



Partial FCC RF Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2307-1
FCC ID : IHDT56AM7
STANDARD : 47 CFR Part 2, 22, 24, 27
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S) : Jun. 28, 2023

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (Kunshan)

**No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China**



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG361225G	Rev. 01	Initial issue of report	Jul. 25, 2023



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1053 §22.917(a) §24.238(a) §27.53(h) §27.53(l)(2)	Radiated Spurious Emission (5G NR n5) (5G NR n2) (5G NR n66) (5G NR n77, n78)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 22.76 dB at 7626.00 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (5G NR n7, n41, n38)	< 55+10log ₁₀ (P[Watts])		

Note: this is a partial report which only assess Radiated Spurious Emission, the other test results will be included in a separate report provided by manufacturer.

Conformity Assessment Condition:
<ol style="list-style-type: none"> The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty" This is a partial report, RSE are tested in this report, the other test cases are assessed in a separate report prepared by other laboratory.
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



1 General Description

1.1 Applicant

Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.2 Manufacturer

Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2307-1
FCC ID	IHDT56AM7
IMEI Code	Radiation: 353852880027914/353852880027922 353852880027732/353852880027740
HW Version	DVT2
SW Version	TTM 33.38
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz
Rx Frequency	5G NR n2 : 1930 MHz ~ 1990 MHz 5G NR n5 : 869 MHz ~ 894 MHz 5G NR n7 : 2620 MHz ~ 2690 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 2110 MHz~ 2200 MHz 5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz
Bandwidth	n2_15KHz: 5MHz / 10MHz / 15MHz / 20MHz / 25MHz / 30MHz/ 40MHz / 50MHz



	n2_30KHz: 10MHz / 15MHz / 20MHz / 25MHz / 30MHz / 40MHz / 50MHz n5_15KHz: 5MHz / 10MHz / 15MHz / 20MHz / 25MHz n5_30KHz: 10MHz / 15MHz / 20MHz / 25MHz n7_15KHz : 5MHz / 10MHz / 15MHz / 20MHz / 25MHz / 30MHz/ 40MHz / 50MHz n7_30KHz: 10MHz / 15MHz / 20MHz / 25MHz / 30MHz / 40MHz / 50MHz n38_15KHz : 5MHz / 10MHz / 15MHz / 20MHz / 25MHz / 30MHz/ 40MHz n38_30KHz : 10MHz / 15MHz / 20MHz / 25MHz / 30MHz/ 40MHz n41_15KHz : 10MHz / 15MHz / 20MHz / 30MHz/ 40MHz / 50MHz n41_30KHz : 10MHz / 15MHz / 20MHz / 30MHz/ 40MHz / 50MHz/ 60MHz/ 70MHz/ 80MHz/ 90MHz/ 100MHz n66_15KHz : 5MHz / 10MHz / 15MHz / 20MHz / 25MHz / 30MHz/ 40MHz n66_30KHz : 10MHz / 15MHz / 20MHz / 25MHz / 30MHz/ 40MHz n77/n78_15KHz : 10MHz / 15MHz / 20MHz / 30MHz/ 40MHz / 50MHz n77/n78_30KHz : 10MHz / 15MHz / 20MHz / 30MHz/ 40MHz / 50MHz/ 60MHz/ 70MHz/ 80MHz/ 90MHz/ 100MHz
Antenna Gain	<Ant. 0> n2: -0.8 dBi n5: -3.5 dBi n7: -2 dBi n38: -2 dBi n41: -2 dBi n66: -0.5 dBi <Ant. 1> n2: -2 dBi n5: -6 dBi n7: -3 dBi n38: -3 dBi n41: -3 dBi n66: -1.5 dBi <Ant. 2> n77: -4 dBi n78: -4 dBi <Ant. 4> n77: -3.5 dBi n78: -3.5 dBi <Ant. 7> n77: -2 dBi n78: -1 dBi <Ant. 8> n77: -5 dBi n78: -5 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. 5G NR n2/n66 only support NSA mode, n5/n7/n38/n41/n77/n78 support SA & NSA mode.
2. All the supported ENDC combinations are verified conducted power, only the ENDC combination with highest power are shown in the report.
3. The EN-DC mode combination could be referred to the product spec.

1.5 Modification of EUT

No modifications are made to the EUT during all test items.



