



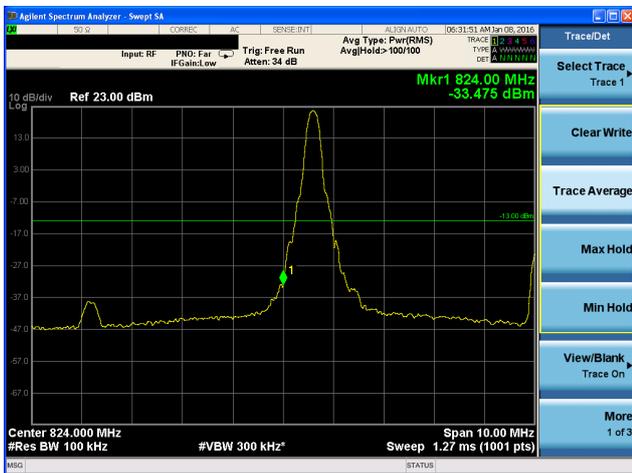
LTE Band 5 16QAM 5MHz CH20425 100%RB



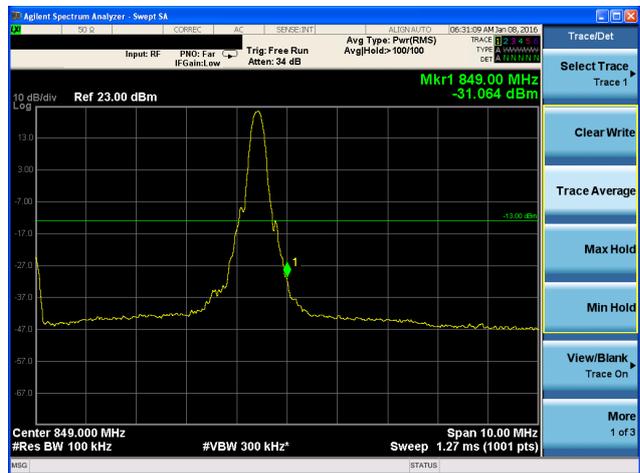
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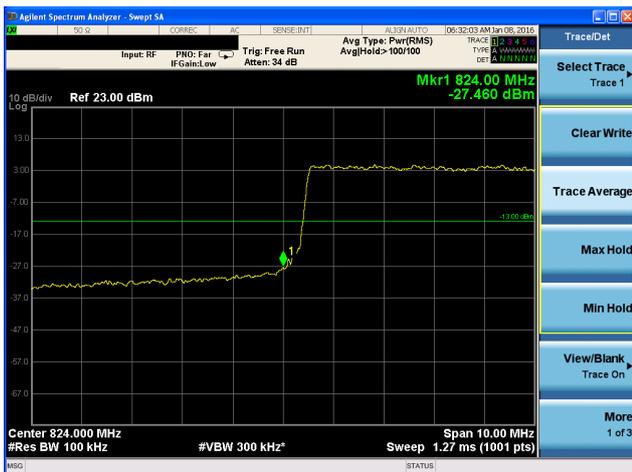
LTE Band 5 16QAM 10MHz CH20450 1RB



LTE Band 5 16QAM 10MHz CH20600 1RB



LTE Band 5 16QAM 10MHz CH20450 100%RB

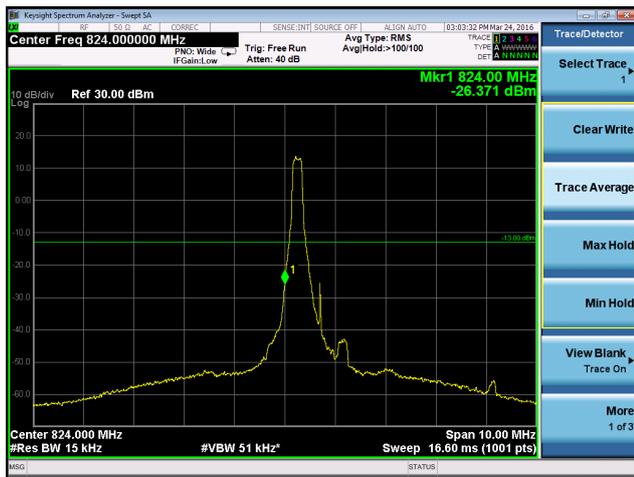


LTE Band 5 16QAM 10MHz CH20600 100%RB

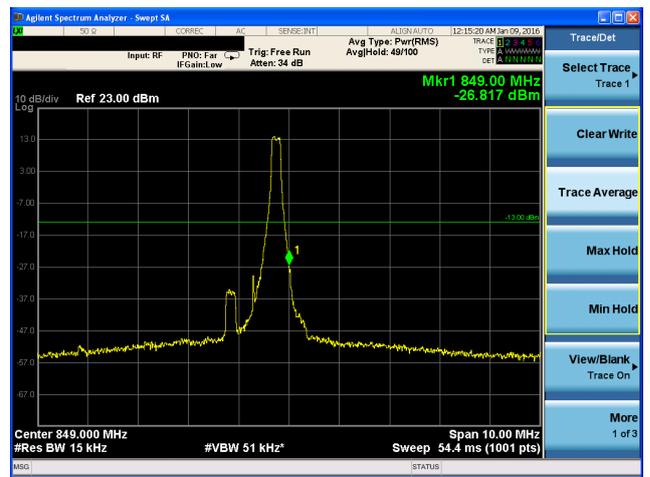




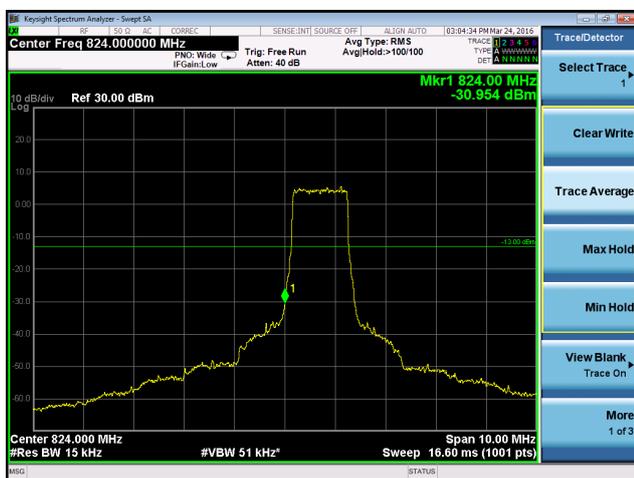
LTE Band 26 QPSK 1.4MHz CH26797 1RB



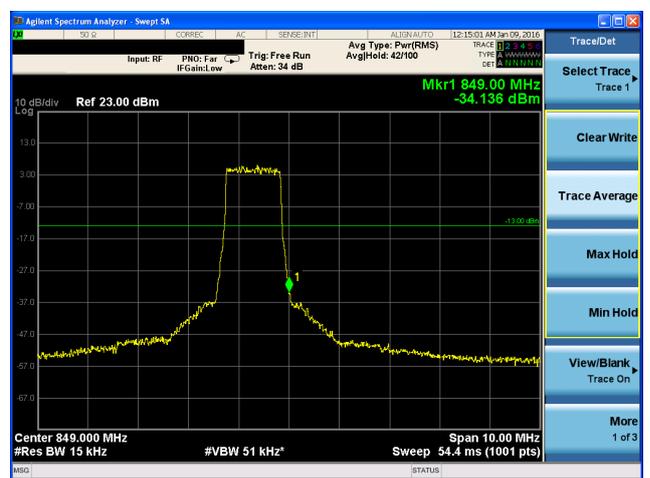
LTE Band 26 QPSK 1.4MHz CH27033 1RB



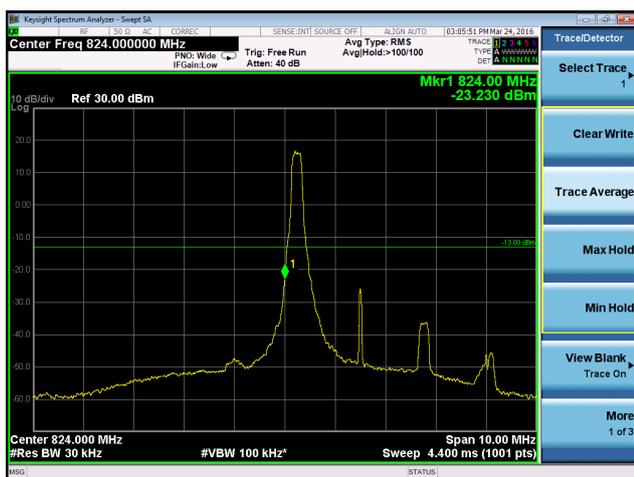
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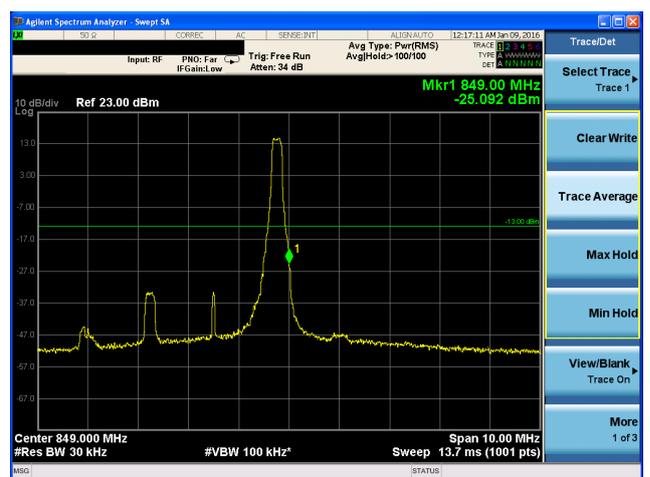
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LTE Band 26 QPSK 3MHz CH26805 1RB



LTE Band 26 QPSK 3MHz CH27025 1RB





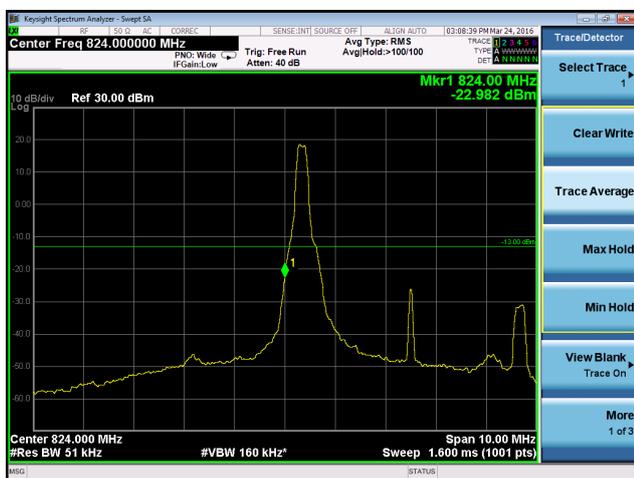
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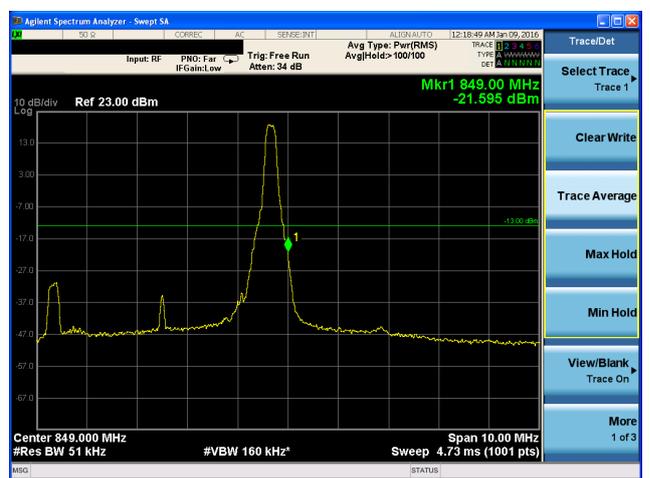
LTE Band 26 QPSK 3MHz CH27025 100%RB



LTE Band 26 QPSK 5MHz CH26815 1RB



LTE Band 26 QPSK 5MHz CH27015 1RB



LTE Band 26 QPSK 5MHz CH26815 100%RB

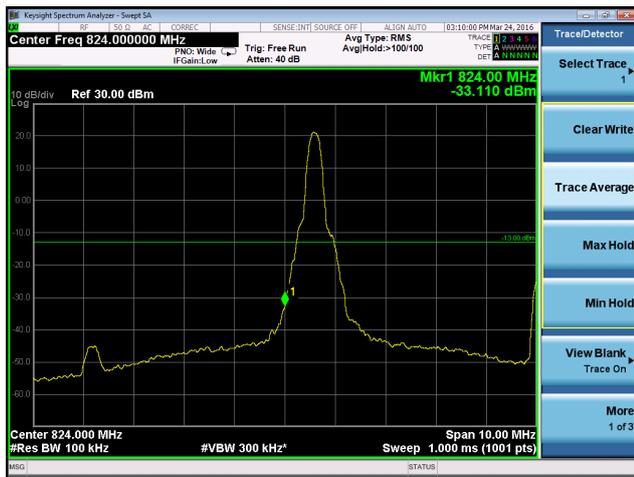


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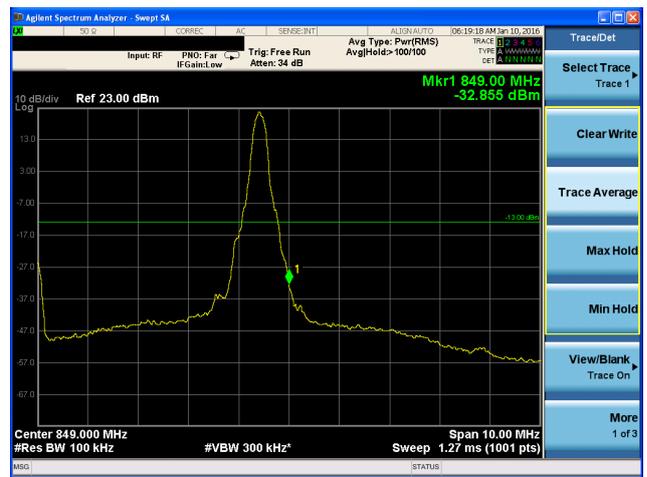




### LTE Band 26 QPSK 10MHz CH26840 1RB



### LTE Band 26 QPSK 10MHz CH26990 1RB



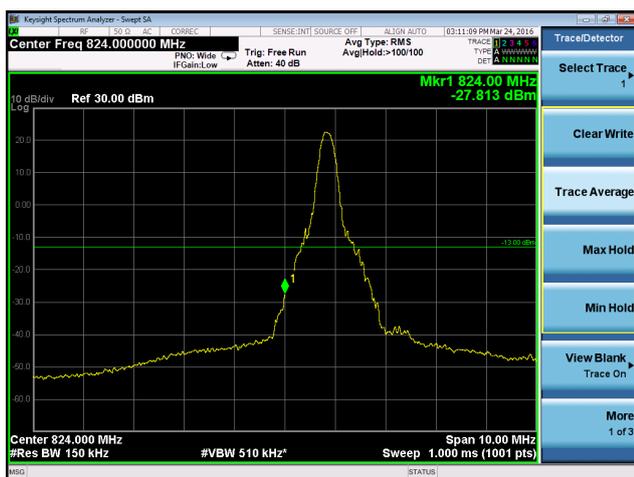
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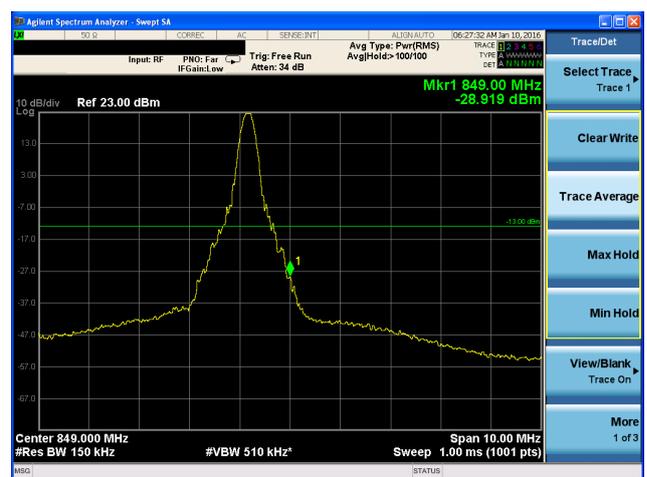
### LTE Band 26 QPSK 10MHz CH26990 100%RB



### LTE Band 26 QPSK 15MHz CH26865 1RB



### LTE Band 26 QPSK 15MHz CH26965 1RB





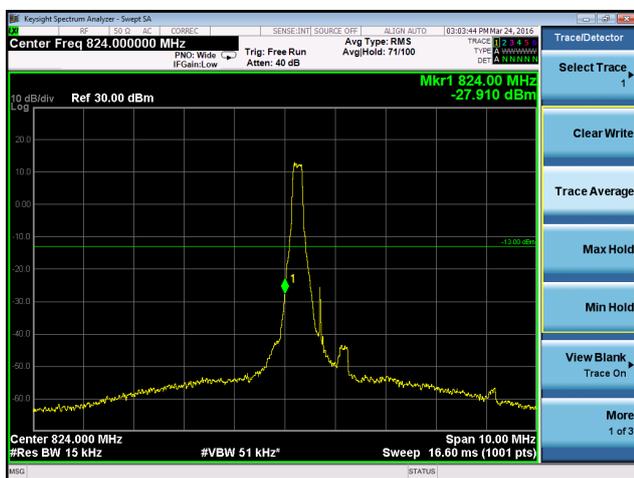
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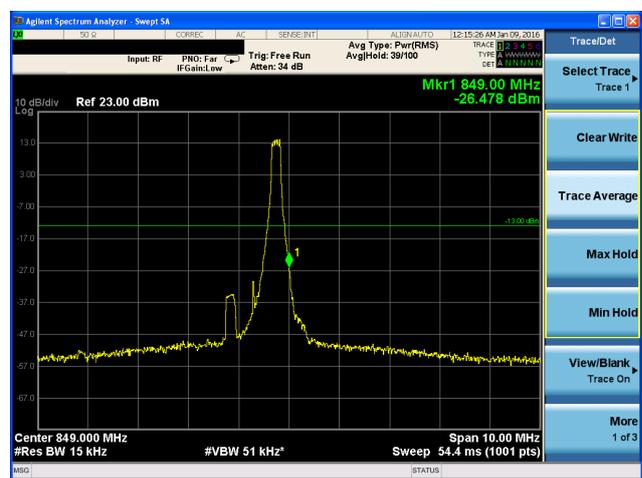
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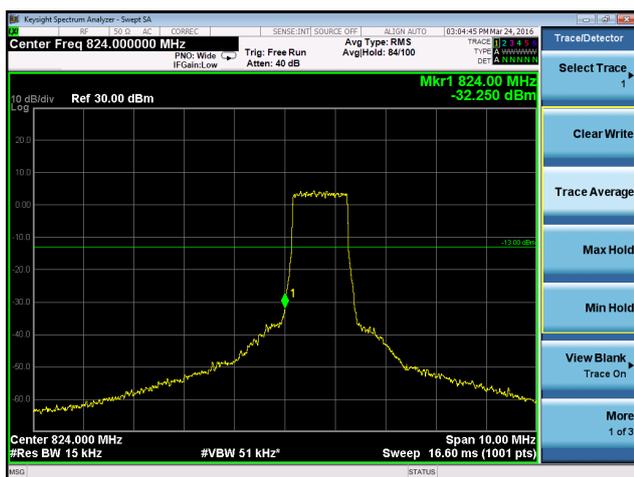
LTE Band 26 16QAM 1.4MHz CH26797 1RB



