FCC RADIO TEST REPORT

FCC ID	:	**RAXKVD21**
Equipment	:	**5G Gateway**
Brand Name	:	**T-Mobile**
Model Name	:	**KVD21**
Applicant	:	**Arcadyan Technology Corporation No.8, Sec.2, Guangfu Rd.,Hsinchu, 30071 Taiwan**
Manufacturer	:	**Arcadyan Technology Corporation No.8, Sec.2, Guangfu Rd.,Hsinchu, 30071 Taiwan**
Standard	:	**FCC 47 CFR Part 2, 24(E), 27**

The product was received on Sep. 07, 2021 and testing was started from Sep. 28, 2021 and completed on Oct. 20, 2021. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

The test results in this partial report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FG190215B	01	Initial issue of report	Oct. 26, 2021

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Reporting only	-
	§27.50 (c)(10)	Effective Radiated Power (n71)	Pass	
	§24.232 (c) §27.50 (h)(2)	Equivalent Isotropic Radiated Power (n25) (n41)		
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power (n66)		
-	§24.232 (d) §27.50 (d)(5)	Peak-to-Average Ratio	-	See Note
-	§2.1049	Occupied Bandwidth	-	See Note
-	§2.1051 §24.238 (a) §27.53 (g) §27.53 (h)	Conducted Band Edge Measurement (n25) (n66) (n71)	-	See Note
	§2.1051 §27.53 (m)(4)	Conducted Band Edge Measurement (n41)		
-	§2.1051 §24.238 (a) §27.53 (g) §27.53 (h)	Conducted Spurious Emission (n25) (n66) (n71)	-	See Note
	§2.1051 §27.53 (m)(4)	Conducted Spurious Emission (n41)		
-	§2.1055 §24.235 §27.54	Frequency Stability Temperature & Voltage	-	See Note
4.2	§2.1053 §24.238 (a) §27.53 (g) §27.53 (h)	Radiated Spurious Emission (n25) (n66) (n71)	Pass	Under limit 16.66 dB at 7494.000 MHz
	§2.1051 §27.53 (m)(4)	Radiated Spurious Emission (n41)		

Note: The module (Model: FG360-NA) makes no difference after verifying output power, this report reuses test data from the module report.

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Lewis Ho

Report Producer: Lucy Wu

1 General Description

1.1 Product Feature of Equipment Under Test

LTE/5G NR, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ac/ax and Wi-Fi 5GHz 802.11a/n/ac/ax

Product Specification subjective to this standard	
Antenna Type	WWAN: Dipole Antenna WLAN: <Ant. 1>: Dipole Antenna <Ant. 2>: Dipole Antenna <Ant. 3>: Dipole Antenna <Ant. 4>: Dipole Antenna Bluetooth: Dipole Antenna
Antenna Gain	**<Ant. 8>:** 5G NR n25: 4.66 dBi 5G NR n41: 5.45 dBi 5G NR n66: 4.84 dBi 5G NR n71: 1.63 dBi **<Ant. 3>:** 5G NR n41: 5.45 dBi

Remark: The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.

1.2 Modification of EUT

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

1.3 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory	
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	Sporton Site No.	
	TH03-HY	03CH07-HY
Test Engineer	Ivy Yeh	Jesse Wang, Stan Hsieh, and Ken Wu
Temperature	24~26℃	19~27℃
Relative Humidity	47~52%	48~63%

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW1190

1.4 Applicable Standards

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

- ANSI C63.26-2015
- ANSI / TIA-603-E
- FCC 47 CFR Part 2, 24(E), 27
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- FCC KDB 414788 D01 Radiated Test Site v01r01.

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.
3. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

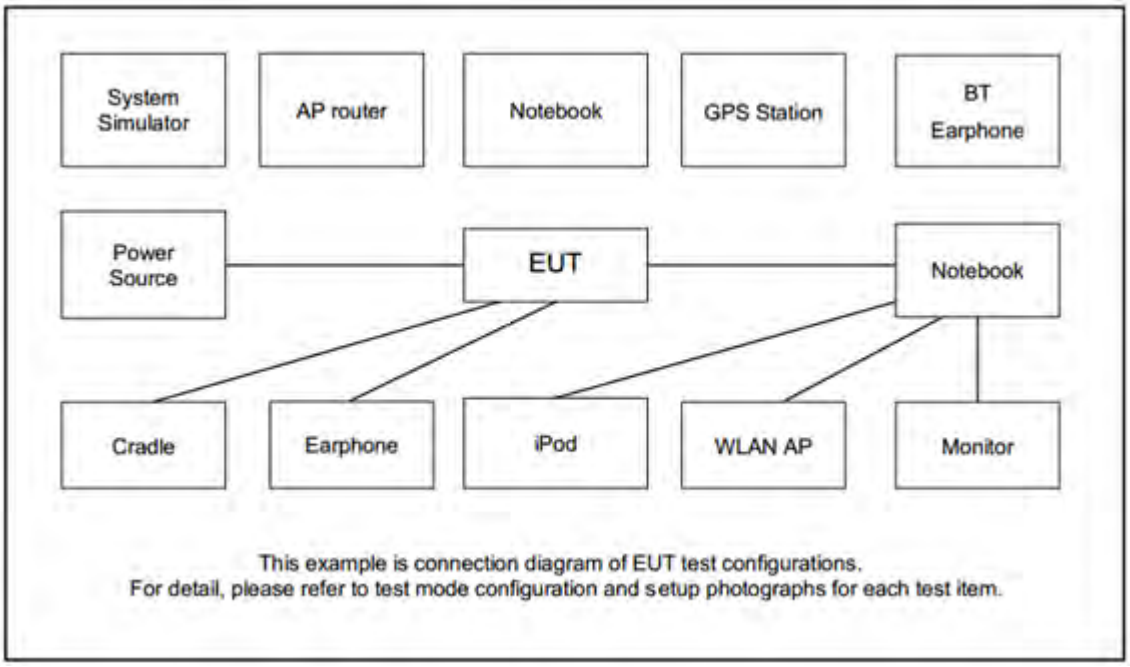
For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and find Y Plane as worst plane.

