



FCC RADIO TEST REPORT

FCC ID : AK8VTG100
Equipment : Visilion Tracker G100
Brand Name : Sony Group Corporation
Applicant : Sony Group Corporation
1-7-1 Konan Minato-ku, Tokyo, 108-0075 Japan
Manufacturer : Sony Network Communications Europe B.V.
Taurusavenue 16, 2132LS Hoofddorp, Netherlands
Standard : FCC 47 CFR Part 2, 22(H), 24(E)

The product was received on Apr. 16, 2021 and testing was started from May 13, 2021 and completed on May 29, 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
FG140729-02A	01	Initial issue of report	Aug. 13, 2021



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 (GSM850)		
	§24.232 (c)	Equivalent Isotropic Radiated Power (GSM1900)		
-	§24.232 (d)	Peak-to-Average Ratio	-	See Note
-	§2.1049 §22.917 (b) §24.238 (b)	Occupied Bandwidth (GSM850) (GSM1900)	-	See Note
-	§2.1051 §22.917 (a) §24.238 (a)	Band Edge Measurement (GSM850) (GSM1900)	-	See Note
-	§2.1051 §22.917 (a) §24.238 (a)	Conducted Emission (GSM850) (GSM1900)	-	See Note
-	§2.1055 §22.355 §24.235	Frequency Stability Temperature & Voltage	-	See Note
4.4	§2.1053 §22.917 (a) §24.238 (a)	Field Strength of Spurious Radiation (GSM850) (GSM1900)	Pass	Under limit 8.23 dB at 5730.000 MHz
Note: The module (Model: BG95-M3) 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: Keven Cheng

Report Producer: Cindy Liu



1 General Description

1.1 Product Feature of Equipment Under Test

GSM/LTE, Bluetooth-LE and GNSS.

Product Specification subjective to this standard	
Antenna Type	PIFA Antenna
Antenna Gain	Cellular Band: -0.7 dBi PCS Band: 2.82 dBi

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

EUT Information List			
HW Version	SW Version	IMEI	Performed Test Item
0B	0.0.0	867730050909229	Conducted Measurement
	0.1.11-fac	864475047644835	Radiated Spurious Emission
	0.0.0	867730050909229	ERP/EIRP Test

Accessory List	
AC Adapter	Model Name : UCH32
	S/N: 6218W30200191
USB Cable	Model Name : UCB24
	S/N : N/A

Note:

1. Above EUT list used are electrically identical per declared by manufacturer.
2. Above the accessories list are used to exercise the EUT during test, and the serial number of each type of accessories is listed in each section of this report. .
3. For other wireless features of this EUT, test report will be issued separately.

1.2 Modification of EUT

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

1.3 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator

FCC Rule	Frequency Range (MHz)	System	Type of Modulation	Maximum ERP/EIRP (W)	Frequency Tolerance (ppm)	Emission Designator
Part 22	824.2 ~848.8	GSM850 GPRS class 8	GMSK	0.8318	-	-
Part 22	824.2 ~848.8	GSM850 EDGE class 10	8PSK	0.1663	-	-
Part 24	1850.2 ~1909.8	GSM1900 GPRS class 8	GMSK	1.2942	-	-
Part 24	1850.2 ~1909.8	GSM1900 EDGE class 8	8PSK	0.5000	-	-



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. TH03-HY
Test Engineer	Benjamin Lin
Temperature	23.2~25.1℃
Relative Humidity	49.9~52.4%

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. 03CH12-HY (TAF Code: 3786)
Test Engineer	Jack Cheng, Lance Chiang and Chuan Chu
Temperature	22.5~26.8℃
Relative Humidity	54.6~66.8%
Remark	The Radiated Spurious Emission test item subcontracted to Sporton International Inc. Wensan Laboratory.

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

FCC Designation No.: TW1190 and TW3786



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)
- ♦ 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.

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 X Plane for PCS Band; Y plane for Cellular Band as worst plane.