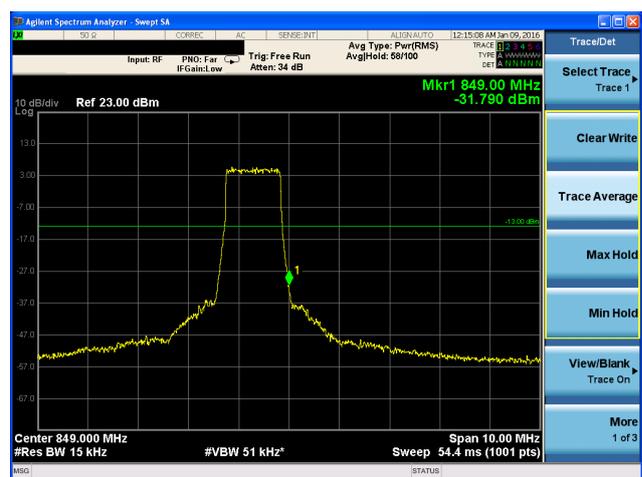
LTE Band 26 16QAM 1.4MHz CH27033 1RB



LTE Band 26 16QAM 1.4MHz CH26797 100%RB

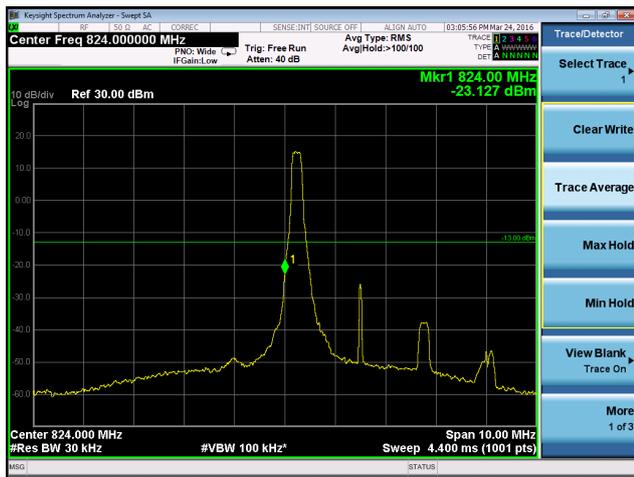


LTE Band 26 16QAM 1.4MHz CH27033 100%RB

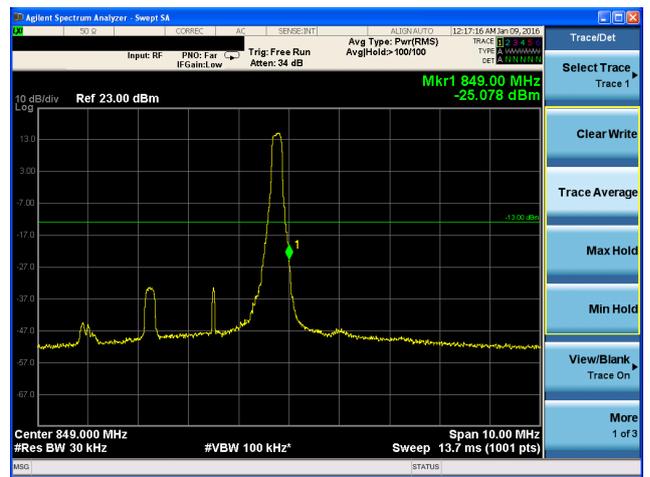




LTE Band 26 16QAM 3MHz CH26805 1RB



LTE Band 26 16QAM 3MHz CH27025 1RB



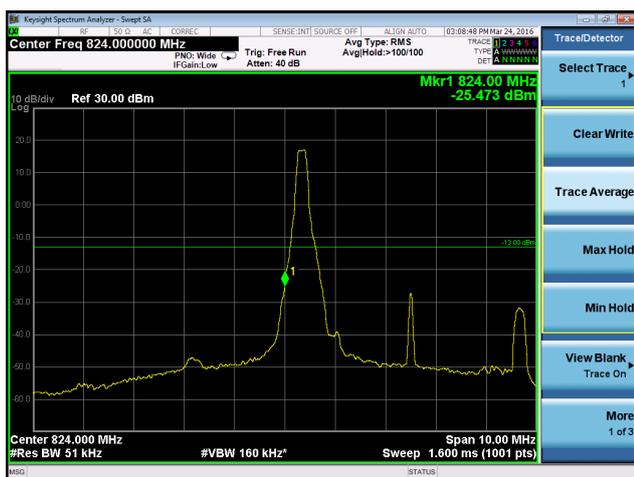
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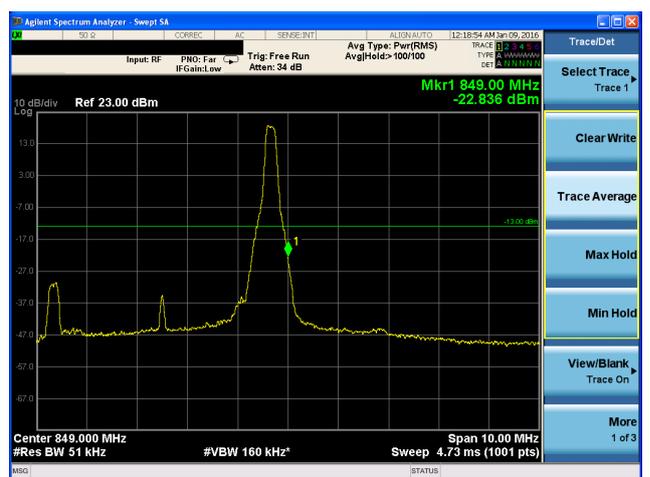
LTE Band 26 16QAM 3MHz CH27025 100%RB

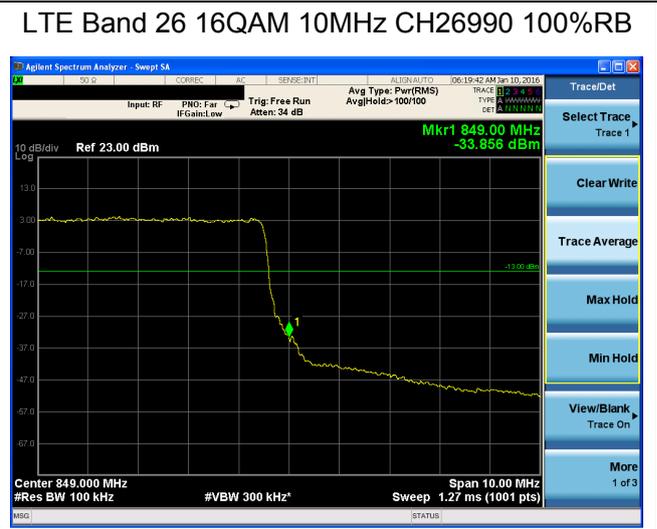
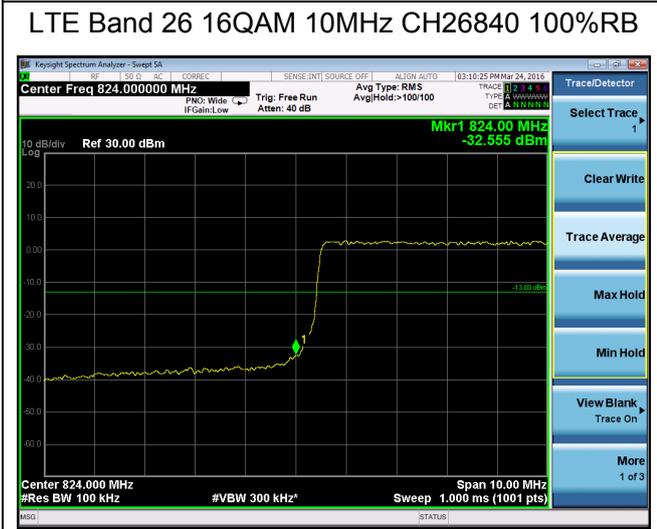
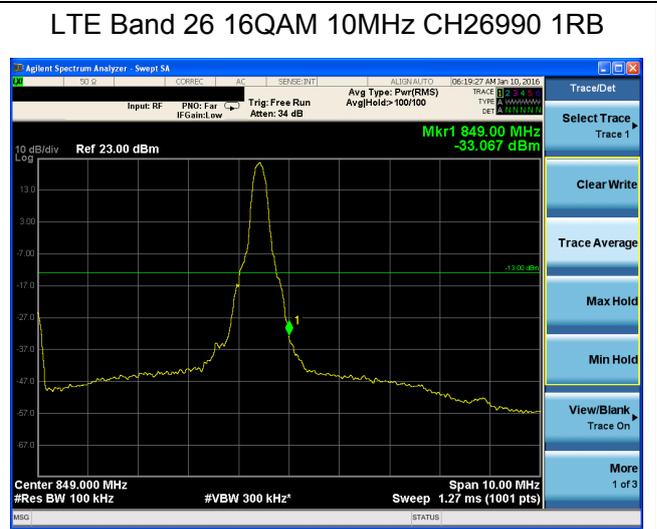
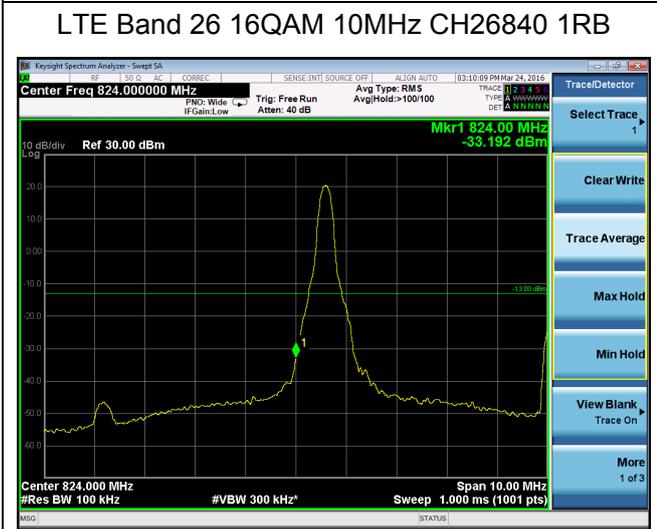
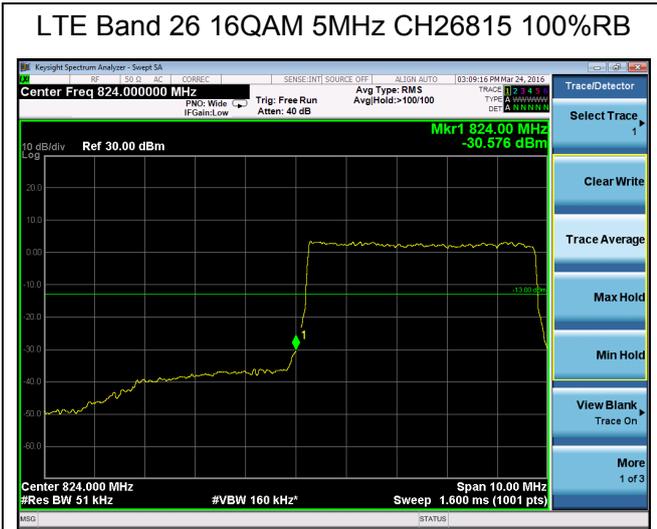


LTE Band 26 16QAM 5MHz CH26815 1RB



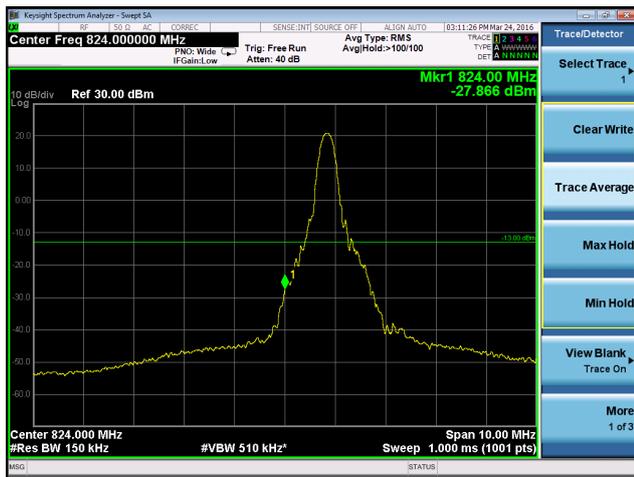
LTE Band 26 16QAM 5MHz CH27015 1RB







### LTE Band 26 16QAM 15MHz CH26865 1RB



### LTE Band 26 16QAM 15MHz CH26965 1RB



### LTE Band 26 16QAM 15MHz CH26865 100%RB



### LTE Band 26 16QAM 15MHz CH26965 100%RB



## 5.5. Frequency Stability

### Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

### Method of Measurement

#### 1. Frequency Stability (Temperature Variation)

The temperature inside the climate chamber is varied from -30°C to +50°C in 10°C step size,

(1) With all power removed, the temperature was decreased to 0°C and permitted to stabilize for three hours.

(2) Measure the carrier frequency with the test equipment in a “call mode”. These measurements should be made within 1 minute of powering up the mobile station, to prevent significant self warming.

(3) Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, un-powered, before making measurements.

#### 2. Frequency Stability (Voltage Variation)

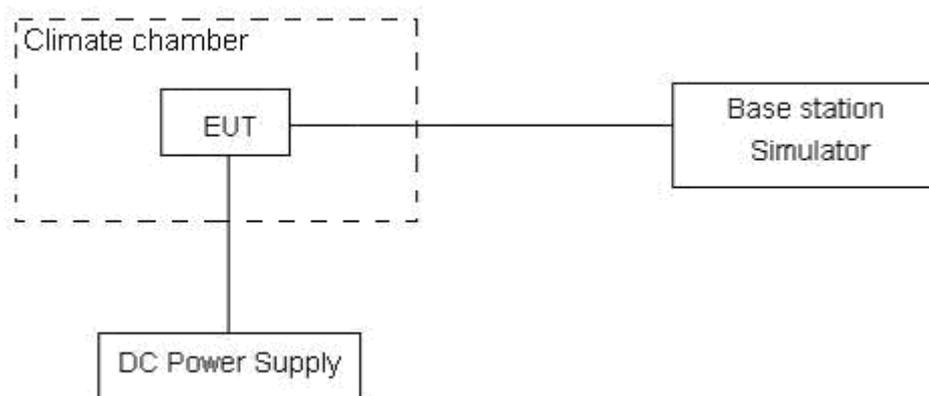
The frequency stability shall be measured with variation of primary supply voltage as follows:

(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

(2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery-operating end point which shall be specified by the manufacturer.

This transceiver is specified to operate with an input voltage of between 3.6 V and 4.35 V, with a nominal voltage of 3.8V.

### Test setup



**Limits**

According to the Sec. 22.355, the frequency stability of the carrier shall be accurate to within 2.5 ppm of the received frequency for mobile stations.

Limits	$\leq 2.5$ ppm
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**Measurement Uncertainty**

The assessed measurement uncertainty to ensure 99.75% confidence level for the normal distribution is with the coverage factor  $k = 3, U = 0.01$ ppm.

