



FCC RADIO TEST REPORT

FCC ID : LHJ-FE4NA0210
Equipment : FE4NA0210
Brand Name : Continental
Model Name : FE4NA0210
Applicant : Continental Automotive Systems, Inc.
21440 W Lake Cook Rd.
Manufacturer : Continental Automotive Systems, Inc.
21440 W Lake Cook Rd.
Standard : FCC 47 CFR Part 2, 22(H), 24(E), 27(L)

The product was received on Nov. 30, 2021 and testing was performed from Jan. 20, 2022 to Jan. 28, 2022. 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 variant report apply exclusively to the tested model / sample. Without written approval from 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.)



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	6
1.1 Product Feature of Equipment Under Test	6
1.2 Product Specification of Equipment Under Test	6
1.3 Modification of EUT	7
1.4 Testing Location	7
1.5 Applicable Standards	8
2 Test Configuration of Equipment Under Test	9
2.1 Test Mode.....	9
2.2 Connection Diagram of Test System	9
2.3 Support Unit used in test configuration	10
2.4 Frequency List of Low/Middle/High Channels.....	10
3 Conducted Test Result	11
3.1 Measuring Instruments.....	11
3.2 Conducted Output Power and ERP/EIRP	12
4 Radiated Test Items	13
4.1 Measuring Instruments.....	13
4.2 Test Setup	13
4.3 Test Result of Radiated Test.....	14
4.4 Field Strength of Spurious Radiation Measurement	15
5 List of Measuring Equipment.....	16
6 Uncertainty of Evaluation	17
Appendix A. Test Results of Conducted Test	
Appendix B. Test Results of Radiated Test	
Appendix C. Test Setup Photographs	



History of this test report

Report No.	Version	Description	Issue Date
FG1N3040-01A	01	Initial issue of report	Feb. 10, 2022
FG1N3040-01A	02	Revise Support Unit used in test configuration	Feb. 16, 2022



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Pass	-
	§22.913 (a)(5)	Effective Radiated Power (WCDMA Band V)		
	§24.232 (c)	Equivalent Isotropic Radiated Power (WCDMA Band II)		
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power (WCDMA Band IV)		
-	§24.232 (d)	Peak-to-Average Ratio	Not Required	-
-	§2.1049 §22.917 (b) §24.238 (b) §27.53 (g)	Occupied Bandwidth (WCDMA Band V) (WCDMA Band II) (WCDMA Band IV)	Not Required	-
-	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Band Edge Measurement (WCDMA Band V) (WCDMA Band II) (WCDMA Band IV)	Not Required	-
-	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Conducted Emission (WCDMA Band V) (WCDMA Band II) (WCDMA Band IV)	Not Required	-
-	§2.1055 §22.355 §24.235 §27.54	Frequency Stability Temperature & Voltage	Not Required	-
4.4	§2.1053 §22.917 (a) §24.238 (a) §27.53 (h)	Field Strength of Spurious Radiation (WCDMA Band V) (WCDMA Band II) (WCDMA Band IV)	Pass	26.98 dB under the limit at 2504.000 MHz

Remark:

1. Not required means after assessing, test items are not necessary to carry out.
2. This is a variant report by adding external antenna information. All the test cases were performed on original report which can be referred to Sporton Report Number FG1N3040A. Based on the original report, the test cases were verified.



Declaration of Conformity:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to this report "Uncertainty of Evaluation".
Comments and Explanations:
The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Yun Huang

Report Producer: Celery Wei



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	FE4NA0210
Brand Name	Continental
Model Name	FE4NA0210
FCC ID	LHJ-FE4NA0210
Integrated the Host	Equipment: G12N410G1, G12N410M1 Brand Name: Continental Model Name: G12N410G1, G12N410M1
EUT supports Radios application	WCDMA/HSPA/LTE/GNSS
HW Version	P4
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer.

