

TEST REPORT

FCC ID..... :	2A9LJ-ME65	
Test Report No..... :	TCT240513E041	
Date of issue..... :	Aug. 20, 2024	
Testing laboratory	SHENZHEN TONGCE TESTING LAB	
Testing location/ address:	2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China	
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Manufacturer's name ... :	Meferi Technologies Co., Ltd.	
Address..... :	4F, A6, Tianfu Software Park, No. 1129, Century City Road, High-tech Zone, 610041, Chengdu, Sichuan, 610041 China	
Standard(s)	FCC CFR Title 47 Part 2 FCC CFR Title 47 Part22 FCC CFR Title 47 Part24 FCC CFR Title 47 Part27 FCC CFR Title 47 Part90	
Product Name..... :	MOBILE COMPUTER	
Trade Mark	MEFERI	
Model/Type reference..... :	ME65, ME65P, ME65T, ME65H, ME65L, ME65S, ME68	
Rating(s)..... :	Refer to EUT description of page 4	
Date of receipt of test item	May 13, 2024	
Date (s) of performance of test..... :	May 13, 2024 ~ Aug. 20, 2024	
Tested by (+signature) ... :	Rleo LIU	
Check by (+signature).... :	Beryl ZHAO	
Approved by (+signature):	Tomsin	

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1. General Product Information

1.1. EUT description

Product Name.....:	MOBILE COMPUTER
Model/Type reference.....:	ME65
Sample Number.....:	TCT240513E003-0102
Tx Frequency	5G NR n 2: 1850 MHz ~ 1910 MHz 5G NR n 5: 824 MHz ~ 849 MHz 5G NR n 7: 2500 MHz ~ 2570 MHz 5G NR n 26-1: 814 MHz ~ 824 MHz 5G NR n 26-2: 824 MHz ~ 849 MHz 5G NR n 41: 2496 MHz ~ 2690 MHz 5G NR n 66: 1710 MHz ~ 1780 MHz 5G NR n 77: 3700 MHz ~ 3980 MHz 5G NR n 78: 3450 MHz ~ 3550 MHz
Rx Frequency	5G NR n 2: 1930 MHz ~ 1990 MHz 5G NR n 5: 869 MHz ~ 894 MHz 5G NR n 7: 2620 MHz ~ 2690 MHz 5G NR n 26-1: 859 MHz ~ 869 MHz 5G NR n 26-2: 869 MHz ~ 894 MHz 5G NR n 41: 2496 MHz ~ 2690 MHz 5G NR n 66: 2110 MHz ~ 2180 MHz 5G NR n 77: 3700 MHz ~ 3980 MHz 5G NR n 78: 3450 MHz ~ 3550 MHz
Bandwidth.....:	5G NR n 2: 5MHz /10MHz /15MHz /20MHz 5G NR n 5: 5MHz /10MHz /15MHz /20MHz 5G NR n 7: 5MHz /10MHz /15MHz /20MHz 5G NR n 26-1: 5MHz /10MHz 5G NR n 26-2: 5MHz /10MHz /15MHz /20MHz 5G NR n 41: 20MHz /30MHz /40MHz /50MHz /60MHz /70MHz /80MHz /90MHz /100MHz 5G NR n 66: 5MHz /10MHz /15MHz /20MHz 5G NR n 77: 20MHz /40MHz /50MHz /60MHz /70MHz /80MHz /90MHz /100MHz 5G NR n 78: 20MHz /40MHz /60MHz /80MHz /100MHz
Maximum Output Power to Antenna.....:	5G NR n 2: 21.88dBm 5G NR n 5: 23.02dBm 5G NR n 7: 22.54dBm 5G NR n 26-1: 22.92dBm 5G NR n 26-2: 22.76dBm 5G NR n 41: 26.05dBm 5G NR n 66: 22.76dBm 5G NR n 77: 26.85dBm 5G NR n 78: 26.29dBm
99% Occupied	5G NR n 2: 19M1W7D 5G NR n 5: 19M1W7D

Bandwidth:	5G NR n 7: 19M1G7D 5G NR n 26-1: 9M31W7D 5G NR n 26-2: 19M1G7D 5G NR n 41: 97M9W7D 5G NR n 66: 19M1G7D 5G NR n 77: 97M7G7D 5G NR n 78: 97M7G7D
Type of Modulation:	BPSK, QPSK, 16QAM, 64QAM, 256QAM
Antenna Type:	Internal Antenna
Antenna Gain:	5G NR n 2: 1.78dBi 5G NR n 5: -2.17dBi 5G NR n 7: 1.13dBi 5G NR n 26-1: -2.00dBi 5G NR n 26-2: -2.00dBi 5G NR n 41: 3.27dBi 5G NR n 66: -0.09dBi 5G NR n 77: 1.50dBi 5G NR n 78: 0.83dBi
Rating(s):	Adapter Information: Model: HJ-FC001K7-US Input: AC 100-240V, 50/60Hz, 0.6A Output: DC 5.0V, 3.0A/DC 9.0V, 2.0A/DC 12.0V, 1.5A, 18.0W Rechargeable Li-ion Battery DC 3.85V

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

No.	Model No.	Tested with
1	ME65	☒
Other models	ME65P, ME65T, ME65H, ME65L, ME65S, ME68	☐

Note: ME65 is tested model, other models are derivative models. The models are identical in circuit and PCB layout, only different on the model names. So the test data of ME65 can represent the remaining models.

1.3. Emission Designator

5G NR n 2	BPSK		QPSK		16QAM		64QAM		256QAM	
BW (MHz)	Emission Designator (99%OBW)	Maxi. EIRP (W)	Emission Designator (99%OBW)	Max. EIRP (W)	Emission Designator (99%OBW)	Maxi. EIRP (W)	Emission Designator (99%OBW)	Max. EIRP (W)	Emission Designator (99%OBW)	Maxi. EIRP (W)
5	4M49G7D	0.228	4M49G7D	0.232	4M51W7D	0.232	4M50W7D	0.231	4M51W7D	0.210
10	9M00G7D	0.207	9M33G7D	0.215	9M31W7D	0.213	9M33W7D	0.214	9M33W7D	0.213
15	13M5G7D	0.183	14M2G7D	0.183	14M2W7D	0.201	14M1W7D	0.185	14M2W7D	0.174
20	17M9G7D	0.192	19M0G7D	0.181	19M0W7D	0.179	19M0W7D	0.180	19M1W7D	0.179

5G NR n 5	BPSK		QPSK		16QAM		64QAM		256QAM	
BW (MHz)	Emission Designator (99%OBW)	Maxi. ERP (W)	Emission Designator (99%OBW)	Max. ERP (W)	Emission Designator (99%OBW)	Maxi. ERP (W)	Emission Designator (99%OBW)	Max. ERP (W)	Emission Designator (99%OBW)	Maxi. ERP (W)
5	4M52G7D	0.072	4M52G7D	0.074	4M52W7D	0.074	4M52W7D	0.074	4M49W7D	0.044
10	8M97G7D	0.042	9M33G7D	0.041	9M33W7D	0.041	9M33W7D	0.041	9M33W7D	0.041
15	13M5G7D	0.042	14M2G7D	0.042	14M1W7D	0.042	14M2W7D	0.042	14M2W7D	0.042
20	18M0G7D	0.042	18M9G7D	0.041	19M0W7D	0.042	18M9W7D	0.042	19M1W7D	0.042

