ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

Applicant:	Wistron Neweb Corporation 20 Park Avenue II Hsinchu Science Park, Hsinchu 308, Taiwan
Manufacturer:	Wistron Neweb Corporation 20 Park Avenue II Hsinchu Science Park, Hsinchu 308, Taiwan
Product Name:	DRMR-H01
Brand Name:	WNC
Model No. / ISED HVIN:	DRMR-H01
ISED PMN:	DRMR-H01
Report Number:	TERF2501000195ER
FCC ID	NKR-DRMRH01
IC:	4441A-DRMRH01
Date of EUT Received:	January 10, 2025
Date of Test:	January 13, 2025~April 29, 2025
Issue Date:	June 2, 2025

Approved By _____
Blue Yang

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Central RF Lab The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI ANSI C63.26-2015 and the energy emitted by the sample EUT comply with FCC rule part 2 , 22H & 24E & 27 C & 90S and ISED RSS-Gen, 130, 132, 133, 139, 140, 170, 195, 199.

The results of this report relate only to the sample identified in this report.

Revision History

Report Number	Revision	Description	Issue Date	Revised By	Remark
TERF2501000195ER	00	Original	May 12, 2025	Karen Huang	
TERF2501000195ER	01	Update section 1.3	June 2, 2025	Karen Huang	*

Note:

1、 The remark "*" indicates modification of the report upon requests from certification body.

Contents

1 GENERAL PRODUCT INFORMATION

1.1 Product Description

Product Name:	DRMR-H01
Brand Name:	WNC
Model No. / ISED HVIN:	DRMR-H01
Hardware Version:	N/A
Firmware Version:	N/A
EUT Series No.:	355182430001732,355182430001765,151515151515156
Power Supply:	3.3 Vdc
Test Software (Name/Version)	Connect with call box

1.2 Operation Frequency Range

NR Band 2			
BW (MHz)	Operation Frequency (MHz)		
5	1852.5	-	1907.5
10	1855.0	-	1905.0
15	1857.5	-	1902.5
20	1860.0	-	1900.0

NR Band 5			
BW (MHz)	Operation Frequency (MHz)		
5	826.5	-	846.5
10	829.0	-	844.0
15	831.5	-	841.5
20	834.0	-	839.0

NR Band 7			
BW (MHz)	Operation Frequency (MHz)		
5	2502.5	-	2567.5
10	2505.0	-	2565.0
15	2507.5	-	2562.5
20	2510.0	-	2560.0
25	2512.5	-	2557.5
30	2515.0	-	2555.0
40	2520.0	-	2550.0
50	2525.0	-	2545.0

NR Band 12			
BW (MHz)	Operation Frequency (MHz)		
5	701.5	-	713.5
10	704.0	-	711.0
15	706.5	-	708.5

NR Band 14			
BW (MHz)	Operation Frequency (MHz)		
5	790.5	-	795.5
10	793.0	-	793.0

NR Band 25			
BW (MHz)	Operation Frequency (MHz)		
5	1852.5	-	1912.5
10	1855.0	-	1910.0
15	1857.5	-	1907.5
20	1860.0	-	1905.0
25	1862.5	-	1902.5
30	1865.0	-	1900.0
40	1870.0	-	1895.0

NR Band 26 (Part 90)			
BW (MHz)	Operation Frequency (MHz)		
5	816.5	-	821.5
10	819.0	-	819.0

NR Band 26			
BW (MHz)	Operation Frequency (MHz)		
5	826.5	-	846.5
10	829.0	-	844.0
15	831.5	-	841.5
20	834.0	-	839.0

NR Band 30			
BW (MHz)	Operation Frequency (MHz)		
5	826.5	-	846.5
10	829.0	-	844.0

NR Band 38			
BW (MHz)	Operation Frequency (MHz)		
5	2572.5	-	2617.5
10	2575.0	-	2615.0
15	2577.5	-	2612.5
20	2580.0	-	2610.0
25	2582.5	-	2607.5
30	2585.0	-	2605.0
40	2590.0	-	2600.0

NR Band 41			
BW (MHz)	Operation Frequency (MHz)		
20	2506.0	-	2680.0
30	2511.0	-	2675.0
40	2516.0	-	2670.0
50	2521.0	-	2665.0
60	2526.0	-	2660.0
80	2536.0	-	2650.0
90	2541.0	-	2645.0
100	2546.0	-	2640.0

NR Band 66			
BW (MHz)	Operation Frequency (MHz)		
5	1712.5	-	1777.5
10	1715.0	-	1775.0
15	1717.5	-	1772.5
20	1720.0	-	1770.0
25	1722.5	-	1767.5
30	1725.0	-	1765.0
40	1730.0	-	1760.0

NR Band 71			
BW (MHz)	Operation Frequency (MHz)		
5	665.5	-	695.5
10	668.0	-	693.0
15	670.5	-	690.5
20	673.0	-	688.0

NR Band 77 (lower)			
BW (MHz)	Operation Frequency (MHz)		
10	3455.0	-	3545.0
15	3457.5	-	3542.5
20	3460.0	-	3540.0
30	3465.0	-	3535.0
40	3470.0	-	3530.0
50	3475.0	-	3525.0
60	3480.0	-	3520.0
70	3485.0	-	3515.0
80	3490.0	-	3510.0
90	3495.0	-	3505.0
100	3500.0	-	3500.0

NR Band 77 (upper)			
BW (MHz)	Operation Frequency (MHz)		
10	3705.0	-	3975.0
15	3707.5	-	3972.5
20	3710.0	-	3970.0
30	3715.0	-	3965.0
40	3720.0	-	3960.0
50	3725.0	-	3955.0
60	3730.0	-	3950.0
70	3735.0	-	3945.0
80	3740.0	-	3940.0
90	3745.0	-	3935.0
100	3750.0	-	3930.0

1.3 Antenna Designation

Antenna Type	Part No.	Antenna Model No.
PIFA	260-29161	PIFA#12
	260-29158	PIFA#9
	260-29152	PIFA#3
	260-29156	PIFA#7
	260-29159	PIFA#10
	260-29151	PIFA#2
	260-29155	PIFA#6
	260-29150	PIFA#1
Monopole	260-29143	Monopole#3
	260-29144	Monopole#4
	260-29147	Monopole#7
	260-29148	Monopole#8
	260-29142	Monopole#2
	260-29146	Monopole#6
	260-29145	Monopole#5
Note: Transmission frequencies in this test report are only available by the above antenna(s).		

Bands	Freq. (MHz)	Peak Antenna Gain (dBi)			
		Gain	PIFA Ant. No.	Gain	Monopole Ant. No.
B2 / n2	1850~1910	3.60	12	3.45	3
B5 / n5	824~849	2.88	3	3.42	3
B7 / n7	2500~2570	4.06	7	3.69	7
B12 / n12	698~716	3.08	3	2.82	8
B14 / n14	788~798	2.94	3	3.32	2
B25 / n25	1850~1915	3.60	12	3.45	3
B26 / n26	814~849	2.79	10	3.42	3
B30 / n30	2305~2315	1.00	2	1.00	6
B38 / n38	2570~2620	4.06	7	3.74	7
B41 / n41	2496~2690	3.33	1	3.76	7
B66 / n66	1710~1780	4.03	9	4.86	4
B71 / n71	663~698	3.30	3	3.30	5
n77	3450~3980	2.95	6	2.93	2

Note: Antenna information is provided by the applicant.

1.4 Type of Emission & Max ERP/EIRP Power Measurement Result:

5G NR Band n2_Uplink frequency band : 1850 to 1910 MHz

Bandwidth (MHz)	Lower Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
5	1852.5	1907.5	DFT-s PI/2 BPSK	23.85	27.45	0.556	4.4822	4482.2	4M48G7W
			DFT-s QPSK	23.81	27.41	0.551	4.4844	4484.4	4M48G7W
			DFT-s QAM	23.29	26.89	0.489	4.4938	4493.8	4M49D7W
			CP QPSK	22.42	26.02	0.400	4.4844	4484.4	4M48G7W
			CP QAM	22.04	25.64	0.366	4.4938	4493.8	4M49D7W
10	1855	1905	DFT-s PI/2 BPSK	24.01	27.61	0.577	8.9676	8967.6	8M97G7W
			DFT-s QPSK	23.82	27.42	0.552	8.988	8988.0	8M99G7W
			DFT-s QAM	23.37	26.97	0.498	8.9862	8986.2	8M99D7W
			CP QPSK	22.67	26.27	0.424	8.988	8988.0	8M99G7W
			CP QAM	22.29	25.89	0.388	8.9862	8986.2	8M99D7W
15	1857.5	1902.5	DFT-s PI/2 BPSK	24.00	27.60	0.575	13.457	13457.0	13M5G7W
			DFT-s QPSK	23.96	27.56	0.570	13.446	13446.0	13M4G7W
			DFT-s QAM	23.21	26.81	0.480	13.479	13479.0	13M5D7W
			CP QPSK	22.24	25.84	0.384	13.446	13446.0	13M4G7W
			CP QAM	22.91	26.51	0.448	13.479	13479.0	13M5D7W
20	1860	1900	DFT-s PI/2 BPSK	23.82	27.42	0.552	17.965	17965.0	18M0G7W
			DFT-s QPSK	23.77	27.37	0.546	17.915	17915.0	17M9G7W
			DFT-s QAM	22.92	26.52	0.449	17.951	17951.0	18M0D7W
			CP QPSK	22.12	25.72	0.373	17.915	17915.0	17M9G7W
			CP QAM	21.99	25.59	0.362	17.951	17951.0	18M0D7W

5G NR Band n5_Uplink frequency band : 824 to 849 MHz

Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
5	826.5	846.5	DFT-s PI/2 BPSK	23.54	24.81	0.303	4.4802	4480.2	4M48G7W
			DFT-s QPSK	23.31	24.58	0.287	4.5095	4509.5	4M51G7W
			DFT-s QAM	22.46	23.73	0.236	4.5163	4516.3	4M52D7W
			CP QPSK	21.64	22.91	0.195	4.5095	4509.5	4M51G7W
			CP QAM	21.69	22.96	0.198	4.5163	4516.3	4M52D7W
10	829	844	DFT-s PI/2 BPSK	23.37	24.64	0.291	8.964	8964.0	8M96G7W
			DFT-s QPSK	23.24	24.51	0.282	8.9624	8962.4	8M96G7W
			DFT-s QAM	22.67	23.94	0.248	9.0206	9020.6	9M02D7W
			CP QPSK	21.73	23.00	0.200	8.9624	8962.4	8M96G7W
			CP QAM	21.86	23.13	0.206	9.0206	9020.6	9M02D7W
15	831.5	841.5	DFT-s PI/2 BPSK	23.56	24.83	0.304	13.45	13450.0	13M5G7W
			DFT-s QPSK	23.38	24.65	0.292	13.436	13436.0	13M4G7W
			DFT-s QAM	22.72	23.99	0.251	13.478	13478.0	13M5D7W
			CP QPSK	21.87	23.14	0.206	13.436	13436.0	13M4G7W
			CP QAM	21.83	23.10	0.204	13.478	13478.0	13M5D7W
20	834	839	DFT-s PI/2 BPSK	23.49	24.76	0.299	17.967	17967.0	18M0G7W
			DFT-s QPSK	23.28	24.55	0.285	17.89	17890.0	17M9G7W
			DFT-s QAM	22.78	24.05	0.254	17.956	17956.0	18M0D7W
			CP QPSK	21.81	23.08	0.203	17.89	17890.0	17M9G7W
			CP QAM	21.66	22.93	0.196	17.956	17956.0	18M0D7W

5G NR Band n7_Uplink frequency band : 2500 to 2570 MHz

Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
5	2502.5	2567.5	DFT-s PI/2 BPSK	23.61	27.67	0.585	4.5137	4513.7	4M51G7W
			DFT-s QPSK	23.40	27.46	0.557	4.4975	4497.5	4M50G7W
			DFT-s QAM	22.48	26.54	0.451	4.4903	4490.3	4M49D7W
			CP QPSK	22.05	26.11	0.408	4.4975	4497.5	4M50G7W
			CP QAM	21.89	25.95	0.394	4.4903	4490.3	4M49D7W
10	2505	2565	DFT-s PI/2 BPSK	23.64	27.70	0.589	8.9569	8956.9	8M96G7W
			DFT-s QPSK	23.56	27.62	0.578	8.9743	8974.3	8M97G7W
			DFT-s QAM	22.66	26.72	0.470	8.9975	8997.5	9M00D7W
			CP QPSK	21.96	26.02	0.400	8.9743	8974.3	8M97G7W
			CP QAM	21.75	25.81	0.381	8.9975	8997.5	9M00D7W
15	2507.5	2562.5	DFT-s PI/2 BPSK	23.63	27.69	0.587	13.469	13469.0	13M5G7W
			DFT-s QPSK	23.58	27.64	0.581	13.46	13460.0	13M5G7W
			DFT-s QAM	22.63	26.69	0.467	13.489	13489.0	13M5D7W
			CP QPSK	22.14	26.20	0.417	13.46	13460.0	13M5G7W
			CP QAM	21.49	25.55	0.359	13.489	13489.0	13M5D7W
20	2510	2560	DFT-s PI/2 BPSK	23.60	27.66	0.583	17.934	17934.0	17M9G7W
			DFT-s QPSK	23.58	27.64	0.581	17.988	17988.0	18M0G7W
			DFT-s QAM	22.57	26.63	0.460	17.983	17983.0	18M0D7W
			CP QPSK	21.81	25.87	0.386	17.988	17988.0	18M0G7W
			CP QAM	21.54	25.60	0.363	17.983	17983.0	18M0D7W
25	2512.5	2557.5	DFT-s PI/2 BPSK	23.53	27.59	0.574	23.009	23009.0	23M0G7W
			DFT-s QPSK	23.49	27.55	0.569	23.002	23002.0	23M0G7W
			DFT-s QAM	22.27	26.33	0.430	23.008	23008.0	23M0D7W
			CP QPSK	21.83	25.89	0.388	23.002	23002.0	23M0G7W
			CP QAM	21.33	25.39	0.346	23.008	23008.0	23M0D7W
30	2515	2555	DFT-s PI/2 BPSK	23.47	27.53	0.566	28.668	28668.0	28M7G7W
			DFT-s QPSK	23.46	27.52	0.565	28.653	28653.0	28M7G7W
			DFT-s QAM	22.03	26.09	0.406	28.669	28669.0	28M7D7W
			CP QPSK	21.54	25.60	0.363	28.653	28653.0	28M7G7W
			CP QAM	20.99	25.05	0.320	28.669	28669.0	28M7D7W
40	2520	2550	DFT-s PI/2 BPSK	23.42	27.48	0.560	38.652	38652.0	38M7G7W
			DFT-s QPSK	23.39	27.45	0.556	38.605	38605.0	38M6G7W
			DFT-s QAM	22.17	26.23	0.420	38.71	38710.0	38M7D7W
			CP QPSK	21.52	25.58	0.361	38.605	38605.0	38M6G7W
			CP QAM	21.04	25.10	0.324	38.71	38710.0	38M7D7W
50	2525	2545	DFT-s PI/2 BPSK	23.48	27.54	0.568	48.265	48265.0	48M3G7W
			DFT-s QPSK	23.45	27.51	0.564	48.204	48204.0	48M2G7W
			DFT-s QAM	22.23	26.29	0.426	48.333	48333.0	48M3D7W
			CP QPSK	21.61	25.67	0.369	48.204	48204.0	48M2G7W
			CP QAM	21.39	25.45	0.351	48.333	48333.0	48M3D7W

