ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

FCC Applicant:	ASUSTeK COMPUTER INC. 1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan
FCC Manufacturer:	ASUSTeK COMPUTER INC. 1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan
Product Name:	ASUS Phone(Mobile Phone)
Brand Name:	ASUS
Model No.:	ASUSAI2501E
Family Model No.:	ASUSAI2501D
Model Difference:	Refer to section1.2
Report Number:	TERF2407002104ER
FCC ID	MSQAI2501
Date of EUT Received:	July 01, 2024
Date of Test:	July 17, 2024 ~ November 15, 2024
Issue Date:	November 15, 2024

Approved By Marcus Tseng

Marcus Tseng

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.

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**
TERF2407002104ER	00	Original	November 15, 2024	Yuri Tsai	

Note:

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

2、 Variant information of model numbers is provided by the applicant, test results of this report are applicable to the sample EUT(s) received.
And are assessed as electrically identical in RF characteristics, therefore, no further assessment required for the variant(s).

Contents

1 GENERAL PRODUCT INFORMATION

1.1 Product Description

Product Name:	ASUS Phone(Mobile Phone)
Brand Name:	ASUS
Model No.:	ASUSAI2501E
Family Model No.:	ASUSAI2501D
Hardware Version:	R2.0C
Firmware Version:	35.1400.1400.10
EUT Series No.:	S7AIOCN13359SCN
Power Supply:	7.8 Vdc from Battery
Test Software (Name/Version)	Conncet with callbox

1.2 Model Difference

Model Name	ASUSAI2501D	ASUSAI2501E
3rd Camera	5MP Macro	32 MP Tele
LED Light	mini LED (85 pcs)	mini LED (648 pcs)
Memory	12/256, 12/512, 16/512	16/512, 24/1TB
Side USB port	Y	
Air trigger	Y	
Power	5800mAh, 65W	
Refresh Rate	185Hz	

1.3 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
25	1862.5	-	1897.5
30	1865.0	-	1895.0
35	1867.5	-	1892.5
40	1870.0	-	1890.0

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
35	2517.5	-	2552.5
40	2520.0	-	2550.0
50	2525	-	2545

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 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
35	1867.5	-	1897.5
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)		
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	-	2600

NR Band 41			
BW (MHz)	Operation Frequency (MHz)		
10	2501.0	-	2685.0
15	2503.5	-	2682.5
20	2506.0	-	2680.0
25	2508.51	-	2677.5
30	2511.0	-	2675.0
35	2513.52	-	2672.49
40	2516.0	-	2670.0
45	2516.02	-	2667.48
50	2521.0	-	2665.0
60	2526.0	-	2660.0
70	2531.0	-	2655.0
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
35	1727.5	-	1762.5
40	1730.0	-	1760.0
45	1732.5	-	1757.5

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
25	3462.5	-	3537.5
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
25	3712.5	-	3967.5
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

1.4 Antenna Designation

Antenna Type	Antenna Model No.
PIFA	Ant0
	Ant1
	Ant2
	Ant6
	Ant7
	Ant8
	Ant9
Note: Transmission frequencies in this test report are only available by the above antenna(s).	

Type	5G NR Bands	Frequency (MHz)	Peak Antenna Gain (dBi)						
			Ant0	Ant1	Ant2	Ant6	Ant7	Ant8	Ant9
PIFA	2	1850 ~ 1910		-0.2	-1.9		-5.1		
	5	824 ~ 849	-2.4		-3.3				
	7	2500 ~ 2570		-2.5	-1.1		-5.5		
	12	699 ~ 716	-1.6		-4.8				
	25	1850 ~ 1915		-0.2	-1.9		-5.1		
	26 Part90	814 824	-2.4		-3.3				
	26	824 849	-2.4		-3.3				
	30	2305 2315		-1.5	-0.7				
	38	2570 ~ 2620		-2.5	-1.1			-1.8	-8.1
	41	2496 ~ 2690		-2.5	-1.1			-1.8	-8.1
	66	1710 ~ 1780		-1.5	-1.9				
	71	663 ~ 698	-3.4		-9.9				
	77 (lower)	3450 ~ 3550				-1.34	-2.15	-2.4	-2.5
	77 (upper)	3700 3980				-1.7	-0.86	1.1	-3.2

Note: Antenna information is provided by the applicant.

1.5 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	24.41	24.21	0.264	4.5155	4515.5	4M52G7W
			DFT-s QPSK	24.37	24.17	0.261	4.5011	4501.1	4M50G7W
			DFT-s QAM	23.49	23.29	0.213	4.5161	4516.1	4M52D7W
			CP QPSK	24.48	24.28	0.268	4.5011	4501.1	4M50G7W
			CP QAM	23.61	23.41	0.219	4.5011	4501.1	4M50D7W
10	1855	1905	DFT-s PI/2 BPSK	24.43	24.23	0.265	8.9791	8979.1	8M98G7W
			DFT-s QPSK	24.40	24.20	0.263	8.9823	8982.3	8M98G7W
			DFT-s QAM	23.50	23.30	0.214	9.0153	9015.3	9M02D7W
			CP QPSK	24.46	24.26	0.267	8.9823	8982.3	8M98G7W
			CP QAM	23.99	23.79	0.239	9.0153	9015.3	9M02D7W
15	1857.5	1902.5	DFT-s PI/2 BPSK	24.39	24.19	0.262	13.479	13479.0	13M5G7W
			DFT-s QPSK	24.37	24.17	0.261	13.465	13465.0	13M5G7W
			DFT-s QAM	23.50	23.30	0.214	13.509	13509.0	13M5D7W
			CP QPSK	24.39	24.19	0.262	13.465	13465.0	13M5G7W
			CP QAM	23.99	23.79	0.239	13.465	13465.0	13M5D7W
20	1860	1900	DFT-s PI/2 BPSK	24.40	24.20	0.263	17.915	17915.0	17M9G7W
			DFT-s QPSK	24.33	24.13	0.259	17.923	17923.0	17M9G7W
			DFT-s QAM	23.39	23.19	0.208	17.952	17952.0	18M0D7W
			CP QPSK	24.36	24.16	0.261	17.923	17923.0	17M9G7W
			CP QAM	23.31	23.11	0.205	17.952	17952.0	18M0D7W
25	1862.5	1897.5	DFT-s PI/2 BPSK	24.35	24.15	0.260	22.974	22974.0	23M0G7W
			DFT-s QPSK	24.34	24.14	0.259	23.017	23017.0	23M0G7W
			DFT-s QAM	23.34	23.14	0.206	23.018	23018.0	23M0D7W
			CP QPSK	24.37	24.17	0.261	23.017	23017.0	23M0G7W
			CP QAM	23.34	23.14	0.206	23.018	23018.0	23M0D7W
30	1865	1895	DFT-s PI/2 BPSK	24.32	24.12	0.258	28.661	28661.0	28M7G7W
			DFT-s QPSK	24.28	24.08	0.256	28.702	28702.0	28M7G7W
			DFT-s QAM	23.38	23.18	0.208	28.716	28716.0	28M7D7W
			CP QPSK	24.27	24.07	0.255	28.702	28702.0	28M7G7W
			CP QAM	23.38	23.18	0.208	28.702	28702.0	28M7D7W
35	1867.5	1892.5	DFT-s PI/2 BPSK	24.45	24.25	0.266	32.218	32218.0	32M2G7W
			DFT-s QPSK	24.33	24.13	0.259	32.248	32248.0	32M2G7W
			DFT-s QAM	23.99	23.79	0.239	32.232	32232.0	32M2D7W
			CP QPSK	24.25	24.05	0.254	32.248	32248.0	32M2G7W
			CP QAM	23.97	23.77	0.238	32.248	32248.0	32M2D7W
40	1870	1890	DFT-s PI/2 BPSK	24.45	24.25	0.266	38.784	38784.0	38M8G7W
			DFT-s QPSK	24.33	24.13	0.259	38.689	38689.0	38M7G7W
			DFT-s QAM	23.99	23.79	0.239	38.713	38713.0	38M7D7W
			CP QPSK	24.25	24.05	0.254	38.689	38689.0	38M7G7W
			CP QAM	23.97	23.77	0.238	38.713	38713.0	38M7D7W

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	24.39	19.84	0.096	4.4821	4482.1	4M48G7W
			DFT-s QPSK	24.44	19.89	0.097	4.4962	4496.2	4M50G7W
			DFT-s QAM	23.44	18.89	0.077	4.5276	4527.6	4M53D7W
			CP QPSK	24.43	19.88	0.097	4.4962	4496.2	4M50G7W
			CP QAM	23.65	19.10	0.081	4.4962	4496.2	4M50D7W
10	829	844	DFT-s PI/2 BPSK	24.32	19.77	0.095	8.9654	8965.4	8M97G7W
			DFT-s QPSK	24.42	19.87	0.097	8.9725	8972.5	8M97G7W
			DFT-s QAM	23.26	18.71	0.074	9.0024	9002.4	9M00D7W
			CP QPSK	24.38	19.83	0.096	8.9725	8972.5	8M97G7W
			CP QAM	23.92	19.37	0.086	9.0024	9002.4	9M00D7W
15	831.5	841.5	DFT-s PI/2 BPSK	24.48	19.93	0.098	13.437	13437.0	13M4G7W
			DFT-s QPSK	24.40	19.85	0.097	13.438	13438.0	13M4G7W
			DFT-s QAM	23.14	18.59	0.072	13.483	13483.0	13M5D7W
			CP QPSK	24.43	19.88	0.097	13.438	13438.0	13M4G7W
			CP QAM	23.77	19.22	0.084	13.438	13438.0	13M4D7W
20	834	839	DFT-s PI/2 BPSK	24.45	19.90	0.098	17.926	17926.0	17M9G7W
			DFT-s QPSK	24.36	19.81	0.096	17.931	17931.0	17M9G7W
			DFT-s QAM	23.33	18.78	0.076	17.936	17936.0	17M9D7W
			CP QPSK	24.45	19.90	0.098	17.931	17931.0	17M9G7W
			CP QAM	23.59	19.04	0.080	17.936	17936.0	17M9D7W

