

FCC RF Test Report

APPLICANT : Viavi Solutions Inc.
EQUIPMENT : 5G Sub-6 GHz M.2 Module with WCDMA and LTE
BRAND NAME : VIAVI
MODEL NAME : RM520N-GL
FCC ID : WUW-RM520NGL
STANDARD : 47 CFR Part 27 Subpart Q
CLASSIFICATION : PCS Licensed Transmitter (PCB)
TEST DATE(S) : Jul. 30, 2024

The product was installed into a host (Brand Name: VIAVI, Model Name: NXE-DEVICE-4M) during the test, only Conducted Power, EIRP and RSE test items are tested in this report.

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
FG452001Q	Rev. 01	Initial issue of report	Dec. 18, 2024

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	—	Report Only	-
-	§27.50 (k)(4)	Peak-to-Average Ratio	<13dB	PASS	1
3.5	§27.50 (k)(3)	EIRP	EIRP < 1W (30dBm)	PASS	-
-	§2.1049	Occupied Bandwidth	—	Report Only	1
-	§2.1051 §27.53 (n)(2)	Conducted Band Edge Measurement	-13dBm/MHz	PASS	1
-	§2.1051 §27.53 (n)(2)	Conducted Spurious Emission	-13dBm/MHz	PASS	1
-	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within the band	PASS	1
4.4	§2.1053 §27.53 (n)(2)	Radiated Spurious Emission	-13dBm/MHz	PASS	Under limit 47.34 dB at 13800.000 MHz

Remark 1: Test results are leveraged from module RF report No “SEWA220400008RG01”

Conformity Assessment Condition:

- 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/manufacture 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”

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

Viavi Solutions Inc.

1445 South Spectrum Boulevard, Suite 102, Chandler, Arizona 85286

1.2 Manufacturer

Viavi Solutions Inc.

1445 South Spectrum Boulevard, Suite 102, Chandler, Arizona 85286

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	5G Sub-6 GHz M.2 Module with WCDMA and LTE
Brand Name	VIAVI
Model Name	RM520N-GL
FCC ID	WUW-RM520NGL
EUT Stage	Identical Prototype

Host Product Feature	
Equipment	XEDGE 2.0
Brand Name	VIAVI
Model Name	NXE-DEVICE-4M
IMEI Code	Conducted : IMEI A: 868371051639645 IMEI B: 868371051635213 IMEI C: 868371051635338 IMEI D: 868371051639819 Radiation : IMEI A: 868371051120539 IMEI B: 868371051121032 IMEI C: 868371051143184 IMEI D: 868371051635312
Applicant	Viavi Solutions Inc. 1445 South Spectrum Boulevard, Suite 102, Chandler, Arizona 85286
Manufacturer	Viavi Solutions Inc. 1445 South Spectrum Boulevard, Suite 102, Chandler, Arizona 85286

1.4 Product Specification of Equipment Under Test

Product Feature	
Tx/Rx Frequency	LTE Band 42: 3450 MHz ~ 3550 MHz
Bandwidth	5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	< Module A> <Ant.2> LTE Band 42: 21.87 dBm LTE Band CA_42C: 21.79 dBm < Module B> <Ant.2> LTE Band 42: 21.87 dBm LTE Band CA_42C: 21.74 dBm < Module C> <Ant.2> LTE Band 42: 22.21 dBm LTE Band CA_42C: 22.12 dBm < Module D> <Ant.2> LTE Band 42: 21.91 dBm LTE Band CA_42C: 21.78 dBm
Antenna Gain	< Module A/B/C/D> <Ant.2> LTE Band 42: 5.5 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The maximum EIRP is calculated from max output power and antenna gain, only the maximum EIRP of Ant. 2 (Module C) are shown in the report.
2. The four Modules are the same include Power setting, but we still verified the real power, which is within the uncertainty range, so we chose the module of the higher power for testing, each Module has four antennas, for LTE band 42, only Ant.2 supports TX/RX function, the others are RX only.
3. For RSE testing, we choice the module of the higher conducted Power to test, because between four modules do not support MIMO mode.
4. LTE Band 42 supports HPUE Mode.