Test Items	NR Band	Bandwidth (MHz)										Modulation					RB #			Test Channel		
		5	10	15	20	40	50	60	80	90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	n25				v	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v	v
	n41	-			v						v	v	v	v	v	v	v	v	v	v	v	v
	n66			v			-	-	-	-	-	v	v	v	v	v	v	v	v	v	v	v
	n71	v				-	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v	v
E.R.P / E.I.R.P	n25				v	-	-	-	-	-	-	v	v	v	v	v	Max. Power					
	n41	-			v						v	v	v	v	v	v						
	n66			v			-	-	-	-	-	v	v	v	v	v						
	n71	v				-	-	-	-	-	-	v	v	v	v	v						
Radiated Spurious Emission	n25				v	-	-	-	-	-	-		v				v			v	v	v
	n41	-			v						v		v				v			v	v	v
	n66			v			-	-	-	-	-		v				v			v	v	v
	n71	v				-	-	-	-	-	-		v				v			v	v	v

Remark

1. The mark "**v** " means that this configuration is chosen for testing
2. The mark "-" means that this bandwidth is not supported.
3. 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.
4. For radiated measurement, pre-scanned in two modes, DFT-s OFDM and CP OFDM. The worst cases (DFT-s OFDM for SISO Mode , NSA Mode and 5G NR CA Mode; CP OFDM for MIMO Mode) were recorded in this report, and the worst modes of FR1 and LTE for simultaneous transmission were verified and compliant.
5. For NSA Mode, test combination are EN-DC 12A_n25A, EN-DC 12A_n66A, EN-DC 2A_n71A, and EN-DC 66A_n71A.
6. For 5G NR CA Mode, test combination are 5G NR n25A+n41A, 5G NR n41A+n66A, 5G NR n25A+n71A, 5G NR n41A+n71A, and 5G NR n66A+n71A.

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Radio Communication Analyzer	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
2.	5G Wireless Test Platform	Keysight	E7515B	N/A	N/A	Unshielded, 1.8 m

2.4 Frequency List of Low/Middle/High Channels

5G NR Band n25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	372000	376500	381000
	Frequency	1860	1882.5	1905

5G NR Band n41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	509202	518598	528000
	Frequency	2546.01	2592.99	2640
20	Channel	501204	518598	535998
	Frequency	2506.02	2592.99	2679.99

5G NR Band n66 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
15	Channel	343500	349000	354500
	Frequency	1717.5	1745	1772.5

5G NR Band n71 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
5	Channel	133100	136100	139100
	Frequency	665.5	680.5	695.5

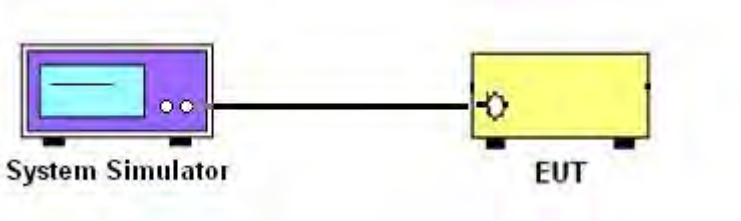
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.1.1 Test Setup

3.1.2 Conducted Output Power



3.1.3 Test Result of Conducted Test

Please refer to Appendix A.

3.2 Conducted Output Power and ERP/EIRP

3.2.1 Description of the Conducted Output Power Measurement and ERP/EIRP Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The ERP of mobile transmitters must not exceed 3 Watts for 5G NR n71

The EIRP of mobile transmitters must not exceed 2 Watts for 5G NR n25, n41

The EIRP of mobile transmitters must not exceed 1 Watts for 5G NR n66

According to KDB 412172 D01 Power Approach,

EIRP = $P_T + G_T – L_C$, ERP = EIRP -2.15, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.2.2 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.

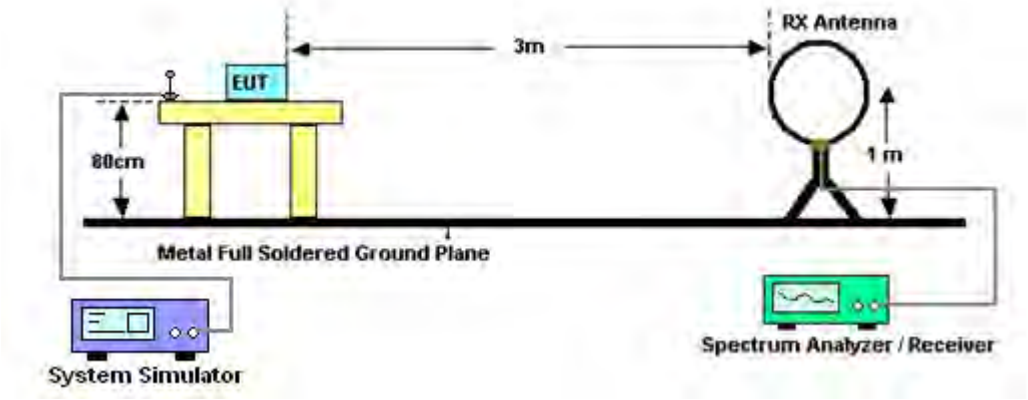
4 Radiated Test Items

4.1 Measuring Instruments

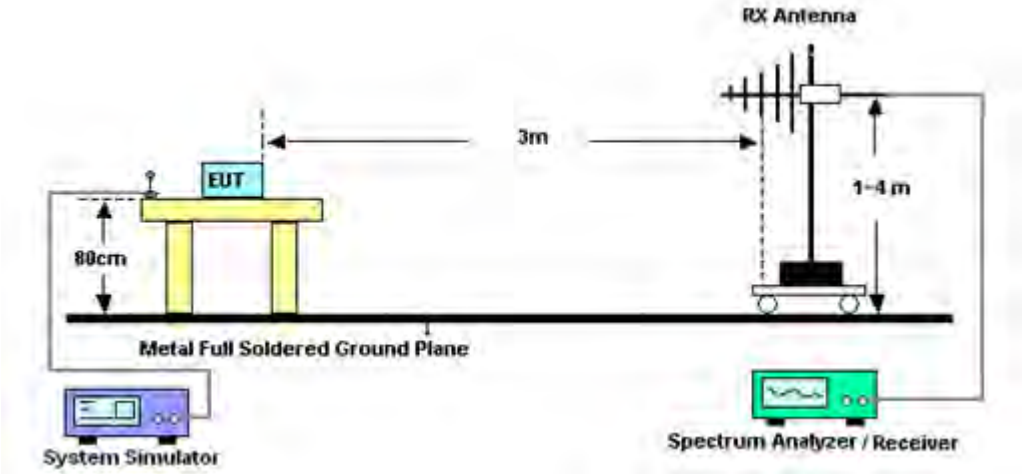
See list of measuring instruments of this test report.

4.1.1 Test Setup

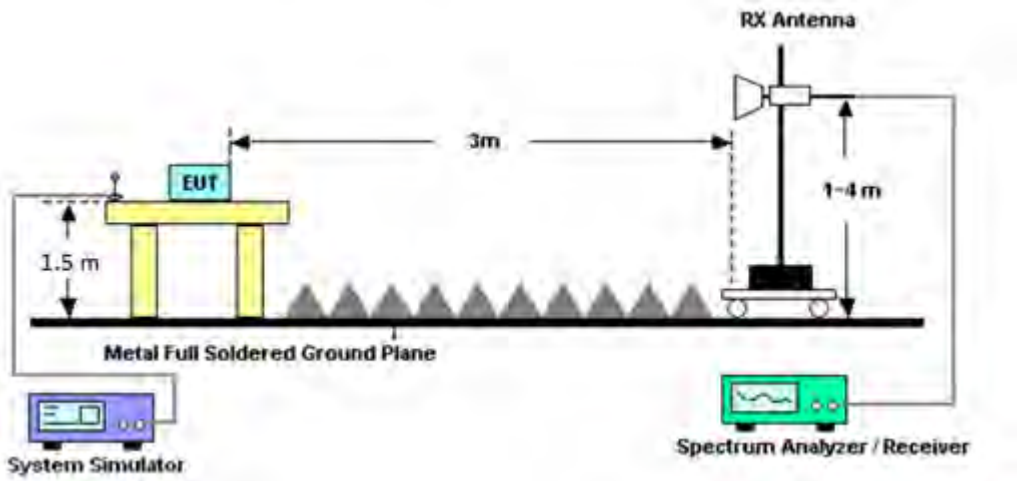
For radiated test below 30MHz



For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



4.1.2 Test Result of Radiated Test

Please refer to Appendix B.