Radiated emissions were investigated as following frequency range:

1. 30 MHz to 9000 MHz for GSM850
1. 30 MHz to 19100 MHz for GSM1900

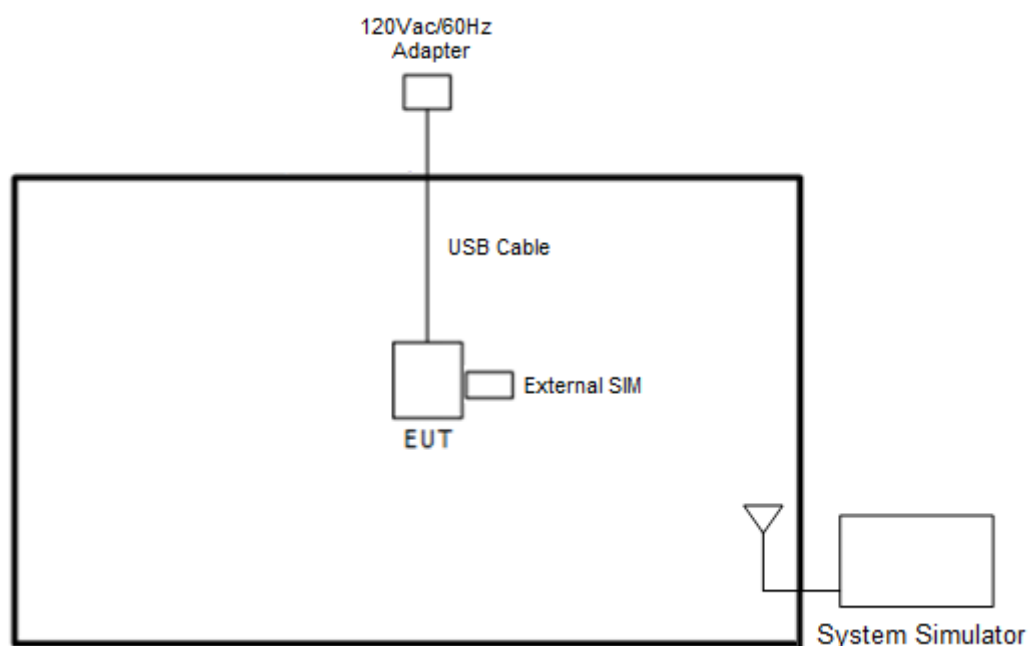
All modes, data rates and positions were investigated.

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

Test Modes		
Band	Radiated TCs	Conducted TCs
GSM850	■ GPRS Class 8 Link	■ GPRS Class 8 Link
	■ EDGE Class 10 Link	■ EDGE Class 10 Link
GSM1900	■ GPRS Class 8 Link	■ GPRS Class 8 Link
	■ EDGE Class 8 Link	■ EDGE Class 8 Link

Remark: We have evaluated simultaneous transmissions modes and determined no new significant emissions are observed.

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.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
2.	External SIM	Compal	N/A	N/A	N/A	N/A

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
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.

3.2 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 GSM850

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

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 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.