5G NR Band n12_Uplink frequency band : 699 to 716 MHz

Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
5	701.5	713.5	DFT-s PI/2 BPSK	23.15	24.08	0.256	4.5089	4508.9	4M51G7W
			DFT-s QPSK	23.13	24.06	0.255	4.5017	4501.7	4M50G7W
			DFT-s QAM	22.22	23.15	0.207	4.4903	4490.3	4M49D7W
			CP QPSK	21.74	22.67	0.185	4.5017	4501.7	4M50G7W
			CP QAM	21.27	22.20	0.166	4.4903	4490.3	4M49D7W
10	704	711	DFT-s PI/2 BPSK	23.12	24.05	0.254	8.9516	8951.6	8M95G7W
			DFT-s QPSK	23.09	24.02	0.252	8.9966	8996.6	9M00G7W
			DFT-s QAM	22.16	23.09	0.204	8.9832	8983.2	8M98D7W
			CP QPSK	21.43	22.36	0.172	8.9966	8996.6	9M00G7W
			CP QAM	21.10	22.03	0.160	8.9832	8983.2	8M98D7W
15	706.5	708.5	DFT-s PI/2 BPSK	22.96	23.89	0.245	13.485	13485.0	13M5G7W
			DFT-s QPSK	22.95	23.88	0.244	13.47	13470.0	13M5G7W
			DFT-s QAM	22.17	23.10	0.204	13.494	13494.0	13M5D7W
			CP QPSK	21.49	22.42	0.175	13.47	13470.0	13M5G7W
			CP QAM	20.95	21.88	0.154	13.494	13494.0	13M5D7W

5G NR Band n14_Uplink frequency band : 788 to 798 MHz

Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
5	790.5	795.5	DFT-s PI/2 BPSK	22.91	23.84	0.242	4.4889	4488.9	4M49G7W
			DFT-s QPSK	22.90	23.83	0.242	4.4746	4474.6	4M47G7W
			DFT-s QAM	21.53	22.46	0.176	4.514	4514.0	4M51D7W
			CP QPSK	21.36	22.29	0.169	4.4746	4474.6	4M47G7W
			CP QAM	20.71	21.64	0.146	4.514	4514.0	4M51D7W
10	793	793	DFT-s PI/2 BPSK	22.89	23.82	0.241	8.9401	8940.1	8M94G7W
			DFT-s QPSK	22.83	23.76	0.238	8.9941	8994.1	8M99G7W
			DFT-s QAM	21.78	22.71	0.187	8.997	8997.0	9M00D7W
			CP QPSK	21.73	22.66	0.185	8.9941	8994.1	8M99G7W
			CP QAM	21.62	22.55	0.180	8.997	8997.0	9M00D7W

5G NR Band n25_Uplink frequency band : 1850 to 1915 MHz

Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
5	1852.5	1912.5	DFT-s PI/2 BPSK	23.84	27.44	0.555	4.5158	4515.8	4M52G7W
			DFT-s QPSK	23.64	27.24	0.530	4.4963	4496.3	4M50G7W
			DFT-s QAM	22.85	26.45	0.442	4.5037	4503.7	4M50D7W
			CP QPSK	22.40	26.00	0.398	4.4963	4496.3	4M50G7W
			CP QAM	22.16	25.76	0.377	4.5037	4503.7	4M50D7W
10	1855	1910	DFT-s PI/2 BPSK	23.86	27.46	0.557	8.9457	8945.7	8M95G7W
			DFT-s QPSK	23.75	27.35	0.543	8.9935	8993.5	8M99G7W
			DFT-s QAM	22.97	26.57	0.454	8.9866	8986.6	8M99D7W
			CP QPSK	22.11	25.71	0.372	8.9935	8993.5	8M99G7W
			CP QAM	22.08	25.68	0.370	8.9866	8986.6	8M99D7W
15	1857.5	1907.5	DFT-s PI/2 BPSK	23.76	27.36	0.545	13.469	13469.0	13M5G7W
			DFT-s QPSK	23.73	27.33	0.541	13.451	13451.0	13M5G7W
			DFT-s QAM	22.91	26.51	0.448	13.478	13478.0	13M5D7W
			CP QPSK	22.20	25.80	0.380	13.451	13451.0	13M5G7W
			CP QAM	21.69	25.29	0.338	13.478	13478.0	13M5D7W
20	1860	1905	DFT-s PI/2 BPSK	23.74	27.34	0.542	17.923	17923.0	17M9G7W
			DFT-s QPSK	23.67	27.27	0.533	17.949	17949.0	17M9G7W
			DFT-s QAM	22.55	26.15	0.412	17.962	17962.0	18M0D7W
			CP QPSK	21.97	25.57	0.361	17.949	17949.0	17M9G7W
			CP QAM	21.64	25.24	0.334	17.962	17962.0	18M0D7W
25	1862.5	1902.5	DFT-s PI/2 BPSK	23.83	27.43	0.553	22.961	22961.0	23M0G7W
			DFT-s QPSK	23.76	27.36	0.545	22.935	22935.0	22M9G7W
			DFT-s QAM	22.76	26.36	0.433	22.969	22969.0	23M0D7W
			CP QPSK	22.07	25.67	0.369	22.935	22935.0	22M9G7W
			CP QAM	21.43	25.03	0.318	22.969	22969.0	23M0D7W
30	1865	1900	DFT-s PI/2 BPSK	23.77	27.37	0.546	28.661	28661.0	28M7G7W
			DFT-s QPSK	23.75	27.35	0.543	28.717	28717.0	28M7G7W
			DFT-s QAM	22.35	25.95	0.394	28.672	28672.0	28M7D7W
			CP QPSK	22.21	25.81	0.381	28.717	28717.0	28M7G7W
			CP QAM	21.52	25.12	0.325	28.672	28672.0	28M7D7W
40	1870	1895	DFT-s PI/2 BPSK	23.62	27.22	0.527	38.758	38758.0	38M8G7W
			DFT-s QPSK	23.58	27.18	0.522	38.624	38624.0	38M6G7W
			DFT-s QAM	22.65	26.25	0.422	38.718	38718.0	38M7D7W
			CP QPSK	21.84	25.44	0.350	38.624	38624.0	38M6G7W
			CP QAM	21.35	24.95	0.313	38.718	38718.0	38M7D7W

5G NR Band n26_Uplink frequency band : 824 to 849 MHz

Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
5	826.5	846.5	DFT-s PI/2 BPSK	22.95	24.22	0.264	4.4871	4487.1	4M49G7W
			DFT-s QPSK	22.90	24.17	0.261	4.4886	4488.6	4M49G7W
			DFT-s QAM	21.73	23.00	0.200	4.4942	4494.2	4M49D7W
			CP QPSK	21.52	22.79	0.190	4.4886	4488.6	4M49G7W
			CP QAM	21.07	22.34	0.171	4.4942	4494.2	4M49D7W
10	829	844	DFT-s PI/2 BPSK	22.93	24.20	0.263	8.984	8984.0	8M98G7W
			DFT-s QPSK	22.90	24.17	0.261	8.9669	8966.9	8M97G7W
			DFT-s QAM	22.11	23.38	0.218	9.0124	9012.4	9M01D7W
			CP QPSK	21.51	22.78	0.190	8.9669	8966.9	8M97G7W
			CP QAM	21.29	22.56	0.180	9.0124	9012.4	9M01D7W
15	831.5	841.5	DFT-s PI/2 BPSK	23.19	24.46	0.279	13.472	13472.0	13M5G7W
			DFT-s QPSK	23.10	24.37	0.274	13.444	13444.0	13M4G7W
			DFT-s QAM	22.15	23.42	0.220	13.487	13487.0	13M5D7W
			CP QPSK	21.70	22.97	0.198	13.444	13444.0	13M4G7W
			CP QAM	20.83	22.10	0.162	13.487	13487.0	13M5D7W
20	834	839	DFT-s PI/2 BPSK	22.96	24.23	0.265	17.886	17886.0	17M9G7W
			DFT-s QPSK	22.95	24.22	0.264	17.952	17952.0	18M0G7W
			DFT-s QAM	21.89	23.16	0.207	17.947	17947.0	17M9D7W
			CP QPSK	21.44	22.71	0.187	17.952	17952.0	18M0G7W
			CP QAM	21.16	22.43	0.175	17.947	17947.0	17M9D7W

5G NR Band n26 Part90s_Uplink frequency band : 814 to 824 MHz									
Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
5	816.5	821.5	DFT-s PI/2 BPSK	22.90	24.17	0.261	4.4858	4485.8	4M49G7W
			DFT-s QPSK	22.86	24.13	0.259	4.4856	4485.6	4M49G7W
			DFT-s QAM	21.65	22.92	0.196	4.4938	4493.8	4M49D7W
			CP QPSK	21.51	22.78	0.190	4.4856	4485.6	4M49G7W
			CP QAM	20.98	22.25	0.168	4.4938	4493.8	4M49D7W
10	819	819	DFT-s PI/2 BPSK	22.89	24.16	0.261	8.9337	8933.7	8M93G7W
			DFT-s QPSK	22.82	24.09	0.256	8.9438	8943.8	8M94G7W
			DFT-s QAM	21.73	23.00	0.200	8.9728	8972.8	8M97D7W
			CP QPSK	21.37	22.64	0.184	8.9438	8943.8	8M94G7W
			CP QAM	20.59	21.86	0.153	8.9728	8972.8	8M97D7W

5G NR Band n30_Uplink frequency band : 2305 to 2315 MHz									
Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
5	2307.5	2312.5	DFT-s PI/2 BPSK	22.27	23.27	0.212	4.4956	4495.6	4M50G7W
			DFT-s QPSK	22.22	23.22	0.210	4.4856	4485.6	4M49G7W
			DFT-s QAM	21.17	22.17	0.165	4.5156	4515.6	4M52D7W
			CP QPSK	20.92	21.92	0.156	4.4856	4485.6	4M49G7W
			CP QAM	20.31	21.31	0.135	4.5156	4515.6	4M52D7W
10	2310	2310	DFT-s PI/2 BPSK	22.28	23.28	0.213	8.9419	8941.9	8M94G7W
			DFT-s QPSK	22.27	23.27	0.212	8.9285	8928.5	8M93G7W
			DFT-s QAM	21.95	22.95	0.197	8.9876	8987.6	8M99D7W
			CP QPSK	20.84	21.84	0.153	8.9285	8928.5	8M93G7W
			CP QAM	20.75	21.75	0.150	8.9876	8987.6	8M99D7W

5G NR Band n38_Uplink frequency band : 2570 to 2620 MHz									
Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
5	2572.5	2617.5	DFT-s PI/2 BPSK	23.37	27.43	0.553	4.4982	4498.2	4M50G7W
			DFT-s QPSK	23.27	27.33	0.541	4.4857	4485.7	4M49G7W
			DFT-s QAM	22.23	26.29	0.426	4.5107	4510.7	4M51D7W
			CP QPSK	21.69	25.75	0.376	4.4857	4485.7	4M49G7W
			CP QAM	21.44	25.50	0.355	4.5107	4510.7	4M51D7W
10	2575	2615	DFT-s PI/2 BPSK	23.72	27.78	0.600	8.9763	8976.3	8M98G7W
			DFT-s QPSK	23.45	27.51	0.564	9.0023	9002.3	9M00G7W
			DFT-s QAM	22.54	26.60	0.457	8.9904	8990.4	8M99D7W
			CP QPSK	22.17	26.23	0.420	9.0023	9002.3	9M00G7W
			CP QAM	21.43	25.49	0.354	8.9904	8990.4	8M99D7W
15	2577.5	2612.5	DFT-s PI/2 BPSK	23.51	27.57	0.571	13.432	13432.0	13M4G7W
			DFT-s QPSK	23.50	27.56	0.570	13.427	13427.0	13M4G7W
			DFT-s QAM	22.72	26.78	0.476	13.458	13458.0	13M5D7W
			CP QPSK	21.82	25.88	0.387	13.427	13427.0	13M4G7W
			CP QAM	21.73	25.79	0.379	13.458	13458.0	13M5D7W
20	2580	2610	DFT-s PI/2 BPSK	23.49	27.55	0.569	17.917	17917.0	17M9G7W
			DFT-s QPSK	23.46	27.52	0.565	17.934	17934.0	17M9G7W
			DFT-s QAM	22.29	26.35	0.432	17.956	17956.0	18M0D7W
			CP QPSK	21.60	25.66	0.368	17.934	17934.0	17M9G7W
			CP QAM	21.52	25.58	0.361	17.956	17956.0	18M0D7W
25	2582.5	2607.5	DFT-s PI/2 BPSK	23.51	27.57	0.571	22.937	22937.0	22M9G7W
			DFT-s QPSK	23.44	27.50	0.562	22.952	22952.0	23M0G7W
			DFT-s QAM	22.16	26.22	0.419	22.986	22986.0	23M0D7W
			CP QPSK	21.71	25.77	0.378	22.952	22952.0	23M0G7W
			CP QAM	21.40	25.46	0.352	22.986	22986.0	23M0D7W
30	2585	2605	DFT-s PI/2 BPSK	23.46	27.52	0.565	28.611	28611.0	28M6G7W
			DFT-s QPSK	23.45	27.51	0.564	28.681	28681.0	28M7G7W
			DFT-s QAM	22.55	26.61	0.458	28.602	28602.0	28M6D7W
			CP QPSK	21.60	25.66	0.368	28.681	28681.0	28M7G7W
			CP QAM	21.54	25.60	0.363	28.602	28602.0	28M6D7W
40	2590	2600	DFT-s PI/2 BPSK	23.39	27.45	0.556	38.635	38635.0	38M6G7W
			DFT-s QPSK	23.33	27.39	0.548	38.645	38645.0	38M6G7W
			DFT-s QAM	21.97	26.03	0.401	38.695	38695.0	38M7D7W
			CP QPSK	21.32	25.38	0.345	38.645	38645.0	38M6G7W
			CP QAM	21.10	25.16	0.328	38.695	38695.0	38M7D7W

FCC 5G NR Band n41_Uplink frequency band : 2496 to 2690 MHz									
Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
20	2506.02	2679.99	DFT-s PI/2 BPSK	26.27	30.03	1.007	17.963	17963.0	18M0G7W
			DFT-s QPSK	26.25	30.01	1.002	17.953	17953.0	18M0G7W
			DFT-s QAM	25.28	29.04	0.802	17.95	17950.0	18M0D7W
			CP QPSK	25.12	28.88	0.773	17.953	17953.0	18M0G7W
			CP QAM	24.62	28.38	0.689	17.95	17950.0	18M0D7W
30	2511	2674.98	DFT-s PI/2 BPSK	26.32	30.08	1.019	28.71	28710.0	28M7G7W
			DFT-s QPSK	26.29	30.05	1.012	28.69	28690.0	28M7G7W
			DFT-s QAM	25.12	28.88	0.773	28.646	28646.0	28M6D7W
			CP QPSK	24.60	28.36	0.685	28.69	28690.0	28M7G7W
			CP QAM	24.28	28.04	0.637	28.646	28646.0	28M6D7W
40	2516.01	2670	DFT-s PI/2 BPSK	26.27	30.03	1.007	38.622	38622.0	38M6G7W
			DFT-s QPSK	26.22	29.98	0.995	38.609	38609.0	38M6G7W
			DFT-s QAM	24.97	28.73	0.746	38.674	38674.0	38M7D7W
			CP QPSK	24.21	27.97	0.627	38.609	38609.0	38M6G7W
			CP QAM	24.22	27.98	0.628	38.674	38674.0	38M7D7W
50	2521.02	2664.99	DFT-s PI/2 BPSK	26.29	30.05	1.012	48.203	48203.0	48M2G7W
			DFT-s QPSK	26.28	30.04	1.009	48.283	48283.0	48M3G7W
			DFT-s QAM	25.26	29.02	0.798	48.279	48279.0	48M3D7W
			CP QPSK	24.69	28.45	0.700	48.283	48283.0	48M3G7W
			CP QAM	24.11	27.87	0.612	48.279	48279.0	48M3D7W
60	2526	2659.98	DFT-s PI/2 BPSK	26.37	30.13	1.030	57.826	57826.0	57M8G7W
			DFT-s QPSK	26.31	30.07	1.016	57.887	57887.0	57M9G7W
			DFT-s QAM	25.72	29.48	0.887	57.954	57954.0	58M0D7W
			CP QPSK	24.41	28.17	0.656	57.887	57887.0	57M9G7W
			CP QAM	23.64	27.40	0.550	57.954	57954.0	58M0D7W
80	2536.02	2649.99	DFT-s PI/2 BPSK	26.22	29.98	0.995	77.128	77128.0	77M1G7W
			DFT-s QPSK	26.21	29.97	0.993	77.176	77176.0	77M2G7W
			DFT-s QAM	25.97	29.73	0.940	77.32	77320.0	77M3D7W
			CP QPSK	24.08	27.84	0.608	77.176	77176.0	77M2G7W
			CP QAM	24.30	28.06	0.640	77.32	77320.0	77M3D7W
90	2541	2644.98	DFT-s PI/2 BPSK	26.17	29.93	0.984	86.754	86754.0	86M8G7W
			DFT-s QPSK	26.16	29.92	0.982	86.809	86809.0	86M8G7W
			DFT-s QAM	24.69	28.45	0.700	86.927	86927.0	86M9D7W
			CP QPSK	24.10	27.86	0.611	86.809	86809.0	86M8G7W
			CP QAM	23.63	27.39	0.548	86.927	86927.0	86M9D7W
100	2546.01	2640	DFT-s PI/2 BPSK	26.26	30.02	1.005	96.187	96187.0	96M2G7W
			DFT-s QPSK	26.21	29.97	0.993	96.305	96305.0	96M3G7W
			DFT-s QAM	24.47	28.23	0.665	96.296	96296.0	96M3D7W
			CP QPSK	23.85	27.61	0.577	96.305	96305.0	96M3G7W
			CP QAM	23.44	27.20	0.525	96.296	96296.0	96M3D7W

