



According to RSS-132 5.5:

Mobile and base station equipment shall comply with the limits in (i) and (ii) below.

(i) In the first 1.0 MHz band immediately outside and adjacent to each of the sub-bands specified in Section 5.1, the power of emissions per any 1% of the occupied bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts).

(ii) After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts). If the measurement is performed

According to RSS-133 6.5:

Equipment shall comply with the limits in (i) and (ii) below.

(i) In the 1.0 MHz bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1% of the emission bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts).

(ii) After the first 1.0 MHz, the emission power in any 1 MHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts). If the measurement is performed using 1% of the emission bandwidth, power integration over 1.0 MHz is required.

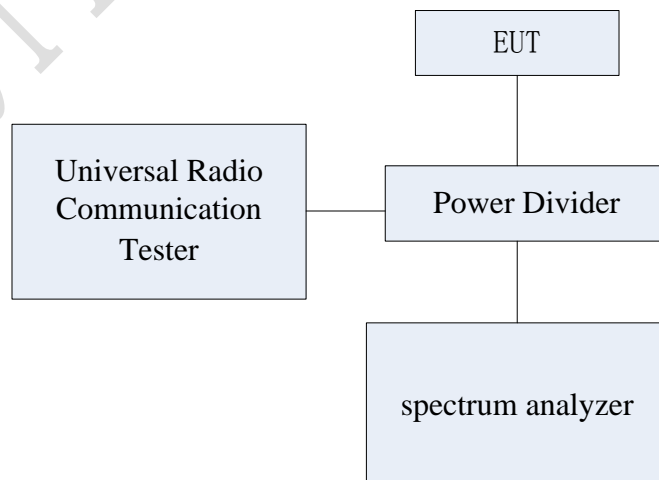
According to RSS-139 6.6:

(i) In the first 1.0 MHz bands immediately outside and adjacent to the equipment's smallest operating frequency block, which can contain the equipment's occupied bandwidth, the emission power per any 1% of the emission bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least $43 + 10 \log_{10} p$ (watts) dB.

(ii) After the first 1.0 MHz outside the equipment's smallest operating frequency block, which can contain the equipment's occupied bandwidth, the emission power in any 1 MHz bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least $43 + 10 \log_{10} p$ (watts) dB.

Test Setup:

During the test, the EUT was controlled via the Wireless Communications Test Set to ensure max power transmission and proper modulation and measured by spectrum analyzer.





Test Method:

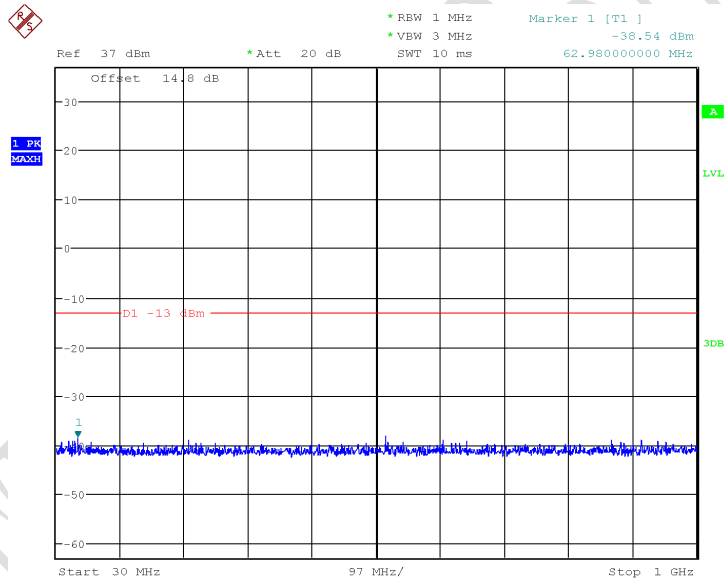
The measurement was performed accordance with section 2.2.13 of ANSI/TIA-603-D: Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

The measurement was performed accordance with section 2.2.13 of ANSI/TIA-603-D-2010: Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band emissions, if any, up to 10th harmonic. The EUT was scanned for spurious emissions from 30MHz to 20GHz with sufficient bandwidth and video resolution. The spectrum analyzer was set to Maximum hold mode to ensure that the worst-case emissions were captured.

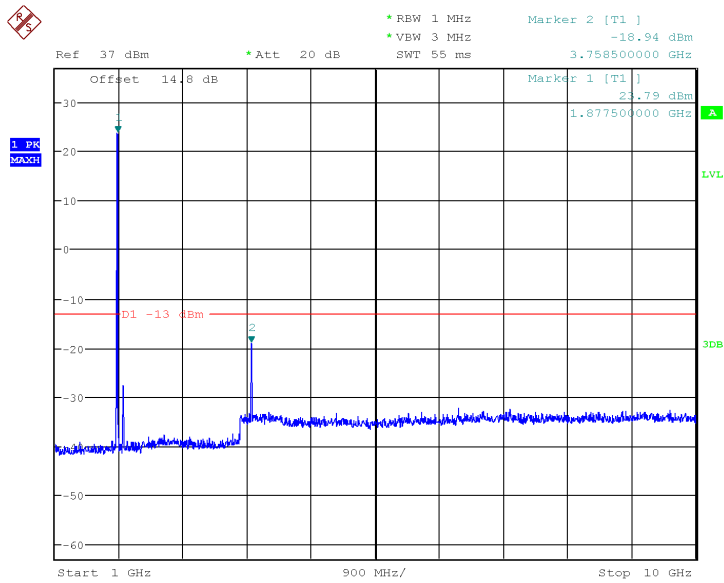
Note: --

5.3.1 WCDMA Band mode Conducted Spurious Emission Results



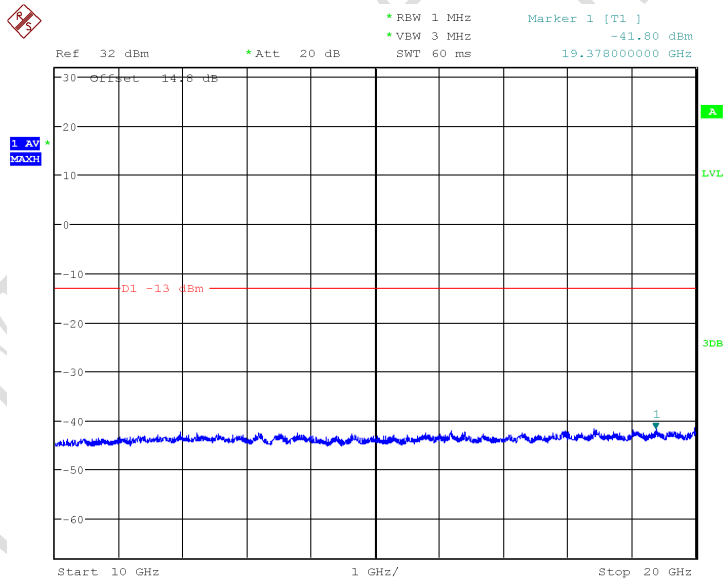
Date: 23.JUN.2017 14:32:46

WCDMA Band 2 Middle Channel, 1880 MHz, 30MHz to 1GHz



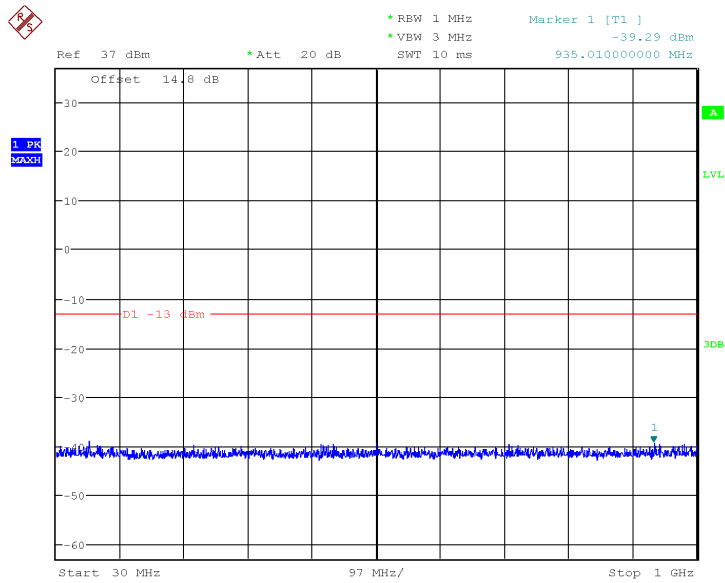
Date: 23.JUN.2017 14:33:24

WCDMA Band 2 Middle Channel, 1880 MHz, 1GHz to 10GHz
Note: The strong emission shown in each case is the carrier signal.



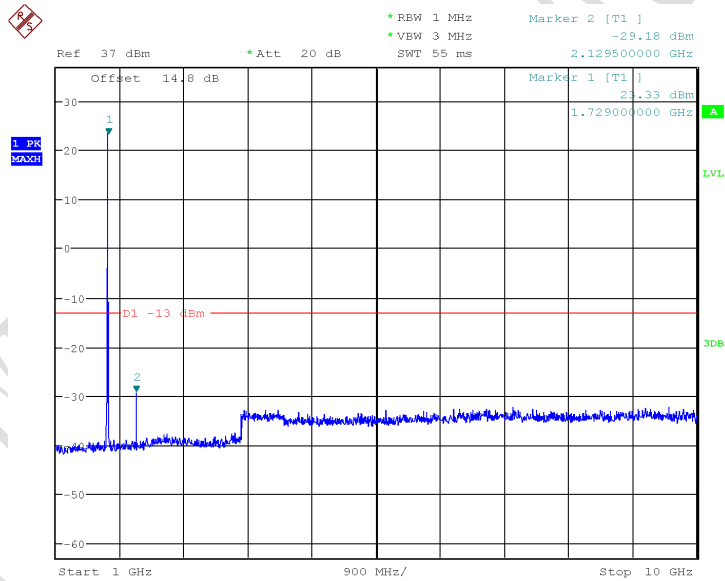
Date: 27.JUN.2017 10:40:11

WCDMA Band 2 Middle Channel, 1880 MHz, 10GHz to 20GHz



Date: 23.JUN.2017 15:10:05

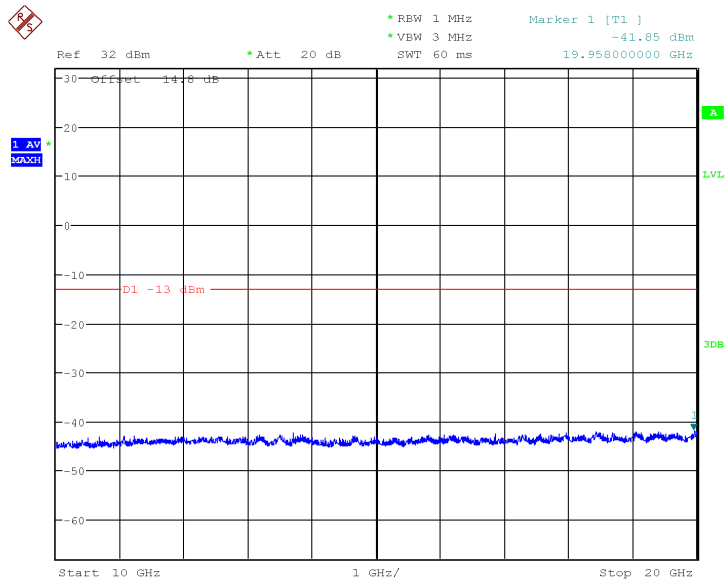
WCDMA Band 4 Middle Channel, 1732.4 MHz, 30MHz to 1GHz



Date: 23.JUN.2017 15:09:48

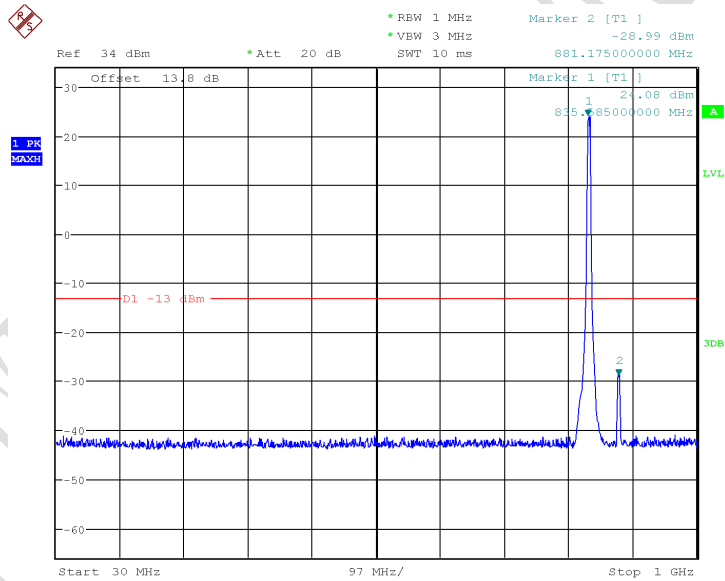
WCDMA Band 4 Middle Channel, 1732.4 MHz, 1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.



Date: 27.JUN.2017 10:40:44

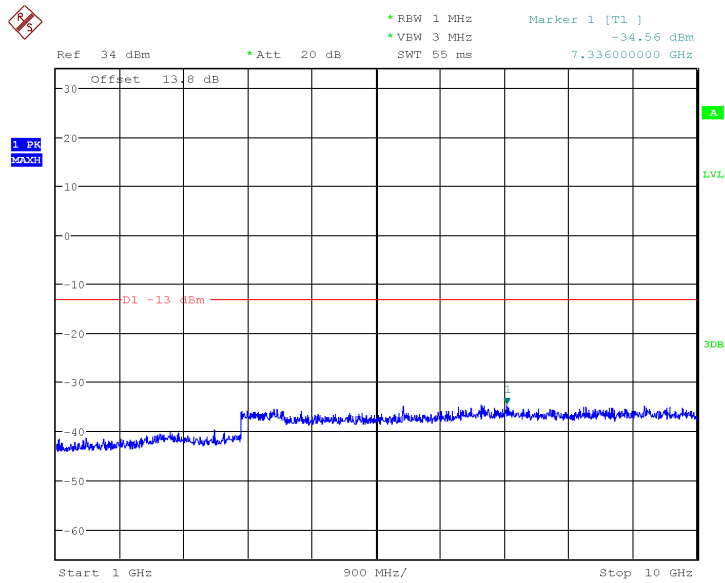
WCDMA Band 4 Middle Channel, 1732.4 MHz, 10GHz to 20GHz



Date: 23.JUN.2017 14:26:50

WCDMA Band 5 Middle Channel, 836.4 MHz, 30MHz to 1GHz

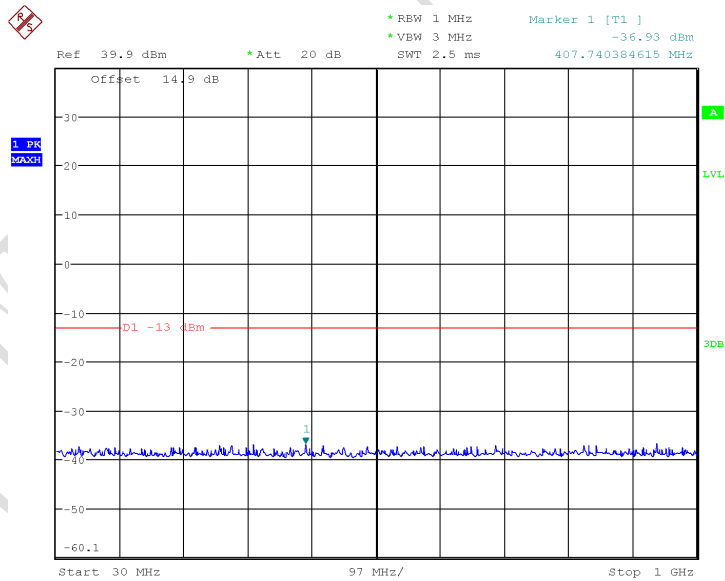
Note: The strong emission shown in each case is the carrier signal.