Antenna Information				
External Antenna	Brand Name	Amphenol	Peak gain(dBi)	Cellular Band: 3.2 PCS Band: 8.1 AWS Band: 5.8
	Model Name	85563011	Type	external sharkfin Antenna

1.2 Product Specification of Equipment Under Test

Product Specification is subject to this standard	
Tx Frequency	WCDMA: Band V: 826.4 MHz ~ 846.6 MHz Band II: 1852.4 MHz ~ 1907.6 MHz Band IV: 1712.4 MHz ~ 1752.6 MHz
Rx Frequency	WCDMA: Band V: 871.4 MHz ~ 891.6 MHz Band II: 1932.4 MHz ~ 1987.6 MHz Band IV: 2112.4 MHz ~ 2152.6 MHz
Maximum Output Power to Antenna	WCDMA: Band V: 22.73 dBm Band II: 22.67 dBm Band IV: 22.50 dBm
Type of Modulation	WCDMA: BPSK (Uplink) HSDPA: 64QAM (Downlink) HSUPA: QPSK (Uplink)

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



1.3 Modification of EUT

No modifications made to the EUT during the testing.

1.4 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. 03CH07-HY
Test Engineer	Ken Wu and Jesse wang
Temperature (°C)	18.4~20.7
Relative Humidity (%)	61.3~67.4

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

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No. TH05-HY (TAF Code: 3786)
Test Engineer	Hao En Zhang
Temperature (°C)	21.8~23.7
Relative Humidity (%)	45.3~51.2
Remark	The Conducted test item subcontracted to Sporton International Inc. Wensan Laboratory

FCC Designation No.: TW1190 and TW3786



1.5 Applicable Standards

According to the specifications declared by 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, 22(H), 24(E), 27(L)
- ♦ 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 the test items were validated and recorded in accordance with the standards without any modification during the testing.
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 were performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

Radiated emissions were investigated as following frequency range:

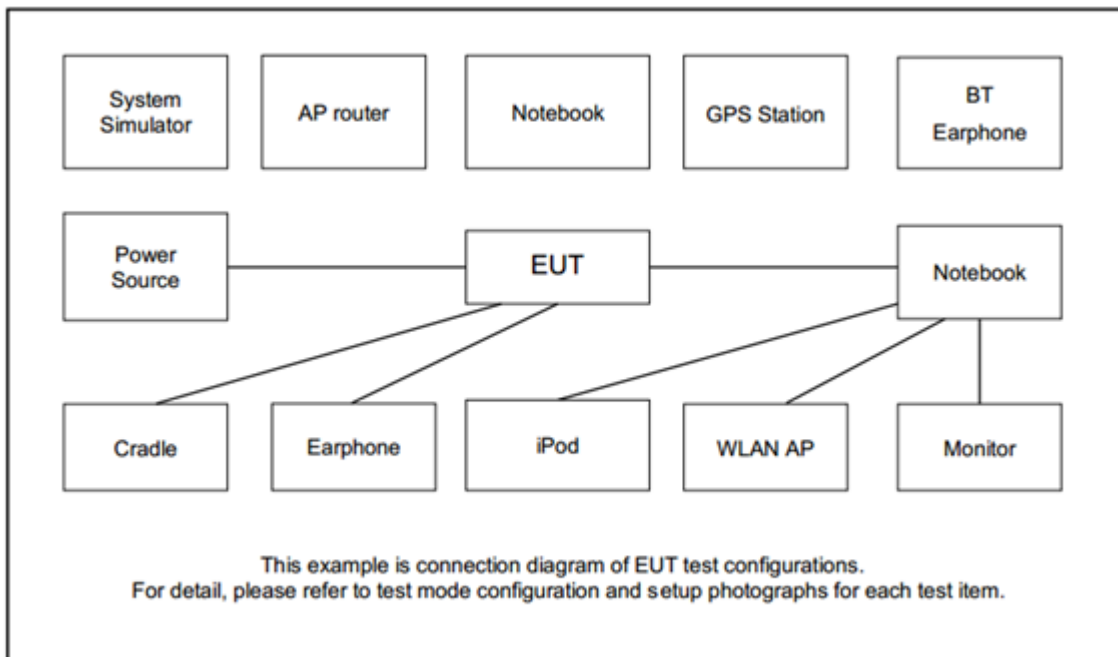
1. 30 MHz to 9000 MHz for WCDMA Band V
2. 30 MHz to 18000 MHz for WCDMA Band IV
3. 30 MHz to 19100 MHz for WCDMA Band II

All modes, data rates and positions were investigated.

