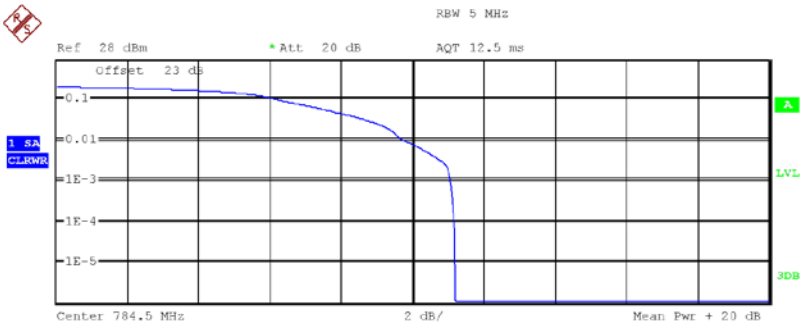
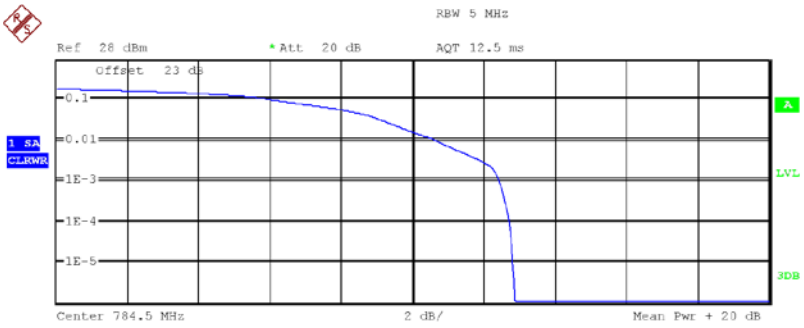


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 7.1MHz

	Trace 1
Mean	17.08 dBm
Peak	28.27 dBm
Crest	11.19 dB
10 %	6.28 dB
1 %	9.74 dB
.1 %	11.06 dB
.01 %	11.19 dB

Date: 7.AUG.2018 16:20:07

Band13-CH23230-710MHz-5MHz Bandwidth-QPSK

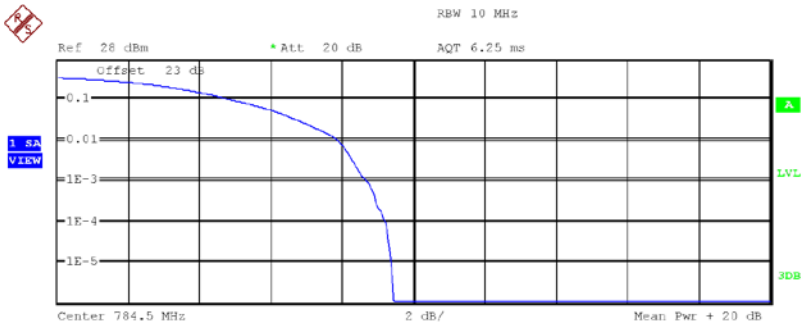


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 7.1MHz

	Trace 1
Mean	15.20 dBm
Peak	28.06 dBm
Crest	12.86 dB
10 %	6.12 dB
1 %	10.64 dB
.1 %	12.44 dB
.01 %	12.72 dB