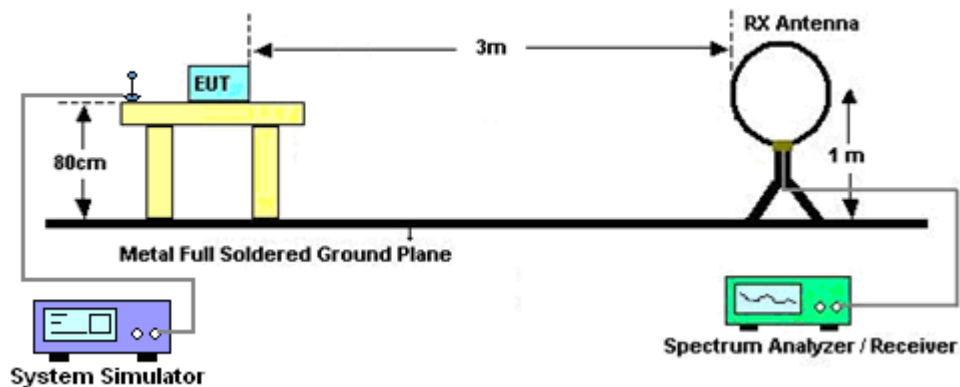
4 Radiated Test Items

4.1 Measuring Instruments

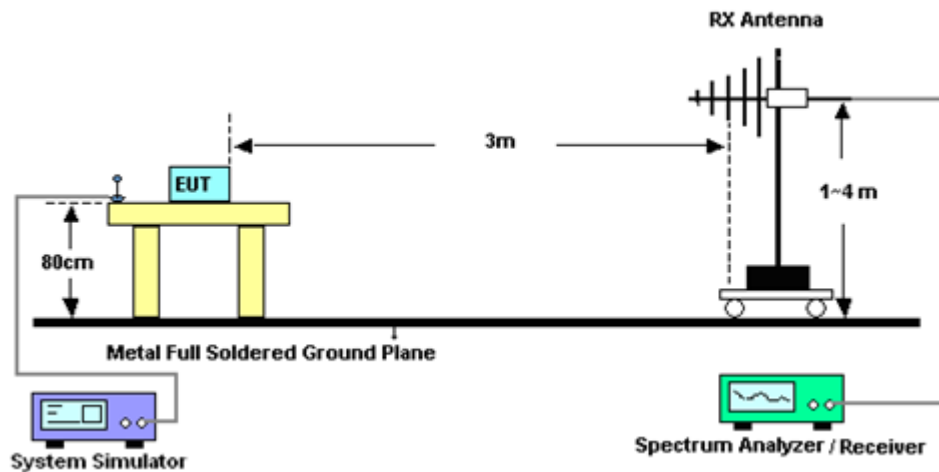
See list of measuring instruments of this test report.