1.6 Specification of Accessory

Specification of Accessory			
AC Adapter 1(US)	Brand Name	Motorola(Acbel)	Model Name MC-681N
AC Adapter 1(EU)	Brand Name	Motorola(Acbel)	Model Name MC-682N
AC Adapter 1(UK)	Brand Name	Motorola(Acbel)	Model Name MC-683N
AC Adapter 1(AU)	Brand Name	Motorola(Acbel)	Model Name MC-685N
AC Adapter 1(AR)	Brand Name	Motorola(Acbel)	Model Name MC-686N
AC Adapter 1(BR)	Brand Name	Motorola(Acbel)	Model Name MC-687N
AC Adapter 2(US)	Brand Name	Motorola(Chenyang)	Model Name MC-681N
AC Adapter 2(EU)	Brand Name	Motorola(Chenyang)	Model Name MC-682N
AC Adapter 2(UK)	Brand Name	Motorola(Chenyang)	Model Name MC-683N
AC Adapter 2(AU)	Brand Name	Motorola(Chenyang)	Model Name MC-685N
AC Adapter 2(AR)	Brand Name	Motorola(Chenyang)	Model Name MC-686N
AC Adapter 2(BR)	Brand Name	Motorola(Chenyang)	Model Name MC-687N
AC Adapter 2(CHILE)	Brand Name	Motorola(Chenyang)	Model Name MC-689N
AC Adapter 2(KR)	Brand Name	Motorola(Chenyang)	Model Name MC-680N
Battery 1	Brand Name	Motorola(SUNWODA)	Model Name QM50
Battery 2	Brand Name	Motorola(CosMX)	Model Name QM50
Earphone	Brand Name	Motorola(Lyand)	Model Name MI181C(SH38D62338)
USB Cable 1	Brand Name	Saibao(Motorola)	Model Name SC18D71644
USB Cable 2	Brand Name	Saibao(Motorola)	Model Name SC18D86731

1.7 Testing Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People’s Republic of China TEL : +86-512-57900158		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH04-KS	CN1257	314309



1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH04-KS	AUDIX	E3	6.2009-8-24al

1.9 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 2, 22, 24, 27
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

All test items were verified and recorded according to the standards and without any deviation during the test.




2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

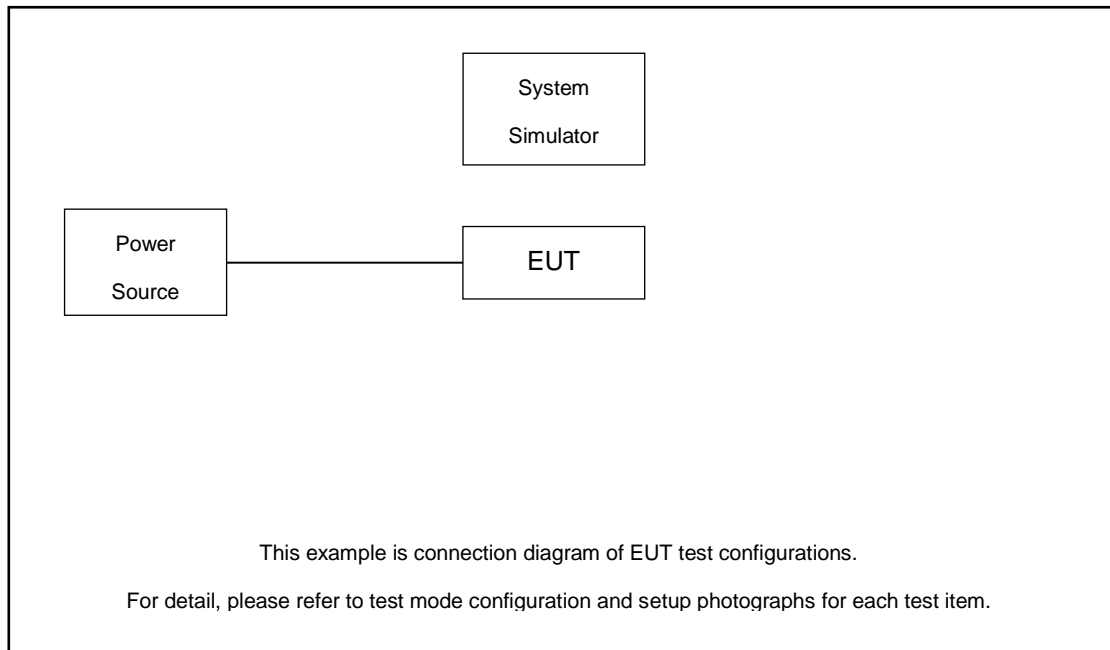
For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases were recorded in this report.