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	24.34	23.24	0.211	4.5078	4507.8	4M51G7W
			DFT-s QPSK	24.30	23.20	0.209	4.499	4499.0	4M50G7W
			DFT-s QAM	23.35	22.25	0.168	4.5051	4505.1	4M51D7W
			CP QPSK	24.22	23.12	0.205	4.499	4499.0	4M50G7W
			CP QAM	23.72	22.62	0.183	4.499	4499.0	4M50D7W
10	2505	2565	DFT-s PI/2 BPSK	24.34	23.24	0.211	8.9762	8976.2	8M98G7W
			DFT-s QPSK	24.32	23.22	0.210	8.9652	8965.2	8M97G7W
			DFT-s QAM	23.28	22.18	0.165	8.9955	8995.5	9M00D7W
			CP QPSK	24.45	23.35	0.216	8.9652	8965.2	8M97G7W
			CP QAM	23.60	22.50	0.178	8.9955	8995.5	9M00D7W
15	2507.5	2562.5	DFT-s PI/2 BPSK	24.31	23.21	0.209	13.453	13453.0	13M5G7W
			DFT-s QPSK	24.28	23.18	0.208	13.432	13432.0	13M4G7W
			DFT-s QAM	23.24	22.14	0.164	13.477	13477.0	13M5D7W
			CP QPSK	24.22	23.12	0.205	13.432	13432.0	13M4G7W
			CP QAM	23.84	22.74	0.188	13.432	13432.0	13M4D7W
20	2510	2560	DFT-s PI/2 BPSK	24.34	23.24	0.211	17.898	17898.0	17M9G7W
			DFT-s QPSK	24.30	23.20	0.209	17.924	17924.0	17M9G7W
			DFT-s QAM	23.41	22.31	0.170	17.953	17953.0	18M0D7W
			CP QPSK	24.25	23.15	0.207	17.924	17924.0	17M9G7W
			CP QAM	23.96	22.86	0.193	17.953	17953.0	18M0D7W
25	2512.5	2557.5	DFT-s PI/2 BPSK	24.35	23.25	0.211	22.961	22961.0	23M0G7W
			DFT-s QPSK	24.29	23.19	0.208	22.99	22990.0	23M0G7W
			DFT-s QAM	23.35	22.25	0.168	22.935	22935.0	22M9D7W
			CP QPSK	24.30	23.20	0.209	22.99	22990.0	23M0G7W
			CP QAM	23.97	22.87	0.194	22.935	22935.0	22M9D7W
30	2515	2555	DFT-s PI/2 BPSK	24.21	23.11	0.205	28.628	28628.0	28M6G7W
			DFT-s QPSK	24.19	23.09	0.204	28.595	28595.0	28M6G7W
			DFT-s QAM	23.37	22.27	0.169	28.648	28648.0	28M6D7W
			CP QPSK	24.26	23.16	0.207	28.595	28595.0	28M6G7W
			CP QAM	23.81	22.71	0.187	28.648	28648.0	28M6D7W
35	2517.5	510500	DFT-s PI/2 BPSK	24.21	23.11	0.205	32.241	32241.0	32M2G7W
			DFT-s QPSK	24.19	23.09	0.204	32.218	32218.0	32M2G7W
			DFT-s QAM	23.98	22.88	0.194	32.172	32172.0	32M2D7W
			CP QPSK	24.28	23.18	0.208	32.218	32218.0	32M2G7W
			CP QAM	23.60	22.50	0.178	32.172	32172.0	32M2D7W
40	2520	2550	DFT-s PI/2 BPSK	24.21	23.11	0.205	38.685	38685.0	38M7G7W
			DFT-s QPSK	24.19	23.09	0.204	38.691	38691.0	38M7G7W
			DFT-s QAM	23.98	22.88	0.194	38.675	38675.0	38M7D7W
			CP QPSK	24.28	23.18	0.208	38.691	38691.0	38M7G7W
			CP QAM	23.60	22.50	0.178	38.675	38675.0	38M7D7W
50	2525	2545	DFT-s PI/2 BPSK	24.25	23.15	0.207	48.37	48370.0	48M4G7W
			DFT-s QPSK	24.24	23.14	0.206	48.486	48486.0	48M5G7W
			DFT-s QAM	23.33	22.23	0.167	48.531	48531.0	48M5D7W
			CP QPSK	24.24	23.14	0.206	48.486	48486.0	48M5G7W
			CP QAM	23.43	22.33	0.171	48.531	48531.0	48M5D7W

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	24.30	20.55	0.114	4.5019	4501.9	4M50G7W
			DFT-s QPSK	24.27	20.52	0.113	4.508	4508.0	4M51G7W
			DFT-s QAM	23.39	19.64	0.092	4.5061	4506.1	4M51D7W
			CP QPSK	24.29	20.54	0.113	4.508	4508.0	4M51G7W
			CP QAM	23.84	20.09	0.102	4.508	4508.0	4M51D7W
10	704	711	DFT-s PI/2 BPSK	24.37	20.62	0.115	8.9639	8963.9	8M96G7W
			DFT-s QPSK	24.33	20.58	0.114	8.9774	8977.4	8M98G7W
			DFT-s QAM	23.47	19.72	0.094	9.0767	9076.7	9M08D7W
			CP QPSK	24.24	20.49	0.112	8.9774	8977.4	8M98G7W
			CP QAM	23.70	19.95	0.099	9.0767	9076.7	9M08D7W
15	706.5	708.5	DFT-s PI/2 BPSK	24.43	20.68	0.117	13.424	13424.0	13M4G7W
			DFT-s QPSK	24.37	20.62	0.115	13.418	13418.0	13M4G7W
			DFT-s QAM	23.32	19.57	0.091	13.496	13496.0	13M5D7W
			CP QPSK	24.30	20.55	0.114	13.418	13418.0	13M4G7W
			CP QAM	23.84	20.09	0.102	13.418	13418.0	13M4D7W

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	24.42	24.22	0.264	4.5135	4513.5	4M51G7W
			DFT-s QPSK	24.34	24.14	0.259	4.5074	4507.4	4M51G7W
			DFT-s QAM	23.44	23.24	0.211	4.4972	4497.2	4M50D7W
			CP QPSK	24.25	24.05	0.254	4.5074	4507.4	4M51G7W
			CP QAM	23.95	23.75	0.237	4.5074	4507.4	4M51D7W
10	1855	1910	DFT-s PI/2 BPSK	24.53	24.33	0.271	8.9913	8991.3	8M99G7W
			DFT-s QPSK	24.36	24.16	0.261	8.9847	8984.7	8M98G7W
			DFT-s QAM	23.48	23.28	0.213	9.0087	9008.7	9M01D7W
			CP QPSK	24.26	24.06	0.255	8.9847	8984.7	8M98G7W
			CP QAM	23.97	23.77	0.238	9.0087	9008.7	9M01D7W
15	1857.5	1907.5	DFT-s PI/2 BPSK	24.46	24.26	0.267	13.454	13454.0	13M5G7W
			DFT-s QPSK	24.32	24.12	0.258	13.441	13441.0	13M4G7W
			DFT-s QAM	23.44	23.24	0.211	13.476	13476.0	13M5D7W
			CP QPSK	24.29	24.09	0.256	13.441	13441.0	13M4G7W
			CP QAM	23.94	23.74	0.237	13.441	13441.0	13M4D7W
20	1860	1905	DFT-s PI/2 BPSK	24.52	24.32	0.270	17.913	17913.0	17M9G7W
			DFT-s QPSK	24.44	24.24	0.265	17.917	17917.0	17M9G7W
			DFT-s QAM	23.45	23.25	0.211	17.95	17950.0	18M0D7W
			CP QPSK	24.28	24.08	0.256	17.917	17917.0	17M9G7W
			CP QAM	23.90	23.70	0.234	17.95	17950.0	18M0D7W
25	1860	1905	DFT-s PI/2 BPSK	24.51	24.31	0.270	22.966	22966.0	23M0G7W
			DFT-s QPSK	24.47	24.27	0.267	23.014	23014.0	23M0G7W
			DFT-s QAM	23.19	22.99	0.199	23.013	23013.0	23M0D7W
			CP QPSK	24.30	24.10	0.257	23.014	23014.0	23M0G7W
			CP QAM	24.00	23.80	0.240	23.013	23013.0	23M0D7W
30	1860	1905	DFT-s PI/2 BPSK	24.51	24.31	0.270	28.658	28658.0	28M7G7W
			DFT-s QPSK	24.47	24.27	0.267	28.66	28660.0	28M7G7W
			DFT-s QAM	23.42	23.22	0.210	28.695	28695.0	28M7D7W
			CP QPSK	24.27	24.07	0.255	28.66	28660.0	28M7G7W
			CP QAM	23.78	23.58	0.228	28.695	28695.0	28M7D7W
35	1867.5	1897.5	DFT-s PI/2 BPSK	24.49	24.29	0.269	32.241	32241.0	32M2G7W
			DFT-s QPSK	24.37	24.17	0.261	32.187	32187.0	32M2G7W
			DFT-s QAM	23.97	23.77	0.238	32.208	32208.0	32M2D7W
			CP QPSK	24.21	24.01	0.252	32.187	32187.0	32M2G7W
			CP QAM	23.80	23.60	0.229	32.208	32208.0	32M2D7W
40	1860	1905	DFT-s PI/2 BPSK	24.49	24.29	0.269	38.769	38769.0	38M8G7W
			DFT-s QPSK	24.37	24.17	0.261	38.671	38671.0	38M7G7W
			DFT-s QAM	23.97	23.77	0.238	38.717	38717.0	38M7D7W
			CP QPSK	24.21	24.01	0.252	38.671	38671.0	38M7G7W
			CP QAM	23.80	23.60	0.229	38.717	38717.0	38M7D7W

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	24.38	19.83	0.096	4.517	4517.0	4M52G7W
			DFT-s QPSK	24.34	19.79	0.095	4.5006	4500.6	4M50G7W
			DFT-s QAM	23.10	18.55	0.072	4.5058	4505.8	4M51D7W
			CP QPSK	24.24	19.69	0.093	4.5006	4500.6	4M50G7W
			CP QAM	23.58	19.03	0.080	4.5006	4500.6	4M50D7W
10	819	819	DFT-s PI/2 BPSK	24.47	19.92	0.098	8.9677	8967.7	8M97G7W
			DFT-s QPSK	24.30	19.75	0.094	8.96	8960.0	8M96G7W
			DFT-s QAM	23.00	18.45	0.070	8.9913	8991.3	8M99D7W
			CP QPSK	24.10	19.55	0.090	8.96	8960.0	8M96G7W
			CP QAM	23.86	19.31	0.085	8.9913	8991.3	8M99D7W

