2$  BPSK

1 RB / 74 RB Offset



Channel 134100  
(670.5MHz)

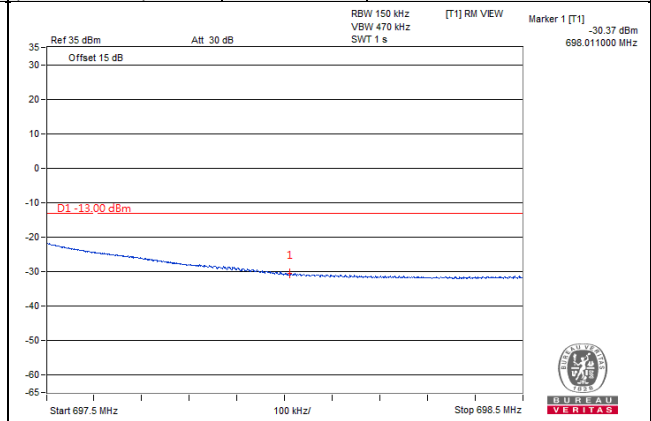
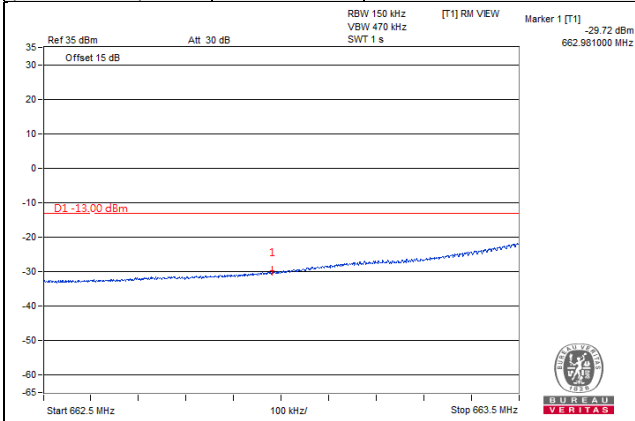
$\pi/2$  BPSK

75 RB / 0 RB Offset

Channel 138100  
(690.5MHz)

$\pi/2$  BPSK

75 RB / 0 RB Offset



Channel Bandwidth: 20MHz

Channel 134600  
(673.0MHz)

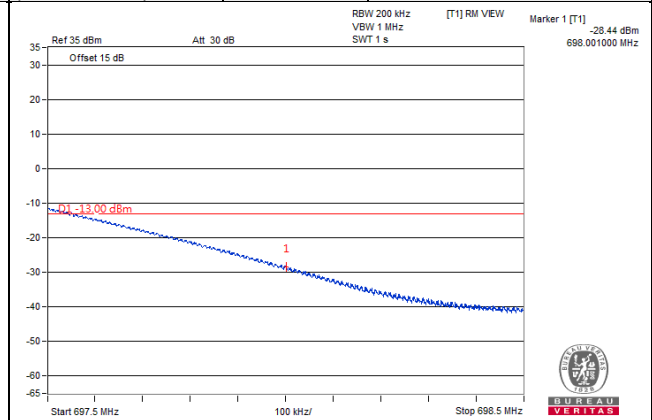
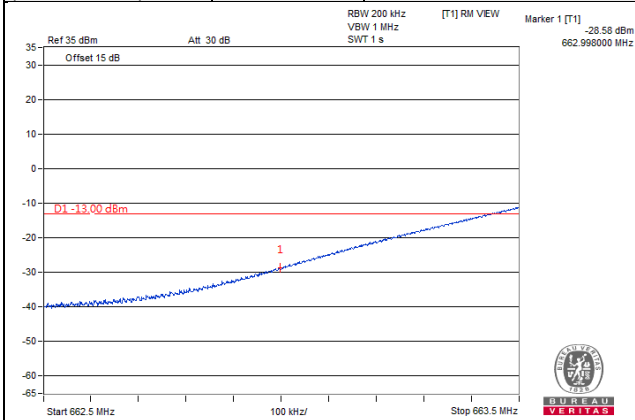
$\pi/2$  BPSK

1 RB / 0 RB Offset

Channel 137600  
(688.0MHz)

$\pi/2$  BPSK

1 RB / 99 RB Offset



Channel 134600  
(673.0MHz)

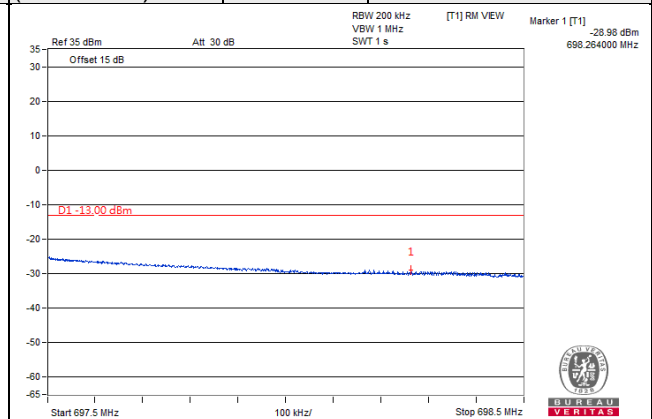
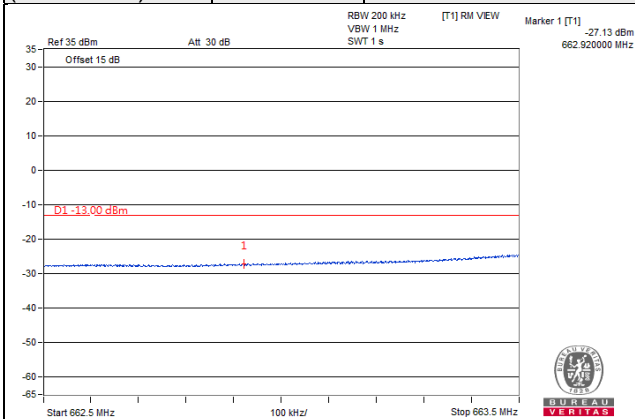
$\pi/2$  BPSK

100 RB / 0 RB Offset

Channel 137600  
(688.0MHz)

$\pi/2$  BPSK

100 RB / 0 RB Offset



LTE Band 2,

Channel Bandwidth 1.4MHz

Channel 18607  
(1850.70MHz)

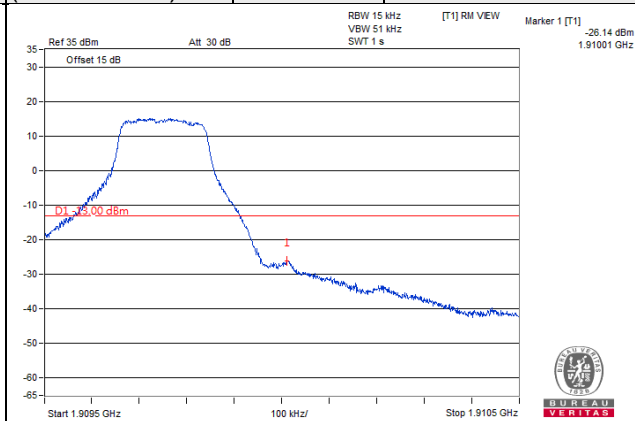
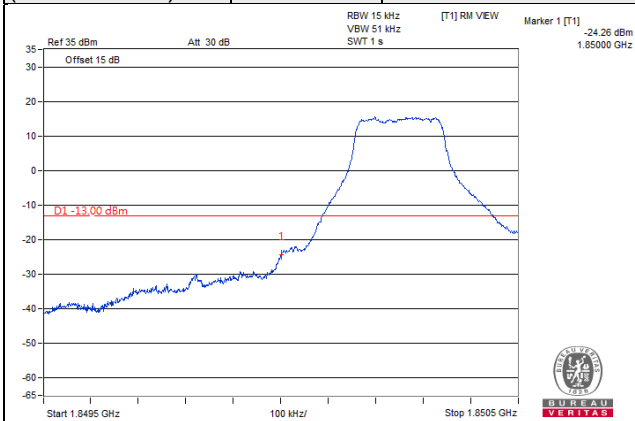
QPSK

1 RB / 0 RB Offset

Channel 19193  
(1909.30MHz)

QPSK

1 RB / 5 RB Offset



Channel 18607  
(1850.70MHz)

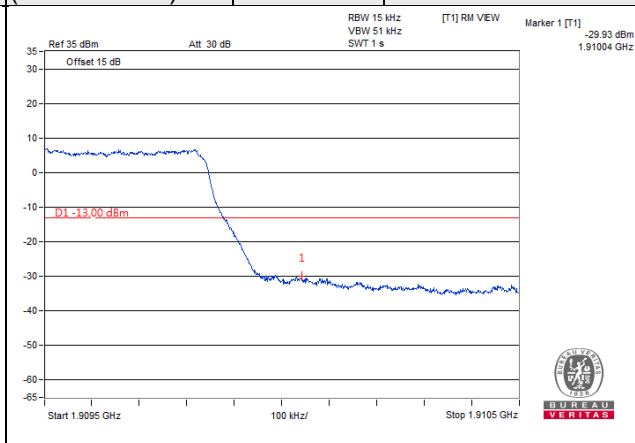
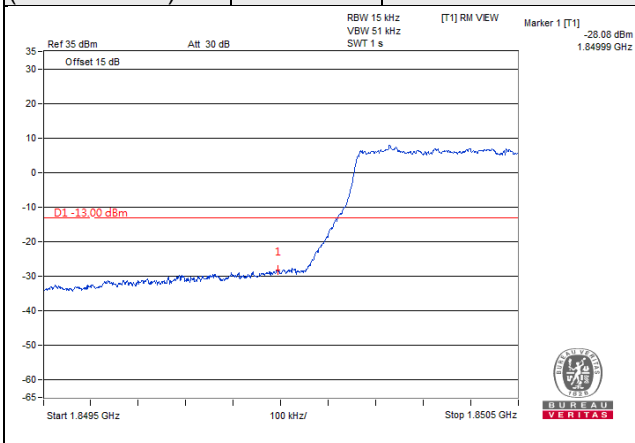
QPSK

6 RB / 0 RB Offset

Channel 19193  
(1909.30MHz)

QPSK

6 RB / 0 RB Offset



**Channel Bandwidth 3MHz**

**Channel 18615  
(1851.50MHz)**

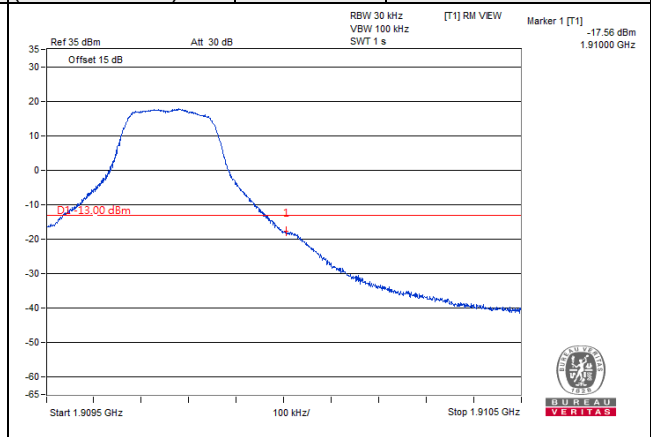
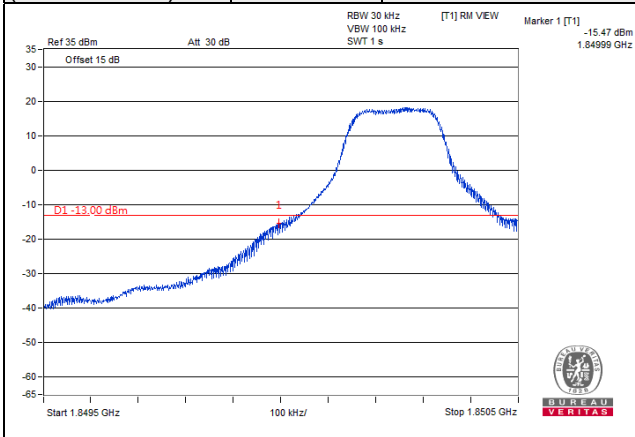
**QPSK**

**1 RB / 0 RB Offset**

**Channel 19185  
(1908.50MHz)**

**QPSK**

**1 RB / 14 RB Offset**



**Channel 18615  
(1851.50MHz)**

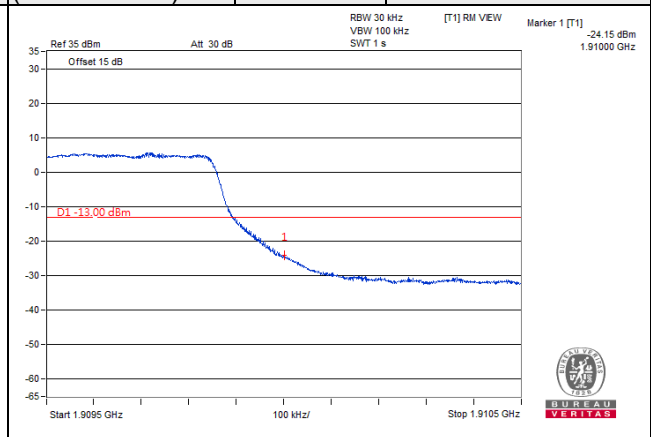
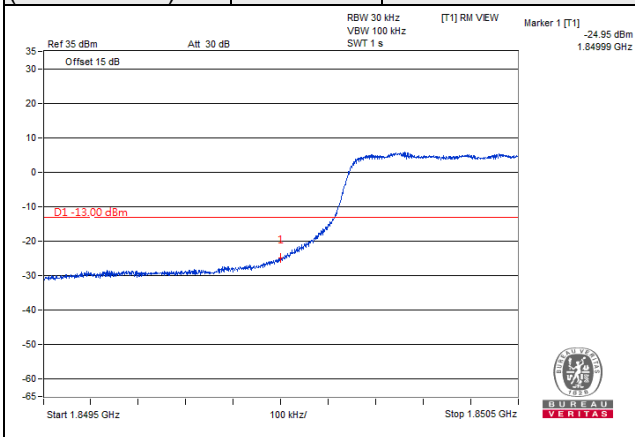
**QPSK**

**15 RB / 0 RB Offset**

**Channel 19185  
(1908.50MHz)**

**QPSK**

**15 RB / 0 RB Offset**





**Channel Bandwidth 5MHz**

**Channel 18625  
(1852.50MHz)**

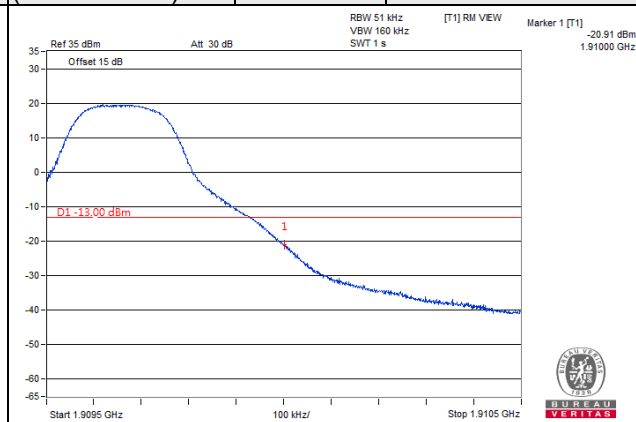
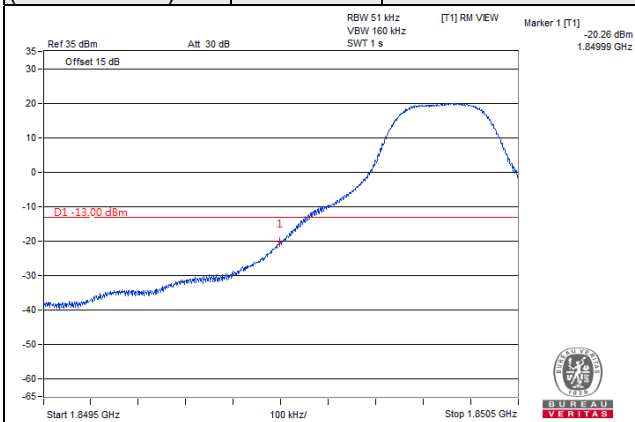
**QPSK**

**1 RB / 0 RB Offset**

**Channel 19175  
(1907.50MHz)**

**QPSK**

**1 RB / 24 RB Offset**



**Channel 18625  
(1852.50MHz)**

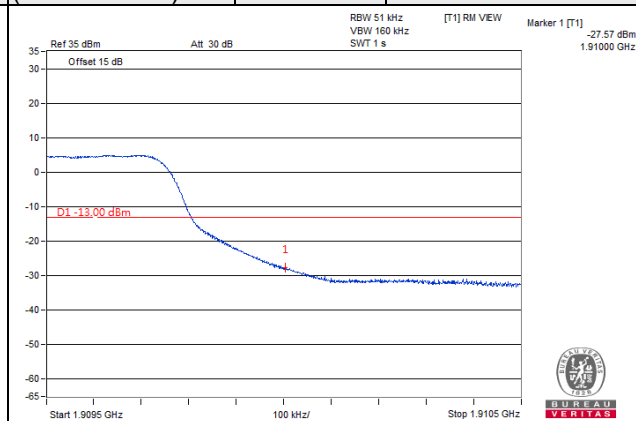
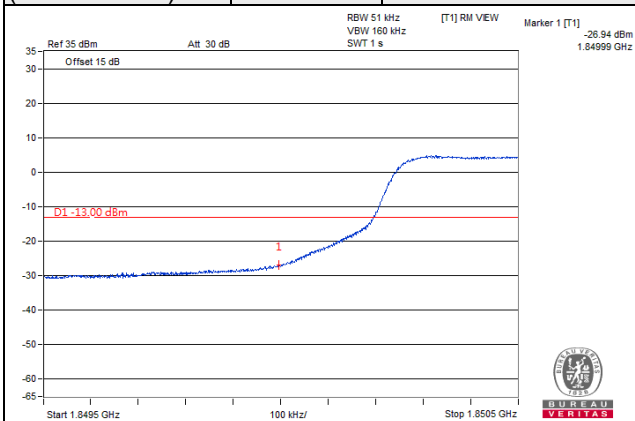
**QPSK**

**25 RB / 0 RB Offset**

**Channel 19175  
(1907.50MHz)**

**QPSK**

**25 RB / 0 RB Offset**



**Channel Bandwidth 10MHz**

**Channel 18650  
(1855.00MHz)**

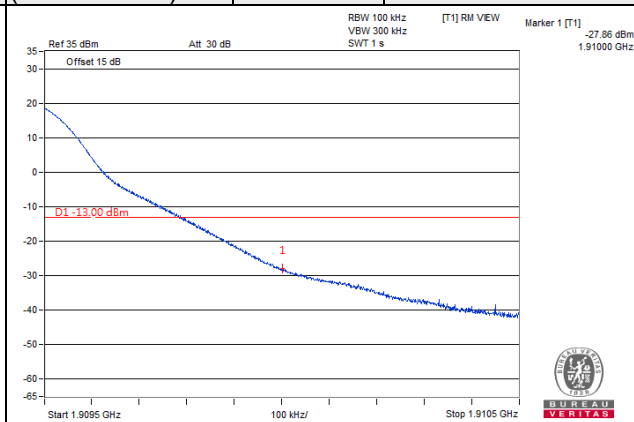
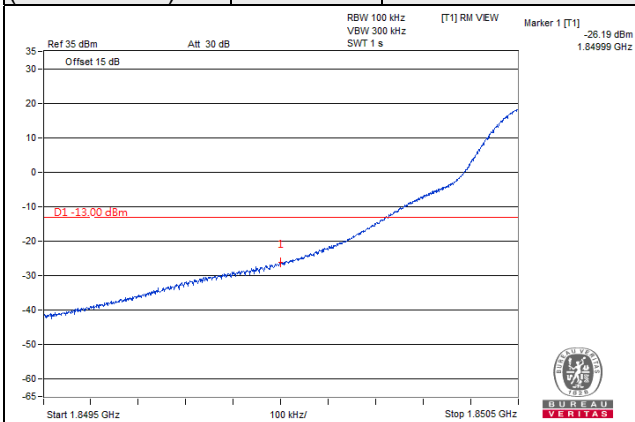
**QPSK**

**1 RB / 0 RB Offset**

**Channel 19150  
(1905.00MHz)**

**QPSK**

**1 RB / 49 RB Offset**



**Channel 18650  
(1855.00MHz)**

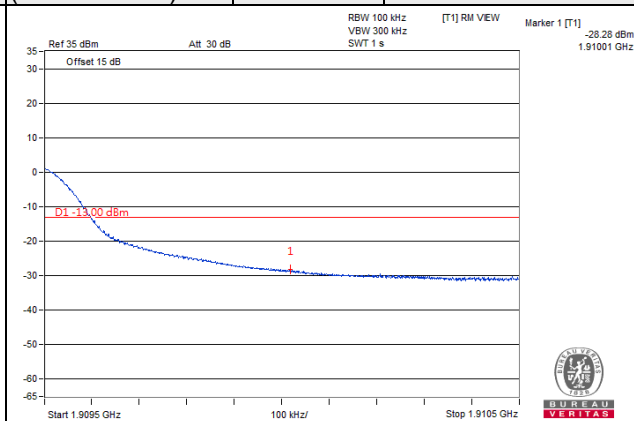
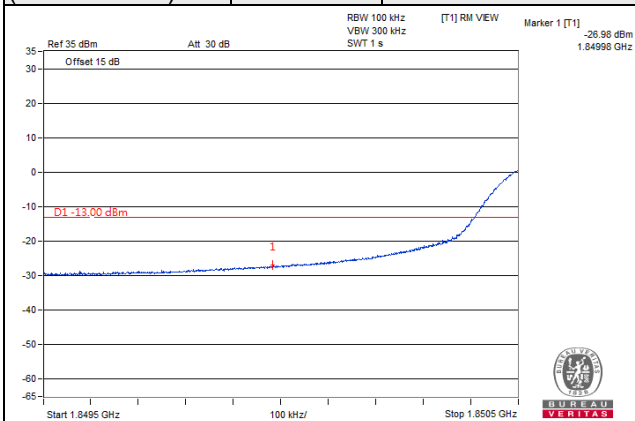
**QPSK**

**50 RB / 0 RB Offset**

**Channel 19150  
(1905.00MHz)**

**QPSK**

**50 RB / 0 RB Offset**



**Channel Bandwidth 15MHz**

**Channel 18675  
(1857.50MHz)**

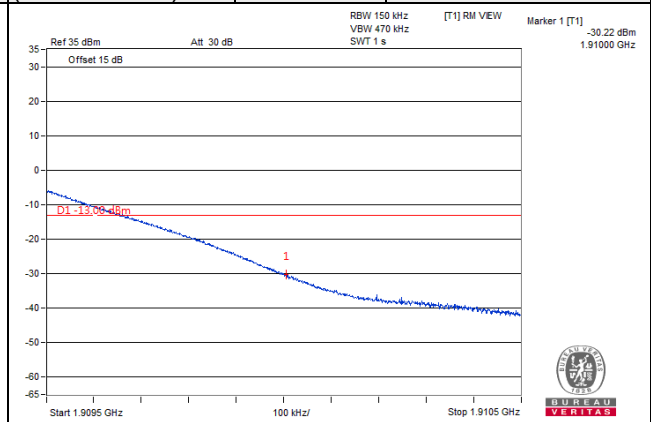
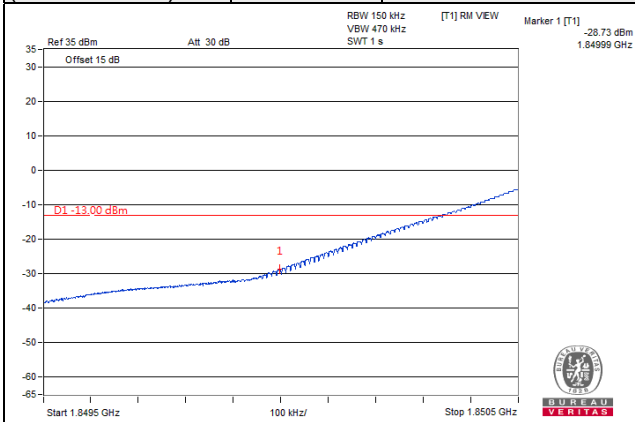
**QPSK**

**1 RB / 0 RB Offset**

**Channel 19125  
(1902.50MHz)**

**QPSK**

**1 RB / 74 RB Offset**



**Channel 18675  
(1857.50MHz)**

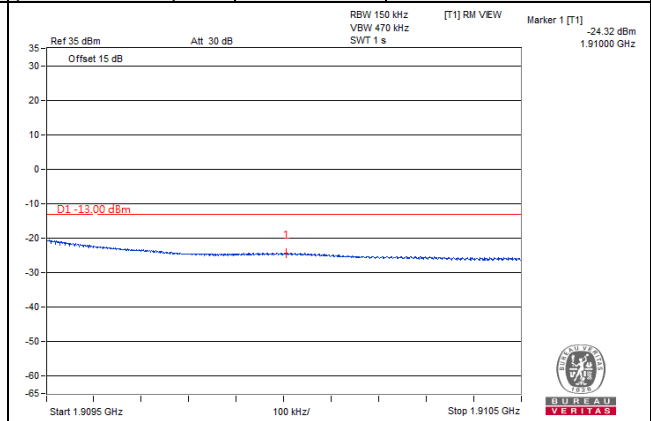
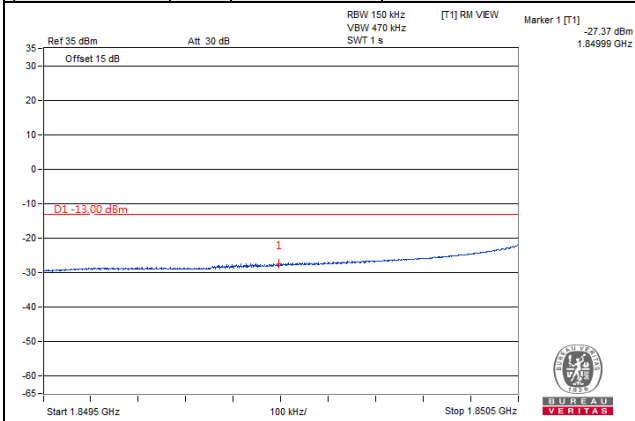
**QPSK**

**75 RB / 0 RB Offset**

**Channel 19125  
(1902.50MHz)**

**QPSK**

**75 RB / 0 RB Offset**



**Channel Bandwidth 20MHz**

**Channel 18700  
(1860.00MHz)**

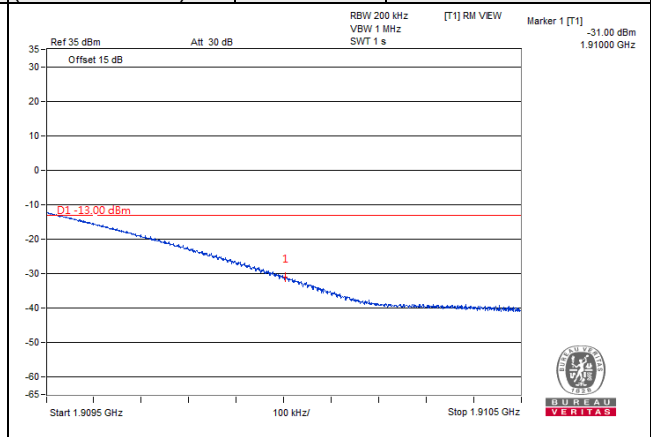
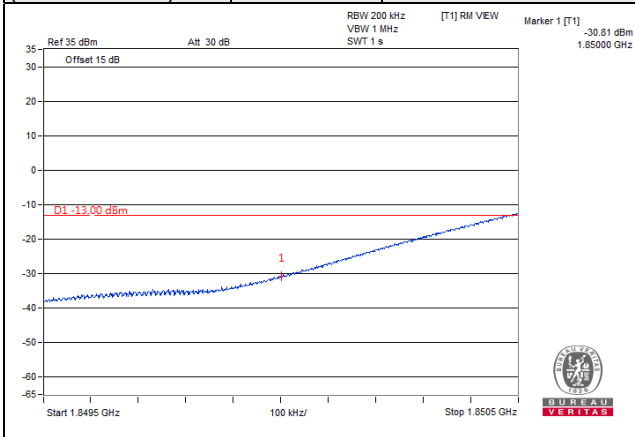
**QPSK**

**1 RB / 0 RB Offset**

**Channel 19100  
(1900.00 MHz)**

**QPSK**

**1 RB / 99 RB Offset**



**Channel 18700  
(1860.00MHz)**

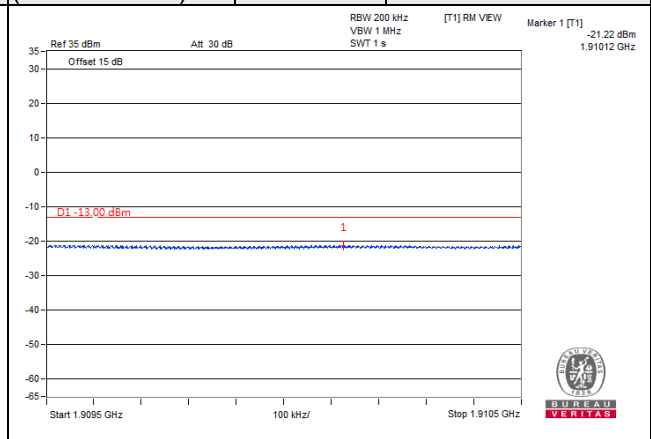
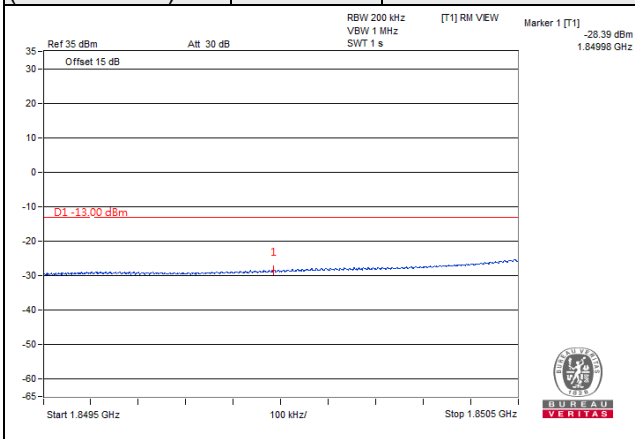
**QPSK**