Date: 23.JUN.2017 14:27:36

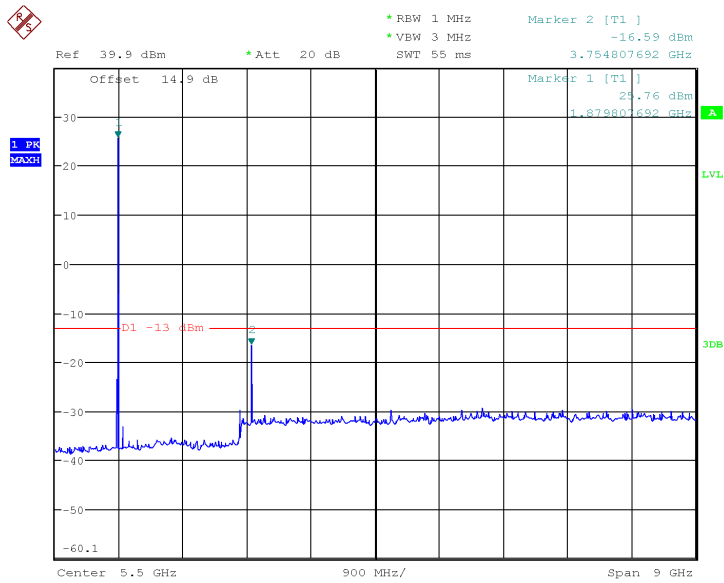
WCDMA Band 5 Middle Channel, 836.4 MHz, 1GHz to 10GHz

5.3.2 LTE B2 Conducted Spurious Emission Results



Date: 20.JUN.2017 17:38:09

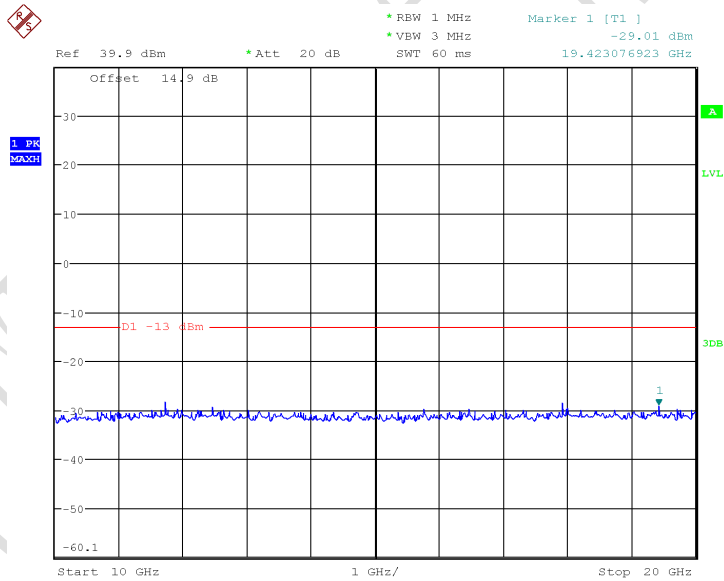
1.4MHz bandwidth QPSK Mode Middle channel, 1880 MHz, 30MHz to 1GHz



Date: 20.JUN.2017 17:37:53

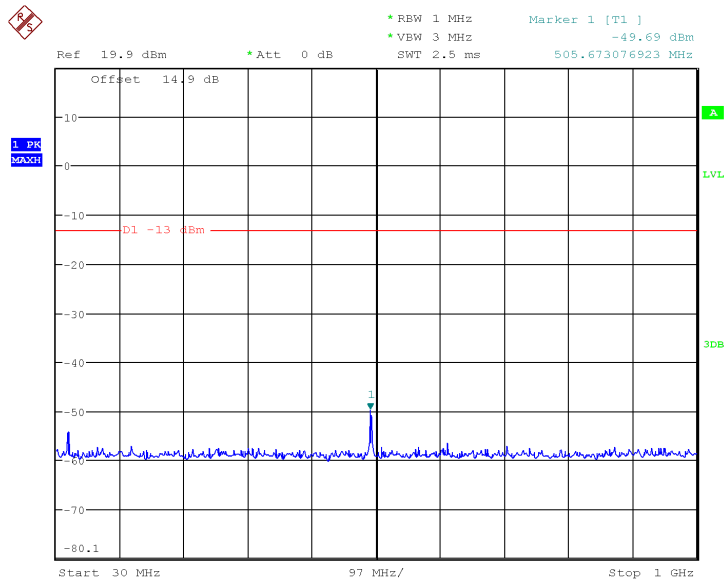
1.4MHz bandwidth QPSK Middle channel, 1880MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.



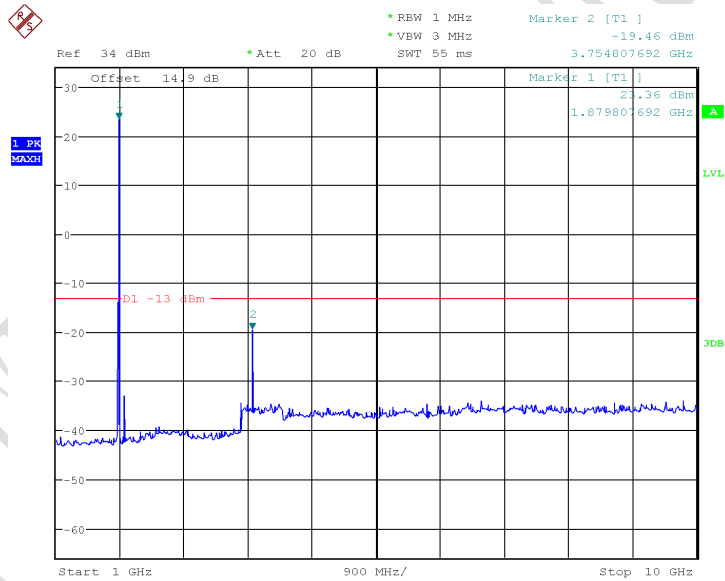
Date: 20.JUN.2017 17:38:29

1.4MHz bandwidth QPSK Middle channel, 1880 MHz,10GHz to 20GHz



Date: 20.JUN.2017 17:39:23

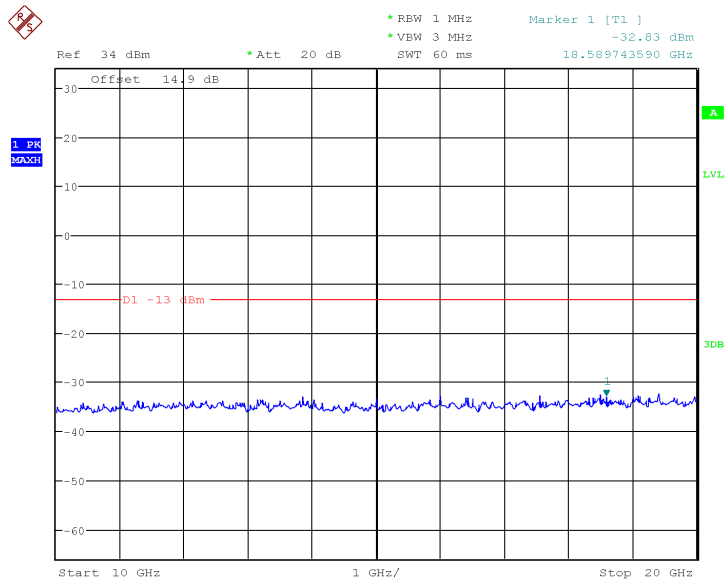
3MHz bandwidth QPSK Mode Middle Channel, 1880 MHz, 30MHz to 1GHz



Date: 20.JUN.2017 17:39:53

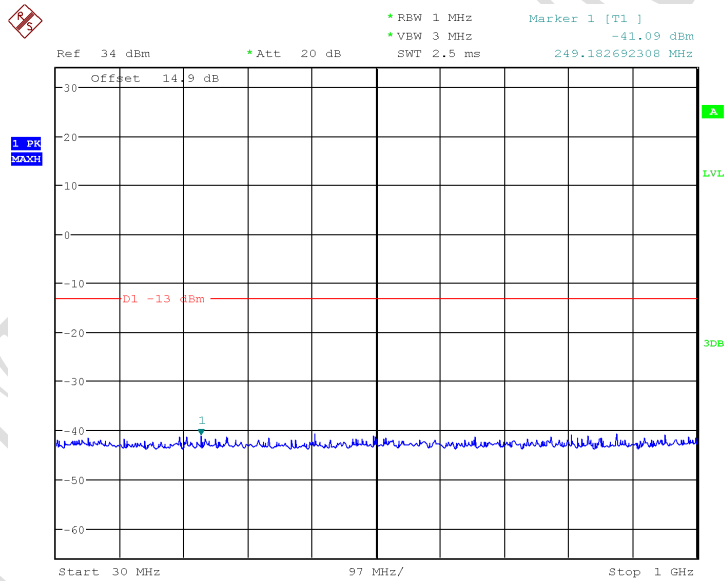
3MHz bandwidth QPSK Middle Channel, 1880 MHz, 1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.



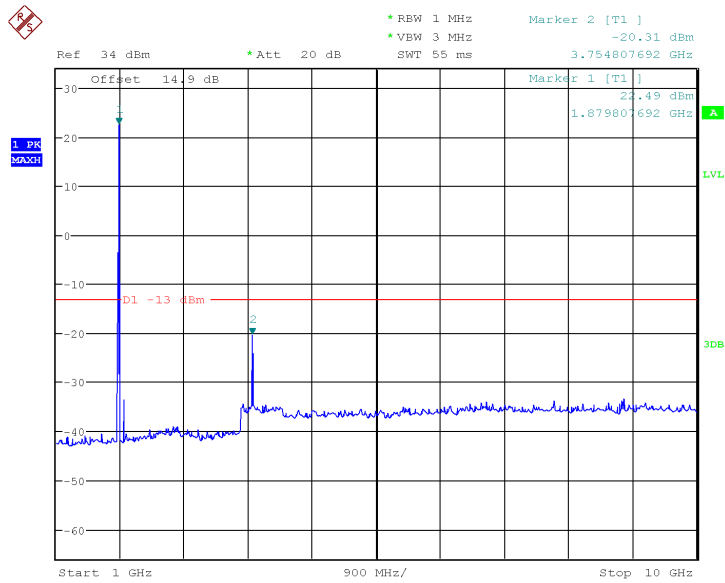
Date: 20.JUN.2017 17:40:20

3MHz bandwidth QPSK Middle Channel, 1880 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 17:40:46

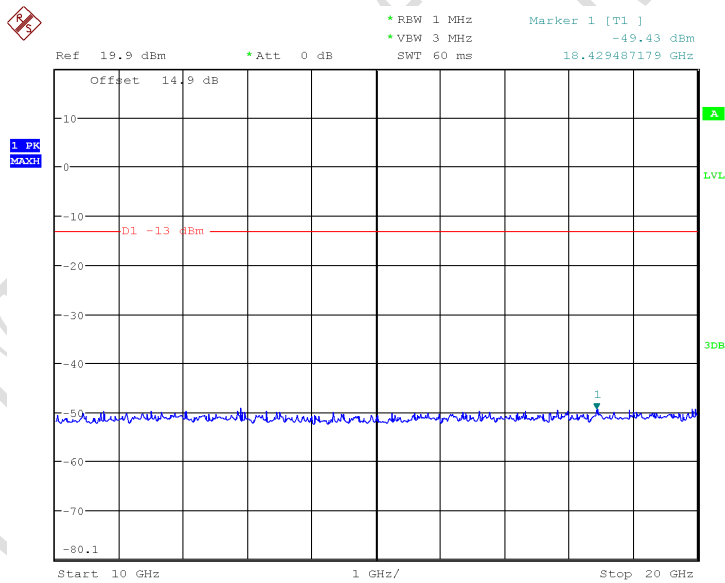
5MHz bandwidth QPSK Mode Middle Channel, 1880 MHz, 30MHz to 1GHz



Date: 20.JUN.2017 17:41:21

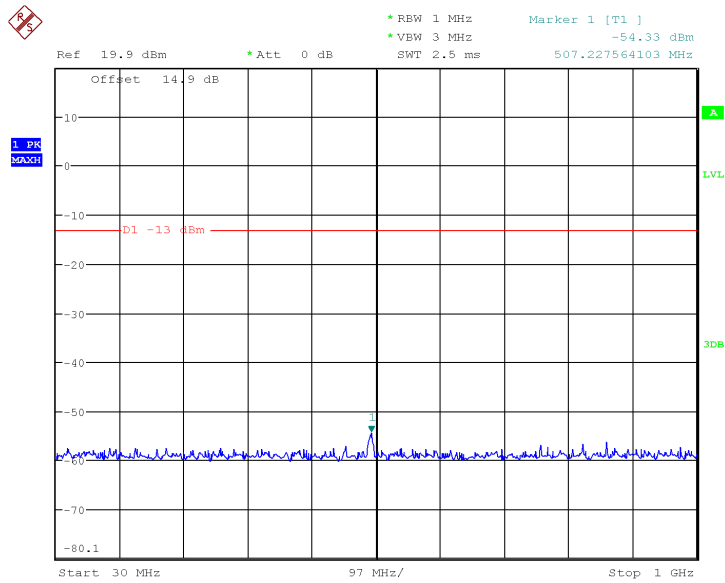
5MHz bandwidth QPSK Mode Middle Channel, 1880 MHz, 1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.



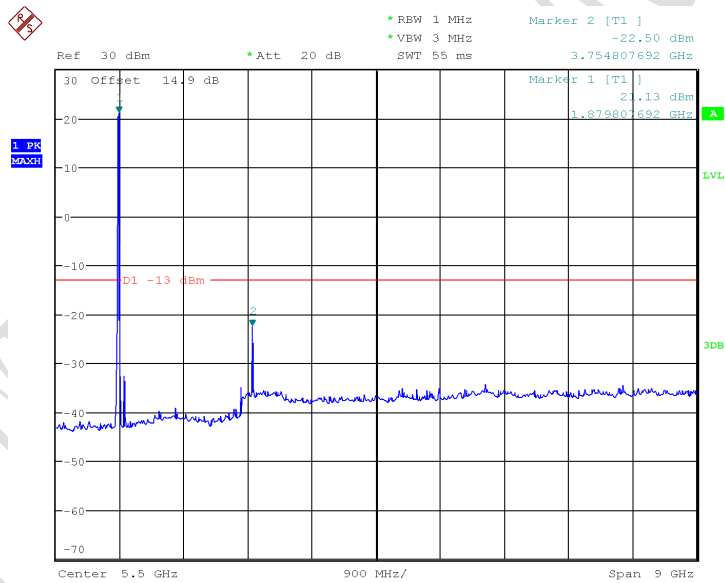
Date: 20.JUN.2017 17:41:59

5MHz bandwidth QPSK Mode Middle Channel, 1880 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 17:42:50

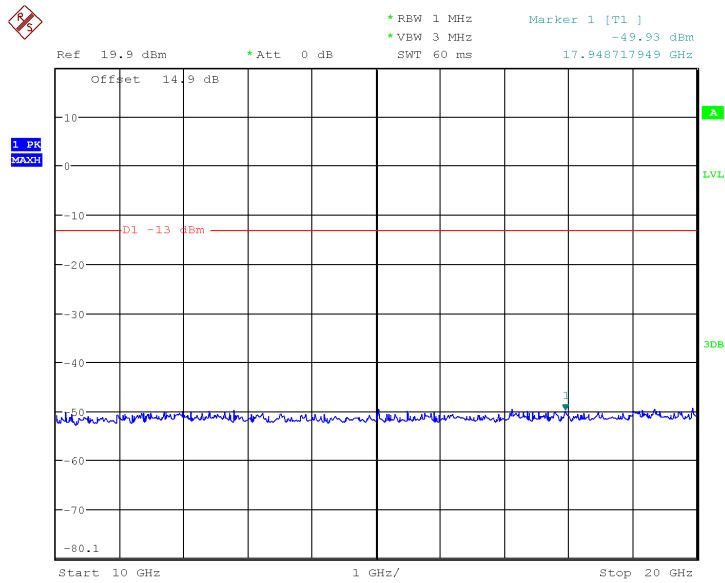
10MHz bandwidth QPSK Mode Middle Channel, 1880 MHz, 30MHz to 1GHz



Date: 20.JUN.2017 17:43:35

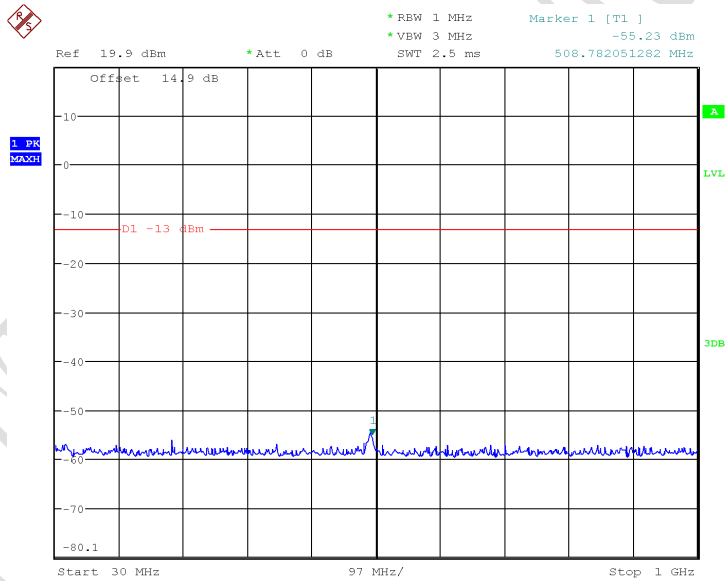
10MHz bandwidth QPSK Mode Middle Channel, 1880 MHz, 1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.



