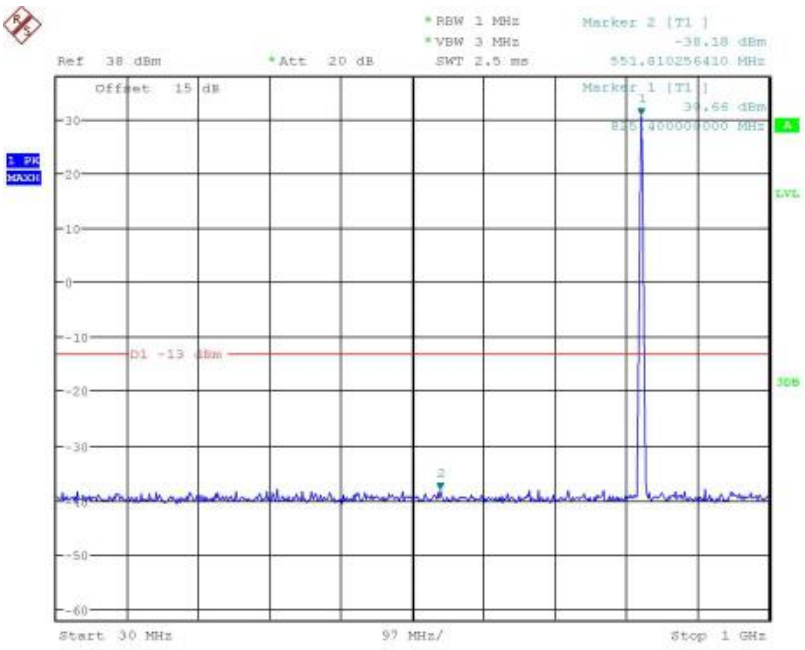
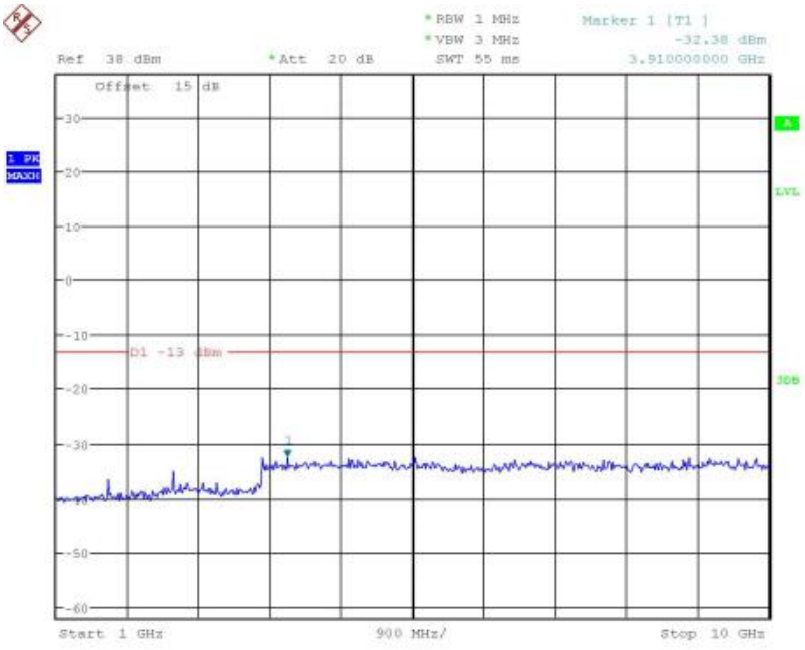
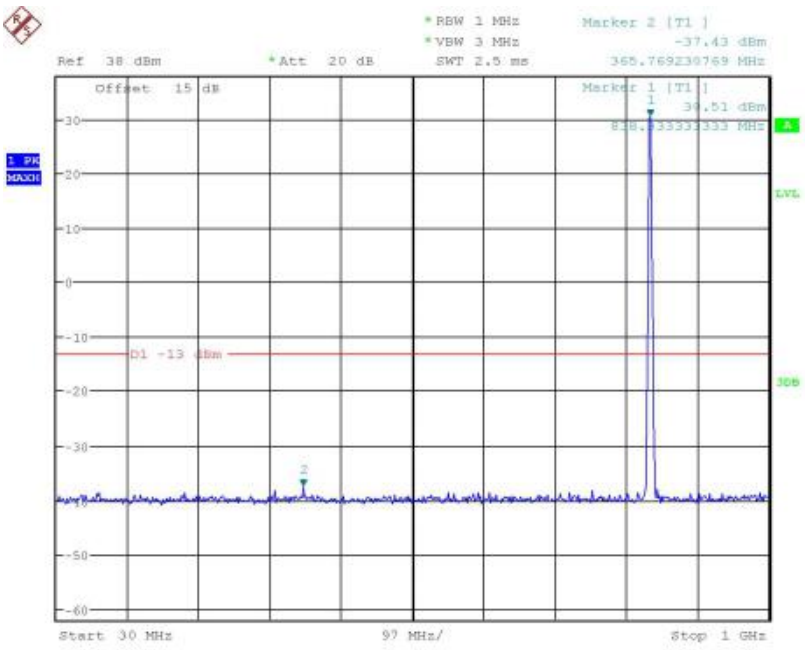


8PSK- Low channel-824.200 MHz-30MHz to 1GHz

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

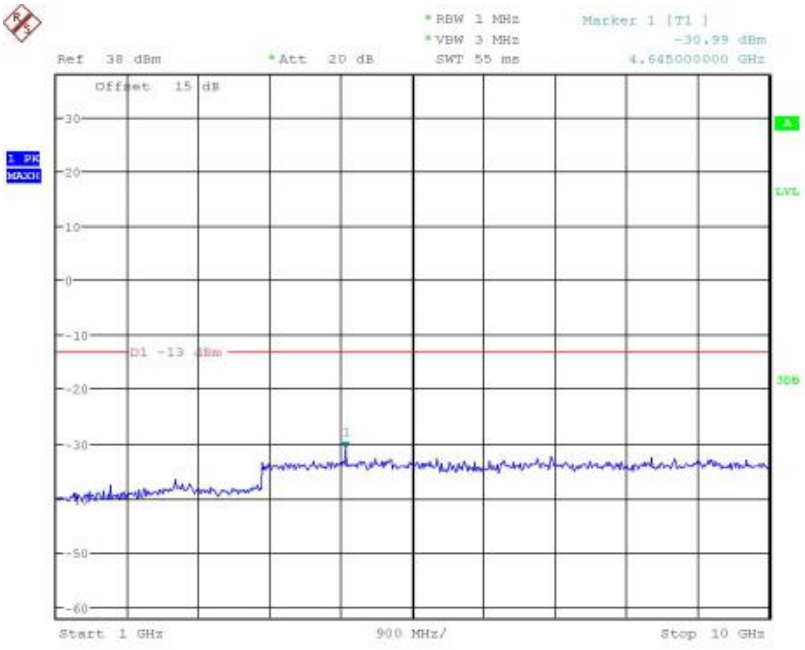


8PSK-Low channel-824.200 MHz-1GHz to 10GHz

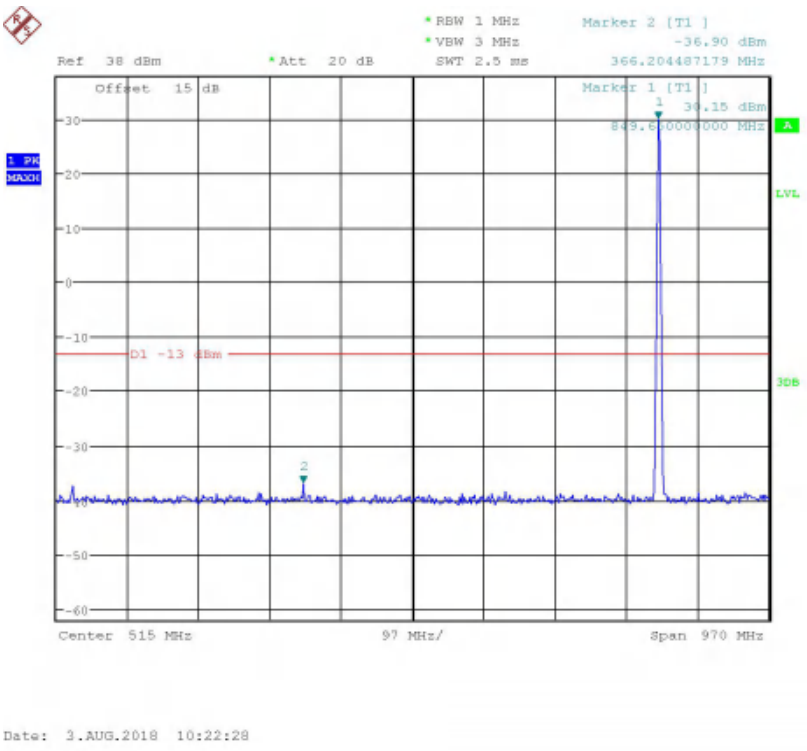


8PSK-Mid Channel-836.6 MHz-30MHz to 1GHz

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

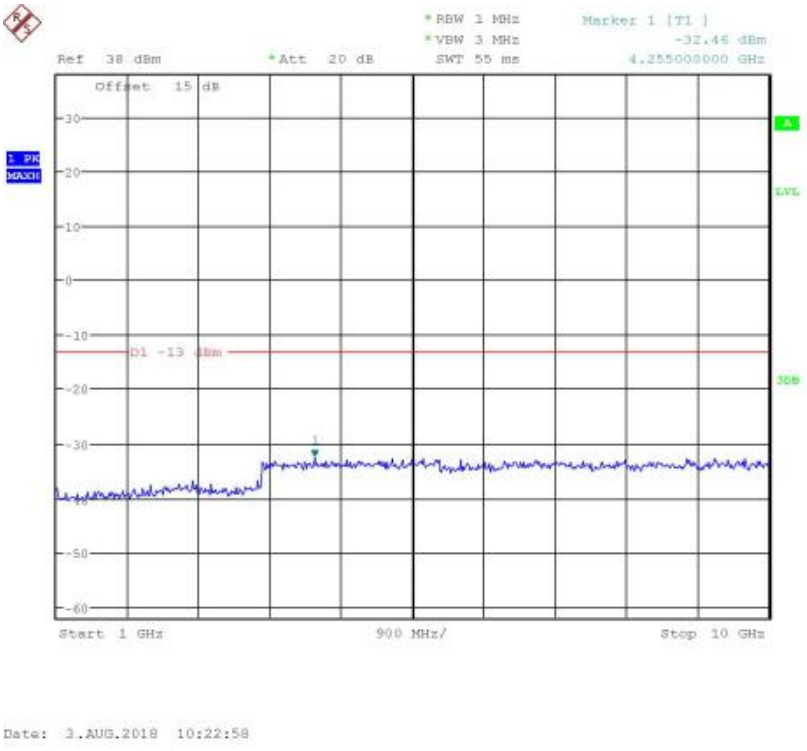


8PSK-Mid Channel-836.6 MHz-1GHz to 10GHz



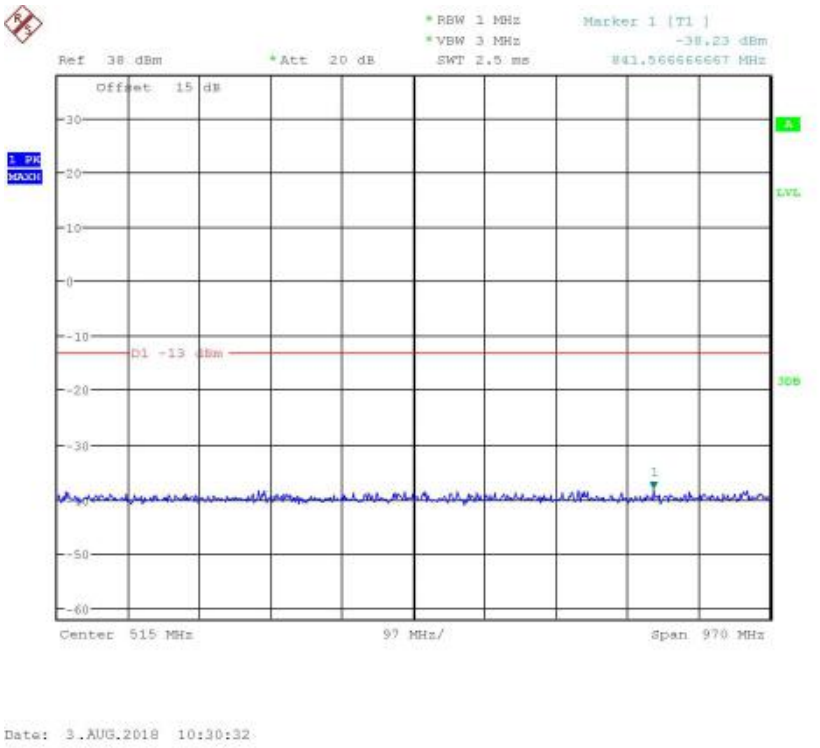
8PSK-High Channel-848.8 MHz-30MHz to 1GHz

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

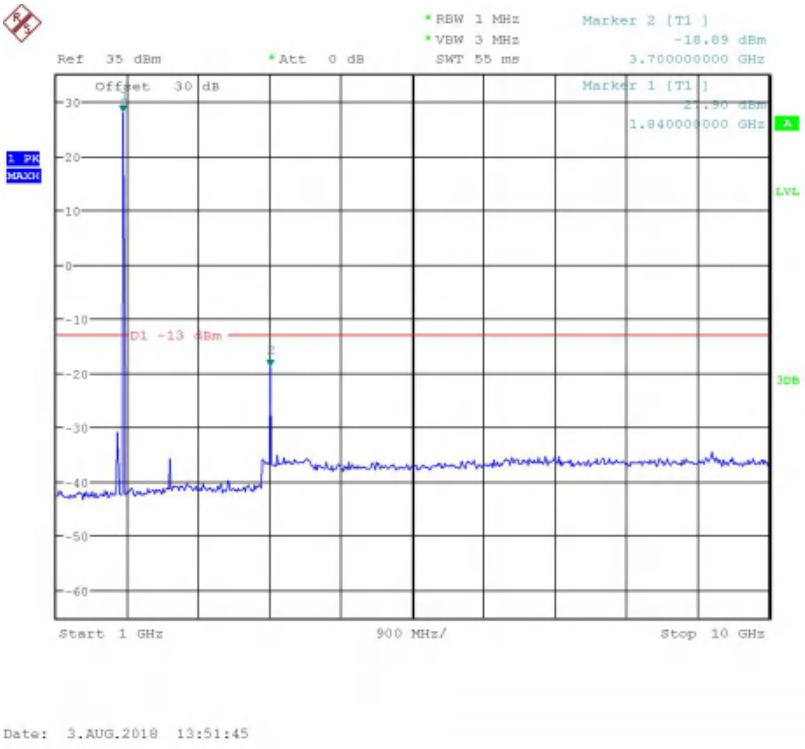


8PSK-High Channel-848.8 MHz-1GHz to 10GHz

5.3.3 PCS1900 Conducted Spurious Emission Results

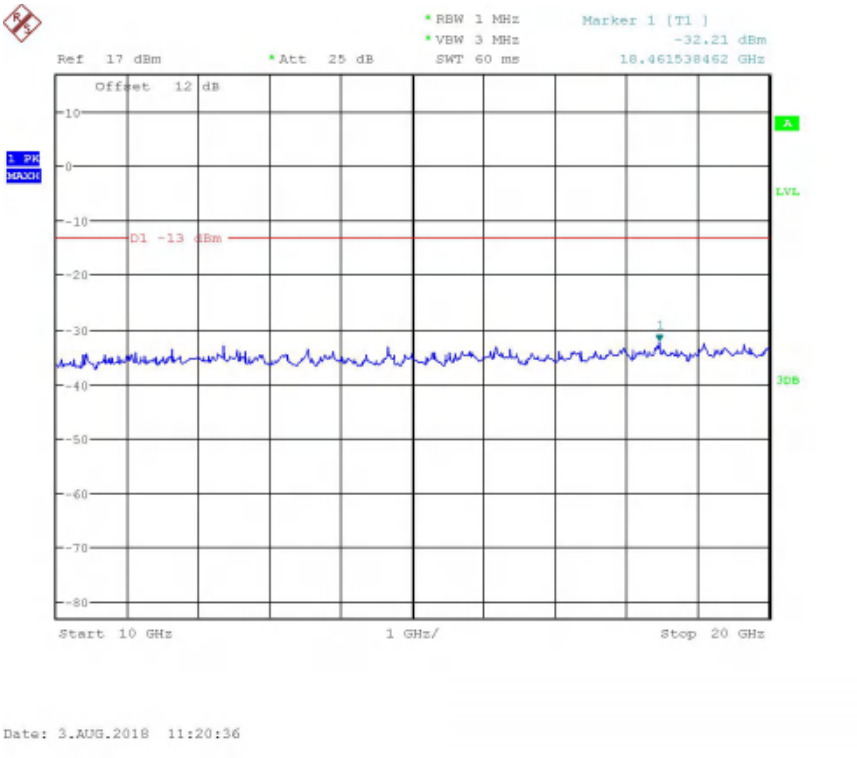


GMSK-Low channel-1850.2 MHz-30MHz to 1GHz

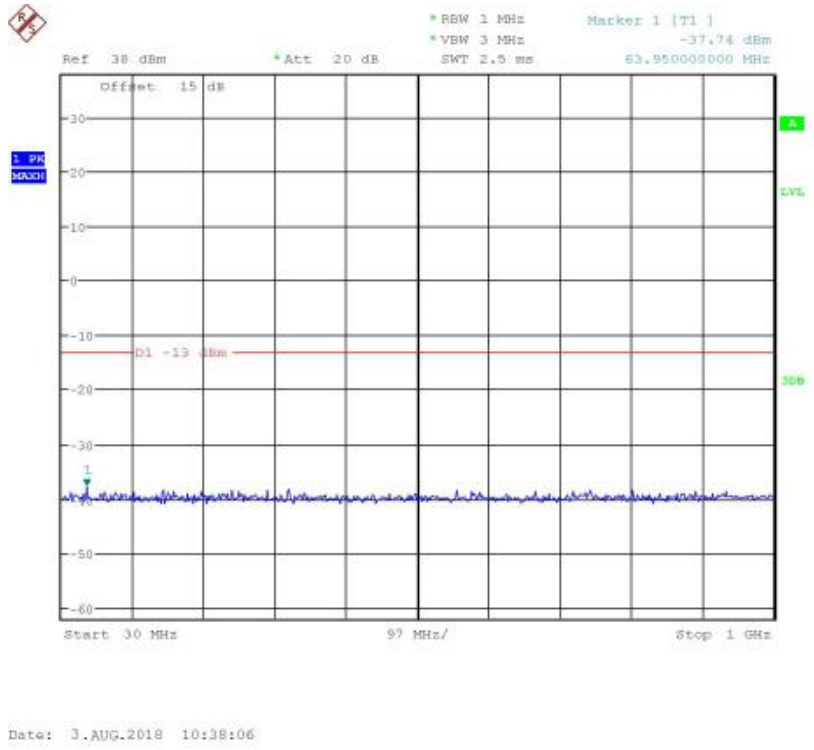


GMSK-Low channel-1850.2 MHz-1GHz to 10GHz

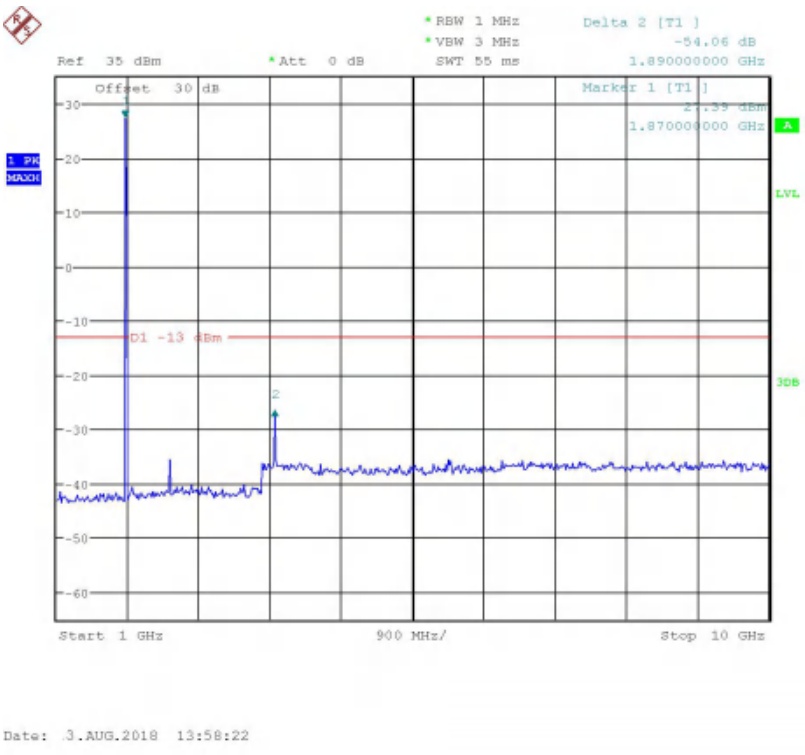
Note: The strong emission shown is the carrier signal.



GMSK-Low channel-1850.2 MHz-10GHz to 20GHz

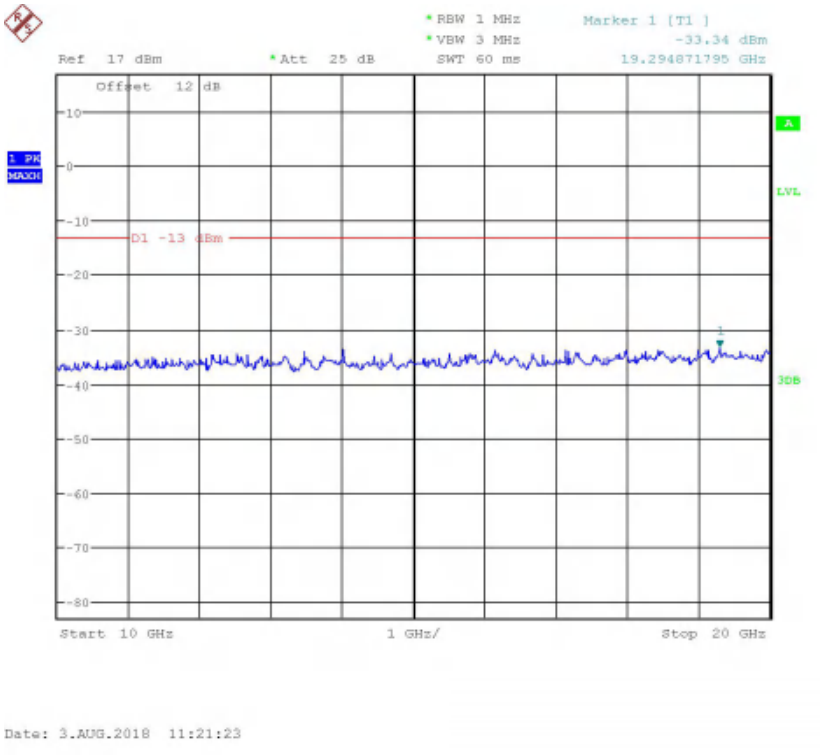


GMSK-Middle channel-1880.0 MHz-30MHz to 1GHz

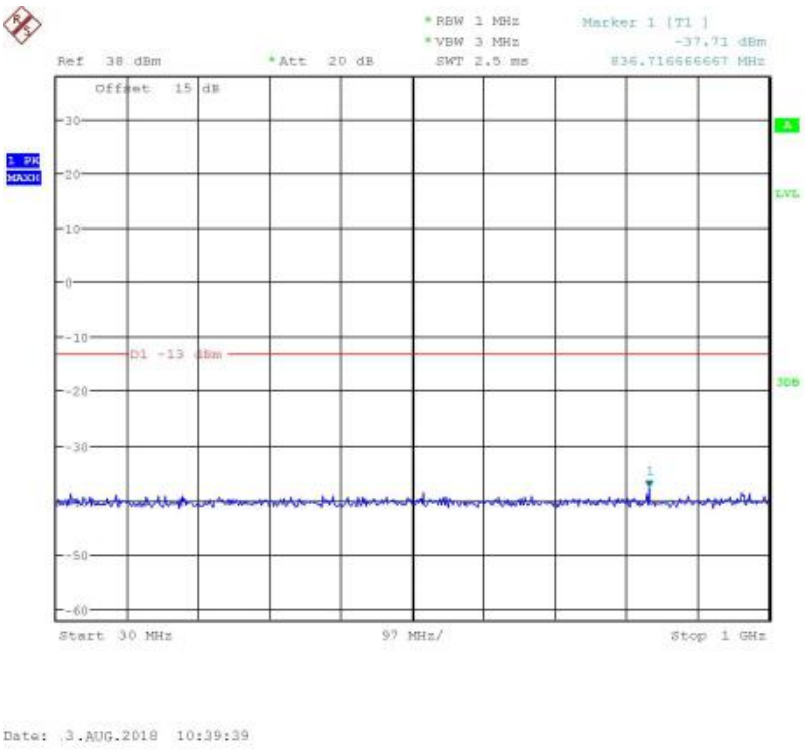


GMSK-Middle channel-1880.0 MHz-1GHz to 10GHz

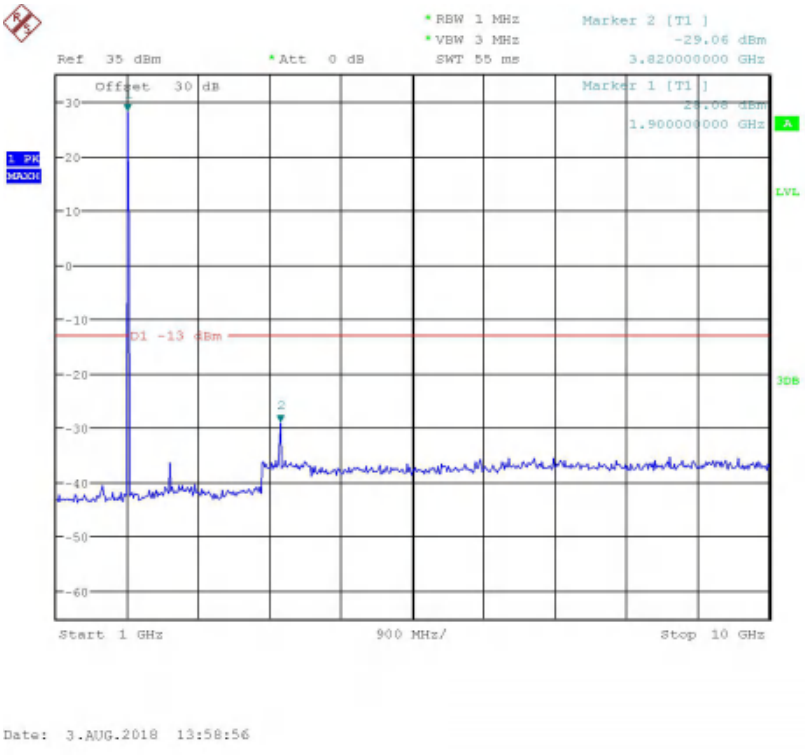
Note: The strong emission shown is the carrier signal.



GMSK-Middle channel-1880.0 MHz-10GHz to 20GHz

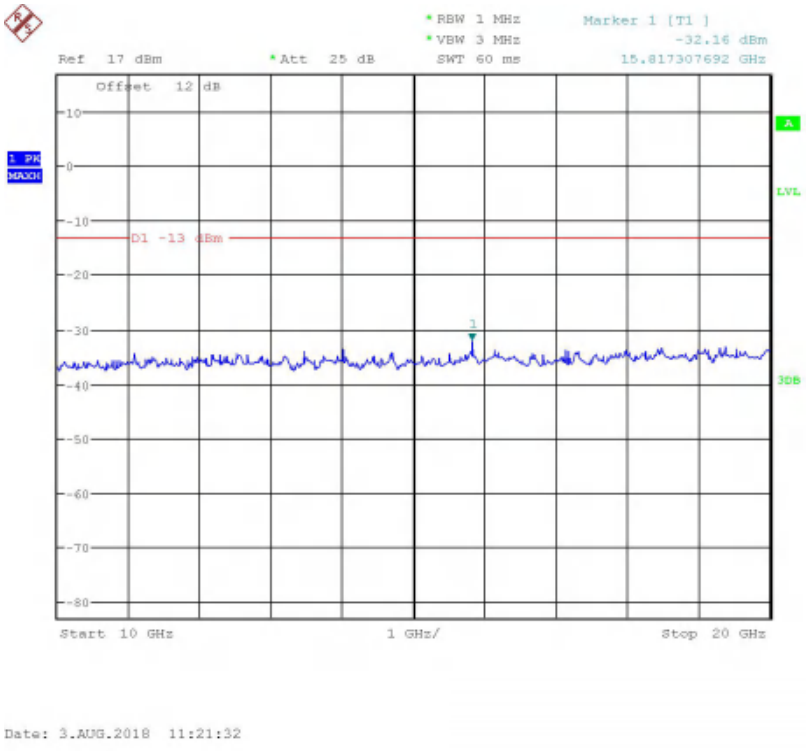


GMSK-High channel-1909.8 MHz-30MHz to 1GHz

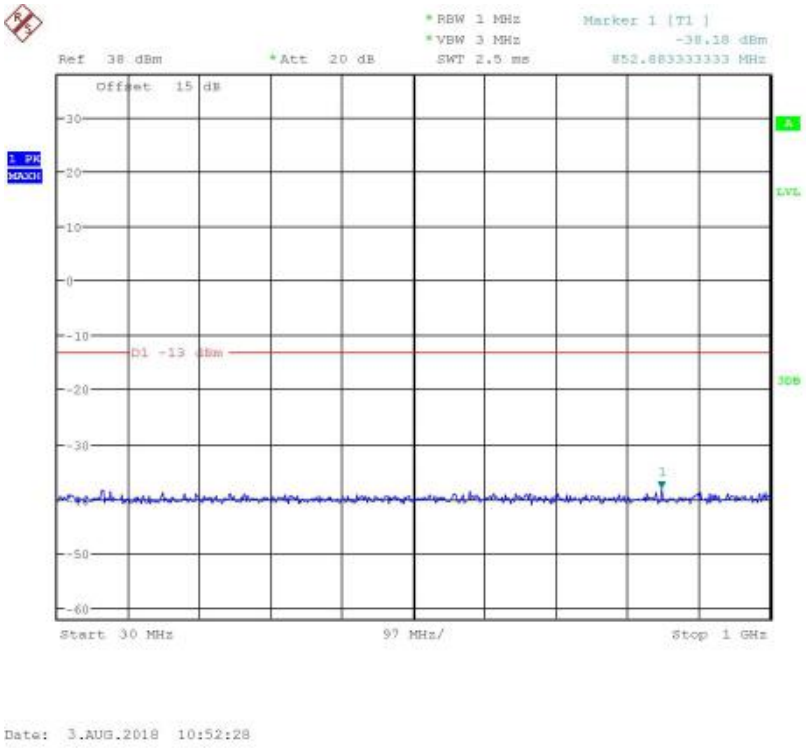


GMSK-High channel-1909.8 MHz-1GHz to 10GHz

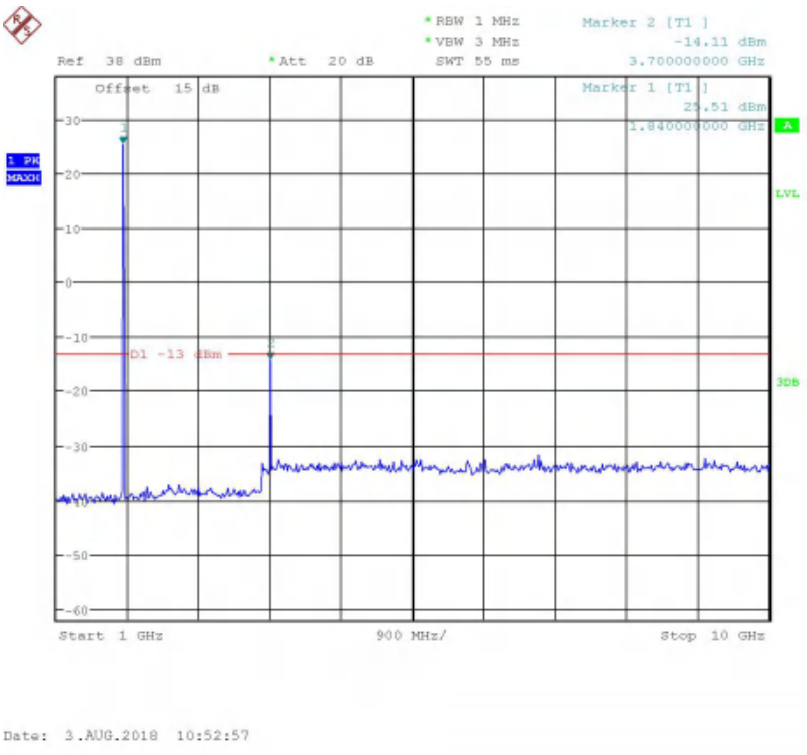
Note: The strong emission shown is the carrier signal.



GMSK-High channel-1909.8 MHz-10GHz to 20GHz

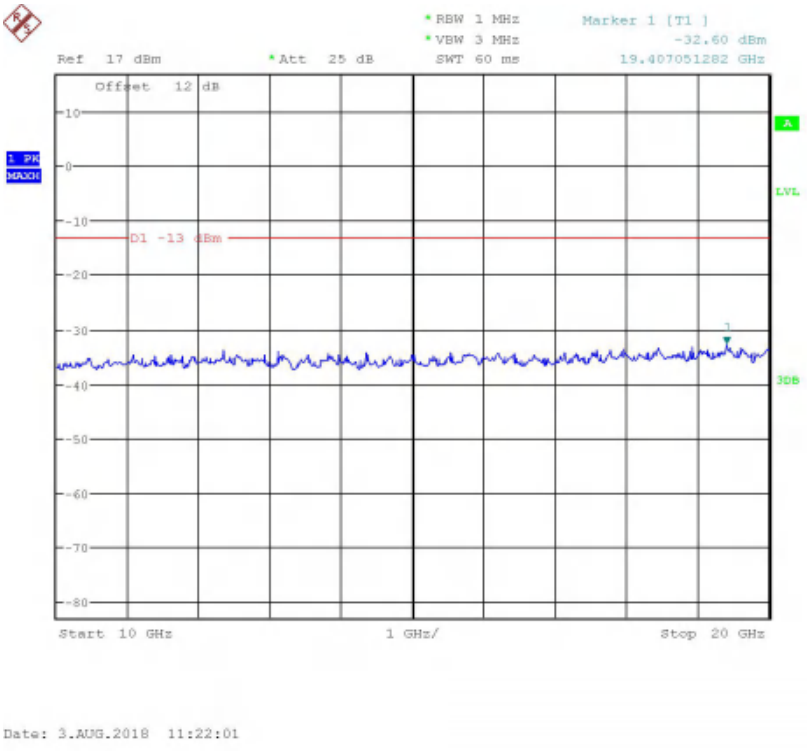


8PSK-Low channel-1850.2 MHz-30MHz to 1GHz

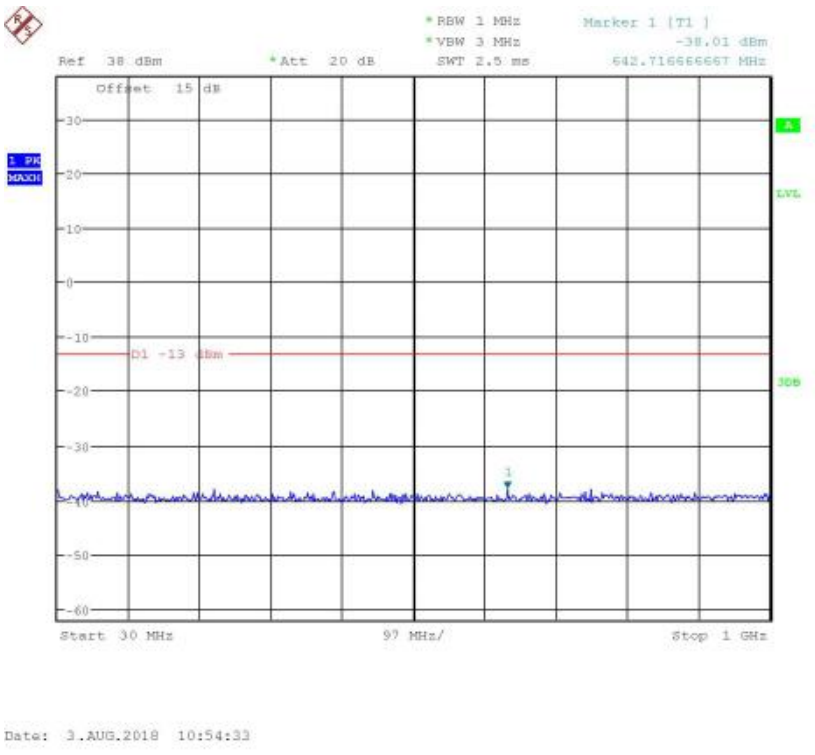


8PSK-Low channel-1850.2 MHz-1GHz to 10GHz

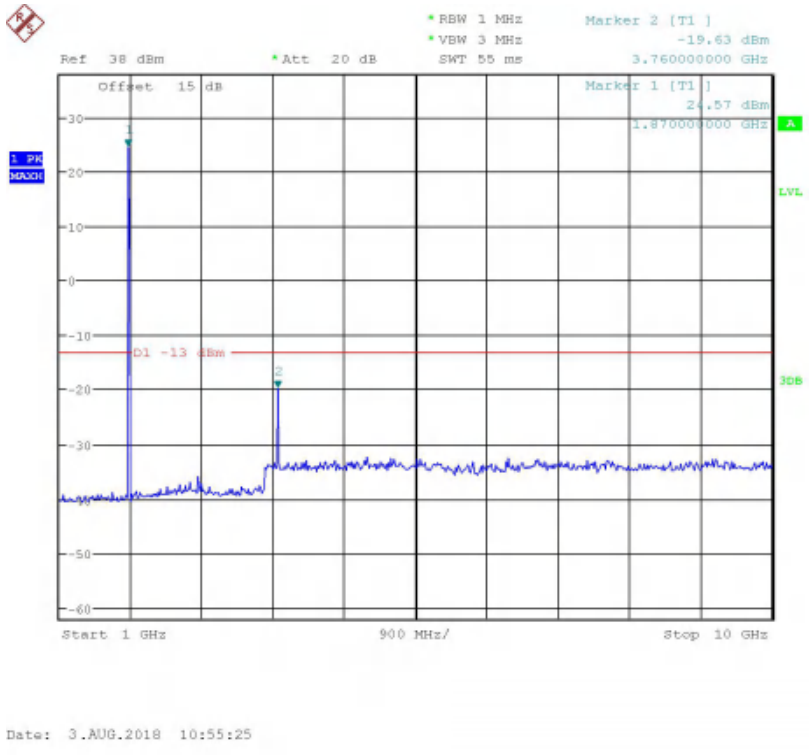
Note: The strong emission shown is the carrier signal.



8PSK- Low channel-1850.2 MHz-10GHz to 20GHz

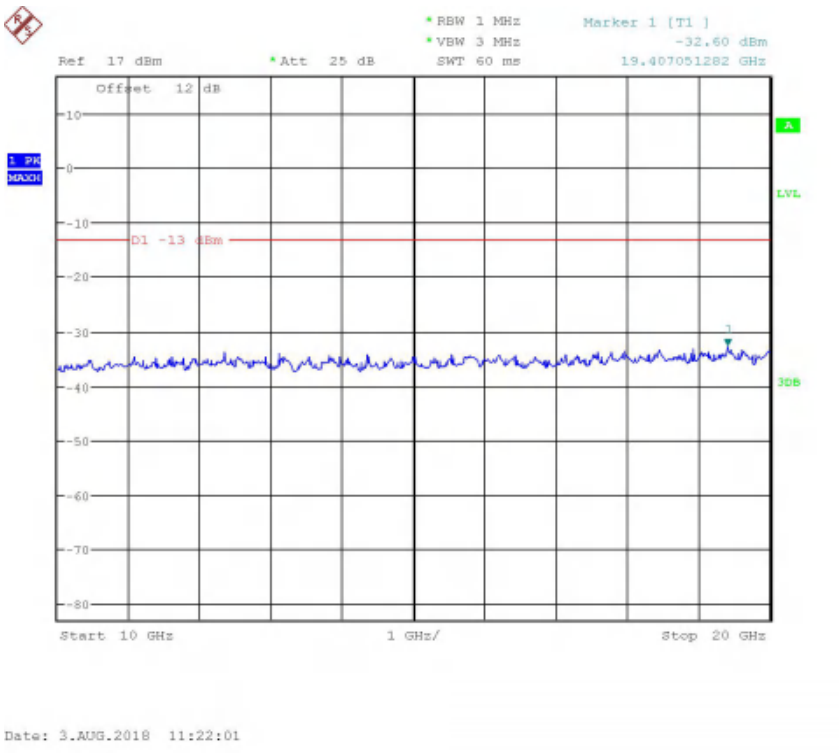


8PSK-Middle channel-1880.0 MHz-30MHz to 1GHz

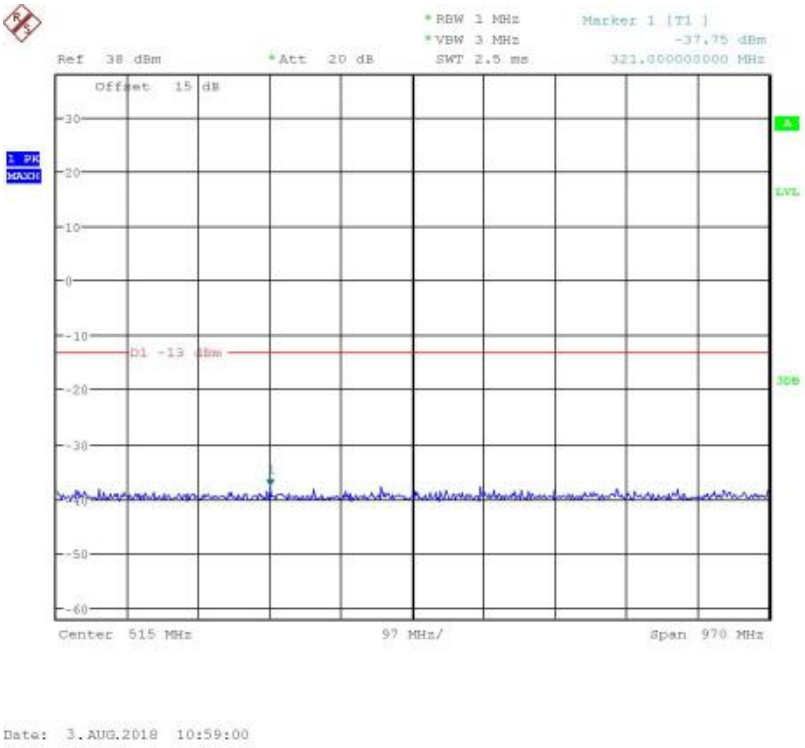


8PSK-Middle channel-1880.0 MHz-1GHz to 10GHz

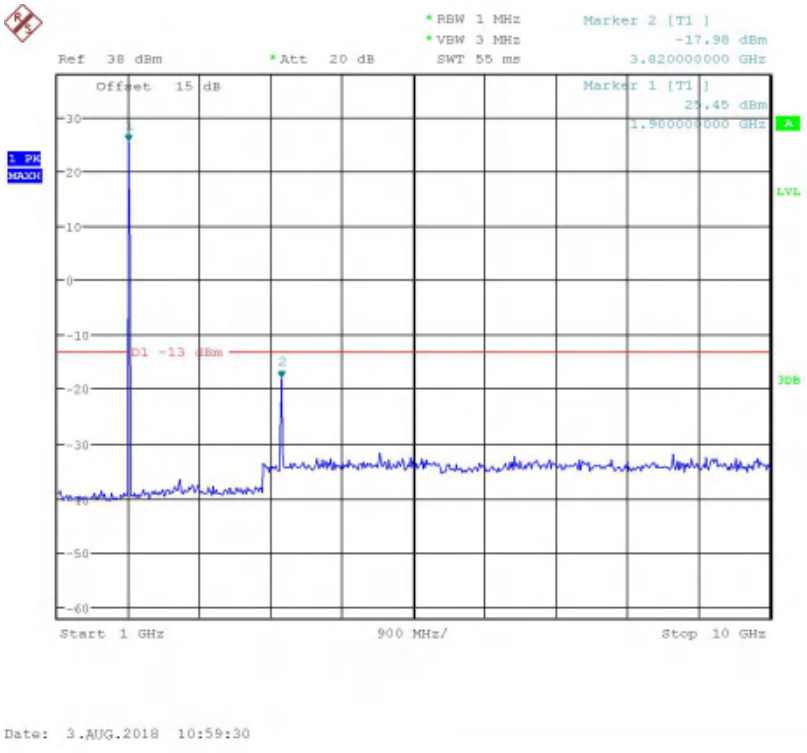
Note: The strong emission shown is the carrier signal.