5G NR n 7	BPSK		QPSK		16QAM		64QAM		256QAM	
BW (MHz)	Emission Designator (99%OBW)	Maxi. EIRP (W)	Emission Designator (99%OBW)	Max. EIRP (W)	Emission Designator (99%OBW)	Maxi. EIRP (W)	Emission Designator (99%OBW)	Max. EIRP (W)	Emission Designator (99%OBW)	Maxi. EIRP (W)
5	4M50G7D	0.230	4M49G7D	0.232	4M49W7D	0.233	4M50W7D	0.232	4M50W7D	0.208
10	9M29G7D	0.169	9M37G7D	0.167	9M31W7D	0.170	9M35W7D	0.169	9M33W7D	0.168
15	13M5G7D	0.201	14M2G7D	0.203	14M2W7D	0.201	14M2W7D	0.200	14M2W7D	0.201
20	18M0G7D	0.204	19M1G7D	0.188	19M1W7D	0.204	19M1W7D	0.165	19M1W7D	0.194

5G NR n 26-1	BPSK		QPSK		16QAM		64QAM		256QAM	
BW (MHz)	Emission Designator (99%OBW)	Maxi. ERP (W)	Emission Designator (99%OBW)	Max. ERP (W)	Emission Designator (99%OBW)	Maxi. ERP (W)	Emission Designator (99%OBW)	Max. ERP (W)	Emission Designator (99%OBW)	Maxi. ERP (W)
5	4M48G7D	0.073	4M49G7D	0.072	4M49W7D	0.073	4M50W7D	0.075	4M49W7D	0.071
10	8M95G7D	0.070	9M29G7D	0.071	9M29W7D	0.070	9M31W7D	0.062	9M31W7D	0.072

5G NR n 26-2	BPSK		QPSK		16QAM		64QAM		256QAM	
BW (MHz)	Emission Designator (99%OBW)	Maxi. ERP (W)	Emission Designator (99%OBW)	Max. ERP (W)	Emission Designator (99%OBW)	Maxi. ERP (W)	Emission Designator (99%OBW)	Max. ERP (W)	Emission Designator (99%OBW)	Maxi. ERP (W)
5	4M49G7D	0.073	4M51G7D	0.073	4M50W7D	0.072	4M49W7D	0.069	4M49W7D	0.072
10	9M01G7D	0.070	9M33G7D	0.070	9M31W7D	0.071	9M33W7D	0.069	9M33W7D	0.067
15	13M5G7D	0.070	14M1G7D	0.066	14M2W7D	0.067	14M2W7D	0.070	14M1W7D	0.070
20	18M0G7D	0.068	18M9G7D	0.068	18M9W7D	0.070	18M9W7D	0.070	19M0W7D	0.068

5G NR n 41	BPSK		QPSK		16QAM		64QAM		256QAM	
BW (MHz)	Emission Designator (99%OBW)	Maxi. EIRP (W)	Emission Designator (99%OBW)	Max. EIRP (W)	Emission Designator (99%OBW)	Maxi. EIRP (W)	Emission Designator (99%OBW)	Max. EIRP (W)	Emission Designator (99%OBW)	Maxi. EIRP (W)
20	18M0G7D	0.740	18M3G7D	0.748	18M4W7D	0.753	18M4W7D	0.740	18M3W7D	0.741
30	27M1G7D	0.664	28M2G7D	0.700	28M2W7D	0.698	28M2W7D	0.752	28M3W7D	0.673
40	36M0G7D	0.773	38M2G7D	0.682	38M0W7D	0.700	38M1W7D	0.855	38M0W7D	0.703
50	45M9G7D	0.701	47M6G7D	0.726	47M7W7D	0.738	47M7W7D	0.708	47M6W7D	0.697
60	58M5G7D	0.716	58M6G7D	0.689	58M6W7D	0.718	58M6W7D	0.700	58M5W7D	0.793
70	64M8G7D	0.728	68M1G7D	0.724	68M3W7D	0.841	68M3W7D	0.724	68M4W7D	0.706
80	77M7G7D	0.728	78M0G7D	0.731	78M0W7D	0.726	78M0W7D	0.774	77M8W7D	0.752
90	87M0G7D	0.748	87M9G7D	0.731	87M8W7D	0.748	87M9W7D	0.743	87M9W7D	0.782
100	96M5G7D	0.733	97M7G7D	0.729	97M9W7D	0.738	97M7W7D	0.785	97M5W7D	0.750

5G NR n 66	BPSK		QPSK		16QAM		64QAM		256QAM	
BW (MHz)	Emission Designator (99%OBW)	Maxi. EIRP (W)	Emission Designator (99%OBW)	Max. EIRP (W)	Emission Designator (99%OBW)	Maxi. EIRP (W)	Emission Designator (99%OBW)	Max. EIRP (W)	Emission Designator (99%OBW)	Maxi. EIRP (W)
5	4M49G7D	0.175	4M51G7D	0.173	4M51W7D	0.177	4M52W7D	0.177	4M50W7D	0.171
10	9M01G7D	0.175	9M33G7D	0.174	9M33W7D	0.175	9M33W7D	0.177	9M33W7D	0.178
15	13M5G7D	0.185	14M2G7D	0.180	14M2W7D	0.179	14M2W7D	0.182	14M2W7D	0.171
20	18M0G7D	0.151	19M1G7D	0.146	19M1W7D	0.154	19M1W7D	0.141	19M1W7D	0.154

5G NR n 77	BPSK		QPSK		16QAM		64QAM		256QAM	
BW (MHz)	Emission Designator (99%OBW)	Maxi. EIRP (W)	Emission Designator (99%OBW)	Max. EIRP (W)	Emission Designator (99%OBW)	Maxi. EIRP (W)	Emission Designator (99%OBW)	Max. EIRP (W)	Emission Designator (99%OBW)	Maxi. EIRP (W)
20	18M0G7D	0.670	18M4G7D	0.676	18M3W7D	0.671	18M3W7D	0.671	18M4W7D	0.647
40	36M0G7D	0.637	38M0G7D	0.664	38M0W7D	0.596	38M0W7D	0.598	38M1W7D	0.598
50	46M1G7D	0.634	47M8G7D	0.625	47M6W7D	0.650	47M6W7D	0.624	47M7W7D	0.644
60	58M5G7D	0.622	58M3G7D	0.624	58M4W7D	0.615	58M3W7D	0.638	58M5W7D	0.624
70	64M9G7D	0.624	68M0G7D	0.684	68M0W7D	0.622	67M8W7D	0.622	68M0W7D	0.628
80	77M5G7D	0.612	77M8G7D	0.617	77M8W7D	0.611	77M8W7D	0.641	78M0W7D	0.621
90	87M2G7D	0.641	87M8G7D	0.632	87M6W7D	0.631	87M8W7D	0.635	87M9W7D	0.681
100	96M7G7D	0.637	97M7G7D	0.637	97M7W7D	0.637	97M7W7D	0.553	97M3W7D	0.689

5G NR n 78	BPSK		QPSK		16QAM		64QAM		256QAM	
BW (MHz)	Emission Designator (99%OBW)	Maxi. EIRP (W)	Emission Designator (99%OBW)	Max. EIRP (W)	Emission Designator (99%OBW)	Maxi. EIRP (W)	Emission Designator (99%OBW)	Max. EIRP (W)	Emission Designator (99%OBW)	Maxi. EIRP (W)
20	18M0G7D	0.479	18M4G7D	0.446	18M4W7D	0.441	18M4W7D	0.488	18M3W7D	0.514
40	36M0G7D	0.420	38M2G7D	0.428	38M1W7D	0.501	38M1W7D	0.493	38M1W7D	0.515
60	58M4G7D	0.390	58M4G7D	0.424	58M4W7D	0.423	58M4W7D	0.390	58M5W7D	0.418
80	77M7G7D	0.413	77M8G7D	0.443	78M2W7D	0.443	78M0W7D	0.444	78M0W7D	0.443
100	96M7G7D	0.385	97M7G7D	0.383	97M5W7D	0.385	97M7W7D	0.387	97M3W7D	0.385