Note:

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.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

4.2 Radiated Spurious Emission Measurement

4.2.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA-603-E. 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 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.

4.2.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI / TIA-603-E Section 2.2.12.

1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)

    For 5G NR n41

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

    EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain

    ERP (dBm) = EIRP - 2.15

5 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Programmable Power Supply	GW Instek	PSS-2005	EL890089	50Hz~60Hz	Feb. 20, 2021	Sep. 28, 2021~ Oct. 04, 2021	Feb. 19, 2022	Conducted (TH03-HY)
Signal Analyzer	Rohde & Schwarz	FSV3044	101048	10Hz~44GHz	Apr. 20, 2021	Sep. 28, 2021~ Oct. 04, 2021	Apr. 19, 2022	Conducted (TH03-HY)
Temperature Chamber	ESPEC	LHU-113	101200586 0	-20℃ ~85℃	Jan. 18, 2021	Sep. 28, 2021~ Oct. 04, 2021	Jan. 17, 2022	Conducted (TH03-HY)
Hygrometer	Testo	608-H11	3489324	NA	Mar. 01, 2021	Sep. 28, 2021~ Oct. 04, 2021	Feb. 28, 2022	Conducted (TH03-HY)
Base Station (Measure)	Anritsu	MT8821C	626204465 7	LTE	Jan. 07, 2021	Sep. 28, 2021~ Oct. 04, 2021	Jan. 06, 2022	Conducted (TH03-HY)
Base Station (Measure)	Anritsu	MT8000A	626201291 7	FR1	Jan. 07, 2021	Sep. 28, 2021~ Oct. 04, 2021	Jan. 06, 2022	Conducted (TH03-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 28, 2021	Oct. 13, 2021~ Oct. 20, 2021	Apr. 27, 2022	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 01, 2020	Oct. 13, 2021~ Oct. 20, 2021	Nov. 30, 2021	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010180 0-30-10P	1590075	1GHz~18GHz	Apr. 22, 2021	Oct. 13, 2021~ Oct. 20, 2021	Apr. 21, 2022	Radiation (03CH07-HY)
Preamplifier	COM-POWE R	PA-103A	161241	10MHz~1GHz	May 18, 2021	Oct. 13, 2021~ Oct. 20, 2021	May 17, 2022	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A0236 2	1GHz~26.5GHz	Oct. 31, 2020	Oct. 13, 2021~ Oct. 20, 2021	Oct. 30, 2021	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 23, 2021	Oct. 13, 2021~ Oct. 20, 2021	Jul. 22, 2022	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY523502 76	3Hz~44GHz	Jul. 22, 2021	Oct. 13, 2021~ Oct. 20, 2021	Jul. 21, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682-4	30MHz to 18GHz	Feb. 24, 2021	Oct. 13, 2021~ Oct. 20, 2021	Feb. 23, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971-4	9kHz to 18GHz	Feb. 24, 2021	Oct. 13, 2021~ Oct. 20, 2021	Feb. 23, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655-4	9kHz to 18GHz	Feb. 24, 2021	Oct. 13, 2021~ Oct. 20, 2021	Feb. 23, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2, 801606/2	18GHz~40GHz	Feb. 24, 2021	Oct. 13, 2021~ Oct. 20, 2021	Feb. 23, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/12 6E	30MHz~18GHz	Sep. 17, 2021	Oct. 13, 2021~ Oct. 20, 2021	Sep. 16, 2022	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Oct. 13, 2021~ Oct. 20, 2021	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Oct. 13, 2021~ Oct. 20, 2021	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Oct. 13, 2021~ Oct. 20, 2021	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Oct. 13, 2021~ Oct. 20, 2021	N/A	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8-24	N/A	N/A	N/A	Oct. 13, 2021~ Oct. 20, 2021	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB24 95	N/A	Mar. 09, 2021	Oct. 13, 2021~ Oct. 20, 2021	Mar. 08, 2022	Radiation (03CH07-HY)
Horn Antenna	EMCO	3117	00143261	1GHz~18GHz	Jan. 26, 2021	Oct. 13, 2021~ Oct. 20, 2021	Jan. 25, 2022	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZB ECK	BBHA 9170	BBHA9170 251	18GHz~40GHz	Dec. 02, 2020	Oct. 13, 2021~ Oct. 20, 2021	Dec. 01, 2021	Radiation (03CH07-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	Dec. 04, 2020	Oct. 13, 2021~ Oct. 20, 2021	Dec. 03, 2021	Radiation (03CH07-HY)

6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.16 dB**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.71 dB**

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.16 dB**

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power) and ERP/EIRP

<SISO Mode>

NR n25 Maximum Average Power [dBm] (GT - LC = 4.66 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
20	1	1	PI/2 BPSK	23.05	23.05	23.03	27.78	0.5998
20	1	104		23.06	23.04	23.02		
20	50	25		23.08	23.02	23.07		
20	1	0		22.68	22.68	22.67		
20	1	105		22.81	22.67	22.70		
20	100	0		22.91	22.55	22.68		
20	1	1	QPSK	23.12	23.09	23.03		
20	1	104		23.03	23.07	23.03		
20	50	25		23.08	23.00	23.05		
20	1	0		22.20	22.18	22.12		
20	1	105		22.23	22.10	22.32		
20	100	0		22.39	22.09	22.18		
20	1	1	16-QAM	22.10	22.21	22.18	26.87	0.4864
20	1	1	64-QAM	20.77	20.82	20.78		
20	1	1	256-QAM	18.74	18.85	18.81		
Limit	EIRP < 2W			Result			Pass	