**Test Result**

Mode	Test status	Test Results (ppm)			Conclusion
		GSM (GMSK)	GPRS (GMSK)	EGPRS (8PSK)	
GSM 850 Channel 190	-30°C/3.8 V	0.0123	0.0243	0.0276	PASS
	-20°C/3.8 V	-0.0045	-0.0016	0.0008	PASS
	-10°C/3.8 V	0.005	0.0163	0.0233	PASS
	0°C/3.8 V	0.0118	0.0258	0.0221	PASS
	10°C/3.8 V	0.0089	0.0121	0.0198	PASS
	20°C/3.8 V	0.0055	0.0174	0.0235	PASS
	30°C/3.8 V	0.0079	0.0194	0.0204	PASS
	40°C/3.8 V	0.0073	0.0231	0.0196	PASS
	50°C/3.8 V	0.0112	0.0101	0.0169	PASS
	20°C/3.6 V	0.0201	0.0192	0.0191	PASS
	20°C/4.35 V	0.0189	0.0101	0.0214	PASS
/	/	RMC			/
WCDMA Band V Channel 4183	-30°C/3.8 V		-0.0001		PASS
	-20°C/3.8 V		-0.0004		PASS
	-10°C/3.8 V		0.00019		PASS
	0°C/3.8 V		0.00014		PASS
	10°C/3.8 V		0.00019		PASS
	20°C/3.8 V		0.00048		PASS
	30°C/3.8 V		0.00037		PASS
	40°C/3.8 V		0.00108		PASS
	50°C/3.8 V		0.00003		PASS
	20°C/3.6 V		0.00015		PASS
	20°C/4.35 V		0.00016		PASS



Mode	Test status	Test Results (ppm)	Conclusion
		EV-DO (Rev.0)	
CDMA BC0 Channel 384	-30°C/3.8 V	-0.00063	PASS
	-20°C/3.8 V	-0.00052	PASS
	-10°C/3.8 V	-0.00104	PASS
	0°C/3.8 V	-0.00094	PASS
	10°C/3.8 V	-0.00142	PASS
	20°C/3.8 V	-0.00071	PASS
	30°C/3.8 V	-0.0005	PASS
	40°C/3.8 V	-0.0008	PASS
	50°C/3.8 V	-0.00067	PASS
	20°C/3.6 V	-0.00014	PASS
	20°C/4.35 V	-0.00065	PASS



Bandwidth	Test status	LTE Band 5 Channel 20525 Test Results (ppm)		
		QPSK	16QAM	Conclusion
1.4MHz	-30°C/3.8 V	0.00004	0.00052	PASS
	-20°C/3.8 V	0.00030	-0.00045	PASS
	-10°C/3.8 V	0.00005	0.00055	PASS
	0°C/3.8 V	0.00031	-0.00047	PASS
	10°C/3.8 V	-0.00074	-0.0006	PASS
	20°C/3.8 V	0.00008	-0.00049	PASS
	30°C/3.8 V	-0.00043	-0.00044	PASS
	40°C/3.8 V	-0.00128	-0.00061	PASS
	50°C/3.8 V	0.00027	-0.00008	PASS
	20°C/3.6 V	0.00027	-0.00005	PASS
	20°C/4.35 V	-0.00063	-0.00036	PASS
	3MHz	-30°C/3.8 V	0.00022	-0.00005
-20°C/3.8 V		0.0007	-0.00030	PASS
-10°C/3.8 V		0.00031	-0.00008	PASS
0°C/3.8 V		0.0008	-0.00037	PASS
10°C/3.8 V		-0.00001	0.00053	PASS
20°C/3.8 V		0.00071	0.00035	PASS
30°C/3.8 V		0.00013	-0.00139	PASS
40°C/3.8 V		-0.00036	0.00005	PASS
50°C/3.8 V		0.00012	0.00065	PASS
20°C/3.6 V		-0.00016	-0.00079	PASS
20°C/4.35 V		0.00032	0.00088	PASS
5MHz		-30°C/3.8 V	0.00190	0.00060
	-20°C/3.8 V	0.00111	0.00022	PASS
	-10°C/3.8 V	0.00195	0.00061	PASS
	0°C/3.8 V	0.00115	0.00025	PASS
	10°C/3.8 V	0.00063	0.00086	PASS
	20°C/3.8 V	0.00143	0.001	PASS
	30°C/3.8 V	0.00152	0.00088	PASS
	40°C/3.8 V	0.00151	0.00024	PASS
	50°C/3.8 V	0.00055	0.00111	PASS
	20°C/3.5 V	0.00024	0.00067	PASS
	20°C/4.2 V	0.00116	0.00041	PASS
	10MHz	-30°C/3.8 V	0.00120	0.00005
-20°C/3.8 V		0.00011	-0.00077	PASS
-10°C/3.8 V		0.00123	0.00008	PASS
0°C/3.8 V		0.00031	-0.00094	PASS
10°C/3.8 V		0.00036	0.00103	PASS
20°C/3.8 V		0.00047	0.00051	PASS
30°C/3.8 V		-0.00005	-0.0002	PASS



	40°C/3.8 V	0.00001	0.00031	PASS
	50°C/3.8 V	0.0012	0.00043	PASS
	20°C/3.6 V	-0.00044	-0.00065	PASS
	20°C/4.35 V	0.00087	0.00063	PASS

Bandwidth	Test status	LTE Band 26 Channel 26915 Test Results (ppm)		
		QPSK	16QAM	Conclusion
1.4MHz	-30°C/3.8 V	-0.00059	-0.00044	PASS
	-20°C/3.8 V	0.00065	-0.00092	PASS
	-10°C/3.8 V	0.00004	-0.00004	PASS
	0°C/3.8 V	-0.00080	0.00049	PASS
	10°C/3.8 V	-0.00060	-0.00060	PASS
	20°C/3.8 V	-0.00037	-0.00188	PASS
	30°C/3.8 V	0.00001	-0.00011	PASS
	40°C/3.8 V	0.00005	-0.00060	PASS
	50°C/3.8 V	0.00024	-0.00048	PASS
	20°C/3.6 V	-0.00065	0.00031	PASS
	20°C/4.35 V	-0.00007	-0.00032	PASS
3MHz	-30°C/3.8 V	-0.00209	-0.00059	PASS
	-20°C/3.8 V	0.00011	0.00027	PASS
	-10°C/3.8 V	-0.00008	-0.00152	PASS
	0°C/3.8 V	-0.00037	0.00020	PASS
	10°C/3.8 V	-0.00043	-0.00017	PASS
	20°C/3.8 V	-0.00056	-0.00087	PASS
	30°C/3.8 V	-0.00012	-0.00135	PASS
	40°C/3.8 V	-0.00053	-0.00071	PASS
	50°C/3.8 V	-0.0002	-0.00008	PASS
	20°C/3.6 V	-0.00016	0.00008	PASS
	20°C/4.35 V	0.00029	0.00012	PASS
5MHz	-30°C/3.8 V	-0.00055	-0.00106	PASS
	-20°C/3.8 V	0.00100	0.00082	PASS
	-10°C/3.8 V	-0.00099	-0.00016	PASS
	0°C/3.8 V	-0.00074	-0.00139	PASS
	10°C/3.8 V	-0.00049	-0.00115	PASS
	20°C/3.8 V	-0.00004	-0.00071	PASS
	30°C/3.8 V	0.00011	-0.00135	PASS
	40°C/3.8 V	0.00005	-0.00023	PASS
	50°C/3.8 V	0.00035	-0.00134	PASS
	20°C/3.6 V	-0.00011	0.00063	PASS



	20°C/4.35 V	-0.00017	-0.00036	PASS
10MHz	-30°C/3.8 V	0.00061	-0.00116	PASS
	-20°C/3.8 V	0.00025	0.00041	PASS
	-10°C/3.8 V	-0.00116	-0.00044	PASS
	0°C/3.8 V	-0.00143	-0.00007	PASS
	10°C/3.8 V	-0.00037	0.00032	PASS
	20°C/3.8 V	-0.00061	-0.00112	PASS
	30°C/3.8 V	-0.00148	0.00025	PASS
	40°C/3.8 V	-0.00099	-0.00088	PASS
	50°C/3.8 V	-0.00077	-0.00035	PASS
	20°C/3.6 V	-0.00004	0.00074	PASS
	20°C/4.35 V	0.00023	-0.00082	PASS
	15MHz	-30°C/3.8 V	-0.00061	-0.00023
-20°C/3.8 V		0.00014	0.0003	PASS
-10°C/3.8 V		-0.00061	-0.00088	PASS
0°C/3.8 V		0.00027	0.00008	PASS
10°C/3.8 V		-0.00094	-0.00048	PASS
20°C/3.8 V		-0.00049	-0.00100	PASS
30°C/3.8 V		-0.00036	-0.00005	PASS
40°C/3.8 V		-0.00017	-0.0002	PASS
50°C/3.8 V		-0.00037	-0.00067	PASS
20°C/3.6 V		0.00019	-0.00074	PASS
20°C/4.35 V		-0.00039	-0.00092	PASS

### 5.6. Spurious Emissions at Antenna Terminals

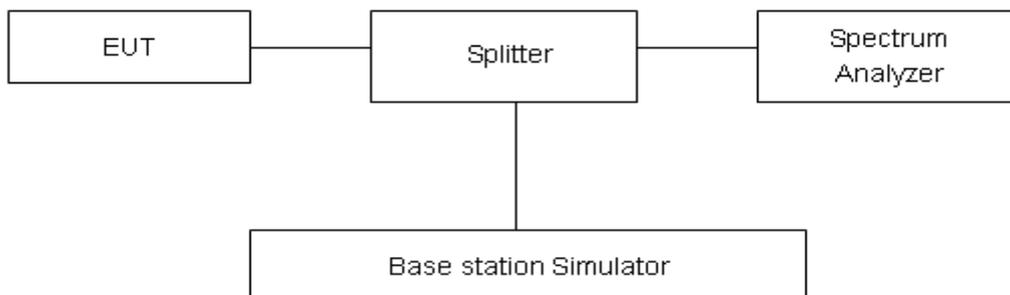
#### Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

#### Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The measurement is carried out using a spectrum analyzer. The spectrum analyzer scans from 30MHz to the 10th harmonic of the carrier. The peak detector is used. For RBW and VBW are set to 100 kHz, Sweep is set to ATUO.

#### Test setup



#### Limits

Rule Part 22.917(a) specifies that “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.”

Limit	-13 dBm
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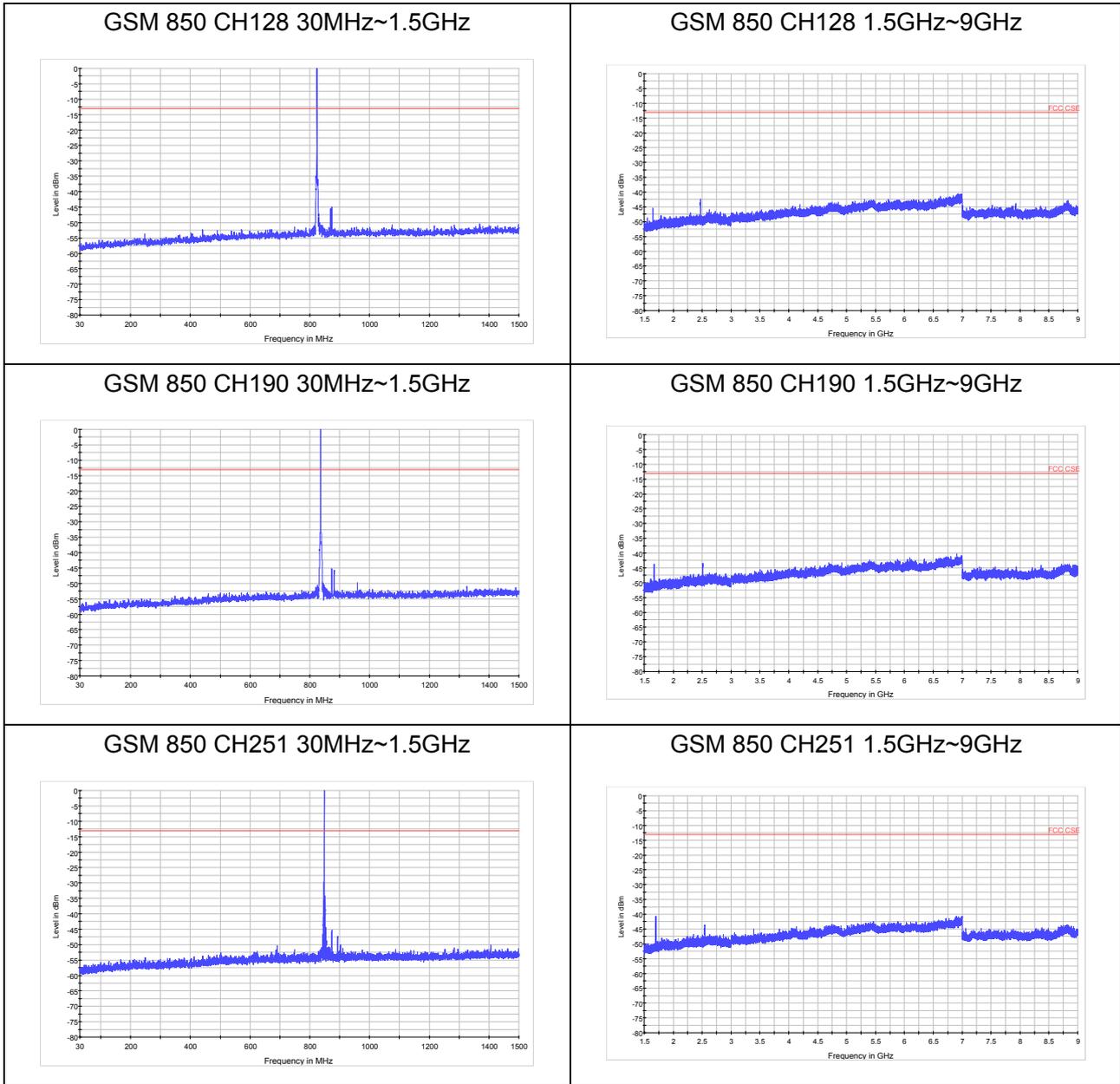
#### Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75% confidence level for the normal distribution is with the coverage factor  $k = 1.96$ .

Frequency	Uncertainty
100kHz-2GHz	0.684 dB
2GHz-12.75GHz	1.407 dB

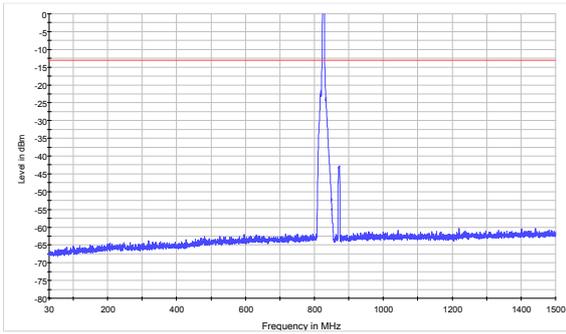
### Test Result

If disturbances were found more than 20dB below limit line, the mark is not required for the EUT.  
The signal beyond the limit is carrier.