1.4. Test Frequency

5G NR n 2(5MHz)		5G NR n 2(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
370500	1852.5	371000	1855
376000	1880	376000	1880
381500	1907.5	381000	1905
5G NR n 2(15MHz)		5G NR n 2(20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
371500	1857.5	372000	1860
376000	1880	376000	1880
380500	1902.5	380000	1900

5G NR n 5(5MHz)		5G NR n 5(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
165300	826.5	165800	829
167300	836.5	167300	836.5
169300	846.5	168800	844
5G NR n 5(15MHz)		5G NR n 5(20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
166300	831.5	166800	834
167300	836.5	167300	836.5
168300	841.5	167800	839

5G NR n 7(5MHz)		5G NR n 7(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
500500	2502.5	501000	2505
507000	2535	507000	2535
513500	2567.5	513000	2565
5G NR n 7(15MHz)		5G NR n 7(20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
501500	2507.5	502000	2510
507000	2535	507000	2535
512500	2562.5	512000	2560

5G NR n 26-1(5MHz)		5G NR n 26-1(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
163300	816.5	-	-
163800	819	163800	819
164300	821.5	-	-

5G NR n 26-2(5MHz)		5G NR n 26-2(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
165300	826.5	165800	829
167300	836.5	167300	836.5
169300	846.5	168800	844
5G NR n 26-2(15MHz)		5G NR n 26-2(20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
166300	831.5	166800	834
167300	836.5	167300	836.5
168300	841.5	167800	839

5G NR n 41(20MHz)		5G NR n 41(30MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
501204	2506.02	502200	2511
518598	2592.99	518598	2592.99
535998	2679.99	534996	2674.98
5G NR n 41(40MHz)		5G NR n 41(50MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
503202	2516.01	504204	2521.02
518598	2592.99	518598	2592.99
534000	2670	532998	2664.99
5G NR n 41(60MHz)		5G NR n 41(70MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
505200	2526	506202	2531.01
518598	2592.99	518598	2592.99
531996	2659.98	531000	2655
5G NR n 41(80MHz)		5G NR n 41(90MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
507204	2536.02	508200	2541
518598	2592.99	518598	2592.99
529998	2649.99	528996	2644.98
5G NR n 41(100MHz)		-	
Channel	Frequency (MHz)	-	-
509202	2546.01	-	-
518598	2592.99	-	-
528000	2640	-	-

5G NR n 66(5MHz)		5G NR n 66(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
342500	1712.5	343000	1715
349000	1745	349000	1745
355500	1777.5	355000	1775
5G NR n 66(15MHz)		5G NR n 66(20MHz)	
343500	1717.5	344000	1720
349000	1745	349000	1745
354500	1772.5	354000	1770

5G NR n 77(20MHz)		5G NR n 77(40MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
647334	3710.01	648000	3720
656000	3840	656000	3840
664666	3969.99	664000	3960
5G NR n 77(50MHz)		5G NR n 77(60MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
648334	3725.01	648668	3730.02
650000	3750	656000	3840
651666	3774.99	663332	3949.98
5G NR n 77(70MHz)		5G NR n 77(80MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
649000	3735	649334	3740.01
649334	3740.01	656000	3840
650000	3750	662666	3939.99
5G NR n 77(90MHz)		5G NR n 77(100MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
649668	3745.02	650000	3750
650000	3750	656000	3840
650332	3754.98	662000	3930

5G NR n 78(20MHz)		5G NR n 78(40MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
630668	3460.02	631334	3470.01
633334	3500.01	633334	3500.01
636000	3540	635332	3529.98
5G NR n 78(60MHz)		5G NR n 78(80MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
632000	3480	632668	3490.02
633334	3500.01	633334	3500.01
634666	3519.99	634000	3510
5G NR n 78(100MHz)		-	
Channel	Frequency (MHz)	-	-
-	-	-	-
633334	3500.01	-	-
-	-	-	-

2. Test Result Summary

Requirement	CFR 47 Section	Result
Conducted Output Power	§2.1046; §22.913; §24.232(c) §27.50(d); §27.50(h); §27.50(j); §27.50(k); §90.635;	PASS
Peak-to-Average Ratio	§2.1046; §24.232(d) §27.50(d); §27.50(h); §27.50(j); §27.50(k)	PASS
Effective Radiated Power	§2.1046; §22.913; §90.635;	PASS
Equivalent Isotropic Radiated Power	§2.1046; §22.913; §24.232(c); §27.50(d); §27.50(h); §27.50(j); §27.50(k)	PASS
Occupied Bandwidth	§2.1049; §24.238(b); §27.53	PASS
Band Edge	§2.1051; §22.917(a); §24.238(a) §27.53(h); §27.53(i); §27.53(m); §27.53(n); §90.691(a);	PASS
Conducted Spurious Emission	§2.1051; §22.917(a); §24.238(a) §27.53(h); §27.53(i); §27.53(m); §27.53(n); §90.691(a);	PASS
Field Strength of Spurious Radiation	§2.1051; §22.917(a); §24.238(a) §27.53(h); §27.53(i); §27.53(m); §27.53(n); §90.691(a);	PASS
Frequency Stability for Temperature & Voltage	§2.1055; §22.355; §24.235; §27.54 §90.213;	PASS

Note:

1. PASS: Test item meets the requirement.
2. Fail: Test item does not meet the requirement.
3. N/A: Test case does not apply to the test object.
4. The test result judgment is decided by the limit of test standard.

3. General Information

3.1. Test environment and mode

Operating Environment:	
Temperature:	25.0 °C
Humidity:	56 % RH
Atmospheric Pressure:	1010 mbar
Remark: This product has a built-in rechargeable battery, so in an independent test, the EUT battery was fully-charged.	

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power. Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission. The sample was placed 0.8m/1.5m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarization. The emissions worst-case are shown in Test Results of the following pages.

Test Items	SCS	Band	Test Bandwidth (MHz)	Modulation					RB #			Test Channel		
				BPSK	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	15	2	5/10/15/20	v	v	v	v	v	v	v	v	v	v	v
	15	5	5/10/15/20	v	v	v	v	v	v	v	v	v	v	v
	15	7	5/10/15/20	v	v	v	v	v	v	v	v	v	v	v
	15	26-1	5/10	v	v	v	v	v	v	v	v	v	v	v
	15	26-2	5/10/15/20	v	v	v	v	v	v	v	v	v	v	v
	30	41	20/30/40/50/60/70/80/90/100	v	v	v	v	v	v	v	v	v	v	v
	15	66	5/10/15/20	v	v	v	v	v	v	v	v	v	v	v
	30	77	20/40/50/60/70/80/90/100	v	v	v	v	v	v	v	v	v	v	v
	30	78	20/40/60/80/100	v	v	v	v	v	v	v	v	v	v	v
E.R.P./ E.I.R.P.	15	2	5/10/15/20	v	v	v	v	v	v	v	v	v	v	v
	15	5	5/10/15/20	v	v	v	v	v	v	v	v	v	v	v
	15	7	5/10/15/20	v	v	v	v	v	v	v	v	v	v	v
	15	26-1	5/10	v	v	v	v	v	v	v	v	v	v	v
	15	26-2	5/10/15/20	v	v	v	v	v	v	v	v	v	v	v
	30	41	20/30/40/50/60/70/80/90/100	v	v	v	v	v	v	v	v	v	v	v
	15	66	5/10/15/20	v	v	v	v	v	v	v	v	v	v	v
	30	77	20/40/50/60/70/80/90/100	v	v	v	v	v	v	v	v	v	v	v
	30	78	20/40/60/80/100	v	v	v	v	v	v	v	v	v	v	v

