FCC EMI TEST REPORT

FCC ID	:	**APYHRO00327**
Equipment	:	**Smart Phone**
Brand Name	:	**SHARP**
Model Name	:	**APYHRO00327**
Applicant	:	**SHARP CORPORATION** **1 Takumi-Cho, Sakai-Ku, Sakai-Shi, Osaka 590-8522, Japan**
Manufacturer	:	**SHARP CORPORATION** **1 Takumi-Cho, Sakai-Ku, Sakai-Shi, Osaka 590-8522, Japan**
Standard	:	**FCC 47 CFR FCC Part 15 Subpart B Class B**

The product was received on Mar. 22, 2023 and testing was performed from Mar. 28, 2023 to Apr. 20, 2023. 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 C63.4-2014 and has been in compliance with the applicable technical standards.

The test results in this 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.)

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History of this test report

Report No.	Version	Description	Issue Date
FC322209	01	Initial issue of report	May 11, 2023

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.107	AC Conducted Emission	Pass	3.50 dB under the limit at 0.159 MHz
3.2	15.109	Radiated Emission	Pass	7.91 dB under the limit at 177.690 MHz

Conformity Assessment Condition:
1. 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/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. 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.

Reviewed by: Keven Cheng

Report Producer: Lea Yu

1. General Description

1.1. Product Feature of Equipment Under Test

Product Feature
General Specs GSM/WCDMA/LTE, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n/ac, FM Receiver, NFC and GNSS. **Antenna Type** WWAN: <Ant. 0>: Monopole Antenna <Ant. 1>: PIFA Antenna <Ant. 2>: Monopole Antenna WLAN: Loop Antenna Bluetooth: Loop Antenna GPS / Glonass / BDS / Galileo: PIFA Antenna NFC: Loop Antenna FM Receiver: using earphone as antenna

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

SKU List				
Item	Main		2nd Source	
	Main Sample		Sample 2	
	Vendor	Model Number	Vendor	Model Number
Battery	SCUD	BPSX1000010	UTL	BPSX300001S
Main PCB	Wuzhu	SB0SX31BW0C	ZDT	SB0SX31BK0C
CPU	MTK	SA06833V010 (MT6833V_NZA)	MTK	SA06833V010 (MT6833V_NZA)
G- sensor	Bosch	SA0MI320020(BMI320)	TDK	SA042670020(ICM-42670-N)
rear housing	DY	MESX361010A	LF	MESX361011A
FPC_USB	SUNFLEX	MESX114012A	PBH	MESX314004A
FPC_AJ	SUNFLEX	MESX114013A	PBH	MESX314003A
FPC_Main	SUNFLEX	MESX314002A	PBH	MESX314012A
FPC_SPK	AKM	MESX114005A	PBH	MESX314005A
FPC_Side_Key	SUNFLEX	MESX314001A	PBH	MESX314011A
Memory	SAMSUNG	KM5P9001DM-B424	SAMSUNG	KM5P9001DM-B424

SKU List				
Item	2nd Source			
	Sample 3		Sample 4	
	Vendor	Model Number	Vendor	Model Number
Battery	SCUD	BPSX1000010	SCUD	BPSX1000010
Main PCB	Wuzhu	SB0SX31BW0C	Wuzhu	SB0SX31BW0C
CPU	MTK	SA06833V011 (MT6833V_ZA)	MTK	SA06833V010 (MT6833V_NZA)
G- sensor	Bosch	SA0MI320020(BMI320)	Bosch	SA0MI320020(BMI320)
rear housing	DY	MESX361030A	DY	MESX361010A
FPC_USB	PBH	MESX314004A	PBH	MESX314004A
FPC_AJ	PBH	MESX314003A	PBH	MESX314003A
FPC_Main	SUNFLEX	MESX314002A	SUNFLEX	MESX314002A
FPC_SPK	AKM	MESX114005A	AKM	MESX114005A
FPC_Side_Key	SUNFLEX	MESX314001A	SUNFLEX	MESX314001A
Memory	SAMSUNG	KM5P9001DM-B424	Hynix	H9QG9G5AN6X154

1.2. Modification of EUT

No modifications made to the EUT during the testing.

1.3. Test 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.**
	CO05-HY

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.**
	03CH10-HY (TAF Code: 3786)
Remark	The Radiated Emission test item subcontracted to Sporton International Inc. Wensan Laboratory

FCC designation No.: TW1093 and TW1132

1.4. Applicable Standards

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

- FCC 47 CFR FCC Part 15 Subpart B Class B
- ANSI C63.4-2014

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

The EUT is tested along with the peripherals, operating under possible configurations in compliant with normal operation. The maximum emissions can be identified by a pre-scan carried out in different orientations of placement pursuant to ANSI C63.4-2014. Frequency range covered: Conduction Emission (150 kHz to 30 MHz), Radiation Emission (30 MHz to the 5th harmonics of the highest fundamental frequency or to 40 GHz, whichever is lower).

