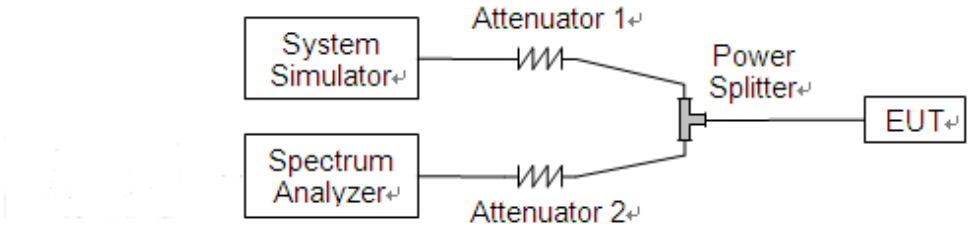
2.6. Band Edge

2.6.1. Requirement

According to FCC section 22.917(b), 24.238(b) and 27.53(h) in the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth (26dB emission bandwidth) of the fundamental emission of the transmitter may be employed.

2.6.2. Test Description

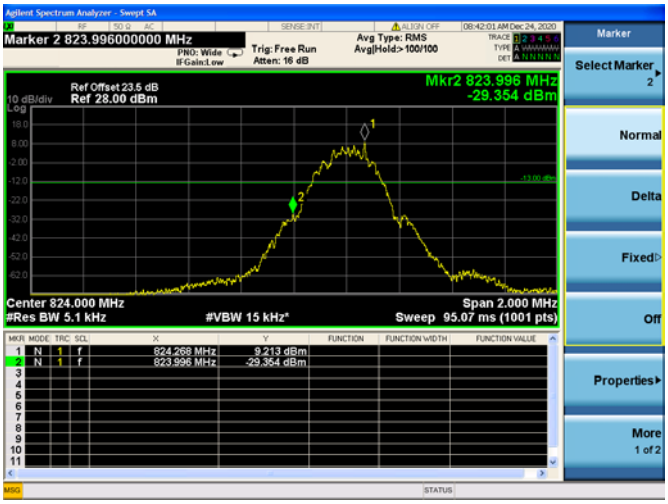
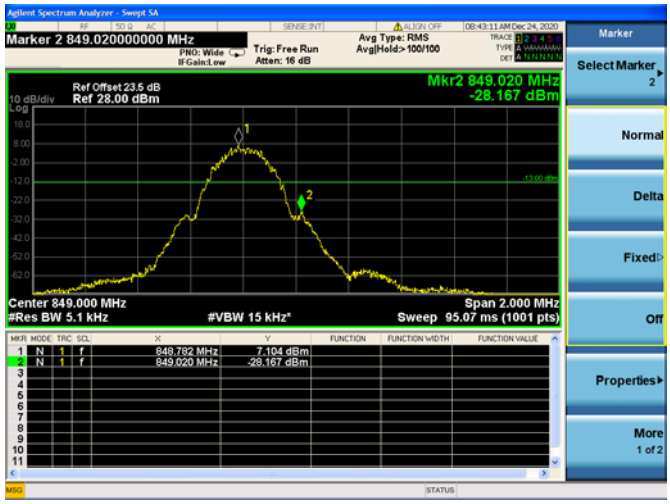
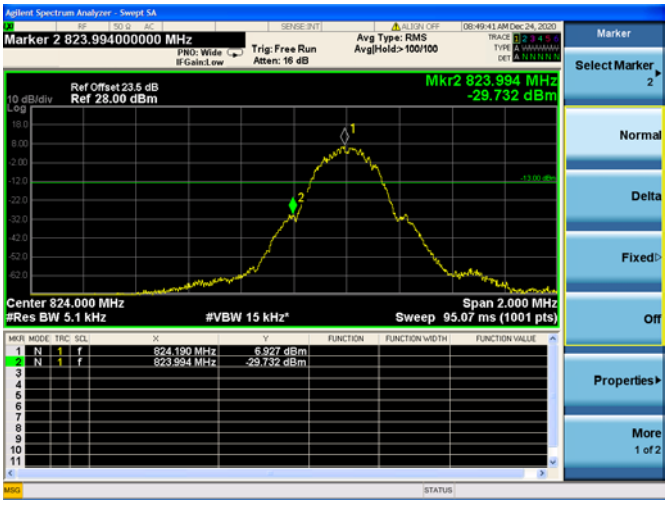
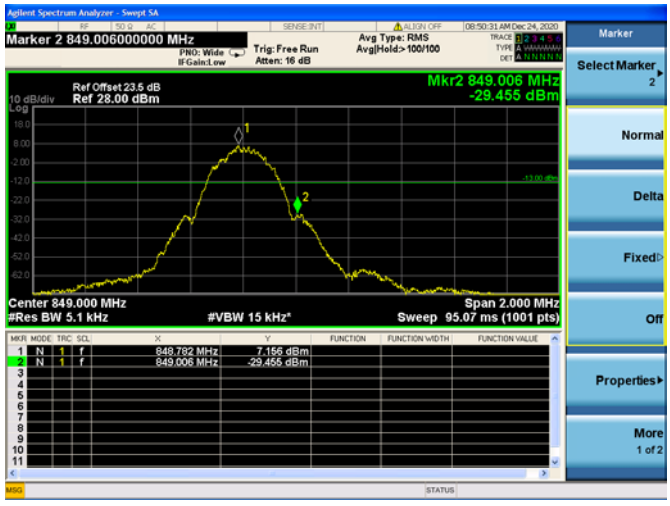
Test Setup:

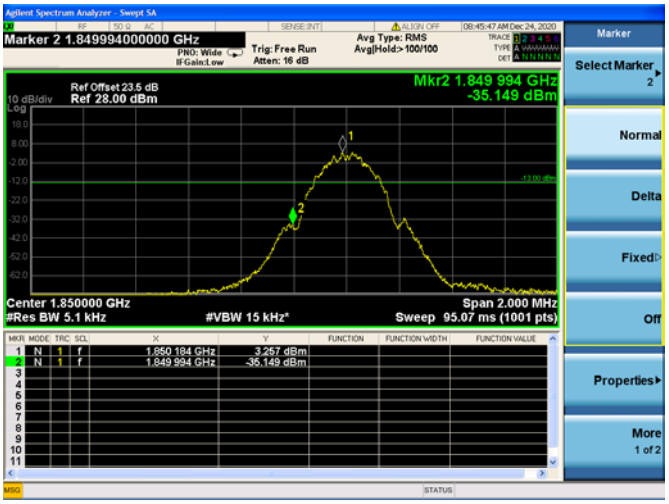
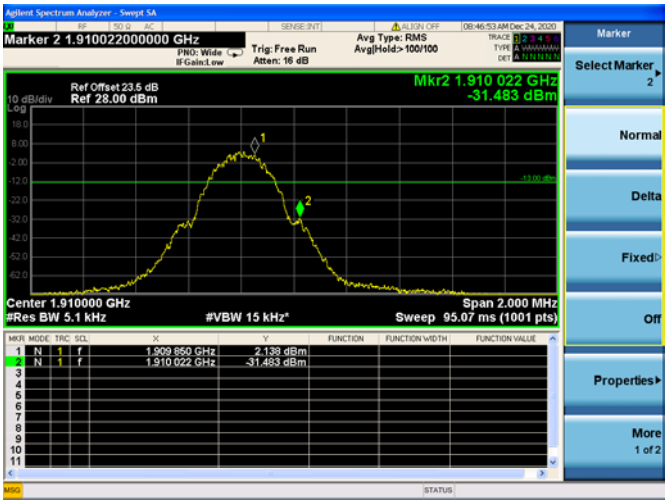
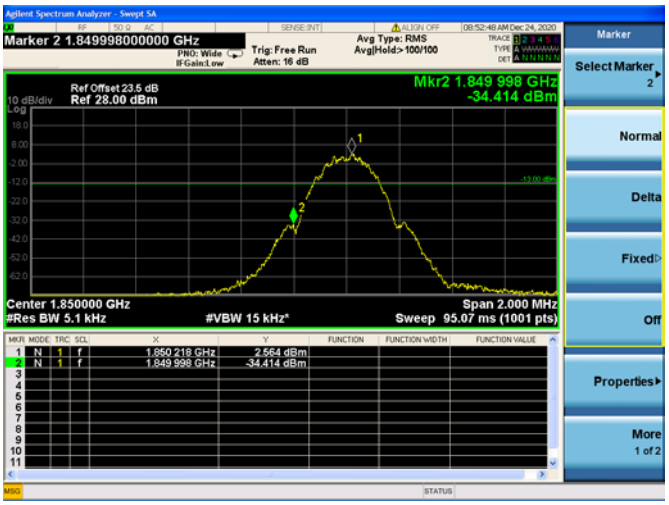
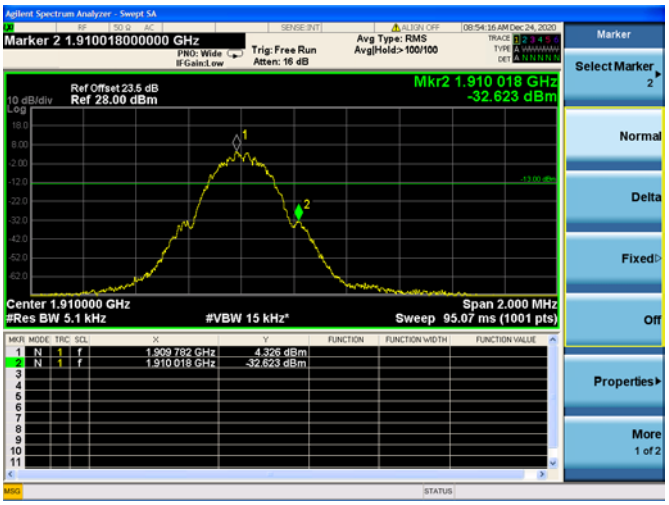