The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.

Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			

Test Items	5G NR	Bandwidth (MHz)													Modulation				RB #		Test Channel						
		5	10	15	20	25	30	40	50	60	70	80	90	100	PI/2 BPSK	QPSK	16 QAM	64 QAM	256 QAM	1	Full	L	M	H			
Radiated Spurious Emission	n2	Worst Case																					v				
	n5	Worst Case																							v		
	n7	Worst Case																							v		
	n38	Worst Case																							v		
	n41	Worst Case																							v		
	n66	Worst Case																							v		
	n77	Worst Case																							v		
	n78	Worst Case																							v		
Note	<ol style="list-style-type: none"> The mark "v" means that this configuration is chosen for testing The mark "-" means that this bandwidth is not supported. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. Frequency Stability : Normal Voltage = 3.91V ; Low Voltage =3.50V. ; High Voltage =4.50V 																										

2.2 Connection Diagram of Test System



The EUT has been configuration operated in a manner tended to maximize its emission characteristics in a typical application.

2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	DC Power Supply	GW	GPS-3030D	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
3.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m



2.4 Frequency List of Low/Middle/High Channels

5G NR n2 Channel and Frequency List for SCS 15k/30k				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
50	Channel	375000	376000	377000
	Frequency	1875	1880	1885
40	Channel	374000	376000	378000
	Frequency	1870	1880	1890
30	Channel	373000	376000	379000
	Frequency	1865.0	1880	1895.0
25	Channel	372500	376000	379500
	Frequency	1862.5	1880	1897.5
20	Channel	372000	376000	380000
	Frequency	1860	1880	1900
15	Channel	371500	376000	380500
	Frequency	1857.5	1880	1902.5
10	Channel	371000	376000	381000
	Frequency	1855	1880	1905
5	Channel	370500	376000	381500
	Frequency	1852.5	1880	1907.5

Note: SCS 15KHz does not support BW 5MHz.

5G NR n5 Channel and Frequency List for SCS 15k/30k				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	166800	167300	167800
	Frequency	834	836.5	839
15	Channel	166300	167300	168300
	Frequency	831.5	836.5	841.5
10	Channel	165800	167300	168800
	Frequency	829	836.5	844
5	Channel	165300	167300	169300
	Frequency	826.5	836.5	846.5

Note: SCS 15KHz does not support BW 5MHz.



5G NR n7 Channel and Frequency List for SCS 15k/30k				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
50	Channel	505000	507000	509000
	Frequency	2525	2535	2545
40	Channel	504000	507000	510000
	Frequency	2520	2535	2550
30	Channel	503000	507000	511000
	Frequency	2515	2535	2555
25	Channel	502500	507000	511500
	Frequency	2512.5	2535	2557.5
20	Channel	502000	507000	512000
	Frequency	2510	2535	2560
15	Channel	501500	507000	512500
	Frequency	2507.5	2535	2562.5
10	Channel	501000	507000	513000
	Frequency	2505	2535	2565
5	Channel	500500	507000	513500
	Frequency	2502.5	2535	2567.5

Note: SCS 15KHz does not support BW 5MHz.

5G NR n38 Channel and Frequency List for SCS 15k/30k				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
40	Channel	518000	519000	520000
	Frequency	2590	2595	2600
30	Channel	517000	519000	521000
	Frequency	2585	2595	2605
25	Channel	516500	519000	521500
	Frequency	2582.5	2595	2607.5
20	Channel	516000	519000	522000
	Frequency	2580	2595	2610
15	Channel	515500	519000	522500
	Frequency	2577.5	2595	2612.5
10	Channel	515000	519000	523000
	Frequency	2575	2595	2615
5	Channel	514500	519000	523500
	Frequency	2572.5	2595	2617.5

Note: SCS 15KHz does not support BW 5MHz.