Test Items	Functions Enabled
AC Conducted Emission	Mode 1 : GSM850 Idle + Bluetooth Link + WLAN (2.4GHz) Link + Camera (Rear) + Earphone + USB Cable (Charging form Adapter) + SIM 1 + SD Card + Battery 1 for Main Sample Mode 2 : WCDMA Band V Idle + Bluetooth Link + WLAN (5GHz) Link + Camera (Front) + Earphone + USB Cable (Charging form Adapter) + E-SIM + Battery 1 for Main Sample Mode 3 : LTE Band 5 Idle + Bluetooth Link + WLAN (2.4GHz) Link + FM Rx + Earphone + USB Cable (Charging form Adapter) + SIM 1 + SD Card + Battery 1 for Main Sample Mode 4 : LTE Band 12 Idle + Bluetooth Link + WLAN (5GHz) Link + NFC On + Earphone + USB Cable (Charging form Adapter) + SIM 1 + SD Card + Battery 1 for Main Sample Mode 5 : LTE Band 17 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + H-Pattern + Earphone + USB Cable (Data Link with Notebook) (Read) + SIM 1 + SD Card + Battery 1 for Main Sample Mode 6 : LTE Band 17 Idle + Bluetooth Idle + WLAN (5GHz) Idle + GPS Rx + Earphone + USB Cable (Data Link with Notebook) (write) + SIM 1 + SD Card + Battery 1 for Main Sample Mode 7 : LTE Band 17 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + H-Pattern + Earphone + USB Cable (Data Link with Notebook) (Read) + SIM 1 + SD Card + Battery 2 for Sample 2 Mode 8 : LTE Band 17 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + fingerprint + Earphone + USB Cable (Data Link with Notebook) (Read) + SIM 1 + SD Card + Battery 1 for Main Sample Mode 9 : LTE Band 17 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + H-Pattern + Earphone + USB Cable (Data Link with Notebook) (Read) + SIM 1 + SD Card + Battery 1 for Sample 3 Mode 10 : LTE Band 17 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + H-Pattern + Earphone + USB Cable (Data Link with Notebook) (Read) + SIM 1 + SD Card + Battery 1 for Sample 4

Test Items	Functions Enabled
Radiated Emissions	Mode 1 : GSM850 Idle + Bluetooth Link + WLAN (2.4GHz) Link + Camera (Rear) + Earphone + USB Cable (Charging form Adapter) + SD Card + Battery 1 for Main Sample Mode 2 : WCDMA Band V Idle + Bluetooth Link + WLAN (5GHz) Link + Camera (Front) + Earphone + USB Cable (Charging form Adapter) + Battery 1 for Main Sample Mode 3 : LTE Band 5 Idle + Bluetooth Link + WLAN (2.4GHz) Link + FM Rx + Earphone + USB Cable (Charging form Adapter) + SD Card + Battery 1 for Main Sample Mode 4 : LTE Band 12 Idle + Bluetooth Link + WLAN (5GHz) Link + NFC On + Earphone + USB Cable (Charging form Adapter) + SD Card + Battery 1 for Main Sample Mode 5 : LTE Band 17 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + H Pattern + Earphone + USB Cable (Data Link with Notebook) (Read) + SD Card + Battery 1 for Main Sample Mode 6 : LTE Band 17 Idle + Bluetooth Idle + WLAN (5GHz) Idle + GPS Rx + Earphone + USB Cable (Data Link with Notebook) (write) + SD Card + Battery 1 for Main Sample Mode 7 : LTE Band 17 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + H-Pattern + Earphone + USB Cable (Data Link with Notebook) (Read) + SD Card + Battery 2 for Sample 2 Mode 8 : LTE Band 17 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + Fingerprint + Earphone + USB Cable (Data Link with Notebook) (Read) + SD Card + Battery 1 for Main Sample Mode 9 : LTE Band 17 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + H-Pattern + Earphone + USB Cable (Data Link with Notebook) (Read) + SD Card + Battery 1 for Sample 3 Mode 10 : LTE Band 17 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + H-Pattern + Earphone + USB Cable (Data Link with Notebook) (Read) + SD Card + Battery 1 for Sample 4

Remark:

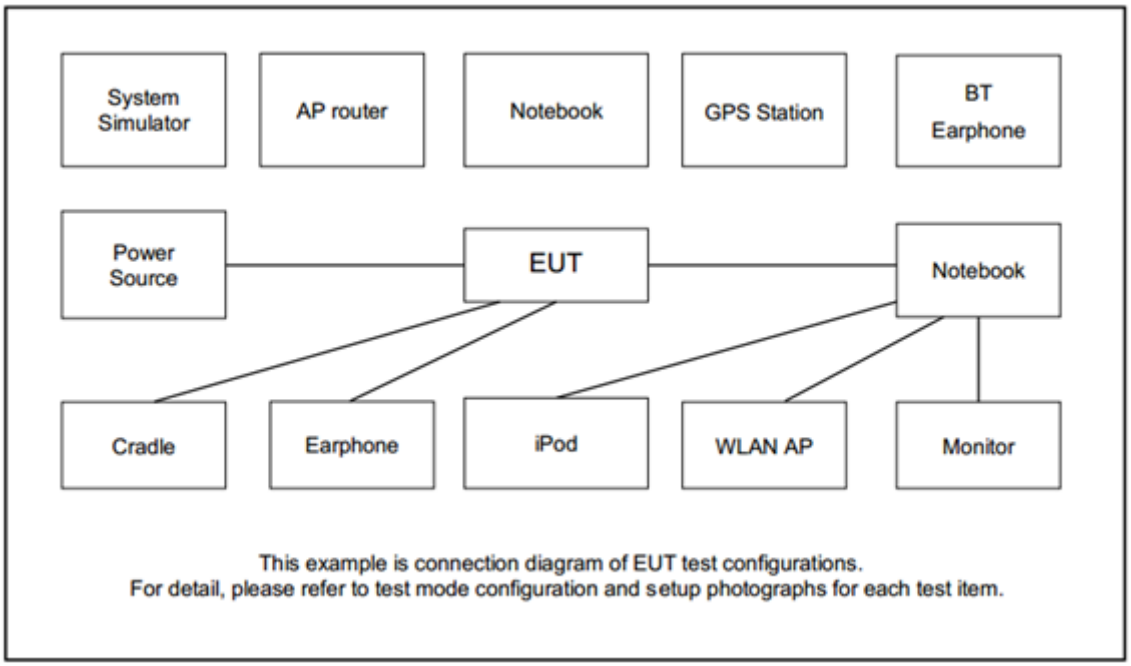
1. The worst case of AC is mode 8; only the test data of this mode was reported.