**100 RB / 0 RB Offset**



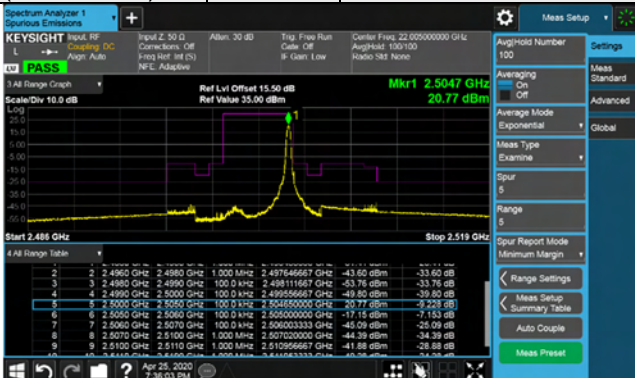
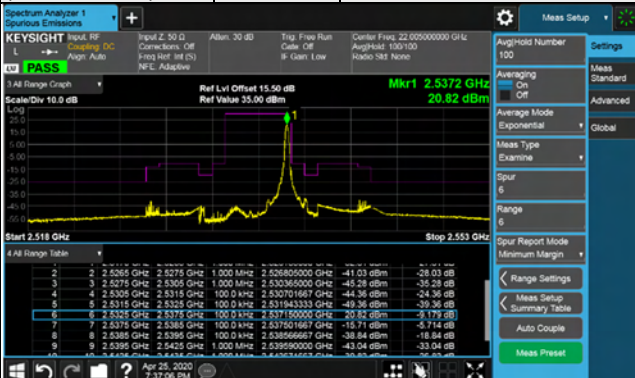
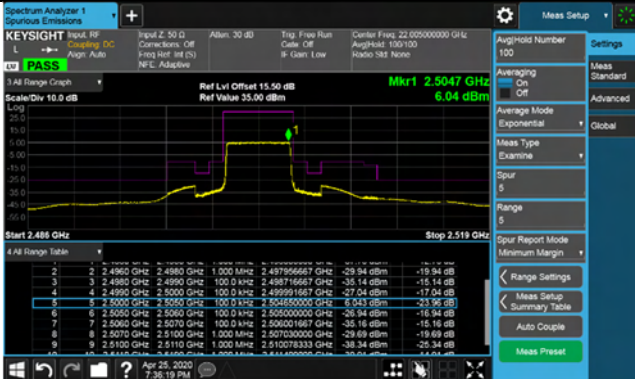
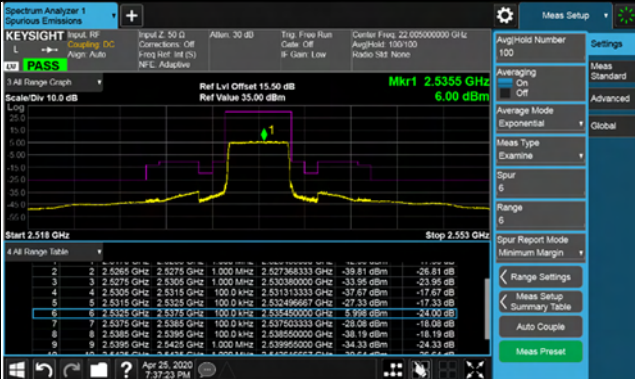
**Channel 19100  
(1900.00 MHz)**

**QPSK**

**100 RB / 0 RB Offset**

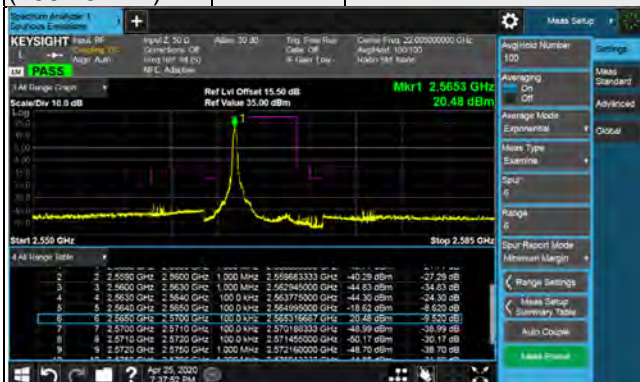


LTE Band 7  
Emission Mask:

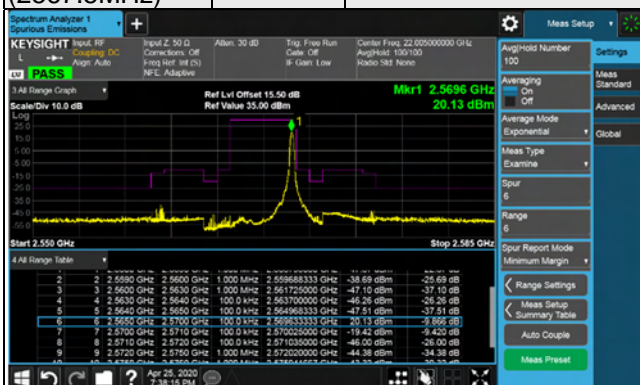
Channel Bandwidth: 5MHz					
Channel 20775 (2502.5MHz)	QPSK	1 RB / 0 RB Offset	Channel 21100 (2535.0MHz)	QPSK	1 RB / 0 RB Offset
					
					
Channel 20775 (2502.5MHz)	QPSK	1 RB / 24 RB Offset	Channel 21100 (2535.0MHz)	QPSK	1 RB / 24 RB Offset
					
					
Channel 20775 (2502.5MHz)	QPSK	25 RB / 0 RB Offset	Channel 21100 (2535.0MHz)	QPSK	25 RB / 0 RB Offset
					
					

Channel Bandwidth: 5MHz

Channel 21425 (2567.5MHz) QPSK 1 RB / 0 RB Offset



Channel 21425 (2567.5MHz) QPSK 1 RB / 24 RB Offset



Channel 21425 (2567.5MHz) QPSK 25 RB / 0 RB Offset



Channel Bandwidth: 10MHz

Channel 20800  
(2505.0MHz)

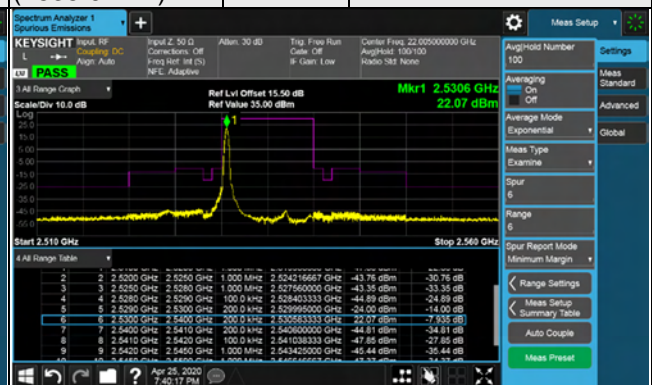
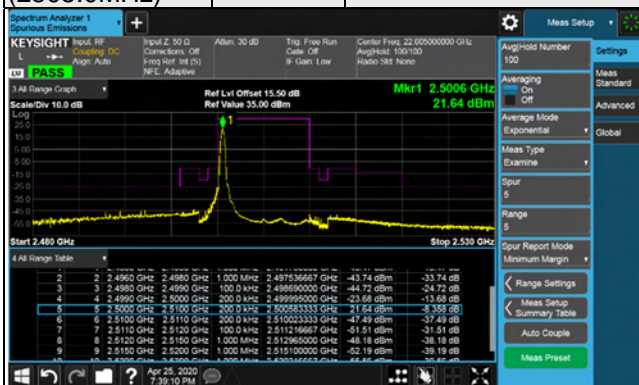
QPSK

1 RB / 0 RB Offset

Channel 21100  
(2535.0MHz)

QPSK

1 RB / 0 RB Offset



Channel 20800  
(2505.0MHz)

QPSK

1 RB / 49 RB Offset

Channel 21100  
(2535.0MHz)

QPSK

1 RB / 49 RB Offset



Channel 20800  
(2505.0MHz)

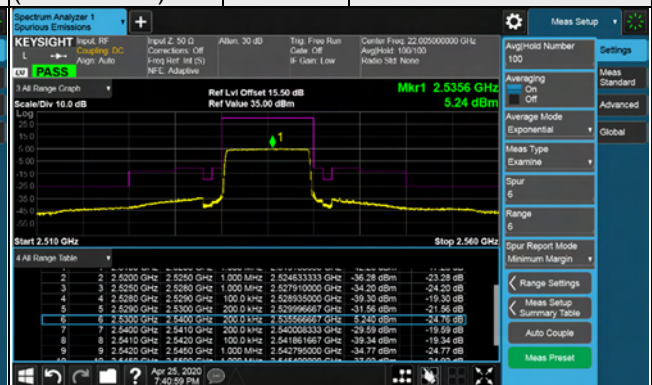
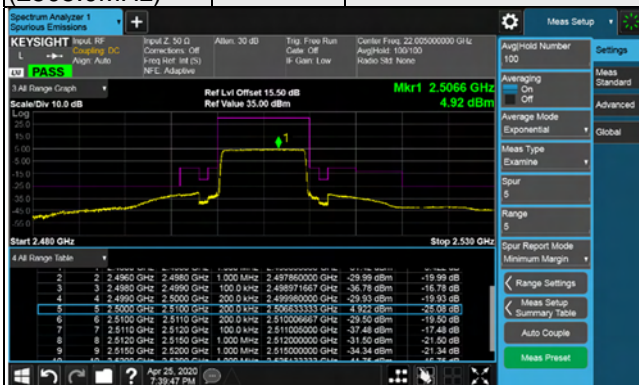
QPSK

50 RB / 0 RB Offset

Channel 21100  
(2535.0MHz)

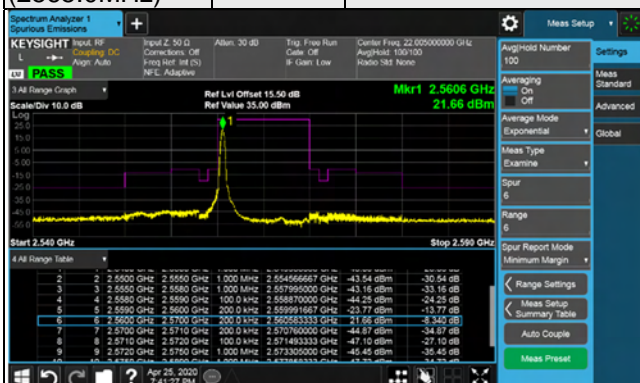
QPSK

50 RB / 0 RB Offset

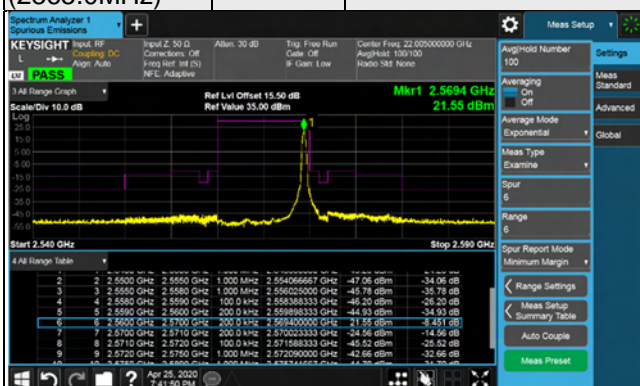


Channel Bandwidth: 10MHz

Channel 21400 (2565.0MHz) QPSK 1 RB / 0 RB Offset



Channel 21400 (2565.0MHz) QPSK 1 RB / 49 RB Offset



Channel 21400 (2565.0MHz) QPSK 50 RB / 0 RB Offset





Channel Bandwidth: 15MHz

Channel 20825  
(2507.5MHz)

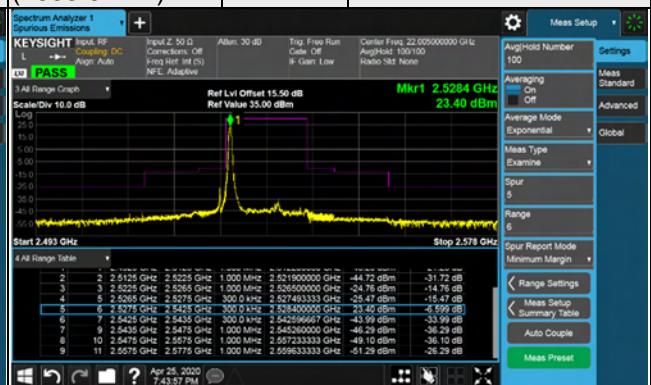
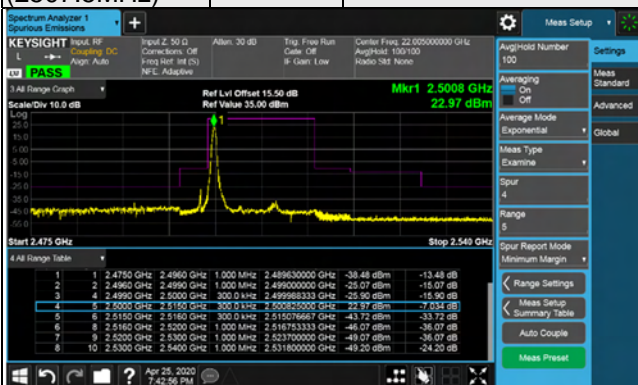
QPSK

1 RB / 0 RB Offset

Channel 21100  
(2535.0MHz)

QPSK

1 RB / 0 RB Offset



Channel 20825  
(2507.5MHz)

QPSK

1 RB / 74 RB Offset

Channel 21100  
(2535.0MHz)

QPSK

1 RB / 74 RB Offset



Channel 20825  
(2507.5MHz)

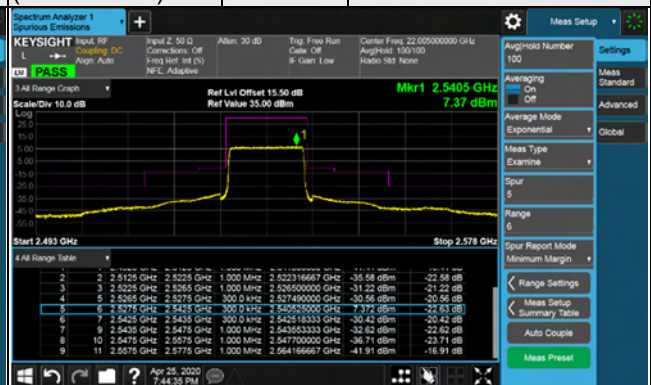
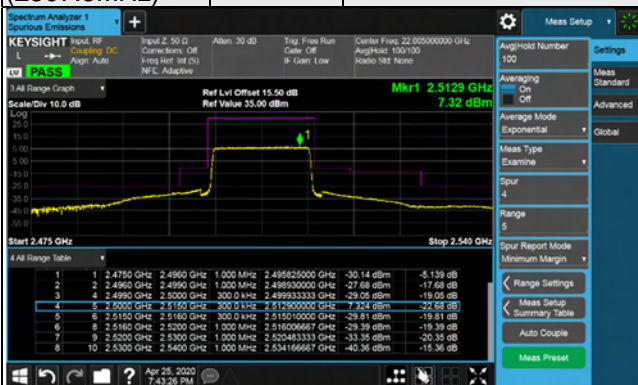
QPSK

75 RB / 0 RB Offset

Channel 21100  
(2535.0MHz)

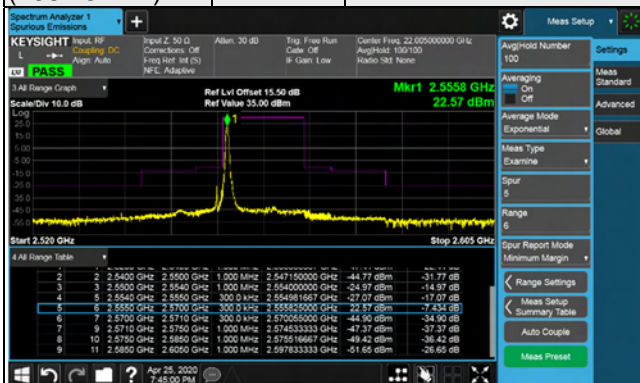
QPSK

75 RB / 0 RB Offset

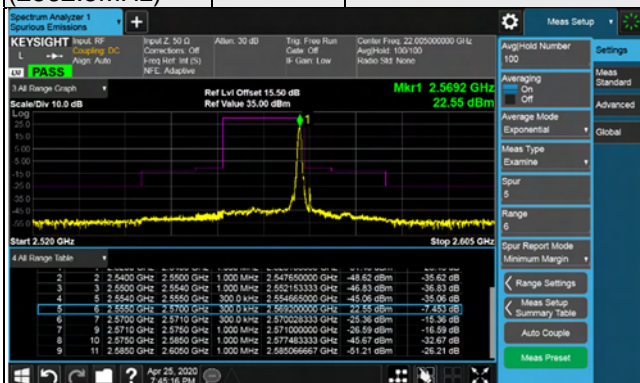


Channel Bandwidth: 15MHz

Channel 21375 (2562.5MHz) QPSK 1 RB / 0 RB Offset



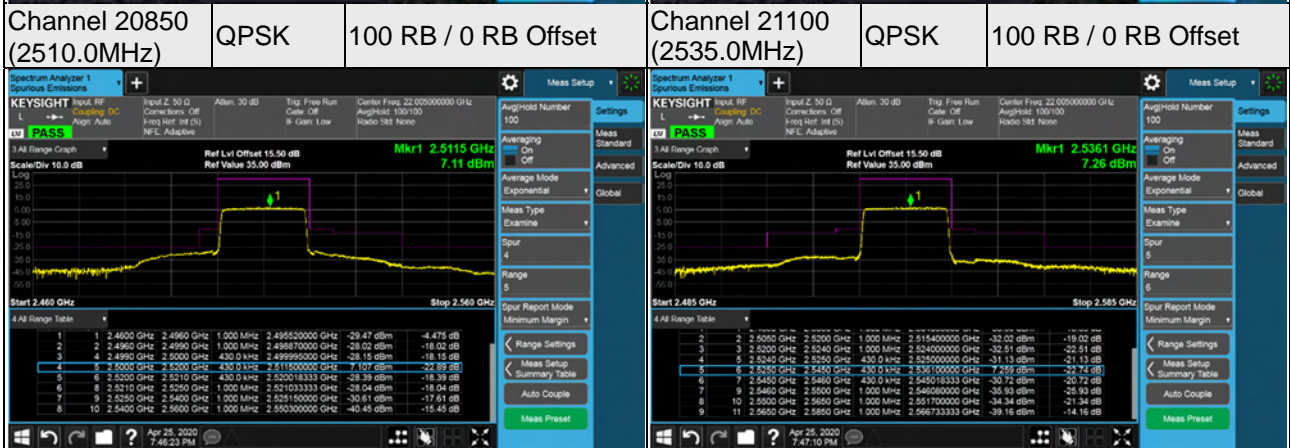
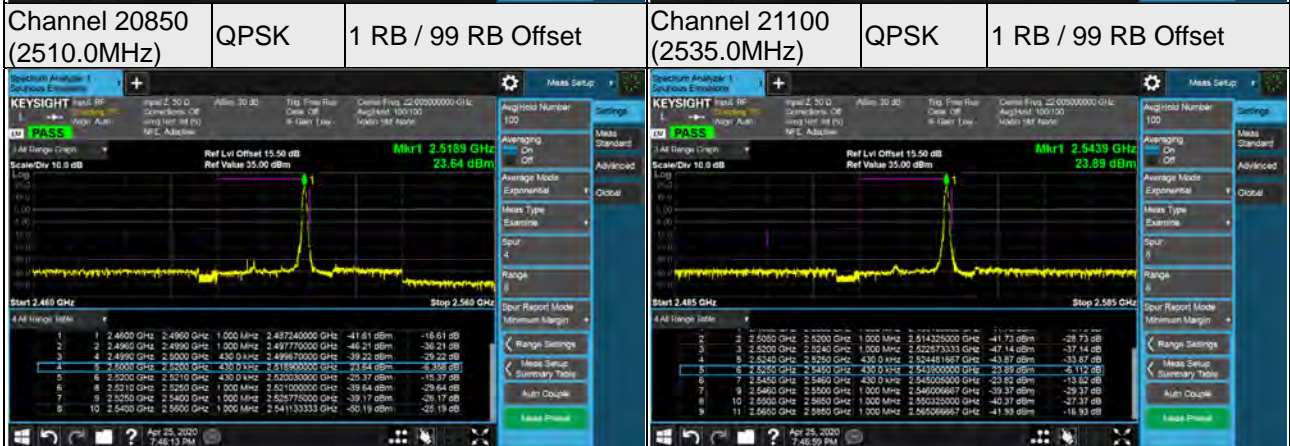
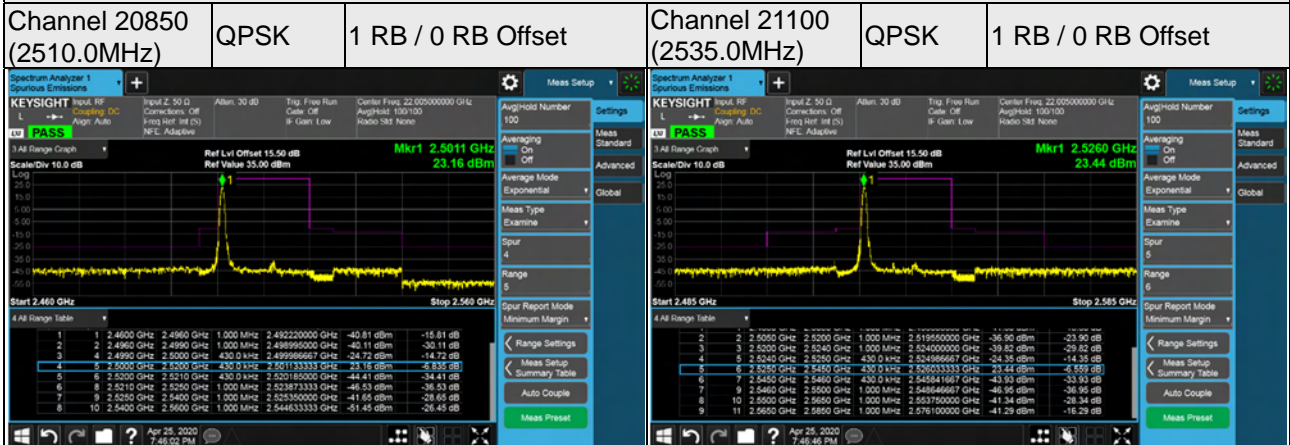
Channel 21375 (2562.5MHz) QPSK 1 RB / 74 RB Offset



Channel 21375 (2562.5MHz) QPSK 75 RB / 0 RB Offset

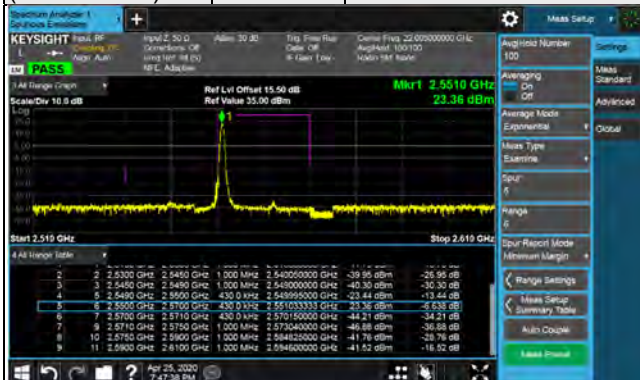


Channel Bandwidth: 20MHz

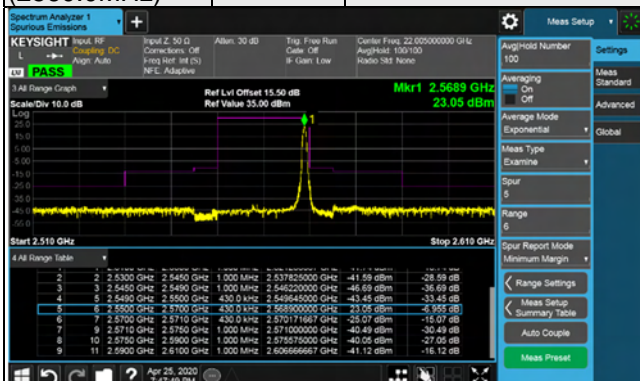


Channel Bandwidth: 20MHz

Channel 21350 (2560.0MHz) QPSK 1 RB / 0 RB Offset



Channel 21350 (2560.0MHz) QPSK 1 RB / 99 RB Offset



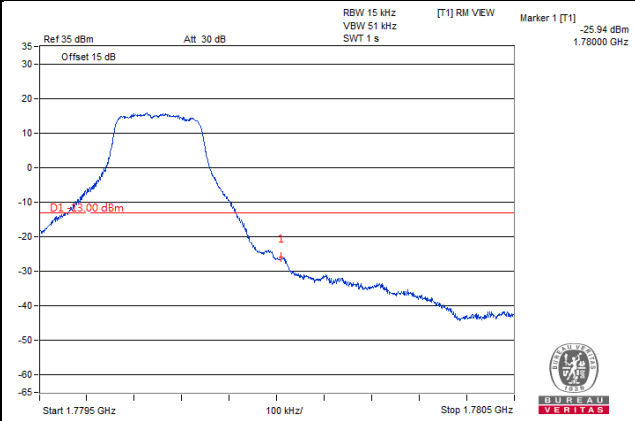
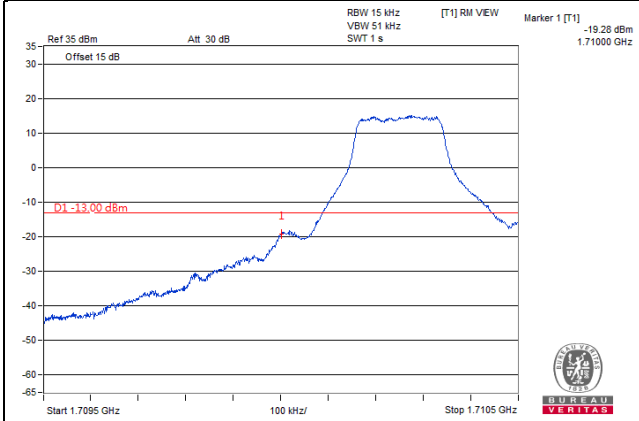
Channel 21350 (2560.0MHz) QPSK 100 RB / 0 RB Offset



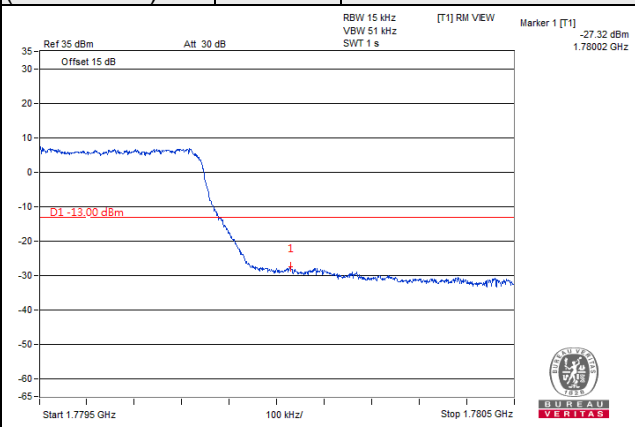
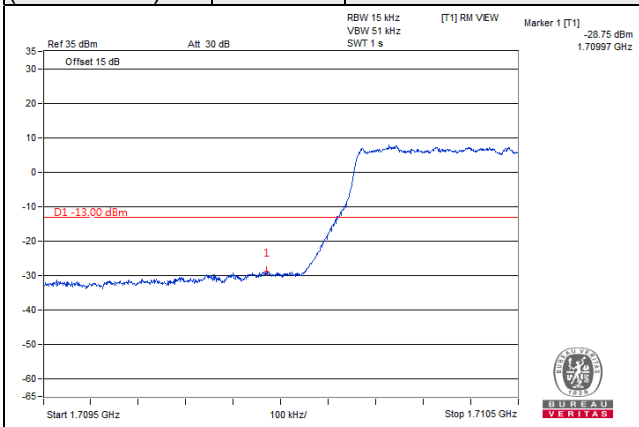
LTE Band 66

Channel Bandwidth: 1.4MHz

Channel 131979 (1710.7MHz)	QPSK	1 RB / 0 RB Offset	Channel 132665 (1779.3MHz)	QPSK	1 RB / 5 RB Offset
-------------------------------	------	--------------------	-------------------------------	------	--------------------



Channel 131979 (1710.7MHz)	QPSK	6 RB / 0 RB Offset	Channel 132665 (1779.3MHz)	QPSK	6 RB / 0 RB Offset
-------------------------------	------	--------------------	-------------------------------	------	--------------------



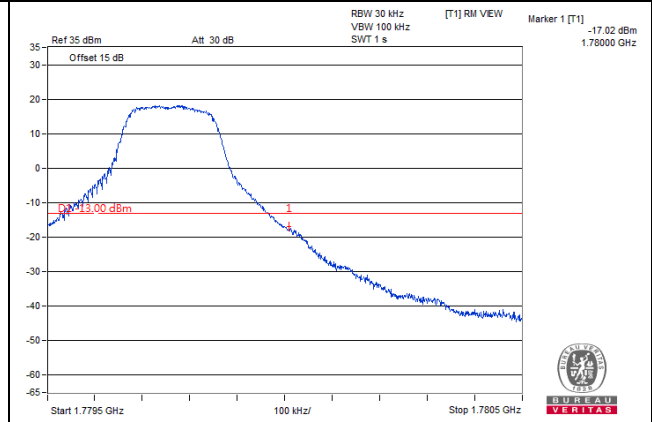
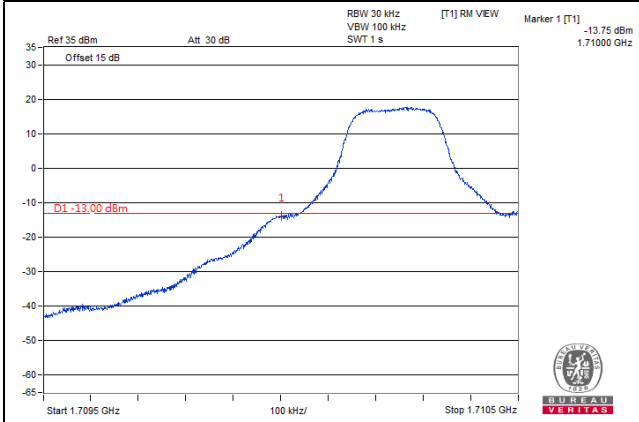
**Channel Bandwidth: 3MHz**

**Channel 131987  
(1711.5MHz)**

**QPSK      1 RB / 0 RB Offset**

**Channel 132657  
(1778.5MHz)**

**QPSK      1 RB / 14 RB Offset**

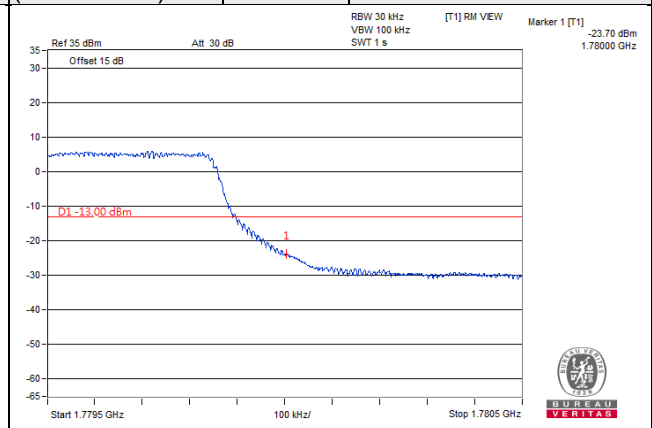
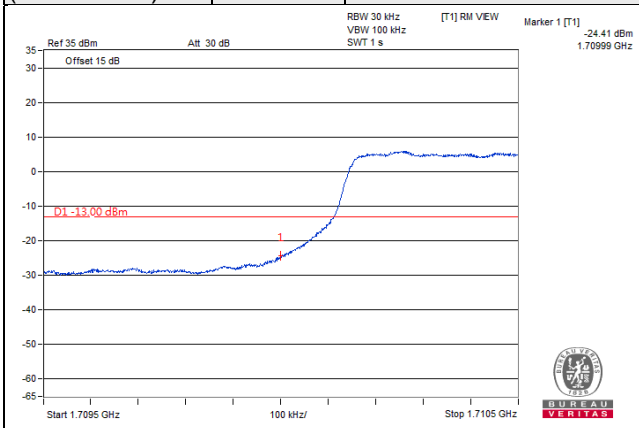