	30	78	20/40/60/80/100	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	15	2	5/10/15/20	v	v	v	v	v	-	-	v	v	v	v
	15	5	5/10/15/20	v	v	v	v	v	-	-	v	v	v	v
	15	7	5/10/15/20	v	v	v	v	v	-	-	v	v	v	v
	15	26-1	5/10	v	v	v	v	v	-	-	v	v	v	v
	15	26-2	5/10/15/20	v	v	v	v	v	-	-	v	v	v	v
	30	41	20/30/40/50/60/70/80/90/100	v	v	v	v	v	-	-	v	v	v	v
	15	66	5/10/15/20	v	v	v	v	v	-	-	v	v	v	v
	30	77	20/40/50/60/70/80/90/100	v	v	v	v	v	-	-	v	v	v	v
	30	78	20/40/60/80/100	v	v	v	v	v	-	-	v	v	v	v
26dB and 99% Bandwidth	15	2	5/10/15/20	v	v	v	v	v	-	-	v	v	v	v
	15	5	5/10/15/20	v	v	v	v	v	-	-	v	v	v	v
	15	7	5/10/15/20	v	v	v	v	v	-	-	v	v	v	v
	15	26-1	5/10	v	v	v	v	v	-	-	v	v	v	v
	15	26-2	5/10/15/20	v	v	v	v	v	-	-	v	v	v	v
	30	41	20/30/40/50/60/70/80/90/100	v	v	v	v	v	-	-	v	v	v	v
	15	66	5/10/15/20	v	v	v	v	v	-	-	v	v	v	v
	30	77	20/40/50/60/70/80/90/100	v	v	v	v	v	-	-	v	v	v	v
	30	78	20/40/60/80/100	v	v	v	v	v	-	-	v	v	v	v
Conducted Band Edge	15	2	5/10/15/20	-	v	-	-	-	v	-	v	v	-	v
	15	5	5/10/15/20	-	v	-	-	-	v	-	v	v	-	v
	15	7	5/10/15/20	-	v	-	-	-	v	-	v	v	-	v
	15	26-1	5/10	-	v	-	-	-	v	-	v	v	-	v
	15	26-2	5/10/15/20	-	v	-	-	-	v	-	v	v	-	v
	30	41	20/30/40/50/60/70/80/90/100	-	v	-	-	-	v	-	v	v	-	v
	15	66	5/10/15/20	-	v	-	-	-	v	-	v	v	-	v
	30	77	20/40/50/60/70/80/90/100	-	v	-	-	-	v	-	v	v	-	v
	30	78	20/40/60/80/100	-	v	-	-	-	v	-	v	v	-	v
Conducted Spurious Emission	15	2	5/10/15/20	-	v	-	-	-	v	-	v	v	v	v
	15	5	5/10/15/20	-	v	-	-	-	v	-	v	v	v	v
	15	7	5/10/15/20	-	v	-	-	-	v	-	v	v	v	v
	15	26-1	5/10	-	v	-	-	-	v	-	v	v	v	v
	15	26-2	5/10/15/20	-	v	-	-	-	v	-	v	v	v	v
	30	41	20/30/40/50/60/70/80/90/100	-	v	-	-	-	v	-	v	v	v	v
	15	66	5/10/15/20	-	v	-	-	-	v	-	v	v	v	v
	30	77	20/40/50/60/70/80/90/100	-	v	-	-	-	v	-	v	v	v	v
	30	78	20/40/60/80/100	-	v	-	-	-	v	-	v	v	v	v

Frequency Stability	15	2	5/10/15/20	v	-	-	-	-	-	-	v	v	v	v
	15	5	5/10/15/20	v	-	-	-	-	-	-	v	v	v	v
	15	7	5/10/15/20	v	-	-	-	-	-	-	v	v	v	v
	15	26-1	5/10	v	-	-	-	-	-	-	v	v	v	v
	15	26-2	5/10/15/20	v	-	-	-	-	-	-	v	v	v	v
	30	41	20/30/40/50/60/70/80/90/100	v	-	-	-	-	-	-	v	v	v	v
	15	66	5/10/15/20	v	-	-	-	-	-	-	v	v	v	v
	30	77	20/40/50/60/70/80/90/100	v	-	-	-	-	-	-	v	v	v	v
	30	78	20/40/60/80/100	v	-	-	-	-	-	-	v	v	v	v
Radiated Spurious Emission	15	2	20	v	-	-	-	-	-	-	v	v	v	v
	15	5	20	v	-	-	-	-	-	-	v	v	v	v
	15	7	20	v	-	-	-	-	-	-	v	v	v	v
	15	26-1	10	v	-	-	-	-	-	-	v	v	v	v
	15	26-2	20	v	-	-	-	-	-	-	v	v	v	v
	30	41	100	v	-	-	-	-	-	-	v	v	v	v
	15	66	20	v	-	-	-	-	-	-	v	v	v	v
	30	77	100	v	-	-	-	-	-	-	v	v	v	v
	30	78	100	v	-	-	-	-	-	-	v	v	v	v
Note	1. The mark "v" means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported.													

3.2. Description of Support Units

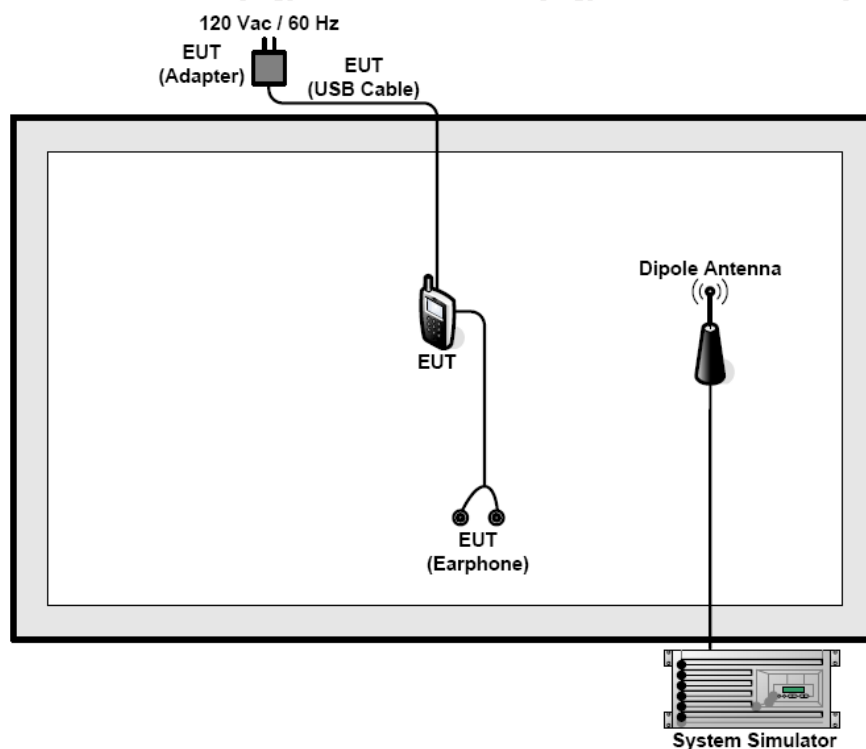
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
/	/	/	/	/

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

3.3. Configuration of Tested System



3.4. 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 attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level. The spectrum analyzer offset is derived from RF cable loss and attenuator factor.
Offset = RF cable loss + attenuator factor.