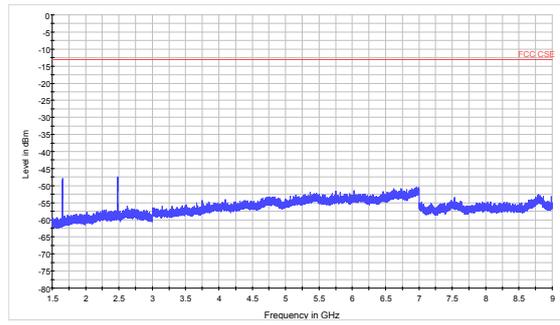




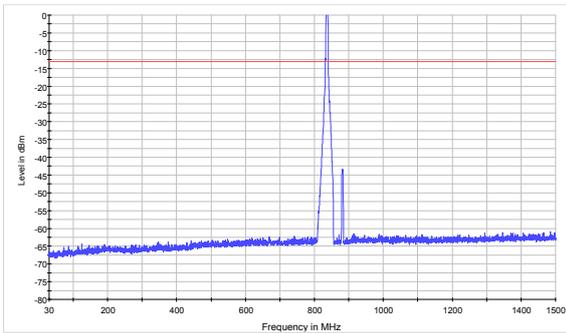
WCDMA Band V CH4132 30MHz~1.5GHz



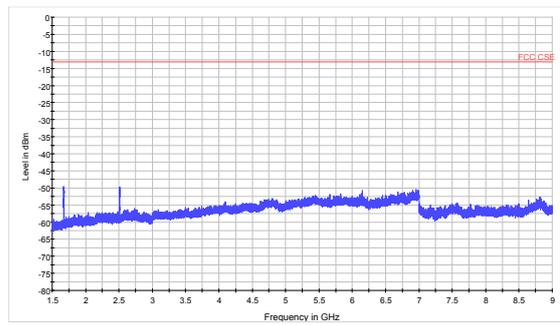
WCDMA Band V CH4132 1.5GHz~9GHz



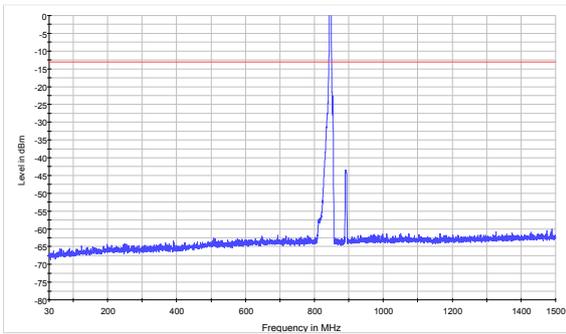
WCDMA Band V CH4183 30MHz~1.5GHz



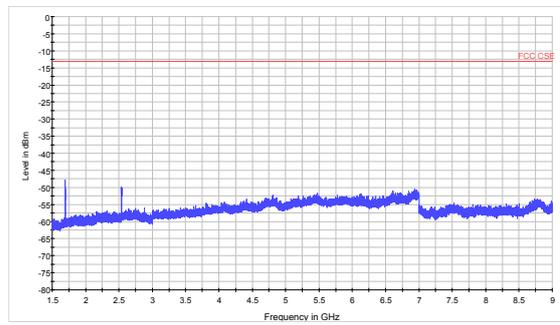
WCDMA Band V CH4183 1.5GHz~9GHz



WCDMA Band V CH4233 30MHz~1.5GHz

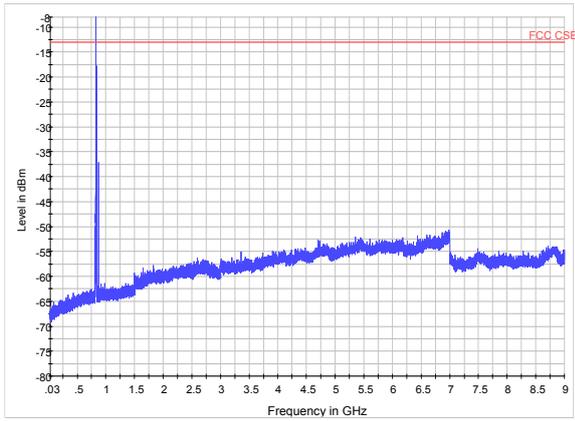


WCDMA Band V CH4233 1.5GHz~9GHz

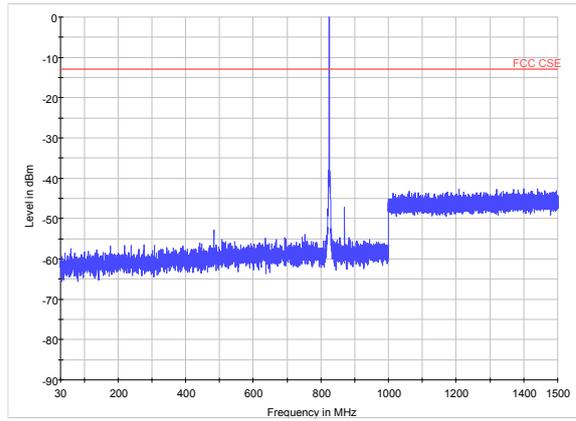




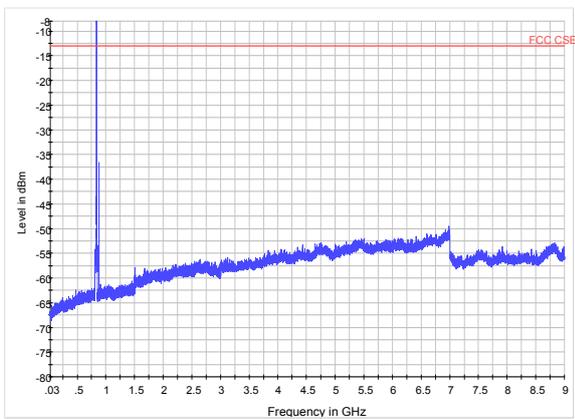
CDMA EVDO BC0 CH1013 30MHz~9GHz



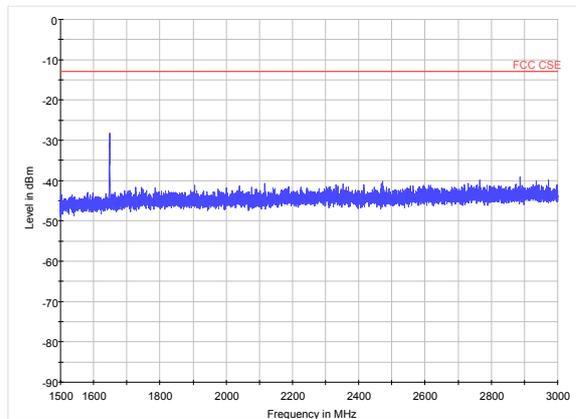
LTE Band 5 1.4MHz CH20407 30MHz~1.5GHz



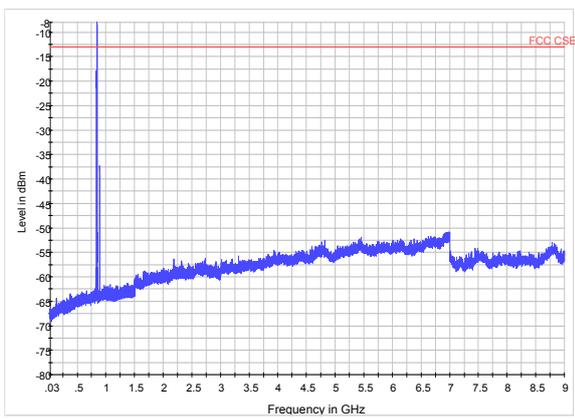
CDMA EVDO BC0 CH384 30MHz~9GHz



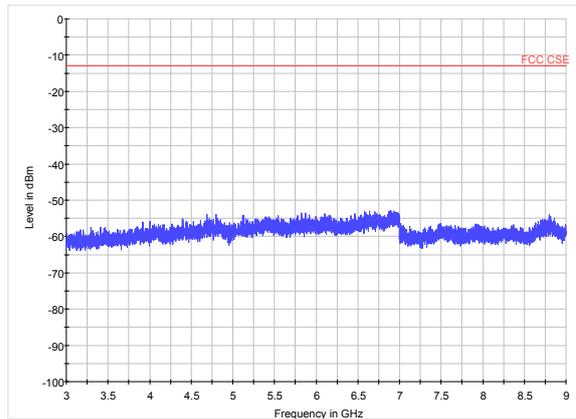
LTE Band 5 1.4MHz CH20407 1.5GHz~3GHz



CDMA EVDO BC0 CH777 30MHz~9GHz

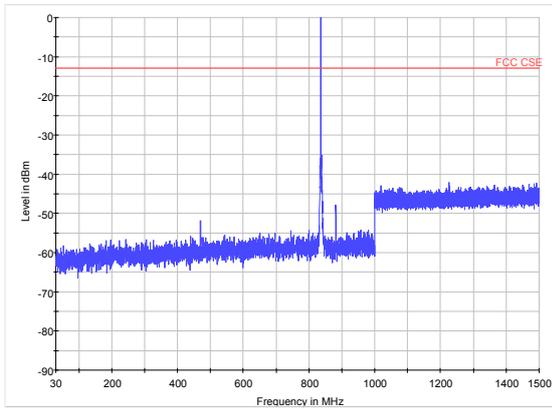


LTE Band 5 1.4MHz CH20407 3GHz~9GHz

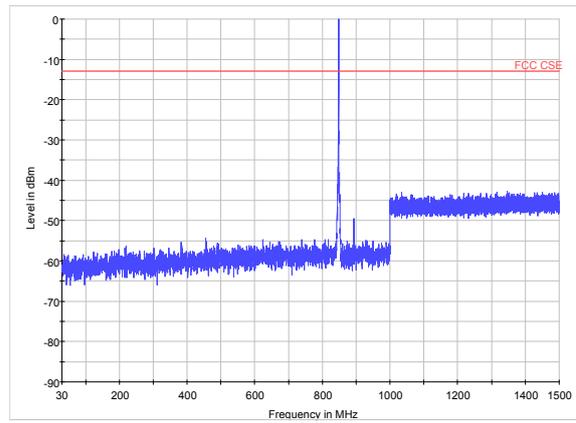




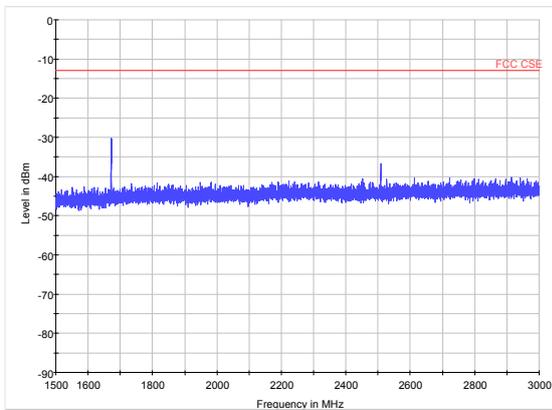
LTE Band 5 1.4MHz CH20525 30MHz~1.5GHz



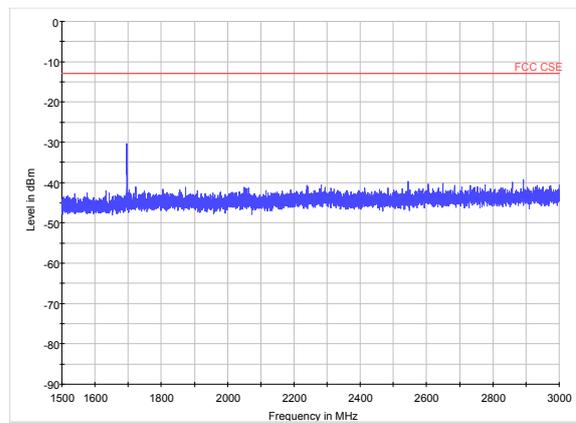
LTE Band 5 1.4MHz CH20643 30MHz~1.5GHz



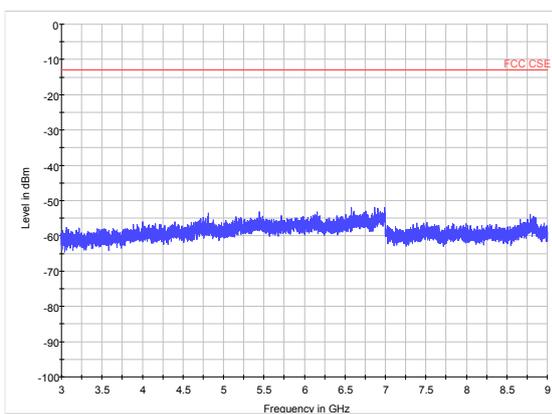
LTE Band 5 1.4MHz CH20525 1.5GHz~3GHz



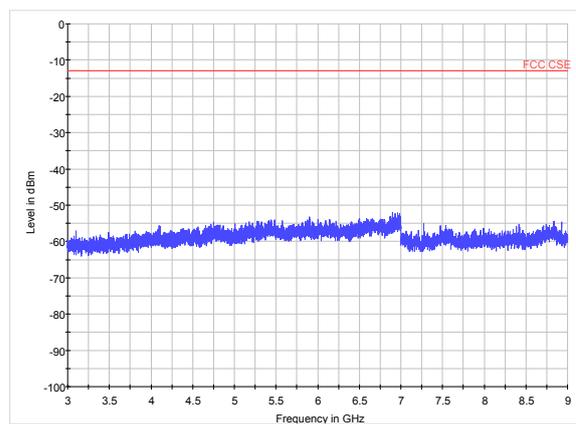
LTE Band 5 1.4MHz CH20643 1.5GHz~3GHz



LTE Band 5 1.4MHz CH20525 3GHz~9GHz

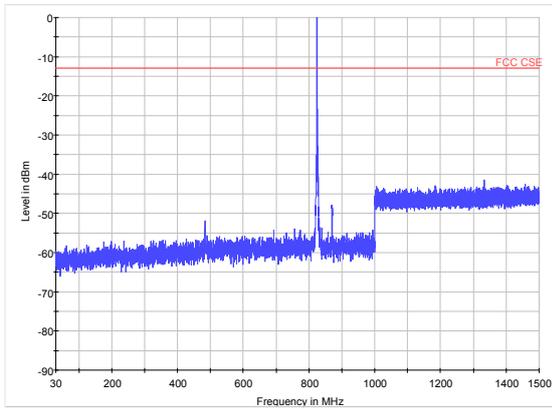


LTE Band 5 1.4MHz CH20643 3GHz~9GHz

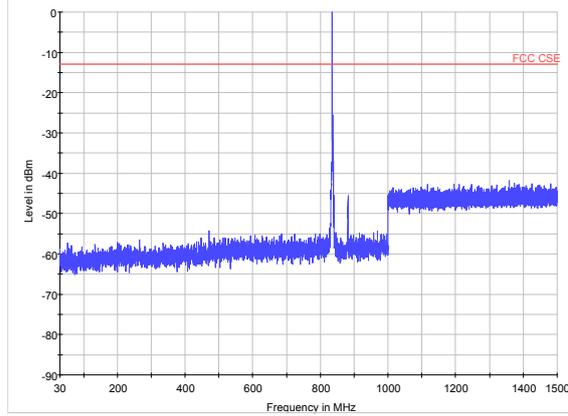




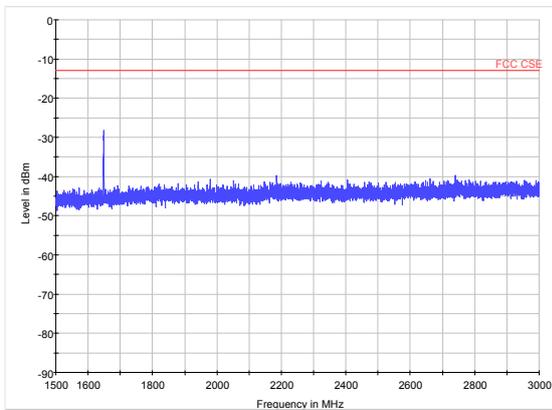
LTE Band 5 3MHz CH20415 30MHz~1.5GHz



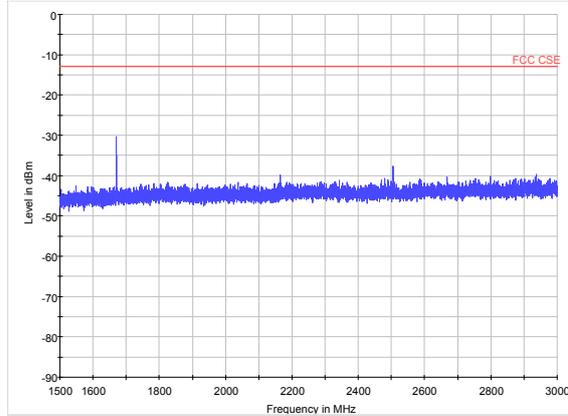
LTE Band 5 3MHz CH20525 30MHz~1.5GHz



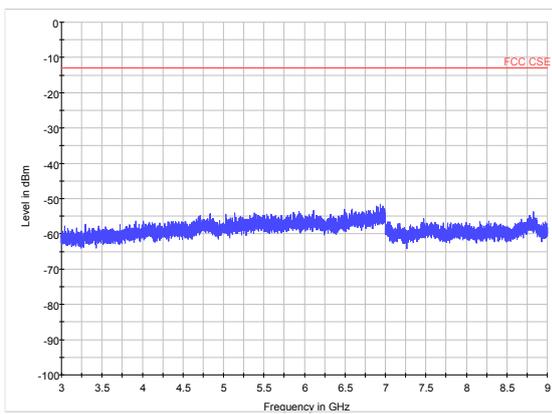
LTE Band 5 3MHz CH20415 1.5GHz~3GHz



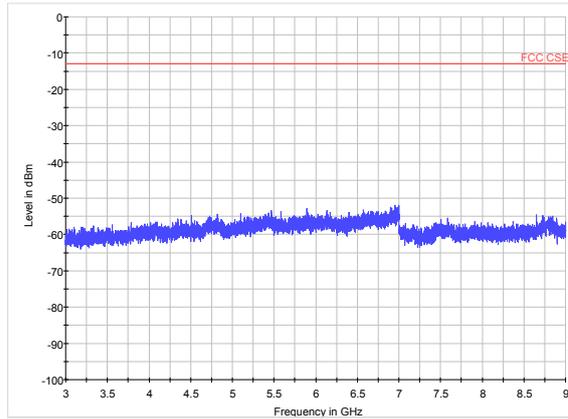
LTE Band 5 3MHz CH20525 1.5GHz~3GHz



LTE Band 5 3MHz CH20415 3GHz~9GHz

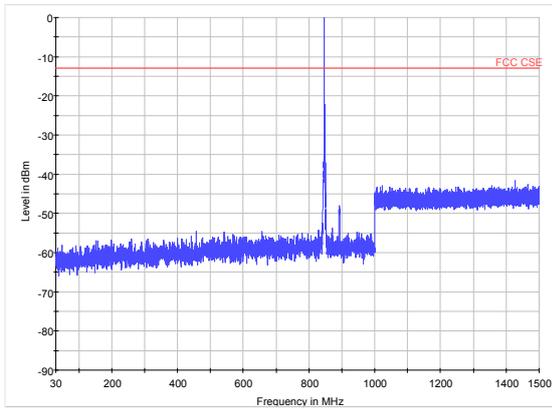


LTE Band 5 3MHz CH20525 3GHz~9GHz

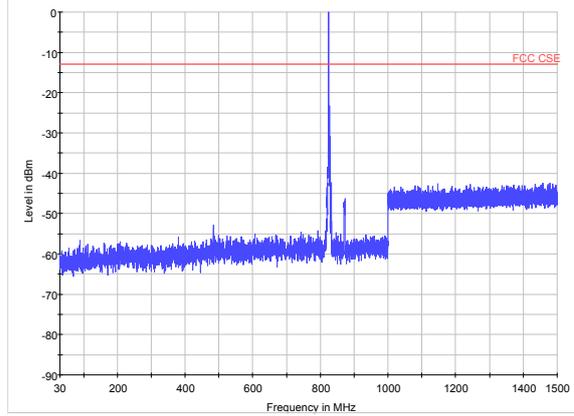




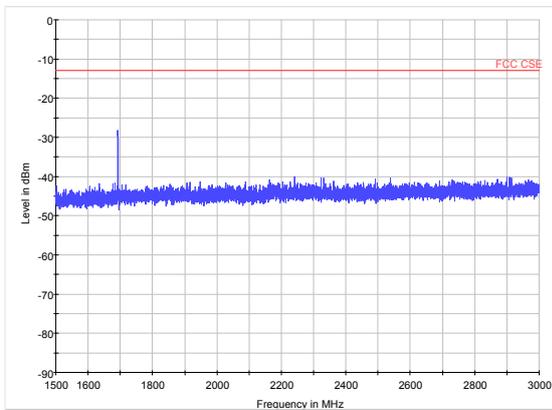
LTE Band 5 3MHz CH20635 30MHz~1.5GHz



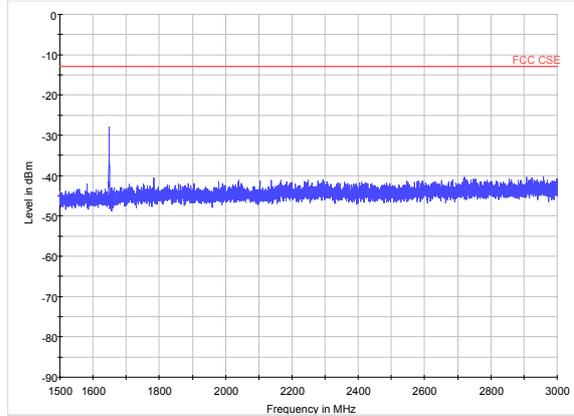
LTE Band 5 5MHz CH20425 30MHz~1.5GHz



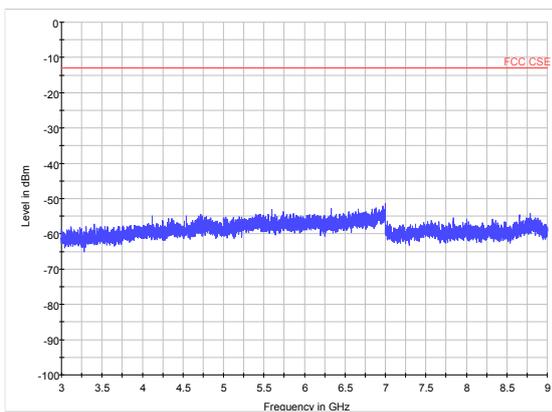
LTE Band 5 3MHz CH20635 1.5GHz~3GHz



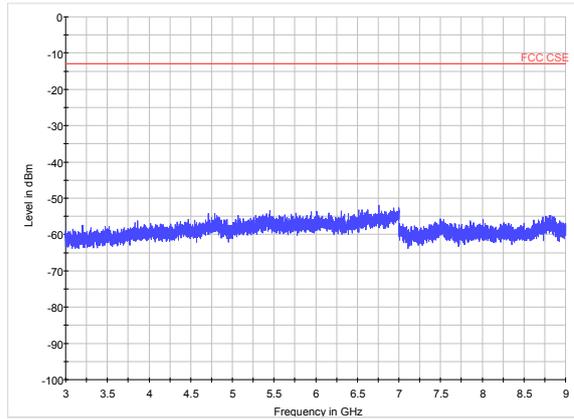
LTE Band 5 5MHz CH20425 1.5GHz~3GHz



LTE Band 5 3MHz CH20635 3GHz~9GHz

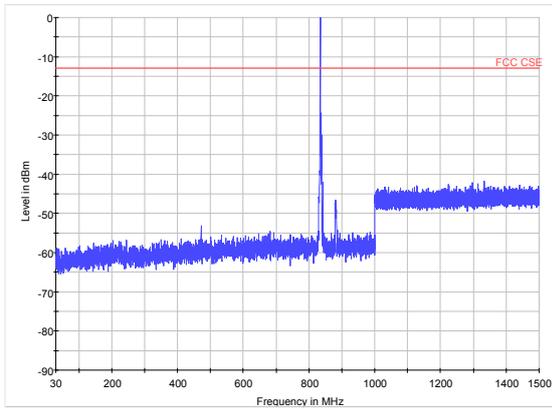


LTE Band 5 5MHz CH20425 3GHz~9GHz