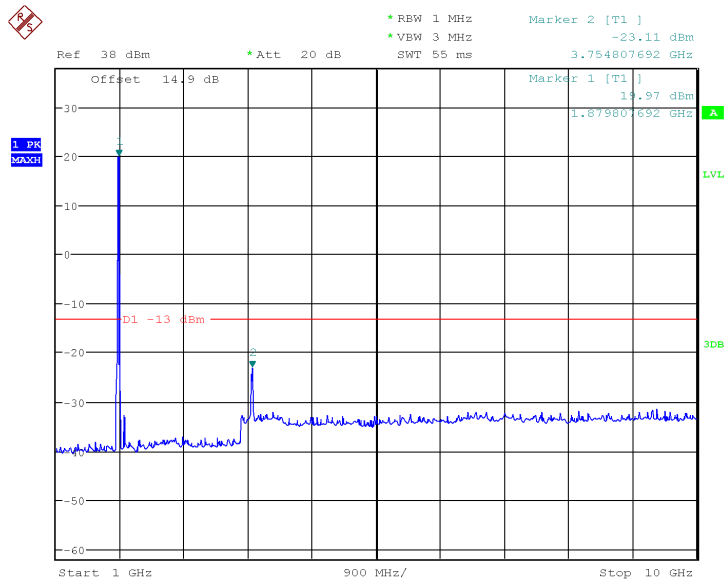
Date: 20.JUN.2017 17:43:55

10MHz bandwidth QPSK Mode Middle Channel, 1880 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 17:44:26

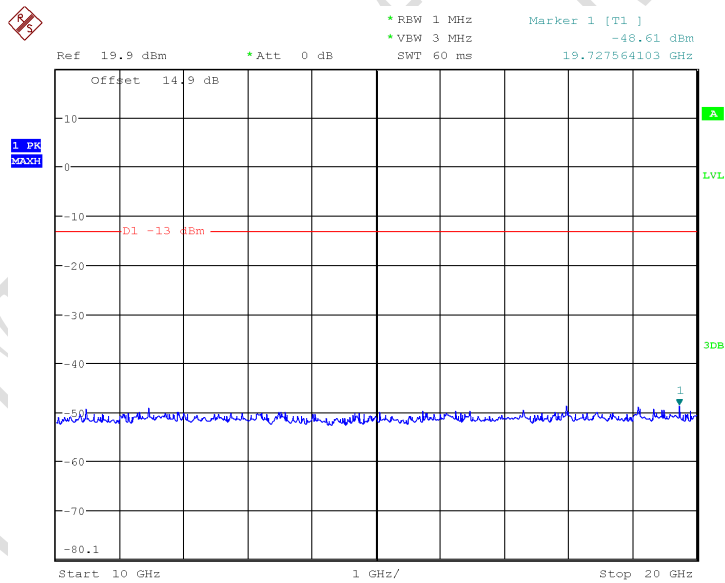
15MHz bandwidth QPSK Mode Middle Channel, 1880 MHz, 30MHz to 1GHz



Date: 20.JUN.2017 17:45:22

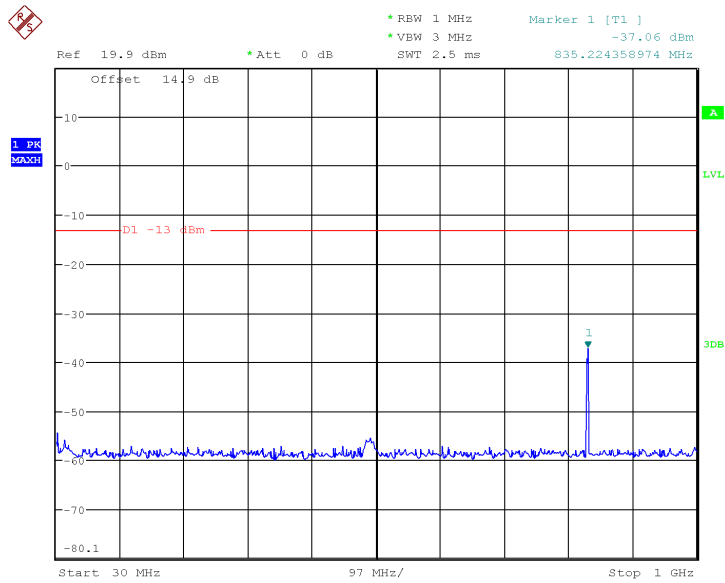
15MHz bandwidth QPSK Mode Middle Channel, 1880 MHz, 1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.



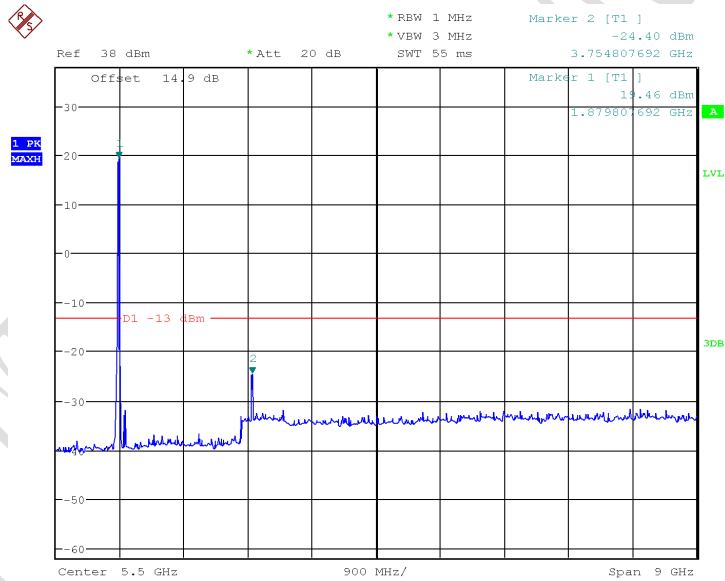
Date: 20.JUN.2017 17:44:09

15MHz bandwidth QPSK Mode Middle Channel, 1880 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 17:47:27

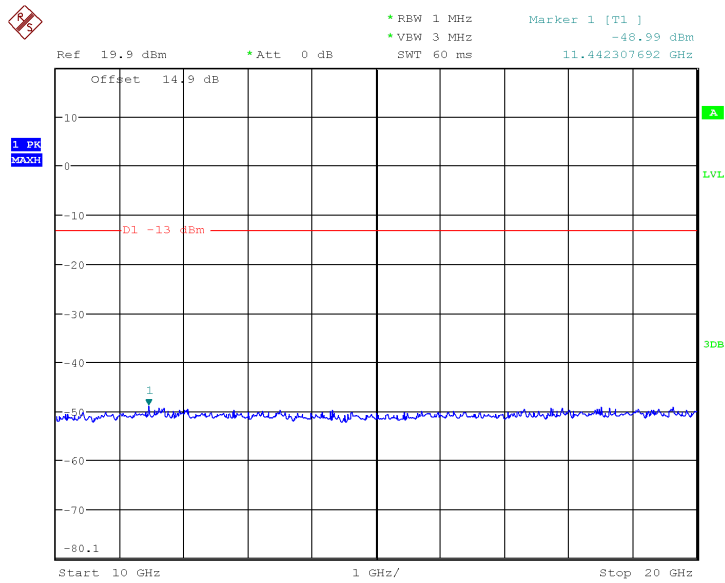
20MHz bandwidth QPSK Mode Middle Channel, 1880 MHz, 30MHz to 1GHz



Date: 20.JUN.2017 17:45:57

20MHz bandwidth QPSK Mode Middle Channel, 1880 MHz, 1GHz to 10GHz

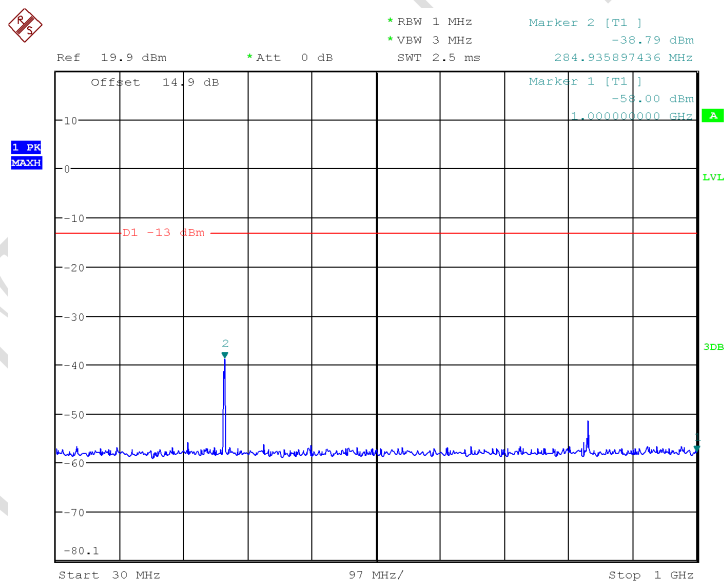
Note: The strong emission shown in each case is the carrier signal.



Date: 20.JUN.2017 17:46:43

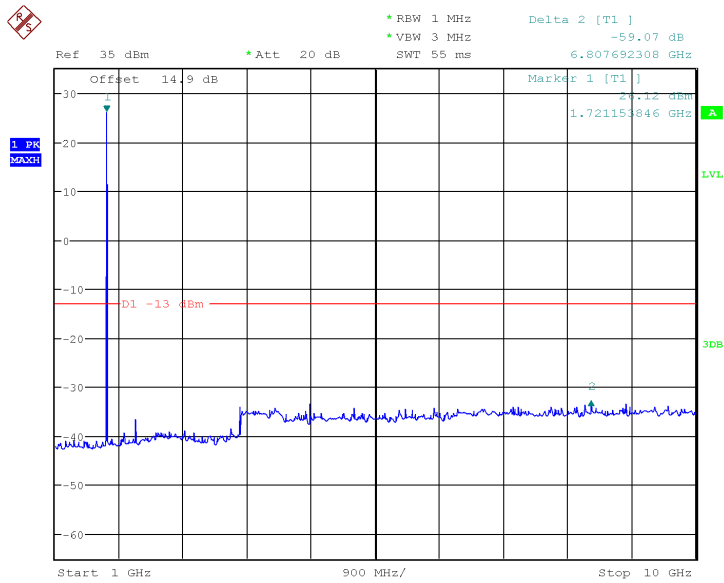
20MHz bandwidth QPSK Mode Middle Channel, 1880 MHz, 10GHz to 20GHz

5.3.3 LTE B4 Conducted Spurious Emission Results



Date: 20.JUN.2017 17:51:09

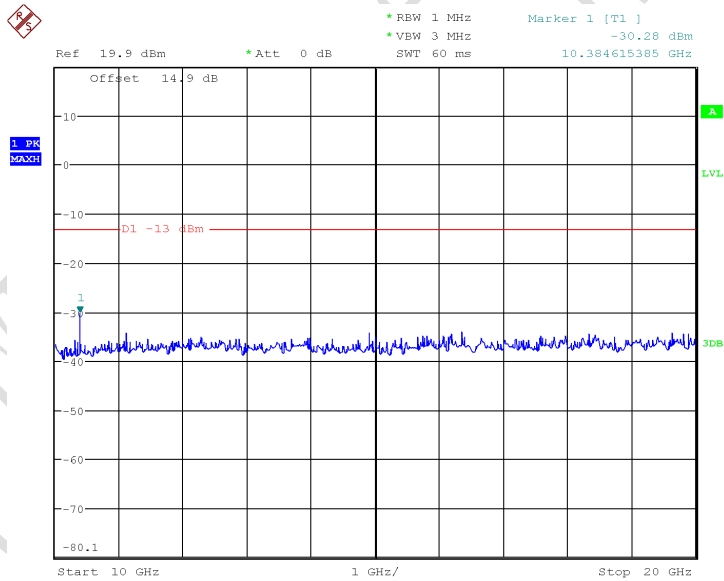
1.4MHz bandwidth QPSK Mode Middle channel, 1732.5 MHz, 30MHz to 1GHz



Date: 20.JUN.2017 17:52:41

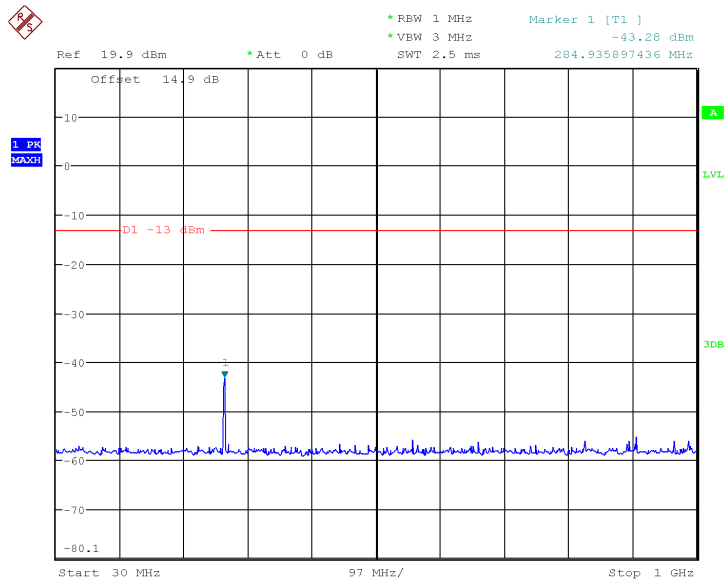
1.4MHz bandwidth QPSK Middle channel, 1732.5MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.



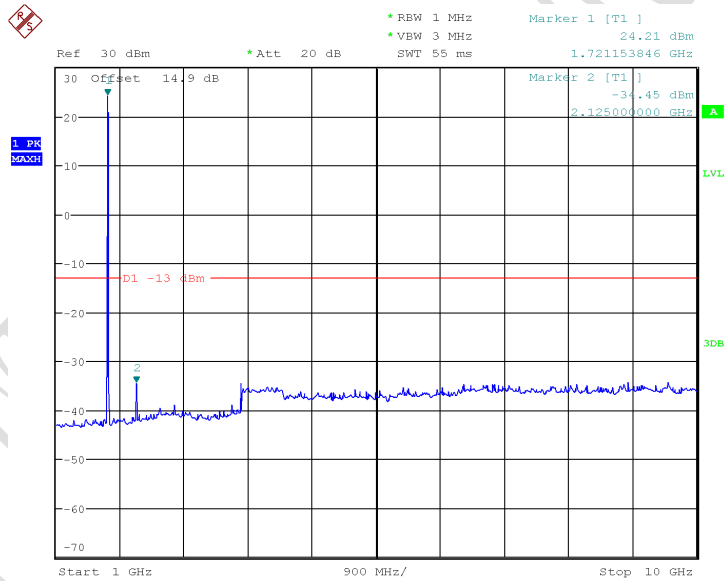
Date: 20.JUN.2017 17:54:10

1.4MHz bandwidth QPSK Middle channel, 1732.5 MHz,10GHz to 20GHz



Date: 20.JUN.2017 17:55:56

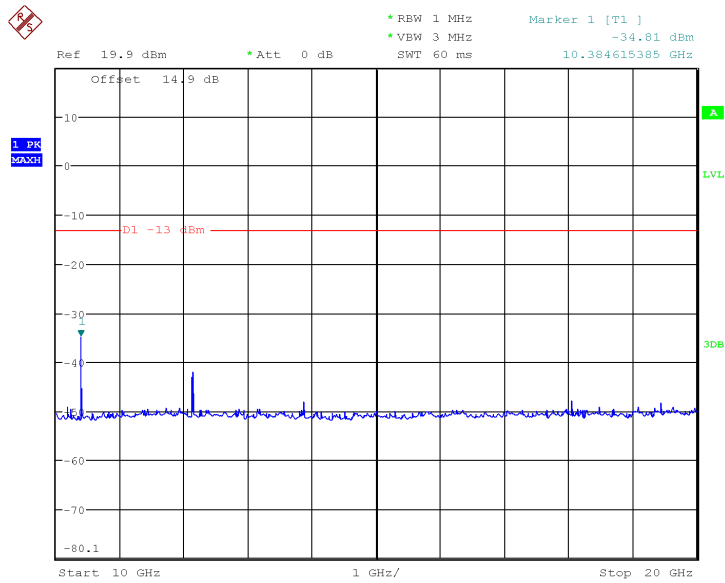
3MHz bandwidth QPSK Mode Middle Channel, 1732.5 MHz, 30MHz to 1GHz



Date: 20.JUN.2017 17:57:38

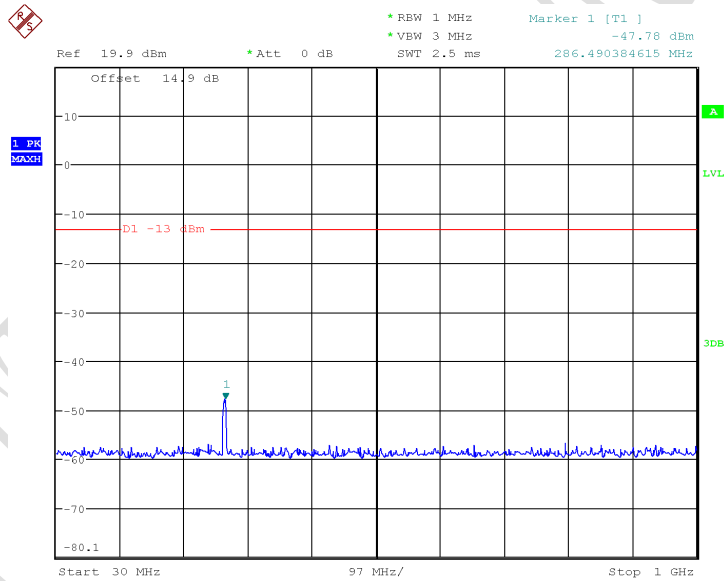
3MHz bandwidth QPSK Middle Channel, 1732.5 MHz, 1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.



