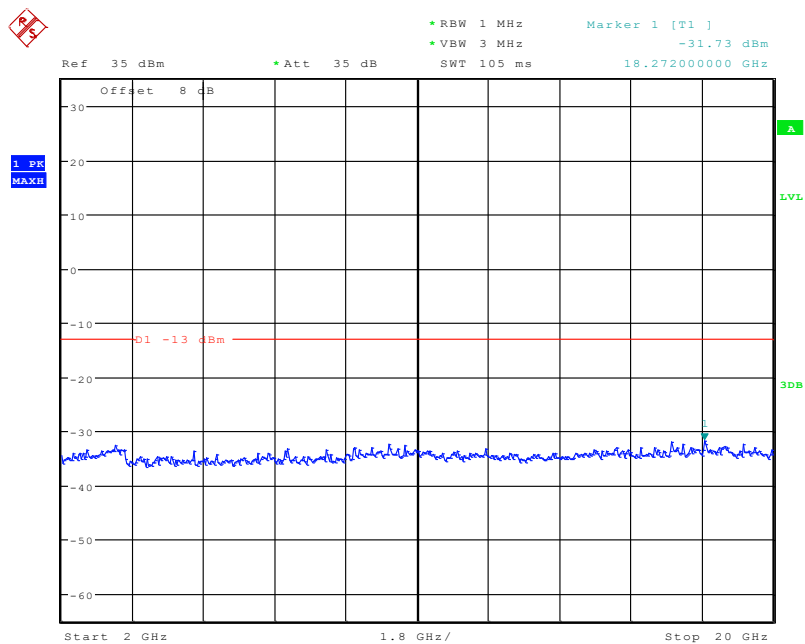
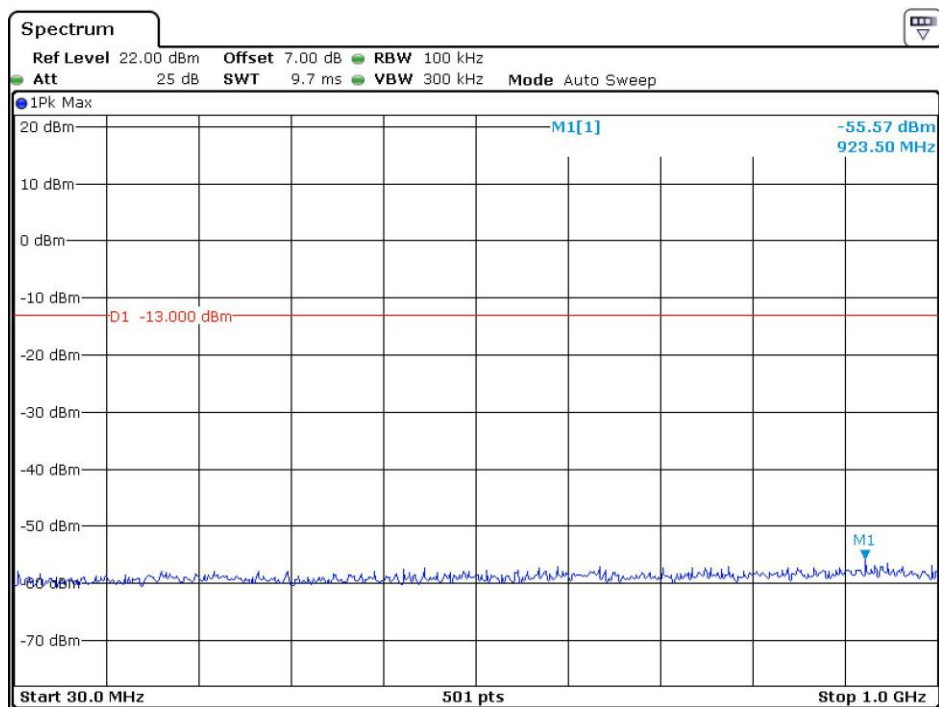


2 GHz – 20 GHz (GSM Mode)



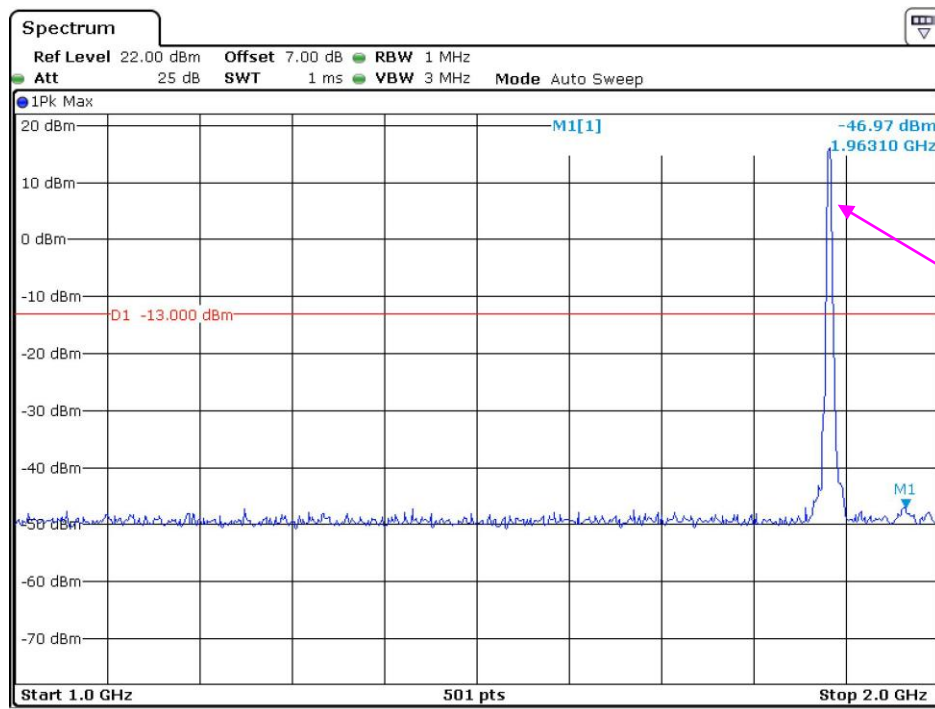
Date: 25.MAR.2022 11:43:21

30 MHz – 1 GHz (WCDMA Mode)



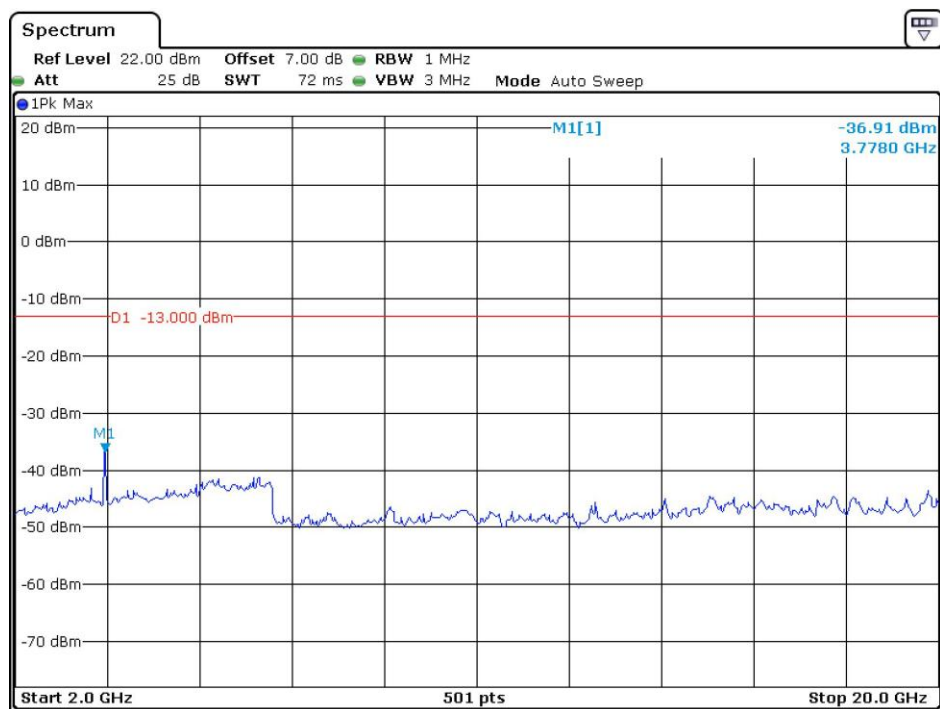
Date: 12.MAR.2022 19:29:13

1 GHz – 2GHz (WCDMA Mode)

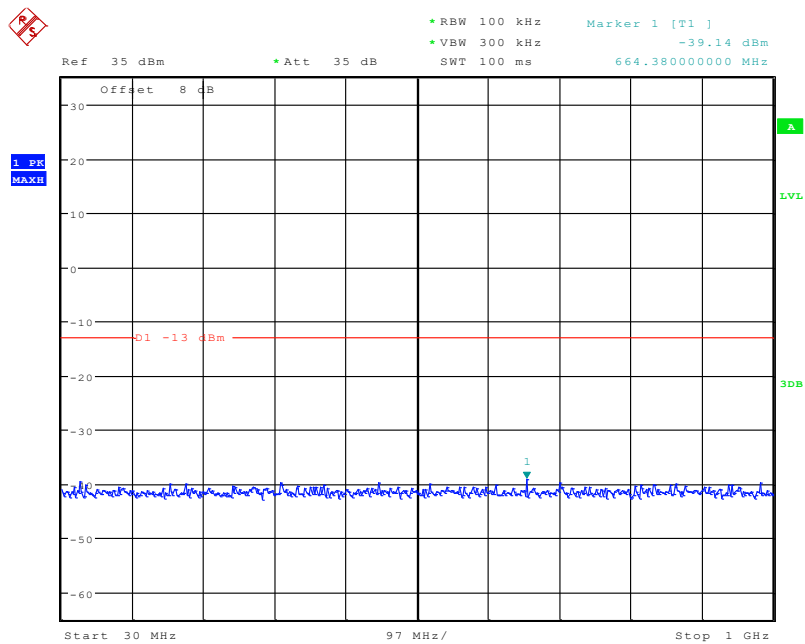


Date: 12.MAR.2022 19:24:39

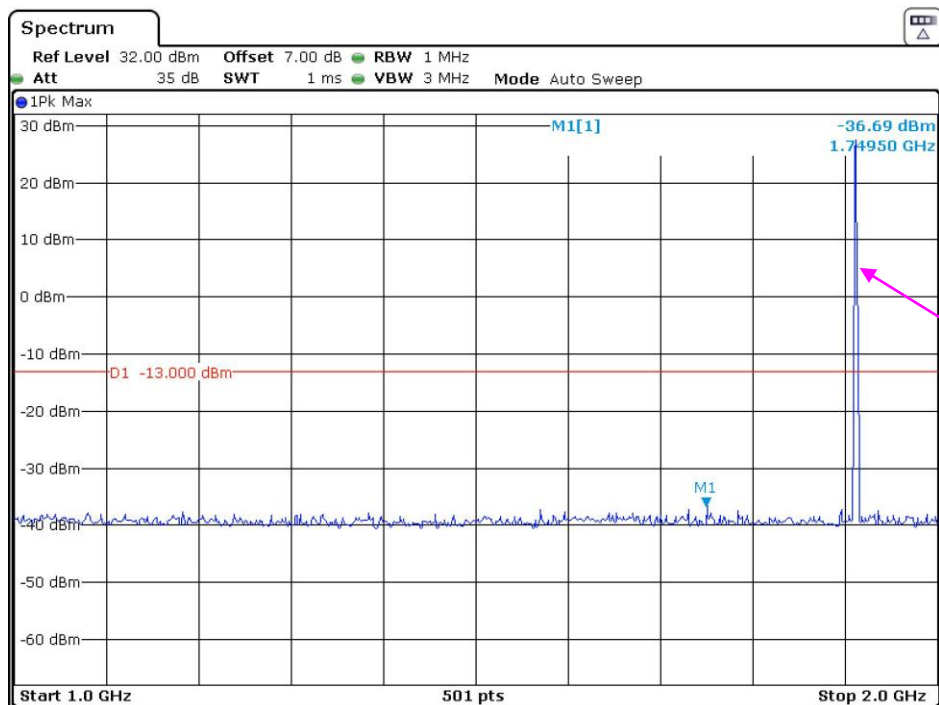
2 GHz – 20GHz (WCDMA Mode)