NR n41 Maximum Average Power [dBm] (GT - LC = 5.45 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
100	1	1	PI/2 BPSK	24.88	25.22	25.10	31.17	1.3092
100	1	271		25.19	25.01	25.31		
100	135	67		25.69	25.64	25.62		
100	1	0		21.46	21.82	21.63		
100	1	272		21.80	21.64	21.83		
100	270	0		25.10	25.27	25.14		
100	1	1	QPSK	24.86	25.72	25.11		
100	1	271		25.23	25.14	25.22		
100	135	67		25.61	25.66	25.61		
100	1	0		21.42	21.78	21.59		
100	1	272		21.78	21.55	21.82		
100	270	0		24.64	24.79	24.66		
100	1	1	16-QAM	23.95	24.24	24.18	29.69	0.9311
100	1	1	64-QAM	22.71	22.58	22.63		
100	1	1	256-QAM	20.45	20.58	20.65		
Limit	EIRP < 2W			Result			Pass	

NR n66 Maximum Average Power [dBm] (GT - LC = 4.84 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
15	1	1	PI/2 BPSK	22.99	22.95	22.85	27.85	0.6095
15	1	77		22.91	22.98	22.87		
15	36	18		22.90	22.91	22.92		
15	1	0		22.66	22.56	22.45		
15	1	78		22.68	22.76	22.45		
15	75	0		22.56	22.65	22.48		
15	1	1	QPSK	23.01	22.94	22.83		
15	1	77		22.90	22.99	22.91		
15	36	18		22.97	22.91	22.88		
15	1	0		22.12	22.00	21.87		
15	1	78		22.17	22.22	21.94		
15	75	0		22.06	22.10	21.90		
15	1	1	16-QAM	22.53	22.50	22.31	27.37	0.5458
15	1	1	64-QAM	20.86	20.72	20.63		
15	1	1	256-QAM	19.19	19.10	18.97		
Limit	EIRP < 1W			Result			Pass	

NR n71 Maximum Average Power [dBm] (GT - LC = 1.63 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
5	1	1	PI/2 BPSK	23.17	22.93	22.88	22.73	0.1875
5	1	23		23.10	22.87	22.83		
5	12	6		23.11	22.88	22.90		
5	1	0		22.63	22.40	22.28		
5	1	24		22.55	22.33	22.31		
5	25	0		22.56	22.38	22.38		
5	1	1	QPSK	23.25	22.83	22.84		
5	1	23		23.15	22.77	22.78		
5	12	6		23.12	22.90	22.86		
5	1	0		22.15	21.85	21.83		
5	1	24		22.07	21.84	21.85		
5	25	0		22.23	21.92	21.98		
5	1	1	16-QAM	22.19	21.97	21.77	21.67	0.1469
5	1	1	64-QAM	20.37	20.18	19.78		
5	1	1	256-QAM	19.12	18.81	18.70		
Limit	ERP < 3W			Result			Pass	

<MIMO Mode>

NR n41 Maximum Average Power [dBm], DG = 5.45 dBi														
BW	RB	RB	Mod	Antenna 3			Antenna 8			Combine			EIRP	EIRP
(MHz)	Size	Offset		Lowest	Middle	Highest	Lowest	Middle	Highest	Lowest	Middle	Highest	(dBm)	(W)
20	1	1	QPSK	21.20	21.13	20.98	21.71	21.30	21.06	24.47	24.23	24.03	29.92	0.9817
20	1	49		21.07	21.22	21.02	21.50	21.15	21.12	24.30	24.20	24.08		
20	25	12		21.01	21.17	21.22	21.48	21.43	21.18	24.26	24.31	24.21		
20	1	0		19.56	19.19	19.06	19.02	19.37	19.00	22.31	22.29	22.04		
20	1	50		19.15	19.23	19.18	19.55	19.17	19.07	22.36	22.21	22.14		
20	51	0		19.65	19.75	19.79	20.09	19.85	19.67	22.89	22.81	22.74		
20	1	1	16-QAM	20.53	20.56	20.34	21.21	20.92	20.56	23.89	23.75	23.46	29.34	0.8590
20	1	1	64-QAM	19.15	19.31	19.19	19.38	19.13	18.74	22.28	22.23	21.98		
20	1	1	256-QAM	16.46	16.53	16.43	17.10	16.83	16.27	19.80	19.69	19.36		
Limit	EIRP < 2W			Result									Pass	

Appendix B. Test Results of Radiated Test

<Ant. 8>

5G NR n25

5G NR n25 / 20MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-57.59	-13	-44.59	-78.52	-64.16	1.67	8.24	H
	5550	-55.51	-13	-42.51	-80.99	-62.58	2.65	9.72	H
	7404	-54.21	-13	-41.21	-81.29	-63.36	2.46	11.61	H
									H
									H
									H
	3702	-57.48	-13	-44.48	-78.33	-64.05	1.67	8.24	V
	5550	-55.52	-13	-42.52	-81.09	-62.59	2.65	9.72	V
	7404	-53.48	-13	-40.48	-80.79	-62.63	2.46	11.61	V
									V
									V
									V
Middle	3744	-57.42	-13	-44.42	-78.32	-64.03	1.68	8.29	H
	5622	-55.62	-13	-42.62	-81.35	-62.67	2.70	9.75	H
	7488	-53.63	-13	-40.63	-80.82	-62.97	2.43	11.78	H
									H
									H
									H
	3744	-56.71	-13	-43.71	-77.51	-63.32	1.68	8.29	V
	5622	-51.21	-13	-38.21	-76.86	-58.26	2.70	9.75	V
	7488	-52.99	-13	-39.99	-81.39	-62.33	2.43	11.78	V
									V
									V
									V

5G NR n25 / 20MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	3792	-57.74	-13	-44.74	-78.69	-64.39	1.70	8.35	H
	5688	-54.92	-13	-41.92	-80.82	-61.96	2.73	9.78	H
	7578	-53.88	-13	-40.88	-81.28	-63.32	2.40	11.85	H
									H
									H
									H
	3792	-56.74	-13	-43.74	-77.52	-63.39	1.70	8.35	V
	5688	-55.01	-13	-42.01	-80.9	-62.05	2.73	9.78	V
	7578	-53.62	-13	-40.62	-81.31	-63.06	2.40	11.85	V
									V
									V
									V

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

5G NR n66

5G NR n66 / 15MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-57.53	-13	-44.53	-78.17	-63.6	1.58	7.65	H
	5130	-56.71	-13	-43.71	-80.52	-64	2.41	9.70	H
	6840	-55.53	-13	-42.53	-82.1	-63.5	2.64	10.61	H
									H
									H
									H
	3420	-58.13	-13	-45.13	-78.48	-64.2	1.58	7.65	V
	5130	-57.01	-13	-44.01	-80.63	-64.3	2.41	9.70	V
	6840	-55.43	-13	-42.43	-81.93	-63.4	2.64	10.61	V
									V
									V
									V
Middle	3475	-57.91	-13	-44.91	-78.3	-64.2	1.60	7.89	H
	5213	-56.86	-13	-43.86	-80.98	-64.1	2.46	9.70	H
	6950	-55.17	-13	-42.17	-81.78	-63.3	2.61	10.74	H
									H
									H
									H
	3475	-57.81	-13	-44.81	-78.18	-64.1	1.60	7.89	V
	5213	-56.66	-13	-43.66	-80.99	-63.9	2.46	9.70	V
	6950	-55.57	-13	-42.57	-82.05	-63.7	2.61	10.74	V
									V
									V
									V