1.5 Modification of EUT

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

1.6 Maximum EIRP and Emission Designator

LTE Band 42		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	3452.5 ~ 3547.5	0.5834	-	0.4581	-
10	3455 ~ 3545	0.5754	-	0.4624	-
15	3457.5 ~ 3542.5	0.5834	-	0.4570	-
20	3460 ~ 3540	0.5902	-	0.4645	-

LTE Band 42 CA		QPSK		16QAM/64QAM/256QAM	
BW (MHz) Frequency (MHz)		Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5MHz+20MHz (3452.5 ~ 3540 MHz)		0.5675	-	0.5610	-
10MHz+20MHz (3455 ~ 3540 MHz)		0.5636	-	0.5649	-
15MHz+20MHz (3457.5 ~ 3540 MHz)		0.5728	-	0.5521	-
20MHz+5MHz (3460 ~ 3547.5 MHz)		0.5728	-	0.5534	-
20MHz+10MHz (3460 ~ 3545 MHz)		0.5741	-	0.5521	-
20MHz+15MHz (3460 ~ 3542.5 MHz)		0.5689	-	0.5649	-
20MHz+20MHz (3460 ~ 3540 MHz)		0.5781	-	0.5754	-

Note: All modulations have been tested, and only the worst test results of PSK & QAM are shown in the report.

1.7 Testing Site

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 TH01-KS	CN1257	314309

1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	TH01-KS	SPORTON	Part2224_Ver5.0 200330	5.0
2.	03CH04-KS	AUDIX	E3	210616

1.9 Applied Standards

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

- ♦ 47 CFR Part 27 Subpart Q
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 Power Meas License Digital Systems D01 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

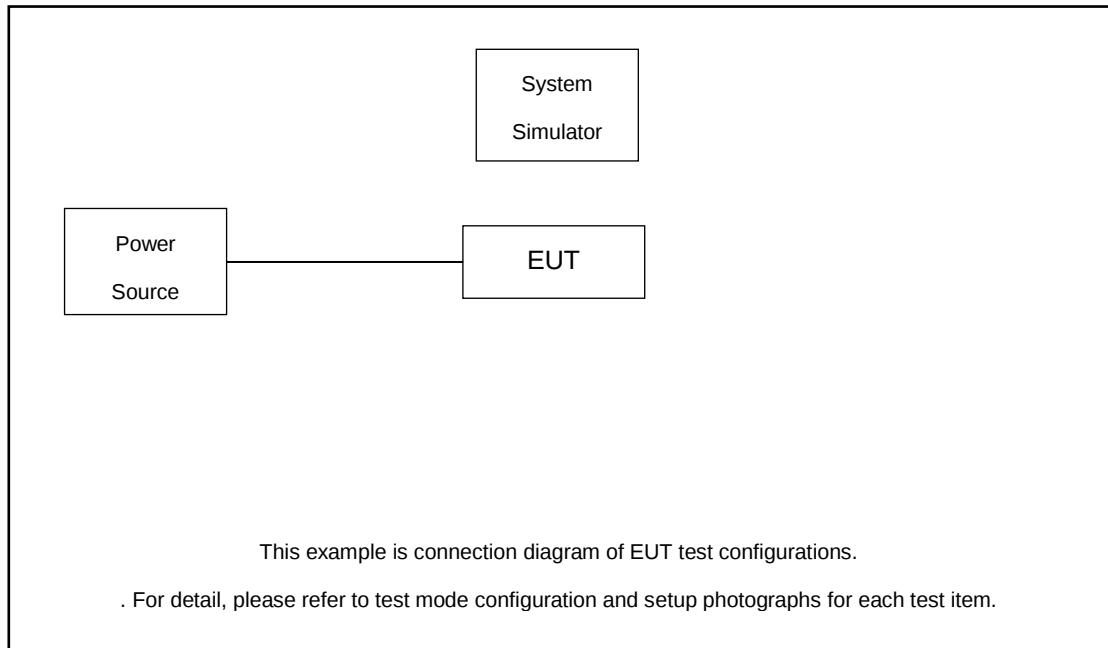
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission. (Y Plane)

Test Cases	Band	Bandwidth (MHz)	Modulation	RB #	Test Channel
		eg. 5M, 10M, 15M, 20M	eg. QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L/M/H
Max. Output Power	LTE Band 42	5M, 10M, 15M, 20M	QPSK, 16QAM, 64QAM, 256QAM	1RB, Full RB	L, M, H
E.I.R.P	LTE Band 42	5M, 10M, 15M, 20M	QPSK, 16QAM, 64QAM, 256QAM	1RB, Full RB	L, M, H
Radiated Spurious Emission	LTE Band 42	Worst case from maximum power			L, M, H
Note: 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.					