**Channel 131987  
(1711.5MHz)**

**QPSK      15 RB / 0 RB Offset**

**Channel 132657  
(1778.5MHz)**

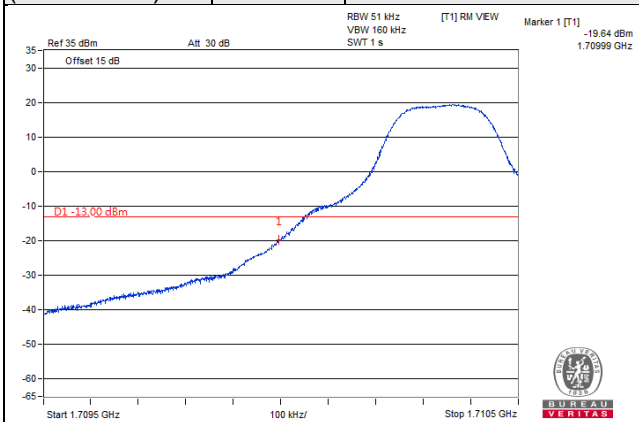
**QPSK      15 RB / 0 RB Offset**



Channel Bandwidth: 5MHz

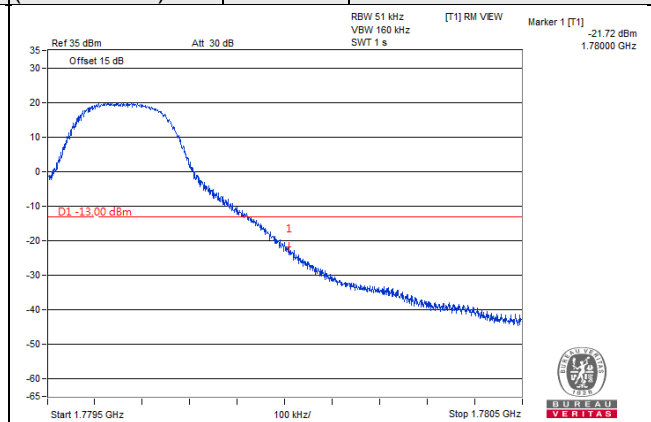
Channel 131997  
(1712.5MHz)

QPSK  
1 RB / 0 RB Offset



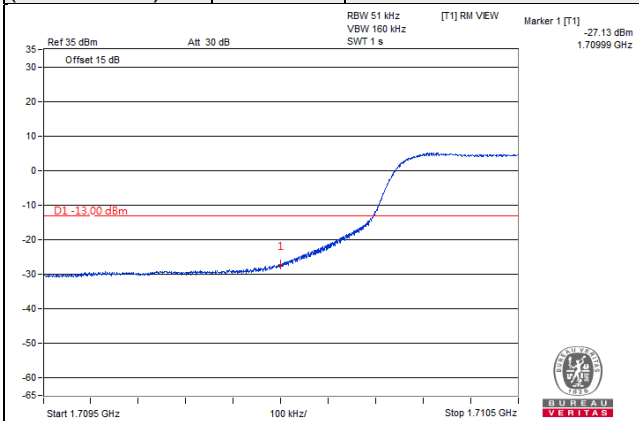
Channel 132647  
(1777.5MHz)

QPSK  
1 RB / 24 RB Offset



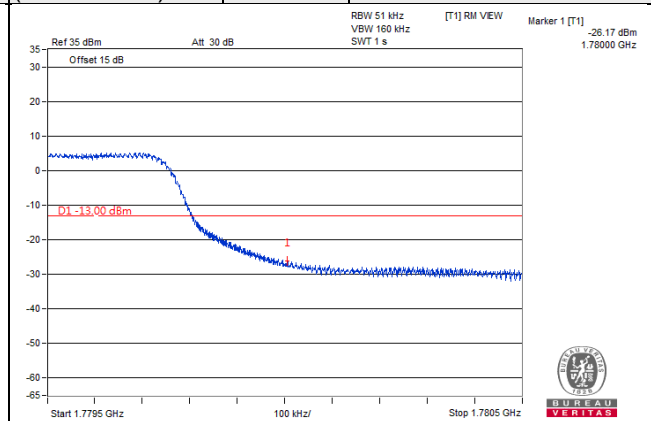
Channel 131997  
(1712.5MHz)

QPSK  
25 RB / 0 RB Offset



Channel 132647  
(1777.5MHz)

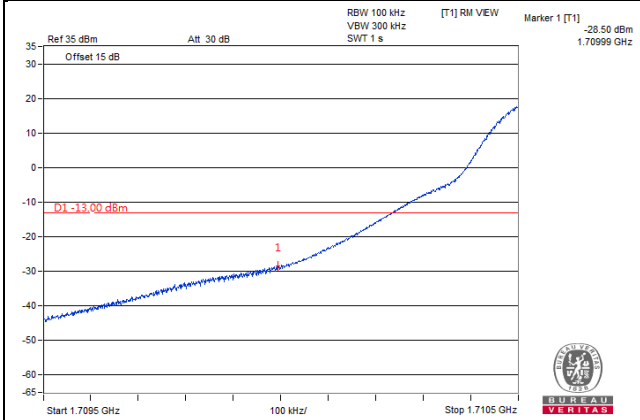
QPSK  
25 RB / 0 RB Offset



Channel Bandwidth: 10MHz

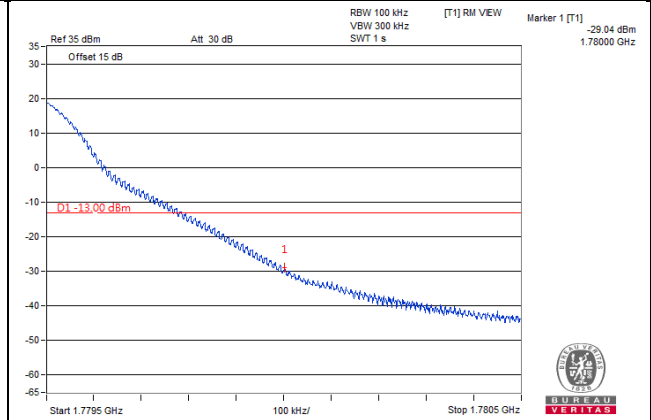
Channel 132022  
(1715.0MHz)

QPSK 1 RB / 0 RB Offset



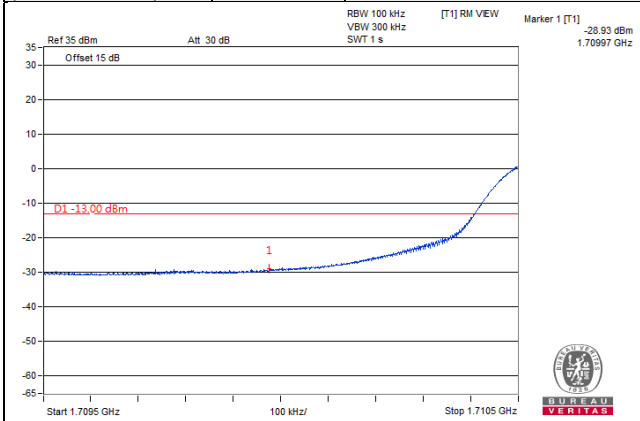
Channel 132622  
(1775.0MHz)

QPSK 1 RB / 49 RB Offset



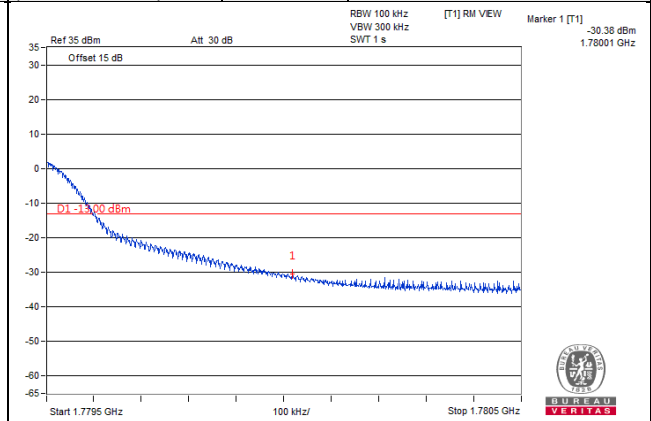
Channel 132022  
(1715.0MHz)

QPSK 50 RB / 0 RB Offset



Channel 132622  
(1775.0MHz)

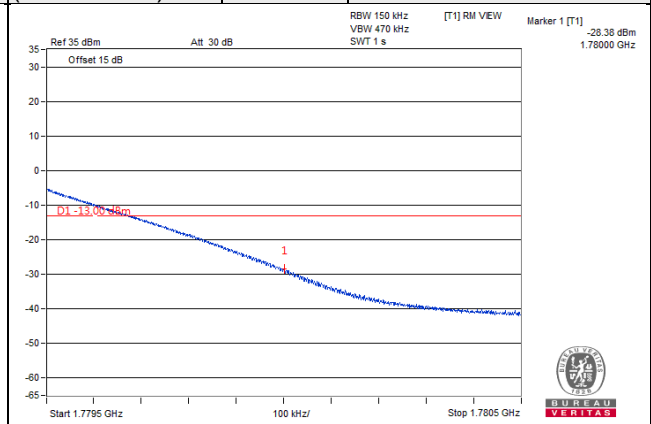
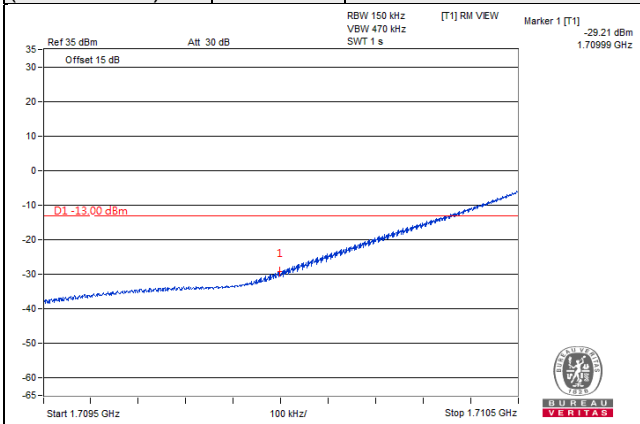
QPSK 50 RB / 0 RB Offset



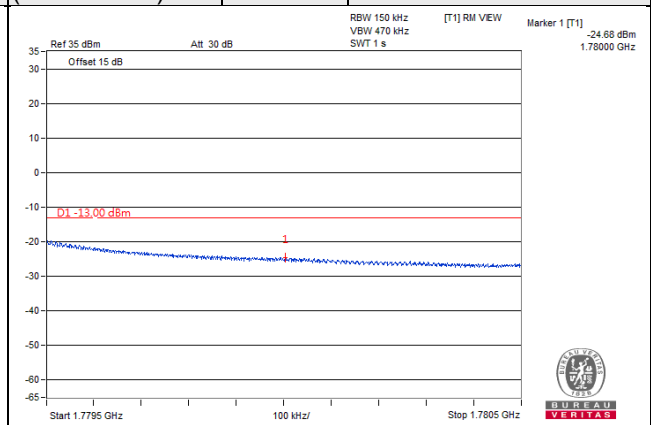
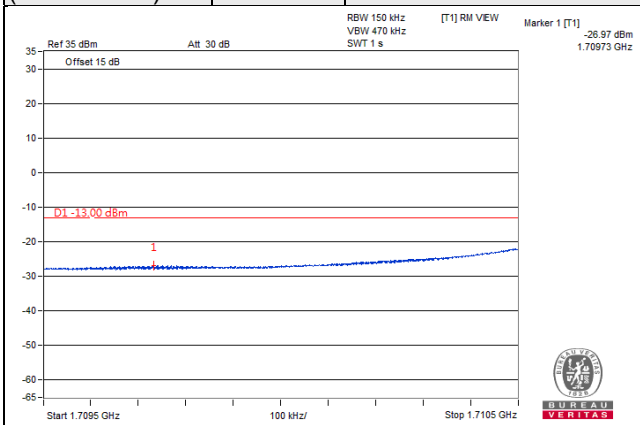


**Channel Bandwidth: 15MHz**

<b>Channel 132047 (1717.5MHz)</b>	<b>QPSK</b>	<b>1 RB / 0 RB Offset</b>	<b>Channel 132597 (1772.5MHz)</b>	<b>QPSK</b>	<b>1 RB / 74 RB Offset</b>
---------------------------------------	-------------	---------------------------	---------------------------------------	-------------	----------------------------

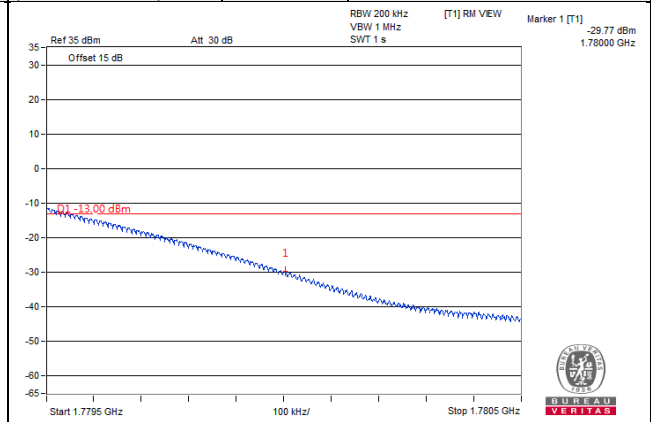
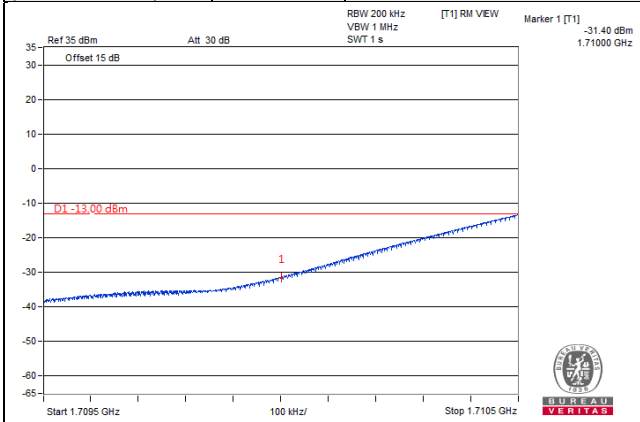


<b>Channel 132047 (1717.5MHz)</b>	<b>QPSK</b>	<b>75 RB / 0 RB Offset</b>	<b>Channel 132597 (1772.5MHz)</b>	<b>QPSK</b>	<b>75 RB / 0 RB Offset</b>
---------------------------------------	-------------	----------------------------	---------------------------------------	-------------	----------------------------

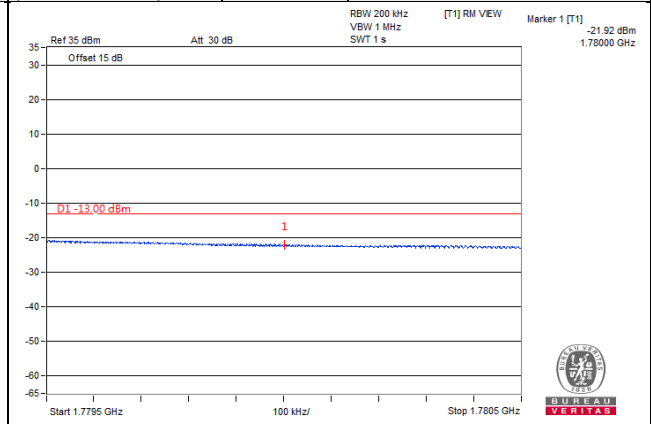
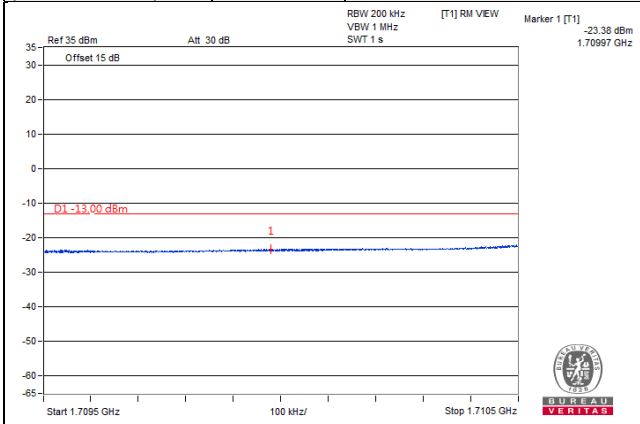


Channel Bandwidth: 20MHz

Channel 132072 (1720.0MHz)	QPSK	1 RB / 0 RB Offset	Channel 132572 (1770.0MHz)	QPSK	1 RB / 99 RB Offset
-------------------------------	------	--------------------	-------------------------------	------	---------------------



Channel 132072 (1720.0MHz)	QPSK	100 RB / 0 RB Offset	Channel 132572 (1770.0MHz)	QPSK	100 RB / 0 RB Offset
-------------------------------	------	----------------------	-------------------------------	------	----------------------

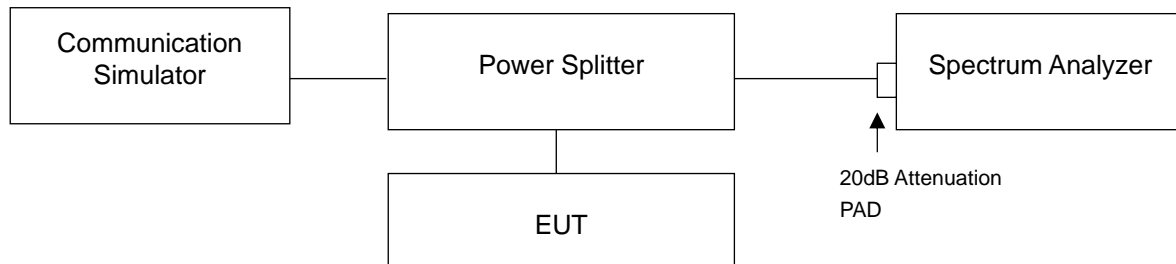


## 4.6 Peak to Average Ratio

### 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%.

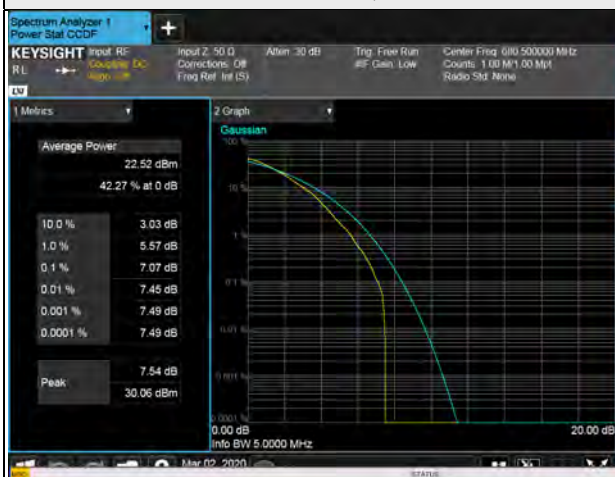
#### 4.6.4 Test Results

n71

n71, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
133100	665.5	3.50	3.53	5.19	6.73	4.27
136100	680.5	3.70	3.53	4.40	7.07	4.78
139100	695.5	3.67	3.59	4.72	6.83	5.24
n71, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
133600	668	3.45	3.59	5.11	6.66	4.49
136100	680.5	3.85	3.63	5.01	6.89	5.21
138600	693	3.78	3.78	4.94	6.78	5.62
n71, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
134100	670.5	3.42	3.32	5.06	6.49	4.15
136100	680.5	3.64	3.52	4.91	6.94	5.35
138100	690.5	3.61	3.48	5.35	6.97	4.56
n71, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
134600	673	3.44	3.45	5.04	6.54	4.20
136100	680.5	3.77	3.65	5.31	6.92	4.55
137600	688	3.49	3.34	4.58	6.79	5.18

### Spectrum Plot of Worst Value

5MHz / 64QAM



10MHz / 64QAM



15MHz / 64QAM



20MHz / 64QAM



LTE Band 2, Channel Bandwidth 1.4MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
18607	1850.7	4.05	5.01	6.44
18900	1880.0	3.83	4.92	6.47
19193	1909.3	3.59	4.34	6.39

LTE Band 2, Channel Bandwidth 3MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
18615	1851.5	3.83	4.86	6.38
18900	1880.0	3.83	4.73	6.56
19185	1908.5	3.55	4.29	6.40

LTE Band 2, Channel Bandwidth 5MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
18625	1852.5	3.82	4.84	6.97
18900	1880.0	3.78	4.49	6.84
19175	1907.5	3.62	4.37	6.49

LTE Band 2, Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
18650	1855.0	3.97	4.75	7.27
18900	1880.0	3.65	4.70	7.05
19150	1905.0	3.54	4.23	6.31

LTE Band 2, Channel Bandwidth 15MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
18675	1857.5	3.89	4.75	7.11
18900	1880.0	3.90	4.76	7.49
19125	1902.5	3.52	4.16	6.18

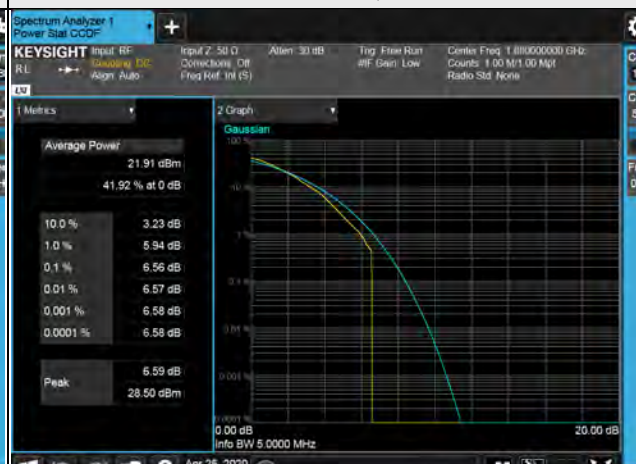
LTE Band 2, Channel Bandwidth 20MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
18700	1860.0	3.81	4.64	6.96
18900	1880.0	3.85	4.67	6.79
19100	1900.0	3.61	4.16	6.20

### Spectrum Plot of Worst Value

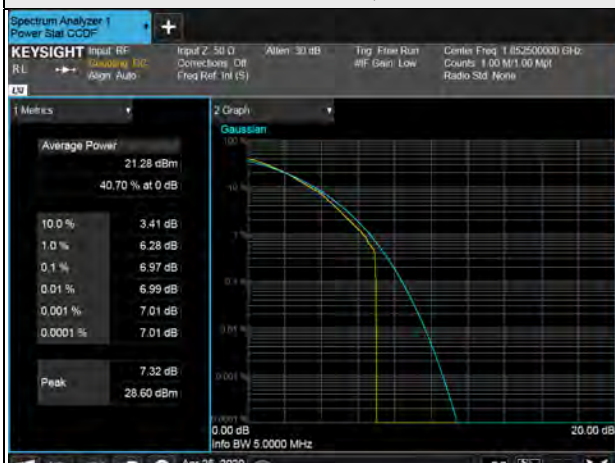
1.4MHz / 64QAM



3MHz / 64QAM



5MHz / 64QAM



10MHz / 16QAM



15MHz / 64QAM



20MHz / 64QAM



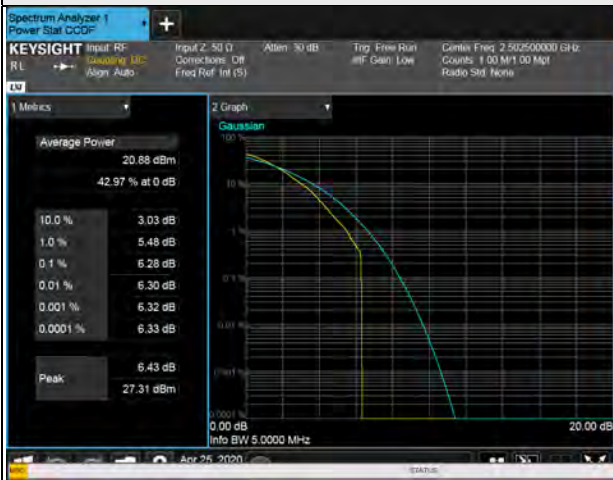
LTE Band 7

LTE Band 7, Channel Bandwidth 5MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
20775	2502.5	3.57	5.08	6.28
21100	2535.0	3.57	5.02	6.10
21425	2567.5	3.41	4.12	6.12
LTE Band 7, Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
20800	2505.0	3.69	5.02	6.39
21100	2535.0	3.73	4.81	6.15
21400	2565.0	3.39	4.08	6.08
LTE Band 7, Channel Bandwidth 15MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
20825	2507.5	3.48	4.87	6.14
21100	2535.0	3.34	4.79	5.99
21375	2562.5	3.35	4.06	6.03
LTE Band 7, Channel Bandwidth 20MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
20850	2510.0	4.05	5.20	6.86
21100	2535.0	3.30	4.78	6.00
21350	2560.0	3.37	4.16	6.01



### Spectrum Plot of Worst Value

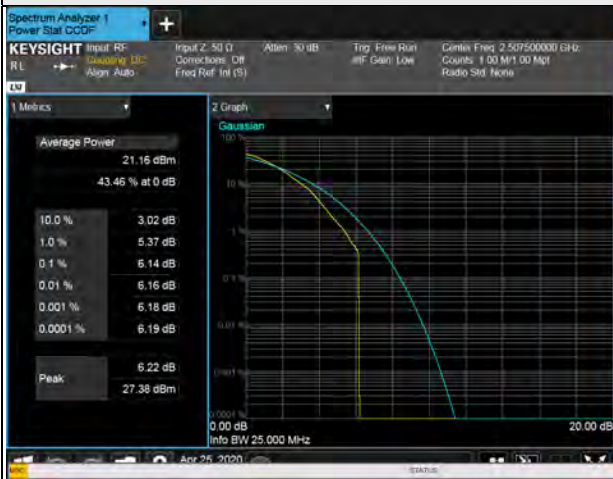
5MHz / 64QAM



10MHz / 64QAM



15MHz / 64QAM



20MHz / 64QAM



LTE Band 66

LTE Band 66, Channel Bandwidth 1.4MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
131979	1710.7	3.73	4.49	6.68
132322	1745.0	3.66	4.45	6.75
132665	1779.3	3.94	5.10	6.37
LTE Band 66, Channel Bandwidth 3MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
131987	1711.5	3.62	4.42	6.54
132322	1745.0	3.60	4.42	6.59
132657	1778.5	3.74	5.15	6.40
LTE Band 66, Channel Bandwidth 5MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
131997	1712.5	3.65	4.43	6.59
132322	1745.0	3.68	4.43	6.65
132647	1777.5	3.75	4.85	6.44
LTE Band 66, Channel Bandwidth 10MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
132022	1715.0	3.79	4.61	6.85
132322	1745.0	3.73	4.56	6.86
132622	1775.0	3.59	4.35	6.62
LTE Band 66, Channel Bandwidth 15MHz				
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
132047	1717.5	3.74	4.38	6.64
132322	1745.0	3.69	4.48	6.71
132597	1772.5	3.46	4.19	6.28

LTE Band 66, Channel Bandwidth 20MHz

Channel	Frequency (MHz)	Peak To Average Ratio (dB)		
		QPSK	16QAM	64QAM
132072	1720.0	3.78	4.55	6.90
132322	1745.0	3.74	4.60	6.82
132572	1770.0	3.54	4.85	6.24

### Spectrum Plot of Worst Value

1.4MHz / 64QAM



3MHz / 64QAM



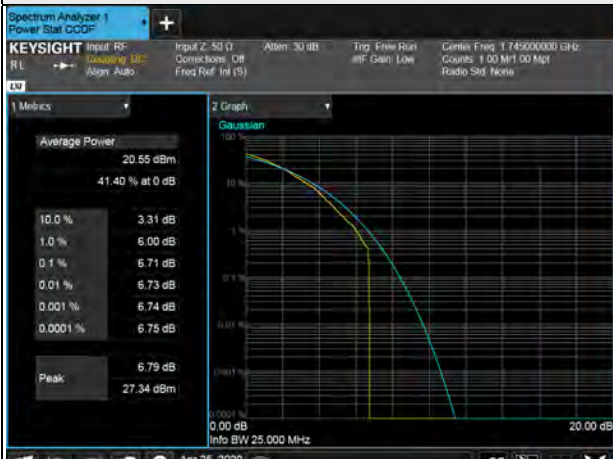
5MHz / 64QAM



10MHz / 64QAM



15MHz / 64QAM



20MHz / 64QAM



## 4.7 Conducted Spurious Emissions

### 4.7.1 Limits of Conducted Spurious Emissions Measurement

For LTE Band 2

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

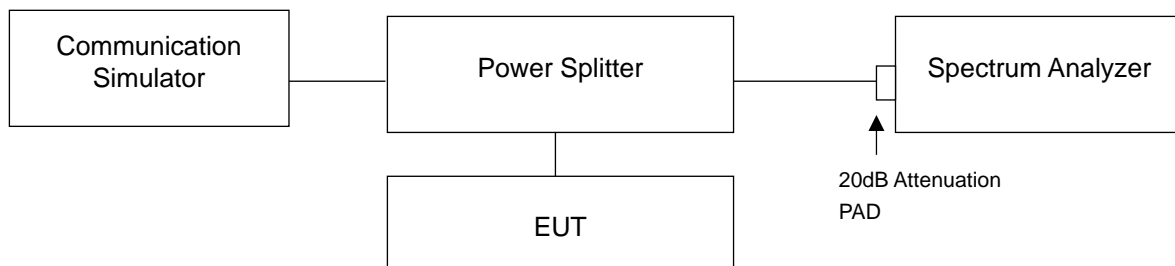
For LTE Band 7

In the FCC 27.53(m)(4), On any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least  $55 + 10 \log(P)$  dB. The emission limit equal to  $-25\text{dBm}$ .

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  $-13\text{dBm}$ .