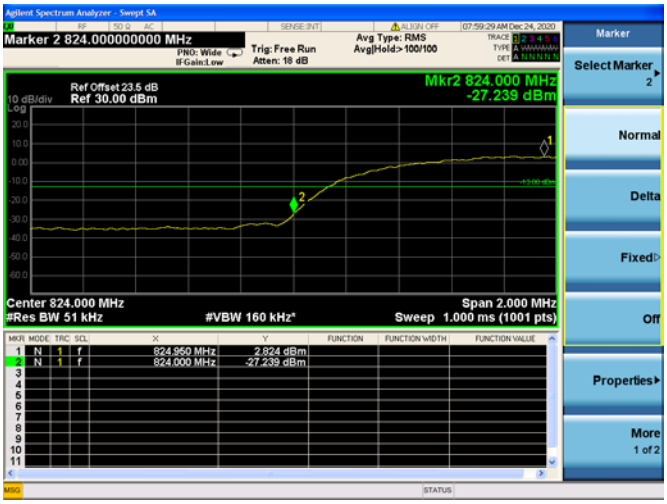
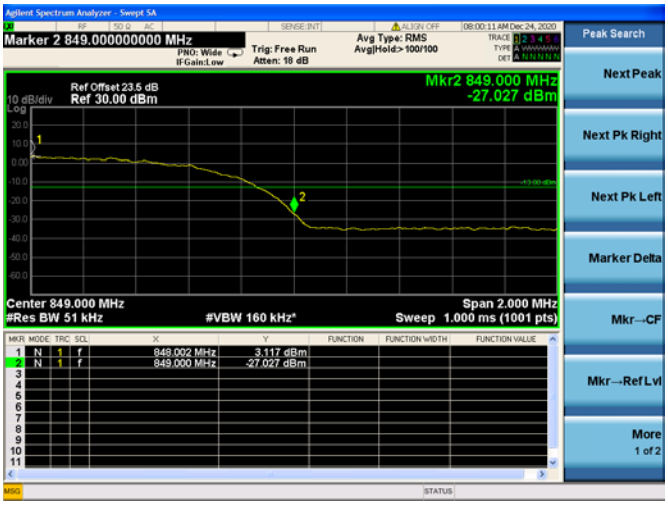
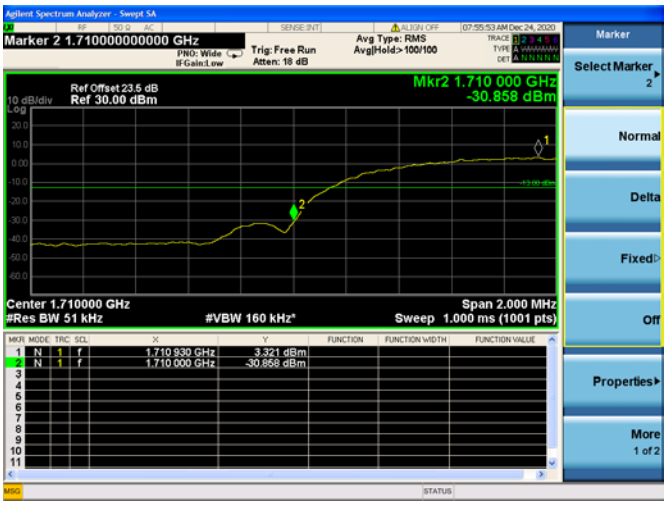
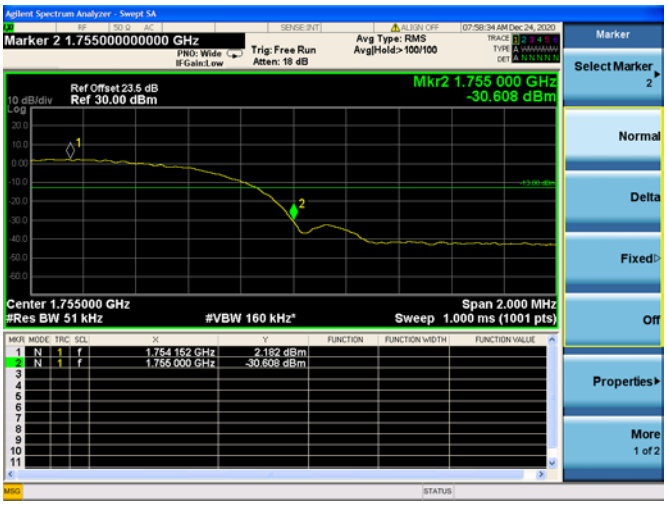
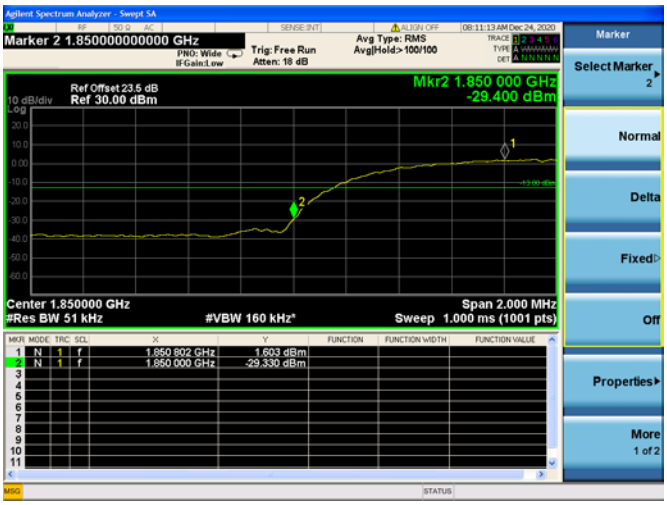
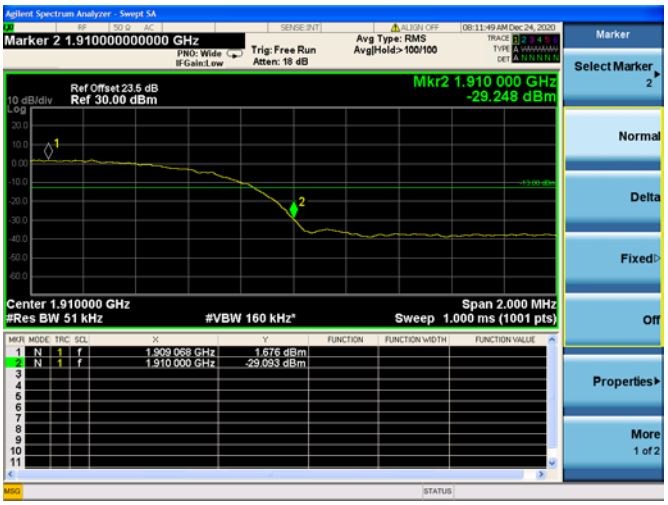
The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.

2.6.3. Test Result

The lowest and highest channels are tested to verify the band edge emissions.

GSM850(GSM), CH128, 824.2MHz	GSM850(GSM), CH251, 848.8MHz
	
GSM850(EDGE), CH128, 824.2MHz	**GSM850(EDGE), CH251, 848.8MHz**
	

GSM1900(GSM), CH512, 1850.2MHz	GSM1900(GSM), CH810, 1909.8MHz
	
GSM1900(EDGE), CH512, 1850.2MHz	**GSM1900(EDGE), CH810, 1909.8MHz**
	

WCDMA Band V, CH4132, 826.4MHz	WCDMA Band V, CH4233, 846.6MHz
	
WCDMA Band IV, CH1312, 1712.4MHz	**WCDMA Band IV, CH1513, 1752.6MHz**
	
WCDMA Band II, CH9262, 1852.4MHz	**WCDMA Band II, CH9538, 1907.6MHz**
	

2.7. Determining E.R.P. and/or E.I.R.P. from conducted RF output power measurements

2.7.1. Requirement

According to FCC section 22.913, the Effective Radiated Power (E.R.P.) of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.
According to FCC section 24.232, the broadband PCS mobile station is limited to 2 Watts e.i.r.p. peak power.
According to FCC section 27.50, mobile, and portable (hand-held) stations is limited to 1 Watts e.i.r.p. peak power.

2.7.2. Test Description

The test setups refer to section 2.1.3
A call is established between the EUT and the SS via a Common Antenna. The EUT is commanded by the SS to operate at the maximum and minimum output power (i.e. GSM850MHz band Power Control Level (PCL) = 5/19 and Power Class = 4, GSM1900MHz band Power Control Level (PCL) = 0/15 and Power Class = 1), and only the test result of the maximum output power was recorded. Please refer to section 2.1.3 of this report.
The relevant equation for determining the maximum E.R.P. or E.I.R.P. from the measured RF output power is given in Equation (1) as follows:
E.R.P. or E.I.R.P. = $P_{Meas} + G_T$
Where:
E.R.P. or E.I.R.P. effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, e.g., dBm or dBW)
P_{Meas} measured transmitter output power or PSD, in dBm or dBW
G_T gain of the transmitting antenna, in dBd (E.R.P.) or dBi (E.I.R.P.)
For devices utilizing multiple antennas, see ANSI C63.25-2015 6.4 for guidance with respect to determining the effective array transmit antenna gain term to be used in the above equation.
The following equations demonstrate the mathematical relationship between E.R.P. and E.I.R.P.:
a) E.R.P. = E.I.R.P. − 2.15, where E.R.P. and E.I.R.P. are expressed in consistent units.
b) E.I.R.P. = E.R.P. + 2.15, where E.R.P. and E.I.R.P. are expressed in consistent units.

2.7.3. Test Result

GSM850								
Band	Channel	Frequency (MHz)	PCL	Measured E.R.P.		Limit		Verdict
				dBm	W	dBm	W	
GSM	128	824.20	5	24.96	0.313	38.5	7	PASS
	189	836.40	5	24.93	0.311			PASS
	251	848.80	5	24.92	0.310			PASS
GPRS	128	824.20	5	24.97	0.314	38.5	7	PASS
	189	836.40	5	24.92	0.310			PASS
	251	848.80	5	24.94	0.312			PASS
EDGE	128	824.20	5	20.17	0.104	38.5	7	PASS
	189	836.40	5	19.93	0.098			PASS
	251	848.80	5	20.00	0.100			PASS
Note 1: For the GPRS and EDGE mode, all the slots were tested and just the worst data were recorded in this report.								

GSM1900								
Band	Channel	Frequency (MHz)	PCL	Measured E.I.R.P.		Limit		Verdict
				dBm	W	dBm	W	
GSM	512	1850.2	0	25.78	0.378	33	2	PASS
	661	1880.0	0	25.71	0.372			PASS
	810	1909.8	0	25.68	0.370			PASS
GPRS	512	1850.2	0	25.79	0.379	33	2	PASS
	661	1880.0	0	25.73	0.374			PASS
	810	1909.8	0	25.70	0.372			PASS
EDGE	512	1850.2	0	23.03	0.201	33	2	PASS
	661	1880.0	0	23.08	0.203			PASS
	810	1909.8	0	22.96	0.198			PASS
Note 1: For the GPRS and EDGE mode, all the slots were tested and just the worst data were recorded in this report.								

WCDMA Band V							
Band	Channel	Frequency (MHz)	Measured E.R.P.		Limit		Verdict
			dBm	W	dBm	W	
WCDMA	4132	826.4	15.62	0.036	38.5	7	PASS
	4182	836.4	15.69	0.037			PASS
	4233	846.6	15.66	0.037			PASS
HSDPA	4132	826.4	15.21	0.033	38.5	7	PASS
	4182	836.4	15.19	0.033			PASS
	4233	846.6	15.28	0.034			PASS
HSUPA	4132	826.4	15.22	0.033	38.5	7	PASS
	4182	836.4	15.25	0.033			PASS
	4233	846.6	15.28	0.034			PASS
Note 1: For the HSDPA and HSUPA mode, all the subtests were tested and just the worst data were recorded in this report.							

WCDMA Band IV							
Band	Channel	Frequency (MHz)	Measured E.I.R.P.		Limit		Verdict
			dBm	W	dBm	W	
WCDMA	1312	1712.4	19.57	0.091	30	1	PASS
	1413	1732.6	19.39	0.087			PASS
	1513	1752.6	19.49	0.089			PASS
HSDPA	1312	1712.4	19.36	0.086	30	1	PASS
	1413	1732.6	19.33	0.086			PASS
	1513	1752.6	19.08	0.081			PASS
HSUPA	1312	1712.4	19.46	0.088	30	1	PASS
	1413	1732.6	19.31	0.085			PASS
	1513	1752.6	19.11	0.081			PASS
Note 1: For the HSDPA and HSUPA mode, all the subtests were tested and just the worst data were recorded in this report.							

WCDMA Band IV							
Band	Channel	Frequency (MHz)	Measured E.I.R.P.		Limit		Verdict
			dBm	W	dBm	W	
WCDMA	9262	1852.4	18.91	0.078	33	2	PASS
	9400	1880.0	18.98	0.079			PASS
	9538	1907.6	18.85	0.077			PASS
HSDPA	9262	1852.4	17.43	0.055	33	2	PASS
	9400	1880.0	17.36	0.054			PASS
	9538	1907.6	17.29	0.054			PASS
HSUPA	9262	1852.4	17.34	0.054	33	2	PASS
	9400	1880.0	17.28	0.053			PASS
	9538	1907.6	17.21	0.053			PASS
Note 1: For the HSDPA and HSUPA mode, all the subtests were tested and just the worst data were recorded in this report.							

2.8. Radiated Out of Band Emissions

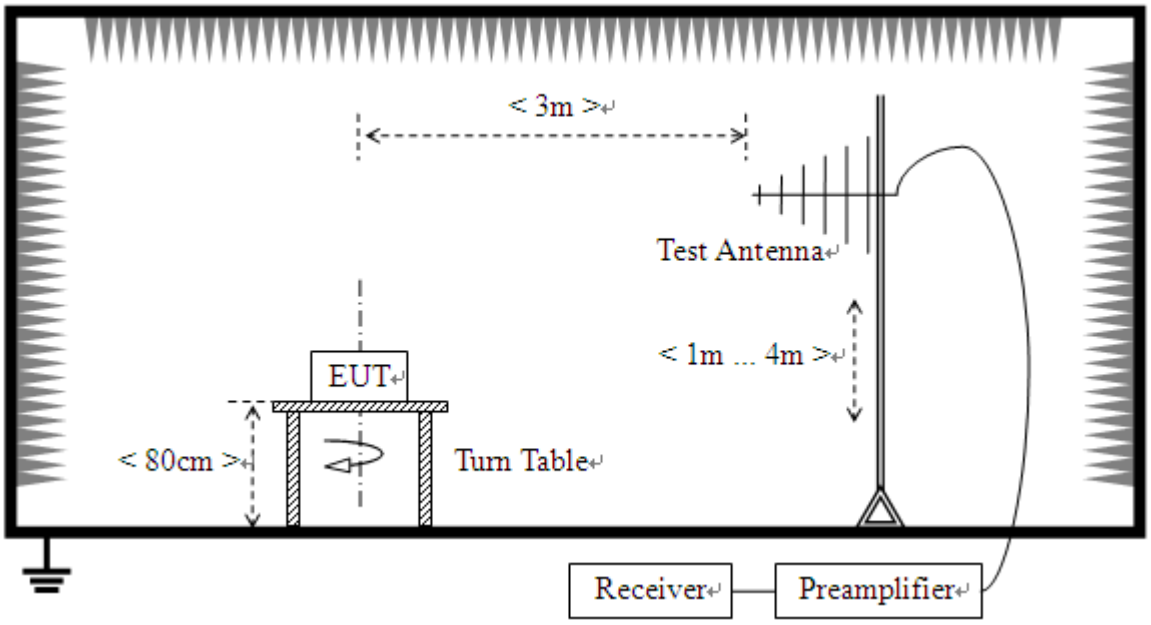
2.8.1. Requirement

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. This calculated to be -13dBm. The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency.