8PSK-Middle channel-1880.0 MHz-10GHz to 20GHz

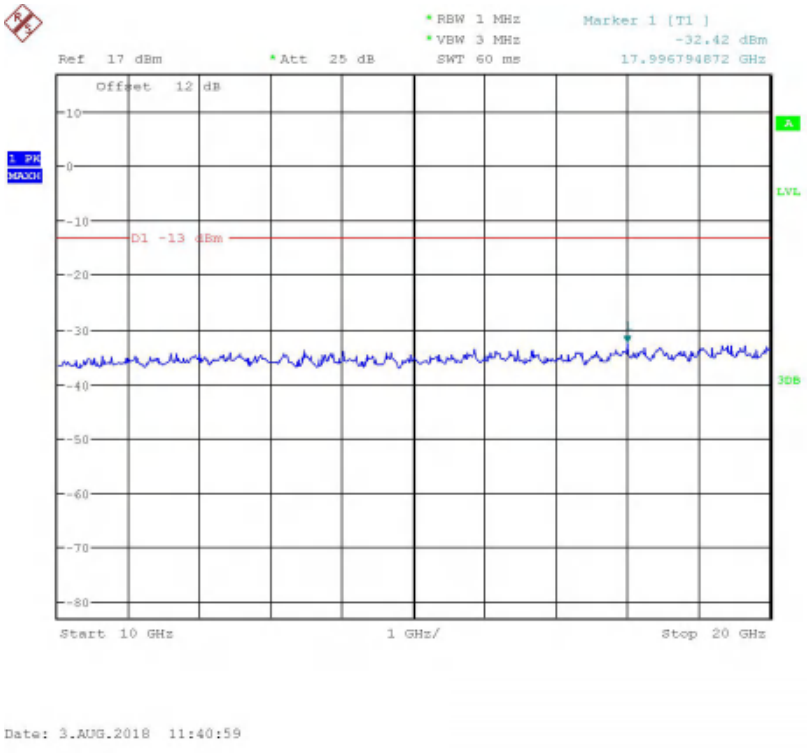


8PSK-High channel-1909.8 MHz-30MHz to 1GHz



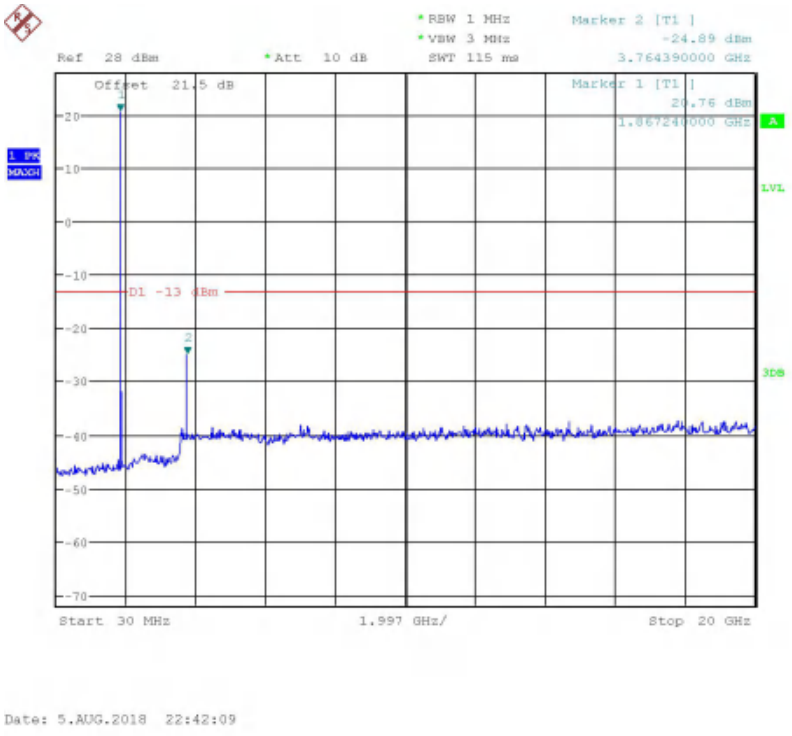
8PSK-High channel-1909.8 MHz-1GHz to 10GHz

Note: The strong emission shown is the carrier signal



8PSK-High channel-1909.8 MHz-10GHz to 20GHz

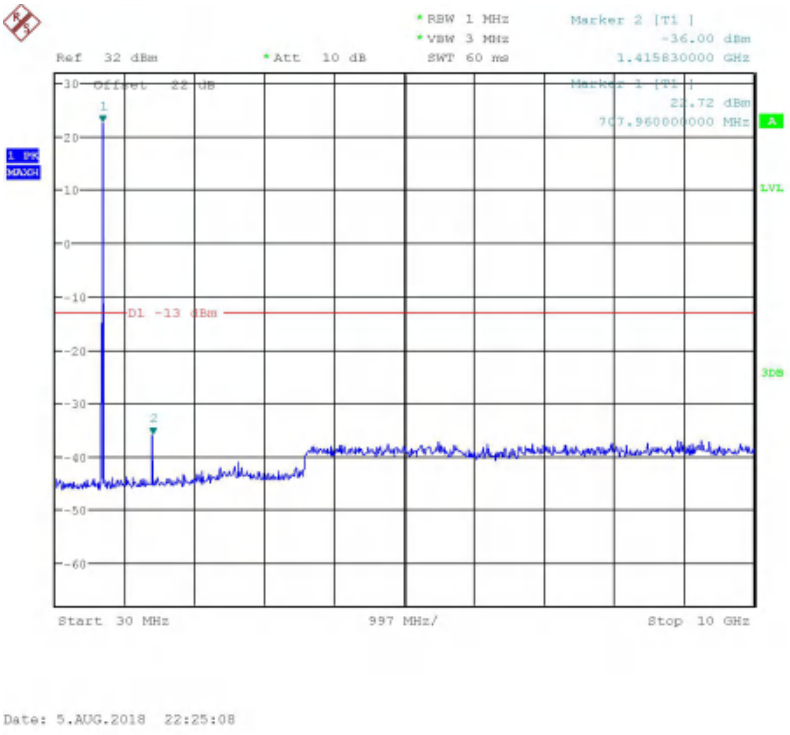
5.3.4 NB-IoT B2 Conducted Spurious Emission Results



Band2-Middle Channel-30MHz to 20GHz

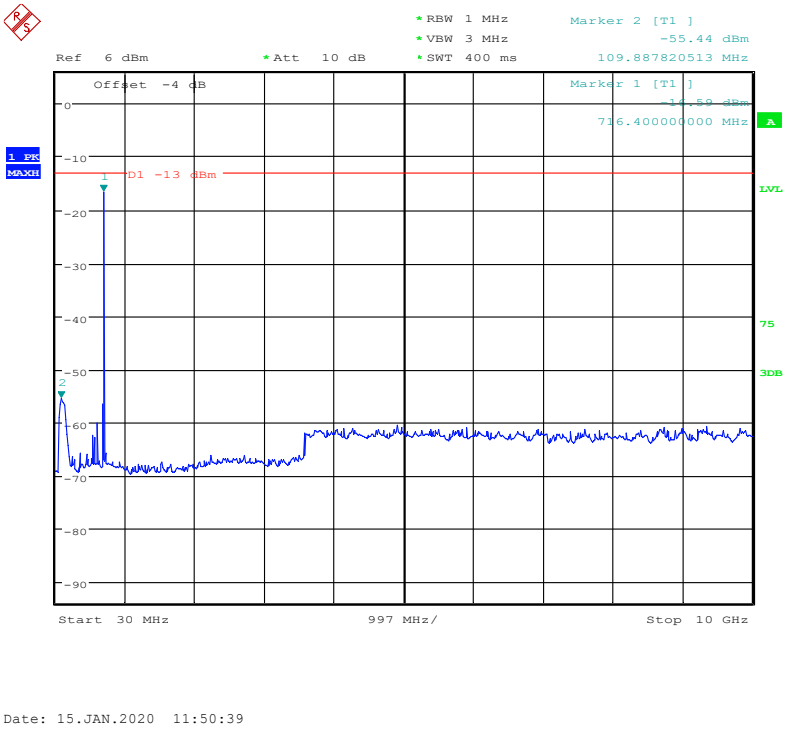
Note: The strong emission shown in each case is the carrier signal.

5.3.5 NB-IoT B12 Conducted Spurious Emission Results



Band12-Middle Channel-30MHz to 20GHz

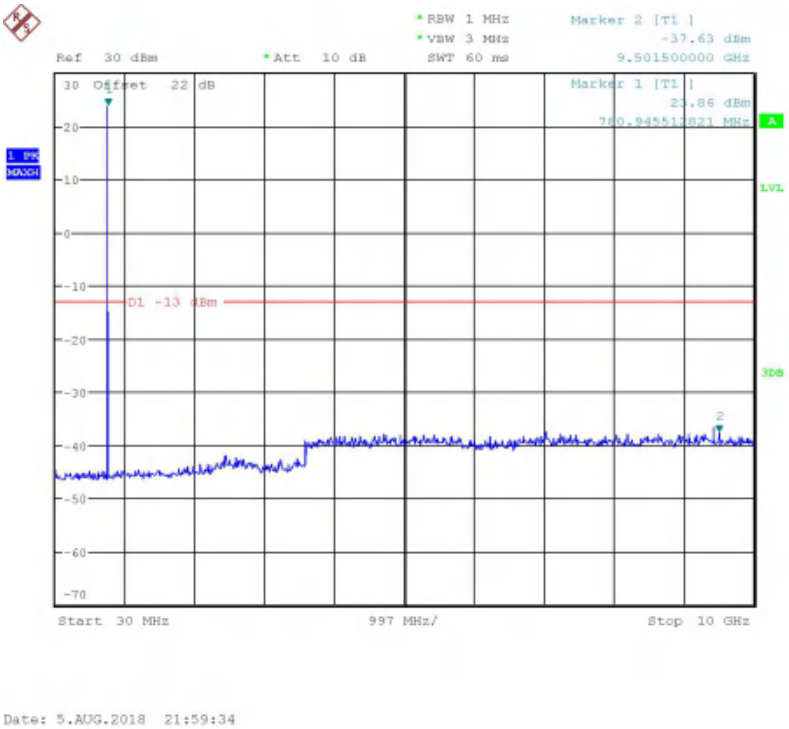
Note: The strong emission shown in each case is the carrier signal.



Band12-23179 Channel-30MHz to 20GHz

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

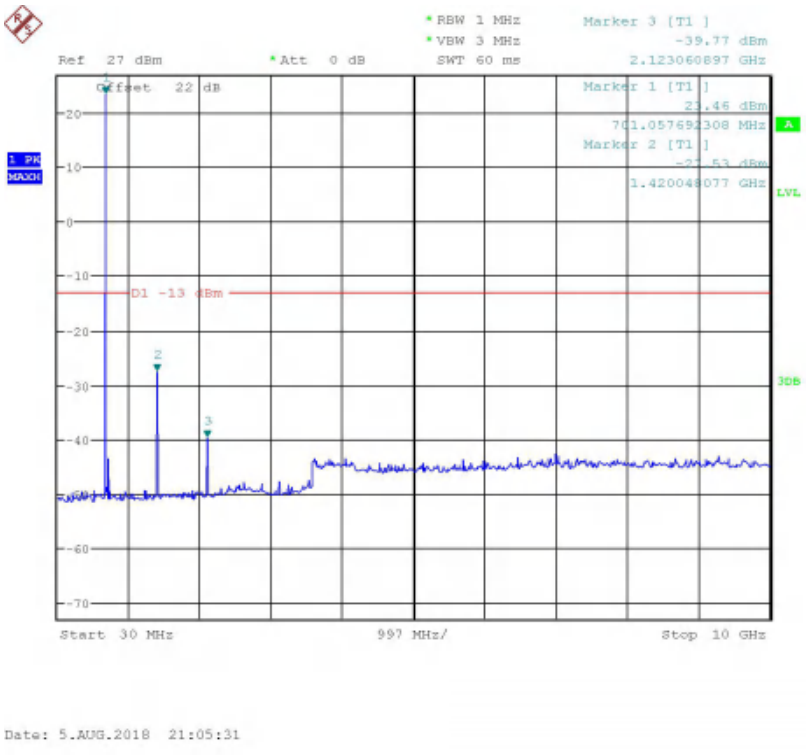
5.3.6 NB-IoT B13 Conducted Spurious Emission Results



Band13-Middle Channel-30MHz to 20GHz

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

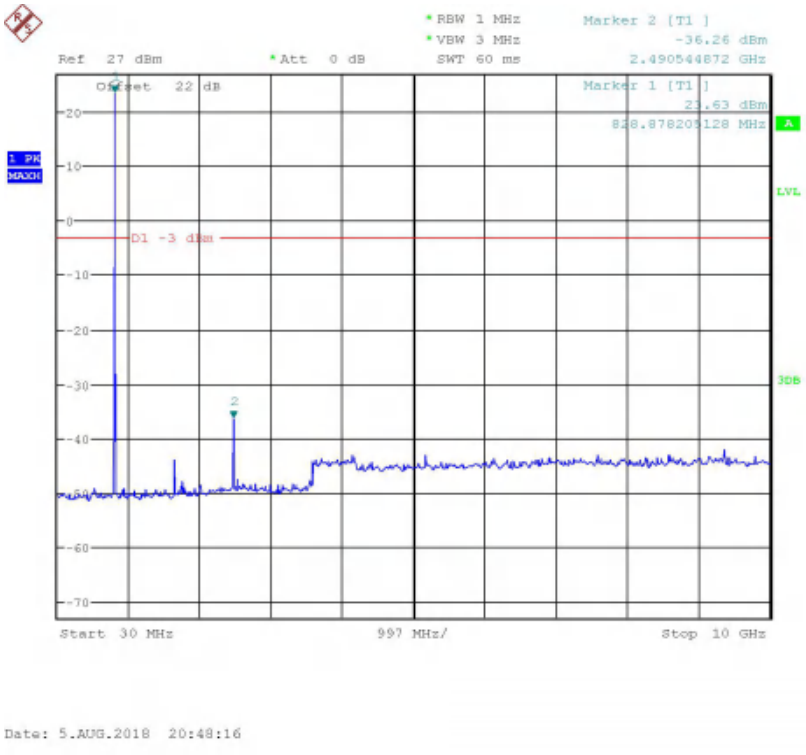
5.3.7 NB-IoT B17 Conducted Spurious Emission Results



Band13-Middle Channel-30MHz to 10GHz

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

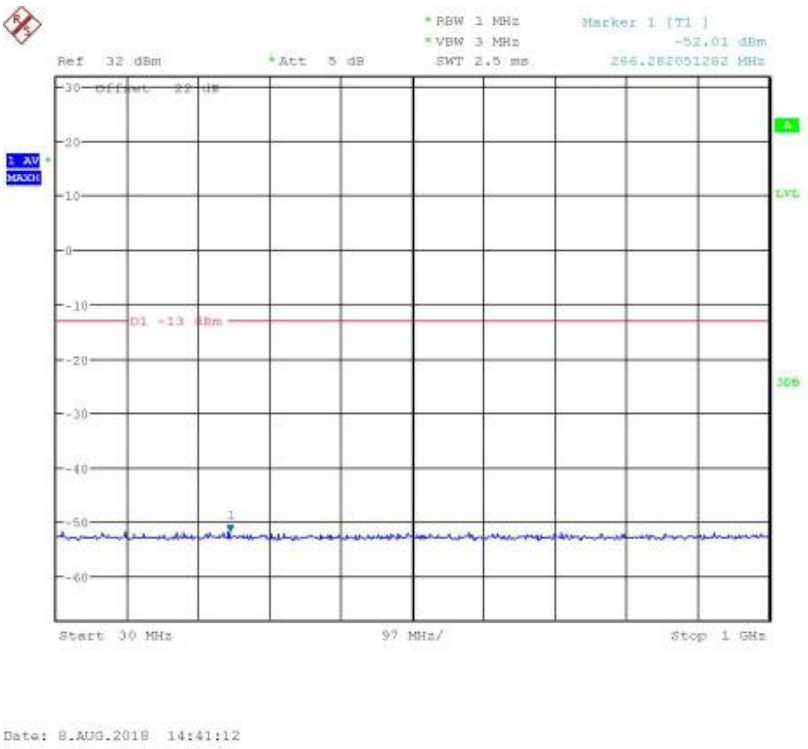
5.3.8 NB-IoT B26 Conducted Spurious Emission Results



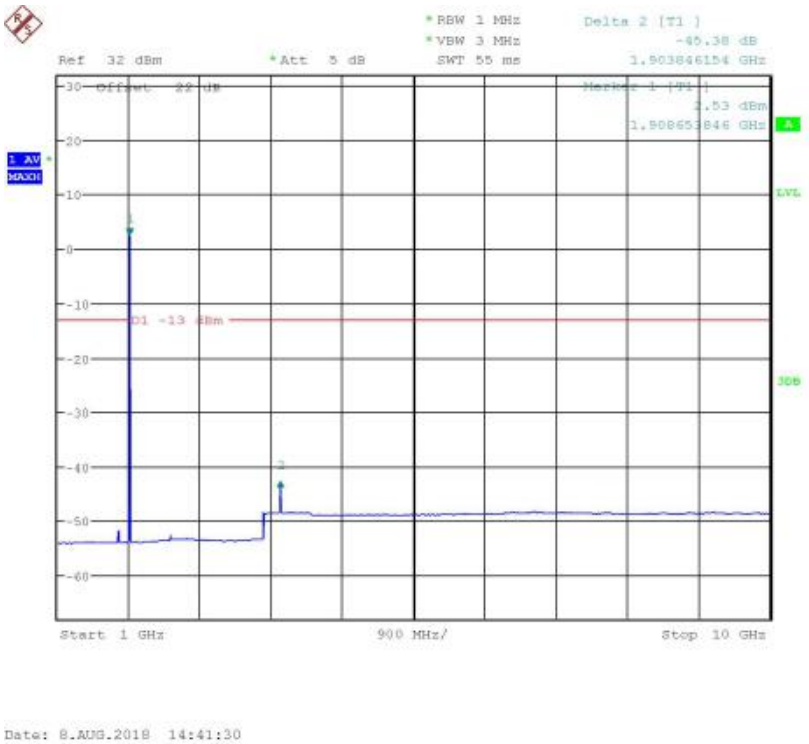
Band17-Middle Channel-30MHz to 10GHz

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

5.3.9 CAT-M B2 Conducted Spurious Emission Results

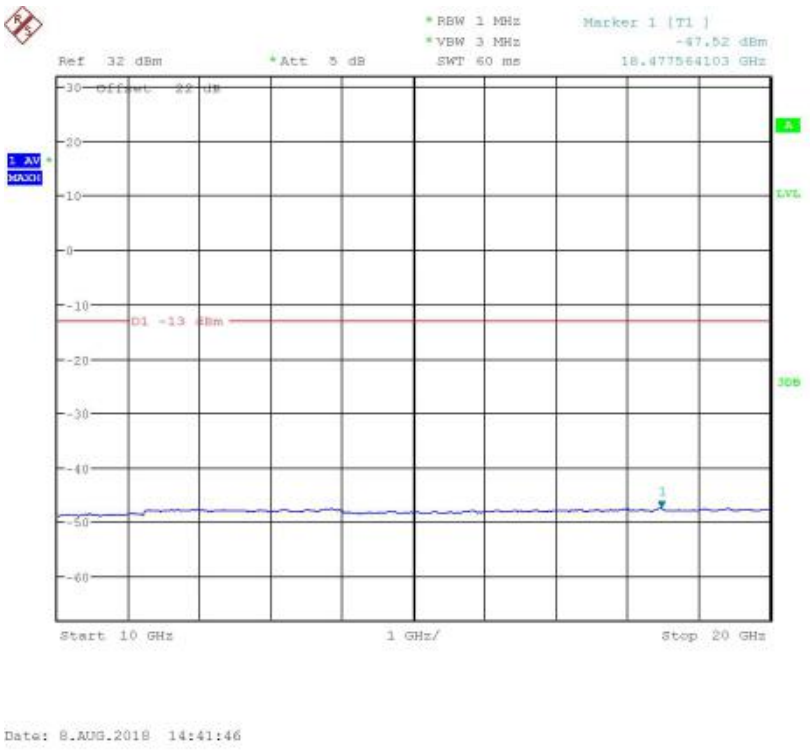


Band2-High Channel-1.4MHz Bandwidth-30MHz to 1GHz

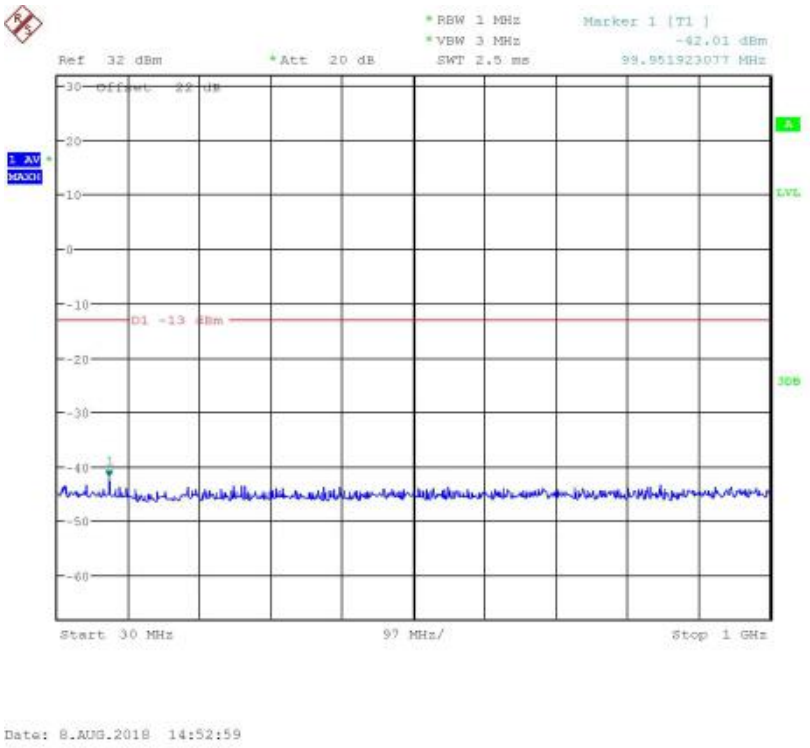


Band2-High Channel-1.4MHz Bandwidth-1GHz to 10GHz

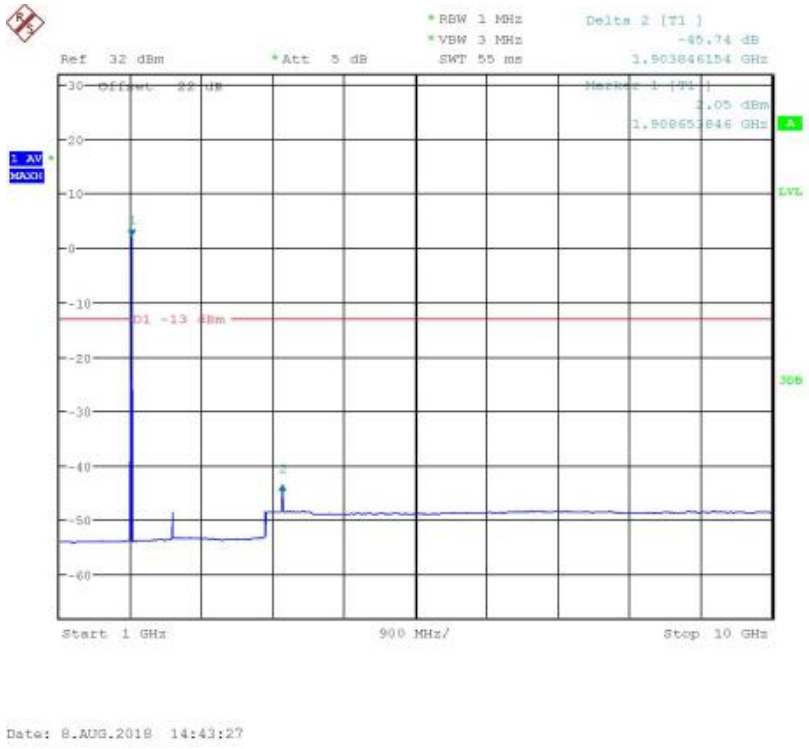
Note: The strong emission shown in each case is the carrier signal.



Band2-High Channel-1.4MHz Bandwidth-10GHz to 20GHz

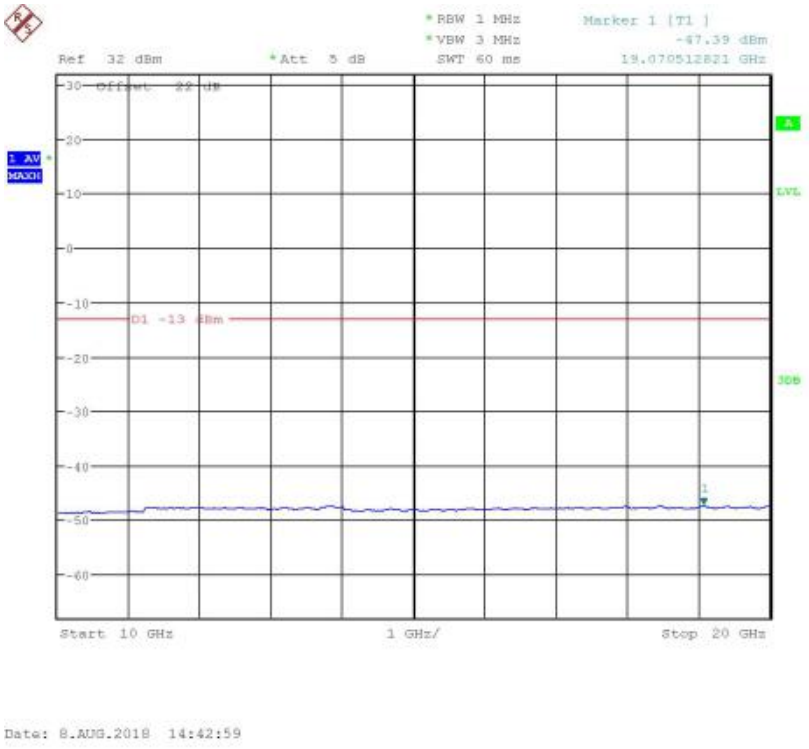


Band2-High Channel-3MHz Bandwidth-30MHz to 1GHz

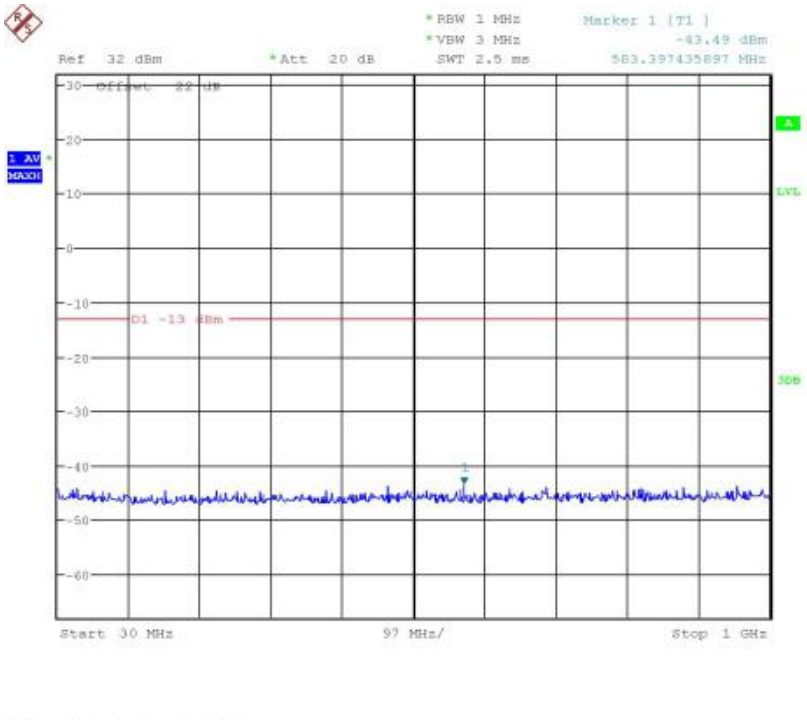


Band2-High Channel-3MHz Bandwidth-1GHz to 10GHz

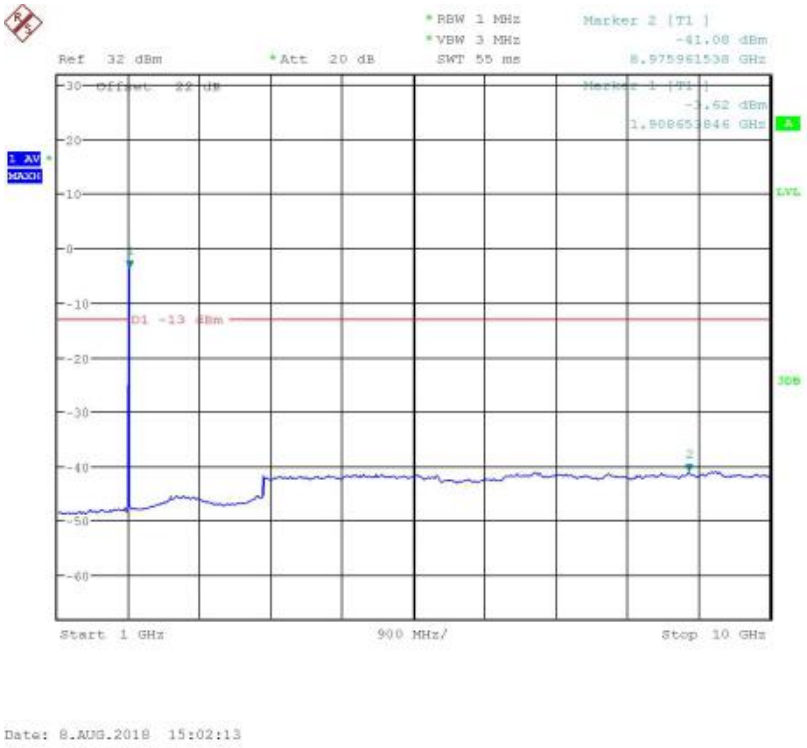
Note: The strong emission shown in each case is the carrier signal.



Band2-High Channel-3MHz Bandwidth-10GHz to 20GHz

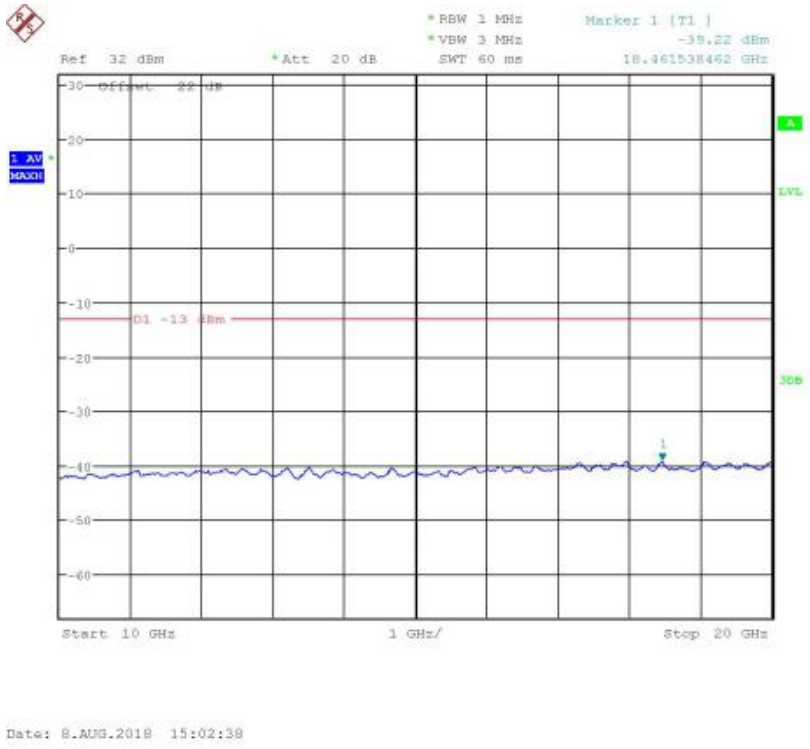


Band2-High Channel-5MHz Bandwidth-30MHz to 1GHz

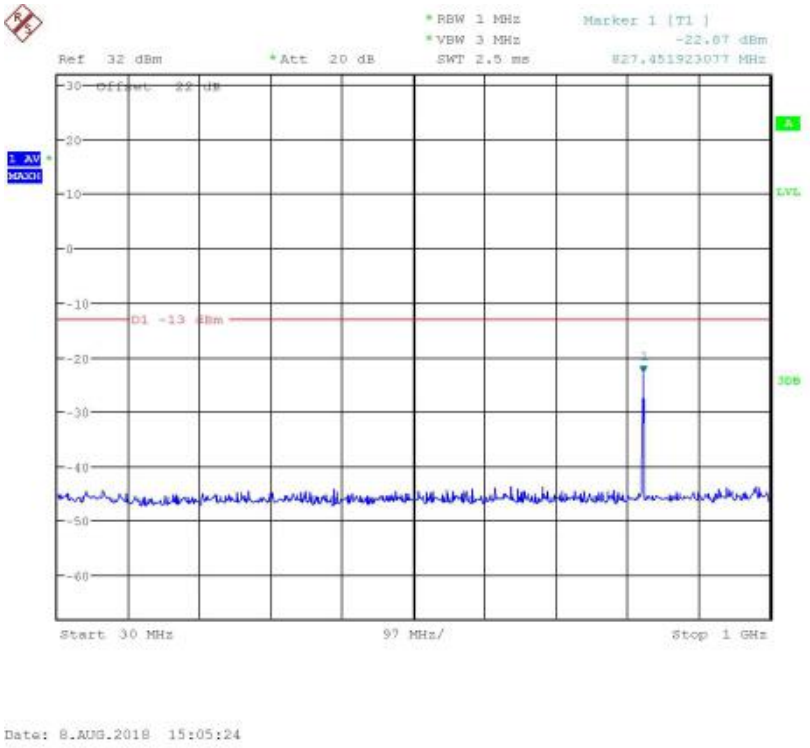


Band2-High Channel-5MHz Bandwidth-1GHz to 10GHz

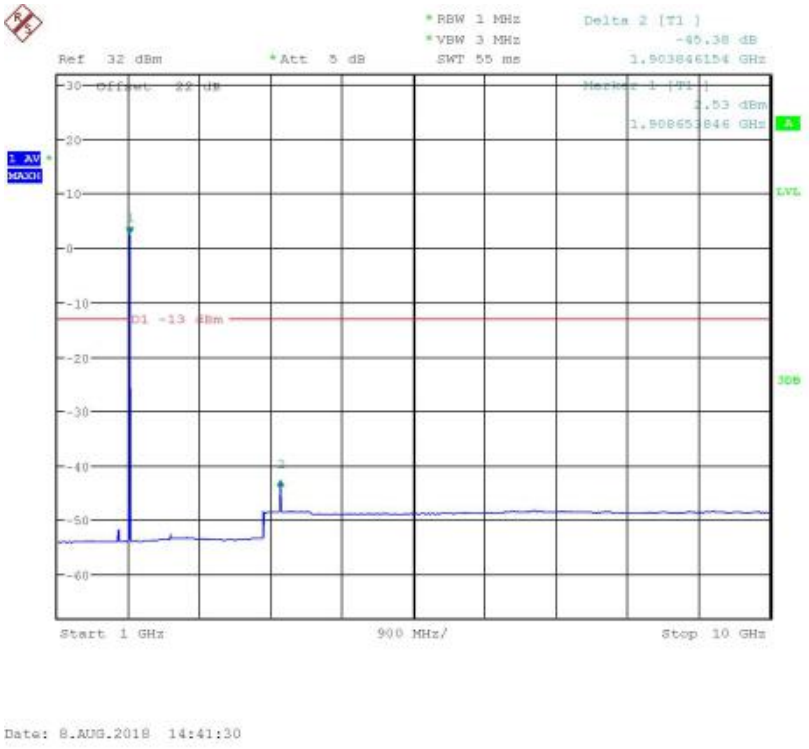
Note: The strong emission shown in each case is the carrier signal.



Band2-High Channel-5MHz Bandwidth-10GHz to 20GHz

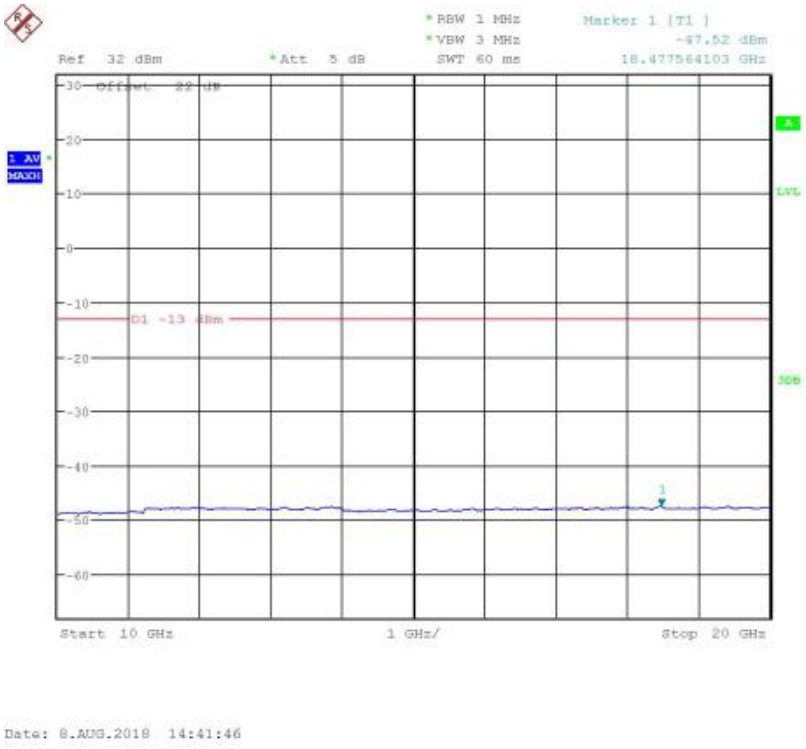


Band2-High Channel-10MHz Bandwidth-30MHz to 1GHz

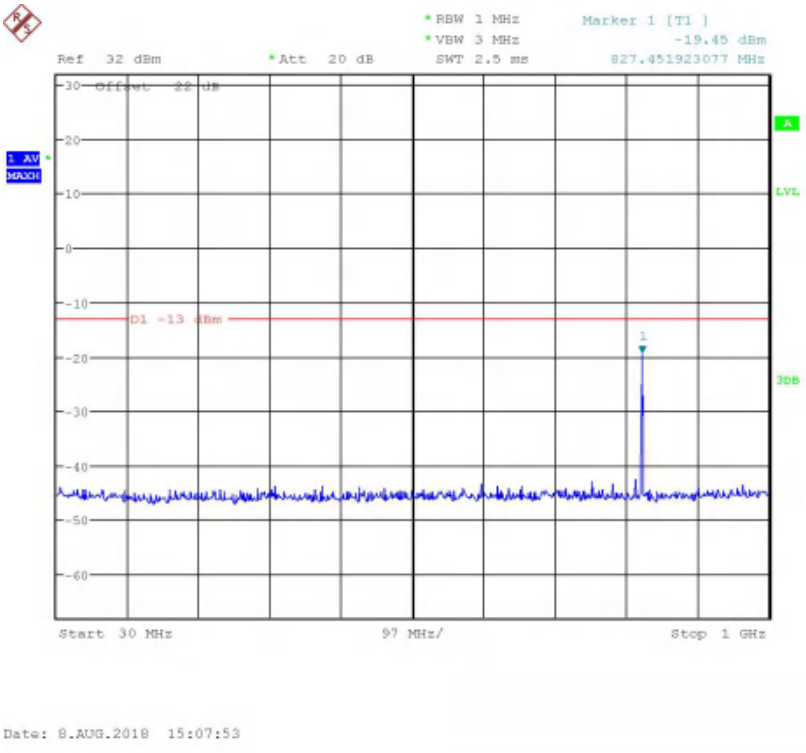


Band2-High Channel-10MHz Bandwidth-1GHz to 10GHz

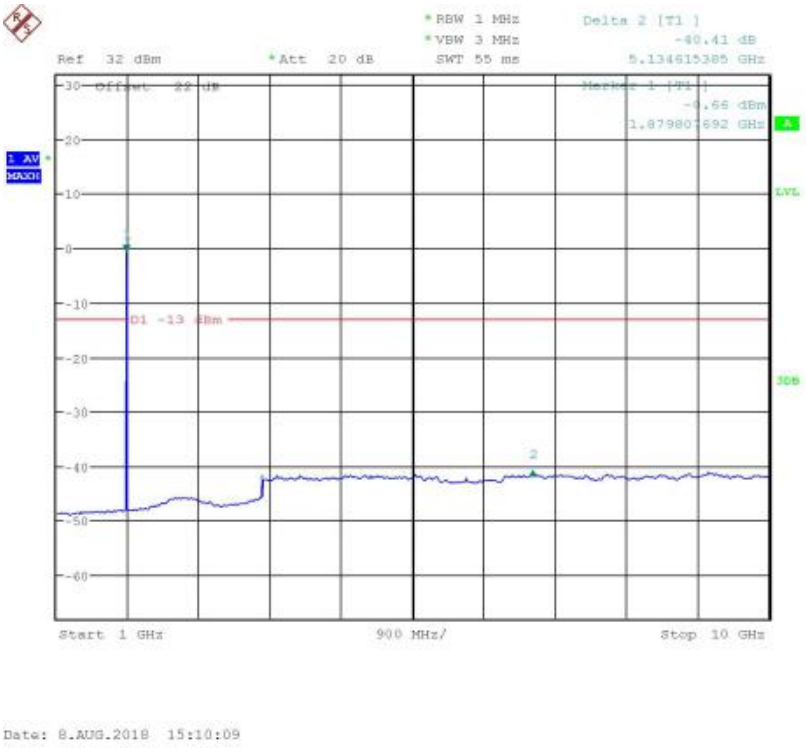
Note: The strong emission shown in each case is the carrier signal.



Band2-High Channel-10MHz Bandwidth-10GHz to 20GHz

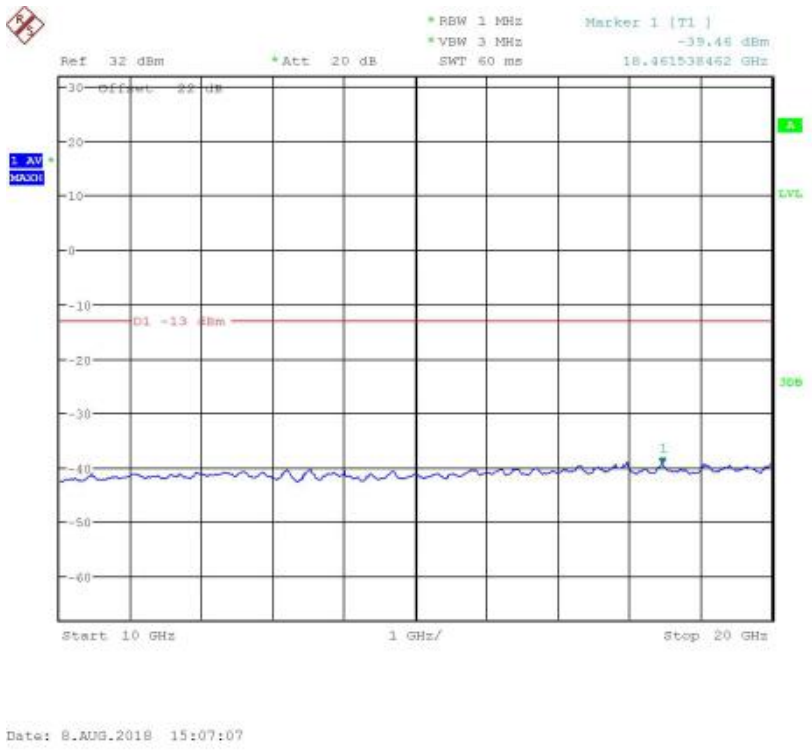


Band2-High Channel-15MHz Bandwidth-30MHz to 1GHz

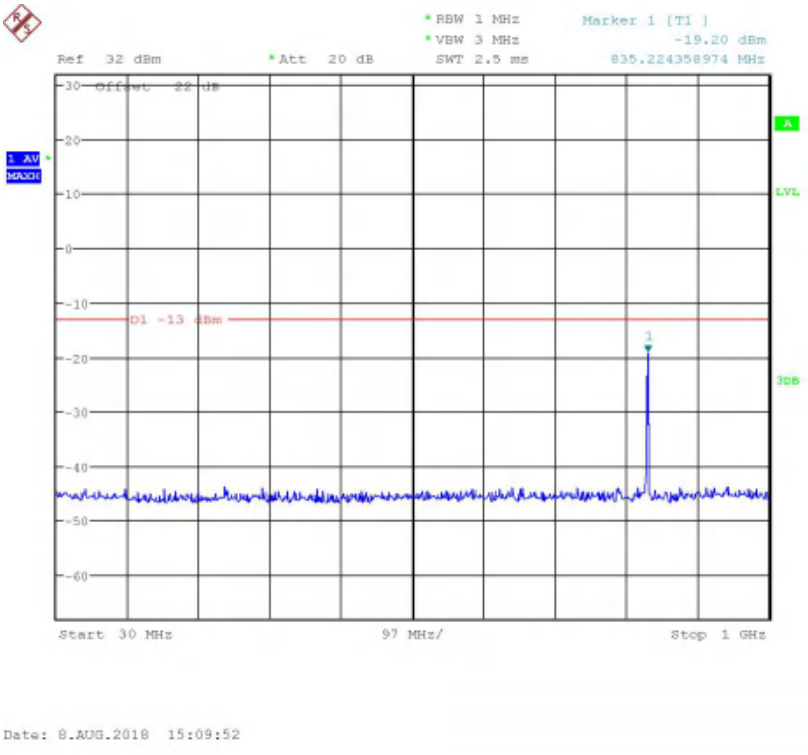


Band2-High Channel-15MHz Bandwidth-1GHz to 10GHz

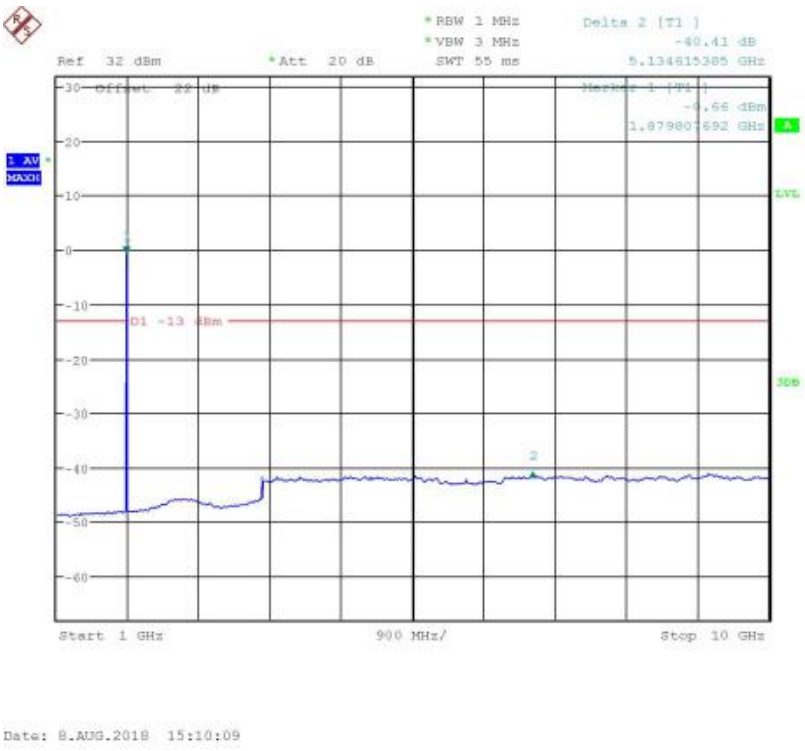
Note: The strong emission shown in each case is the carrier signal.