4. Facilities and Accreditations

4.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Innovation, Science and Economic Development Canada for radio equipment testing.

4.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: 86-755-27673339

4.3. Measurement Uncertainty

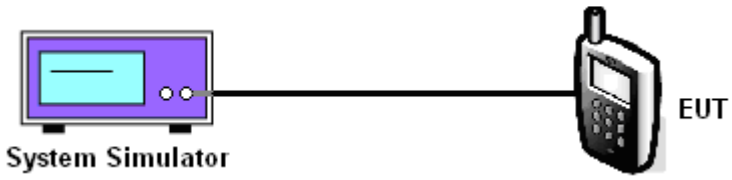
The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	MU
1	Conducted Emission	± 3.32 dB
2	RF power, conducted	± 1.08 dB
3	Spurious emissions, conducted	± 2.94 dB
4	All emissions, radiated(<1 GHz)	± 4.86 dB
5	All emissions, radiated(1 GHz - 18 GHz)	± 4.91 dB
6	All emissions, radiated(18 GHz- 40 GHz)	± 4.36 dB

5. Test Results and Measurement Data

5.1. Effective Radiated Power and Effective Isotropic Radiated Power Measurement

5.1.1. Test Specification

Test Requirement:	FCC part 22.913, FCC part 24.232(c), FCC part 27.50(d), FCC part 27.50(h), FCC part 27.50(j), FCC part 27.50(k), FCC part 90.635
Test Method:	FCC part 2.1046
Limit:	5G NR n 2: 2W 5G NR n 5/n26: 7W 5G NR n 7/n41: 2W 5G NR n 66: 1W 5G NR n 77/n78: 3W
Test Setup:	 The diagram illustrates the test setup. On the left, a box labeled 'System Simulator' is connected by a line to a mobile phone icon on the right labeled 'EUT'.
Test Procedure:	1. The transmitter output port was connected to the system simulator. 2. Set EUT at maximum power through system simulator. 3. Select lowest, middle, highest channels for each band and different modulation. 4. Measure and record the power level from the system simulator. 5. Calculate the ERP and EIRP The relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is: $\text{ERP or EIRP} = P_{\text{Meas}} + G_T - L_C$ where: ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, typically dBW or dBm); P_{Meas} = measured transmitter output power or PSD, in dBm or dBW; G_T = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP); L_C = signal attenuation in the connecting cable

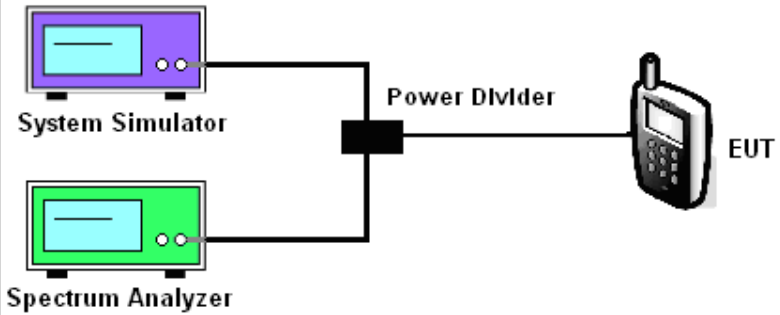
	between the transmitter and antenna, in dB. <i>Note: For personal/portable radios utilizing an integral antenna, the factor L C is typically negligible. However, in a fixed station transmit system that utilizes a long cable run between the transmitter and the transmitting antenna, this factor can be significant.</i>
Test Result:	PASS

5.1.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Wireless communication test platform	Anritsu	MT8000A	6262208369	Jan. 31, 2025
Radio communication analyzer	Anritsu	MT8821C	6262192286	Jan. 31, 2025
Spectrum Analyzer	R&S	FSV40-N	102188	Jan. 31, 2025

5.2. Peak to Average Ratio

5.2.1. Test Specification

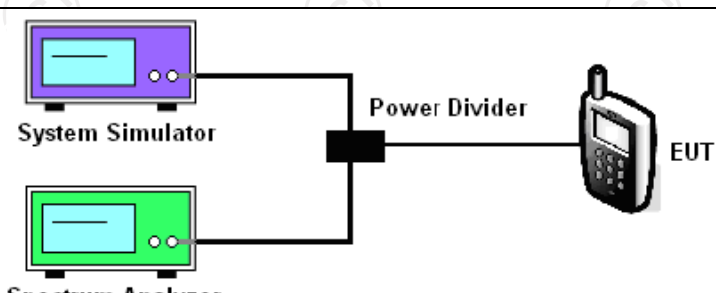
Test Requirement:	FCC part 22.913, FCC part 24.232(d), FCC part 27.50(d), FCC part 27.50(h), FCC part 27.50(j), FCC part 27.50(k), FCC part 90.635
Test Method:	FCC KDB 971168 D01v03r01
Limit:	The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.
Test Setup:	 The diagram illustrates the test setup. A System Simulator (represented by a purple monitor icon) and a Spectrum Analyzer (represented by a green monitor icon) are connected to a central Power Divider (represented by a black square icon). The Power Divider is then connected to the EUT (Equipment Under Test, represented by a mobile phone icon).
Test Procedure:	1. The testing follows FCC KDB 971168 D01v03r01 Section 5.7.1. 2. The EUT was connected to spectrum analyzer and system simulator via a power divider. 3. Set EUT to transmit at maximum output power. 4. Set the CCDF (Complementary Cumulative Distribution Function) option of the spectrum analyzer. Record the maximum PAPR level associated with a probability of 0.1%.
Test Result:	PASS

5.2.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Wireless communication test platform	Anritsu	MT8000A	6262208369	Jan. 31, 2025
Radio communication analyzer	Anritsu	MT8821C	6262192286	Jan. 31, 2025
Spectrum Analyzer	R&S	FSV40-N	102188	Jan. 31, 2025
Test software	MW	MTS 8200 NR	/	/

5.3. 99% Occupied Bandwidth and 26dB Bandwidth Measurement

5.3.1. Test Specification

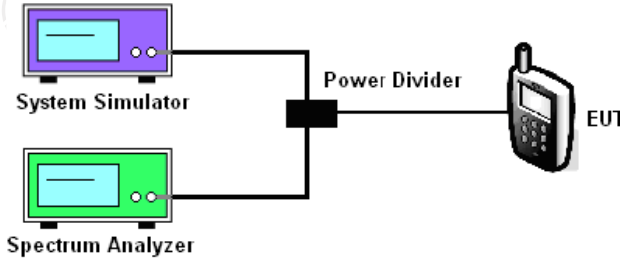
Test Requirement:	FCC part 27.53 and FCC part 24.238(b)
Test Method:	FCC part 2.1049
Limit:	N/A
Test Setup:	 The diagram illustrates the test setup. A System Simulator (represented by a purple box) and a Spectrum Analyzer (represented by a green box) are connected to a Power Divider (represented by a black box). The Power Divider is then connected to the EUT (Equipment Under Test, represented by a mobile phone icon).
Test Procedure:	1. The testing follows FCC KDB 971168 D01v03r01 Section 4.2. 2. The EUT was connected to the spectrum analyzer and system simulator via a power divider. 3. The RF output of the EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 4. The 99% occupied bandwidth were measured, set RBW= 1% of OBW, VBW= 3*RBW, sample detector, trace maximum hold. 5. The 26dB bandwidth were measured, set RBW= 1% of EBW, VBW= 3*RBW, peak detector, trace maximum hold.
Test Result:	PASS