2. The worst case of RE is mode 7; only the test data of this mode was reported.

3. For Radiation Emission after pre-scanned the cellular band between 30MHz ~ 960MHz (GSM850/WCDMA Band V/LTE Band 5/12/17); only the worst case for cellular band test data of this mode was reported.

4. Data Link with Notebook means data application transferred mode between EUT and Notebook.

2.2. Connection Diagram of Test System



2.3. Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
3.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8 m
4.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
5.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded,1.8m
6.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
7.	Notebook	Dell	Latitude 3420	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
8.	Notebook	Dell	Latitude 5480	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
9.	SD Card	SanDisk	16G	FCC DoC	N/A	N/A

2.4. EUT Operation Test Setup

The EUT is in GSM or WCDMA or LTE idle mode during the test. The EUT is synchronized with the BCCH, and has been continuous receiving mode by setting paging reorganization of the system simulator.

For associated equipment, the programs, “EMCTest.exe” or “EMI.Test.exe”, installed in notebook, which generate a complete line of repeating "H" pattern, are used as the test software. The programs are executed as follows:

a. Turn on the power of all equipment.
b. The notebook reads the test program from the hard disk drive and runs it.
c. The notebook sends "H" messages to the panel, and "H" patterns are displayed on the screen.
d. The notebook sends "H" messages to the internal hard disk, and the messages are read by the hard disk and written in it.
e. Repeat the steps from b to d.

At the same time, the EUT is attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT are programmed during the test:

1. Data application is transferred between Laptop and EUT via USB cable.
2. Execute “GPS Test” to make the EUT receive continuous signals from GPS station.
3. Turn on camera to capture images.
4. EUT links with Notebook and executes ping.
5. Turn on NFC function.
6. Turn on radio function and receive continuous signals from system simulator.

3. Test Result

3.1. Test of AC Conducted Emission Measurement

3.1.1. Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

<Class B>

Frequency of emission (MHz)	Conducted limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

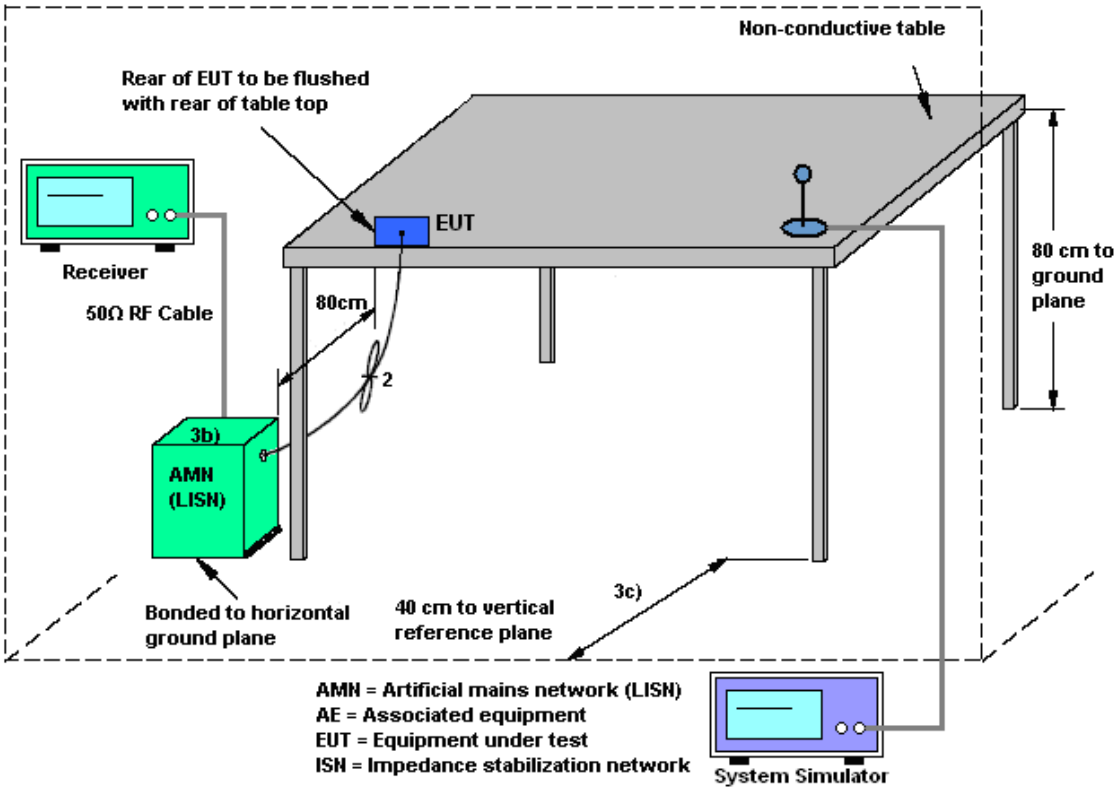
3.1.2. Measuring Instruments

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

3.1.3. Test Procedure

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (If Bandwidth = 9 kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.1.4. Test Setup



3.1.5. Test Result of AC Conducted Emission

Please refer to Appendix A.