Date: 7.AUG.2018 16:20:41

Band13-CH23230-710MHz-5MHz Bandwidth-16QAM

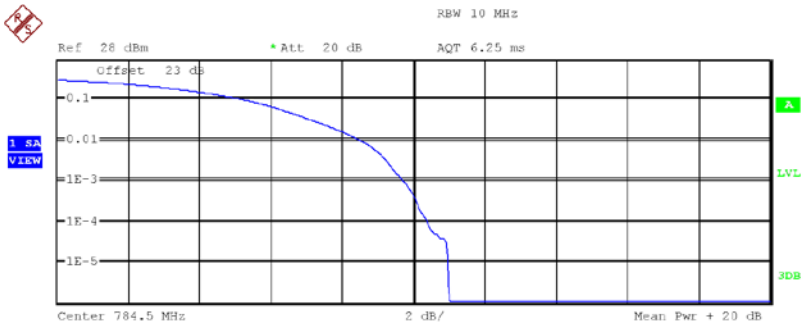


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	12.27 dBm
Peak	21.69 dBm
Crest	9.43 dB
10 %	4.94 dB
1 %	7.85 dB
.1 %	8.69 dB
.01 %	9.20 dB

Date: 7.AUG.2018 16:22:10

Band13-CH23230-710MHz-10MHz Bandwidth-QPSK

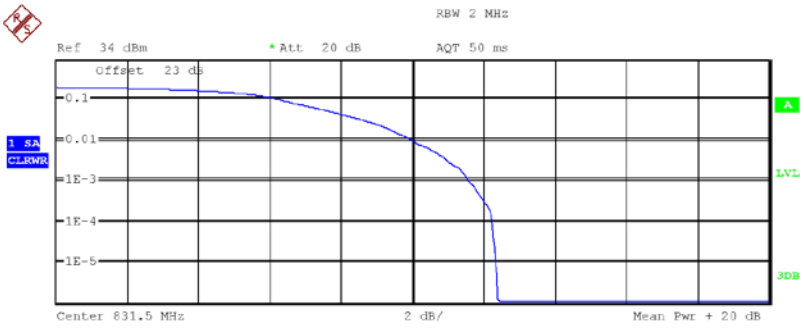


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	11.14 dBm
Peak	22.12 dBm
Crest	10.98 dB
10 %	5.29 dB
1 %	8.49 dB
.1 %	9.71 dB
.01 %	10.38 dB

Date: 7.AUG.2018 16:21:51

Band13-CH23230-710MHz-10MHz Bandwidth-16QAM

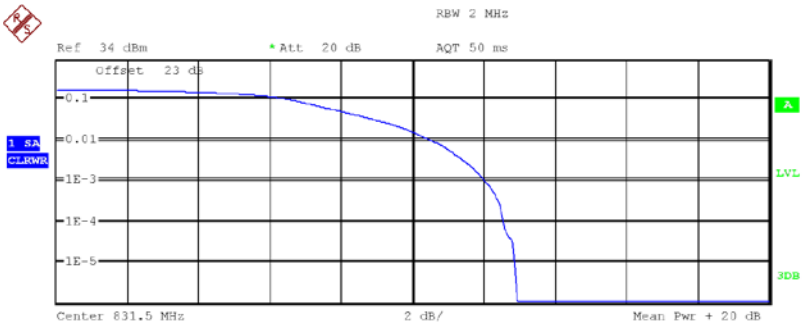


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 1.7MHz

	Trace 1
Mean	14.06 dBm
Peak	26.46 dBm
Crest	12.39 dB
10 %	6.31 dB
1 %	10.00 dB
.1 %	11.57 dB
.01 %	12.24 dB

Date: 7.AUG.2018 18:04:52

Band26-CH26865-831.5MHz-1.4MHz Bandwidth-QPSK

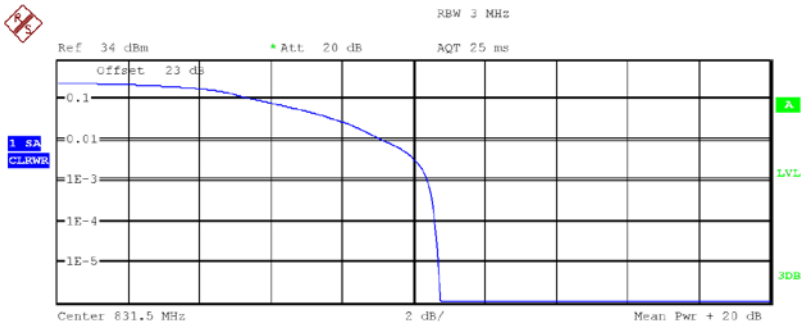


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 1.7MHz

	Trace 1
Mean	13.47 dBm
Peak	26.39 dBm
Crest	12.92 dB
10 %	6.63 dB
1 %	10.54 dB
.1 %	12.02 dB
.01 %	12.56 dB