Band2-High Channel-15MHz Bandwidth-10GHz to 20GHz

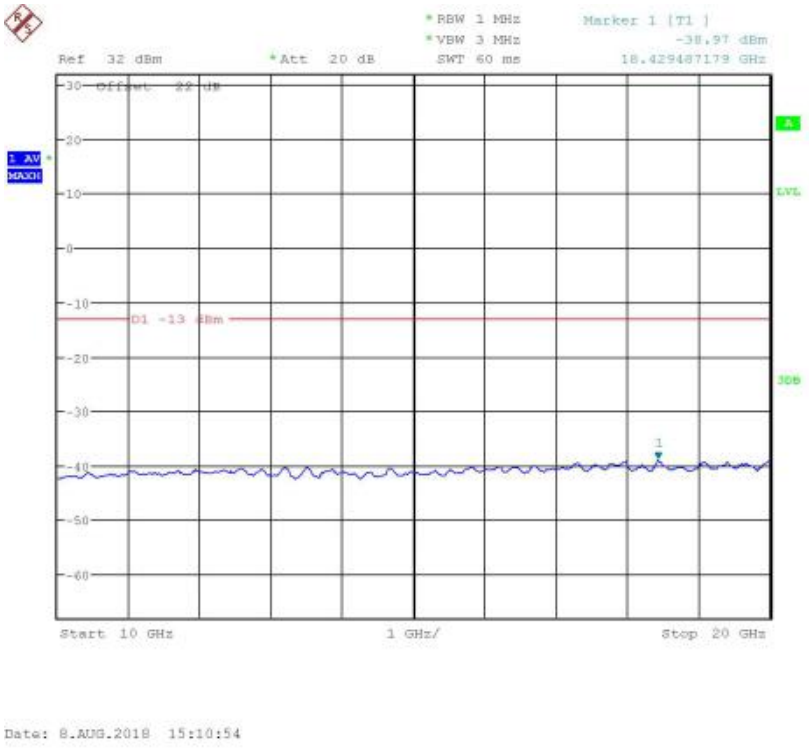


Band2-High Channel-20MHz Bandwidth-30MHz to 1GHz

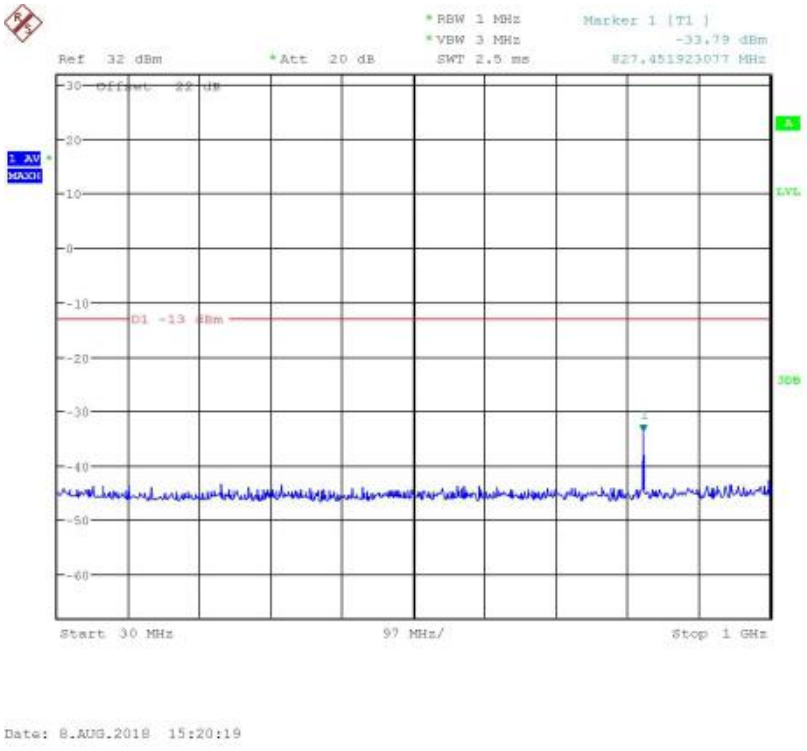


Band2-High Channel-20MHz Bandwidth-1GHz to 10GHz

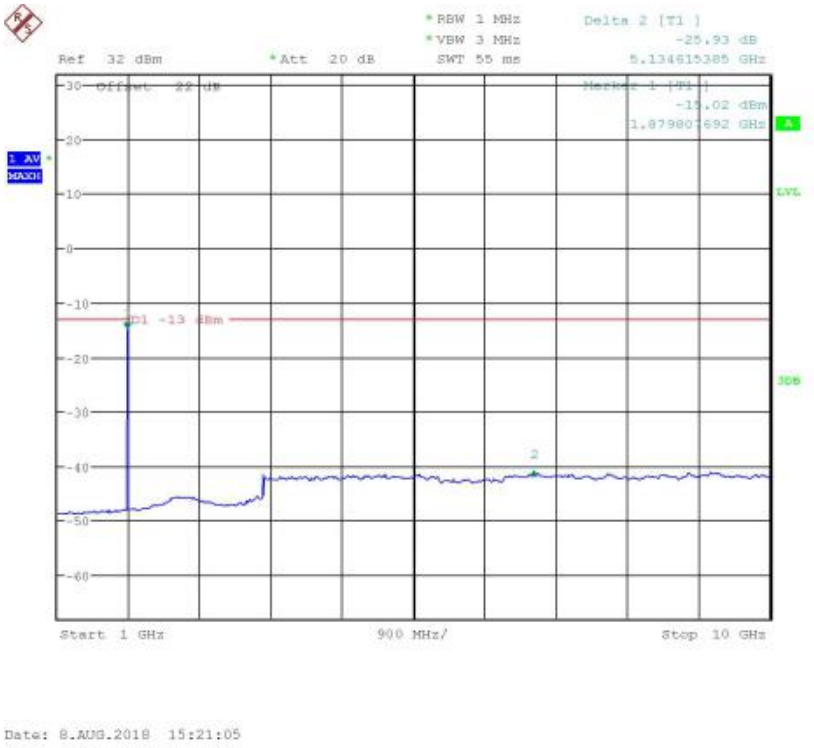
Note: The strong emission shown in each case is the carrier signal.



Band2-High Channel-20MHz Bandwidth-10GHz to 20GHz

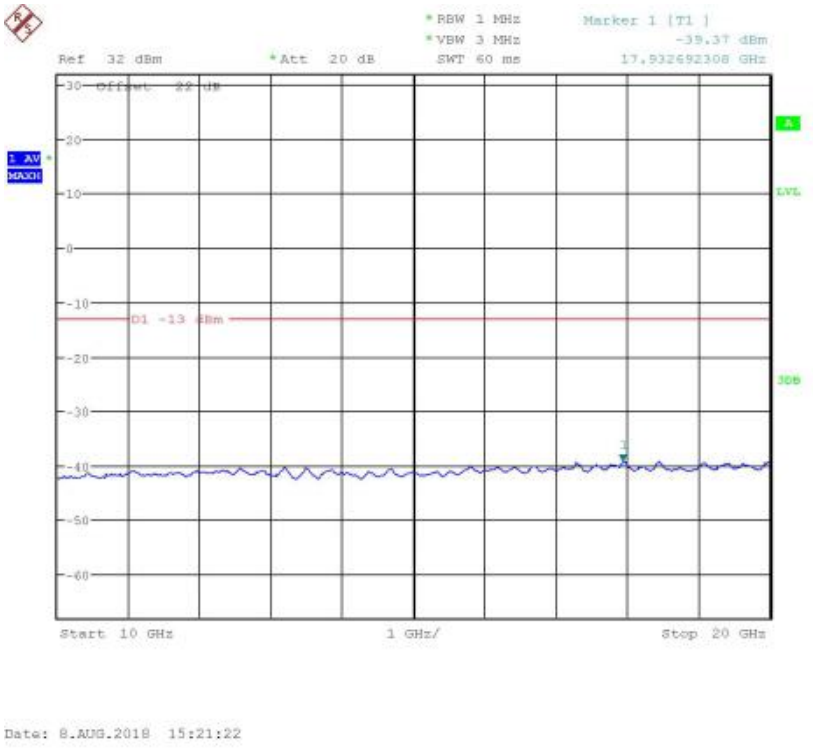


Band2-Middle Channel-1.4MHz Bandwidth-30MHz to 1GHz

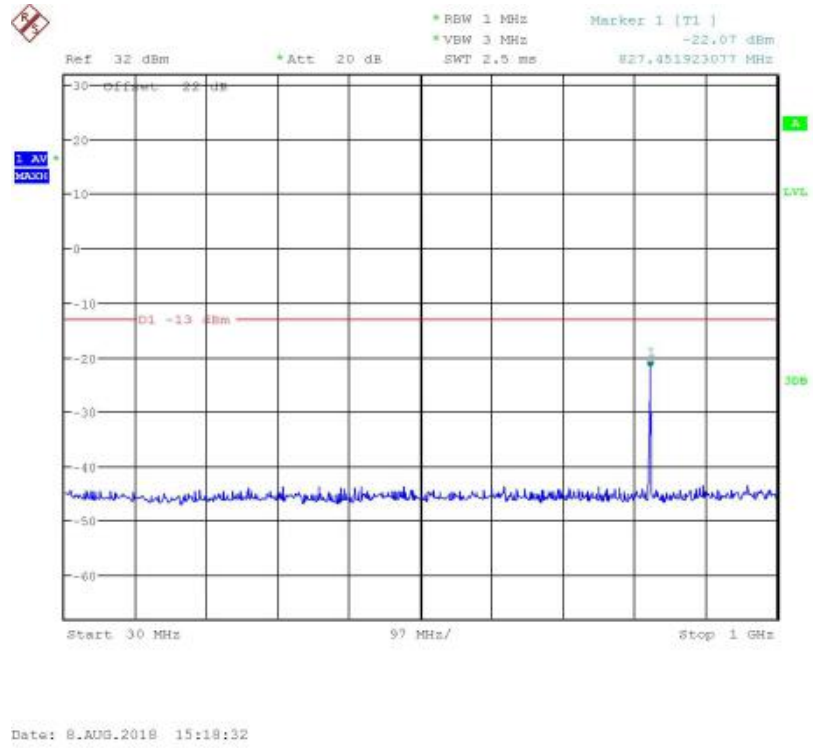


Band2-Middle Channel-1.4MHz Bandwidth-1GHz to 10GHz

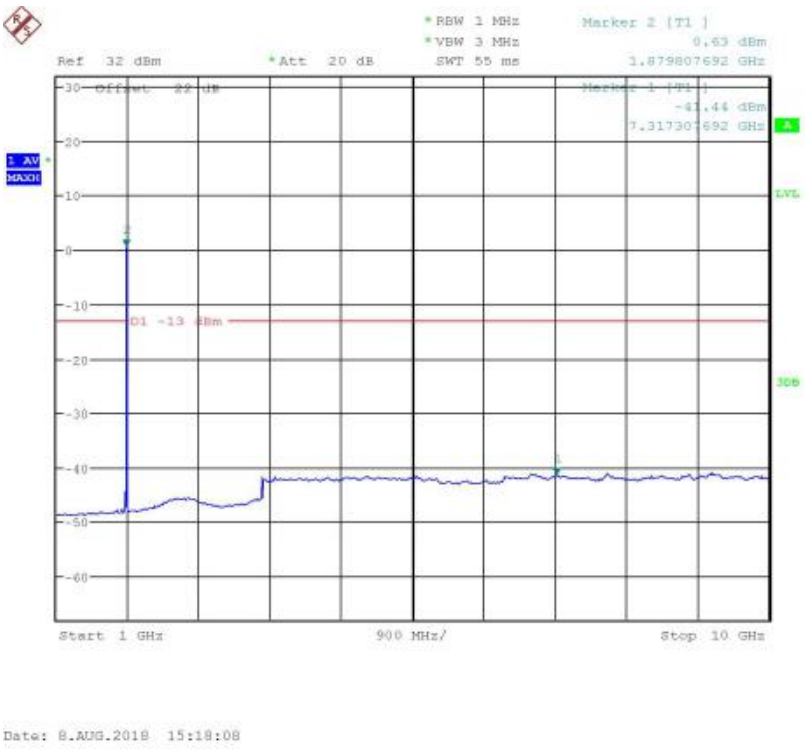
Note: The strong emission shown in each case is the carrier signal.



Band2-Middle Channel-1.4MHz Bandwidth-10GHz to 20GHz

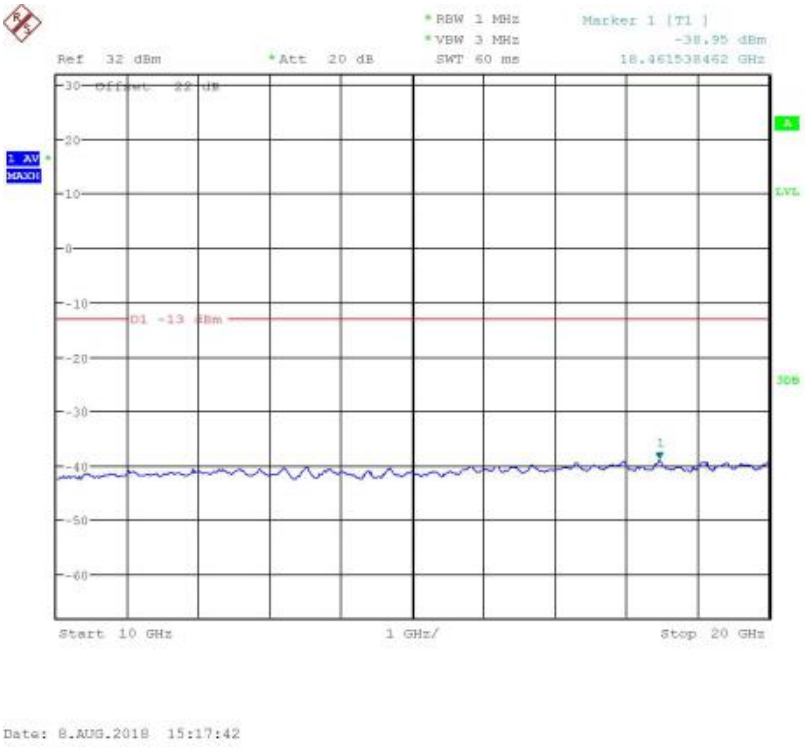


Band2-Middle Channel-3MHz Bandwidth-30MHz to 1GHz

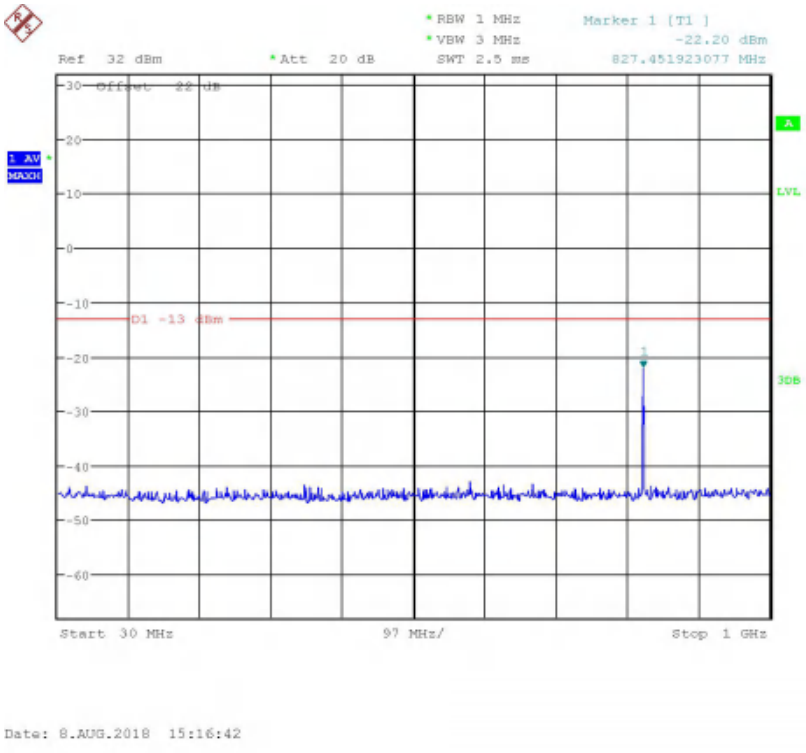


Band2-Middle Channel-3MHz Bandwidth-1GHz to 10GHz

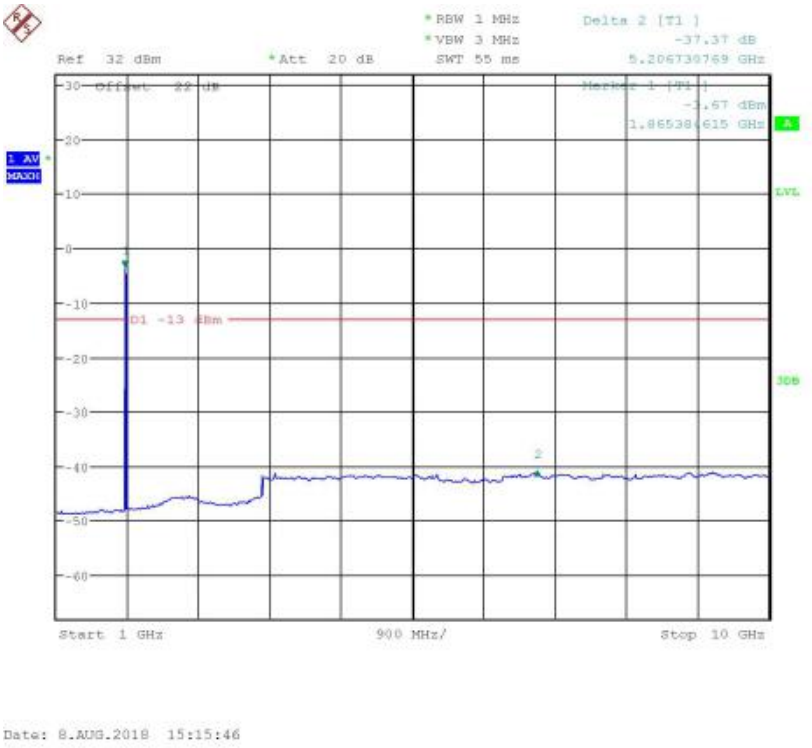
Note: The strong emission shown in each case is the carrier signal.



Band2-Middle Channel-3MHz Bandwidth-10GHz to 20GHz

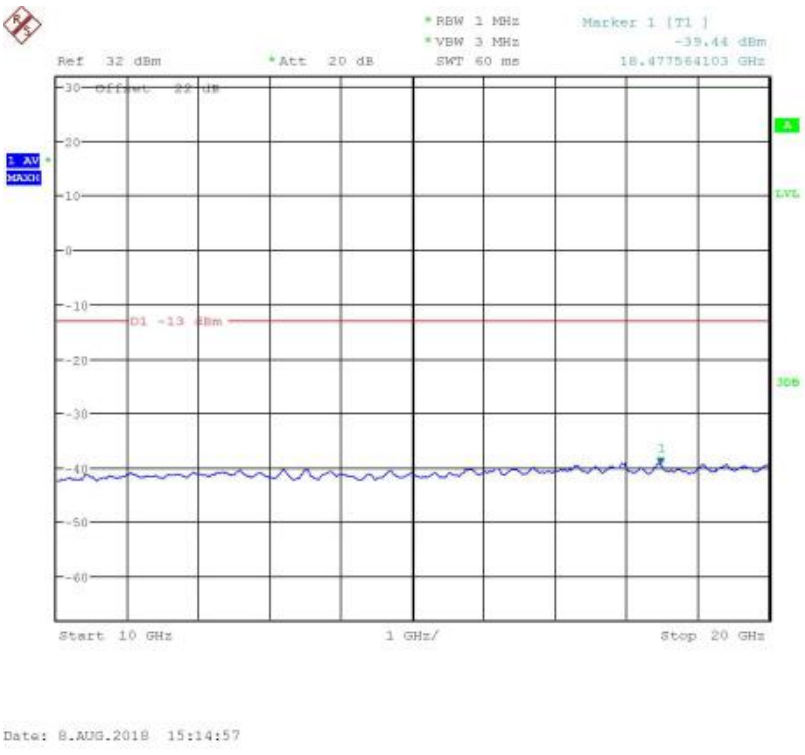


Band2-Middle Channel-5MHz Bandwidth-30MHz to 1GHz

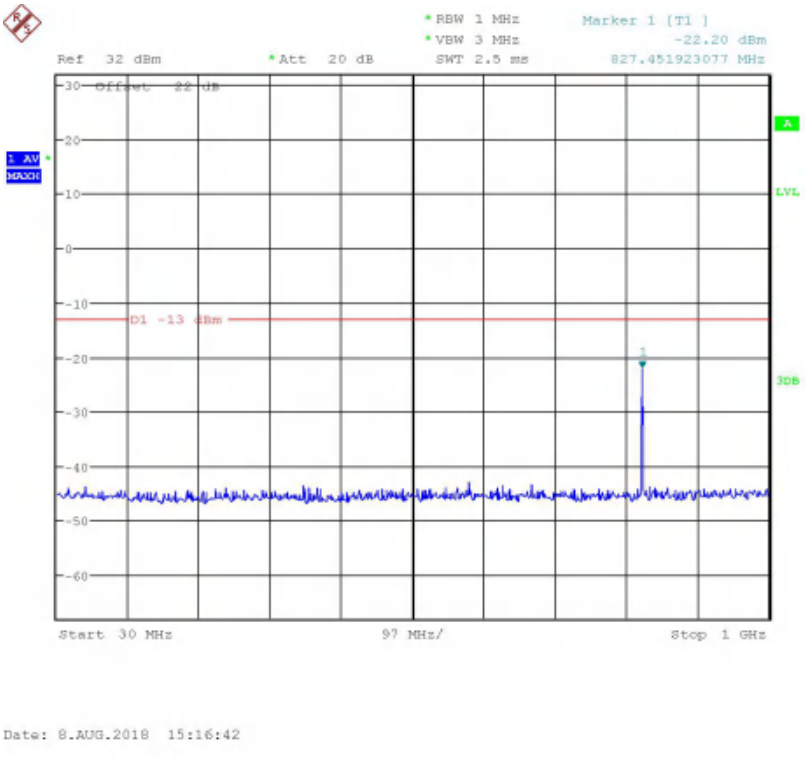


Band2-Middle Channel-5MHz Bandwidth-1GHz to 10GHz

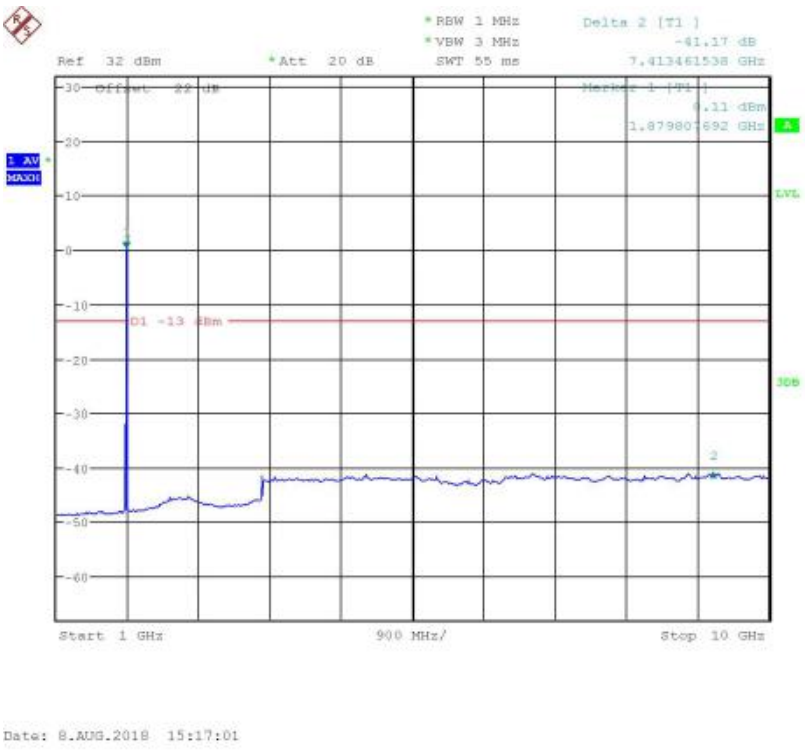
Note: The strong emission shown in each case is the carrier signal.



Band2-Middle Channel-5MHz Bandwidth-10GHz to 20GHz

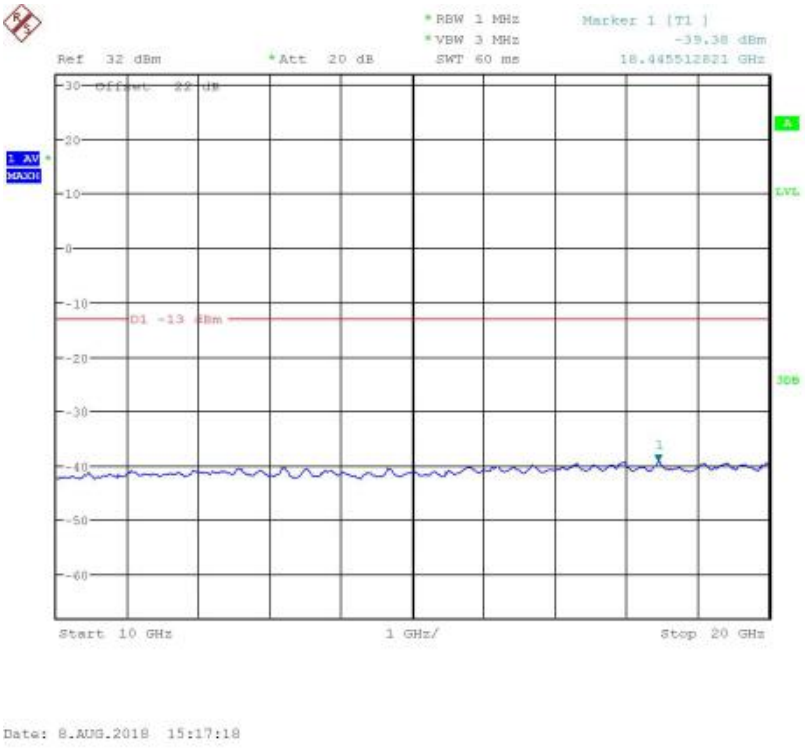


Band2-Middle Channel-10MHz Bandwidth-30MHz to 1GHz

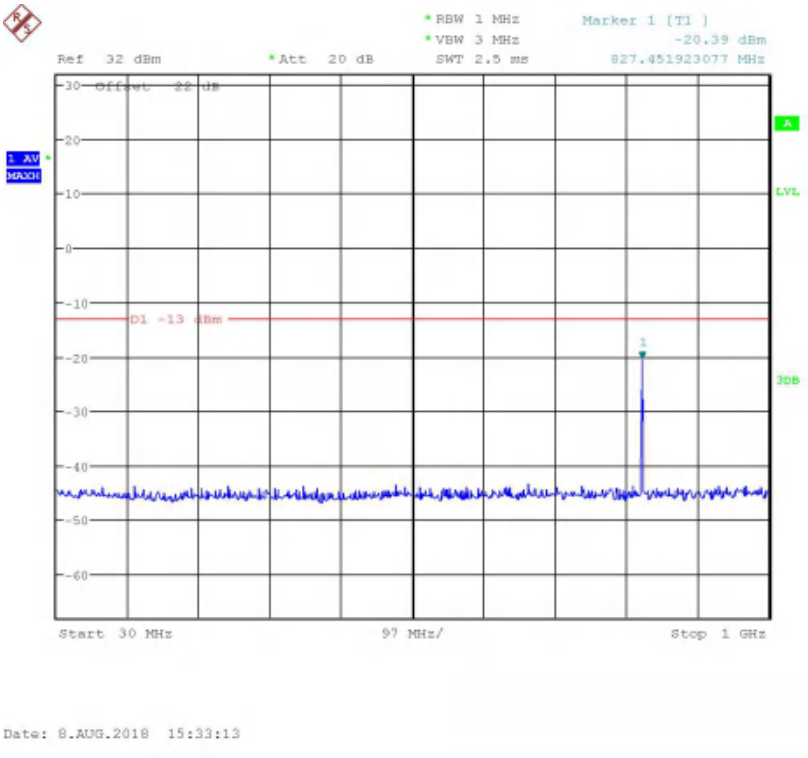


Band2-Middle Channel-10MHz Bandwidth-1GHz to 10GHz

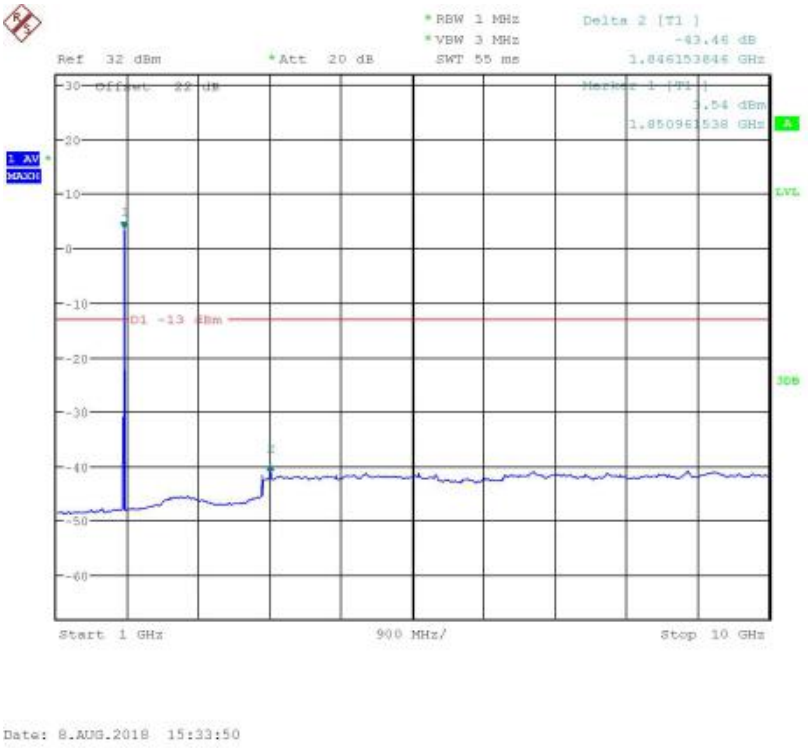
Note: The strong emission shown in each case is the carrier signal.



Band2-Middle Channel-10MHz Bandwidth-10GHz to 20GHz

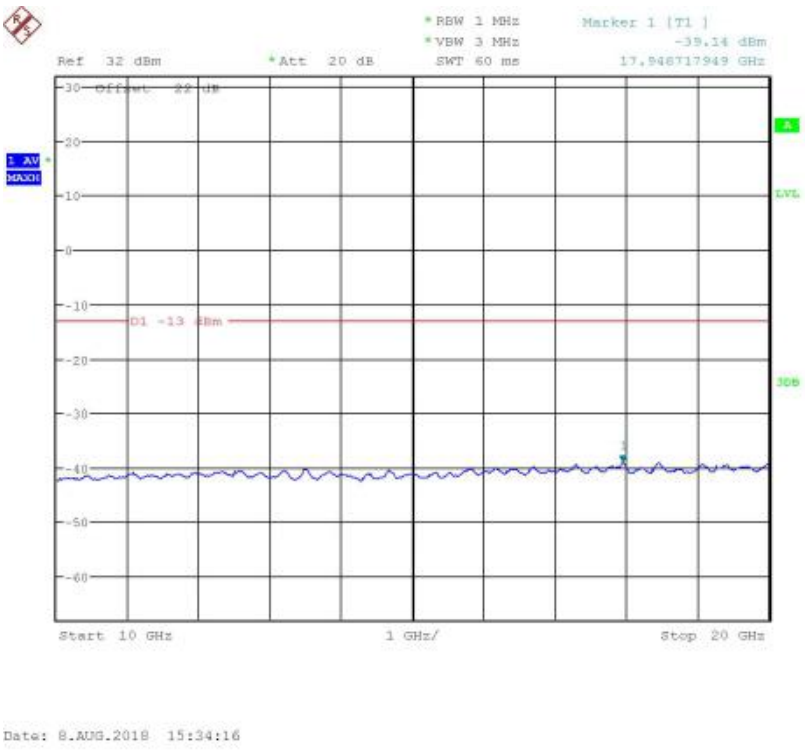


Band2-Middle Channel-15MHz Bandwidth-30MHz to 1GHz

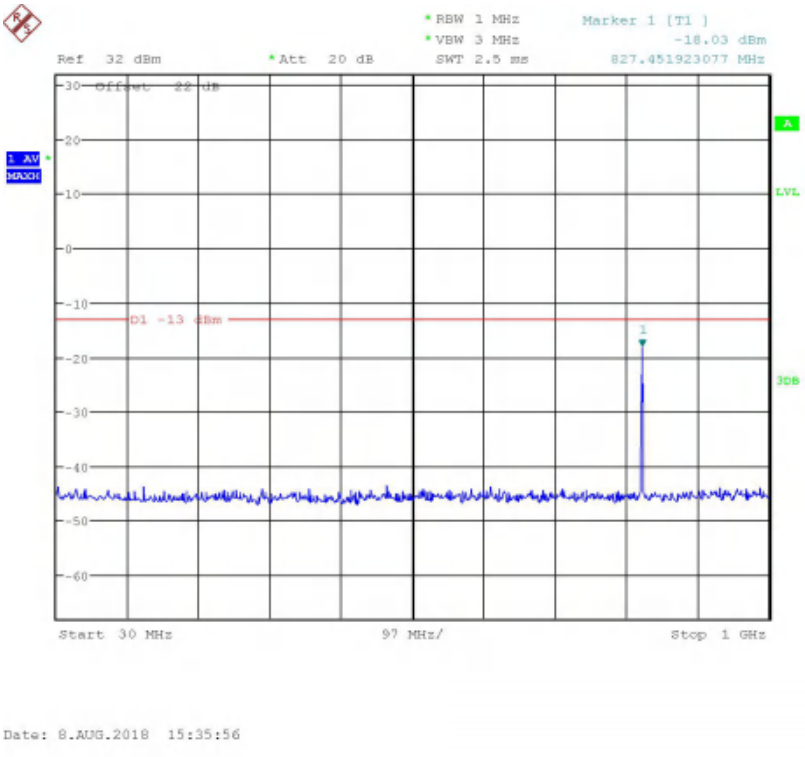


Band2-Middle Channel-15MHz Bandwidth-1GHz to 10GHz

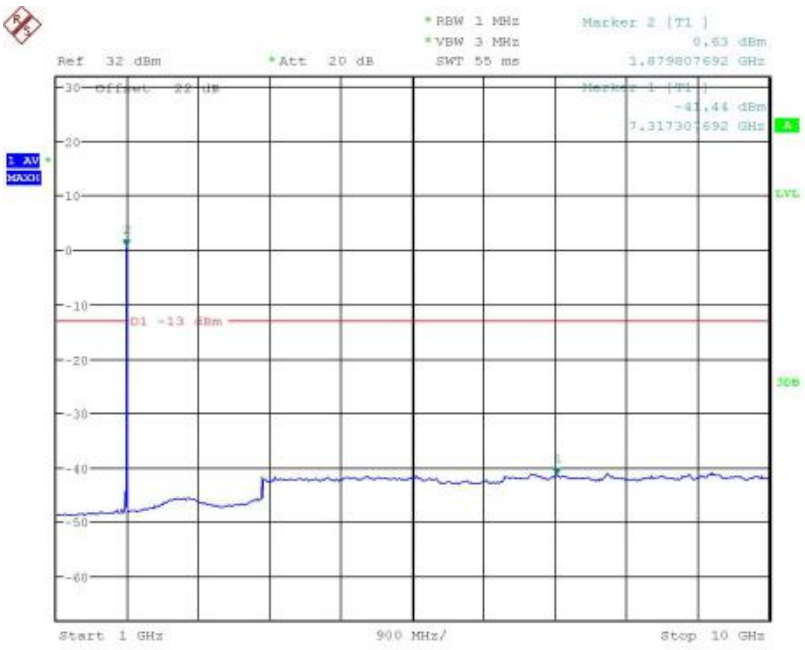
Note: The strong emission shown in each case is the carrier signal.



Band2-Middle Channel-15MHz Bandwidth-10GHz to 20GHz

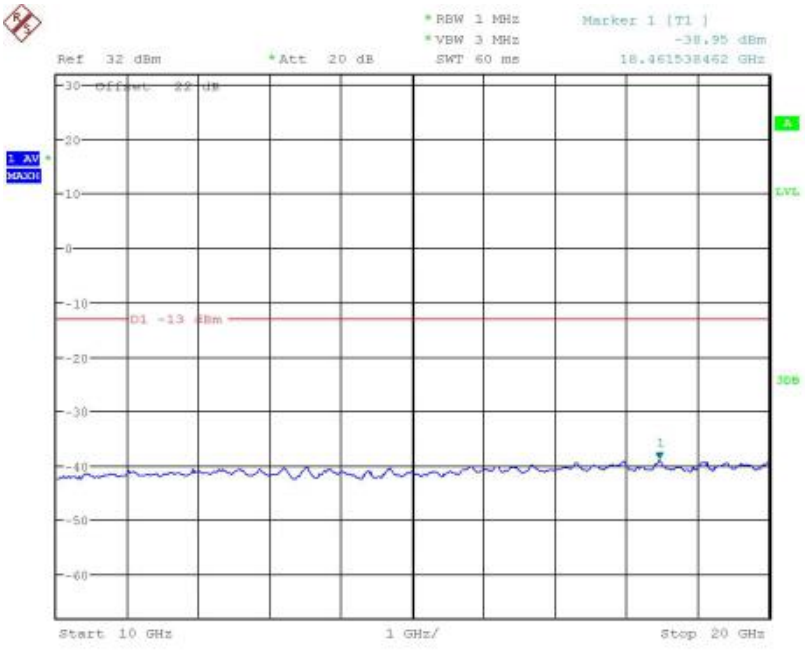


Band2-Middle Channel-20MHz Bandwidth-30MHz to 1GHz

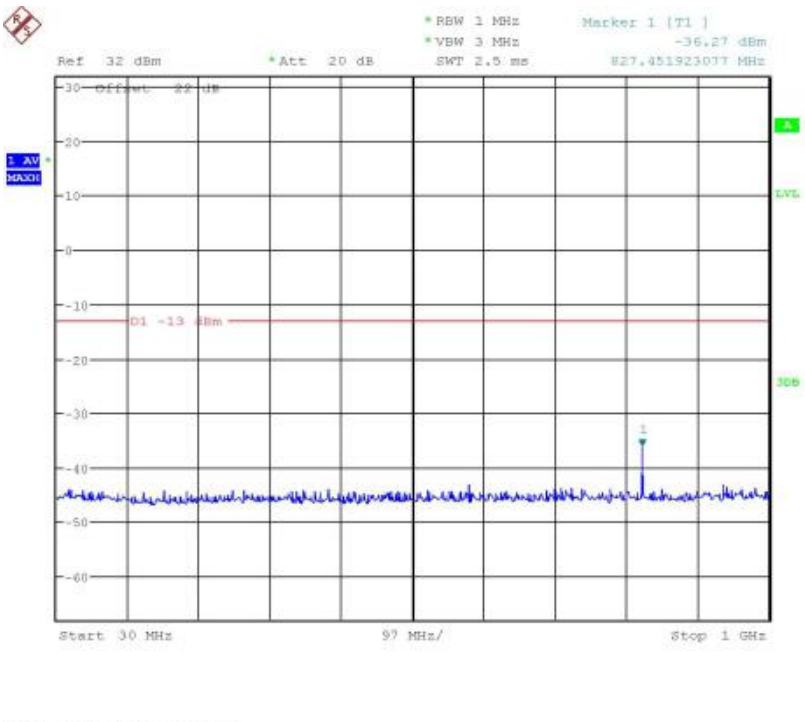


Band2-Middle Channel-20MHz Bandwidth-1GHz to 10GHz

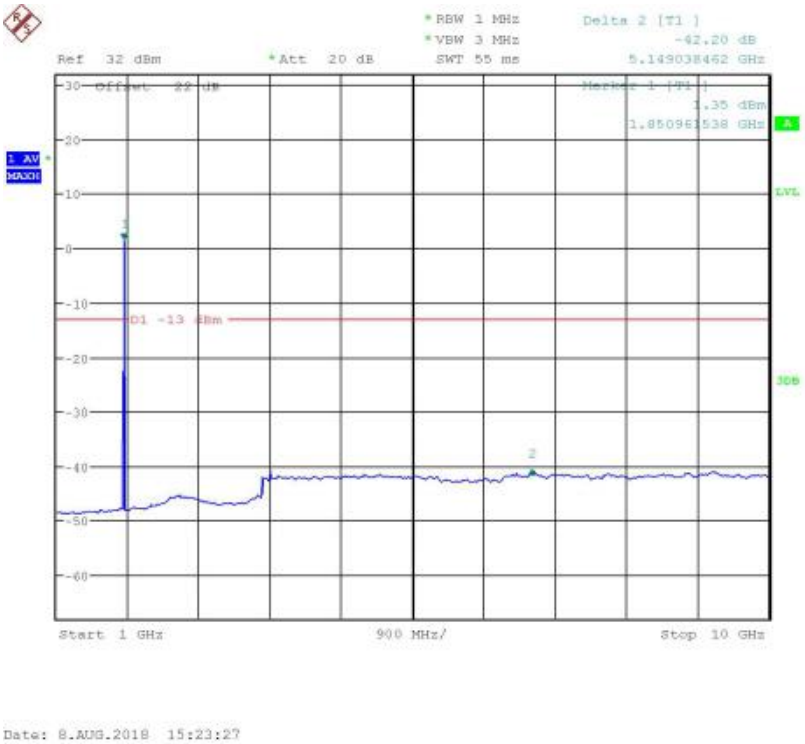
Note: The strong emission shown in each case is the carrier signal.



Band2-Middle Channel-20MHz Bandwidth-10GHz to 20GHz

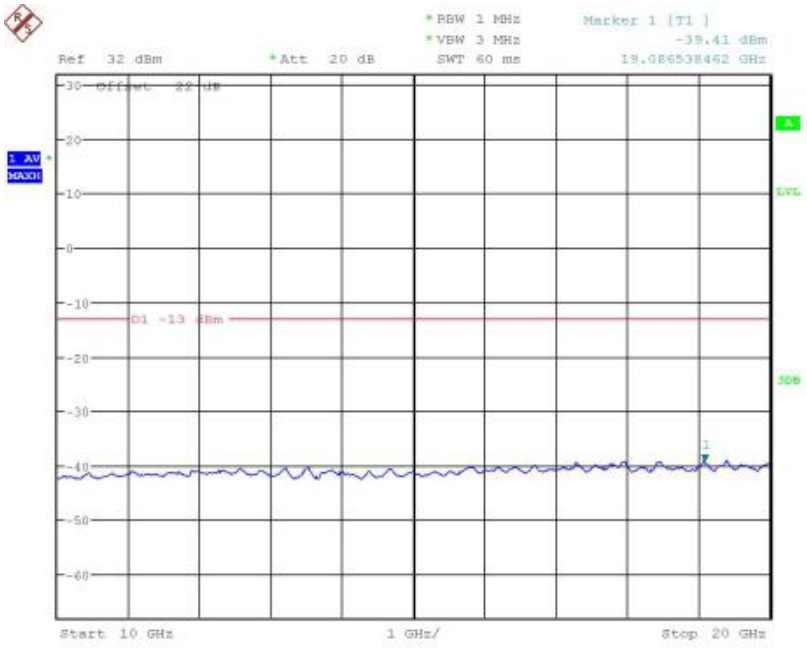


Band2-Low Channel-1.4MHz Bandwidth-30MHz to 1GHz

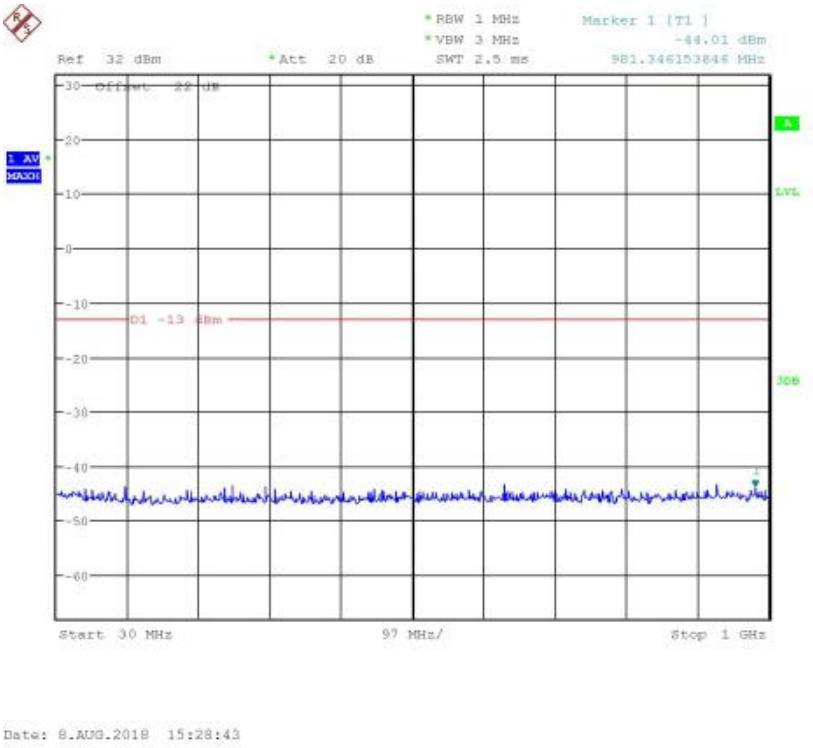


Band2-Low Channel-1.4MHz Bandwidth-1GHz to 10GHz

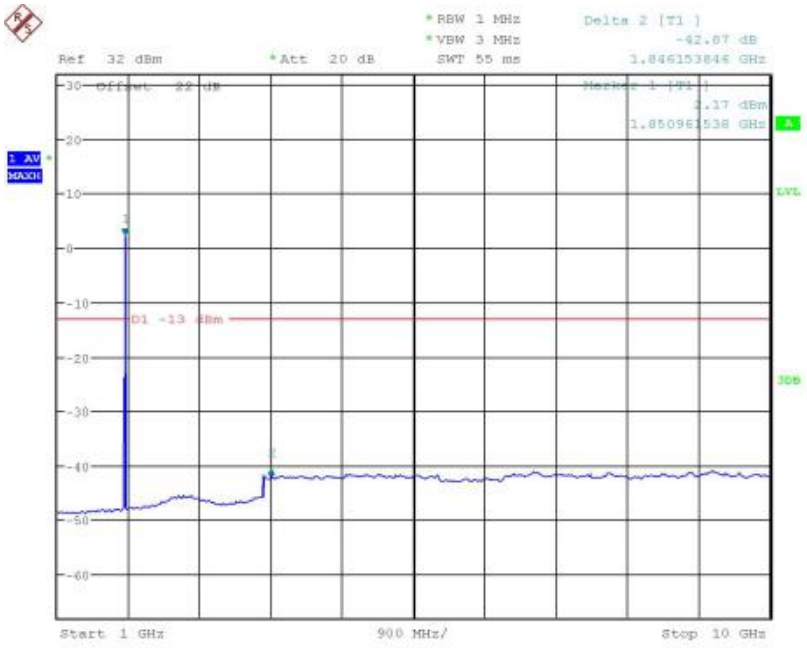
Note: The strong emission shown in each case is the carrier signal.