3.2. Test of Radiated Emission Measurement

3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

<Class B>

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.2.2. Measuring Instruments

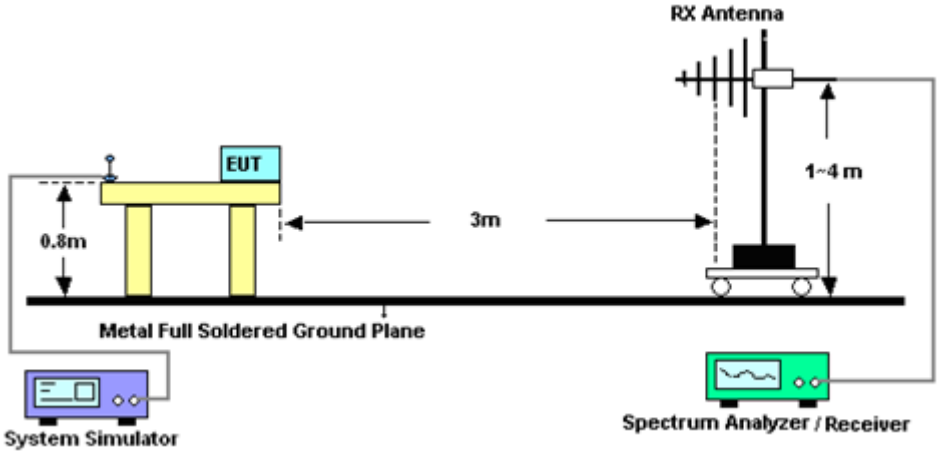
Please refer to the measuring equipment list in this test report.

3.2.3. Test Procedures

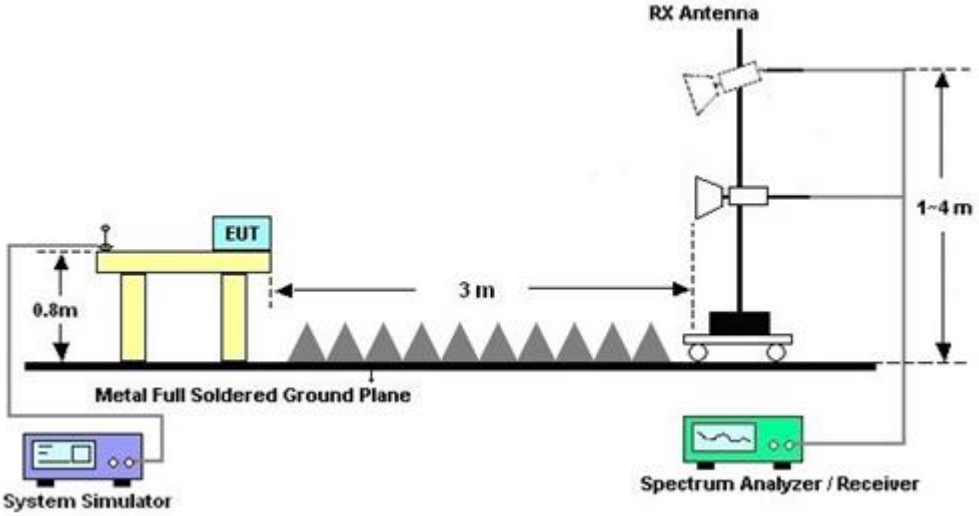
1. The EUT is placed on a turntable with 0.8 meter above ground.
2. The EUT is set 3 meters from the interference receiving antenna, which is mounted on the top of a variable height antenna tower.
3. The table is rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120 kHz/VBW=300 kHz for frequency below 1 GHz; RBW=1 MHz VBW=3 MHz (Peak), RBW=1 MHz/VBW=10 Hz (Average) for frequency above 1 GHz).
7. If the emission level of the EUT in peak mode is 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.

3.2.4. Test Setup of Radiated Emission

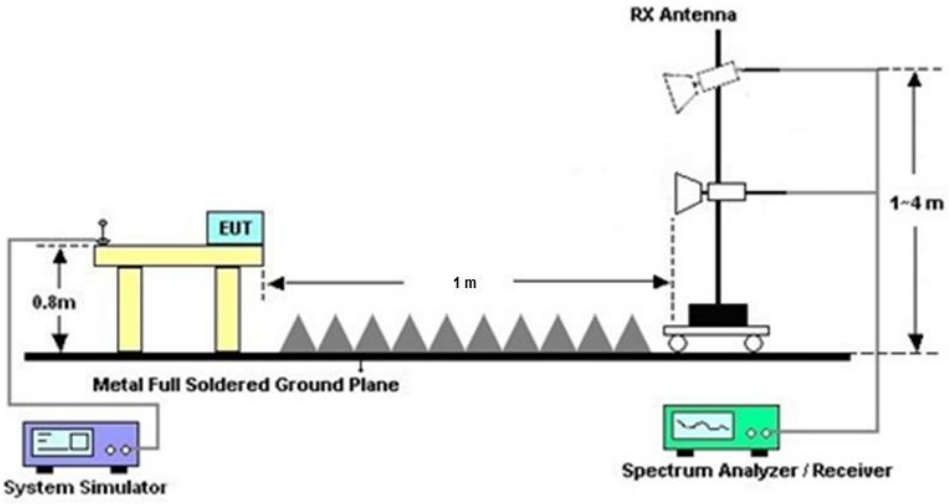
For Radiated Emissions from 30 MHz to 1 GHz



For Radiated Emissions from 1GHz to 18GHz



For Radiated Emissions above 18GHz



3.2.5. Test Result of Radiated Emission

Please refer to Appendix B.