Date: 7.AUG.2018 18:04:45

Band26-CH26865-831.5MHz-1.4MHz Bandwidth-16QAM

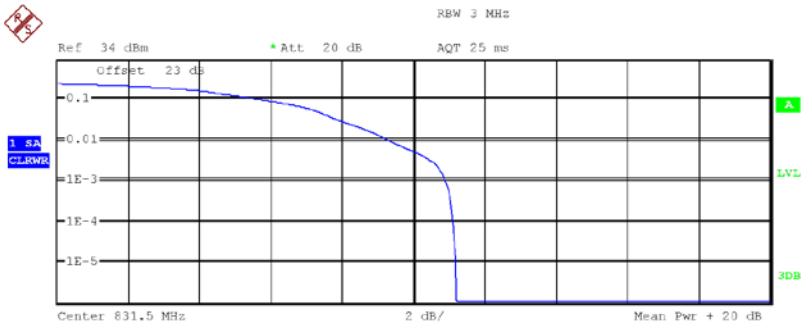


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 3.5MHz

	Trace 1
Mean	15.64 dBm
Peak	26.39 dBm
Crest	10.74 dB
10 %	5.64 dB
1 %	9.13 dB
.1 %	10.38 dB
.01 %	10.61 dB

Date: 7.AUG.2018 18:06:15

Band26-CH26865-831.5MHz-3MHz Bandwidth-QPSK

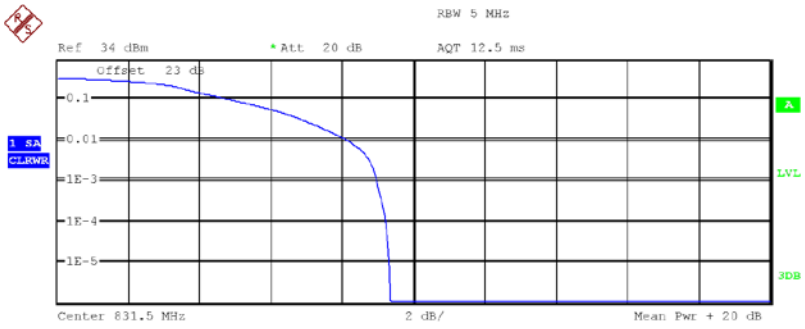


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 3.5MHz

	Trace 1
Mean	16.25 dBm
Peak	27.44 dBm
Crest	11.19 dB
10 %	5.83 dB
1 %	9.29 dB
.1 %	10.90 dB
.01 %	11.12 dB

Date: 7.AUG.2018 18:07:29

Band26-CH26865-831.5MHz-3MHz Bandwidth-16QAM

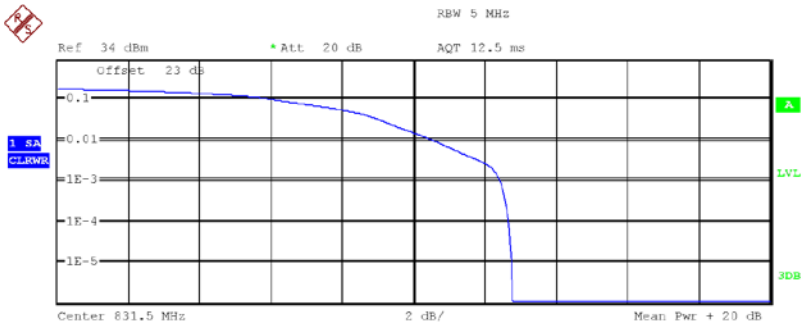


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 7.1MHz

	Trace 1
Mean	18.04 dBm
Peak	27.37 dBm
Crest	9.33 dB
10 %	4.90 dB
1 %	8.17 dB
.1 %	8.97 dB
.01 %	9.23 dB