Band2-Low Channel-1.4MHz Bandwidth-10GHz to 20GHz

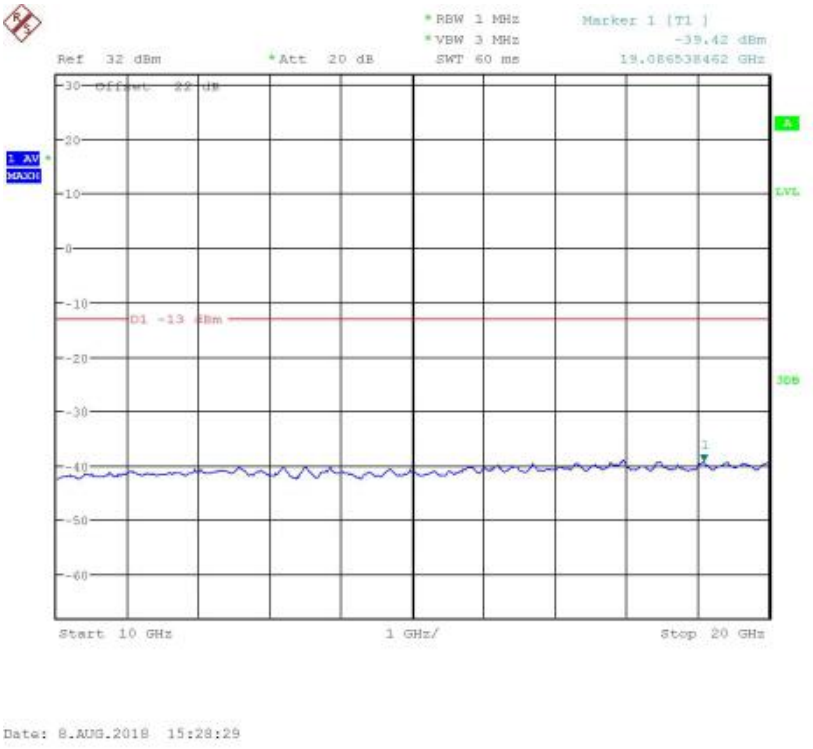


Band2-Low Channel-3MHz Bandwidth-30MHz to 1GHz

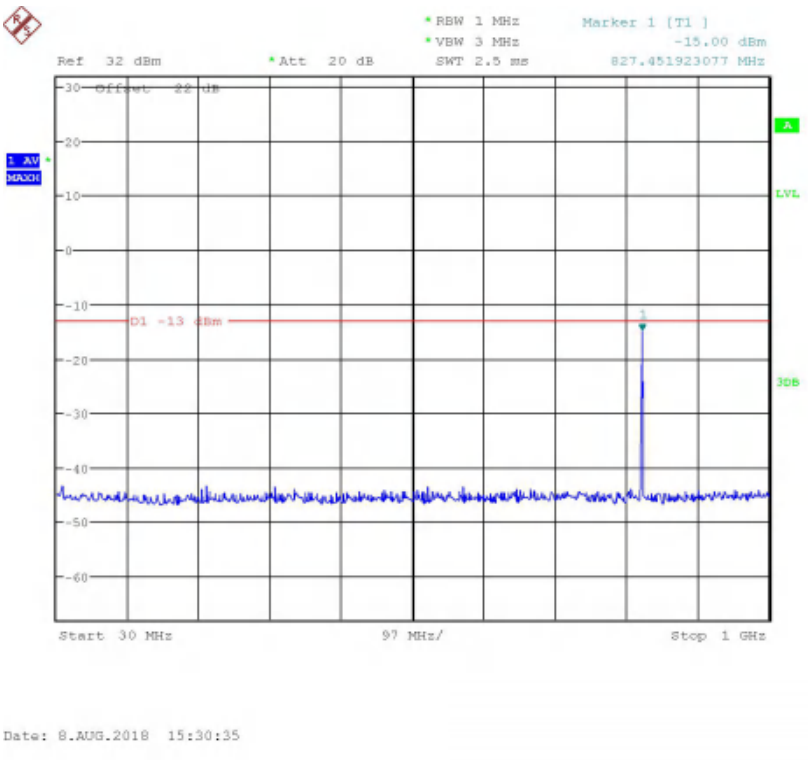


Band2-Low Channel-3MHz Bandwidth-1GHz to 10GHz

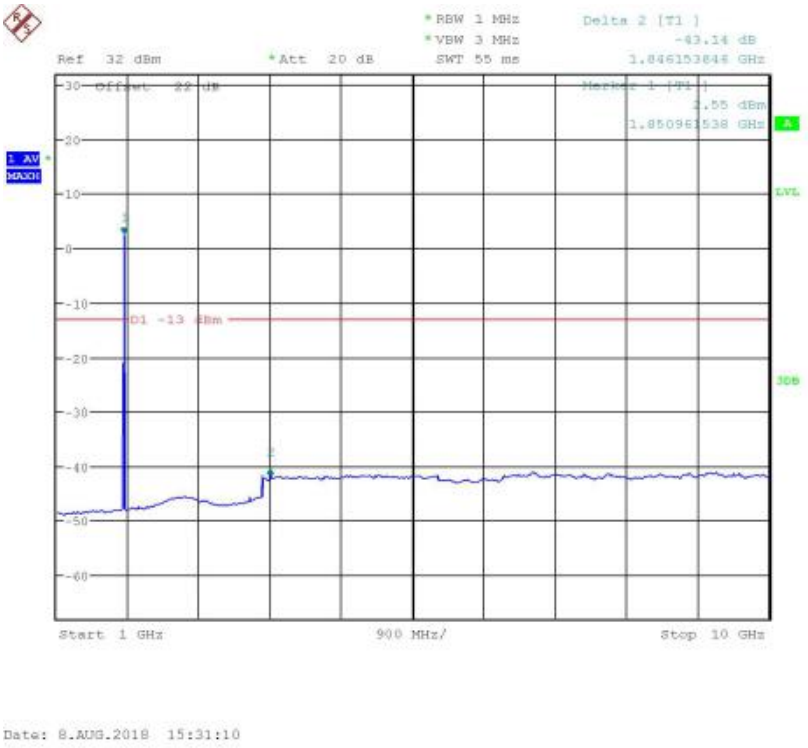
Note: The strong emission shown in each case is the carrier signal.



Band2-Low Channel-3MHz Bandwidth-10GHz to 20GHz

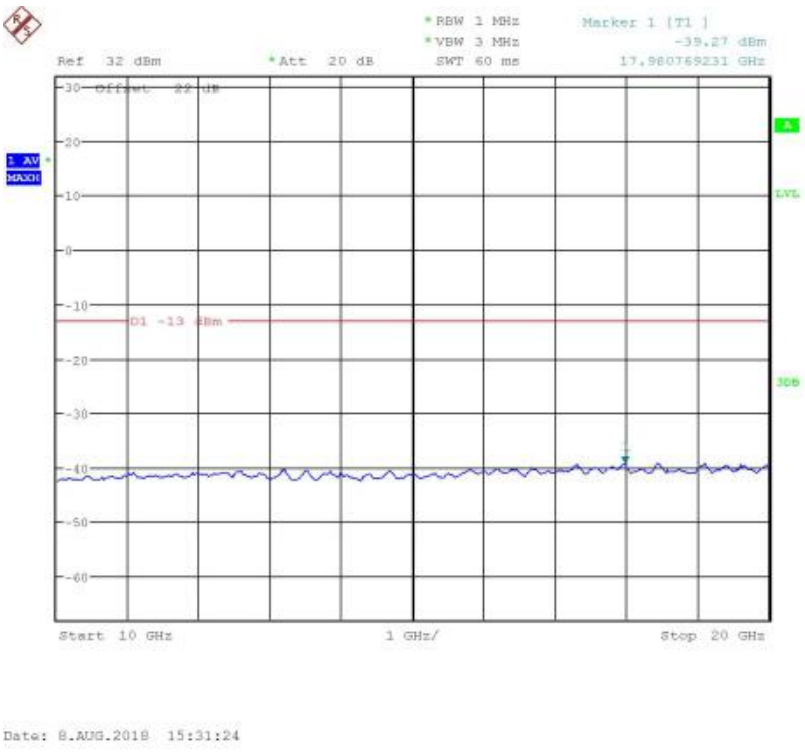


Band2-Low Channel-5MHz Bandwidth-30MHz to 1GHz

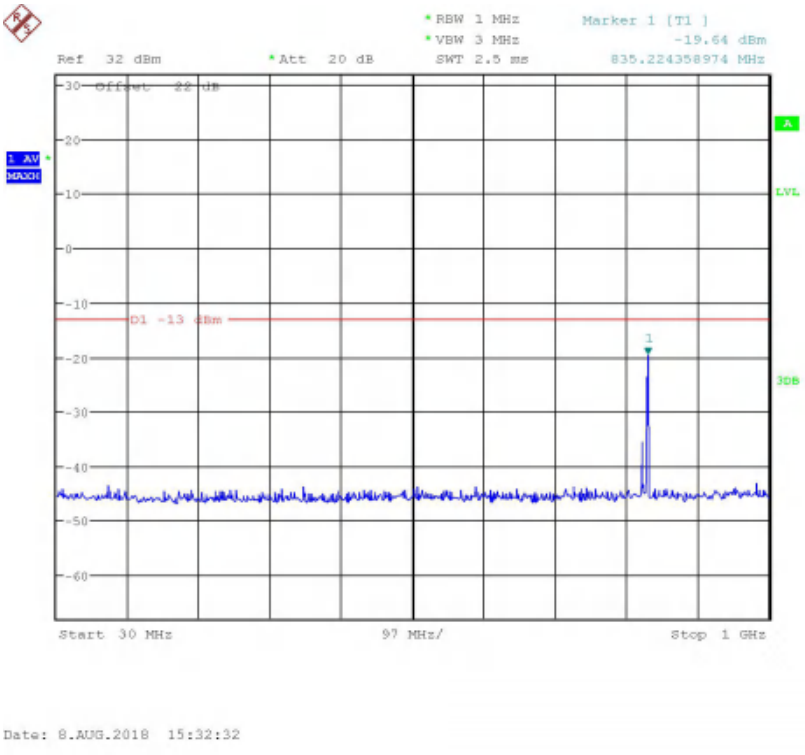


Band2-Low Channel-5MHz Bandwidth-1GHz to 10GHz

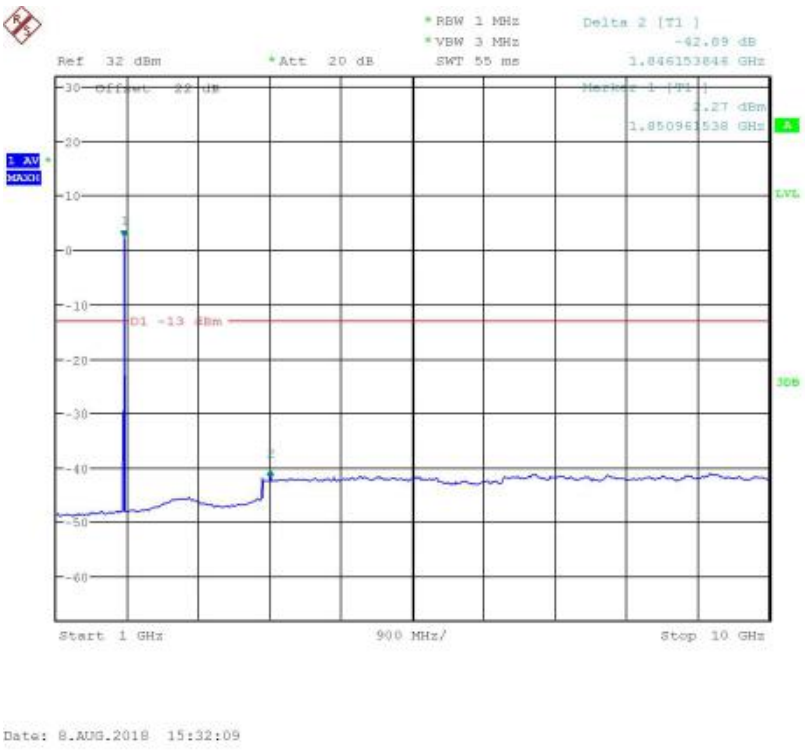
Note: The strong emission shown in each case is the carrier signal.



Band2-Low Channel-5MHz Bandwidth-10GHz to 20GHz

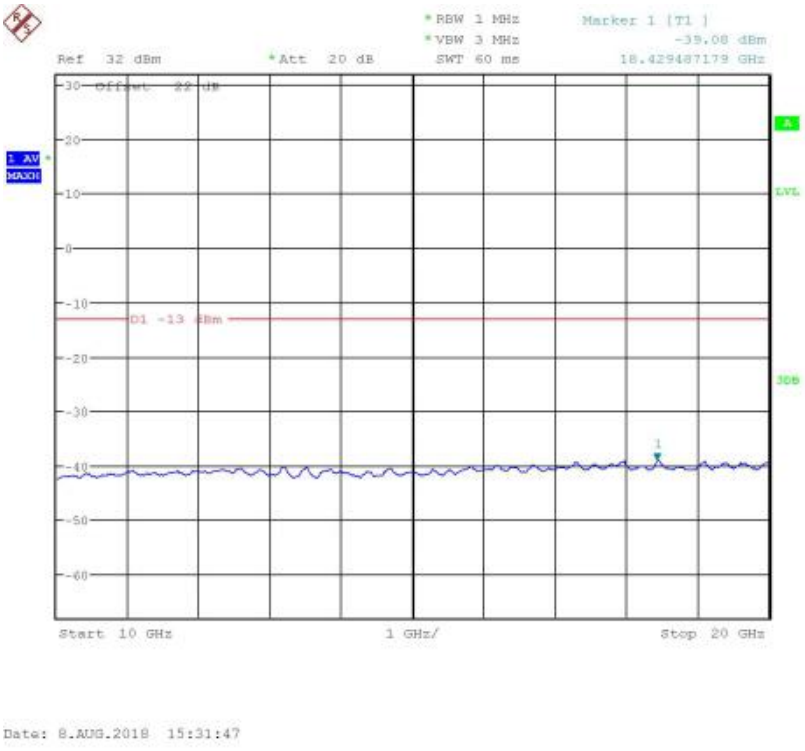


Band2-Low Channel-10MHz Bandwidth-30MHz to 1GHz

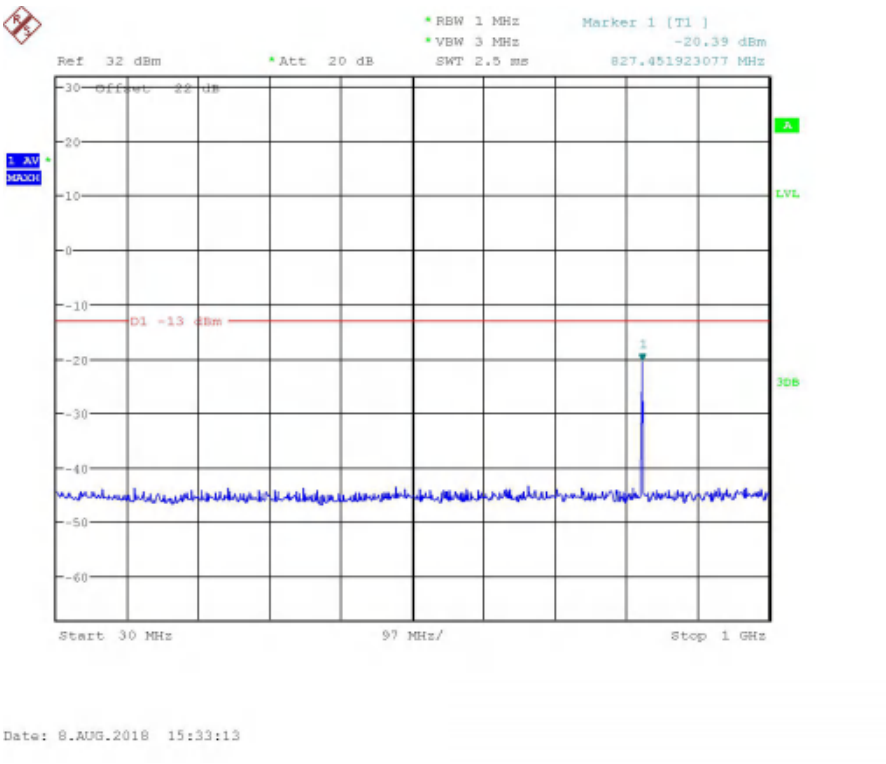


Band2-Low Channel-10MHz Bandwidth-1GHz to 10GHz

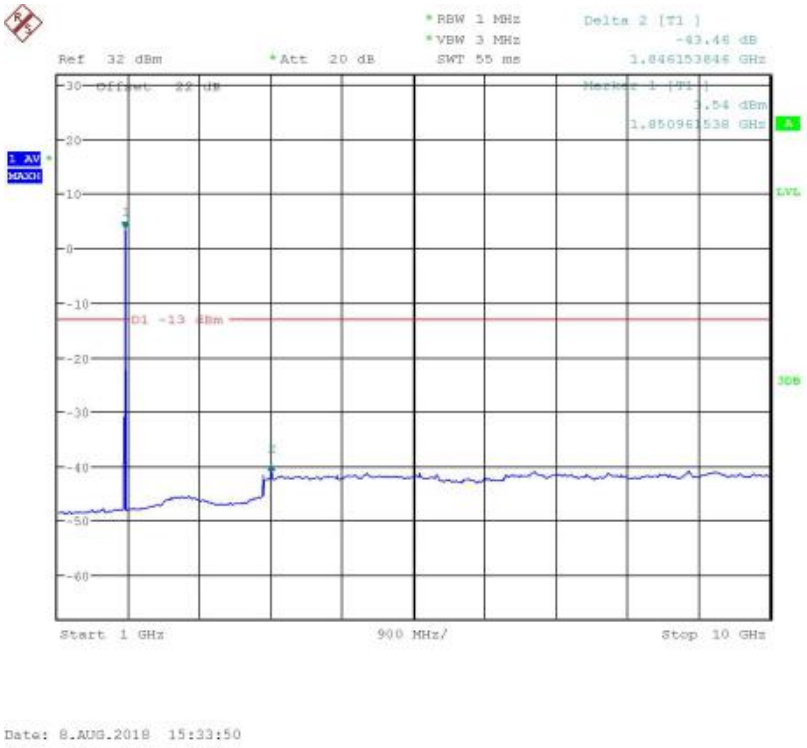
Note: The strong emission shown in each case is the carrier signal.



Band2-Low Channel-10MHz Bandwidth-10GHz to 20GHz

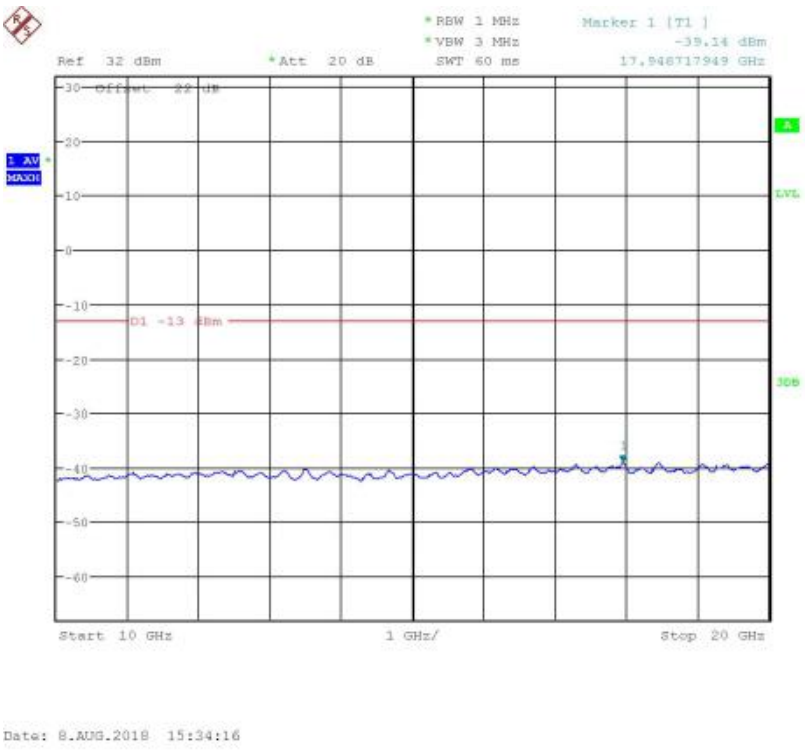


Band2-Low Channel-15MHz Bandwidth-30MHz to 1GHz

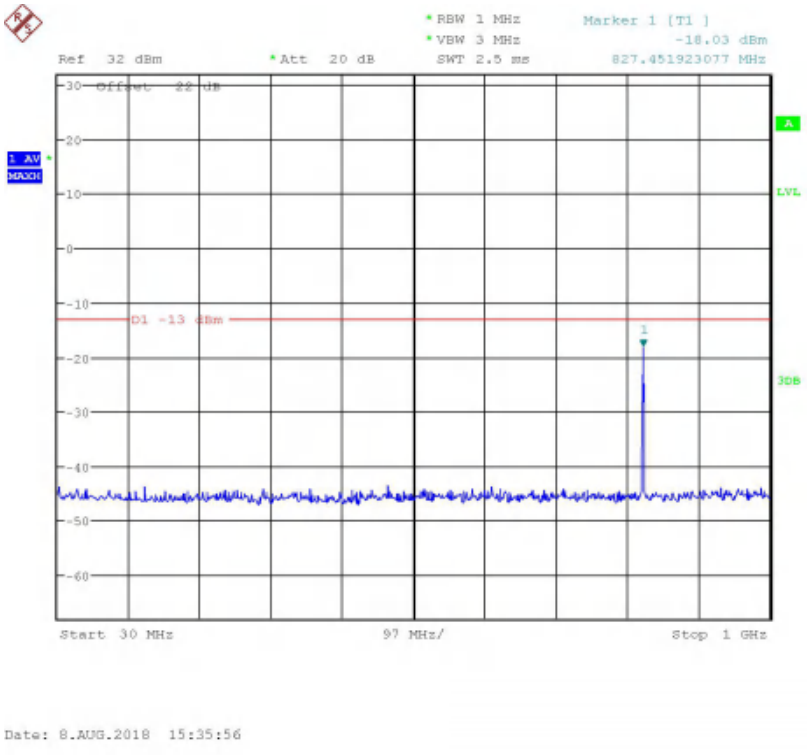


Band2-Low Channel-15MHz Bandwidth-1GHz to 10GHz

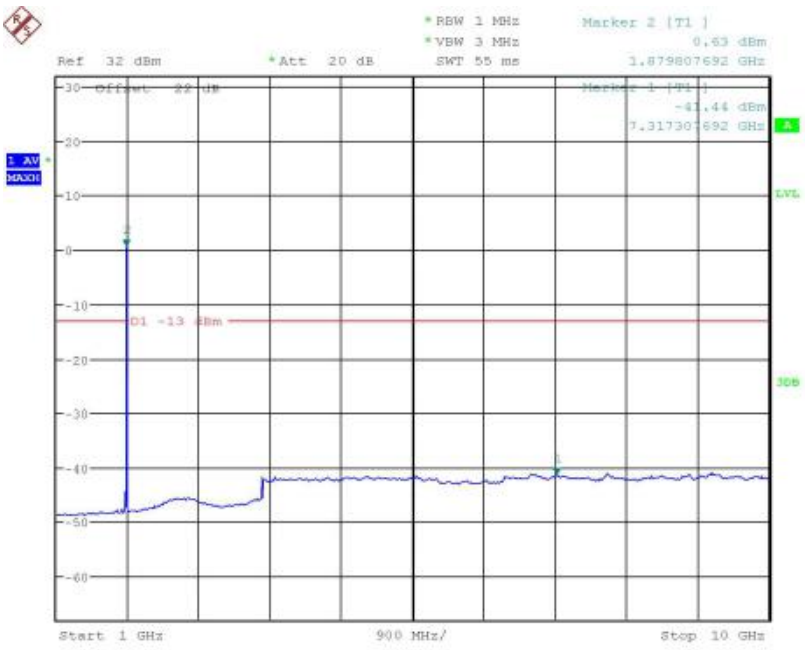
Note: The strong emission shown in each case is the carrier signal.



Band2-Low Channel-15MHz Bandwidth-10GHz to 20GHz

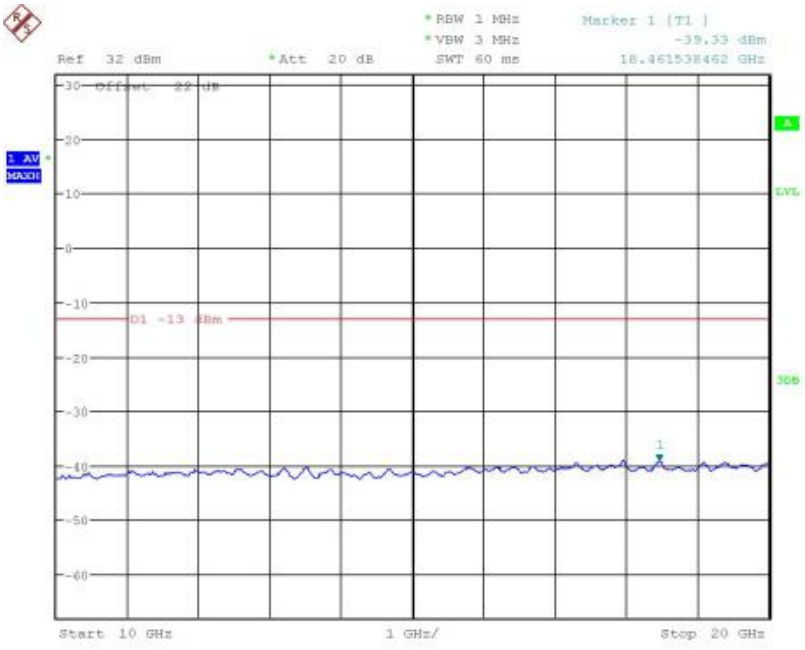


Band2-Low Channel-20MHz Bandwidth-30MHz to 1GHz



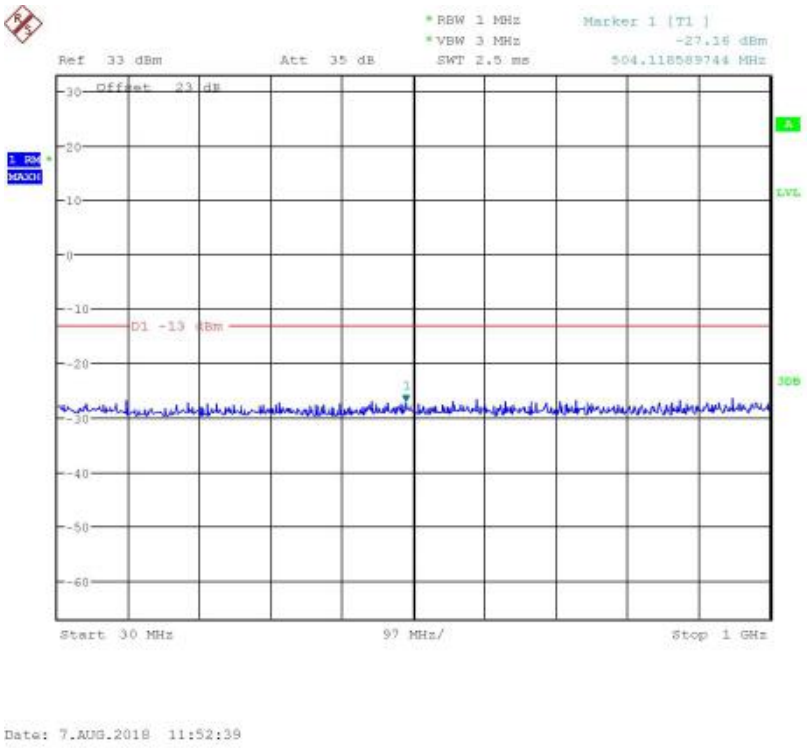
Band2-Low Channel-20MHz Bandwidth-1GHz to 10GHz

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

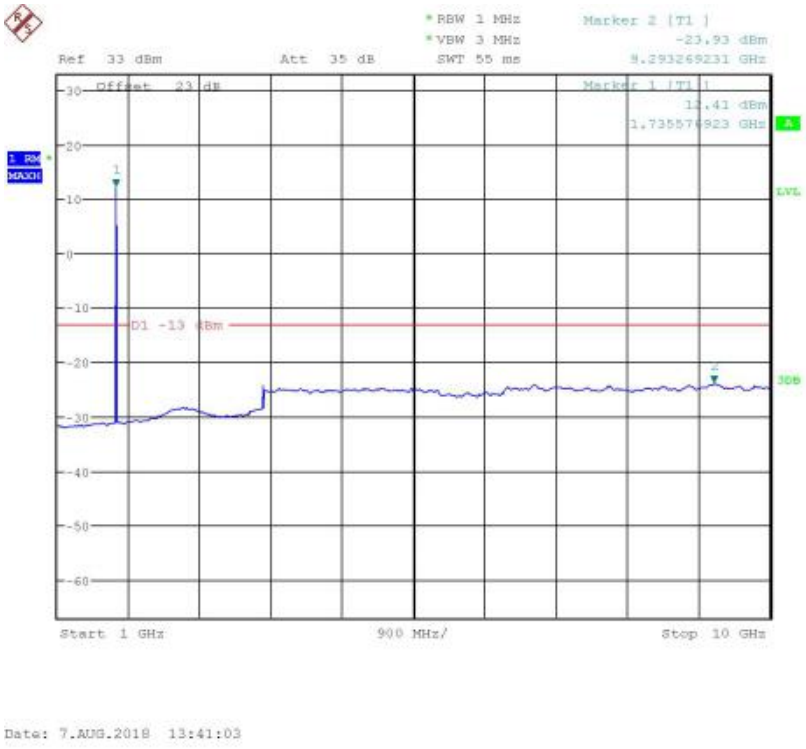


Band2-Low Channel-20MHz Bandwidth-10GHz to 20GHz

5.3.10 CAT-M B4 Conducted Spurious Emission Results

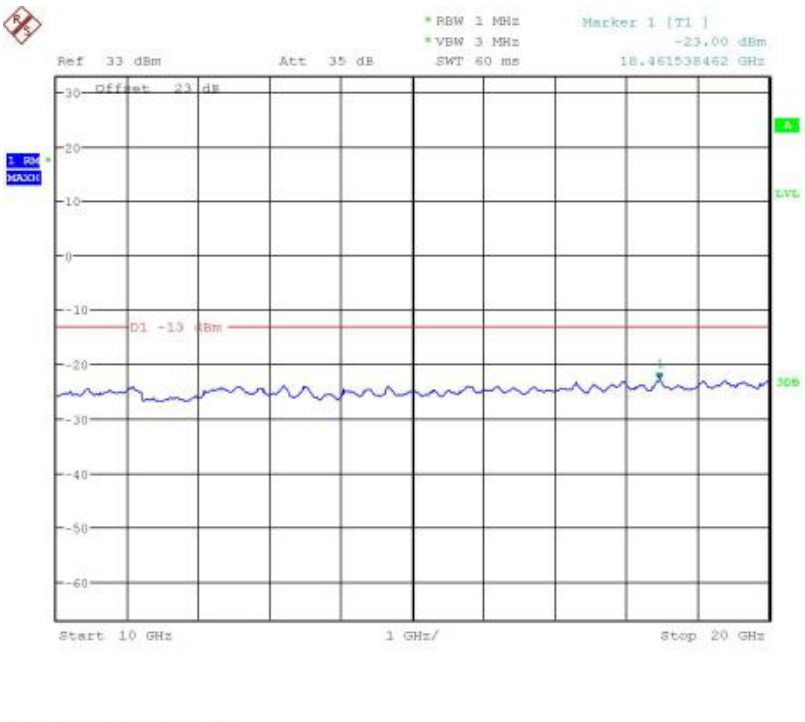


Band4-High Channel-1.4MHz Bandwidth-30MHz to 1GHz

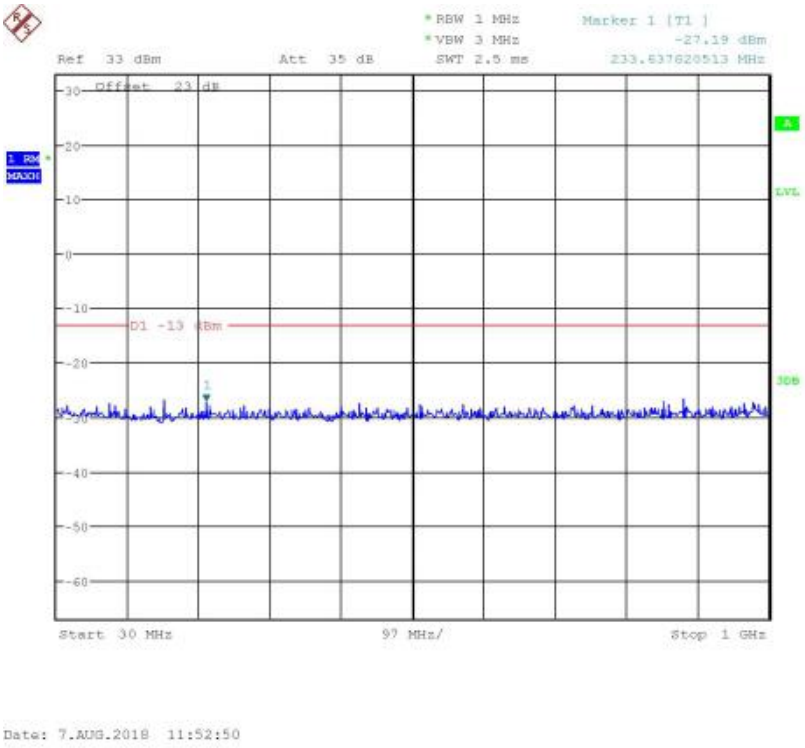


Band4-High Channel-1.4MHz Bandwidth-1GHz to 10GHz

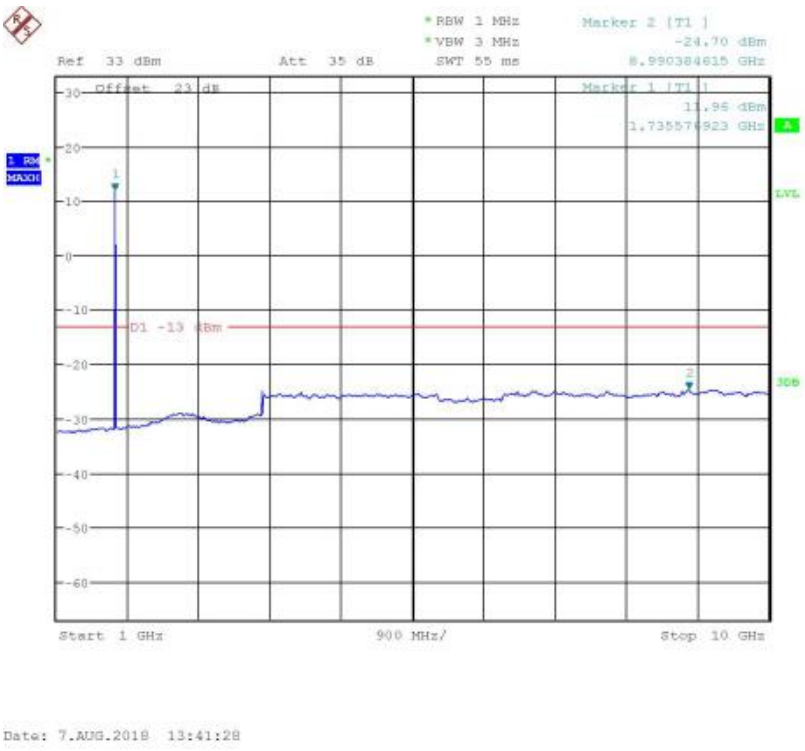
Note: The strong emission shown in each case is the carrier signal.



Band4-High Channel-1.4MHz Bandwidth-10GHz to 20GHz

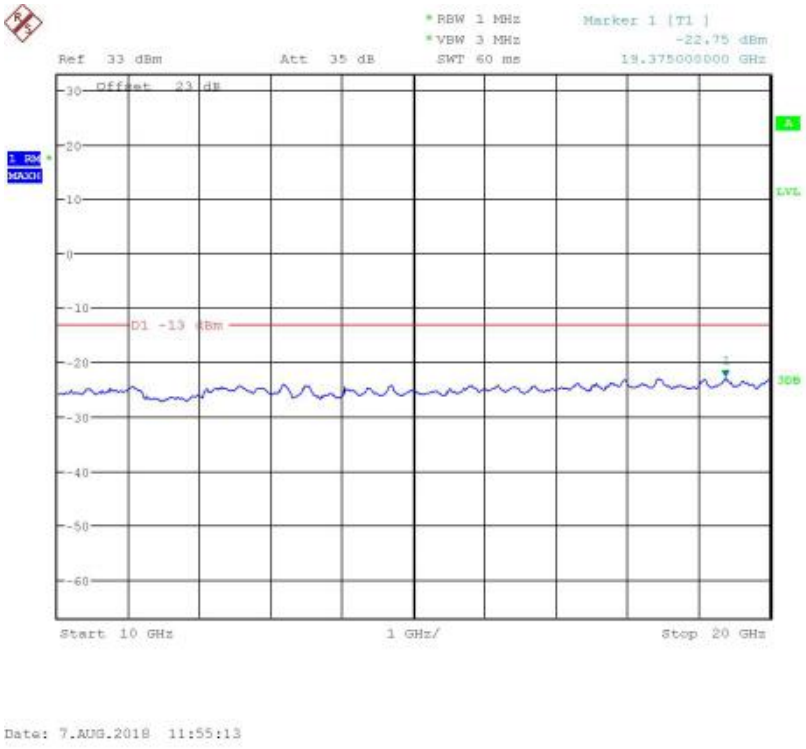


Band4-High Channel-3MHz Bandwidth-30MHz to 1GHz

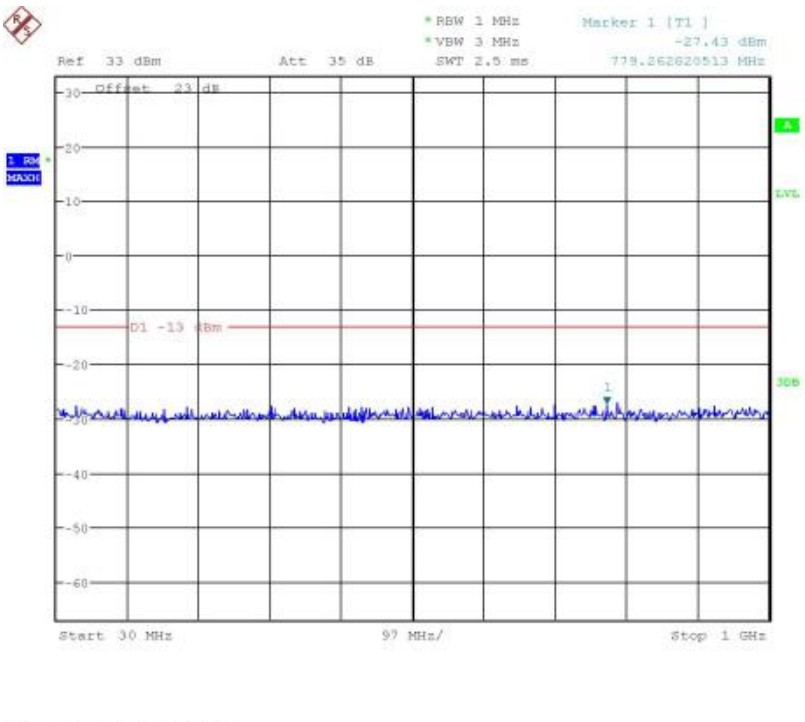


Band4-High Channel-3MHz Bandwidth-1GHz to 10GHz

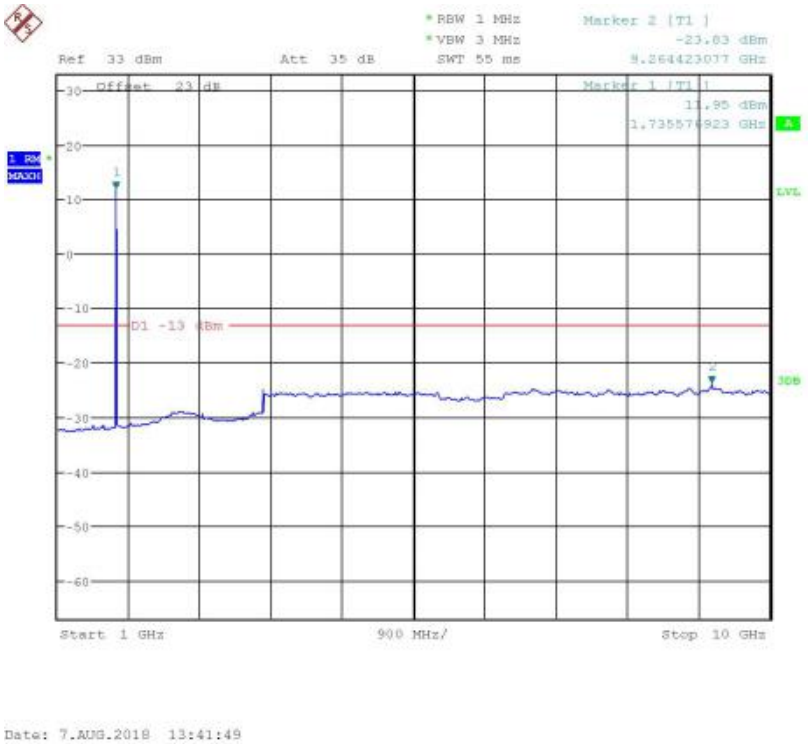
Note: The strong emission shown in each case is the carrier signal.



Band4-High Channel-3MHz Bandwidth-10GHz to 20GHz

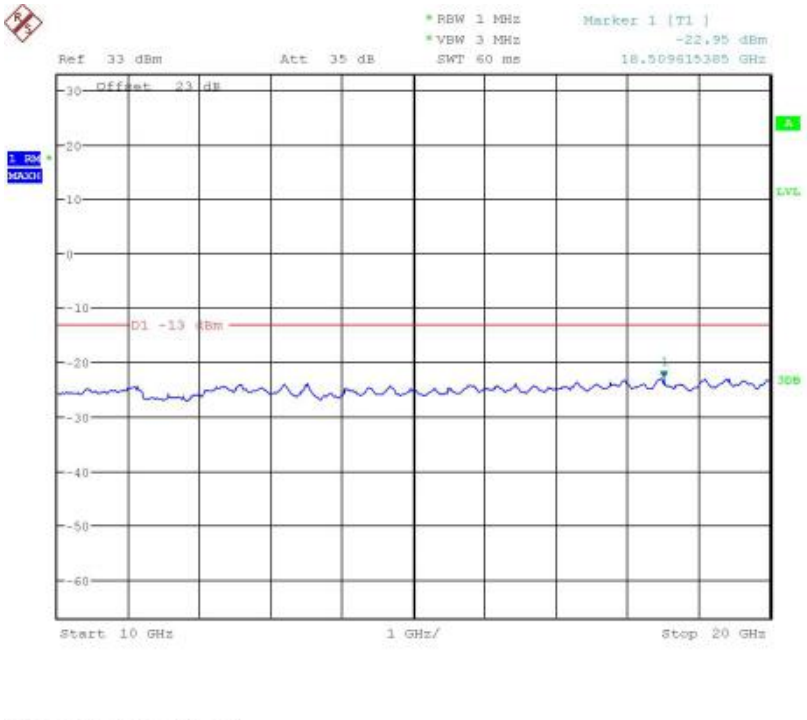


Band4-High Channel-5MHz Bandwidth-30MHz to 1GHz

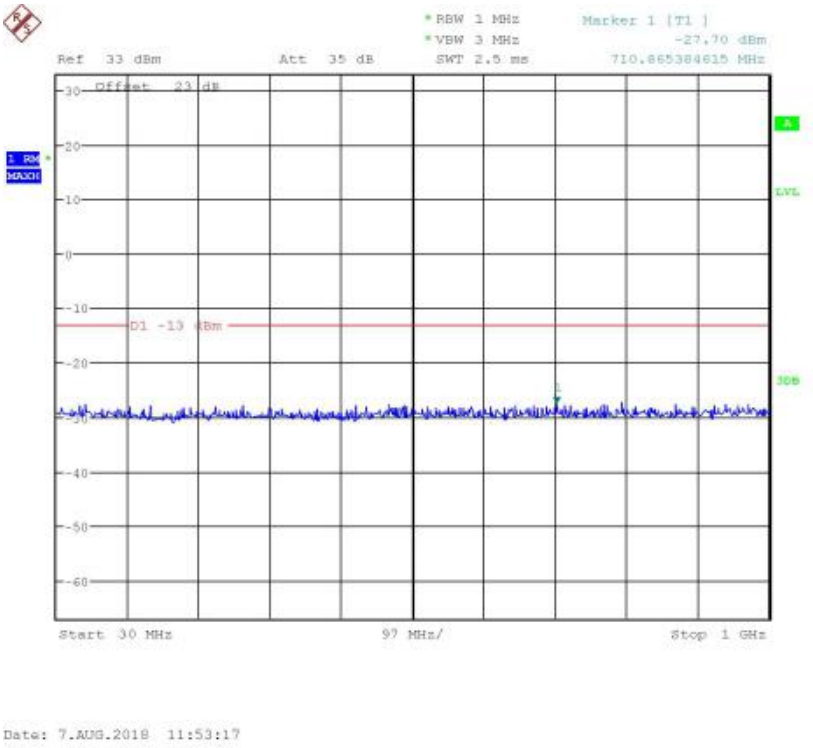


Band4-High Channel-5MHz Bandwidth-1GHz to 10GHz

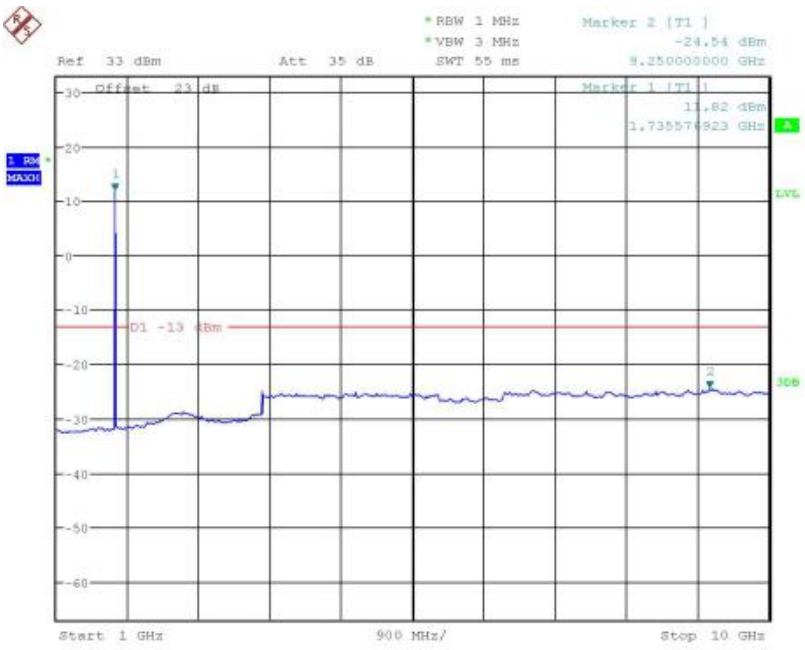
Note: The strong emission shown in each case is the carrier signal.



