



FCC EMI TEST REPORT

FCC ID : APYHRO00310
Equipment : Smart phone
Brand Name : SHARP
Model Name : APYHRO00310
Applicant : SHARP CORPORATION
1 Takumi-cho, Sakai-ku, Sakai City Osaka, Japan 590-8522
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 Feb. 11, 2022 and testing was performed from Feb. 22, 2022 to Feb. 25, 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 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.

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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Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.107	AC Conducted Emission	Pass	3.91 dB under the limit at 0.159 MHz
3.2	15.109	Radiated Emission	Pass	7.94 dB under the limit at 960.000 MHz

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: Keven Cheng

Report Producer: Vivian Hsu



1. General Description

1.1. Product Feature of Equipment Under Test

GSM/WCDMA/LTE, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ac, Wi-Fi 5GHz 802.11a/n/ac, NFC, and GNSS.

Product Feature	
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

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

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, 03CH06-HY

FCC designation No.: TW1093

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

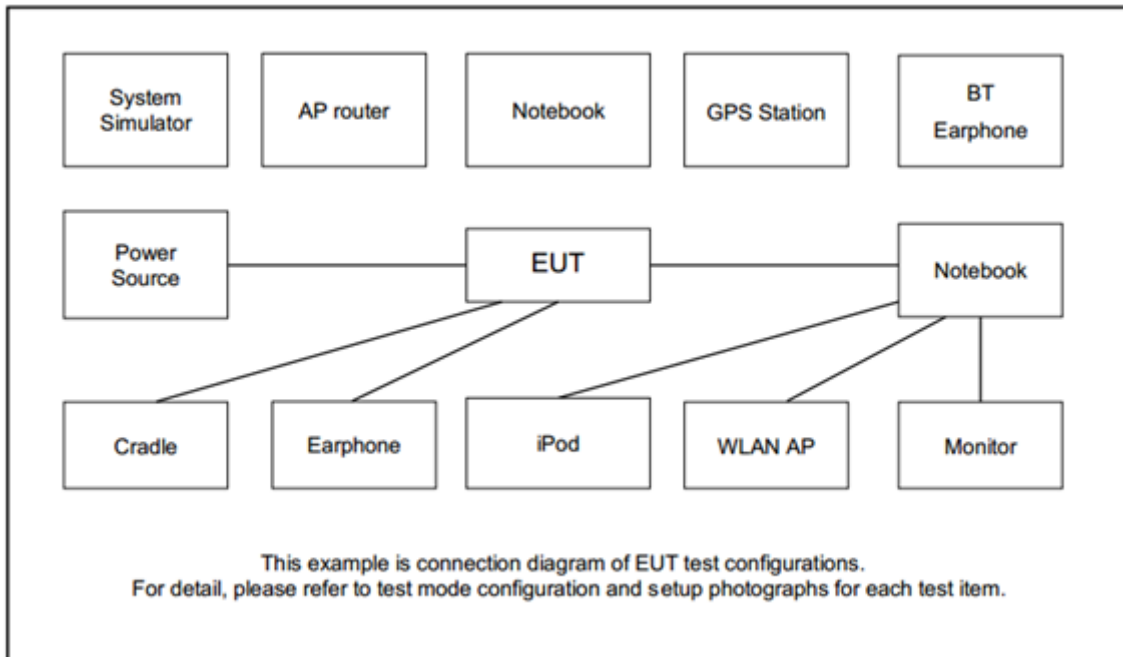
The EUT is tested along with the peripherals, operating under possible configurations in compliant with normal operation. The maximum emissions can be identified by a pre-scan carried out in different orientations of placement pursuant to ANSI C63.4-2014. Frequency range covered: Conduction Emission (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: LTE Band 5 (Low Channel) Idle + Bluetooth Link + WLAN (2.4GHz) Link + Camera (Rear) + Earphone + USB Cable (Charging from Adapter Port) + SD Card + Battery + SIM 1
	Mode 2: LTE Band 5 (Middle Channel) Idle + Bluetooth Link + WLAN (5GHz) Link + Camera (Front) + Earphone + USB Cable (Charging from Adapter Port) + SD Card + Battery + E- SIM
	Mode 3: LTE Band 5 (High Channel) Idle + Bluetooth Link + WLAN (2.4GHz) Link + MPEG4 + Earphone + USB Cable (Charging from Adapter Port) + SD Card + Battery + SIM 1
	Mode 4: LTE Band 12 (Low Channel) Idle + Bluetooth Link + WLAN (5GHz) Link + NFC On + Earphone + USB Cable (Charging from Adapter Port) + SD Card + Battery + SIM 1
	Mode 5: LTE Band 12 (Middle Channel) Idle + Bluetooth Link + WLAN (2.4GHz) Link + Fingerprint + Earphone + USB Cable (Data Link with Notebook) (Read) + SD Card + Battery + SIM 1
	Mode 6: LTE Band 12 (High Channel) Idle + Bluetooth Link + WLAN (5GHz) Link + GPS Rx + Earphone + USB Cable (Data Link with Notebook) (Write) + SD Card + Battery + SIM 1
	Mode 7: LTE Band 12 (Middle Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + H-Patten + Earphone + USB Cable (Charging from Adapter Port) + SD Card + Battery + SIM 1