IC 5G NR Band n41_Uplink frequency band : 2500 to 2690 MHz									
Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
20	2510.01	2679.99	DFT-s PI/2 BPSK	26.27	30.03	1.007	17.946	17946.0	17M9G7W
			DFT-s QPSK	26.25	30.01	1.002	17.953	17953.0	18M0G7W
			DFT-s QAM	25.28	29.04	0.802	17.95	17950.0	18M0D7W
			CP QPSK	24.59	28.35	0.684	17.953	17953.0	18M0G7W
			CP QAM	24.62	28.38	0.689	17.95	17950.0	18M0D7W
30	2515.02	2674.98	DFT-s PI/2 BPSK	26.32	30.08	1.019	28.71	28710.0	28M7G7W
			DFT-s QPSK	26.29	30.05	1.012	28.69	28690.0	28M7G7W
			DFT-s QAM	25.02	28.78	0.755	28.637	28637.0	28M6D7W
			CP QPSK	24.60	28.36	0.685	28.69	28690.0	28M7G7W
			CP QAM	24.06	27.82	0.605	28.637	28637.0	28M6D7W
40	2520	2670	DFT-s PI/2 BPSK	26.27	30.03	1.007	38.622	38622.0	38M6G7W
			DFT-s QPSK	26.22	29.98	0.995	38.609	38609.0	38M6G7W
			DFT-s QAM	24.97	28.73	0.746	38.661	38661.0	38M7D7W
			CP QPSK	24.21	27.97	0.627	38.609	38609.0	38M6G7W
			CP QAM	24.22	27.98	0.628	38.661	38661.0	38M7D7W
50	2525.01	2664.99	DFT-s PI/2 BPSK	26.29	30.05	1.012	48.203	48203.0	48M2G7W
			DFT-s QPSK	26.28	30.04	1.009	48.283	48283.0	48M3G7W
			DFT-s QAM	25.06	28.82	0.762	48.279	48279.0	48M3D7W
			CP QPSK	24.50	28.26	0.670	48.283	48283.0	48M3G7W
			CP QAM	24.05	27.81	0.604	48.279	48279.0	48M3D7W
60	2530.02	2659.98	DFT-s PI/2 BPSK	26.37	30.13	1.030	57.826	57826.0	57M8G7W
			DFT-s QPSK	26.31	30.07	1.016	57.887	57887.0	57M9G7W
			DFT-s QAM	25.39	29.15	0.822	57.954	57954.0	58M0D7W
			CP QPSK	24.41	28.17	0.656	57.887	57887.0	57M9G7W
			CP QAM	23.64	27.40	0.550	57.954	57954.0	58M0D7W
80	2540.01	2649.99	DFT-s PI/2 BPSK	26.22	29.98	0.995	77.128	77128.0	77M1G7W
			DFT-s QPSK	26.21	29.97	0.993	77.176	77176.0	77M2G7W
			DFT-s QAM	25.97	29.73	0.940	77.32	77320.0	77M3D7W
			CP QPSK	24.08	27.84	0.608	77.176	77176.0	77M2G7W
			CP QAM	23.75	27.51	0.564	77.32	77320.0	77M3D7W
90	2545.02	2644.98	DFT-s PI/2 BPSK	26.17	29.93	0.984	86.754	86754.0	86M8G7W
			DFT-s QPSK	26.12	29.88	0.973	86.809	86809.0	86M8G7W
			DFT-s QAM	24.69	28.45	0.700	86.927	86927.0	86M9D7W
			CP QPSK	24.10	27.86	0.611	86.809	86809.0	86M8G7W
			CP QAM	23.63	27.39	0.548	86.927	86927.0	86M9D7W
100	2550	2640	DFT-s PI/2 BPSK	26.26	30.02	1.005	96.187	96187.0	96M2G7W
			DFT-s QPSK	26.21	29.97	0.993	96.305	96305.0	96M3G7W
			DFT-s QAM	24.47	28.23	0.665	96.277	96277.0	96M3D7W
			CP QPSK	23.85	27.61	0.577	96.305	96305.0	96M3G7W
			CP QAM	23.44	27.20	0.525	96.277	96277.0	96M3D7W

5G NR Band n66_Uplink frequency band : 1710 to 1780 MHz									
Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
5	1712.5	1777.5	DFT-s PI/2 BPSK	23.97	28.83	0.764	4.4916	4491.6	4M49G7W
			DFT-s QPSK	23.96	28.82	0.762	4.4879	4487.9	4M49G7W
			DFT-s QAM	22.79	27.65	0.582	4.499	4499.0	4M50D7W
			CP QPSK	22.42	27.28	0.535	4.4879	4487.9	4M49G7W
			CP QAM	21.92	26.78	0.476	4.499	4499.0	4M50D7W
10	1715	1775	DFT-s PI/2 BPSK	23.98	28.84	0.766	8.9565	8956.5	8M96G7W
			DFT-s QPSK	23.97	28.83	0.764	8.9768	8976.8	8M98G7W
			DFT-s QAM	23.12	27.98	0.628	8.9924	8992.4	8M99D7W
			CP QPSK	22.56	27.42	0.552	8.9768	8976.8	8M98G7W
			CP QAM	22.25	27.11	0.514	8.9924	8992.4	8M99D7W
15	1717.5	1772.5	DFT-s PI/2 BPSK	23.99	28.85	0.767	13.467	13467.0	13M5G7W
			DFT-s QPSK	23.94	28.80	0.759	13.441	13441.0	13M4G7W
			DFT-s QAM	23.18	28.04	0.637	13.479	13479.0	13M5D7W
			CP QPSK	22.39	27.25	0.531	13.441	13441.0	13M4G7W
			CP QAM	22.16	27.02	0.504	13.479	13479.0	13M5D7W
20	1720	1770	DFT-s PI/2 BPSK	23.95	28.81	0.760	17.921	17921.0	17M9G7W
			DFT-s QPSK	23.92	28.78	0.755	17.932	17932.0	17M9G7W
			DFT-s QAM	22.96	27.82	0.605	17.955	17955.0	18M0D7W
			CP QPSK	22.35	27.21	0.526	17.932	17932.0	17M9G7W
			CP QAM	21.78	26.64	0.461	17.955	17955.0	18M0D7W
25	1722.5	1767.5	DFT-s PI/2 BPSK	23.97	28.83	0.764	22.928	22928.0	22M9G7W
			DFT-s QPSK	23.95	28.81	0.760	22.91	22910.0	22M9G7W
			DFT-s QAM	22.65	27.51	0.564	23.021	23021.0	23M0D7W
			CP QPSK	22.50	27.36	0.545	22.91	22910.0	22M9G7W
			CP QAM	21.97	26.83	0.482	23.021	23021.0	23M0D7W
30	1725	1765	DFT-s PI/2 BPSK	23.95	28.81	0.760	28.652	28652.0	28M7G7W
			DFT-s QPSK	23.93	28.79	0.757	28.625	28625.0	28M6G7W
			DFT-s QAM	22.94	27.80	0.603	28.641	28641.0	28M6D7W
			CP QPSK	22.22	27.08	0.511	28.625	28625.0	28M6G7W
			CP QAM	21.96	26.82	0.481	28.641	28641.0	28M6D7W
40	1730	1760	DFT-s PI/2 BPSK	23.95	28.81	0.760	38.688	38688.0	38M7G7W
			DFT-s QPSK	23.92	28.78	0.755	38.613	38613.0	38M6G7W
			DFT-s QAM	22.61	27.47	0.558	38.701	38701.0	38M7D7W
			CP QPSK	22.02	26.88	0.488	38.613	38613.0	38M6G7W
			CP QAM	21.75	26.61	0.458	38.701	38701.0	38M7D7W

5G NR Band n71_Uplink frequency band : 663 to 698 MHz									
Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
5	665.5	695.5	DFT-s PI/2 BPSK	23.65	24.80	0.302	4.4947	4494.7	4M49G7W
			DFT-s QPSK	23.52	24.67	0.293	4.4945	4494.5	4M49G7W
			DFT-s QAM	22.70	23.85	0.243	4.4964	4496.4	4M50D7W
			CP QPSK	22.07	23.22	0.210	4.4945	4494.5	4M49G7W
			CP QAM	21.61	22.76	0.189	4.4964	4496.4	4M50D7W
10	668	693	DFT-s PI/2 BPSK	23.60	24.75	0.299	8.981	8981.0	8M98G7W
			DFT-s QPSK	23.52	24.67	0.293	8.9729	8972.9	8M97G7W
			DFT-s QAM	22.92	24.07	0.255	8.988	8988.0	8M99D7W
			CP QPSK	22.33	23.48	0.223	8.9729	8972.9	8M97G7W
			CP QAM	21.62	22.77	0.189	8.988	8988.0	8M99D7W
15	670.5	690.5	DFT-s PI/2 BPSK	23.82	24.97	0.314	13.476	13476.0	13M5G7W
			DFT-s QPSK	23.76	24.91	0.310	13.452	13452.0	13M5G7W
			DFT-s QAM	22.69	23.84	0.242	13.444	13444.0	13M4D7W
			CP QPSK	22.16	23.31	0.214	13.452	13452.0	13M5G7W
			CP QAM	21.69	22.84	0.192	13.444	13444.0	13M4D7W
20	673	688	DFT-s PI/2 BPSK	23.54	24.69	0.294	17.927	17927.0	17M9G7W
			DFT-s QPSK	23.45	24.60	0.288	17.92	17920.0	17M9G7W
			DFT-s QAM	22.79	23.94	0.248	17.948	17948.0	17M9D7W
			CP QPSK	22.03	23.18	0.208	17.92	17920.0	17M9G7W
			CP QAM	21.67	22.82	0.191	17.948	17948.0	17M9D7W

5G NR Band n77_Part27_Uplink frequency band : 3450 to 3550 MHz									
Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
10	3455.01	3544.98	DFT-s PI/2 BPSK	26.20	29.15	0.822	8.9722	8972.2	8M97G7W
			DFT-s QPSK	25.88	28.83	0.764	8.9794	8979.4	8M98G7W
			DFT-s QAM	25.56	28.51	0.710	8.9769	8976.9	8M98D7W
			CP QPSK	24.26	27.21	0.526	8.9794	8979.4	8M98G7W
			CP QAM	24.48	27.43	0.553	8.9769	8976.9	8M98D7W
15	3457.5	3542.49	DFT-s PI/2 BPSK	26.48	29.43	0.877	13.445	13445.0	13M4G7W
			DFT-s QPSK	26.03	28.98	0.791	13.437	13437.0	13M4G7W
			DFT-s QAM	25.80	28.75	0.750	13.464	13464.0	13M5D7W
			CP QPSK	24.31	27.26	0.532	13.437	13437.0	13M4G7W
			CP QAM	25.52	28.47	0.703	13.464	13464.0	13M5D7W
20	3460.02	3540	DFT-s PI/2 BPSK	26.01	28.96	0.787	17.963	17963.0	18M0G7W
			DFT-s QPSK	25.93	28.88	0.773	17.911	17911.0	17M9G7W
			DFT-s QAM	24.99	27.94	0.622	17.966	17966.0	18M0D7W
			CP QPSK	24.37	27.32	0.540	17.911	17911.0	17M9G7W
			CP QAM	25.66	28.61	0.726	17.966	17966.0	18M0D7W
30	3465	3534.99	DFT-s PI/2 BPSK	25.99	28.94	0.783	28.634	28634.0	28M6G7W
			DFT-s QPSK	25.98	28.93	0.782	28.62	28620.0	28M6G7W
			DFT-s QAM	25.50	28.45	0.700	28.672	28672.0	28M7D7W
			CP QPSK	25.51	28.46	0.701	28.62	28620.0	28M6G7W
			CP QAM	25.54	28.49	0.706	28.672	28672.0	28M7D7W
40	3470.01	3529.98	DFT-s PI/2 BPSK	26.04	28.99	0.793	38.702	38702.0	38M7G7W
			DFT-s QPSK	26.01	28.96	0.787	38.696	38696.0	38M7G7W
			DFT-s QAM	25.90	28.85	0.767	38.59	38590.0	38M6D7W
			CP QPSK	25.26	28.21	0.662	38.696	38696.0	38M7G7W
			CP QAM	24.57	27.52	0.565	38.59	38590.0	38M6D7W
50	3475.02	3525	DFT-s PI/2 BPSK	26.53	29.48	0.887	48.244	48244.0	48M2G7W
			DFT-s QPSK	26.39	29.34	0.859	48.219	48219.0	48M2G7W
			DFT-s QAM	25.81	28.76	0.752	48.246	48246.0	48M2D7W
			CP QPSK	24.60	27.55	0.569	48.219	48219.0	48M2G7W
			CP QAM	25.29	28.24	0.667	48.246	48246.0	48M2D7W
60	3480	3519.99	DFT-s PI/2 BPSK	25.96	28.91	0.778	57.951	57951.0	58M0G7W
			DFT-s QPSK	25.91	28.86	0.769	57.876	57876.0	57M9G7W
			DFT-s QAM	25.23	28.18	0.658	57.921	57921.0	57M9D7W
			CP QPSK	24.09	27.04	0.506	57.876	57876.0	57M9G7W
			CP QAM	23.80	26.75	0.473	57.921	57921.0	57M9D7W
70	3485.01	3514.98	DFT-s PI/2 BPSK	26.06	29.01	0.796	64.379	64379.0	64M4G7W
			DFT-s QPSK	26.01	28.96	0.787	64.357	64357.0	64M4G7W
			DFT-s QAM	24.92	27.87	0.612	64.475	64475.0	64M5D7W
			CP QPSK	24.18	27.13	0.516	64.357	64357.0	64M4G7W
			CP QAM	23.69	26.64	0.461	64.475	64475.0	64M5D7W
80	3490.02	3510	DFT-s PI/2 BPSK	25.90	28.85	0.767	77.361	77361.0	77M4G7W
			DFT-s QPSK	25.89	28.84	0.766	77.354	77354.0	77M4G7W
			DFT-s QAM	25.10	28.05	0.638	77.389	77389.0	77M4D7W
			CP QPSK	24.02	26.97	0.498	77.354	77354.0	77M4G7W
			CP QAM	23.69	26.64	0.461	77.389	77389.0	77M4D7W
90	3495	3504.99	DFT-s PI/2 BPSK	25.81	28.76	0.752	86.718	86718.0	86M7G7W
			DFT-s QPSK	25.76	28.71	0.743	86.699	86699.0	86M7G7W
			DFT-s QAM	24.57	27.52	0.565	86.893	86893.0	86M9D7W
			CP QPSK	23.83	26.78	0.476	86.699	86699.0	86M7G7W
			CP QAM	23.25	26.20	0.417	86.893	86893.0	86M9D7W
100	3500.01	3500.01	DFT-s PI/2 BPSK	25.82	28.77	0.753	95.776	95776.0	95M8G7W
			DFT-s QPSK	25.78	28.73	0.746	95.958	95958.0	96M0G7W
			DFT-s QAM	23.99	26.94	0.494	96.049	96049.0	96M0D7W
			CP QPSK	23.61	26.56	0.453	95.958	95958.0	96M0G7W
			CP QAM	22.72	25.67	0.369	96.049	96049.0	96M0D7W