4.2 Test Setup

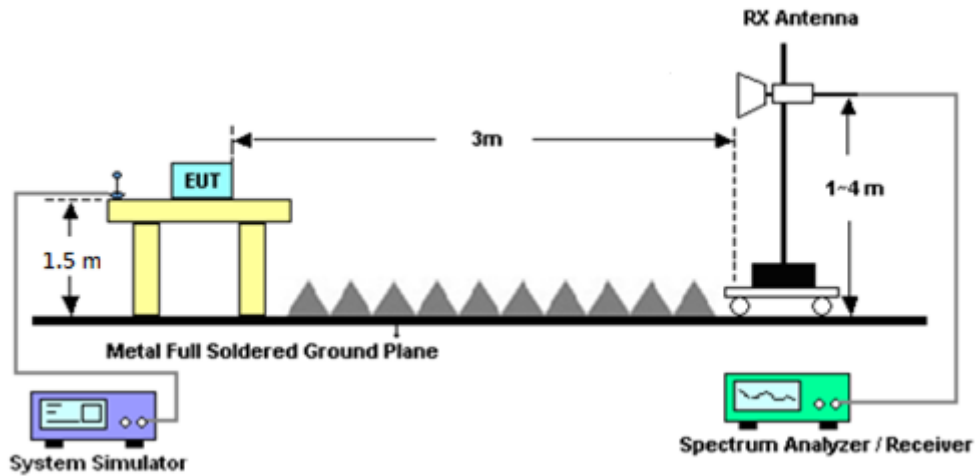
For radiated test below 30MHz



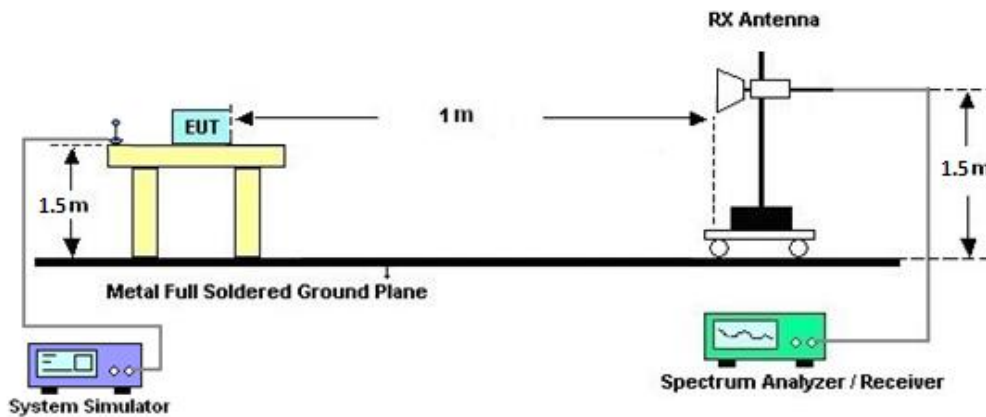
For radiated test from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

Note:

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB 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.



4.4 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 1 GHz and 1.5 meter for frequency above 1 GHz 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 = 1 MHz, VBW = 3 MHz, 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. Take the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
11. $ERP \text{ (dBm)} = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
13. The limit line is derived from $43 + 10\log(P)$ 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
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jul. 14, 2020	May 13, 2021~ May 29, 2021	Jul. 13, 2021	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	37059 & 01	30MHz~1GHz	Oct. 11, 2020	May 13, 2021~ May 29, 2021	Oct. 10, 2021	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & N-6-06	35414 & AT-N0602	30MHz~1GHz	Oct. 11, 2020	May 13, 2021~ May 29, 2021	Oct. 10, 2021	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1328	1GHz~18GHz	Nov. 19, 2020	May 13, 2021~ May 29, 2021	Nov. 22, 2021	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1212	1GHz~18GHz	May 20, 2020	May 13, 2021~ May 18, 2021	May 19, 2021	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1212	1GHz~18GHz	May 18, 2021	May 18, 2021~ May 29, 2021	May 17, 2022	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	00993	18GHz~40GHz	Dec. 19, 2020	May 13, 2021~ May 29, 2021	Dec. 18, 2021	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA917058 4	18GHz~40GHz	Dec. 11, 2020	May 13, 2021~ May 29, 2021	Dec. 10, 2021	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 24, 2021	May 13, 2021~ May 29, 2021	Mar. 23, 2022	Radiation (03CH12-HY)
Preamplifier	Keysight	83017A	MY57280120	1GHz~26.5GHz	Jul. 20, 2020	May 13, 2021~ May 29, 2021	Jul. 19, 2021	Radiation (03CH12-HY)
Preamplifier	E-INSTRUME NT TECH LTD.	ERA-100M-18 G-56-01-A70	EC1900249	1GHz~18GHz	Dec. 05, 2020	May 13, 2021~ May 29, 2021	Dec. 04, 2021	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 15, 2020	May 13, 2021~ May 29, 2021	Jun. 14, 2021	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 11, 2020	May 13, 2021~ May 29, 2021	Dec. 10, 2021	Radiation (03CH12-HY)
Spectrum Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Sep. 14, 2020	May 13, 2021~ May 29, 2021	Sep. 13, 2021	Radiation (03CH12-HY)
Signal Generator	Rohde & Schwarz	SMB100A	101107	100kHz~40GHz	Dec. 04, 2020	May 13, 2021~ May 29, 2021	Dec. 03, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30MHz~18GHz	Dec. 11, 2020	May 13, 2021~ May 29, 2021	Dec. 10, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 22, 2021	May 13, 2021~ May 29, 2021	Feb. 21, 2022	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30MHz~40GHz	Feb. 22, 2021	May 13, 2021~ May 29, 2021	Feb. 21, 2022	Radiation (03CH12-HY)
Filter	Wainwright	WLKS1200-12 SS	SN2	1.2GHz Low Pass Filter	Mar. 17, 2021	May 13, 2021~ May 29, 2021	Mar. 16, 2022	Radiation (03CH12-HY)
Filter	Wainwright	WHKX12-1080 -1200-15000-6 OSS	SN1	1.2GHz High Pass Filter	Mar. 17, 2021	May 13, 2021~ May 29, 2021	Mar. 16, 2022	Radiation (03CH12-HY)
Filter	Wainwright	WHKX12-2700 -3000-18000-6 OST	SN2	3GHz High Pass Filter	Jul. 14, 2020	May 13, 2021~ May 29, 2021	Jul. 13, 2021	Radiation (03CH12-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECPEL	DTM-303B	TP140349	N/A	Oct. 02, 2020	May 13, 2021~ May 29, 2021	Oct. 01, 2021	Radiation (03CH12-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	May 13, 2021~ May 29, 2021	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	May 13, 2021~ May 29, 2021	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	May 13, 2021~ May 29, 2021	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	May 13, 2021~ May 29, 2021	N/A	Radiation (03CH12-HY)
Base Station (Measure)	Anritsu	MT8821C	6262002534 1	N/A	Oct. 05, 2020	May 18, 2021	Oct. 05, 2021	Conducted (TH03-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101397	10Hz~40GHz	Nov. 27, 2020	May 18, 2021	Nov. 26, 2021	Conducted (TH03-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890094	1V~20V 0.5A~5A	Oct. 05, 2020	May 18, 2021	Oct. 04, 2021	Conducted (TH03-HY)
Coupler	Warison	20dB 25W SMA Directional Coupler	#B	1-18GHz	Jan. 09, 2021	May 18, 2021	Jan. 08, 2022	Conducted (TH03-HY)