5G NR n41 Channel and Frequency List for SCS 15k/30k				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	509202	518598	528000
	Frequency	2546.01	2592.99	2640
90	Channel	508200	518598	528996
	Frequency	2541	2592.99	2644.98
80	Channel	507204	518598	529998
	Frequency	2536.02	2592.99	2649.99
70	Channel	506202	518598	531000
	Frequency	2531.01	2592.99	2655
60	Channel	505200	518598	531996
	Frequency	2526	2592.99	2659.98
50	Channel	504201	518601	532998
	Frequency	2521.005	2593.005	2664.99
40	Channel	503202	518601	534000
	Frequency	2516.01	2593.005	2670
30	Channel	502200	518601	534999
	Frequency	2511	2593.005	2674.995
20	Channel	501201	518601	535998
	Frequency	2506.005	2593.005	2679.99
15	Channel	500700	518601	536499
	Frequency	2503.5	2593.005	2682.495
10	Channel	500202	518601	537000
	Frequency	2501.01	2593.005	2685

Note: SCS 15KHz does not support BW 60/70/80/90/100MHz.

5G NR n66 Channel and Frequency List for SCS 15k/30k				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
40	Channel	346000	349000	352000
	Frequency	1730	1745	1760
30	Channel	345000	349000	353000
	Frequency	1725	1745	1765
25	Channel	344500	349000	353500
	Frequency	1722.5	1745	1767.5
20	Channel	344000	349000	354000
	Frequency	1720	1745	1770



15	Channel	343500	349000	354500
	Frequency	1717.5	1745	1772.5
10	Channel	343000	349000	355000
	Frequency	1715	1745	1775
5	Channel	342500	349000	355500
	Frequency	1712.5	1745	1777.5

Note: SCS 15KHz does not support BW 5MHz.

5G n77 Channel and Frequency List for SCS 15k/30k				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	650000	656000	662000
	Frequency	3750	3840	3930
90	Channel	649668	656000	662332
	Frequency	3745.02	3840	3934.98
80	Channel	649334	656000	662666
	Frequency	3740.01	3840	3939.99
70	Channel	649000	656000	663000
	Frequency	3735	3840	3945
60	Channel	648668	656000	663332
	Frequency	3730.02	3840	3949.98
50	Channel	648334	656000	663666
	Frequency	3725.01	3840	3954.99
40	Channel	648000	656000	664000
	Frequency	3720	3840	3960
30	Channel	647668	656000	664332
	Frequency	3715.02	3840	3964.98
20	Channel	647334	656000	664666
	Frequency	3710.01	3840	3969.99
15	Channel	647168	656000	664832
	Frequency	3707.52	3840	3972.48
10	Channel	647000	656000	665000
	Frequency	3705	3840	3975

Note: SCS 15KHz does not support BW 60/70/80/90/100MHz.



5G n78 Channel and Frequency List for SCS 15k/30k				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	650000		
	Frequency	3750		
90	Channel	649668	650000	650332
	Frequency	3745.02	3750	3754.98
80	Channel	649334	650000	650666
	Frequency	3740.01	3750	3759.99
70	Channel	649000	650000	651000
	Frequency	3735	3750	3765
60	Channel	648668	650000	651332
	Frequency	3730.02	3750	3769.98
50	Channel	648334	650000	651666
	Frequency	3725.01	3750	3774.99
40	Channel	648000	650000	652000
	Frequency	3720	3750	3780
30	Channel	647668	650000	652332
	Frequency	3715.02	3750	3784.98
20	Channel	647334	650000	652666
	Frequency	3710.01	3750	3789.99
15	Channel	647168	650000	652832
	Frequency	3707.52	3750	3792.48
10	Channel	647000	650000	653000
	Frequency	3705	3750	3795

Note: SCS 15KHz does not support BW 60/70/80/90/100MHz.