### 4.7.2 Test Setup



### 4.7.3 Test Procedure

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

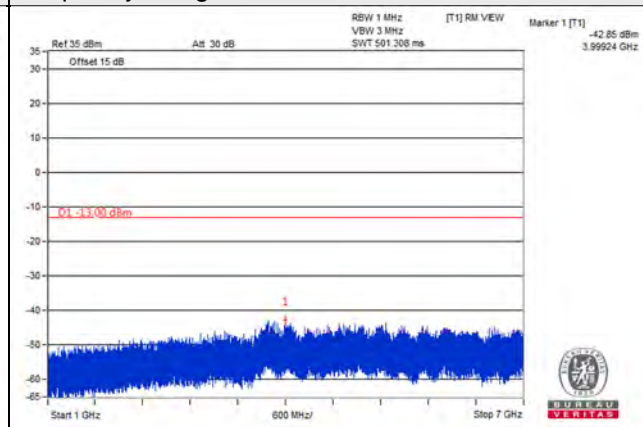
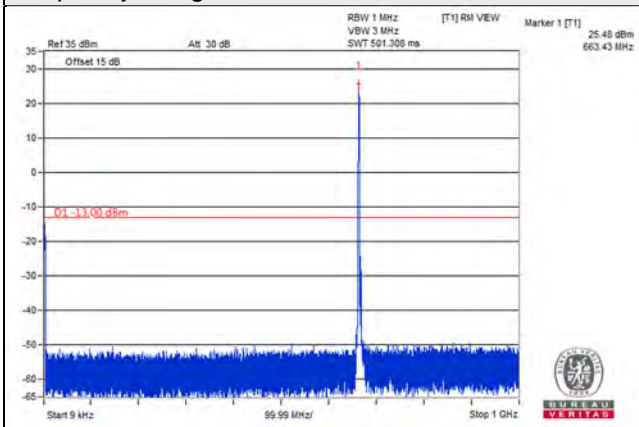
### 4.7.4 Test Results

n71

Channel Bandwidth: 5MHz

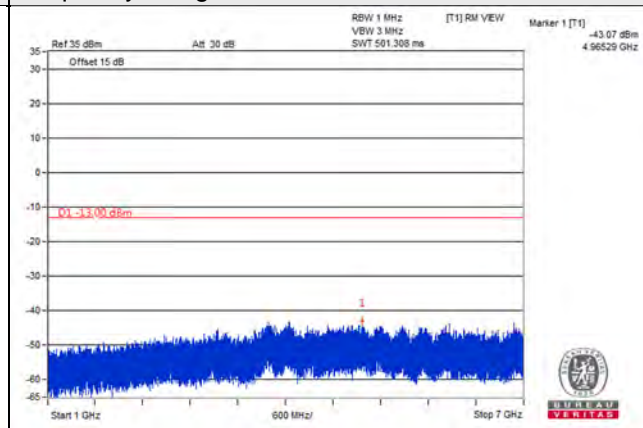
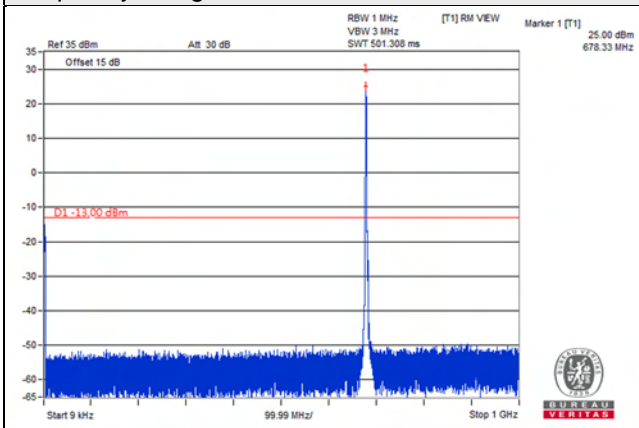
Channel 133100 (665.5MHz)

Frequency Range : 9kHz~1GHz      Frequency Range : 1GHz~7GHz



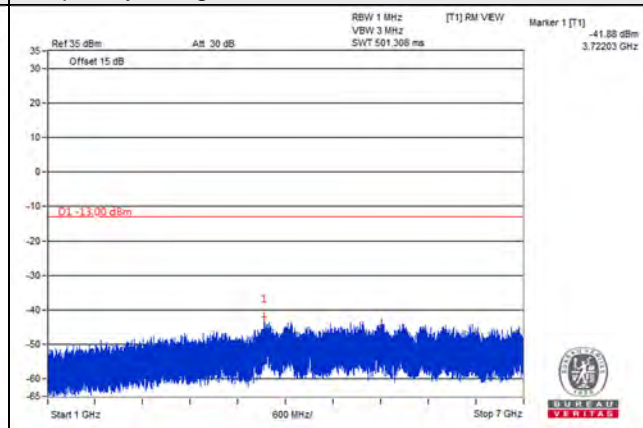
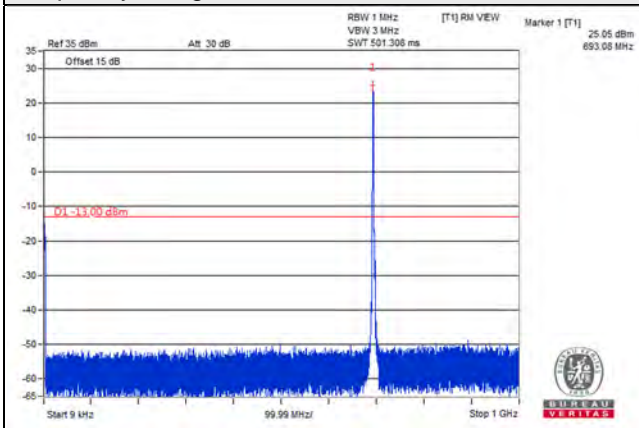
Channel 136100 (680.5MHz)

Frequency Range : 9kHz~1GHz      Frequency Range : 1GHz~7GHz



Channel 139100 (695.5MHz)

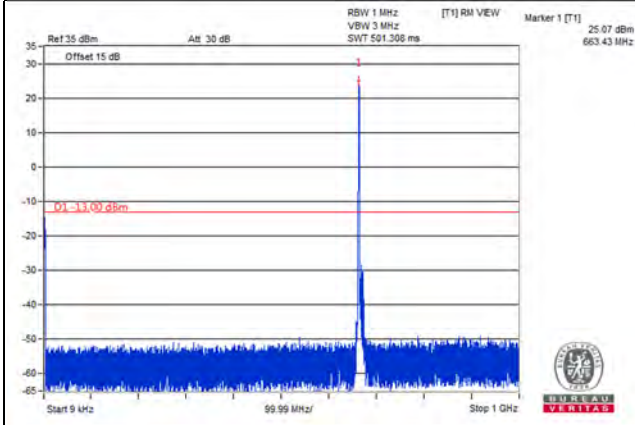
Frequency Range : 9kHz~1GHz      Frequency Range : 1GHz~7GHz



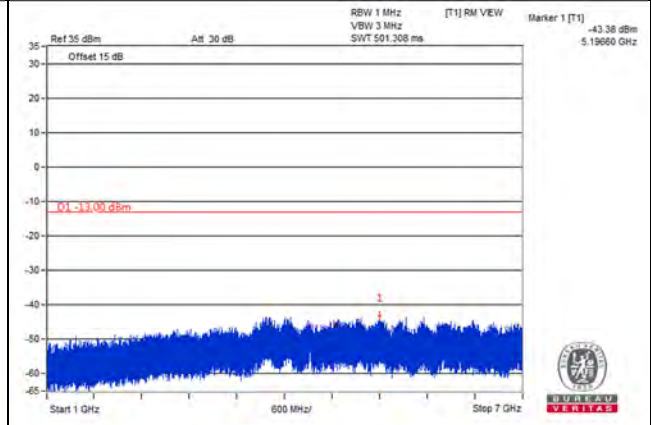
Channel Bandwidth: 10MHz

Channel 133600 (668.0MHz)

Frequency Range : 9kHz~1GHz

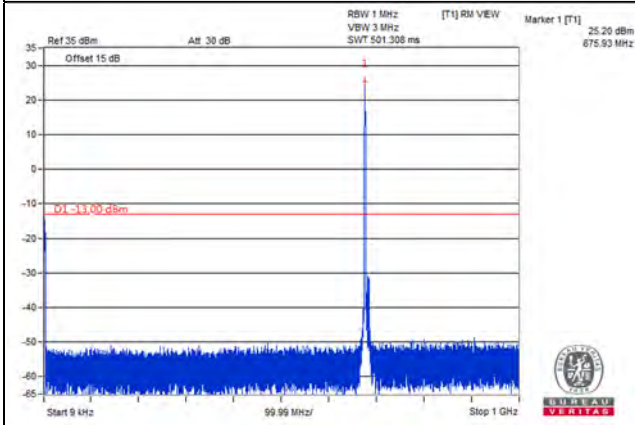


Frequency Range : 1GHz~7GHz

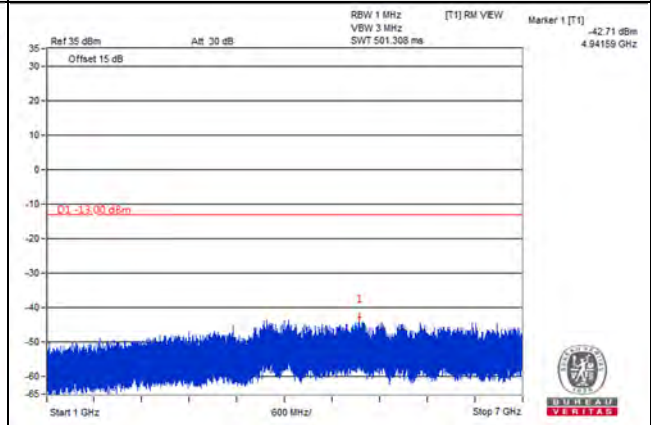


Channel 136100 (680.5MHz)

Frequency Range : 9kHz~1GHz

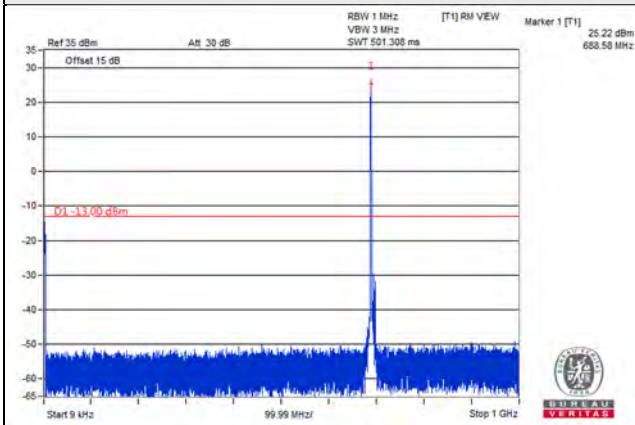


Frequency Range : 1GHz~7GHz

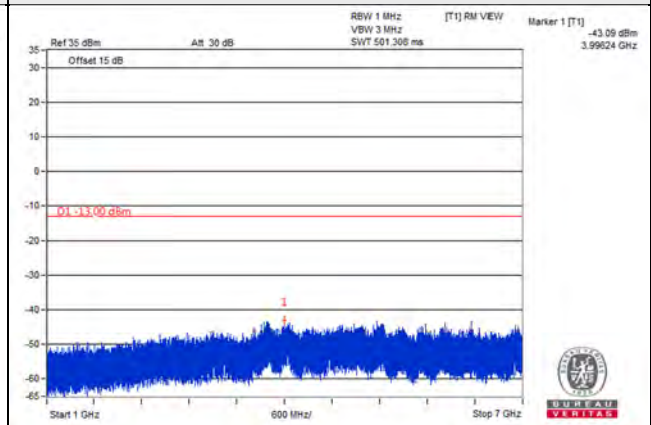


Channel 138600 (693.0MHz)

Frequency Range : 9kHz~1GHz



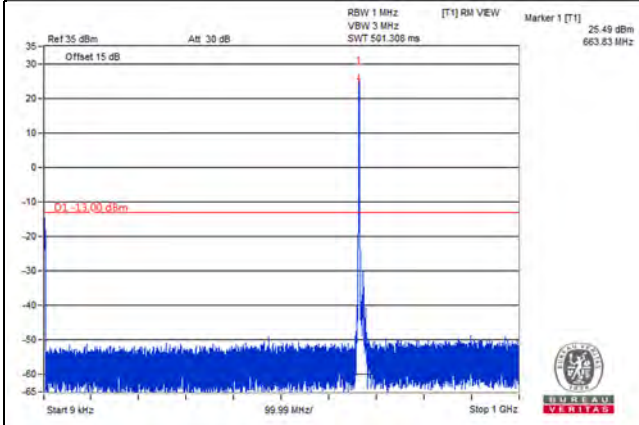
Frequency Range : 1GHz~7GHz



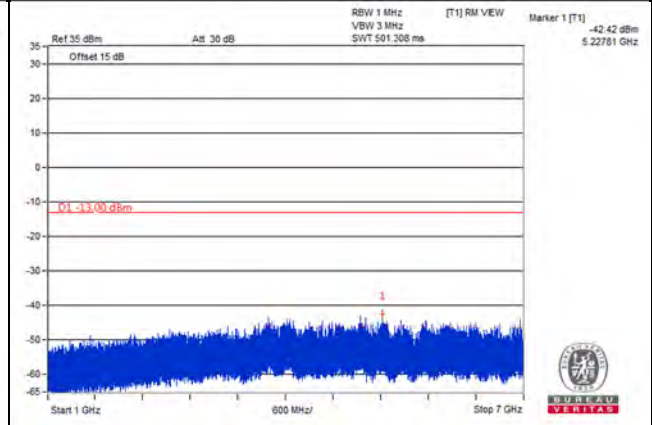
Channel Bandwidth: 15MHz

Channel 134100 (670.5MHz)

Frequency Range : 9kHz~1GHz

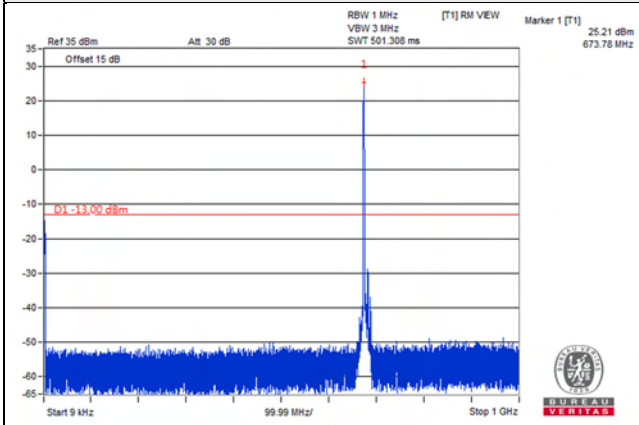


Frequency Range : 1GHz~7GHz

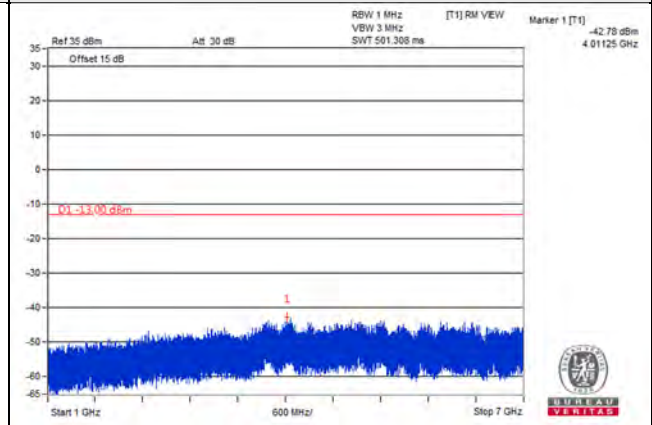


Channel 136100 (680.5MHz)

Frequency Range : 9kHz~1GHz

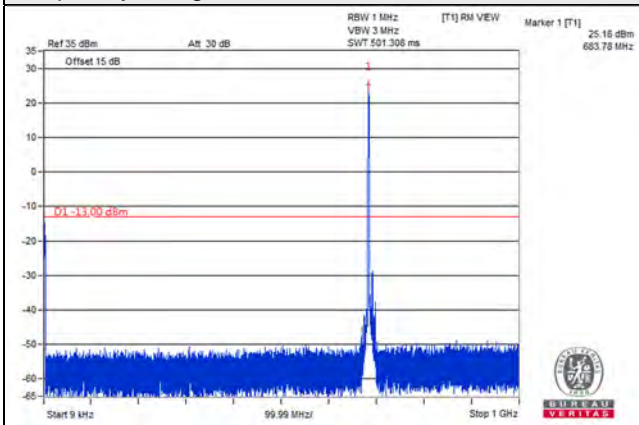


Frequency Range : 1GHz~7GHz

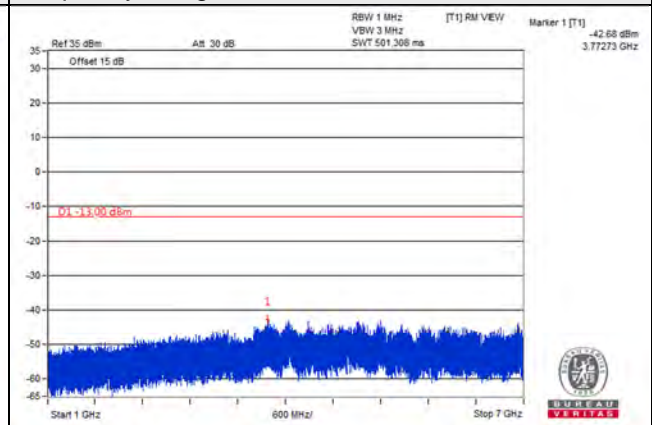


Channel 138100 (690.5MHz)

Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~7GHz

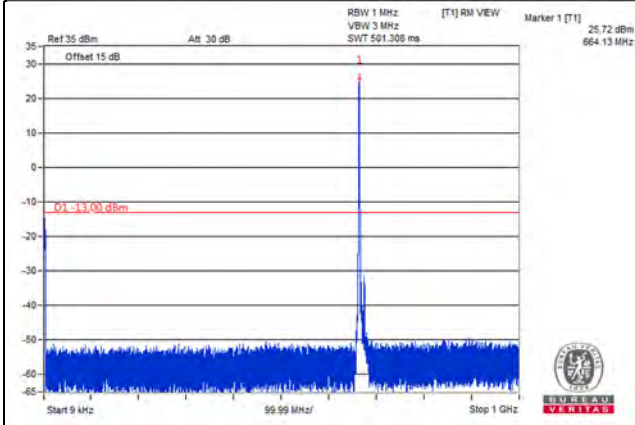




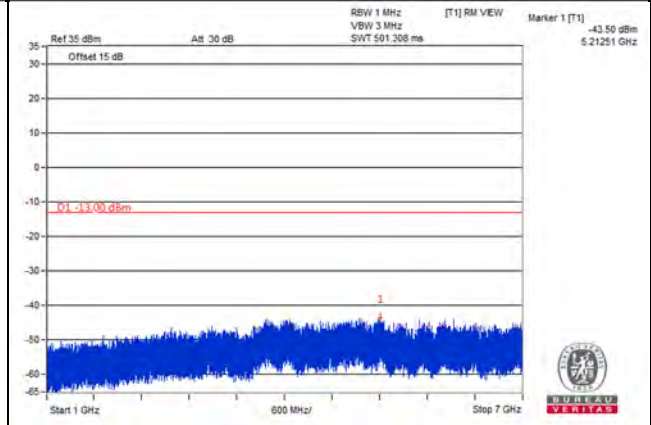
Channel Bandwidth: 20MHz

Channel 134600 (673.0MHz)

Frequency Range : 9kHz~1GHz

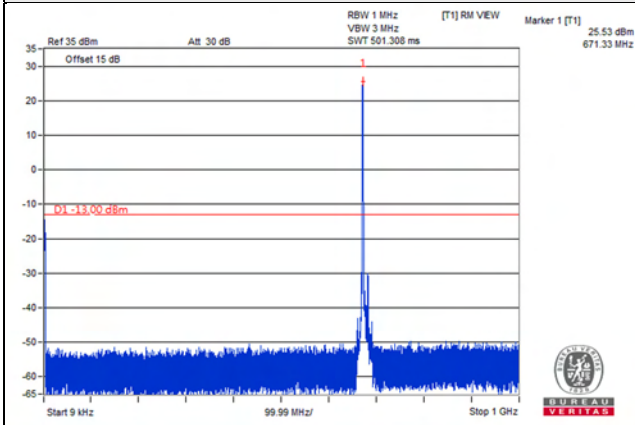


Frequency Range : 1GHz~7GHz

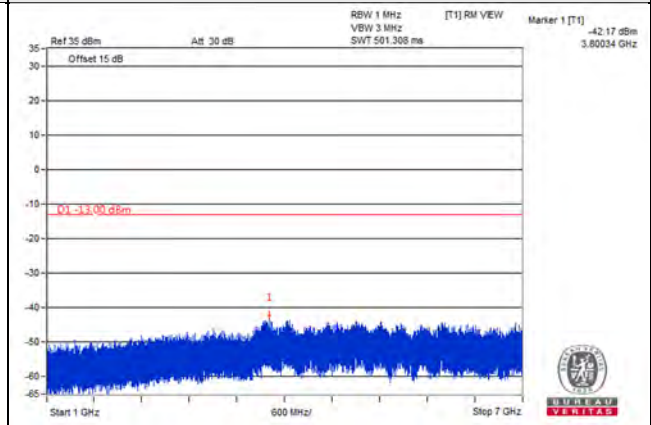


Channel 136100 (680.5MHz)

Frequency Range : 9kHz~1GHz

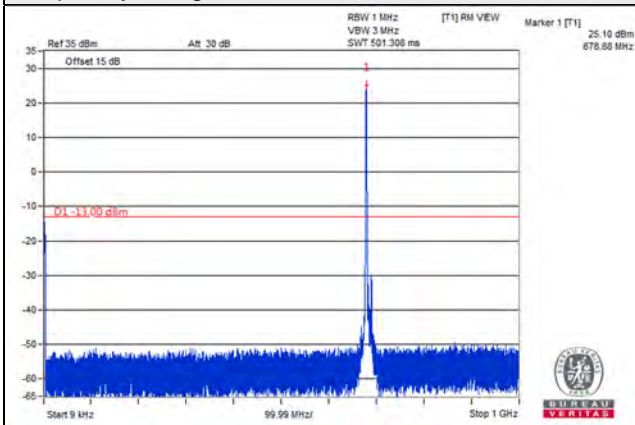


Frequency Range : 1GHz~7GHz

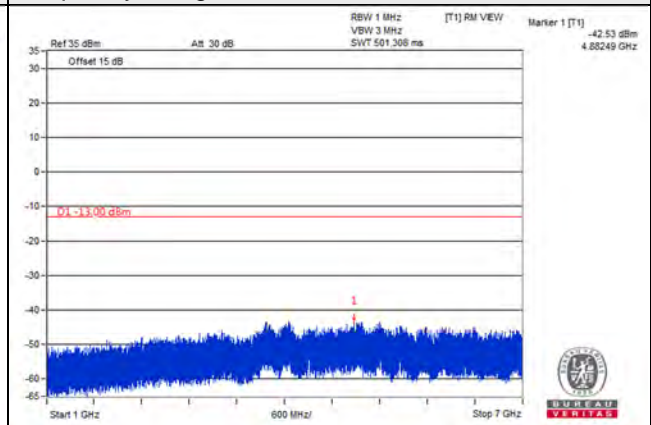


Channel 137600 (688.0MHz)

Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~7GHz

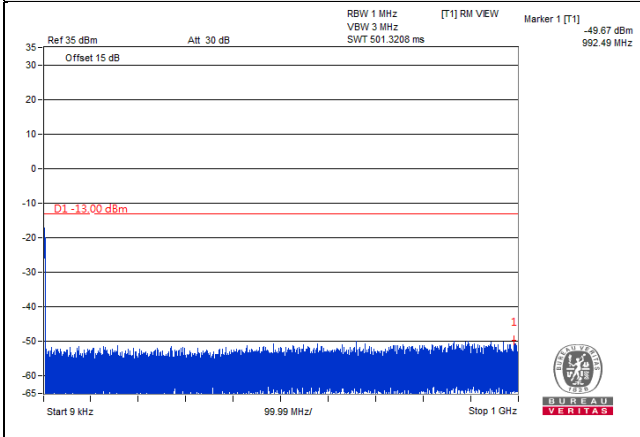


LTE Band 2

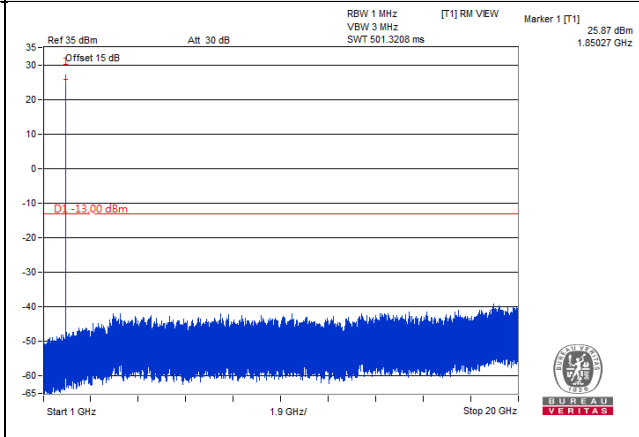
Channel Bandwidth 1.4MHz

Channel 18607 (1850.70MHz)

Frequency Range : 9kHz~1GHz

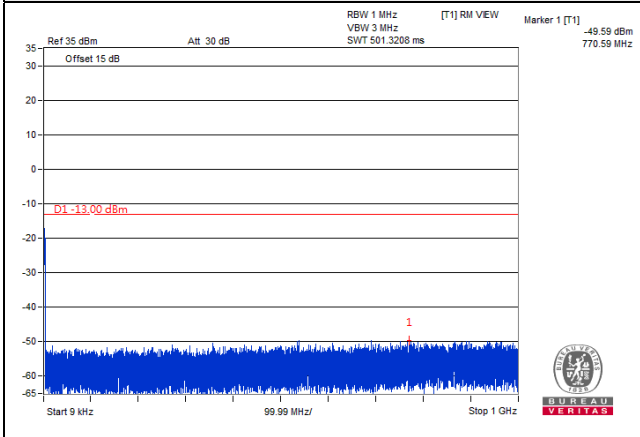


Frequency Range : 1GHz~20GHz

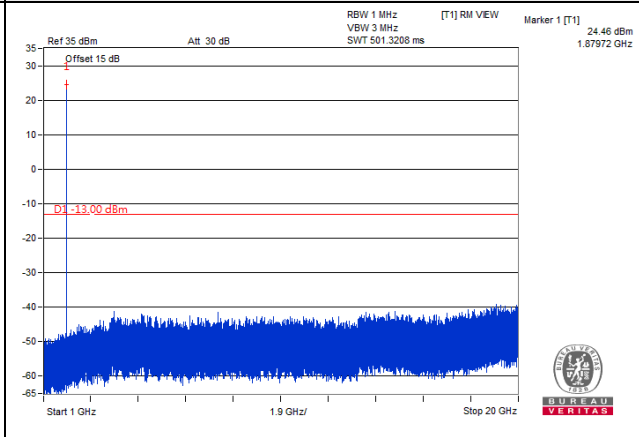


Channel 18900 (1880.00MHz)

Frequency Range : 9kHz~1GHz

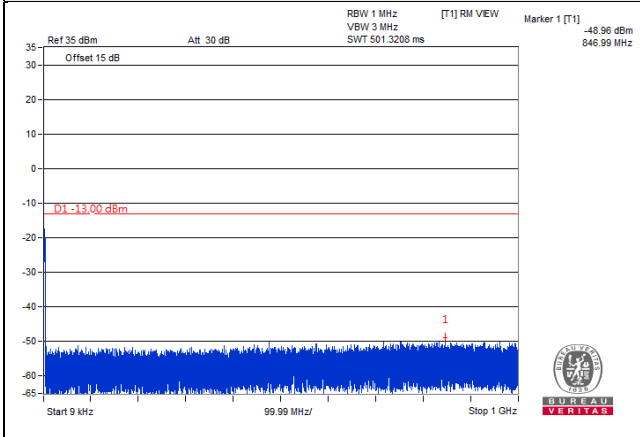


Frequency Range : 1GHz~20GHz

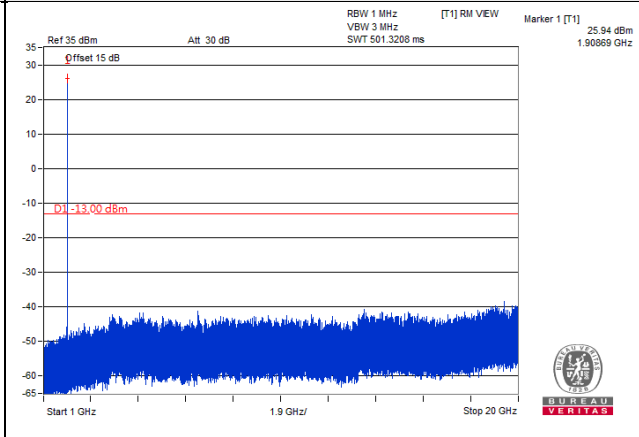


Channel 19193 (1909.30MHz)