6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.07 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.21 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.80 dB
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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power) & ERP / EIRP

GSM850 Maximum Average Power [dBm] (GT - LC = -0.7 dB)					
Channel	128	189	251	ERP (dBm)	ERP (W)
Frequency	824.2	836.4	848.8		
GSM	31.90	32.02	32.01	29.20	0.8318
GPRS class 8	31.93	32.05	32.03		
GPRS class 10	31.76	31.81	31.83		
GPRS class 11	30.36	30.25	30.26		
GPRS class 12	28.76	28.64	28.65		
EGPRS class 8	25.03	24.96	25.05	22.21	0.1663
EGPRS class 10	24.95	24.95	25.06		
EGPRS class 11	22.98	23.21	23.19		
EGPRS class 12	21.97	22.02	22.10		
Limit	ERP < 7W			Result	Pass

GSM1900 Maximum Average Power [dBm] (GT - LC = 2.82 dB)					
Channel	512	661	810	EIRP (dBm)	EIRP (W)
Frequency	1850.2	1880	1909.8		
GSM	28.09	27.83	28.10	31.12	1.2942
GPRS class 8	28.30	28.17	28.07		
GPRS class 10	27.53	27.15	26.85		
GPRS class 11	24.99	25.24	24.72		
GPRS class 12	23.65	22.99	23.55		
EGPRS class 8	24.17	23.71	23.53	26.99	0.5000
EGPRS class 10	23.02	22.87	22.69		
EGPRS class 11	21.24	21.23	21.02		
EGPRS class 12	20.47	20.02	20.03		
Limit	EIRP < 2W			Result	Pass