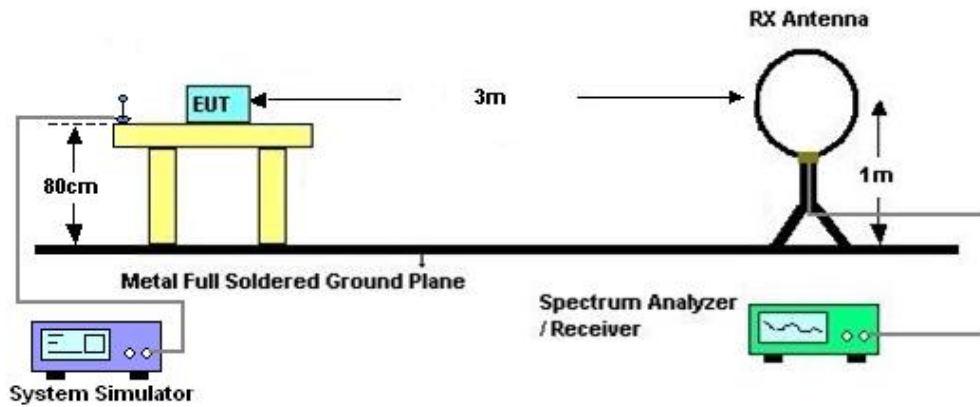
3 Radiated Test Items

3.1 Measuring Instruments

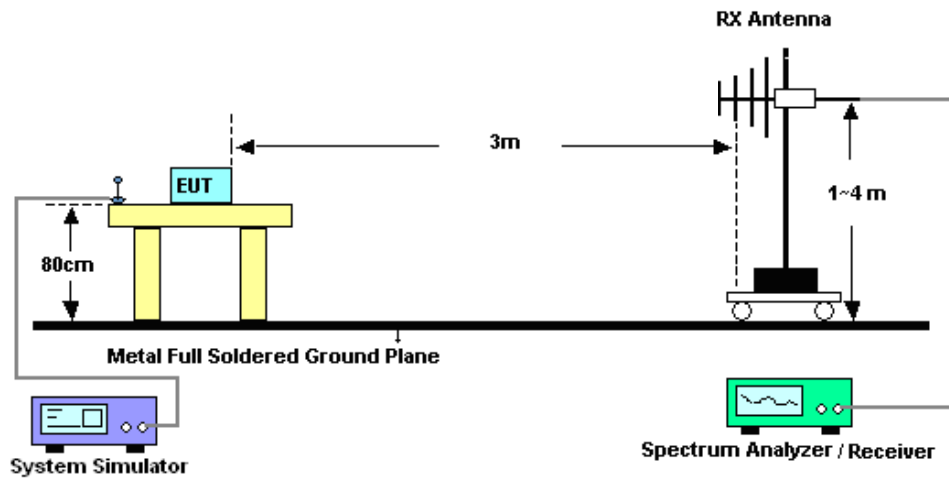
See list of measuring instruments of this test report.

3.2 Test Setup

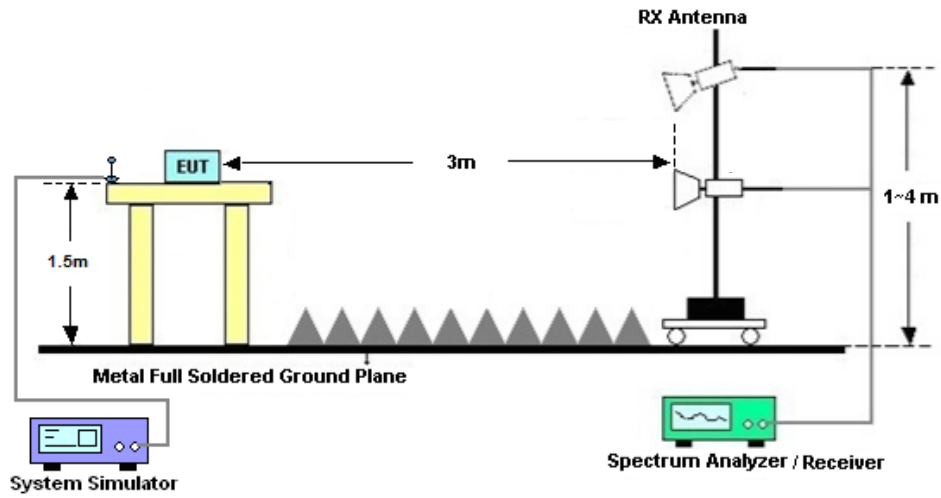
3.2.1 For radiated test below 30MHz



3.2.2 For radiated test from 30MHz to 1GHz



3.2.3 For radiated test above 1GHz



3.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix A.