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	24.43	19.88	0.097	4.4849	4484.9	4M48G7W
			DFT-s QPSK	24.40	19.85	0.097	4.526	4526.0	4M53G7W
			DFT-s QAM	23.50	18.95	0.079	4.5319	4531.9	4M53D7W
			CP QPSK	24.16	19.61	0.091	4.526	4526.0	4M53G7W
			CP QAM	23.96	19.41	0.087	4.526	4526.0	4M53D7W
10	829	844	DFT-s PI/2 BPSK	24.44	19.89	0.097	8.9689	8968.9	8M97G7W
			DFT-s QPSK	24.39	19.84	0.096	8.9774	8977.4	8M98G7W
			DFT-s QAM	23.38	18.83	0.076	9.0912	9091.2	9M09D7W
			CP QPSK	24.27	19.72	0.094	8.9774	8977.4	8M98G7W
			CP QAM	24.00	19.45	0.088	9.0912	9091.2	9M09D7W
15	831.5	841.5	DFT-s PI/2 BPSK	24.47	19.92	0.098	13.604	13604.0	13M6G7W
			DFT-s QPSK	24.42	19.87	0.097	13.46	13460.0	13M5G7W
			DFT-s QAM	23.32	18.77	0.075	13.648	13648.0	13M6D7W
			CP QPSK	24.30	19.75	0.094	13.46	13460.0	13M5G7W
			CP QAM	23.88	19.33	0.086	13.46	13460.0	13M5D7W
20	834	839	DFT-s PI/2 BPSK	24.48	19.93	0.098	18.112	18112.0	18M1G7W
			DFT-s QPSK	24.44	19.89	0.097	18.028	18028.0	18M0G7W
			DFT-s QAM	23.35	18.80	0.076	18.138	18138.0	18M1D7W
			CP QPSK	24.26	19.71	0.094	18.028	18028.0	18M0G7W
			CP QAM	23.54	18.99	0.079	18.138	18138.0	18M1D7W

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	23.80	24.00	0.251	4.4792	4479.2	4M48G7W
			DFT-s QPSK	23.76	23.96	0.249	4.4977	4497.7	4M50G7W
			DFT-s QAM	22.74	22.94	0.197	4.4952	4495.2	4M50D7W
			CP QPSK	22.56	22.76	0.189	4.4977	4497.7	4M50G7W
			CP QAM	21.75	21.95	0.157	4.4952	4495.2	4M50D7W
10	2310	2310	DFT-s PI/2 BPSK	23.82	24.02	0.252	8.9539	8953.9	8M95G7W
			DFT-s QPSK	23.70	23.90	0.245	8.9436	8943.6	8M94G7W
			DFT-s QAM	22.33	22.53	0.179	8.9254	8925.4	8M93D7W
			CP QPSK	22.63	22.83	0.192	8.9436	8943.6	8M94G7W
			CP QAM	21.70	21.90	0.155	8.9436	8943.6	8M94D7W

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
10	2575	2615	DFT-s PI/2 BPSK	24.37	23.27	0.212	8.6234	8623.4	8M62G7W
			DFT-s QPSK	24.30	23.20	0.209	8.6491	8649.1	8M65G7W
			DFT-s QAM	23.33	22.23	0.167	8.6756	8675.6	8M68D7W
			CP QPSK	24.16	23.06	0.202	8.6491	8649.1	8M65G7W
			CP QAM	23.27	22.17	0.165	8.6756	8675.6	8M68D7W
15	2577.5	2612.5	DFT-s PI/2 BPSK	24.30	23.20	0.209	12.962	12962.0	13M0G7W
			DFT-s QPSK	24.29	23.19	0.208	13.634	13634.0	13M6G7W
			DFT-s QAM	23.44	22.34	0.171	12.982	12982.0	13M0D7W
			CP QPSK	24.24	23.14	0.206	13.634	13634.0	13M6G7W
			CP QAM	23.26	22.16	0.164	13.634	13634.0	13M6D7W
20	2580	2610	DFT-s PI/2 BPSK	24.36	23.26	0.212	17.941	17941.0	17M9G7W
			DFT-s QPSK	24.29	23.19	0.208	18.001	18001.0	18M0G7W
			DFT-s QAM	23.50	22.40	0.174	17.959	17959.0	18M0D7W
			CP QPSK	24.30	23.20	0.209	18.001	18001.0	18M0G7W
			CP QAM	24.00	22.90	0.195	17.959	17959.0	18M0D7W
25	2582.5	2607.5	DFT-s PI/2 BPSK	24.36	23.26	0.212	22.865	22865.0	22M9G7W
			DFT-s QPSK	24.30	23.20	0.209	22.903	22903.0	22M9G7W
			DFT-s QAM	23.27	22.17	0.165	23.011	23011.0	23M0D7W
			CP QPSK	24.22	23.12	0.205	22.903	22903.0	22M9G7W
			CP QAM	23.61	22.51	0.178	23.011	23011.0	23M0D7W
30	2585	2605	DFT-s PI/2 BPSK	24.32	23.22	0.210	26.909	26909.0	26M9G7W
			DFT-s QPSK	24.28	23.18	0.208	26.948	26948.0	26M9G7W
			DFT-s QAM	23.45	22.35	0.172	26.946	26946.0	26M9D7W
			CP QPSK	24.27	23.17	0.207	26.948	26948.0	26M9G7W
			CP QAM	23.87	22.77	0.189	26.946	26946.0	26M9D7W
40	2590	2600	DFT-s PI/2 BPSK	24.44	23.34	0.216	35.85	35850.0	35M9G7W
			DFT-s QPSK	24.39	23.29	0.213	35.833	35833.0	35M8G7W
			DFT-s QAM	23.32	22.22	0.167	35.877	35877.0	35M9D7W
			CP QPSK	24.26	23.16	0.207	35.833	35833.0	35M8G7W
			CP QAM	23.49	22.39	0.173	35.877	35877.0	35M9D7W

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
10	2501.01	2685	DFT-s PI/2 BPSK	26.39	25.29	0.338	8.6722	8672.2	8M67G7W
			DFT-s QPSK	26.36	25.26	0.336	8.6535	8653.5	8M65G7W
			DFT-s QAM	24.28	23.18	0.208	8.691	8691.0	8M69D7W
			CP QPSK	24.36	23.26	0.212	8.6535	8653.5	8M65G7W
			CP QAM	23.80	22.70	0.186	8.691	8691.0	8M69D7W
15	2503.5	2682.48	DFT-s PI/2 BPSK	26.34	25.24	0.334	12.98	12980.0	13M0G7W
			DFT-s QPSK	26.26	25.16	0.328	12.936	12936.0	12M9G7W
			DFT-s QAM	24.30	23.20	0.209	13.005	13005.0	13M0D7W
			CP QPSK	24.36	23.26	0.212	12.936	12936.0	12M9G7W
			CP QAM	23.70	22.60	0.182	12.936	12936.0	12M9D7W
20	2506.02	2679.99	DFT-s PI/2 BPSK	26.39	25.29	0.338	17.893	17893.0	17M9G7W
			DFT-s QPSK	26.36	25.26	0.336	17.96	17960.0	18M0G7W
			DFT-s QAM	24.23	23.13	0.206	17.968	17968.0	18M0D7W
			CP QPSK	24.28	23.18	0.208	17.96	17960.0	18M0G7W
			CP QAM	23.68	22.58	0.181	17.968	17968.0	18M0D7W
25	2508.51	2677.5	DFT-s PI/2 BPSK	26.30	25.20	0.331	22.947	22947.0	22M9G7W
			DFT-s QPSK	26.16	25.06	0.321	23.001	23001.0	23M0G7W
			DFT-s QAM	24.94	23.84	0.242	22.989	22989.0	23M0D7W
			CP QPSK	24.21	23.11	0.205	23.001	23001.0	23M0G7W
			CP QAM	23.89	22.79	0.190	22.989	22989.0	23M0D7W
30	2511	2674.98	DFT-s PI/2 BPSK	26.37	25.27	0.337	26.848	26848.0	26M8G7W
			DFT-s QPSK	26.34	25.24	0.334	26.886	26886.0	26M9G7W
			DFT-s QAM	24.35	23.25	0.211	26.921	26921.0	26M9D7W
			CP QPSK	24.31	23.21	0.209	26.886	26886.0	26M9G7W
			CP QAM	23.66	22.56	0.180	26.921	26921.0	26M9D7W
35	2513.52	2672.49	DFT-s PI/2 BPSK	26.15	25.05	0.320	32.223	32223.0	32M2G7W
			DFT-s QPSK	26.10	25.00	0.316	32.261	32261.0	32M3G7W
			DFT-s QAM	24.31	23.21	0.209	32.28	32280.0	32M3D7W
			CP QPSK	24.33	23.23	0.210	32.261	32261.0	32M3G7W
			CP QAM	24.19	23.09	0.204	32.28	32280.0	32M3D7W
40	2516.01	2670	DFT-s PI/2 BPSK	26.30	25.20	0.331	35.778	35778.0	35M8G7W
			DFT-s QPSK	26.11	25.01	0.317	35.81	35810.0	35M8G7W
			DFT-s QAM	24.24	23.14	0.206	35.816	35816.0	35M8D7W
			CP QPSK	24.39	23.29	0.213	35.81	35810.0	35M8G7W
			CP QAM	23.68	22.58	0.181	35.816	35816.0	35M8D7W
45	2516.01	2667.48	DFT-s PI/2 BPSK	26.09	24.99	0.316	38.616	38616.0	38M6G7W
			DFT-s QPSK	26.11	25.01	0.317	38.657	38657.0	38M7G7W
			DFT-s QAM	24.94	23.84	0.242	38.625	38625.0	38M6D7W
			CP QPSK	24.35	23.25	0.211	38.657	38657.0	38M7G7W
			CP QAM	24.22	23.12	0.205	38.625	38625.0	38M6D7W
50	2521.02	2664.99	DFT-s PI/2 BPSK	26.37	25.27	0.337	45.806	45806.0	45M8G7W
			DFT-s QPSK	26.32	25.22	0.333	45.966	45966.0	46M0G7W
			DFT-s QAM	24.38	23.28	0.213	45.809	45809.0	45M8D7W
			CP QPSK	24.33	23.23	0.210	45.966	45966.0	46M0G7W
			CP QAM	23.72	22.62	0.183	45.809	45809.0	45M8D7W
60	2526	2659.98	DFT-s PI/2 BPSK	26.38	25.28	0.337	57.87	57870.0	57M9G7W
			DFT-s QPSK	26.27	25.17	0.329	57.904	57904.0	57M9G7W
			DFT-s QAM	24.31	23.21	0.209	57.908	57908.0	57M9D7W
			CP QPSK	24.28	23.18	0.208	57.904	57904.0	57M9G7W
			CP QAM	23.75	22.65	0.184	57.908	57908.0	57M9D7W
70	2531.01	2655	DFT-s PI/2 BPSK	26.38	25.28	0.337	64.398	64398.0	64M4G7W
			DFT-s QPSK	26.26	25.16	0.328	64.383	64383.0	64M4G7W
			DFT-s QAM	24.38	23.28	0.213	64.423	64423.0	64M4D7W
			CP QPSK	24.26	23.16	0.207	64.383	64383.0	64M4G7W
			CP QAM	23.78	22.68	0.185	64.423	64423.0	64M4D7W
80	2536.02	2649.99	DFT-s PI/2 BPSK	26.39	25.29	0.338	77.02	77020.0	77M0G7W
			DFT-s QPSK	26.18	25.08	0.322	77.286	77286.0	77M3G7W
			DFT-s QAM	24.18	23.08	0.203	77.131	77131.0	77M1D7W
			CP QPSK	24.27	23.17	0.207	77.286	77286.0	77M3G7W
			CP QAM	23.49	22.39	0.173	77.131	77131.0	77M1D7W
90	2541	2644.98	DFT-s PI/2 BPSK	26.34	25.24	0.334	86.908	86908.0	86M9G7W
			DFT-s QPSK	26.21	25.11	0.324	86.929	86929.0	86M9G7W
			DFT-s QAM	24.11	23.01	0.200	86.942	86942.0	86M9D7W
			CP QPSK	24.16	23.06	0.202	86.929	86929.0	86M9G7W
			CP QAM	23.71	22.61	0.182	86.942	86942.0	86M9D7W
100	2546.01	2640	DFT-s PI/2 BPSK	26.40	25.30	0.339	96.485	96485.0	96M5G7W
			DFT-s QPSK	26.28	25.18	0.330	96.592	96592.0	96M6G7W
			DFT-s QAM	25.27	24.17	0.261	96.474	96474.0	96M5D7W
			CP QPSK	24.36	23.26	0.212	96.592	96592.0	96M6G7W
			CP QAM	23.80	22.70	0.186	96.474	96474.0	96M5D7W