Appendix B. Test Results of Radiated Test

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)
Lowest	1648	-48.30	-13	-35.30	-56.72	-53.89	0.92	8.66	H
	2472	-45.10	-13	-32.10	-58.55	-52.47	1.14	10.66	H
	3296	-53.39	-13	-40.39	-68.72	-61.93	1.32	12.01	H
									H
									H
									H
	1648	-49.33	-13	-36.33	-57.22	-54.92	0.92	8.66	V
	2472	-36.34	-13	-23.34	-49.94	-43.71	1.14	10.66	V
	3296	-53.40	-13	-40.40	-69.2	-61.94	1.32	12.01	V
									V
									V
									V
Middle	1672	-49.00	-13	-36.00	-57.5	-54.68	0.93	8.75	H
	2509	-43.23	-13	-30.23	-56.72	-50.64	1.15	10.71	H
	3344	-50.60	-13	-37.60	-65.82	-59.24	1.33	12.13	H
	4182	-54.21	-13	-41.21	-72.99	-63.36	1.46	12.76	H
									H
									H
									H
	1672	-53.01	-13	-40.01	-60.88	-58.69	0.93	8.75	V
	2509	-38.39	-13	-25.39	-52.08	-45.80	1.15	10.71	V
	3344	-53.79	-13	-40.79	-69.46	-62.43	1.33	12.13	V
	4182	-50.32	-13	-37.32	-69.23	-59.47	1.46	12.76	V
									V
									V
									V



Highest	1696	-49.51	-13	-36.51	-58.07	-55.27	0.94	8.84	H
	2544	-44.30	-13	-31.30	-57.8	-51.74	1.16	10.75	H
	3392	-52.80	-13	-39.80	-67.92	-61.55	1.34	12.24	H
	4248	-53.65	-13	-40.65	-72.69	-62.80	1.45	12.75	H
									H
									H
									H
	1696	-50.49	-13	-37.49	-58.34	-56.25	0.94	8.84	V
	2544	-40.92	-13	-27.92	-54.53	-48.36	1.16	10.75	V
	3392	-53.42	-13	-40.42	-68.97	-62.17	1.34	12.24	V
	4248	-48.02	-13	-35.02	-67.12	-57.17	1.45	12.75	V
									V
									V
									V

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

**EDGE 850**

EDGE 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)
Lowest	1648	-47.13	-13	-34.13	-55.55	-52.72	0.92	8.66	H
	2472	-44.94	-13	-31.94	-58.39	-52.31	1.14	10.66	H
	3296	-54.25	-13	-41.25	-69.58	-62.79	1.32	12.01	H
	4120	-54.61	-13	-41.61	-73.31	-63.77	1.47	12.78	H
									H
									H
									H
	1648	-50.44	-13	-37.44	-58.33	-56.03	0.92	8.66	V
	2472	-38.03	-13	-25.03	-51.63	-45.40	1.14	10.66	V
	3296	-53.29	-13	-40.29	-69.09	-61.83	1.32	12.01	V
	4120	-51.09	-13	-38.09	-69.84	-60.25	1.47	12.78	V
									V
									V
									V
Middle	1672	-47.64	-13	-34.64	-56.14	-53.32	0.93	8.75	H
	2509	-42.49	-13	-29.49	-55.98	-49.90	1.15	10.71	H
	3344	-50.57	-13	-37.57	-65.79	-59.21	1.33	12.13	H
	4184	-53.72	-13	-40.72	-72.5	-62.87	1.46	12.76	H
									H
									H
									H
	1672	-50.68	-13	-37.68	-58.55	-56.36	0.93	8.75	V
	2509	-38.26	-13	-25.26	-51.94	-45.67	1.15	10.71	V
	3344	-54.08	-13	-41.08	-69.75	-62.72	1.33	12.13	V
	4184	-50.44	-13	-37.44	-69.35	-59.59	1.46	12.76	V
									V
									V
									V



Highest	1696	-49.13	-13	-36.13	-57.69	-54.89	0.94	8.84	H
	2544	-44.47	-13	-31.47	-57.97	-51.91	1.16	10.75	H
	3392	-53.71	-13	-40.71	-68.83	-62.46	1.34	12.24	H
	4244	-53.61	-13	-40.61	-72.63	-62.76	1.45	12.75	H
									H
									H
									H
	1696	-49.99	-13	-36.99	-57.84	-55.75	0.94	8.84	V
	2544	-41.80	-13	-28.80	-55.41	-49.24	1.16	10.75	V
	3392	-53.80	-13	-40.80	-69.35	-62.55	1.34	12.24	V
	4244	-48.31	-13	-35.31	-67.4	-57.46	1.45	12.75	V
									V
									V
									V