5.3.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Wireless communication test platform	Anritsu	MT8000A	6262208369	Jan. 31, 2025
Radio communication analyzer	Anritsu	MT8821C	6262192286	Jan. 31, 2025
Spectrum Analyzer	R&S	FSV40-N	102188	Jan. 31, 2025
Test software	MW	MTS 8200 NR	/	/

5.4. Band Edge and Conducted Spurious Emission Measurement

5.4.1. Test Specification

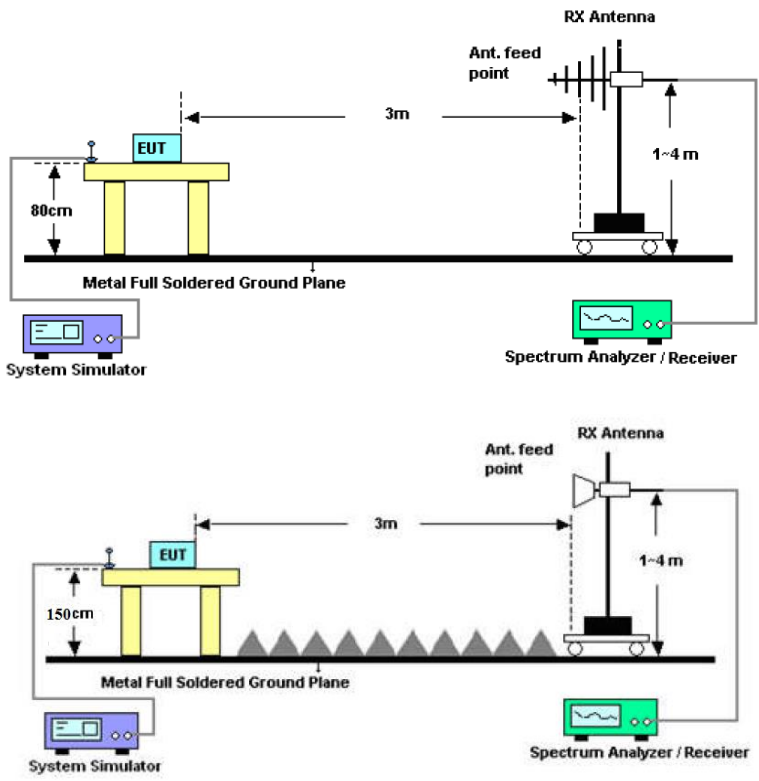
Test Requirement:	FCC part 22.917(a), FCC part 24.238(a), FCC part 27.53(h), FCC part 27.53(i), FCC part 27.53(m), FCC part 27.53(n), FCC part 90.691(a)
Test Method:	FCC part 2.1051
Limit:	For 5G NR n 2, 5, 26, 66, 77, 78: -13dBm; For 5G NR n 7, 41: the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least: (i) $40 + 10 \log_{10} p$ from the channel edges to 5 MHz away (ii) $43 + 10 \log_{10} p$ between 5 MHz and X MHz from the channel edges, and (iii) $55 + 10 \log_{10} p$ at X MHz and beyond from the channel edges. In addition, the attenuation shall not be less than $43 + 10 \log_{10} p$ on all frequencies between 2490.5 MHz and 2496 MHz, and $55 + 10 \log_{10} p$ at or below 2490.5 MHz.
Test Setup:	 The diagram shows a System Simulator (top) and a Spectrum Analyzer (bottom) connected to a central Power Divider. The Power Divider is also connected to the EUT (Equipment Under Test) on the right.
Test Procedure:	1. The testing follows FCC KDB 971168 D01v03r01 Section 6.0. 2. The EUT was connected to the spectrum analyzer and system simulator via a power divider. 3. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement. 4. The band edges of low and high channels for the highest RF powers were measured. 5. The conducted spurious emission for the whole frequency range was taken. 6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
Test Result:	PASS

5.4.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Wireless communication test platform	Anritsu	MT8000A	6262208369	Jan. 31, 2025
Radio communication analyzer	Anritsu	MT8821C	6262192286	Jan. 31, 2025
Spectrum Analyzer	R&S	FSV40-N	102188	Jan. 31, 2025
Test software	MW	MTS 8200 NR	/	/

5.5. Field Strength of Spurious Radiation Measurement

5.5.1. Test Specification

Test Requirement:	FCC part 27.53(g), FCC part 27.53(h), FCC part 27.53(m)(4), FCC part 22.917(a), 24.238(b)
Test Method:	FCC part 2.1053
Limit:	For 5G NR n 2, 5, 26, 66, 77, 78: -13dBm; For 5G NR n 7, 41: -25dBm
Test setup:	 The test setup consists of two configurations. In both, a System Simulator is connected to an EUT (Equipment Under Test) placed on a rotatable wooden table. The table is positioned 3m from a receiving antenna (RX Antenna) mounted on a tower. The receiving antenna is connected to a Spectrum Analyzer / Receiver. The ground plane is a Metal Full Soldered Ground Plane. In the top configuration, the table height is 80cm and the antenna height is 1~4m. In the bottom configuration, the table height is 150cm and the antenna height is 1~4m.
Test Procedure:	1. The testing follows FCC KDB 971168 D01v03r01 Section 5.8 and ANSI / TIA-603-D-2010Section 2.2.12. 2. The EUT was placed on a rotatable wooden table 0.8 meters above the ground. 3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower. 4. The table was rotated 360 degrees to determine the position of the highest spurious emission. 5. The height of the receiving antenna is varied between one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations. 6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.

	7. A horn antenna was substituted in place of the EUT and was driven by a signal generator. 8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission. 9. Taking the record of output power at antenna port. 10. Repeat step 7 to step 8 for another polarization. 11. $EIRP\ (dBm) = S.G.\ Power - Tx\ Cable\ Loss + Tx\ Antenna\ Gain$ 12. $ERP\ (dBm) = EIRP - 2.15$ 13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
Test results:	PASS
Remark:	All modulations have been tested, but only the worst modulation show in this test item.

5.5.2. Test Instruments

Radiated Emission Test Site (966)				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Wideband Radio Communication Tester	R&S	CMW500	137557	Jan. 31, 2025
Spectrum Analyzer	R&S	FSQ40	200061	Jun. 26, 2025
Signal Generator	Agilent	N5173B	MY58108823	Jan. 31, 2025
Broadband Antenna	Schwarzbeck	VULB9163	340	Jun. 28, 2025
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Jun. 28, 2025
Broadband Antenna	Schwarzbeck	VULB9163	412	Jun. 28, 2025
Horn Antenna	Schwarzbeck	BBHA 9120D	1201	Jun. 28, 2025
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Feb. 02, 2025
Coaxial cable	SKET	RE-03-D	/	Jun. 26, 2025
Coaxial cable	SKET	RE-03-M	/	Jun. 26, 2025
Coaxial cable	SKET	RE-03-L	/	Jun. 26, 2025
Coaxial cable	SKET	RE-04-D	/	Jun. 26, 2025
Coaxial cable	SKET	RE-04-M	/	Jun. 26, 2025
Coaxial cable	SKET	RE-04-L	/	Jun. 26, 2025
Antenna Mast	Keleto	RE-AM	/	/
EMI Test Software	EZ_EMCC	FA-03A2 RE+	1.1.4.2	/

5.5.3. Test Data

Frequency Range (9 kHz-30MHz)

Frequency (MHz)	Level@3m (dBμV/m)	Limit@3m (dBμV/m)
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--	--	--
--	--	--
--	--	--

Note: 1. Emission Level=Reading+ Cable loss + Antenna factor-Amp factor

2. The emission levels are 20 dB below the limit value, which are not reported. It is deemed to comply with the requirement

