FCC RADIO TEST REPORT

FCC ID	**:**	**A4RG025I**
Equipment	**:**	**Phone**
Model Name	**:**	**G025I, G025H**
Applicant	**:**	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, California, 94043 USA**
Standard	**:**	**FCC 47 CFR Part 2, 22(H), 24(E), 27(L)**

The product was received on May 13, 2020 and testing was started from May 25, 2020 and completed on Jul. 01, 2020. 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 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, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FG022521-04A	01	Initial issue of report	Jul. 09, 2020
FG022521-04A	02	Revising summary typo.	Jul. 20, 2020
FG022521-04A	03	Revising the remark description in summary.	Jul. 23, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1.4	§2.1046	Conducted Output Power	Pass	-
	§22.913 (a)(2)	Effective Radiated Power (GSM850) (WCDMA Band V)		
	§24.232 (c)	Equivalent Isotropic Radiated Power (GSM1900) (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 (GSM850) (WCDMA Band V) (GSM1900) (WCDMA Band II) (WCDMA Band IV)	Not Required	-
-	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Band Edge Measurement (GSM850) (WCDMA Band V) (GSM1900) (WCDMA Band II) (WCDMA Band IV)	Not Required	-
-	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Conducted Emission (GSM850) (WCDMA Band V) (GSM1900) (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 (GSM850) (WCDMA Band V) (GSM1900) (WCDMA Band II) (WCDMA Band IV)	Pass	Under limit 31.50 dB at 3760.000 MHz for Primary Antenna Under limit 23.36 dB at 2512.000 MHz for ASDIV Antenna

Remark:
1. Not required means after assessing, test items are not necessary to carry out.
2. This is a variant report which can be referred Product Equality Declaration. After spot-checking the tests, the parent test results were worse than variant test results, thus this test report was reuse parent test data, all the test cases were performed on original report which can be referred to Sporton Report Number FG022521-02A

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: Wii Chang

Report Producer: Tina Chuang

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Phone
Model Name	G025I, G025H
FCC ID	A4RG025I
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE/5G NR/ NFC/GNSS WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE

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

EUT Information List	
S/N	Performed Test Item
04271FQCB00019	Conducted Measurement ERP/EIRP
04241FQCB00338	Radiated Spurious Emission

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	**GSM/GPRS/EDGE:** 850: 824.2 MHz ~ 848.8 MHz 1900: 1850.2 MHz ~ 1909.8 MHz **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	**GSM/GPRS/EDGE:** 850: 869.2 MHz ~ 893.8 MHz 1900: 1930.2 MHz ~ 1989.8 MHz **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

Standards-related Product Specification	
Maximum Output Power to Antenna	**<Primary Antenna>** **GSM/GPRS/EDGE:** 850: 32.28 dBm 1900: 29.44 dBm **WCDMA:** Band V: 24.08 dBm Band II: 24.43 dBm Band IV: 24.06 dBm **<ASDIV Antenna>** **GSM/GPRS/EDGE:** 850: 32.45 dBm 1900: 29.20 dBm **WCDMA:** Band V: 23.74 dBm Band II: 24.45 dBm Band IV: 24.23 dBm
Antenna Type	**<Primary Antenna>:** **<Ant. 0>:** PIFA Antenna type **<Ant. 2>:** Monopole Antenna type **<ASDIV Antenna>:** **<Ant. 0>:** PIFA Antenna type **<Ant. 1>:** PIFA Antenna type
Type of Modulation	GSM / GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA: QPSK (Uplink) HSDPA: 64QAM (Downlink) HSUPA: QPSK (Uplink)

<Primary Antenna>

Radio Tech	Band Number	Antenna name	Gain
GSM	850	Ant 0	-2.8
GSM	1900	Ant 2	2.2
WCDMA	B2	Ant 2	2.2
WCDMA	B4	Ant 2	1.2
WCDMA	B5	Ant 0	-2.8