5G NR Band n77_Part27_Uplink frequency band : 3700 to 3980 MHz									
Bandwidth (MHz)	Low Frequency (MHz)	Upper Frequency (MHz)	Modulation	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (MHz)	99% BW (kHz)	Type of Emission
10	3705	3975	DFT-s PI/2 BPSK	26.07	29.02	0.798	8.953	8953.0	8M95G7W
			DFT-s QPSK	26.05	29.00	0.794	8.9739	8973.9	8M97G7W
			DFT-s QAM	24.68	27.63	0.579	9.0141	9014.1	9M01D7W
			CP QPSK	25.09	28.04	0.637	8.9739	8973.9	8M97G7W
			CP QAM	25.07	28.02	0.634	9.0141	9014.1	9M01D7W
15	3707.52	3972.48	DFT-s PI/2 BPSK	26.40	29.35	0.861	13.44	13440.0	13M4G7W
			DFT-s QPSK	26.25	29.20	0.832	13.5	13500.0	13M5G7W
			DFT-s QAM	26.32	29.27	0.845	13.508	13508.0	13M5D7W
			CP QPSK	25.22	28.17	0.656	13.5	13500.0	13M5G7W
			CP QAM	24.19	27.14	0.518	13.508	13508.0	13M5D7W
20	3710.01	3969.99	DFT-s PI/2 BPSK	26.45	29.40	0.871	17.934	17934.0	17M9G7W
			DFT-s QPSK	25.86	28.81	0.760	17.874	17874.0	17M9G7W
			DFT-s QAM	25.48	28.43	0.697	17.926	17926.0	17M9D7W
			CP QPSK	25.74	28.69	0.740	17.874	17874.0	17M9G7W
			CP QAM	23.68	26.63	0.460	17.926	17926.0	17M9D7W
30	3715.02	3964.98	DFT-s PI/2 BPSK	25.84	28.79	0.757	28.557	28557.0	28M6G7W
			DFT-s QPSK	25.70	28.65	0.733	28.713	28713.0	28M7G7W
			DFT-s QAM	25.84	28.79	0.757	28.626	28626.0	28M6D7W
			CP QPSK	25.57	28.52	0.711	28.713	28713.0	28M7G7W
			CP QAM	24.67	27.62	0.578	28.626	28626.0	28M6D7W
40	3720	3960	DFT-s PI/2 BPSK	26.04	28.99	0.793	38.667	38667.0	38M7G7W
			DFT-s QPSK	25.84	28.79	0.757	38.819	38819.0	38M8G7W
			DFT-s QAM	24.20	27.15	0.519	38.794	38794.0	38M8D7W
			CP QPSK	23.62	26.57	0.454	38.819	38819.0	38M8G7W
			CP QAM	23.36	26.31	0.428	38.794	38794.0	38M8D7W
50	3725.01	3954.99	DFT-s PI/2 BPSK	26.04	28.99	0.793	48.077	48077.0	48M1G7W
			DFT-s QPSK	25.93	28.88	0.773	48.28	48280.0	48M3G7W
			DFT-s QAM	24.74	27.69	0.587	48.34	48340.0	48M3D7W
			CP QPSK	23.87	26.82	0.481	48.28	48280.0	48M3G7W
			CP QAM	23.37	26.32	0.429	48.34	48340.0	48M3D7W
60	3730.02	3949.98	DFT-s PI/2 BPSK	26.01	28.96	0.787	57.92	57920.0	57M9G7W
			DFT-s QPSK	25.85	28.80	0.759	57.859	57859.0	57M9G7W
			DFT-s QAM	24.63	27.58	0.573	57.989	57989.0	58M0D7W
			CP QPSK	23.73	26.68	0.466	57.859	57859.0	57M9G7W
			CP QAM	23.21	26.16	0.413	57.989	57989.0	58M0D7W
70	3735	3945	DFT-s PI/2 BPSK	26.05	29.00	0.794	64.34	64340.0	64M3G7W
			DFT-s QPSK	25.97	28.92	0.780	64.369	64369.0	64M4G7W
			DFT-s QAM	24.20	27.15	0.519	64.485	64485.0	64M5D7W
			CP QPSK	23.65	26.60	0.457	64.369	64369.0	64M4G7W
			CP QAM	23.34	26.29	0.426	64.485	64485.0	64M5D7W
80	3740.01	3939.99	DFT-s PI/2 BPSK	25.99	28.94	0.783	77.486	77486.0	77M5G7W
			DFT-s QPSK	25.89	28.84	0.766	77.274	77274.0	77M3G7W
			DFT-s QAM	24.08	27.03	0.505	77.305	77305.0	77M3D7W
			CP QPSK	23.63	26.58	0.455	77.274	77274.0	77M3G7W
			CP QAM	23.13	26.08	0.406	77.305	77305.0	77M3D7W
90	3745.02	3934.98	DFT-s PI/2 BPSK	26.01	28.96	0.787	86.947	86947.0	86M9G7W
			DFT-s QPSK	25.79	28.74	0.748	86.929	86929.0	86M9G7W
			DFT-s QAM	23.88	26.83	0.482	86.92	86920.0	86M9D7W
			CP QPSK	23.30	26.25	0.422	86.929	86929.0	86M9G7W
			CP QAM	22.89	25.84	0.384	86.92	86920.0	86M9D7W
100	3750	3930	DFT-s PI/2 BPSK	25.98	28.93	0.782	96.154	96154.0	96M2G7W
			DFT-s QPSK	25.87	28.82	0.762	96.212	96212.0	96M2G7W
			DFT-s QAM	23.89	26.84	0.483	96.526	96526.0	96M5D7W
			CP QPSK	23.35	26.30	0.427	96.212	96212.0	96M2G7W
			CP QAM	22.88	25.83	0.383	96.526	96526.0	96M5D7W

1.5 Test Methodology of Applied Standards

FCC 47 CFR Part 2, 22H, 24E, 27C, Part 90
ISED RSS-GEN Issue 5 Amendment 2 Feb. 2021
ISED RSS-130 Issue 2 Feb. 2019
ISED RSS-132 Issue 4 Jan. 2023
ISED RSS-133 Issue 7 July 2024
ISED RSS-139 Issue 4 Amendment Oct. 2022
ISED RSS-140 Issue 1 Apr. 2018
ISED RSS-195 Issue 2 Apr. 24, 2014
ISED RSS-199 Issue 4 July 2023
ANSI C63.26-2015
KDB971168 D01 Power Meas license Digital System v03r01
KDB412172 D01 Determining ERP and EIRP v01r01

1.6 Test Facility

Laboratory	Test Site Address	Test Site Name	FCC Designation number	IC CAB identifier
SGS Taiwan Ltd. Central RF Lab. (TAF code 3702)	No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan.	SAC 1	TW0027	TW3702
		SAC 2		
		SAC 3		
		Conduction 1		
		Conducted 1		
		Conducted 2		
		Conducted 3		
		Conducted 4		
		Conducted 5		
		Conducted 6		
	No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333	Conduction C	TW0028	
		SAC C		
		SAC D		
		SAC G		
		Conducted A		
		Conducted B		
		Conducted C		
		Conducted D		
		Conducted E		
		Conducted F		
		Conducted G		

Note: Test site name is remarked on the equipment list in each section of this report as an indication where measurements occurred in specific test site and address.

1.7 Special Accessories

No special accessories were used during testing.

1.8 Equipment Modifications

There was no modifications incorporated into the EUT.

1.9 Radiated Emission Test Sites For Measurements From 9 kHz To 30 MHz

Radiated emission below 30MHz is measured in a 9m*6m*6m semi-anechoic chamber, the measurements correspond to those obtained at an open-field test site.
There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

2 SYSTEM TEST CONFIGURATION

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

The EUT (Transmitter) was operated in the continuous transmission mode employed with the simulator of the Base Station that fixates at test default channels to fix the Tx frequency which was for the purpose of the measurements.

2.3 Test Procedure

2.3.1 Conducted Measurement at Antenna Port

The EUT is placed on a table which is 0.8 m above ground plane. A low loss of RF cable was used to connect the antenna port of EUT to measurement equipment.

2.3.2 Radiated Emissions (ERP/EIRP)

The EUT is placed on a turn table, for emission measurements below 1 GHz is 0.8 m above ground plane, for emission measurements above 1 GHz, the table height shall be 1.5 m. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both Horizontal and Vertical. In order to find out the max. emission, the relative positions of this transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made “while keeping the antenna in the ‘cone of radiation’ from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response.” is still within the 3dB illumination BW of the measurement antenna.

2.4 Measurement Results Explanation Example

For all conducted test items:
The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuation factor between EUT conducted port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly EUT RF output level.
Note:
The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

2.5 Final Amplifier Voltage and Current Information:

5G NR BAND n2		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	3.3	520
Bandwidth:10MHz Mod:256QAM	3.3	530
Bandwidth:15MHz Mod:256QAM	3.3	540
Bandwidth:20MHz Mod:256QAM	3.3	530
5G NR BAND n5		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	3.3	650
Bandwidth:10MHz Mod:256QAM	3.3	680
Bandwidth:15MHz Mod:256QAM	3.3	690
Bandwidth:20MHz Mod:256QAM	3.3	700
5G NR BAND n7		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	3.3	610
Bandwidth:10MHz Mod:256QAM	3.3	610
Bandwidth:15MHz Mod:256QAM	3.3	640
Bandwidth:20MHz Mod:256QAM	3.3	660
Bandwidth:25MHz Mod:256QAM	3.3	670
Bandwidth:30MHz Mod:256QAM	3.3	680
Bandwidth:40MHz Mod:256QAM	3.3	680
Bandwidth:50MHz Mod:256QAM	3.3	660
5G NR BAND n12		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	3.3	580
Bandwidth:10MHz Mod:256QAM	3.3	600
Bandwidth:15MHz Mod:256QAM	3.3	610
5G NR BAND n14		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	3.3	600
Bandwidth:10MHz Mod:256QAM	3.3	630

5G NR BAND n25		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	3.3	540
Bandwidth:10MHz Mod:256QAM	3.3	530
Bandwidth:15MHz Mod:256QAM	3.3	530
Bandwidth:20MHz Mod:256QAM	3.3	540
Bandwidth:25MHz Mod:256QAM	3.3	550
Bandwidth:30MHz Mod:256QAM	3.3	560
Bandwidth:40MHz Mod:256QAM	3.3	570

5G NR BAND n26		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	3.3	650
Bandwidth:10MHz Mod:256QAM	3.3	660
Bandwidth:15MHz Mod:256QAM	3.3	670
Bandwidth:20MHz Mod:256QAM	3.3	680

5G NR BAND n26 Part90s		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	3.3	650
Bandwidth:10MHz Mod:256QAM	3.3	660

5G NR BAND n30		
CP-OFDM_SCS 30 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:10MHz Mod:256QAM	3.3	580

5G NR BAND n38		
CP-OFDM_SCS 30 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:10MHz Mod:256QAM	3.3	260
Bandwidth:15MHz Mod:256QAM	3.3	270
Bandwidth:20MHz Mod:256QAM	3.3	270
Bandwidth:25MHz Mod:256QAM	3.3	270
Bandwidth:30MHz Mod:256QAM	3.3	280
Bandwidth:40MHz Mod:256QAM	3.3	280

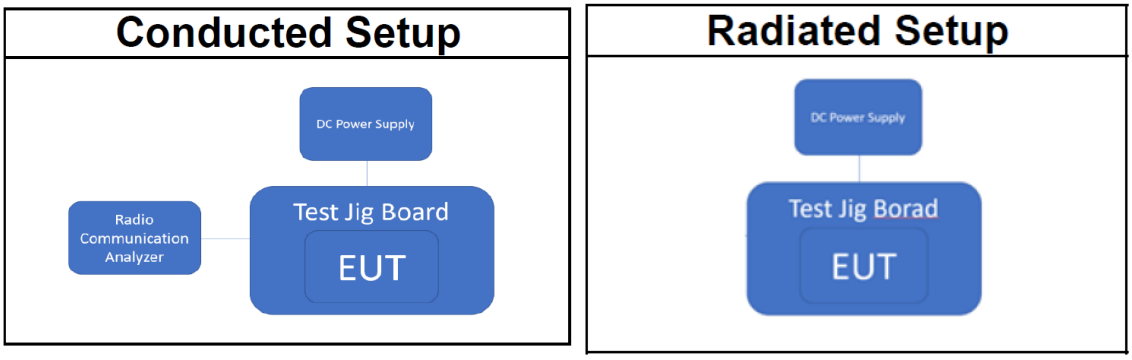
5G NR BAND n41		
CP-OFDM_SCS 30 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:20MHz Mod:256QAM	3.3	290
Bandwidth:30MHz Mod:256QAM	3.3	310
Bandwidth:40MHz Mod:256QAM	3.3	300
Bandwidth:50MHz Mod:256QAM	3.3	310
Bandwidth:60MHz Mod:256QAM	3.3	330
Bandwidth:80MHz Mod:256QAM	3.3	320
Bandwidth:90MHz Mod:256QAM	3.3	320
Bandwidth:100MHz Mod:256QAM	3.3	340
5G NR BAND n66		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	3.3	570
Bandwidth:10MHz Mod:256QAM	3.3	570
Bandwidth:15MHz Mod:256QAM	3.3	570
Bandwidth:20MHz Mod:256QAM	3.3	570
Bandwidth:25MHz Mod:256QAM	3.3	570
Bandwidth:30MHz Mod:256QAM	3.3	600
Bandwidth:40MHz Mod:256QAM	3.3	590
5G NR BAND n71		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	3.3	730
Bandwidth:10MHz Mod:256QAM	3.3	750
Bandwidth:15MHz Mod:256QAM	3.3	750
Bandwidth:20MHz Mod:256QAM	3.3	740

5G NR BAND n77		
CP-OFDM_SCS 30 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:10MHz Mod:256QAM	3.3	570
Bandwidth:15MHz Mod:256QAM	3.3	580
Bandwidth:20MHz Mod:256QAM	3.3	580
Bandwidth:30MHz Mod:256QAM	3.3	600
Bandwidth:40MHz Mod:256QAM	3.3	600
Bandwidth:50MHz Mod:256QAM	3.3	610
Bandwidth:60MHz Mod:256QAM	3.3	610
Bandwidth:70MHz Mod:256QAM	3.3	620
Bandwidth:80MHz Mod:256QAM	3.3	630
Bandwidth:90MHz Mod:256QAM	3.3	620
Bandwidth:100MHz Mod:256QAM	3.3	650

2TX

5G NR BAND n41		
CP-OFDM_SCS 30 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:20MHz Mod:256QAM	3.3	460
Bandwidth:30MHz Mod:256QAM	3.3	470
Bandwidth:40MHz Mod:256QAM	3.3	470
Bandwidth:50MHz Mod:256QAM	3.3	490
Bandwidth:60MHz Mod:256QAM	3.3	480
Bandwidth:80MHz Mod:256QAM	3.3	500
Bandwidth:90MHz Mod:256QAM	3.3	510
Bandwidth:100MHz Mod:256QAM	3.3	500
5G NR BAND n77_Part27		
CP-OFDM_SCS 30 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:10MHz Mod:256QAM	3.3	840
Bandwidth:15MHz Mod:256QAM	3.3	850
Bandwidth:20MHz Mod:256QAM	3.3	850
Bandwidth:30MHz Mod:256QAM	3.3	860
Bandwidth:40MHz Mod:256QAM	3.3	860
Bandwidth:50MHz Mod:256QAM	3.3	880
Bandwidth:60MHz Mod:256QAM	3.3	880
Bandwidth:70MHz Mod:256QAM	3.3	870
Bandwidth:80MHz Mod:256QAM	3.3	880
Bandwidth:90MHz Mod:256QAM	3.3	840
Bandwidth:100MHz Mod:256QAM	3.3	830

2.6 Test Configuration



Note: Radio Communication Analyzer is placed in remote side for radiated test.