Frequency Range : 9kHz~1GHz



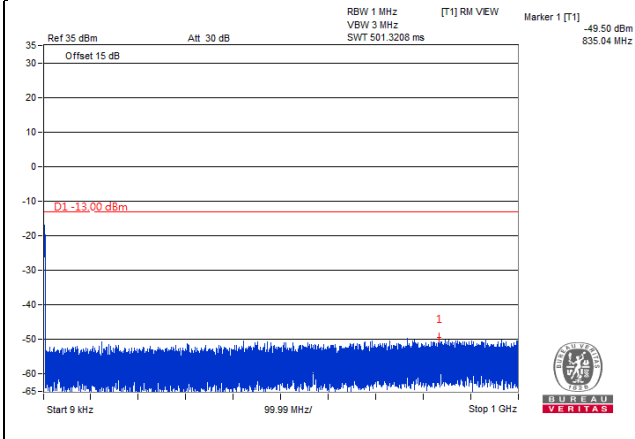
Frequency Range : 1GHz~20GHz



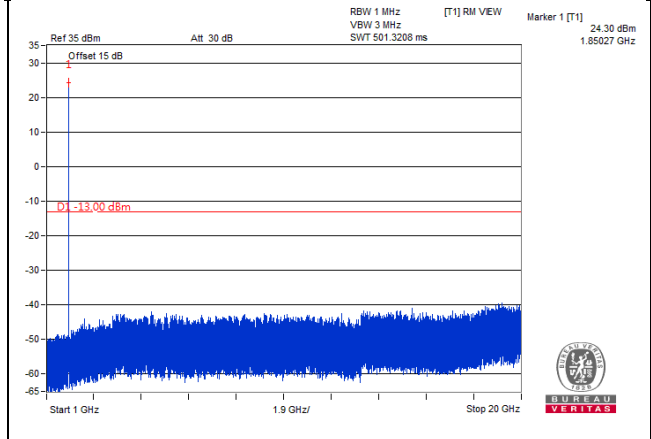
**Channel Bandwidth 3MHz**

**Channel 18615 (1851.50MHz)**

**Frequency Range : 9kHz~1GHz**

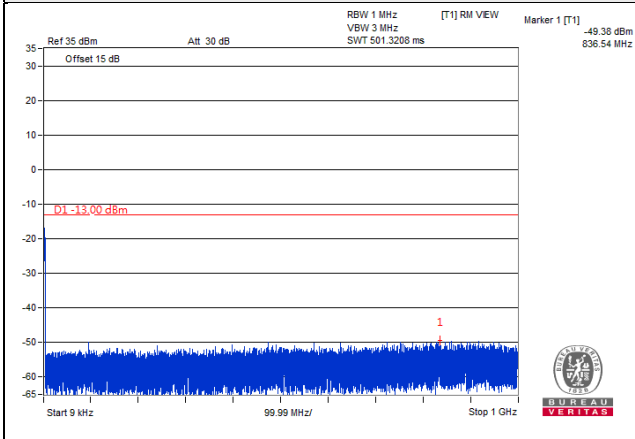


**Frequency Range : 1GHz~20GHz**

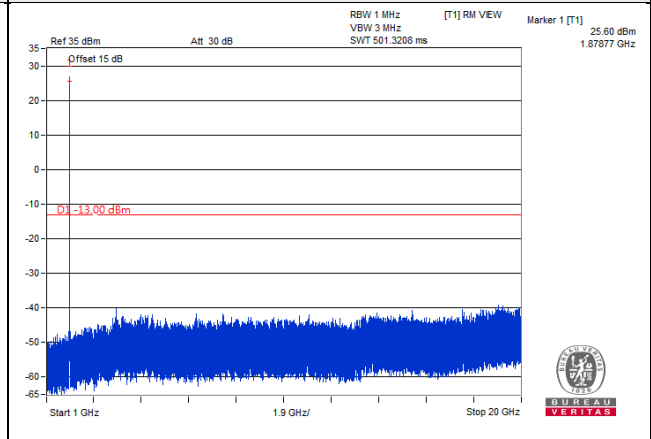


**Channel 18900 (1880.00MHz)**

**Frequency Range : 9kHz~1GHz**

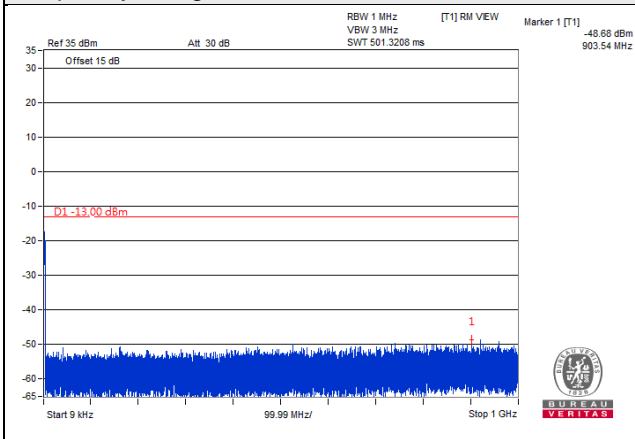


**Frequency Range : 1GHz~20GHz**

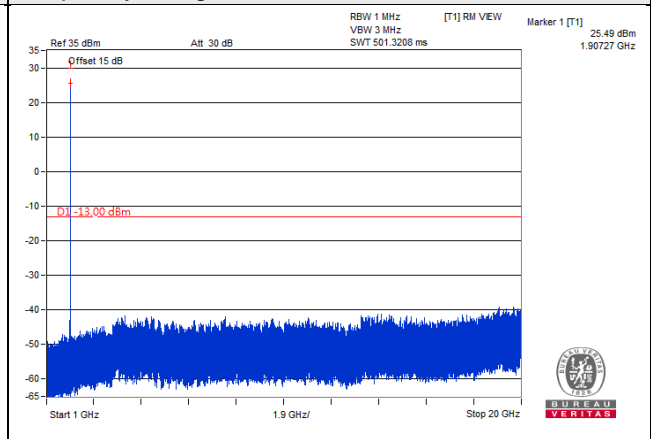


**Channel 19185 (1908.50MHz)**

**Frequency Range : 9kHz~1GHz**



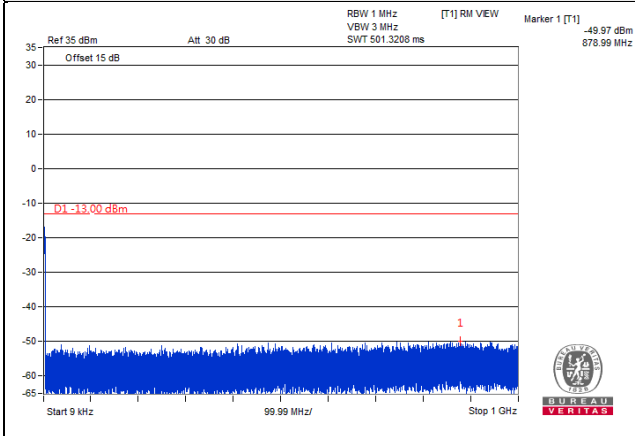
**Frequency Range : 1GHz~20GHz**



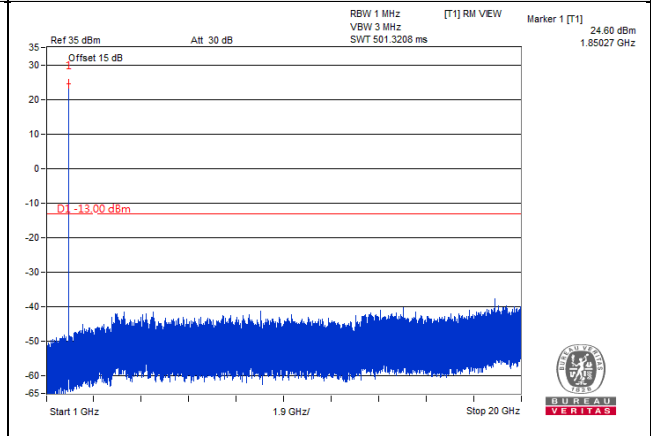
**Channel Bandwidth 5MHz**

**Channel 18625 (1852.50MHz)**

**Frequency Range : 9kHz~1GHz**

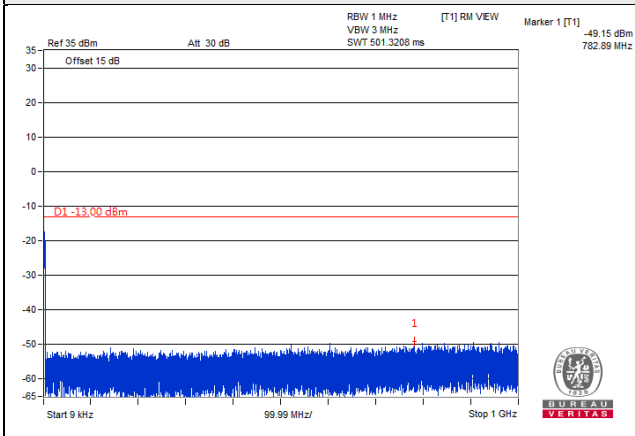


**Frequency Range : 1GHz~20GHz**

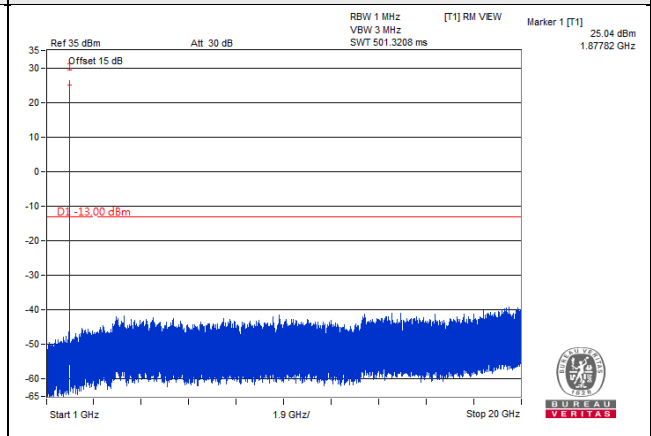


**Channel 18900 (1880.00MHz)**

**Frequency Range : 9kHz~1GHz**

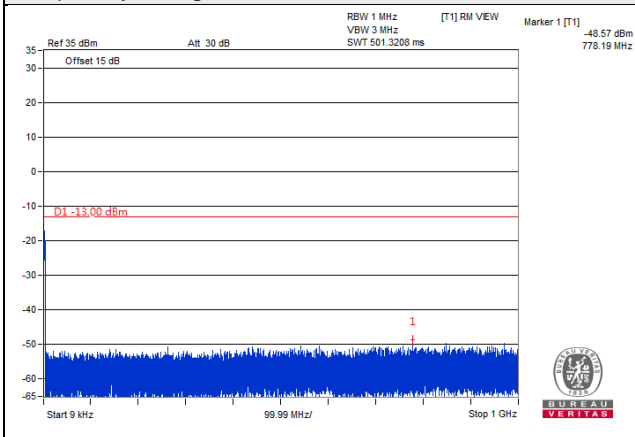


**Frequency Range : 1GHz~20GHz**

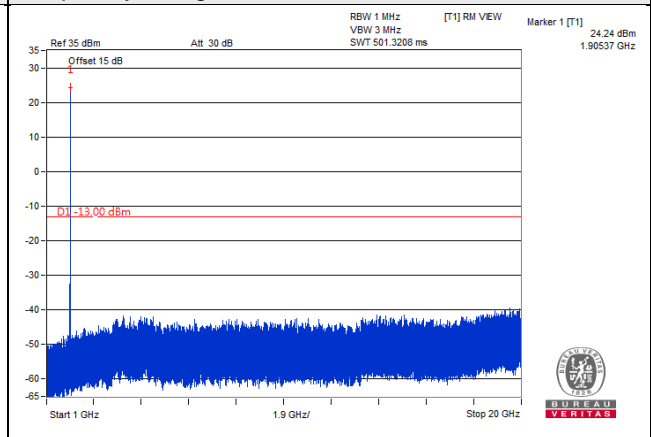


**Channel 19175 (1907.50MHz)**

**Frequency Range : 9kHz~1GHz**



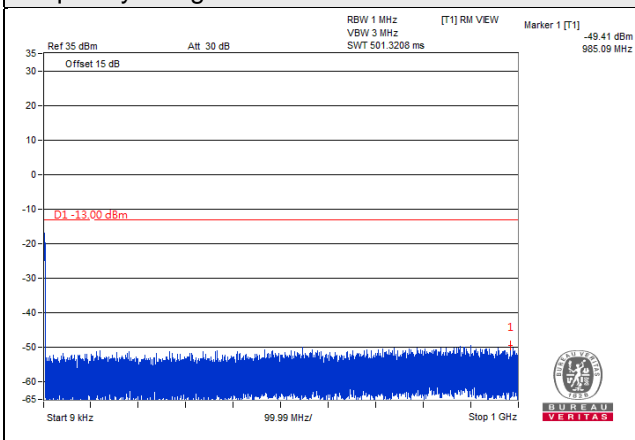
**Frequency Range : 1GHz~20GHz**



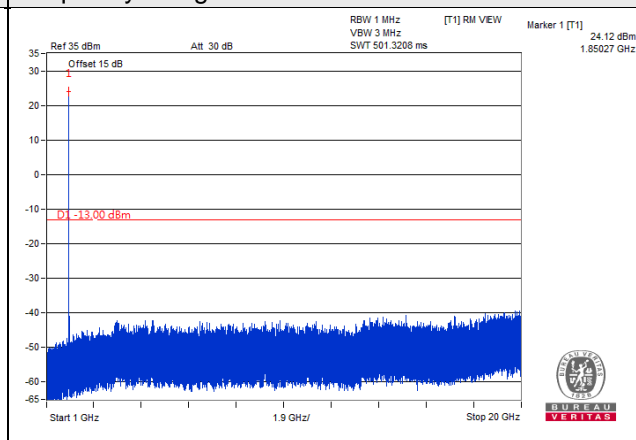
**Channel Bandwidth 10MHz**

**Channel 18650 (1855.00MHz)**

**Frequency Range : 9kHz~1GHz**

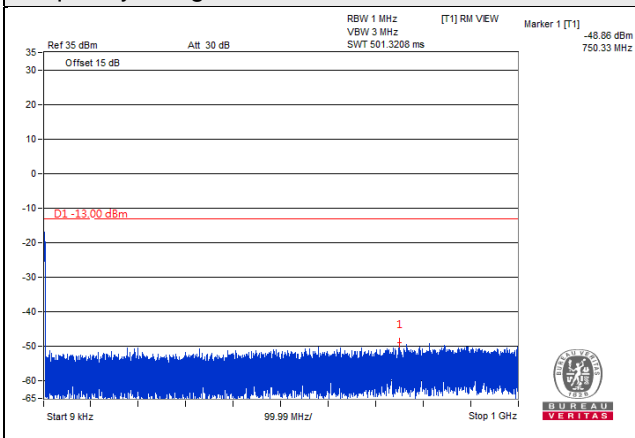


**Frequency Range : 1GHz~20GHz**

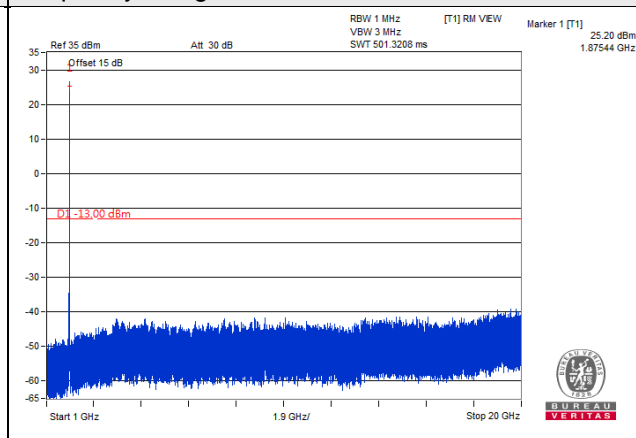


**Channel 18900 (1880.00MHz)**

**Frequency Range : 9kHz~1GHz**

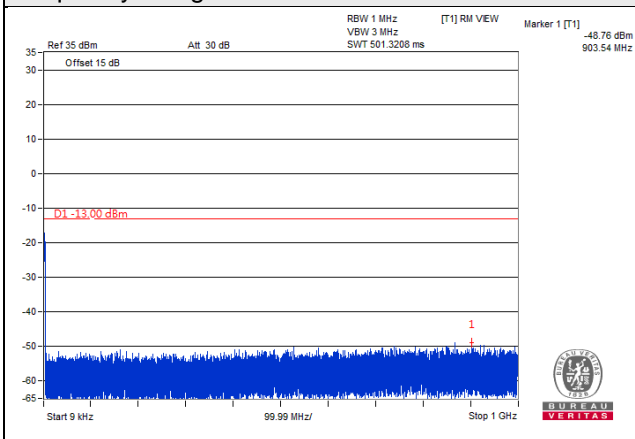


**Frequency Range : 1GHz~20GHz**

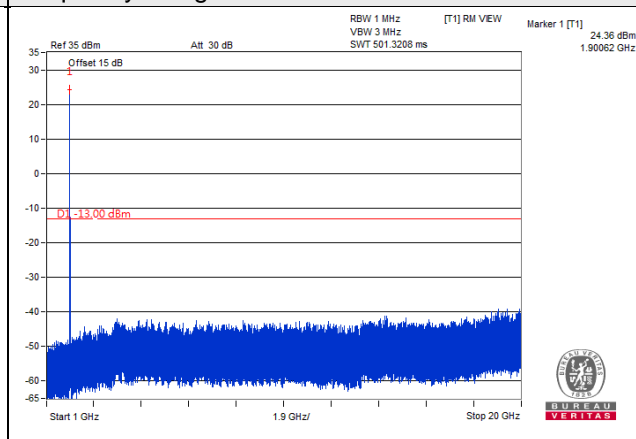


**Channel 19150 (1905.00MHz)**

**Frequency Range : 9kHz~1GHz**



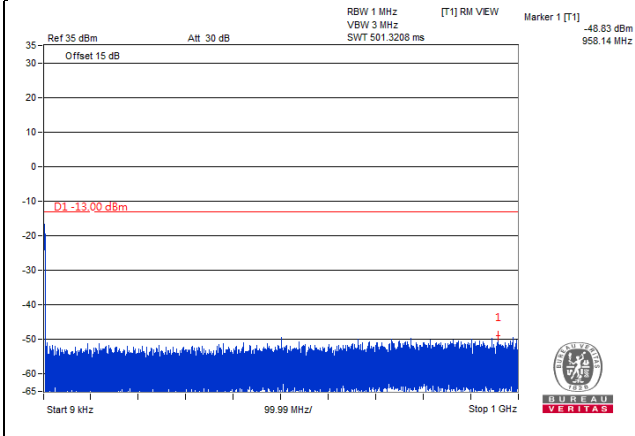
**Frequency Range : 1GHz~20GHz**



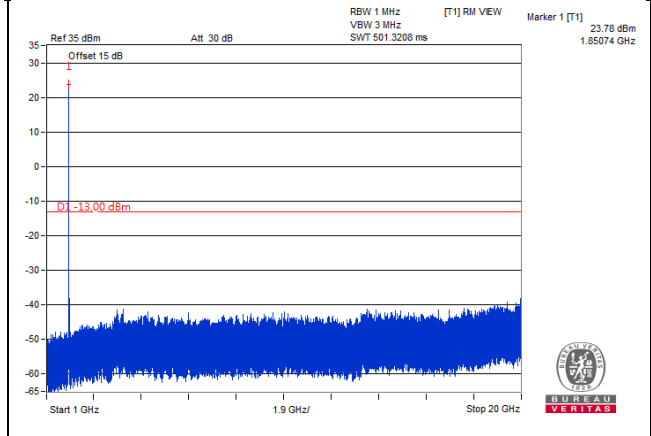
**Channel Bandwidth 15MHz**

**Channel 18675 (1857.50MHz)**

**Frequency Range : 9kHz~1GHz**

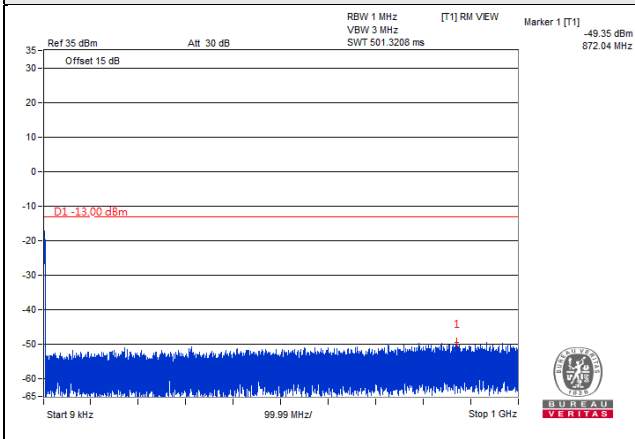


**Frequency Range : 1GHz~20GHz**

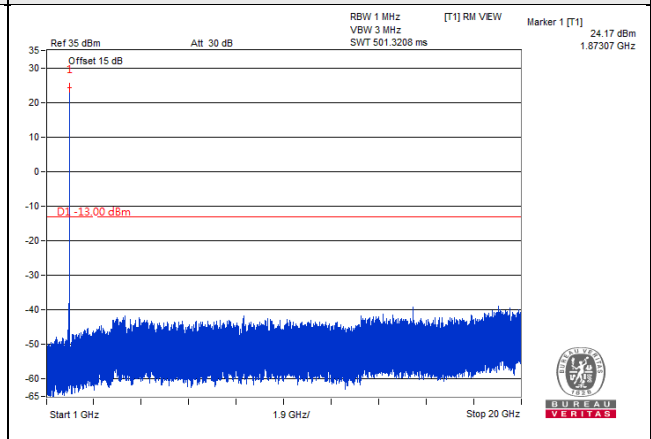


**Channel 18900 (1880.00MHz)**

**Frequency Range : 9kHz~1GHz**

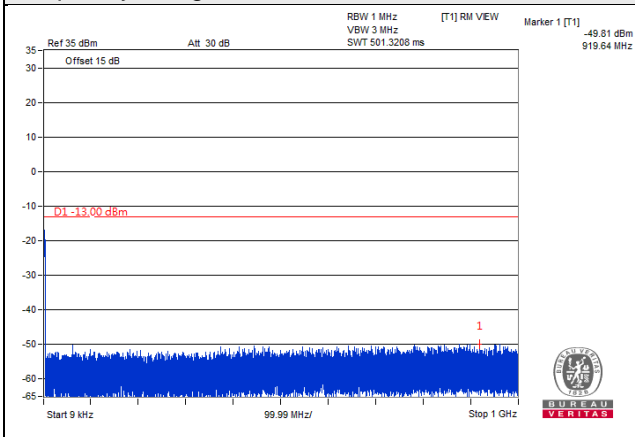


**Frequency Range : 1GHz~20GHz**

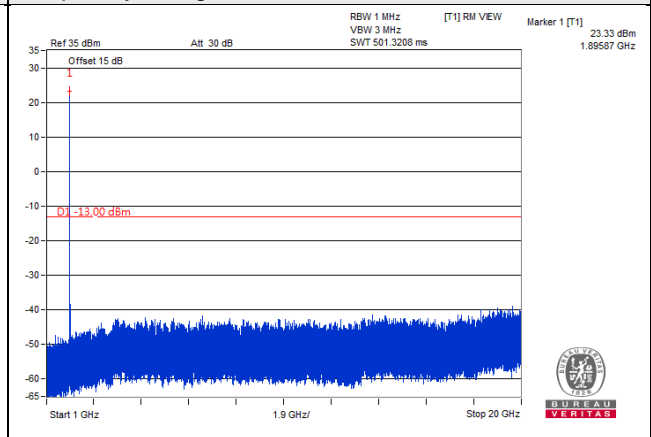


**Channel 19125 (1902.50MHz)**

**Frequency Range : 9kHz~1GHz**



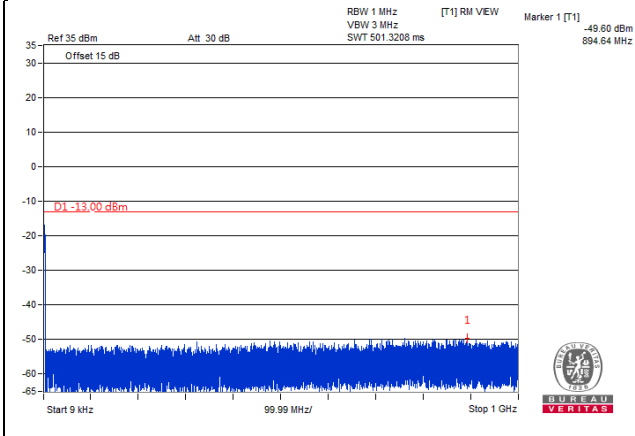
**Frequency Range : 1GHz~20GHz**



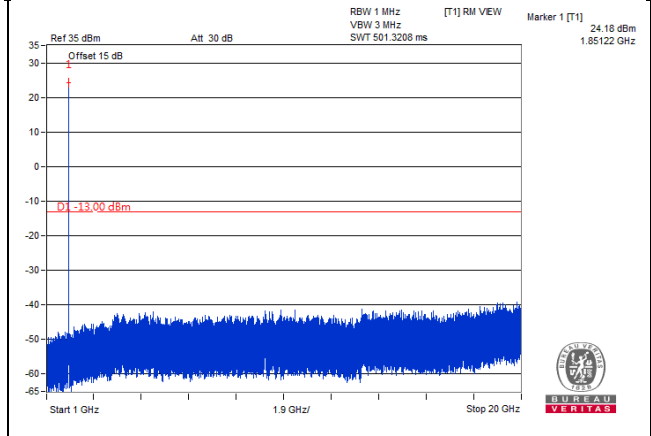
**Channel Bandwidth 20MHz**

**Channel 18700 (1860.00MHz)**

**Frequency Range : 9kHz~1GHz**

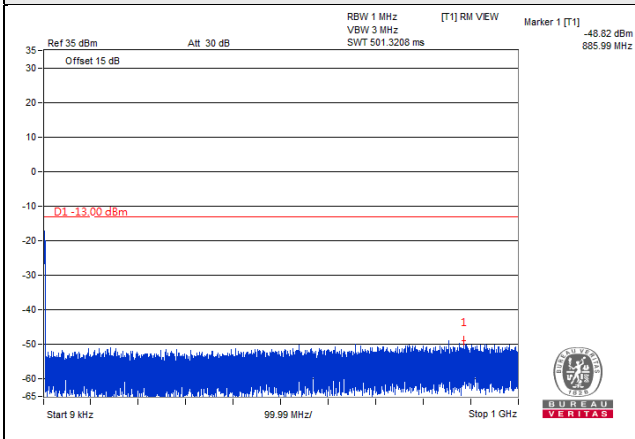


**Frequency Range : 1GHz~20GHz**

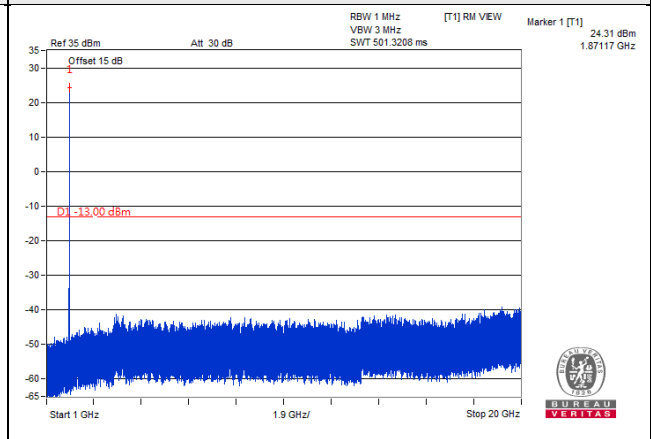


**Channel 18900 (1880.00MHz)**

**Frequency Range : 9kHz~1GHz**

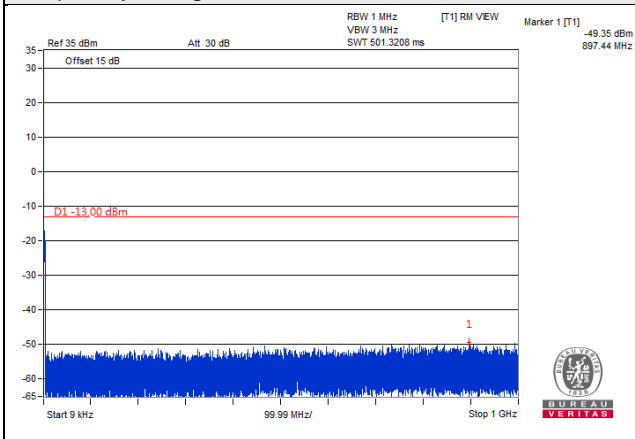


**Frequency Range : 1GHz~20GHz**

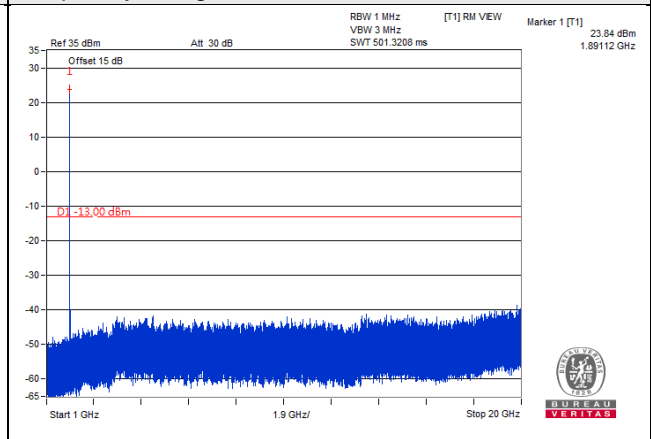


**Channel 19100 (1900.00MHz)**

**Frequency Range : 9kHz~1GHz**



**Frequency Range : 1GHz~20GHz**

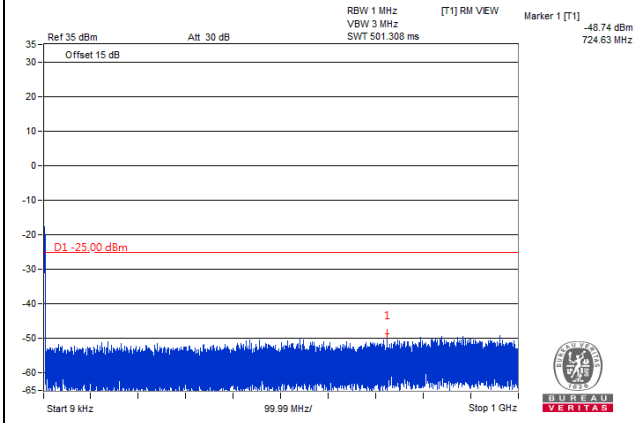


LTE Band 7

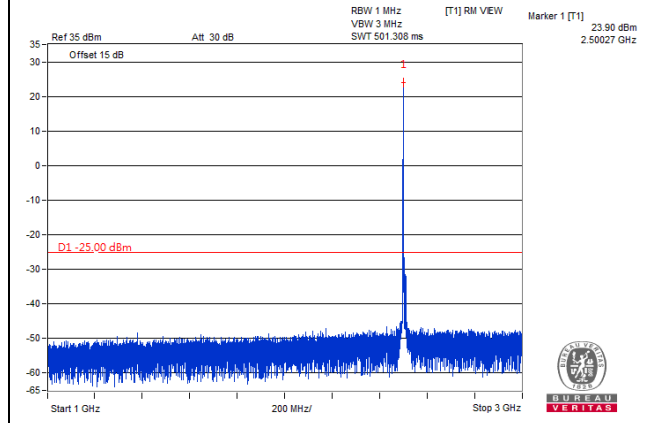
Channel Band width: 5MHz

Channel 20775(2502.5MHz)

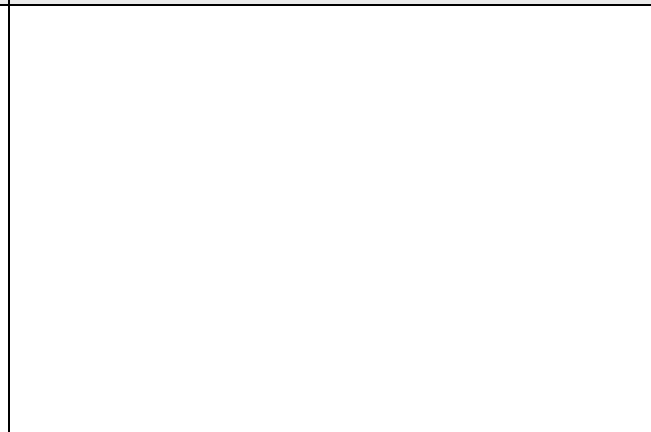
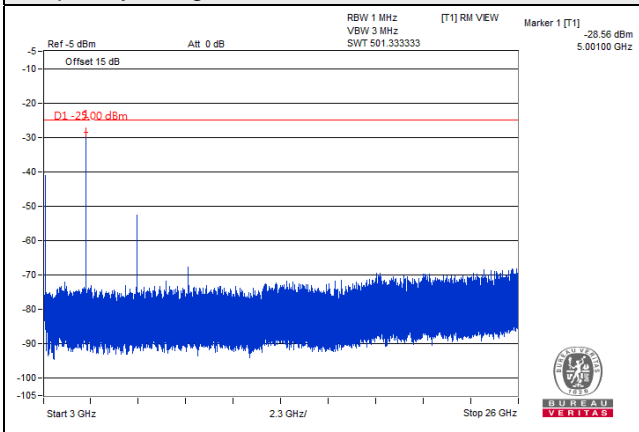
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~3GHz



Frequency Range : 3GHz~26GHz



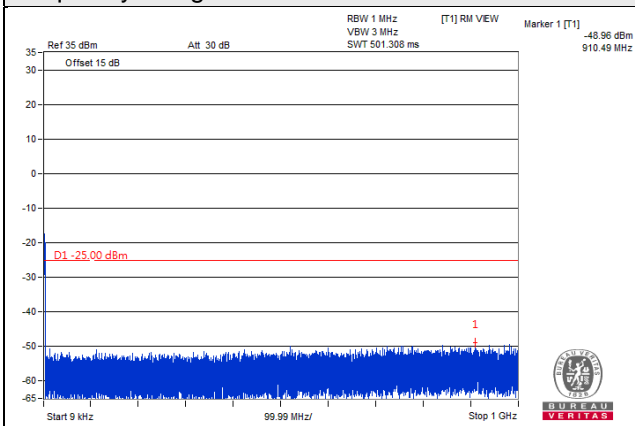
\*The 9kHz signal over the limit is from Spectrum.