Test Items	Functions Enabled
Radiated Emissions	Mode 1 : LTE Band 5 (Low Channel) Idle + Bluetooth Link + WLAN (2.4GHz) Link + Camera (Rear) + Earphone + USB Cable (Charging from Adapter Port) + SD Card + Battery + SIM 1
	Mode 2 : LTE Band 5 (Middle Channel) Idle + Bluetooth Link + WLAN (5GHz) Link + Camera (Front) + Earphone + USB Cable (Charging from Adapter Port) + SD Card + Battery + E- SIM
	Mode 3 : LTE Band 5 (High Channel) Idle + Bluetooth Link + WLAN (2.4GHz) Link + MPEG4 + Earphone + USB Cable (Charging from Adapter Port) + SD Card + Battery + SIM 1
	Mode 4 : LTE Band 12 (Low Channel) Idle + Bluetooth Link + WLAN (5GHz) Link + NFC On + Earphone + USB Cable (Charging from Adapter Port) + SD Card + Battery + SIM 1
	Mode 5 : LTE Band 12 (Middle Channel) Idle + Bluetooth Link + WLAN (2.4GHz) Link + Fingerprint + Earphone + USB Cable (Data Link with Notebook) (Read) + SD Card + Battery + SIM 1
	Mode 6 : LTE Band 12 (High Channel) Idle + Bluetooth Link + WLAN (5GHz) Link + GPS Rx + Earphone + USB Cable (Data Link with Notebook) (Write) + SD Card + Battery + SIM 1
	Mode 7 : LTE Band 12 (High Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + H-Patten + Earphone + USB Cable (Charging from Adapter Port) + SD Card + Battery + SIM 1
Remark: <ol style="list-style-type: none">1. The worst case of AC is mode 5; only the test data of this mode was reported.2. The worst case of RE is mode 6; 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, 1.8m
2.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8m
3.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8m
4.	Bluetooth Earphone	Sony Ericsson	MW600	PY700A2029	N/A	N/A
5.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8m
6.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0m	N/A
7.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
8.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
9.	Earphone	Nokia	WH-108	FCC DoC	Unshielded, 1.5m	N/A



2.4. EUT Operation Test Setup

The EUT is in 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, "EMC32Test.exe" or "E3", 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. Turn on Fingerprint function.
5. Turn on NFC function.



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.