<ASDIV Antenna>

Radio Tech	Band Number	Antenna name	Gain
GSM	850	Ant 1	-3.5
GSM	1900	Ant 0	0.4
WCDMA	B2	Ant 0	0.4
WCDMA	B4	Ant 0	0.8
WCDMA	B5	Ant 1	-3.5

1.3 Modification of EUT

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

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, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	TH03-HY
Test Engineer	Louis Chung
Temperature	21~24℃
Relative Humidity	51~55%

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

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH12-HY
Test Engineer	Jack Cheng , Lance Chiang and ,Chuan Chu
Temperature	20~26℃
Relative Humidity	52~66%

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

FCC Designation No.: TW1190 and TW0007

1.5 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, 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 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 were performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Primary Antenna: Z Plane for PCS Band; ASDIV Antenna: X Plane for Cellular Band) were recorded in this report.

Radiated emissions were investigated as following frequency range:

1. 30 MHz to 9000 MHz for GSM850 and WCDMA Band V
2. 30 MHz to 18000 MHz for WCDMA Band IV
3. 30 MHz to 19100 MHz for GSM1900 and WCDMA Band II

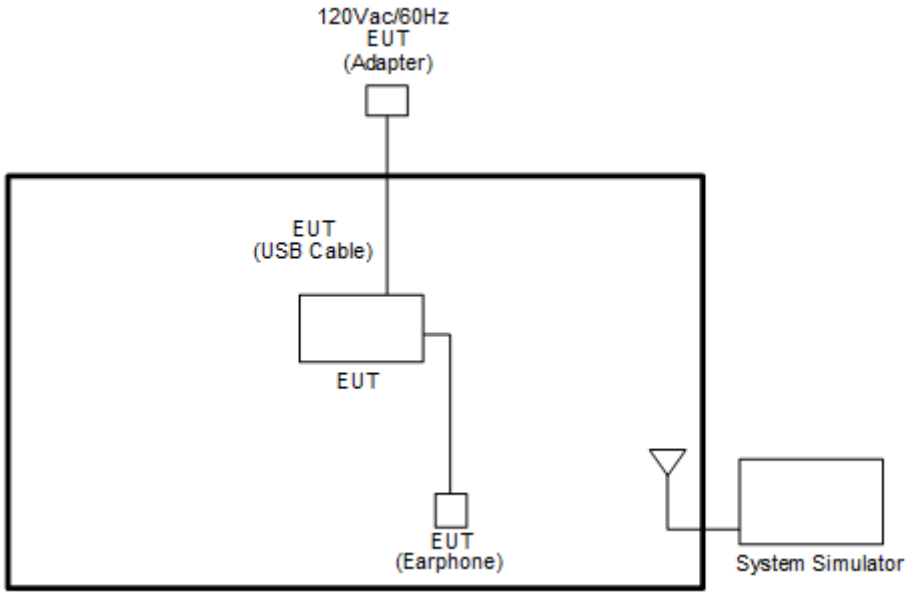
All modes and data rates and positions were investigated.

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

Test Modes	
Band	**Radiated TCs**
GSM850	■ GPRS Class 8 Link
GSM1900	■ EDGE Class 8 Link

Remark: All the radiated test cases were performed with Adapter 1 and USB Cable 1.

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m

2.4 Frequency List of Low/Middle/High Channels

Frequency List				
Band	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
GSM850	Channel	128	189	251
	Frequency	824.2	836.4	848.8
WCDMA Band V	Channel	4132	4182	4233
	Frequency	826.4	836.4	846.6
GSM1900	Channel	512	661	810
	Frequency	1850.2	1880.0	1909.8

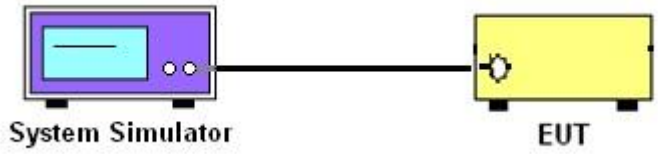
3 Conducted Test Result

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.

3.1.4 Conducted Output Power and ERP/EIRP

3.1.5 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 GSM850 and WCDMA Band V

The EIRP of mobile transmitters must not exceed 2 Watts for GSM1900 and 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

3.1.6 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select lowest, middle, and 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.