Date: 12.MAR.2022 19:20:05

High Channel:**30 MHz – 1 GHz (GSM Mode)**

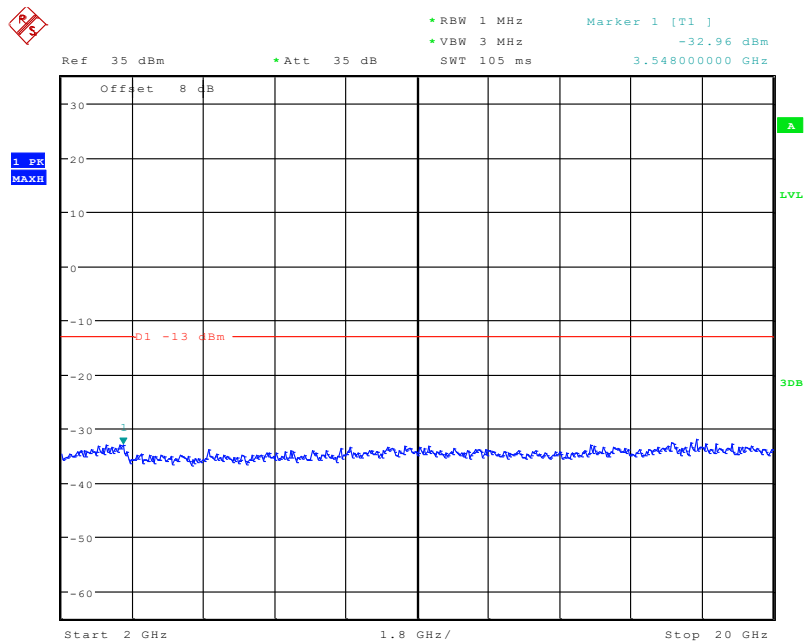
Date: 25.MAR.2022 11:38:54

1 GHz – 2 GHz (GSM Mode)

Date: 30.MAR.2022 11:50:33

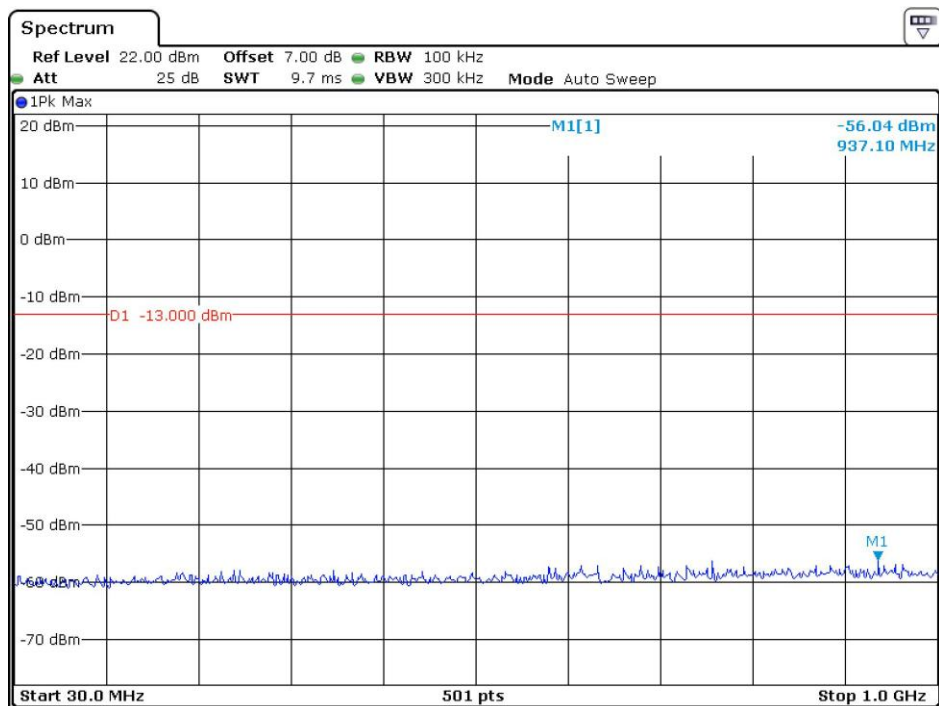
Fundamental test

2 GHz– 20 GHz (GSM Mode)



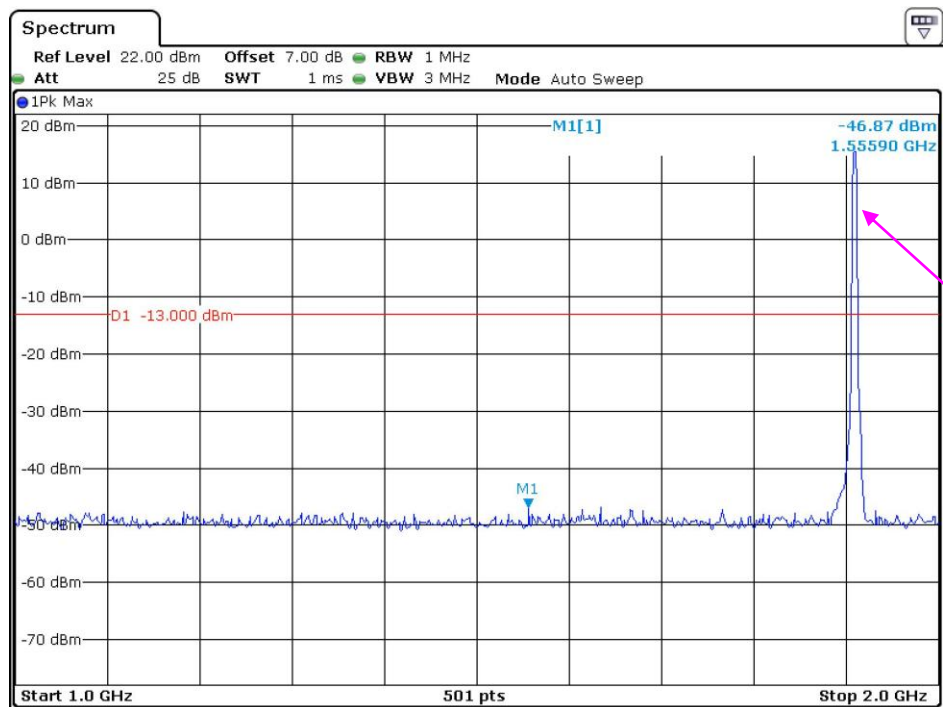
Date: 25.MAR.2022 11:42:55

30 MHz – 1 GHz (WCDMA Mode)



Date: 12.MAR.2022 19:29:01

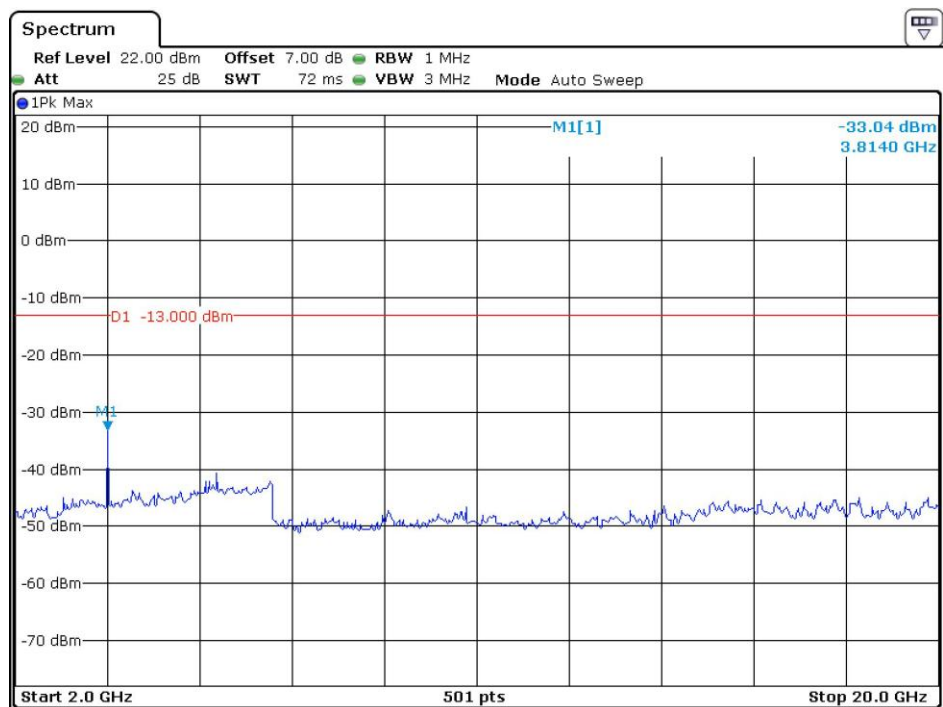
1 GHz – 2 GHz (WCDMA Mode)



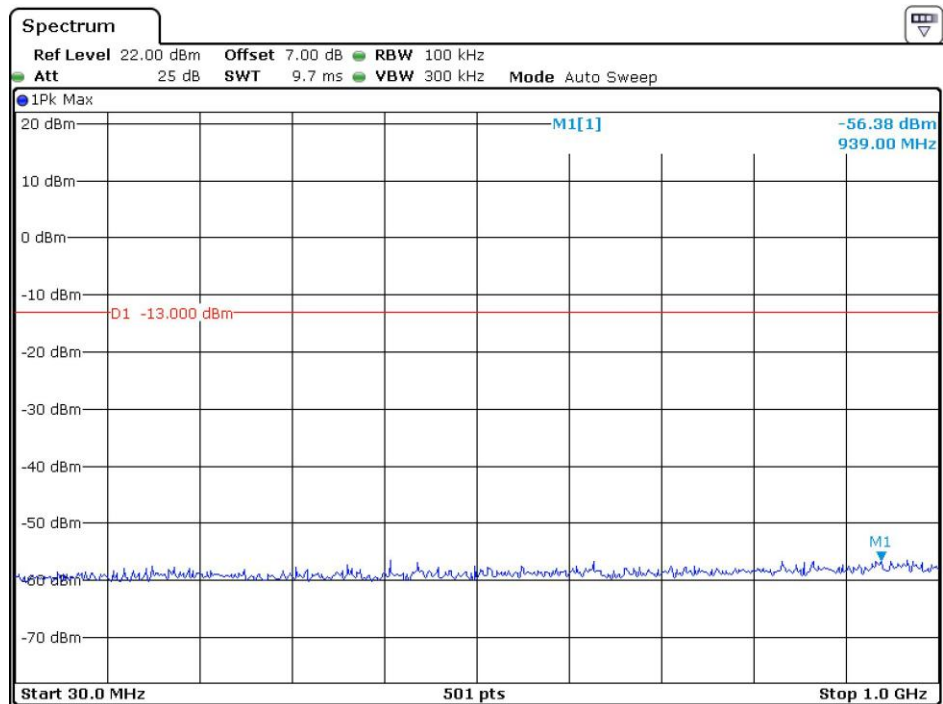
Date: 12.MAR.2022 19:25:37

Fundamental test

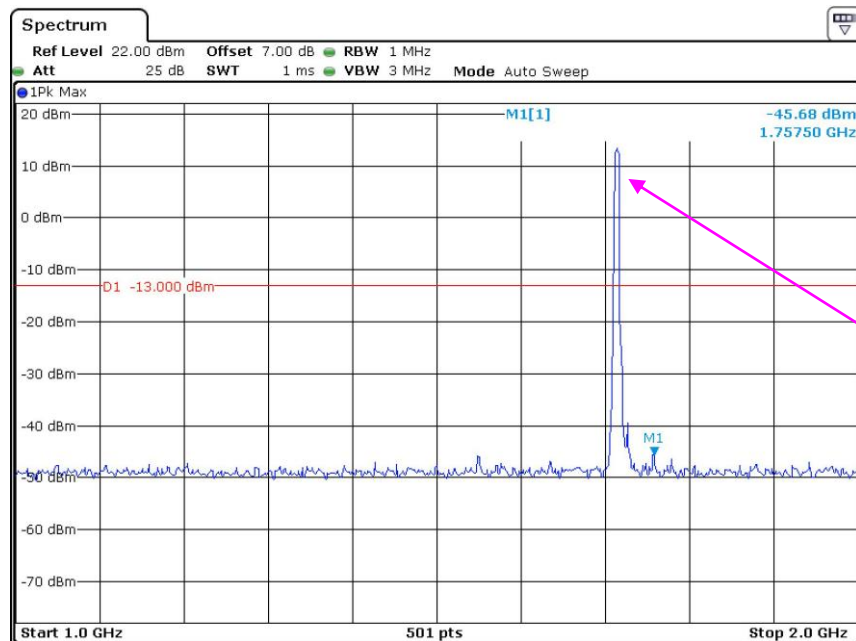
2GHz – 20 GHz (WCDMA Mode)



Date: 12.MAR.2022 19:21:03

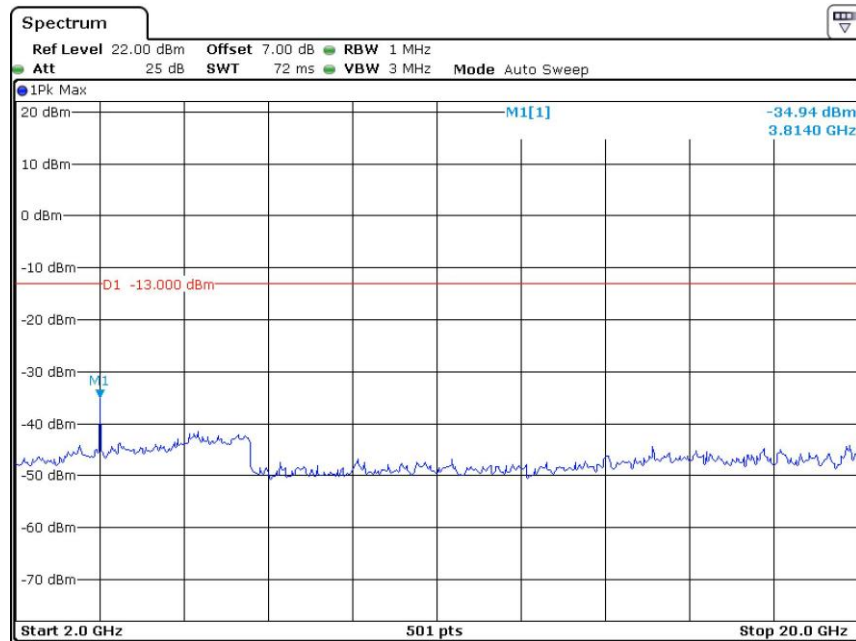
AWS Band (Part 27)
Low Channel:**30 MHz – 1 GHz (WCDMA Mode)**

Date: 12.MAR.2022 19:28:12

1 GHz – 2 GHz (WCDMA Mode)

Date: 12.MAR.2022 19:27:32

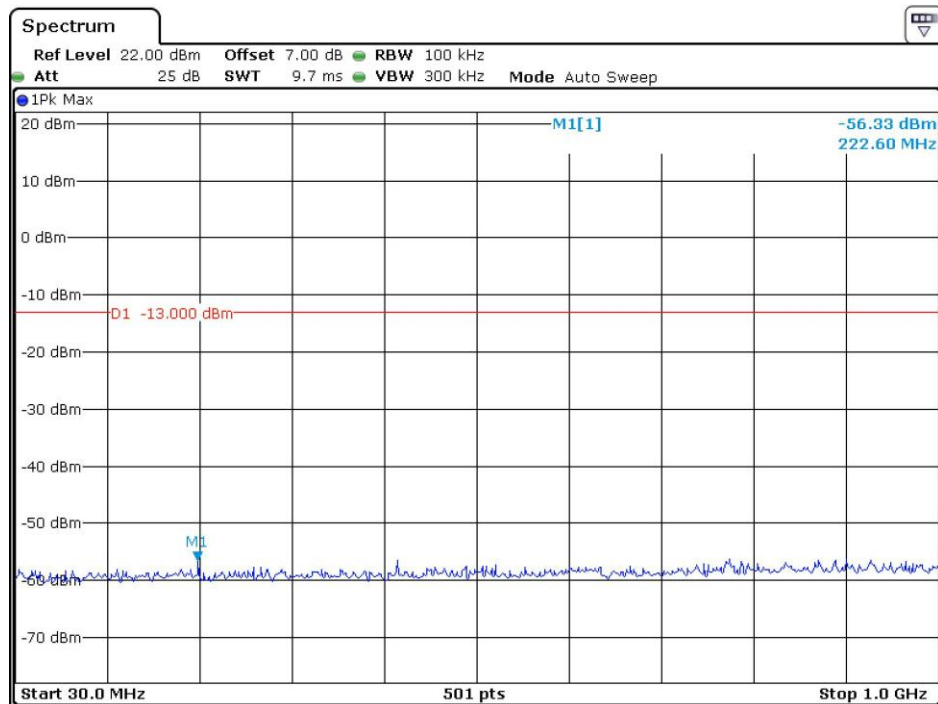
2 GHz – 20 GHz (WCDMA Mode)