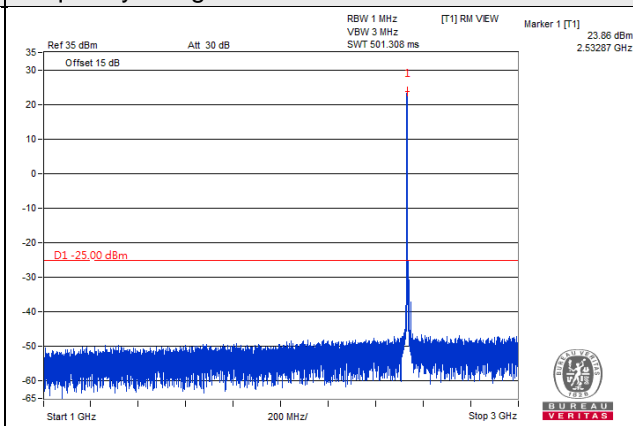
Channel Band width: 5MHz

Channel 21100(2535MHz)

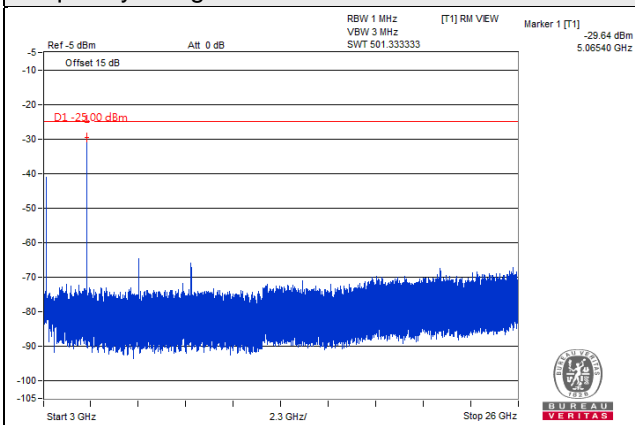
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~3GHz



Frequency Range : 3GHz~26GHz

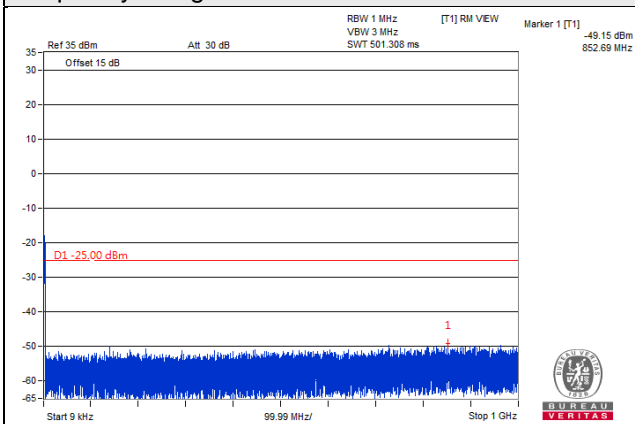


\*The 9kHz signal over the limit is from Spectrum.

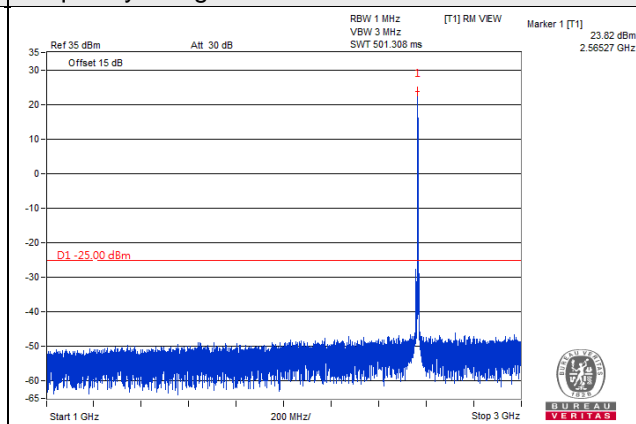
Channel Band width: 5MHz

Channel 21425(2567.5MHz)

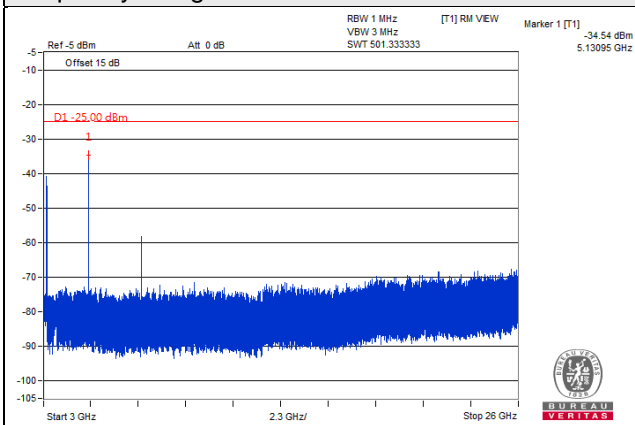
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~3GHz



Frequency Range : 3GHz~26GHz

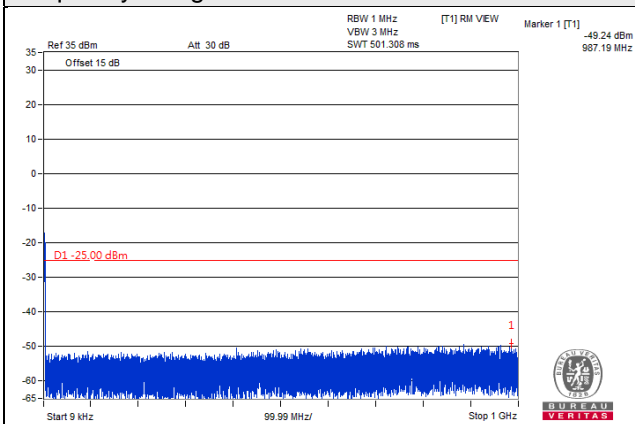


\*The 9kHz signal over the limit is from Spectrum.

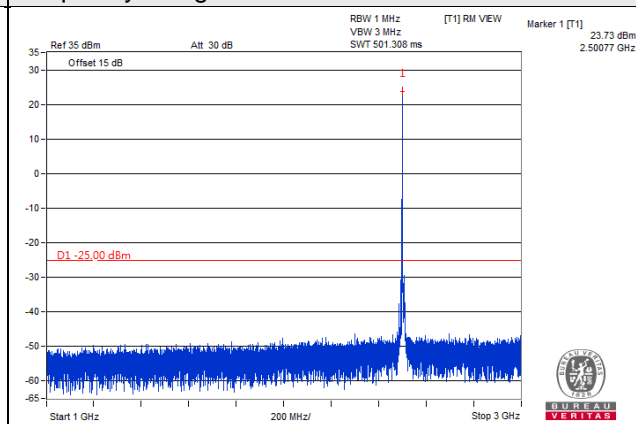
Channel Band width: 10MHz

Channel 20800(2505MHz)

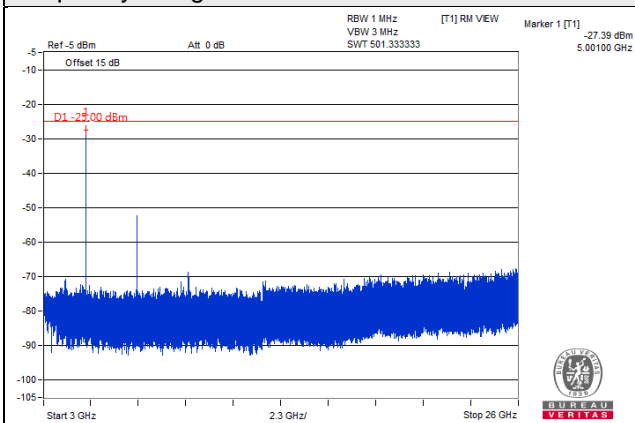
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~3GHz



Frequency Range : 3GHz~26GHz

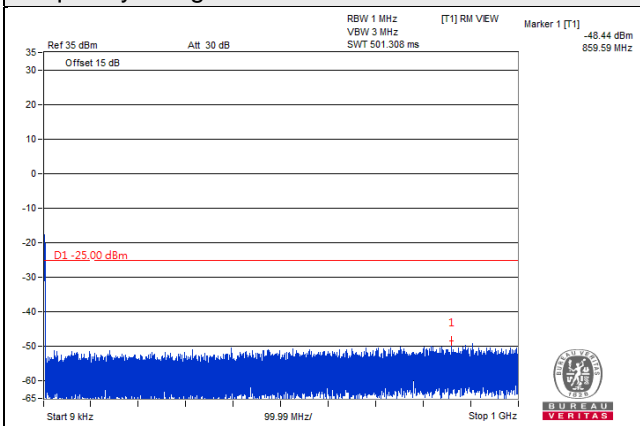


\*The 9kHz signal over the limit is from Spectrum.

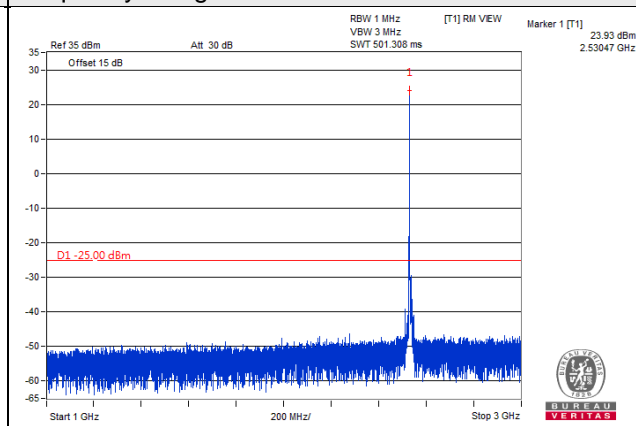
Channel Band width: 10MHz

Channel 21100(2535MHz)

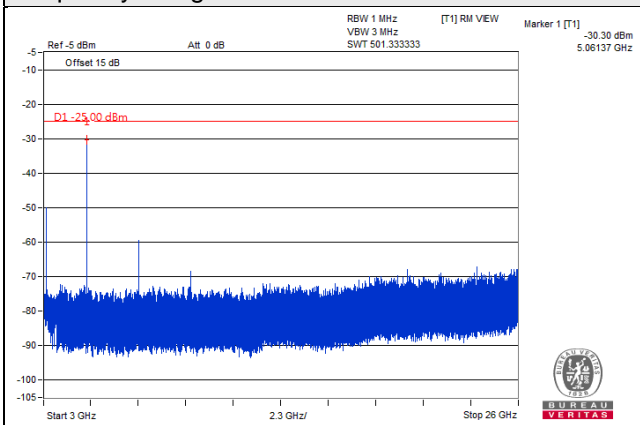
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~3GHz



Frequency Range : 3GHz~26GHz

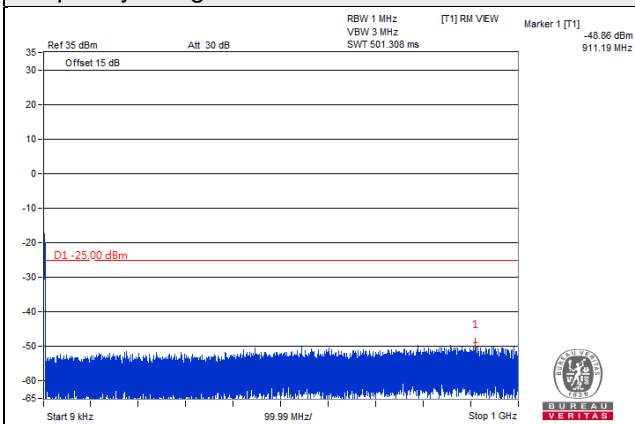


\*The 9kHz signal over the limit is from Spectrum.

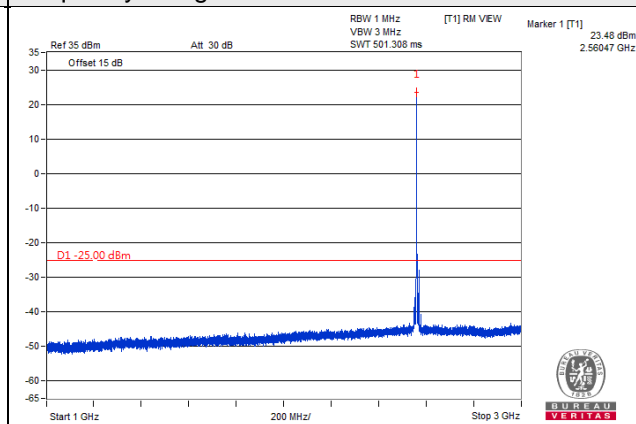
Channel Band width: 10MHz

Channel 21400(2565MHz)

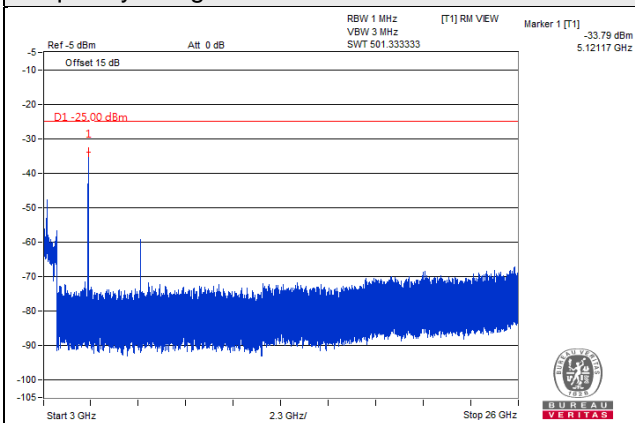
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~3GHz



Frequency Range : 3GHz~26GHz

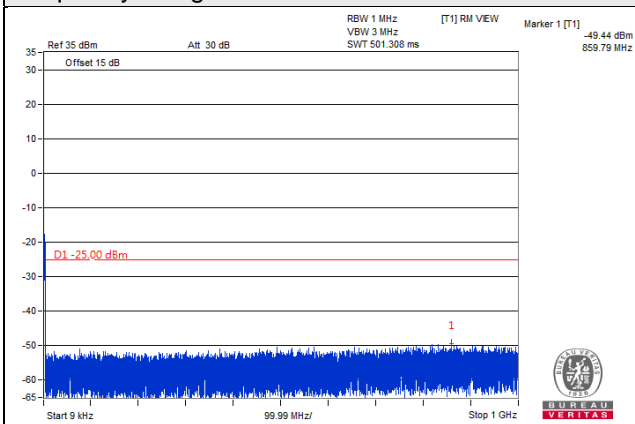


\*The 9kHz signal over the limit is from Spectrum.

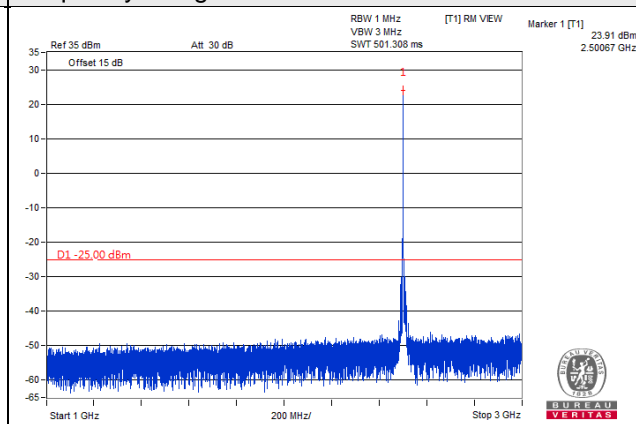
Channel Band width: 15MHz

Channel 20825(2507.5MHz)

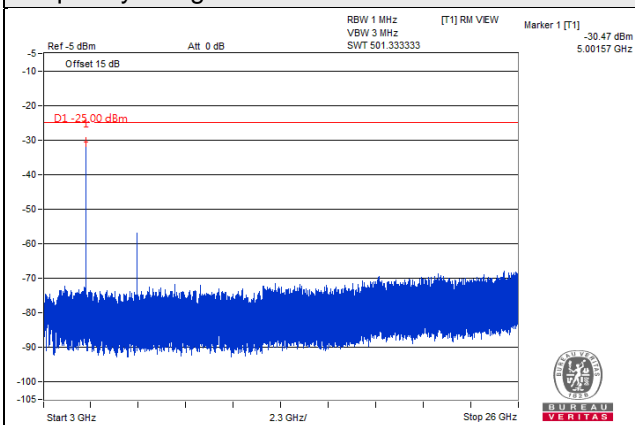
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~3GHz



Frequency Range : 3GHz~26GHz

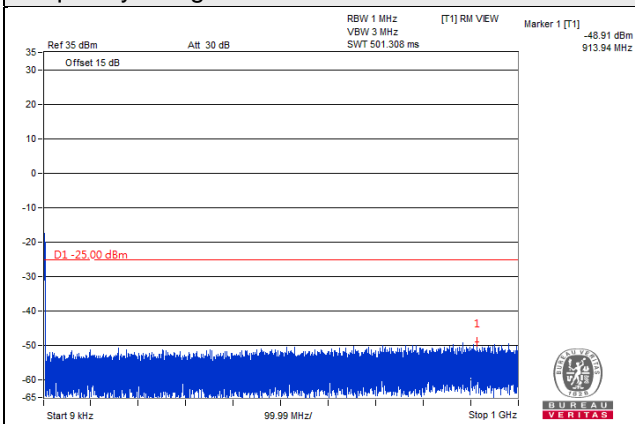


\*The 9kHz signal over the limit is from Spectrum.

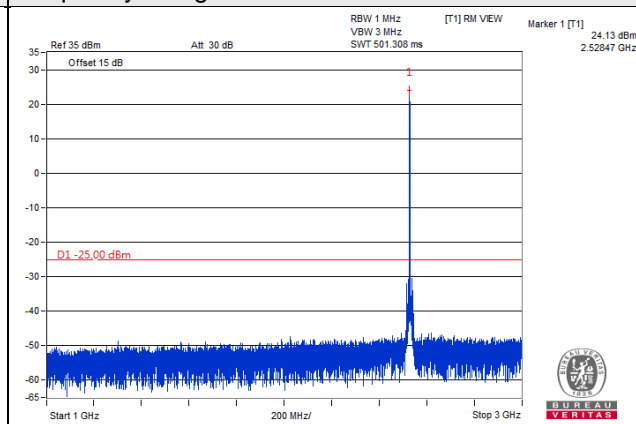
Channel Band width: 15MHz

Channel 21100(2535MHz)

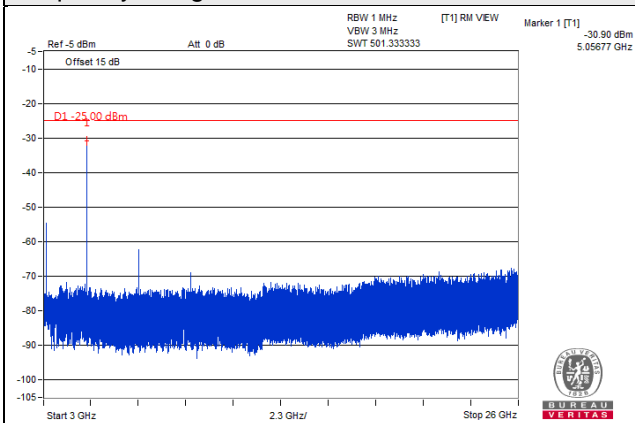
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~3GHz



Frequency Range : 3GHz~26GHz

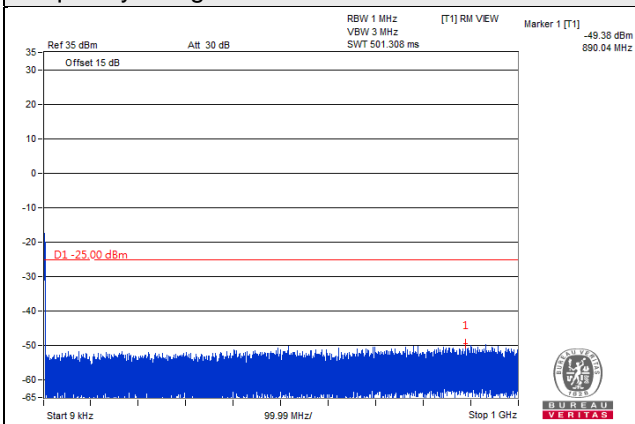


\*The 9kHz signal over the limit is from Spectrum.

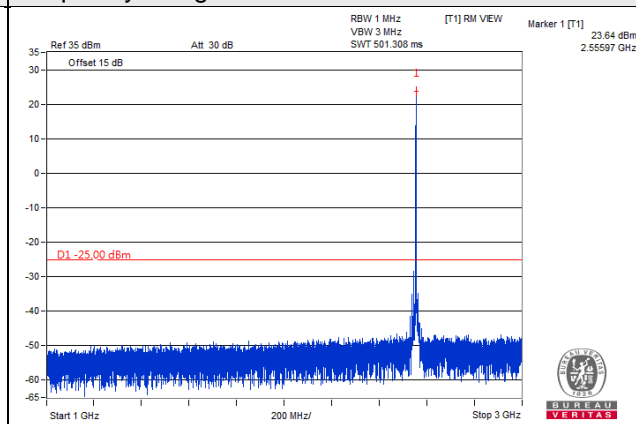
Channel Band width: 15MHz

Channel 21375(2562.5MHz)

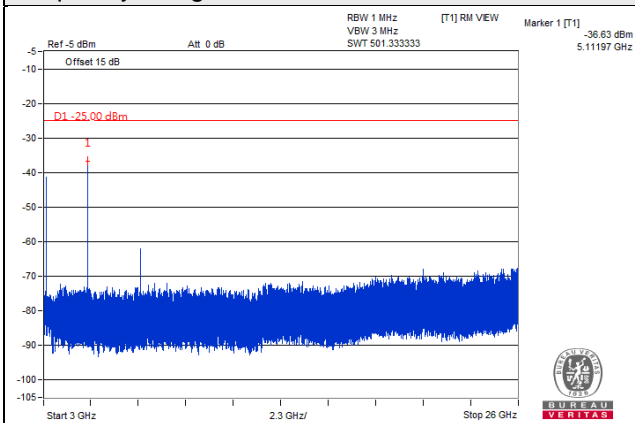
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~3GHz



Frequency Range : 3GHz~26GHz



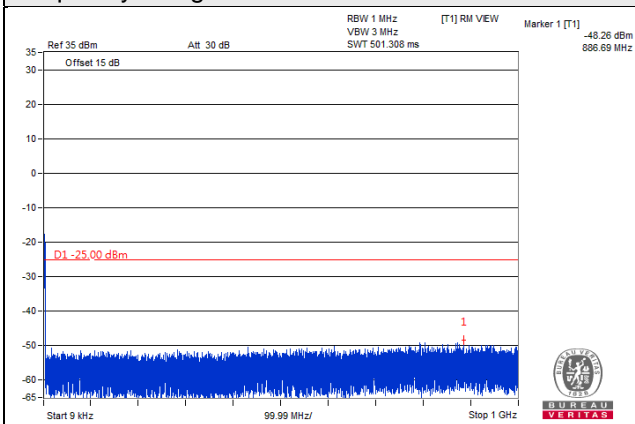
\*The 9kHz signal over the limit is from Spectrum.



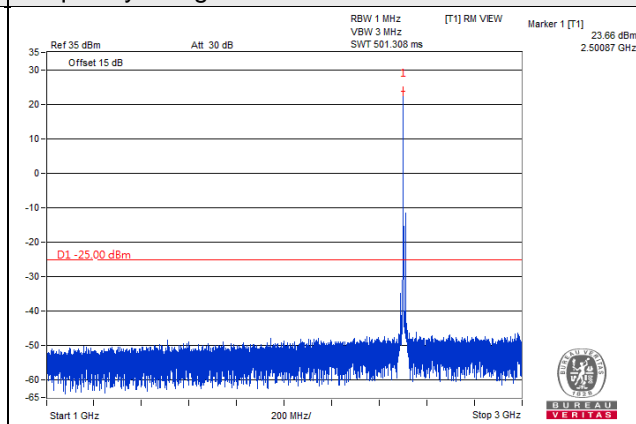
Channel Band width: 20MHz

Channel 20850(2510MHz)

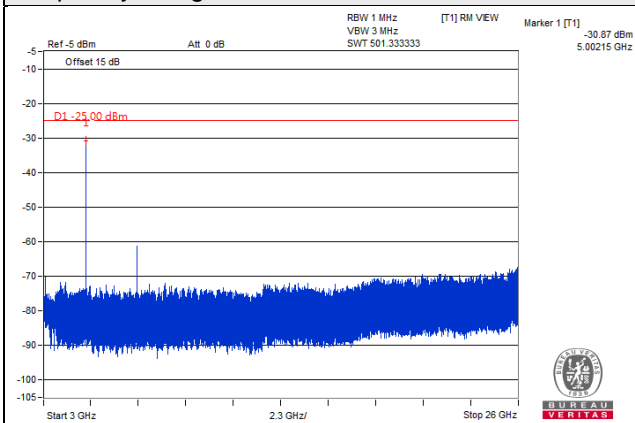
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~3GHz



Frequency Range : 3GHz~26GHz

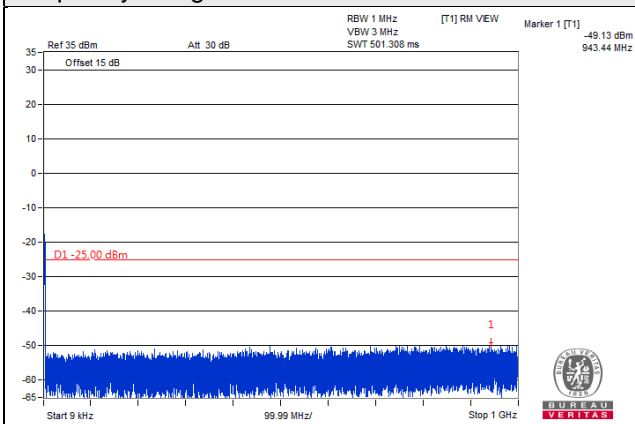


\*The 9kHz signal over the limit is from Spectrum.

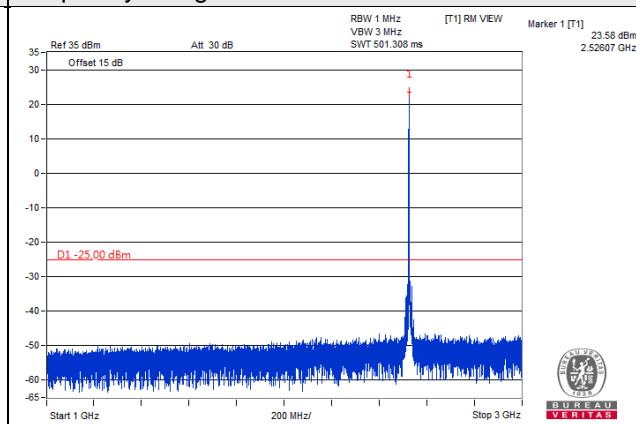
Channel Band width: 20MHz

Channel 21100(2535MHz)

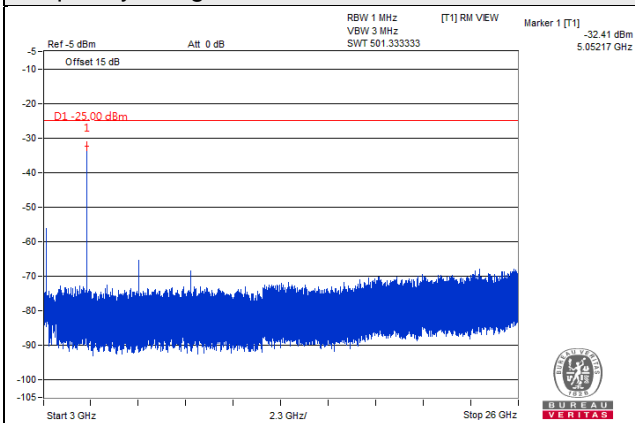
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~3GHz



Frequency Range : 3GHz~26GHz

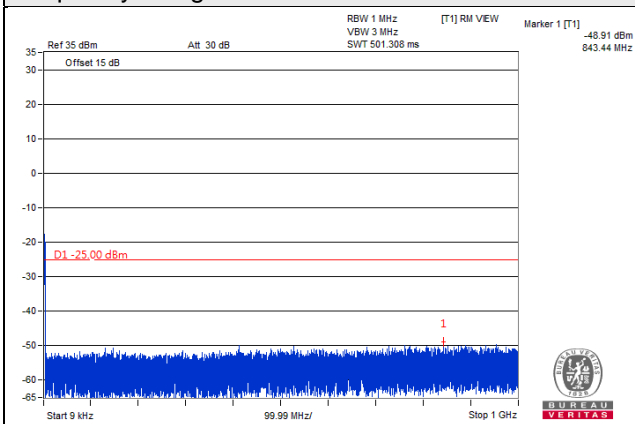


\*The 9kHz signal over the limit is from Spectrum.

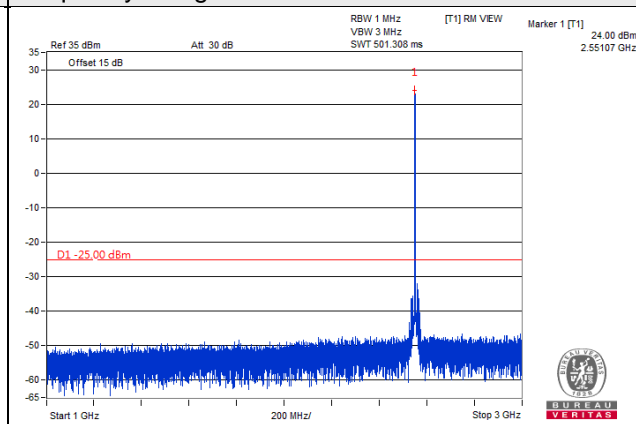
Channel Band width: 20MHz

Channel 21350(2560MHz)

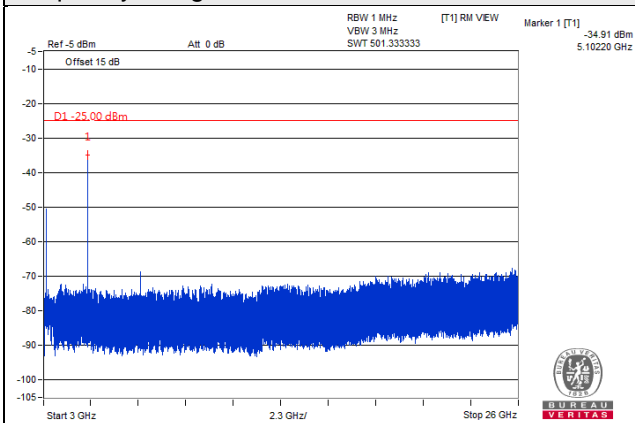
Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~3GHz



Frequency Range : 3GHz~26GHz



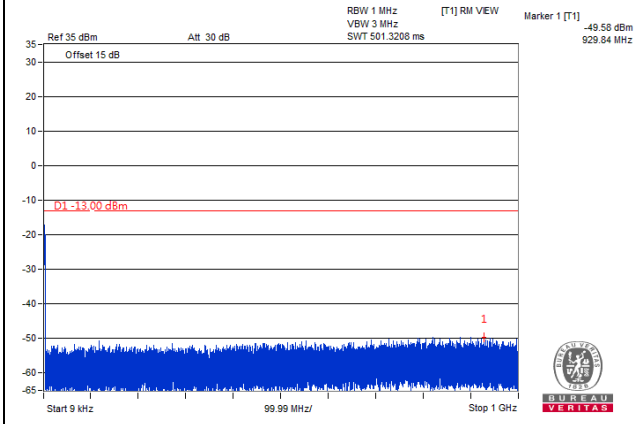
\*The 9kHz signal over the limit is from Spectrum.