Date: 7.AUG.2018 18:09:03

Band26-CH26865-831.5MHz-5MHz Bandwidth-QPSK

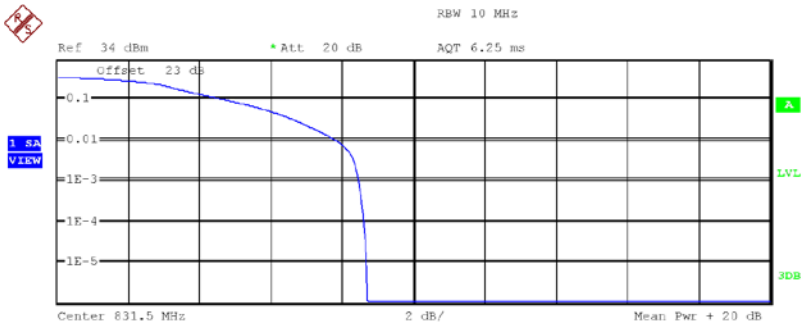


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 7.1MHz

	Trace 1
Mean	14.54 dBm
Peak	27.30 dBm
Crest	12.77 dB
10 %	6.19 dB
1 %	10.58 dB
.1 %	12.44 dB
.01 %	12.66 dB

Date: 7.AUG.2018 18:08:47

Band26-CH26865-831.5MHz-5MHz Bandwidth-16QAM

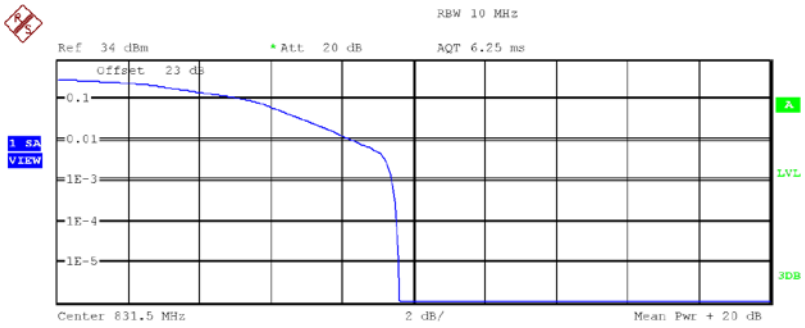


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	18.52 dBm
Peak	27.21 dBm
Crest	8.68 dB
10 %	4.78 dB
1 %	7.82 dB
.1 %	8.46 dB
.01 %	8.62 dB

Date: 7.AUG.2018 18:09:36

Band26-CH26865-831.5MHz-10MHz Bandwidth-QPSK

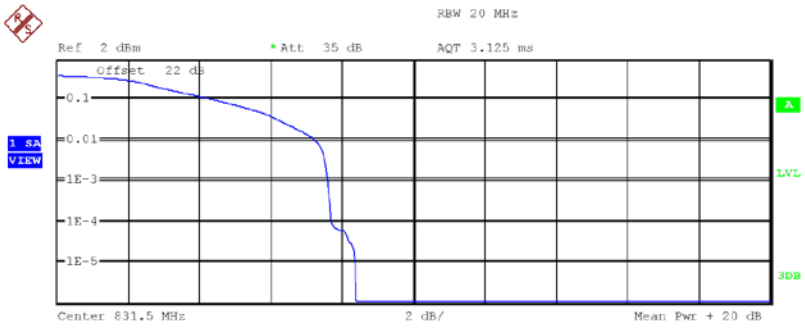


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	17.55 dBm
Peak	27.14 dBm
Crest	9.58 dB
10 %	5.35 dB
1 %	8.30 dB
.1 %	9.39 dB
.01 %	9.52 dB