4. List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Apr. 14, 2023	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2022	Apr. 14, 2023	Nov. 30, 2023	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2022	Apr. 14, 2023	Nov. 16, 2023	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 01, 2022	Apr. 14, 2023	Nov. 30, 2023	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 17, 2022	Apr. 14, 2023	Nov. 16, 2023	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Apr. 14, 2023	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Aug. 01, 2022	Apr. 14, 2023	Jul. 31, 2023	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 29, 2022	Apr. 14, 2023	Dec. 28, 2023	Conduction (CO05-HY)
Amplifier	SONOMA	310N	187311	9kHz~1GHz	Oct. 19, 2022	Mar. 28, 2023~ Apr. 20, 2023	Oct. 18, 2023	Radiation (03CH10-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	35413 & 02	30MHz~1GHz	Nov. 06, 2022	Mar. 28, 2023~ Apr. 20, 2023	Nov. 05, 2023	Radiation (03CH10-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1325	1GHz~18GHz	Oct. 27, 2022	Mar. 28, 2023~ Apr. 20, 2023	Oct. 26, 2023	Radiation (03CH10-HY)
Preamplifier	Jet-Power	JAP00101800-30-10P	160118550004	1GHz~18GHz	Feb. 27, 2023	Mar. 28, 2023~ Apr. 20, 2023	Feb. 26, 2024	Radiation (03CH10-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Mar. 28, 2023~ Apr. 20, 2023	N/A	Radiation (03CH10-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Mar. 28, 2023~ Apr. 20, 2023	N/A	Radiation (03CH10-HY)
Turn Table	EMEC	TT 2200	N/A	0~360 Degree	N/A	Mar. 28, 2023~ Apr. 20, 2023	N/A	Radiation (03CH10-HY)
Software	Audix	E3 6.2009-8-24	RK-001042	N/A	N/A	Mar. 28, 2023~ Apr. 20, 2023	N/A	Radiation (03CH10-HY)
EMI Test Receiver	Keysight	N9038A	MY59053012	3Hz~26.5GHz	Nov. 18, 2022	Mar. 28, 2023~ Apr. 20, 2023	Nov. 17, 2023	Radiation (03CH10-HY)
Signal Analyzer	Keysight	N9010B	MY60241055	10Hz~44GHz	Jul. 22, 2022	Mar. 28, 2023~ Apr. 20, 2023	Jul. 21, 2023	Radiation (03CH10-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	519226/2, 804014/2, 804026/2	30MHz~40GHz	Nov. 02, 2022	Mar. 28, 2023~ Apr. 20, 2023	Nov. 01, 2023	Radiation (03CH10-HY)

5. Measurement Uncertainty

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.5 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**6.2 dB**

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.6 dB**

Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.3 dB**

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.5 dB**

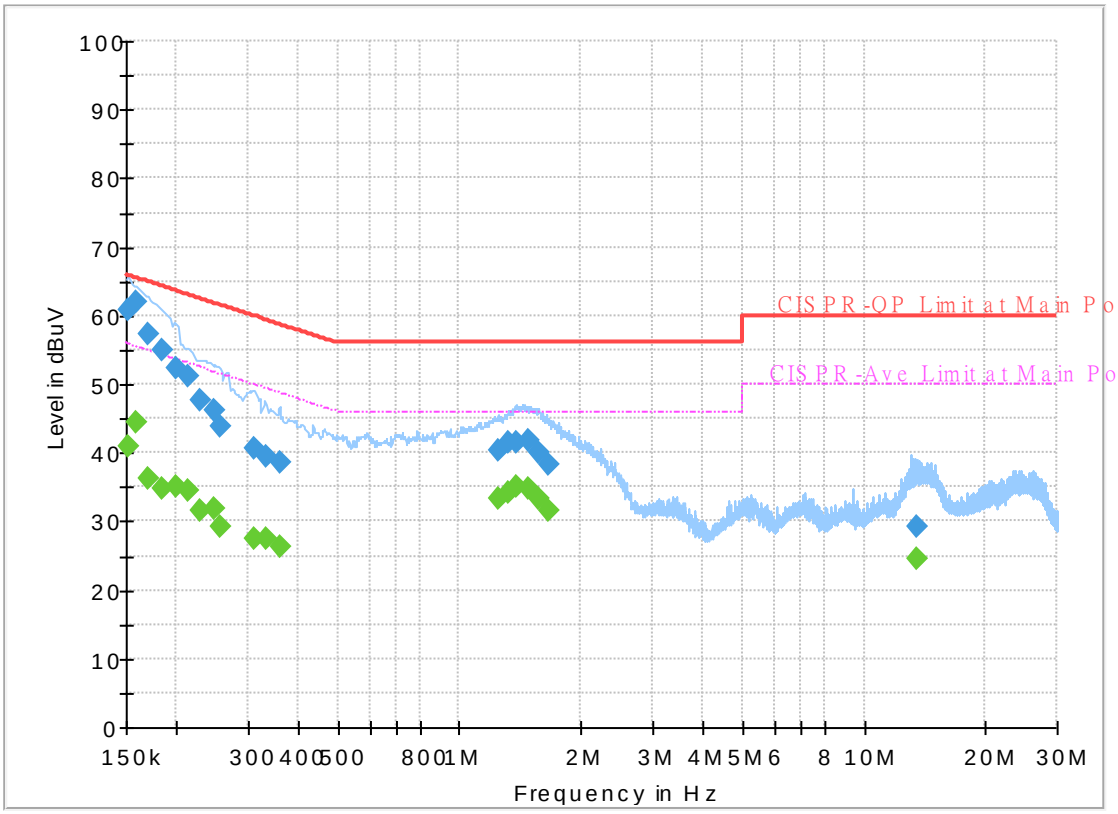
Appendix A. AC Conducted Emission Test Results

Test Engineer :	Calvin Wang	**Temperature :**	23~26℃
		Relative Humidity :	45~55%