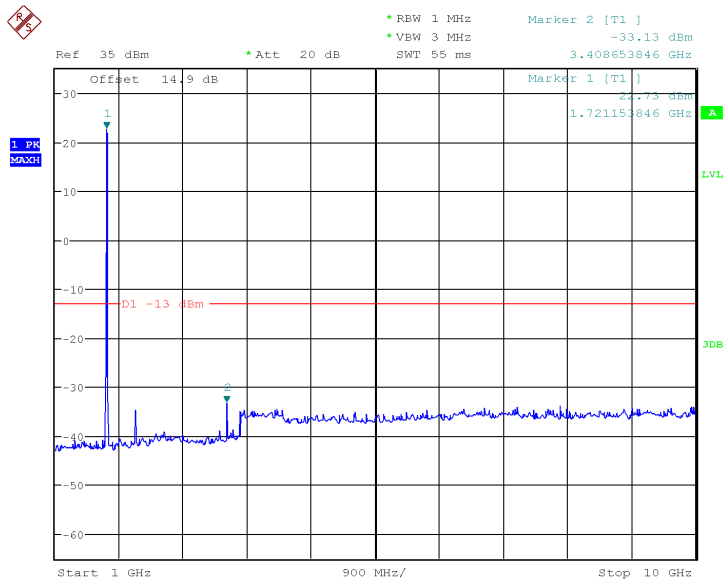
Date: 20.JUN.2017 18:05:43

3MHz bandwidth QPSK Middle Channel, 1732.5 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 17:58:56

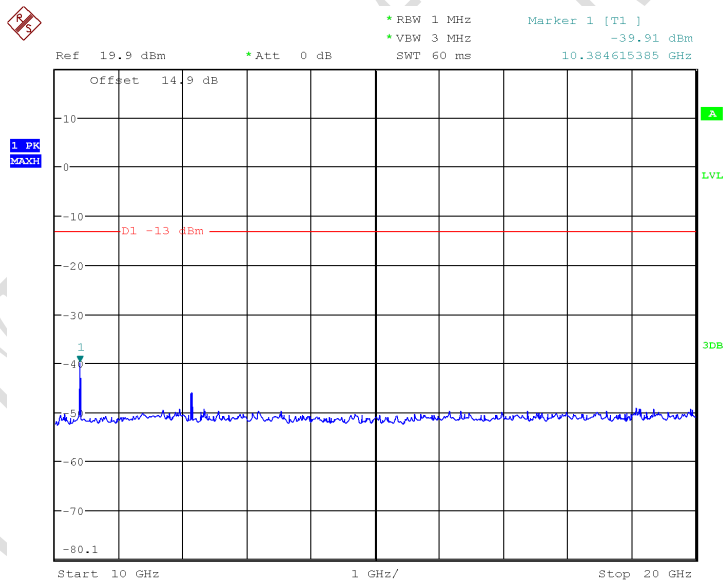
5MHz bandwidth QPSK Mode Middle Channel, 1732.5 MHz, 30MHz to 1GHz



Date: 20.JUN.2017 17:59:25

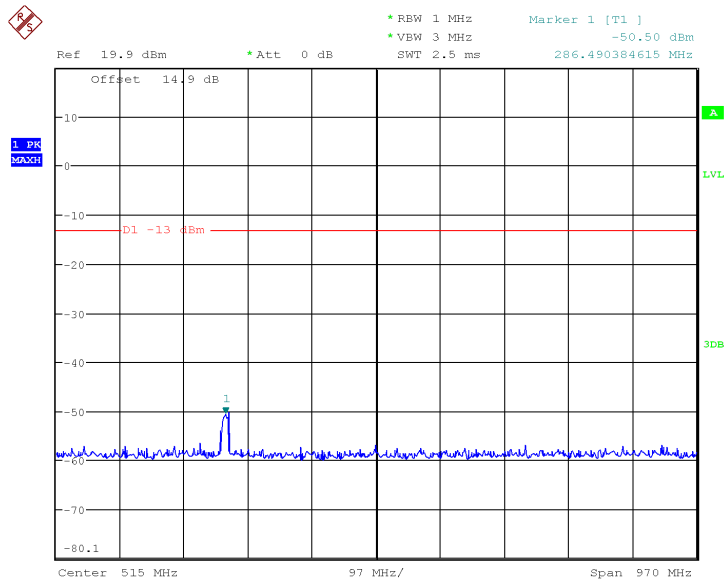
5MHz bandwidth QPSK Mode Middle Channel, 1732.5 MHz, 1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.



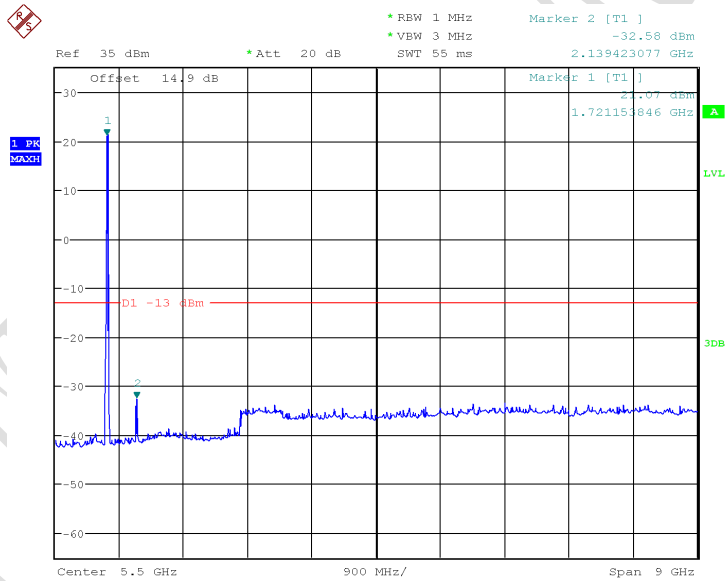
Date: 20.JUN.2017 17:58:37

5MHz bandwidth QPSK Mode Middle Channel, 1732.5 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 18:00:37

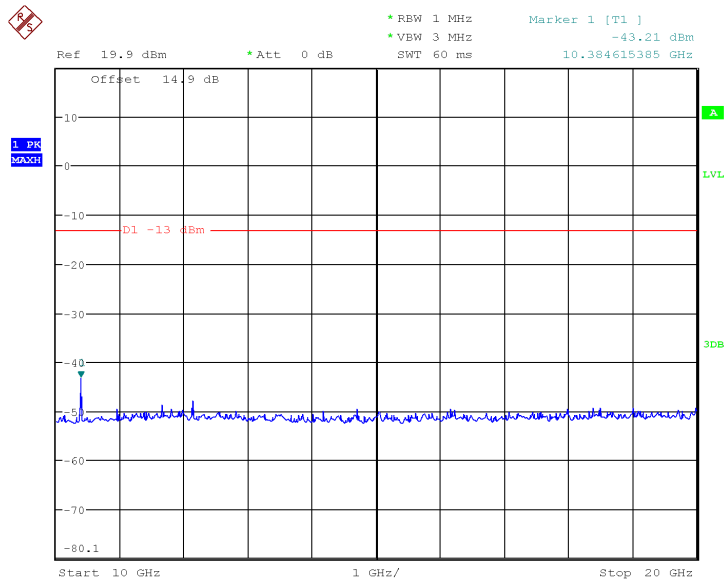
10MHz bandwidth QPSK Mode Middle Channel, 1732.5 MHz, 30MHz to 1GHz



Date: 20.JUN.2017 18:00:16

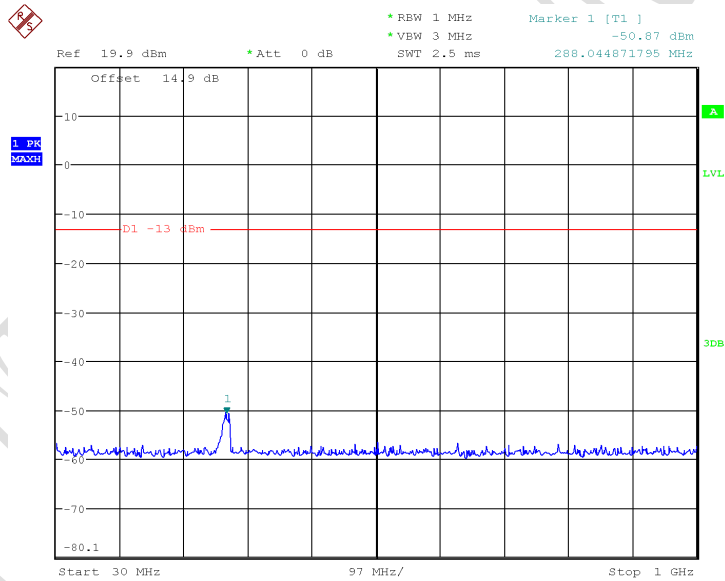
10MHz bandwidth QPSK Mode Middle Channel, 1732.5 MHz, 1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.



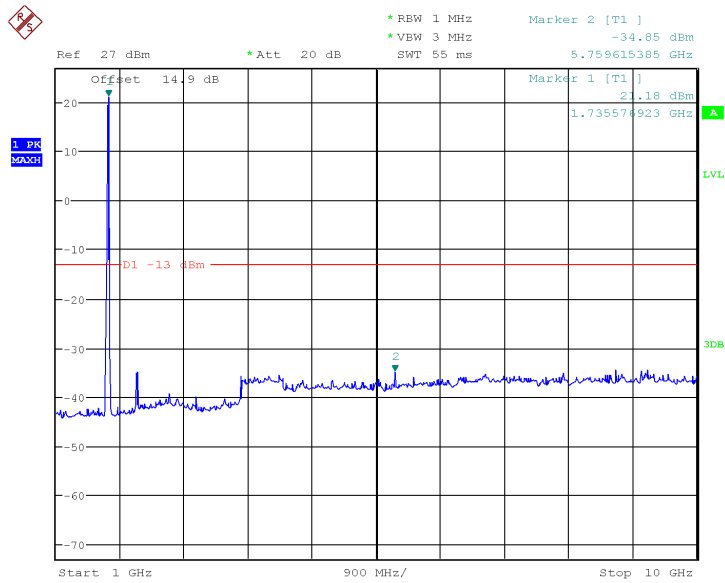
Date: 20.JUN.2017 18:00:55

10MHz bandwidth QPSK Mode Middle Channel, 1732.5 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 18:01:36

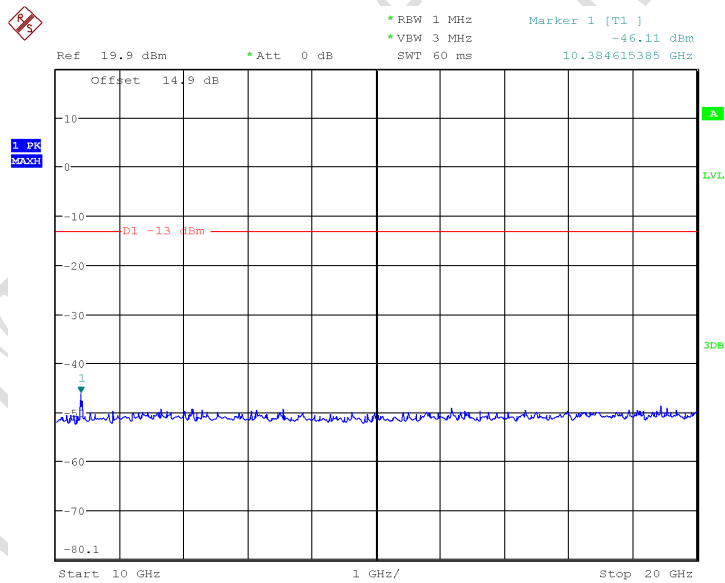
15MHz bandwidth QPSK Mode Middle Channel, 1732.5 MHz, 30MHz to 1GHz



Date: 20.JUN.2017 18:02:10

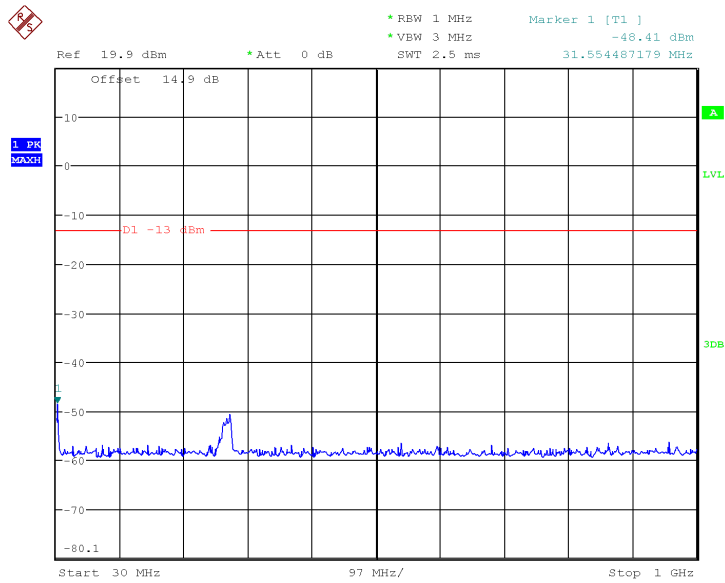
15MHz bandwidth QPSK Mode Middle Channel, 1732.5 MHz, 1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.



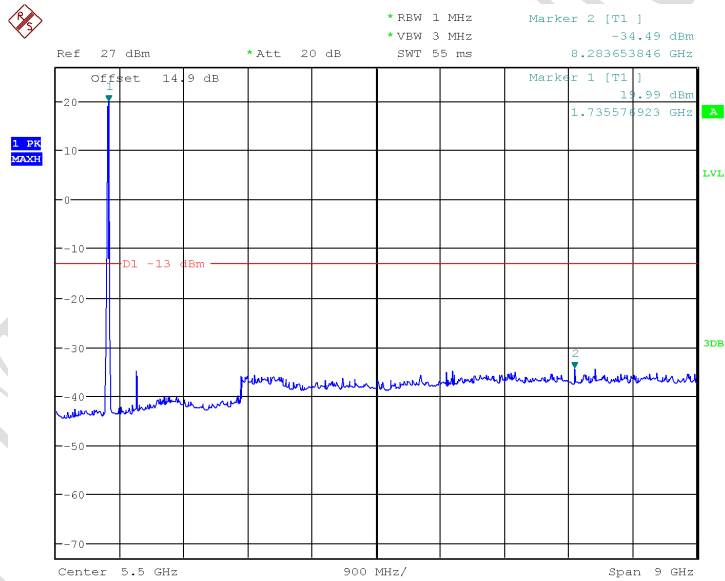
Date: 20.JUN.2017 18:01:18

15MHz bandwidth QPSK Mode Middle Channel, 1732.5 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 18:03:20

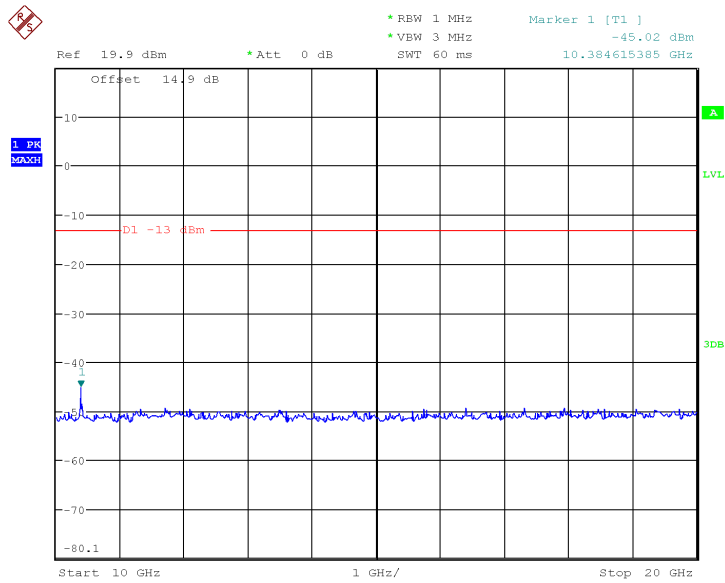
20MHz bandwidth QPSK Mode Middle Channel, 1732.5 MHz, 30MHz to 1GHz



Date: 20.JUN.2017 18:02:31

20MHz bandwidth QPSK Mode Middle Channel, 1732.5 MHz, 1GHz to 10GHz

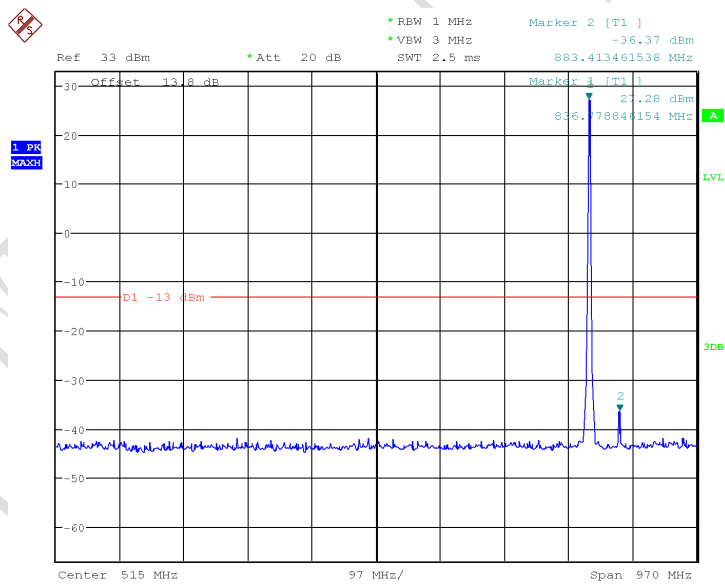
Note: The strong emission shown in each case is the carrier signal.