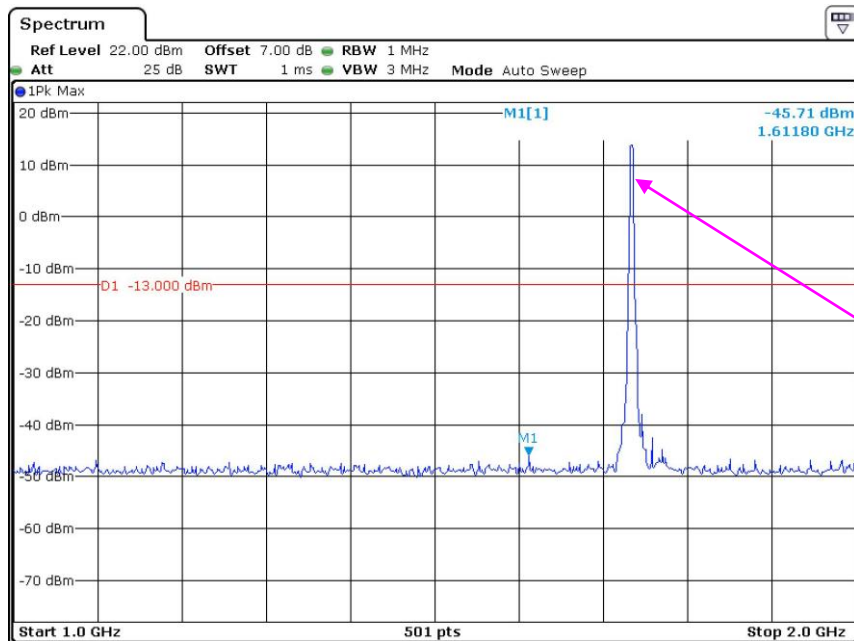
Date: 12.MAR.2022 19:21:22

Middle Channel

30 MHz – 1 GHz (WCDMA Mode)

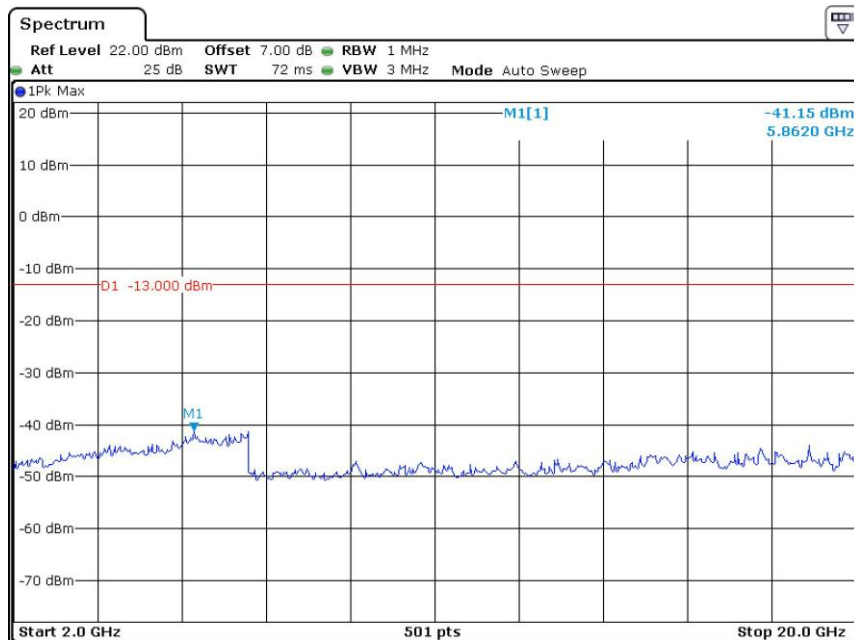


Date: 12.MAR.2022 19:28:27

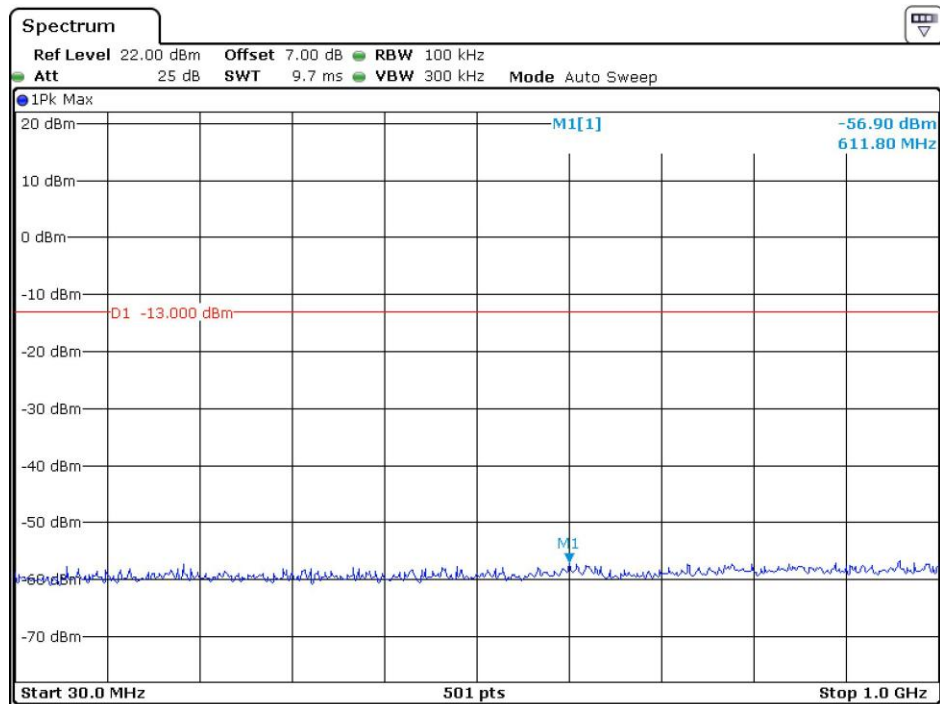
1 GHz – 2 GHz (WCDMA Mode)

Date: 12.MAR.2022 19:27:02

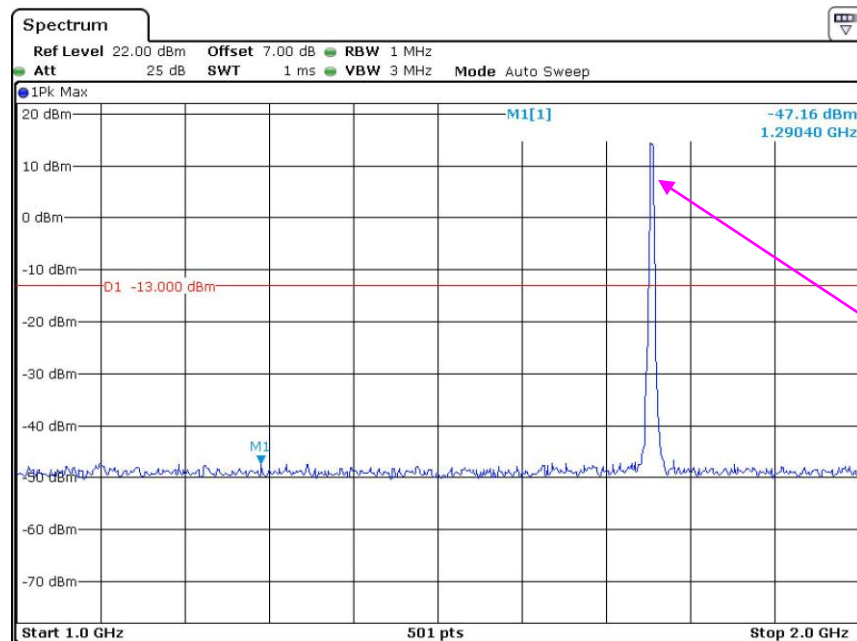
Fundamental test

2 GHz – 20 GHz (WCDMA Mode)

Date: 12.MAR.2022 19:21:37

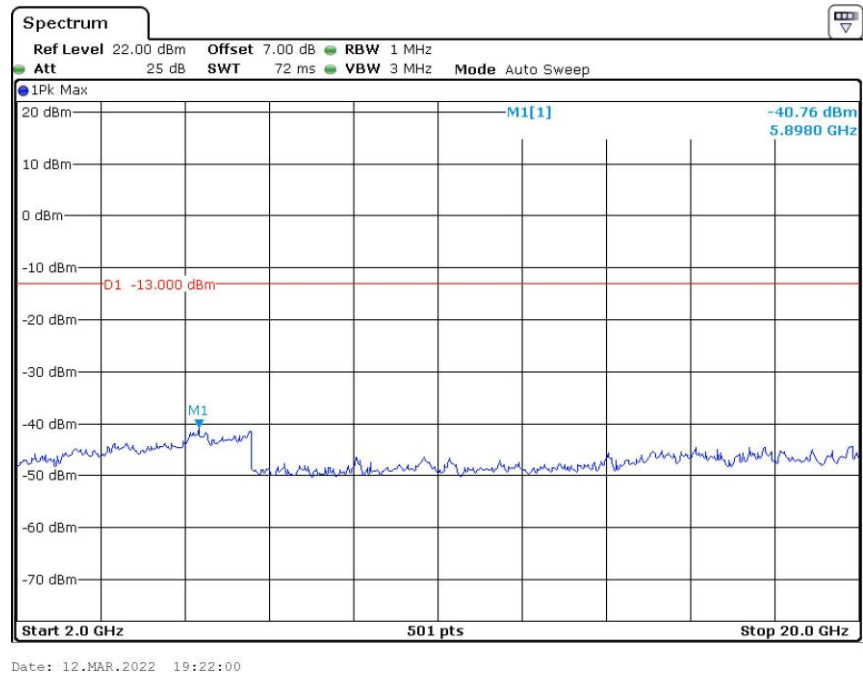
High Channel:**30 MHz – 1 GHz (WCDMA Mode)**

Date: 12.MAR.2022 19:28:40

1 GHz – 2 GHz (WCDMA Mode)

Date: 12.MAR.2022 19:26:07

2 GHz – 20 GHz (WCDMA Mode)



The test plots of LTE band please refer to the Appendix B.

FCC § 2.1053; § 22.917 (a); § 24.238 (a); § 27.53- SPURIOUS RADIATED EMISSIONS

Applicable Standard

FCC § 2.1053, § 22.917(a) & § 24.238(a) & § 27.53.

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the receiving antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Test Data

Environmental Conditions

Temperature:	25.4~27.2 °C
Relative Humidity:	51~54 %
ATM Pressure:	101.0 kPa

The testing was performed by Chao Mo from 2022-03-09 to 2022-03-11.

Test mode: Transmitting (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

The worst case is as below:

30MHz-10GHz:**Cellular Band (Part 22H)**

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
GSM850								
Low Channel								
288.51	-69.46	199	1.7	H	2.0	-67.46	-13	-54.46
288.51	-68.53	91	1.2	V	1.9	-66.63	-13	-53.63
1648.4	-55.50	284	1.3	H	3.5	-52.00	-13	-39.00
1648.4	-55.80	209	1.3	V	3.1	-52.70	-13	-39.70
2472.6	-43.90	87	2.0	H	6.6	-37.30	-13	-24.30
2472.6	-43.00	48	2.1	V	5.8	-37.20	-13	-24.20
3296.8	-47.60	134	1.2	H	6.4	-41.20	-13	-28.20
3296.8	-49.20	185	1.4	V	5.7	-43.50	-13	-30.50
Middle Channel								
288.51	-69.14	172	1.8	H	2.0	-67.14	-13	-54.14
288.51	-68.78	330	2.2	V	1.9	-66.88	-13	-53.88
1673.2	-51.70	7	1.5	H	3.8	-47.90	-13	-34.90
1673.2	-51.50	136	2.2	V	3.1	-48.40	-13	-35.40
2509.8	-51.40	122	1.6	H	6.2	-45.20	-13	-32.20
2509.8	-47.60	29	1.1	V	5.6	-42.00	-13	-29.00
3346.4	-45.90	249	1.5	H	6.6	-39.30	-13	-26.30
3346.4	-47.80	23	1.6	V	5.4	-42.40	-13	-29.40
High Channel								
288.51	-70.26	150	1.3	H	2.0	-68.26	-13	-55.26
288.51	-67.37	194	1.5	V	1.9	-65.47	-13	-52.47
1697.6	-51.40	96	1.7	H	4.1	-47.30	-13	-34.30
1697.6	-48.20	278	2.0	V	3.1	-45.10	-13	-32.10
2546.4	-50.70	178	1.6	H	6.1	-44.60	-13	-31.60
2546.4	-49.50	232	1.7	V	5.8	-43.70	-13	-30.70
3395.2	-46.30	30	1.1	H	6.2	-40.10	-13	-27.10
3395.2	-48.30	220	1.1	V	5.4	-42.90	-13	-29.90

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 5								
Low Channel								
288.51	-69.60	185	1.5	H	2.0	-67.60	-13	-54.60
288.51	-67.83	28	2.1	V	1.9	-65.93	-13	-52.93
1652.8	-54.70	158	1.6	H	3.5	-51.20	-13	-38.20
1652.8	-54.30	160	2.1	V	3.1	-51.20	-13	-38.20
2479.2	-48.10	89	1.6	H	6.5	-41.60	-13	-28.60
2479.2	-44.80	260	2.1	V	5.7	-39.10	-13	-26.10
3305.6	-51.90	101	1.3	H	6.4	-45.50	-13	-32.50
3305.6	-50.90	254	1.4	V	5.7	-45.20	-13	-32.20
Middle Channel								
288.51	-70.29	310	1.1	H	2.0	-68.29	-13	-55.29
288.51	-68.45	192	1.9	V	1.9	-66.55	-13	-53.55
1673.2	-49.60	219	1.4	H	3.8	-45.80	-13	-32.80
1673.2	-50.50	180	1.2	V	3.1	-47.40	-13	-34.40
2509.8	-51.90	202	2.0	H	6.2	-45.70	-13	-32.70
2509.8	-51.40	178	1.5	V	5.6	-45.80	-13	-32.80
3346.4	-52.00	25	2.0	H	6.6	-45.40	-13	-32.40
3346.4	-50.30	301	1.6	V	5.4	-44.90	-13	-31.90
High Channel								
288.51	-70.89	56	1.6	H	2.0	-68.89	-13	-55.89
288.51	-67.83	203	1.9	V	1.9	-65.93	-13	-52.93
1693.2	-56.30	287	2.0	H	4.0	-52.30	-13	-39.30
1693.2	-55.30	8	2.0	V	3.1	-52.20	-13	-39.20
2539.8	-49.00	291	1.1	H	6.1	-42.90	-13	-29.90
2539.8	-42.50	114	1.7	V	5.7	-36.80	-13	-23.80
3386.4	-51.80	45	1.0	H	6.3	-45.50	-13	-32.50
3386.4	-50.40	22	1.8	V	5.4	-45.00	-13	-32.00

30MHz-20GHz:**PCS Band (Part 24E)**

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
GSM 1900								
Low Channel								
288.51	-69.13	205	1.5	H	2.0	-67.13	-13	-54.13
288.51	-67.63	146	1.3	V	1.9	-65.73	-13	-52.73
3700.4	-52.80	103	1.5	H	8.1	-44.70	-13	-31.70
3700.4	-53.10	227	2.0	V	7.6	-45.50	-13	-32.50
5550.6	-48.80	341	1.7	H	9.6	-39.20	-13	-26.20
5550.6	-46.90	149	1.5	V	9.1	-37.80	-13	-24.80
Middle Channel								
288.51	-70.72	335	1.6	H	2.0	-68.72	-13	-55.72
288.51	-68.66	330	1.2	V	1.9	-66.76	-13	-53.76
3760.0	-53.20	59	1.3	H	8.8	-44.40	-13	-31.40
3760.0	-53.50	227	2.0	V	8.0	-45.50	-13	-32.50
5640.0	-50.10	138	2.0	H	10.1	-40.00	-13	-27.00
5640.0	-48.60	334	1.6	V	9.4	-39.20	-13	-26.20
High Channel								
288.51	-69.58	22	1.9	H	2.0	-67.58	-13	-54.58
288.51	-68.64	216	2.1	V	1.9	-66.74	-13	-53.74
3819.6	-49.80	39	1.4	H	8.7	-41.10	-13	-28.10
3819.6	-53.00	152	2.2	V	8.0	-45.00	-13	-32.00
5729.4	-51.80	265	1.1	H	10.6	-41.20	-13	-28.20
5729.4	-49.90	315	1.7	V	10.2	-39.70	-13	-26.70

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 2								
Low Channel								
288.51	-69.09	243	1.0	H	2.0	-67.09	-13	-54.09
288.51	-68.49	14	1.6	V	1.9	-66.59	-13	-53.59
3704.8	-51.50	142	1.8	H	8.2	-43.30	-13	-30.30
3704.8	-52.20	143	1.3	V	7.6	-44.60	-13	-31.60
5557.2	-49.90	72	1.0	H	9.7	-40.20	-13	-27.20
5557.2	-48.60	244	1.3	V	9.1	-39.50	-13	-26.50
Middle Channel								
288.51	-70.86	153	1.0	H	2.0	-68.86	-13	-55.86
288.51	-67.82	122	1.5	V	1.9	-65.92	-13	-52.92
3760.0	-51.00	114	1.1	H	8.8	-42.20	-13	-29.20
3760.0	-52.00	54	1.2	V	8.0	-44.00	-13	-31.00
5640.0	-52.80	230	1.3	H	10.1	-42.70	-13	-29.70
5640.0	-50.90	183	1.8	V	9.4	-41.50	-13	-28.50
High Channel								
288.51	-69.44	358	1.8	H	2.0	-67.44	-13	-54.44
288.51	-67.07	32	1.3	V	1.9	-65.17	-13	-52.17
3815.2	-50.00	351	1.9	H	8.7	-41.30	-13	-28.30
3815.2	-47.90	216	1.0	V	7.9	-40.00	-13	-27.00
5722.8	-54.20	204	1.7	H	10.6	-43.60	-13	-30.60
5722.8	-52.20	95	1.6	V	10.1	-42.10	-13	-29.10

30MHz-20GHz:**AWS Band (Part 27E)**

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 4								
Low Channel								
288.51	-70.23	206	1.9	H	2.0	-68.23	-13	-55.23
288.51	-68.78	297	1.5	V	1.9	-66.88	-13	-53.88
3424.8	-50.60	180	1.2	H	6.4	-44.20	-13	-31.20
3424.8	-50.60	328	1.7	V	5.7	-44.90	-13	-31.90
5137.2	-56.70	243	1.9	H	11.3	-45.40	-13	-32.40
5137.2	-56.40	127	2.1	V	10.8	-45.60	-13	-32.60
Middle Channel								
288.51	-70.22	243	1.8	H	2.0	-68.22	-13	-55.22
288.51	-68.61	180	1.0	V	1.9	-66.71	-13	-53.71
3465.2	-48.00	351	2.1	H	7.0	-41.00	-13	-28.00
3465.2	-51.40	192	2.1	V	6.2	-45.20	-13	-32.20
5197.8	-55.30	14	1.8	H	10.4	-44.90	-13	-31.90
5197.8	-54.50	137	2.1	V	9.8	-44.70	-13	-31.70
High Channel								
288.51	-70.39	318	1.9	H	2.0	-68.39	-13	-55.39
288.51	-68.41	353	2.1	V	1.9	-66.51	-13	-53.51
3505.2	-50.10	212	1.8	H	7.8	-42.30	-13	-29.30
3505.2	-51.30	165	1.1	V	6.5	-44.80	-13	-31.80
5257.8	-53.70	86	1.3	H	9.4	-44.30	-13	-31.30
5257.8	-52.90	44	1.3	V	9.0	-43.90	-13	-30.90