3.4 Radiated Spurious Emission

3.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For 5G NR n7/n38/n41

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna 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 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. $EIRP (dBm) = S.G. Power - Tx Cable Loss + Tx Antenna Gain$
11. $ERP (dBm) = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)] (dB)$
 $= [30 + 10\log(P)] (dBm) - [43 + 10\log(P)] (dB)$
 $= -13dBm.$

13. For 5G NR n7/n38/n41:

The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Spectrum Analyzer	Keysight	N9010B	MY57471079	10Hz-44G,MAX 30dB	Oct. 12, 2022	Jun. 28, 2023	Oct. 11, 2023	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Oct. 16, 2022	Jun. 28, 2023	Oct. 15, 2023	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Apr. 09, 2023	Jun. 28, 2023	Apr. 08, 2024	Radiation (03CH04-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	1284	1GHz~18GHz	Oct. 16, 2022	Jun. 28, 2023	Oct. 15, 2023	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 08, 2023	Jun. 28, 2023	Jan. 07, 2024	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380827	9KHz-1GHz	Jul. 11, 2022	Jun. 28, 2023	Jul. 10, 2023	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40G GA	060728	18~40GHz	Jan. 05, 2023	Jun. 28, 2023	Jan. 04, 2024	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18G A	060840	1Ghz-18Ghz	Oct. 12, 2022	Jun. 28, 2023	Oct. 11, 2023	Radiation (03CH04-KS)
Amplifier	Agilent	8449B	3008A02370	1Ghz-18Ghz	Oct. 12, 2022	Jun. 28, 2023	Oct. 11, 2023	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jun. 28, 2023	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jun. 28, 2023	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jun. 28, 2023	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required



5 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.82 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.56 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.54 dB
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----- THE END -----



Appendix A. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Chris Chen	Temperature :	23~25°C
		Relative Humidity :	41~42%

RSE Pre-scanned harmonic for the different antenna combinations, we choose the worst antenna mode to perform final test.

EN-DC_66A_n2A / LTE 20MHz(ANT0) + NR 50MHz(ANT1) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3720	-68.13	-13	-55.13	-80.39	2.64	14.90	H
	5580	-60.59	-13	-47.59	-72.45	2.94	14.80	H
	7425	-58.67	-13	-45.67	-68.44	3.39	13.16	H
	9285	-51.39	-13	-38.39	-61.87	4.00	14.48	H
	3720	-67.98	-13	-54.98	-80.24	2.64	14.90	V
	5580	-60.50	-13	-47.50	-72.36	2.94	14.80	V
	7425	-56.67	-13	-43.67	-66.44	3.39	13.16	V
	9285	-50.53	-13	-37.53	-61.01	4.00	14.48	V

SA n5 / NR 20MHz(ANT0) / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1648	-72.73	-13	-59.73	-79.70	1.58	10.70	H
	2472	-65.73	-13	-52.73	-73.98	2.102	12.50	H
	3304	-68.55	-13	-55.55	-77.44	2.856	13.90	H
	1648	-72.43	-13	-59.43	-79.40	1.58	10.70	V
	2472	-68.80	-13	-55.80	-77.05	2.10	12.50	V
	3304	-68.40	-13	-55.40	-77.29	2.86	13.90	V

EN-DC_7A_n5A / LTE 10MHz(ANT0) + NR 20MHz(ANT1) / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1648	-77.45	-13	-64.45	-84.42	1.58	10.70	H
	2472	-72.48	-13	-59.48	-80.73	2.102	12.50	H
	3304	-69.81	-13	-56.81	-78.70	2.856	13.90	H
	1648	-77.05	-13	-64.05	-84.02	1.58	10.70	V
	2472	-72.65	-13	-59.65	-80.90	2.10	12.50	V
	3304	-70.04	-13	-57.04	-78.93	2.86	13.90	V



SA n7 / NR 50MHz(ANT0) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5024	-60.75	-25	-35.75	-70.96	3.03	13.24	H
	7536	-58.05	-25	-33.05	-67.50	3.56	13.01	H
	10050	-52.29	-25	-27.29	-61.81	3.92	13.44	H
	5024	-61.13	-25	-36.13	-71.34	3.03	13.24	V
	7536	-58.51	-25	-33.51	-67.96	3.56	13.01	V
	10050	-52.38	-25	-27.38	-61.90	3.92	13.44	V