Date: 20.JUN.2017 18:03:02

20MHz bandwidth QPSK Mode Middle Channel, 1732.5 MHz, 10GHz to 20GHz

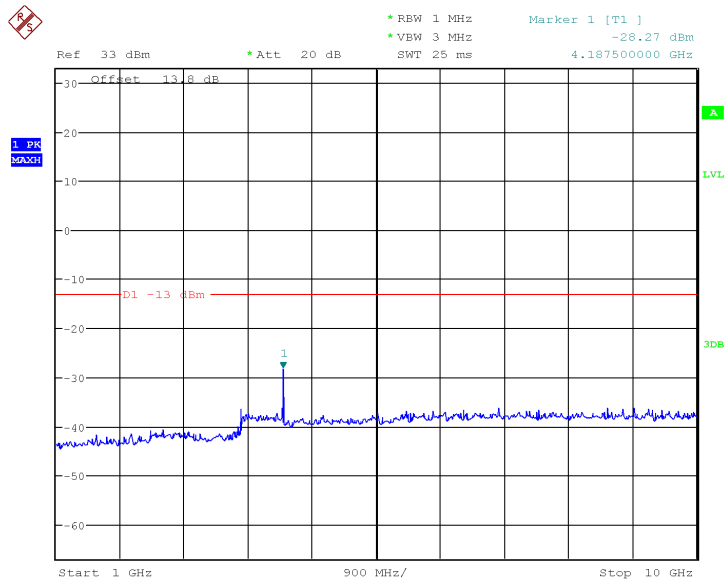
5.3.4 LTE B5 Conducted Spurious Emission Results



Date: 20.JUN.2017 17:17:22

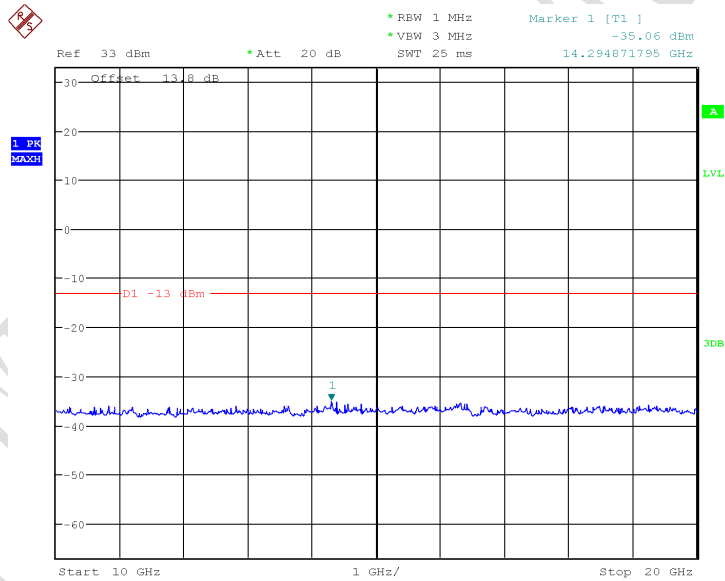
1.4MHz bandwidth QPSK Mode Middle Channel, 836.5 MHz, 30MHz to 1GHz

Note: The strong emission shown in each case is the carrier signal.



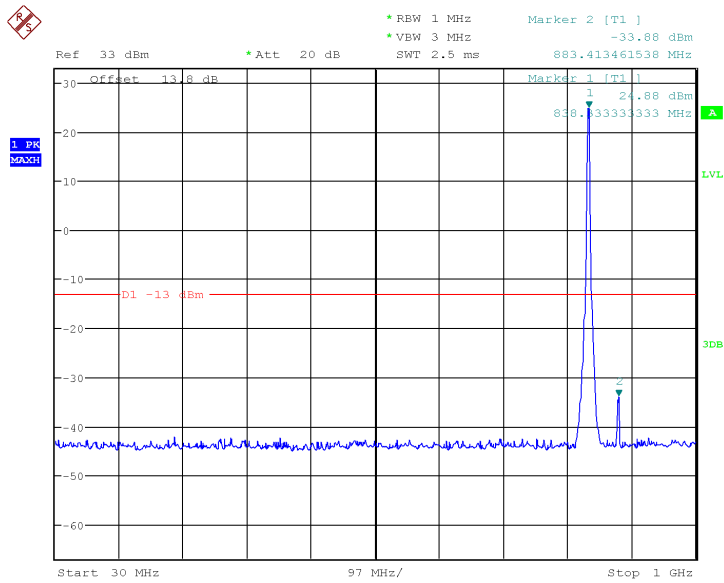
Date: 20.JUN.2017 17:18:00

1.4MHz bandwidth QPSK Mode Middle Channel, 836.5 MHz, 1GHz to 10GHz



Date: 20.JUN.2017 17:18:36

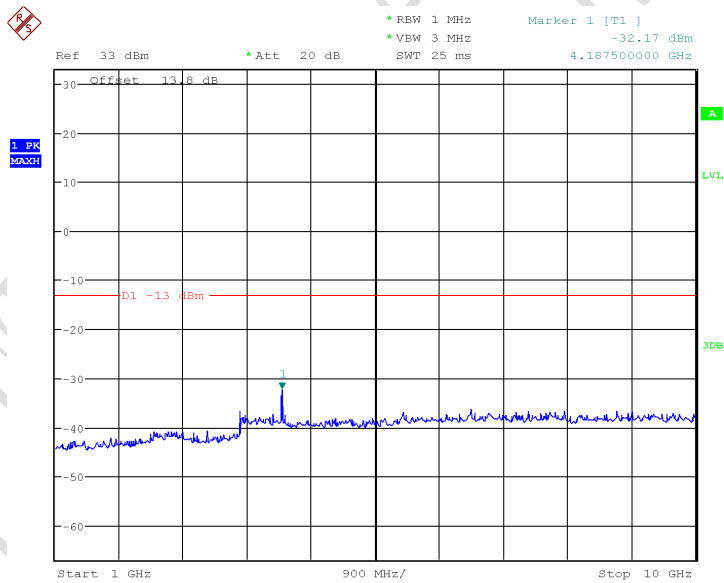
1.4MHz bandwidth QPSK Mode Middle Channel, 836.5 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 17:19:10

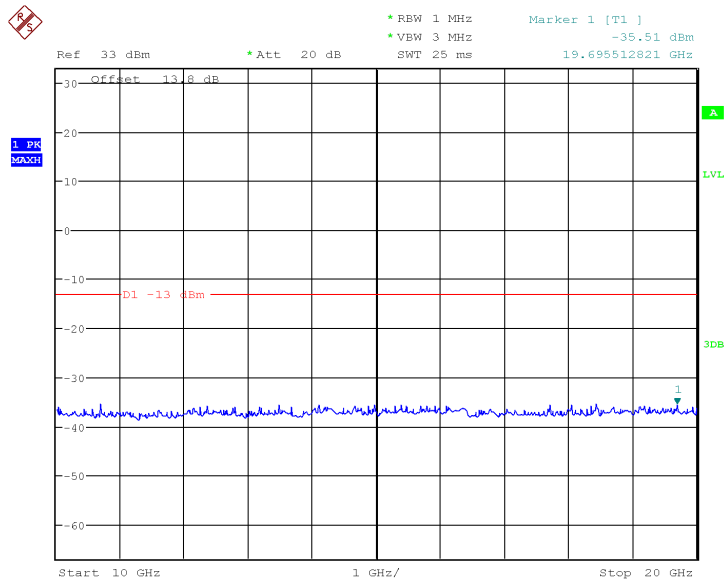
3MHz bandwidth QPSK Mode Middle Channel, 836.5 MHz,30MHz to 1GHz

Note: The strong emission shown in each case is the carrier signal.



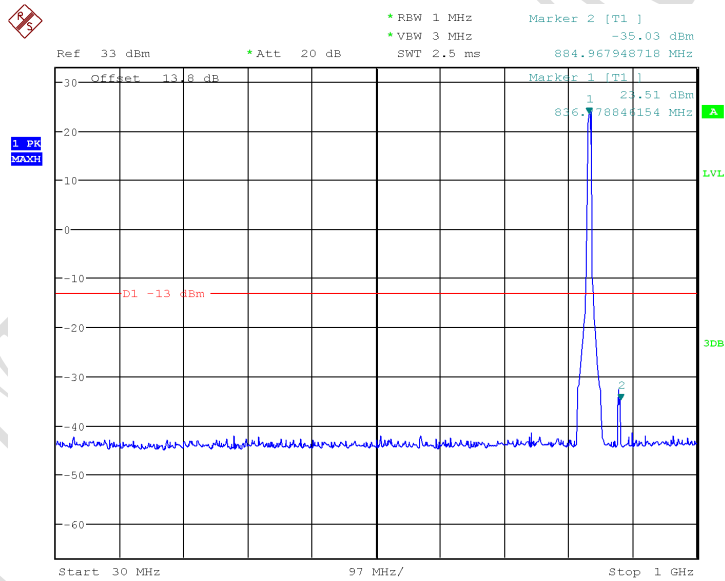
Date: 20.JUN.2017 17:19:27

3MHz bandwidth QPSK Mode Middle Channel, 836.5 MHz,1GHz to 10GHz



Date: 20.JUN.2017 17:19:53

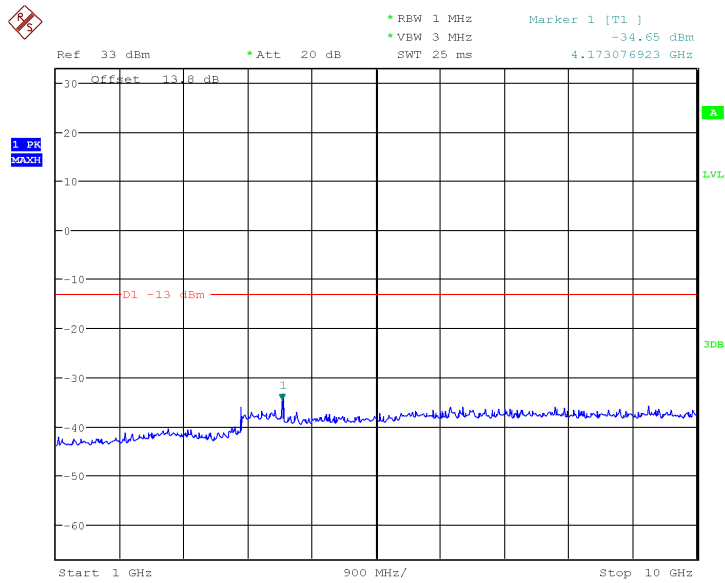
3MHz bandwidth QPSK Mode Middle Channel, 836.5 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 17:20:31

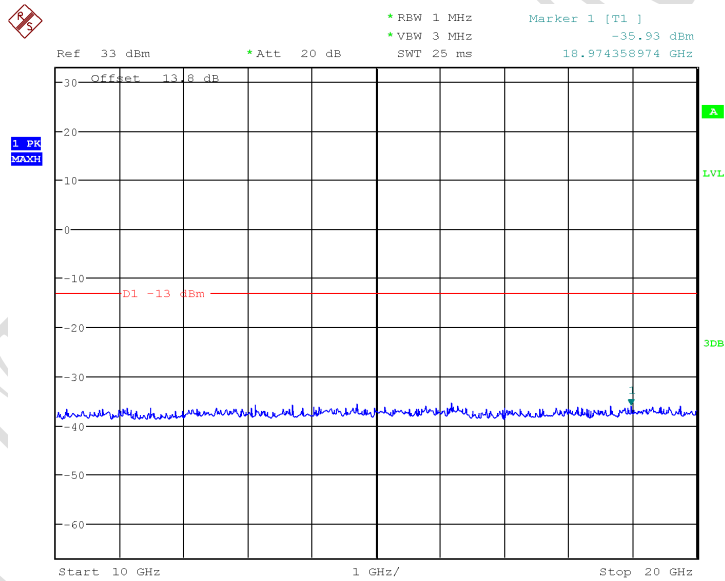
5MHz bandwidth QPSK Mode Middle Channel, 836.5 MHz, 30MHz to 1GHz

Note: The strong emission shown in each case is the carrier signal.



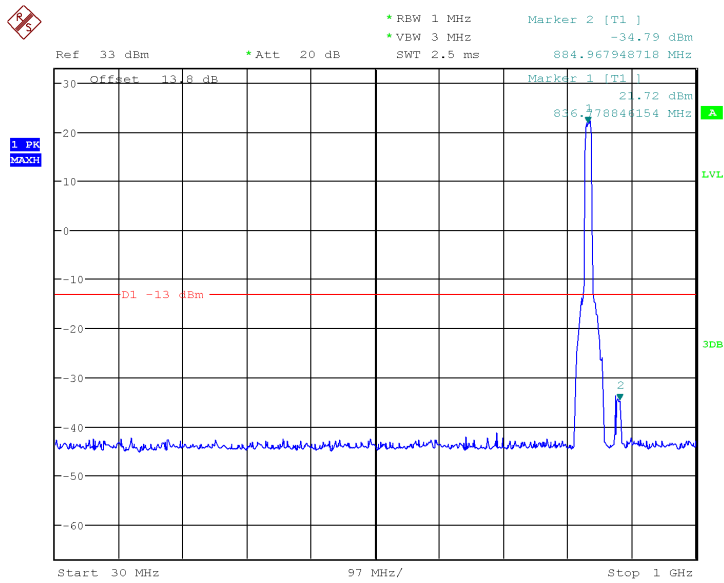
Date: 20.JUN.2017 17:21:33

5MHz bandwidth QPSK Mode Middle Channel, 836.5 MHz, 1GHz to 10GHz



Date: 20.JUN.2017 17:21:48

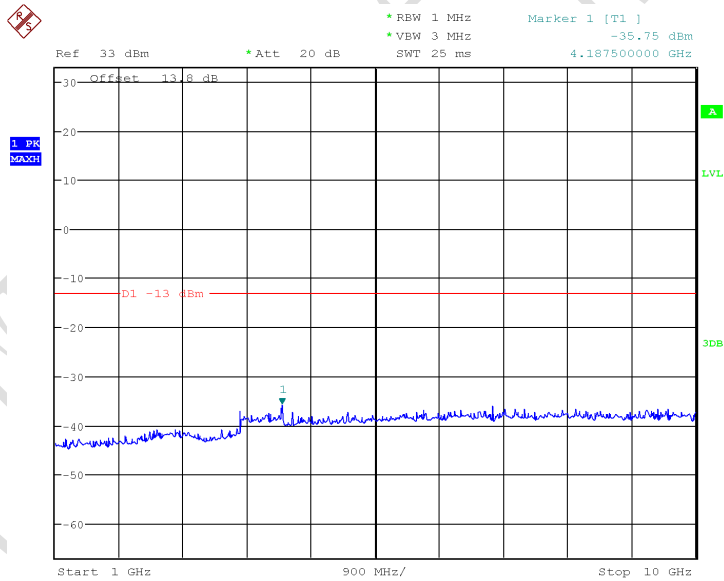
5MHz bandwidth QPSK Mode Middle Channel, 836.5 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 17:22:17

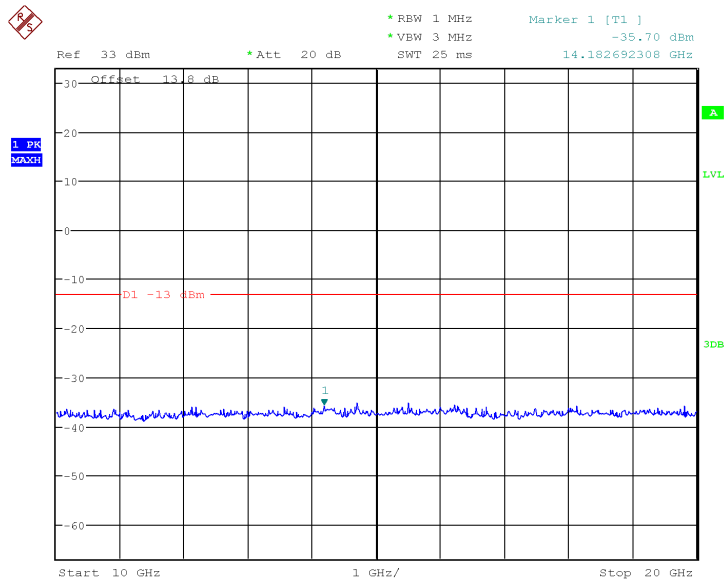
10MHz bandwidth QPSK Mode Middle Channel, 836.5 MHz,30MHz to 1GHz

Note: The strong emission shown in each case is the carrier signal.