Date: 7.AUG.2018 18:10:00

Band26-CH26865-831.5MHz-10MHz Bandwidth-16QAM

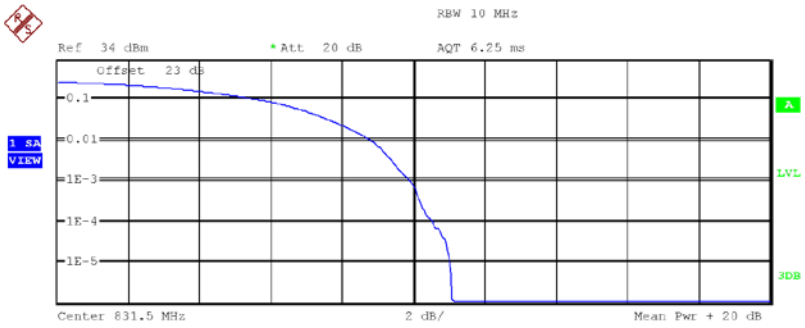


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

	Trace 1
Mean	19.13 dBm
Peak	27.52 dBm
Crest	8.39 dB
10 %	4.42 dB
1 %	7.24 dB
.1 %	7.60 dB
.01 %	7.69 dB

Date: 8.AUG.2018 09:58:11

Band26-CH26865-831.5MHz-15MHz Bandwidth-QPSK



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	13.16 dBm
Peak	24.24 dBm
Crest	11.08 dB
10 %	5.71 dB
1 %	8.81 dB
.1 %	9.90 dB
.01 %	10.54 dB

Date: 7.AUG.2018 18:10:39

5.9 ERP and EIRP

Specifications:	FCC Part 22.913(a), 24.232(b)
DUT Serial Number:	S2:MP0618221C7CAF8
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	--

Limit

Part 22:

According to Part 22.913(a)(2):The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

Part 24:

According to Part 24.232(b)):The EIRP of mobile transmitters and auxiliary test transmitters must not exceed 2 Watts.