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	24.58	23.08	0.203	4.5028	4502.8	4M50G7W
			DFT-s QPSK	24.49	22.99	0.199	4.5018	4501.8	4M50G7W
			DFT-s QAM	23.33	21.83	0.152	4.5139	4513.9	4M51D7W
			CP QPSK	24.30	22.80	0.191	4.5018	4501.8	4M50G7W
			CP QAM	23.36	21.86	0.153	4.5018	4501.8	4M50D7W
10	1715	1775	DFT-s PI/2 BPSK	24.67	23.17	0.207	8.965	8965.0	8M97G7W
			DFT-s QPSK	24.29	22.79	0.190	9.0072	9007.2	9M01G7W
			DFT-s QAM	23.34	21.84	0.153	9.0268	9026.8	9M03D7W
			CP QPSK	24.28	22.78	0.190	9.0072	9007.2	9M01G7W
			CP QAM	24.00	22.50	0.178	9.0268	9026.8	9M03D7W
15	1717.5	1772.5	DFT-s PI/2 BPSK	24.65	23.15	0.207	13.448	13448.0	13M4G7W
			DFT-s QPSK	24.45	22.95	0.197	13.444	13444.0	13M4G7W
			DFT-s QAM	23.24	21.74	0.149	13.476	13476.0	13M5D7W
			CP QPSK	24.19	22.69	0.186	13.444	13444.0	13M4G7W
			CP QAM	23.45	21.95	0.157	13.444	13444.0	13M4D7W
20	1720	1770	DFT-s PI/2 BPSK	24.62	23.12	0.205	17.885	17885.0	17M9G7W
			DFT-s QPSK	24.44	22.94	0.197	17.905	17905.0	17M9G7W
			DFT-s QAM	23.44	21.94	0.156	17.944	17944.0	17M9D7W
			CP QPSK	24.30	22.80	0.191	17.905	17905.0	17M9G7W
			CP QAM	23.61	22.11	0.163	17.944	17944.0	17M9D7W
25	1722.5	1767.5	DFT-s PI/2 BPSK	24.68	23.18	0.208	22.972	22972.0	23M0G7W
			DFT-s QPSK	24.37	22.87	0.194	22.961	22961.0	23M0G7W
			DFT-s QAM	23.42	21.92	0.156	22.974	22974.0	23M0D7W
			CP QPSK	24.25	22.75	0.188	22.961	22961.0	23M0G7W
			CP QAM	23.96	22.46	0.176	22.974	22974.0	23M0D7W
30	1725	1765	DFT-s PI/2 BPSK	24.65	23.15	0.207	28.594	28594.0	28M6G7W
			DFT-s QPSK	24.50	23.00	0.200	28.697	28697.0	28M7G7W
			DFT-s QAM	23.43	21.93	0.156	28.644	28644.0	28M6D7W
			CP QPSK	24.22	22.72	0.187	28.697	28697.0	28M7G7W
			CP QAM	23.68	22.18	0.165	28.644	28644.0	28M6D7W
35	1727.5	1762.5	DFT-s PI/2 BPSK	24.58	23.08	0.203	32.185	32185.0	32M2G7W
			DFT-s QPSK	24.33	22.83	0.192	32.176	32176.0	32M2G7W
			DFT-s QAM	24.00	22.50	0.178	32.293	32293.0	32M3D7W
			CP QPSK	24.23	22.73	0.187	32.176	32176.0	32M2G7W
			CP QAM	23.62	22.12	0.163	32.293	32293.0	32M3D7W
40	1730	1760	DFT-s PI/2 BPSK	24.77	23.27	0.212	38.602	38602.0	38M6G7W
			DFT-s QPSK	24.41	22.91	0.195	38.663	38663.0	38M7G7W
			DFT-s QAM	23.42	21.92	0.156	38.633	38633.0	38M6D7W
			CP QPSK	24.28	22.78	0.190	38.663	38663.0	38M7G7W
			CP QAM	23.81	22.31	0.170	38.633	38633.0	38M6D7W
45	1732.5	1751.5	DFT-s PI/2 BPSK	24.70	23.20	0.209	42.965	42965.0	43M0G7W
			DFT-s QPSK	24.36	22.86	0.193	42.934	42934.0	42M9G7W
			DFT-s QAM	23.95	22.45	0.176	42.944	42944.0	42M9D7W
			CP QPSK	24.28	22.78	0.190	42.934	42934.0	42M9G7W
			CP QAM	23.84	22.34	0.171	42.944	42944.0	42M9D7W

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	24.43	18.88	0.077	4.5136	4513.6	4M51G7W
			DFT-s QPSK	24.37	18.82	0.076	4.5021	4502.1	4M50G7W
			DFT-s QAM	23.48	17.93	0.062	4.4993	4499.3	4M50D7W
			CP QPSK	24.30	18.75	0.075	4.5021	4502.1	4M50G7W
			CP QAM	23.66	18.11	0.065	4.5021	4502.1	4M50D7W
10	668	693	DFT-s PI/2 BPSK	24.44	18.89	0.077	8.9394	8939.4	8M94G7W
			DFT-s QPSK	24.40	18.85	0.077	8.9657	8965.7	8M97G7W
			DFT-s QAM	23.48	17.93	0.062	9.001	9001.0	9M00D7W
			CP QPSK	24.25	18.70	0.074	8.9657	8965.7	8M97G7W
			CP QAM	23.40	17.85	0.061	9.001	9001.0	9M00D7W
15	670.5	690.5	DFT-s PI/2 BPSK	24.44	18.89	0.077	13.461	13461.0	13M5G7W
			DFT-s QPSK	24.40	18.85	0.077	13.416	13416.0	13M4G7W
			DFT-s QAM	23.31	17.76	0.060	13.447	13447.0	13M4D7W
			CP QPSK	24.30	18.75	0.075	13.416	13416.0	13M4G7W
			CP QAM	23.87	18.32	0.068	13.416	13416.0	13M4D7W
20	673	688	DFT-s PI/2 BPSK	24.49	18.94	0.078	17.868	17868.0	17M9G7W
			DFT-s QPSK	24.45	18.90	0.078	17.908	17908.0	17M9G7W
			DFT-s QAM	23.49	17.94	0.062	17.951	17951.0	18M0D7W
			CP QPSK	24.28	18.73	0.075	17.908	17908.0	17M9G7W
			CP QAM	23.76	18.21	0.066	17.951	17951.0	18M0D7W