Date: 20.JUN.2017 17:22:35

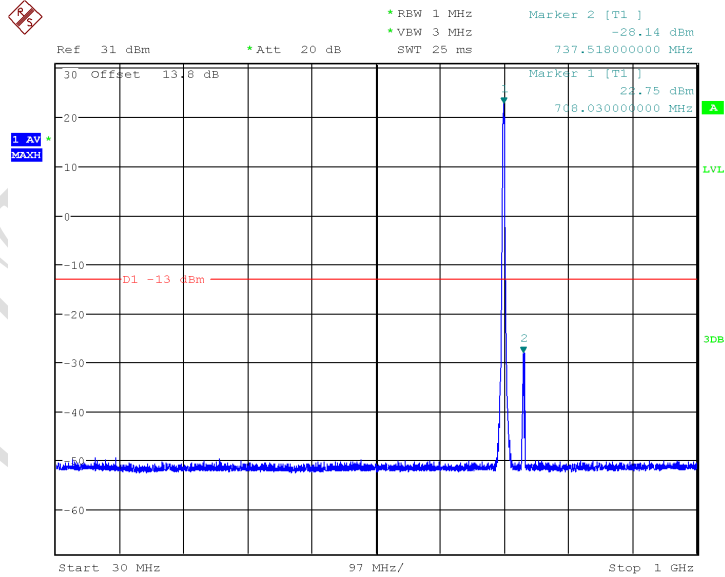
10MHz bandwidth QPSK Mode Middle Channel, 836.5 MHz,1GHz to 10GHz



Date: 20.JUN.2017 17:22:57

10MHz bandwidth QPSK Mode Middle Channel, 836.5 MHz, 10GHz to 20GHz

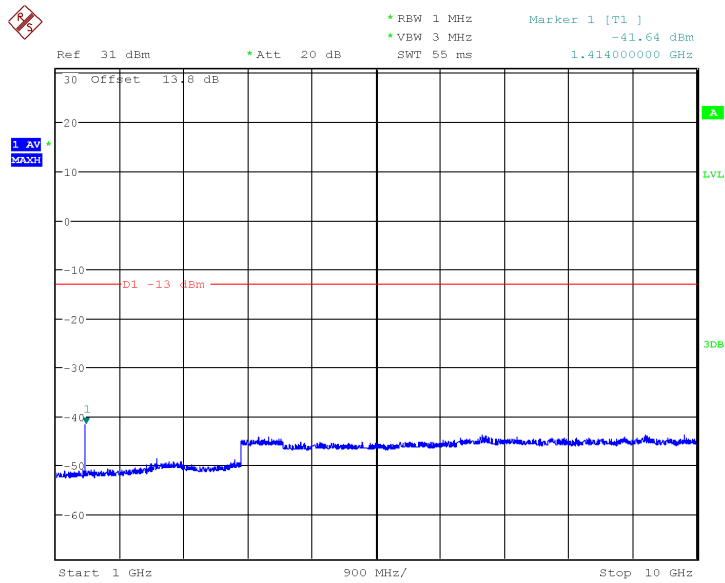
5.3.5 LTE B12 Conducted Spurious Emission Results



Date: 27.JUN.2017 10:25:01

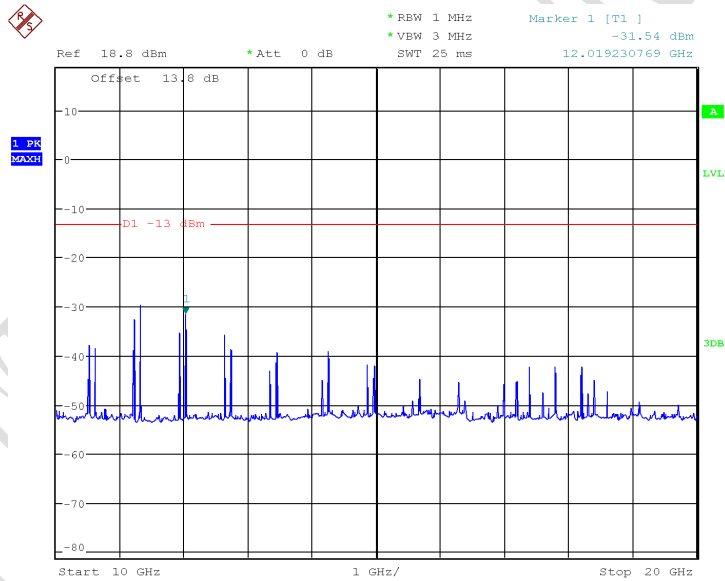
1.4MHz bandwidth QPSK Mode Middle Channel, 707.5 MHz, 30MHz to 1GHz

Note: The strong emission shown in each case is the carrier signal.



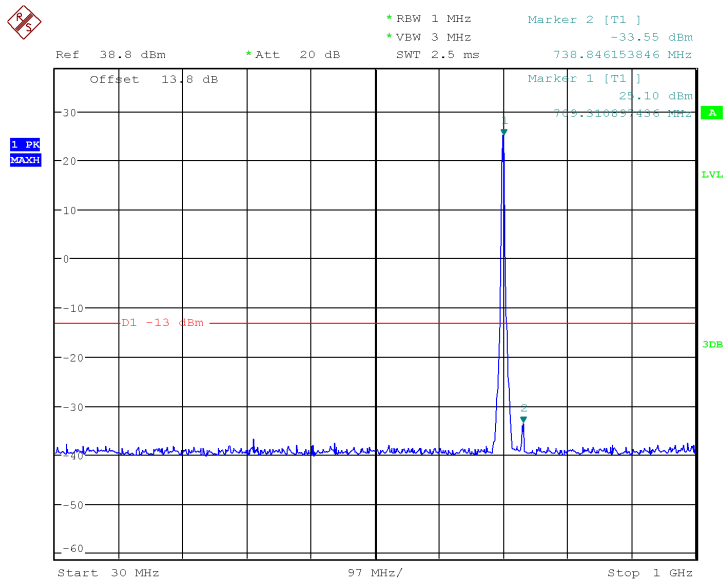
Date: 27.JUN.2017 10:36:37

1.4MHz bandwidth QPSK Mode Middle Channel, 707.5 MHz, 1GHz to 10GHz



Date: 20.JUN.2017 16:45:16

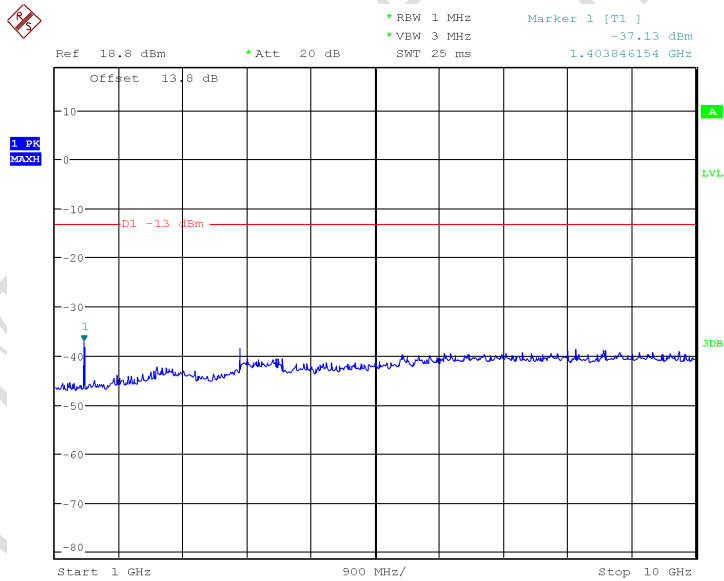
1.4MHz bandwidth QPSK Mode Middle Channel, 707.5 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 16:46:31

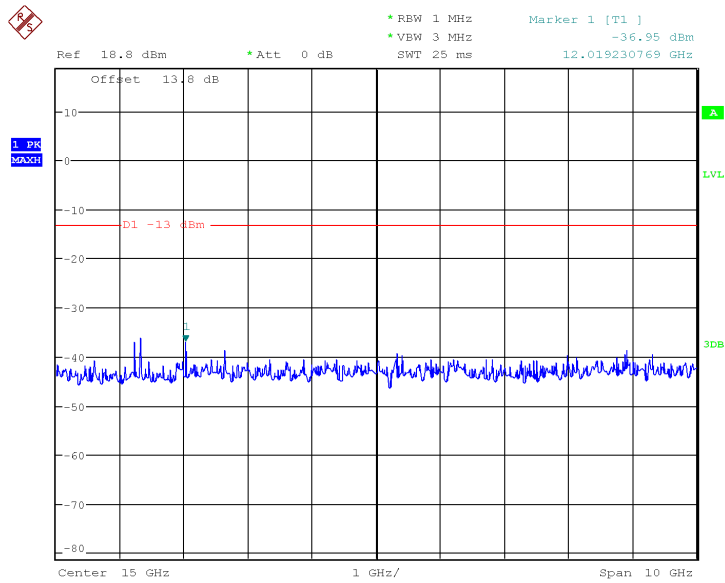
3MHz bandwidth QPSK Mode Middle Channel, 707.5 MHz,30MHz to 1GHz

Note: The strong emission shown in each case is the carrier signal.



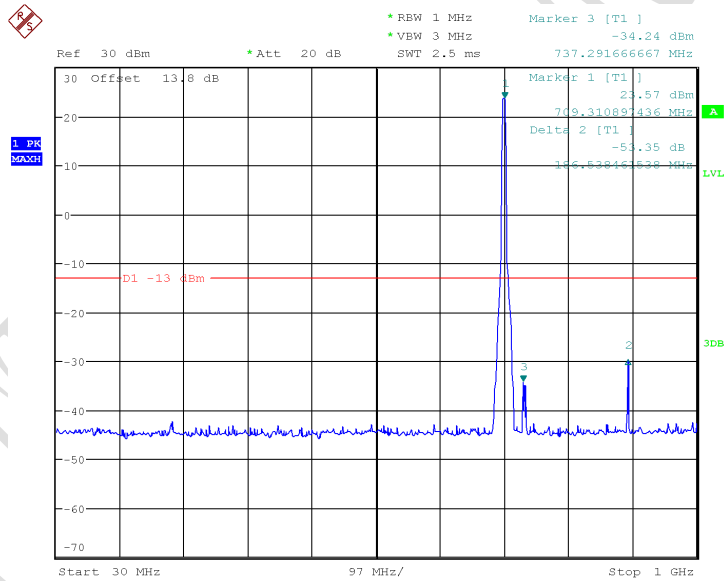
Date: 20.JUN.2017 16:49:05

3MHz bandwidth QPSK Mode Middle Channel, 707.5 MHz,1GHz to 10GHz



Date: 20.JUN.2017 16:50:00

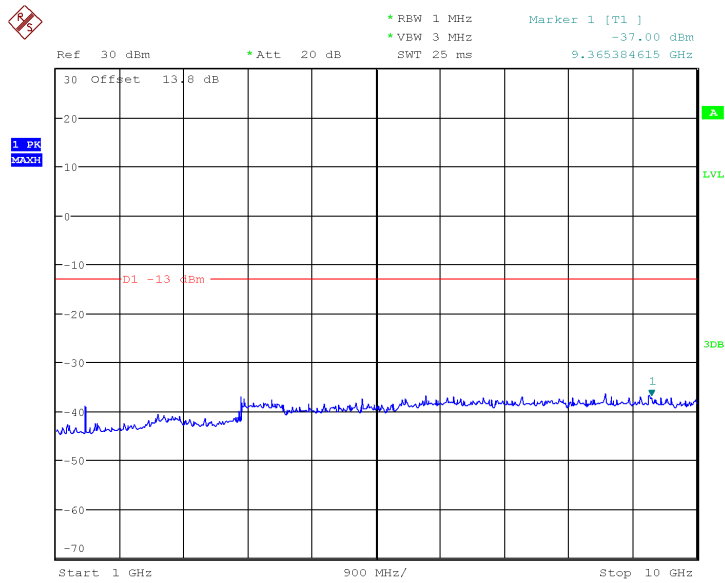
3MHz bandwidth QPSK Mode Middle Channel, 707.5 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 16:53:05

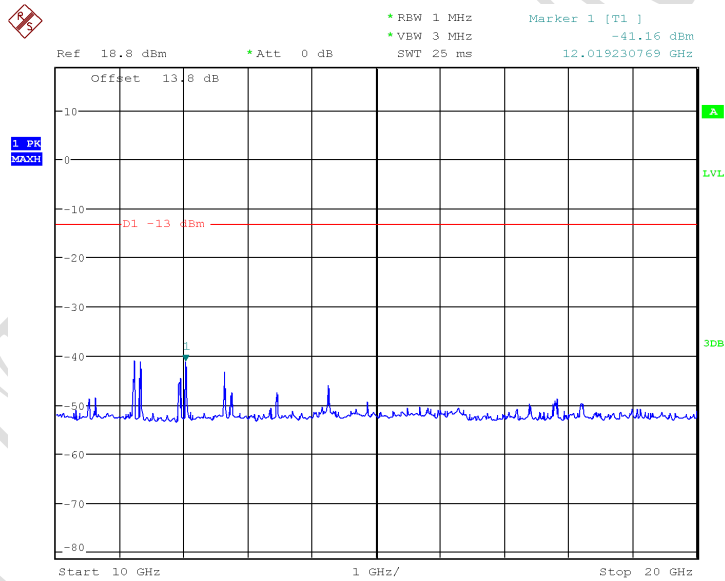
5MHz bandwidth QPSK Mode Middle Channel, 707.5 MHz, 30MHz to 1GHz

Note: The strong emission shown in each case is the carrier signal.



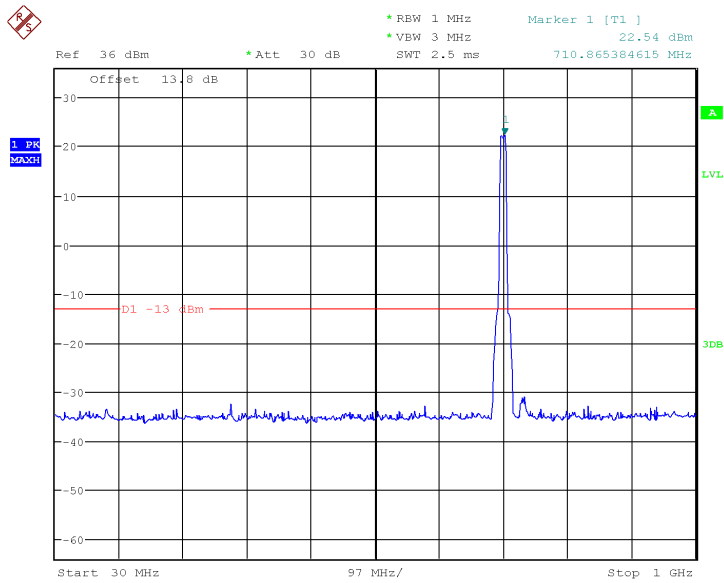
Date: 20.JUN.2017 16:54:10

5MHz bandwidth QPSK Mode Middle Channel, 707.5 MHz, 1GHz to 10GHz



Date: 20.JUN.2017 16:55:10

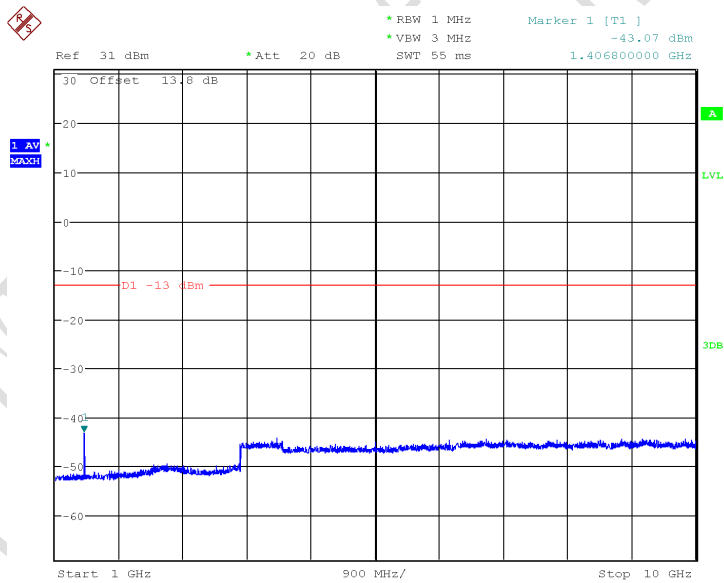
5MHz bandwidth QPSK Mode Middle Channel, 707.5 MHz, 10GHz to 20GHz



Date: 20.JUN.2017 16:56:36

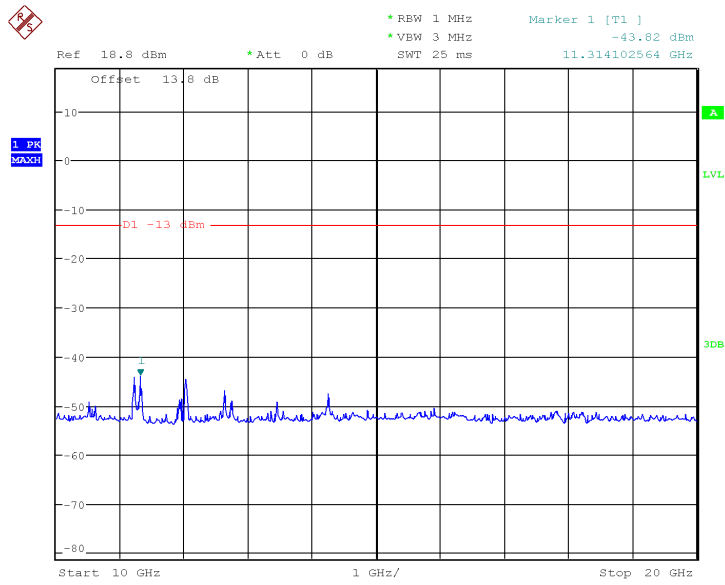
10MHz bandwidth QPSK Mode Middle Channel, 707.5 MHz,30MHz to 1GHz

Note: The strong emission shown in each case is the carrier signal.



Date: 27.JUN.2017 10:37:19

10MHz bandwidth QPSK Mode Middle Channel, 707.5 MHz,1GHz to 10GHz



Date: 20.JUN.2017 17:09:51

10MHz bandwidth QPSK Mode Middle Channel, 707.5 MHz, 10GHz to 20GHz

**5.4 Radiated Spurious Emission**

Specifications:	FCC Part 2.1051, 24.238, 2.1053, 22.917, 27.53 RSS-130 4.6, RSS-132 5.5, RSS-133 6.5, RSS-139 6.6
DUT Serial Number:	S1: U3708475240103
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	--

Limit Level Construction:

According to Part 22.917 (a), i.e., Out of band emissions. 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.