EUT Information

Report NO :	322209
Test Mode :	Mode 8
Test Voltage :	Power From System
Phase :	Line

Full Spectrum



Final_Result

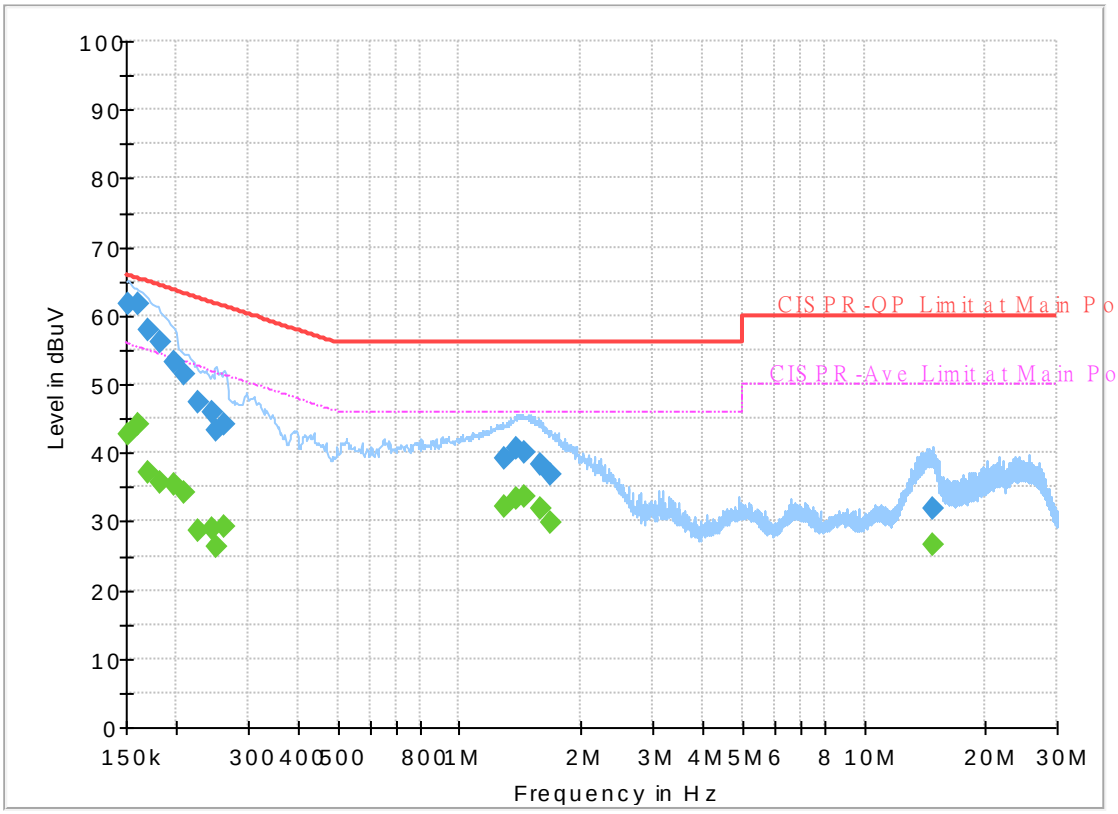
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	41.00	55.88	14.88	L1	OFF	19.8
0.152250	60.95	---	65.88	4.93	L1	OFF	19.8
0.159000	---	44.40	55.52	11.12	L1	OFF	19.8
0.159000	62.02	---	65.52	3.50	L1	OFF	19.8
0.170250	---	36.19	54.95	18.76	L1	OFF	19.8
0.170250	57.41	---	64.95	7.54	L1	OFF	19.8
0.183750	---	34.68	54.31	19.63	L1	OFF	19.8
0.183750	54.84	---	64.31	9.47	L1	OFF	19.8
0.199500	---	34.96	53.63	18.67	L1	OFF	19.8
0.199500	52.34	---	63.63	11.29	L1	OFF	19.8
0.213000	---	34.46	53.09	18.63	L1	OFF	19.8
0.213000	51.07	---	63.09	12.02	L1	OFF	19.8
0.228750	---	31.44	52.50	21.06	L1	OFF	19.8
0.228750	47.56	---	62.50	14.94	L1	OFF	19.8
0.246750	---	31.92	51.87	19.95	L1	OFF	19.8
0.246750	46.06	---	61.87	15.81	L1	OFF	19.8
0.255750	---	29.34	51.57	22.23	L1	OFF	19.8
0.255750	43.88	---	61.57	17.69	L1	OFF	19.8
0.312000	---	27.45	49.92	22.47	L1	OFF	19.8
0.312000	40.67	---	59.92	19.25	L1	OFF	19.8
0.334500	---	27.46	49.34	21.88	L1	OFF	19.8

0.334500	39.52	---	59.34	19.82	L1	OFF	19.8
0.359250	---	26.41	48.75	22.34	L1	OFF	19.8
0.359250	38.70	---	58.75	20.05	L1	OFF	19.8
1.252500	---	33.34	46.00	12.66	L1	OFF	19.8
1.252500	40.21	---	56.00	15.79	L1	OFF	19.8
1.322250	---	34.32	46.00	11.68	L1	OFF	19.8
1.322250	41.50	---	56.00	14.50	L1	OFF	19.8
1.376250	---	35.07	46.00	10.93	L1	OFF	19.8
1.376250	41.66	---	56.00	14.34	L1	OFF	19.8
1.475250	---	34.83	46.00	11.17	L1	OFF	19.8
1.475250	41.76	---	56.00	14.24	L1	OFF	19.8
1.572000	---	33.48	46.00	12.52	L1	OFF	19.8
1.572000	39.92	---	56.00	16.08	L1	OFF	19.8
1.668750	---	31.71	46.00	14.29	L1	OFF	19.8
1.668750	38.40	---	56.00	17.60	L1	OFF	19.8
13.582500	---	24.45	50.00	25.55	L1	OFF	20.0
13.582500	29.20	---	60.00	30.80	L1	OFF	20.0