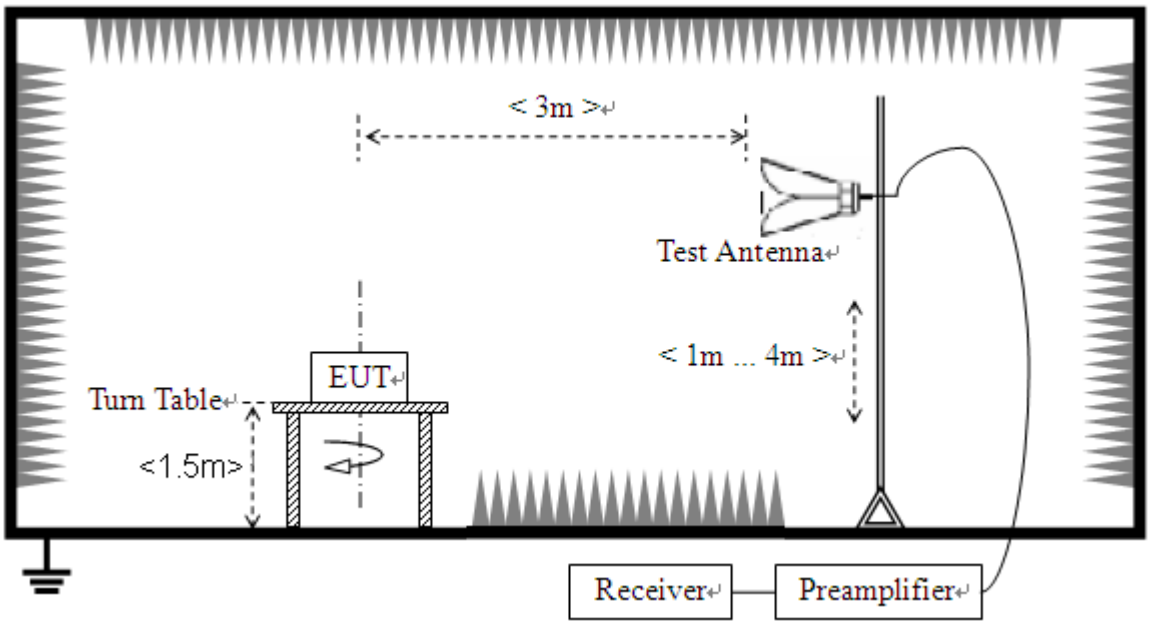
2.8.2. Test Description

Test Setup:

1) Below1GHz



2) Above 1GHz



The EUT is located in a 3m Full-Anechoic Chamber, the cable loss, air loss and so on of the site as factors are pre-calibrated using the "Substitution" method, and calculated to correct the reading.

A call is established between the EUT and the SS via a Common Antenna. The EUT is commanded by the SS to operate at the maximum and minimum output power (i.e. GSM850MHz band Power Control Level (PCL) = 5/19 and Power Class = 4, GSM1900MHz band Power Control Level (PCL) = 0/15 and Power Class = 1), and only the test result of the maximum output power was recorded. Please refer to section 2.1.3 of this report.

- Step size (dB): 3dB

The Test Antenna is a Bi-Log one (used for 30MHz to 1GHz) and a Horn one (used for above 3 GHz), it's located at the same height as the EUT. The Filters consists of Notch Filters and High Pass Filter.

Note: when doing measurements above 1GHz, the EUT has been within the 3dB cone width of the horn antenna during horizontal antenna.

2.8.3. Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested to verify the out of band emissions.

The substitution corrections are obtained as described below:

$A_{SUBST} = P_{SUBST\_TX} - P_{SUBST\_RX} - L_{SUBST\_CABLES} + G_{SUBST\_TX\_ANT}$

$A_{TOT} = L_{CABLES} + A_{SUBST}$

Where A_{SUBST} is the final substitution correction including receive antenna gain.

P_{SUBST_TX} is signal generator level,

P_{SUBST_RX} is receiver level,

L_{SUBST_CABLES} is cable losses including TX cable,

$G_{SUBST\_TX\_ANT}$ is substitution antenna gain.

A_{TOT} is total correction factor including cable loss and substitution correction

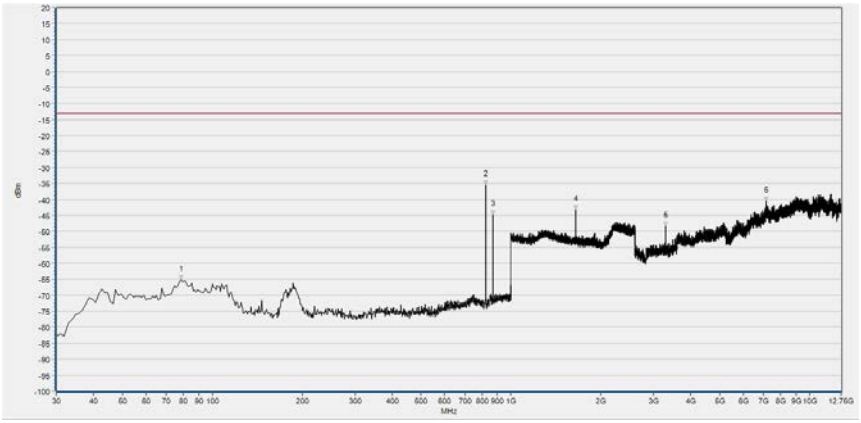
During the test, the data of A_{TOT} was added in the test spectrum analyze, so spectrum analyze reading is the final values which contain the data of A_{TOT}.

Note1: The power of the EUT transmitting frequency should be ignored.

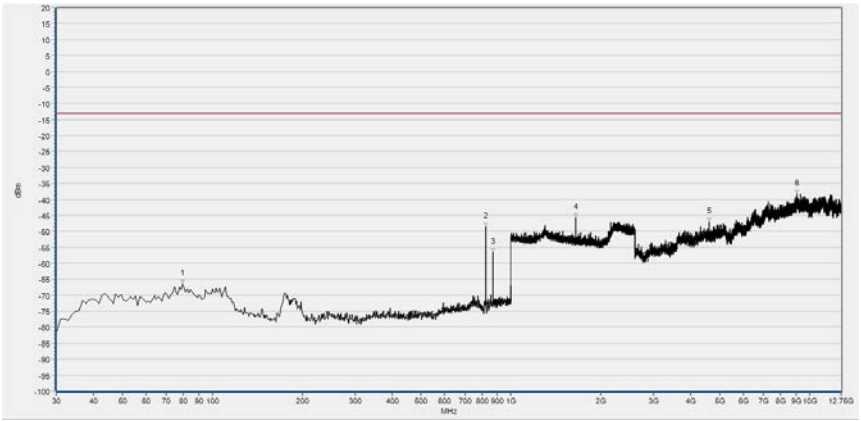
Note2: All test mode and condition mentioned were considered and evaluated respectively by performing full test, only the worst data were recorded and reported.

Note3: All spurious emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

GSM850(GSM), Low Channel

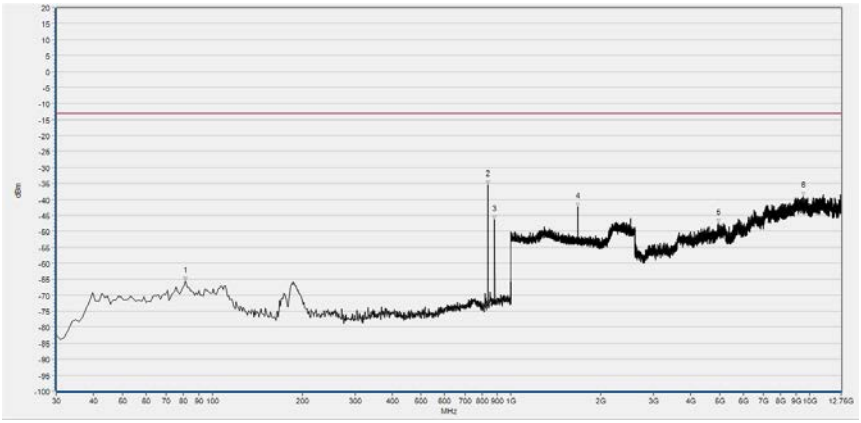


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	78.500	-65.07	-13.00	Horizontal	PASS
2	824.430	-35.52	-13.00	Horizontal	N/A
3	869.050	-44.87	-13.00	Horizontal	N/A
4	1647.939	-43.22	-13.00	Horizontal	PASS
5	3295.863	-48.32	-13.00	Horizontal	PASS
6	7153.564	-40.66	-13.00	Horizontal	PASS

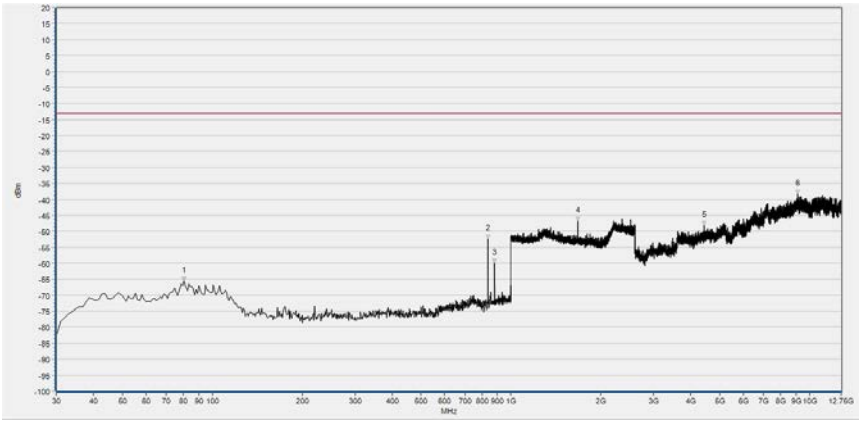


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	79.470	-66.44	-13.00	Vertical	PASS
2	824.430	-48.50	-13.00	Vertical	N/A
3	869.050	-56.76	-13.00	Vertical	N/A
4	1648.579	-45.71	-13.00	Vertical	PASS
5	4604.528	-47.01	-13.00	Vertical	PASS
6	9043.653	-38.28	-13.00	Vertical	PASS

GSM850(GSM), Mid Channel

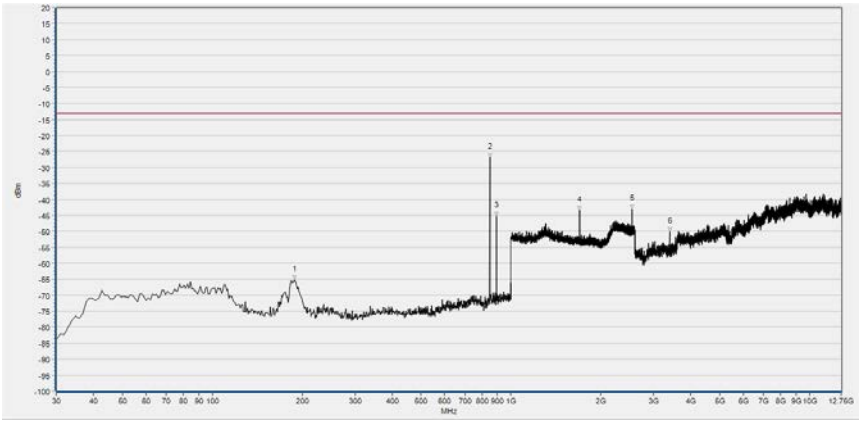


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	81.410	-65.68	-13.00	Horizontal	PASS
2	836.070	-35.34	-13.00	Horizontal	N/A
3	881.660	-46.29	-13.00	Horizontal	N/A
4	1672.909	-42.30	-13.00	Horizontal	PASS
5	4951.537	-47.57	-13.00	Horizontal	PASS
6	9501.409	-38.92	-13.00	Horizontal	PASS