5G NR n66 / 15MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	3530	-57.38	-13	-44.38	-78.16	-63.8	1.61	8.04	H
	5295	-57.01	-13	-44.01	-81.39	-64.2	2.51	9.70	H
	7060	-54.95	-13	-41.95	-81.53	-63.3	2.57	10.92	H
									H
									H
									H
	3530	-57.28	-13	-44.28	-78.11	-63.7	1.61	8.04	V
	5295	-56.91	-13	-43.91	-81.32	-64.1	2.51	9.70	V
	7060	-55.25	-13	-42.25	-81.87	-63.6	2.57	10.92	V
									V
									V
									V

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

5G NR n71

5G NR n71 / 5MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1328	-60.25	-13	-47.25	-69.69	-61.5	0.84	4.23	H
	1992	-57.96	-13	-44.96	-72.26	-58.6	1.13	3.92	H
	2656	-60.76	-13	-47.76	-77.82	-62.8	1.34	5.52	H
									H
									H
									H
	1328	-62.85	-13	-49.85	-72.83	-64.1	0.84	4.23	V
	1992	-59.86	-13	-46.86	-74.84	-60.5	1.13	3.92	V
	2656	-59.86	-13	-46.86	-77.61	-61.9	1.34	5.52	V
									V
									V
									V
Middle	1360	-58.67	-13	-45.67	-68.26	-60.1	0.85	4.43	H
	2032	-53.60	-13	-40.60	-68.3	-54.3	1.14	4.00	H
	2712	-60.74	-13	-47.74	-77.61	-62.8	1.36	5.57	H
									H
									H
									H
	1360	-61.57	-13	-48.57	-71.63	-63	0.85	4.43	V
	2032	-55.80	-13	-42.80	-71.02	-56.5	1.14	4.00	V
	2712	-60.24	-13	-47.24	-77.67	-62.3	1.36	5.57	V
									V
									V
									V

5G NR n71 / 5MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	1384	-61.93	-13	-48.93	-49.67	-63.5	0.86	4.58	H
	2080	-54.07	-13	-41.07	-41.86	-54.9	1.16	4.14	H
	2776	-60.11	-13	-47.11	-48.05	-62.2	1.38	5.62	H
									H
									H
									H
	1384	-62.73	-13	-49.73	-73.18	-64.3	0.86	4.58	V
	2080	-56.67	-13	-43.67	-72.11	-57.5	1.16	4.14	V
	2776	-59.01	-13	-46.01	-77.02	-61.1	1.38	5.62	V
									V
									V
									V

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

EN-DC 12A-n25A

EN-DC 12A-n25A / 20MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-57.25	-13	-44.25	-77.97	-63.82	1.67	8.24	H
	5556	-53.91	-13	-40.91	-79.5	-60.98	2.66	9.72	H
	7398	-53.72	-13	-40.72	-80.84	-62.85	2.46	11.60	H
									H
									H
									H
	3702	-57.16	-13	-44.16	-78	-63.73	1.67	8.24	V
	5556	-54.99	-13	-41.99	-80.49	-62.06	2.66	9.72	V
	7398	-53.61	-13	-40.61	-80.9	-62.74	2.46	11.60	V
									V
									V
									V
Middle	3744	-56.76	-13	-43.76	-77.63	-63.37	1.68	8.29	H
	5622	-54.92	-13	-41.92	-80.6	-61.97	2.70	9.75	H
	7488	-53.44	-13	-40.44	-80.61	-62.78	2.43	11.78	H
									H
									H
									H
	3744	-56.79	-13	-43.79	-77.67	-63.4	1.68	8.29	V
	5622	-55.09	-13	-42.09	-80.76	-62.14	2.70	9.75	V
	7488	-52.99	-13	-39.99	-80.4	-62.33	2.43	11.78	V
									V
									V
									V

EN-DC 12A-n25A / 20MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	3792	-57.93	-13	-44.93	-78.8	-64.58	1.70	8.35	H
	5688	-54.74	-13	-41.74	-80.64	-61.78	2.73	9.78	H
	7578	-53.12	-13	-40.12	-80.53	-62.56	2.40	11.85	H
									H
									H
									H
	3792	-57.51	-13	-44.51	-78.37	-64.16	1.70	8.35	V
	5688	-54.52	-13	-41.52	-80.44	-61.56	2.73	9.78	V
	7578	-52.91	-13	-39.91	-80.5	-62.35	2.40	11.85	V
									V
									V
									V

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

EN-DC 12A-n66A

EN-DC 12A-n66A / 15MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-56.72	-13	-43.72	-77.38	-62.79	1.58	7.65	H
	5130	-56.06	-13	-43.06	-80.29	-63.35	2.41	9.70	H
	6840	-54.54	-13	-41.54	-81.25	-62.51	2.64	10.61	H
									H
									H
									H
	3420	-56.51	-13	-43.51	-77.23	-62.58	1.58	7.65	V
	5130	-56.37	-13	-43.37	-80.32	-63.66	2.41	9.70	V
	6840	-54.65	-13	-41.65	-81.31	-62.62	2.64	10.61	V
									V
									V
									V
Middle	3474	-56.34	-13	-43.34	-77.3	-62.63	1.60	7.89	H
	5214	-55.87	-13	-42.87	-80.37	-63.11	2.46	9.70	H
	6948	-54.38	-13	-41.38	-81.35	-62.51	2.61	10.74	H
									H
									H
									H
	3474	-56.59	-13	-43.59	-77.45	-62.88	1.60	7.89	V
	5214	-55.78	-13	-42.78	-80.21	-63.02	2.46	9.70	V
	6948	-54.54	-13	-41.54	-81.5	-62.67	2.61	10.74	V
									V
									V
									V

EN-DC 12A-n66A / 15MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	3528	-56.51	-13	-43.51	-77.47	-62.93	1.61	8.03	H
	5292	-55.83	-13	-42.83	-80.63	-63.02	2.51	9.70	H
	7062	-54.29	-13	-41.29	-81.39	-62.64	2.57	10.92	H
									H
									H
									H
	3528	-56.16	-13	-43.16	-76.95	-62.58	1.61	8.03	V
	5292	-55.78	-13	-42.78	-80.47	-62.97	2.51	9.70	V
	7062	-54.01	-13	-41.01	-81.13	-62.36	2.57	10.92	V
									V
									V
									V