Band	n 2(BPSK, 20MHz)	Test channel:	Lowest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
3720.00	Vertical	-41.87	1.05	-40.82	-13.00	PASS
5580.00	V	-46.75	6.98	-39.77		
7440.00	V	-62.01	10.40	-51.61		
3720.00	Horizontal	-41.48	2.08	-39.40		
5580.00	H	-48.38	7.46	-40.92		
7440.00	H	-60.43	10.00	-50.43		

Band	n 2(BPSK, 20MHz)	Test channel:	Middle
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
3760.00	Vertical	-43.78	1.32	-42.46	-13.00	PASS
5640.00	V	-55.72	7.21	-48.51		
7520.00	V	-63.94	10.43	-53.51		
3760.00	Horizontal	-41.93	2.48	-39.45		
5640.00	H	-47.65	7.63	-40.02		
7520.00	H	-62.79	10.03	-52.76		

Band	n 2(BPSK, 20MHz)	Test channel:	Highest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
3800.00	Vertical	-44.77	1.59	-43.18	-13.00	PASS
5700.00	V	-53.68	7.43	-46.25		
7600.00	V	-62.01	10.53	-51.48		
3800.00	Horizontal	-39.54	2.88	-36.66		
5700.00	H	-48.21	7.81	-40.40		
7600.00	H	-62.63	10.23	-52.40		

Band	n 5(BPSK, 20MHz)	Test channel:	Lowest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
1668.00	Vertical	-42.37	-6.46	-48.83	-13.00	PASS
2502.00	V	-49.26	-2.78	-52.04		
3336.00	V	-51.31	-0.48	-51.79		
1668.00	Horizontal	-41.99	-6.31	-48.30		
2502.00	H	-48.58	-2.90	-51.48		
3336.00	H	-49.60	-0.10	-49.70		

Band	n 5(BPSK, 20MHz)	Test channel:	Middle
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
1673.00	Vertical	-45.58	-6.46	-52.04	-13.00	PASS
2509.50	V	-48.50	-2.75	-51.25		
3346.00	V	-51.18	-0.47	-51.65		
1673.00	Horizontal	-39.88	-6.32	-46.20		
2509.50	H	-49.22	-2.86	-52.08		
3346.00	H	-53.10	-0.10	-53.20		

Band	n 5(BPSK, 20MHz)	Test channel:	Highest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
1688.00	Vertical	-44.71	-6.45	-51.16	-13.00	PASS
2532.00	V	-48.38	-2.65	-51.03		
3376.00	V	-52.65	-0.47	-53.12		
1688.00	Horizontal	-41.06	-6.34	-47.40		
2532.00	H	-49.08	-2.73	-51.81		
3376.00	H	-54.38	-0.10	-54.48		

Band	n 7(BPSK, 20MHz)	Test channel:	Lowest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
5020.00	Vertical	-44.44	5.93	-38.51	-25.00	PASS
7530.00	V	-47.61	10.45	-37.16		
10040.00	V	-63.81	14.82	-48.99		
5020.00	Horizontal	-38.40	6.33	-32.07		
7530.00	H	-46.75	10.06	-36.69		
10040.00	H	-59.70	14.48	-45.22		

Band	n 7(BPSK, 20MHz)	Test channel:	Middle
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
5070.00	Vertical	-43.62	6.01	-37.61	-25.00	PASS
7605.00	V	-54.88	10.54	-44.34		
10140.00	V	-62.19	14.89	-47.30		
5070.00	Horizontal	-39.96	6.42	-33.54		
7605.00	H	-47.73	10.24	-37.49		
10140.00	H	-61.02	14.65	-46.37		

Band	n 7(BPSK, 20MHz)	Test channel:	Highest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
5120.00	Vertical	-45.38	6.09	-39.29	-25.00	PASS
7680.00	V	-53.43	10.63	-42.80		
10240.00	V	-60.55	14.95	-45.60		
5120.00	Horizontal	-40.99	6.52	-34.47		
7680.00	H	-49.44	10.43	-39.01		
10240.00	H	-63.80	14.82	-48.98		

Band	n 26-1 (BPSK, 5MHz)	Test channel:	Lowest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
1633.00	Vertical	-32.33	-6.48	-38.81	-13.00	PASS
2449.50	V	-35.97	-2.97	-38.94		
3266.00	V	-37.36	-0.49	-37.85		
1633.00	Horizontal	-34.09	-6.26	-40.35		
2449.50	H	-36.87	-3.05	-39.92		
3266.00	H	-38.54	-0.10	-38.64		

Band	n 26-1 (BPSK, 5MHz)	Test channel:	Middle
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
1638.00	Vertical	-33.64	-6.48	-40.12	-13.00	PASS
2457.00	V	-35.65	-2.95	-38.60		
3276.00	V	-41.10	-0.49	-41.59		
1638.00	Horizontal	-31.43	-6.27	-37.70		
2457.00	H	-36.82	-3.03	-39.85		
3276.00	H	-42.78	-0.10	-42.88		

Band	n 26-1 (BPSK, 5MHz)	Test channel:	Highest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
1643.00	Vertical	-32.41	-6.47	-38.88	-13.00	PASS
2464.50	V	-35.32	-2.92	-38.24		
3286.00	V	-37.92	-0.48	-38.40		
1643.00	Horizontal	-31.93	-6.28	-38.21		
2464.5	H	-33.17	-3.01	-36.18		
3286.00	H	-35.93	-0.10	-36.03		

Band	n 26-2 (BPSK, 20MHz)	Test channel:	Lowest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
1668.00	Vertical	-34.21	-6.46	-40.67	-13.00	PASS
2502.00	V	-35.76	-2.78	-38.54		
3336.00	V	-39.04	-0.48	-39.52		
1668.00	Horizontal	-33.38	-6.31	-39.69		
2502.00	H	-36.06	-2.90	-38.96		
3336.00	H	-38.30	-0.10	-38.40		

Band	n 26-2 (BPSK, 20MHz)	Test channel:	Middle
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
1673.00	Vertical	-32.87	-6.46	-39.33	-13.00	PASS
2509.50	V	-34.83	-2.75	-37.58		
3346.00	V	-40.53	-0.47	-41.00		
1673.00	Horizontal	-31.28	-6.32	-37.60		
2509.50	H	-36.60	-2.86	-39.46		
3346.00	H	-42.25	-0.10	-42.35		

Band	n 26-2 (BPSK, 20MHz)	Test channel:	Highest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
1678.00	Vertical	-35.59	-6.45	-42.04	-13.00	PASS
2517.00	V	-35.93	-2.71	-38.64		
3356.00	V	-37.12	-0.47	-37.59		
1678.00	Horizontal	-31.07	-6.33	-37.40		
2517.00	H	-34.36	-2.81	-37.17		
3356.00	H	-35.23	-0.10	-35.33		

Band	n 41 (BPSK, 100MHz)	Test channel:	Lowest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
5092.00	Vertical	-42.11	6.04	-36.07	-25.00	PASS
7638.00	V	-47.86	10.58	-37.28		
10184.00	V	-65.10	14.92	-50.18		
5092.00	Horizontal	-41.78	6.46	-35.32		
7638.00	H	-48.90	10.33	-38.57		
10184.00	H	-61.81	14.72	-47.09		

Band	n 41 (BPSK, 100MHz)	Test channel:	Middle
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
5186.00	Vertical	-42.15	6.19	-35.96	-25.00	PASS
7779.00	V	-54.88	10.74	-44.14		
10372.00	V	-61.26	15.04	-46.22		
5186.00	Horizontal	-39.88	6.64	-33.24		
7779.00	H	-49.05	10.68	-38.37		
10372.00	H	-61.74	15.04	-46.70		