Band4-High Channel-5MHz Bandwidth-10GHz to 20GHz

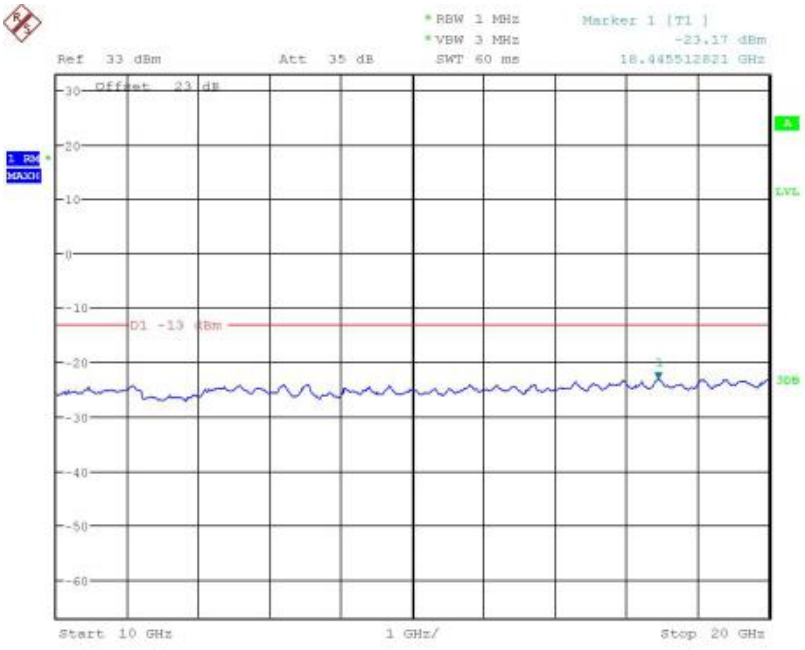


Band4-High Channel-10MHz Bandwidth-30MHz to 1GHz

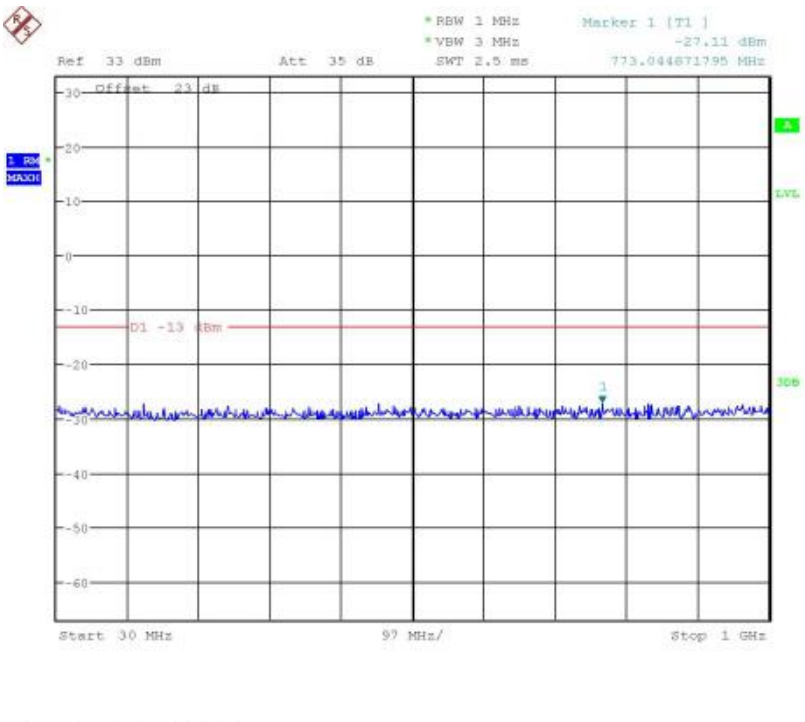


Band4-High Channel-10MHz Bandwidth-1GHz to 10GHz

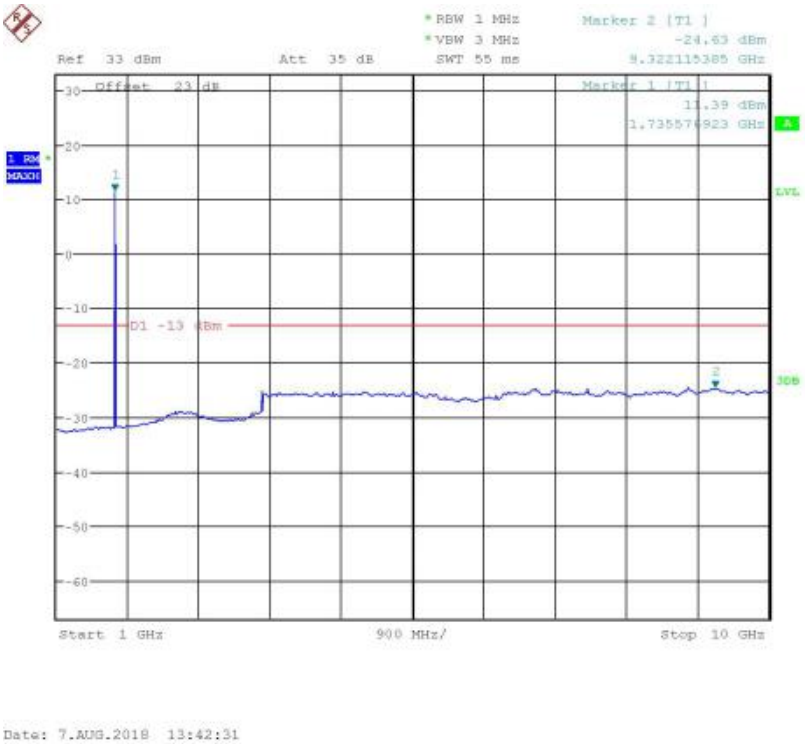
Note: The strong emission shown in each case is the carrier signal.



Band4-High Channel-10MHz Bandwidth-10GHz to 20GHz

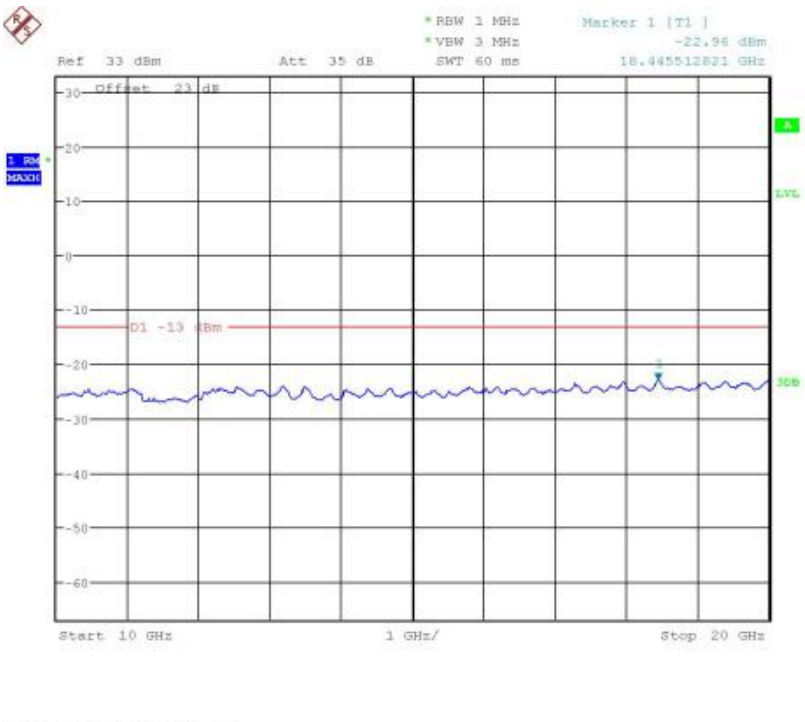


Band4-High Channel-15MHz Bandwidth-30MHz to 1GHz

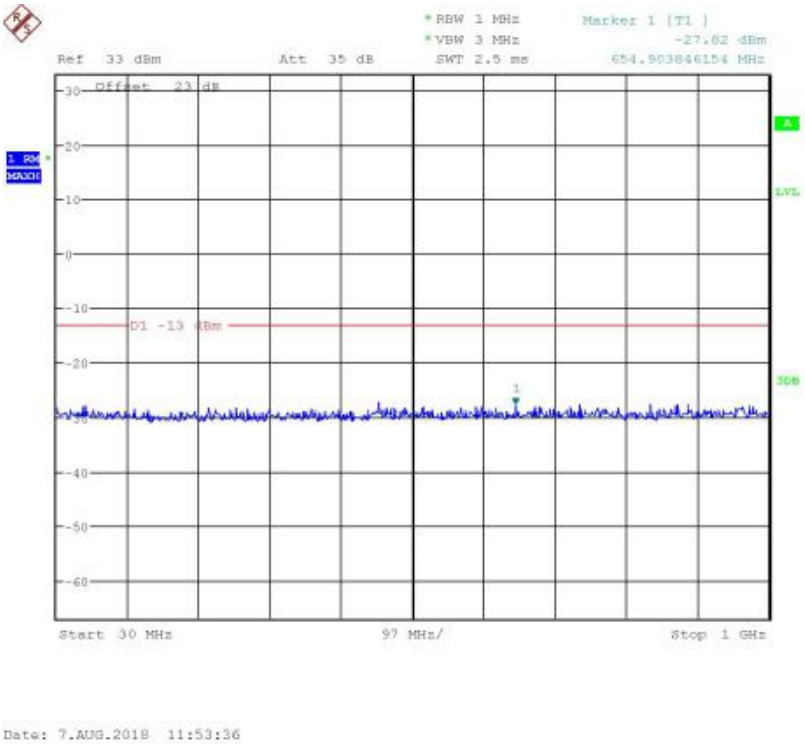


Band4-High Channel-15MHz Bandwidth-1GHz to 10GHz

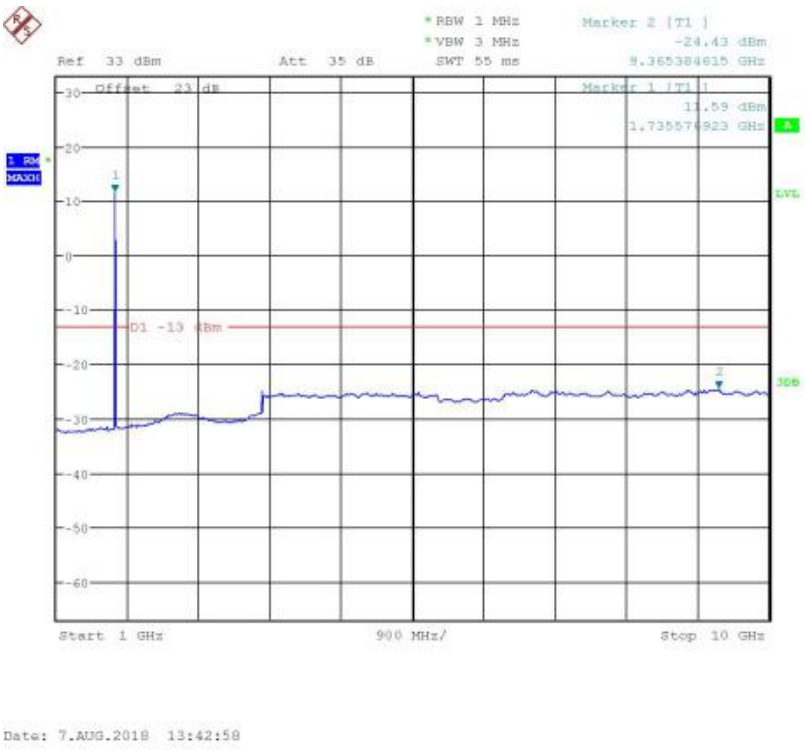
Note: The strong emission shown in each case is the carrier signal.



Band4-High Channel-15MHz Bandwidth-10GHz to 20GHz

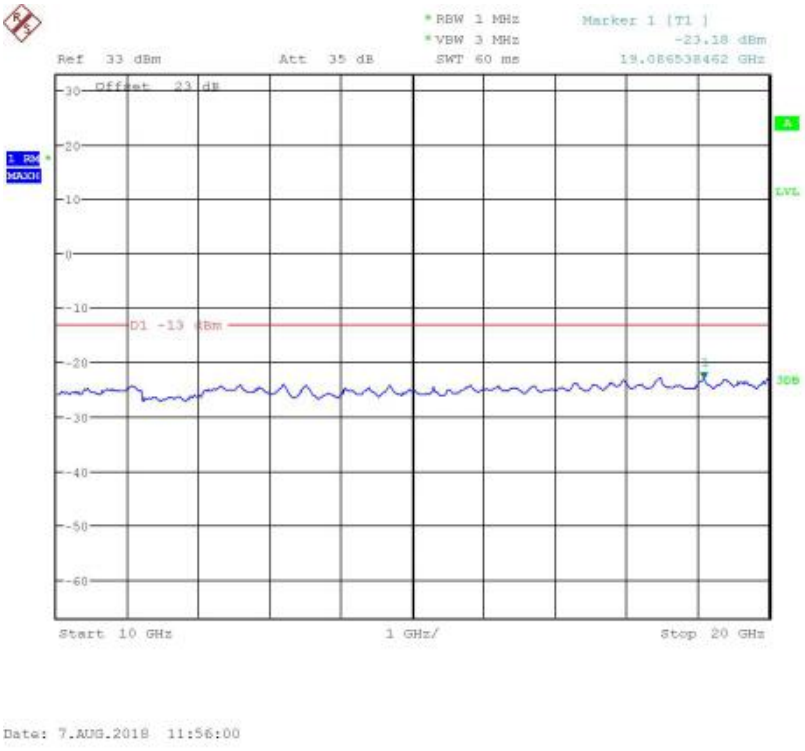


Band4-High Channel-20MHz Bandwidth-30MHz to 1GHz

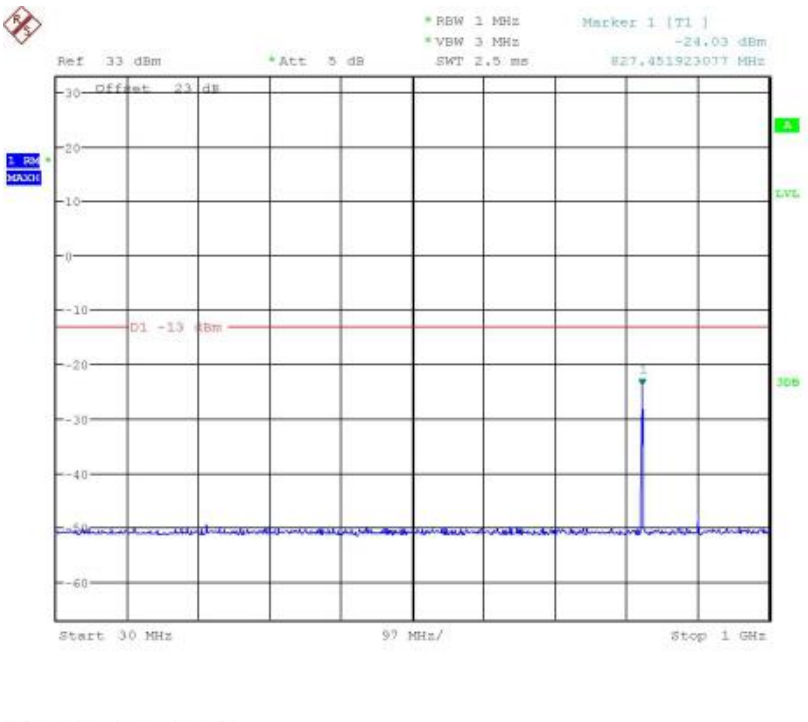


Band4-High Channel-20MHz Bandwidth-1GHz to 10GHz

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



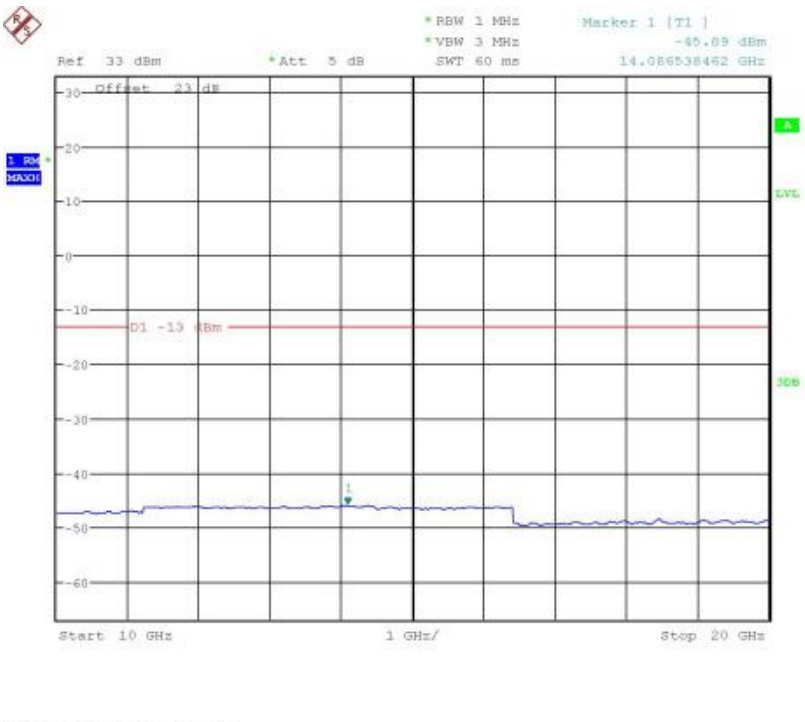
Band4-High Channel-20MHz Bandwidth-10GHz to 20GHz



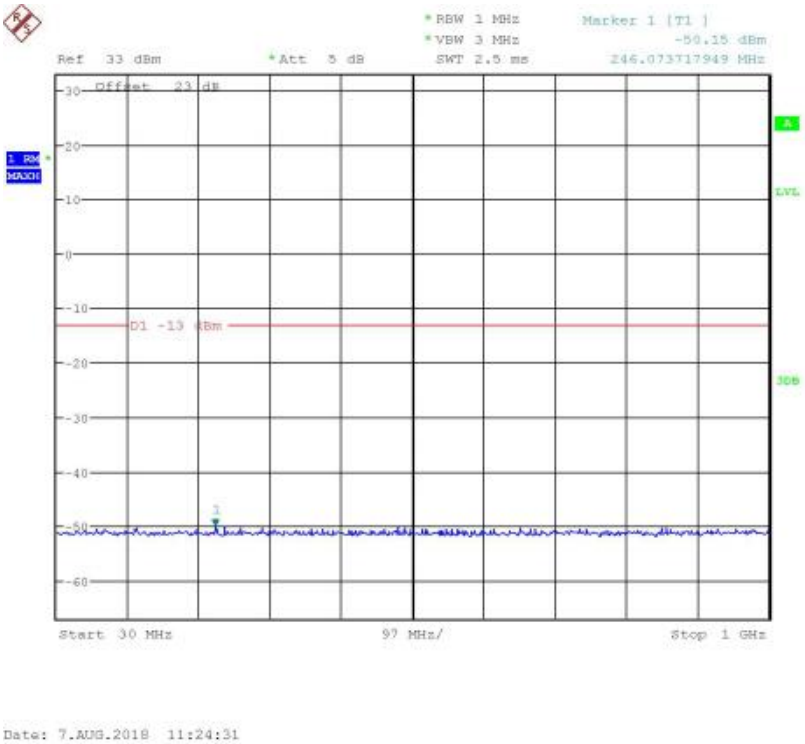
Band4-Middle Channel-1.4MHz Bandwidth-30MHz to 1GHz

Band4-Middle Channel-1.4MHz Bandwidth-1GHz to 10GHz

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



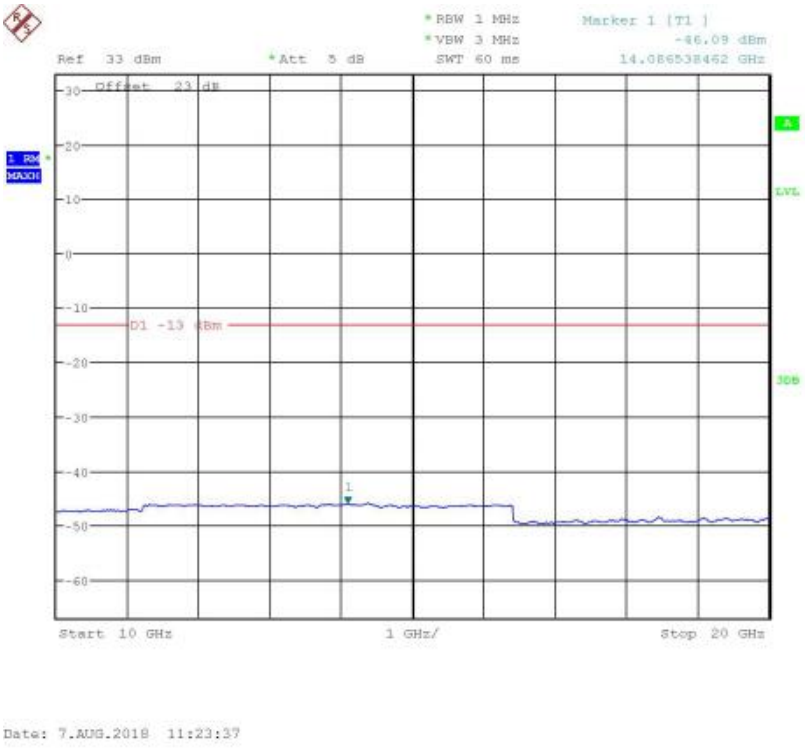
Band4-Middle Channel-1.4MHz Bandwidth-10GHz to 20GHz



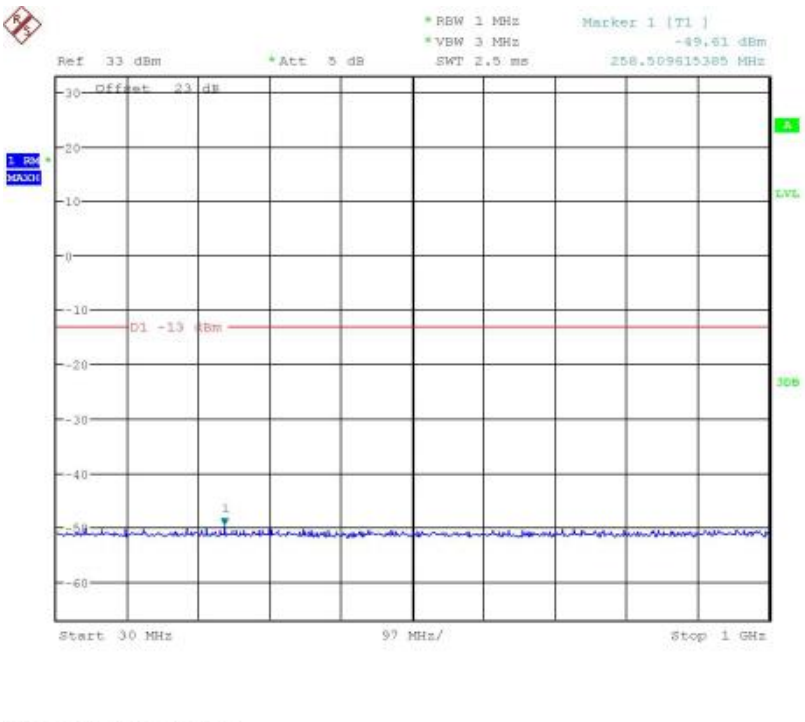
Band4-Middle Channel-3MHz Bandwidth-30MHz to 1GHz

Band4-Middle Channel-3MHz Bandwidth-1GHz to 10GHz

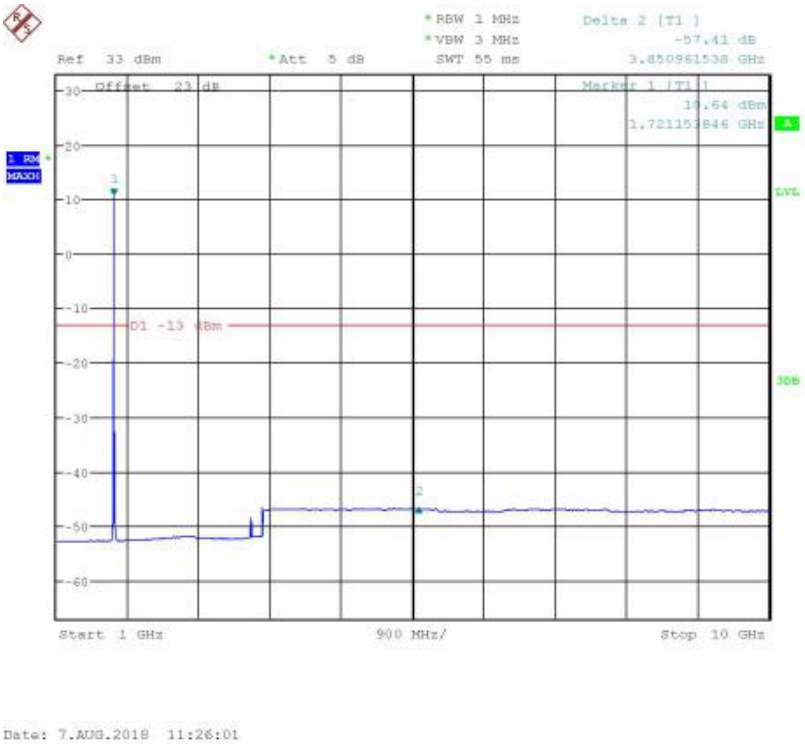
Note: The strong emission shown in each case is the carrier signal.



Band4-Middle Channel-3MHz Bandwidth-10GHz to 20GHz

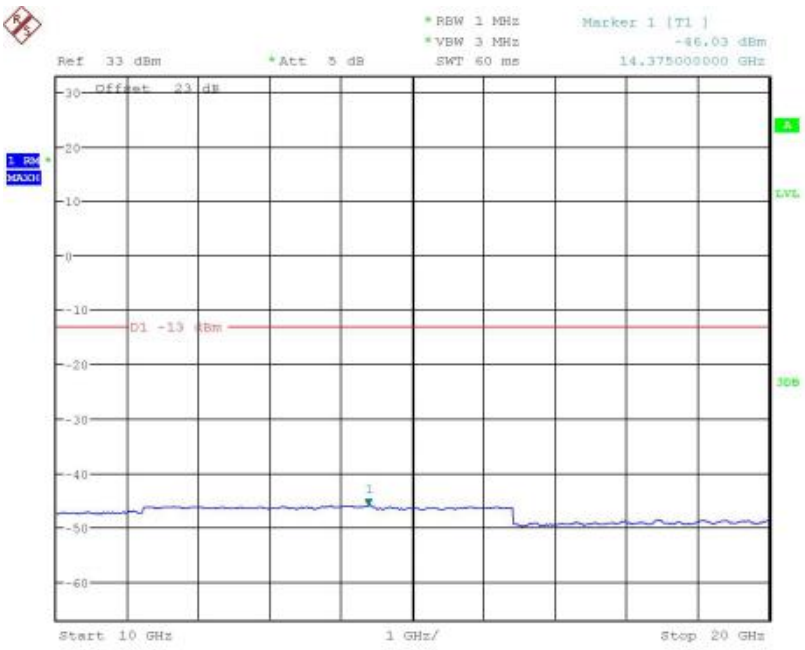


Band4-Middle Channel-5MHz Bandwidth-30MHz to 1GHz

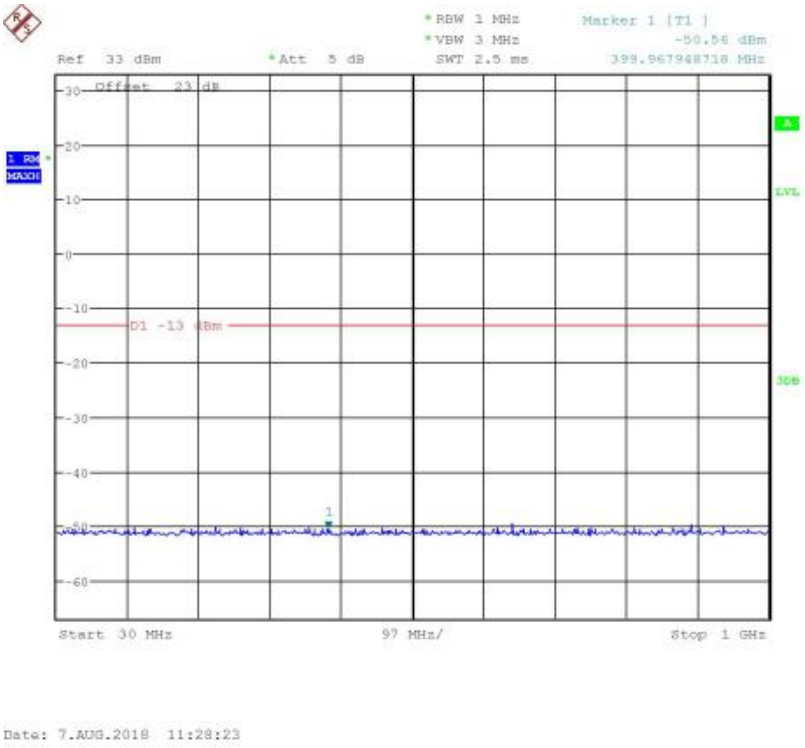


Band4-Middle Channel-5MHz Bandwidth-1GHz to 10GHz

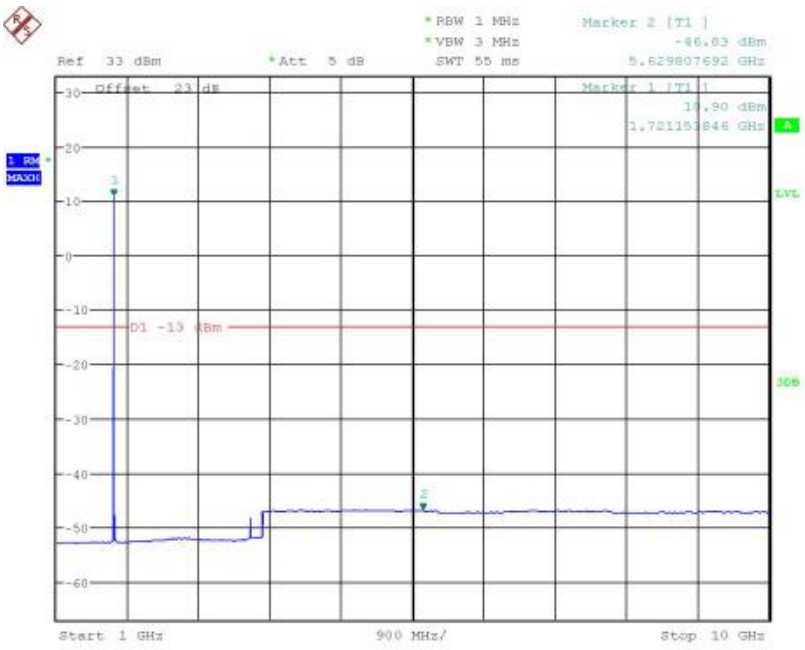
Note: The strong emission shown in each case is the carrier signal.



Band4-Middle Channel-5MHz Bandwidth-10GHz to 20GHz

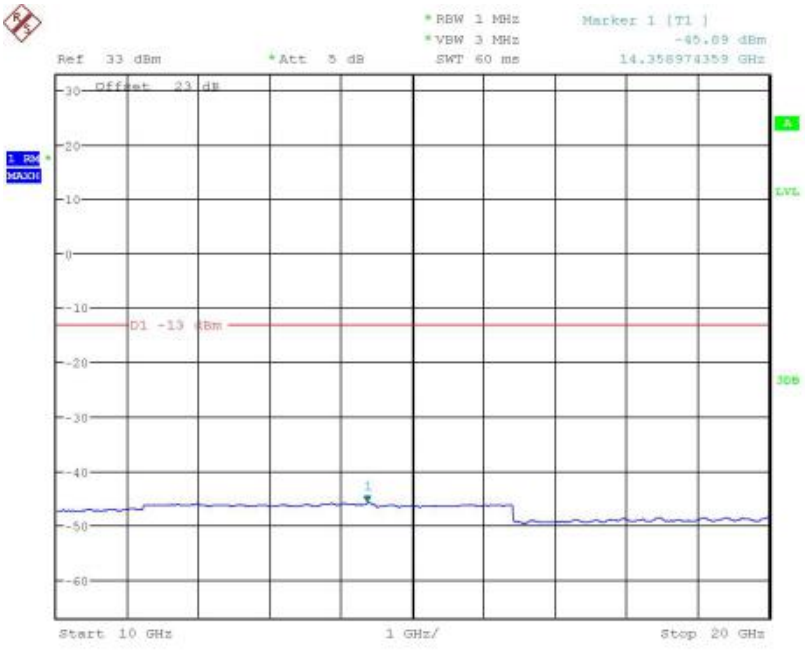


Band4-Middle Channel-10MHz Bandwidth-30MHz to 1GHz

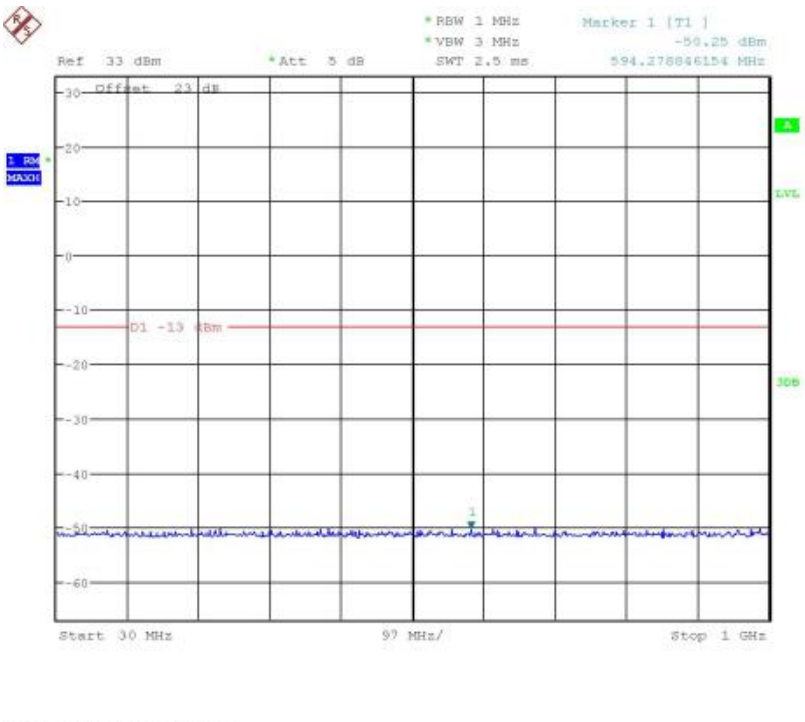


Band4-Middle Channel-10MHz Bandwidth-1GHz to 10GHz

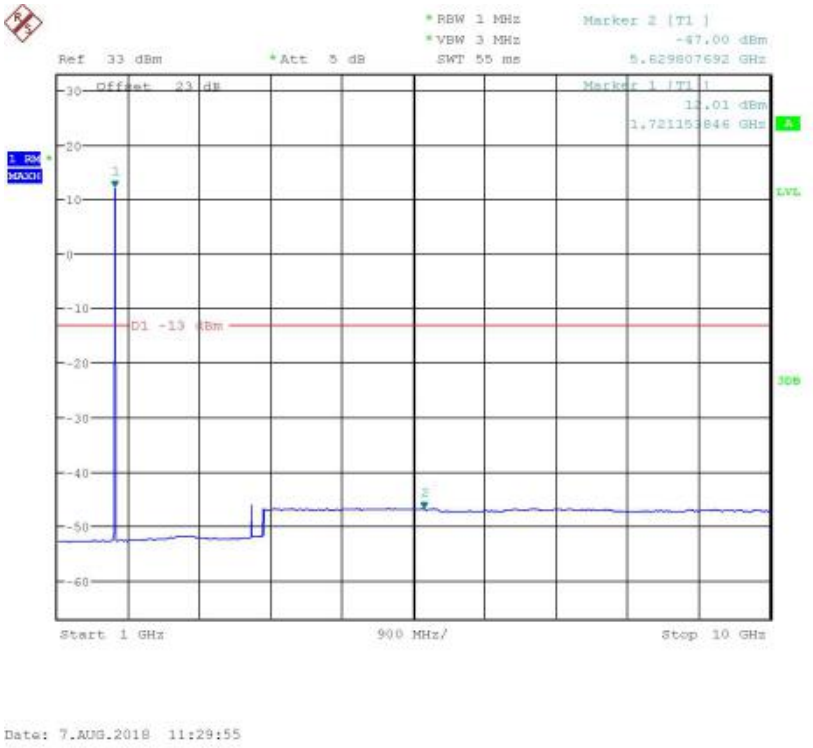
Note: The strong emission shown in each case is the carrier signal.



Band4-Middle Channel-10MHz Bandwidth-10GHz to 20GHz

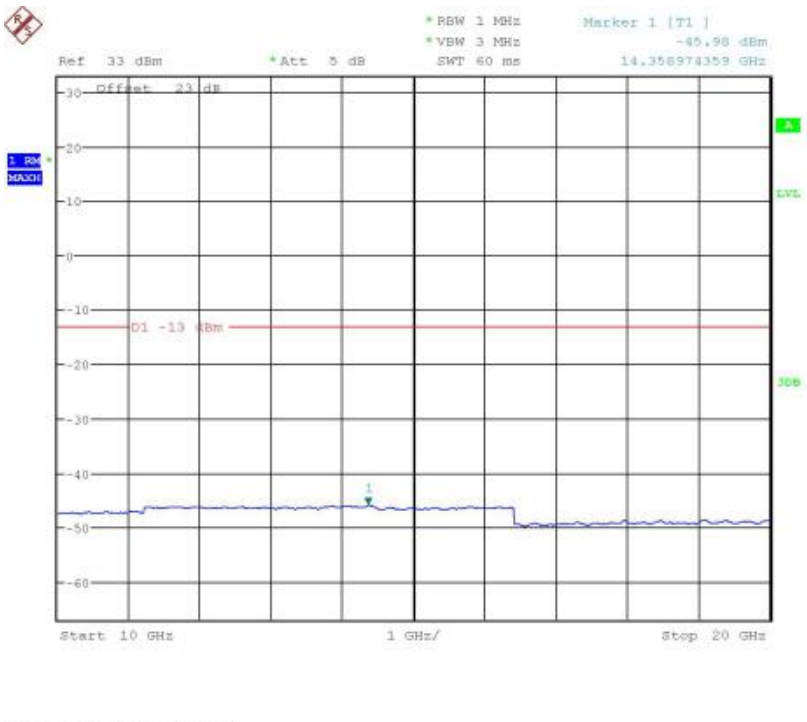


Band4-Middle Channel-15MHz Bandwidth-30MHz to 1GHz

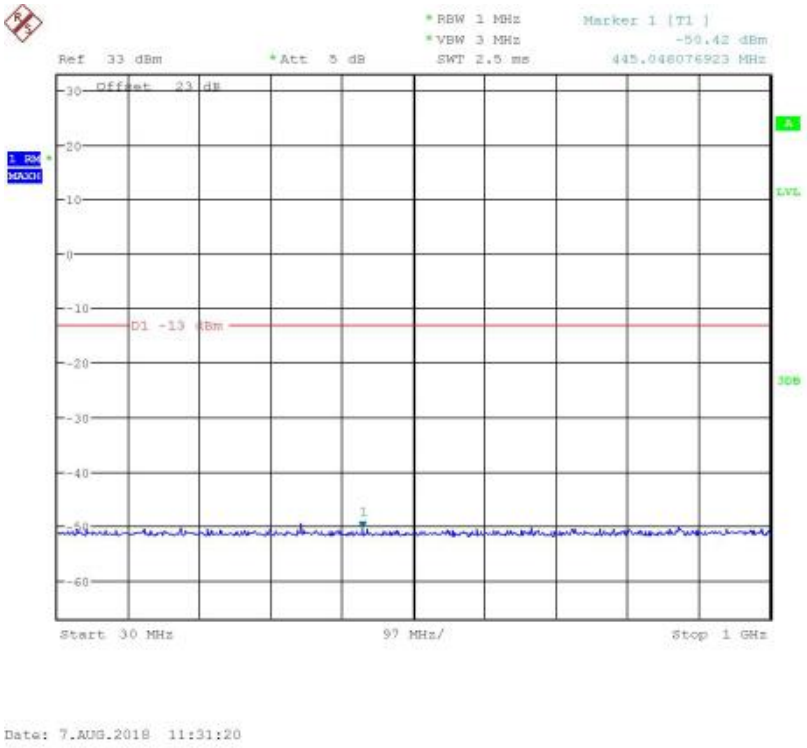


Band4-Middle Channel-15MHz Bandwidth-1GHz to 10GHz

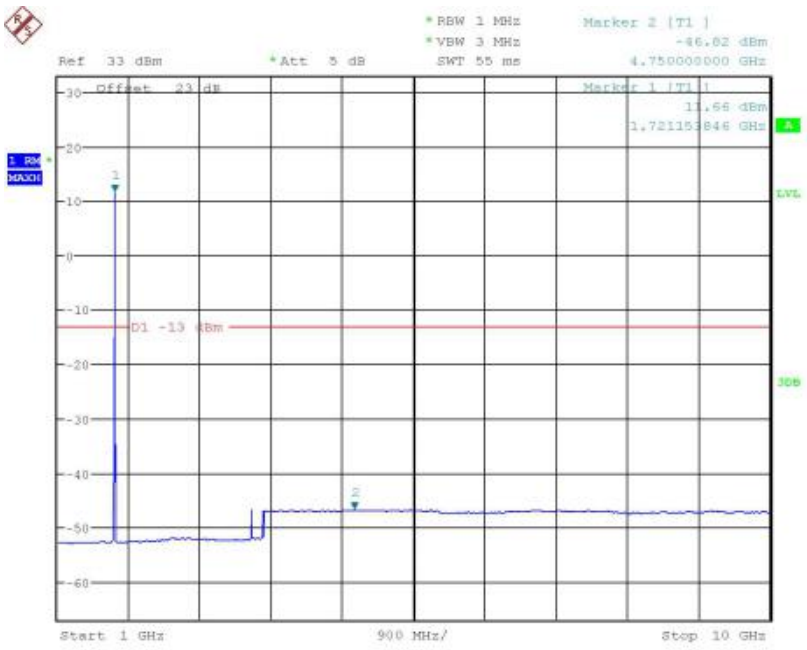
Note: The strong emission shown in each case is the carrier signal.



Band4-Middle Channel-15MHz Bandwidth-10GHz to 20GHz

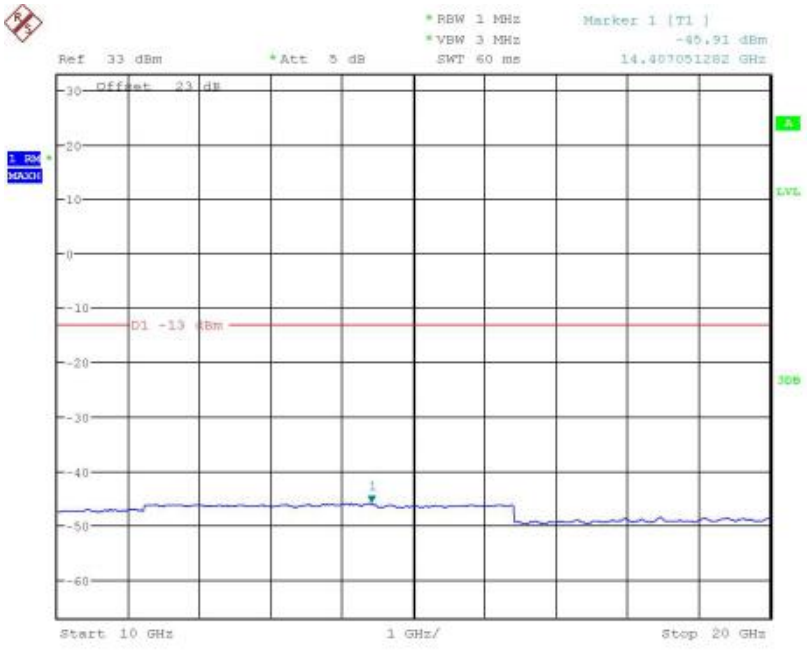


Band4-Middle Channel-20MHz Bandwidth-30MHz to 1GHz

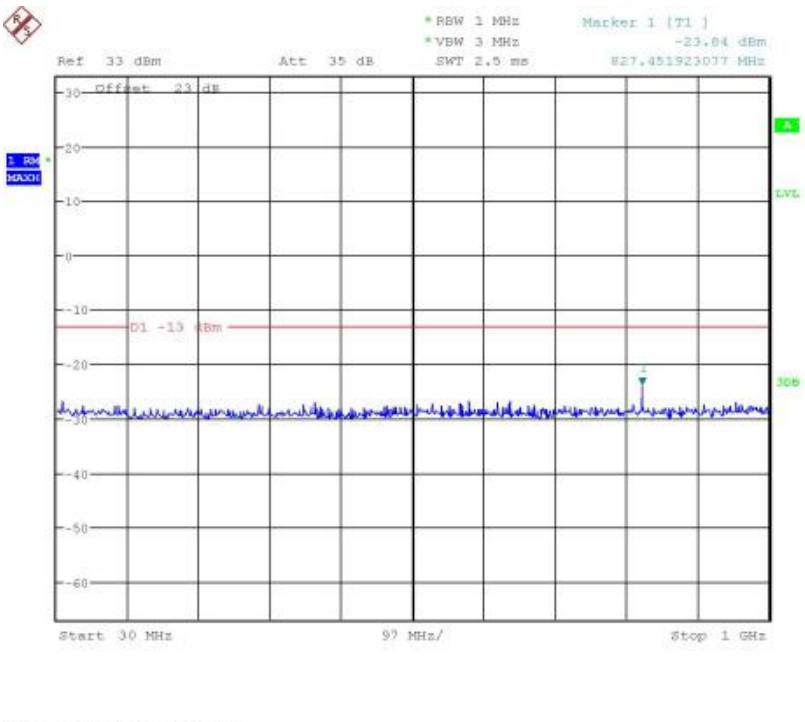


Band4-Middle Channel-20MHz Bandwidth-1GHz to 10GHz

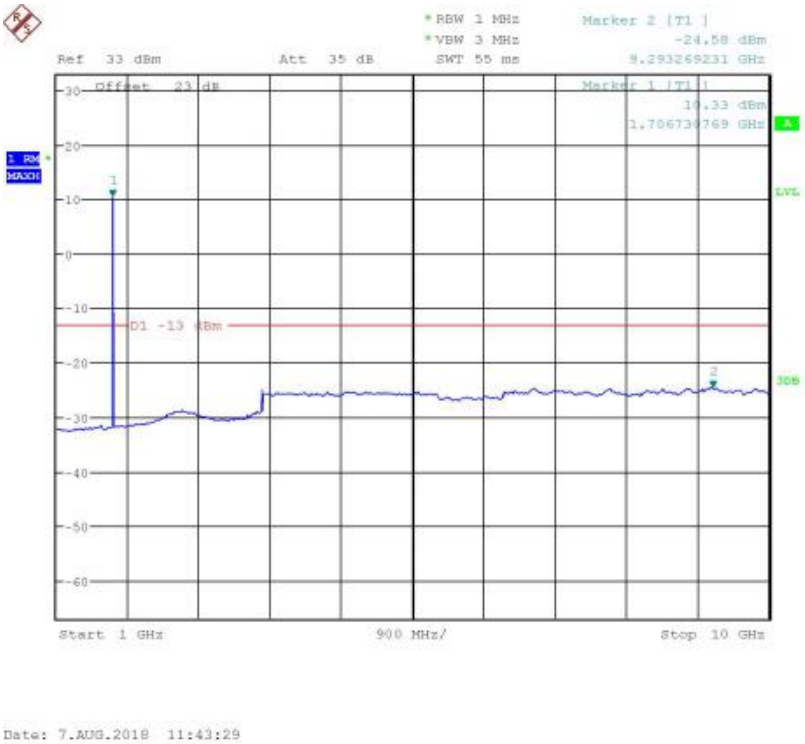
Note: The strong emission shown in each case is the carrier signal.