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

EN-DC 2A-n71A

EN-DC 2A-n71A / 5MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1328	-63.98	-13	-50.98	-73.83	-65.23	0.84	4.23	H
	1992	-60.18	-13	-47.18	-75.15	-60.82	1.13	3.92	H
	2648	-59.42	-13	-46.42	-76.7	-61.45	1.34	5.52	H
									H
									H
									H
	1328	-63.78	-13	-50.78	-74.08	-65.03	0.84	4.23	V
	1992	-60.38	-13	-47.38	-75.57	-61.02	1.13	3.92	V
	2648	-59.09	-13	-46.09	-76.91	-61.12	1.34	5.52	V
									V
									V
									V
Middle	1352	-64.22	-13	-51.22	-74.29	-65.61	0.85	4.38	H
	2032	-53.46	-13	-40.46	-68.63	-54.16	1.14	4.00	H
	2712	-58.96	-13	-45.96	-76.35	-61.02	1.36	5.57	H
									H
									H
									H
	1352	-63.67	-13	-50.67	-74.14	-65.06	0.85	4.38	V
	2032	-56.45	-13	-43.45	-71.94	-57.15	1.14	4.00	V
	2712	-58.52	-13	-45.52	-76.62	-60.58	1.36	5.57	V
									V
									V
									V

EN-DC 2A-n71A / 5MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	1384	-62.03	-13	-49.03	-71.61	-63.6	0.86	4.58	H
	2080	-54.67	-13	-41.67	-69.9	-55.5	1.16	4.14	H
	2772	-59.11	-13	-46.11	-76.36	-61.2	1.38	5.62	H
	3464	-58.00	-13	-45.00	-77.48	-62.1	1.59	7.84	H
									H
									H
	1384	-62.03	-13	-49.03	-72.39	-63.6	0.86	4.58	V
	2080	-47.07	-13	-34.07	-62.7	-47.9	1.16	4.14	V
	2772	-58.91	-13	-45.91	-76.46	-61	1.38	5.62	V
	3464	-56.50	-13	-43.50	-76.49	-60.6	1.59	7.84	V
									V
									V

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

EN-DC 66A-n71A

EN-DC 66A-n71A / 5MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1360	-64.67	-13	-51.67	-74.37	-66.1	0.85	4.43	H
	2032	-39.30	-13	-26.30	-54.42	-40	1.14	4.00	H
	2712	-59.24	-13	-46.24	-76.12	-61.3	1.36	5.57	H
	3392	-55.00	-13	-42.00	-74.18	-58.8	1.57	7.52	H
									H
									H
	1360	-62.17	-13	-49.17	-72.31	-63.6	0.85	4.43	V
	2032	-51.50	-13	-38.50	-66.81	-52.2	1.14	4.00	V
	2712	-58.84	-13	-45.84	-76.35	-60.9	1.36	5.57	V
	3392	-57.80	-13	-44.80	-77.06	-61.6	1.57	7.52	V
									V
									V

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

5G NR n25A + n71A

5G NR n25A + n71A / 20MHz+5MHz / 1RB1 QPSK+1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
5G NR n25A Lowest	3700	-58.03	-13	-45.03	-78.58	-64.6	1.67	8.24	H
	5550	-55.83	-13	-42.83	-81.3	-62.9	2.65	9.72	H
	7400	-54.96	-13	-41.96	-81.35	-64.1	2.46	11.60	H
									H
									H
									H
	3700	-57.63	-13	-44.63	-78.43	-64.2	1.67	8.24	V
	5550	-55.83	-13	-42.83	-81.23	-62.9	2.65	9.72	V
	7400	-54.26	-13	-41.26	-81.35	-63.4	2.46	11.60	V
									V
									V
									V
5G NR n25A Middle	3744	-57.54	-13	-44.54	-78.4	-64.15	1.68	8.29	H
	5616	-56.51	-13	-43.51	-81.12	-63.56	2.69	9.75	H
	7488	-53.78	-13	-40.78	-81.06	-63.12	2.43	11.78	H
									H
									H
									H
	3744	-57.54	-13	-44.54	-78.38	-64.15	1.68	8.29	V
	5616	-55.73	-13	-42.73	-81.37	-62.78	2.69	9.75	V
	7488	-53.82	-13	-40.82	-81.2	-63.16	2.43	11.78	V
									V
									V
									V

5G NR n25A + n71A / 20MHz+5MHz / 1RB1 QPSK+1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
5G NR n25A Highest	3792	-58.17	-13	-45.17	-79.11	-64.82	1.70	8.35	H
	5688	-55.31	-13	-42.31	-81.24	-62.35	2.73	9.78	H
	7578	-54.12	-13	-41.12	-81.49	-63.56	2.40	11.85	H
									H
									H
									H
	3792	-58.16	-13	-45.16	-79.11	-64.81	1.70	8.35	V
	5688	-55.37	-13	-42.37	-81.3	-62.41	2.73	9.78	V
	7578	-53.81	-13	-40.81	-81.36	-63.25	2.40	11.85	V
									V
									V
									V

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

5G NR n25A + n71A / 20MHz+5MHz / 1RB1 QPSK+1RB1 QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
5G NR n71A Lowest	1326	-54.52	-13	-41.52	-74.33	-55.76	0.83	4.22	H
	1988	-50.87	-13	-37.87	-75.67	-51.52	1.13	3.93	H
	2652	-49.26	-13	-36.26	-76.54	-51.29	1.34	5.52	H
									H
									H
									H
	1326	-54.29	-13	-41.29	-74.62	-55.53	0.83	4.22	V
	1988	-50.61	-13	-37.61	-75.76	-51.26	1.13	3.93	V
	2652	-48.72	-13	-35.72	-76.61	-50.75	1.34	5.52	V
									V
									V
									V
5G NR n71A Middle	1356	-54.71	-13	-41.71	-74.63	-56.12	0.85	4.41	H
	2034	-51.02	-13	-38.02	-76.2	-51.73	1.14	4.00	H
	2712	-49.22	-13	-36.22	-76.54	-51.28	1.36	5.57	H
									H
									H
									H
	1356	-54.45	-13	-41.45	-74.86	-55.86	0.85	4.41	V
	2034	-50.42	-13	-37.42	-75.93	-51.13	1.14	4.00	V
	2712	-48.52	-13	-35.52	-76.62	-50.58	1.36	5.57	V
									V
									V
									V

5G NR n25A + n71A / 20MHz+5MHz / 1RB1 QPSK+1RB1 QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
5G NR n71A Highest	1386	-54.86	-13	-41.86	-74.98	-56.44	0.86	4.59	H
	2080	-50.81	-13	-37.81	-76.09	-51.64	1.16	4.14	H
	2772	-49.14	-13	-36.14	-76.53	-51.23	1.38	5.62	H
									H
									H
									H
	1386	-54.04	-13	-41.04	-74.63	-55.62	0.86	4.59	V
	2080	-50.19	-13	-37.19	-75.76	-51.02	1.16	4.14	V
	2772	-48.14	-13	-35.14	-76.24	-50.23	1.38	5.62	V
									V
									V
									V