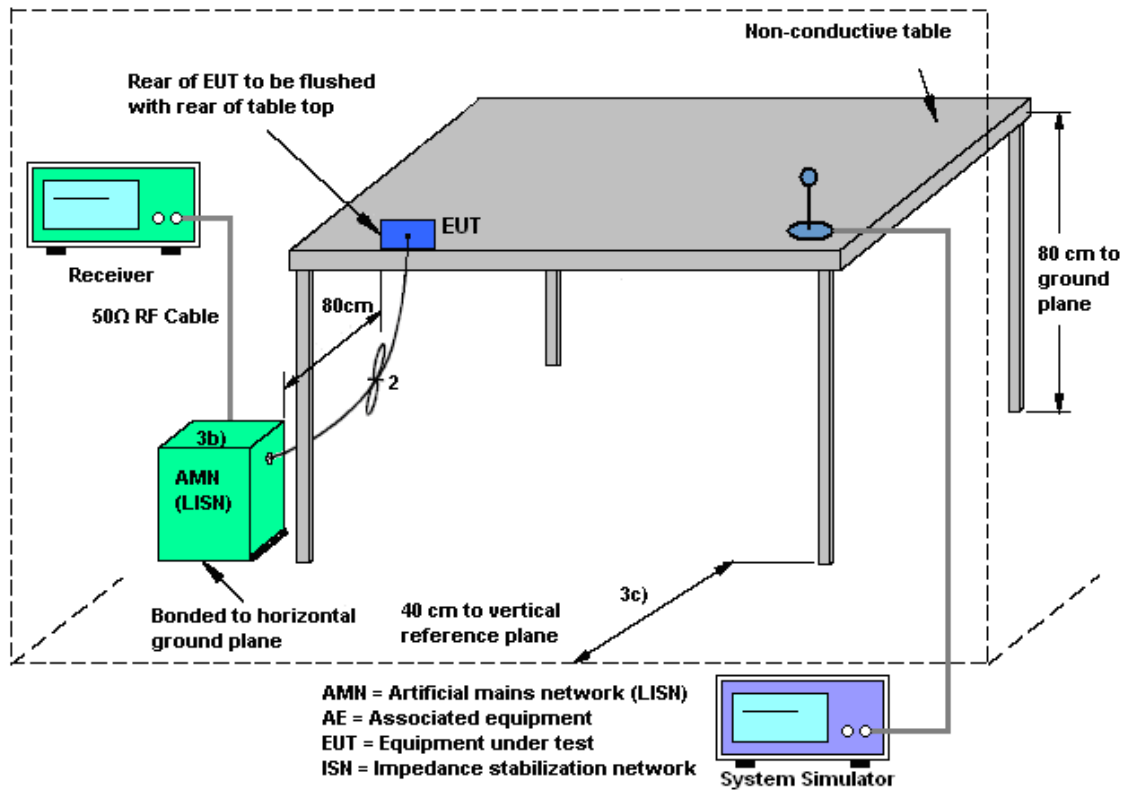
3.1.2. Measuring Instruments

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

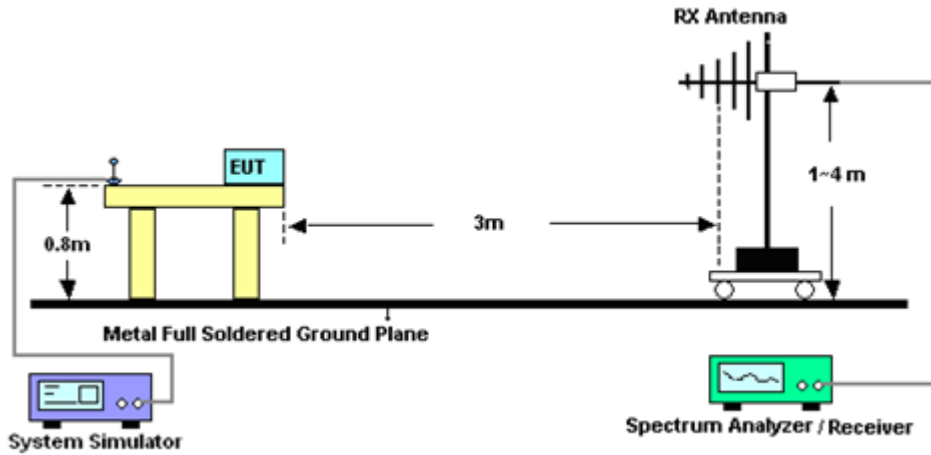
Please refer to the measuring equipment list in this test report.

3.2.3. Test Procedures

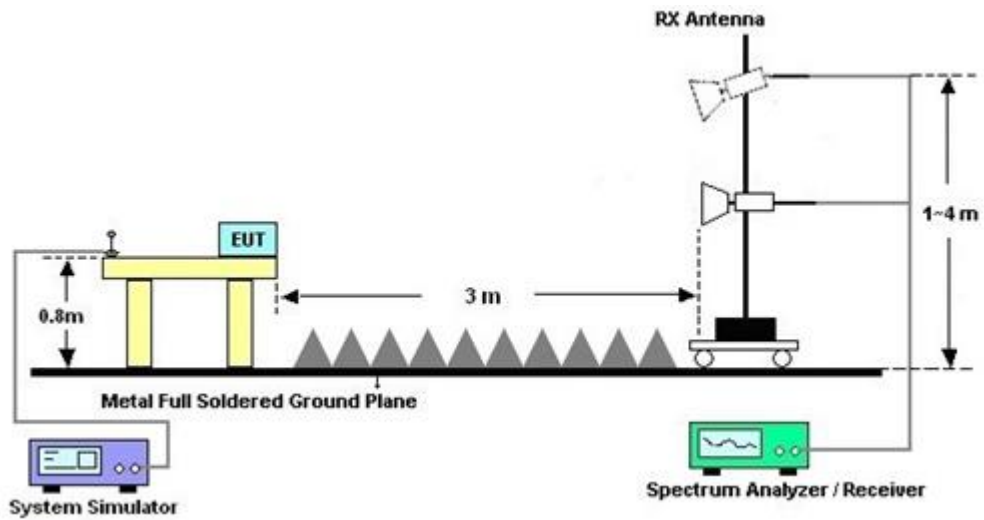
1. The EUT is placed on a turntable with 0.8 meter above ground.
2. The EUT is set 3 meters from the interference receiving antenna for measured frequency 30MHz~18GHz, which is mounted on the top of a variable height antenna tower.
3. The table is rotated 360 degrees to determine the position of the 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.
8. Emission level (dBµV/m) = 20 log Emission level (µV/m)
9. Distance extrapolation factor = 20 log (specific distance / test distance) (dB)
10. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor - Distance extrapolation factor = Level