Test Items	Band	Bandwidth (MHz)										Modulation				RB #			Test Channel		
		20+20	20+15	15+20	20+10	10+20	20+5	5+20	15+15	15+10	10+15	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	42C_CA	v	v	v	v	v	v	v	-	-	-	v	v	v	v	v	v	v	v	v	v
E.I.R.P.	42C_CA	v	v	v	v	v	v	v	-	-	-	v	v	v	v	v			v	v	v
Radiated Spurious Emission	42C_CA	Worst Case																	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. 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.																				

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m

2.4 Frequency List of Low/Middle/High Channels

LTE Band 42 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	42190	42590	42990
	Frequency	3460	3500	3540
15	Channel	42165	42590	43015
	Frequency	3457.5	3500	3542.5
10	Channel	42140	42590	43040
	Frequency	3455	3500	3545
5	Channel	42115	42590	43065
	Frequency	3452.5	3500	3547.5

LTE Band 42C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	41690	42491	43292
		Frequency	3410	3490.1	3570.2
	SCC	Channel	41888	42689	43490
		Frequency	3429.8	3509.9	3590
20 + 15	PCC	Channel	41690	42516	43341
		Frequency	3410	3492.6	3575.1
	SCC	Channel	41861	42687	43512
		Frequency	3427.1	3509.7	3592.2
15 + 20	PCC	Channel	41668	42493	43319
		Frequency	3407.8	3490.3	3572.9
	SCC	Channel	41839	42664	43490
		Frequency	3424.9	3507.4	3590
20 + 10	PCC	Channel	41690	42541	43391
		Frequency	3410	3495.1	3580.1
	SCC	Channel	41834	42685	43535
		Frequency	3424.4	3509.5	3594.5
10 + 20	PCC	Channel	41645	42496	43346
		Frequency	3405.5	3490.6	3575.6
	SCC	Channel	41789	42640	43490
		Frequency	3419.9	3505	3590
20 + 5	PCC	Channel	41690	42565	43440
		Frequency	3410	3497.5	3585
	SCC	Channel	41807	42682	43557
		Frequency	3421.7	3509.2	3596.7
5 + 20	PCC	Channel	41623	42498	43373
		Frequency	3403.3	3490.8	3578.3
	SCC	Channel	41740	42615	43490
		Frequency	3415	3502.5	3590

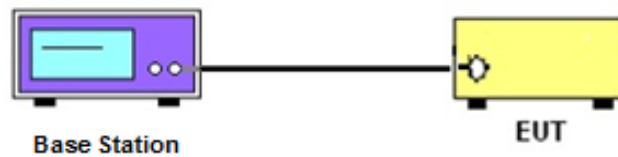
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.2 Test Setup

3.2.1 Conducted Output Power



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power Measurement

3.4.1 Description of the Conducted Output Power Measurement

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

3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

3.5 EIRP

3.5.1 Description of EIRP Limit

§ 27.50 (k)(3)

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

3.5.2 Test Procedures

1. According to KDB 412172 D01 Power Approach,
2. $EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, 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