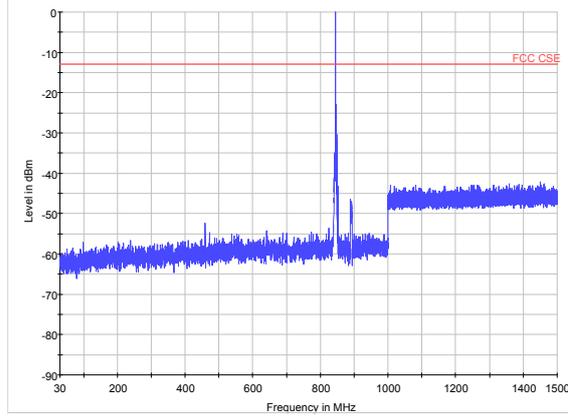




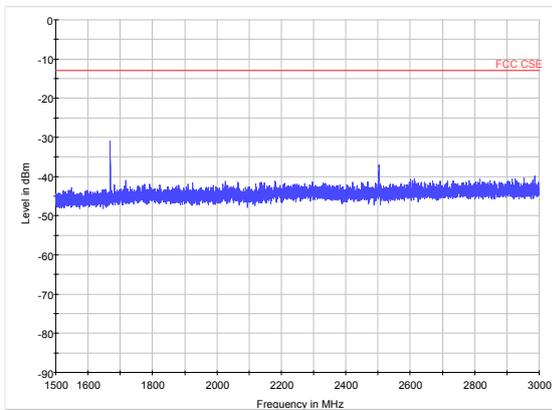
LTE Band 5 5MHz CH20525 30MHz~1.5GHz



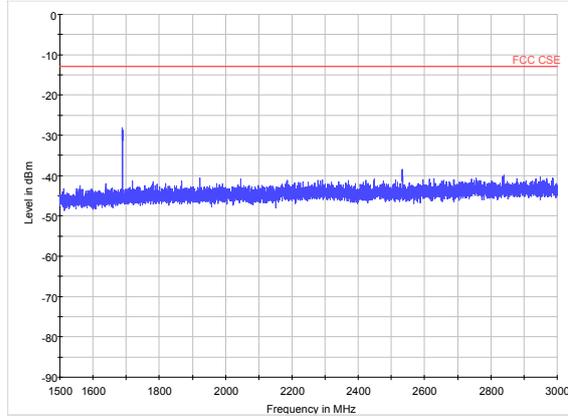
LTE Band 5 5MHz CH20625 30MHz~1.5GHz



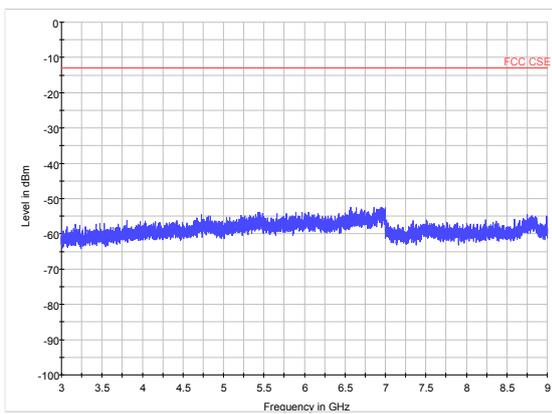
LTE Band 5 5MHz CH20525 1.5GHz~3GHz



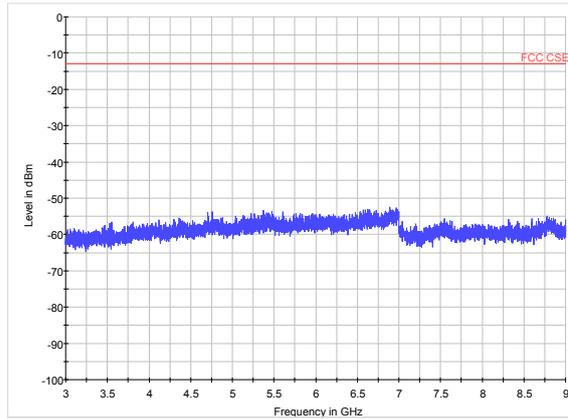
LTE Band 5 5MHz CH20625 1.5GHz~3GHz



LTE Band 5 5MHz CH20525 3GHz~9GHz

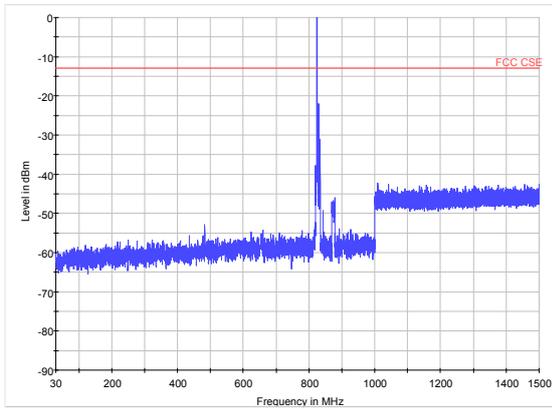


LTE Band 5 5MHz CH20625 3GHz~9GHz

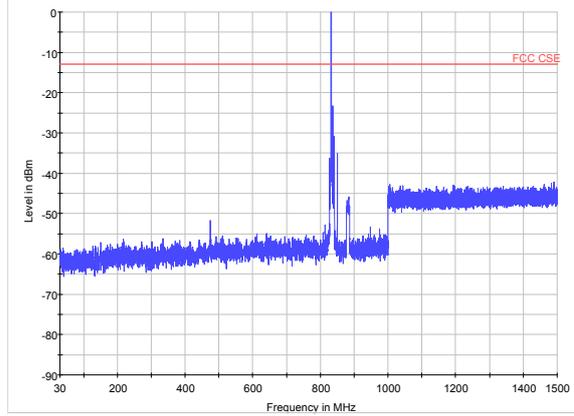




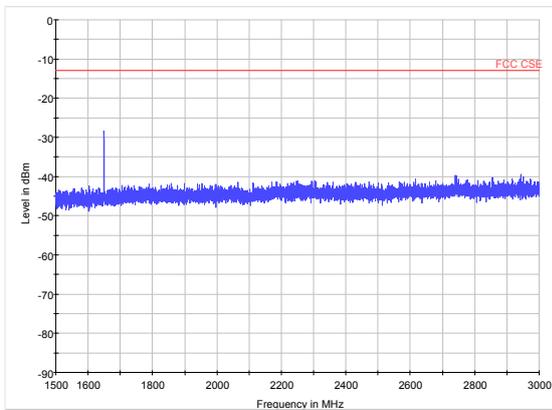
LTE Band 5 10MHz CH20450 30MHz~1.5GHz



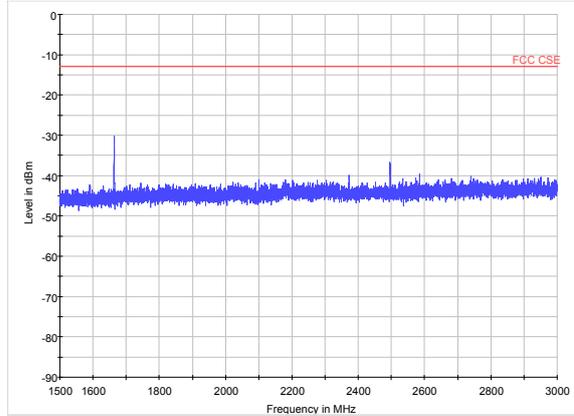
LTE Band 5 10MHz CH20525 30MHz~1.5GHz



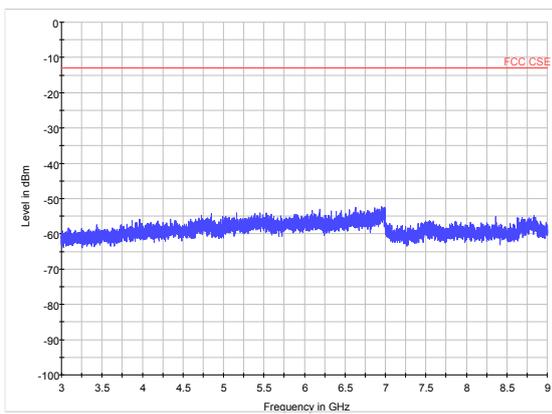
LTE Band 5 10MHz CH20450 1.5GHz~3GHz



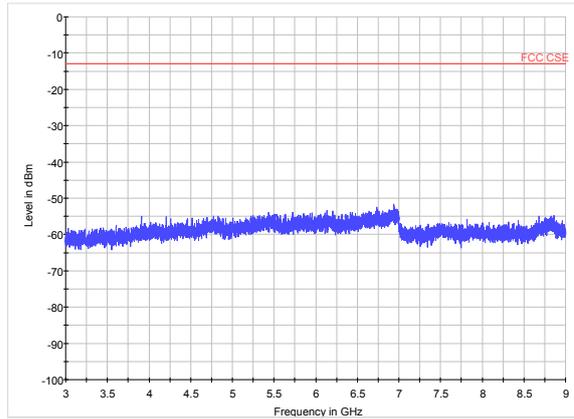
LTE Band 5 10MHz CH20525 1.5GHz~3GHz



LTE Band 5 10MHz CH20450 3GHz~9GHz

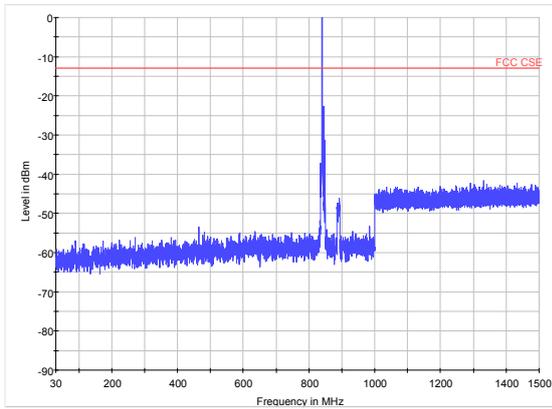


LTE Band 5 10MHz CH20525 3GHz~9GHz

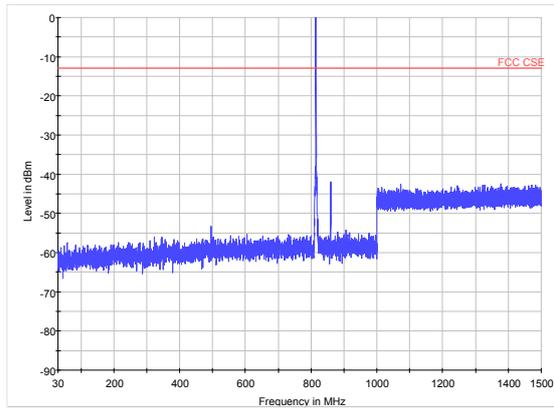




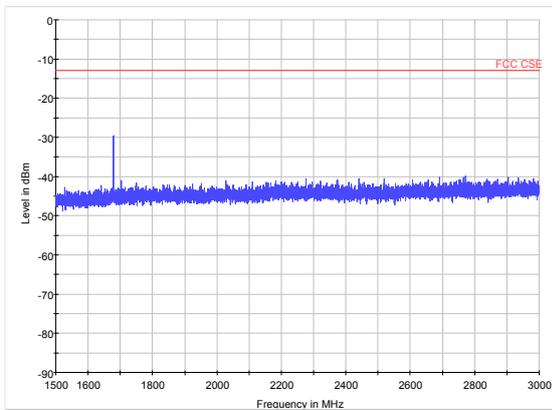
LTE Band 5 10MHz CH20600 30MHz~1.5GHz



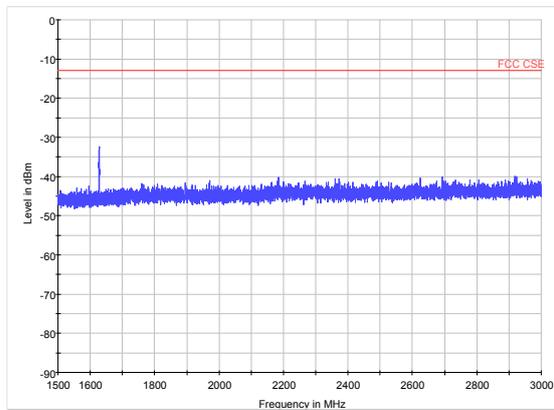
LTE Band 26 1.4MHz CH26797 30MHz~1.5GHz



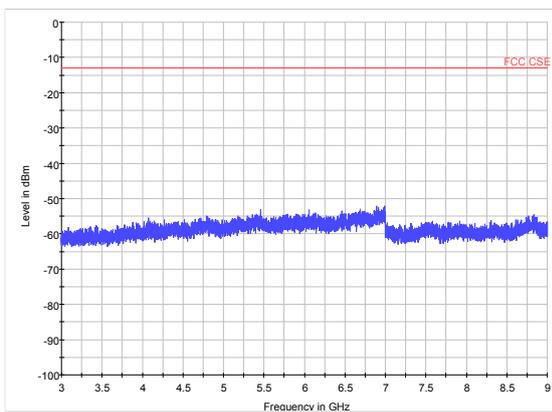
LTE Band 5 10MHz CH20600 1.5GHz~3GHz



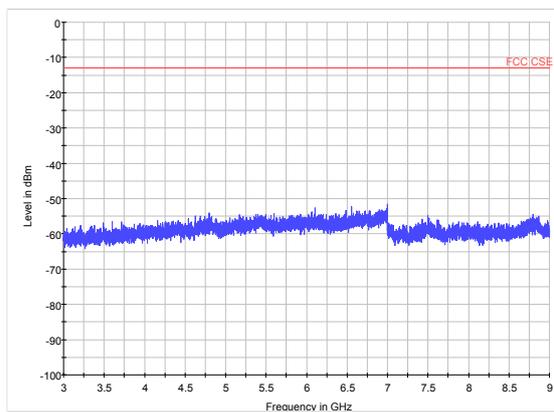
LTE Band 26 1.4MHz CH26797 1.5GHz~3GHz



LTE Band 5 10MHz CH20600 3GHz~9GHz

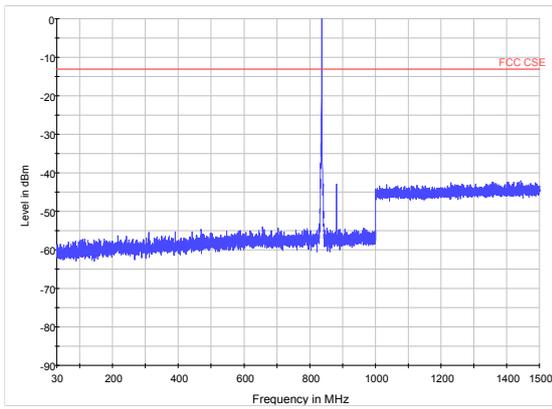


LTE Band 26 1.4MHz CH26797 3GHz~9GHz

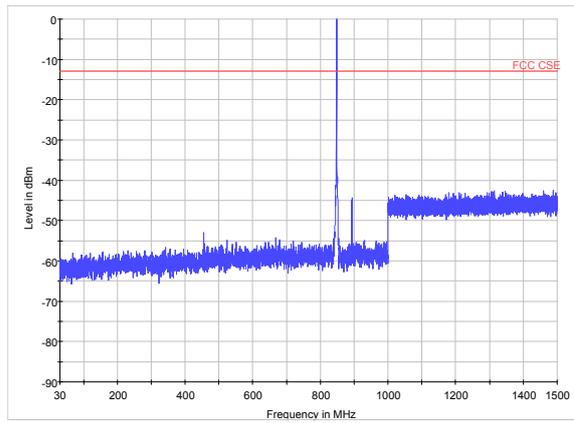




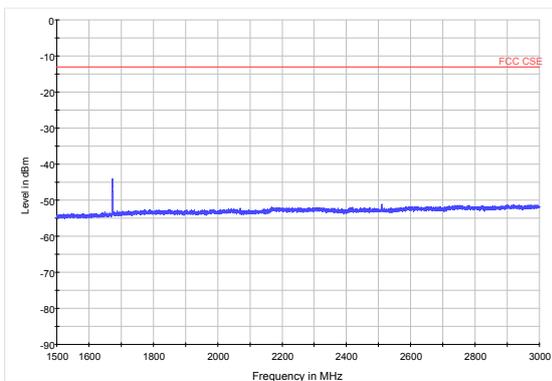
LTE Band 26 1.4MHz CH26915 30MHz~1.5GHz



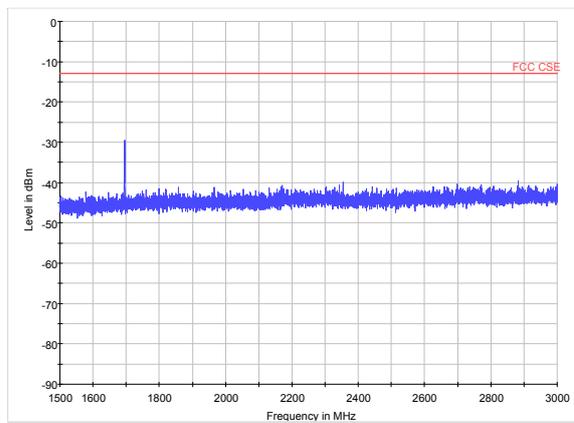
LTE Band 26 1.4MHz CH27033 30MHz~1.5GHz



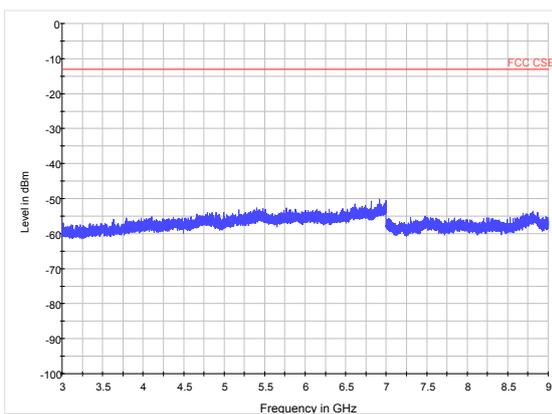
LTE Band 26 1.4MHz CH26915 1.5GHz~3GHz



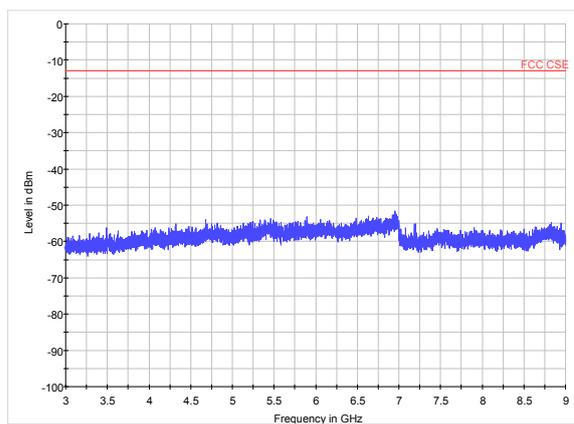
LTE Band 26 1.4MHz CH27033 1.5GHz~3GHz



LTE Band 26 1.4MHz CH26915 3GHz~9GHz

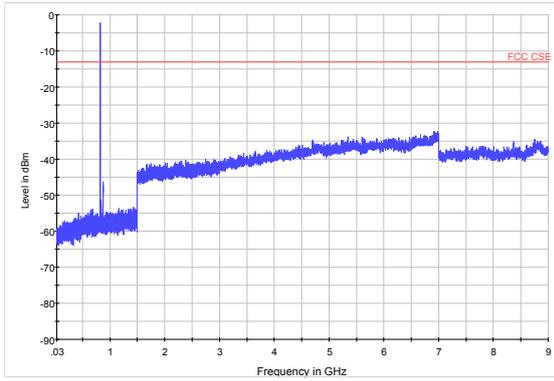


LTE Band 26 1.4MHz CH27033 3GHz~9GHz

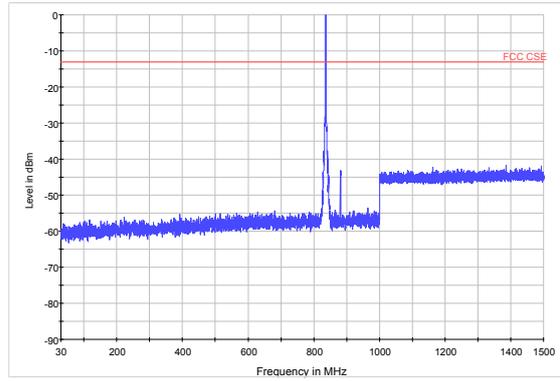




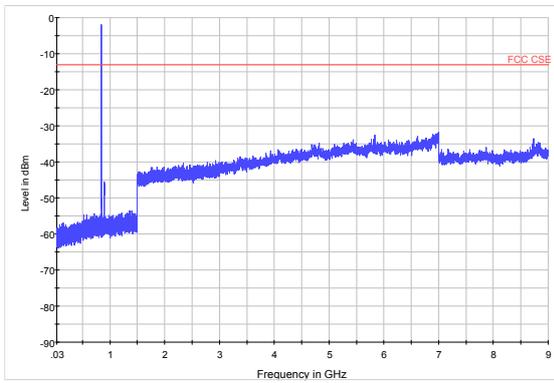
LTE Band 26 3MHz CH26805 30MHz~9GHz



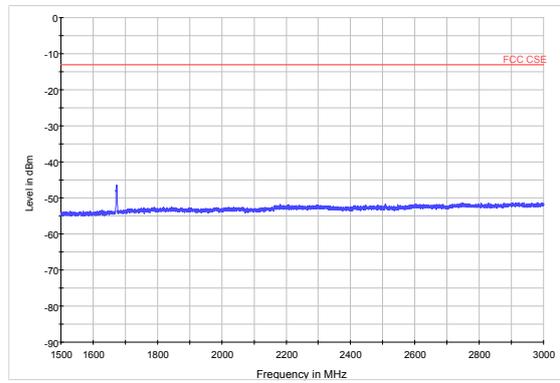
LTE Band 26 3MHz CH26915 30MHz~1.5GHz



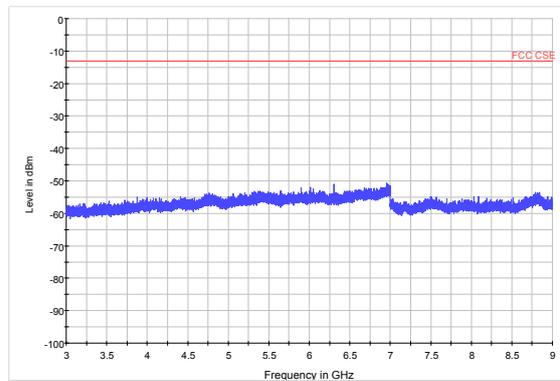
LTE Band 26 3MHz CH27025 30MHz~9GHz



LTE Band 26 3MHz CH26915 1.5GHz~3GHz

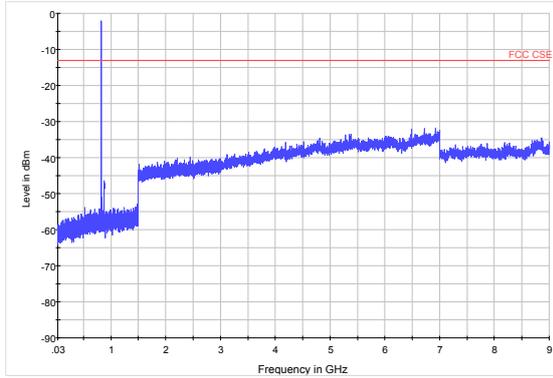


LTE Band 26 3MHz CH26915 3GHz~9GHz