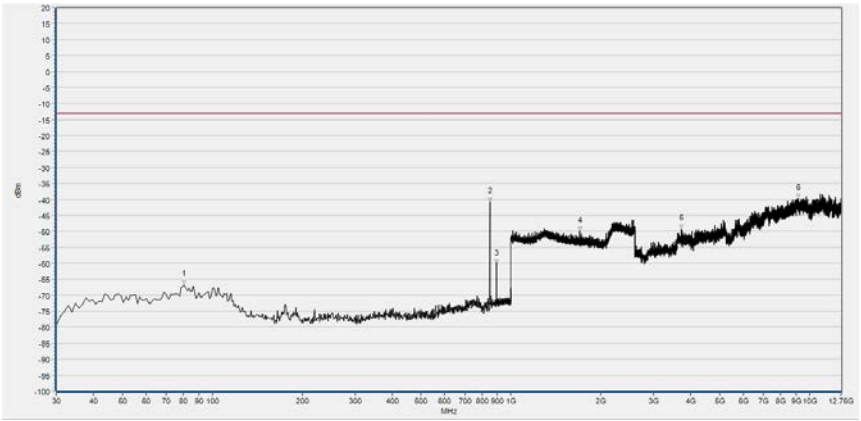


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	80.440	-65.48	-13.00	Vertical	PASS
2	837.040	-52.37	-13.00	Vertical	N/A
3	881.660	-60.00	-13.00	Vertical	N/A
4	1672.909	-46.82	-13.00	Vertical	PASS
5	4436.561	-48.05	-13.00	Vertical	PASS
6	9117.485	-38.29	-13.00	Vertical	PASS

GSM850(GSM), High Channel

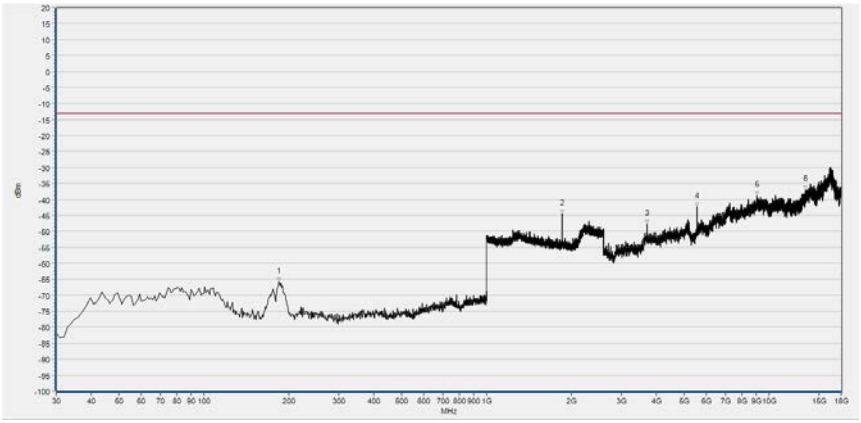


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	188.110	-65.11	-13.00	Horizontal	PASS
2	848.680	-26.91	-13.00	Horizontal	N/A
3	894.270	-45.33	-13.00	Horizontal	N/A
4	1697.239	-43.53	-13.00	Horizontal	PASS
5	2546.218	-43.04	-13.00	Horizontal	PASS
6	3395.536	-50.26	-13.00	Horizontal	PASS

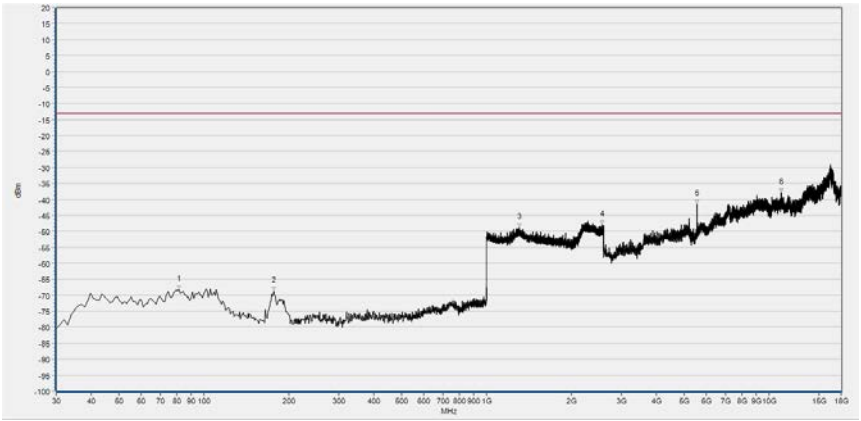


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	80.440	-66.73	-13.00	Vertical	PASS
2	848.680	-40.84	-13.00	Vertical	N/A
3	894.270	-60.16	-13.00	Vertical	N/A
4	1697.879	-49.93	-13.00	Vertical	PASS
5	3711.166	-49.34	-13.00	Vertical	PASS
6	9165.476	-39.72	-13.00	Vertical	PASS

GSM1900(GSM), Low Channel

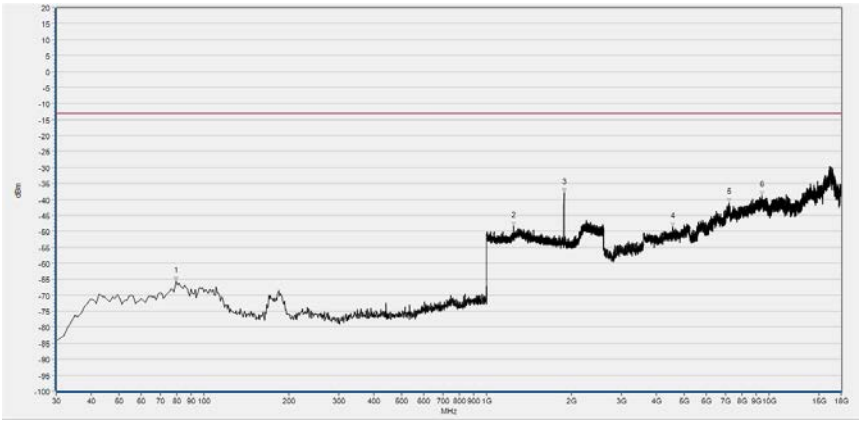


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	184.230	-65.86	-13.00	Horizontal	PASS
2	1850.260	-44.50	-13.00	Horizontal	N/A
3	3700.600	-47.79	-13.00	Horizontal	PASS
4	5548.936	-42.38	-13.00	Horizontal	PASS
5	9071.977	-38.83	-13.00	Horizontal	PASS
6	13443.572	-37.07	-13.00	Horizontal	PASS

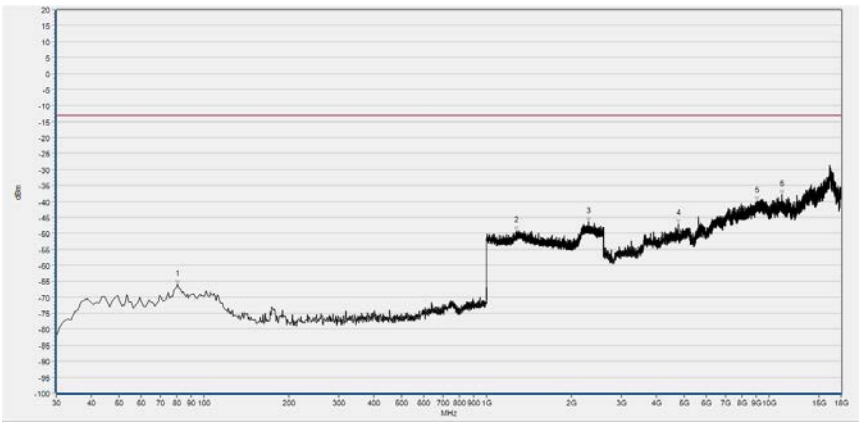


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	81.410	-68.32	-13.00	Vertical	PASS
2	176.470	-68.60	-13.00	Vertical	PASS
3	1306.683	-48.87	-13.00	Vertical	PASS
4	2565.426	-47.98	-13.00	Vertical	PASS
5	5551.737	-41.50	-13.00	Vertical	PASS
6	11057.538	-37.81	-13.00	Vertical	PASS

GSM1900(GSM), Mid Channel

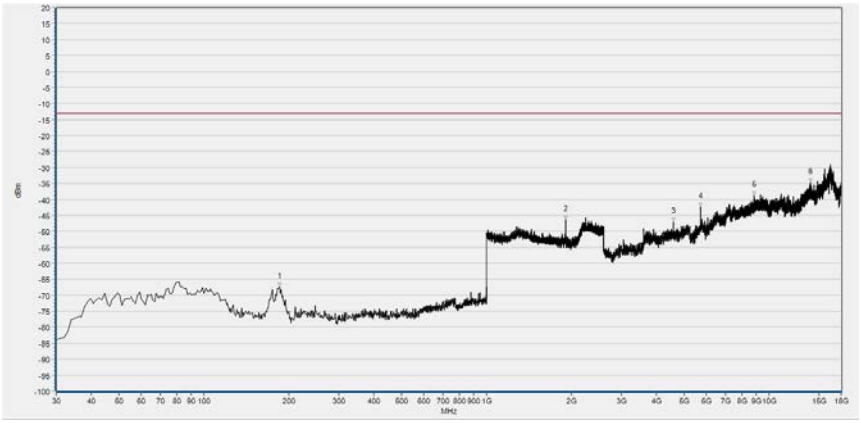


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	79.470	-65.58	-13.00	Horizontal	PASS
2	1247.779	-48.45	-13.00	Horizontal	PASS
3	1879.712	-37.90	-13.00	Horizontal	N/A
4	4565.957	-48.67	-13.00	Horizontal	PASS
5	7220.840	-41.10	-13.00	Horizontal	PASS
6	9430.442	-38.81	-13.00	Horizontal	PASS

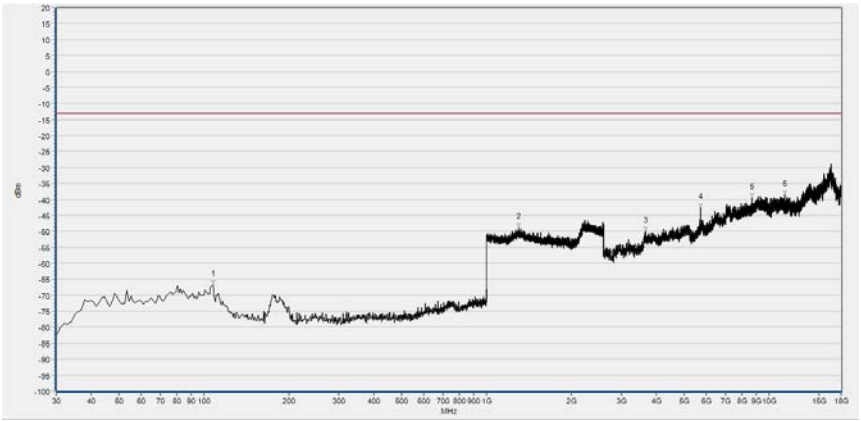


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	80.440	-66.00	-13.00	Vertical	PASS
2	1279.152	-49.19	-13.00	Vertical	PASS
3	2295.238	-46.42	-13.00	Vertical	PASS
4	4773.195	-47.10	-13.00	Vertical	PASS
5	9046.772	-39.86	-13.00	Vertical	PASS
6	11093.944	-37.83	-13.00	Vertical	PASS

GSM1900(GSM), High Channel

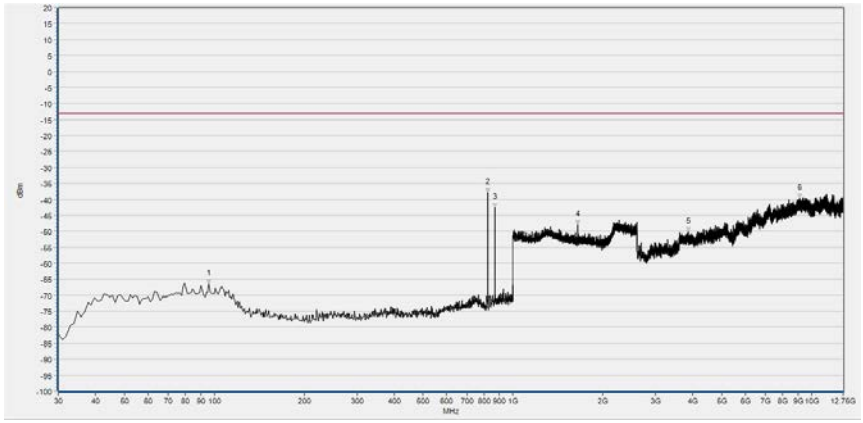


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	185.200	-67.45	-13.00	Horizontal	PASS
2	1909.164	-46.37	-13.00	Horizontal	N/A
3	4577.159	-47.04	-13.00	Horizontal	PASS
4	5728.169	-42.36	-13.00	Horizontal	PASS
5	8850.736	-38.83	-13.00	Horizontal	PASS
6	14014.875	-34.78	-13.00	Horizontal	PASS