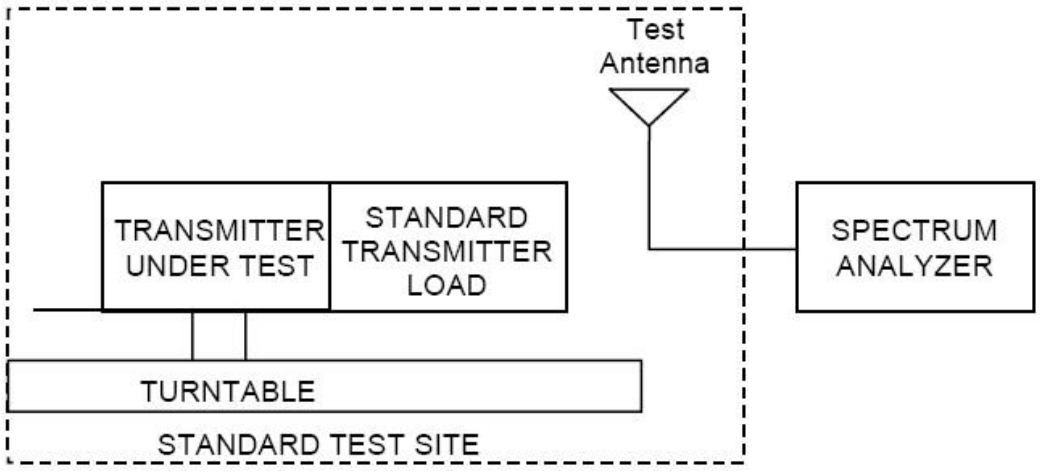
Test Setup

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

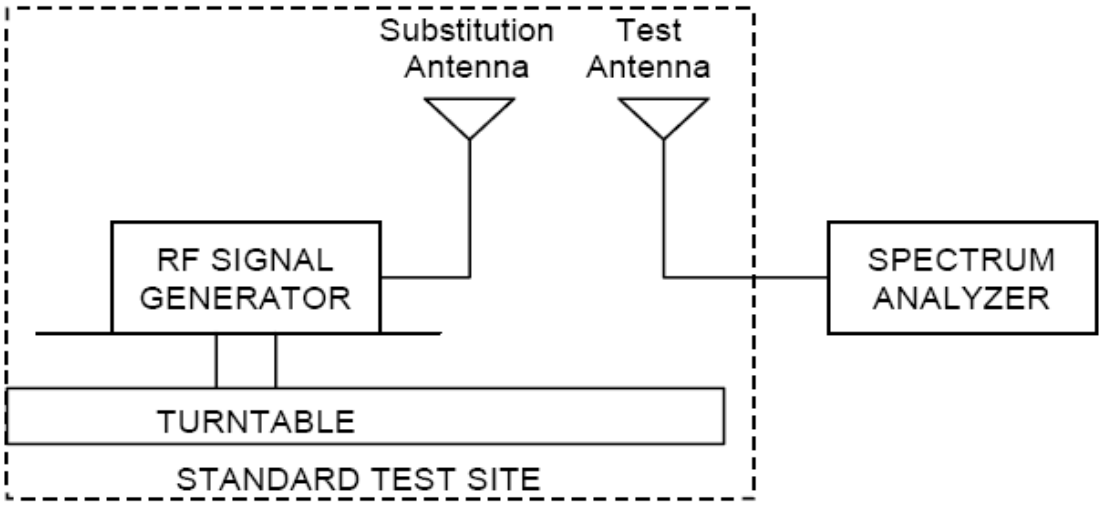
Test Method:

The measurement method is substitution method accordance with section 2.2.12 of ANSI/TIA-603-C: 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.



(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:

ERP=S.G output(dBM)-cable loss (dB) + antenna gain (dBd)

EIRP=S.G output(dBM)-cable loss (dB) + antenna gain (dBi)

5.9.1 GSM 850 ERP Results

Test Data （GMSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
824.2	27.20	3.4	-0.96	31.56	V
836.6	27.38	3.4	-0.96	31.74	V
848.8	27.07	3.4	-0.96	31.43	V

Test Data （8PSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
824.2	27.10	3.4	-0.96	30.46	V
836.6	27.72	3.4	-0.96	31.08	V
848.8	27.23	3.4	-0.96	30.59	V

5.9.2 GSM 1900 EIRP

Test Data （GMSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1850.2	32.27	5.0	10.4	26.87	V
1880.0	32.44	5.0	10.4	27.04	V
1909.8	32.55	5.1	10.4	27.25	V

Test Data （8PSK Mode ）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1850.2	32.36	5.0	10.4	26.96	V
1880.0	32.23	5.0	10.4	26.83	V
1909.8	32.48	5.1	10.4	27.18	V

5.9.3 NB-IoT Band 2 EIRP

Test Data （QPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1850.0	27.63	5.0	10.4	22.23	V
1880.0	27.58	5.0	10.4	22.18	V
1910.0	27.79	5.1	10.4	22.49	V

Test Data （BPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1850.0	27.34	5.0	10.4	21.94	V
1880.0	27.72	5.0	10.4	22.32	V
1910.0	27.48	5.1	10.4	22.18	V

5.9.4 NB-IoT Band 12 ERP

Test Data （QPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
699.0	17.63	3.1	-1.1	21.83	V
707.5	17.85	3.1	-1.1	22.05	V
716.0	17.75	3.1	-1.1	21.95	V

Test Data （BPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
699.0	17.68	3.1	-1.1	21.88	V
707.5	17.74	3.1	-1.1	21.94	V
716.0	17.83	3.1	-1.1	22.03	V