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	26.26	26.46	0.443	8.6625	8662.5	8M66G7W
			DFT-s QPSK	26.10	26.30	0.427	8.6409	8640.9	8M64G7W
			DFT-s QAM	24.69	24.89	0.308	8.6622	8662.2	8M66D7W
			CP QPSK	24.16	24.36	0.273	8.6409	8640.9	8M64G7W
			CP QAM	23.86	24.06	0.255	8.6622	8662.2	8M66D7W
15	3457.5	3542.49	DFT-s PI/2 BPSK	26.18	26.38	0.435	12.94	12940.0	12M9G7W
			DFT-s QPSK	26.10	26.30	0.427	13.007	13007.0	13M0G7W
			DFT-s QAM	24.72	24.92	0.310	12.954	12954.0	13M0D7W
			CP QPSK	24.34	24.54	0.284	13.007	13007.0	13M0G7W
			CP QAM	23.88	24.08	0.256	13.007	13007.0	13M0D7W
20	3460.02	3540	DFT-s PI/2 BPSK	26.29	26.49	0.446	17.928	17928.0	17M9G7W
			DFT-s QPSK	26.16	26.36	0.433	17.981	17981.0	18M0G7W
			DFT-s QAM	24.24	24.44	0.278	17.987	17987.0	18M0D7W
			CP QPSK	24.44	24.64	0.291	17.981	17981.0	18M0G7W
			CP QAM	23.89	24.09	0.256	17.987	17987.0	18M0D7W
25	3462.51	3537.48	DFT-s PI/2 BPSK	26.29	26.49	0.446	22.941	22941.0	22M9G7W
			DFT-s QPSK	26.12	26.32	0.429	22.932	22932.0	22M9G7W
			DFT-s QAM	24.87	25.07	0.321	23.052	23052.0	23M1D7W
			CP QPSK	24.31	24.51	0.282	22.932	22932.0	22M9G7W
			CP QAM	23.97	24.17	0.261	23.052	23052.0	23M1D7W
30	3465	3534.99	DFT-s PI/2 BPSK	26.28	26.48	0.445	26.935	26935.0	26M9G7W
			DFT-s QPSK	26.09	26.29	0.426	26.886	26886.0	26M9G7W
			DFT-s QAM	24.78	24.98	0.315	27.01	27010.0	27M0D7W
			CP QPSK	24.35	24.55	0.285	26.886	26886.0	26M9G7W
			CP QAM	24.16	24.36	0.273	27.01	27010.0	27M0D7W
40	3470.01	3529.98	DFT-s PI/2 BPSK	26.16	26.36	0.433	35.808	35808.0	35M8G7W
			DFT-s QPSK	26.14	26.34	0.431	35.774	35774.0	35M8G7W
			DFT-s QAM	24.48	24.68	0.294	35.941	35941.0	35M9D7W
			CP QPSK	24.04	24.24	0.265	35.774	35774.0	35M8G7W
			CP QAM	23.79	23.99	0.251	35.941	35941.0	35M9D7W
50	3475.02	3525	DFT-s PI/2 BPSK	26.13	26.33	0.430	45.803	45803.0	45M8G7W
			DFT-s QPSK	26.10	26.30	0.427	45.903	45903.0	45M9G7W
			DFT-s QAM	24.93	25.13	0.326	45.837	45837.0	45M8D7W
			CP QPSK	24.19	24.39	0.275	45.903	45903.0	45M9G7W
			CP QAM	24.19	24.39	0.275	45.837	45837.0	45M8D7W
60	3480	3519.99	DFT-s PI/2 BPSK	26.15	26.35	0.432	57.91	57910.0	57M9G7W
			DFT-s QPSK	26.10	26.30	0.427	57.943	57943.0	57M9G7W
			DFT-s QAM	24.93	25.13	0.326	57.994	57994.0	58M0D7W
			CP QPSK	24.16	24.36	0.273	57.943	57943.0	57M9G7W
			CP QAM	24.03	24.23	0.265	57.994	57994.0	58M0D7W
70	3485.01	3514.98	DFT-s PI/2 BPSK	26.13	26.33	0.430	64.389	64389.0	64M4G7W
			DFT-s QPSK	26.15	26.35	0.432	64.435	64435.0	64M4G7W
			DFT-s QAM	24.24	24.44	0.278	64.553	64553.0	64M6D7W
			CP QPSK	24.44	24.64	0.291	64.435	64435.0	64M4G7W
			CP QAM	24.18	24.38	0.274	64.553	64553.0	64M6D7W
80	3490.02	3510	DFT-s PI/2 BPSK	26.17	26.37	0.434	77.256	77256.0	77M3G7W
			DFT-s QPSK	26.19	26.39	0.436	77.224	77224.0	77M2G7W
			DFT-s QAM	24.95	25.15	0.327	77.353	77353.0	77M4D7W
			CP QPSK	24.45	24.65	0.292	77.224	77224.0	77M2G7W
			CP QAM	24.29	24.49	0.281	77.353	77353.0	77M4D7W
90	3495	3504.99	DFT-s PI/2 BPSK	26.30	26.50	0.447	86.92	86920.0	86M9G7W
			DFT-s QPSK	26.15	26.35	0.432	86.924	86924.0	86M9G7W
			DFT-s QAM	24.94	25.14	0.327	86.915	86915.0	86M9D7W
			CP QPSK	24.06	24.26	0.267	86.924	86924.0	86M9G7W
			CP QAM	23.78	23.98	0.250	86.915	86915.0	86M9D7W
100	3500.01	3500.01	DFT-s PI/2 BPSK	26.37	26.57	0.454	96.552	96552.0	96M6G7W
			DFT-s QPSK	26.16	26.36	0.433	96.159	96159.0	96M2G7W
			DFT-s QAM	24.49	24.69	0.294	96.617	96617.0	96M6D7W
			CP QPSK	23.57	23.77	0.238	96.159	96159.0	96M2G7W
			CP QAM	24.28	24.48	0.281	96.617	96617.0	96M6D7W

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	26.19	26.59	0.456	8.5965	8596.5	8M60G7W
			DFT-s QPSK	26.16	26.56	0.453	8.6422	8642.2	8M64G7W
			DFT-s QAM	24.72	25.12	0.325	8.645	8645.0	8M65D7W
			CP QPSK	24.48	24.88	0.308	8.6422	8642.2	8M64G7W
			CP QAM	23.87	24.27	0.267	8.645	8645.0	8M65D7W
15	3707.52	3972.48	DFT-s PI/2 BPSK	26.15	26.55	0.452	12.893	12893.0	12M9G7W
			DFT-s QPSK	26.17	26.57	0.454	12.88	12880.0	12M9G7W
			DFT-s QAM	24.99	25.39	0.346	12.981	12981.0	13M0D7W
			CP QPSK	24.25	24.65	0.292	12.88	12880.0	12M9G7W
			CP QAM	23.75	24.15	0.260	12.88	12880.0	12M9D7W
20	3710.01	3969.99	DFT-s PI/2 BPSK	26.25	26.65	0.462	17.886	17886.0	17M9G7W
			DFT-s QPSK	26.16	26.56	0.453	17.902	17902.0	17M9G7W
			DFT-s QAM	24.60	25.00	0.316	17.936	17936.0	17M9D7W
			CP QPSK	24.45	24.85	0.305	17.902	17902.0	17M9G7W
			CP QAM	24.05	24.45	0.279	17.936	17936.0	17M9D7W
25	3712.5	3767.49	DFT-s PI/2 BPSK	26.24	26.64	0.461	22.872	22872.0	22M9G7W
			DFT-s QPSK	26.12	26.52	0.449	22.954	22954.0	23M0G7W
			DFT-s QAM	24.74	25.14	0.327	22.995	22995.0	23M0D7W
			CP QPSK	24.50	24.90	0.309	22.954	22954.0	23M0G7W
			CP QAM	24.30	24.70	0.295	22.995	22995.0	23M0D7W
30	3715.02	3964.98	DFT-s PI/2 BPSK	26.19	26.59	0.456	26.715	26715.0	26M7G7W
			DFT-s QPSK	26.20	26.60	0.457	27.039	27039.0	27M0G7W
			DFT-s QAM	24.52	24.92	0.310	26.984	26984.0	27M0D7W
			CP QPSK	24.41	24.81	0.303	27.039	27039.0	27M0G7W
			CP QAM	24.04	24.44	0.278	26.984	26984.0	27M0D7W
40	3720	3960	DFT-s PI/2 BPSK	26.29	26.69	0.467	35.819	35819.0	35M8G7W
			DFT-s QPSK	26.10	26.50	0.447	35.664	35664.0	35M7G7W
			DFT-s QAM	24.86	25.26	0.336	35.953	35953.0	36M0D7W
			CP QPSK	24.16	24.56	0.286	35.664	35664.0	35M7G7W
			CP QAM	24.19	24.59	0.288	35.953	35953.0	36M0D7W
50	3725.01	3954.99	DFT-s PI/2 BPSK	26.21	26.61	0.458	45.782	45782.0	45M8G7W
			DFT-s QPSK	26.12	26.52	0.449	45.687	45687.0	45M7G7W
			DFT-s QAM	24.52	24.92	0.310	45.921	45921.0	45M9D7W
			CP QPSK	24.21	24.61	0.289	45.687	45687.0	45M7G7W
			CP QAM	23.90	24.30	0.269	45.921	45921.0	45M9D7W
60	3730.02	3949.98	DFT-s PI/2 BPSK	26.13	26.53	0.450	57.986	57986.0	58M0G7W
			DFT-s QPSK	26.18	26.58	0.455	58.021	58021.0	58M0G7W
			DFT-s QAM	24.77	25.17	0.329	58.077	58077.0	58M1D7W
			CP QPSK	23.87	24.27	0.267	58.021	58021.0	58M0G7W
			CP QAM	23.45	23.85	0.243	58.077	58077.0	58M1D7W
70	3735	3945	DFT-s PI/2 BPSK	26.15	26.55	0.452	64.535	64535.0	64M5G7W
			DFT-s QPSK	26.17	26.57	0.454	64.261	64261.0	64M3G7W
			DFT-s QAM	24.95	25.35	0.343	64.481	64481.0	64M5D7W
			CP QPSK	24.24	24.64	0.291	64.261	64261.0	64M3G7W
			CP QAM	23.97	24.37	0.274	64.481	64481.0	64M5D7W
80	3740.01	3939.99	DFT-s PI/2 BPSK	26.16	26.56	0.453	77.142	77142.0	77M1G7W
			DFT-s QPSK	26.17	26.57	0.454	77.475	77475.0	77M5G7W
			DFT-s QAM	24.91	25.31	0.340	77.213	77213.0	77M2D7W
			CP QPSK	24.48	24.88	0.308	77.475	77475.0	77M5G7W
			CP QAM	23.63	24.03	0.253	77.213	77213.0	77M2D7W
90	3745.02	3934.98	DFT-s PI/2 BPSK	26.22	26.62	0.459	86.67	86670.0	86M7G7W
			DFT-s QPSK	26.19	26.59	0.456	86.936	86936.0	86M9G7W
			DFT-s QAM	24.84	25.24	0.334	87.042	87042.0	87M0D7W
			CP QPSK	24.40	24.80	0.302	86.936	86936.0	86M9G7W
			CP QAM	23.90	24.30	0.269	87.042	87042.0	87M0D7W
100	3750	3930	DFT-s PI/2 BPSK	26.33	26.73	0.471	96.637	96637.0	96M6G7W
			DFT-s QPSK	26.19	26.59	0.456	96.262	96262.0	96M3G7W
			DFT-s QAM	24.72	25.12	0.325	96.882	96882.0	96M9D7W
			CP QPSK	23.94	24.34	0.272	96.262	96262.0	96M3G7W
			CP QAM	23.76	24.16	0.261	96.882	96882.0	96M9D7W