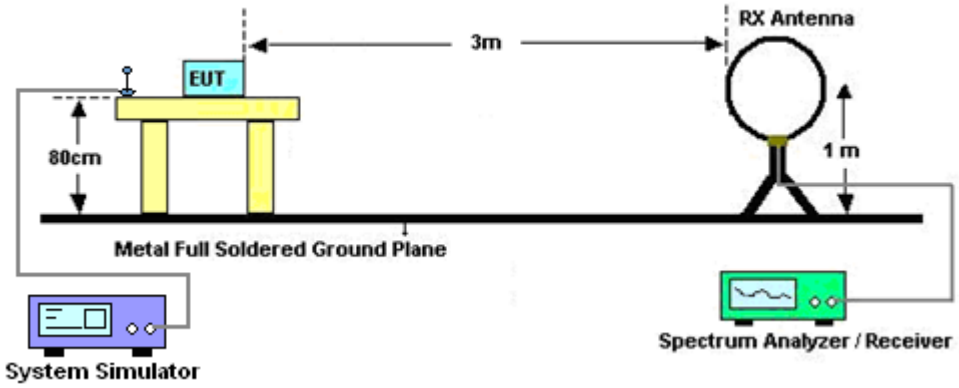
4 Radiated Test Items

4.1 Measuring Instruments

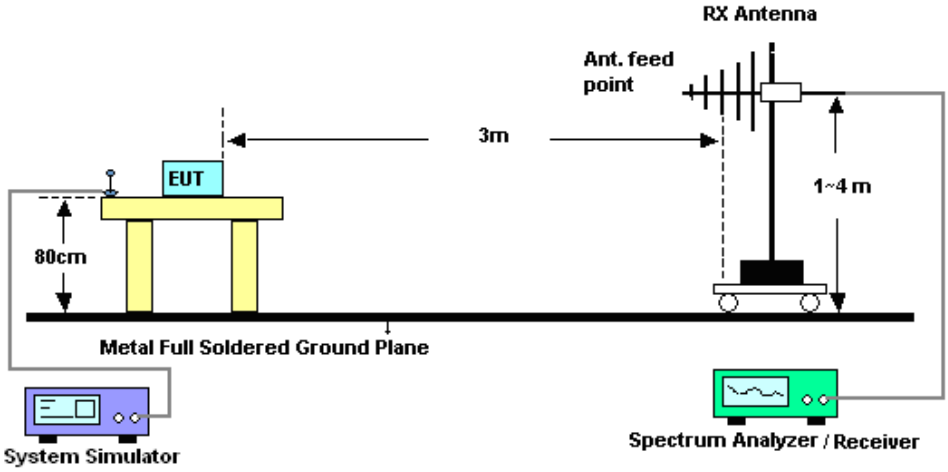
See list of measuring instruments of this test report.