EUT Information

Report NO :	322209
Test Mode :	Mode 8
Test Voltage :	Power From System
Phase :	Neutral

Full Spectrum



Final_Result

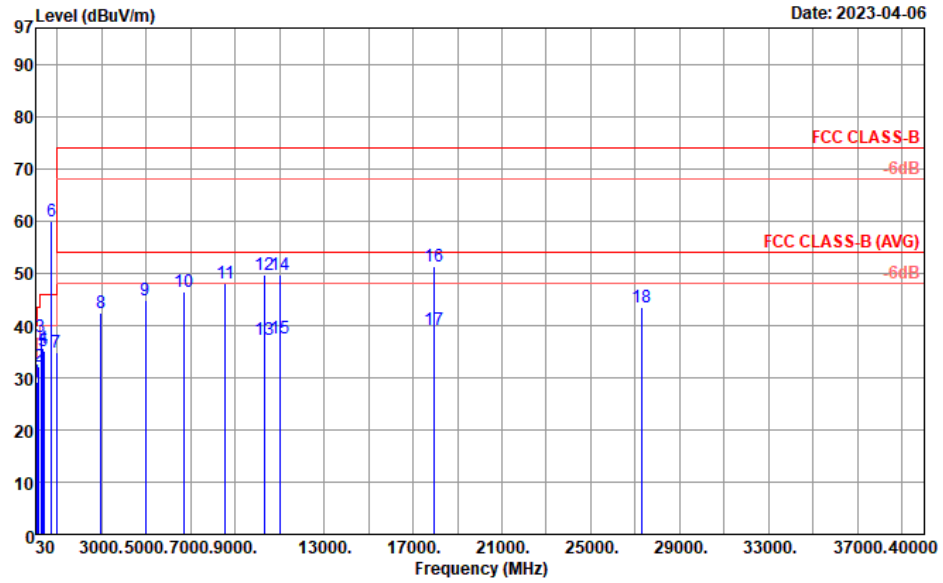
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	42.74	55.88	13.14	N	OFF	19.8
0.152250	61.58	---	65.88	4.30	N	OFF	19.8
0.161250	---	44.13	55.40	11.27	N	OFF	19.8
0.161250	61.70	---	65.40	3.70	N	OFF	19.8
0.170250	---	37.04	54.95	17.91	N	OFF	19.8
0.170250	57.83	---	64.95	7.12	N	OFF	19.8
0.181500	---	35.78	54.42	18.64	N	OFF	19.8
0.181500	56.15	---	64.42	8.27	N	OFF	19.8
0.197250	---	35.45	53.73	18.28	N	OFF	19.8
0.197250	53.17	---	63.73	10.56	N	OFF	19.8
0.208500	---	34.32	53.27	18.95	N	OFF	19.8
0.208500	51.51	---	63.27	11.76	N	OFF	19.8
0.226500	---	28.67	52.58	23.91	N	OFF	19.8
0.226500	47.29	---	62.58	15.29	N	OFF	19.8
0.244500	---	29.02	51.94	22.92	N	OFF	19.8
0.244500	45.87	---	61.94	16.07	N	OFF	19.8
0.251250	---	26.29	51.72	25.43	N	OFF	19.8
0.251250	43.23	---	61.72	18.49	N	OFF	19.8
0.262500	---	29.34	51.35	22.01	N	OFF	19.8
0.262500	44.15	---	61.35	17.20	N	OFF	19.8
1.293000	---	32.07	46.00	13.93	N	OFF	19.8

1.293000	39.31	---	56.00	16.69	N	OFF	19.8
1.376250	---	33.38	46.00	12.62	N	OFF	19.8
1.376250	40.51	---	56.00	15.49	N	OFF	19.8
1.455000	---	33.58	46.00	12.42	N	OFF	19.8
1.455000	40.17	---	56.00	15.83	N	OFF	19.8
1.578750	---	31.77	46.00	14.23	N	OFF	19.8
1.578750	38.25	---	56.00	17.75	N	OFF	19.8
1.677750	---	29.96	46.00	16.04	N	OFF	19.8
1.677750	36.74	---	56.00	19.26	N	OFF	19.8
14.790750	---	26.53	50.00	23.47	N	OFF	20.1
14.790750	31.94	---	60.00	28.06	N	OFF	20.1

Appendix B. Radiated Emission Test Result

Test Engineer :	Donny Tang, Yu Wang and Howard Huang	**Temperature :**	22.7~23.9˚C
		Relative Humidity :	59.2~61.4%
Test Distance :	3m	**Polarization :**	Horizontal
Remark :	#6 is system simulator signal which can be ignored.		