LTE Band 66

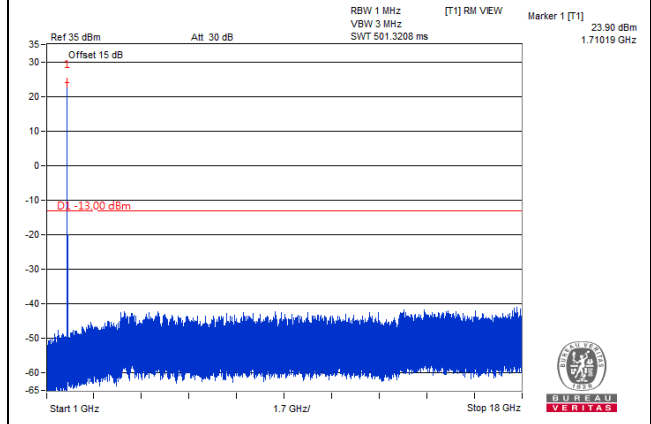
Channel Bandwidth: 1.4MHz

Channel 131979 (1710.7MHz)

Frequency Range : 9kHz~1GHz

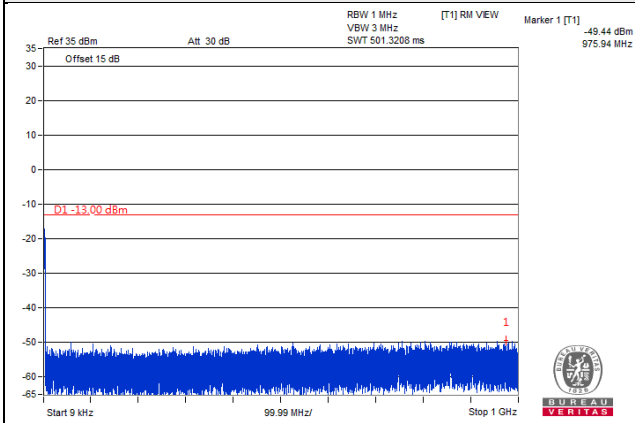


Frequency Range : 1GHz~18GHz

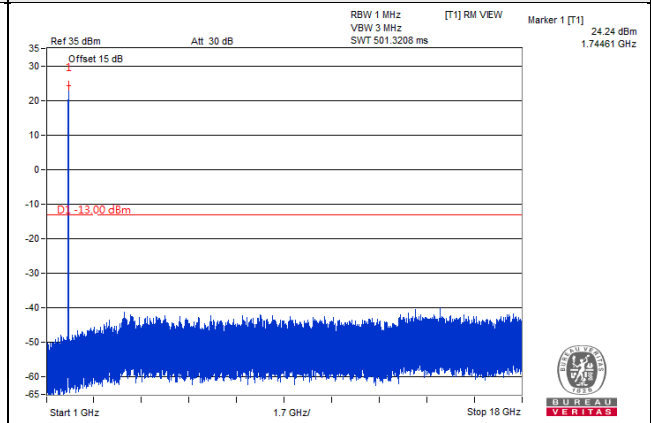


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz~1GHz

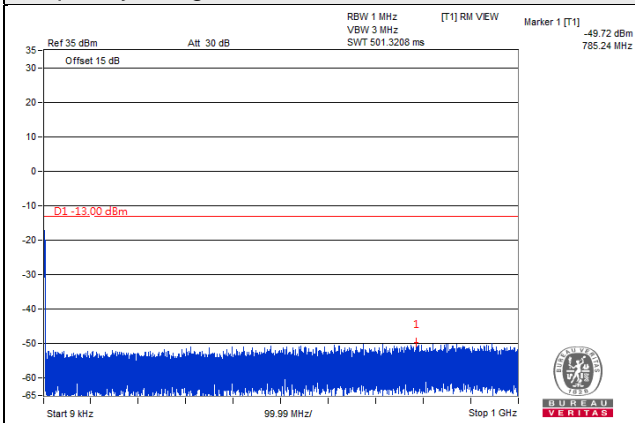


Frequency Range : 1GHz~18GHz

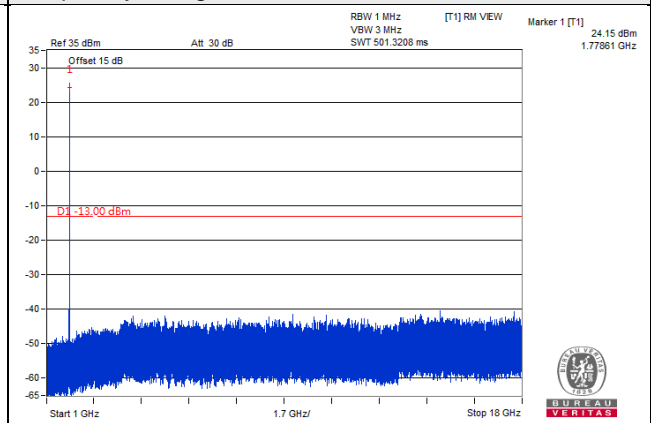


Channel 132665 (1779.3MHz)

Frequency Range : 9kHz~1GHz



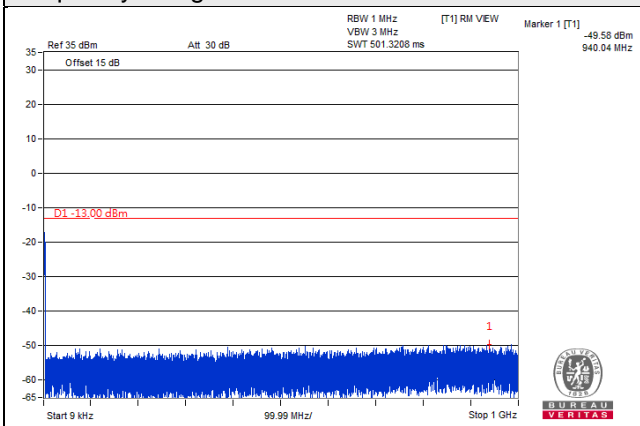
Frequency Range : 1GHz~18GHz



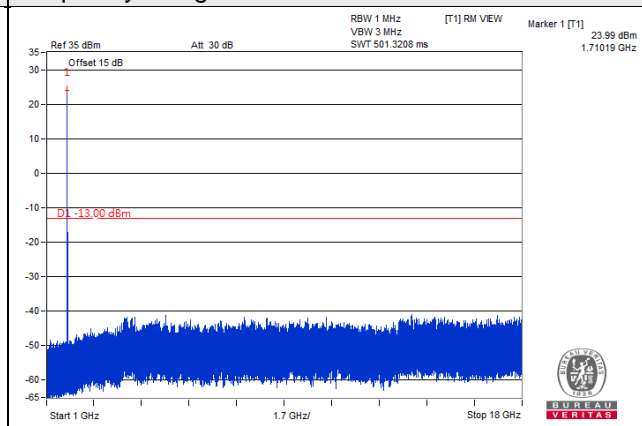
Channel Bandwidth: 3MHz

Channel 131987 (1711.5MHz)

Frequency Range : 9kHz~1GHz

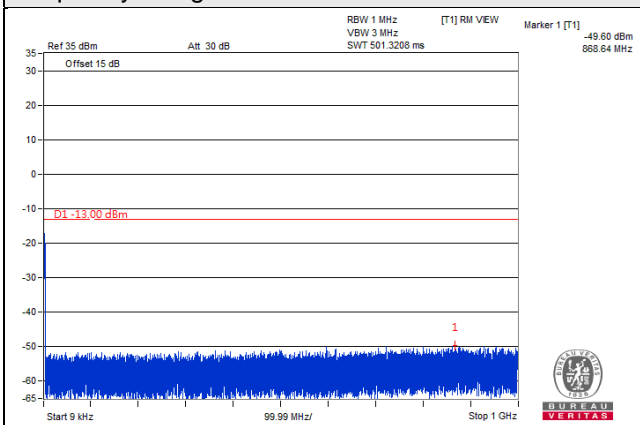


Frequency Range : 1GHz~18GHz

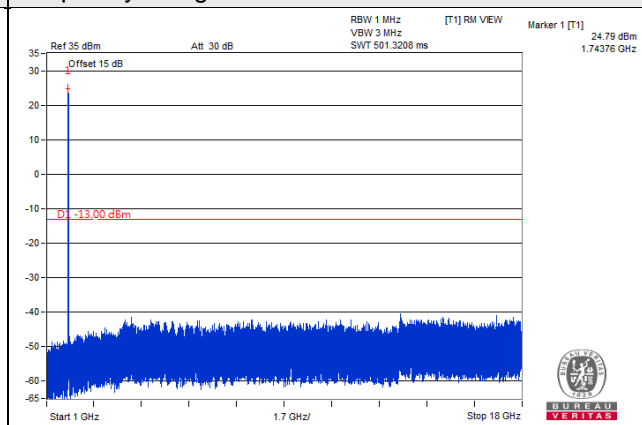


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz~1GHz

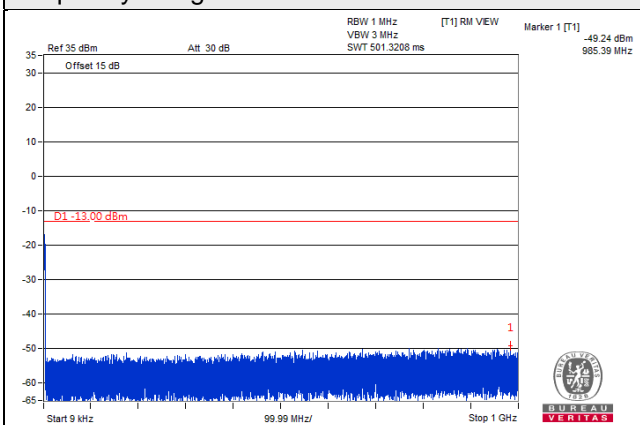


Frequency Range : 1GHz~18GHz

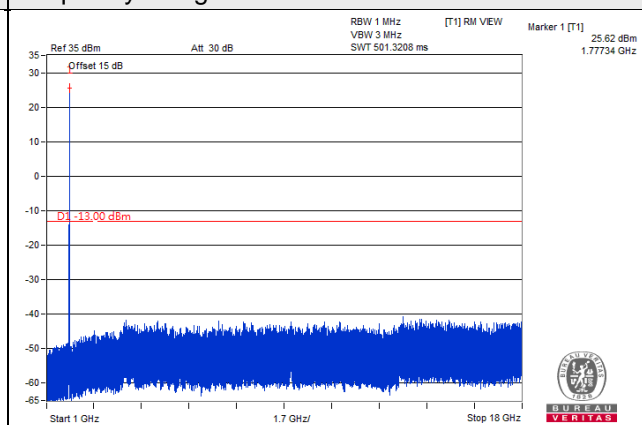


Channel 132657 (1778.5MHz)

Frequency Range : 9kHz~1GHz



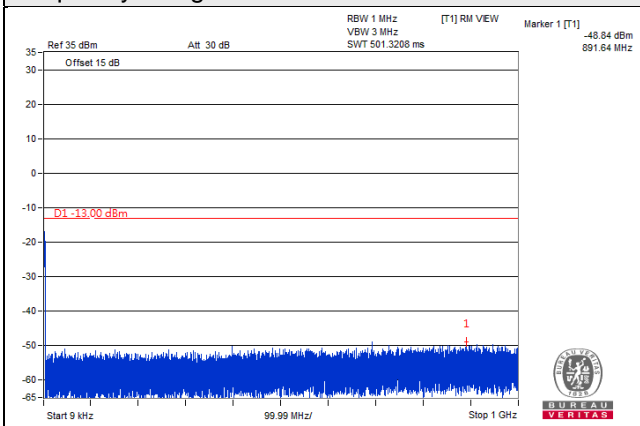
Frequency Range : 1GHz~18GHz



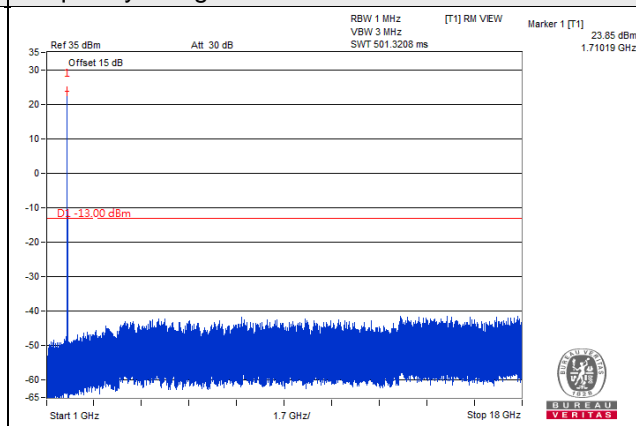
Channel Bandwidth: 5MHz

Channel 131997 (1712.5MHz)

Frequency Range : 9kHz~1GHz

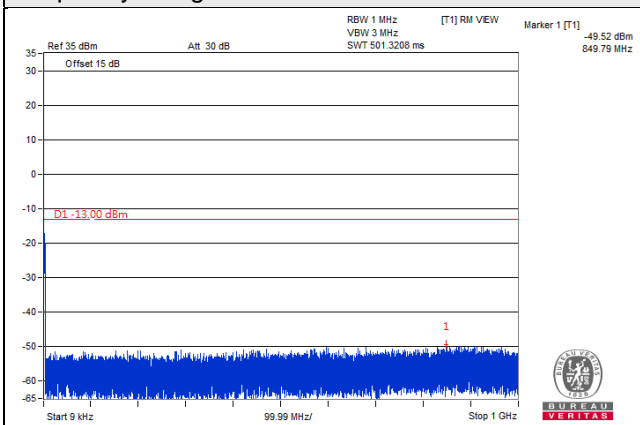


Frequency Range : 1GHz~18GHz

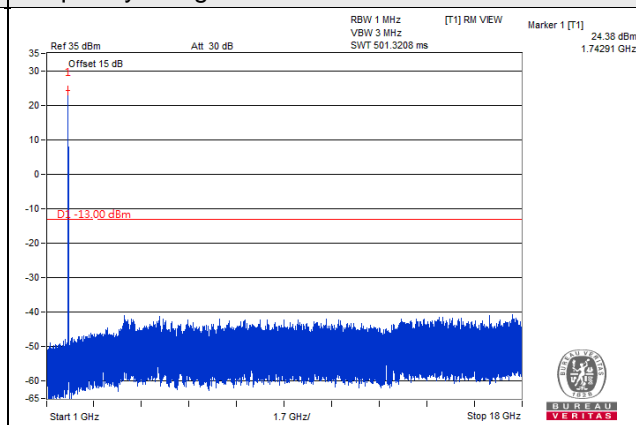


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz~1GHz

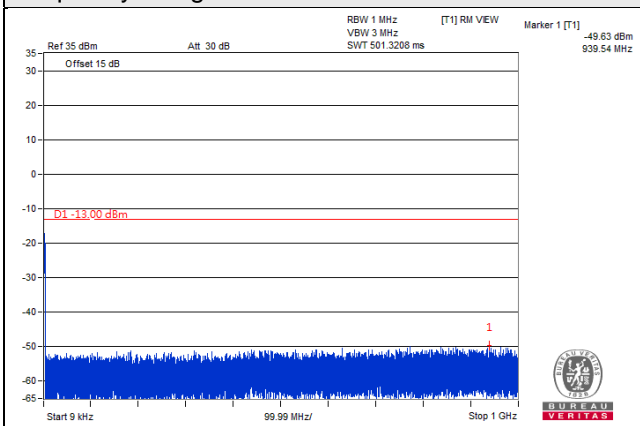


Frequency Range : 1GHz~18GHz

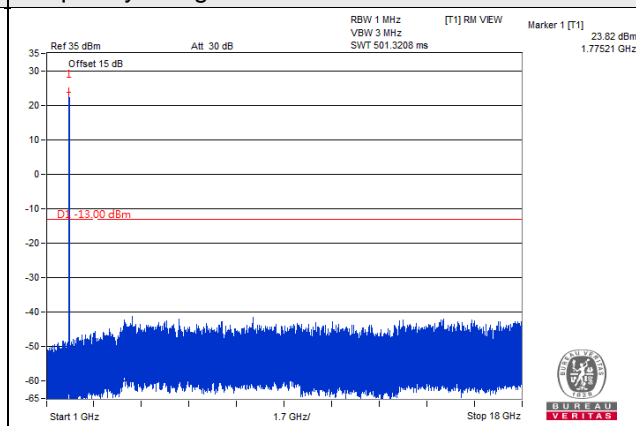


Channel 132647 (1777.5MHz)

Frequency Range : 9kHz~1GHz



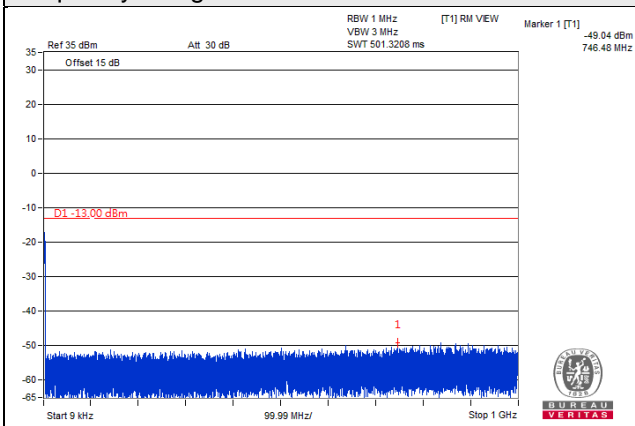
Frequency Range : 1GHz~18GHz



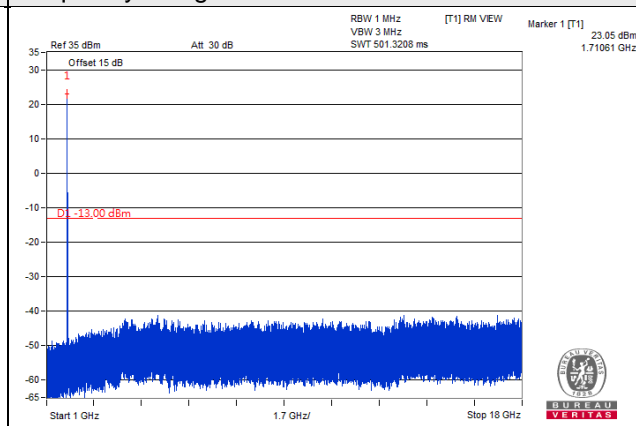
Channel Bandwidth: 10MHz

Channel 132022 (1715.0MHz)

Frequency Range : 9kHz~1GHz

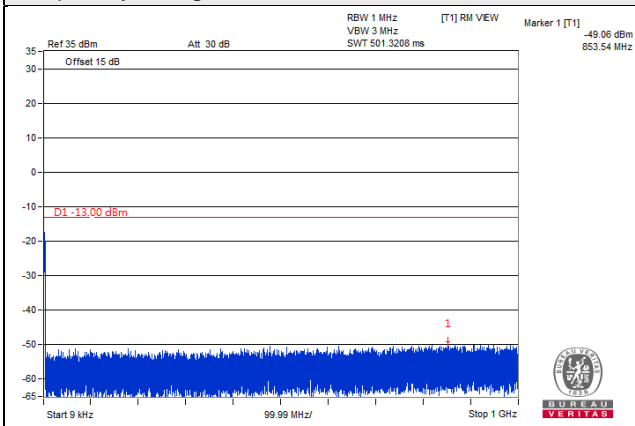


Frequency Range : 1GHz~18GHz

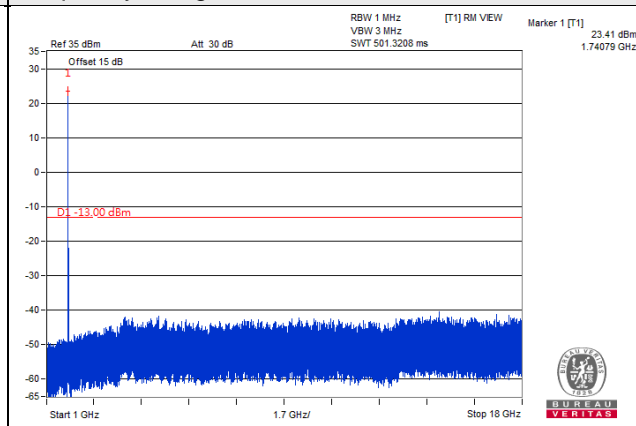


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz~1GHz

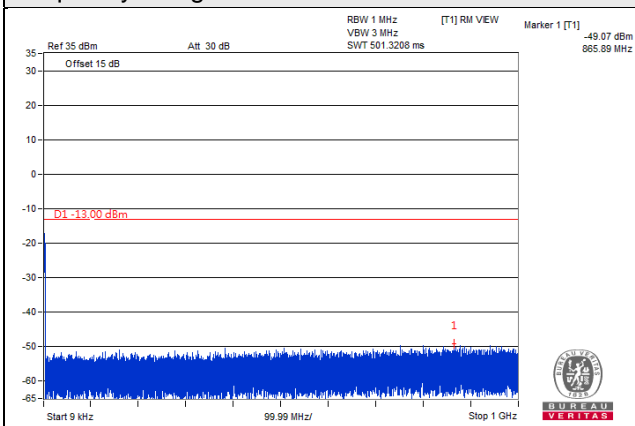


Frequency Range : 1GHz~18GHz

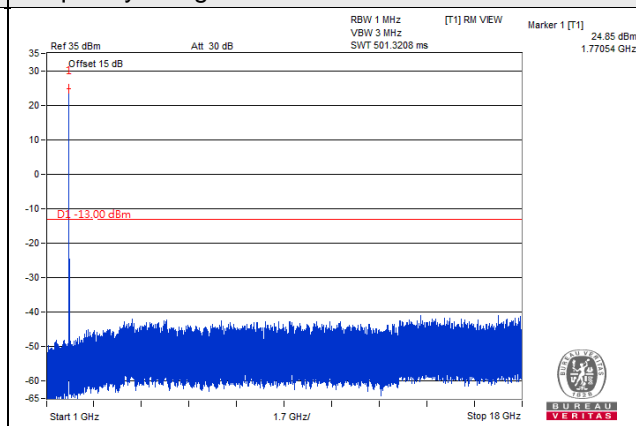


Channel 132622 (1775.0MHz)

Frequency Range : 9kHz~1GHz



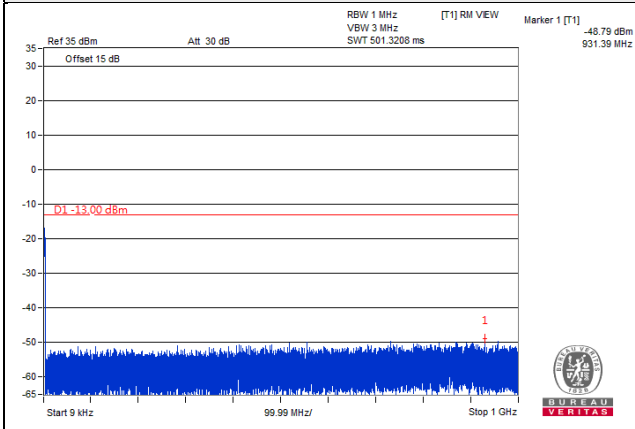
Frequency Range : 1GHz~18GHz



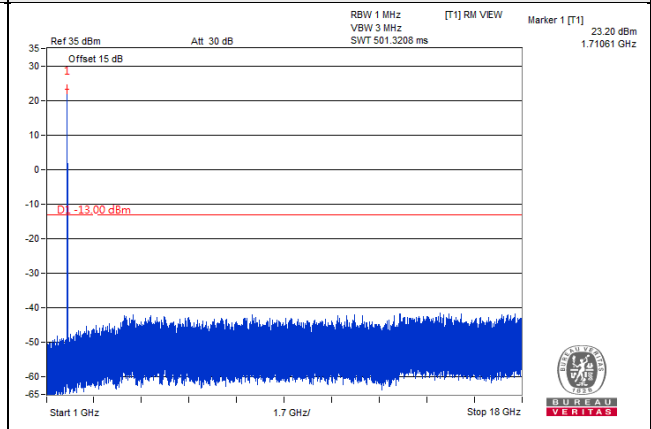
Channel Bandwidth: 15MHz

Channel 132047 (1717.5MHz)

Frequency Range : 9kHz~1GHz

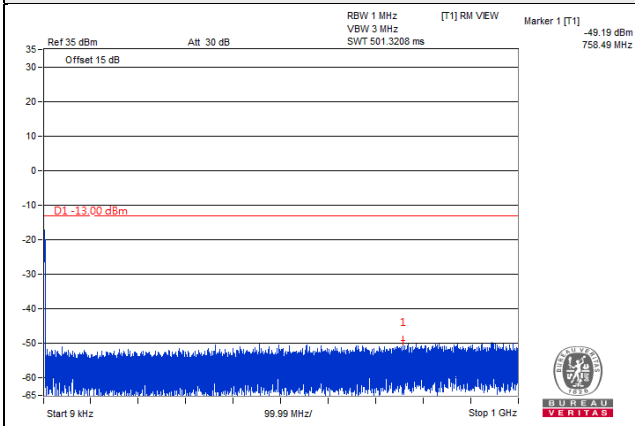


Frequency Range : 1GHz~18GHz

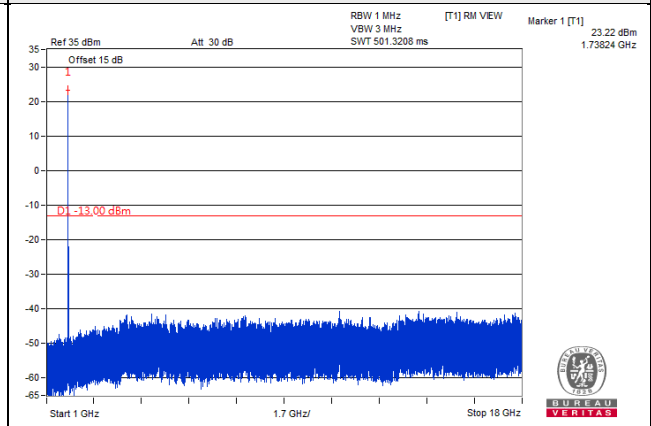


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz~1GHz

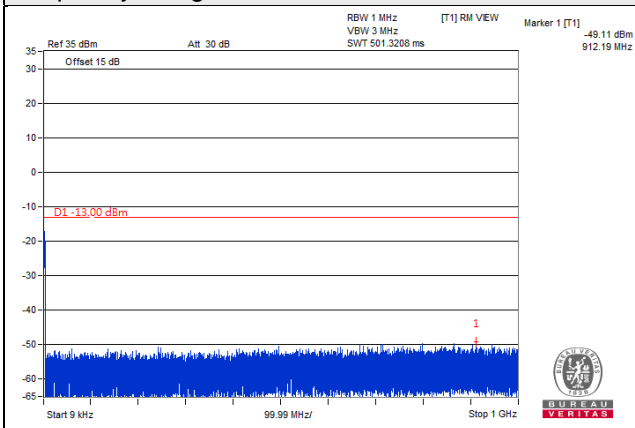


Frequency Range : 1GHz~18GHz

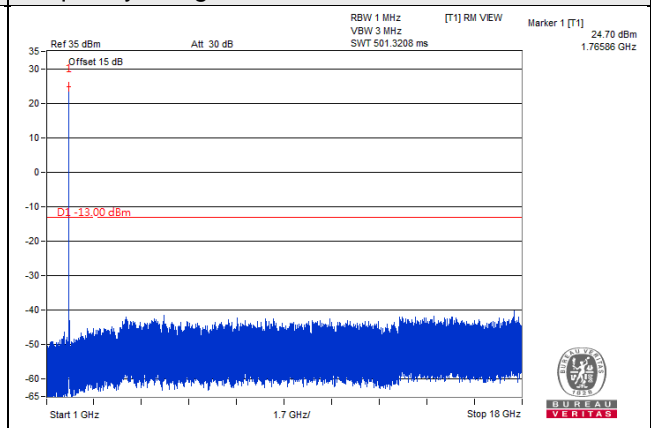


Channel 132597 (1772.5MHz)

Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz

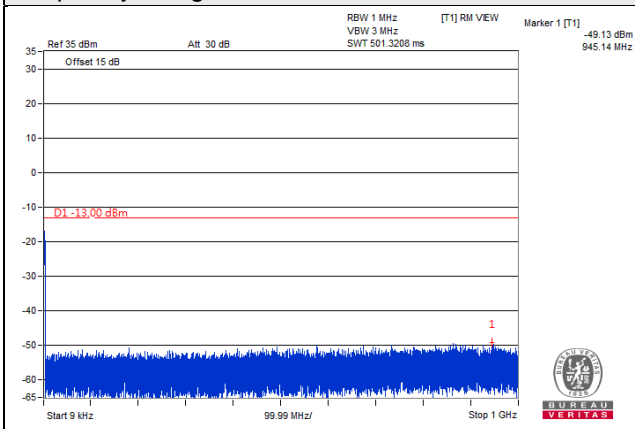




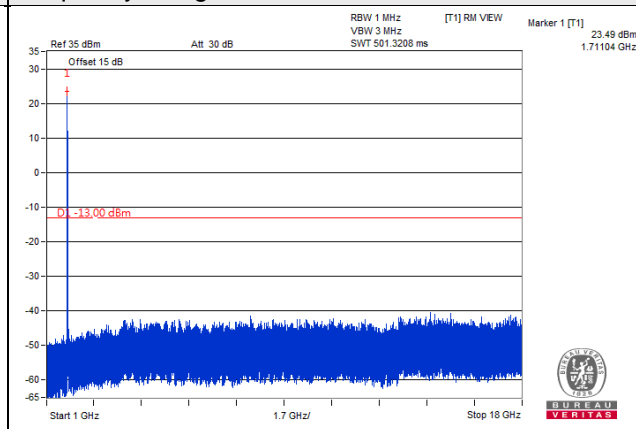
Channel Bandwidth: 20MHz

Channel 132072 (1720.0MHz)

Frequency Range : 9kHz~1GHz

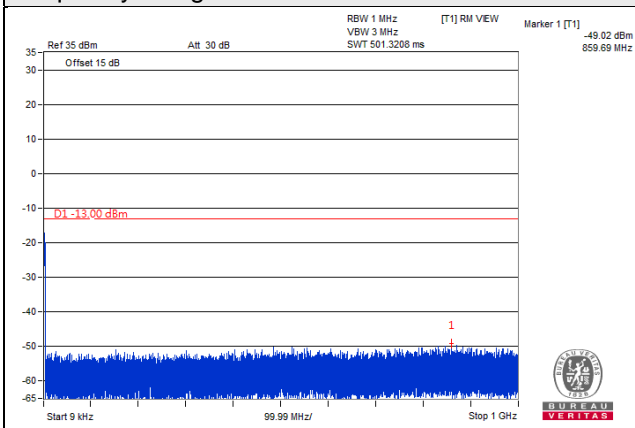


Frequency Range : 1GHz~18GHz

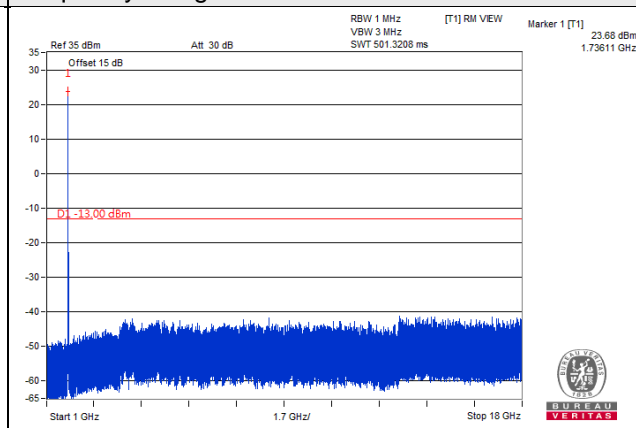


Channel 132322 (1745.0MHz)

Frequency Range : 9kHz~1GHz

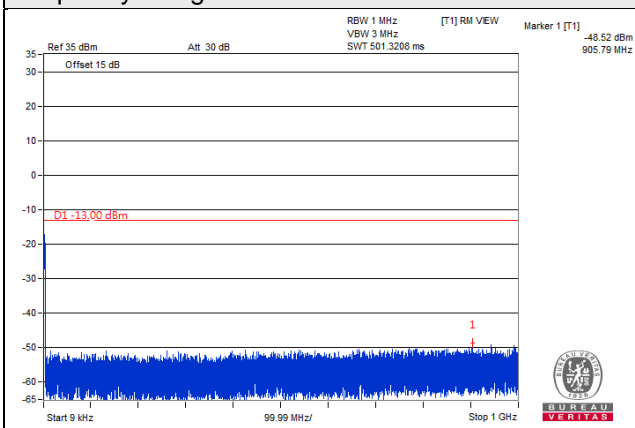


Frequency Range : 1GHz~18GHz

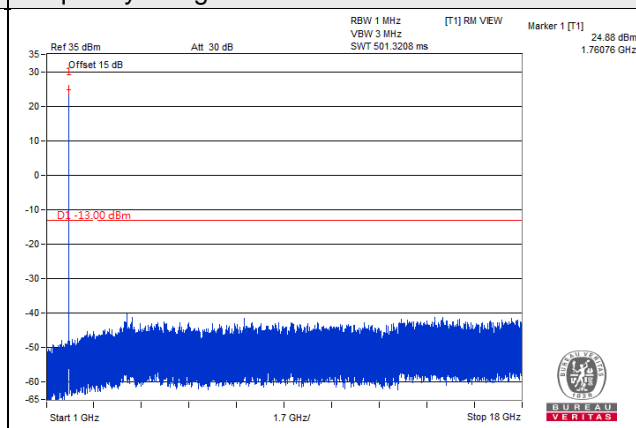


Channel 132572 (1770.0MHz)

Frequency Range : 9kHz~1GHz



Frequency Range : 1GHz~18GHz



## 4.8 Radiated Emission Measurement

### 4.8.1 Limits of Radiated Emission Measurement

For LTE Band 2:

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

For LTE Band 7

In the FCC 27.53(m)(4), On any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least  $55 + 10 \log(P)$  dB. The emission limit equal to  $-25\text{dBm}$ .