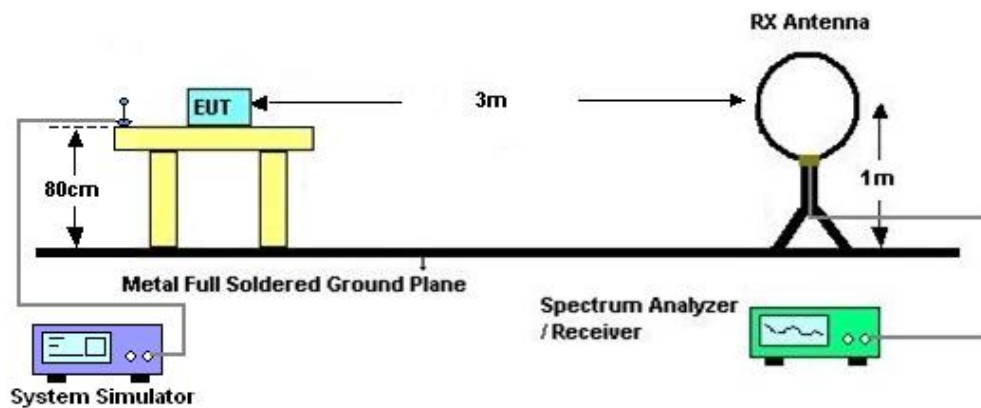
4 Radiated Test Items

4.1 Measuring Instruments

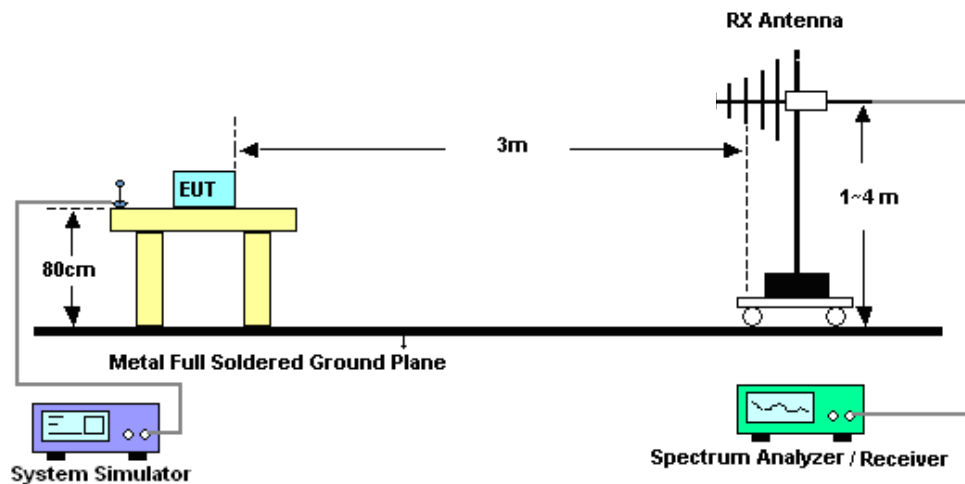
See list of measuring instruments of this test report.

4.2 Test Setup

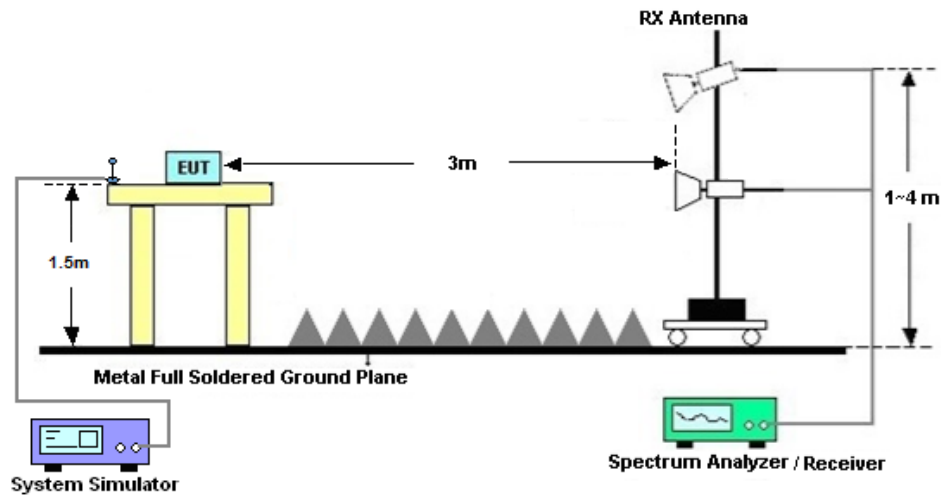
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 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 B.

4.4 Radiated Spurious Emission Measurement

4.4.1 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 shall not exceed -13 dBm/MHz.

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

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
1. 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.
2. The EUT was set 3 meters from the receiving antenna 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 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
5. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the 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.
$$\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$$
$$\text{ERP (dBm)} = \text{EIRP} - 2.15$$
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 11, 2023	Jul. 30, 2024	Oct. 10, 2024	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Jul. 30, 2024	NCR	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471079	10Hz~44G,MAX 30dB	Oct. 11, 2023	Jul. 30, 2024~ Nov. 29, 2024	Oct. 10, 2024	Radiation (03CH04-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471079	10Hz~44G,MAX 30dB	Oct. 10, 2024		Oct. 09, 2025	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 09, 2023	Jul. 30, 2024~ Nov. 29, 2024	Sep. 08, 2024	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024		Sep. 07, 2025	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz~1GHz	Dec. 06, 2023	Jul. 30, 2024~ Nov. 29, 2024	Dec. 05, 2024	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 23, 2023	Jul. 30, 2024~ Nov. 29, 2024	Oct. 22, 2024	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 22, 2024		Oct. 21, 2025	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 27, 2024	Jul. 30, 2024~ Nov. 29, 2024	Jan. 26, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	413740	9KHz~1GHz	Jan. 03, 2024	Jul. 30, 2024~ Nov. 29, 2024	Jan. 02, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM18G40G A	060728	18~40GHz	Jan. 02, 2024	Jul. 30, 2024~ Nov. 29, 2024	Jan. 01, 2025	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18G A	060840	1Ghz~18Ghz	Oct. 11, 2023	Jul. 30, 2024~ Nov. 29, 2024	Oct. 10, 2024	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18G A	060840	1Ghz~18Ghz	Oct. 10, 2024		Oct. 09, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM01G18G A	060892	1Ghz~18Ghz	Oct. 11, 2023	Jul. 30, 2024~ Nov. 29, 2024	Oct. 10, 2024	Radiation (03CH04-KS)
Amplifier	EM	EM01G18G A	060892	1Ghz~18Ghz	Oct. 10, 2024		Oct. 09, 2025	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jul. 30, 2024~ Nov. 29, 2024	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jul. 30, 2024~ Nov. 29, 2024	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jul. 30, 2024~ Nov. 29, 2024	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required