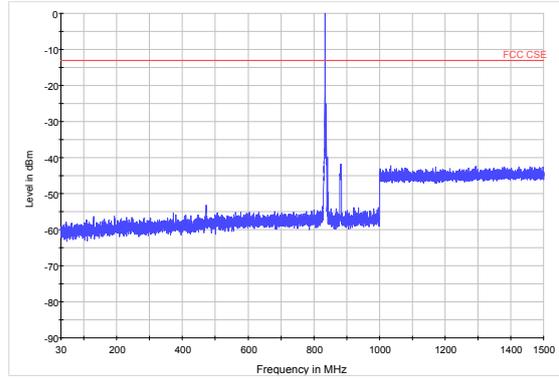




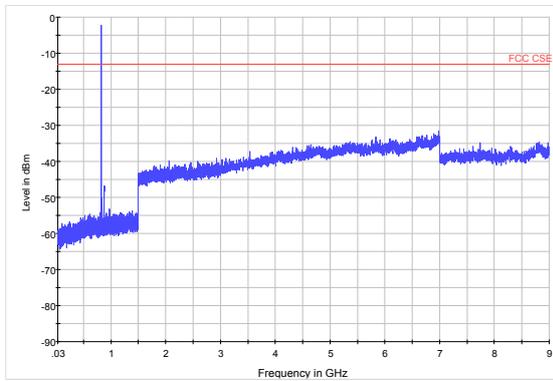
LTE Band 26 5MHz CH26815 30MHz~9GHz



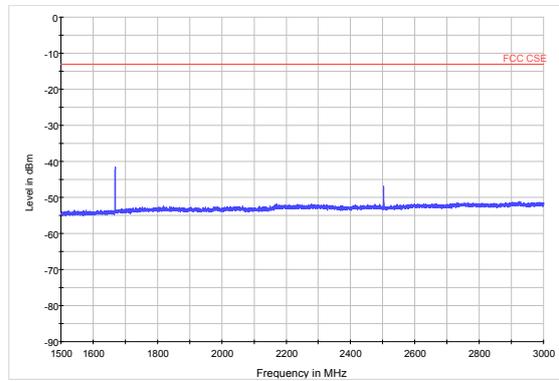
LTE Band 26 5MHz CH26915 30MHz~1.5GHz



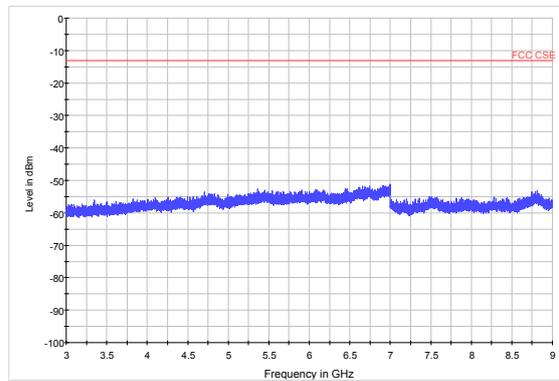
LTE Band 26 5MHz CH27015 30MHz~9GHz



LTE Band 26 5MHz CH26915 1.5GHz~3GHz

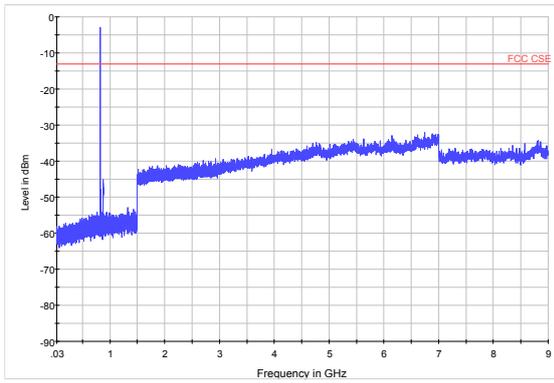


LTE Band 26 5MHz CH26915 3GHz~9GHz

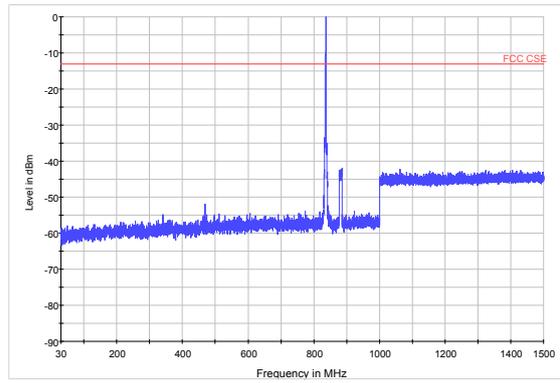




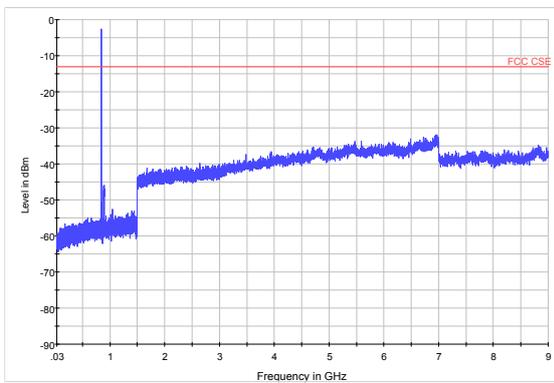
LTE Band 26 10MHz CH26840 30MHz~9GHz



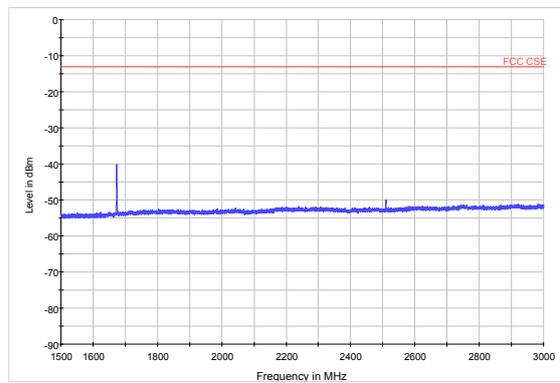
LTE Band 26 10MHz CH26915 30MHz~1.5GHz



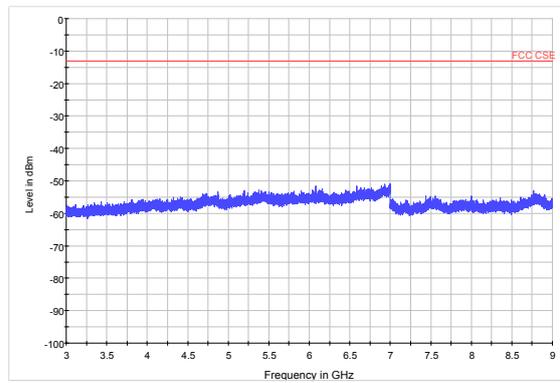
LTE Band 26 10MHz CH26990 30MHz~9GHz



LTE Band 26 10MHz CH26915 1.5GHz~3GHz

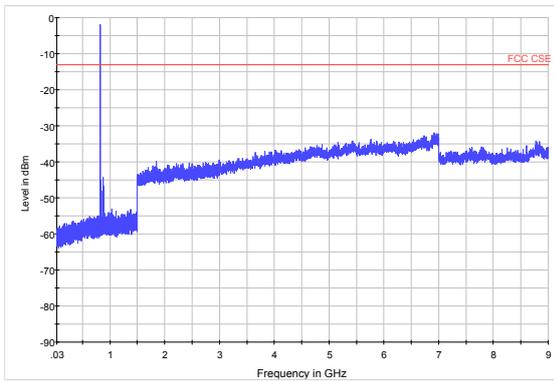


LTE Band 26 10MHz CH26915 3GHz~9GHz

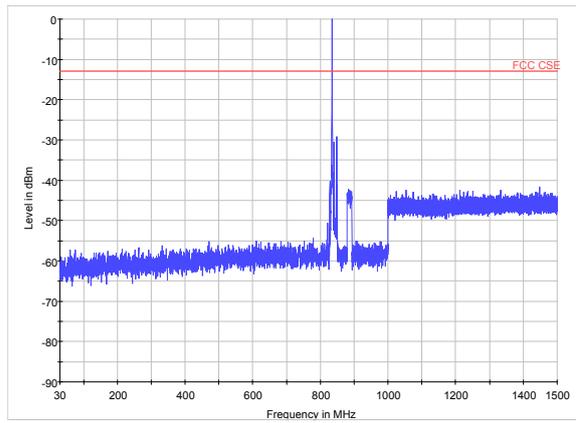




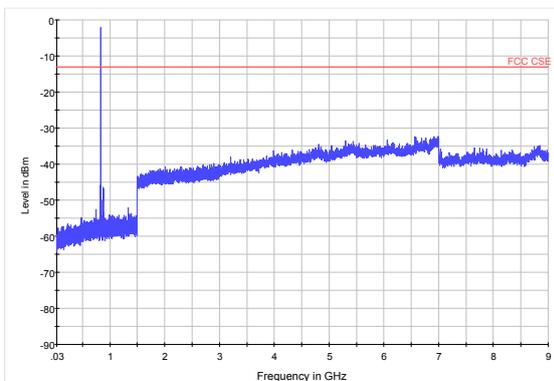
LTE Band 26 10MHz CH26865 30MHz~1.5GHz



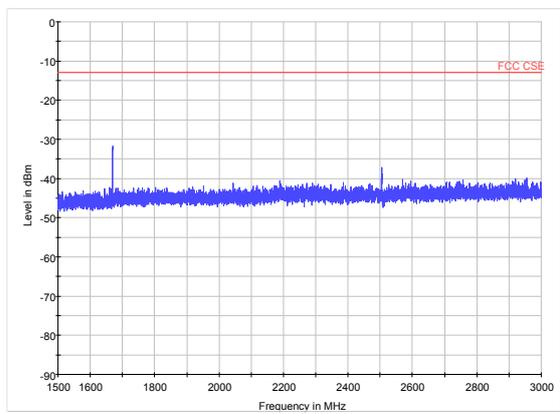
LTE Band 26 15MHz CH26965 30MHz~1.5GHz



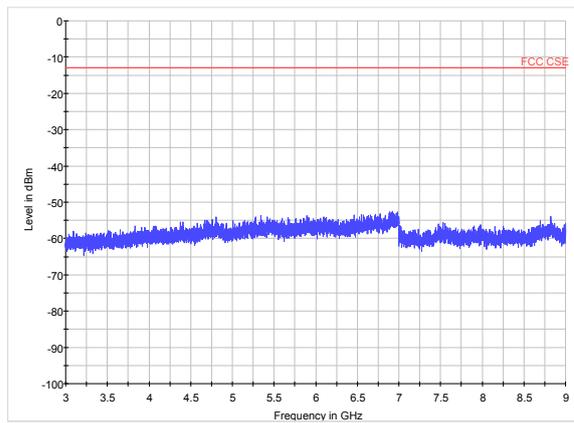
LTE Band 26 10MHz CH26915 1.5GHz~3GHz



LTE Band 26 15MHz CH26965 1.5GHz~3GHz



LTE Band 26 15MHz CH26965 3GHz~9GHz



## 5.7. Radiates Spurious Emission

### Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

### Method of Measurement

The measurements procedures in TIA -603-D are used.

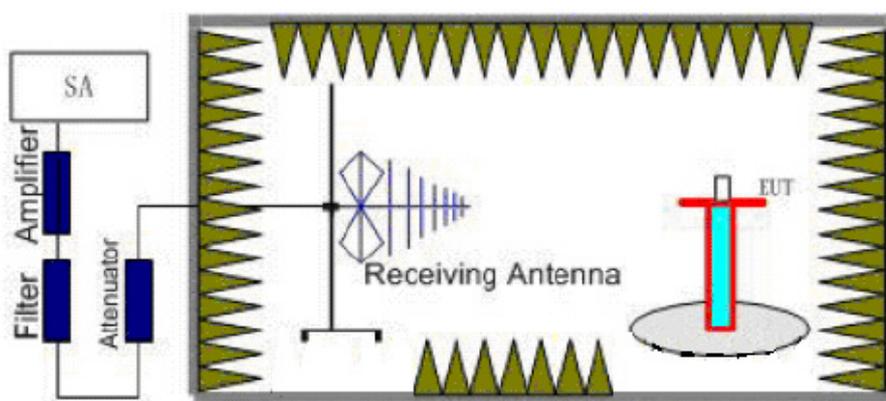
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment.

The emissions less than 20 dB below the permissible value are reported.

The procedure of Radiates Spurious Emission is as follows:

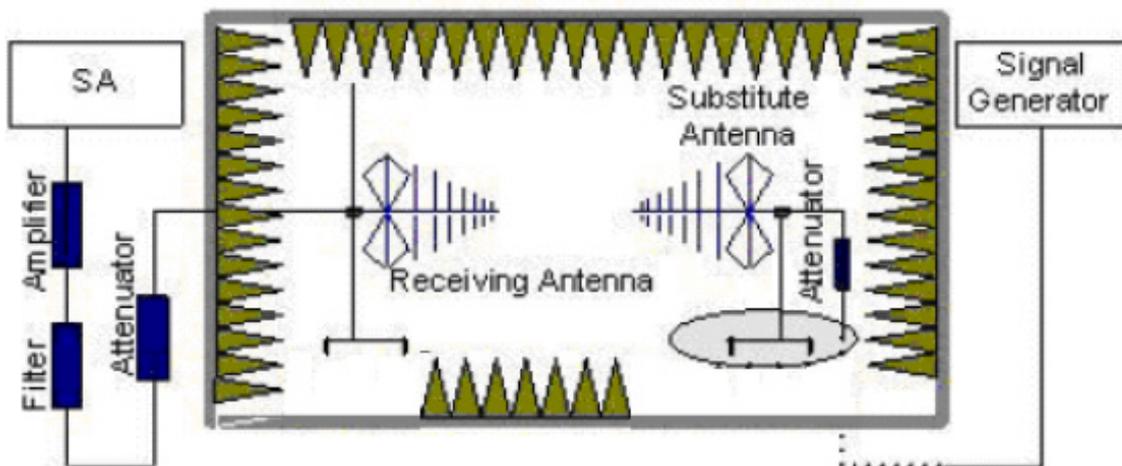
#### Step 1:

The measurement is carried out in the semi-anechoic chamber. EUT was placed on a 1.5 meters high non-conductive table at a 3 meters test distance from the test receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT. A radio link shall be established between EUT and Tester. The output power of the cell signal of the tester will be decreased until the output power of the EUT reach a maximum value. A peak detector is used while RBW and VBW are both set to 100 kHz. During the measurement, the highest emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna moved up and down over a range from 1 to 4 meters in both horizontally and vertically polarized orientations. The test setup refers to figure below.