LTE Band: (Pre-scan with all the bandwidth and modulation, and worst case as below)

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 2								
Test frequency range: 30MHz-20GHz								
QPSK, 1.4MHz bandwidth, Low Channel								
288.51	-69.74	44	1.2	H	2.0	-67.74	-13	-54.74
288.51	-68.67	306	1.2	V	1.9	-66.77	-13	-53.77
3701.4	-48.20	173	1.6	H	8.1	-40.10	-13	-27.10
3701.4	-49.20	210	1.9	V	7.6	-41.60	-13	-28.60
5552.1	-49.80	252	1.3	H	9.6	-40.20	-13	-27.20
5552.1	-47.50	81	1.5	V	9.1	-38.40	-13	-25.40
QPSK, 1.4MHz bandwidth, Middle Channel								
288.51	-69.84	212	1.8	H	2.0	-67.84	-13	-54.84
288.51	-67.63	137	1.1	V	1.9	-65.73	-13	-52.73
3760.0	-47.10	206	2.1	H	8.8	-38.30	-13	-25.30
3760.0	-48.80	149	1.7	V	8.0	-40.80	-13	-27.80
5640.0	-48.70	126	1.9	H	10.1	-38.60	-13	-25.60
5640.0	-46.40	274	1.6	V	9.4	-37.00	-13	-24.00
QPSK, 1.4MHz bandwidth, High Channel								
288.51	-70.26	161	2.0	H	2.0	-68.26	-13	-55.26
288.51	-67.90	215	1.7	V	1.9	-66.00	-13	-53.00
3818.6	-47.60	145	2.0	H	8.7	-38.90	-13	-25.90
3818.6	-49.10	32	1.5	V	7.9	-41.20	-13	-28.20
5727.9	-50.30	217	1.2	H	10.6	-39.70	-13	-26.70
5727.9	-48.10	77	1.8	V	10.2	-37.90	-13	-24.90

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 4								
Test frequency range: 30MHz-20GHz								
QPSK, 1.4MHz bandwidth, Low Channel								
288.51	-70.86	156	1.6	H	2.0	-68.86	-13	-55.86
288.51	-67.87	195	1.6	V	1.9	-65.97	-13	-52.97
3421.4	-46.40	4	2.1	H	6.4	-40.00	-13	-27.00
3421.4	-47.70	320	1.7	V	5.7	-42.00	-13	-29.00
5132.1	-55.50	181	2.1	H	11.3	-44.20	-13	-31.20
5132.1	-52.60	34	2.0	V	10.8	-41.80	-13	-28.80
QPSK, 1.4MHz bandwidth, Middle Channel								
288.51	-69.95	360	1.2	H	2.0	-67.95	-13	-54.95
288.51	-68.26	64	1.8	V	1.9	-66.36	-13	-53.36
3465.0	-46.10	213	1.4	H	7.0	-39.10	-13	-26.10
3465.0	-48.80	263	2.0	V	6.2	-42.60	-13	-29.60
5197.5	-53.50	184	1.4	H	10.4	-43.10	-13	-30.10
5197.5	-51.00	38	1.1	V	9.8	-41.20	-13	-28.20
QPSK, 1.4MHz bandwidth, High Channel								
288.51	-69.40	216	2.0	H	2.0	-67.40	-13	-54.40
288.51	-67.82	358	1.4	V	1.9	-65.92	-13	-52.92
3508.6	-45.40	194	1.7	H	7.8	-37.60	-13	-24.60
3508.6	-47.20	197	1.8	V	6.6	-40.60	-13	-27.60
5262.9	-50.80	78	1.3	H	9.5	-41.30	-13	-28.30
5262.9	-48.80	52	2.0	V	8.9	-39.90	-13	-26.90

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 5								
Test frequency range: 30MHz-10GHz								
QPSK, 1.4MHz bandwidth, Low Channel								
288.51	-69.99	144	1.2	H	2.0	-67.99	-13	-54.99
288.51	-68.29	32	1.1	V	1.9	-66.39	-13	-53.39
1649.4	-53.90	315	1.8	H	3.5	-50.40	-13	-37.40
1649.4	-54.70	333	2.1	V	3.1	-51.60	-13	-38.60
2474.1	-40.80	357	1.7	H	6.6	-34.20	-13	-21.20
2474.1	-36.30	16	1.9	V	5.8	-30.50	-13	-17.50
3298.8	-51.80	287	2.0	H	6.4	-45.40	-13	-32.40
3298.8	-50.80	337	1.8	V	5.7	-45.10	-13	-32.10
QPSK, 1.4MHz bandwidth, Middle Channel								
288.51	-69.60	200	1.3	H	2.0	-67.60	-13	-54.60
288.51	-67.92	324	1.4	V	1.9	-66.02	-13	-53.02
1673.0	-54.20	312	1.4	H	3.8	-50.40	-13	-37.40
1673.0	-54.70	188	1.4	V	3.1	-51.60	-13	-38.60
2509.5	-40.40	91	1.6	H	6.2	-34.20	-13	-21.20
2509.5	-36.10	68	1.9	V	5.6	-30.50	-13	-17.50
3346.0	-52.00	56	2.0	H	6.6	-45.40	-13	-32.40
3346.0	-50.50	77	2.0	V	5.4	-45.10	-13	-32.10
QPSK, 1.4MHz bandwidth, High Channel								
288.51	-69.13	277	1.2	H	2.0	-67.13	-13	-54.13
288.51	-68.35	289	2.1	V	1.9	-66.45	-13	-53.45
1696.6	-49.70	138	1.1	H	4.1	-45.60	-13	-32.60
1696.6	-50.80	221	1.0	V	3.1	-47.70	-13	-34.70
2544.9	-46.00	110	2.1	H	6.1	-39.90	-13	-26.90
2544.9	-43.00	194	1.7	V	5.8	-37.20	-13	-24.20
3393.2	-52.20	79	1.9	H	6.3	-45.90	-13	-32.90
3393.2	-50.70	106	1.2	V	5.4	-45.30	-13	-32.30

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 7								
Test frequency range: 30MHz-26.5GHz								
QPSK, 5MHz bandwidth, Low Channel								
288.51	-70.23	34	1.0	H	2.0	-68.23	-25	-43.23
288.51	-67.11	310	1.3	V	1.9	-65.21	-25	-40.21
5005.0	-56.70	202	1.2	H	10.8	-45.90	-25	-20.90
5005.0	-55.40	3	2.1	V	10.2	-45.20	-25	-20.20
7507.5	-63.50	238	2.0	H	20.3	-43.20	-25	-18.20
7507.5	-62.70	151	1.4	V	20.1	-42.60	-25	-17.60
QPSK, 5MHz bandwidth, Middle Channel								
288.51	-69.72	78	2.2	H	2.0	-67.72	-25	-42.72
288.51	-68.41	261	1.9	V	1.9	-66.51	-25	-41.51
5070.0	-56.50	157	1.0	H	11.1	-45.40	-25	-20.40
5070.0	-56.00	232	1.1	V	10.8	-45.20	-25	-20.20
7605.0	-66.50	342	1.1	H	21.2	-45.30	-25	-20.30
7605.0	-65.10	330	2.1	V	20.1	-45.00	-25	-20.00
QPSK, 5MHz bandwidth, High Channel								
288.51	-70.94	307	1.5	H	2.0	-68.94	-25	-43.94
288.51	-68.48	352	1.9	V	1.9	-66.58	-25	-41.58
5135.0	-56.60	157	1.4	H	11.3	-45.30	-25	-20.30
5135.0	-55.90	165	1.6	V	10.8	-45.10	-25	-20.10
7702.5	-66.40	287	1.9	H	21.2	-45.20	-25	-20.20
7702.5	-65.70	254	2.0	V	21.0	-44.70	-25	-19.70

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 12								
Test frequency range: 30MHz-8GHz								
QPSK, 5MHz bandwidth, Low Channel								
288.51	-70.32	198	1.6	H	2.0	-68.32	-13	-55.32
288.51	-67.53	220	1.6	V	1.9	-65.63	-13	-52.63
1399.4	-56.50	80	1.7	H	5.9	-50.60	-13	-37.60
1399.4	-60.20	293	2.1	V	5.9	-54.30	-13	-41.30
2099.1	-50.70	354	2.2	H	6.3	-44.40	-13	-31.40
2099.1	-51.00	211	2.1	V	5.1	-45.90	-13	-32.90
2798.8	-56.50	290	2.0	H	6.7	-49.80	-13	-36.80
2798.8	-56.40	24	1.6	V	6.7	-49.70	-13	-36.70
QPSK, 5MHz bandwidth, Middle Channel								
288.51	-69.94	5	1.7	H	2.0	-67.94	-13	-54.94
288.51	-67.74	198	1.6	V	1.9	-65.84	-13	-52.84
1415.0	-57.00	148	1.3	H	5.7	-51.30	-13	-38.30
1415.0	-60.90	136	1.5	V	5.4	-55.50	-13	-42.50
2122.5	-53.00	252	1.9	H	6.7	-46.30	-13	-33.30
2122.5	-53.00	249	1.2	V	5.8	-47.20	-13	-34.20
2830.0	-56.50	98	1.7	H	7.1	-49.40	-13	-36.40
2830.0	-55.80	159	2.1	V	6.5	-49.30	-13	-36.30
QPSK, 5MHz bandwidth, High Channel								
288.51	-69.52	55	1.4	H	2.0	-67.52	-13	-54.52
288.51	-67.39	317	1.4	V	1.9	-65.49	-13	-52.49
1430.6	-57.30	355	2.0	H	5.4	-51.90	-13	-38.90
1430.6	-59.80	329	2.1	V	4.8	-55.00	-13	-42.00
2145.9	-52.50	303	2.1	H	7.0	-45.50	-13	-32.50
2145.9	-53.30	133	2.0	V	6.6	-46.70	-13	-33.70
2861.2	-57.70	92	1.6	H	7.3	-50.40	-13	-37.40
2861.2	-57.10	9	1.6	V	6.3	-50.80	-13	-37.80

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 17								
Test frequency range: 30MHz-8GHz								
QPSK, 5MHz bandwidth, Low Channel								
288.51	-69.07	243	1.6	H	2.0	-67.07	-13	-54.07
288.51	-67.10	231	1.9	V	1.9	-65.20	-13	-52.20
1413.0	-61.00	97	1.6	H	5.7	-55.30	-13	-42.30
1413.0	-61.70	292	1.1	V	5.4	-56.30	-13	-43.30
2119.5	-50.60	47	1.3	H	6.6	-44.00	-13	-31.00
2119.5	-52.30	139	1.8	V	5.7	-46.60	-13	-33.60
2826.0	-56.70	191	1.8	H	7.1	-49.60	-13	-36.60
2826.0	-56.00	81	2.0	V	6.5	-49.50	-13	-36.50
QPSK, 5MHz bandwidth, Middle Channel								
288.51	-69.53	134	1.8	H	2.0	-67.53	-13	-54.53
288.51	-67.10	221	1.1	V	1.9	-65.20	-13	-52.20
1420.0	-60.60	111	1.1	H	5.6	-55.00	-13	-42.00
1420.0	-61.20	306	1.1	V	5.2	-56.00	-13	-43.00
2130.0	-50.60	146	1.9	H	6.8	-43.80	-13	-30.80
2130.0	-52.60	221	1.1	V	6.1	-46.50	-13	-33.50
2840.0	-56.70	249	1.1	H	7.3	-49.40	-13	-36.40
2840.0	-55.80	332	1.7	V	6.5	-49.30	-13	-36.30
QPSK, 5MHz bandwidth, High Channel								
288.51	-70.82	325	2.0	H	2.0	-68.82	-13	-55.82
288.51	-67.57	26	1.6	V	1.9	-65.67	-13	-52.67
1427.0	-58.60	195	1.5	H	5.5	-53.10	-13	-40.10
1427.0	-59.10	323	1.3	V	4.9	-54.20	-13	-41.20
2140.5	-49.50	139	2.0	H	6.9	-42.60	-13	-29.60
2140.5	-50.60	300	1.3	V	6.4	-44.20	-13	-31.20
2854.0	-57.20	298	1.6	H	7.4	-49.80	-13	-36.80
2854.0	-56.40	18	1.5	V	6.4	-50.00	-13	-37.00

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 38								
Test frequency range: 30MHz-26.5GHz								
QPSK, 5MHz, Low Channel								
288.51	-70.17	22	1.8	H	2.0	-68.17	-25	-43.17
288.51	-68.80	65	1.9	V	1.9	-66.90	-25	-41.90
5145.0	-55.00	135	1.7	H	11.4	-43.60	-25	-18.60
5145.0	-51.40	136	2.0	V	10.7	-40.70	-25	-15.70
7717.5	-66.00	309	2.1	H	20.5	-45.50	-25	-20.50
7717.5	-65.10	64	1.7	V	20.3	-44.80	-25	-19.80
QPSK, 5MHz, Middle Channel								
288.51	-70.47	104	1.1	H	2.0	-68.47	-25	-43.47
288.51	-67.01	242	1.3	V	1.9	-65.11	-25	-40.11
5190.0	-54.20	48	1.2	H	10.5	-43.70	-25	-18.70
5190.0	-50.90	337	1.4	V	10.0	-40.90	-25	-15.90
7785.0	-62.60	290	1.1	H	18.3	-44.30	-25	-19.30
7785.0	-61.70	51	1.8	V	18.0	-43.70	-25	-18.70
QPSK, 5MHz, High Channel								
288.51	-70.14	120	2.0	H	2.0	-68.14	-25	-43.14
288.51	-67.01	19	1.1	V	1.9	-65.11	-25	-40.11
5235.0	-53.80	87	1.5	H	9.7	-44.10	-25	-19.10
5235.0	-51.50	353	1.6	V	9.2	-42.30	-25	-17.30
7852.5	-62.60	164	2.0	H	18.2	-44.40	-25	-19.40
7852.5	-61.40	326	1.2	V	17.6	-43.80	-25	-18.80

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 41								
Test frequency range: 1-26.5GHz								
QPSK, 5MHz, Low Channel								
288.51	-71.00	161	1.3	H	2.0	-69.00	-25	-44.00
288.51	-67.31	316	1.1	V	1.9	-65.41	-25	-40.41
5075.0	-55.30	155	2.0	H	11.2	-44.10	-25	-19.10
5075.0	-53.10	291	2.1	V	10.8	-42.30	-25	-17.30
7612.5	-66.20	123	1.0	H	21.2	-45.00	-25	-20.00
7612.5	-64.70	150	1.1	V	20.2	-44.50	-25	-19.50
QPSK, 5MHz bandwidth, Middle Channel								
288.51	-69.36	182	1.7	H	2.0	-67.36	-25	-42.36
288.51	-68.72	263	2.1	V	1.9	-66.82	-25	-41.82
5190.0	-53.80	171	1.6	H	10.5	-43.30	-25	-18.30
5190.0	-51.50	285	1.5	V	10.0	-41.50	-25	-16.50
7785.0	-62.30	165	1.9	H	18.3	-44.00	-25	-19.00
7785.0	-61.70	331	1.1	V	18.0	-43.70	-25	-18.70
QPSK, 5MHz bandwidth, High Channel								
288.51	-70.68	102	2.0	H	2.0	-68.68	-25	-43.68
288.51	-67.73	324	1.5	V	1.9	-65.83	-25	-40.83
5305.0	-51.50	238	1.1	H	9.6	-41.90	-25	-16.90
5305.0	-48.50	307	1.0	V	8.8	-39.70	-25	-14.70
7957.5	-63.80	195	1.8	H	18.9	-44.90	-25	-19.90
7957.5	-63.10	28	1.6	V	18.5	-44.60	-25	-19.60

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 66								
Test frequency range: 1-20GHz								
QPSK, 1.4MHz, Low Channel								
288.51	-69.34	276	1.6	H	2.0	-67.34	-13	-54.34
288.51	-67.02	264	2.1	V	1.9	-65.12	-13	-52.12
3421.4	-46.20	311	1.6	H	6.4	-39.80	-13	-26.80
3421.4	-47.80	318	1.8	V	5.7	-42.10	-13	-29.10
5132.1	-55.60	52	1.8	H	11.3	-44.30	-13	-31.30
5132.1	-54.60	256	2.1	V	10.8	-43.80	-13	-30.80
QPSK, 1.4MHz bandwidth, Middle Channel								
288.51	-70.27	260	1.8	H	2.0	-68.27	-13	-55.27
288.51	-68.54	97	1.8	V	1.9	-66.64	-13	-53.64
3490.0	-47.40	89	1.7	H	7.6	-39.80	-13	-26.80
3490.0	-49.80	122	2.1	V	6.4	-43.40	-13	-30.40
5235.0	-53.90	105	1.7	H	9.6	-44.30	-13	-31.30
5235.0	-52.50	198	1.8	V	9.2	-43.30	-13	-30.30
QPSK, 1.4MHz bandwidth, High Channel								
288.51	-70.10	45	2.2	H	2.0	-68.10	-13	-55.10
288.51	-68.73	221	1.0	V	1.9	-66.83	-13	-53.83
3558.6	-47.20	320	1.3	H	7.8	-39.40	-13	-26.40
3558.6	-48.50	64	1.1	V	7.0	-41.50	-13	-28.50
5337.9	-53.10	95	2.1	H	9.4	-43.70	-13	-30.70
5337.9	-51.40	136	1.2	V	8.7	-42.70	-13	-29.70

Note:

Absolute Level = Reading Level + Substituted Factor

Substituted Factor contains: SG Level - Cable loss+ Antenna Gain

Margin = Limit- Absolute Level

FCC § 22.917 (a); § 24.238 (a); §27.53 (h)(m) - BAND EDGES

Applicable Standard

According to § 22.917(a), the power of any emissions 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.