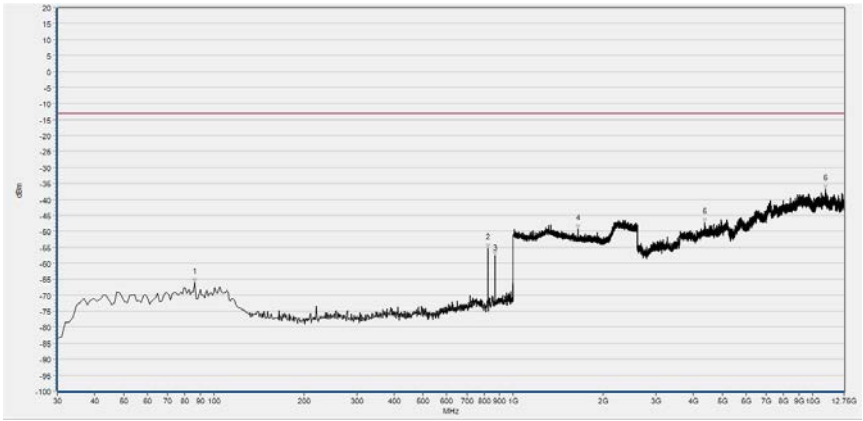


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	107.600	-66.79	-13.00	Vertical	PASS
2	1299.640	-48.84	-13.00	Vertical	PASS
3	3664.193	-49.91	-13.00	Vertical	PASS
4	5728.169	-42.59	-13.00	Vertical	PASS
5	8696.708	-39.53	-13.00	Vertical	PASS
6	11365.594	-38.66	-13.00	Vertical	PASS

GSM850(EDGE), Low Channel

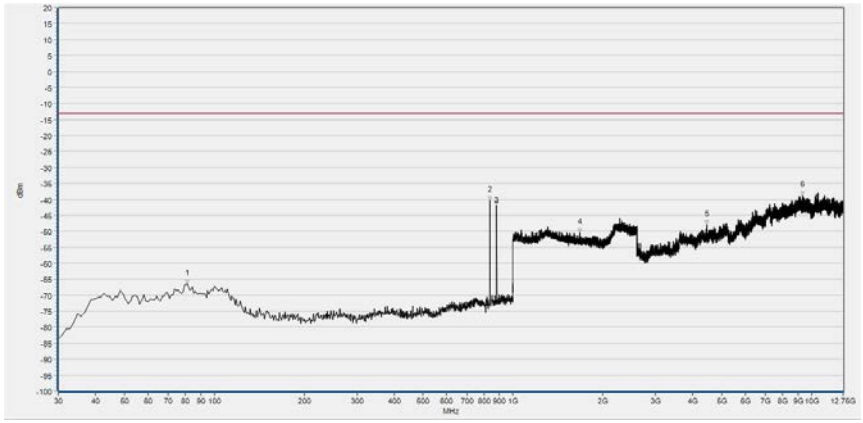


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	95.960	-66.51	-13.00	Horizontal	PASS
2	824.430	-37.77	-13.00	Horizontal	N/A
3	869.050	-42.61	-13.00	Horizontal	N/A
4	1648.579	-47.87	-13.00	Horizontal	PASS
5	3856.983	-50.17	-13.00	Horizontal	PASS
6	9095.336	-39.67	-13.00	Horizontal	PASS

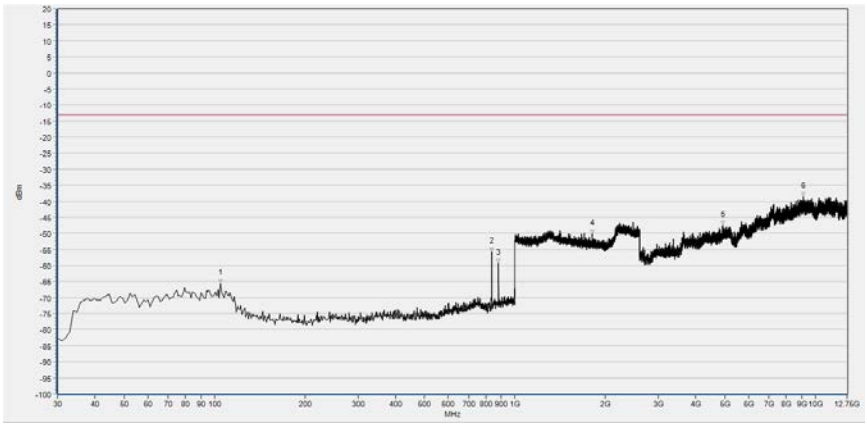


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	86.260	-66.08	-13.00	Vertical	PASS
2	824.430	-55.22	-13.00	Vertical	N/A
3	869.050	-57.54	-13.00	Vertical	N/A
4	1647.939	-49.35	-13.00	Vertical	PASS
5	4357.192	-47.34	-13.00	Vertical	PASS
6	11057.410	-36.68	-13.00	Vertical	PASS

GSM850(EDGE), Mid Channel

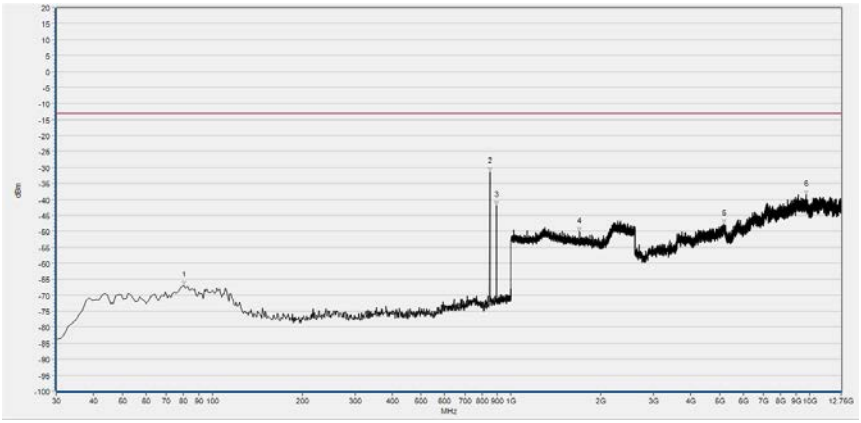


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	81.410	-66.37	-13.00	Horizontal	PASS
2	836.070	-40.38	-13.00	Horizontal	N/A
3	881.660	-41.92	-13.00	Horizontal	N/A
4	1673.549	-50.33	-13.00	Horizontal	PASS
5	4458.711	-48.02	-13.00	Horizontal	PASS
6	9300.218	-38.84	-13.00	Horizontal	PASS

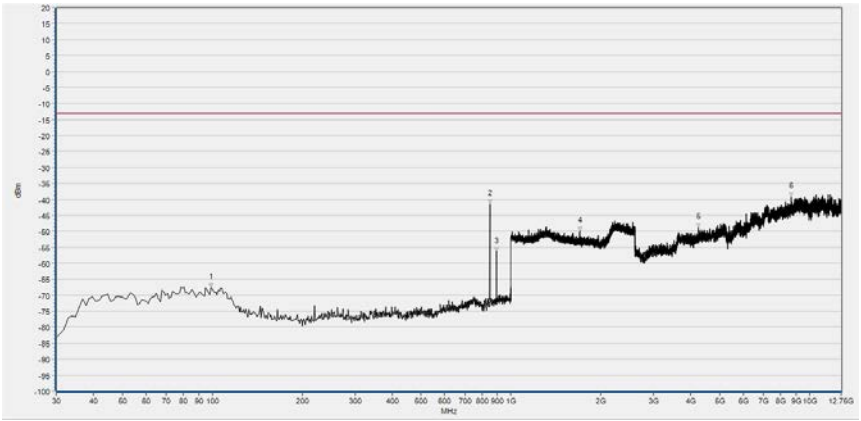


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	104.690	-65.63	-13.00	Vertical	PASS
2	837.040	-55.85	-13.00	Vertical	N/A
3	881.660	-59.42	-13.00	Vertical	N/A
4	1811.845	-50.11	-13.00	Vertical	PASS
5	4909.083	-47.51	-13.00	Vertical	PASS
6	9104.564	-38.60	-13.00	Vertical	PASS

GSM850(EDGE), High Channel

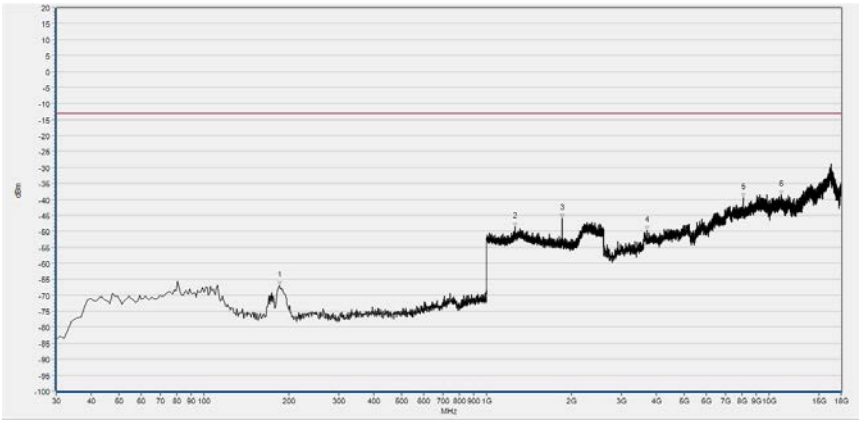


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	80.440	-67.03	-13.00	Horizontal	PASS
2	848.680	-31.45	-13.00	Horizontal	N/A
3	893.300	-41.88	-13.00	Horizontal	N/A
4	1697.239	-50.15	-13.00	Horizontal	PASS
5	5184.106	-47.70	-13.00	Horizontal	PASS
6	9728.442	-38.59	-13.00	Horizontal	PASS

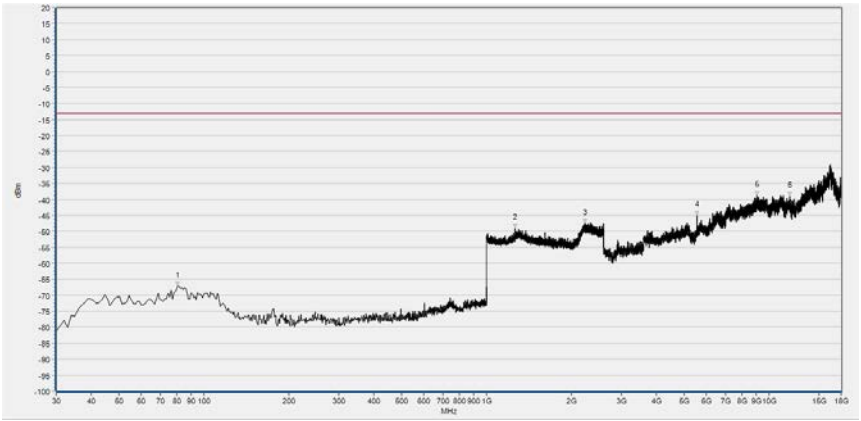


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	98.870	-67.52	-13.00	Vertical	PASS
2	848.680	-41.53	-13.00	Vertical	N/A
3	893.300	-56.35	-13.00	Vertical	N/A
4	1697.879	-49.98	-13.00	Vertical	PASS
5	4250.136	-48.72	-13.00	Vertical	PASS
6	8670.804	-39.23	-13.00	Vertical	PASS

GSM1900(EDGE), Low Channel

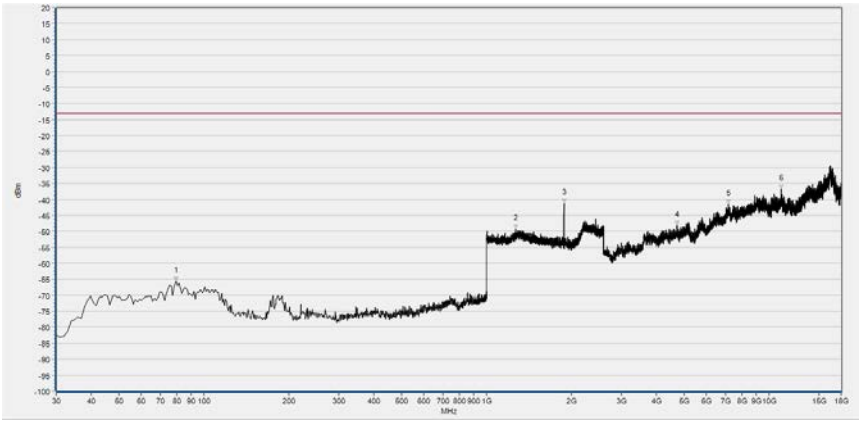


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	185.200	-66.98	-13.00	Horizontal	PASS
2	1261.865	-48.63	-13.00	Horizontal	PASS
3	1850.260	-45.88	-13.00	Horizontal	N/A
4	3700.600	-49.72	-13.00	Horizontal	PASS
5	8091.799	-39.51	-13.00	Horizontal	PASS
6	11051.937	-38.48	-13.00	Horizontal	PASS