■ Emission level (dBμV/m) = 20 log Emission level (μV/m)
■ Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

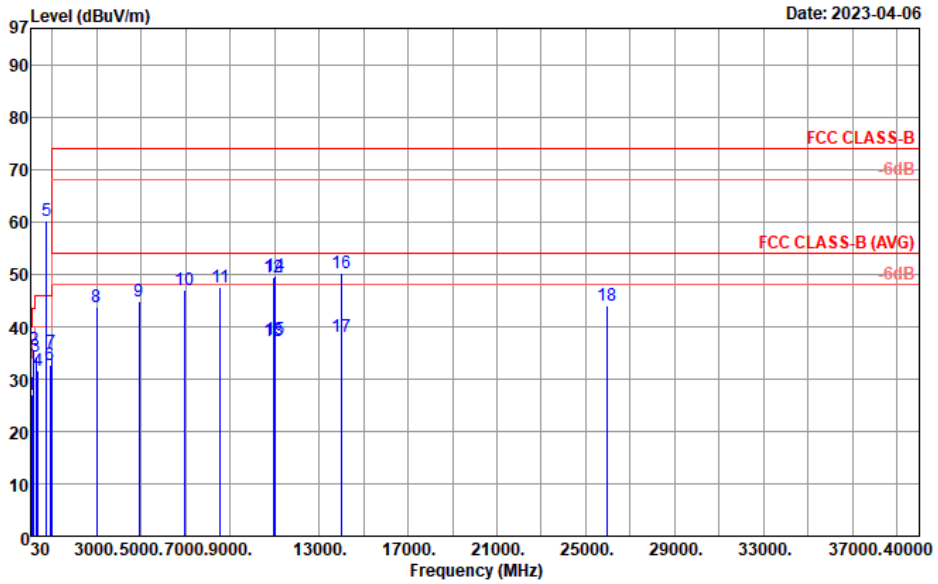


Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHF ANT_70576_221216 HORIZONTAL
Project : 322209
Power : From System
Mode : 7

		Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1		83.73	29.12	-10.88	40.00	46.13	13.98	1.61	32.60	---	---	Peak
2		179.04	32.09	-11.41	43.50	47.15	15.12	2.34	32.52	---	---	Peak
3		280.56	37.78	-8.22	46.00	48.41	18.90	2.93	32.46	---	---	Peak
4		361.60	35.56	-10.44	46.00	43.94	20.71	3.33	32.42	---	---	Peak
5		388.90	35.09	-10.91	46.00	42.54	21.43	3.45	32.33	---	---	Peak
6	*	740.00	59.86			59.64	27.95	4.76	32.49	---	---	Peak
7		954.50	34.88	-11.12	46.00	29.54	31.11	5.37	31.14	---	---	Peak
8		2964.00	42.45	-31.55	74.00	63.14	29.08	9.51	59.28	---	---	Peak
9		4986.00	44.98	-29.02	74.00	59.10	33.02	12.45	59.59	---	---	Peak
10		6710.00	46.34	-27.66	74.00	56.12	36.08	14.48	60.34	---	---	Peak
11		8546.00	48.00	-26.00	74.00	54.90	37.59	16.46	60.95	---	---	Peak
12		10328.00	49.60	-24.40	74.00	53.23	38.80	18.21	60.64	---	---	Peak
13		10328.00	37.38	-16.62	54.00	41.01	38.80	18.21	60.64	---	---	Average
14		11052.00	49.80	-24.20	74.00	52.74	38.70	18.85	60.49	---	---	Peak
15		11052.00	37.58	-16.42	54.00	40.52	38.70	18.85	60.49	---	---	Average
16		17965.00	51.34	-22.66	74.00	43.53	41.66	24.40	58.25	---	---	Peak
17		17965.00	39.12	-14.88	54.00	31.31	41.66	24.40	58.25	---	---	Average
18		27312.00	43.41	-30.59	74.00	66.51	0.00	30.46	53.56	---	---	Peak

Test Engineer :	Donny Tang, Yu Wang and Howard Huang	**Temperature :**	22.7~23.9℃
		Relative Humidity :	59.2~61.4%
Test Distance :	3m	**Polarization :**	Vertical
Remark :	#5 is system simulator signal which can be ignored.		

■ Emission level (dBμV/m) = 20 log Emission level (μV/m)
■ Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level



Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHF ANT_70576_221216 VERTICAL
Project : 322209
Power : From System
Mode : 7

		Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1		86.70	26.90	-13.10	40.00	43.49	14.37	1.64	32.60	---	---	Peak
2		177.69	35.59	-7.91	43.50	50.56	15.21	2.34	32.52	---	---	Peak
3		280.56	34.29	-11.71	46.00	44.92	18.90	2.93	32.46	---	---	Peak
4		370.00	31.60	-14.40	46.00	39.76	20.86	3.37	32.39	---	---	Peak
5	*	740.00	60.21			59.99	27.95	4.76	32.49	---	---	Peak
6		904.80	32.59	-13.41	46.00	29.73	29.18	5.27	31.59	---	---	Peak
7		955.90	35.07	-10.93	46.00	29.66	31.16	5.38	31.13	---	---	Peak
8		2998.00	43.69	-30.31	74.00	64.04	29.38	9.57	59.30	---	---	Peak
9		4910.00	44.86	-29.14	74.00	59.47	32.64	12.36	59.61	---	---	Peak
10		6938.00	46.97	-27.03	74.00	56.77	35.88	14.79	60.47	---	---	Peak
11		8548.00	47.64	-26.36	74.00	54.53	37.60	16.46	60.95	---	---	Peak
12		10956.00	49.57	-24.43	74.00	52.53	38.79	18.77	60.52	---	---	Peak
13		10956.00	37.34	-16.66	54.00	40.30	38.79	18.77	60.52	---	---	Average
14		11034.00	49.66	-24.34	74.00	52.62	38.70	18.84	60.50	---	---	Peak
15		11034.00	37.44	-16.56	54.00	40.40	38.70	18.84	60.50	---	---	Average
16		13990.00	50.33	-23.67	74.00	47.22	40.90	21.25	59.04	---	---	Peak
17		13990.00	38.11	-15.89	54.00	35.00	40.90	21.25	59.04	---	---	Average
18		25980.00	44.02	-29.98	74.00	67.49	0.00	29.63	53.10	---	---	Peak