5.9.5 NB-IoT Band 13 EPR

Test Data （QPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
777.0	18.03	3.3	-0.72	22.05	V
782.0	18.15	3.3	-0.72	22.17	V
787.0	17.92	3.3	-0.72	21.94	V

Test Data （BPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
777.0	17.85	3.3	-0.72	21.87	V
782.0	18.08	3.3	-0.72	22.10	V
787.0	18.27	3.3	-0.72	22.29	V

5.9.6 NB-IoT Band 17 ERP

Test Data （QPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
704.0	17.83	3.1	-1.11	22.04	V
710.0	17.54	3.1	-1.11	21.75	V
716.0	17.47	3.1	-1.11	21.68	V

Test Data （BPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
704.0	18.15	3.1	-1.11	22.36	V
710.0	17.97	3.1	-1.11	22.18	V
716.0	17.78	3.1	-1.11	21.99	V

5.9.7 NB-IoT Band 26 ERP

Test Data （QPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
814.0	17.82	3.3	-0.72	21.84	V
831.5	17.75	3.4	-0.96	22.11	V
849.0	17.10	3.4	-0.96	21.46	V

Test Data （BPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
814.0	17.53	3.3	-0.72	21.55	V
831.5	17.42	3.4	-0.96	21.78	V
849.0	17.13	3.4	-0.96	21.49	V

5.9.8 Cat-M Band 2 EIRP

Test Data （QPSK Mode ）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1850.0	27.04	5.0	10.4	21.64	V
1880.0	27.41	5.0	10.4	22.01	V
1910.0	26.26	5.1	10.4	20.96	V

Test Data （16QAM Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1850.0	26.83	5.0	10.4	21.43	V
1880.0	27.16	5.0	10.4	21.76	V
1910.0	26.58	5.1	10.4	21.28	V

5.9.9 Cat-M Band4 EIRP

Test Data （QPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1710.0	26.71	4.8	10.4	21.11	V
1732.5	26.87	4.9	10.4	21.37	V
1755.0	26.44	4.9	10.4	20.94	V

Test Data （16QAM Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
1710.0	26.93	4.8	10.4	21.33	V
1732.5	27.15	4.9	10.4	21.65	V
1755.0	26.25	4.9	10.4	20.75	V

5.9.10 Cat-M Band 12 ERP

Test Data （QPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
699.0	17.18	3.1	-1.1	21.38	V
707.5	17.42	3.1	-1.1	21.62	V
716.0	17.11	3.1	-1.1	21.31	V

Test Data （16QAM Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
699.0	17.23	3.1	-1.1	21.43	V
707.5	17.85	3.1	-1.1	22.05	V
716.0	17.01	3.1	-1.1	21.21	V

5.9.11 Cat-M Band 13 ERP

Test Data （QPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
777.0	17.13	3.3	-0.72	21.15	V
782.0	17.40	3.3	-0.72	21.42	V
787.0	17.21	3.3	-0.72	21.23	V

Test Data （16QAM Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
777.0	17.33	3.3	-0.72	21.35	V
782.0	17.64	3.3	-0.72	21.66	V
787.0	18.01	3.3	-0.72	22.03	V

5.9.12 Cat-M Band 26 ERP

Test Data （QPSK Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
814.0	17.07	3.3	-0.72	21.09	V
831.5	17.08	3.4	-0.96	21.44	V
849.0	17.38	3.4	-0.96	21.74	V

Test Data （16QAM Mode）

Frequency [MHz]	Generator output power(P_g) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (P_d) [dBm]	Antenna Polarization [H/V]
814.0	17.99	3.3	-0.72	22.01	V
831.5	17.27	3.4	-0.96	21.63	V
849.0	17.03	3.4	-0.96	21.39	V

Annex A EUT Photos

See the document”SIM7000G-External Photos”.
See the document”SIM7000G-Internal Photos”.

ANNEX B Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

End Of Report