According to Part 24.238 (a), i.e., Out of band emissions. 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, so the limit level is: $P(\text{dBm}) - (43 + 10 \log(P)) \text{ dB} = -13\text{dBm}$.

According to Part 27.53(h):

Except as otherwise specified below, 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 $43 + 10 \log_{10}(P)$ dB.

According to Part 27.53(g):

For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

According to RSS-130 4.6:

The power of any unwanted emissions in any 100 kHz bandwidth on any frequency outside the frequency range(s) within which the equipment is designed to operate shall be attenuated below the transmitter power, P (dBW), by at least $43 + 10 \log_{10} p$ (watts), dB. However, in the 100 kHz band immediately outside the equipment's operating frequency range, a resolution bandwidth of 30 kHz may be employed.

In addition to the limit outlined above, equipment operating in the frequency bands 746-756 MHz and 777-787 MHz shall also comply with the following restrictions:

The power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least:

- (i) $76 + 10 \log_{10} p$ (watts), dB, for base and fixed equipment, and
- (ii) $65 + 10 \log_{10} p$ (watts), dB, for mobile and portable equipment



According to RSS-132 5.5:

Mobile and base station equipment shall comply with the limits in (i) and (ii) below.

- (i) In the first 1.0 MHz band immediately outside and adjacent to each of the sub-bands specified in Section 5.1, the power of emissions per any 1% of the occupied bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts).
- (ii) After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts). If the measurement is performed

According to RSS-133 6.5:

Equipment shall comply with the limits in (i) and (ii) below.

- (i) In the 1.0 MHz bands immediately outside and adjacent to the equipment’s operating frequency block, the emission power per any 1% of the emission bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts).
- (ii) After the first 1.0 MHz, the emission power in any 1 MHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10} p$ (watts). If the measurement is performed using 1% of the emission bandwidth, power integration over 1.0 MHz is required.

According to RSS-139 6.6:

- (i) In the first 1.0 MHz bands immediately outside and adjacent to the equipment’s smallest operating frequency block, which can contain the equipment’s occupied bandwidth, the emission power per any 1% of the emission bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least $43 + 10 \log_{10} p$ (watts) dB.
- (ii) After the first 1.0 MHz outside the equipment’s smallest operating frequency block, which can contain the equipment’s occupied bandwidth, the emission power in any 1 MHz bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least $43 + 10 \log_{10} p$ (watts) dB.

Limits for Radiated spurious emissions(UE)	
Frequency range	Limit Level /Resolution Bandwidth
30 MHz to 20000 MHz	-13dBm/1MHz

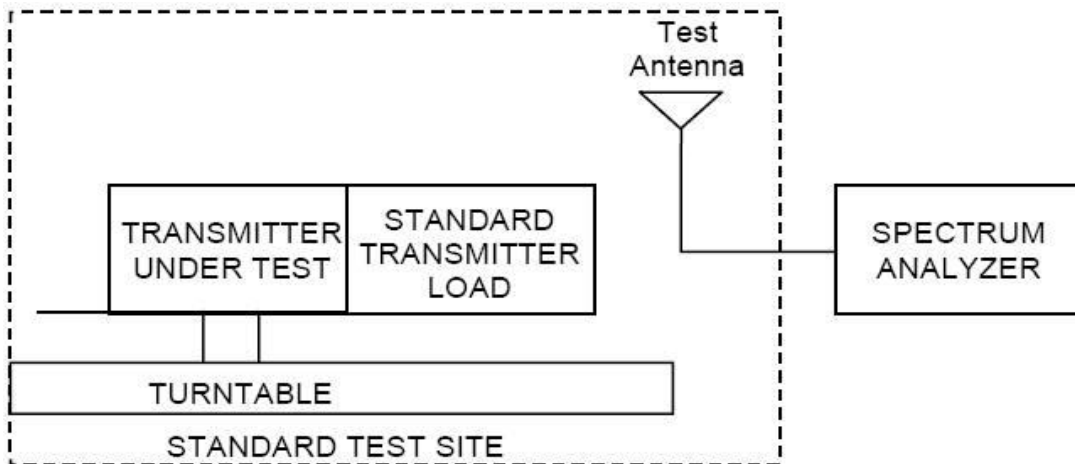
Test Setup:

The EUT was placed in an anechoic chamber. The Wireless Communications Test Set was used to set the TX channel and power level and modulate the TX signal with different bit patterns.

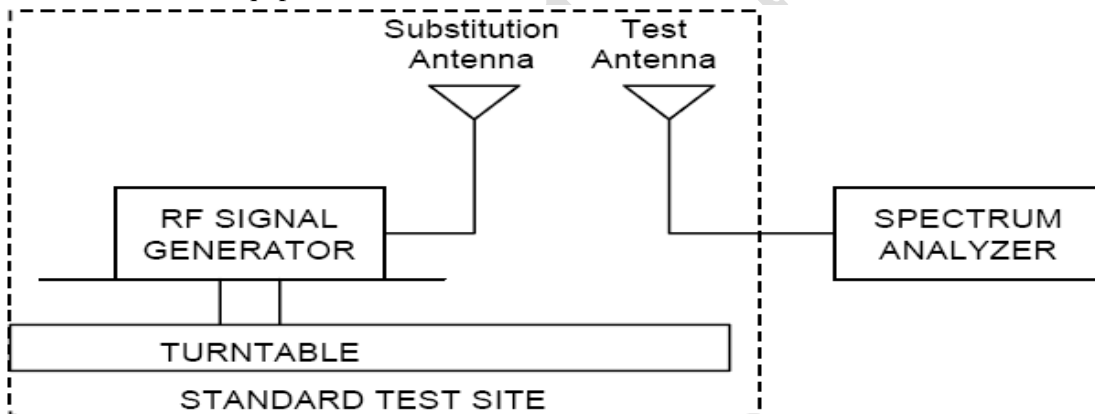
Test Method:

The measurement method is substitution method accordance with section 2.2.12 of ANSI/TIA-603-D: Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

(a) Connect the equipment as illustrated and measure the spurious emissions as the method as above. The distance from the device to the antenna is 3 m .



(b) Reconnect the equipment as illustrated.



(c) Remove the transmitter and replace it with a substitution antenna. The center of the substitution antenna should be approximately at the same location as the center of the transmitter.

(d) Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by means of a non-radiating cable. With the antennas at both ends horizontally polarized, and with the signal generator tuned to a particular spurious frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output.

(e) Repeat step d) with both antennas vertically polarized for each spurious frequency.

(f) Calculate power in dBm into a reference ideal half-wave dipole antenna by reducing the readings obtained in steps d) and e) by the power loss in the cable between the generator and the



antenna, and further corrected for the gain of the substitution antenna used relative to an ideal half-wave dipole antenna by the following formula:

$$P_d(\text{dBm}) = P_g(\text{dBm}) - \text{cable loss (dB)} + \text{antenna gain (dB)}$$

where:

P_d is the dipole equivalent power and

P_g is the generator output power into the substitution antenna.

5.4.1 WCDMA B2 Radiated Spurious Emission Results

Test Data

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
3760.00	-56.70	7.3	12.6	-62.00	V
5640.00	-50.41	1.8	13.1	-61.71	V
7520.00	-46.26	0.8	11.7	-57.16	V
9400.00	-46.30	0.8	11.9	-57.40	V
11280.00	-49.36	0.3	11.5	-60.56	V
3760.00	-54.21	7.3	12.6	-59.51	H
5640.00	-46.24	1.8	13.1	-57.54	H
7520.00	-48.54	0.8	11.7	-59.44	H
9400.00	-49.58	0.8	11.9	-60.68	H
11280.00	-46.00	0.3	11.5	-57.20	H

**5.4.2 WCDMA B4 Radiated Spurious Emission Results****Test Data**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3465.00	-56.71	6.9	12.6	-62.41	V
5197.50	-53.36	5.8	12.7	-60.26	V
6930.00	-51.27	0.9	11.7	-62.07	V
8662.50	-51.06	0.9	11.9	-62.06	V
10395.00	-47.59	0.7	12.1	-58.99	V
3465.00	-56.88	6.9	12.6	-62.58	H
5197.50	-51.85	5.8	12.7	-58.75	H
6930.00	-47.29	0.9	11.7	-58.09	H
8662.50	-51.12	0.9	11.9	-62.12	H
10395.00	-47.43	0.7	12.1	-58.83	H

5.4.3 WCDMA B5 Radiated Spurious Emission Results**Test Data**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1672.80	-37.58	4.7	9.4	-42.28	V
2509.20	-39.21	5.9	10.6	-43.91	V
3345.60	-54.77	6.8	12.6	-60.57	V
4182.00	-55.42	7.8	12.6	-60.22	V
5018.40	-53.66	7.5	12.7	-58.86	V
1672.80	-38.13	4.7	9.4	-42.83	H
2509.20	-37.63	5.9	10.6	-42.33	H
3345.60	-56.54	6.8	12.6	-62.34	H
4182.00	-54.21	7.8	12.6	-59.01	H
5018.40	-55.68	7.5	12.7	-60.88	H

**5.4.4 LTE B2 Radiated Spurious Emission Results****Test Data (1.4MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.00	-55.79	7.3	12.6	-61.09	V
5640.00	-50.65	1.8	13.1	-61.95	V
7520.00	-49.26	0.9	11.7	-60.06	V
8400.00	-52.32	1.2	11.3	-62.42	V
11280.00	-46.06	0.3	11.5	-57.26	V
3760.00	-51.91	7.3	12.6	-57.21	H
5640.00	-48.97	1.8	13.1	-60.27	H
7520.00	-47.10	0.9	11.7	-57.90	H
8400.00	-50.92	1.2	11.3	-61.02	H
11280.00	-48.47	0.3	11.5	-59.67	H

Test Data (1.4MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.00	-52.84	7.3	12.6	-58.14	V
5640.00	-47.48	1.8	13.1	-58.78	V
7520.00	-49.91	0.9	11.7	-60.71	V
8400.00	-49.07	1.2	11.3	-59.17	V
11280.00	-46.72	0.3	11.5	-57.92	V
3760.00	-56.18	7.3	12.6	-61.48	H
5640.00	-49.20	1.8	13.1	-60.50	H
7520.00	-51.18	0.9	11.7	-61.98	H
8400.00	-52.32	1.2	11.3	-62.42	H
11280.00	-49.65	0.3	11.5	-60.85	H

**Test Data (3MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.00	-54.11	7.3	12.6	-59.41	V
5640.00	-50.82	1.8	13.1	-62.12	V
7520.00	-46.64	0.9	11.7	-57.44	V
8400.00	-48.75	1.2	11.3	-58.85	V
11280.00	-46.45	0.3	11.5	-57.65	V
3760.00	-53.96	7.3	12.6	-59.26	H
5640.00	-49.09	1.8	13.1	-60.39	H
7520.00	-48.87	0.9	11.7	-59.67	H
8400.00	-52.85	1.2	11.3	-62.95	H
11280.00	-51.08	0.3	11.5	-62.28	H

Test Data (3MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.00	-52.20	7.3	12.6	-57.50	V
5640.00	-49.66	1.8	13.1	-60.96	V
7520.00	-49.81	0.9	11.7	-60.61	V
8400.00	-48.03	1.2	11.3	-58.13	V
11280.00	-50.11	0.3	11.5	-61.31	V
3760.00	-56.89	7.3	12.6	-62.19	H
5640.00	-47.98	1.8	13.1	-59.28	H
7520.00	-48.64	0.9	11.7	-59.44	H
8400.00	-52.40	1.2	11.3	-62.50	H
11280.00	-48.40	0.3	11.5	-59.60	H

**Test Data (5MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.00	-56.26	7.3	12.6	-61.56	V
5640.00	-49.49	1.8	13.1	-60.79	V
7520.00	-49.76	0.9	11.7	-60.56	V
8400.00	-50.81	1.2	11.3	-60.91	V
11280.00	-47.30	0.3	11.5	-58.50	V
3760.00	-57.16	7.3	12.6	-62.46	H
5640.00	-46.55	1.8	13.1	-57.85	H
7520.00	-47.40	0.9	11.7	-58.20	H
8400.00	-49.34	1.2	11.3	-59.44	H
11280.00	-47.52	0.3	11.5	-58.72	H

Test Data (5MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.00	-54.96	7.3	12.6	-60.26	V
5640.00	-48.60	1.8	13.1	-59.90	V
7520.00	-47.22	0.9	11.7	-58.02	V
8400.00	-48.06	1.2	11.3	-58.16	V
11280.00	-50.58	0.3	11.5	-61.78	V
3760.00	-51.77	7.3	12.6	-57.07	H
5640.00	-48.79	1.8	13.1	-60.09	H
7520.00	-50.53	0.9	11.7	-61.33	H
8400.00	-51.89	1.2	11.3	-61.99	H
11280.00	-47.91	0.3	11.5	-59.11	H

**Test Data (10MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.00	-55.24	7.3	12.6	-60.54	V
5640.00	-47.47	1.8	13.1	-58.77	V
7520.00	-46.92	0.9	11.7	-57.72	V
8400.00	-52.41	1.2	11.3	-62.51	V
11280.00	-49.08	0.3	11.5	-60.28	V
3760.00	-55.12	7.3	12.6	-60.42	H
5640.00	-48.42	1.8	13.1	-59.72	H
7520.00	-46.92	0.9	11.7	-57.72	H
8400.00	-49.65	1.2	11.3	-59.75	H
11280.00	-49.50	0.3	11.5	-60.70	H

Test Data (10MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.00	-53.28	7.3	12.6	-58.58	V
5640.00	-46.96	1.8	13.1	-58.26	V
7520.00	-48.26	0.9	11.7	-59.06	V
8400.00	-52.15	1.2	11.3	-62.25	V
11280.00	-49.42	0.3	11.5	-60.62	V
3760.00	-54.72	7.3	12.6	-60.02	H
5640.00	-49.76	1.8	13.1	-61.06	H
7520.00	-46.65	0.9	11.7	-57.45	H
8400.00	-49.60	1.2	11.3	-59.70	H
11280.00	-50.01	0.3	11.5	-61.21	H

**Test Data (15MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.00	-52.95	7.3	12.6	-58.25	V
5640.00	-51.32	1.8	13.1	-62.62	V
7520.00	-50.04	0.9	11.7	-60.84	V
8400.00	-49.14	1.2	11.3	-59.24	V
11280.00	-49.49	0.3	11.5	-60.69	V
3760.00	-52.61	7.3	12.6	-57.91	H
5640.00	-47.05	1.8	13.1	-58.35	H
7520.00	-49.78	0.9	11.7	-60.58	H
8400.00	-49.34	1.2	11.3	-59.44	H
11280.00	-50.06	0.3	11.5	-61.26	H

Test Data (15MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.00	-53.69	7.3	12.6	-58.99	V
5640.00	-48.20	1.8	13.1	-59.50	V
7520.00	-50.49	0.9	11.7	-61.29	V
8400.00	-49.11	1.2	11.3	-59.21	V
11280.00	-46.16	0.3	11.5	-57.36	V
3760.00	-54.53	7.3	12.6	-59.83	H
5640.00	-48.46	1.8	13.1	-59.76	H
7520.00	-46.97	0.9	11.7	-57.77	H
8400.00	-49.68	1.2	11.3	-59.78	H
11280.00	-49.79	0.3	11.5	-60.99	H

**Test Data (20MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.00	-56.90	7.3	12.6	-62.20	V
5640.00	-46.33	1.8	13.1	-57.63	V
7520.00	-47.51	0.9	11.7	-58.31	V
8400.00	-49.60	1.2	11.3	-59.70	V
11280.00	-47.59	0.3	11.5	-58.79	V
3760.00	-51.71	7.3	12.6	-57.01	H
5640.00	-47.33	1.8	13.1	-58.63	H
7520.00	-50.15	0.9	11.7	-60.95	H
8400.00	-47.32	1.2	11.3	-57.42	H
11280.00	-46.05	0.3	11.5	-57.25	H

Test Data (20MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.00	-56.44	7.3	12.6	-61.74	V
5640.00	-47.19	1.8	13.1	-58.49	V
7520.00	-46.76	0.9	11.7	-57.56	V
8400.00	-52.85	1.2	11.3	-62.95	V
11280.00	-47.66	0.3	11.5	-58.86	V
3760.00	-56.09	7.3	12.6	-61.39	H
5640.00	-51.41	1.8	13.1	-62.71	H
7520.00	-46.38	0.9	11.7	-57.18	H
8400.00	-51.09	1.2	11.3	-61.19	H
11280.00	-45.81	0.3	11.5	-57.01	H

**5.4.5 LTE B4 Radiated Spurious Emission Results****Test Data (1.4MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3465.00	-56.10	6.9	12.6	-61.80	V
5197.50	-51.78	5.8	12.7	-58.68	V
6930.00	-50.18	0.9	11.7	-60.98	V
8662.50	-50.16	1.1	11.9	-60.96	V
10395.00	-49.86	0.8	12.1	-61.16	V
3465.00	-57.28	6.9	12.6	-62.98	H
5197.50	-54.00	5.8	12.7	-60.90	H
6930.00	-49.50	0.9	11.7	-60.30	H
8662.50	-46.89	1.1	11.9	-57.69	H
10395.00	-48.08	0.8	12.1	-59.38	H