Test modes are chosen to be reported as the worst case configuration below:

Test Modes		
Band	Radiated TCs	Conducted TCs
WCDMA Band V	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
WCDMA Band II	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
WCDMA Band IV	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link

2.2 Connection Diagram of Test System





2.3 Support Unit used in test configuration

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Sharkfin antenna	Amphenol	85563011	N/A	N/A	N/A
2.	Teddy Jr Load Box	Continental	N/A	N/A	N/A	N/A
3.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
4.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
5.	DC Power Supply	Topward	3303D	N/A	N/A	N/A

2.4 Frequency List of Low/Middle/High Channels

Frequency List				
Band	Channel/Frequency(MHz)	Lowest	Middle	Highest
WCDMA Band V	Channel	4132	4182	4233
	Frequency	826.4	836.4	846.6
WCDMA Band II	Channel	9262	9400	9538
	Frequency	1852.4	1880.0	1907.6
WCDMA Band IV	Channel	1312	1413	1513
	Frequency	1712.4	1732.6	1752.6

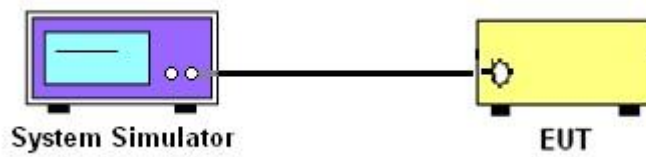
3 Conducted Test Result

3.1 Measuring Instruments

Please refer to the measuring equipment list in 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 and ERP/EIRP

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

The ERP of mobile transmitters must not exceed 7 Watts for WCDMA Band V

The EIRP of mobile transmitters must not exceed 2 Watts for WCDMA Band II

The EIRP of mobile transmitters must not exceed 1 Watts for WCDMA Band IV

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 is connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select the lowest, middle, and the highest channels for each band and different modulation.
4. Measure the maximum burst average power for GSM and maximum average power for other modulation signal.

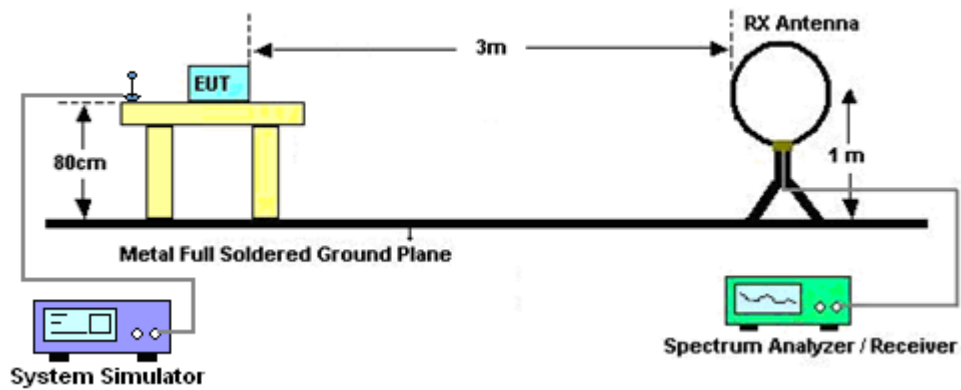
4 Radiated Test Items

4.1 Measuring Instruments

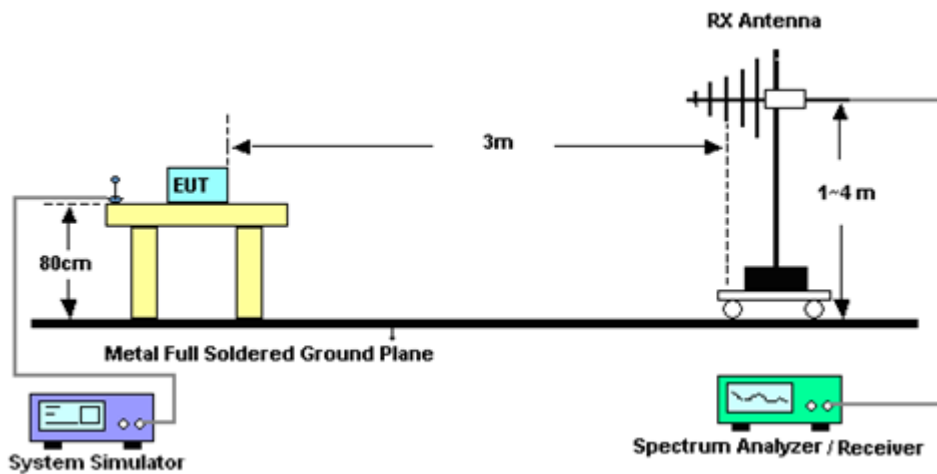
Please refer to the measuring equipment list in this test report.