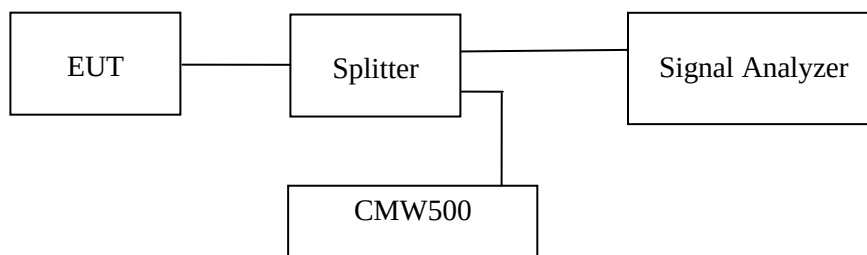
According to §24.238(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to FCC §27.53 (h)(m), 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.

Test Procedure

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

The center of the spectrum analyzer was set to block edge frequency



Test Data

Environmental Conditions

Temperature:	25~28 °C
Relative Humidity:	52.1~56.2 %
ATM Pressure:	101.0 kPa

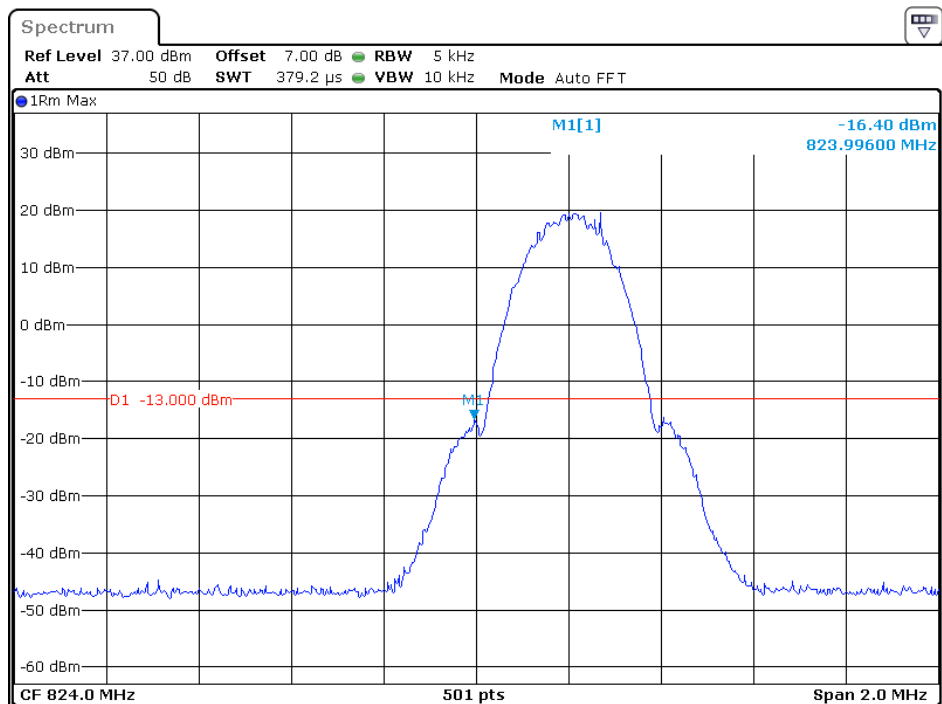
The testing was performed by Key Pei from 2022-03-12 to 2022-03-30.

EUT operation mode: Transmitting (Worst case)

Test Result: Pass

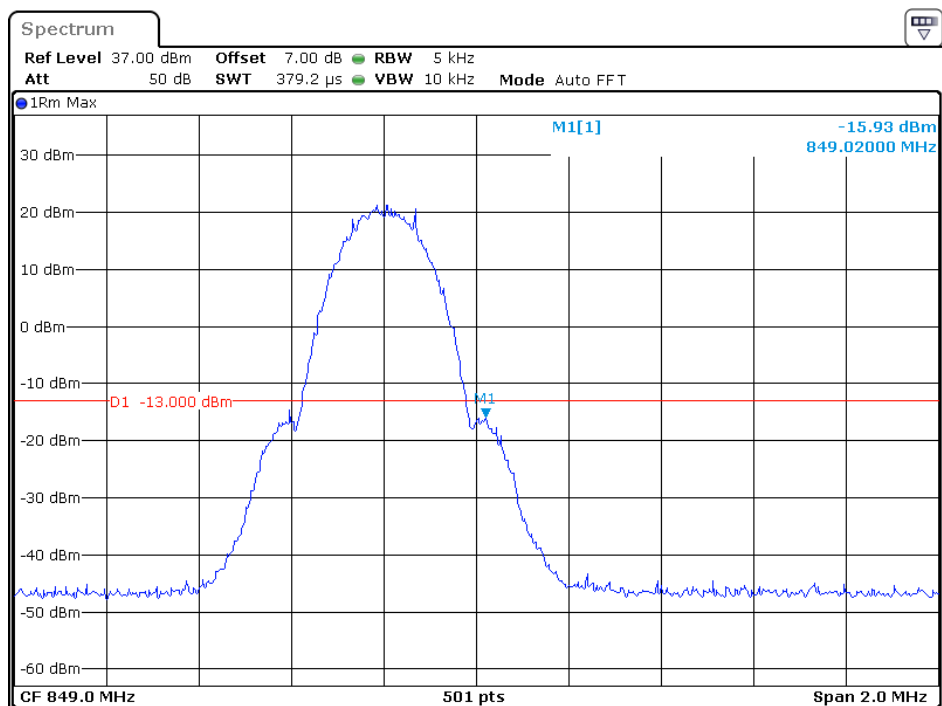
Please refer to the following plots.

Cellular Band, Left Band Edge for GSM (GMSK) Mode



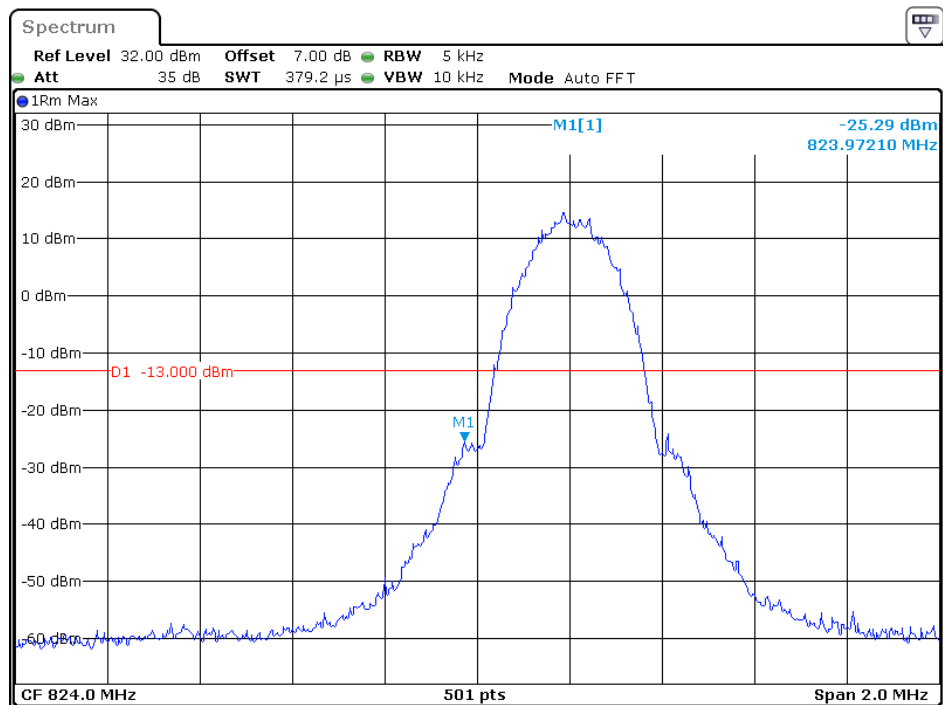
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Cellular Band, Right Band Edge for GSM (GMSK) Mode



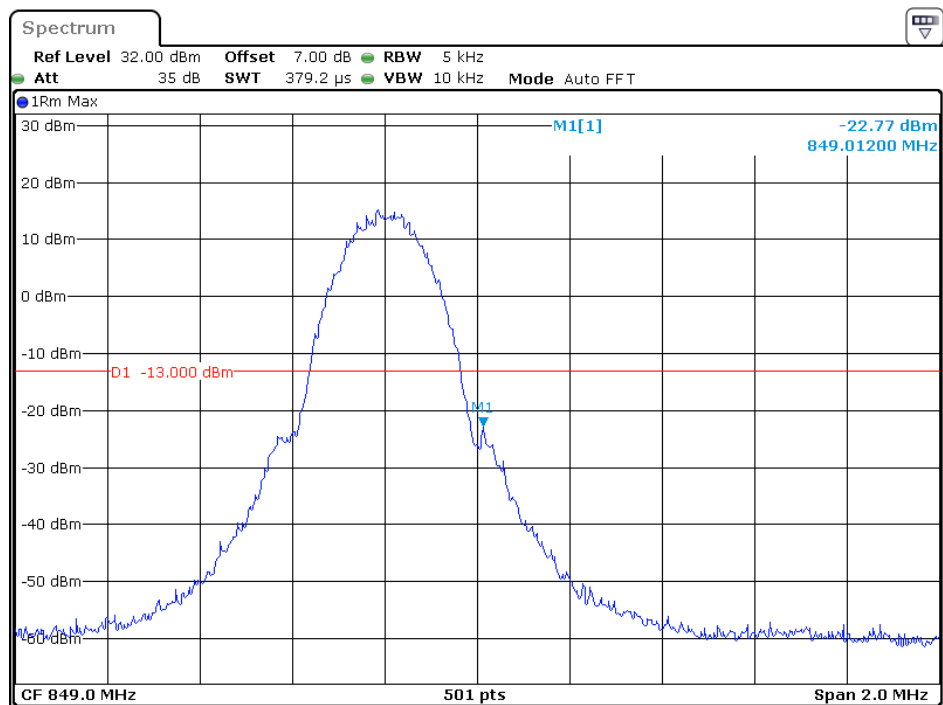
Date: 12.MAR.2022 17:01:34

Cellular Band, Left Band Edge for EGPRS (8PSK) Mode

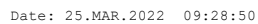


Date: 12.MAR.2022 17:27:51

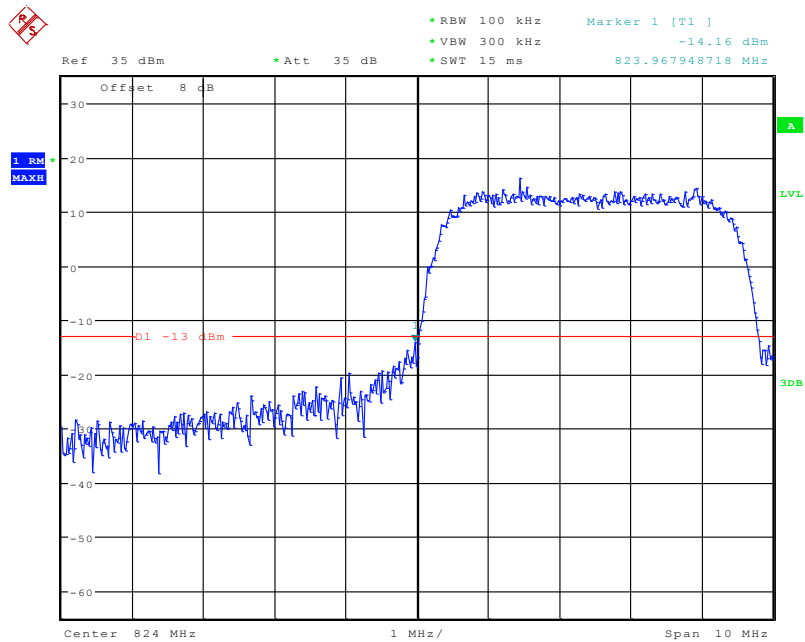
Cellular Band, Right Band Edge for EGPRS (8PSK) Mode