2.7 Control Unit(s)

N/A

3 SUMMARY OF TEST RESULTS

FCC Rules	IC Rules	Description Of Test	Result
§2.1046(a)	RSS-GEN §6.12	RF Power Output	Compliant
§22.913(a)(5) §24.232(c) §27.50(a)(3)(i) §27.50(c)(9) §27.50(d)(4) §27.50(h)(2) §27.50(j)(3) §27.50(k)(3) §90.542(a)(6) §90.635(b)	RSS-130 §4.6 RSS-132 §5.4 RSS-133 §5.5 RSS-139 §5.5 RSS-140 §4.3 RSS-195 §5.5 RSS-199 §5.5	ERP/ EIRP measure-ment	Compliant
§2.1049(h)	RSS-GEN §6.7	99% & 26dB Occu-pied Bandwidth	Compliant
§2.1051 §22.917(a)(b) §24.238(a)(b) §27.53(a)(4) §27.53(g) §27.53(h)(1)&(3) §27.53(l)(2) §27.53(m) §27.53(m)(4) §27.53(n)(2) §90.691(a) §90.543 (e)(2)~(5)	RSS-GEN §6.13 RSS-130 §4.7 RSS-132 §5.5 RSS-133 §5.6 RSS-139 §5.6 RSS-140 §4.4 RSS-195 §5.6 RSS-199 §5.6	Out of Band Emis-sions at Antenna Ter-minals and Band Edge / Emis-sion mask require-ments	Compliant

§2.1053 §22.917(a)(b) §24.238(a)(b) §27.53(a)(4) §27.53(g) §27.53(h) §27.53(l)(2) §27.53(m)(4) §27.53(n)(2) §90.691(a) §90.543 (e)(2)~(5) §90.543 (f)	RSS-GEN §6.13 RSS-130 §4.7 RSS-132 §5.5 RSS-133 §5.6 RSS-139 §5.6 RSS-140 §4.4 RSS-195 §5.6 RSS-199 §5.6	Field Strength of Spurious Radiation	Compliant
§22.913(d) §24.232(d) §27.50(a)(1)(B) §27.50(d)(5) §27.50(j)(4) §27.50 (k)(4)	RSS-130 §4.6.1 RSS-132 §5.4 RSS-133 §5.5 RSS-139 §5.5 RSS-140 §4.3 RSS-195 §5.5 RSS-199 §5.5	Peak to Average Ratio	Compliant
§2.1055(a)(1) §22.355 §24.235 §27.54 §90.539 (e)	RSS-130 §4.5 RSS-132 §5.3 RSS-133 §5.4 RSS-139 §5.4 RSS-140 §4.2 RSS-195 §5.4 RSS-199 §5.4	Frequency Stability	Compliant

4 DESCRIPTION OF TEST MODES

4.1 The Worst Test Modes and Channel Details

1. The EUT has been tested under operating condition.
2. Pre-Scan has been conducted to determine the worst-case scenario from all possible combinations among available modulations, data rates and antenna ports, the worst case configurations listed below for the final test.
3. The field strength of radiated emission was measured as the EUT positioned in different orthogonal planes (E1/E2/H) based on actual usage of the EUT to pre-scan the emissions for determining the worst case scenario.

SA Mode	Available Antennas			Worst Case Antennas
	PIFA#	Monopole#	External	
n2	12	3	V	PIFA #12
n5	3	3	V	Monopole #3
n7	7	7	V	PIFA #7
n12	3	8	V	PIFA #3
n14	3	2	V	Monopole #2
n25	12	3	V	PIFA #12
n26	10	3	V	Monopole #3
N30	2	6	V	Monopole #6
n38	7	7	V	PIFA #7
n41	1	7	V	Monopole #7
n66	9	4	V	Monopole #4
n71	3	5	V	PIFA #3
n77 (Part 27)	6	2	V	PIFA #6

Available ENDC modes
2A_n41A
2A_n77A
5A_n66A
5A_n77A
12A_n2A
12A_n77A
30A_n5A
30A_n77A
41A_n41A
66A_71A

Available NRCA modes
n2A_n14A
n2A_n77A
n12A_n77A
n14A_n30A
n14A_n66A
n30A_n77A
n41A_n71A

4.2 Measurement Configuration

Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power	2	v	v	v	v	v	v	v												v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v					v																	v									v
Occupied Bandwidth		v	v	v	v	v	v	v												v	v	v	v	v										v
Bandedge		v		v	v	v	v	v												v					v				v	v				v
Conducted Emission		v	v	v	v	v	v	v												v											v			
CCDF		v	v	v	v	v	v	v																v										v
Radiated Emission		v	v	v		v														v											v			
Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power	5	v	v	v	v	v	v	v												v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v					v																	v									v
Occupied Bandwidth		v	v	v	v	v	v	v												v	v	v	v	v										v
Bandedge		v		v	v	v	v	v												v					v				v	v				v
Conducted Emission		v	v	v	v	v	v	v												v											v			
CCDF		v	v	v	v	v	v	v																v										v
Radiated Emission		v	v	v			v													v											v			
Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power	7	v	v	v	v	v	v	v	v	v		v		v						v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v											v											v									v
Occupied Bandwidth		v	v	v	v	v	v	v	v	v		v		v						v	v	v	v	v										v
Bandedge		v		v	v	v	v	v	v	v		v		v						v					v				v	v				v
Conducted Emission		v	v	v	v	v	v	v	v	v		v		v						v											v			
CCDF		v	v	v	v	v	v	v	v	v		v		v										v										v
Radiated Emission		v	v	v		v														v											v			
Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power	12	v	v	v	v	v	v													v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v				v																		v									v
Occupied Bandwidth		v	v	v	v	v	v													v	v	v	v	v										v
Bandedge		v		v	v	v	v													v					v				v	v				v
Conducted Emission		v	v	v	v	v	v													v											v			
CCDF		v	v	v	v	v	v																	v										v
Radiated Emission		v	v	v	v															v											v			
Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power	14	v	v	v	v	v														v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v			v																			v									v
Occupied Bandwidth		v	v	v	v	v														v	v	v	v	v										v
Bandedge		v		v	v	v														v					v				v	v				v
Conducted Emission		v	v	v	v	v														v											v			
CCDF		v	v	v	v	v																		v										v
Radiated Emission		v	v	v	v															v											v			
Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30		40	45	50	60	70	80	90	100	BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power	25	v	v	v	v	v	v	v	v	v		v								v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v					v																	v									v
Occupied Bandwidth		v	v	v	v	v	v	v	v	v		v								v	v	v	v	v										v
Bandedge		v		v	v	v	v	v	v	v		v								v					v				v	v				v
Conducted Emission		v	v	v	v	v	v	v	v	v		v								v											v			
CCDF		v	v	v	v	v	v	v	v	v		v												v										v
Radiated Emission		v	v	v		v														v											v			
Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30		40	45	50	60	70	80	90	100	BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power	26	v	v	v	v	v	v	v												v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v					v																	v									v
Occupied Bandwidth		v	v	v	v	v	v	v												v	v	v	v	v										v
Bandedge		v		v	v	v	v	v												v					v				v	v				v
Conducted Emission		v	v	v	v	v	v	v												v											v			
CCDF		v	v	v	v	v	v	v																v										v
Radiated Emission		v	v	v			v													v											v			

Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30		40	45	50	60	70	80	90	100		BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power		v	v	v	v	v															v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v			v																				v										v
Occupied Bandwidth		v	v	v	v	v															v	v	v	v	v										v
Bandedge	26 Part90s	v		v	v	v															v					v				v	v				v
Conducted Emission		v	v	v	v	v															v											v				
CCDF		v	v	v	v	v																			v										v
Radiated Emission		v	v	v	v																v											v				

Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100		BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power		v	v	v	v	v															v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v																							v										v
Occupied Bandwidth		v	v	v	v	v															v	v	v	v	v										v
Bandedge	30	v		v	v	v															v					v				v	v				v
Conducted Emission		v	v	v	v	v															v											v				
CCDF		v	v	v	v	v																			v										v
Radiated Emission		v	v	v		v															v											v				

Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100		BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power		v	v	v	v	v	v	v	v	v		v									v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v									v														v										v
Occupied Bandwidth		v	v	v	v	v	v	v	v	v		v									v	v	v	v	v										v
Mask	38	v		v	v	v	v	v	v	v		v									v					v				v	v				v
Conducted Emission		v	v	v	v	v	v	v	v	v		v									v											v				
CCDF		v	v	v	v	v	v	v	v	v		v																								v
Radiated Emission		v	v	v		v															v											v				

Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100		BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power		v	v	v				v		v		v		v	v		v	v	v		v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v																v							v										v
Occupied Bandwidth		v	v	v				v		v		v		v	v		v	v	v		v	v	v	v	v										v
Mask	41	v		v				v		v		v		v	v		v	v	v		v					v				v	v				v
Conducted Emission		v	v	v				v		v		v		v	v		v	v	v		v											v				
CCDF		v	v	v				v		v		v		v	v		v	v	v																	v
Radiated Emission		v	v	v											v						v											v				

Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100		BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power		v	v	v	v	v	v	v	v	v		v									v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v									v														v										v
Occupied Bandwidth		v	v	v	v	v	v	v	v	v		v									v	v	v	v	v										v
Bandedge	66	v		v	v	v	v	v	v	v		v									v					v				v	v				v
Conducted Emission		v	v	v	v	v	v	v	v	v		v									v											v				
CCDF		v	v	v	v	v	v	v	v	v		v																								v
Radiated Emission		v	v	v			v														v											v				

Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30		40	45	50	60	70	80	90	100		BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power		v	v	v	v	v	v	v													v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v					v																		v										v
Occupied Bandwidth		v	v	v	v	v	v	v													v	v	v	v	v										v
Bandedge	71	v		v	v	v	v	v													v					v				v	v				v
Conducted Emission		v	v	v	v	v	v	v													v											v				
CCDF		v	v	v	v	v	v	v																		v										v
Radiated Emission		v	v	v			v														v											v				

Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-s-OFDM					Modulation CP-OFDM				RB #					
		L	M	H	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100		BPSK	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power		v	v	v		v	v	v		v		v		v	v	v	v	v	v		v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v																v							v										v
Occupied Bandwidth		v	v	v		v	v	v		v		v		v	v	v	v	v	v		v	v	v	v	v										v
Bandedge	77	v		v		v	v	v		v		v		v	v	v	v	v	v		v					v				v	v				v
Conducted Emission		v	v	v		v	v	v		v		v		v	v	v	v	v	v		v											v				
CCDF		v	v	v		v	v	v		v		v		v	v	v	v	v	v																	v
Radiated Emission		v	v	v				v													v											v				

2TX

Test Items	Band	Test Channel			Bandwidth (MHz)												Modulation DFT-s-OFDM				Modulation CP-OFDM				RB #					
		L	M	H	10	15	20	25	30	40	50	60	70	80	90	100	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power	41	v	v	v	v	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v													v					v									v
Occupied Bandwidth		v	v	v	v	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v						v
Bandedge		v		v																										
Mask		v	v	v	v	v	v		v	v	v	v	v	v	v	v					v				v	v				v
Conducted Emission		v	v	v	v	v	v		v	v	v	v	v	v	v	v					v						v			
CCDF		v	v	v	v	v	v		v	v	v	v	v	v	v	v				v				v						v
Radiated Emission		v	v	v			v														v						v			

Test Items	Band	Test Channel			Bandwidth (MHz)												Modulation DFT-s-OFDM				Modulation CP-OFDM				RB #					
		L	M	H	10	15	20	25	30	40	50	60	70	80	90	100	QPSK	16 QAM	64 QAM	256 QAM	QPSK	16 QAM	64 QAM	256 QAM	Edge 1RB_Left	Edge 1RB_Right	Inner 1RB_Left	Inner 1RB_Right	Inner Full	Outer Full
Conducted Power	77	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v	v
Freqency Stability			v													v					v									v
Occupied Bandwidth		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v						v
Bandedge		v		v	v	v	v	v	v	v	v	v	v	v	v															
Mask		v	v	v																	v				v	v				v
Conducted Emission		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v					v						v			
CCDF		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v				v				v						v
Radiated Emission		v	v	v											v						v						v			

ENDC

5G NR ENDC Band	SCS	Test Channel	Channel Bandwidth (MHz)	Modulation	Resource Block Allocation	
					RBs allocated	RB Offset
2A_n41A	30K	18625_371000	5_10	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n41A	30K	18900_376000	5_10	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n41A	30K	19175_381000	5_10	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n77A	15K	18625_371000	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n77A	15K	18900_376000	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n77A	15K	19175_381000	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n66A	15K	20425_343500	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n66A	15K	20525_349000	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n66A	15K	20625_354500	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n77A	15K	20425_630500	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n77A	15K	20525_633334	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n77A	15K	20625_636166	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
12A_n2A	15K	23060_371000	10_10	QPSK_DFT-s PI/2 BPSK	1_1	0_1
12A_n2A	15K	23095_376000	10_10	QPSK_DFT-s PI/2 BPSK	1_1	0_1
12A_n2A	15K	23130_381000	10_10	QPSK_DFT-s PI/2 BPSK	1_1	0_1
12A_n77A	15K	23060_630500	10_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
12A_n77A	15K	23095_633334	10_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
12A_n77A	15K	23130_636166	10_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
30A_n5A	15K	27685_166300	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
30A_n5A	15K	27710_167300	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
30A_n5A	15K	27735_168300	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
30A_n77A	15K	27685_630500	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
30A_n77A	15K	27710_633334	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
30A_n77A	15K	27735_636166	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
41A_n41A	30K	39675_500202	5_10	QPSK_DFT-s PI/2 BPSK	1_1	0_1
41A_n41A	30K	40620_518604	5_10	QPSK_DFT-s PI/2 BPSK	1_1	0_1
41A_n41A	30K	41565_537000	5_10	QPSK_DFT-s PI/2 BPSK	1_1	0_1
66A_71A	15K	131997_134100	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
66A_71A	15K	132322_136100	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
66A_71A	15K	132647_138100	5_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1

NRCA

5G NR NRCA Band	SCS	Test Channel	Channel Bandwidth (MHz)	Modulation	Resource Block Allocation	
					RBs allocated	RB Offset
n2A_n14A	15K_15K	371000_158100	10_5	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n14A	15K_15K	376000_158600	10_5	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n14A	15K_15K	381000_159100	10_5	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n77A	15K_15K	371000_630500	10_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n77A	15K_15K	376000_633334	10_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n77A	15K_15K	381000_636166	10_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n12A_n77A	15K_15K	140300_630500	5_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n12A_n77A	15K_15K	141500_633334	5_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n12A_n77A	15K_15K	142700_636166	5_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n14A_n30A	15K_30K	158100_462000	5_10	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n14A_n30A	15K_30K	158600_462000	5_10	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n14A_n30A	15K_30K	159100_462000	5_10	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n14A_n66A	15K_15K	158100_343500	5_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n14A_n66A	15K_15K	158600_349000	5_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n14A_n66A	15K_15K	159100_354500	5_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n30A_n77A	30K_15K	462000_630500	10_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n30A_n77A	30K_15K	462000_633334	10_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n30A_n77A	30K_15K	462000_636166	10_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n41A_n71A	30K_15K	500202_630500	10_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n41A_n71A	30K_15K	518604_633334	10_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1
n41A_n71A	30K_15K	537000_636166	10_15	DFT-s PI/2 BPSK_DFT-s PI/2 BPSK	1_1	1_1