#### Step 2:

A dipole antenna shall be substituted in place of the EUT. The antenna will be driven by a signal generator with a adjustable S.G. applied through a Tx cable. Adjust the level of the signal generator output until the value of the receiver reach the previously recorded analyzer power level (LVL). Then The E.R.P. /E.I.R.P. of the EUT can be calculated through the level of the signal generator, Tx cable loss and the gain of the substitution antenna. The test setup refers to figure below.



$E.R.P \text{ (peak power)} = S.G. - Tx \text{ Cable loss} + \text{Substitution antenna gain} - 2.15.$   
 $EIRP = E.R.P + 2.15$

**Limits**

Rule Part 22.917(a) specifies that “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.”

Limit	-13 dBm
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**Measurement Uncertainty**

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 1.96$ ,  $U = 3.55$  dB.

**Test Result**

Receiver antenna polarization (horizontal and vertical), the worst emission was found in vertical polarization, and the worst case in vertical polarization was recorded.

## GSM 850 CH128

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1648.5	-67.10	2	10.15	Vertical	-58.95	-13.00	45.95	225
3	2472.6	-55.57	2.51	11.35	Vertical	-46.73	-13.00	33.73	225
4	3297	-63.6	4.2	10.85	Vertical	-56.95	-13.00	43.95	0
5	4121	-59.38	5.2	11.35	Vertical	-53.23	-13.00	40.23	45
6	4945	-60.46	5.5	11.95	Vertical	-54.51	-13.00	41.51	180
7	5769	-61.34	5.7	13.55	Vertical	-53.49	-13.00	40.49	90
8	6594	-59.39	6.3	13.75	Vertical	-51.94	-13.00	38.94	225
9	7418	-59.32	6.8	13.85	Vertical	-52.27	-13.00	39.27	270
10	8242	-58.87	6.9	14.25	Vertical	-51.52	-13.00	38.52	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

## GSM 850 CH190

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1672.9	-62.14	2	10.75	Vertical	-53.39	-13.00	40.39	225
3	2509.7	-57.40	2.51	11.05	Vertical	-48.86	-13.00	35.86	225
4	3346	-63.07	4.2	11.15	Vertical	-56.12	-13.00	43.12	135
5	4183	-60.26	5.2	11.15	Vertical	-54.31	-13.00	41.31	0
6	5020	-59.56	5.5	11.95	Vertical	-53.11	-13.00	40.11	45
7	5856	-61.66	5.7	13.55	Vertical	-53.81	-13.00	40.81	90
8	6693	-59.50	6.3	13.75	Vertical	-52.05	-13.00	39.05	180
9	7529	-60.82	6.8	13.85	Vertical	-53.77	-13.00	40.77	90
10	8366	-60.08	6.9	14.25	Vertical	-52.73	-13.00	39.73	225

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.



## GSM 850 CH251

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1698	-54.23	2	10.15	Vertical	-46.08	-13.00	33.08	90
3	2546	-54.12	2.51	11.05	Vertical	-45.58	-13.00	32.58	135
4	3395	-62.81	4.2	11.15	Vertical	-55.86	-13.00	42.86	270
5	4244	-61.27	5.2	11.15	Vertical	-55.32	-13.00	42.32	0
6	5093	-60.76	5.5	11.95	Vertical	-54.31	-13.00	41.31	180
7	5942	-60.86	5.7	13.55	Vertical	-53.01	-13.00	40.01	90
8	6790	-60.86	6.3	13.75	Vertical	-53.41	-13.00	40.41	225
9	7639	-61.48	6.8	13.85	Vertical	-54.43	-13.00	41.43	270
10	8488	-61.09	6.9	14.25	Vertical	-53.74	-13.00	40.74	135

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

## CDMA BC0 CH1013

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1649.40	-68.85	2	10.15	Vertical	-60.70	-13.00	47.70	225
3	2474.10	-60.56	2.51	11.35	Vertical	-51.72	-13.00	38.72	225
4	3298.80	-63.45	4.2	10.85	Vertical	-56.80	-13.00	43.80	0
5	4123.50	-60.99	5.2	11.35	Vertical	-54.84	-13.00	41.84	45
6	4948.20	-60.31	5.5	11.95	Vertical	-53.86	-13.00	40.86	180
7	5772.90	-61.18	5.7	13.55	Vertical	-53.33	-13.00	40.33	90
8	6597.60	-58.86	6.3	13.75	Vertical	-51.41	-13.00	38.41	225
9	7422.30	-60.58	6.8	13.85	Vertical	-53.53	-13.00	40.53	270
10	8247.00	-60.10	6.9	14.25	Vertical	-52.75	-13.00	39.75	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.



## CDMA BC0 CH384

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.04	-63.26	2	10.75	Vertical	-54.51	-13.00	41.51	225
3	2509.56	-58.24	2.51	11.05	Vertical	-49.70	-13.00	36.70	225
4	3346.08	-63.22	4.2	11.15	Vertical	-56.27	-13.00	43.27	135
5	4182.60	-60.62	5.2	11.15	Vertical	-54.67	-13.00	41.67	0
6	5019.12	-60.71	5.5	11.95	Vertical	-54.26	-13.00	41.26	45
7	5855.64	-61.65	5.7	13.55	Vertical	-53.80	-13.00	40.80	90
8	6692.16	-58.56	6.3	13.75	Vertical	-51.11	-13.00	38.11	180
9	7528.68	-60.98	6.8	13.85	Vertical	-53.93	-13.00	40.93	90
10	8365.20	-59.64	6.9	14.25	Vertical	-52.29	-13.00	39.29	225

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

## CDMA BC0 CH777

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1696.62	-65.68	2	10.15	Vertical	-57.53	-13.00	44.53	90
3	2544.93	-58.17	2.51	11.05	Vertical	-49.63	-13.00	36.63	135
4	3393.24	-62.94	4.2	11.15	Vertical	-55.99	-13.00	42.99	270
5	4241.55	-59.91	5.2	11.15	Vertical	-53.96	-13.00	40.96	0
6	5089.86	-60.94	5.5	11.95	Vertical	-54.49	-13.00	41.49	180
7	5938.17	-63.29	5.7	13.55	Vertical	-55.44	-13.00	42.44	90
8	6786.48	-59.39	6.3	13.75	Vertical	-51.94	-13.00	38.94	225
9	7634.79	-60.21	6.8	13.85	Vertical	-53.16	-13.00	40.16	270
10	8483.10	-60.38	6.9	14.25	Vertical	-53.03	-13.00	40.03	135

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.



## WCDMA Band V CH4357

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1653	-60.99	2	10.15	Vertical	-52.84	-13.00	39.84	180
3	2479	-56.09	2.51	11.35	Vertical	-47.25	-13.00	34.25	90
4	3306	-61.77	4.2	10.85	Vertical	-55.12	-13.00	42.12	0
5	4132	-61.15	5.2	11.35	Vertical	-55.00	-13.00	42.00	270
6	4958	-61.3	5.5	11.95	Vertical	-54.85	-13.00	41.85	315
7	5785	-61.23	5.7	13.55	Vertical	-53.38	-13.00	40.38	180
8	6611	-59.38	6.3	13.75	Vertical	-51.93	-13.00	38.93	270
9	7438	-59.52	6.8	13.85	Vertical	-52.47	-13.00	39.47	135
10	8264	-58.78	6.9	14.25	Vertical	-51.43	-13.00	38.43	45

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

## WCDMA Band V CH4408

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673	-62.07	2	10.75	Vertical	-53.32	-13.00	40.32	225
3	2510	-58.9	2.51	11.05	Vertical	-50.36	-13.00	37.36	270
4	3346	-63.38	4.2	11.15	Vertical	-56.43	-13.00	43.43	0
5	4183	-59.09	5.2	11.15	Vertical	-53.14	-13.00	40.14	270
6	5020	-61.55	5.5	11.95	Vertical	-55.10	-13.00	42.10	315
7	5856	-61.01	5.7	13.55	Vertical	-53.16	-13.00	40.16	225
8	6693	-59.19	6.3	13.75	Vertical	-51.74	-13.00	38.74	135
9	8366	-61.06	6.8	13.85	Vertical	-54.01	-13.00	41.01	270
10	3346	-63.78	6.9	14.25	Vertical	-56.43	-13.00	43.43	0

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

WCDMA Band V CH4458

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1693	-60.63	2	10.15	Vertical	-52.25	-13.00	39.25	135
3	2540	-56.6	2.51	11.05	Vertical	-49.71	-13.00	36.71	45
4	3386	-64.16	4.2	11.15	Vertical	-53.40	-13.00	40.40	0
5	4233	-61.50	5.2	11.15	Vertical	-55.16	-13.00	42.16	135
6	5080	-62.89	5.5	11.95	Vertical	-53.67	-13.00	40.67	0
7	5926	-63.04	5.7	13.55	Vertical	-53.51	-13.00	40.51	45
8	6773	-60.84	6.3	13.75	Vertical	-52.97	-13.00	39.97	180
9	7619	-60.52	6.8	13.85	Vertical	-51.12	-13.00	38.12	90
10	8466	-62.22	6.9	14.25	Vertical	-53.05	-13.00	40.05	225

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

LTE Band 5 1.4MHz CH20407

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1649.4	-68.42	2.00	10.75	vertical	-59.67	-13.00	46.67	225
3	2474.1	-62.24	2.51	11.05	vertical	-53.70	-13.00	40.70	180
4	3298.8	-66.06	4.20	11.15	vertical	-59.11	-13.00	46.11	0
5	4123.5	-63.15	5.20	11.15	vertical	-57.20	-13.00	44.20	90
6	4948.2	-63.09	5.50	11.95	vertical	-56.64	-13.00	43.64	45
7	5772.9	-62.54	5.70	13.55	vertical	-54.69	-13.00	41.69	0
8	6597.6	-60.65	6.30	13.75	vertical	-53.20	-13.00	40.20	135
9	7422.3	-61.43	6.80	13.85	vertical	-54.38	-13.00	41.38	90
10	8247.0	-60.89	6.90	14.25	vertical	-53.54	-13.00	40.54	225

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2.The worst emission was found in the antenna is vertical position.

LTE Band 5 1.4MHz CH20525

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.0	-67.59	2.00	10.75	vertical	-58.84	-13.00	45.84	225
3	2509.5	-62.81	2.51	11.05	vertical	-54.27	-13.00	41.27	180
4	3346.0	-65.78	4.20	11.15	vertical	-58.83	-13.00	45.83	180
5	4182.5	-63.24	5.20	11.15	vertical	-57.29	-13.00	44.29	270
6	5019.0	-62.6	5.50	11.95	vertical	-56.15	-13.00	43.15	45
7	5855.5	-62.99	5.70	13.55	vertical	-55.14	-13.00	42.14	225
8	6692.0	-60.04	6.30	13.75	vertical	-52.59	-13.00	39.59	90
9	7528.5	-62.12	6.80	13.85	vertical	-55.07	-13.00	42.07	135
10	8365.0	-60.91	6.90	14.25	vertical	-53.56	-13.00	40.56	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2.The worst emission was found in the antenna is vertical position.

LTE Band 5 1.4MHz CH20643

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1696.6	-66.83	2.00	10.75	vertical	-58.08	-13.00	45.08	180
3	2544.9	-63.09	2.51	11.05	vertical	-54.55	-13.00	41.55	90
4	3393.2	-65.23	4.20	11.15	vertical	-58.28	-13.00	45.28	180
5	4241.5	-63.92	5.20	11.15	vertical	-57.97	-13.00	44.97	135
6	5089.8	-63.54	5.50	11.95	vertical	-57.09	-13.00	44.09	225
7	5938.1	-62.14	5.70	13.55	vertical	-54.29	-13.00	41.29	180
8	6786.4	-59.11	6.30	13.75	vertical	-51.66	-13.00	38.66	135
9	7634.7	-62.75	6.80	13.85	vertical	-55.70	-13.00	42.70	315
10	8483.0	-61.46	6.90	14.25	vertical	-54.11	-13.00	41.11	315

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2.The worst emission was found in the antenna is vertical position.

LTE Band 5 3MHz CH20415

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1648.3	-52.15	2.00	10.75	vertical	-43.40	-13	30.40	45
3	2476.5	-63.12	2.51	11.05	vertical	-54.58	-13.00	41.58	135
4	3302.0	-65.4	4.20	11.15	vertical	-58.45	-13.00	45.45	135
5	4127.5	-63.15	5.20	11.15	vertical	-57.20	-13.00	44.20	135
6	4953.0	-62.75	5.50	11.95	vertical	-56.30	-13.00	43.30	180
7	5778.5	-62.83	5.70	13.55	vertical	-54.98	-13.00	41.98	270
8	6604.0	-59.27	6.30	13.75	vertical	-51.82	-13.00	38.82	270
9	7429.5	-63.32	6.80	13.85	vertical	-56.27	-13.00	43.27	90
10	8255.0	-60.51	6.90	14.25	vertical	-53.16	-13.00	40.16	315

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2.The worst emission was found in the antenna is vertical position.

LTE Band 5 3MHz CH20525

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1670.3	-52.54	2.00	10.75	vertical	-43.79	-13	30.79	45
3	2509.5	-62.62	2.51	11.05	vertical	-54.08	-13.00	41.08	45
4	3346.0	-64.86	4.20	11.15	vertical	-57.91	-13.00	44.91	180
5	4182.5	-63.85	5.20	11.15	vertical	-57.90	-13.00	44.90	270
6	5019.0	-62.77	5.50	11.95	vertical	-56.32	-13.00	43.32	270
7	5855.5	-63.53	5.70	13.55	vertical	-55.68	-13.00	42.68	90
8	6692.0	-60.1	6.30	13.75	vertical	-52.65	-13.00	39.65	90
9	7528.5	-62.37	6.80	13.85	vertical	-55.32	-13.00	42.32	135
10	8365.0	-59.54	6.90	14.25	vertical	-52.19	-13.00	39.19	90

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2.The worst emission was found in the antenna is vertical position.

LTE Band 5 3MHz CH20635

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1692.5	-55.25	2.00	10.75	vertical	-46.50	-13	33.50	45
3	2542.5	-63.20	2.51	11.05	vertical	-54.66	-13.00	41.66	225
4	3390.0	-65.47	4.20	11.15	vertical	-58.52	-13.00	45.52	180
5	4237.5	-64.15	5.20	11.15	vertical	-58.20	-13.00	45.20	90
6	5085.0	-62.55	5.50	11.95	vertical	-56.10	-13.00	43.10	90
7	5932.5	-64.08	5.70	13.55	vertical	-56.23	-13.00	43.23	90
8	6780.0	-59.45	6.30	13.75	vertical	-52.00	-13.00	39.00	180
9	7627.5	-62.69	6.80	13.85	vertical	-55.64	-13.00	42.64	90
10	8475.0	-59.26	6.90	14.25	vertical	-51.91	-13.00	38.91	45

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
 2.The worst emission was found in the antenna is vertical position.

LTE Band 5 5MHz CH20425

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1649.6	-57.35	2.00	10.75	vertical	-48.60	-13	35.60	90
3	2479.5	-62.3	2.51	11.05	vertical	-53.76	-13.00	40.76	225
4	3306.0	-65.88	4.20	11.15	vertical	-58.93	-13.00	45.93	135
5	4132.5	-64.61	5.20	11.15	vertical	-58.66	-13.00	45.66	135
6	4959.0	-62.49	5.50	11.95	vertical	-56.04	-13.00	43.04	270
7	5785.5	-63.92	5.70	13.55	vertical	-56.07	-13.00	43.07	270
8	6612.0	-58.81	6.30	13.75	vertical	-51.36	-13.00	38.36	45
9	7438.5	-63.45	6.80	13.85	vertical	-56.40	-13.00	43.40	225
10	8265.0	-60.02	6.90	14.25	vertical	-52.67	-13.00	39.67	135

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
 2.The worst emission was found in the antenna is vertical position.

LTE Band 5 5MHz CH20525

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.0	-67.97	2.00	10.75	vertical	-59.22	-13.00	46.22	270
3	2509.5	-61.9	2.51	11.05	vertical	-53.36	-13.00	40.36	135
4	3346.0	-64.91	4.20	11.15	vertical	-57.96	-13.00	44.96	180
5	4182.5	-64.57	5.20	11.15	vertical	-58.62	-13.00	45.62	90
6	5019.0	-62.95	5.50	11.95	vertical	-56.50	-13.00	43.50	270
7	5855.5	-64.89	5.70	13.55	vertical	-57.04	-13.00	44.04	135
8	6692.0	-59.74	6.30	13.75	vertical	-52.29	-13.00	39.29	90
9	7528.5	-62.48	6.80	13.85	vertical	-55.43	-13.00	42.43	315
10	8365.0	-60.7	6.90	14.25	vertical	-53.35	-13.00	40.35	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
 2.The worst emission was found in the antenna is vertical position.

LTE Band 5 5MHz CH20625

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1693.0	-68.24	2.00	10.75	vertical	-59.49	-13.00	46.49	225
3	2539.5	-61.96	2.51	11.05	vertical	-53.42	-13.00	40.42	270
4	3386.0	-65.6	4.20	11.15	vertical	-58.65	-13.00	45.65	135
5	4232.5	-64.1	5.20	11.15	vertical	-58.15	-13.00	45.15	315
6	5079.0	-62.02	5.50	11.95	vertical	-55.57	-13.00	42.57	270
7	5925.5	-65.2	5.70	13.55	vertical	-57.35	-13.00	44.35	90
8	6772.0	-59.77	6.30	13.75	vertical	-52.32	-13.00	39.32	90
9	7618.5	-62.2	6.80	13.85	vertical	-55.15	-13.00	42.15	135
10	8465.0	-59.76	6.90	14.25	vertical	-52.41	-13.00	39.41	270

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
 2.The worst emission was found in the antenna is vertical position.