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

**GPRS 1900**

GPRS 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)
Lowest	3700	-34.75	-13	-21.75	-52.67	-45.96	1.41	12.62	H
	5550	-40.55	-13	-27.55	-63.73	-52.11	1.74	13.30	H
	7400	-45.98	-13	-32.98	-72.81	-55.30	1.94	11.26	H
									H
									H
									H
									H
	3700	-34.09	-13	-21.09	-52.15	-45.30	1.41	12.62	V
	5550	-29.15	-13	-16.15	-51.85	-40.71	1.74	13.30	V
	7400	-40.92	-13	-27.92	-67.59	-50.24	1.94	11.26	V
									V
									V
									V
									V
Middle	3760	-33.06	-13	-20.06	-51.25	-44.29	1.43	12.66	H
	5640	-35.15	-13	-22.15	-58.37	-46.72	1.73	13.30	H
	7520	-46.86	-13	-33.86	-73.13	-55.97	1.99	11.10	H
									H
									H
									H
									H
	3760	-34.10	-13	-21.10	-52.51	-45.33	1.43	12.66	V
	5640	-25.57	-13	-12.57	-48.38	-37.14	1.73	13.30	V
	7520	-40.85	-13	-27.85	-67.08	-49.96	1.99	11.10	V
									V
									V
									V
									V



Highest	3820	-31.82	-13	-18.82	-50.24	-43.07	1.44	12.69	H
	5730	-31.65	-13	-18.65	-55.33	-43.22	1.73	13.30	H
	7640	-47.94	-13	-34.94	-73.8	-57.06	2.01	11.13	H
									H
									H
									H
									H
	3820	-32.66	-13	-19.66	-51.31	-43.91	1.44	12.69	V
	5730	-21.23	-13	-8.23	-44.27	-32.80	1.73	13.30	V
	7640	-42.71	-13	-29.71	-68.47	-51.83	2.01	11.13	V
									V
									V
									V
									V

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

**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)
Lowest	3700	-34.86	-13	-21.86	-52.78	-46.07	1.41	12.62	H
	5550	-40.18	-13	-27.18	-63.36	-51.74	1.74	13.30	H
	7400	-45.69	-13	-32.69	-72.52	-55.01	1.94	11.26	H
									H
									H
									H
									H
	3700	-32.61	-13	-19.61	-50.67	-43.82	1.41	12.62	V
	5550	-28.88	-13	-15.88	-51.58	-40.44	1.74	13.30	V
	7400	-40.95	-13	-27.95	-67.62	-50.27	1.94	11.26	V
									V
									V
									V
									V
Middle	3760	-33.06	-13	-20.06	-51.25	-44.29	1.43	12.66	H
	5640	-35.15	-13	-22.15	-58.37	-46.72	1.73	13.30	H
	7520	-46.86	-13	-33.86	-73.13	-55.97	1.99	11.10	H
									H
									H
									H
									H
	3760	-34.10	-13	-21.10	-52.51	-45.33	1.43	12.66	V
	5640	-25.57	-13	-12.57	-48.38	-37.14	1.73	13.30	V
	7520	-40.85	-13	-27.85	-67.08	-49.96	1.99	11.10	V
									V
									V
									V
									V



Highest	3820	-32.56	-13	-19.56	-50.98	-43.81	1.44	12.69	H
	5730	-31.81	-13	-18.81	-55.49	-43.38	1.73	13.30	H
	7640	-47.50	-13	-34.50	-73.36	-56.62	2.01	11.13	H
									H
									H
									H
									H
	3820	-32.31	-13	-19.31	-50.96	-43.56	1.44	12.69	V
	5730	-22.80	-13	-9.80	-45.84	-34.37	1.73	13.30	V
	7640	-44.30	-13	-31.30	-70.06	-53.42	2.01	11.13	V
									V
									V
									V
									V

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

————THE END————