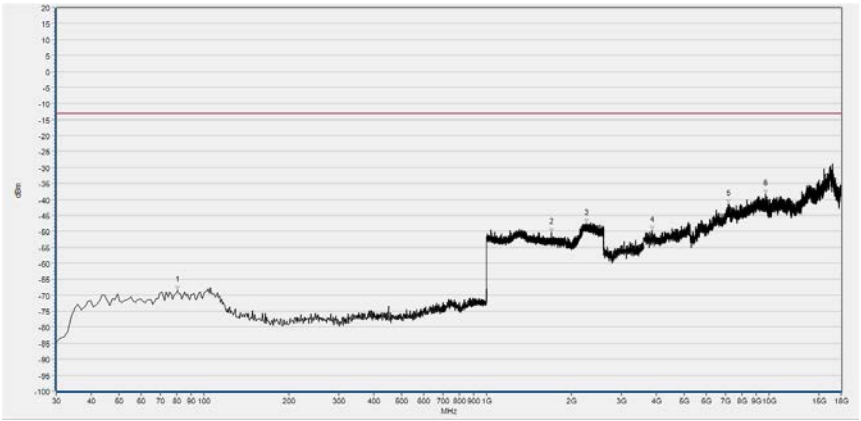


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	80.440	-67.20	-13.00	Vertical	PASS
2	1263.786	-49.16	-13.00	Vertical	PASS
3	2229.932	-47.45	-13.00	Vertical	PASS
4	5551.737	-44.97	-13.00	Vertical	PASS
5	9080.378	-38.74	-13.00	Vertical	PASS
6	11841.680	-38.98	-13.00	Vertical	PASS

GSM1900(EDGE), Mid Channel

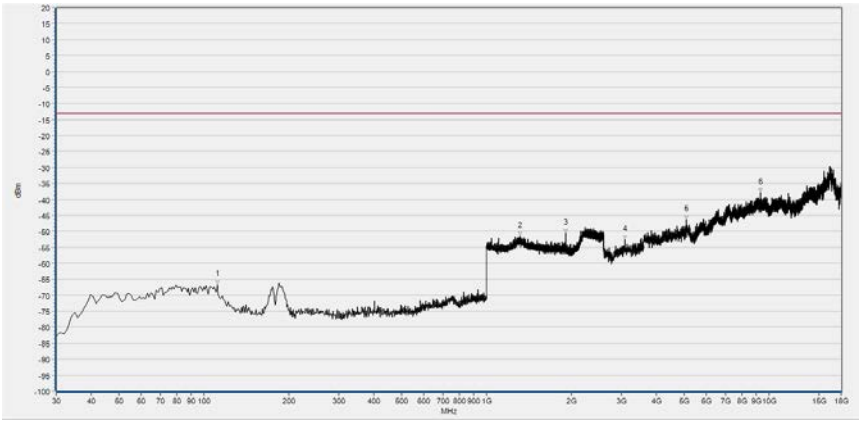


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	79.470	-65.62	-13.00	Horizontal	PASS
2	1271.469	-49.35	-13.00	Horizontal	PASS
3	1879.712	-41.18	-13.00	Horizontal	N/A
4	4722.786	-48.11	-13.00	Horizontal	PASS
5	7190.035	-41.37	-13.00	Horizontal	PASS
6	11043.535	-36.70	-13.00	Horizontal	PASS

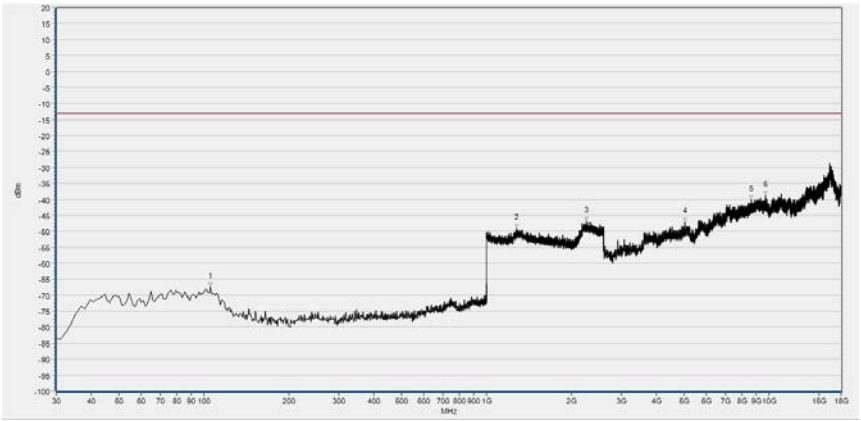


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	80.440	-68.44	-13.00	Vertical	PASS
2	1694.038	-50.38	-13.00	Vertical	PASS
3	2256.823	-47.38	-13.00	Vertical	PASS
4	3863.030	-49.83	-13.00	Vertical	PASS
5	7173.231	-41.43	-13.00	Vertical	PASS
6	9710.493	-38.30	-13.00	Vertical	PASS

GSM1900(EDGD), High Channel

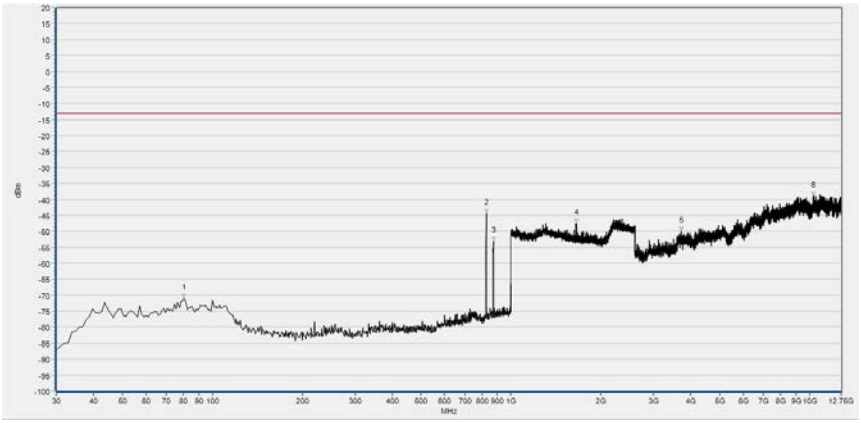


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	111.480	-66.78	-13.00	Horizontal	PASS
2	1316.927	-51.50	-13.00	Horizontal	PASS
3	1909.804	-50.72	-13.00	Horizontal	N/A
4	3090.089	-52.73	-13.00	Horizontal	PASS
5	5089.653	-46.29	-13.00	Horizontal	PASS
6	9312.821	-37.94	-13.00	Horizontal	PASS

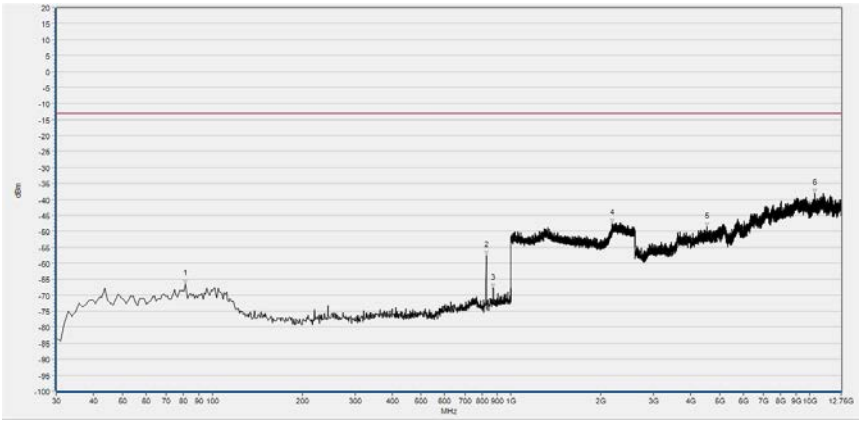


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	105.660	-67.40	-13.00	Vertical	PASS
2	1279.152	-48.98	-13.00	Vertical	PASS
3	2251.701	-46.71	-13.00	Vertical	PASS
4	5022.440	-47.06	-13.00	Vertical	PASS
5	8646.299	-40.18	-13.00	Vertical	PASS
6	9710.493	-38.77	-13.00	Vertical	PASS

WCDMA Band V(WCDMA), Low Channel

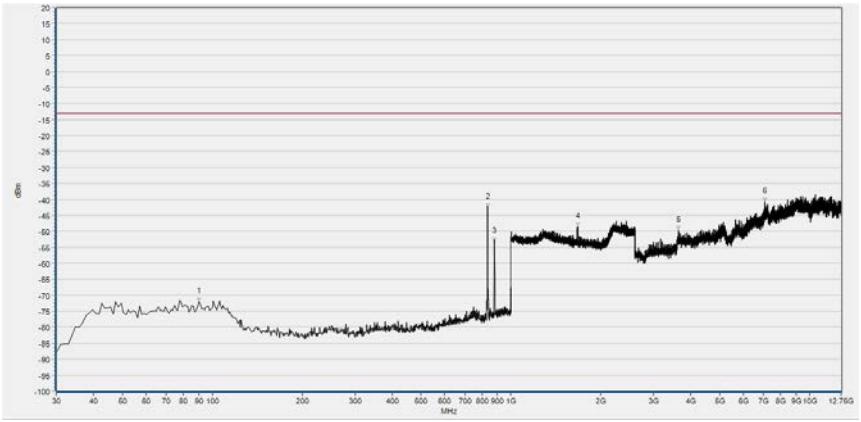


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	80.440	-70.94	-13.00	Horizontal	PASS
2	827.340	-44.41	-13.00	Horizontal	N/A
3	872.930	-53.11	-13.00	Horizontal	N/A
4	1654.982	-47.49	-13.00	Horizontal	PASS
5	3718.549	-49.98	-13.00	Horizontal	PASS
6	10276.641	-39.08	-13.00	Horizontal	PASS

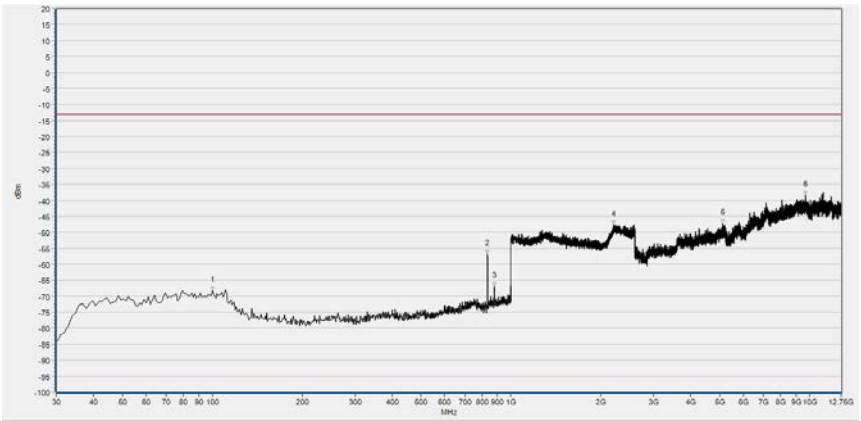


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	81.410	-66.54	-13.00	Vertical	PASS
2	827.340	-57.58	-13.00	Vertical	N/A
3	871.960	-67.80	-13.00	Vertical	N/A
4	2181.273	-47.57	-13.00	Vertical	PASS
5	4527.005	-48.60	-13.00	Vertical	PASS
6	10427.996	-38.13	-13.00	Vertical	PASS

WCDMA Band V(WCDMA), Mid Channel

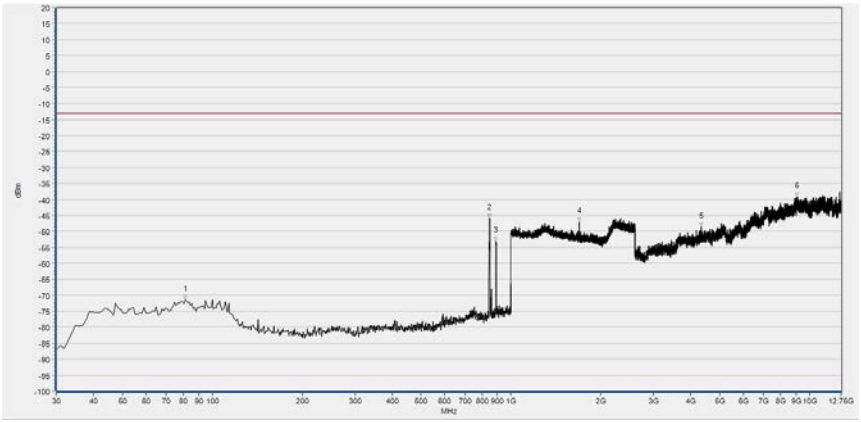


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	90.140	-72.17	-13.00	Horizontal	PASS
2	835.100	-42.55	-13.00	Horizontal	N/A
3	878.750	-53.24	-13.00	Horizontal	N/A
4	1671.629	-48.66	-13.00	Horizontal	PASS
5	3639.180	-49.73	-13.00	Horizontal	PASS
6	7081.578	-40.89	-13.00	Horizontal	PASS