Test Data (1.4MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3465.00	-57.15	6.9	12.6	-62.85	V
5197.50	-50.13	5.8	12.7	-57.03	V
6930.00	-51.24	0.9	11.7	-62.04	V
8662.50	-49.99	1.1	11.9	-60.79	V
10395.00	-49.93	0.8	12.1	-61.23	V
3465.00	-56.20	6.9	12.6	-61.90	H
5197.50	-55.58	5.8	12.7	-62.48	H
6930.00	-49.32	0.9	11.7	-60.12	H
8662.50	-47.45	1.1	11.9	-58.25	H
10395.00	-50.03	0.8	12.1	-61.33	H

**Test Data (3MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3465.00	-52.96	6.9	12.6	-58.66	V
5197.50	-52.66	5.8	12.7	-59.56	V
6930.00	-50.91	0.9	11.7	-61.71	V
8662.50	-47.29	1.1	11.9	-58.09	V
10395.00	-46.25	0.8	12.1	-57.55	V
3465.00	-55.03	6.9	12.6	-60.73	H
5197.50	-51.39	5.8	12.7	-58.29	H
6930.00	-50.88	0.9	11.7	-61.68	H
8662.50	-47.92	1.1	11.9	-58.72	H
10395.00	-51.07	0.8	12.1	-62.37	H

Test Data (3MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3465.00	-56.70	6.9	12.6	-62.40	V
5197.50	-51.66	5.8	12.7	-58.56	V
6930.00	-49.33	0.9	11.7	-60.13	V
8662.50	-46.53	1.1	11.9	-57.33	V
10395.00	-51.07	0.8	12.1	-62.37	V
3465.00	-55.73	6.9	12.6	-61.43	H
5197.50	-55.66	5.8	12.7	-62.56	H
6930.00	-51.78	0.9	11.7	-62.58	H
8662.50	-49.46	1.1	11.9	-60.26	H
10395.00	-50.62	0.8	12.1	-61.92	H

**Test Data (5MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3465.00	-52.60	6.9	12.6	-58.30	V
5197.50	-52.40	5.8	12.7	-59.30	V
6930.00	-51.68	0.9	11.7	-62.48	V
8662.50	-46.91	1.1	11.9	-57.71	V
10395.00	-50.98	0.8	12.1	-62.28	V
3465.00	-51.36	6.9	12.6	-57.06	H
5197.50	-50.25	5.8	12.7	-57.15	H
6930.00	-47.87	0.9	11.7	-58.67	H
8662.50	-51.30	1.1	11.9	-62.10	H
10395.00	-49.58	0.8	12.1	-60.88	H

Test Data (5MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3465.00	-53.15	6.9	12.6	-58.85	V
5197.50	-51.37	5.8	12.7	-58.27	V
6930.00	-48.99	0.9	11.7	-59.79	V
8662.50	-49.12	1.1	11.9	-59.92	V
10395.00	-47.65	0.8	12.1	-58.95	V
3465.00	-55.48	6.9	12.6	-61.18	H
5197.50	-52.42	5.8	12.7	-59.32	H
6930.00	-51.20	0.9	11.7	-62.00	H
8662.50	-49.59	1.1	11.9	-60.39	H
10395.00	-48.08	0.8	12.1	-59.38	H

**Test Data (10MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3465.00	-53.36	6.9	12.6	-59.06	V
5197.50	-51.77	5.8	12.7	-58.67	V
6930.00	-51.52	0.9	11.7	-62.32	V
8662.50	-51.77	1.1	11.9	-62.57	V
10395.00	-50.99	0.8	12.1	-62.29	V
3465.00	-55.06	6.9	12.6	-60.76	H
5197.50	-53.31	5.8	12.7	-60.21	H
6930.00	-47.19	0.9	11.7	-57.99	H
8662.50	-50.68	1.1	11.9	-61.48	H
10395.00	-50.73	0.8	12.1	-62.03	H

Test Data (10MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3465.00	-53.02	6.9	12.6	-58.72	V
5197.50	-56.02	5.8	12.7	-62.92	V
6930.00	-49.09	0.9	11.7	-59.89	V
8662.50	-49.02	1.1	11.9	-59.82	V
10395.00	-45.93	0.8	12.1	-57.23	V
3465.00	-54.62	6.9	12.6	-60.32	H
5197.50	-53.92	5.8	12.7	-60.82	H
6930.00	-51.30	0.9	11.7	-62.10	H
8662.50	-49.02	1.1	11.9	-59.82	H
10395.00	-49.49	0.8	12.1	-60.79	H

**Test Data (15MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3465.00	-55.18	6.9	12.6	-60.88	V
5197.50	-51.06	5.8	12.7	-57.96	V
6930.00	-47.66	0.9	11.7	-58.46	V
8662.50	-48.18	1.1	11.9	-58.98	V
10395.00	-49.37	0.8	12.1	-60.67	V
3465.00	-56.87	6.9	12.6	-62.57	H
5197.50	-53.24	5.8	12.7	-60.14	H
6930.00	-51.87	0.9	11.7	-62.67	H
8662.50	-47.07	1.1	11.9	-57.87	H
10395.00	-48.03	0.8	12.1	-59.33	H

Test Data (15MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3465.00	-52.99	6.9	12.6	-58.69	V
5197.50	-51.24	5.8	12.7	-58.14	V
6930.00	-51.01	0.9	11.7	-61.81	V
8662.50	-46.59	1.1	11.9	-57.39	V
10395.00	-49.34	0.8	12.1	-60.64	V
3465.00	-53.11	6.9	12.6	-58.81	H
5197.50	-52.94	5.8	12.7	-59.84	H
6930.00	-51.29	0.9	11.7	-62.09	H
8662.50	-50.21	1.1	11.9	-61.01	H
10395.00	-49.12	0.8	12.1	-60.42	H

**Test Data (20MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3465.00	-53.48	6.9	12.6	-59.18	V
5197.50	-52.98	5.8	12.7	-59.88	V
6930.00	-49.37	0.9	11.7	-60.17	V
8662.50	-48.20	1.1	11.9	-59.00	V
10395.00	-50.35	0.8	12.1	-61.65	V
3465.00	-54.51	6.9	12.6	-60.21	H
5197.50	-50.29	5.8	12.7	-57.19	H
6930.00	-48.34	0.9	11.7	-59.14	H
8662.50	-46.40	1.1	11.9	-57.20	H
10395.00	-50.38	0.8	12.1	-61.68	H

Test Data (20MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3465.00	-55.71	6.9	12.6	-61.41	V
5197.50	-54.87	5.8	12.7	-61.77	V
6930.00	-51.04	0.9	11.7	-61.84	V
8662.50	-47.70	1.1	11.9	-58.50	V
10395.00	-49.19	0.8	12.1	-60.49	V
3465.00	-56.36	6.9	12.6	-62.06	H
5197.50	-53.89	5.8	12.7	-60.79	H
6930.00	-47.17	0.9	11.7	-57.97	H
8662.50	-51.58	1.1	11.9	-62.38	H
10395.00	-46.68	0.8	12.1	-57.98	H

**5.4.6 LTE B5 Radiated Spurious Emission Results****Test Data (1.4MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1673.00	-46.02	4.7	9.4	-50.72	V
2509.50	-46.14	5.9	10.6	-50.84	V
3346.00	-52.81	6.8	12.6	-58.61	V
4182.50	-53.10	7.8	12.6	-57.90	V
5019.00	-54.21	7.1	13.1	-60.21	V
1673.00	-45.48	4.7	9.4	-50.18	H
2509.50	-45.32	5.9	10.6	-50.02	H
3346.00	-54.31	6.8	12.6	-60.11	H
4182.50	-52.70	7.8	12.6	-57.50	H
5019.00	-56.68	7.1	13.1	-62.68	H

Test Data (1.4MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1673.00	-45.81	4.7	9.4	-50.51	V
2509.50	-46.47	5.9	10.6	-51.17	V
3346.00	-55.18	6.8	12.6	-60.98	V
4182.50	-53.67	7.8	12.6	-58.47	V
5019.00	-56.60	7.1	13.1	-62.60	V
1673.00	-47.17	4.7	9.4	-51.87	H
2509.50	-46.10	5.9	10.6	-50.80	H
3346.00	-51.32	6.8	12.6	-57.12	H
4182.50	-52.78	7.8	12.6	-57.58	H
5019.00	-53.15	7.1	13.1	-59.15	H

**Test Data (3MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1673.00	-47.19	4.7	9.4	-51.89	V
2509.50	-45.63	5.9	10.6	-50.33	V
3346.00	-54.87	6.8	12.6	-60.67	V
4182.50	-54.76	7.8	12.6	-59.56	V
5019.00	-53.19	7.1	13.1	-59.19	V
1673.00	-45.32	4.7	9.4	-50.02	H
2509.50	-46.57	5.9	10.6	-51.27	H
3346.00	-54.58	6.8	12.6	-60.38	H
4182.50	-53.02	7.8	12.6	-57.82	H
5019.00	-55.60	7.1	13.1	-61.60	H

Test Data (3MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1673.00	-45.73	4.7	9.4	-50.43	V
2509.50	-45.69	5.9	10.6	-50.39	V
3346.00	-54.48	6.8	12.6	-60.28	V
4182.50	-56.53	7.8	12.6	-61.33	V
5019.00	-51.46	7.1	13.1	-57.46	V
1673.00	-46.71	4.7	9.4	-51.41	H
2509.50	-47.21	5.9	10.6	-51.91	H
3346.00	-53.93	6.8	12.6	-59.73	H
4182.50	-58.09	7.8	12.6	-62.89	H
5019.00	-55.04	7.1	13.1	-61.04	H

**Test Data (5MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1673.00	-45.62	4.7	9.4	-50.32	V
2509.50	-45.95	5.9	10.6	-50.65	V
3346.00	-54.13	6.8	12.6	-59.93	V
4182.50	-56.91	7.8	12.6	-61.71	V
5019.00	-53.75	7.1	13.1	-59.75	V
1673.00	-45.85	4.7	9.4	-50.55	H
2509.50	-45.49	5.9	10.6	-50.19	H
3346.00	-55.56	6.8	12.6	-61.36	H
4182.50	-52.26	7.8	12.6	-57.06	H
5019.00	-54.57	7.1	13.1	-60.57	H

Test Data (5MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1673.00	-46.17	4.7	9.4	-50.87	V
2509.50	-46.54	5.9	10.6	-51.24	V
3346.00	-52.71	6.8	12.6	-58.51	V
4182.50	-53.51	7.8	12.6	-58.31	V
5019.00	-55.56	7.1	13.1	-61.56	V
1673.00	-46.06	4.7	9.4	-50.76	H
2509.50	-45.84	5.9	10.6	-50.54	H
3346.00	-53.42	6.8	12.6	-59.22	H
4182.50	-56.04	7.8	12.6	-60.84	H
5019.00	-56.62	7.1	13.1	-62.62	H

**Test Data (10MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1673.00	-46.16	4.7	9.4	-50.86	V
2509.50	-46.95	5.9	10.6	-51.65	V
3346.00	-52.90	6.8	12.6	-58.70	V
4182.50	-52.98	7.8	12.6	-57.78	V
5019.00	-51.17	7.1	13.1	-57.17	V
1673.00	-47.09	4.7	9.4	-51.79	H
2509.50	-46.24	5.9	10.6	-50.94	H
3346.00	-56.67	6.8	12.6	-62.47	H
4182.50	-55.74	7.8	12.6	-60.54	H
5019.00	-55.03	7.1	13.1	-61.03	H

Test Data (10MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1673.00	-45.48	4.7	9.4	-50.18	V
2509.50	-45.80	5.9	10.6	-50.50	V
3346.00	-54.86	6.8	12.6	-60.66	V
4182.50	-52.43	7.8	12.6	-57.23	V
5019.00	-56.37	7.1	13.1	-62.37	V
1673.00	-45.56	4.7	9.4	-50.26	H
2509.50	-46.40	5.9	10.6	-51.10	H
3346.00	-51.66	6.8	12.6	-57.46	H
4182.50	-54.55	7.8	12.6	-59.35	H
5019.00	-52.76	7.1	13.1	-58.76	H

**5.4.7 LTE B12 Radiated Spurious Emission Results****Test Data (1.4MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1415.00	-40.59	4.4	8.0	-44.19	V
2122.50	-38.67	5.4	10.4	-43.67	V
2830.00	-55.06	6.3	11.5	-60.26	V
3537.50	-54.76	7.0	12.6	-60.36	V
4245.00	-57.41	7.8	12.6	-62.21	V
1415.00	-39.20	4.4	8.0	-42.80	H
2122.50	-38.23	5.4	10.4	-43.23	H
2830.00	-56.93	6.3	11.5	-62.13	H
3537.50	-53.11	7.0	12.6	-58.71	H
4245.00	-53.53	7.8	12.6	-58.33	H

Test Data (1.4MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1415.00	-39.73	4.4	8.0	-43.33	V
2122.50	-39.59	5.4	10.4	-44.59	V
2830.00	-53.92	6.3	11.5	-59.12	V
3537.50	-56.35	7.0	12.6	-61.95	V
4245.00	-56.20	7.8	12.6	-61.00	V
1415.00	-39.82	4.4	8.0	-43.42	H
2122.50	-39.82	5.4	10.4	-44.82	H
2830.00	-53.76	6.3	11.5	-58.96	H
3537.50	-52.15	7.0	12.6	-57.75	H
4245.00	-56.92	7.8	12.6	-61.72	H

**Test Data (3MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1415.00	-38.74	4.4	8.0	-42.34	V
2122.50	-37.49	5.4	10.4	-42.49	V
2830.00	-57.49	6.3	11.5	-62.69	V
3537.50	-56.10	7.0	12.6	-61.70	V
4245.00	-53.42	7.8	12.6	-58.22	V
1415.00	-41.12	4.4	8.0	-44.72	H
2122.50	-39.71	5.4	10.4	-44.71	H
2830.00	-57.38	6.3	11.5	-62.58	H
3537.50	-55.17	7.0	12.6	-60.77	H
4245.00	-54.90	7.8	12.6	-59.70	H

Test Data (3MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1415.00	-39.66	4.4	8.0	-43.26	V
2122.50	-37.03	5.4	10.4	-42.03	V
2830.00	-52.87	6.3	11.5	-58.07	V
3537.50	-52.71	7.0	12.6	-58.31	V
4245.00	-57.91	7.8	12.6	-62.71	V
1415.00	-39.73	4.4	8.0	-43.33	H
2122.50	-39.42	5.4	10.4	-44.42	H
2830.00	-57.64	6.3	11.5	-62.84	H
3537.50	-51.41	7.0	12.6	-57.01	H
4245.00	-52.91	7.8	12.6	-57.71	H



Test Data (5MHz bandwidth QPSK Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1415.00	-40.65	4.4	8.0	-44.25	V
2122.50	-37.86	5.4	10.4	-42.86	V
2830.00	-52.28	6.3	11.5	-57.48	V
3537.50	-52.97	7.0	12.6	-58.57	V
4245.00	-54.82	7.8	12.6	-59.62	V
1415.00	-38.83	4.4	8.0	-42.43	H
2122.50	-39.43	5.4	10.4	-44.43	H
2830.00	-54.73	6.3	11.5	-59.93	H
3537.50	-55.29	7.0	12.6	-60.89	H
4245.00	-57.92	7.8	12.6	-62.72	H

Test Data (5MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1415.00	-39.33	4.4	8.0	-42.93	V
2122.50	-39.91	5.4	10.4	-44.91	V
2830.00	-56.07	6.3	11.5	-61.27	V
3537.50	-55.73	7.0	12.6	-61.33	V
4245.00	-55.36	7.8	12.6	-60.16	V
1415.00	-39.53	4.4	8.0	-43.13	H
2122.50	-38.05	5.4	10.4	-43.05	H
2830.00	-53.40	6.3	11.5	-58.60	H
3537.50	-53.82	7.0	12.6	-59.42	H
4245.00	-56.15	7.8	12.6	-60.95	H

**Test Data (10MHz bandwidth QPSK Mode)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1415.00	-40.03	4.4	8.0	-43.63	V
2122.50	-39.59	5.4	10.4	-44.59	V
2830.00	-52.23	6.3	11.5	-57.43	V
3537.50	-56.46	7.0	12.6	-62.06	V
4245.00	-55.41	7.8	12.6	-60.21	V
1415.00	-40.21	4.4	8.0	-43.81	H
2122.50	-37.46	5.4	10.4	-42.46	H
2830.00	-52.68	6.3	11.5	-57.88	H
3537.50	-53.00	7.0	12.6	-58.60	H
4245.00	-54.35	7.8	12.6	-59.15	H

Test Data (10MHz bandwidth 16QAM Mode)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1415.00	-40.24	4.4	8.0	-43.84	V
2122.50	-37.07	5.4	10.4	-42.07	V
2830.00	-56.91	6.3	11.5	-62.11	V
3537.50	-53.41	7.0	12.6	-59.01	V
4245.00	-57.72	7.8	12.6	-62.52	V
1415.00	-39.69	4.4	8.0	-43.29	H
2122.50	-38.53	5.4	10.4	-43.53	H
2830.00	-52.30	6.3	11.5	-57.50	H
3537.50	-55.70	7.0	12.6	-61.30	H
4245.00	-53.42	7.8	12.6	-58.22	H