Band4-Middle Channel-20MHz Bandwidth-10GHz to 20GHz

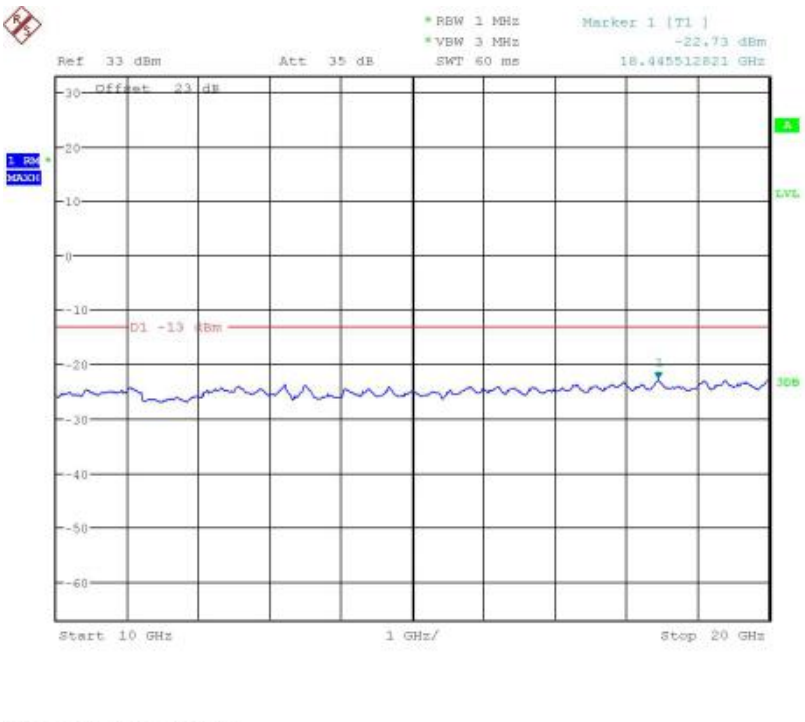


Band4-Low Channel-1.4MHz Bandwidth-30MHz to 1GHz

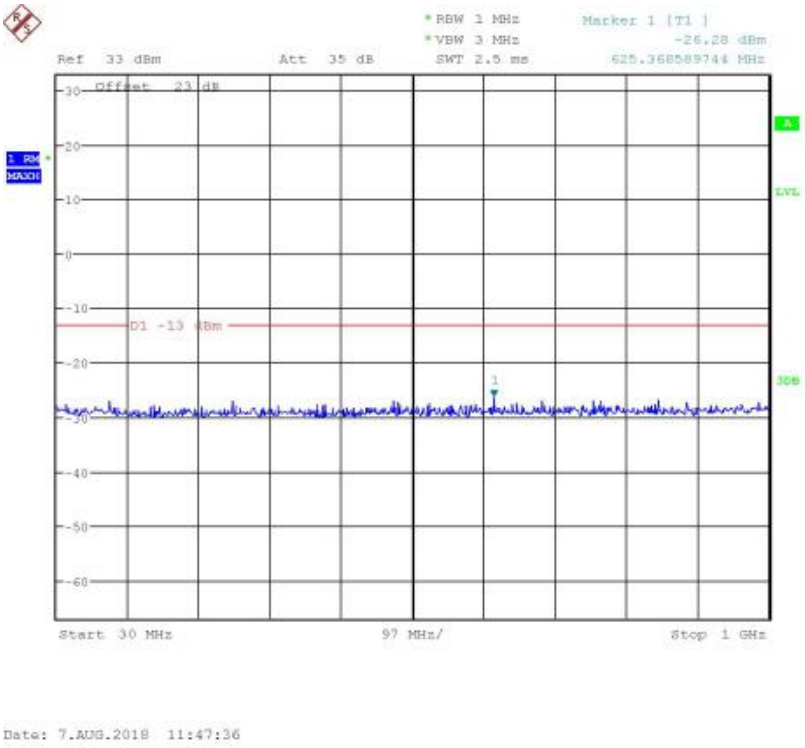


Band4-Low Channel-1.4MHz Bandwidth-1GHz to 10GHz

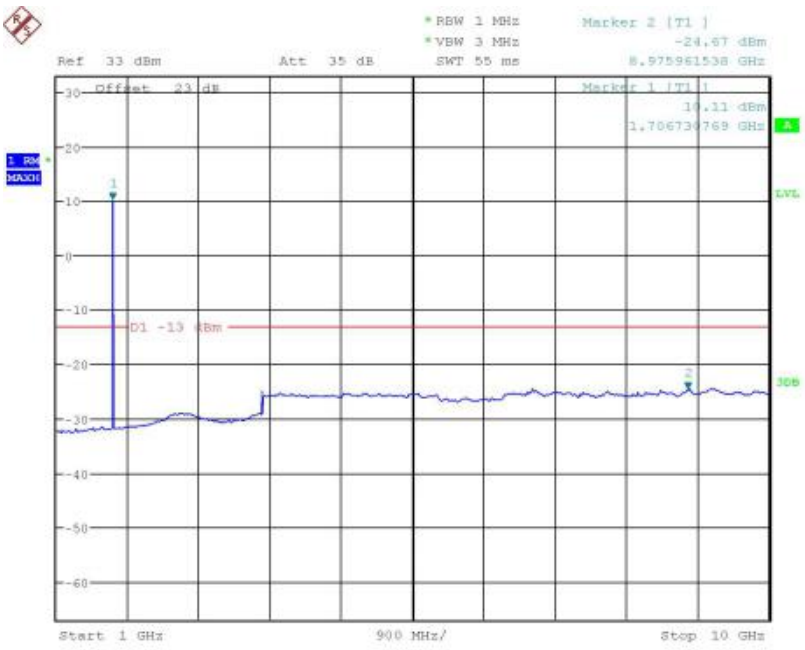
Note: The strong emission shown in each case is the carrier signal.



Band4-Low Channel-1.4MHz Bandwidth-10GHz to 20GHz

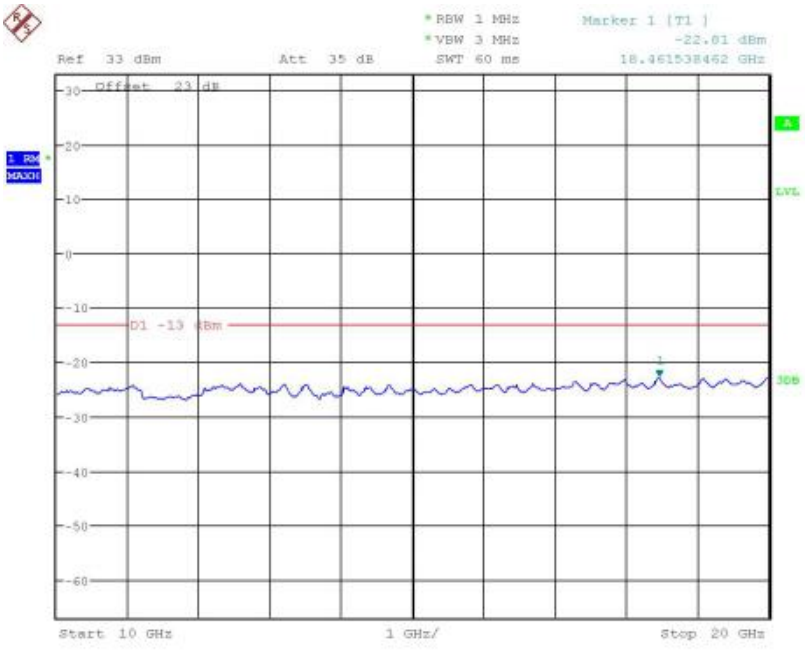


Band4-Low Channel-3MHz Bandwidth-30MHz to 1GHz

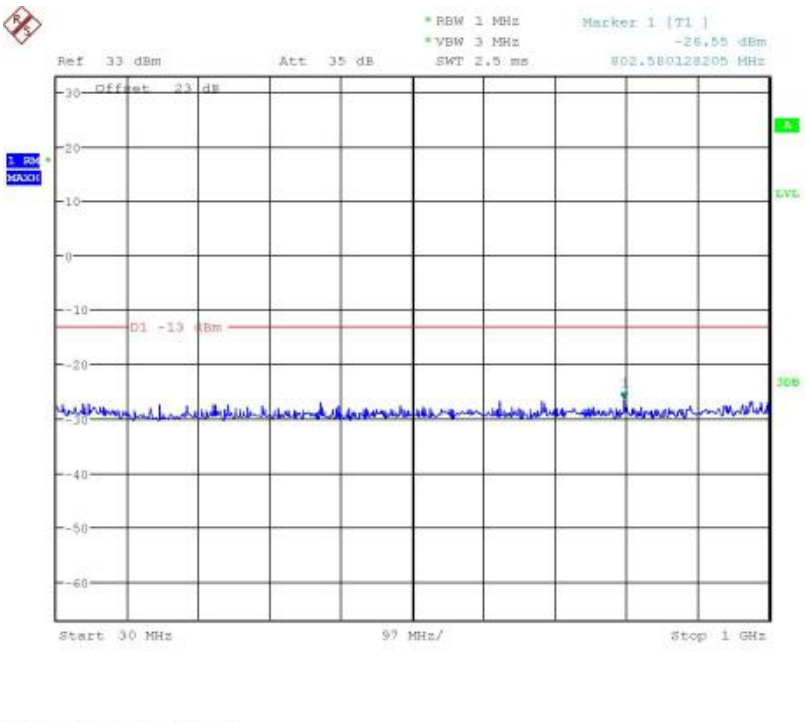


Band4-Low Channel-3MHz Bandwidth-1GHz to 10GHz

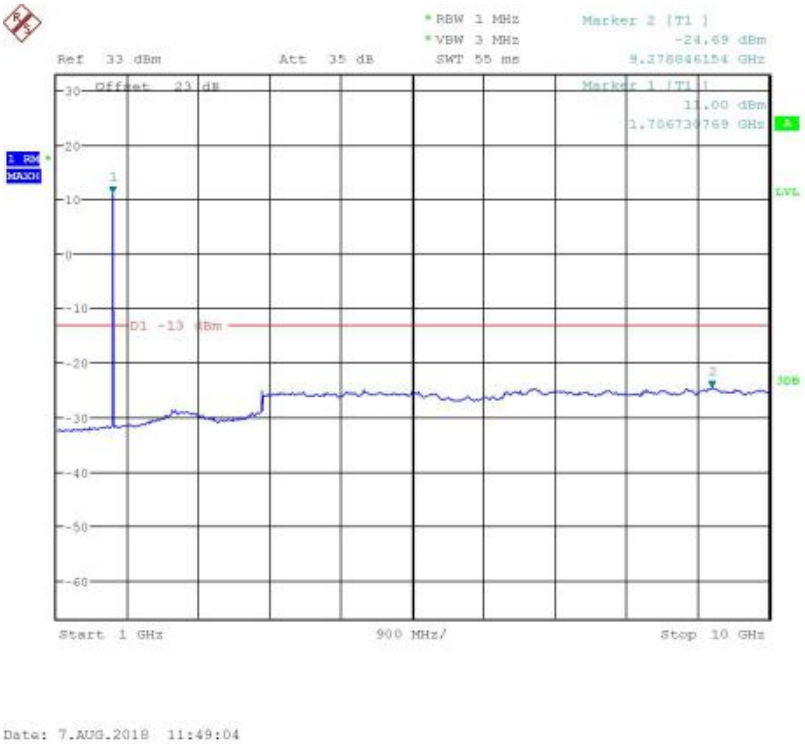
Note: The strong emission shown in each case is the carrier signal.



Band4-Low Channel-3MHz Bandwidth-10GHz to 20GHz

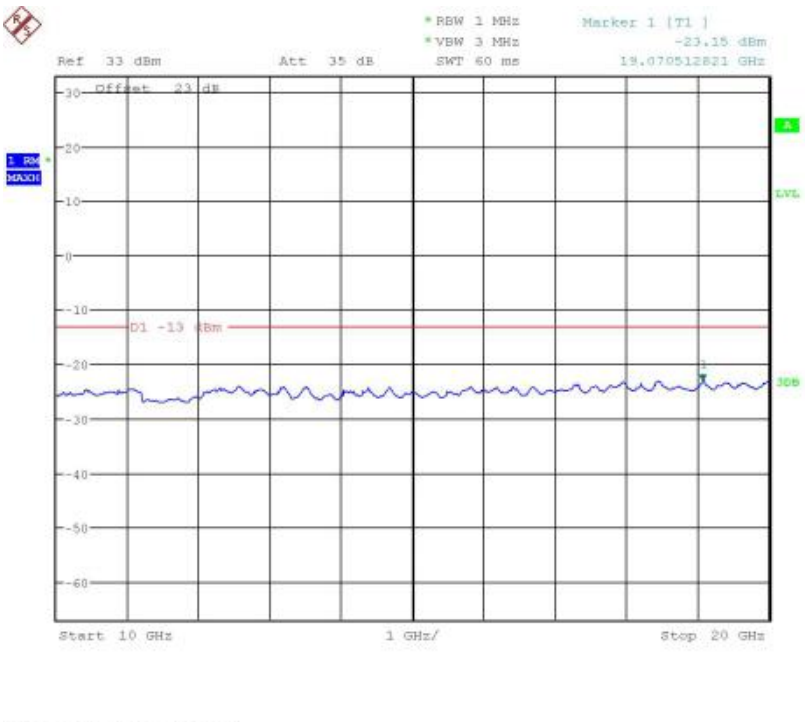


Band4-Low Channel-5MHz Bandwidth-30MHz to 1GHz

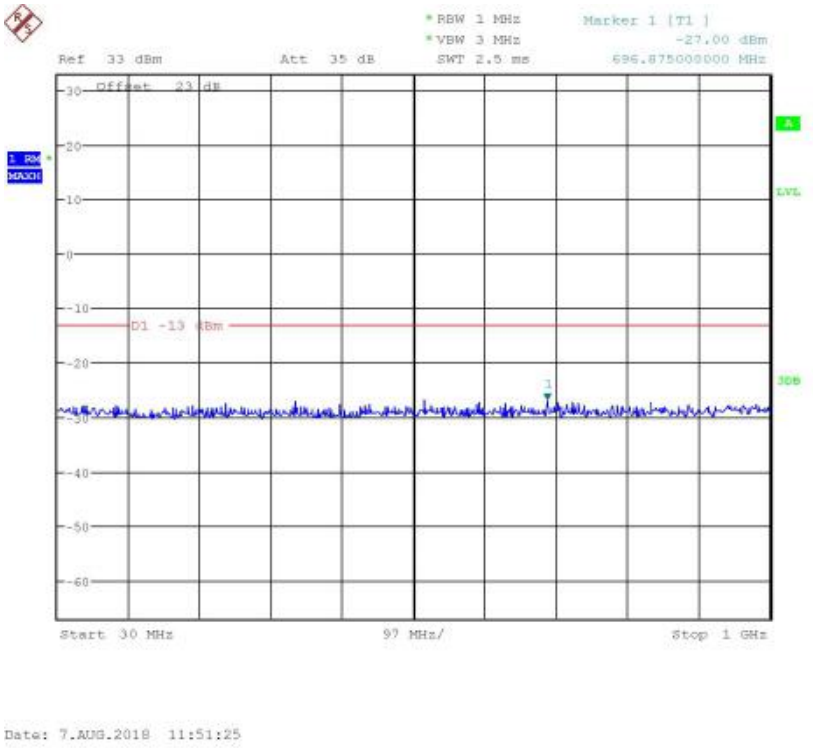


Band4-Low Channel-5MHz Bandwidth-1GHz to 10GHz

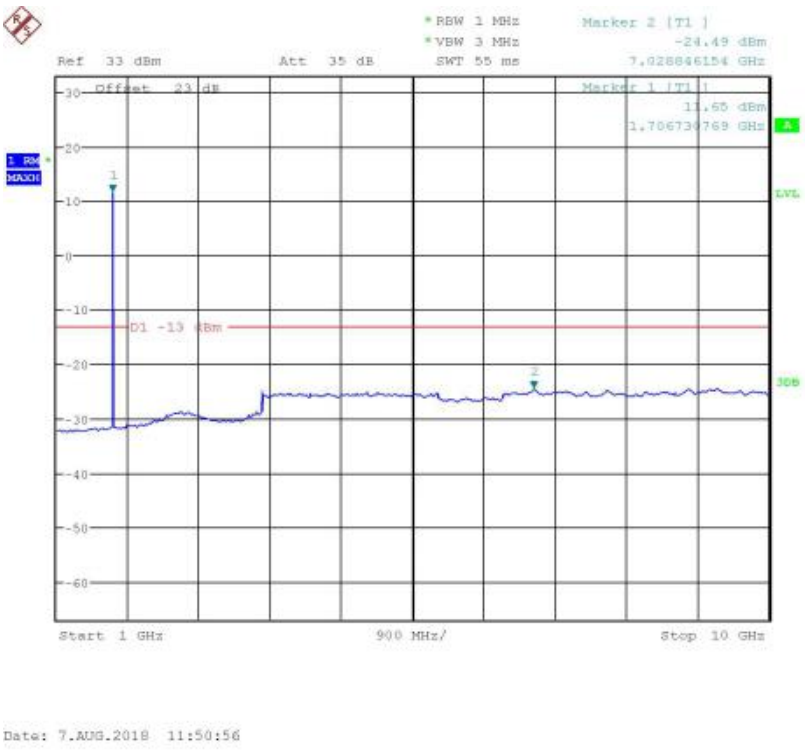
Note: The strong emission shown in each case is the carrier signal.



Band4-Low Channel-5MHz Bandwidth-10GHz to 20GHz

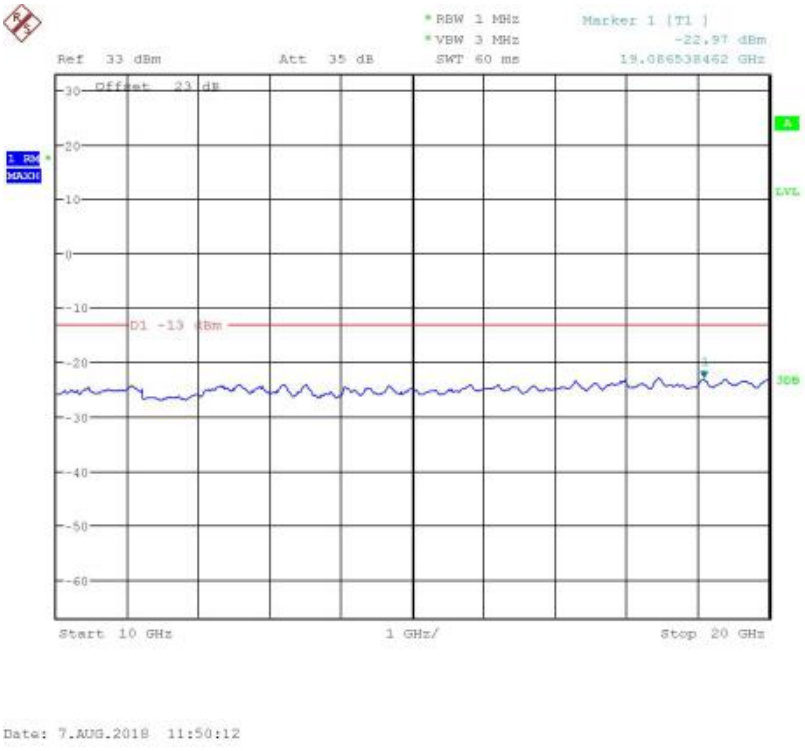


Band4-Low Channel-10MHz Bandwidth-30MHz to 1GHz

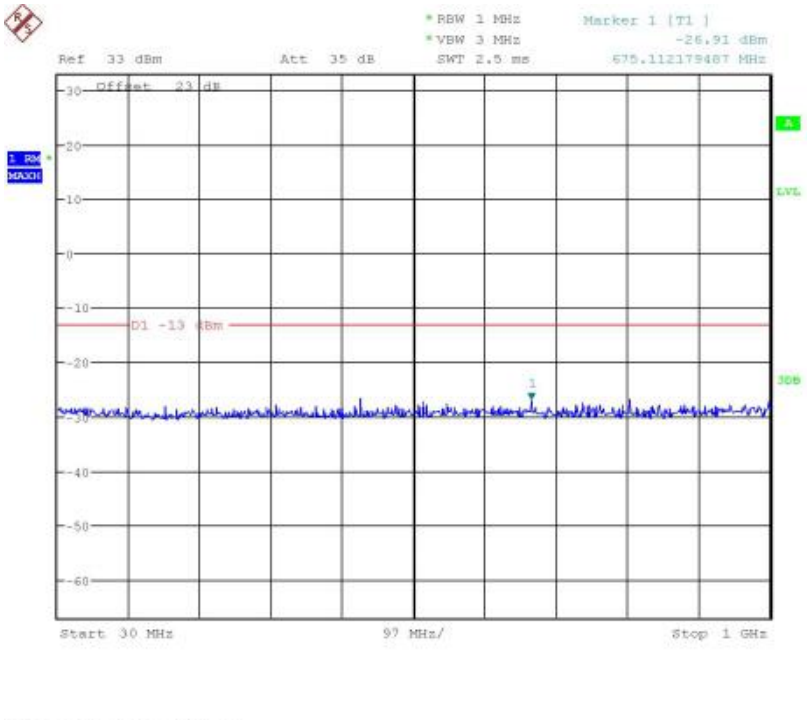


Band4-Low Channel-10MHz Bandwidth-1GHz to 10GHz

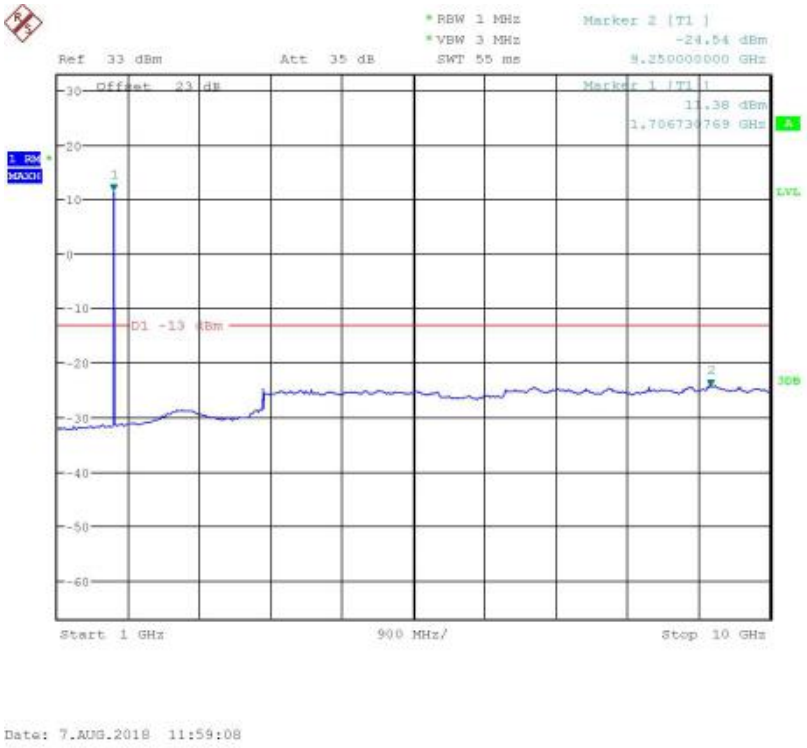
Note: The strong emission shown in each case is the carrier signal.



Band4-Low Channel-10MHz Bandwidth-10GHz to 20GHz

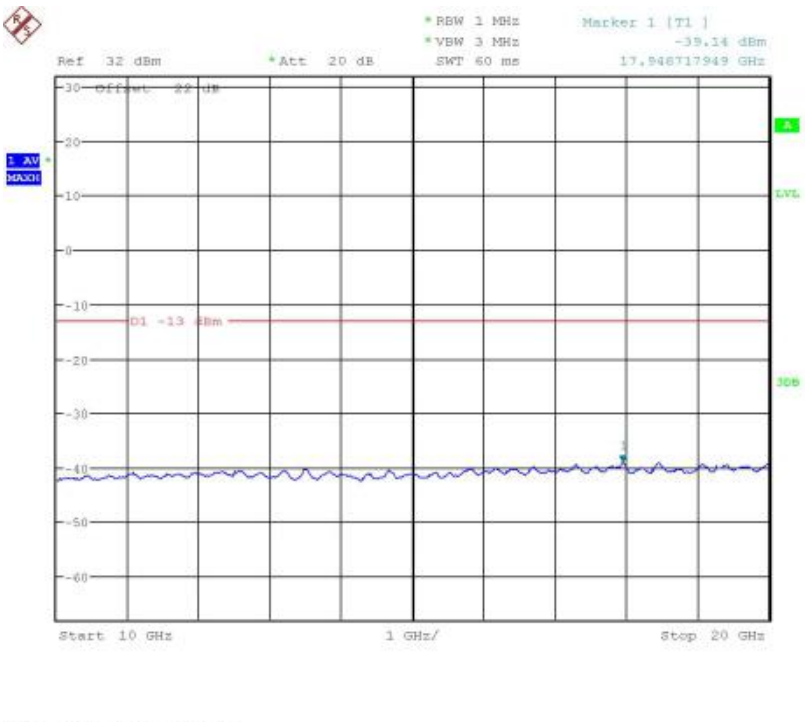


Band4-Low Channel-15MHz Bandwidth-30MHz to 1GHz

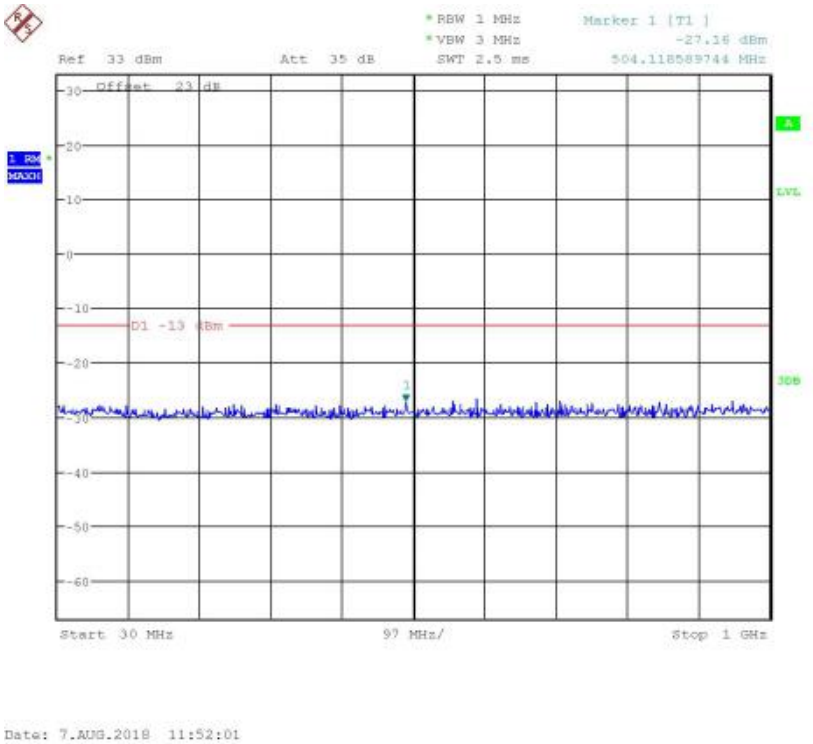


Band4-Low Channel-15MHz Bandwidth-1GHz to 10GHz

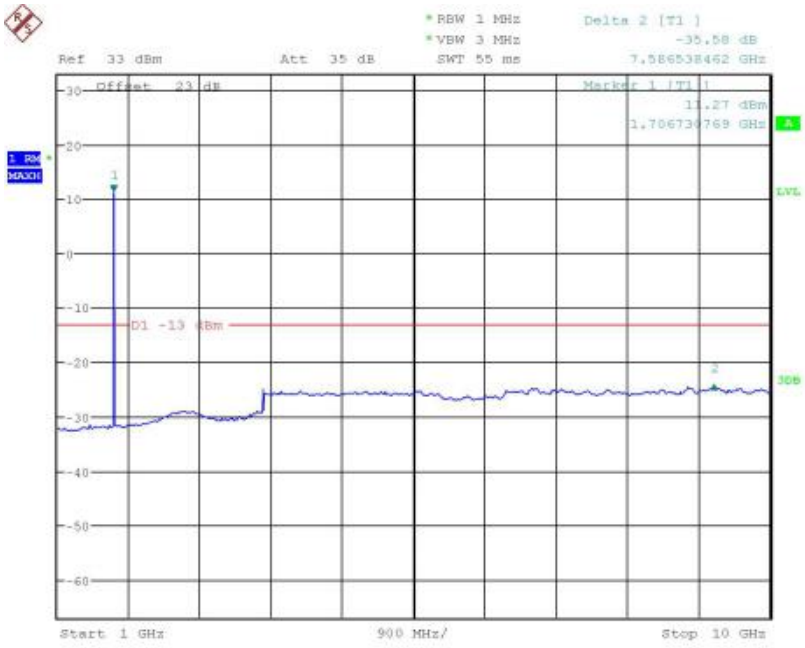
Note: The strong emission shown in each case is the carrier signal.



Band4-Low Channel-15MHz Bandwidth-10GHz to 20GHz

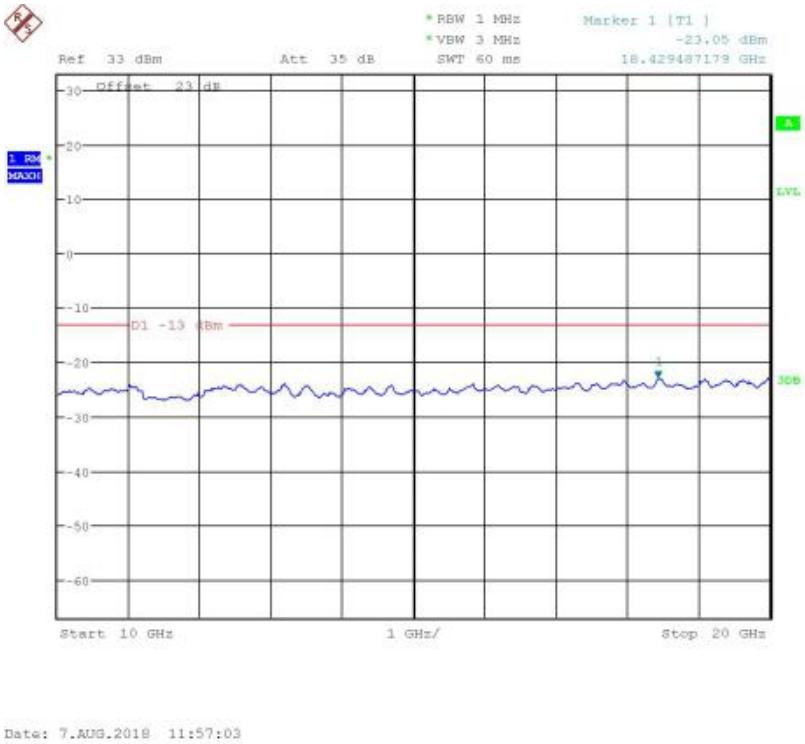


Band4-Low Channel-20MHz Bandwidth-30MHz to 1GHz



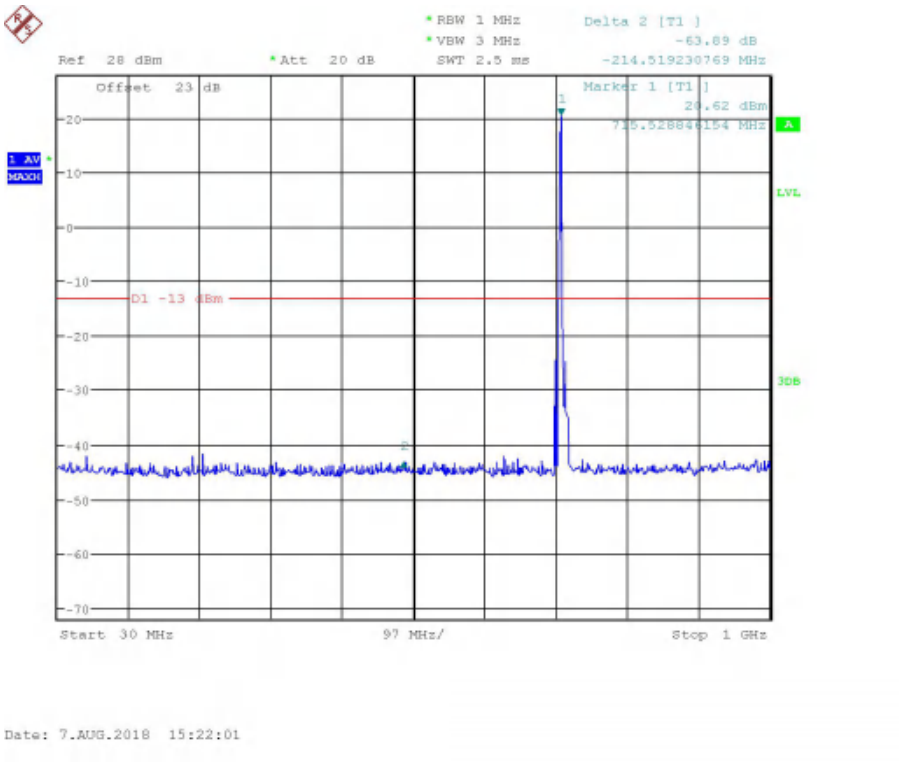
Band4-Low Channel-20MHz Bandwidth-1GHz to 10GHz

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



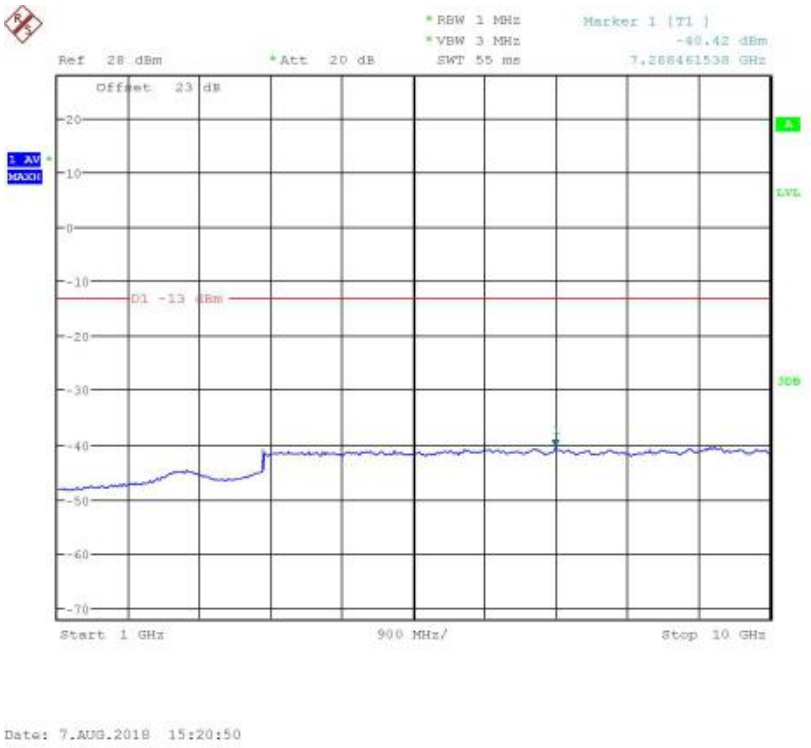
Band4-Low Channel-20MHz Bandwidth-10GHz to 20GHz