EN-DC_2A_n7A / LTE 20MHz(ANT0) + NR 50MHz(ANT1) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5022	-60.79	-25	-35.79	-71.00	3.03	13.24	H
	7542	-58.52	-25	-33.52	-67.97	3.56	13.01	H
	10048	-53.09	-25	-28.09	-62.61	3.92	13.44	H
	5022	-60.91	-25	-35.91	-71.12	3.03	13.24	V
	7542	-58.69	-25	-33.69	-68.14	3.56	13.01	V
	10048	-53.17	-25	-28.17	-62.69	3.92	13.44	V

EN-DC_42A_n7A / LTE 20MHz(ANT4) + NR 50MHz(ANT0) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5022	-62.75	-25	-37.75	-72.96	3.03	13.24	H
	7528	-58.84	-25	-33.84	-68.29	3.56	13.01	H
	10440	-53.97	-25	-28.97	-63.49	3.92	13.44	H
	5022	-62.77	-25	-37.77	-72.98	3.03	13.24	V
	7528	-55.23	-25	-30.23	-64.68	3.56	13.01	V
	10440	-57.22	-25	-32.22	-66.74	3.92	13.44	V

EN-DC_66A_n7A / LTE 20MHz(ANT0) + NR 50MHz(ANT1) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5022	-60.81	-25	-35.81	-71.02	3.03	13.24	H
	7542	-58.73	-25	-33.73	-68.18	3.56	13.01	H
	10048	-53.04	-25	-28.04	-62.56	3.92	13.44	H
	5022	-61.33	-25	-36.33	-71.54	3.03	13.24	V
	7542	-58.64	-25	-33.64	-68.09	3.56	13.01	V
	10048	-53.46	-25	-28.46	-62.98	3.92	13.44	V



SA n38 / NR 40MHz(ANT1) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5148	-63.07	-25	-38.07	-73.28	3.03	13.24	H
	7724	-60.32	-25	-35.32	-69.77	3.56	13.01	H
	10314	-61.44	-25	-36.44	-70.96	3.92	13.44	H
	5148	-63.38	-25	-38.38	-73.59	3.03	13.24	V
	7724	-59.98	-25	-34.98	-69.43	3.56	13.01	V
	10314	-61.61	-25	-36.61	-71.13	3.92	13.44	V

SA n41 / NR 100MHz(ANT0) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5092	-60.45	-25	-35.45	-70.66	3.03	13.24	H
	7640	-56.61	-25	-31.61	-66.06	3.56	13.01	H
	10188	-52.23	-25	-27.23	-61.75	3.92	13.44	H
	5092	-60.69	-25	-35.69	-70.90	3.03	13.24	V
	7640	-56.66	-25	-31.66	-66.11	3.56	13.01	V
	10188	-51.68	-25	-26.68	-61.20	3.92	13.44	V

EN-DC_4A_n41A / LTE 20MHz(ANT1) + NR 100MHz(ANT0) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5092	-60.04	-25	-35.04	-70.25	3.03	13.24	H
	7626	-47.76	-25	-22.76	-57.21	3.56	13.01	H
	10188	-51.64	-25	-26.64	-61.16	3.92	13.44	H
	5092	-59.60	-25	-34.60	-69.81	3.03	13.24	V
	7626	-56.31	-25	-31.31	-65.76	3.56	13.01	V
	10188	-51.61	-25	-26.61	-61.13	3.92	13.44	V

EN-DC_2A_n66A / LTE 20MHz(ANT0) + NR 40MHz(ANT1) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3453	-67.47	-13	-54.47	-78.21	2.604	13.34	H
	5181	-60.16	-13	-47.16	-70.67	3.011	13.52	H
	6912	-57.82	-13	-44.82	-68.02	3.271	13.47	H
	3453	-67.79	-13	-54.79	-78.53	2.604	13.34	V
	5181	-60.44	-13	-47.44	-70.95	3.011	13.52	V
	6912	-57.87	-13	-44.87	-68.07	3.271	13.47	V