4.2 Test Setup

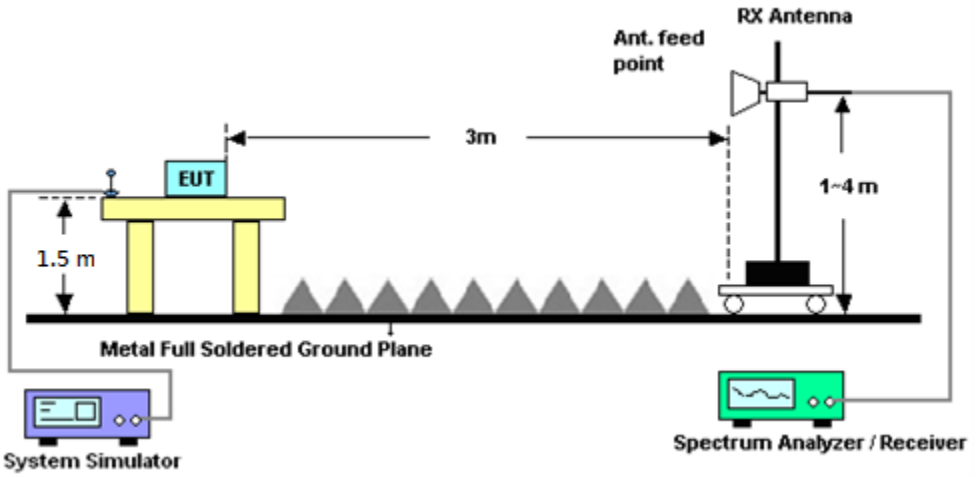
For radiated emissions below 30MHz



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 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 a comparison data 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 was placed on a rotatable wooden table 0.8 meters for frequency below 1GHz and 1.5 meter for frequency above 1GHz above the 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 for the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking 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. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
13. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	Testo	608-H1	34893241	N/A	Mar. 26, 2020	May 25, 2020~ July. 01, 2020	Mar. 25, 2021	Conducted (TH03-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101329	9kHz~30GHz	Sep. 04, 2019	May 25, 2020~ July. 01, 2020	Sep. 03, 2020	Conducted (TH03-HY)
Temperature Chamber	ESPEC	SU-641	92013721	-30℃ ~70℃	Nov. 26, 2019	May 25, 2020~ July. 01, 2020	Nov. 25, 2020	Conducted (TH03-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890001	1V~20V 0.5A~4A	Oct. 09, 2019	May 25, 2020~ July. 01, 2020	Oct. 08, 2020	Conducted (TH03-HY)
Base Station (Measure)	Rohde & Schwarz	CMU200	117995	GSM / GPRS / WCDMA / CDMA	Aug. 23, 2019	May 25, 2020~ July. 01, 2020	Aug. 22, 2020	Conducted (TH03-HY)
Power Divider	Warison	WCOU-0.4-26. 5S-20	#A	N/A	Nov. 06, 2019	May 25, 2020~ July. 01, 2020	Nov. 05, 2020	Conducted (TH03-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Dec. 26, 2019	Jun. 23, 2020~ Jul. 01, 2020	Dec. 25, 2020	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	37059 & 01	30MHz~1GHz	Oct. 12, 2019	Jun. 23, 2020~ Jul. 01, 2020	Oct 11, 2020	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Nov. 14, 2019	Jun. 23, 2020~ Jul. 01, 2020	Nov. 13, 2020	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1522	1GHz ~ 18GHz	Sep. 19, 2019	Jun. 23, 2020~ Jul. 01, 2020	Sep. 18, 2020	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz ~ 40GHz	Dec. 10, 2019	Jun. 23, 2020~ Jul. 01, 2020	Dec. 09, 2020	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170980	18GHz ~ 40GHz	Jan. 10, 2019	Jun. 23, 2020~ Jul. 01, 2020	Jan. 9, 2021	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 25, 2020	Jun. 23, 2020~ Jul. 01, 2020	Mar. 24, 2021	Radiation (03CH12-HY)
Preamplifier	Jet-Power	JPA00101800-30-10P	1601180002	1GHz~18GHz	Feb. 07, 2020	Jun. 23, 2020~ Jul. 01, 2020	Feb. 06, 2021	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 13, 2019	Jun. 23, 2020~ Jul. 01, 2020	Dec. 12, 2020	Radiation (03CH12-HY)
Preamplifier	Keysight	83017A	MY53270148	1GHz~26.5GHz	Dec. 20, 2019	Jun. 23, 2020~ Jul. 01, 2020	Dec. 19, 2020	Radiation (03CH12-HY)
Signal Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Mar. 12, 2020	Jun. 23, 2020~ Jul. 01, 2020	Mar. 11, 2021	Radiation (03CH12-HY)
Signal Generator	Rohde & Schwarz	SMB100A	101107	100kHz~40GHz	Aug. 27, 2019	Jun. 23, 2020~ Jul. 01, 2020	Aug. 26, 2020	Radiation (03CH12-HY)
Hygrometer	TECPEL	DTN-303B	TP140325	N/A	Nov. 07, 2019	Jun. 23, 2020~ Jul. 01, 2020	Nov. 06, 2020	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30M-18G	Dec. 12, 2019	Jun. 23, 2020~ Jul. 01, 2020	Dec. 11, 2020	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Feb. 25, 2020	Jun. 23, 2020~ Jul. 01, 2020	Feb. 24, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30M~40GHz	Feb. 25, 2020	Jun. 23, 2020~ Jul. 01, 2020	Feb. 24, 2021	Radiation (03CH12-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Jun. 23, 2020~ Jul. 01, 2020	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jun. 23, 2020~ Jul. 01, 2020	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jun. 23, 2020~ Jul. 01, 2020	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	Jun. 23, 2020~ Jul. 01, 2020	N/A	Radiation (03CH12-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))	**3.24**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.62**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.06**