Date: 12.MAR.2022 17:26:47

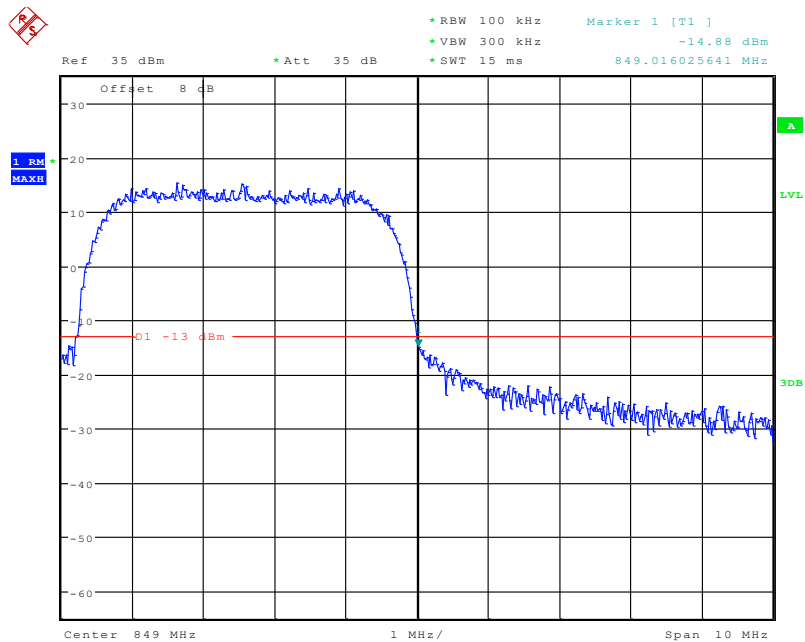


Cellular Band, Left Band Edge for HSDPA(16QAM) Mode

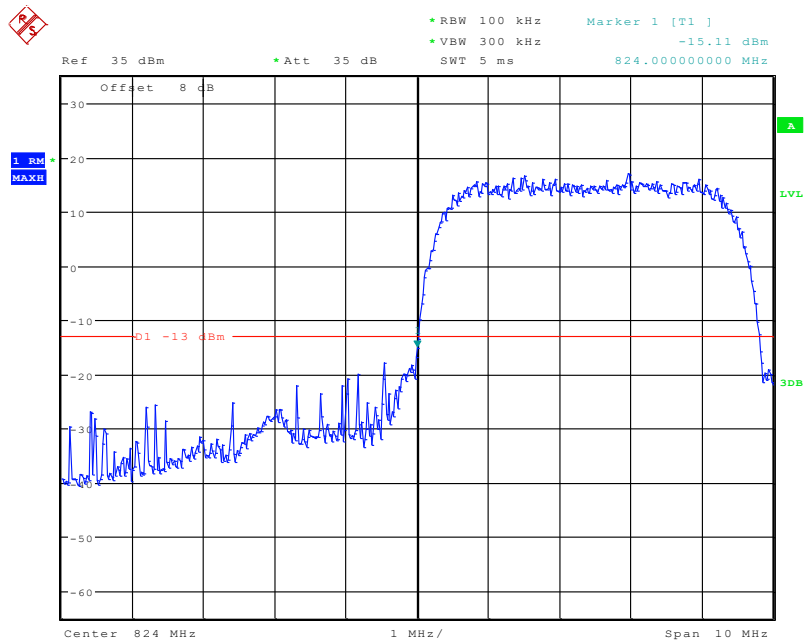


Date: 25.MAR.2022 09:35:43

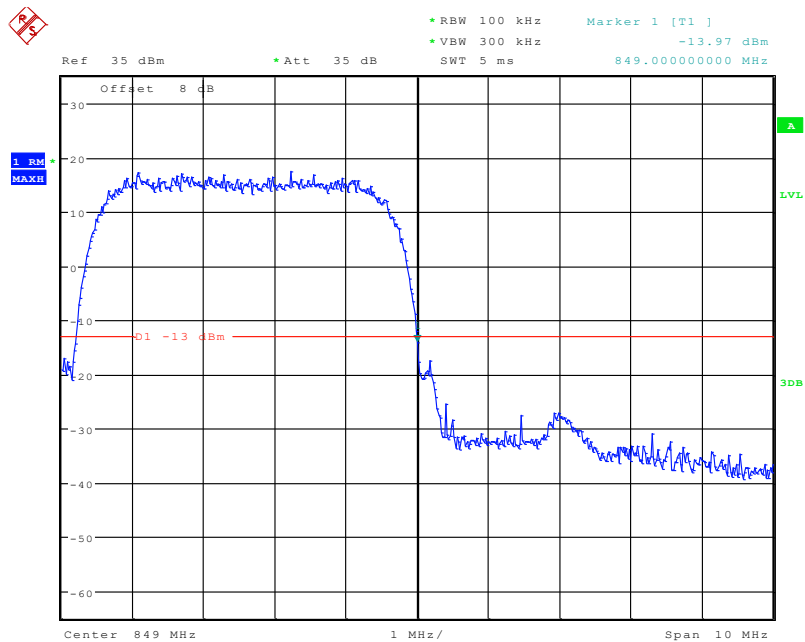
Cellular Band, Right Band Edge for HSDPA (16QAM) Mode



Date: 25.MAR.2022 09:36:42

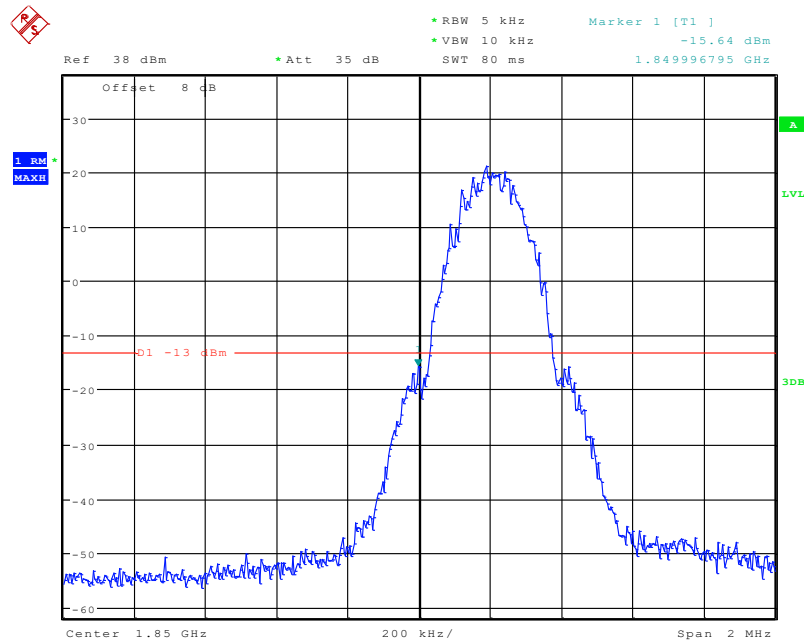
Cellular Band, Left Band Edge for HSUPA (QPSK) Mode

Date: 25.MAR.2022 10:25:54

Cellular Band, Right Band Edge for HSUPA (QPSK) Mode

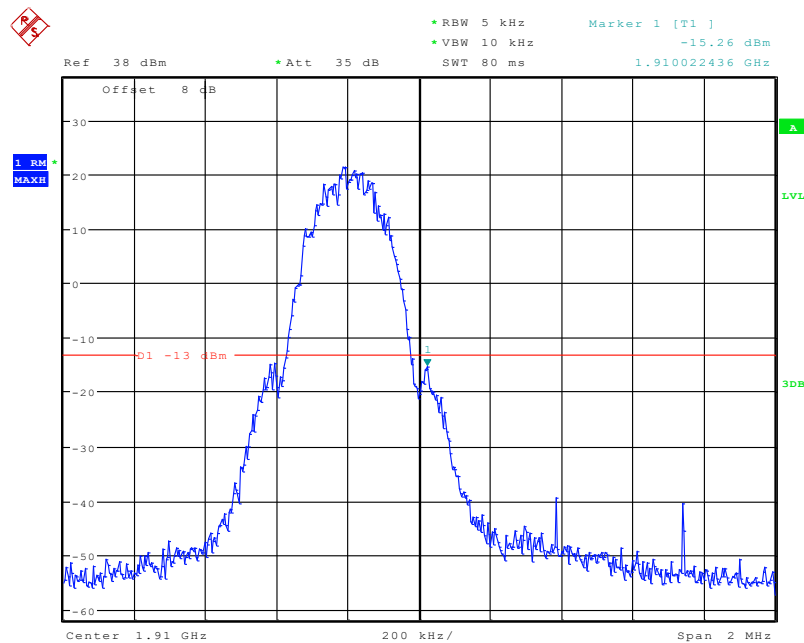
Date: 25.MAR.2022 10:25:30

PCS Band, Left Band Edge for GSM (GMSK) Mode



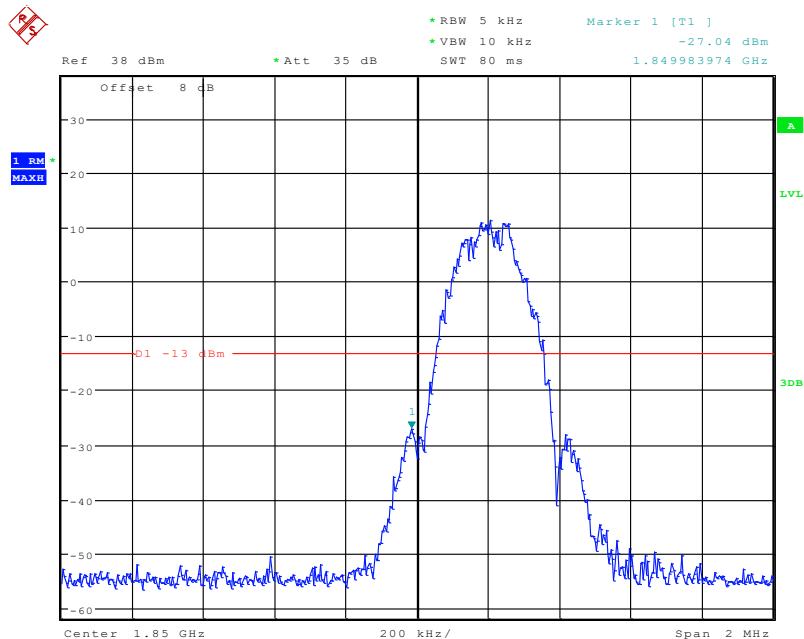
Date: 25.MAR.2022 11:47:24

PCS Band, Right Band Edge for GSM (GMSK) Mode



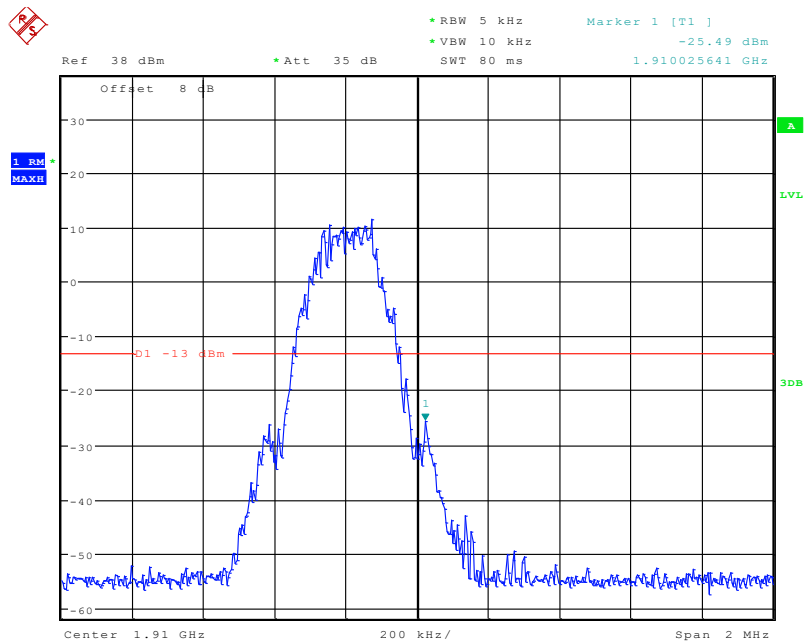
Date: 25.MAR.2022 11:47:48

PCS Band, Left Band Edge for EGPRS (8PSK) Mode



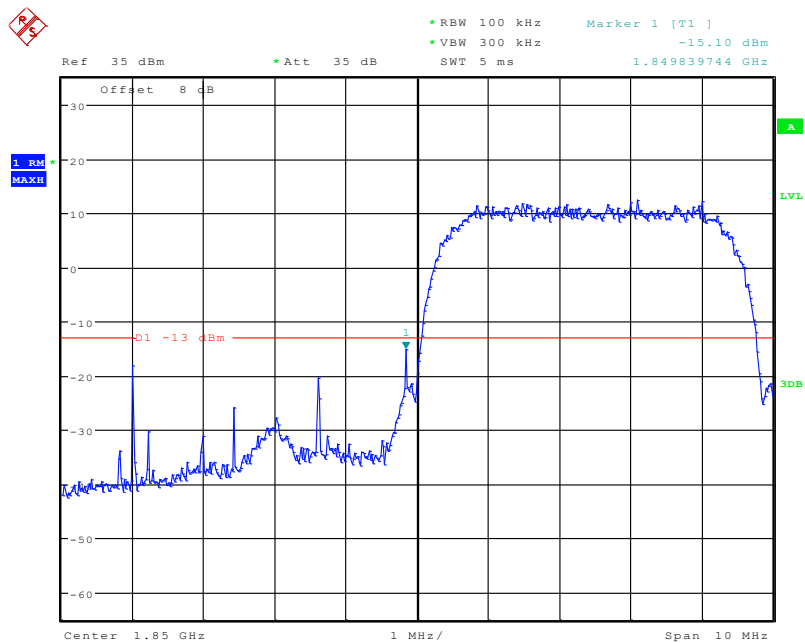
Date: 25.MAR.2022 11:50:11

PCS Band, Right Band Edge for EGPRS (8PSK) Mode



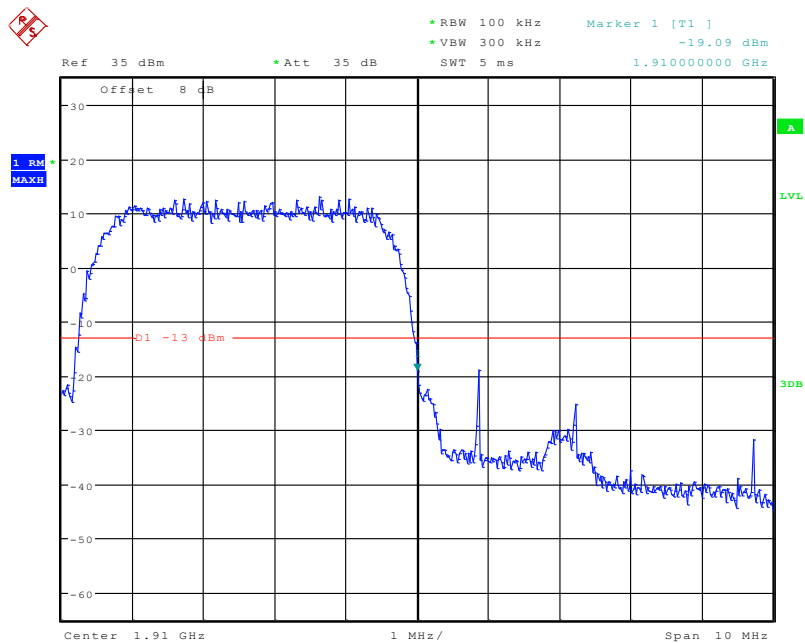
Date: 25.MAR.2022 11:50:38

PCS Band, Left Band Edge for RMC (BPSK) Mode

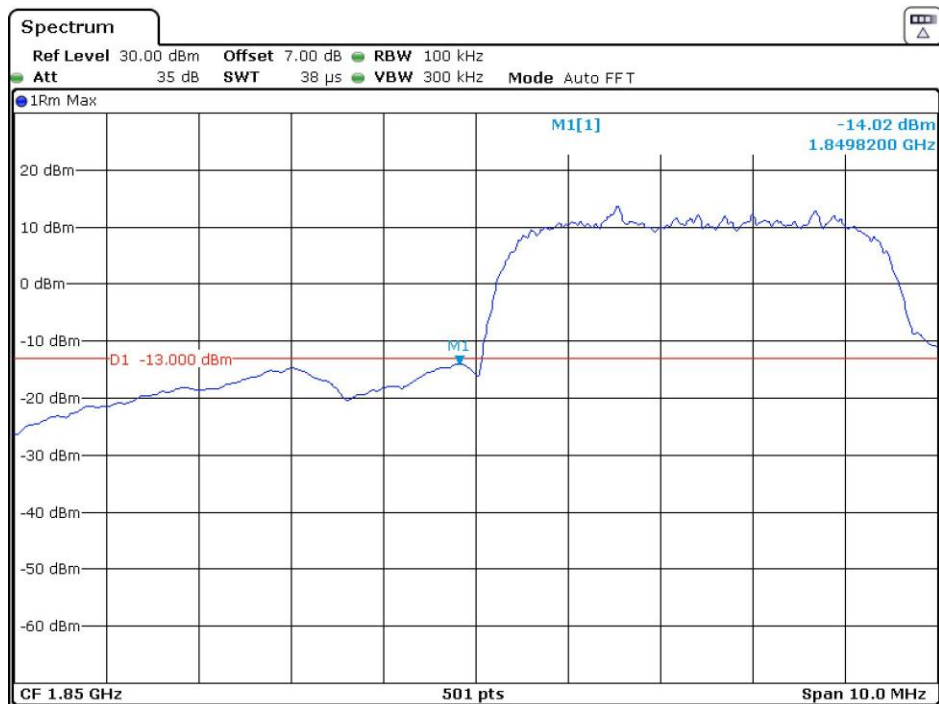


Date: 25.MAR.2022 09:25:42

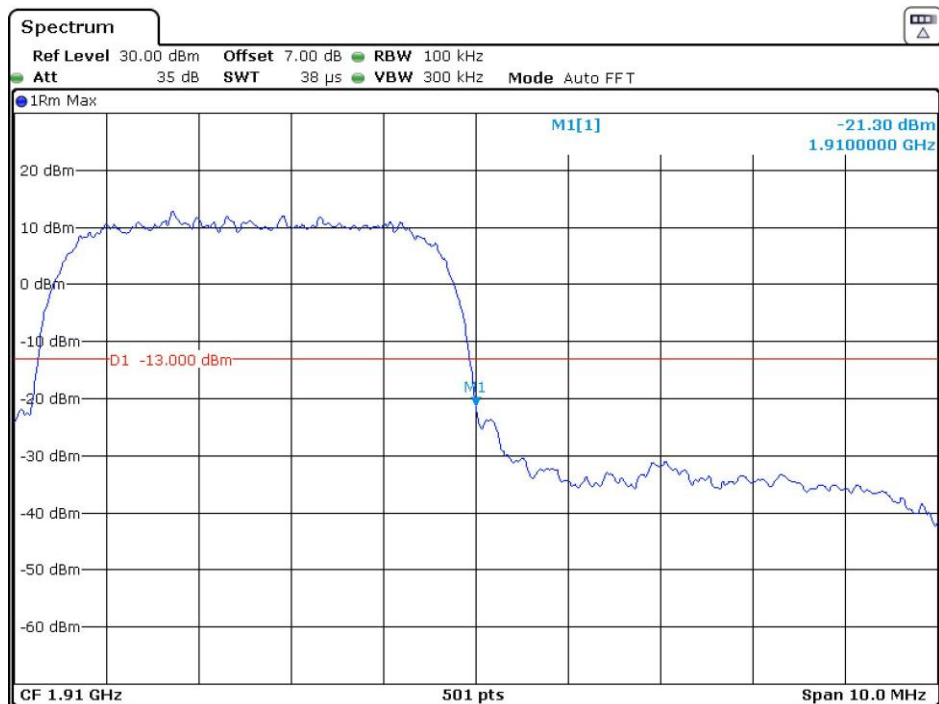
PCS Band, Right Band Edge for RMC (BPSK) Mode