5.3.11 CAT-M B12 Conducted Spurious Emission Results

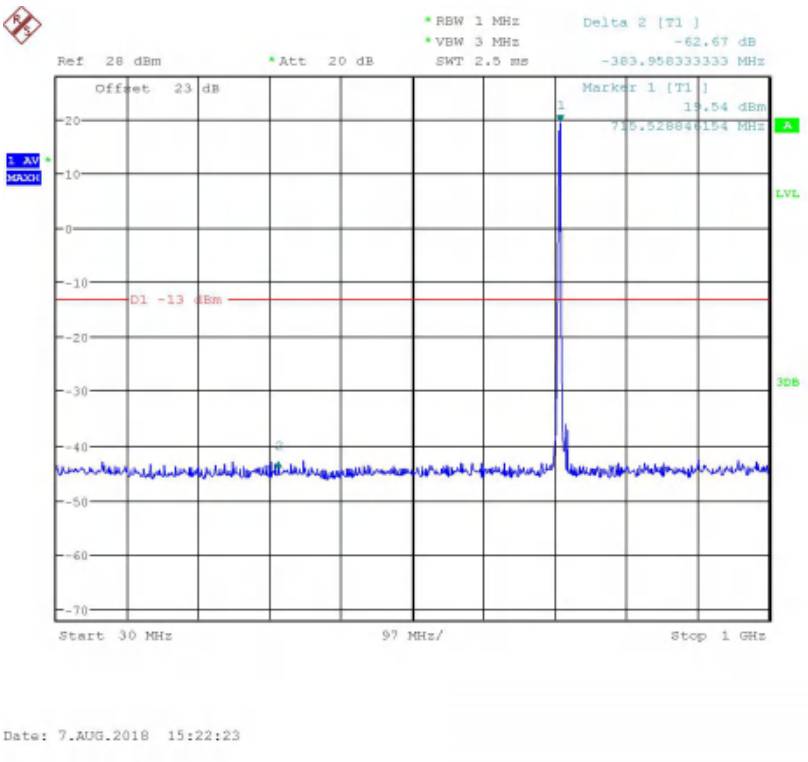


Band12-High Channel-1.4MHz Bandwidth-30MHz to 1GHz

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

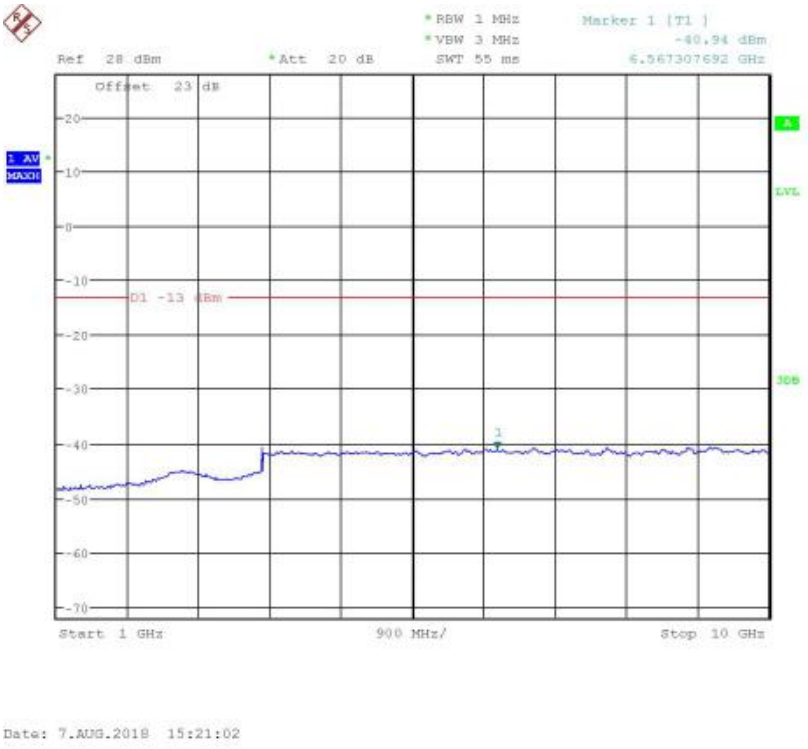


Band12-High Channel-1.4MHz Bandwidth-1GHz to 10GHz

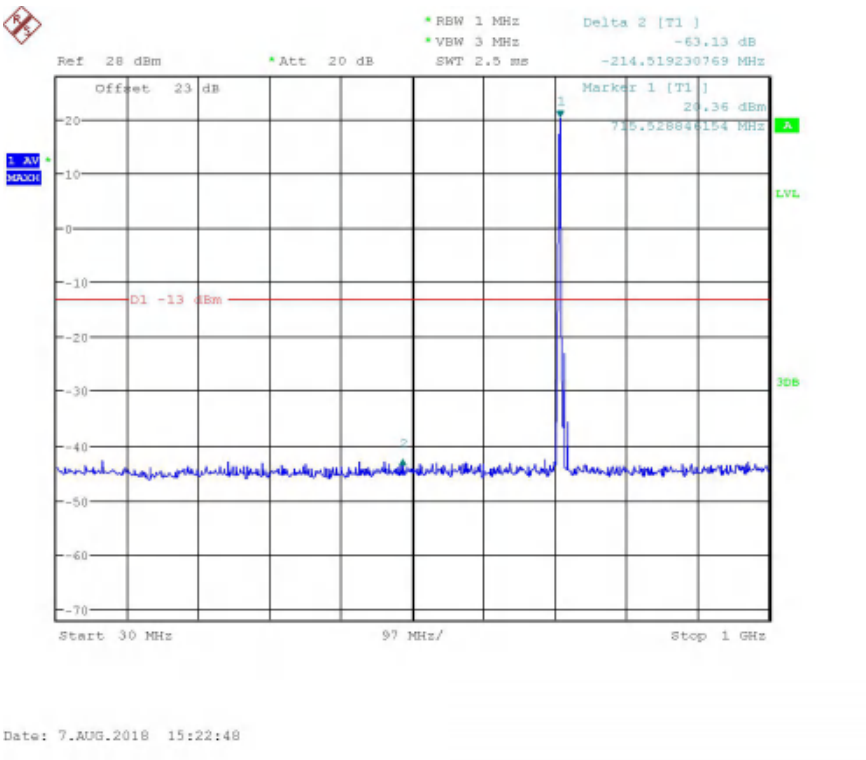


Band12-High Channel-3MHz Bandwidth-30MHz to 1GHz

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

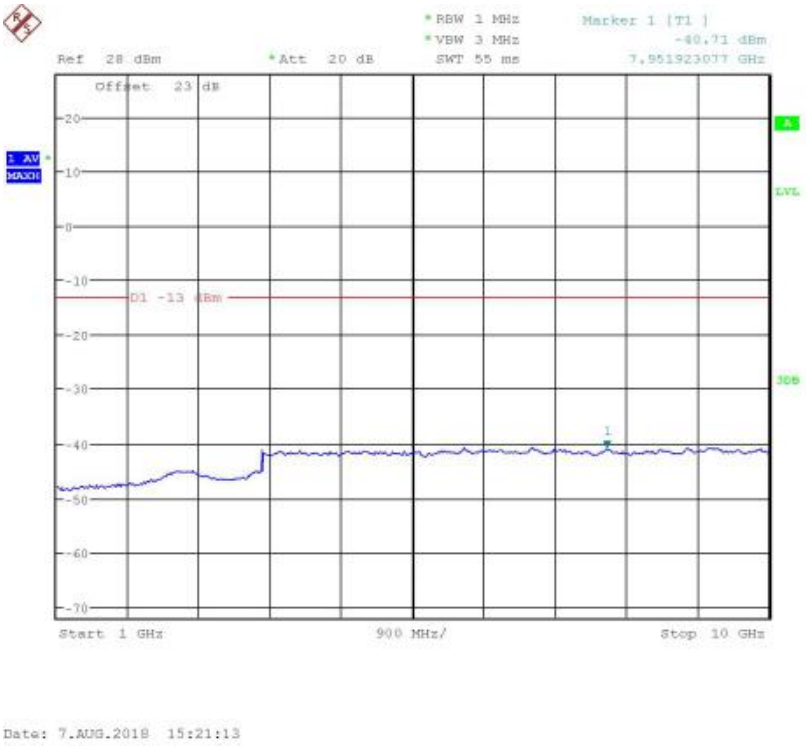


Band12-High Channel-3MHz Bandwidth-1GHz to 10GHz

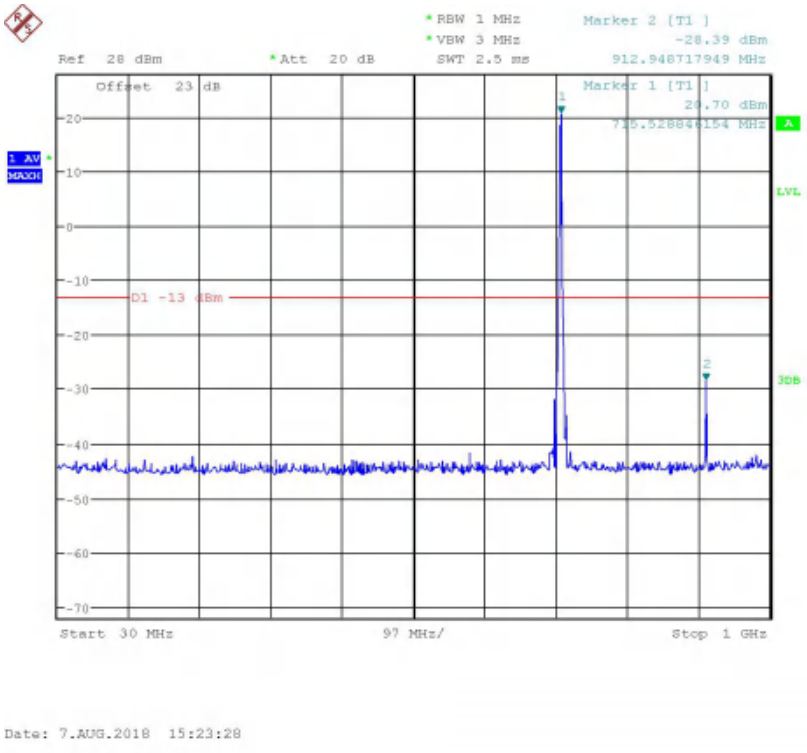


Band12-High Channel-5MHz Bandwidth-30MHz to 1GHz

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

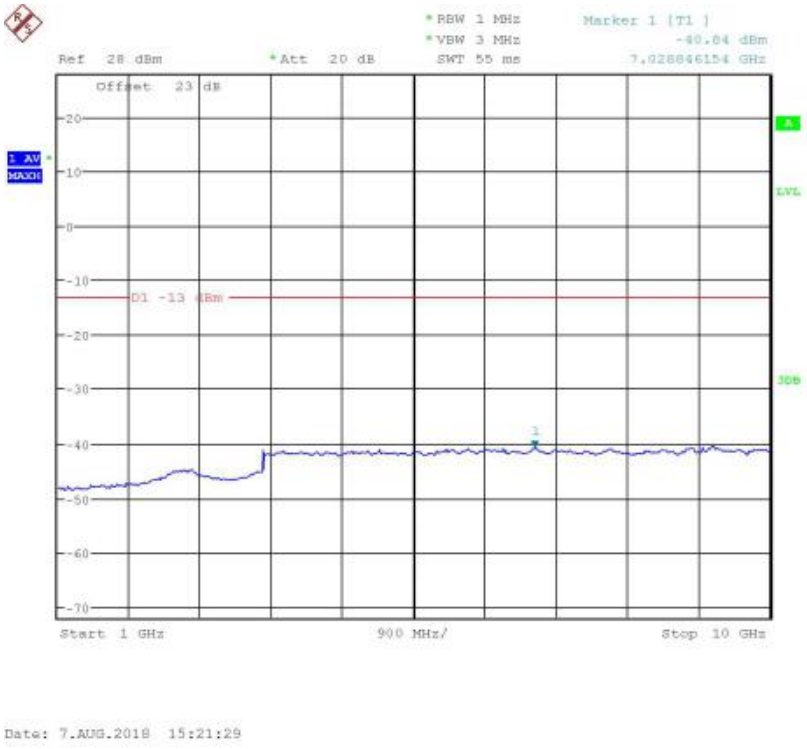


Band12-High Channel-5MHz Bandwidth-1GHz to 10GHz

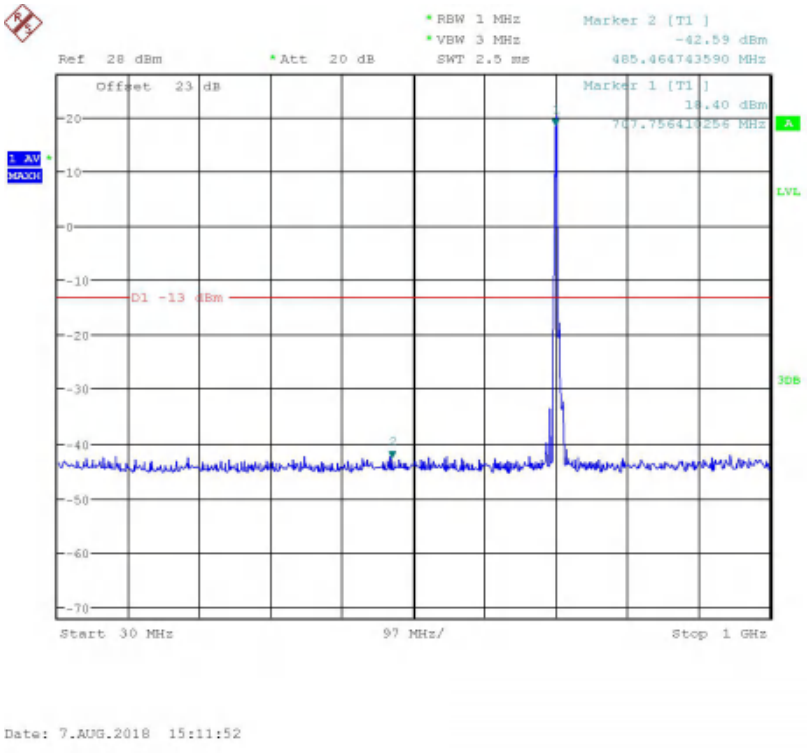


Band12-High Channel-10MHz Bandwidth-30MHz to 1GHz

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

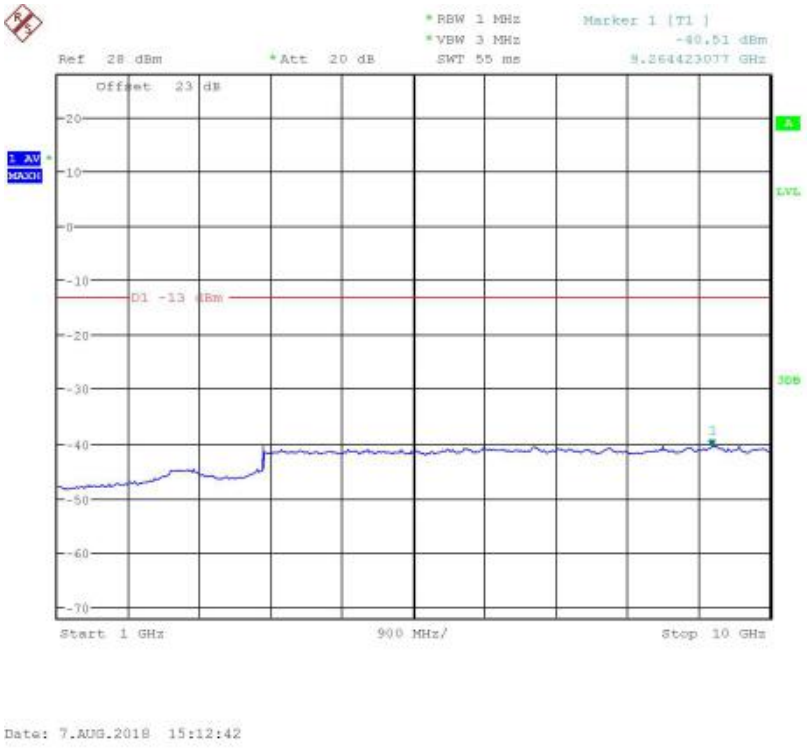


Band12-High Channel-10MHz Bandwidth-1GHz to 10GHz

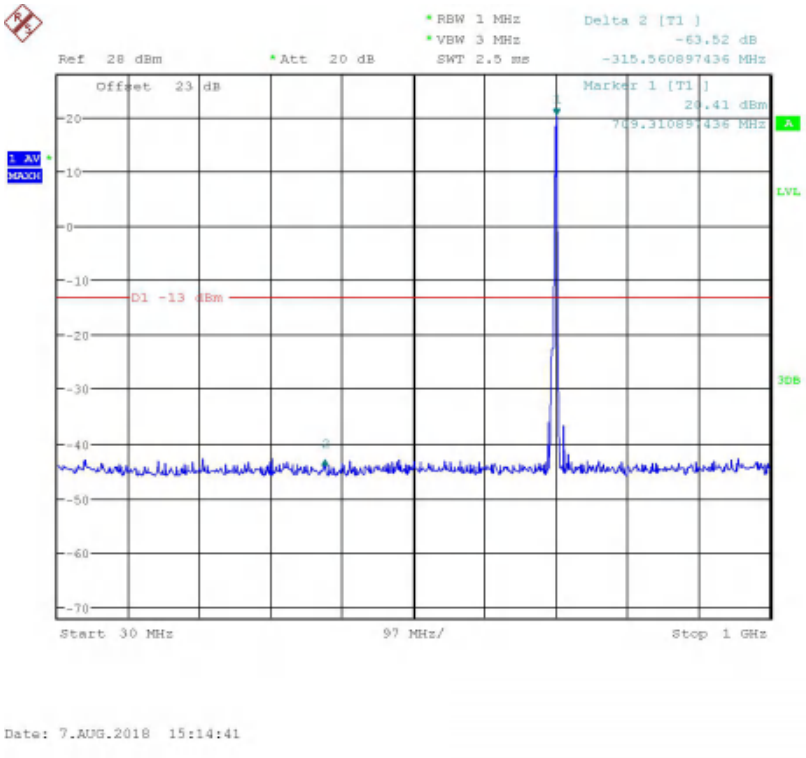


Band12-Middle Channel-1.4MHz Bandwidth-30MHz to 1GHz

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

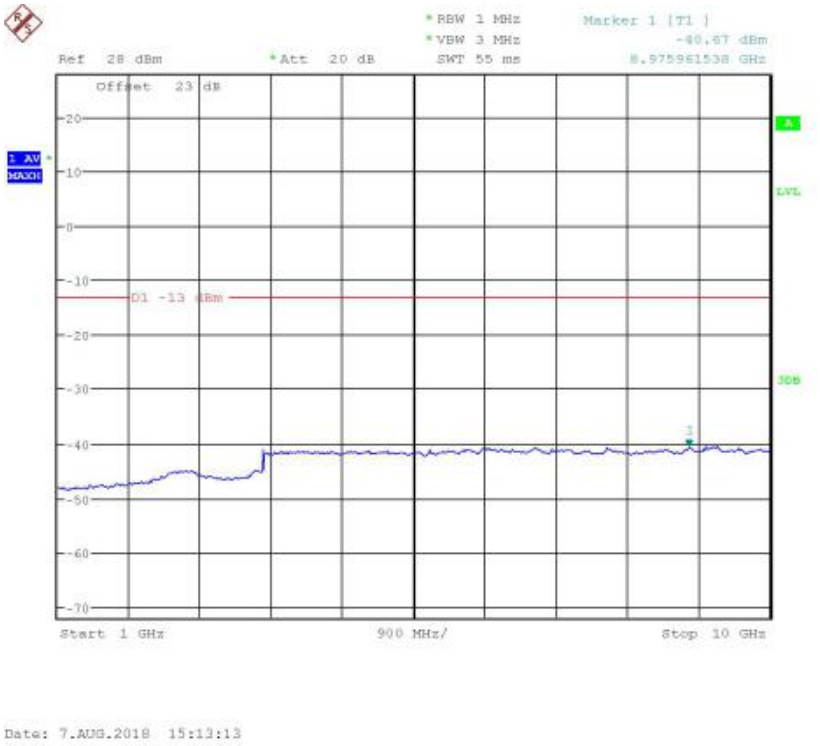


Band12-Middle Channel-1.4MHz Bandwidth-1GHz to 10GHz

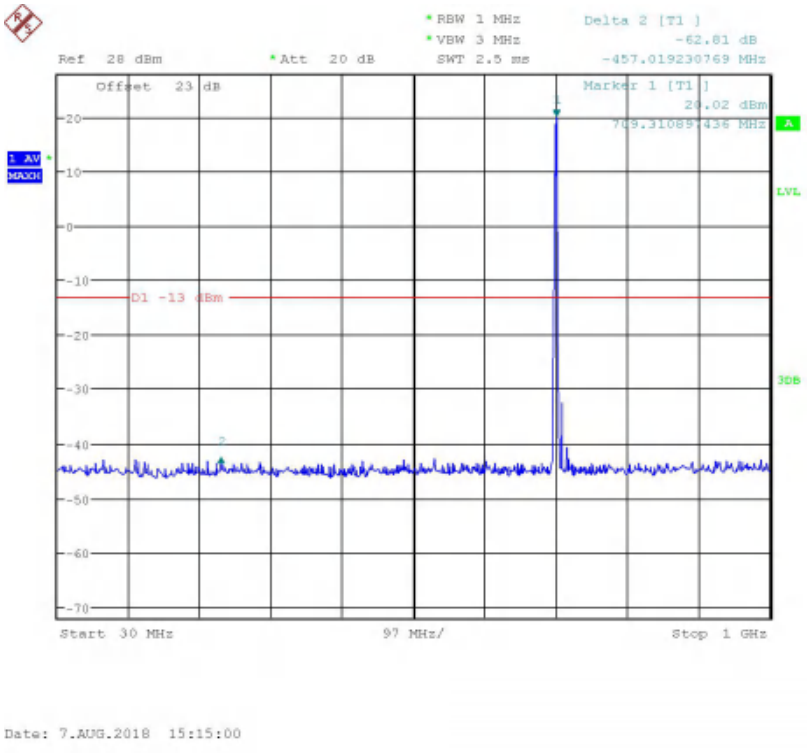


Band12-Middle Channel-3MHz Bandwidth-30MHz to 1GHz

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

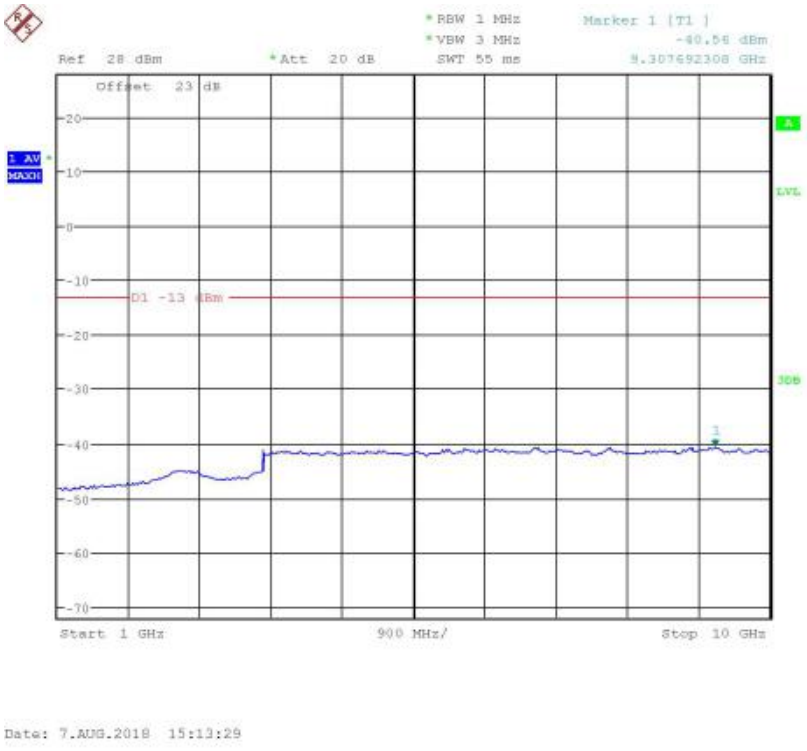


Band12-Middle Channel-3MHz Bandwidth-1GHz to 10GHz

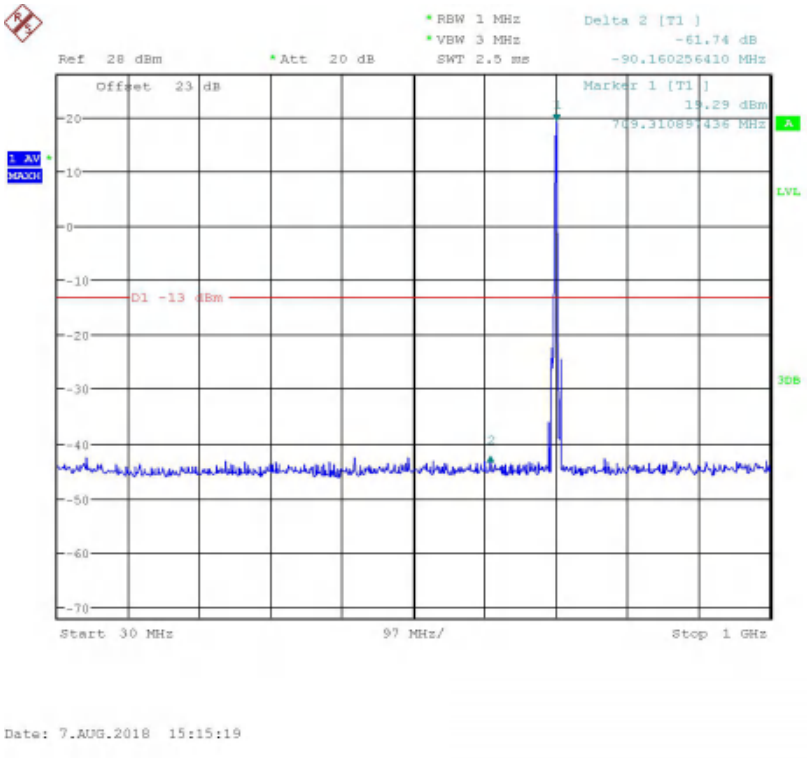


Band12-Middle Channel-5MHz Bandwidth-30MHz to 1GHz

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

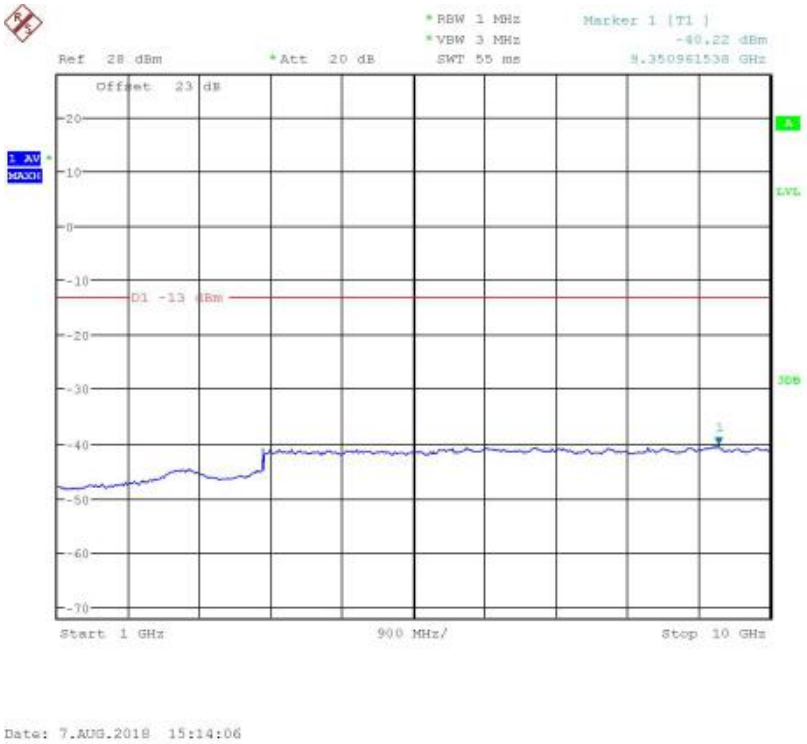


Band12-Middle Channel-5MHz Bandwidth-1GHz to 10GHz

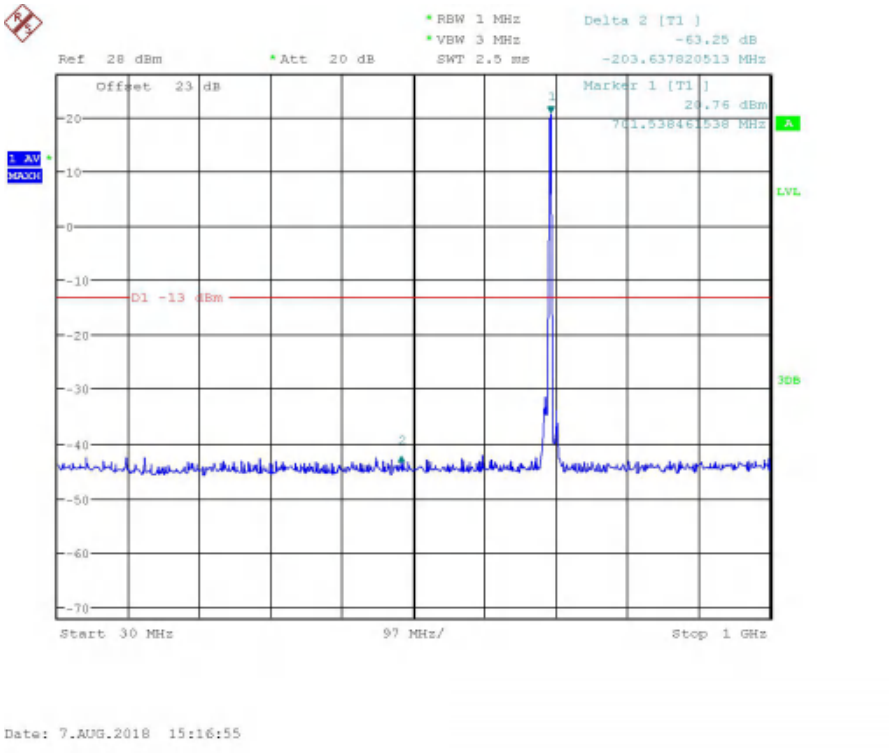


Band12-Middle Channel-10MHz Bandwidth-30MHz to 1GHz

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

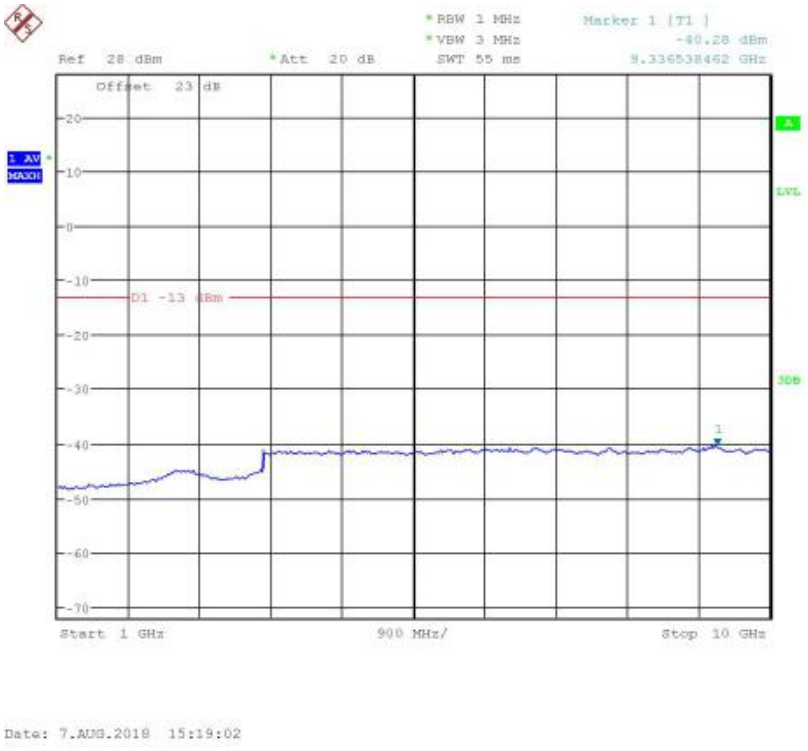


Band12-Middle Channel-10MHz Bandwidth-1GHz to 10GHz

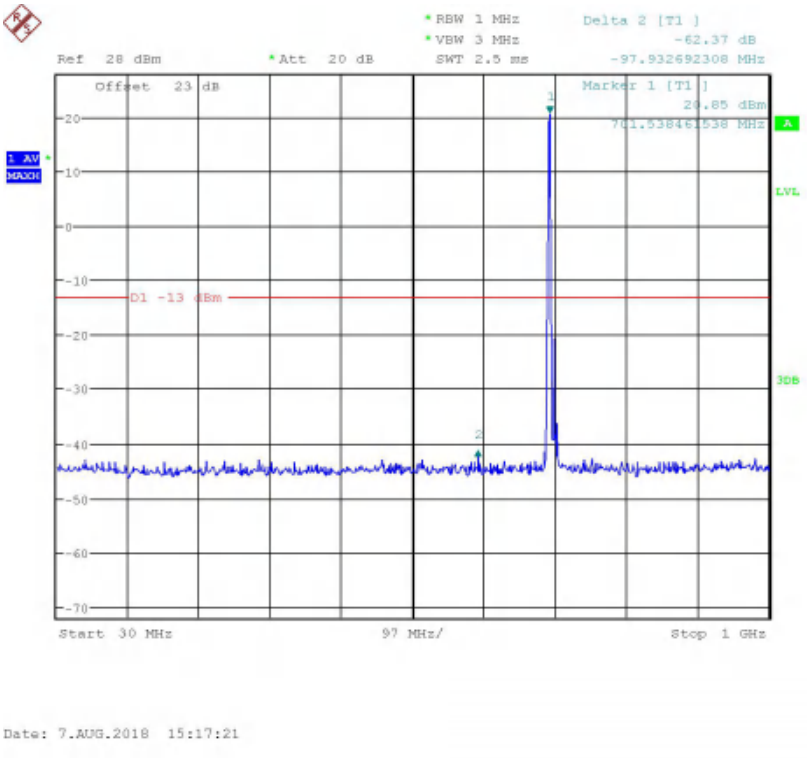


Band12-Low Channel-1.4MHz Bandwidth-30MHz to 1GHz

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

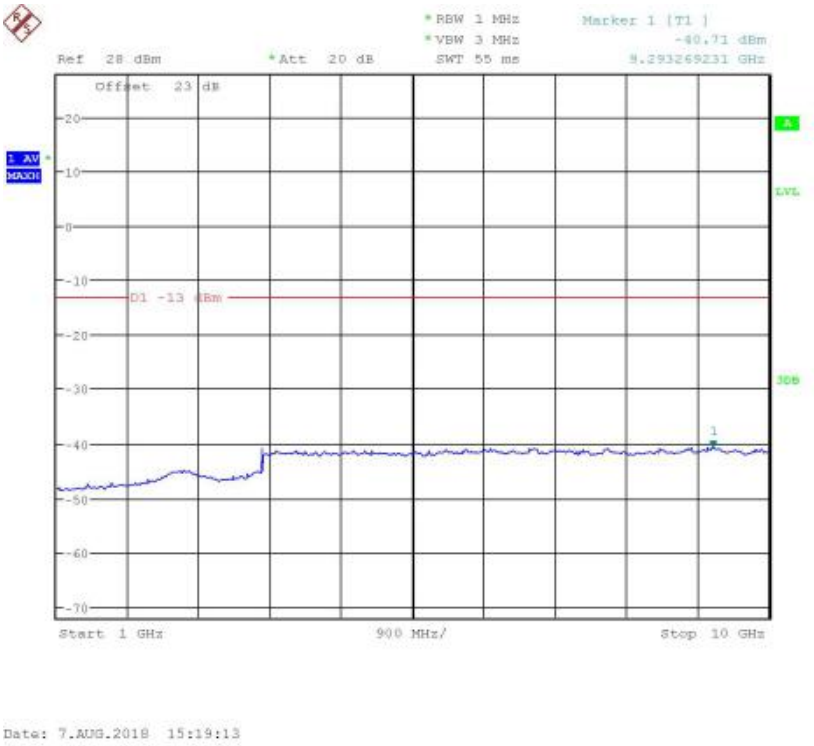


Band12-Low Channel-1.4MHz Bandwidth-1GHz to 10GHz

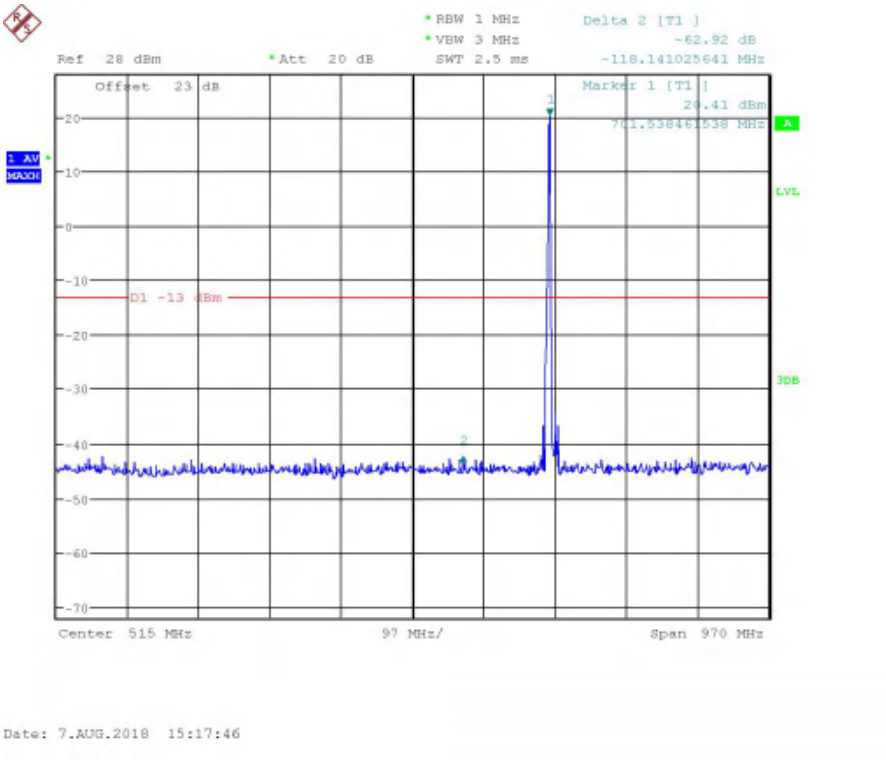


Band12-Low Channel-3MHz Bandwidth-30MHz to 1GHz

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

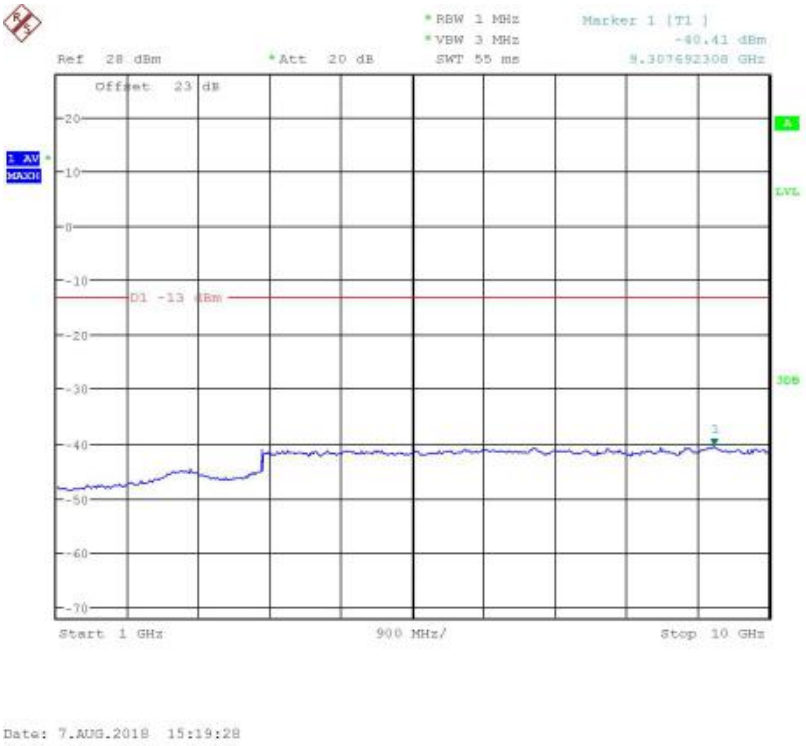


Band12-Low Channel-3MHz Bandwidth-1GHz to 10GHz

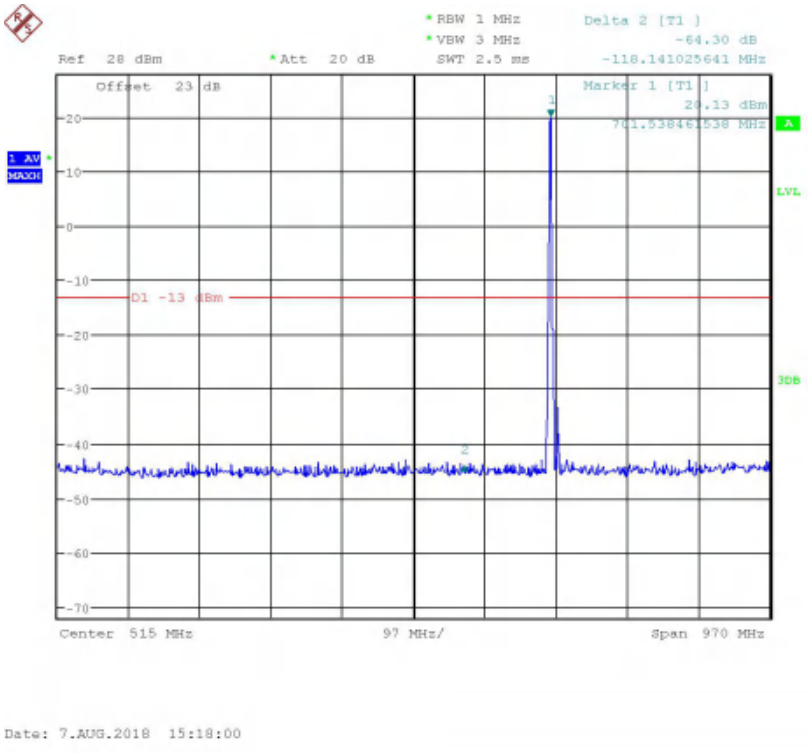


Band12-Low Channel-5MHz Bandwidth-30MHz to 1GHz

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

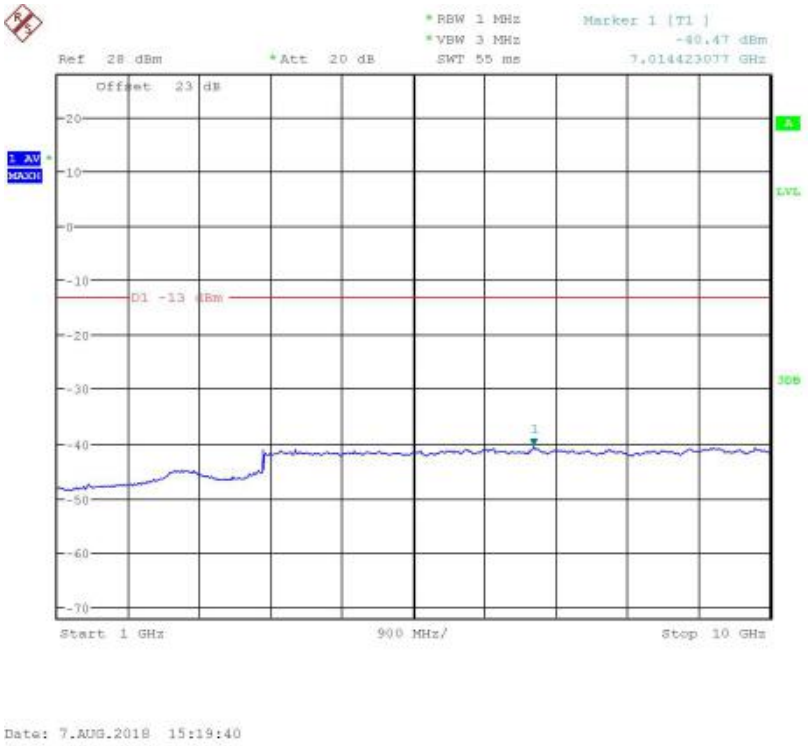


Band12-Low Channel-5MHz Bandwidth-1GHz to 10GHz



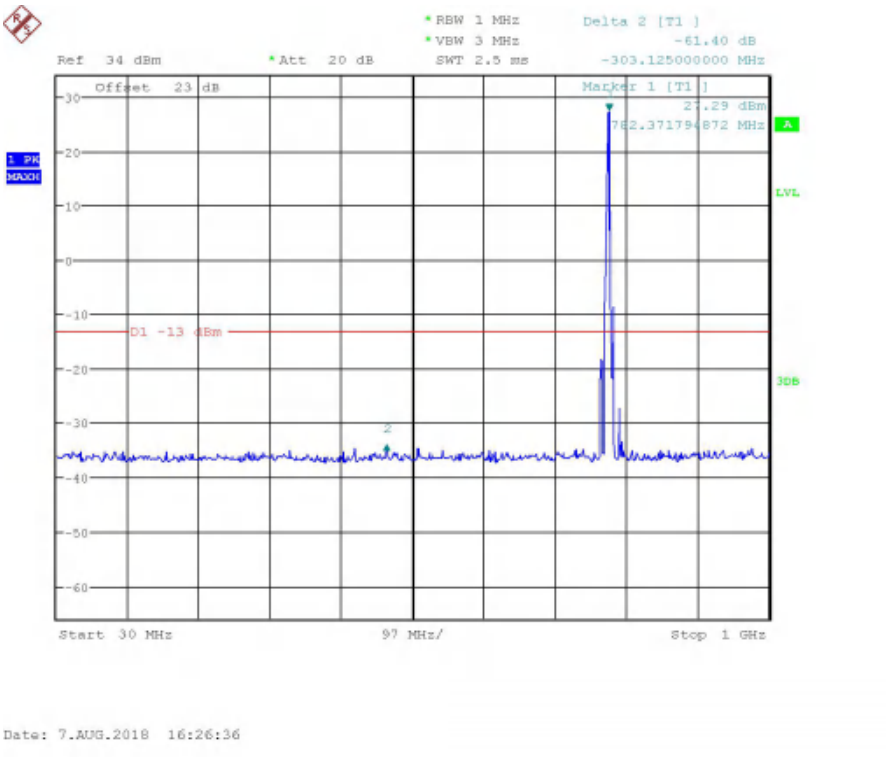
Band12-Low Channel-10MHz Bandwidth-30MHz to 1GHz

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



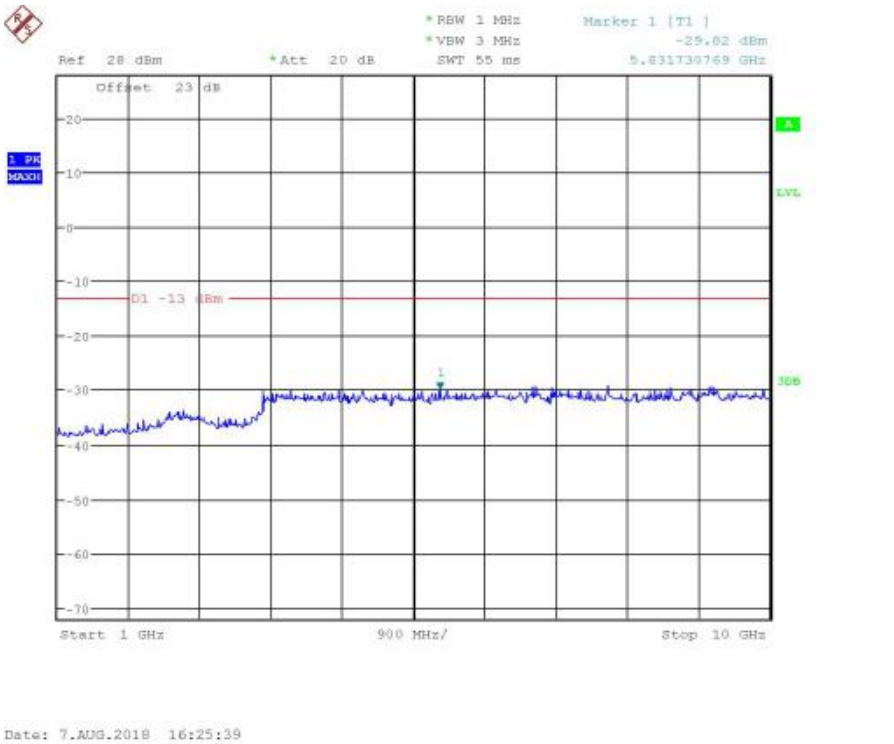
Band12-Low Channel-10MHz Bandwidth-1GHz to 10GHz

5.3.12 CAT-M B13 Conducted Spurious Emission Results

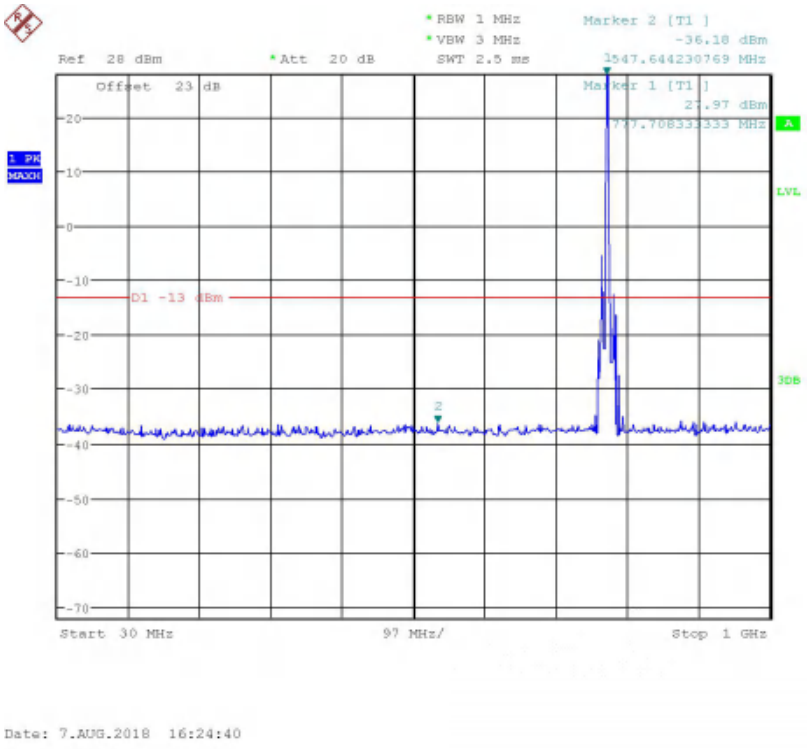


Band13-Middle Channel-5MHz Bandwidth-30MHz to 1GHz

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

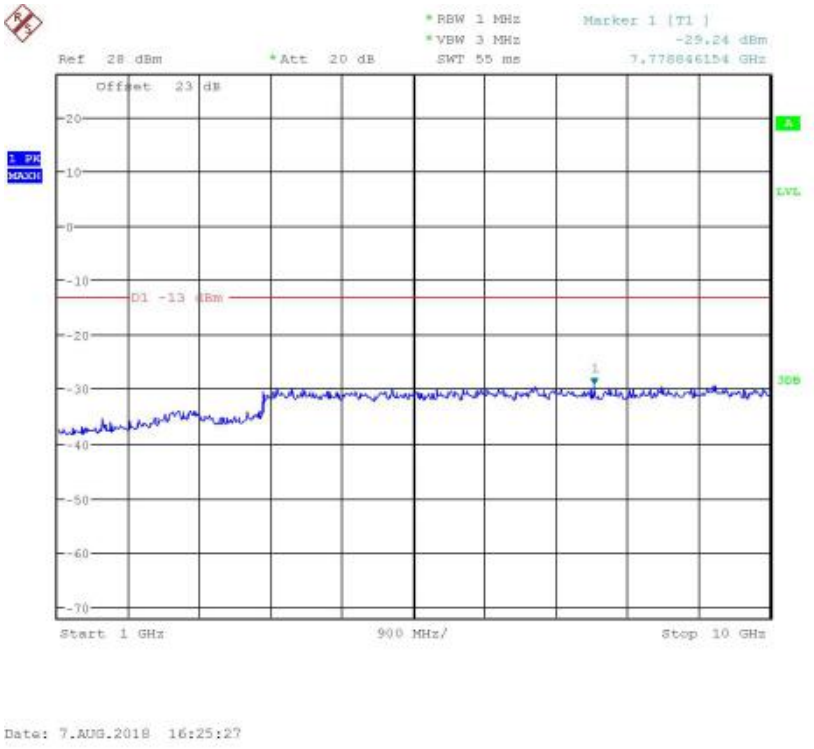


Band13-Middle Channel-5MHz Bandwidth-1GHz to 10GHz



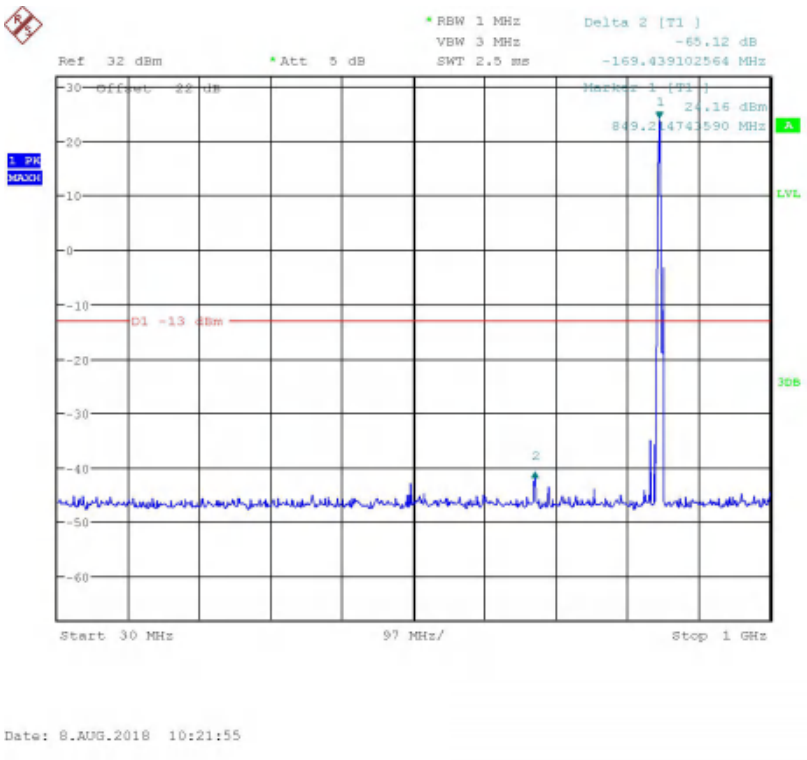
Band13-Middle Channel-10MHz Bandwidth-30MHz to 1GHz

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



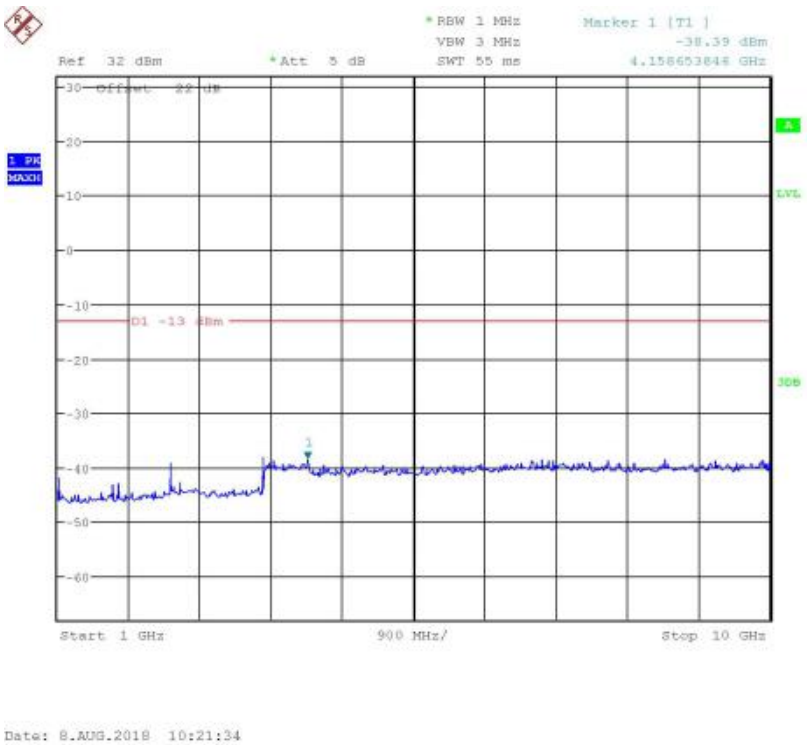
Band13-Middle Channel-10MHz Bandwidth-1GHz to 10GHz