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

5G NR n41A + n71A

5G NR n41A + n71A / 100MHz+5MHz / 1RB1 QPSK+1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
5G NR n41A Middle	5086	-56.79	-25	-31.79	-80.37	-64.1	2.39	9.70	H
	7629	-54.41	-25	-29.41	-81.41	-63.9	2.39	11.88	H
	10172	-49.83	-25	-24.83	81.17	-59.4	2.70	12.27	H
									H
									H
									H
	5086	-56.79	-25	-31.79	-80.47	-64.1	2.39	9.70	V
	7629	-53.81	-25	-28.81	-81.32	-63.3	2.39	11.88	V
	10172	-49.73	-25	-24.73	-81.33	-59.3	2.70	12.27	V
									V
									V
									V

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

5G NR n41A + n71A / 100MHz+5MHz / 1RB1 QPSK+1RB1 QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
5G NR n71A Middle	1356	-55.19	-13	-42.19	-74.72	-56.6	0.85	4.41	H
	2035	-48.99	-13	-35.99	-73.81	-49.7	1.14	4.01	H
	2712	-49.74	-13	-36.74	-76.77	-51.8	1.36	5.57	H
									H
									H
									H
	1356	-54.39	-13	-41.39	-74.64	-55.8	0.85	4.41	V
	2035	-48.49	-13	-35.49	-73.84	-49.2	1.14	4.01	V
	2712	-49.04	-13	-36.04	-76.43	-51.1	1.36	5.57	V
									V
									V
									V

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

5G NR n66A + n71A

5G NR n66A + n71A / 15MHz+5MHz / 1RB1 QPSK+1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
5G NR n66A Middle	3474	-57.01	-13	-44.01	-77.48	-63.3	1.60	7.89	H
	5214	-55.86	-13	-42.86	-80.33	-63.1	2.46	9.70	H
	6954	-55.56	-13	-42.56	-81.91	-63.7	2.61	10.74	H
									H
									H
									H
	3474	-57.11	-13	-44.11	-77.8	-63.4	1.60	7.89	V
	5214	-55.96	-13	-42.96	-80.36	-63.2	2.46	9.70	V
	6954	-55.36	-13	-42.36	-81.76	-63.5	2.61	10.74	V
									V
									V
									V

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

5G NR n66A + n71A / 15MHz+5MHz / 1RB1 QPSK+1RB1 QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
5G NR n71A Middle	1356	-54.79	-13	-41.79	-74.55	-56.2	0.85	4.41	H
	2035	-51.09	-13	-38.09	-75.97	-51.8	1.14	4.01	H
	2712	-49.04	-13	-36.04	-76.69	-51.1	1.36	5.57	H
									H
									H
									H
	1356	-54.89	-13	-41.89	-74.74	-56.3	0.85	4.41	V
	2035	-50.79	-13	-37.79	-76.17	-51.5	1.14	4.01	V
	2712	-49.04	-13	-36.04	-76.69	-51.1	1.36	5.57	V
									V
									V
									V

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

<Ant. 3>

5G NR n41 (HPUE)

5G NR n41 (HPUE) / 100MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	4992	-57.34	-25	-32.34	-81.04	-64.69	2.33	9.68	H
	7494	-41.66	-25	-16.66	-68.73	-51.02	2.43	11.79	H
	9990	-50.01	-25	-25.01	-81.39	-59.52	2.69	12.21	H
									H
									H
									H
	4992	-57.04	-25	-32.04	-80.67	-64.39	2.33	9.68	V
	7494	-44.65	-25	-19.65	-72.01	-54.01	2.43	11.79	V
	9990	-49.81	-25	-24.81	-81.04	-59.32	2.69	12.21	V
									V
									V
									V
Middle	5088	-56.31	-25	-31.31	-80.35	-63.62	2.39	9.70	H
	7632	-53.72	-25	-28.72	-81.23	-63.21	2.39	11.88	H
	10170	-49.01	-25	-24.01	-81.02	-58.58	2.70	12.27	H
									H
									H
									H
	5088	-56.71	-25	-31.71	-80.61	-64.02	2.39	9.70	V
	7632	-53.23	-25	-28.23	-81.06	-62.72	2.39	11.88	V
	10170	-49.25	-25	-24.25	-80.97	-58.82	2.70	12.27	V
									V
									V
									V

5G NR n41 (HPUE) / 100MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	5178	-56.12	-25	-31.12	-80.53	-63.38	2.44	9.70	H
	7776	-53.42	-25	-28.42	-81.28	-63.05	2.34	11.97	H
	10368	-48.71	-25	-23.71	-81.07	-58.36	2.69	12.35	H
									H
									H
									H
	5178	-56.49	-25	-31.49	-80.71	-63.75	2.44	9.70	V
	7776	-51.38	-25	-26.38	-79.5	-61.01	2.34	11.97	V
	10368	-48.98	-25	-23.98	-81.29	-58.63	2.69	12.35	V
									V
									V
									V

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

MIMO <Ant. 3+8>

5G NR n41C (HPUE)

5G NR n41C (HPUE) / 20MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	4992	-57.14	-25	-32.14	-80.96	-64.49	2.33	9.68	H
	7488	-54.01	-25	-29.01	-81.1	-63.35	2.43	11.78	H
	9990	-50.06	-25	-25.06	-81.39	-59.57	2.69	12.21	H
									H
									H
									H
	4992	-56.76	-25	-31.76	-80.32	-64.11	2.33	9.68	V
	7488	-53.67	-25	-28.67	-81.07	-63.01	2.43	11.78	V
	9990	-50.07	-25	-25.07	-81.44	-59.58	2.69	12.21	V
									V
									V
									V
Middle	5166	-56.12	-25	-31.12	-80.39	-63.39	2.43	9.70	H
	7752	-53.51	-25	-28.51	-81.27	-63.11	2.35	11.95	H
	10332	-49.22	-25	-24.22	-81.6	-58.86	2.69	12.33	H
									H
									H
									H
	5166	-56.46	-25	-31.46	-80.72	-63.73	2.43	9.70	V
	7752	-53.83	-25	-28.83	-80.88	-63.43	2.35	11.95	V
	10332	-49.18	-25	-24.18	-81.44	-58.82	2.69	12.33	V
									V
									V
									V

5G NR n41C (HPUE) / 20MHz / 1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	5340	-55.66	-25	-30.66	-80.61	-62.83	2.53	9.70	H
	8010	-52.61	-25	-27.61	-81.04	-62.45	2.27	12.11	H
	10674	-47.27	-25	-22.27	-80.58	-57.01	2.69	12.43	H
									H
									H
									H
	5340	-55.72	-25	-30.72	-80.58	-62.89	2.53	9.70	V
	8010	-52.22	-25	-27.22	-80.95	-62.06	2.27	12.11	V
	10674	-47.97	-25	-22.97	-81.06	-57.71	2.69	12.43	V
									V
									V
									V