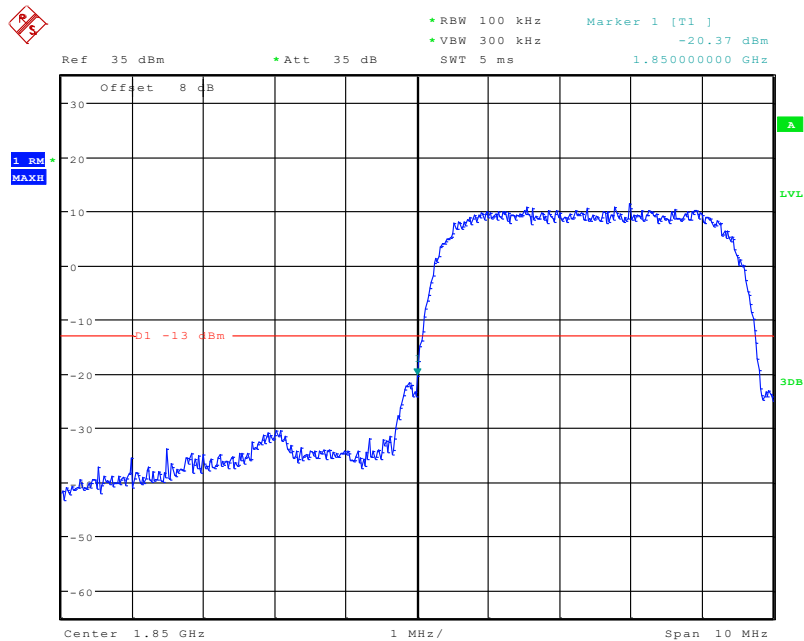
Date: 25.MAR.2022 09:26:02

PCS Band, Left Band Edge for HSDPA(16QAM) Mode

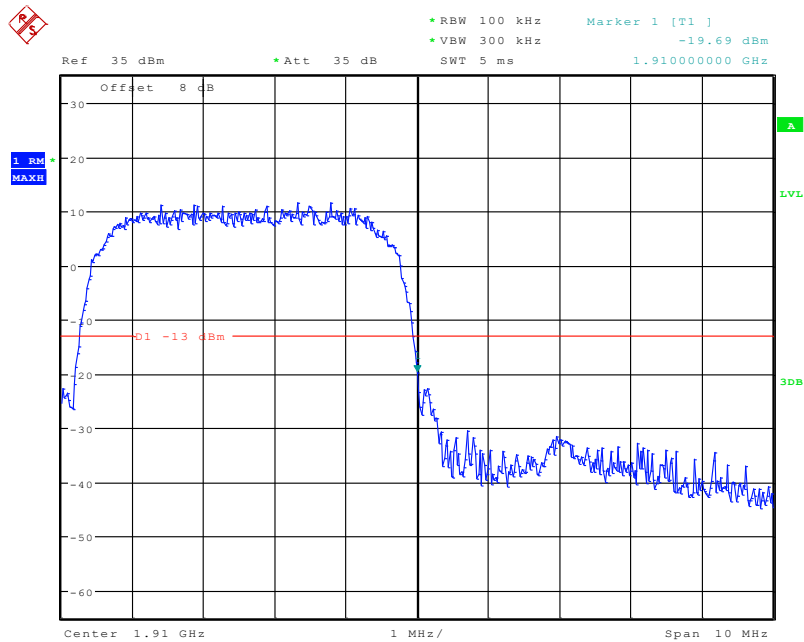
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PCS Band, Right Band Edge for HSDPA (16QAM) Mode

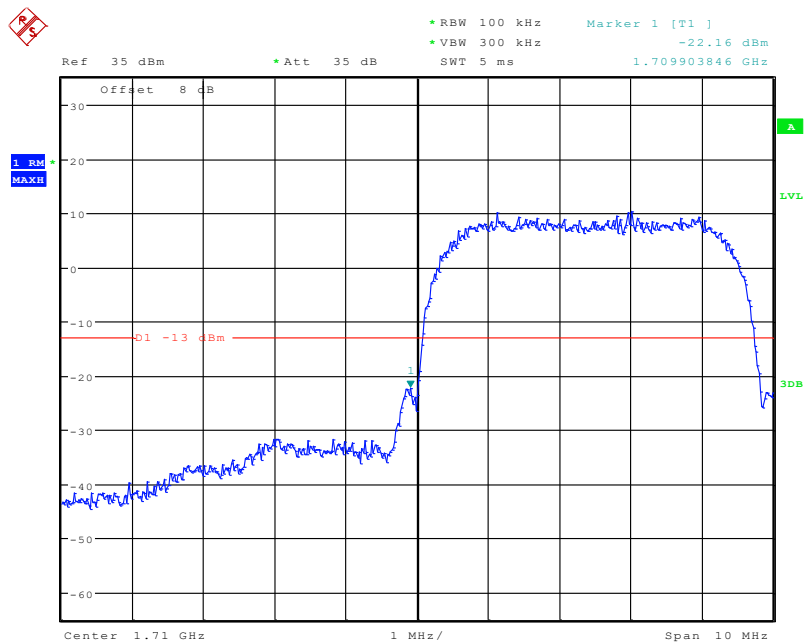
Date: 30.MAR.2022 11:34:06

PCS Band, Left Band Edge for HSUPA (QPSK) Mode

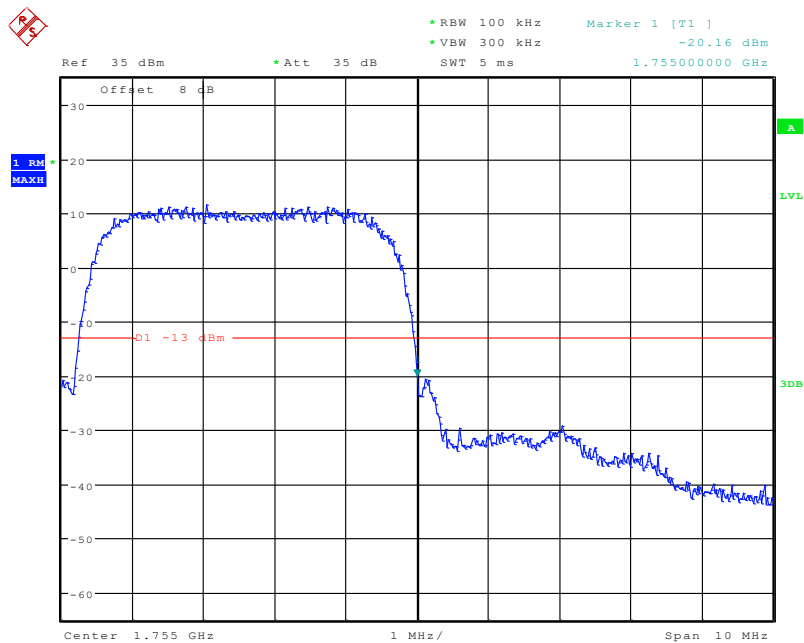
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PCS Band, Right Band Edge for HSUPA (QPSK) Mode

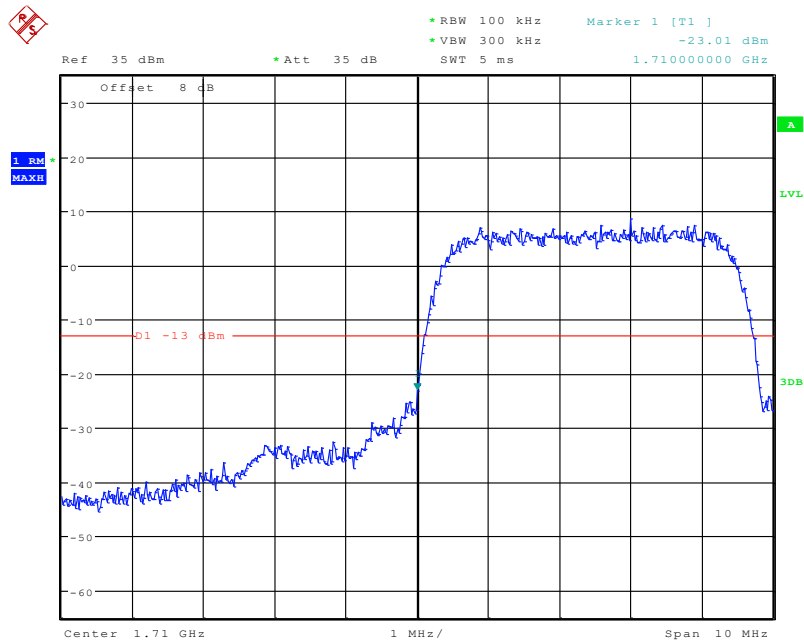
Date: 25.MAR.2022 10:27:32

AWS Band, Left Band Edge for RMC (BPSK) Mode

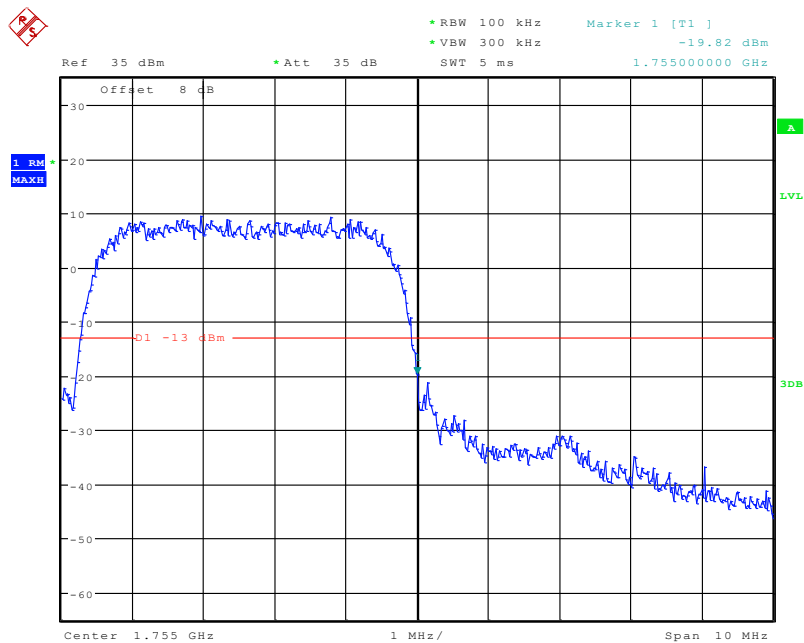
Date: 25.MAR.2022 09:26:54

AWS Band, Right Band Edge for RMC (BPSK) Mode

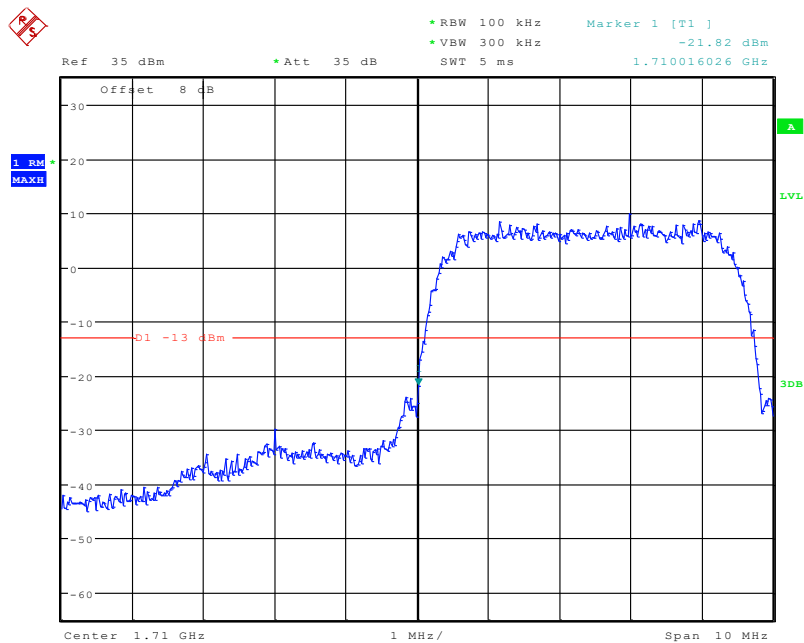
Date: 25.MAR.2022 09:27:46

AWS Band, Left Band Edge for HSDPA(16QAM) Mode

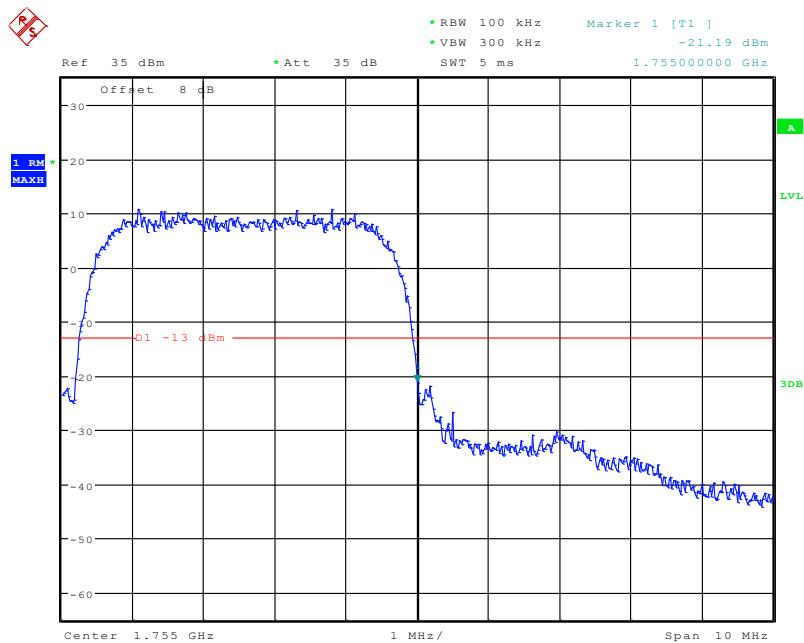
Date: 25.MAR.2022 09:34:44

AWS Band, Right Band Edge for HSDPA (16QAM) Mode

Date: 25.MAR.2022 09:34:09

AWS Band, Left Band Edge for HSUPA (QPSK) Mode

Date: 25.MAR.2022 10:26:40

AWS Band, Right Band Edge for HSUPA (QPSK) Mode

Date: 25.MAR.2022 10:27:06

The test plots of LTE bands please refer to the Appendix C.