5 MEASUREMENT UNCERTAINTY

Test Items	Uncertainty		
Output Power measurement	+/-	0.97	dB
ERP/ EIRP measurement	+/-	2.16	dB
	+/-	2.16	dB
Emission Bandwidth	+/-	1.38	Hz
Out of Band Emissions at Antenna Terminals and Band Edge	+/-	0.77	dB
Peak to Average Ratio	+/-	0.97	dB
Frequency Stability vs. Temperature	+/-	1.48	Hz
Frequency Stability vs. Voltage	+/-	1.48	Hz
Temperature	+/-	0.6	°C
Humidity	+/-	3	%
DC / AC Power Source	+/-	1	%

Radiated Spurious Emission Measurement Uncertainty				
Polarization: Vertical	**+/-**	**1.89**	**dB**	9kHz~30MHz
	+/-	**4.1**	**dB**	30MHz - 1000MHz
	+/-	**3.37**	**dB**	1GHz - 18GHz
	+/-	**3.83**	**dB**	18GHz - 40GHz
Polarization: Horizontal	**+/-**	**1.89**	**dB**	9kHz~30MHz
	+/-	**4.1**	**dB**	30MHz - 1000MHz
	+/-	**3.37**	**dB**	1GHz - 18GHz
	+/-	**3.83**	**dB**	18GHz - 40GHz
Radiated Spurious Emission	**+/-**	**2**	**dB**	33GHz-50GHz
	+/-	**1.59**	**dB**	50GHz-60GHz
	+/-	**1.71**	**dB**	60GHz-90GHz
	+/-	**1.64**	**dB**	90GHz-140GHz
	+/-	**3.84**	**dB**	140GHz-220GHz

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

6 MEASUREMENT EQUIPMENT USED

6.1 Conducted Measurement

Conducted Emission Test Site: Conducted 4					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL. (mm/dd/yyyy)	CAL DUE. (mm/dd/yyyy)
Attenuator	Mini-Circuits	BW-S10W2+	8	12/11/2024	12/10/2025
DC Block	Mini-Circuits	BLK-18-S+	12	12/11/2024	12/10/2025
DC Power Supply	Gwinstek	SPS-3610	GEV856750	08/14/2024	08/13/2025
EXA Spectrum Analyzer	KEYSIGHT	N9010B	MY60240503	12/16/2024	12/15/2025
PXA Spectrum Analyzer	KEYSIGHT	N9030B	MY61330494	04/16/2025	04/15/2026
PXA Spectrum Analyzer	Agilent	N9030A	MY53120760	04/24/2024	04/23/2025
PXA Spectrum Analyzer	Keysight	N9030B	MY61330494	03/22/2024	03/21/2025
Radio Communication Analyzer	KEYSIGHT	E7515B	MY59321561	07/11/2024	07/10/2025
Radio Communication Analyzer	KEYSIGHT	E7515B	MY60191250	02/17/2025	02/16/2026
Splitter	RF-Lambda	RFLT2W1G18G	11-JSPF412-018	12/11/2024	12/10/2025
Temperature Chamber	Giant Force	GTH-150-40-CP-AR	MAA0512-018	06/05/2024	06/04/2025
Test Software	SGS	Radio Test Software	Ver. 21	N.C.R	N.C.R

6.2 Radiated Measurement

Mode: SA

Radiated Emission Test Site: SAC 3					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL. (mm/dd/yyyy)	CAL DUE. (mm/dd/yyyy)
1G High Pass Filter	Micro-Tronics	HPM50108	32	12/11/2024	12/10/2025
2G High Pass Filter	Micro-Tronics	HPM50110	36	12/11/2024	12/10/2025
4G High Pass Filter	WI	WHKX4.0	22	12/11/2024	12/10/2025
Attenuator	Mini-Circuits	BW-S10W2+	16	12/11/2024	12/10/2025
Band Reject Filter 1700-2000	EWT	EWT-54-0038	M1	12/11/2024	12/10/2025
Band Reject Filter 2240-2700	WI	WRCJV2300/2700-2240/2760-40/12SS	1	12/11/2024	12/10/2025
Band Reject Filter 3250-3750	Micro-Tronics	BRM15247	1	12/11/2024	12/10/2025
Band Reject Filter 800-1000	EWT	EWT-54-0037	M3R	12/11/2024	12/10/2025
Bi-log Antenna	SCHWARZBECK	VULB9168	1208	07/17/2024	07/16/2025
Bi-log Antenna	SCHWARZBECK	VULB9168	378	08/09/2024	08/08/2025
Coaxial Cables	EMCI+Huber Suhner	EMC107-SM-SM-1000 +SUCOFLEX 104PEA +EMC107-SM-SM-1500 +SUCOFLEX 106	RX Cable 9K-18G (221110+MY4251/4 PEA+221106+76096 /6)	08/30/2024	08/29/2025
Coaxial Cables	Huber Suhner	SUCOFLEX 102	RX Cable 18G-40G MY2630/2+805062/ 2	08/30/2024	08/29/2025
Coaxial Cables	Huber Suhner	SUCOFLEX 102+SUCOFLEX 106	TX Cable 30M-40G 23051/2+76096/6+2 2962/2	08/30/2024	08/29/2025
DC Power Supply	Gwinstek	SPS-3610	GEV856733	12/04/2024	12/03/2025
EMI Test Receiver	R&S	ESCI 7	100759	08/28/2024	08/27/2025
EXA Spectrum Analyzer	KEYSIGHT	N9010B	MY63440386	02/05/2025	02/04/2026
Horn Antenna	RF SPIN	DRH0844	LE2D05A0844	07/10/2024	07/09/2025
Horn Antenna	SCHWARZBECK	BBHA9120D	1441	09/23/2024	09/22/2025
Horn Antenna	SCHWARZBECK	BBHA9120D	603	05/15/2024	05/14/2025
Horn Antenna	SCHWARZBECK	BBHA9170	184	12/20/2024	12/19/2025
Network Analyzer	R&S	ZNB 40	101842	05/16/2024	05/15/2025
Pre-Amplifier	EMCI	EMC118A45SEE	980868	08/30/2024	08/29/2025
Pre-Amplifier	EMCI	EMC184045SEE	9080939	08/30/2024	08/29/2025
Pre-Amplifier	HP	8447D	2944A07676	08/30/2024	08/29/2025
Radio Communication Analyzer	KEYSIGHT	E7515B	MY59321561	07/11/2024	07/10/2025
Site Cal	SGS	SAC 3	N/A	08/30/2024	08/29/2025
Test Software	Audix	e3	Ver. 9.210616	N.C.R	N.C.R

2TX

Radiated Emission Test Site: SAC 3					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL. (mm/dd/yyyy)	CAL DUE. (mm/dd/yyyy)
4G High Pass Filter	WI	WHKX4.0	22	12/11/2024	12/10/2025
Attenuator	Mini-Circuits	BW-S10W2+	16	12/11/2024	12/10/2025
Band Reject Filter 2240-2700	WI	WRCJV2300/2700-2240/2760-40/12SS	1	12/11/2024	12/10/2025
Band Reject Filter 3250-3750	Micro-Tronics	BRM15247	1	12/11/2024	12/10/2025
Bi-log Antenna	SCHWARZBECK	VULB9168	1208	07/17/2024	07/16/2025
Bi-log Antenna	SCHWARZBECK	VULB9168	378	08/09/2024	08/08/2025
Coaxial Cables	EMCI+Huber Suhner	EMC107-SM-SM-1000 +SUCOFLEX 104PEA +EMC107-SM-SM-1500 +SUCOFLEX 106	RX Cable 9K-18G (221110+MY4251/4 PEA+221106+76096 /6)	08/30/2024	08/29/2025
Coaxial Cables	Huber Suhner	SUCOFLEX 102	RX Cable 18G-40G MY2630/2+805062/ 2	08/30/2024	08/29/2025
Coaxial Cables	Huber Suhner	SUCOFLEX 102+SUCOFLEX 106	TX Cable 30M-40G 23051/2+76096/6+2 2962/2	08/30/2024	08/29/2025
DC Power Supply	Gwinstek	SPS-3610	GEV856733	12/04/2024	12/03/2025
EMI Test Receiver	R&S	ESCI 7	100759	08/28/2024	08/27/2025
EXA Spectrum Analyzer	KEYSIGHT	N9010B	MY63440386	02/05/2025	02/04/2026
Horn Antenna	RF SPIN	DRH0844	LE2D05A0844	07/10/2024	07/09/2025
Horn Antenna	SCHWARZBECK	BBHA9120D	1441	09/23/2024	09/22/2025
Horn Antenna	SCHWARZBECK	BBHA9120D	603	05/15/2024	05/14/2025
Horn Antenna	SCHWARZBECK	BBHA9170	184	12/20/2024	12/19/2025
Network Analyzer	R&S	ZNB 40	101842	05/16/2024	05/15/2025
Pre-Amplifier	EMCI	EMC118A45SEE	980868	08/30/2024	08/29/2025
Pre-Amplifier	EMCI	EMC184045SEE	9080939	08/30/2024	08/29/2025
Pre-Amplifier	HP	8447D	2944A07676	08/30/2024	08/29/2025
Radio Communication Analyzer	KEYSIGHT	E7515B	MY59321561	07/11/2024	07/10/2025
Site Cal	SGS	SAC 3	N/A	08/30/2024	08/29/2025
Test Software	Audix	e3	Ver. 9.210616	N.C.R	N.C.R

Mode: ENDC

Radiated Emission Test Site: SAC 3					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL. (mm/dd/yyyy)	CAL DUE. (mm/dd/yyyy)
1G High Pass Filter	Micro-Tronics	HPM50108	32	12/11/2024	12/10/2025
2G High Pass Filter	Micro-Tronics	HPM50110	36	12/11/2024	12/10/2025
4G High Pass Filter	WI	WHKX4.0	22	12/11/2024	12/10/2025
Attenuator	Mini-Circuits	BW-S10W2+	16	12/11/2024	12/10/2025
Band Reject Filter 1700-2000	EWT	EWT-54-0038	M1	12/11/2024	12/10/2025
Band Reject Filter 2240-2700	WI	WRCJV2300/2700-2240/2760-40/12SS	1	12/11/2024	12/10/2025
Band Reject Filter 3250-3750	Micro-Tronics	BRM15247	1	12/11/2024	12/10/2025
Band Reject Filter 800-1000	EWT	EWT-54-0037	M3R	12/11/2024	12/10/2025
Bi-log Antenna	SCHWARZBECK	VULB9168	1208	07/17/2024	07/16/2025
Bi-log Antenna	SCHWARZBECK	VULB9168	378	08/09/2024	08/08/2025
Coaxial Cables	EMCI+Huber Suhner	EMC107-SM-SM-1000 +SUCOFLEX 104PEA +EMC107-SM-SM-1500 +SUCOFLEX 106	RX Cable 9K-18G (221110+MY4251/4 PEA+221106+76096 /6)	08/30/2024	08/29/2025
Coaxial Cables	Huber Suhner	SUCOFLEX 102	RX Cable 18G-40G MY2630/2+805062/ 2	08/30/2024	08/29/2025
Coaxial Cables	Huber Suhner	SUCOFLEX 102+SUCOFLEX 106	TX Cable 30M-40G 23051/2+76096/6+2 2962/2	08/30/2024	08/29/2025
DC Power Supply	Gwinstek	SPS-3610	GEV856733	12/04/2024	12/03/2025
EMI Test Receiver	R&S	ESCI 7	100759	08/28/2024	08/27/2025
EXA Spectrum Analyzer	KEYSIGHT	N9010B	MY63440386	02/05/2025	02/04/2026
Horn Antenna	RF SPIN	DRH0844	LE2D05A0844	07/10/2024	07/09/2025
Horn Antenna	SCHWARZBECK	BBHA9120D	1441	09/23/2024	09/22/2025
Horn Antenna	SCHWARZBECK	BBHA9120D	603	05/15/2024	05/14/2025
Horn Antenna	SCHWARZBECK	BBHA9170	184	12/20/2024	12/19/2025
Network Analyzer	R&S	ZNB 40	101842	05/16/2024	05/15/2025
Pre-Amplifier	EMCI	EMC118A45SEE	980868	08/30/2024	08/29/2025
Pre-Amplifier	EMCI	EMC184045SEE	9080939	08/30/2024	08/29/2025
Pre-Amplifier	HP	8447D	2944A07676	08/30/2024	08/29/2025
Radio Communication Analyzer	KEYSIGHT	E7515B	MY59321561	07/11/2024	07/10/2025
Site Cal	SGS	SAC 3	N/A	08/30/2024	08/29/2025
Test Software	Audix	e3	Ver. 9.210616	N.C.R	N.C.R

Mode: NRCA

Radiated Emission Test Site: SAC 3					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL. (mm/dd/yyyy)	CAL DUE. (mm/dd/yyyy)
1G High Pass Filter	Micro-Tronics	HPM50108	32	12/11/2024	12/10/2025
2G High Pass Filter	Micro-Tronics	HPM50110	36	12/11/2024	12/10/2025
4G High Pass Filter	WI	WHKX4.0	22	12/11/2024	12/10/2025
Attenuator	Mini-Circuits	BW-S10W2+	16	12/11/2024	12/10/2025
Band Reject Filter 1700-2000	EWT	EWT-54-0038	M1	12/11/2024	12/10/2025
Band Reject Filter 2240-2700	WI	WRCJV2300/2700-2240/2760-40/12SS	1	12/11/2024	12/10/2025
Band Reject Filter 3250-3750	Micro-Tronics	BRM15247	1	12/11/2024	12/10/2025
Band Reject Filter 800-1000	EWT	EWT-54-0037	M3R	12/11/2024	12/10/2025
Bi-log Antenna	SCHWARZBECK	VULB9168	1208	07/17/2024	07/16/2025
Bi-log Antenna	SCHWARZBECK	VULB9168	378	08/09/2024	08/08/2025
Coaxial Cables	EMCI+Huber Suhner	EMC107-SM-SM-1000 +SUCOFLEX 104PEA +EMC107-SM-SM-1500 +SUCOFLEX 106	RX Cable 9K-18G (221110+MY4251/4 PEA+221106+76096 /6)	08/30/2024	08/29/2025
Coaxial Cables	Huber Suhner	SUCOFLEX 102	RX Cable 18G-40G MY2630/2+805062/ 2	08/30/2024	08/29/2025
Coaxial Cables	Huber Suhner	SUCOFLEX 102+SUCOFLEX 106	TX Cable 30M-40G 23051/2+76096/6+2 2962/2	08/30/2024	08/29/2025
DC Power Supply	Gwinstek	SPS-3610	GEV856733	12/04/2024	12/03/2025
EMI Test Receiver	R&S	ESCI 7	100759	08/28/2024	08/27/2025
EXA Spectrum Analyzer	KEYSIGHT	N9010B	MY63440386	02/05/2025	02/04/2026
Horn Antenna	RF SPIN	DRH0844	LE2D05A0844	07/10/2024	07/09/2025
Horn Antenna	SCHWARZBECK	BBHA9120D	1441	09/23/2024	09/22/2025
Horn Antenna	SCHWARZBECK	BBHA9120D	603	05/15/2024	05/14/2025
Horn Antenna	SCHWARZBECK	BBHA9170	184	12/20/2024	12/19/2025
Network Analyzer	R&S	ZNB 40	101842	05/16/2024	05/15/2025
Pre-Amplifier	EMCI	EMC118A45SEE	980868	08/30/2024	08/29/2025
Pre-Amplifier	EMCI	EMC184045SEE	9080939	08/30/2024	08/29/2025
Pre-Amplifier	HP	8447D	2944A07676	08/30/2024	08/29/2025
Radio Communication Analyzer	KEYSIGHT	E7515B	MY59321561	07/11/2024	07/10/2025
Site Cal	SGS	SAC 3	N/A	08/30/2024	08/29/2025
Test Software	Audix	e3	Ver. 9.210616	N.C.R	N.C.R

7 STANDARD APPLICABLE

7.1 Maximum Output Power

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. The measured power in the radio frequency on the transmitter output terminals.