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

<Ant. 8 + Ant. 3>

5G NR n25A + n41A

5G NR n25A + n41A / 20MHz+100MHz / 1RB1 QPSK+1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-57.01	-13	-44.01	-77.88	-63.58	1.67	8.24	H
	4994	-56.48	-25	-31.48	-80.26	-63.83	2.33	9.69	H
	5550	-55.52	-13	-42.52	-81.05	-62.59	2.65	9.72	H
	7400	-53.60	-13	-40.60	-80.77	-62.74	2.46	11.60	H
	7491	-53.66	-25	-28.66	-80.77	-63.01	2.43	11.78	H
	9987	-49.77	-25	-24.77	-81.13	-59.28	2.69	12.21	H
	3702	-57.09	-13	-44.09	-77.95	-63.66	1.67	8.24	V
	4994	-56.87	-25	-31.87	-80.45	-64.22	2.33	9.69	V
	5550	-54.99	-13	-41.99	-80.49	-62.06	2.65	9.72	V
	7400	-53.17	-13	-40.17	-80.58	-62.31	2.46	11.60	V
	7491	-53.56	-25	-28.56	-80.87	-62.91	2.43	11.78	V
	9987	-49.40	-25	-24.40	-80.7	-58.91	2.69	12.21	V
Middle	3745	-57.49	-13	-44.49	-78.2	-64.1	1.68	8.29	H
	5086	-55.99	-25	-30.99	-79.95	-63.3	2.39	9.70	H
	5616	-55.45	-13	-42.45	-80.66	-62.5	2.69	9.75	H
	7490	-53.95	-13	-40.95	-80.63	-63.3	2.43	11.78	H
	7629	-53.61	-25	-28.61	-80.7	-63.1	2.39	11.88	H
	10172	-49.33	-25	-24.33	-80.74	-58.9	2.70	12.27	H
	3745	-56.99	-13	-43.99	-77.76	-63.6	1.68	8.29	V
	5086	-56.29	-25	-31.29	-80.09	-63.6	2.39	9.70	V
	5616	-55.55	-13	-42.55	-81.11	-62.6	2.69	9.75	V
	7490	-54.15	-13	-41.15	-80.7	-63.5	2.43	11.78	V
	7629	-53.61	-25	-28.61	-80.67	-63.1	2.39	11.88	V
	10172	-48.83	-25	-23.83	-80.52	-58.4	2.70	12.27	V

5G NR n25A + n41A / 20MHz+100MHz / 1RB1 QPSK+1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	3792	-58.04	-13	-45.04	-78.87	-64.69	1.70	8.35	H
	5180	-55.73	-25	-30.73	-80.15	-62.99	2.44	9.70	H
	5685	-54.85	-13	-41.85	-80.75	-61.89	2.73	9.77	H
	7580	-53.03	-13	-40.03	-80.42	-62.47	2.40	11.85	H
	7770	-53.15	-25	-28.15	-80.95	-62.77	2.34	11.96	H
	10360	-48.68	-25	-23.68	-81.13	-58.33	2.69	12.34	H
	3792	-57.96	-13	-44.96	-78.83	-64.61	1.70	8.35	V
	5180	-55.91	-25	-30.91	-80.19	-63.17	2.44	9.70	V
	5685	-54.94	-13	-41.94	-80.83	-61.98	2.73	9.77	V
	7580	-53.03	-13	-40.03	-80.67	-62.47	2.40	11.85	V
	7770	-52.79	-25	-27.79	-80.88	-62.41	2.34	11.96	V
	10360	-48.80	-25	-23.80	-81.11	-58.45	2.69	12.34	V

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

<Ant. 3 + Ant. 8>

5G NR n41A + n66A

5G NR n41A + n66A / 100MHz+15MHz / 1RB1 QPSK+1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-56.72	-13	-43.72	-77.41	-62.79	1.58	7.65	H
	4992	-57.01	-25	-32.01	-80.82	-64.36	2.33	9.68	H
	5130	-55.56	-13	-42.56	-79.77	-62.85	2.41	9.70	H
	6840	-54.55	-13	-41.55	-81.25	-62.52	2.64	10.61	H
	7488	-53.52	-25	-28.52	-80.72	-62.86	2.43	11.78	H
	9990	-50.01	-25	-25.01	-81.31	-59.52	2.69	12.21	H
	3420	-56.49	-13	-43.49	-77.22	-62.56	1.58	7.65	V
	4992	-57.29	-25	-32.29	-80.9	-64.64	2.33	9.68	V
	5130	-56.09	-13	-43.09	-80.16	-63.38	2.41	9.70	V
	6840	-54.34	-13	-41.34	-81	-62.31	2.64	10.61	V
	7488	-53.52	-25	-28.52	-80.96	-62.86	2.43	11.78	V
	9990	-49.98	-25	-24.98	-81.15	-59.49	2.69	12.21	V
Middle	3474	-55.88	-13	-42.88	-76.82	-62.17	1.60	7.89	H
	5088	-55.89	-25	-30.89	-79.96	-63.2	2.39	9.70	H
	5214	-55.65	-13	-42.65	-80.2	-62.89	2.46	9.70	H
	6954	-54.43	-13	-41.43	-81.37	-62.57	2.61	10.74	H
	7632	-53.56	-25	-28.56	-81.07	-63.05	2.39	11.88	H
	10170	-49.09	-25	-24.09	-80.96	-58.66	2.70	12.27	H
	3474	-56.46	-13	-43.46	-77.29	-62.75	1.60	7.89	V
	5088	-56.22	-25	-31.22	-80.12	-63.53	2.39	9.70	V
	5214	-55.41	-13	-42.41	-79.83	-62.65	2.46	9.70	V
	6954	-53.94	-13	-40.94	-80.9	-62.08	2.61	10.74	V
	7632	-52.96	-25	-27.96	-80.73	-62.45	2.39	11.88	V
	10170	-48.80	-25	-23.80	-80.57	-58.37	2.70	12.27	V

5G NR n41A + n66A / 100MHz+15MHz / 1RB1 QPSK+1RB1 QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	3528	-56.21	-13	-43.21	-77.17	-62.63	1.61	8.03	H
	5178	-55.99	-25	-30.99	-80.4	-63.25	2.44	9.70	H
	5292	-55.83	-13	-42.83	-80.63	-63.02	2.51	9.70	H
	7062	-54.52	-13	-41.52	-81.59	-62.87	2.57	10.92	H
	7770	-53.39	-25	-28.39	-81.18	-63.01	2.34	11.96	H
	10368	-48.87	-25	-23.87	-81.3	-58.52	2.69	12.35	H
	3528	-55.96	-13	-42.96	-76.83	-62.38	1.61	8.03	V
	5178	-56.15	-25	-31.15	-80.31	-63.41	2.44	9.70	V
	5292	-55.72	-13	-42.72	-80.42	-62.91	2.51	9.70	V
	7062	-53.96	-13	-40.96	-81.02	-62.31	2.57	10.92	V
	7770	-52.96	-25	-27.96	-81	-62.58	2.34	11.96	V
	10368	-49.18	-25	-24.18	-81.43	-58.83	2.69	12.35	V

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