FCC § 2.1055; § 22.355; § 24.235; §27.54 - FREQUENCY STABILITY

Applicable Standard

FCC § 2.1055, §22.355, §24.235& §27.54.

According to FCC §2.1055, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

According to §22.355, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table below:

Frequency Tolerance for Transmitters in the Public Mobile Services

Frequency Range (MHz)	Base, fixed (ppm)	Mobile ≤ 3 watts (ppm)	Mobile > 3 watts (ppm)
25 to 50	20.0	20.0	50.0
50 to 450	5.0	5.0	50.0
450 to 512	2.5	5.0	5.0
821 to 896	1.5	2.5	2.5
928 to 929.	5.0	N/A	N/A
929 to 960.	1.5	N/A	N/A
2110 to 2220	10.0	N/A	N/A

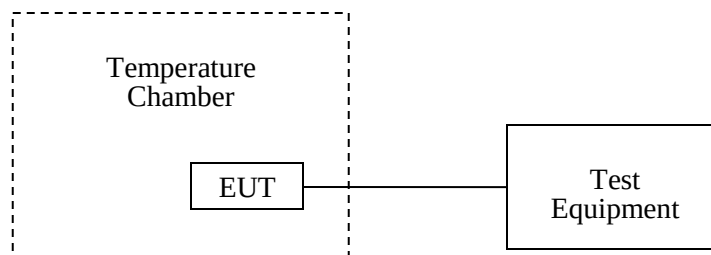
According to §24.235& §27.54, the frequency stability shall be sufficient to ensure that the fundamental emissions stays within the authorized frequency block.

Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to an external AC power supply and the RF output was connected to communication test set via feed-through attenuators. The EUT was placed inside the temperature chamber. The AC leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the communication test set.

Frequency Stability vs. Voltage: For hand carried, battery powered equipment; reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.



Test Data**Environmental Conditions**

Temperature:	27.2 °C
Relative Humidity:	56.2 %
ATM Pressure:	101.0 kPa

The testing was performed by Key Pei from 2022-03-12 to 2022-03-26.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables.

Cellular Band (Part 22H)**GSM Mode**

Middle Channel, $f_0 = 836.6\text{MHz}$				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	N.V.	-0.82	-0.0010	2.5
-20		-1.35	-0.0016	2.5
-10		-1.36	-0.0016	2.5
0		-1.55	-0.0019	2.5
10		-1.43	-0.0017	2.5
20		-0.61	-0.0007	2.5
30		-0.98	-0.0012	2.5
40		-0.64	-0.0008	2.5
50		-0.88	-0.0011	2.5
20	L.V.	-0.72	-0.0009	2.5
	H.V.	-0.68	-0.0008	2.5

EDGE Mode

Middle Channel, $f_0 = 836.6\text{MHz}$				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	N.V.	-5.37	-0.0064	2.5
-20		-5.55	-0.0066	2.5
-10		-6.57	-0.0079	2.5
0		-8.17	-0.0098	2.5
10		-4.65	-0.0056	2.5
20		-6.20	-0.0074	2.5
30		-5.55	-0.0066	2.5
40		-6.38	-0.0076	2.5
50		-5.68	-0.0068	2.5
20	L.V.	-4.49	-0.0054	2.5
	H.V.	-5.68	-0.0068	2.5

WCDMA Mode

Middle Channel, $f_0 = 836.6\text{MHz}$				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	N.V.	-13.08	-0.0156	2.5
-20		-14.35	-0.0172	2.5
-10		-14.39	-0.0172	2.5
0		-14.28	-0.0171	2.5
10		-13.39	-0.0160	2.5
20		-13.07	-0.0156	2.5
30		-14.39	-0.0172	2.5
40		-12.55	-0.0150	2.5
50		-13.22	-0.0158	2.5
20	L.V.	-14.29	-0.0171	2.5
	H.V.	-13.62	-0.0163	2.5

**PCS Band (Part 24E)
GSM Mode**

Middle Channel, $f_o = 1880.0$ MHz				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	18.32	0.0097	pass
-20		17.22	0.0092	pass
-10		12.56	0.0067	pass
0		14.62	0.0078	pass
10		13.55	0.0072	pass
20		18.63	0.0099	pass
30		14.28	0.0076	pass
40		14.39	0.0077	pass
50		13.55	0.0072	pass
20	L.V.	14.39	0.0077	pass
	H.V.	13.88	0.0074	pass

EDGE Mode

Middle Channel, $f_o = 1880.0$ MHz				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	22.35	0.0119	pass
-20		22.34	0.0119	pass
-10		21.43	0.0114	pass
0		22.38	0.0119	pass
10		17.69	0.0094	pass
20		26.99	0.0144	pass
30		18.59	0.0099	pass
40		19.68	0.0105	pass
50		18.65	0.0099	pass
20	L.V.	19.64	0.0104	pass
	H.V.	18.59	0.0099	pass

WCDMA Mode

Middle Channel, $f_0 = 1880.0$ MHz				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	-7.59	-0.0040	pass
-20		-7.88	-0.0042	pass
-10		-7.68	-0.0041	pass
0		-7.69	-0.0041	pass
10		-7.68	-0.0041	pass
20		-8.30	-0.0044	pass
30		-7.39	-0.0039	pass
40		-7.59	-0.0040	pass
50		-7.89	-0.0042	pass
20	L.V.	-8.16	-0.0043	pass
	H.V.	-8.56	-0.0046	pass

AWS Band (Part 27)

Temperature (°C)	Power Supplied (V_{DC})	F_L (MHz)	F_H (MHz)	F_L Limit (MHz)	F_H Limit (MHz)
-30	N.V.	1710.0172	1754.9728	1710	1755
-20		1710.0169	1754.9726	1710	1755
-10		1710.0158	1754.9727	1710	1755
0		1710.0159	1754.9733	1710	1755
10		1710.0138	1754.9736	1710	1755
20		1710.0139	1754.9729	1710	1755
30		1710.0137	1754.9725	1710	1755
40		1710.0128	1754.9735	1710	1755
50		1710.0125	1754.9736	1710	1755
20	L.V.	1710.0136	1754.9728	1710	1755
	H.V.	1710.0144	1754.9729	1710	1755

LTE:
QPSK:
Band 2:

10.0 MHz Middle Channel, $f_0=1880\text{MHz}$				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	-5.89	-0.0031	pass
-20		-9.97	-0.0053	pass
-10		-6.13	-0.0033	pass
0		6.17	0.0033	pass
10		7.92	0.0042	pass
20		6.46	0.0034	pass
30		-6.52	-0.0035	pass
40		7.18	0.0038	pass
50		-9.69	-0.0052	pass
20	L.V.	-8.17	-0.0043	pass
	H.V.	-7.05	-0.0038	pass

Band 4:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1710.1166	1754.8738	1710	1755
-20		1710.1158	1754.8736	1710	1755
-10		1710.1152	1754.8737	1710	1755
0		1710.1154	1754.8738	1710	1755
10		1710.1147	1754.8757	1710	1755
20		1710.1142	1754.8755	1710	1755
30		1710.1139	1754.8754	1710	1755
40		1710.1130	1754.8756	1710	1755
50		1710.1129	1754.8749	1710	1755
20	L.V.	1710.1128	1754.8748	1710	1755
	H.V.	1710.1024	1754.8742	1710	1755

Band 5:

10.0 MHz Middle Channel, $f_o = 836.5\text{MHz}$				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	N.V.	-2.89	-0.0035	2.5
-20		-6.97	-0.0083	2.5
-10		-5.50	-0.0066	2.5
0		6.06	0.0072	2.5
10		9.80	0.0117	2.5
20		5.03	0.0060	2.5
30		-6.62	-0.0079	2.5
40		-8.73	-0.0104	2.5
50		-7.05	-0.0084	2.5
20	L.V.	8.99	0.0107	2.5
	H.V.	-7.17	-0.0086	2.5

Band 7:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	2500.8796	2569.9855	2500	2570
-20		2500.8792	2569.9947	2500	2570
-10		2500.8788	2569.9856	2500	2570
0		2500.8786	2569.9762	2500	2570
10		2500.7987	2569.9828	2500	2570
20		2500.7879	2569.9425	2500	2570
30		2500.7757	2569.9337	2500	2570
40		2500.7656	2569.9926	2500	2570
50		2500.7562	2569.9925	2500	2570
20	L.V.	2500.7528	2569.9835	2500	2570
	H.V.	2500.7431	2569.9741	2500	2570

Band 12:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	699.9633	715.8872	699	716
-20		699.9641	715.7728	699	716
-10		699.4523	715.7458	699	716
0		699.4427	715.7632	699	716
10		699.3232	715.5417	699	716
20		699.4421	715.5284	699	716
30		699.2289	715.6323	699	716
40		699.3347	715.6314	699	716
50		699.4242	715.5454	699	716
20	L.V.	699.3372	715.5672	699	716
	H.V.	699.3374	715.5678	699	716

Band 17:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	704.7895	715.9836	704	716
-20		704.7729	715.9825	704	716
-10		704.7368	715.9725	704	716
0		704.7218	715.8898	704	716
10		704.7326	715.8875	704	716
20		704.7265	715.8794	704	716
30		704.7435	715.8972	704	716
40		704.7532	715.8881	704	716
50		704.7232	715.8847	704	716
20	L.V.	704.7447	715.8826	704	716
	H.V.	704.7335	715.8799	704	716

Band 38:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	2570.8378	2619.9826	2570	2620
-20		2570.8077	2619.8725	2570	2620
-10		2570.7246	2619.7631	2570	2620
0		2570.6155	2619.6557	2570	2620
10		2570.5056	2619.5425	2570	2620
20		2570.3933	2619.4321	2570	2620
30		2570.2838	2619.3225	2570	2620
40		2570.1729	2619.2125	2570	2620
50		2570.1618	2619.1326	2570	2620
20	L.V.	2570.1520	2619.1222	2570	2620
	H.V.	2570.1021	2619.1124	2570	2620

Band 41:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	2535.9758	2654.9871	2535	2655
-20		2535.8678	2654.8852	2535	2655
-10		2535.7565	2654.7766	2535	2655
0		2535.6425	2654.6652	2535	2655
10		2535.5327	2654.5556	2535	2655
20		2535.4228	2654.4438	2535	2655
30		2535.3159	2654.3351	2535	2655
40		2535.2157	2654.2237	2535	2655
50		2535.2939	2654.1065	2535	2655
20	L.V.	2535.8622	2654.0032	2535	2655
	H.V.	2535.8524	2654.0012	2535	2655

Note: The applicant declared the operating frequency range is 2535-2655MHz

Band 66:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1710.0241	1779.9728	1710	1780
-20		1710.0238	1779.9727	1710	1780
-10		1710.0236	1779.9839	1710	1780
0		1710.0235	1779.9756	1710	1780
10		1710.0237	1779.9755	1710	1780
20		1710.0228	1779.9747	1710	1780
30		1710.0257	1779.9749	1710	1780
40		1710.0256	1779.9756	1710	1780
50		1710.0229	1779.9828	1710	1780
20	L.V.	1710.0225	1779.9727	1710	1780
	H.V.	1710.0226	1779.9775	1710	1780

16QAM:**Band 2:**

10.0 MHz Middle Channel, f ₀ = 1880MHz				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	-6.68	-0.0036	pass
-20		9.77	0.0052	pass
-10		-7.62	-0.0041	pass
0		-9.91	-0.0053	pass
10		-9.82	-0.0052	pass
20		-6.68	-0.0036	pass
30		-8.85	-0.0047	pass
40		5.67	0.0030	pass
50		6.05	0.0032	pass
20	L.V.	7.52	0.0040	pass
	H.V.	-6.68	-0.0036	pass

Band 4:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1710.2966	1754.7672	1710	1755
-20		1710.2958	1754.7562	1710	1755
-10		1710.2751	1754.7672	1710	1755
0		1710.2652	1754.7452	1710	1755
10		1710.2633	1754.7435	1710	1755
20		1710.2643	1754.7626	1710	1755
30		1710.2572	1754.7625	1710	1755
40		1710.2658	1754.7652	1710	1755
50		1710.2636	1754.7752	1710	1755
20	L.V.	1710.2621	1754.7536	1710	1755
	H.V.	1710.2715	1754.7524	1710	1755

Band 5:

10.0 MHz Middle Channel, f _o =836.5MHz				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	N.V.	-7.45	-0.0089	2.5
-20		8.10	0.0097	2.5
-10		-8.59	-0.0103	2.5
0		9.33	0.0112	2.5
10		-6.94	-0.0083	2.5
20		7.54	0.009	2.5
30		6.43	0.0077	2.5
40		-6.17	-0.0074	2.5
50		-6.44	-0.0077	2.5
20	L.V.	6.34	0.0076	2.5
	H.V.	-6.89	-0.0082	2.5

Band 7:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	2500.8456	2569.8376	2500	2570
-20		2500.8428	2569.8551	2500	2570
-10		2500.7641	2569.8425	2500	2570
0		2500.7255	2569.8537	2500	2570
10		2500.6326	2569.8285	2500	2570
20		2500.6239	2569.7829	2500	2570
30		2500.6351	2569.7836	2500	2570
40		2500.6327	2569.8426	2500	2570
50		2500.6226	2569.8457	2500	2570
20	L.V.	2500.6235	2569.8352	2500	2570
	H.V.	2500.6144	2569.8238	2500	2570

Band 12:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	699.3125	715.7364	699	716
-20		699.3133	715.6225	699	716
-10		699.3015	715.5954	699	716
0		699.2919	715.6124	699	716
10		699.1724	715.3909	699	716
20		699.2913	715.3776	699	716
30		699.0781	715.4815	699	716
40		699.1839	715.4806	699	716
50		699.2734	715.3946	699	716
20	L.V.	699.1864	715.4164	699	716
	H.V.	699.1866	715.4176	699	716

Band 17:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	704.6387	715.8328	704	716
-20		704.6221	715.8317	704	716
-10		704.5862	715.8217	704	716
0		704.5713	715.7394	704	716
10		704.5818	715.7367	704	716
20		704.5757	715.7286	704	716
30		704.5927	715.7464	704	716
40		704.6024	715.7373	704	716
50		704.5724	715.7339	704	716
20	L.V.	704.5939	715.7318	704	716
	H.V.	704.5827	715.7291	704	716

Band 38:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	2570.9877	2619.9856	2570	2620
-20		2570.8928	2619.8769	2570	2620
-10		2570.7825	2619.7695	2570	2620
0		2570.6731	2619.6556	2570	2620
10		2570.5636	2619.5492	2570	2620
20		2570.4526	2619.4345	2570	2620
30		2570.3412	2619.3294	2570	2620
40		2570.2375	2619.2113	2570	2620
50		2570.1287	2619.1125	2570	2620
20	L.V.	2570.2178	2619.8785	2570	2620
	H.V.	2570.2134	2619.7643	2570	2620

Band 41:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	2535.9456	2654.9655	2535	2655
-20		2535.8442	2654.8582	2535	2655
-10		2535.7372	2654.7486	2535	2655
0		2535.6266	2654.6375	2535	2655
10		2535.5138	2654.5284	2535	2655
20		2535.4175	2654.4182	2535	2655
30		2535.2988	2654.3587	2535	2655
40		2535.1882	2654.1986	2535	2655
50		2535.1829	2654.1882	2535	2655
20	L.V.	2535.1618	2654.0765	2535	2655
	H.V.	2535.0572	2654.0344	2535	2655

Note: The applicant declared the operating frequency range is 2535-2655MHz

Band 66:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1710.0277	1779.8392	1710	1780
-20		1710.0249	1779.8444	1710	1780
-10		1710.0246	1779.8363	1710	1780
0		1710.0275	1779.8358	1710	1780
10		1710.0265	1779.8362	1710	1780
20		1710.0239	1779.8333	1710	1780
30		1710.0225	1779.8341	1710	1780
40		1710.0246	1779.8368	1710	1780
50		1710.0233	1779.8376	1710	1780
20	L.V.	1710.0258	1779.8356	1710	1780
	H.V.	1710.0252	1779.8354	1710	1780

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