Band	n 41 (BPSK, 100MHz)	Test channel:	Highest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
5280.00	Vertical	-43.62	6.34	-37.28	-25.00	PASS
7920.00	V	-54.24	10.91	-43.33		
10560.00	V	-61.14	15.17	-45.97		
5280.00	Horizontal	-40.91	6.82	-34.09		
7920.00	H	-49.85	11.04	-38.81		
10560.00	H	-64.48	15.36	-49.12		

Band	n 66 (BPSK, 20MHz)	Test channel:	Lowest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
3440.00	Vertical	-42.60	-0.46	-43.06	-13.00	PASS
5160.00	V	-48.85	6.15	-42.70		
6880.00	V	-63.60	9.78	-53.82		
3440.00	Horizontal	-43.84	-0.11	-43.95		
5160.00	H	-45.64	6.59	-39.05		
6880.00	H	-61.44	9.70	-51.74		

Band	n 66 (BPSK, 20MHz)	Test channel:	Middle
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
3490.00	Vertical	-40.59	-0.45	-41.04	-13.00	PASS
5235.00	V	-52.62	6.27	-46.35		
6980.00	V	-63.23	10.21	-53.02		
3490.00	Horizontal	-39.58	-0.11	-39.69		
5235.00	H	-47.07	6.73	-40.34		
6980.00	H	-61.30	10.07	-51.23		

Band	n 66 (BPSK, 20MHz)	Test channel:	Highest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
3540.00	Vertical	-45.90	-0.18	-46.08	-13.00	PASS
5310.00	V	-56.53	6.38	-50.15		
7080.00	V	-66.37	10.31	-56.06		
3540.00	Horizontal	-42.01	0.29	-41.72		
5310.00	H	-47.49	6.87	-40.62		
7080.00	H	-65.08	10.11	-54.97		

Band	n 77 (BPSK, 100MHz)	Test channel:	Lowest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
7500.00	Vertical	-42.90	10.41	-32.49	-13.00	PASS
11250.00	V	-45.96	15.26	-30.70		
15000.00	V	-64.86	15.00	-49.86		
7500.00	Horizontal	-43.24	9.98	-33.26		
11250.00	H	-47.03	15.91	-31.12		
15000.00	H	-63.04	14.90	-48.14		

Band	n 77 (BPSK, 100MHz)	Test channel:	Middle
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
7680.00	Vertical	-41.86	10.63	-31.23	-13.00	PASS
11520.00	V	-53.42	15.00	-38.42		
15360.00	V	-62.21	14.00	-48.21		
7680.00	Horizontal	-40.99	10.43	-30.56		
11520.00	H	-48.82	15.70	-33.12		
15360.00	H	-62.77	14.20	-48.57		

Band	n 77 (BPSK, 100MHz)	Test channel:	Highest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
7860.00	Vertical	-44.41	10.84	-33.57	-13.00	PASS
11790.00	V	-53.33	14.80	-38.53		
15720.00	V	-61.23	13.00	-48.23		
7860.00	Horizontal	-40.92	10.89	-30.03		
11790.00	H	-47.78	15.50	-32.28		
15720.00	H	-62.78	13.50	-49.28		

Band	n 78 (BPSK, 80MHz)	Test channel:	Lowest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
6980.02	Vertical	-43.29	10.21	-33.08	-13.00	PASS
10470.10	V	-49.92	15.12	-34.80		
13960.00	V	-64.67	19.10	-45.57		
6980.02	Horizontal	-45.78	10.07	-35.71		
10470.10	H	-45.84	15.23	-30.61		
13960.00	H	-62.20	17.80	-44.40		

Band	n 78 (BPSK, 80MHz)	Test channel:	Middle
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
7000.02	Vertical	-44.62	10.29	-34.33	-13.00	PASS
10500.00	V	-53.86	15.13	-38.73		
14000.00	V	-65.04	19.20	-45.84		
7000.02	Horizontal	-41.13	10.14	-30.99		
10500.00	H	-47.41	15.26	-32.15		
14000.00	H	-62.39	17.90	-44.49		

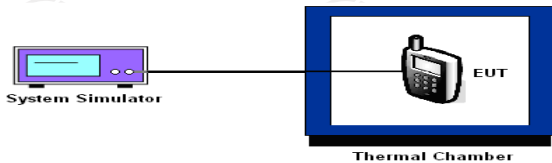
Band	n 78 (BPSK, 80MHz)	Test channel:	Highest
Test mode:		Temperature:	25°C
		Relative Humidity:	56%

Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Frequency (MHz)	Spurious Emission				Limit (dBm)	Result
	Polarization	Level (dBm)	Correction Factor (dB)	Spurious emissions (dBm)		
7020.00	Vertical	-46.01	10.29	-35.72	-13.00	PASS
10530.00	V	-54.97	15.14	-39.83		
14040.00	V	-66.88	19.10	-47.78		
7020.00	Horizontal	-41.20	10.14	-31.06		
10530.00	H	-49.40	15.29	-34.11		
14040.00	H	-66.15	17.80	-48.35		

5.6. Frequency Stability Measurement

5.6.1. Test Specification

Test Requirement:	FCC part 22.355, FCC part 24.235, FCC part 27.54, FCC part 90.213
Test Method:	FCC Part 2.1055
Limit:	For 5G NR n 5, 26: 1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station. For 5G NR n 2, 7, 41, 66, 77, 78: The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation (authorized frequency block).
Test Setup:	 The diagram shows a 'System Simulator' connected via a cable to a 'Thermal Chamber'. Inside the thermal chamber, the 'EUT' (Equipment Under Test) is shown.
Test Procedure:	Test Procedures for Temperature Variation 1. The testing follows FCC KDB 971168 D01v03r01 Section 9.0. 2. The EUT was set up in the thermal chamber and connected with the system simulator. 3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute. 4. With power OFF, the temperature was raised in 10°C steps up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute. Test Procedures for Voltage Variation 1. The testing follows FCC KDB 971168 D01v03r01 Section 9.0. 2. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator. 3. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT. 4. The variation in frequency was measured for the worst case. 5. The worst case(worst bandwidth) for frequency stability reported in the Test Data. The worst bandwidth is as follow: 5M is for 5G NR n 2, 5M is for 5G NR n 5, 5M is for 5G NR n 7, 5M is for 5G NR n 26-1,

	5M is for 5G NR n 26-2, 20M is for 5G NR n 41, 5M is for 5G NR n 66, 20M is for 5G NR n 77, 20M is for 5G NR n 78
Test Result:	PASS

5.6.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Wireless communication test platform	Anritsu	MT8000A	6262208369	Jan. 31, 2025
Radio communication analyzer	Anritsu	MT8821C	6262192286	Jan. 31, 2025
Programable tempratuce and humidity chamber	JQ	JQ-2000	510101234	Jun. 26, 2025
DC power supply	Kingrang	KR3005K	/	Jun. 26, 2025

Appendix B: Photographs of Test Setup

Refer to the test report No. TCT240513E038

Appendix C: Photographs of EUT

Refer to the test report No. TCT240513E003

Test Data for Appendix Refer to Appendix For 5G NR n 2, Appendix For 5G NR n 5, Appendix For 5G NR n 7, Appendix For 5G NR n 26-1, Appendix For 5G NR n 26-2, Appendix For 5G NR n 41, Appendix For 5G NR n 66, Appendix For 5G NR n 77 and Appendix For 5G NR n 78

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