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

<Primary Antenna>

Conducted Power (*Unit: dBm)						
Band	GSM850			GSM1900		
Channel	128	189	251	512	661	810
Frequency	824.2	836.4	848.8	1850.2	1880	1909.8
GSM	32.10	32.25	32.02	29.19	29.21	29.08
GPRS class 8	32.18	**32.28**	32.15	**29.44**	**29.44**	29.43
GPRS class 10	31.20	31.18	30.87	28.58	28.71	28.64
GPRS class 11	28.97	29.28	28.98	26.80	26.82	27.18
GPRS class 12	27.94	27.99	28.06	25.72	25.65	25.20
EGPRS class 8	25.98	**26.19**	25.98	25.41	**25.62**	25.41
EGPRS class 10	25.60	25.76	25.54	24.95	25.11	24.60
EGPRS class 11	23.63	23.68	23.65	24.02	24.10	23.41
EGPRS class 12	21.88	21.83	21.92	23.05	22.99	22.67

Conducted Power (*Unit: dBm)						
Band	WCDMA Band V			WCDMA Band II		
Channel	4132	4182	4233	9262	9400	9538
Frequency	826.4	836.4	846.6	1852.4	1880	1907.6
RMC 12.2K	24.03	**24.08**	24.05	24.36	**24.43**	24.26
HSDPA Subtest-1	23.15	23.18	23.23	23.40	23.45	23.35
HSDPA Subtest-2	23.12	23.20	23.08	23.44	23.45	23.31
HSDPA Subtest-3	22.70	22.69	22.66	22.98	22.97	22.77
HSDPA Subtest-4	22.58	22.72	22.69	22.96	22.88	22.84
HSUPA Subtest-1	23.16	23.20	23.08	23.60	24.02	23.91
HSUPA Subtest-2	21.13	21.18	21.16	21.58	21.61	21.51
HSUPA Subtest-3	22.11	22.19	22.19	22.62	22.68	22.56
HSUPA Subtest-4	21.16	21.13	21.15	21.62	21.64	21.57
HSUPA Subtest-5	23.06	23.16	23.22	23.61	23.68	23.60

Conducted Power (*Unit: dBm)			
Band	**WCDMA Band IV**		
Channel	**1312**	**1413**	**1513**
Frequency	**1712.4**	**1732.6**	**1752.6**
RMC 12.2K	24.02	**24.06**	23.99
HSDPA Subtest-1	23.13	23.18	23.12
HSDPA Subtest-2	23.10	23.16	23.03
HSDPA Subtest-3	22.58	22.64	22.54
HSDPA Subtest-4	22.60	22.69	22.55
HSUPA Subtest-1	23.00	23.12	23.07
HSUPA Subtest-2	20.72	20.78	20.84
HSUPA Subtest-3	21.77	21.79	21.80
HSUPA Subtest-4	20.73	20.91	20.82
HSUPA Subtest-5	22.83	22.81	22.80