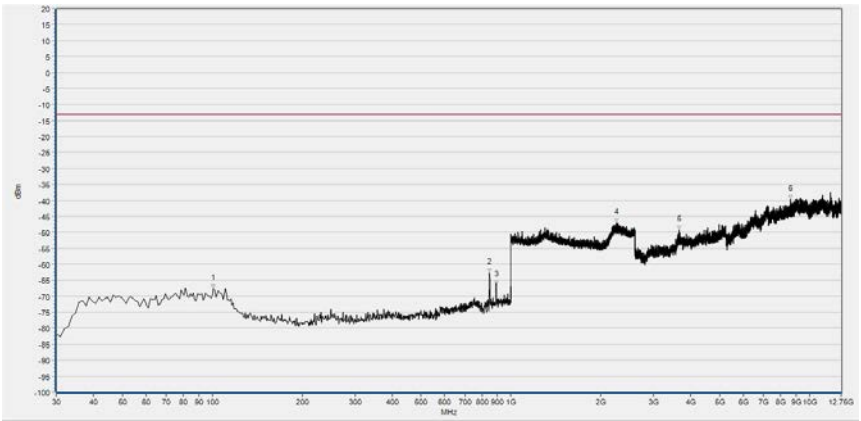


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	99.840	-68.38	-13.00	Vertical	PASS
2	834.130	-56.81	-13.00	Vertical	N/A
3	880.690	-66.89	-13.00	Vertical	N/A
4	2199.840	-47.74	-13.00	Vertical	PASS
5	5123.195	-47.34	-13.00	Vertical	PASS
6	9704.446	-38.33	-13.00	Vertical	PASS

WCDMA Band V(WCDMA), High Channel

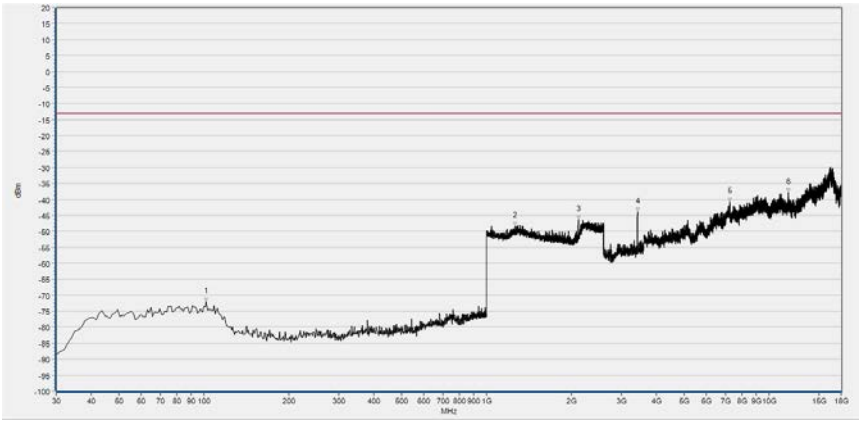


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	81.410	-71.30	-13.00	Horizontal	PASS
2	847.710	-45.84	-13.00	Horizontal	N/A
3	890.390	-53.08	-13.00	Horizontal	N/A
4	1691.477	-47.04	-13.00	Horizontal	PASS
5	4329.505	-48.53	-13.00	Horizontal	PASS
6	9087.952	-39.19	-13.00	Horizontal	PASS

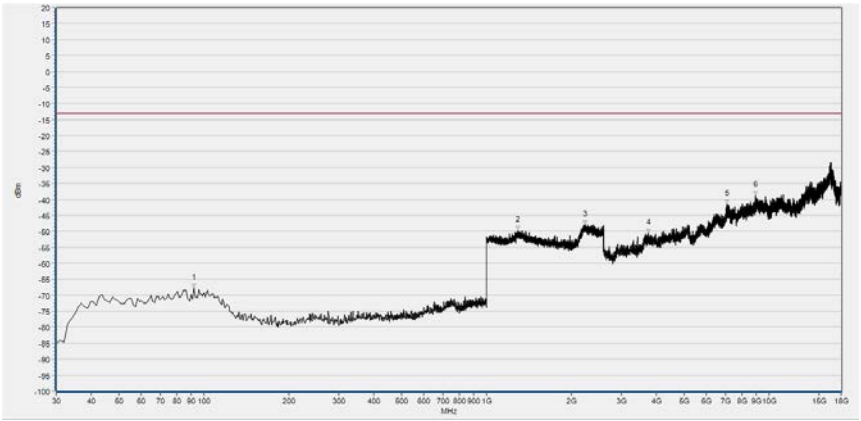


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	100.810	-67.50	-13.00	Vertical	PASS
2	847.710	-62.73	-13.00	Vertical	N/A
3	893.300	-66.45	-13.00	Vertical	N/A
4	2254.262	-47.11	-13.00	Vertical	PASS
5	3652.100	-49.20	-13.00	Vertical	PASS
6	8648.654	-39.64	-13.00	Vertical	PASS

WCDMA Band IV(WCDMA), Low Channel

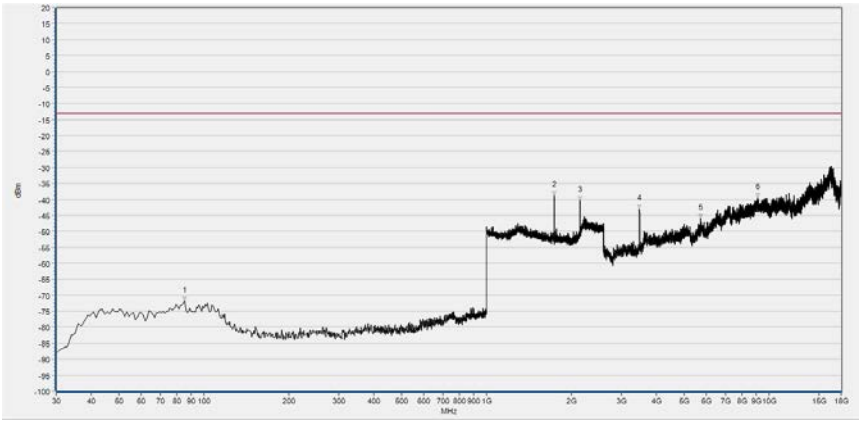


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	101.852	-72.14	-13.00	Horizontal	PASS
2	1260.130	-48.32	-13.00	Horizontal	PASS
3	2111.756	-46.42	-13.00	Horizontal	N/A
4	3426.604	-43.83	-13.00	Horizontal	PASS
5	7251.575	-40.67	-13.00	Horizontal	PASS
6	11720.887	-37.95	-13.00	Horizontal	PASS

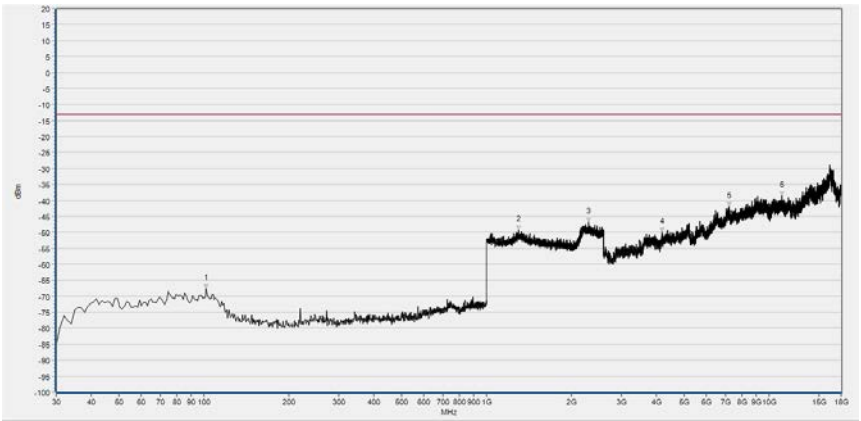


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	92.142	-67.84	-13.00	Vertical	PASS
2	1291.346	-49.83	-13.00	Vertical	PASS
3	2225.413	-47.93	-13.00	Vertical	PASS
4	3734.656	-50.62	-13.00	Vertical	PASS
5	7089.848	-41.45	-13.00	Vertical	PASS
6	8979.230	-38.74	-13.00	Vertical	PASS

WCDMA Band IV(WCDMA), Mid Channel

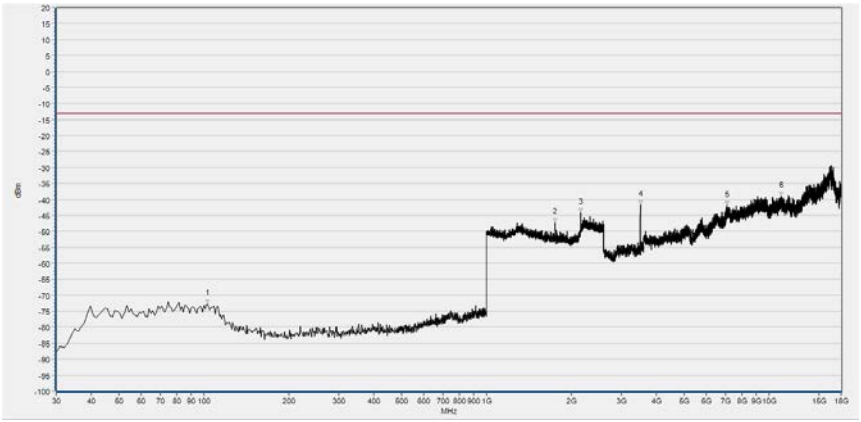


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	85.345	-71.94	-13.00	Horizontal	PASS
2	1738.769	-38.74	-13.00	Horizontal	N/A
3	2138.969	-40.24	-13.00	Horizontal	N/A
4	3477.946	-43.08	-13.00	Horizontal	PASS
5	5731.855	-45.95	-13.00	Horizontal	PASS
6	9099.883	-39.48	-13.00	Horizontal	PASS

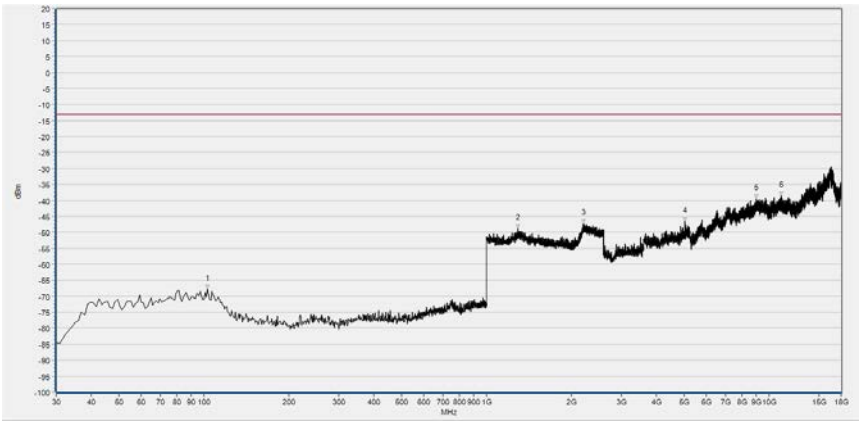


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	101.852	-67.52	-13.00	Vertical	PASS
2	1300.950	-49.32	-13.00	Vertical	PASS
3	2293.447	-46.86	-13.00	Vertical	PASS
4	4191.599	-49.95	-13.00	Vertical	PASS
5	7243.874	-42.01	-13.00	Vertical	PASS
6	11076.546	-38.54	-13.00	Vertical	PASS

WCDMA Band IV(WCDMA), High Channel

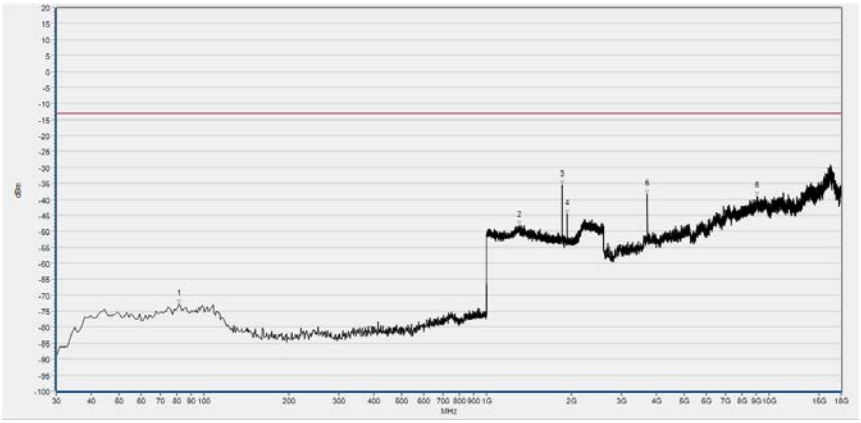


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	102.823	-72.71	-13.00	Horizontal	PASS
2	1751.576	-47.31	-13.00	Horizontal	N/A
3	2152.576	-44.08	-13.00	Horizontal	N/A
4	3508.751	-41.65	-13.00	Horizontal	PASS
5	7112.952	-41.81	-13.00	Horizontal	PASS
6	11061.144	-39.10	-13.00	Horizontal	PASS