4.2 Test Setup

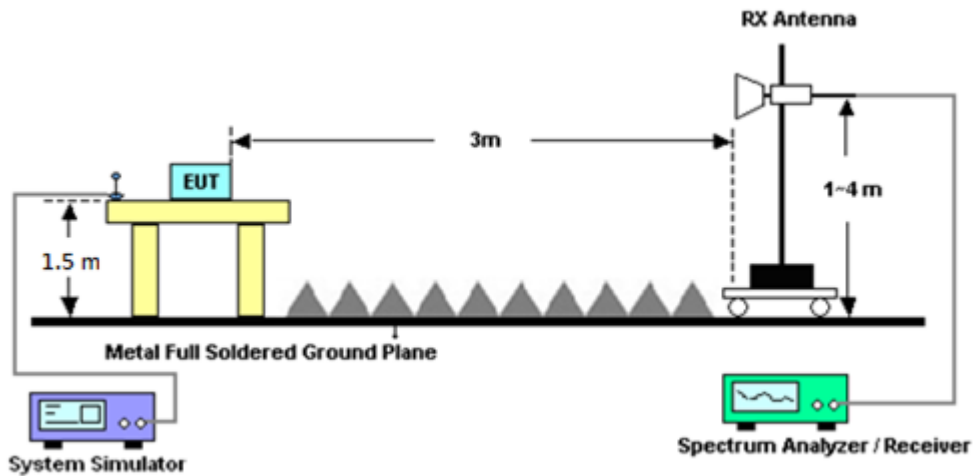
For radiated test below 30MHz



For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

Note:

The low frequency, which starts from 9 kHz to 30 MHz, is pre-scanned and the result which is 20 dB lower than the limit line is 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.



4.4 Field Strength of Spurious Radiation Measurement

4.4.1 Description of Field Strength of Spurious Radiated Measurement

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

4.4.2 Test Procedures

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

1. The EUT is placed on a rotatable wooden table 1.5 meter for frequency above 1 GHz above the ground.
2. The EUT is set 3 meters away from the receiving antenna, which is mounted on the antenna tower.
3. The table is 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 for the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1 MHz, VBW = 3 MHz, taking record of maximum spurious emission.
6. A horn antenna is substituted in place of the EUT and is driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Take the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. $EIRP (dBm) = S.G. Power - Tx Cable Loss + Tx Antenna Gain$
11. $ERP (dBm) = EIRP - 2.15$
12. The RF fundamental frequency shall be excluded against the limit line in the operating frequency band.
13. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)