6 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 Conducted Measurement

Conducted Power	± 0.50 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	2.83 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	2.83 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	2.82 dB
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----- THE END -----

Appendix A. Test Results of Conducted Test

Test Engineer :	Simle Wang	Temperature :	24~26°C
		Relative Humidity :	50~53%

Conducted Output Power(Average power) and EIRP

LTE_B42_Ant.2(Module C):

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				42190	42590	42990	L M H		
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	22.21	22.13	22.11	0.5902	0.5794	0.5768
20	QPSK	1	99	22.15	22.05	22.03	0.5821	0.5689	0.5662
20	QPSK	100	0	22.16	22.03	22.03	0.5834	0.5662	0.5662
20	16QAM	1	0	22.17	22.08	22.01	0.5848	0.5728	0.5636
20	64QAM	1	0	22.07	22.01	21.99	0.5715	0.5636	0.5610
20	256QAM	1	0	20.21	20.15	20.08	0.3724	0.3673	0.3614
Channel				42165	42590	43015	L M H		
Frequency (MHz)				3457.5	3500	3542.5			
15	QPSK	1	0	22.14	22.09	22.04	0.5808	0.5741	0.5675
15	16QAM	1	0	22.13	21.95	21.91	0.5794	0.5559	0.5508
Channel				42140	42590	43040	L M H		
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	22.20	22.12	22.02	0.5888	0.5781	0.5649
10	16QAM	1	0	22.07	22.05	21.90	0.5715	0.5689	0.5495
Channel				42115	42590	43065	L M H		
Frequency (MHz)				3452.5	3500	3547.5			
5	QPSK	1	0	22.19	22.11	21.99	0.5875	0.5768	0.5610
5	16QAM	1	0	22.10	22.05	21.94	0.5754	0.5689	0.5546

LTE_B42C_Ant.2(Module C):

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.12	0.5781
M	QPSK	1	Max	1	0	22.09	0.5741
H	QPSK	1	Max	1	0	21.96	0.5572
L	16QAM	1	Max	1	0	22.10	0.5754
M	16QAM	1	Max	1	0	21.97	0.5585
H	16QAM	1	Max	1	0	21.90	0.5495
L	64QAM	1	Max	1	0	21.58	0.5105
M	64QAM	1	Max	1	0	21.51	0.5023
H	64QAM	1	Max	1	0	21.39	0.4887
L	256QAM	1	Max	1	0	18.68	0.2618
M	256QAM	1	Max	1	0	18.52	0.2523
H	256QAM	1	Max	1	0	18.44	0.2477
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.05	0.5689
L	16QAM	1	Max	1	0	22.02	0.5649
Combination 15MHz+20MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.08	0.5728
L	16QAM	1	Max	1	0	21.92	0.5521
Combination 20MHz+10MHz (100RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.09	0.5741
L	16QAM	1	Max	1	0	21.92	0.5521
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.01	0.5636
L	16QAM	1	Max	1	0	22.02	0.5649
Combination 20MHz+5MHz (100RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.08	0.5728
L	16QAM	1	Max	1	0	21.93	0.5534
Combination 5MHz+20MHz (25RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.04	0.5675
L	16QAM	1	Max	1	0	21.99	0.5610