EN-DC_5A_n66A / LTE 20MHz(ANT0) + NR 40MHz(ANT1) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3450	-67.67	-13	-54.67	-78.41	2.604	13.34	H
	5175	-59.81	-13	-46.81	-70.32	3.011	13.52	H
	6915	-57.59	-13	-44.59	-67.79	3.271	13.47	H
	3450	-67.78	-13	-54.78	-78.52	2.604	13.34	V
	5175	-59.65	-13	-46.65	-70.16	3.011	13.52	V
	6915	-57.37	-13	-44.37	-67.57	3.271	13.47	V

EN-DC_7A_n66A / LTE 20MHz(ANT0) + NR 40MHz(ANT1) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3453	-68.22	-13	-55.22	-78.96	2.604	13.34	H
	5181	-61.10	-13	-48.10	-71.61	3.011	13.52	H
	6912	-57.95	-13	-44.95	-68.15	3.271	13.47	H
	3453	-68.27	-13	-55.27	-79.01	2.604	13.34	V
	5181	-60.94	-13	-47.94	-71.45	3.011	13.52	V
	6912	-57.86	-13	-44.86	-68.06	3.271	13.47	V

SA n77 / NR 100MHz(ANT8) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7584	-49.89	-13	-36.89	-60.10	3.03	13.24	H
	11376	-50.61	-13	-37.61	-60.06	3.56	13.01	H
	15180	-45.40	-13	-32.40	-54.92	3.92	13.44	H
	7584	-62.06	-13	-49.06	-72.27	3.03	13.24	H
	11376	-60.02	-13	-47.02	-69.47	3.56	13.01	H
	15180	-58.10	-13	-45.10	-67.62	3.92	13.44	H
	7584	-56.92	-13	-43.92	-67.13	3.03	13.24	V
	11376	-52.19	-13	-39.19	-61.64	3.56	13.01	V
	15180	-44.81	-13	-31.81	-54.33	3.92	13.44	V
	7584	-57.14	-13	-44.14	-67.35	3.03	13.24	V
	11376	-55.96	-13	-42.96	-65.41	3.56	13.01	V
	15180	-58.07	-13	-45.07	-67.59	3.92	13.44	V



SA n78 / NR 100MHz(ANT8) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7416	-58.32	-13	-45.32	-68.53	3.03	13.24	H
	11100	-38.91	-13	-25.91	-48.36	3.56	13.01	H
	14820	-44.37	-13	-31.37	-53.89	3.92	13.44	H
	7404	-60.59	-13	-47.59	-70.80	3.03	13.24	H
	11100	-58.01	-13	-45.01	-67.46	3.56	13.01	H
	14820	-59.70	-13	-46.70	-69.22	3.92	13.44	H
	7416	-58.39	-13	-45.39	-68.60	3.03	13.24	V
	11100	-42.02	-13	-29.02	-51.47	3.56	13.01	V
	14820	-43.79	-13	-30.79	-53.31	3.92	13.44	V
	7404	-59.88	-13	-46.88	-70.09	3.03	13.24	V
	11100	-57.84	-13	-44.84	-67.29	3.56	13.01	V
	14820	-59.42	-13	-46.42	-68.94	3.92	13.44	V

EN-DC_41A_n77A / LTE 20MHz + NR 100MHz(ANT4) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7584	-53.22	-13	-40.22	-63.43	3.03	13.24	H
	11376	-47.25	-13	-34.25	-56.70	3.56	13.01	H
	15180	-44.83	-13	-31.83	-54.35	3.92	13.44	H
	7584	-52.99	-13	-39.99	-63.20	3.03	13.24	V
	11376	-50.64	-13	-37.64	-60.09	3.56	13.01	V
	15180	-44.50	-13	-31.50	-54.02	3.92	13.44	V

EN-DC_7A_n78A / LTE 20MHz + NR 100MHz(ANT4) / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7404	-52.81	-13	-39.81	-63.02	3.03	13.24	H
	11100	-46.71	-13	-33.71	-56.16	3.56	13.01	H
	14820	-44.10	-13	-31.10	-53.62	3.92	13.44	H
	7404	-55.34	-13	-42.34	-65.55	3.03	13.24	V
	11100	-42.98	-13	-29.98	-52.43	3.56	13.01	V
	14820	-43.53	-13	-30.53	-53.05	3.92	13.44	V

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