7.1.1 ERP/EIRP LIMIT

According to FCC §2.1046

FCC 22.913(a)

(5) mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

FCC 24.232(c)

Mobile and portable stations are limited to 2 W EIRP.

FCC 27.50 (a)

(3) for mobile and portable stations compliant with 3GPP LTE standards transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band are limited to 250 mW/ 5MHz EIRP but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth.

FCC 27.50(c)

(9) Control and mobile stations in the 698-746 MHz band are limited to 30 watts ERP.

FCC 27.50(d)

(4) Mobile, and portable (hand-held) stations operating in the 1710-1755 MHz, 1695-1710 MHz and 1755-1780 MHz bands are limited to 1W EIRP.

FCC 27, 50(h)

(2) Mobile and other user stations transmitting in the BRS and EBS bands are limited to 2 W EIRP.

FCC 27, 50(j)

(3) Mobile and portable stations are limited to 1 Watt EIRP. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

FCC 27, 50(k)

(3) Mobile devices are limited to 1Watt (30 dBm) EIRP. Mobile devices operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

FCC 90.542(a)

(6) Control stations and mobile stations transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 30 watts ERP.

FCC 90.635(b)

Mobile station is limited to 100W ERP

RSS-130 §4.6

The e.r.p. shall not exceed 3 watts for mobile equipment, fixed subscriber equipment and portable equipment operating in the Band 617-652 and 663-698MHz.
The e.r.p. shall not exceed 3 watts for portable equipment and indoor fixed subscriber equipment operating in 698-756 and 777-787 MHz.

RSS-132 §5.4

The transmitter output power shall be measured in terms of average power. The equivalent radiated power (e.r.p.) shall not exceed 7 watts for mobile equipment and 3 watts for portable equipment.

The effective isotropic radiated power (e.i.r.p.) shall not exceed the limits specified in SRSP-503 for base station equipment.

RSS-133 §5.5

The maximum power spectral density of the equipment, measured in terms of average values, shall comply with the limits specified in table 2. These limits are either specified in terms of equivalent isotropically radiated power (e.i.r.p.) or TRP for the purpose of certification and may not apply to all deployment scenarios. Consult SRSP-510 for more deployment details in the bands 1850-1915 MHz and 1930-1995 MHz. AAS equipment with eight antenna elements or less can demonstrate compliance with the e.i.r.p limit specified for non-AAS equipment in table 2, instead of the TRP limit.

Table 2: Maximum power spectral density of equipment

Equipment type	Maximum power spectral density
Non-AAS fixed station and base station	3280 W/MHz e.i.r.p
AAS fixed station and base station	46 dBm/MHz TRP
Subscriber equipment	2 W /channel bandwidth e.i.r.p

RSS-139 §5.5

The maximum output power of the equipment shall comply with the limits specified below. In the tables, maximum power refers to the equivalent isotropically radiated power (e.i.r.p.) or total radiated power (TRP), measured in terms of average values.

The limits in this RSS are specified for the purpose of certification and may not apply to all deployment scenarios. Consult SRSP-513 and SRSP-519 for more details on the bands 2110-2180 MHz and 2180-2200 MHz respectively

Table 3: Maximum power of equipment in the band 1710-1780 MHz	
Equipment type	**Maximum power**
Fixed station and base station	30 dBm e.i.r.p./channel bandwidth
Subscriber equipment	30 dBm e.i.r.p./channel bandwidth

Table 4: Maximum power of equipment in the band 2110-2180 MHz	
Equipment type	**Maximum power**

Non-AAS fixed station and base station	65 dBm e.i.r.p./MHz
AAS fixed station and base station	46 dBm TRP/MHz
Subscriber equipment	30 dBm e.i.r.p./channel bandwidth

Table 5: Maximum power of equipment in the band 2180-2200 MHz	
Equipment type	Maximum power
Non-AAS base station	65 dBm e.i.r.p./MHz
AAS base station	46 dBm TRP/MHz

RSS-140 §4.3

The equivalent radiated power (e.r.p.) for control and mobile equipment shall not exceed 30 W. The e.r.p. for portable equipment including handheld devices shall not ex-ceed 3 W.

RSS-195 §5.5

The e.i.r.p. of mobile or portable equipment transmitting in the band 2305-2315 MHz or the band 2350-2360 MHz, employing 3GPP LTE (Third Generation Part-nership Project Long Term Evolution) standards, shall not exceed 250 mW within any 5 MHz bandwidth. For other technologies, the e.i.r.p. shall not exceed 50 mW within any 1 MHz bandwidth.

RSS-199 §4.4

For mobile subscriber equipment operating in the Band 2500-2690MHz, the e.i.r.p. shall not exceed 2 W.

7.2 Occupied Bandwidth Measurement

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power.

7.3 Out Of Band Emission At Antenna Terminals

FCC §22.917(a), §24.238(a), §27.53(h), §90.543(e)(3)
RSS-130 §4.7, RSS-132 §5.5, RSS-133 §5.6, RSS-139 §5.6, RSS-140 §4.4, RSS-195 §5.6, RSS-199 §4.5

Out of band emissions.The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

FCC §27.53(a)

For operations in the 2305-2320 MHz band and the 2345-2360 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power P (with averaging performed only during periods of transmission) within the licensed band(s) of op-eration, in watts, by the following amounts:

(4) For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:
(i) By a factor of not less than: 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than 61 + 10 log (P) dB on all

frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300 MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296 MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz;

(iii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.

FCC §27.53(g)

Compliance for operations in the 600 MHz, 698-746 MHz, 746-758 MHz and the 776-788 MHz band with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;

(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

FCC §27.53(h)

(h) *AWS emission limits*—(1) *General protection levels.* Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}$ (P) dB.

FCC §27.53(m) (4) (6)

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Measurement procedure. Compliance with these rules is based on the use of measurement nstrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed; for mobile digital stations, in the 1 megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 megahertz or 1 percent of emission bandwidth, as specified; or 1 megahertz or 2 percent for mobile digital stations, except in the band 2495-2496 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and

one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

FCC §90.543 (e)

For operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.

(2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.

(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

FCC §90.691 Emission mask requirements for EA-based systems

(a) Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

RSS-130 §4.7.1

Compliance for operations in the 617-652 MHz, 663-698 MHz, 698-756 MHz and the 777-787 MHz band, the unwanted emissions in any 100 kHz bandwidth on any frequency outside the low frequency edge and the high frequency edge of each frequency block range(s), shall be attenuated below the transmitter power, P (dBW), by at least 43 + 10 log10 p (watts), dB. However, in the 100 kHz band immediately outside of the equipment's frequency block range, a resolution bandwidth of 30 kHz may be employed.

RSS-132 §5.5

i. Equipment shall meet the unwanted emission limits specified below:

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

ii. After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated below the transmitter output power P (dBW) by at least 43 + 10 log(p) dB. If the measurement is performed using 1% of the occupied bandwidth, power integration over 100 kHz is required.

p is the output power specified in watts.

RSS-133 §5.6

Unwanted emissions shall be measured in terms of average values while the transmitter is operating at the manufacturer's rated power and modulated as specified in RSS-Gen. Equipment shall meet the unwanted emission limits, specified in table 3, outside each frequency block group. For each channel bandwidth supported by the equipment under test, the unwanted emissions shall be measured and reported for two channel frequencies: one located as close as possible to the low end and one located as close as possible to the high end of the equipment's operating frequency range. For the unwanted emission limits, in the 1 MHz bands immediately outside and adjacent to the frequency block group, the power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth (OBW). Beyond these 1 MHz bands, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth may be used, provided that the Personal Communications Service Equipment Operating in the Bands 1850-1915 MHz and 1930-1995 MHz RSS-133 6 measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% of the OBW, as applicable. For all equipment, the TRP or total conducted power (sum of conducted power across all antenna connectors), where applicable, of the unwanted emissions outside the frequency block or frequency block group shall not exceed the limits shown in the table 3.

Table 3: Unwanted emission limits for all equipment

Offset frequency from the edge of the frequency block group (MHz)	Unwanted emission limits
≤1	-13 dBm/(1% of OB*)
>1 MHz	-13 dBm/MHz

RSS-139 §5.6 for LTE B4, 10, 66

Unwanted emissions shall be measured in terms of average values.

For all equipment, the TRP or total conducted power (sum of conducted power across all antenna connectors) of the unwanted emissions outside the frequency block or frequency block group shall not exceed the limits shown in table 6.

Table 6: Table 6: Unwanted emission limits	
Offset from the edge of the frequency block or frequency block group	**Unwanted emission limits**
1 MHz	-13 dBm/(1% of OB*)
>1 MHz	-13 dBm/MHz
Subscriber equipment	30 dBm e.i.r.p./channel bandwidth

*OB is the occupied bandwidth.

In addition to complying with the above limits, equipment operating in the band 2180-2200 MHz may require additional filtering (see SRSP-519).

RSS-140 §4.4

a. For any frequency between 769-775 MHz and 799-806 MHz:
   i. 76 + 10 log (p), dB in a 6.25 kHz band for fixed and base station equipment

ii. 65 + 10 log (p), dB in a 6.25 kHz band for mobile and portable/hand-held equipment

b. For any frequency between 775-788 MHz, above 806 MHz, and below 758 MHz: 43 + 10 log (p), dB in a bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency bands 758-768 MHz and 788-798 MHz, a resolution bandwidth of 30 kHz may be employed.

c. RSS-195 §5.6

d. The power of any emission outside the frequency range(s) in which the equipment operates shall be attenuated below the transmitter power, P(dBW), by the amount indicated in Table 2, where p is the transmitter output power measured in watts.

Table 2 — Unwanted Emissions for Mobile, Portable and Low-Power Fixed Subscriber Equipment

Frequency (MHz)	Attenuation (dB)	Frequency (MHz)	Attenuation (dB)
<2200	43 + 10 $\log_{10}$(p)	2324 - 2328	61 + 10 $\log_{10}$(p)
2200 - 2288	70 + 10 $\log_{10}$(p)	2328 - 2337	67 + 10 $\log_{10}$(p)
2288 - 2292	67 + 10 $\log_{10}$(p)	2337 - 2341	61 + 10 $\log_{10}$(p)
2292 - 2296	61 + 10 $\log_{10}$(p)	2341 - 2345	55 + 10 $\log_{10}$(p)
2296 - 2300	55 + 10 $\log_{10}$(p)	2345 - 2360	43 + 10 log10(p) FootnoteNote
2300 - 2305	43 + 10 $\log_{10}$(p)	2360 - 2365	43 + 10 $\log_{10}$(p)
2305 - 2320	43 + 10 log10(p) FootnoteNote	2365 - 2395	70 + 10 $\log_{10}$(p)
2320 - 2324	55 + 10 $\log_{10}$(p)	>2395	43 + 10 $\log_{10}$(p)

Note -- Mobile and portable equipment are prohibited from transmitting in the bands 2315-2320 MHz and 2345-2350 MHz. In addition, mobile and portable equipment employing FDD technology shall be restricted to transmitting in the band 2305-2315 MHz.

e. **RSS-199 §4.5**
In the 1 MHz band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment, and 2% for mobile subscriber equipment. Beyond the 1 MHz band, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% or 2% of the occupied bandwidth, as applicable.
Equipment shall comply with the following unwanted emission limits:
for base station and fixed subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least 43 + 10 log10 p for mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least:

f. 40 + 10 log10 p from the channel edges to 5 MHz away

g. 43 + 10 log10 p between 5 MHz and X MHz from the channel edges, and

h. 55 + 10 log10 p at X MHz and beyond from the channel edges

i. In addition, the attenuation shall not be less than 43 + 10 log10 p on all frequencies between 2490.5 MHz and 2496 MHz, and 55 + 10 log10 p at or below 2490.5 MHz.
In (a) and (b), p is the transmitter power measured in watts and X is 6 MHz or the equipment occupied bandwidth, whichever is greater.

7.4 Field Strength Of Spurious Radiation Measurement

According to FCC §2.1053,

FCC §22.917(a), §24.238(a), §27.53(h), §90.543(e)(3)
RSS-130 §4.7, RSS-132 §5.5, RSS-133 §5.6, RSS-139 §5.6, RSS-140 §4.4, RSS-195 §5.6, RSS-199 §4.5

Out of band emissions.The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

FCC §27.53(a)

For operations in the 2305-2320 MHz band and the 2345-2360 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power P (with averaging performed only during periods of transmission) within the licensed band(s) of operation, in watts, by the following amounts:

(4) For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:
(ii) By a factor of not less than 70 + 10 log (P) dB below 2288 MHz;
(iii) By a factor of not less than 70 + 10 log (P) dB above 2365 MHz.

FCC §27.53(g)

Compliance for operations in the 600 MHz, 698-746 MHz, 746-758 MHz and the 776-788 MHz band with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
(3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;
(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

FCC §90.543 (f)

For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC §27.53(h)(1)

(h) *AWS emission limits*—(1) *General protection levels.* Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 $\log_{10}$ (P) dB.

FCC §27.53(m) (4) (6)

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between

2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Measurement procedure. Compliance with these rules is based on the use of measurement nstrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed; for mobile digital stations, in the 1 megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 megahertz or 1 percent of emission bandwidth, as specified; or 1 megahertz or 2 percent for mobile digital stations, except in the band 2495-2496 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

§90.691 Emission mask requirements for EA-based systems

(a) Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:
(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.
(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

RSS-130 §4.7.1

Compliance for operations in the 617-652 MHz, 663-698 MHz, 698-756 MHz and the 777-787 MHz band, the unwanted emissions in any 100 kHz bandwidth on any frequency outside the low frequency edge and the high frequency edge of each frequency block range(s), shall be attenuated below the transmitter power, P (dBW), by at least 43 + 10 log10 p (watts), dB. However, in the 100 kHz band immediately outside of the equipment's frequency block range, a resolution bandwidth of 30 kHz may be employed.

RSS-132 §5.5

i. Equipment shall meet the unwanted emission limits specified below:

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

ii. After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated below the transmitter output power P (dBW) by at least 43 + 10 log(p) dB. If the measurement is performed using 1% of the occupied bandwidth, power integration over 100 kHz is required.

p is the output power specified in watts.

RSS-133 §5.6

Unwanted emissions shall be measured in terms of average values while the transmitter is operating at the manufacturer's rated power and modulated as specified in RSS-Gen. Equipment shall meet the unwanted emission limits, specified in table 3, outside each frequency block group. For each channel bandwidth supported by the equipment under test, the unwanted emissions shall be measured and reported for two channel frequencies: one located as close as possible to the low end and one located as close as possible to the high end of the equipment's operating frequency range. For the unwanted emission limits, in the 1 MHz bands immediately outside and adjacent to the frequency block group, the power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth (OBW). Beyond these 1 MHz bands, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth may be used, provided that the Personal Communications Service Equipment Operating in the Bands 1850-1915 MHz and 1930-1995 MHz RSS-133 6 measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% of the OBW, as applicable. For all equipment, the TRP or total conducted power (sum of conducted power across all antenna connectors), where applicable, of the unwanted emissions outside the frequency block or frequency block group shall not exceed the limits shown in the table 3.