2TX

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
10	2501.01	2685	CP QPSK	25.37	26.24	0.420	8.6924	8692.4	8M69G7W
			CP QAM	24.68	25.54	0.358	8.6672	8667.2	8M67D7W
15	2503.5	2682.48	CP QPSK	25.42	26.29	0.425	13.658	13658.0	13M7G7W
			CP QAM	24.51	25.38	0.345	13.658	13658.0	13M7D7W
20	2506.02	2679.99	CP QPSK	25.35	26.22	0.419	18.327	18327.0	18M3G7W
			CP QAM	24.55	25.42	0.349	18.306	18306.0	18M3D7W
25	2506.02	2679.99	CP QPSK	25.29	26.15	0.412	18.297	18297.0	18M3G7W
			CP QAM	24.82	25.69	0.371	18.306	18306.0	18M3D7W
30	2511	2674.98	CP QPSK	25.61	26.48	0.444	27.941	27941.0	27M9G7W
			CP QAM	24.65	25.52	0.357	27.975	27975.0	28M0D7W
35	2511	2674.98	CP QPSK	25.38	26.25	0.422	27.932	27932.0	27M9G7W
			CP QAM	24.60	25.46	0.352	27.966	27966.0	28M0D7W
40	2516.01	2670	CP QPSK	25.49	26.36	0.433	37.951	37951.0	38M0G7W
			CP QAM	24.71	25.58	0.361	37.992	37992.0	38M0D7W
45	2516.01	2670	CP QPSK	25.34	26.21	0.418	37.951	37951.0	38M0G7W
			CP QAM	24.64	25.50	0.355	37.978	37978.0	38M0D7W
50	2521.02	2664.99	CP QPSK	25.32	26.18	0.415	47.662	47662.0	47M7G7W
			CP QAM	24.75	25.62	0.364	47.617	47617.0	47M6D7W
60	2526	2659.98	CP QPSK	25.26	26.13	0.410	57.935	57935.0	57M9G7W
			CP QAM	24.17	25.04	0.319	58.069	58069.0	58M1D7W
70	2531.01	2655	CP QPSK	25.23	26.10	0.407	67.72	67720.0	67M7G7W
			CP QAM	24.67	25.54	0.358	67.669	67669.0	67M7D7W
80	2536.02	2649.99	CP QPSK	25.21	26.08	0.405	77.563	77563.0	77M6G7W
			CP QAM	24.53	25.39	0.346	77.733	77733.0	77M7D7W
90	2541	2644.98	CP QPSK	25.26	26.13	0.410	87.807	87807.0	87M8G7W
			CP QAM	24.65	25.51	0.356	87.673	87673.0	87M7D7W
100	2546.01	2640	CP QPSK	25.70	26.57	0.453	97.757	97757.0	97M8G7W
			CP QAM	24.52	25.39	0.346	97.683	97683.0	97M7D7W

1.6 Test Methodology of Applied Standards

FCC 47 CFR Part 2, 22H, 24E, 27C, Part 90
ANSI C63.26-2015
KDB971168 D01 Power Meas license Digital System v03r01
KDB412172 D01 Determining ERP and EIRP v01r01

1.7 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.

1.8 Special Accessories

No special accessories were used during testing.

1.9 Equipment Modifications

There was no modifications incorporated into the EUT.

1.10 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	7.8	180
Bandwidth:10MHz Mod:256QAM	7.8	172
Bandwidth:15MHz Mod:256QAM	7.8	202
Bandwidth:20MHz Mod:256QAM	7.8	208
Bandwidth:25MHz Mod:256QAM	7.8	233
Bandwidth:30MHz Mod:256QAM	7.8	202
Bandwidth:35MHz Mod:256QAM	7.8	172
Bandwidth:40MHz Mod:256QAM	7.8	199
5G NR BAND n5		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	7.8	247
Bandwidth:10MHz Mod:256QAM	7.8	223
Bandwidth:15MHz Mod:256QAM	7.8	241
Bandwidth:20MHz Mod:256QAM	7.8	200
5G NR BAND n7		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	7.8	181
Bandwidth:10MHz Mod:256QAM	7.8	211
Bandwidth:15MHz Mod:256QAM	7.8	222
Bandwidth:20MHz Mod:256QAM	7.8	244
Bandwidth:25MHz Mod:256QAM	7.8	206
Bandwidth:30MHz Mod:256QAM	7.8	263
Bandwidth:35MHz Mod:256QAM	7.8	239
Bandwidth:40MHz Mod:256QAM	7.8	181
Bandwidth:50MHz Mod:256QAM	7.8	230
5G NR BAND n12		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	7.8	245
Bandwidth:10MHz Mod:256QAM	7.8	210
Bandwidth:15MHz Mod:256QAM	7.8	205

5G NR BAND n25		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	7.8	227
Bandwidth:10MHz Mod:256QAM	7.8	194
Bandwidth:15MHz Mod:256QAM	7.8	198
Bandwidth:20MHz Mod:256QAM	7.8	179
Bandwidth:25MHz Mod:256QAM	7.8	175
Bandwidth:30MHz Mod:256QAM	7.8	241
Bandwidth:35MHz Mod:256QAM	7.8	238
Bandwidth:40MHz Mod:256QAM	7.8	256
5G NR BAND n26 Part90s		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	7.8	188
Bandwidth:10MHz Mod:256QAM	7.8	256
5G NR BAND n26		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	7.8	178
Bandwidth:10MHz Mod:256QAM	7.8	263
Bandwidth:15MHz Mod:256QAM	7.8	189
Bandwidth:20MHz Mod:256QAM	7.8	217
5G NR BAND n30		
CP-OFDM_SCS 30 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	7.8	200
Bandwidth:10MHz Mod:256QAM	7.8	253
5G NR BAND n38		
CP-OFDM_SCS 30 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:10MHz Mod:256QAM	7.8	187
Bandwidth:15MHz Mod:256QAM	7.8	189
Bandwidth:20MHz Mod:256QAM	7.8	182
Bandwidth:25MHz Mod:256QAM	7.8	262
Bandwidth:30MHz Mod:256QAM	7.8	216
Bandwidth:40MHz Mod:256QAM	7.8	226

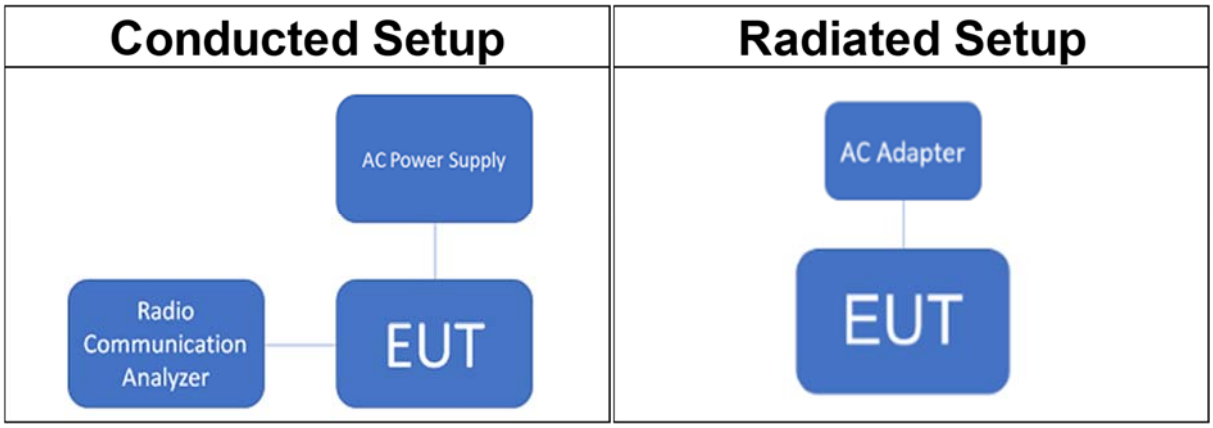
5G NR BAND n41		
CP-OFDM_SCS 30 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:10MHz Mod:256QAM	7.8	195
Bandwidth:15MHz Mod:256QAM	7.8	259
Bandwidth:20MHz Mod:256QAM	7.8	249
Bandwidth:25MHz Mod:256QAM	7.8	201
Bandwidth:30MHz Mod:256QAM	7.8	230
Bandwidth:35MHz Mod:256QAM	7.8	240
Bandwidth:40MHz Mod:256QAM	7.8	250
Bandwidth:45MHz Mod:256QAM	7.8	186
Bandwidth:50MHz Mod:256QAM	7.8	189
Bandwidth:60MHz Mod:256QAM	7.8	213
Bandwidth:70MHz Mod:256QAM	7.8	257
Bandwidth:80MHz Mod:256QAM	7.8	209
Bandwidth:90MHz Mod:256QAM	7.8	204
Bandwidth:100MHz Mod:256QAM	7.8	173
5G NR BAND n66		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	7.8	262
Bandwidth:10MHz Mod:256QAM	7.8	208
Bandwidth:15MHz Mod:256QAM	7.8	216
Bandwidth:20MHz Mod:256QAM	7.8	216
Bandwidth:25MHz Mod:256QAM	7.8	252
Bandwidth:30MHz Mod:256QAM	7.8	199
Bandwidth:35MHz Mod:256QAM	7.8	231
Bandwidth:40MHz Mod:256QAM	7.8	256
Bandwidth:45MHz Mod:256QAM	7.8	230
5G NR BAND n71		
CP-OFDM_SCS 15 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:5MHz Mod:256QAM	7.8	180
Bandwidth:10MHz Mod:256QAM	7.8	264
Bandwidth:15MHz Mod:256QAM	7.8	265
Bandwidth:20MHz Mod:256QAM	7.8	230

5G NR BAND n77		
CP-OFDM_SCS 30 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:10MHz Mod:256QAM	7.8	259
Bandwidth:15MHz Mod:256QAM	7.8	172
Bandwidth:20MHz Mod:256QAM	7.8	224
Bandwidth:25MHz Mod:256QAM	7.8	244
Bandwidth:30MHz Mod:256QAM	7.8	223
Bandwidth:40MHz Mod:256QAM	7.8	175
Bandwidth:50MHz Mod:256QAM	7.8	250
Bandwidth:60MHz Mod:256QAM	7.8	187
Bandwidth:70MHz Mod:256QAM	7.8	173
Bandwidth:80MHz Mod:256QAM	7.8	253
Bandwidth:90MHz Mod:256QAM	7.8	178
Bandwidth:100MHz Mod:256QAM	7.8	208