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

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

LTE Band 42 / 20MHz / QPSK / Ant. 2								
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)
Lowest	6900	-63.33	-13	-50.33	-73.54	3.03	13.24	H
	10356	-62.47	-13	-49.47	-71.92	3.56	13.01	H
	13800	-60.34	-13	-47.34	-69.86	3.92	13.44	H
	6900	-63.91	-13	-50.91	-74.12	3.03	13.24	V
	10356	-63.54	-13	-50.54	-72.99	3.56	13.01	V
	13800	-61.18	-13	-48.18	-70.70	3.92	13.44	V
Middle	6984	-62.84	-13	-49.84	-73.05	3.03	13.24	H
	10476	-60.39	-13	-47.39	-69.84	3.56	13.01	H
	13968	-60.74	-13	-47.74	-70.26	3.92	13.44	H
	6984	-62.95	-13	-49.95	-73.16	3.03	13.24	V
	10476	-61.12	-13	-48.12	-70.57	3.56	13.01	V
	13968	-60.88	-13	-47.88	-70.40	3.92	13.44	V
Highest	7068	-64.58	-13	-51.58	-74.79	3.03	13.24	H
	10596	-62.47	-13	-49.47	-71.92	3.56	13.01	H
	14124	-62.82	-13	-49.82	-72.34	3.92	13.44	H
	7068	-64.54	-13	-51.54	-74.75	3.03	13.24	V
	10596	-62.82	-13	-49.82	-72.27	3.56	13.01	V
	14124	-62.53	-13	-49.53	-72.05	3.92	13.44	V

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

LTE Band 42C / 20MHz + 20MHz / QPSK / Ant. 2								
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)
Lowest	6804	-62.89	-13	-49.89	-73.10	3.03	13.24	H
	10200	-60.05	-13	-47.05	-69.50	3.56	13.01	H
	13608	-59.40	-13	-46.40	-68.92	3.92	13.44	H
	6804	-62.91	-13	-49.91	-73.12	3.03	13.24	V
	10200	-60.61	-13	-47.61	-70.06	3.56	13.01	V
	13608	-59.31	-13	-46.31	-68.83	3.92	13.44	V
	6840	-62.76	-13	-49.76	-72.97	3.03	13.24	H
	10260	-60.45	-13	-47.45	-69.90	3.56	13.01	H
	13680	-59.11	-13	-46.11	-68.63	3.92	13.44	H
	6840	-62.61	-13	-49.61	-72.82	3.03	13.24	V
	10260	-60.49	-13	-47.49	-69.94	3.56	13.01	V
	13680	-58.73	-13	-45.73	-68.25	3.92	13.44	V
Middle	6960	-62.20	-13	-49.20	-72.41	3.03	13.24	H
	10440	-60.10	-13	-47.10	-69.55	3.56	13.01	H
	13920	-59.66	-13	-46.66	-69.18	3.92	13.44	H
	6960	-62.18	-13	-49.18	-72.39	3.03	13.24	V
	10440	-60.81	-13	-47.81	-70.26	3.56	13.01	V
	13920	-59.63	-13	-46.63	-69.15	3.92	13.44	V
	6996	-61.67	-13	-48.67	-71.88	3.03	13.24	H
	10500	-60.68	-13	-47.68	-70.13	3.56	13.01	H
	14004	-55.36	-13	-42.36	-64.88	3.92	13.44	H
	6996	-62.06	-13	-49.06	-72.27	3.03	13.24	V
	10500	-61.48	-13	-48.48	-70.93	3.56	13.01	V
	14004	-54.48	-13	-41.48	-64.00	3.92	13.44	V
Highest	7128	-62.28	-13	-49.28	-72.49	3.03	13.24	H
	10680	-60.83	-13	-47.83	-70.28	3.56	13.01	H
	14244	-59.71	-13	-46.71	-69.23	3.92	13.44	H
	6960	-66.40	-13	-53.40	-76.61	3.03	13.24	V
	10440	-63.07	-13	-50.07	-72.52	3.56	13.01	V
	13920	-63.06	-13	-50.06	-72.58	3.92	13.44	V
	7164	-61.79	-13	-48.79	-72.00	3.03	13.24	H
	10740	-60.55	-13	-47.55	-70.00	3.56	13.01	H
	14328	-59.45	-13	-46.45	-68.97	3.92	13.44	H
	7164	-62.03	-13	-49.03	-72.24	3.03	13.24	V
	10740	-60.73	-13	-47.73	-70.18	3.56	13.01	V
	14328	-59.84	-13	-46.84	-69.36	3.92	13.44	V

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