LTE Band 5 10MHz CH20450

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1658.0	-54.25	2.00	10.75	vertical	-45.50	-13	32.50	90
3	2487.0	-61.12	2.51	11.05	vertical	-52.58	-13.00	39.58	270
4	3316.0	-66.28	4.20	11.15	vertical	-59.33	-13.00	46.33	225
5	4145.0	-63.8	5.20	11.15	vertical	-57.85	-13.00	44.85	45
6	4974.0	-62.15	5.50	11.95	vertical	-55.70	-13.00	42.70	225
7	5803.0	-64.22	5.70	13.55	vertical	-56.37	-13.00	43.37	90
8	6632.0	-60.75	6.30	13.75	vertical	-53.30	-13.00	40.30	225
9	7461.0	-63.16	6.80	13.85	vertical	-56.11	-13.00	43.11	90
10	8290.0	-59.19	6.90	14.25	vertical	-51.84	-13.00	38.84	135

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2.The worst emission was found in the antenna is vertical position.

LTE Band 5 10MHz CH20525

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.0	-50.95	2.00	10.75	vertical	-42.20	-13	29.20	45
3	2509.5	-61.52	2.51	11.05	vertical	-52.98	-13.00	39.98	225
4	3346.0	-65.71	4.20	11.15	vertical	-58.76	-13.00	45.76	180
5	4182.5	-63.63	5.20	11.15	vertical	-57.68	-13.00	44.68	180
6	5019.0	-61.66	5.50	11.95	vertical	-55.21	-13.00	42.21	135
7	5855.5	-63.55	5.70	13.55	vertical	-55.70	-13.00	42.70	135
8	6692.0	-61.02	6.30	13.75	vertical	-53.57	-13.00	40.57	90
9	7528.5	-62.37	6.80	13.85	vertical	-55.32	-13.00	42.32	45
10	8365.0	-58.75	6.90	14.25	vertical	-51.40	-13.00	38.40	270

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2.The worst emission was found in the antenna is vertical position.



## LTE Band 5 10MHz CH20600

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1688.0	-69.12	2.00	10.75	vertical	-60.37	-13.00	47.37	180
3	2532.0	-61.78	2.51	11.05	vertical	-53.24	-13.00	40.24	270
4	3376.0	-65.67	4.20	11.15	vertical	-58.72	-13.00	45.72	135
5	4220.0	-63.98	5.20	11.15	vertical	-58.03	-13.00	45.03	315
6	5064.0	-61.19	5.50	11.95	vertical	-54.74	-13.00	41.74	270
7	5908.0	-63.81	5.70	13.55	vertical	-55.96	-13.00	42.96	270
8	6752.0	-60.04	6.30	13.75	vertical	-52.59	-13.00	39.59	270
9	7596.0	-62.10	6.80	13.85	vertical	-55.05	-13.00	42.05	90
10	8440.0	-57.77	6.90	14.25	vertical	-50.42	-13.00	37.42	45

- Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
2.The worst emission was found in the antenna is vertical position.

## LTE Band 26 1.4MHz CH26797

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1629.40	-57.07	2.00	10.75	vertical	-48.32	-13.00	35.32	225
3	2444.10	-50.88	2.51	11.05	vertical	-42.34	-13.00	29.34	90
4	3258.80	-51.42	4.20	11.15	vertical	-44.47	-13.00	31.47	0
5	4073.50	-56.44	5.20	11.15	vertical	-50.49	-13.00	37.49	90
6	4888.20	-56.32	5.50	11.95	vertical	-49.87	-13.00	36.87	45
7	5702.90	-50.50	5.70	13.55	vertical	-42.65	-13.00	29.65	0
8	6517.60	-52.04	6.30	13.75	vertical	-44.59	-13.00	31.59	135
9	7332.30	-48.74	6.80	13.85	vertical	-41.69	-13.00	28.69	90
10	8147.00	-52.73	6.90	14.25	vertical	-45.38	-13.00	32.38	225

- Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
2.The worst emission was found in the antenna is vertical position.

LTE Band 26 1.4MHz CH26915

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.0	-53.33	2.00	10.75	vertical	-44.58	-13.00	31.58	0
3	2509.5	-59.68	2.51	11.05	vertical	-51.14	-13.00	38.14	180
4	3346.0	-60.50	4.20	11.15	vertical	-53.55	-13.00	40.55	180
5	4182.5	-56.13	5.20	11.15	vertical	-50.18	-13.00	37.18	270
6	5019.0	-56.91	5.50	11.95	vertical	-50.46	-13.00	37.46	45
7	5855.5	-51.53	5.70	13.55	vertical	-43.68	-13.00	30.68	225
8	6692.0	-50.91	6.30	13.75	vertical	-43.46	-13.00	30.46	90
9	7528.5	-49.30	6.80	13.85	vertical	-42.25	-13.00	29.25	135
10	8365.0	-51.54	6.90	14.25	vertical	-44.19	-13.00	31.19	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
 2.The worst emission was found in the antenna is vertical position.

LTE Band 26 1.4MHz CH27033

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1696.6	-51.34	2.00	10.75	vertical	-42.59	-13.00	29.59	180
3	2544.9	-58.89	2.51	11.05	vertical	-50.35	-13.00	37.35	90
4	3393.2	-52.63	4.20	11.15	vertical	-45.68	-13.00	32.68	180
5	4241.5	-56.30	5.20	11.15	vertical	-50.35	-13.00	37.35	135
6	5089.8	-56.33	5.50	11.95	vertical	-49.88	-13.00	36.88	225
7	5938.1	-52.51	5.70	13.55	vertical	-44.66	-13.00	31.66	180
8	6786.4	-50.50	6.30	13.75	vertical	-43.05	-13.00	30.05	135
9	7634.7	-49.52	6.80	13.85	vertical	-42.47	-13.00	29.47	315
10	8483.0	-53.19	6.90	14.25	vertical	-45.84	-13.00	32.84	315

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
 2.The worst emission was found in the antenna is vertical position.

LTE Band 26 3MHz CH26805

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1651.0	39.69	2.00	10.75	vertical	48.44	-13.00	-61.44	45
3	2476.5	-59.89	2.51	11.05	vertical	-51.35	-13.00	38.35	135
4	3302.0	-52.63	4.20	11.15	vertical	-45.68	-13.00	32.68	135
5	4127.5	-56.39	5.20	11.15	vertical	-50.44	-13.00	37.44	135
6	4953.0	-56.08	5.50	11.95	vertical	-49.63	-13.00	36.63	180
7	5778.5	-52.43	5.70	13.55	vertical	-44.58	-13.00	31.58	270
8	6604.0	-51.10	6.30	13.75	vertical	-43.65	-13.00	30.65	270
9	7429.5	-49.97	6.80	13.85	vertical	-42.92	-13.00	29.92	90
10	8255.0	-52.62	6.90	14.25	vertical	-45.27	-13.00	32.27	315

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
 2.The worst emission was found in the antenna is vertical position.

LTE Band 26 3MHz CH26915

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.0	-57.76	2.00	10.75	vertical	-49.01	-13.00	36.01	45
3	2509.5	-59.11	2.51	11.05	vertical	-50.57	-13.00	37.57	45
4	3346.0	-50.43	4.20	11.15	vertical	-43.48	-13.00	30.48	180
5	4182.5	-56.76	5.20	11.15	vertical	-50.81	-13.00	37.81	270
6	5019.0	-57.29	5.50	11.95	vertical	-50.84	-13.00	37.84	270
7	5855.5	-51.69	5.70	13.55	vertical	-43.84	-13.00	30.84	90
8	6692.0	-51.37	6.30	13.75	vertical	-43.92	-13.00	30.92	90
9	7528.5	-49.32	6.80	13.85	vertical	-42.27	-13.00	29.27	135
10	8365.0	-52.27	6.90	14.25	vertical	-44.92	-13.00	31.92	90

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
 2.The worst emission was found in the antenna is vertical position.

LTE Band 26 3MHz CH27025

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1695.0	-56.10	2.00	10.75	vertical	-47.35	-13.00	34.35	225
3	2542.5	-58.88	2.51	11.05	vertical	-50.34	-13.00	37.34	225
4	3390.0	-51.42	4.20	11.15	vertical	-44.47	-13.00	31.47	180
5	4237.5	-56.60	5.20	11.15	vertical	-50.65	-13.00	37.65	90
6	5085.0	-56.06	5.50	11.95	vertical	-49.61	-13.00	36.61	90
7	5932.5	-50.39	5.70	13.55	vertical	-42.54	-13.00	29.54	90
8	6780.0	-52.21	6.30	13.75	vertical	-44.76	-13.00	31.76	180
9	7627.5	-48.64	6.80	13.85	vertical	-41.59	-13.00	28.59	90
10	8475.0	-51.72	6.90	14.25	vertical	-44.37	-13.00	31.37	45

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
 2.The worst emission was found in the antenna is vertical position.

LTE Band 26 5MHz CH26815

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1653.0	-56.12	2.00	10.75	vertical	-47.37	-13.00	34.37	180
3	2479.5	-60.00	2.51	11.05	vertical	-51.46	-13.00	38.46	225
4	3306.0	-52.23	4.20	11.15	vertical	-45.28	-13.00	32.28	135
5	4132.5	-56.88	5.20	11.15	vertical	-50.93	-13.00	37.93	135
6	4959.0	-55.82	5.50	11.95	vertical	-49.37	-13.00	36.37	270
7	5785.5	-52.65	5.70	13.55	vertical	-44.80	-13.00	31.80	270
8	6612.0	-50.50	6.30	13.75	vertical	-43.05	-13.00	30.05	45
9	7438.5	-49.69	6.80	13.85	vertical	-42.64	-13.00	29.64	225
10	8265.0	-52.87	6.90	14.25	vertical	-45.52	-13.00	32.52	135

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
 2.The worst emission was found in the antenna is vertical position.

LTE Band 26 5MHz CH26915

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.0	-59.73	2.00	10.75	vertical	-50.98	-13.00	37.98	270
3	2509.5	-59.26	2.51	11.05	vertical	-50.72	-13.00	37.72	135
4	3346.0	-50.02	4.20	11.15	vertical	-43.07	-13.00	30.07	180
5	4182.5	-56.30	5.20	11.15	vertical	-50.35	-13.00	37.35	90
6	5019.0	-56.80	5.50	11.95	vertical	-50.35	-13.00	37.35	270
7	5855.5	-51.20	5.70	13.55	vertical	-43.35	-13.00	30.35	135
8	6692.0	-50.62	6.30	13.75	vertical	-43.17	-13.00	30.17	90
9	7528.5	-49.87	6.80	13.85	vertical	-42.82	-13.00	29.82	315
10	8365.0	-51.73	6.90	14.25	vertical	-44.38	-13.00	31.38	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2.The worst emission was found in the antenna is vertical position.

LTE Band 26 5MHz CH27015

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1693.0	-59.40	2.00	10.75	vertical	-50.65	-13.00	37.65	225
3	2539.5	-59.48	2.51	11.05	vertical	-50.94	-13.00	37.94	270
4	3386.0	-51.87	4.20	11.15	vertical	-44.92	-13.00	31.92	135
5	4232.5	-56.47	5.20	11.15	vertical	-50.52	-13.00	37.52	315
6	5079.0	-55.51	5.50	11.95	vertical	-49.06	-13.00	36.06	270
7	5925.5	-50.77	5.70	13.55	vertical	-42.92	-13.00	29.92	90
8	6772.0	-51.69	6.30	13.75	vertical	-44.24	-13.00	31.24	90
9	7618.5	-48.11	6.80	13.85	vertical	-41.06	-13.00	28.06	135
10	8465.0	-52.25	6.90	14.25	vertical	-44.90	-13.00	31.90	270

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2.The worst emission was found in the antenna is vertical position.

LTE Band 26 10MHz CH26840

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1640.00	-59.03	2.00	10.75	vertical	-50.28	-13.00	37.28	180
3	2460.00	-60.41	2.51	11.05	vertical	-51.87	-13.00	38.87	270
4	3280.00	-58.64	4.20	11.15	vertical	-51.69	-13.00	38.69	225
5	4100.00	-57.37	5.20	11.15	vertical	-51.42	-13.00	38.42	45
6	4920.00	-56.60	5.50	11.95	vertical	-50.15	-13.00	37.15	225
7	5740.00	-55.87	5.70	13.55	vertical	-48.02	-13.00	35.02	90
8	6560.00	-52.40	6.30	13.75	vertical	-44.95	-13.00	31.95	225
9	7380.00	-49.10	6.80	13.85	vertical	-42.05	-13.00	29.05	90
10	8200.00	39.00	6.90	14.25	vertical	46.35	-13.00	-59.35	135

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
 2.The worst emission was found in the antenna is vertical position.

LTE Band 26 10MHz CH26915

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.0	-56.02	2.00	10.75	vertical	-47.27	-13.00	34.27	90
3	2509.5	-59.77	2.51	11.05	vertical	-51.23	-13.00	38.23	225
4	3346.0	-59.41	4.20	11.15	vertical	-52.46	-13.00	39.46	180
5	4182.5	-56.50	5.20	11.15	vertical	-50.55	-13.00	37.55	180
6	5019.0	-56.93	5.50	11.95	vertical	-50.48	-13.00	37.48	135
7	5855.5	-55.47	5.70	13.55	vertical	-47.62	-13.00	34.62	135
8	6692.0	-49.00	6.30	13.75	vertical	-41.55	-13.00	28.55	90
9	7528.5	-50.00	6.80	13.85	vertical	-42.95	-13.00	29.95	45
10	8365.0	36.95	6.90	14.25	vertical	44.30	-13.00	-57.30	270

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
 2.The worst emission was found in the antenna is vertical position.



## LTE Band 26 10MHz CH26990

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1688.0	-59.26	2.00	10.75	vertical	-50.51	-13.00	37.51	180
3	2532.0	-58.95	2.51	11.05	vertical	-50.41	-13.00	37.41	270
4	3376.0	-60.41	4.20	11.15	vertical	-53.46	-13.00	40.46	135
5	4220.0	-57.80	5.20	11.15	vertical	-51.85	-13.00	38.85	315
6	5064.0	-56.91	5.50	11.95	vertical	-50.46	-13.00	37.46	270
7	5908.0	-56.53	5.70	13.55	vertical	-48.68	-13.00	35.68	270
8	6752.0	-51.40	6.30	13.75	vertical	-43.95	-13.00	30.95	270
9	7596.0	-49.06	6.80	13.85	vertical	-42.01	-13.00	29.01	90
10	8440.0	38.29	6.90	14.25	vertical	45.64	-13.00	-58.64	45

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2.The worst emission was found in the antenna is vertical position.

## LTE Band 26 15MHz CH26865

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1663.0	-61.55	2.00	10.75	vertical	-52.80	-13.00	39.80	180
3	2494.5	-60.38	2.51	11.05	vertical	-51.84	-13.00	38.84	270
4	3326.0	-58.63	4.20	11.15	vertical	-51.68	-13.00	38.68	225
5	4157.5	-58.00	5.20	11.15	vertical	-52.05	-13.00	39.05	45
6	4989.0	-57.50	5.50	11.95	vertical	-51.05	-13.00	38.05	225
7	5820.5	-56.53	5.70	13.55	vertical	-48.68	-13.00	35.68	90
8	6652.0	-51.60	6.30	13.75	vertical	-44.15	-13.00	31.15	225
9	7483.5	-49.24	6.80	13.85	vertical	-42.19	-13.00	29.19	90
10	8315.0	-52.74	6.90	14.25	vertical	-45.39	-13.00	32.39	135

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2.The worst emission was found in the antenna is vertical position.

LTE Band 26 15MHz CH26915

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.0	-58.62	2.00	10.75	vertical	-49.87	-13.00	36.87	90
3	2509.5	-61.07	2.51	11.05	vertical	-52.53	-13.00	39.53	225
4	3346.0	-59.80	4.20	11.15	vertical	-52.85	-13.00	39.85	180
5	4182.5	-57.00	5.20	11.15	vertical	-51.05	-13.00	38.05	180
6	5019.0	-57.29	5.50	11.95	vertical	-50.84	-13.00	37.84	135
7	5855.5	-55.26	5.70	13.55	vertical	-47.41	-13.00	34.41	135
8	6692.0	-48.51	6.30	13.75	vertical	-41.06	-13.00	28.06	90
9	7528.5	-49.11	6.80	13.85	vertical	-42.06	-13.00	29.06	45
10	8365.0	-53.56	6.90	14.25	vertical	-46.21	-13.00	33.21	270

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is vertical position.

LTE Band 26 15MHz CH26965

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1683.0	-59.62	2.00	10.75	vertical	-50.87	-13.00	37.87	180
3	2524.5	-61.86	2.51	11.05	vertical	-53.32	-13.00	40.32	270
4	3366.0	-59.80	4.20	11.15	vertical	-52.85	-13.00	39.85	135
5	4207.5	-58.00	5.20	11.15	vertical	-52.05	-13.00	39.05	315
6	5049.0	-56.47	5.50	11.95	vertical	-50.02	-13.00	37.02	270
7	5890.5	-56.11	5.70	13.55	vertical	-48.26	-13.00	35.26	270
8	6732.0	-50.80	6.30	13.75	vertical	-43.35	-13.00	30.35	270
9	7573.5	-49.06	6.80	13.85	vertical	-42.01	-13.00	29.01	90
10	8415.0	-51.89	6.90	14.25	vertical	-44.54	-13.00	31.54	45

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is vertical position.

## 6. Main Test Instruments

Name	Type	Manufacturer	Serial Number	Calibration Date	Expiration Time
Base Station Simulator	CMW500	R&S	113645	2015-05-22	2016-05-21
Power Splitter	SHX-GF2-2-13	Hua Xiang	10120101	NA	NA
Spectrum Analyzer	E4445A	Agilent	MY46181146	2015-05-22	2016-05-21
Spectrum Analyzer	N9010A	Agilent	MY47191109	2015-05-22	2016-05-21
Universal Radio Communication Tester	E5515C	Agilent	MY48367192	2015-12-17	2016-12-16
Signal Analyzer	FSV30	R&S	100815	2015-12-17	2016-12-16
Signal generator	SMB 100A	R&S	102594	2015-05-22	2016-05-21
Signal generator	SMR27	R&S	100365	2015-05-22	2016-05-21
EMI Test Receiver	ESCI	R&S	100948	2015-05-22	2016-05-21
Trilog Antenna	VUBL 9163	SCHWARZBECK	9163-201	2014-12-06	2017-12-05
Trilog Antenna	VUBL 9163	SCHWARZBECK	9163-391	2014-12-06	2017-12-05
Horn Antenna	HF907	R&S	100126	2014-12-06	2017-12-05
Horn Antenna	HF907	R&S	100125	2014-12-06	2017-12-05
Climatic Chamber	PT-30B	Re Ce	20101891	2015-07-18	2016-07-17
RF Cable	SMA 15cm	Agilent	0001	2016-01-09	2016-03-08

\*\*\*\*\*END OF REPORT \*\*\*\*\*