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. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole,  $\text{E.R.P power} = \text{E.I.R.P power} - 2.15\text{dBi}$ .

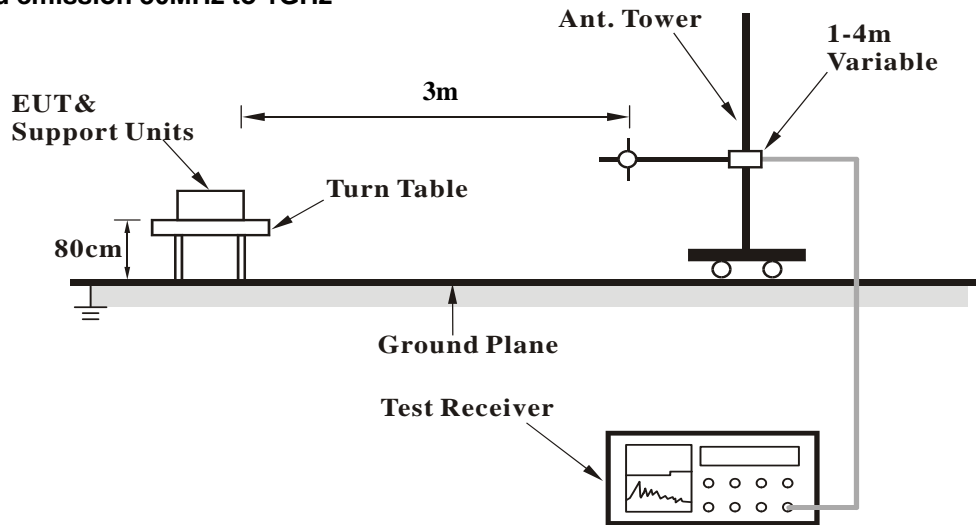
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

### 4.8.3 Deviation from Test Standard

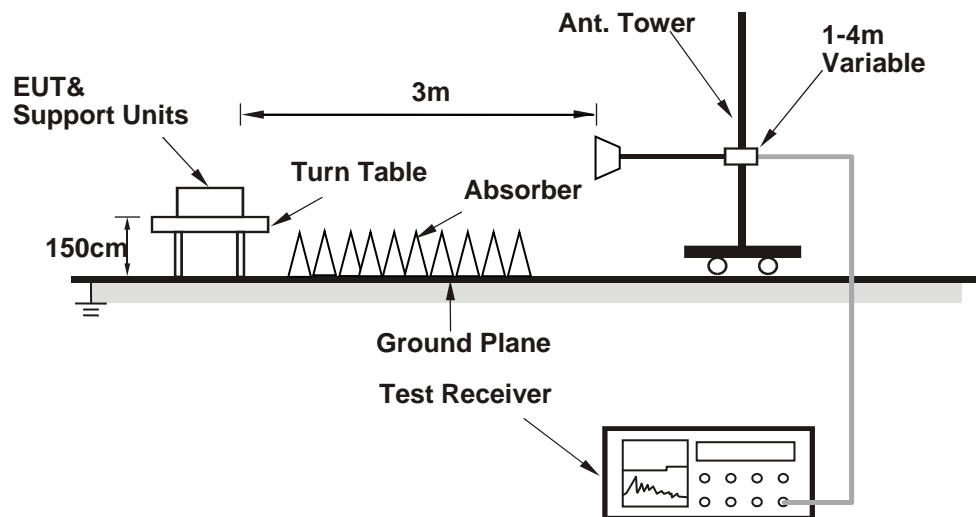
No deviation.

#### 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

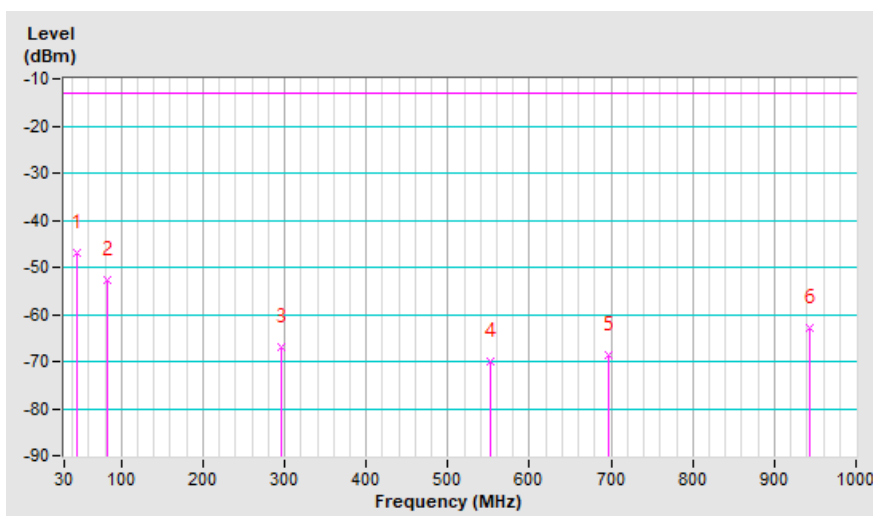
n71, Channel Bandwidth: 5MHz

Mode	TX channel 139100 (695.5MHz)	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)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	45.52	-45.4	-36.4	-10.4	-46.8	-13.0	-33.8
2	82.38	-45.2	-53.2	0.4	-52.8	-13.0	-39.8
3	296.75	-62.0	-65.2	-1.8	-67.0	-13.0	-54.0
4	552.83	-68.2	-73.7	3.8	-69.9	-13.0	-56.9
5	697.36	-69.0	-71.8	3.3	-68.5	-13.0	-55.5
6	943.74	-69.0	-66.5	3.7	-62.8	-13.0	-49.8

Remarks:

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

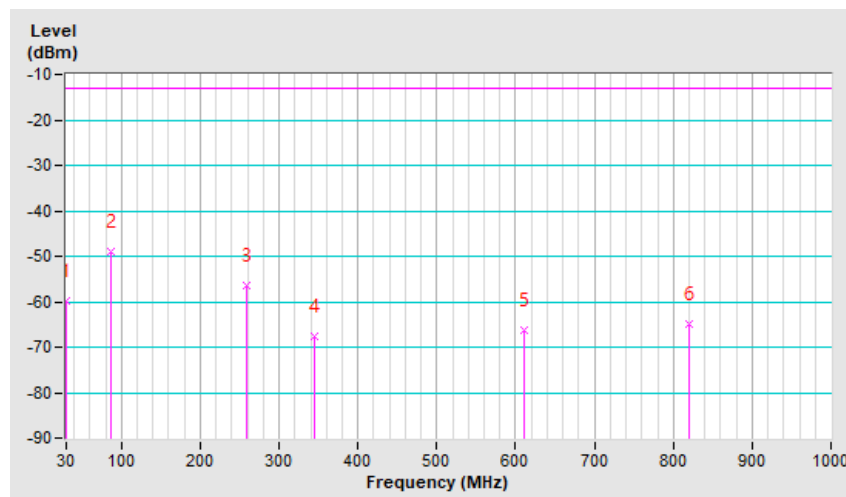


Mode	TX channel 139100 (695.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	30.97	-47.4	-41.0	-18.8	-59.8	-13.0	-46.8
2	86.26	-41.0	-49.2	0.1	-49.1	-13.0	-36.1
3	258.92	-54.8	-54.8	-1.5	-56.3	-13.0	-43.3
4	345.25	-64.8	-71.4	3.9	-67.5	-13.0	-54.5
5	610.06	-68.9	-70.1	3.7	-66.4	-13.0	-53.4
6	820.55	-70.2	-68.9	3.9	-65.0	-13.0	-52.0

Remarks:

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



n71, Channel Bandwidth: 20MHz

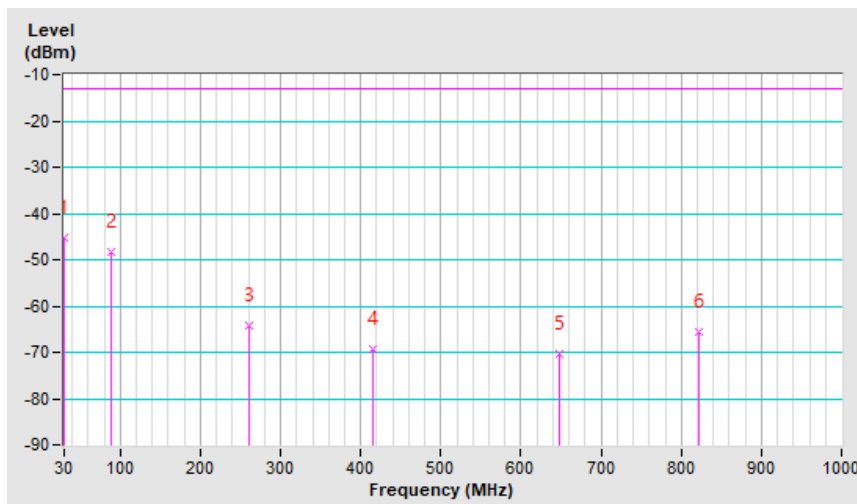
Mode	TX channel 137600 (688.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	30.00	-47.1	-25.9	-19.4	-45.3	-13.0	-32.3
2	88.20	-38.5	-48.0	-0.2	-48.2	-13.0	-35.2
3	259.89	-57.1	-62.6	-1.5	-64.1	-13.0	-51.1
4	416.06	-67.0	-72.6	3.4	-69.2	-13.0	-56.2
5	648.86	-70.5	-74.2	3.7	-70.5	-13.0	-57.5
6	821.52	-70.0	-69.6	3.9	-65.7	-13.0	-52.7

Remarks:

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

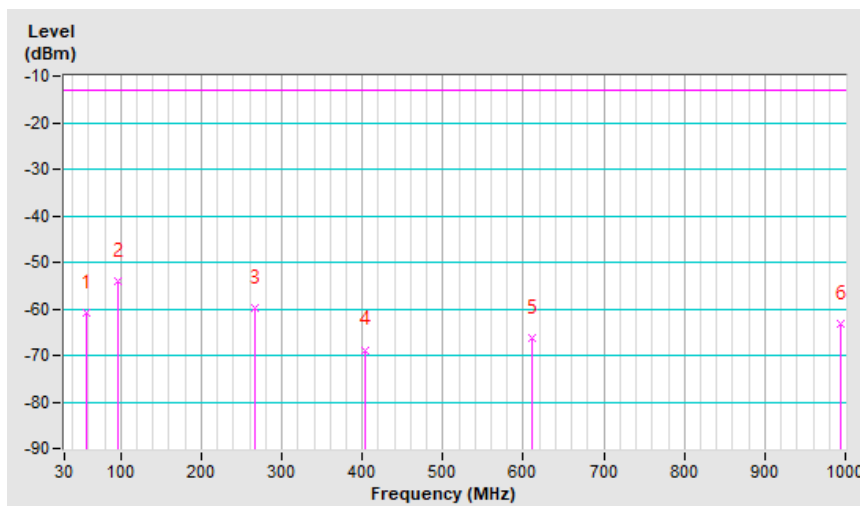


Mode	TX channel 137600 (688.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	58.13	-51.8	-56.7	-4.2	-60.9	-13.0	-47.9
2	95.96	-44.1	-53.0	-1.2	-54.2	-13.0	-41.2
3	265.71	-58.9	-58.3	-1.6	-59.9	-13.0	-46.9
4	404.42	-66.0	-72.1	3.3	-68.8	-13.0	-55.8
5	610.06	-68.9	-70.1	3.7	-66.4	-13.0	-53.4
6	993.21	-71.0	-66.5	3.4	-63.1	-13.0	-50.1

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 2, Channel Bandwidth: 20MHz

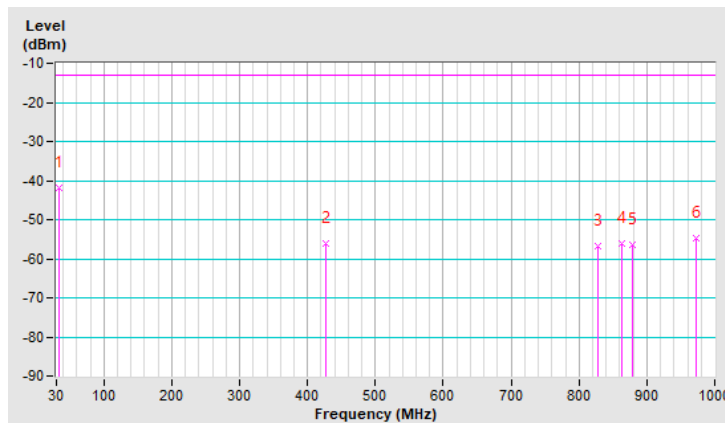
Mode	TX channel 18900 (1880.00MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	33.88	-44.9	-24.9	-17.1	-42.0	-13.0	-29.0
2	427.70	-55.7	-59.6	3.5	-56.1	-13.0	-43.1
3	827.34	-63.7	-60.7	3.9	-56.8	-13.0	-43.8
4	862.26	-62.5	-59.2	3.2	-56.0	-13.0	-43.0
5	879.72	-63.4	-59.6	3.2	-56.4	-13.0	-43.4
6	972.84	-63.6	-58.5	3.7	-54.8	-13.0	-41.8

Remarks:

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



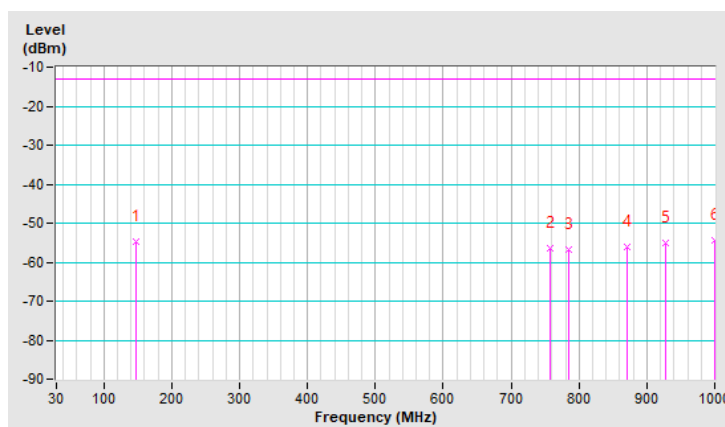


Mode	TX channel 18900 (1880.00MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	146.40	-52.8	-51.8	-3.0	-54.8	-13.0	-41.8
2	757.50	-63.6	-60.2	3.8	-56.4	-13.0	-43.4
3	784.66	-63.6	-60.7	4.0	-56.7	-13.0	-43.7
4	870.02	-63.5	-59.4	3.3	-56.1	-13.0	-43.1
5	928.22	-63.8	-58.7	3.6	-55.1	-13.0	-42.1
6	1000.00	-64.4	-57.5	3.2	-54.3	-13.0	-41.3

Remarks:

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



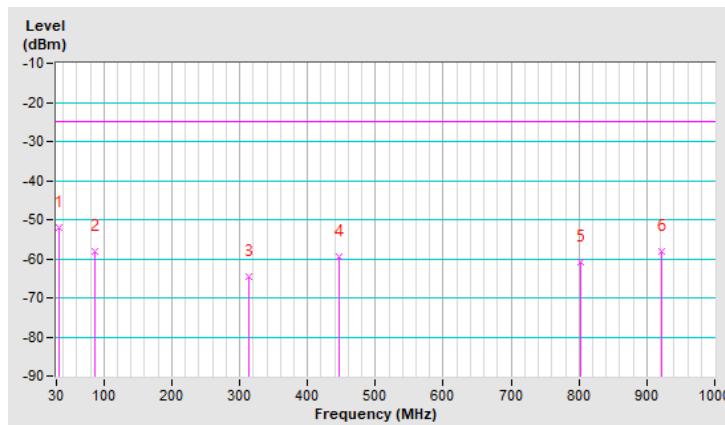
LTE Band 7, Channel Bandwidth: 20MHz

Mode	TX channel 21100 (2535MHz)	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	33.88	-55.0	-35.0	-17.1	-52.1	-25.0	-27.1
2	86.26	-51.3	-58.2	0.1	-58.1	-25.0	-33.1
3	313.24	-60.5	-68.6	4.0	-64.6	-25.0	-39.6
4	447.10	-59.6	-63.0	3.4	-59.6	-25.0	-34.6
5	802.12	-66.6	-64.9	4.0	-60.9	-25.0	-35.9
6	922.40	-66.2	-61.7	3.6	-58.1	-25.0	-33.1

Remarks:

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

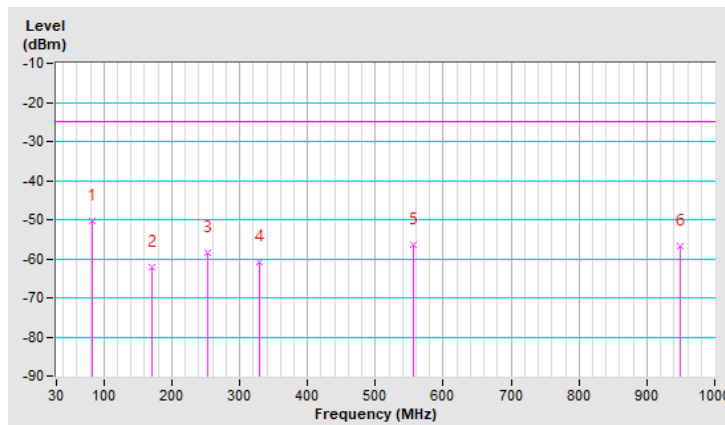


Mode	TX channel 21100 (2535MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	82.38	-45.8	-50.7	0.4	-50.3	-25.0	-25.3
2	171.62	-58.7	-59.3	-2.9	-62.2	-25.0	-37.2
3	253.10	-58.6	-57.1	-1.4	-58.5	-25.0	-33.5
4	328.76	-60.6	-65.0	4.1	-60.9	-25.0	-35.9
5	555.74	-58.2	-60.2	3.7	-56.5	-25.0	-31.5
6	949.56	-66.1	-60.5	3.7	-56.8	-25.0	-31.8

Remarks:

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



LTE Band 66, Channel Bandwidth: 1.4MHz

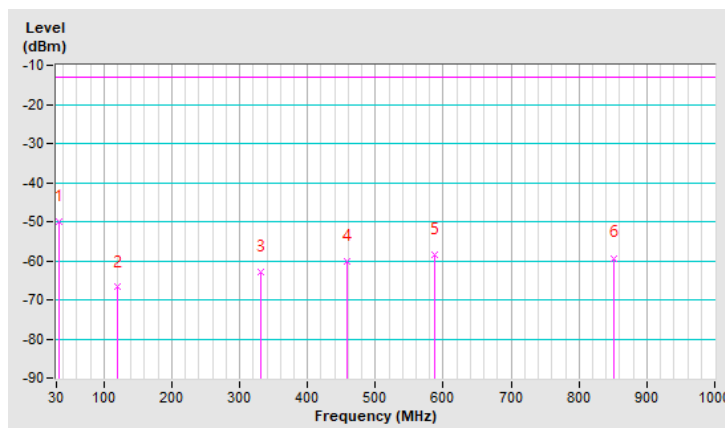
Mode	TX channel 131979 (1710.7MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	33.88	-52.9	-32.9	-17.1	-50.0	-13.0	-37.0
2	119.24	-59.0	-63.7	-3.1	-66.8	-13.0	-53.8
3	330.70	-58.9	-66.8	4.0	-62.8	-13.0	-49.8
4	458.74	-60.2	-63.7	3.5	-60.2	-13.0	-47.2
5	586.78	-59.6	-62.2	3.8	-58.4	-13.0	-45.4
6	850.62	-65.9	-62.6	3.3	-59.3	-13.0	-46.3

Remarks:

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

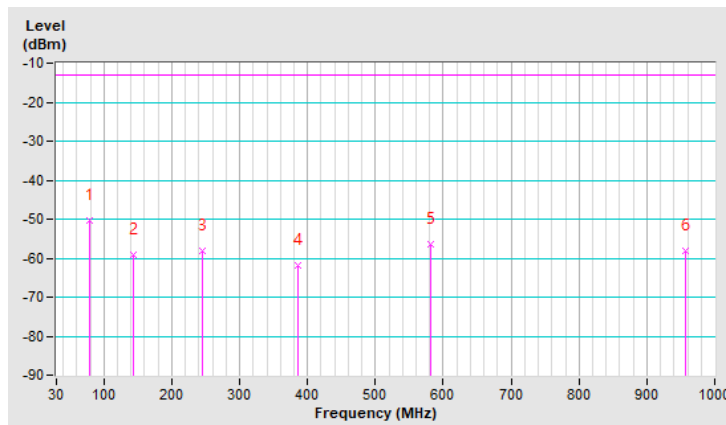


Mode	TX channel 131979 (1710.7MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 68%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	78.50	-45.0	-50.8	0.6	-50.2	-13.0	-37.2
2	142.52	-56.8	-55.9	-3.1	-59.0	-13.0	-46.0
3	245.34	-57.1	-56.7	-1.6	-58.3	-13.0	-45.3
4	385.02	-61.5	-65.4	3.5	-61.9	-13.0	-48.9
5	580.96	-58.4	-60.1	3.8	-56.3	-13.0	-43.3
6	957.32	-67.5	-62.0	3.8	-58.2	-13.0	-45.2

Remarks:

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



Above 1GHz  
n71, Channel Bandwidth: 5MHz

Mode	TX channel 133100 (665.5MHz)	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	1331.00	-62.1	-56.7	0.4	-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	1331.00	-58.9	-54.4	0.4	-54.0	-13.0	-41.0

Remarks:

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

Mode	TX channel 136100 (680.5MHz)	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	1361.00	-61.9	-56.1	0.6	-55.5	-13.0	-42.5
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	1361.00	-59.5	-54.7	0.6	-54.1	-13.0	-41.1

Remarks:

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

Mode	TX channel 139100 (695.5MHz)	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	1391.00	-62.3	-56.2	0.8	-55.4	-13.0	-42.4
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	1391.00	-59.2	-54.2	0.8	-53.4	-13.0	-40.4

Remarks:

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

n71, Channel Bandwidth: 10MHz

Mode	TX channel 133600 (668.0MHz)	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	1336.00	-61.8	-56.3	0.5	-55.8	-13.0	-42.8
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	1336.00	-59.0	-54.5	0.5	-54.0	-13.0	-41.0

Remarks:

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

Mode	TX channel 136100 (680.5MHz)	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	1361.00	-62.6	-56.8	0.6	-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	1361.00	-58.8	-54.0	0.6	-53.4	-13.0	-40.4

Remarks:

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



Mode	TX channel 138600 (693.0MHz)	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	1386.00	-62.1	-56.0	0.8	-55.2	-13.0	-42.2
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	1386.00	-58.9	-53.9	0.8	-53.1	-13.0	-40.1

Remarks:

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

n71, Channel Bandwidth: 15MHz

Mode	TX channel 134100 (670.5MHz)	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	1341.00	-62.4	-56.9	0.5	-56.4	-13.0	-43.4
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	1341.00	-59.5	-55.0	0.5	-54.5	-13.0	-41.5

Remarks:

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

Mode	TX channel 136100 (680.5MHz)	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	1361.00	-62.0	-56.2	0.6	-55.6	-13.0	-42.6
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	1361.00	-59.5	-54.7	0.6	-54.1	-13.0	-41.1

Remarks:

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

Mode	TX channel 138100 (690.5MHz)	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	1381.00	-61.6	-55.6	0.7	-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)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1381.00	-59.2	-54.2	0.7	-53.5	-13.0	-40.5

Remarks:

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

n71, Channel Bandwidth: 20MHz

Mode	TX channel 134600 (673.0MHz)	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	1346.00	-61.9	-56.2	0.5	-55.7	-13.0	-42.7
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	1346.00	-58.9	-54.3	0.5	-53.8	-13.0	-40.8

Remarks:

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

Mode	TX channel 136100 (680.5MHz)	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	1361.00	-61.8	-56.0	0.6	-55.4	-13.0	-42.4
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	1361.00	-59.4	-54.6	0.6	-54.0	-13.0	-41.0

Remarks:

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

Mode	TX channel 137600 (688.0MHz)	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	1376.00	-62.4	-56.5	0.7	-55.8	-13.0	-42.8
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	1376.00	-59.2	-54.3	0.7	-53.6	-13.0	-40.6

Remarks:

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

LTE Band 2, Channel Bandwidth: 1.4MHz

Mode	TX channel 18607 (1850.70MHz)	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	3701.40	-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	3701.40	-59.4	-51.2	1.4	-49.8	-13.0	-36.8

Remarks:

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

Mode	TX channel 18900 (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	-59.5	-51.2	1.3	-49.9	-13.0	-36.9

Remarks:

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

Mode	TX channel 19193 (1909.30MHz)	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	3818.60	-60.7	-52.4	1.4	-51.0	-13.0	-38.0
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	3818.60	-59.4	-51.2	1.4	-49.8	-13.0	-36.8

Remarks:

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

LTE Band 2, Channel Bandwidth 5MHz

Mode	TX channel 18625 (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	-61.0	-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	3705.00	-59.1	-50.9	1.4	-49.5	-13.0	-36.5

Remarks:

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

Mode	TX channel 18900 (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	-60.4	-51.9	1.3	-50.6	-13.0	-37.6
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	3760.00	-59.2	-50.9	1.3	-49.6	-13.0	-36.6

Remarks:

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



Mode	TX channel 19175 (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	-61.1	-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	3815.00	-58.9	-50.7	1.4	-49.3	-13.0	-36.3

Remarks:

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

LTE Band 2, Channel Bandwidth 20MHz

Mode	TX channel 18700 (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	-61.5	-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	3720.00	-58.9	-50.7	1.4	-49.3	-13.0	-36.3

Remarks:

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

Mode	TX channel 18900 (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	-60.8	-52.3	1.3	-51.0	-13.0	-38.0
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	3760.00	-58.7	-50.4	1.3	-49.1	-13.0	-36.1

Remarks:

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

Mode	TX channel 19100 (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	-58.8	-50.6	1.3	-49.3	-13.0	-36.3

Remarks:

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

LTE Band 7, Channel Bandwidth: 5MHz

Mode	TX channel 20775 (2502.5MHz)	Frequency Range	1GHz ~ 27GHz
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	5005.00	-64.3	-52.0	1.4	-50.6	-25.0	-25.6

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	5005.00	-59.4	-48.4	1.4	-47.0	-25.0	-22.0

Remarks:

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

Mode	TX channel 21100 (2535MHz)	Frequency Range	1GHz ~ 27GHz
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	5070.00	-64.6	-52.1	1.4	-50.7	-25.0	-25.7

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	5070.00	-59.7	-48.3	1.4	-46.9	-25.0	-21.9

Remarks:

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

Mode	TX channel 21425 (2567.5MHz)	Frequency Range	1GHz ~ 27GHz
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	5135.00	-64.4	-52.2	1.4	-50.8	-25.0	-25.8
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	5135.00	-60.0	-48.2	1.4	-46.8	-25.0	-21.8

Remarks:

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

LTE Band 7, Channel Bandwidth: 20MHz

Mode	TX channel 20850 (2510MHz)	Frequency Range	1GHz ~ 27GHz
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	5020.00	-63.3	-50.9	1.4	-49.5	-25.0	-24.5

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	5020.00	-59.1	-48.0	1.4	-46.6	-25.0	-21.6

Remarks:

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

Mode	TX channel 21100 (2535MHz)	Frequency Range	1GHz ~ 27GHz
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	5070.00	-63.3	-50.8	1.4	-49.4	-25.0	-24.4

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	<b>5070.00</b>	<b>-59.3</b>	<b>-47.9</b>	<b>1.4</b>	<b>-46.5</b>	<b>-25.0</b>	<b>-21.5</b>

Remarks:

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

Mode	TX channel 21350 (2560MHz)	Frequency Range	1GHz ~ 27GHz
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	5120.00	-64.0	-51.7	1.4	-50.3	-25.0	-25.3
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	5120.00	-59.9	-48.1	1.4	-46.7	-25.0	-21.7

Remarks:

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

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	-62.1	-53.5	1.3	-52.2	-13.0	-39.2
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	3421.40	-60.3	-52.2	1.3	-50.9	-13.0	-37.9

Remarks:

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

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	-62.6	-54.4	1.5	-52.9	-13.0	-39.9
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	3490.00	-60.1	-52.5	1.5	-51.0	-13.0	-38.0

Remarks:

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



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	-62.5	-54.0	1.4	-52.6	-13.0	-39.6
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	-60.2	-52.4	1.4	-51.0	-13.0	-38.0

Remarks:

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

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	-62.5	-53.9	1.3	-52.6	-13.0	-39.6
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	3425.00	-60.6	-52.5	1.3	-51.2	-13.0	-38.2

Remarks:

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

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	-62.1	-53.9	1.5	-52.4	-13.0	-39.4
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	-60.5	-52.9	1.5	-51.4	-13.0	-38.4

Remarks:

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

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	-62.3	-53.9	1.4	-52.5	-13.0	-39.5
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	-60.7	-52.9	1.4	-51.5	-13.0	-38.5

Remarks:

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

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	-62.3	-53.8	1.3	-52.5	-13.0	-39.5
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	3440.00	-60.4	-52.4	1.3	-51.1	-13.0	-38.1

Remarks:

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

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	-62.6	-54.4	1.5	-52.9	-13.0	-39.9
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	3490.00	-60.4	-52.8	1.5	-51.3	-13.0	-38.3

Remarks:

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

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	-62.3	-53.9	1.4	-52.5	-13.0	-39.5
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	3540.00	-60.3	-52.5	1.4	-51.1	-13.0	-38.1

Remarks:

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

## 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.

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

### Lin Kou EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

### Hsin Chu EMC/RF/Telecom Lab

Tel: 886-3-6668565

Fax: 886-3-6668323

### Hwa Ya EMC/RF/Safety Lab

Tel: 886-3-3183232

Fax: 886-3-3270892

**Email:** [service.adt@tw.bureauveritas.com](mailto:service.adt@tw.bureauveritas.com)

**Web Site:** [www.bureauveritas-adt.com](http://www.bureauveritas-adt.com)

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

--- END ---