5 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 28, 2021	Jan. 21, 2022~ Jan. 28, 2022	Apr. 27, 2022	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 03, 2021	Jan. 21, 2022~ Jan. 28, 2022	Dec. 02, 2022	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-00101 800-30-10P	1590075	1GHz~18GHz	Apr. 22, 2021	Jan. 21, 2022~ Jan. 28, 2022	Apr. 21, 2022	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 04, 2021	Jan. 21, 2022~ Jan. 28, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 04, 2021	Jan. 21, 2022~ Jan. 28, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 23, 2021	Jan. 21, 2022~ Jan. 28, 2022	Jul. 22, 2022	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jul. 22, 2021	Jan. 21, 2022~ Jan. 28, 2022	Jul. 21, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682-4	30MHz to 18GHz	Feb. 24, 2021	Jan. 21, 2022~ Jan. 28, 2022	Feb. 23, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971-4	9kHz to 18GHz	Feb. 24, 2021	Jan. 21, 2022~ Jan. 28, 2022	Feb. 23, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655-4	9kHz to 18GHz	Feb. 24, 2021	Jan. 21, 2022~ Jan. 28, 2022	Feb. 23, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2,801 606/2	18GHz~40GHz	Feb. 24, 2021	Jan. 21, 2022~ Jan. 28, 2022	Feb. 23, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 17, 2021	Jan. 21, 2022~ Jan. 28, 2022	Sep. 16, 2022	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Jan. 21, 2022~ Jan. 28, 2022	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Jan. 21, 2022~ Jan. 28, 2022	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Jan. 21, 2022~ Jan. 28, 2022	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Jan. 21, 2022~ Jan. 28, 2022	N/A	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Jan. 21, 2022~ Jan. 28, 2022	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Mar. 09, 2021	Jan. 21, 2022~ Jan. 28, 2022	Mar. 08, 2022	Radiation (03CH07-HY)
Horn Antenna	EMCO	3117	00066584	1GHz~18GHz	Oct. 25, 2021	Jan. 21, 2022~ Jan. 28, 2022	Oct. 24, 2022	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 30, 2021	Jan. 21, 2022~ Jan. 28, 2022	Nov. 29, 2022	Radiation (03CH07-HY)
Signal Generator	Anritsu	MG3710A	6261943042	2G / 3G / LTE / 5G FR1	May 10, 2021	Jan. 21, 2022~ Jan. 28, 2022	May 09, 2022	Radiation (03CH07-HY)
Radio Communication Analyzer	Anritsu	MT8821C	6261849015	LTE	Oct. 06, 2021	Jan. 20, 2022	Oct. 05, 2022	Conducted (TH05-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) & ERP / EIRP

WCDMA Band V Maximum Average Power [dBm] (GT - LC = 3.2 dB)					
Channel	4132	4182	4233	ERP (dBm)	ERP (W)
Frequency	826.4	836.4	846.6		
RMC 12.2K	22.73	22.72	22.63	23.78	0.2388
HSDPA Subtest-1	22.14	22.24	22.14		
HSDPA Subtest-2	22.11	22.21	22.02		
HSDPA Subtest-3	21.75	21.74	21.54		
HSDPA Subtest-4	21.63	21.65	21.65		
HSUPA Subtest-1	22.15	22.13	21.91		
HSUPA Subtest-2	20.10	20.22	19.99		
HSUPA Subtest-3	21.14	21.21	21.08		
HSUPA Subtest-4	20.25	20.16	20.12		
HSUPA Subtest-5	22.25	22.21	22.06		
Limit	ERP < 7W				

WCDMA Band II Maximum Average Power [dBm] (GT - LC = 8.1 dB)					
Channel	9262	9400	9538	EIRP (dBm)	EIRP (W)
Frequency	1852.4	1880	1907.6		
RMC 12.2K	22.44	22.61	22.67	30.77	1.1940
HSDPA Subtest-1	21.71	22.00	21.98		
HSDPA Subtest-2	21.69	21.78	22.00		
HSDPA Subtest-3	21.28	21.39	21.40		
HSDPA Subtest-4	21.14	21.29	21.53		
HSUPA Subtest-1	21.63	21.90	21.92		
HSUPA Subtest-2	19.64	19.78	20.04		
HSUPA Subtest-3	20.68	20.85	21.20		
HSUPA Subtest-4	19.59	19.93	20.13		
HSUPA Subtest-5	21.90	22.00	21.87		
Limit	EIRP < 2W				

WCDMA Band IV Maximum Average Power [dBm] (GT - LC = 5.8 dB)					
Channel	1312	1413	1513	EIRP (dBm)	EIRP (W)
Frequency	1712.4	1732.6	1752.6		
RMC 12.2K	22.29	22.50	22.40	28.30	0.6761
HSDPA Subtest-1	21.60	21.81	21.77		
HSDPA Subtest-2	21.54	21.93	21.91		
HSDPA Subtest-3	21.17	21.39	21.26		
HSDPA Subtest-4	21.22	21.46	21.45		
HSUPA Subtest-1	21.57	21.90	21.59		
HSUPA Subtest-2	19.65	19.94	19.45		
HSUPA Subtest-3	20.81	20.94	20.90		
HSUPA Subtest-4	19.68	19.91	19.52		
HSUPA Subtest-5	21.70	21.94	21.39		
Limit	EIRP < 1W				