Table 3: Unwanted emission limits for all equipment

Offset frequency from the edge of the frequency block group (MHz)	Unwanted emission limits
≤1	-13 dBm/(1% of OB*)
>1 MHz	-13 dBm/MHz

RSS-139 §5.6

Unwanted emissions shall be measured in terms of average values.

For all equipment, the TRP or total conducted power (sum of conducted power across all antenna connectors) of the unwanted emissions outside the frequency block or frequency block group shall not exceed the limits shown in table 6.

Table 6: Table 6: Unwanted emission limits	
Offset from the edge of the frequency block or frequency block group	**Unwanted emission limits**
1 MHz	-13 dBm/(1% of OB*)
>1 MHz	-13 dBm/MHz
Subscriber equipment	30 dBm e.i.r.p./channel bandwidth

*OB is the occupied bandwidth.

In addition to complying with the above limits, equipment operating in the band 2180-2200 MHz may require additional filtering (see SRSP-519).

RSS-140 §4.4

a. For any frequency between 769-775 MHz and 799-806 MHz:

i. 76 + 10 log (p), dB in a 6.25 kHz band for fixed and base station equipment

ii. 65 + 10 log (p), dB in a 6.25 kHz band for mobile and portable/hand-held equipment

b. For any frequency between 775-788 MHz, above 806 MHz, and below 758 MHz: 43 + 10 log (p), dB in a bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency bands 758-768 MHz and 788-798 MHz, a resolution bandwidth of 30 kHz may be employed.

c. RSS-195 §5.6

d. The power of any emission outside the frequency range(s) in which the equipment operates shall be attenuated below the transmitter power, P(dBW), by the amount indicated in Table 2, where p is the transmitter output power measured in watts.

Table 2 — Unwanted Emissions for Mobile, Portable and Low-Power Fixed Subscriber Equipment

Frequency (MHz)	Attenuation (dB)	Frequency (MHz)	Attenuation (dB)
<2200	43 + 10 $\log_{10}$(p)	2324 - 2328	61 + 10 $\log_{10}$(p)
2200 - 2288	70 + 10 $\log_{10}$(p)	2328 - 2337	67 + 10 $\log_{10}$(p)
2288 - 2292	67 + 10 $\log_{10}$(p)	2337 - 2341	61 + 10 $\log_{10}$(p)
2292 - 2296	61 + 10 $\log_{10}$(p)	2341 - 2345	55 + 10 $\log_{10}$(p)
2296 - 2300	55 + 10 $\log_{10}$(p)	2345 - 2360	43 + 10 log10(p) FootnoteNote
2300 - 2305	43 + 10 $\log_{10}$(p)	2360 - 2365	43 + 10 $\log_{10}$(p)
2305 - 2320	43 + 10 log10(p) FootnoteNote	2365 - 2395	70 + 10 $\log_{10}$(p)
2320 - 2324	55 + 10 $\log_{10}$(p)	>2395	43 + 10 $\log_{10}$(p)

Note -- Mobile and portable equipment are prohibited from transmitting in the bands 2315-2320 MHz and 2345-2350 MHz. In addition, mobile and portable equipment employing FDD technology shall be restricted to transmitting in the band 2305-2315 MHz.

RSS-199 §4.5

In the 1 MHz band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment, and 2% for mobile subscriber equipment. Beyond the 1 MHz band, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% or 2% of the occupied bandwidth, as applicable.
Equipment shall comply with the following unwanted emission limits:
for base station and fixed subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least 43 + 10 log10 p for mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least:

40 + 10 log10 p from the channel edges to 5 MHz away

43 + 10 log10 p between 5 MHz and X MHz from the channel edges, and

55 + 10 log10 p at X MHz and beyond from the channel edges

In addition, the attenuation shall not be less than 43 + 10 log10 p on all frequencies between 2490.5 MHz and 2496 MHz, and 55 + 10 log10 p at or below 2490.5 MHz.
In (a) and (b), p is the transmitter power measured in watts and X is 6 MHz or the equipment occupied bandwidth, whichever is greater.

7.5 Frequency Stability Measurement

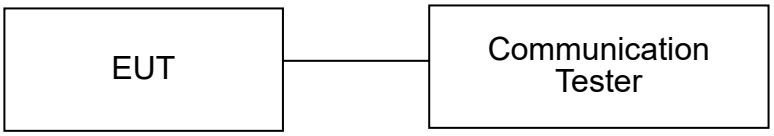
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

7.6 Peak to Average Ratio

The peak-to-average ratio (PAR) of the transmission may not exceed 13dB.

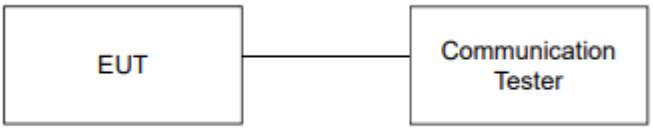
8 TEST SETUP

8.1 Maximum Output Power



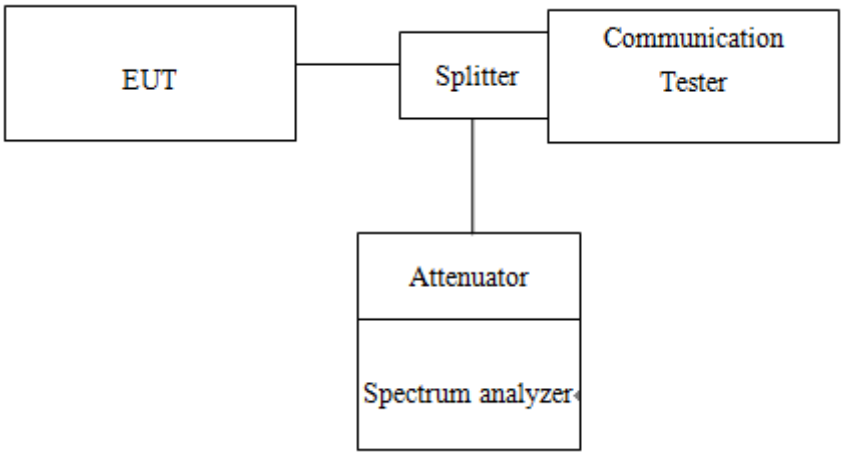
Note: *Measurement setup for testing on Antenna connector*

8.2 Occupied Bandwidth Measurement



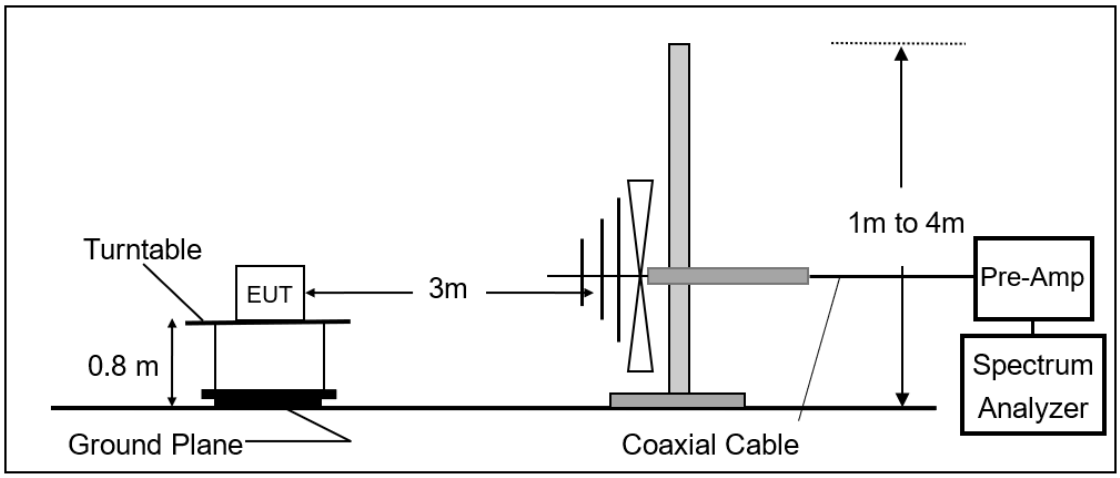
Note: *Measurement setup for testing on Antenna connector*

8.3 Out of Band Emission At Antenna Terminals

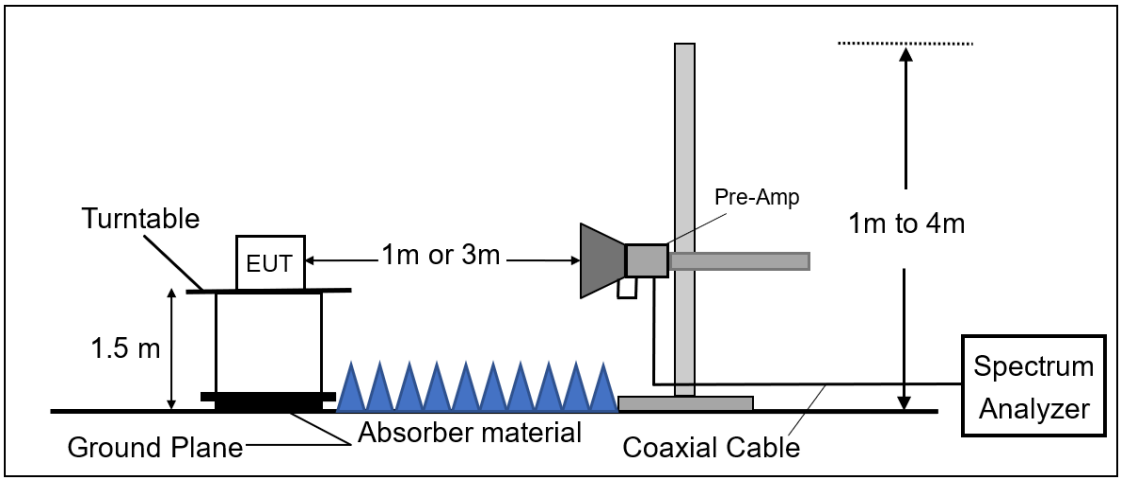


8.4 Field Strength of Spurious Radiation Measurement

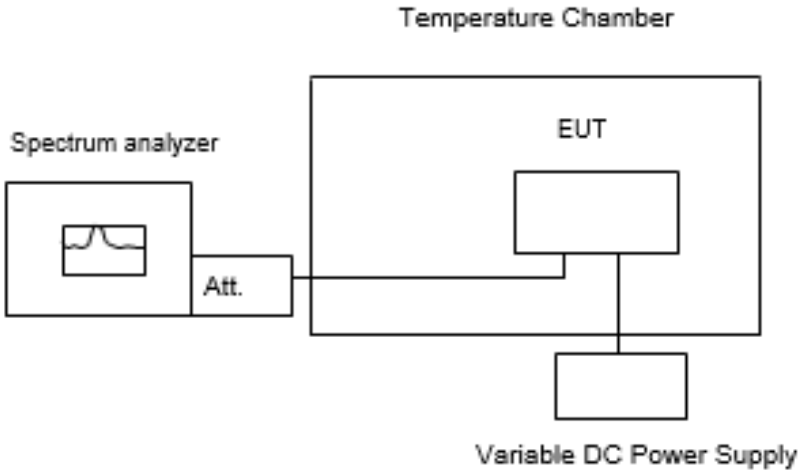
Radiated Emission Test Set-Up, Frequency From 30MHz to 1000MHz.



Radiated Emission Test Set-Up, Frequency Above 1GHz.

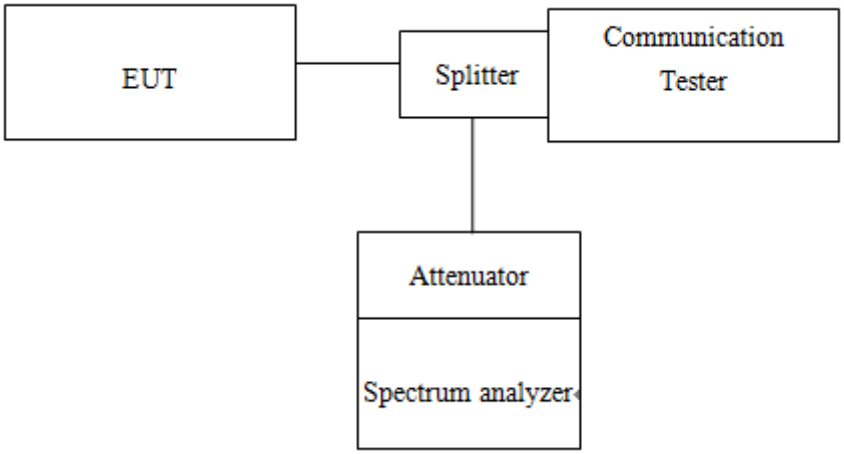


8.5 Frequency Stability Measurement



Note: *Measurement setup for testing on Antenna connector*

8.6 Peak To Average Ratio



9 TEST PROCEDURE

9.1 Maximum Output Power

9.1.1 Output Power Measurement Applicable Guideance

The transmitter output was connected to a communication tester. Transmitter output was read off the communication tester in dBm. The power output at the transmitter antenna port was determined by the communication tester reading.
KDB 971168 D01 Power Meas License Digital System as the supplemental test methodology to adjust the proper setting obtaining the measurement results.
All LTE bands conducted average power is obtained from the simulator telecommunication test set.

9.1.2 Determining ERP and/or EIRP from conducted RF output power measurements

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$,

$ERP = EIRP - 2.15$,

Where:

ERP or EIRP	= effective radiated power or equivalent isotropically radiated power (expressed in the same units as PT, typically dBW, dBm, or power spectral density (PSD)2), relative to either a dipole antenna (ERP) or an isotropic antenna (EIRP);
P_T	= transmitter output power, expressed in dBW, dBm, or PSD;
G_T	= gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);
L_C	= signal attenuation in the connecting cable between the transmitter and antenna, in dB.

9.2 Occupied Bandwidth Measurement

99% &26dB Bandwidth with detector peak

The EUT's output RF connector was connected with a short cable to the spectrum analyzer, RBW was set to about 1% of emission BW, VBW= 3 times RBW, -26dBc display line was placed on the screen (or 26dB bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace. Then set RBW to 99% bandwidth, RBW= 1% ~ 5%, VBW ≥ 3 * RBW, with span > 2 * Signal BW, set % Power = 99%.

9.3 Out of Band Emission at Antenna Terminals

9.3.1 Conducted Emission

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.

1. To connect Antenna Port of EUT to Spectrum.
2. Set RBW = 1MHz & VBW = 1MHz on Spectrum.
3. Allow trace to fully stabilize
4. Repeat above procedures until all default test channel measured were complete.

9.3.2 Band Edge

1. To connect Antenna Port of EUT to Spectrum.
2. The band edge of low and high channels for the highest RF powers was measured. Setting RBW ≥ 1% EBW.
3. Allow trace to fully stabilize
4. Repeat above procedures until all default test channel measured were complete.

9.4 Field Strength of Spurious Radiation Measurement

The EUT was placed on a non-conductive; the measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The frequency range up to tenth harmonic was investigated for each of three fundamental frequencies (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method.

The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.

ERP (dBm) = SG Level(dBm) + Antenna Gain(dBd) + Cable Loss(dB)

EIRP (dBm) = SG Level(dBm) + Antenna Gain(dBi) + Cable Loss(dB)

9.5 Frequency Stability Measurement

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to –30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

Set chamber temperature to 20℃. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low

enough to obtain the desired frequency resolution and recorded the frequency.
Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint as declared by the manufacturer, record the maximum frequency change.

9.6 Peak to Average Ratio

1. KDB 971168 D01 is employed as the following procedure is proper adjusted accordingly:
2. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth; & internal =1ms
3. Set the number of counts to a value that stabilizes the measured CCDF curve.

10 MEASUREMENT RESULTS

Please refer to the Annex A and Anenex B (2TX) for Measurement Results.

~End of Report~