2TX

5G NR BAND n41		
CP-OFDM_SCS 30 kHz		
Test mode	DC voltage (V)	DC current (mA)
Bandwidth:10MHz Mod:256QAM	7.8	198
Bandwidth:15MHz Mod:256QAM	7.8	204
Bandwidth:20MHz Mod:256QAM	7.8	187
Bandwidth:25MHz Mod:256QAM	7.8	210
Bandwidth:30MHz Mod:256QAM	7.8	188
Bandwidth:35MHz Mod:256QAM	7.8	183
Bandwidth:40MHz Mod:256QAM	7.8	196
Bandwidth:45MHz Mod:256QAM	7.8	205
Bandwidth:50MHz Mod:256QAM	7.8	211
Bandwidth:60MHz Mod:256QAM	7.8	216
Bandwidth:70MHz Mod:256QAM	7.8	198
Bandwidth:80MHz Mod:256QAM	7.8	193
Bandwidth:90MHz Mod:256QAM	7.8	204
Bandwidth:100MHz Mod:256QAM	7.8	189

2.6 Test Configuration



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

2.7 Control Unit(s)

Radiated Emission Test Site: SAC 3					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
AC Adapter	Shenzhen JingQuanHua & Everrise Intelligent Electric Co., Ltd	NSA65EU-20032500	N/A	N/A	N/A
USB Cable	ASAP	LA9U2030-CS-H	N/A	N/A	N/A

3 SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§2.1046(a)	RF Power Output	Compliant
§22.913(a)(5) §24.232(c) §27.50(c)(9)(10) §27.50(d)(4) §27.50(h)(2) §27.50(j)(3) §27.50(k)(3) §27.50(a)(3)(i) §90.635(b)	ERP/ EIRP measurement	Compliant
§2.1049(h)	99% & 26dB Occupied Bandwidth	Compliant
§2.1051 §22.917(a)(b) §24.238(a)(b) §27.53(g) §27.53(l)(2) §27.53 (n)(2) §27.53(m)(4) §27.53(a)(4) §27.53(h)(1)&(3) §27.53(l)(2) §90.691(a)	Out of Band Emissions at Antenna Terminals and Band Edge / Emission mask requirements	Compliant
§2.1053 §2.1057(a)(1) §22.917(a)(b) §24.238(a)(b) §27.53(g) §27.53(h) §27.53(l)(2) §27.53 (n)(2) §27.53(a)(4) §27.53(m)(4) §90.691(a)	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)	Peak to Average Ratio	Compliant
§2.1055(a)(1) §22.355 §24.235 §27.54	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.

5G NR Band	SCS	Test Channel	Channel Bandwidth (MHz)	Modulation	Resource Block Allocation	
					RBs allocated	RB Offset
n2	15K	374000	40	DFT-s PI/2 BPSK	1	1
n2	15K	376000	40	DFT-s PI/2 BPSK	1	1
n2	15K	378000	40	DFT-s PI/2 BPSK	1	1
n5	15K	166300	15	DFT-s PI/2 BPSK	1	1
n5	15K	167300	15	DFT-s PI/2 BPSK	1	1
n5	15K	168300	15	DFT-s PI/2 BPSK	1	1
n7	15K	505000	50	DFT-s PI/2 BPSK	1	1
n7	15K	507000	50	DFT-s PI/2 BPSK	1	1
n7	15K	509000	50	DFT-s PI/2 BPSK	1	1
n12	15K	141300	15	DFT-s PI/2 BPSK	1	1
n12	15K	141500	15	DFT-s PI/2 BPSK	1	1
n12	15K	141700	15	DFT-s PI/2 BPSK	1	1
n25	15K	374000	40	DFT-s PI/2 BPSK	1	1
n25	15K	376500	40	DFT-s PI/2 BPSK	1	1
n25	15K	379000	40	DFT-s PI/2 BPSK	1	1
n26(Part90s)	15K	163800	10	DFT-s PI/2 BPSK	1	1
n26	15K	166800	20	DFT-s PI/2 BPSK	1	1
n26	15K	167300	20	DFT-s PI/2 BPSK	1	1
n26	15K	167800	20	DFT-s PI/2 BPSK	1	1
n30	15K	462000	10	DFT-s PI/2 BPSK	1	1
n38	30K	518000	40	DFT-s PI/2 BPSK	1	1
n38	30K	519000	40	DFT-s PI/2 BPSK	1	1
n38	30K	520000	40	DFT-s PI/2 BPSK	1	1
n41	30K	509202	100	DFT-s PI/2 BPSK	1	1
n41	30K	510000	100	DFT-s PI/2 BPSK	1	1
n41	30K	518598	100	DFT-s PI/2 BPSK	1	1
n66	30K	346000	40	DFT-s PI/2 BPSK	1	1
n66	30K	349000	40	DFT-s PI/2 BPSK	1	1
n66	30K	352000	40	DFT-s PI/2 BPSK	1	1
n71	15K	134600	20	DFT-s PI/2 BPSK	1	1
n71	15K	136100	20	DFT-s PI/2 BPSK	1	1
n71	15K	137600	20	DFT-s PI/2 BPSK	1	1
n77(Part27)	30K	633334	100	DFT-s PI/2 BPSK	1	1
n77(Part27)	30K	650000	100	DFT-s PI/2 BPSK	1	1
n77(Part27)	30K	656000	100	DFT-s PI/2 BPSK	1	1
n77(Part27)	30K	662000	100	DFT-s PI/2 BPSK	1	1

5G NR ENDC Band	SCS	Test Channel	Channel Bandwidth (MHz)	Modulation	Resource Block Allocation	
					RBs allocated	RB Offset
2A_n5A	15K	18700_166300	20_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n5A	15K	18900_167300	20_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n5A	15K	19100_168300	20_15	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n41A	30K	18700_509202	20_100	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n41A	30K	18900_510000	20_100	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n41A	30K	19100_518598	20_100	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n66A	30K	18700_346000	20_40	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n66A	30K	18900_349000	20_40	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n66A	30K	19100_352000	20_40	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n77A	30K	18700_633334	20_100	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n77A	30K	18700_650000	20_100	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n77A	30K	18900_656000	20_100	QPSK_DFT-s PI/2 BPSK	1_1	0_1
2A_n77A	30K	19100_662000	20_100	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n2A	15K	20450_374000	10_40	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n2A	15K	20525_376000	10_40	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n2A	15K	20600_378000	10_40	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n7A	15K	20450_505000	20_50	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n7A	15K	20525_507000	20_50	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n7A	15K	20600_507000	20_50	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n77A	30K	20450_633334	10_100	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n77A	30K	20450_650000	10_100	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n77A	30K	20525_656000	10_100	QPSK_DFT-s PI/2 BPSK	1_1	0_1
5A_n77A	30K	20600_662000	10_100	QPSK_DFT-s PI/2 BPSK	1_1	0_1

5G NR NRCA Band	SCS	Test Channel	Channel Bandwidth (MHz)	Modulation	Resource Block Allocation	
					RBs allocated	RB Offset
n2A_n5A	15K	374000_166300	40_15	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n5A	15K	376000_167300	40_15	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n5A	15K	378000_168300	40_15	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n66A	15K_30K	374000_346000	40_40	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n66A	15K_30K	376000_349000	40_40	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n66A	15K_30K	378000_352000	40_40	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n77A	15K_30K	374000_633334	40_100	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n77A	15K_30K	374000_650000	40_100	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n77A	15K_30K	376000_656000	40_100	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n2A_n77A	15K_30K	378000_662000	40_100	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n5A_n66A	15K_30K	166300_518601	15_40	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n5A_n66A	15K_30K	167300_650000	15_40	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n5A_n66A	15K_30K	168300_636666	15_40	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n5A_n77A	15K_30K	166300_633334	15_100	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n5A_n77A	15K_30K	166300_650000	15_100	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n5A_n77A	15K_30K	167300_656000	15_100	QPSK_DFT-s PI/2 BPSK	1_1	1_1
n5A_n77A	15K_30K	168300_662000	15_100	QPSK_DFT-s PI/2 BPSK	1_1	1_1

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			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
Mask																																			
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	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
Mask																																			
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	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
Bandedge		v		v	v	v	v	v	v	v	v	v		v						v					v				v	v				v
Mask																																			
Conducted Emission		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
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
Mask																																			
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	25	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
Mask																																			
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	26 Part90s	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
Mask																																			
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	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
Mask																																			
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	30	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
Mask																																		
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	38	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
Bandedge																																			
Mask		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				
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	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			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																																			
Mask		v		v		v	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	v	v											v				
CCDF		v	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				

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	66	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
Bandedge		v		v	v	v	v	v	v	v	v	v	v							v					v				v	v				v
Mask																																			
Conducted Emission		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
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	71	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
Mask																																			
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	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	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
Bandedge		v		v		v	v	v	v	v		v		v	v	v	v	v	v																
Mask																				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
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	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	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
Bandedge		v		v		v	v	v	v	v	v	v	v	v	v	v	v	v	v						v				v	v				v
Mask		v	v	v		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	v						v						v			
CCDF		v	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			

5 MEASUREMENT UNCERTAINTY

Test Items	Uncertainty		
RF Power Output	+/-	0.97	dB
ERP/ EIRP measurement	+/-	2.15	dB
	+/-	2.15	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
	+/-	**4.15**	**dB**	30MHz - 1000MHz
	+/-	**3.43**	**dB**	1GHz - 18GHz
	+/-	**3.86**	**dB**	18GHz - 40GHz
Polarization: Horizontal	**+/-**	**1.89**	**dB**	9kHz~30MHz
	+/-	**4.02**	**dB**	30MHz - 1000MHz
	+/-	**3.43**	**dB**	1GHz - 18GHz
	+/-	**3.86**	**dB**	18GHz - 40GHz
Radiated Spurious Emission	**+/-**	**2**	**dB**	33GHz-50GHz
	+/-	**1.59**	**dB**	50GHz-60GHz
	+/-	**1.7**	**dB**	60GHz-90GHz
	+/-	**1.64**	**dB**	90GHz-140GHz
	+/-	**3.83**	**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 3					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
PXA Spectrum Analyzer	Agilent	N9030A	MY53120760	04/24/2024	04/23/2025
PXA Spectrum Analyzer	Keysight	N9030B	MY61330494	03/22/2024	03/21/2025
3.1G High Pass Filter	Woken	WFIL-H3100-18000F-01	WRGBAFWC2B6	12/12/2023	12/11/2024
Attenuator	Mini-Circuits	BW-S10W2+	16	12/12/2023	12/11/2024
DC Block	Mini-Circuits	BLK-18-S+	14	12/12/2023	12/11/2024
DC Power Supply	Gwinstek	SPS-3610	GEW902152	01/18/2024	01/17/2025
Radio Communication Analyzer	KEYSIGHT	E7515B	MY60191250	01/14/2024	01/13/2025
Spectrum Analyzer	KEYSIGHT	N9010A	MY57120290	04/10/2024	04/09/2025
Splitter	Titan	T0510E2W118Q	22015158	12/12/2023	12/11/2024
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