<ASDIV Antenna>

Conducted Power (*Unit: dBm)						
Band	GSM850			GSM1900		
Channel	128	189	251	512	661	810
Frequency	824.2	836.4	848.8	1850.2	1880	1909.8
GSM	32.25	32.38	32.23	28.91	29.20	28.75
GPRS class 8	32.28	32.45	32.23	29.00	29.20	28.78
GPRS class 10	31.35	31.44	31.11	28.15	28.23	28.06
GPRS class 11	29.24	29.26	29.00	26.75	26.67	26.47
GPRS class 12	28.28	27.81	27.52	25.23	25.39	24.55
EGPRS class 8	26.24	26.35	26.25	25.47	25.38	24.94
EGPRS class 10	25.55	25.78	25.75	24.64	24.61	24.18
EGPRS class 11	23.66	23.94	23.74	23.67	23.39	22.85
EGPRS class 12	21.79	22.05	21.77	22.47	22.30	21.50

Conducted Power (*Unit: dBm)						
Band	WCDMA Band V			WCDMA Band II		
Channel	4132	4182	4233	9262	9400	9538
Frequency	826.4	836.4	846.6	1852.4	1880	1907.6
RMC 12.2K	23.74	23.69	23.71	24.39	24.45	24.31
HSDPA Subtest-1	22.87	22.90	22.86	23.09	23.51	23.42
HSDPA Subtest-2	22.87	22.88	22.85	23.08	23.51	23.42
HSDPA Subtest-3	22.39	22.44	22.40	22.58	23.02	22.92
HSDPA Subtest-4	22.35	22.35	22.36	22.65	23.10	22.86
HSUPA Subtest-1	22.87	22.82	22.85	23.18	23.45	23.37
HSUPA Subtest-2	20.86	20.91	20.85	21.12	21.07	21.02
HSUPA Subtest-3	21.89	21.87	21.80	22.07	22.11	22.04
HSUPA Subtest-4	20.78	20.95	20.82	21.16	21.17	21.00
HSUPA Subtest-5	22.93	22.89	22.81	23.22	23.05	23.03

Conducted Power (*Unit: dBm)			
Band	WCDMA Band IV		
Channel	1312	1413	1513
Frequency	1712.4	1732.6	1752.6
RMC 12.2K	24.23	24.14	24.16
HSDPA Subtest-1	23.34	23.37	23.40
HSDPA Subtest-2	23.37	23.38	23.39
HSDPA Subtest-3	22.92	22.49	22.85
HSDPA Subtest-4	22.85	22.86	22.93
HSUPA Subtest-1	23.39	23.34	23.30
HSUPA Subtest-2	21.07	21.07	21.08
HSUPA Subtest-3	22.02	22.05	22.12
HSUPA Subtest-4	21.05	21.09	21.10
HSUPA Subtest-5	23.09	23.05	23.12

Appendix B. Test Results of ERP/EIRP and Radiated Test

ERP/EIRP

<Primary Antenna>

Channel	Mode	Conducted		ERP	
		Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	GSM850	32.18	1.6520	27.23	0.5284
Middle	GPRS class 8	32.28	1.6904	27.33	0.5408
Highest	(GT - LC = -2.8 dB)	32.15	1.6406	27.20	0.5248
Lowest	GSM850	25.98	0.3963	21.03	0.1268
Middle	EDGE class 8	26.19	0.4159	21.24	0.1330
Highest	(GT - LC = -2.8 dB)	25.98	0.3963	21.03	0.1268
Lowest	WCDMA Band V	24.03	0.2529	19.08	0.0809
Middle	RMC 12.2Kbps	24.08	0.2559	19.13	0.0818
Highest	(GT - LC = -2.8 dB)	24.05	0.2541	19.10	0.0813
Limit	ERP < 7W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900	29.44	0.8790	31.64	1.4588
Middle	GPRS class 8	29.44	0.8790	31.64	1.4588
Highest	(GT - LC = 2.2 dB)	29.43	0.8770	31.63	1.4555
Lowest	GSM1900	25.41	0.3475	27.61	0.5768
Middle	EDGE class 8	25.62	0.3648	27.82	0.6053
Highest	(GT - LC = 2.2 dB)	25.41	0.3475	27.61	0.5768
Lowest	WCDMA Band II	24.36	0.2729	26.56	0.4529
Middle	RMC 12.2Kbps	24.43	0.2773	26.63	0.4603
Highest	(GT - LC = 2.2 dB)	24.26	0.2667	26.46	0.4426
Limit	EIRP < 2W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	WCDMA Band IV	24.02	0.2523	25.22	0.3327
Middle	RMC 12.2Kbps	24.06	0.2547	25.26	0.3357
Highest	(GT - LC = 1.2 dB)	23.99	0.2506	25.19	0.3304
Limit	EIRP < 1W	Result		PASS	