Appendix B. Test Results of Radiated Test

<External Antenna>

WCDMA 850

WCDMA 850									
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	1672	-53.44	-13	-40.44	-65.67	-55.12	0.99	4.82	H
	2504	-41.29	-13	-28.29	-58.46	-43.25	1.29	5.40	H
	3344	-59.17	-13	-46.17	-78.65	-62.78	1.56	7.31	H
									H
									H
	1672	-44.78	-13	-31.78	-57.44	-46.46	0.99	4.82	V
	2504	-39.98	-13	-26.98	-57.64	-41.94	1.29	5.40	V
	3344	-58.65	-13	-45.65	-78.47	-62.26	1.56	7.31	V
									V
									V
Highest	1696	-63.38	-13	-50.38	-75.74	-64.98	1.00	4.75	H
	2540	-59.52	-13	-46.52	-76.78	-61.5	1.30	5.43	H
	3386	-58.47	-13	-45.47	-78.23	-62.25	1.57	7.50	H
									H
									H
	1696	-55.71	-13	-42.71	-68.51	-57.31	1.00	4.75	V
	2540	-57.06	-13	-44.06	-74.82	-59.04	1.30	5.43	V
	3386	-58.23	-13	-45.23	-78.12	-62.01	1.57	7.50	V
									V
									V

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



WCDMA 1700

WCDMA 1700									
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)
Middle	3462	-55.62	-13	-42.62	-76.43	-61.86	1.59	7.83	H
	5196	-57.14	-13	-44.14	-81.19	-64.39	2.45	9.70	H
	6930	-55.15	-13	-42.15	-81.94	-63.25	2.61	10.72	H
									H
									H
	3462	-54.98	-13	-41.98	-75.66	-61.22	1.59	7.83	V
	5196	-51.81	-13	-38.81	-75.84	-59.06	2.45	9.70	V
	6930	-55.13	-13	-42.13	-82.03	-63.23	2.61	10.72	V
									V
									V
Highest	3505	-57.16	-13	-44.16	-78.08	-63.56	1.61	8.01	H
	5256	-52.77	-13	-39.77	-77.13	-59.99	2.48	9.70	H
	7010	-55.60	-13	-42.60	-82.31	-63.83	2.59	10.82	H
									H
									H
	3505	-57.35	-13	-44.35	-78.12	-63.75	1.61	8.01	V
	5256	-54.42	-13	-41.42	-78.66	-61.64	2.48	9.70	V
	7010	-55.49	-13	-42.49	-82.26	-63.72	2.59	10.82	V
									V
									V

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



WCDMA 1900

WCDMA 1900									
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)
Middle	3762	-52.99	-13	-39.99	-73.74	-59.62	1.69	8.31	H
	5634	-48.32	-13	-35.32	-73.85	-55.37	2.70	9.75	H
	7518	-54.22	-13	-41.22	-81.31	-63.61	2.42	11.81	H
									H
									H
	3762	-47.48	-13	-34.48	-68.27	-54.11	1.69	8.31	V
	5634	-41.69	-13	-28.69	-67.31	-48.74	2.70	9.75	V
	7518	-53.94	-13	-40.94	-81.42	-63.33	2.42	11.81	V
									V
									V
Highest	3816	-58.56	-13	-45.56	-79.27	-65.24	1.70	8.38	H
	5721	-55.09	-13	-42.09	-80.76	-62.13	2.75	9.79	H
	7628	-54.02	-13	-41.02	-81.51	-63.51	2.39	11.88	H
									H
									H
	3816	-58.55	-13	-45.55	-79.33	-65.23	1.70	8.38	V
	5721	-55.37	-13	-42.37	-81.03	-62.41	2.75	9.79	V
	7628	-53.50	-13	-40.50	-81.25	-62.99	2.39	11.88	V
									V
									V

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