5.3.13 CAT-M B26 Conducted Spurious Emission Results

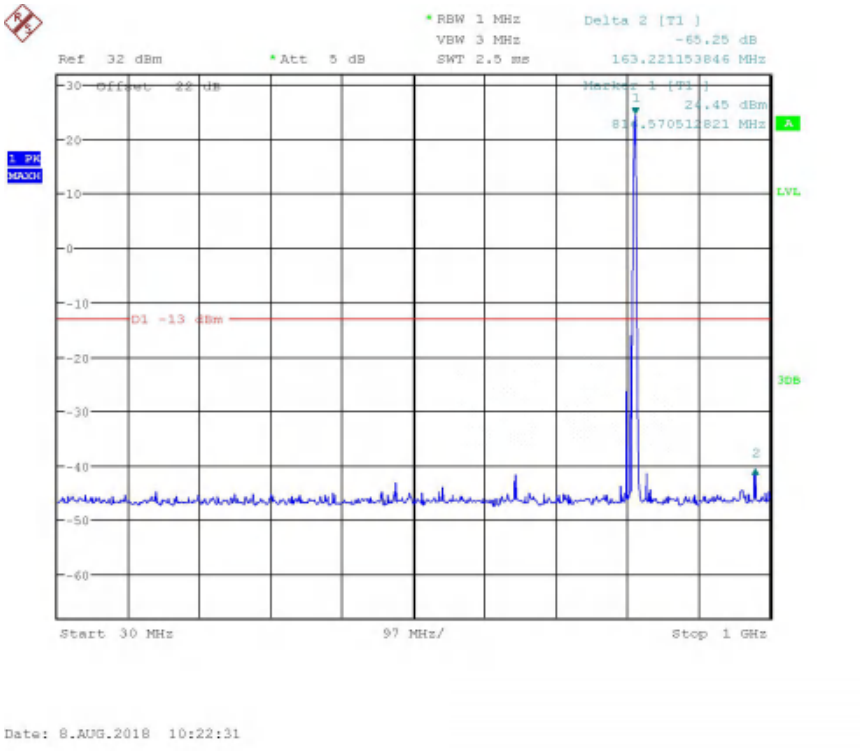


Band26-High Channel-1.4MHz Bandwidth-30MHz to 1GHz

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

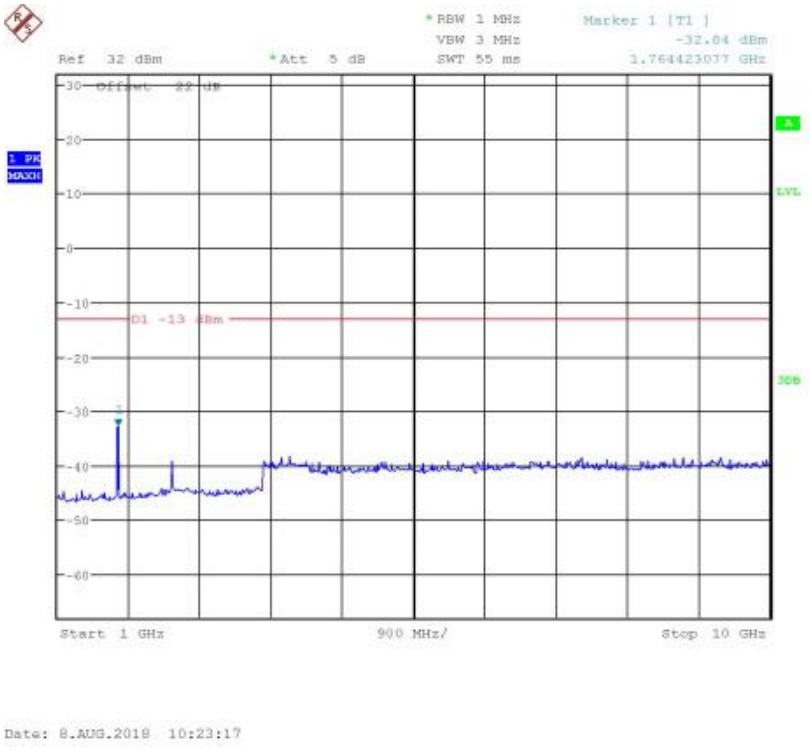


Band26-High Channel-1.4MHz Bandwidth-1GHz to 10GHz

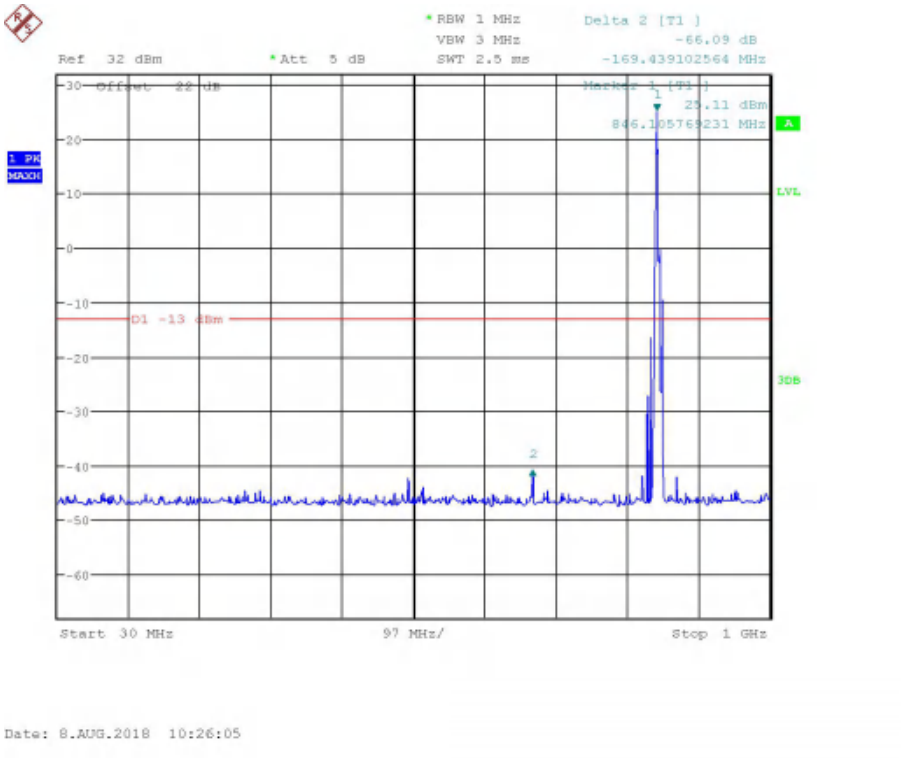


Band26-High Channel-3MHz Bandwidth-30MHz to 1GHz

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



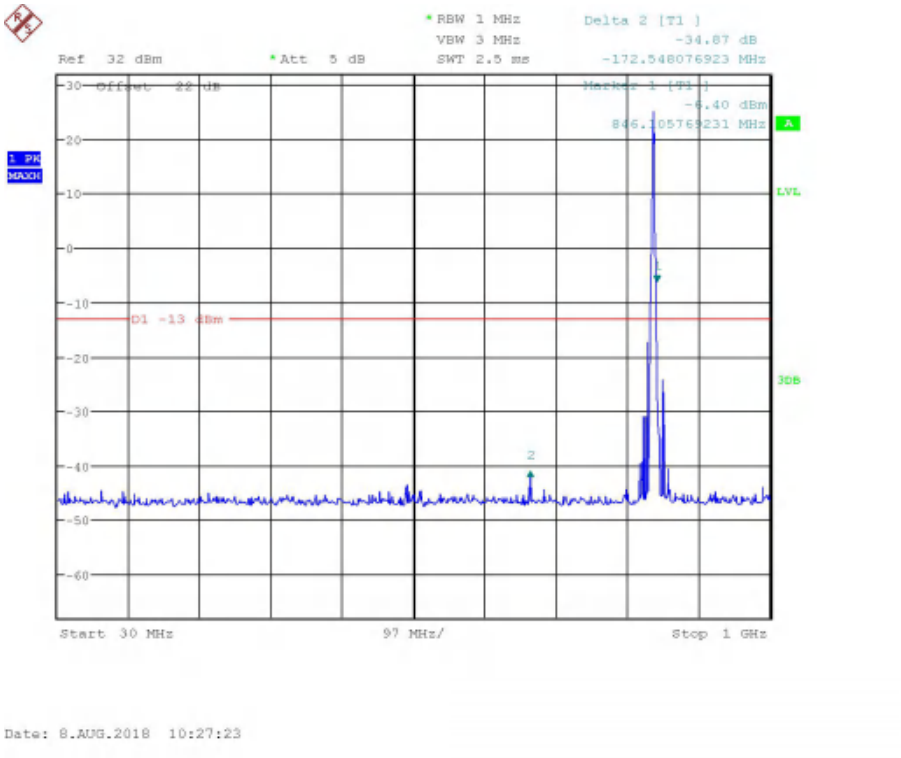
Band26-High Channel-3MHz Bandwidth-1GHz to 10GHz



Band26-High Channel-5MHz Bandwidth-30MHz to 1GHz

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

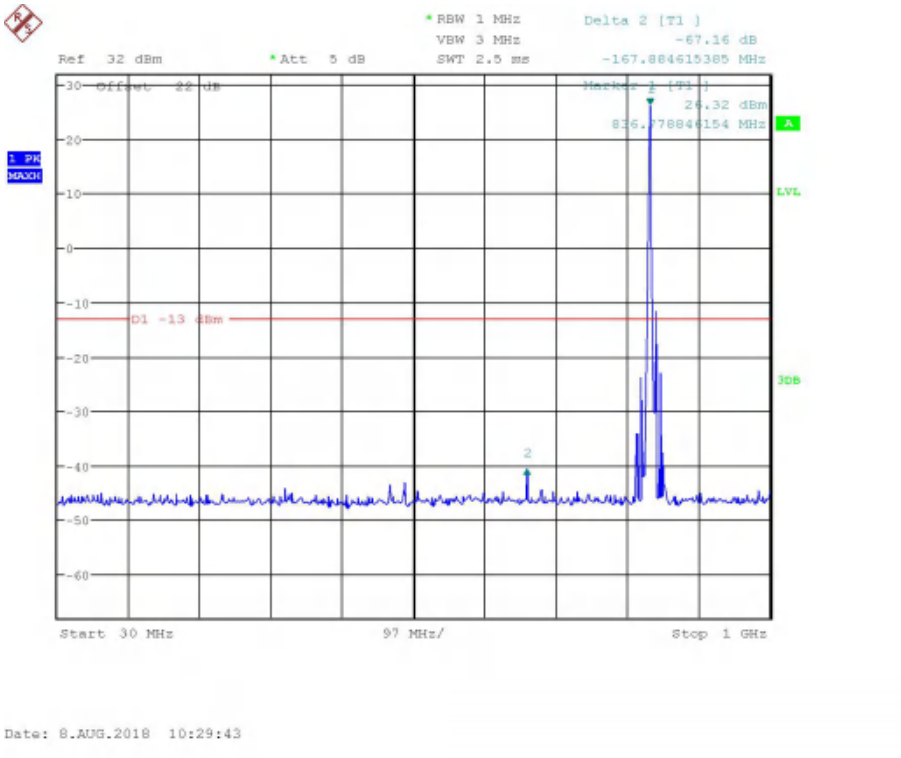
Band26-High Channel-5MHz Bandwidth-1GHz to 10GHz



Band26-High Channel-10MHz Bandwidth-30MHz to 1GHz

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

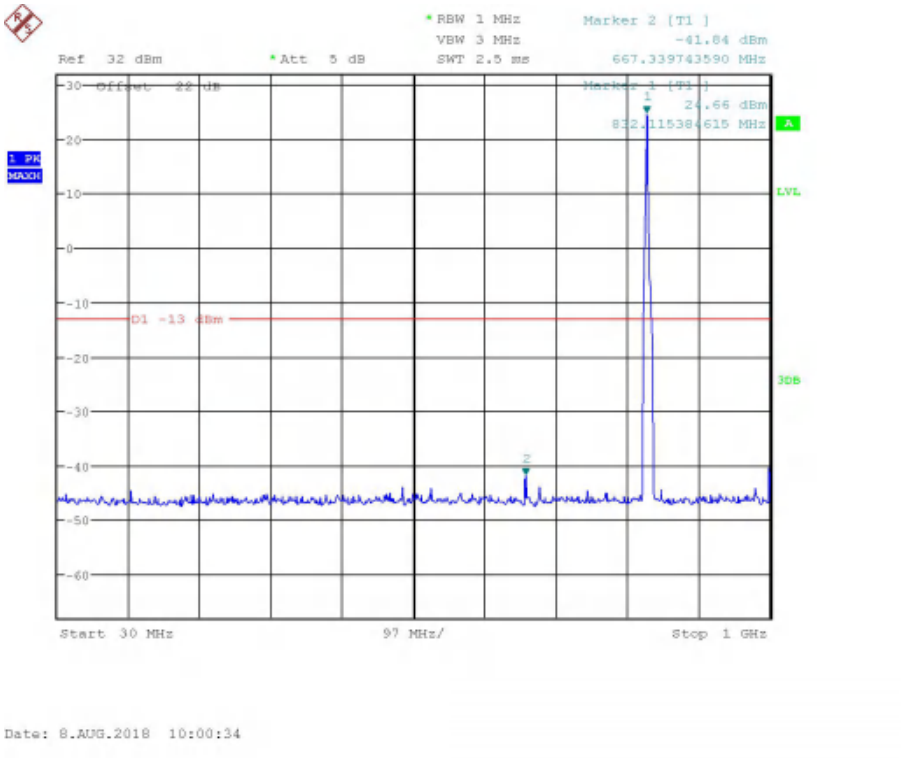
Band26-High Channel-10MHz Bandwidth-1GHz to 10GHz



Band26-High Channel-15MHz Bandwidth-30MHz to 1GHz

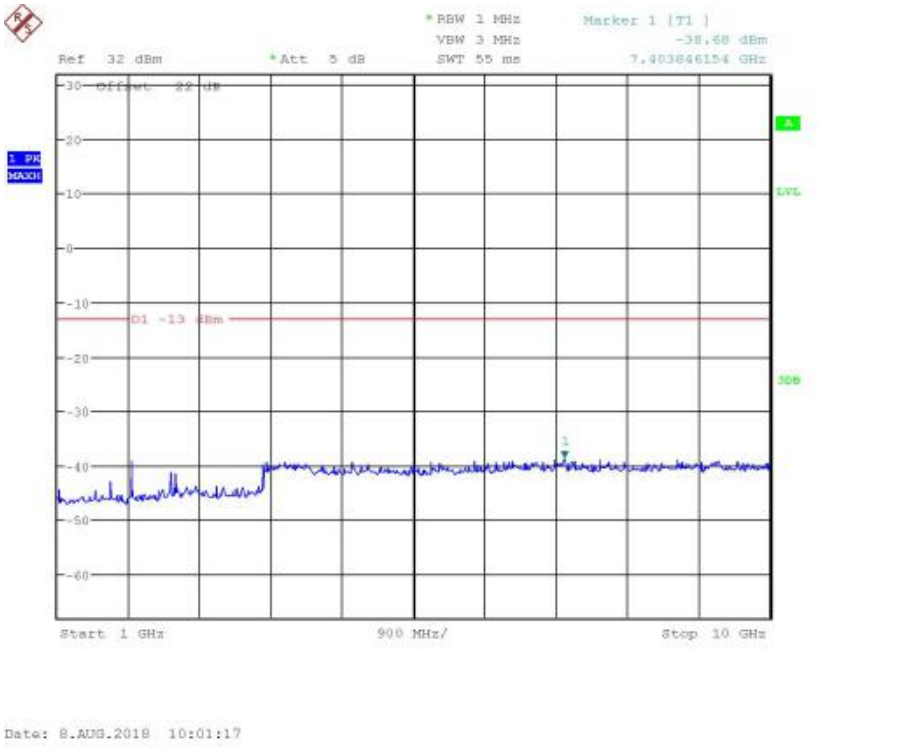
Note: The strong emission shown in each case is the carrier signal.

Band26-High Channel-15MHz Bandwidth-1GHz to 10GHz

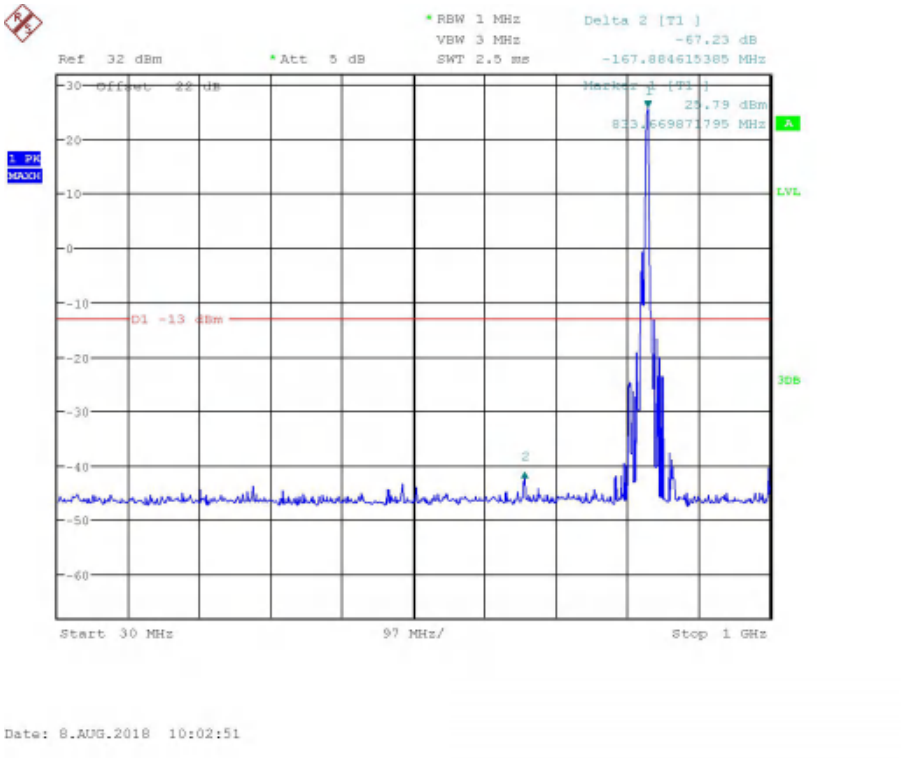


Band26-Middle Channel-1.4MHz Bandwidth-30MHz to 1GHz

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

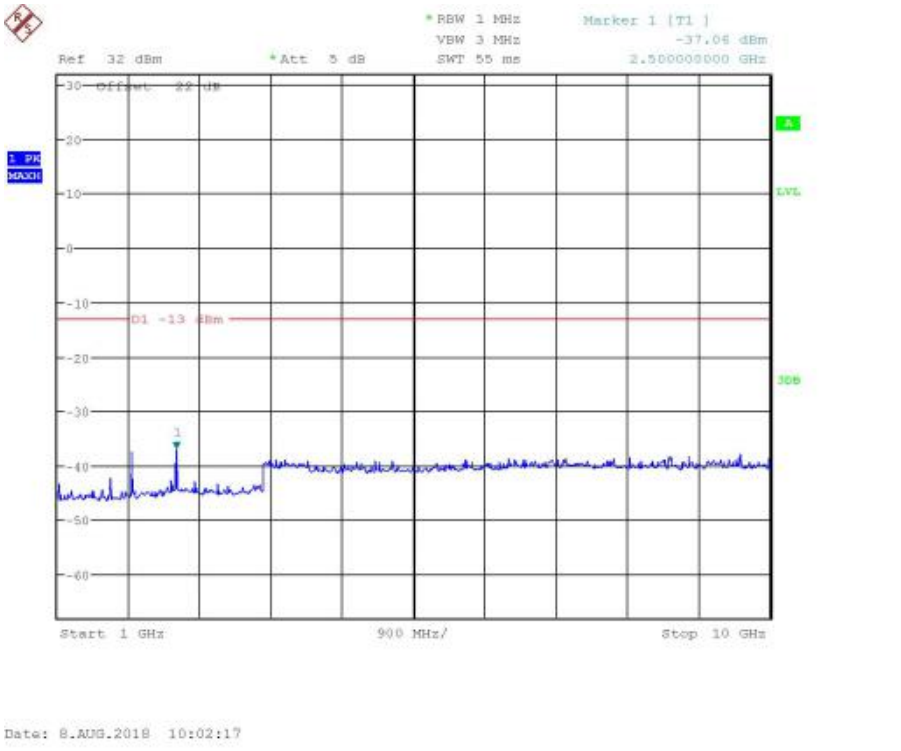


Band26-Middle Channel-1.4MHz Bandwidth-1GHz to 10GHz

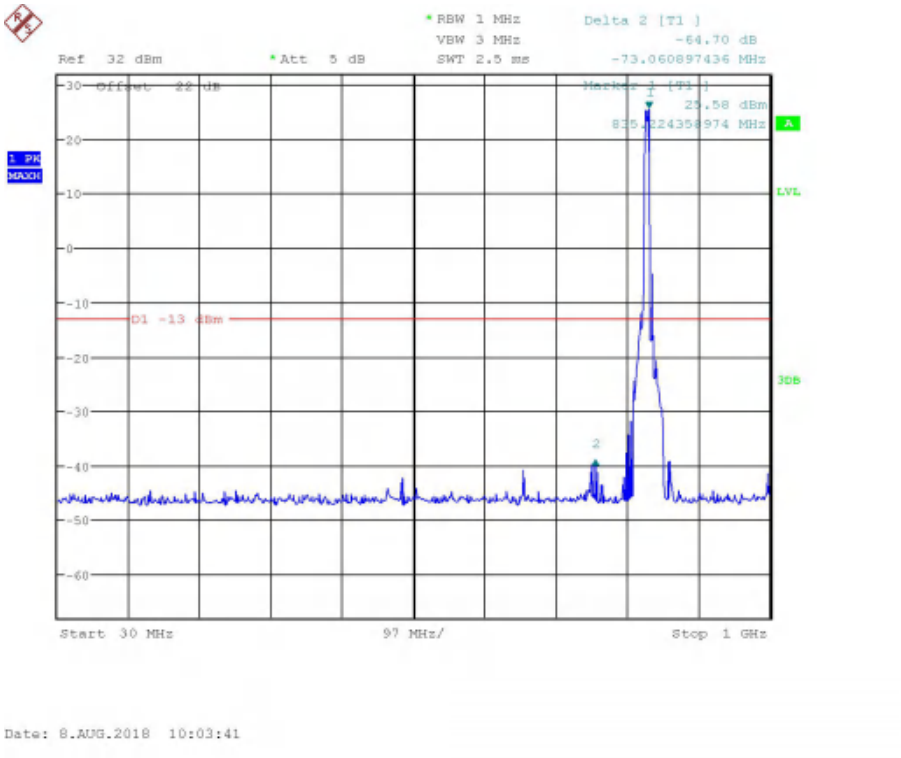


Band26-Middle Channel-3MHz Bandwidth-30MHz to 1GHz

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



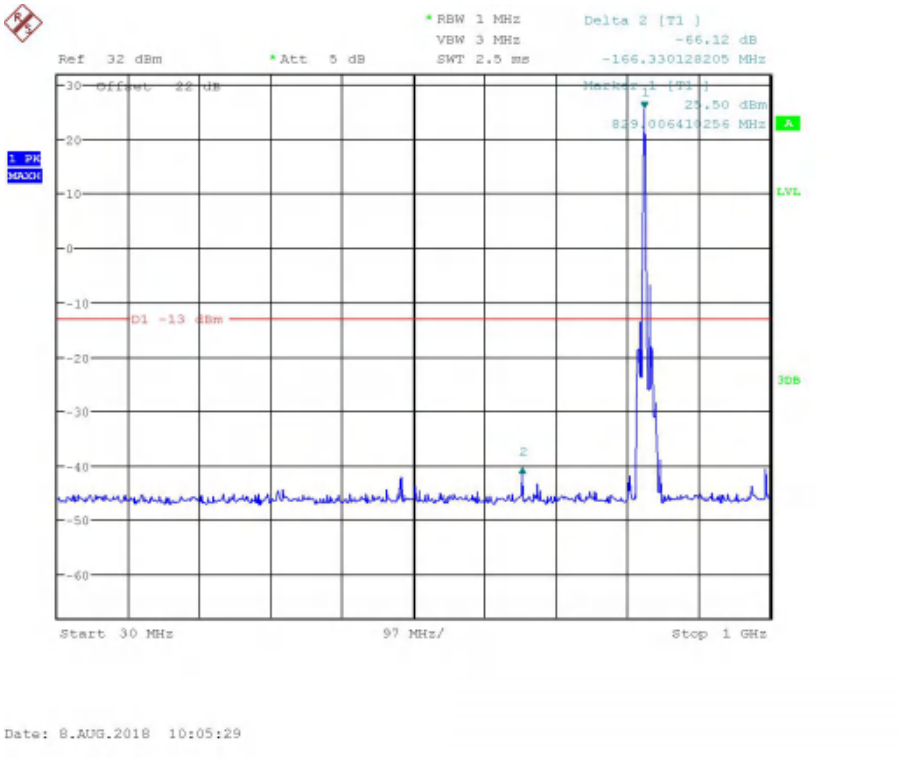
Band26-Middle Channel-3MHz Bandwidth-1GHz to 10GHz



Band26-Middle Channel-5MHz Bandwidth-30MHz to 1GHz

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

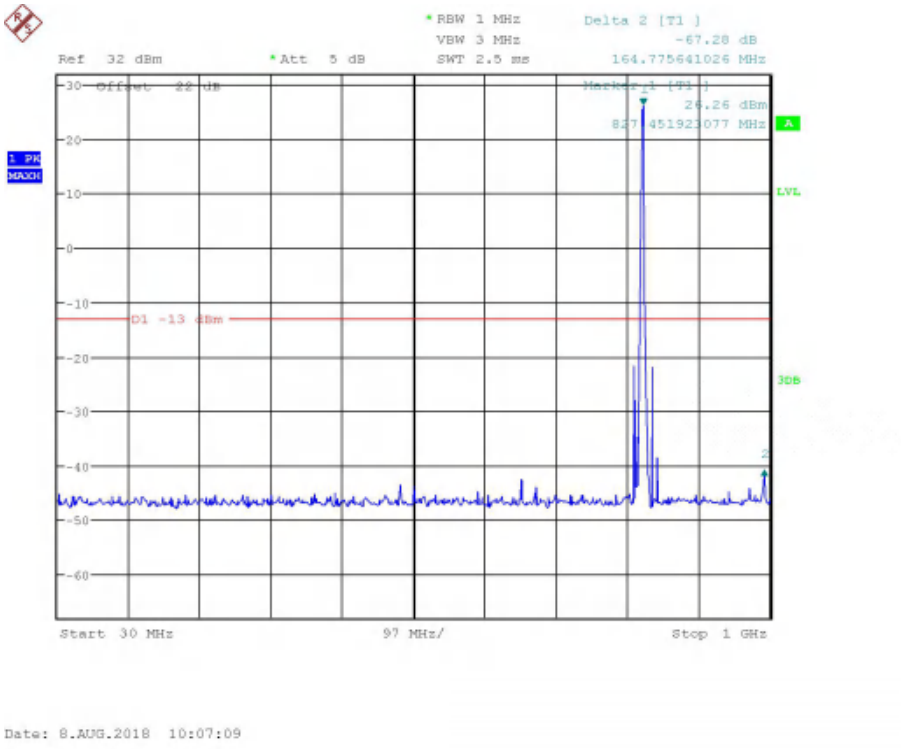
Band26-Middle Channel-5MHz Bandwidth-1GHz to 10GHz



Band26-Middle Channel-10MHz Bandwidth-30MHz to 1GHz

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

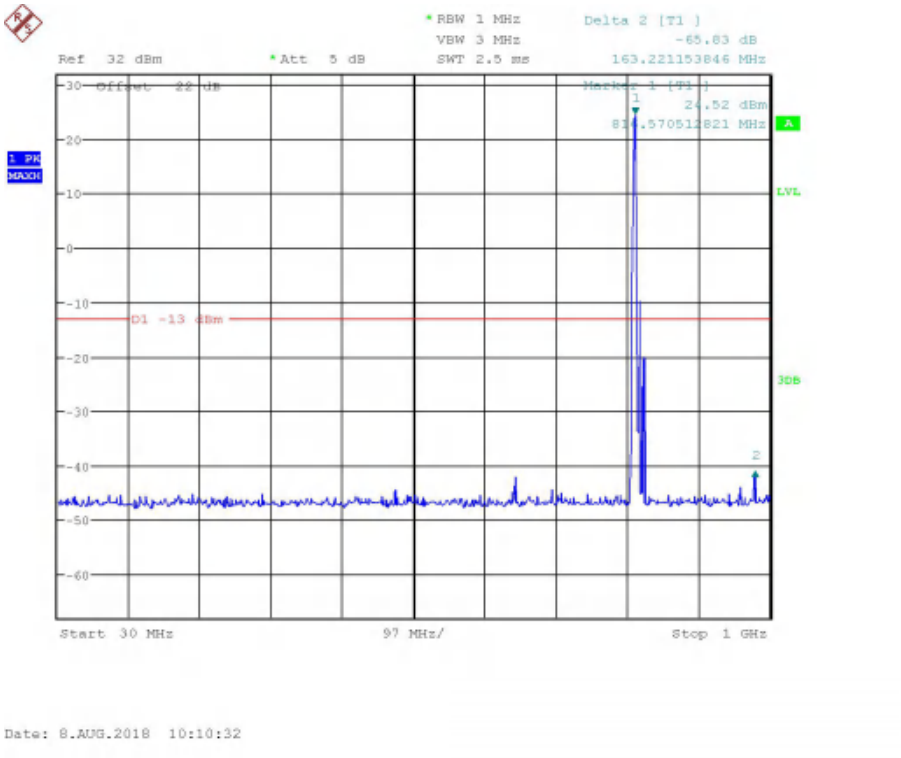
Band26-Middle Channel-10MHz Bandwidth-1GHz to 10GHz



Band26-Middle Channel-15MHz Bandwidth-30MHz to 1GHz

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

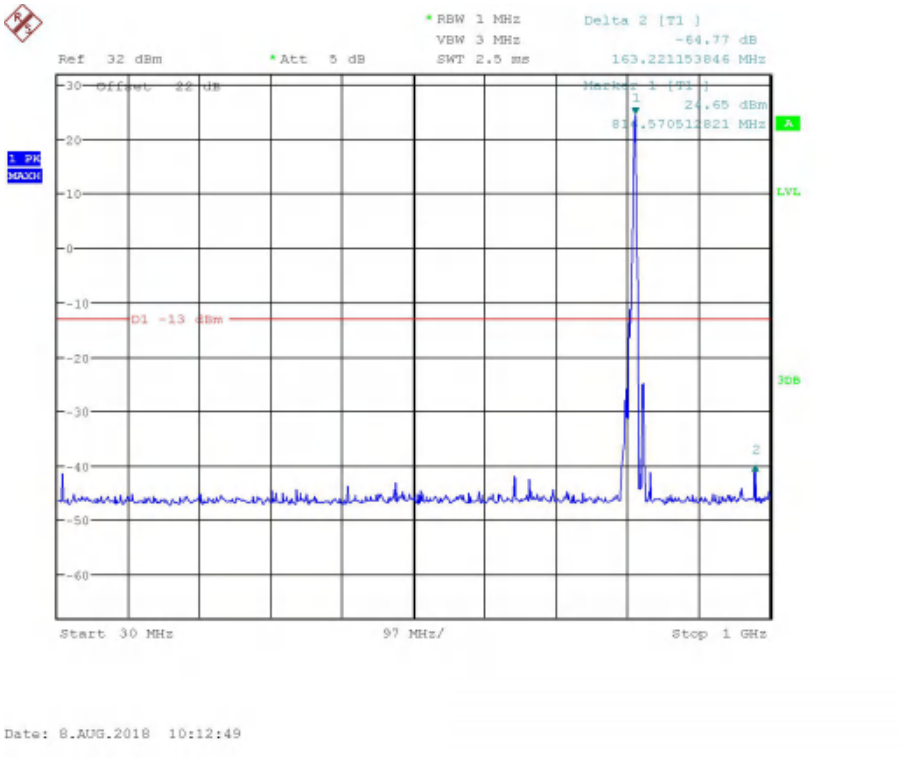
Band26-Middle Channel-15MHz Bandwidth-1GHz to 10GHz



Band26-Low Channel-1.4MHz Bandwidth-30MHz to 1GHz

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

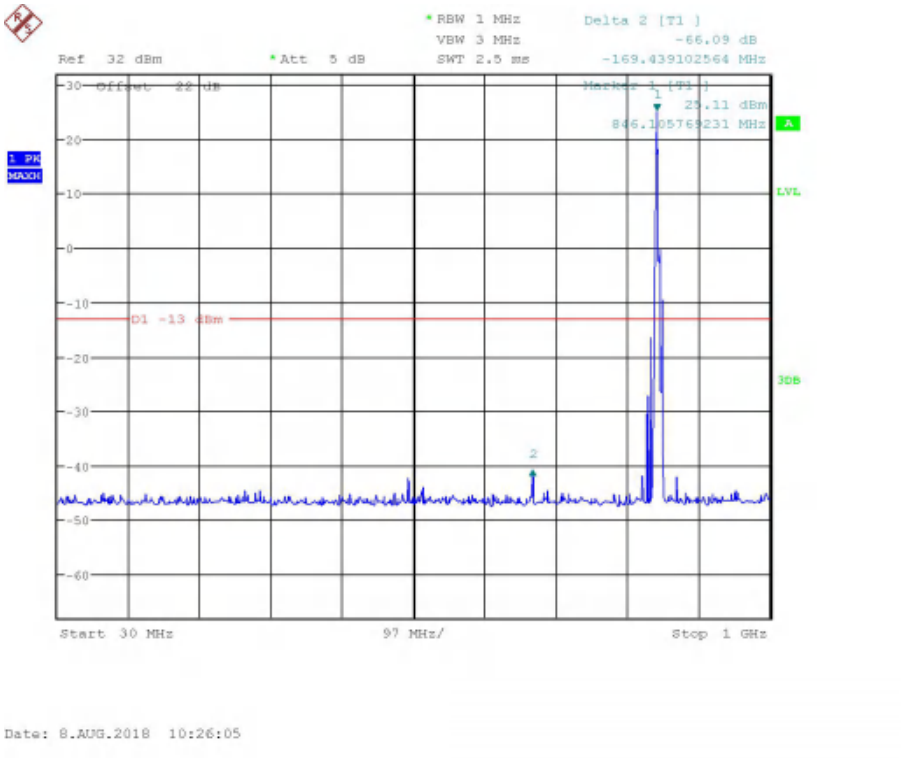
Band26-Low Channel-1.4MHz Bandwidth-1GHz to 10GHz



Band26-Low Channel-3MHz Bandwidth-30MHz to 1GHz

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

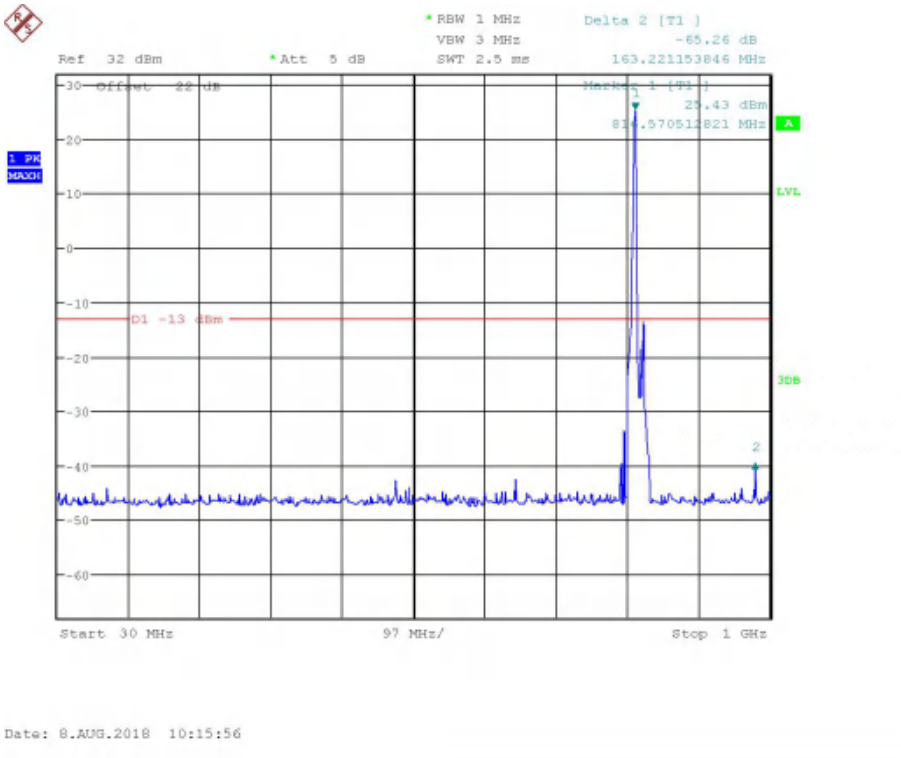
Band26-Low Channel-3MHz Bandwidth-1GHz to 10GHz



Band26-Low Channel-5MHz Bandwidth-30MHz to 1GHz

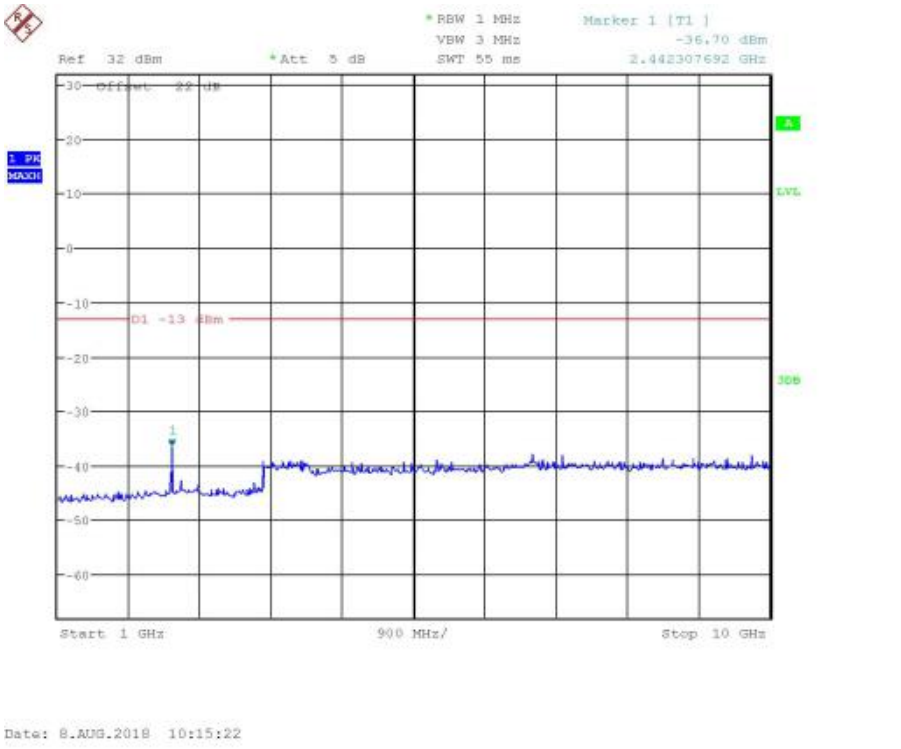
Note: The strong emission shown in each case is the carrier signal.

Band26-Low Channel-5MHz Bandwidth-1GHz to 10GHz

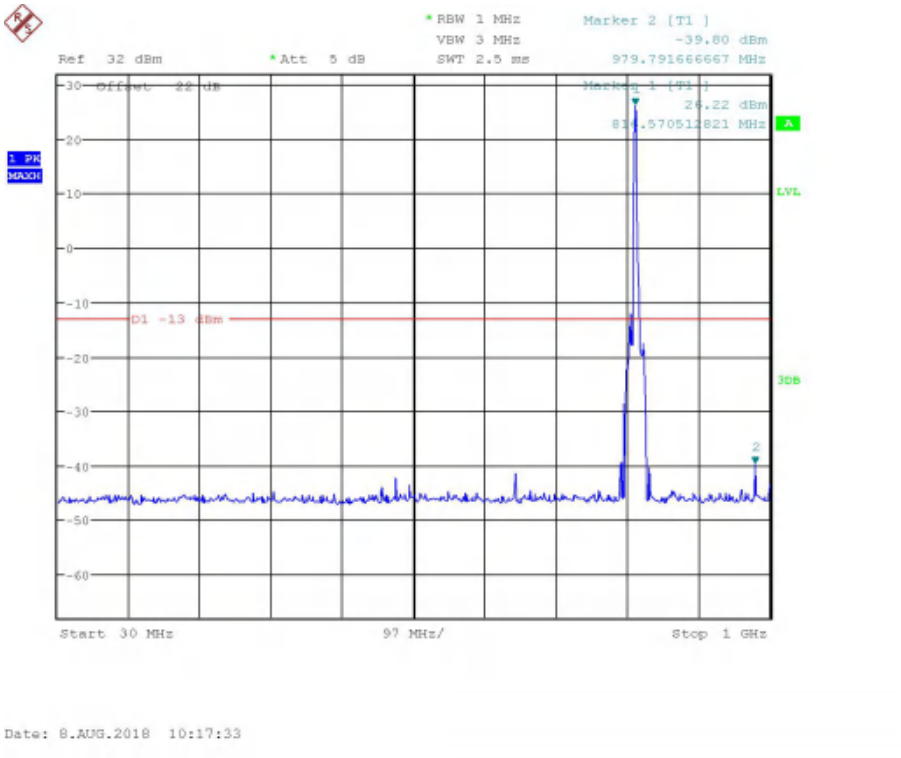


Band26-Low Channel-10MHz Bandwidth-30MHz to 1GHz

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



Band26-Low Channel-10MHz Bandwidth-1GHz to 10GHz



Band26-Low Channel-15MHz Bandwidth-30MHz to 1GHz

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

Band26-Low Channel-15MHz Bandwidth-1GHz to 10GHz

5.4 Radiated Spurious Emission

Specifications:	FCC Part 2.1051, 24.238, 2.1053, 22.917, 27.53
DUT Serial Number:	S2: MP0618221C7CAF8
Test conditions:	Ambient Temperature:15℃-35℃ 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(dBm)– (43 + 10 log(P)) dB= -13dBm.

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 log10(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.

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

Test Setup:

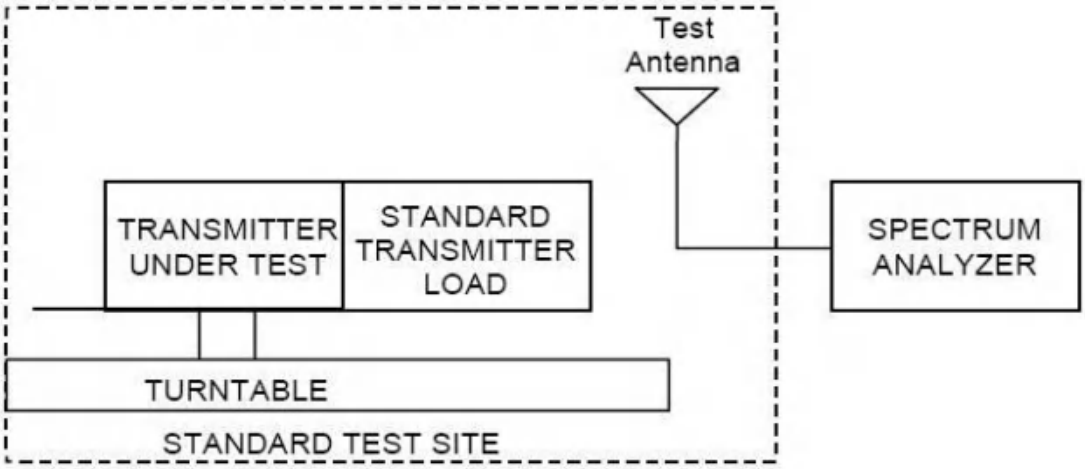
The EUT was placed in an anechoic chamber. The Wireless Communications Test Set was used to set the TX channel and power level and modulate the TX signal with different bit patterns.

Test Method:

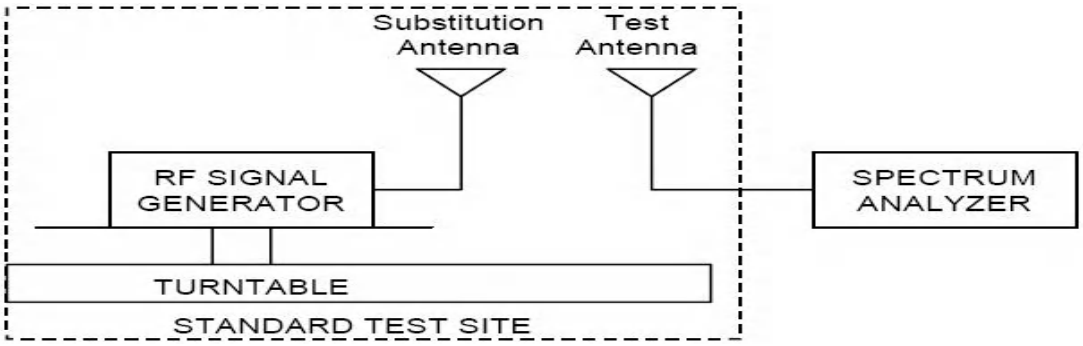
The measurement method is substitution method accordance with section 2.2.12 of ANSI/TIA-603-D: Land Mobile FM or PM Communications Equipment Measurement and

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(dBm) = P_g(dBm) – cable loss (dB) + antenna gain (dB)

where:
Pd is the dipole equivalent power and Pg is the generator output power into the substitution antenna.

5.4.1 GSM 850 Radiated Spurious Emission Results

Test Data （GMSK Mode channel 128）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1648.46	-38.23	4.7	9.4	-33.53	V
2471.78	-47.34	5.9	10.6	-42.64	H
3296.75	-54.70	6.7	11.5	-49.90	V
4121.23	-54.55	7.6	12.6	-49.55	V
4945.23	-54.15	7.7	12.7	-49.15	V
5769.44	-50.69	1.4	13.1	-38.99	H

Test Data （GMSK Mode channel 190）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1673.23	-39.32	4.7	9.4	-34.62	V
2510.43	-46.11	5.9	10.6	-41.41	V
3346.19	-53.94	6.7	11.5	-49.14	V
4182.69	-51.58	7.6	12.6	-46.58	V
5019.61	-50.64	7.7	12.7	-45.64	V
5856.32	-54.97	1.4	13.1	-43.27	V

Test Data （GMSK Mode channel 251）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1696.42	-37.23	4.8	9.4	-32.63	V
2544.60	-45.45	5.9	10.6	-40.75	V

3392.64	-51.86	6.9	11.5	-47.26	V
4241.04	-53.30	7.8	12.6	-48.50	H
5089.23	-54.55	6.8	12.7	-48.65	H
5937.53	-53.15	1.4	13.1	-41.45	V

Test Data （8PSK Mode channel 128）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1648.46	-37.43	4.7	9.4	-32.73	V
2471.78	-44.30	5.9	10.6	-39.60	H
3296.75	-54.73	6.7	11.5	-49.93	H
4121.23	-50.25	7.6	12.6	-45.25	V
4945.23	-51.00	7.7	12.7	-46.00	V
5769.44	-54.85	1.4	13.1	-43.15	H

Test Data （8PSK K Mode channel 190）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1673.23	-39.19	4.7	9.4	-34.49	H
2510.43	-43.88	5.9	10.6	-39.18	V
3346.19	-52.71	6.7	11.5	-47.91	V
4182.69	-53.40	7.6	12.6	-48.40	H
5019.61	-50.17	7.7	12.7	-45.17	V
5856.32	-51.08	1.4	13.1	-39.38	V

Test Data （8PSK Mode channel 251）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1696.42	-38.67	4.8	9.4	-34.07	V
2544.60	-45.76	5.9	10.6	-41.06	V

3392.64	-51.35	6.9	11.5	-46.75	V
4241.04	-51.30	7.8	12.6	-46.50	V
5089.23	-54.84	6.8	12.7	-48.94	H
5937.53	-50.42	1.4	13.1	-38.72	V

5.4.2 GSM 1900 Radiated Spurious Emission Results

Test Data （GMSK Mode channel 512）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
3700.36	-53.95	7.2	12.6	-48.55	V
5550.57	-50.14	2.0	13.1	-39.04	V
7400.31	-52.94	0.9	11.7	-42.14	V
9251.39	-54.96	1.0	11.9	-44.06	V
11100.87	-54.17	0.4	11.5	-43.07	V
12951.65	-54.93	0.4	13.6	-41.73	V

Test Data （GMSK Mode channel 661）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
3760.61	-53.92	7.4	12.6	-48.72	H
5641.05	-51.98	1.8	13.1	-40.68	V
7518.97	-51.46	0.9	11.7	-40.66	V
9400.84	-51.26	0.8	11.9	-40.16	H
11279.77	-53.78	0.3	11.5	-42.58	V
13160.33	-52.95	0.4	13.6	-39.75	V

Test Data （GMSK Mode channel 810）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
3818.73	-53.53	7.4	12.6	-48.33	V

5727.33	-53.92	1.8	13.1	-42.62	V
7636.48	-53.14	0.9	11.7	-42.34	V
9547.16	-50.09	0.8	11.9	-38.99	V
11455.98	-53.18	0.3	11.5	-41.98	H
13362.79	-50.21	0.4	13.6	-37.01	V

Test Data （8PSK Mode channel 512）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
3700.39	-52.19	7.2	12.6	-46.79	V
5550.43	-51.95	2.0	13.1	-40.85	H
7400.89	-51.09	0.9	11.7	-40.29	H
9251.57	-53.82	1.0	11.9	-42.92	V
11100.34	-50.99	0.4	11.5	-39.89	V
12950.98	-52.54	0.4	13.6	-39.34	V

Test Data （8PSK K Mode channel 661）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
3760.23	-51.64	7.4	12.6	-46.44	H
5641.62	-52.20	1.8	13.1	-40.90	V
7519.61	-54.02	0.9	11.7	-43.22	V
9400.48	-53.98	0.8	11.9	-42.88	H
11280.58	-50.49	0.3	11.5	-39.29	V
13160.81	-53.68	0.4	13.6	-40.48	V

Test Data （8PSK Mode channel 810）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]

3818.45	-53.81	7.4	12.6	-48.61	V
5728.21	-51.87	1.8	13.1	-40.57	V
7636.67	-54.44	0.9	11.7	-43.64	V
9548.08	-53.31	0.8	11.9	-42.21	H
11455.00	-50.26	0.3	11.5	-39.06	V
13362.53	-52.00	0.4	13.6	-38.80	H

5.4.3 NB-IoT Band 2 Radiated Spurious Emission Results

Test Data （QPSK Mode channel 18600）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3701.12	-54.55	7.2	12.6	-49.15	H
5551.32	-50.19	2.0	13.1	-39.09	V
7401.07	-53.18	0.9	11.7	-42.38	V
9250.10	-53.01	1.0	11.9	-42.11	V
11100.53	-51.41	0.4	11.5	-40.31	V
12950.72	-52.60	0.4	13.6	-39.40	H

Test Data （QPSK Mode channel 18900）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
3760.35	-53.62	7.4	12.6	-48.42	V
5640.32	-52.11	1.8	13.1	-40.81	V
7519.59	-54.63	0.9	11.7	-43.83	V
9400.40	-50.63	0.8	11.9	-39.53	H
11280.38	-51.88	0.3	11.5	-40.68	V
13160.19	-51.28	0.4	13.6	-38.08	V