<ASDIV Antenna>

Channel	Mode	Conducted		ERP	
		Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	GSM850	32.28	1.6904	26.63	0.4603
Middle	GPRS class 8	32.45	1.7579	26.80	0.4786
Highest	(GT - LC = -3.5 dB)	32.23	1.6711	26.58	0.4550
Lowest	GSM850	26.24	0.4207	20.59	0.1146
Middle	EDGE class 8	26.35	0.4315	20.70	0.1175
Highest	(GT - LC = -3.5 dB)	26.25	0.4217	20.60	0.1148
Lowest	WCDMA Band V	23.74	0.2366	18.09	0.0644
Middle	RMC 12.2Kbps	23.69	0.2339	18.04	0.0637
Highest	(GT - LC = -3.5 dB)	23.71	0.2350	18.06	0.0640
Limit	ERP < 7W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900	28.91	0.7780	29.31	0.8531
Middle	GSM	29.20	0.8318	29.60	0.9120
Highest	(GT - LC = 0.4 dB)	28.75	0.7499	29.15	0.8222
Lowest	GSM1900	25.47	0.3524	25.87	0.3864
Middle	EDGE class 8	25.38	0.3451	25.78	0.3784
Highest	(GT - LC = 0.4 dB)	24.94	0.3119	25.34	0.3420
Lowest	WCDMA Band II	24.39	0.2748	24.79	0.3013
Middle	RMC 12.2Kbps	24.45	0.2786	24.85	0.3055
Highest	(GT - LC = 0.4 dB)	24.31	0.2698	24.71	0.2958
Limit	EIRP < 2W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	WCDMA Band IV	24.23	0.2649	25.03	0.3184
Middle	RMC 12.2Kbps	24.14	0.2594	24.94	0.3119
Highest	(GT - LC = 0.8 dB)	24.16	0.2606	24.96	0.3133
Limit	EIRP < 1W	Result		PASS	

Radiated Spurious Emission

<Primary Antenna>

<Ant. 0>

EDGE1900

EDGE 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	3760	-46.25	-13	-33.25	-64.42	-57.48	1.43	12.66	H
	5640	-49.23	-13	-36.23	-72.15	-60.80	1.73	13.30	H
	7520	-45.74	-13	-32.74	-72.24	-54.85	1.99	11.10	H
									H
									H
									H
									H
	3760	-44.50	-13	-31.50	-62.97	-55.73	1.43	12.66	V
	5640	-49.69	-13	-36.69	-72.2	-61.26	1.73	13.30	V
	7520	-46.02	-13	-33.02	-72.48	-55.13	1.99	11.10	V
									V
									V
									V
									V

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

<ASDIV Antenna>

<Ant. 1>

GPRS850

GPRS 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	-55.53	-13	-42.53	-65.25	-61.21	0.93	8.75	H
	2512	-36.36	-13	-23.36	-50.22	-43.77	1.15	10.71	H
	3344	-55.92	-13	-42.92	-71.23	-64.56	1.33	12.13	H
	4184	-49.89	-13	-36.89	-68.39	-59.04	1.46	12.76	H
									H
									H
									H
	1672	-60.31	-13	-47.31	-69.4	-65.99	0.93	8.75	V
	2512	-36.99	-13	-23.99	-51.04	-44.40	1.15	10.71	V
	3344	-55.36	-13	-42.36	-71.12	-64.00	1.33	12.13	V
	4184	-46.80	-13	-33.80	-65.43	-55.95	1.46	12.76	V
									V
									V
									V

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

———THE END———