Radiated Emission Test Site: SAC 3					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
1G High Pass Filter	Micro-Tronics	HPM50108	32	12/12/2023	12/11/2024
2G High Pass Filter	Micro-Tronics	HPM50110	36	12/12/2023	12/11/2024
Band Reject Filter 1700-2000	EWT	EWT-54-0038	M1	12/12/2023	12/11/2024
Band Reject Filter 3300-3900	WI	WRCGV3400/3800-3300/3900-40/12SS	1	12/12/2023	12/11/2024
Band Reject Filter 800-1000	EWT	EWT-54-0037	M3R	12/12/2023	12/11/2024
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
EXA Spectrum Analyzer	KEYSIGHT	N9010B	MY63440386	02/06/2024	02/05/2025
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	12/28/2023	12/27/2024
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	MY59321566	02/15/2024	02/14/2025
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) f

(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 90.635(b)

Mobile station is limited to 100W ERP

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), §90.691(a)

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:

(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 §90.691 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.

7.4 Field Strength Of Spurious Radiation Measurement

According to FCC §2.1053,

FCC §22.917(a), §24.238(a), §27.53(h), §90.691(a)

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 §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.

7.5 Frequency Stability Measurement

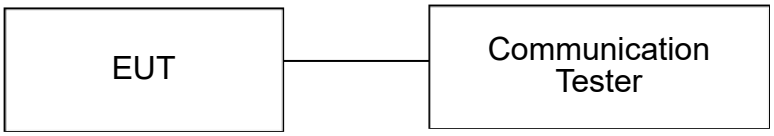
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

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

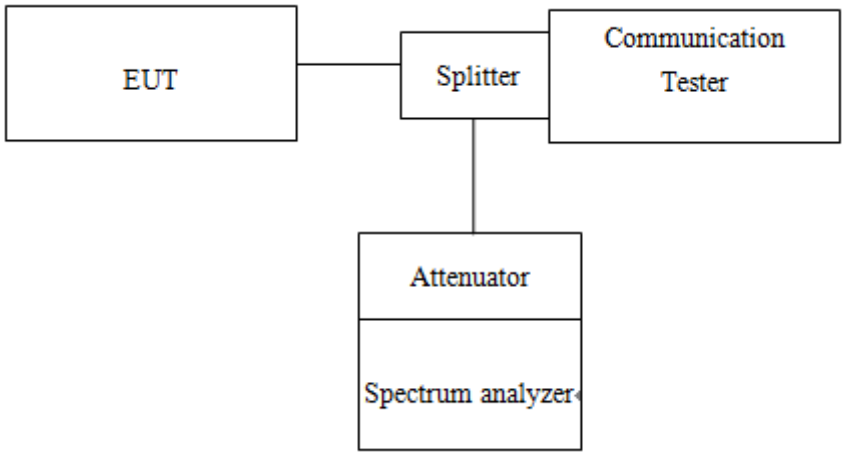


Note: *Measurement setup for testing on Antenna connector*

8.2 Occupied Bandwidth Measurement

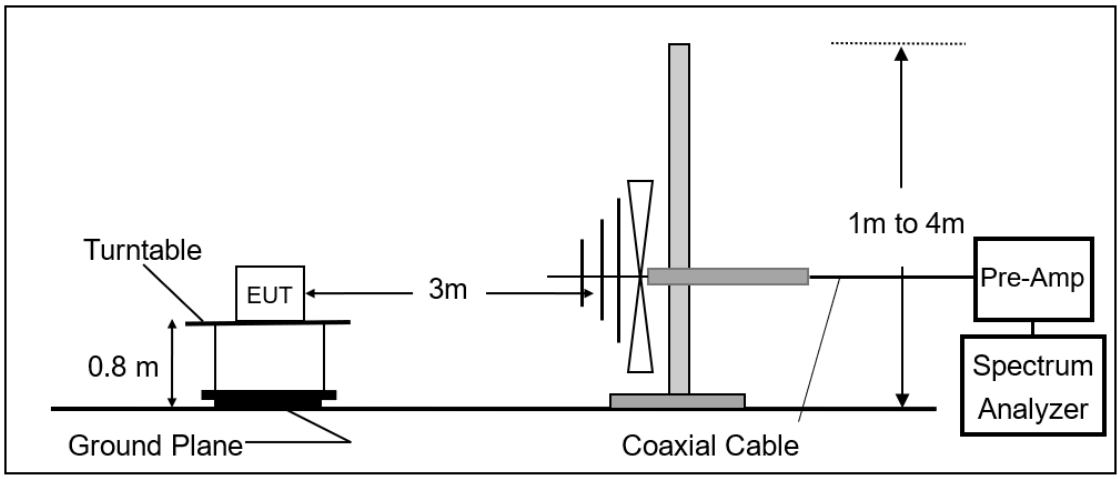
Note: *Measurement setup for testing on Antenna connector*

8.3 Out of Band Emission At Antenna Terminals

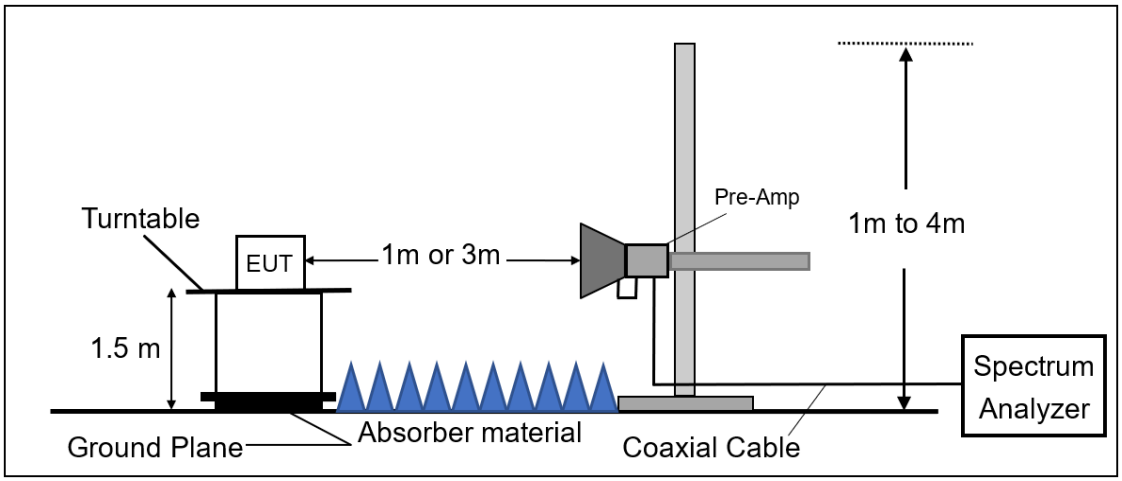


8.4 Field Strength of Spurious Radiation Measurement

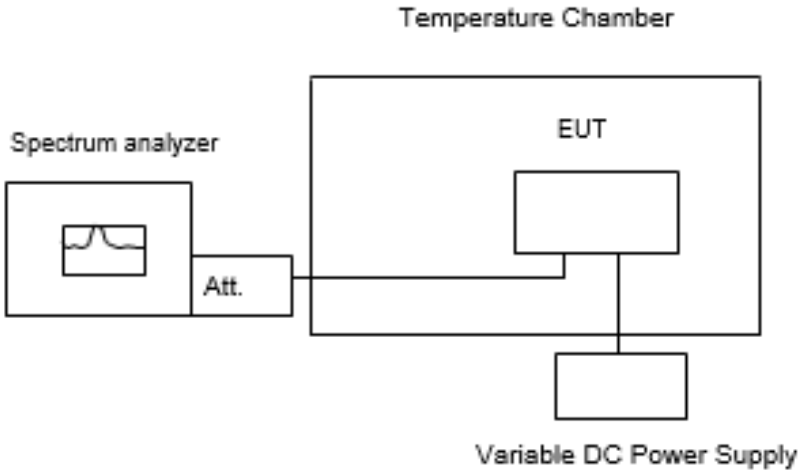
Radiated Emission Test Set-Up, Frequency From 30MHz to 1000MHz.



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

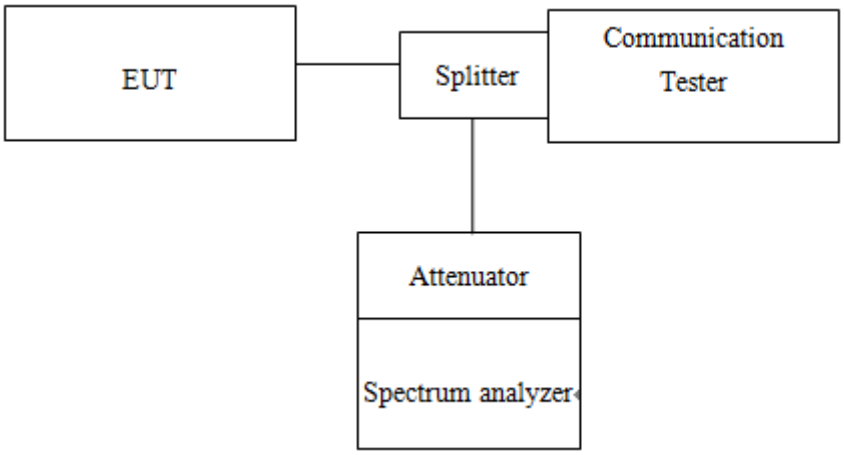


8.5 Frequency Stability Measurement



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%, VBW= 3 * RBW, with span > 2 * Signal BW, set % Power = 99%.

99% Bandwidth with detector sample

The EUT's output RF connector was connected with a short cable to the spectrum analyzer, RBW was set to about 1% ~ 5% of emission BW, VBW= 3 times RBW.
Set 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-Measurement Results.

~ End of Report ~