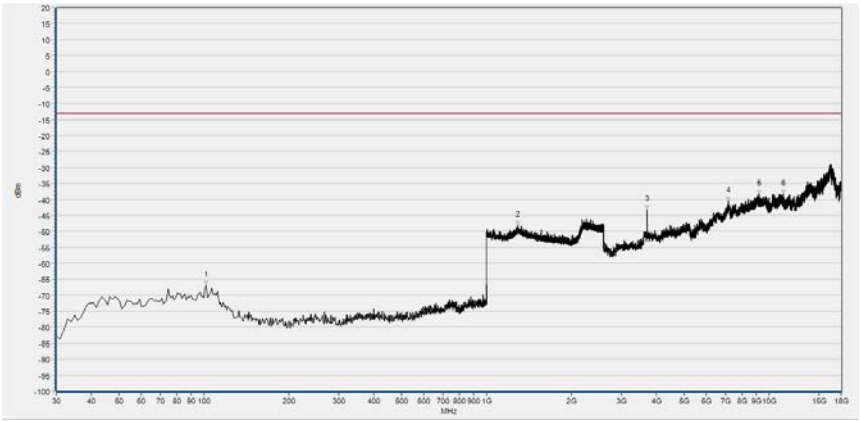


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	102.823	-67.84	-13.00	Vertical	PASS
2	1288.944	-48.81	-13.00	Vertical	PASS
3	2199.800	-47.15	-13.00	Vertical	PASS
4	5049.008	-46.70	-13.00	Vertical	PASS
5	9035.706	-39.52	-13.00	Vertical	PASS
6	11043.174	-38.64	-13.00	Vertical	PASS

WCDMA Band II(WCDMA), Low Channel

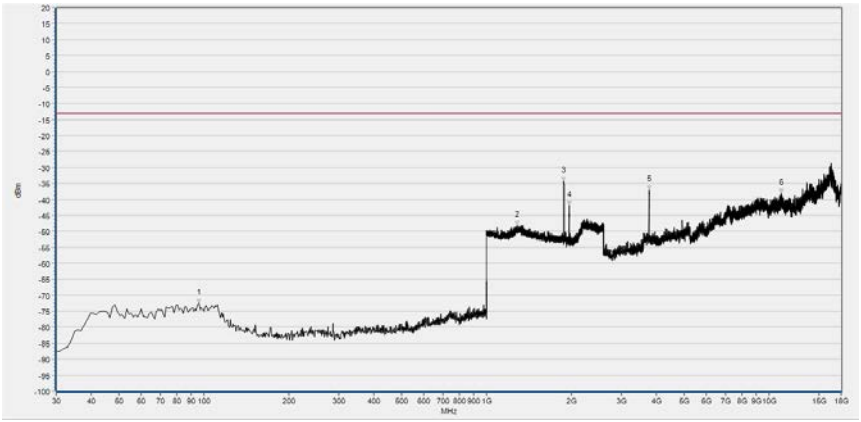


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	81.410	-72.76	-13.00	Horizontal	PASS
2	1309.244	-48.07	-13.00	Horizontal	PASS
3	1851.541	-35.36	-13.00	Horizontal	N/A
4	1932.853	-44.58	-13.00	Horizontal	N/A
5	3706.201	-38.32	-13.00	Horizontal	PASS
6	9088.780	-39.06	-13.00	Horizontal	PASS

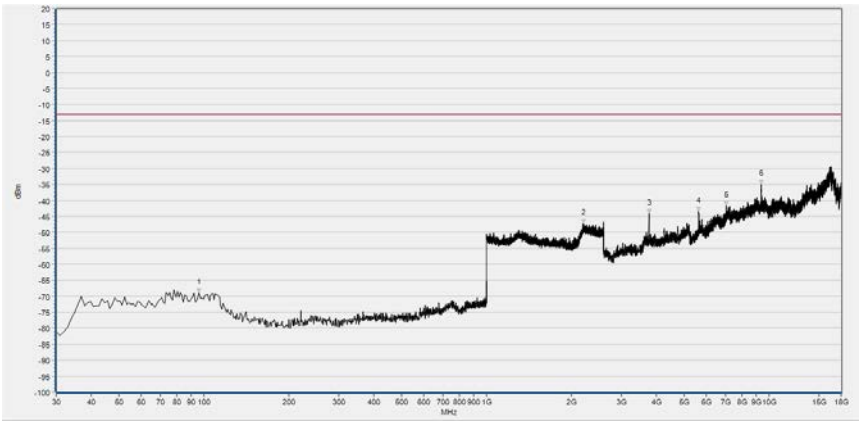


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	101.780	-67.02	-13.00	Vertical	PASS
2	1291.317	-48.27	-13.00	Vertical	PASS
3	3703.401	-43.13	-13.00	Vertical	PASS
4	7184.434	-40.63	-13.00	Vertical	PASS
5	9209.202	-38.31	-13.00	Vertical	PASS
6	11211.566	-38.34	-13.00	Vertical	PASS

WCDMA Band II(WCDMA), Mid Channel

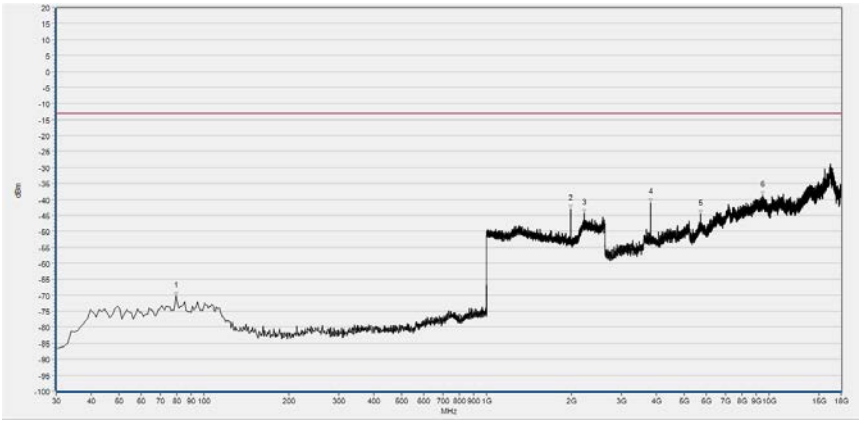


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	95.960	-72.53	-13.00	Horizontal	PASS
2	1282.353	-48.21	-13.00	Horizontal	PASS
3	1878.431	-34.31	-13.00	Horizontal	N/A
4	1960.384	-41.84	-13.00	Horizontal	N/A
5	3762.211	-36.95	-13.00	Horizontal	PASS
6	11063.139	-38.21	-13.00	Horizontal	PASS

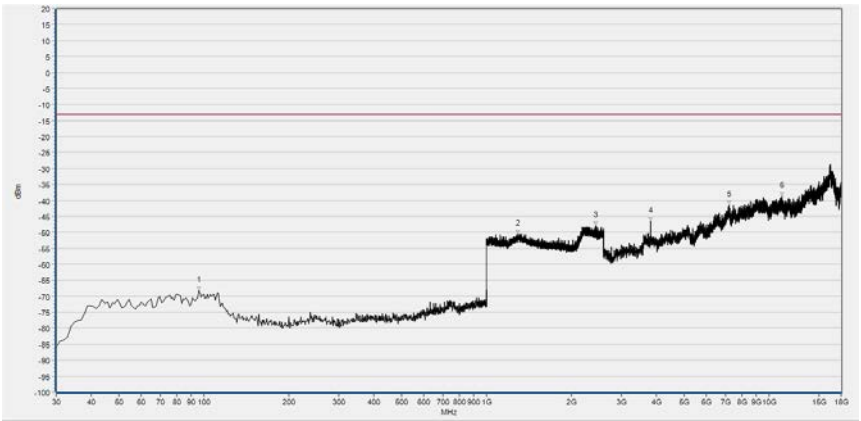


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	95.960	-68.91	-13.00	Vertical	PASS
2	2212.005	-47.20	-13.00	Vertical	PASS
3	3756.610	-44.17	-13.00	Vertical	PASS
4	5635.752	-43.41	-13.00	Vertical	PASS
5	7072.413	-41.75	-13.00	Vertical	PASS
6	9405.237	-34.87	-13.00	Vertical	PASS

WCDMA Band II(WCDMA), High Channel



No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	79.470	-70.32	-13.00	Horizontal	PASS
2	1986.635	-43.11	-13.00	Horizontal	N/A
3	2219.688	-44.43	-13.00	Horizontal	PASS
4	3818.221	-40.98	-13.00	Horizontal	PASS
5	5719.767	-44.69	-13.00	Horizontal	PASS
6	9500.455	-38.72	-13.00	Horizontal	PASS



No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	95.960	-68.28	-13.00	Vertical	PASS
2	1294.518	-50.58	-13.00	Vertical	PASS
3	2435.454	-48.01	-13.00	Vertical	PASS
4	3812.620	-46.67	-13.00	Vertical	PASS
5	7243.244	-41.46	-13.00	Vertical	PASS
6	11085.543	-38.81	-13.00	Vertical	PASS

Annex A Test Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for test performed on the EUT as specified in CISPR 16-1-2:

Test items	Uncertainty
Output Power	±2.22dB
Bandwidth	±5%
Conducted Spurious Emission	±2.77 dB
Radiated Emission	±2.95dB

This uncertainty represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2

Annex B Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Laboratory Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. Facilities and Accreditations

All measurement facilities used to collect the measurement data are located at FL.3, Building A, FeiYang Science Park, Block 67, BaoAn District, Shenzhen, 518101 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.10-2013 and CISPR Publication 22; the FCC designation number is CN1192, the test firm registration number is 226174.

4. Test Equipments Utilized

4.1 Conducted Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
Power Splitter	NW521	1506A	Weinschel	2020.04.15	2021.04.14
Attenuator 1	(N/A.)	10dB	Resnet	2020.04.15	2021.04.14
Attenuator 2	(N/A.)	3dB	Resnet	2020.04.15	2021.04.14
EXA Signal Analzyer	MY51511149	N9020A	Agilent	2020.07.27	2021.07.26
System Simulator	6200995016	MT8820C	Anritsu	2020.01.13	2021.01.12
RF cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
Coaxial cable	CB02	RF02	Morlab	N/A	N/A
SMA connector	CN01	RF03	HUBER-SUHNER	N/A	N/A
Temperature Chamber	(N/A)	HUT705P	CHONGQING HANBA EXPERIMENTAL EQUIPMENT CO.,LTD	2020.03.25	2021.03.24
Computer	T430i	Think Pad	Lenovo	N/A	N/A

4.2 Radiated Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
System Simulator	152038	CMW500	R&S	2020.01.13	2021.01.12
Receiver	MY54130016	N9038A	Agilent	2020.07.28	2021.07.27
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2019.05.24	2022.05.23
Test Antenna - Horn	9170C-531	BBHA9170	Schwarzbeck	2019.07.26	2022.07.25
Test Antenna - Horn	01774	BBHA 9120D	Schwarzbeck	2019.05.24	2022.05.23
Coaxial cable (N male) (9kHz-30MHz)	CB04	EMC04	Morlab	N/A	N/A
Coaxial cable (N male) (30MHz-26GHz)	CB02	EMC02	Morlab	N/A	N/A
Coaxial cable (N male) (30MHz-26GHz)	CB03	EMC03	Morlab	N/A	N/A
1-18GHz pre-Amplifier	MA02	TS-PR18	Rohde& Schwarz	2020.07.28	2021.07.27
18-26.5GHz pre-Amplifier	MA03	TS-PR18	Rohde& Schwarz	2020.07.28	2021.07.27
Notch Filter	N/A	WRCG-GSM 850	Wainwright	2020.07.28	2021.07.27
Notch Filter	N/A	WRCG-GSM 1900	Wainwright	2020.07.28	2021.07.27
Notch Filter	N/A	WRCGV-W Band V	Wainwright	2020.07.28	2021.07.27
Notch Filter	N/A	WRCGV-W Band II	Wainwright	2020.07.28	2021.07.27
Notch Filter	N/A	WRCGV-W Band IV	Wainwright	2020.07.28	2021.07.27
Anechoic Chamber	N/A	9m*6m*6m	CRT	2019.07.13	2022.07.12

END OF REPORT