3.2.4. Test Setup of Radiated Emission

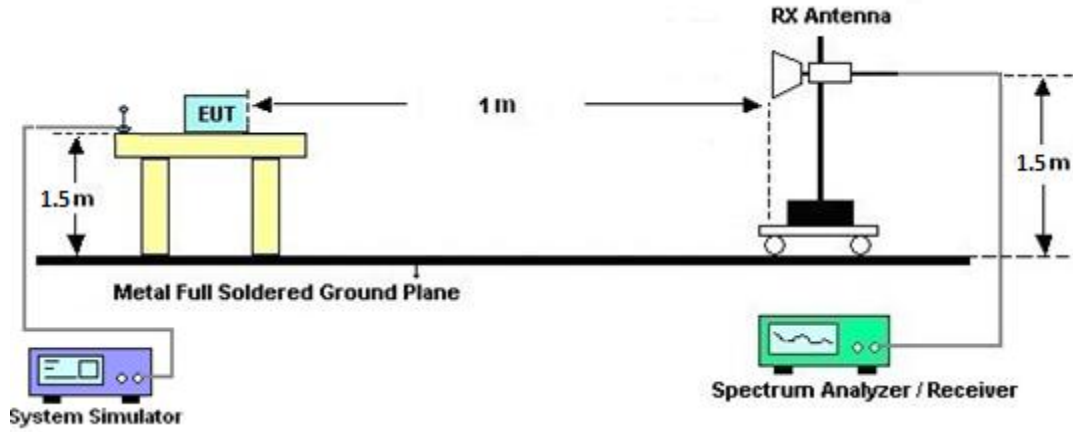
For Radiated Emissions from 30 MHz to 1 GHz



For radiated test from 1GHz to 18GHz



For radiated test 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	Feb. 22, 2022	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2021	Feb. 22, 2022	Nov. 30, 2022	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2021	Feb. 22, 2022	Nov. 16, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 03, 2021	Feb. 22, 2022	Dec. 02, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 16, 2021	Feb. 22, 2022	Nov. 15, 2022	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Feb. 22, 2022	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Jul. 28, 2021	Feb. 22, 2022	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 30, 2021	Feb. 22, 2022	Dec. 29, 2022	Conduction (CO05-HY)
Amplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 29, 2021	Feb. 24, 2022~ Feb. 25, 2022	Apr. 28, 2022	Radiation (03CH06-HY)
Bilog Antenna	Schaffner	CBL 6111C & N-6-06	2725 & AT-N0601	30MHz~1GHz	Nov. 11, 2021	Feb. 24, 2022~ Feb. 25, 2022	Nov. 10, 2022	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100390	20Hz~26.5GHz	May 22, 2021	Feb. 24, 2022~ Feb. 25, 2022	May 21, 2022	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Sep. 27, 2021	Feb. 24, 2022~ Feb. 25, 2022	Sep. 26, 2022	Radiation (03CH06-HY)
Preamplifier	Jet-Power	JPA00101800-30-10P	1601180001	1GHz~18GHz	Jul. 19, 2021	Feb. 24, 2022~ Feb. 25, 2022	Jul. 18, 2022	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	SF102_7000mm	532299/2	30MHz to 40GHz	Jul. 05, 2021	Feb. 24, 2022~ Feb. 25, 2022	Jul. 04, 2022	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	SF102_3000mm	532422/2	30MHz to 40GHz	Jul. 05, 2021	Feb. 24, 2022~ Feb. 25, 2022	Jul. 04, 2022	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	SF102_2000mm	532421/2	30MHz to 40GHz	Jul. 05, 2021	Feb. 24, 2022~ Feb. 25, 2022	Jul. 04, 2022	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	SF104	802433/4	30Mhz to 18Ghz	Aug. 19, 2021	Feb. 24, 2022~ Feb. 25, 2022	Aug. 18, 2022	Radiation (03CH06-HY)
Controller	INN-CO	EM1000	060782	Control Turn table & Ant Mast	N/A	Feb. 24, 2022~ Feb. 25, 2022	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	Feb. 24, 2022~ Feb. 25, 2022	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Feb. 24, 2022~ Feb. 25, 2022	N/A	Radiation (03CH06-HY)
Software	Audix	E3 6.2009-8-24(k5)	N/A	N/A	N/A	Feb. 24, 2022~ Feb. 25, 2022	N/A	Radiation (03CH06-HY)



5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.1 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.2 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.4 dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.3 dB
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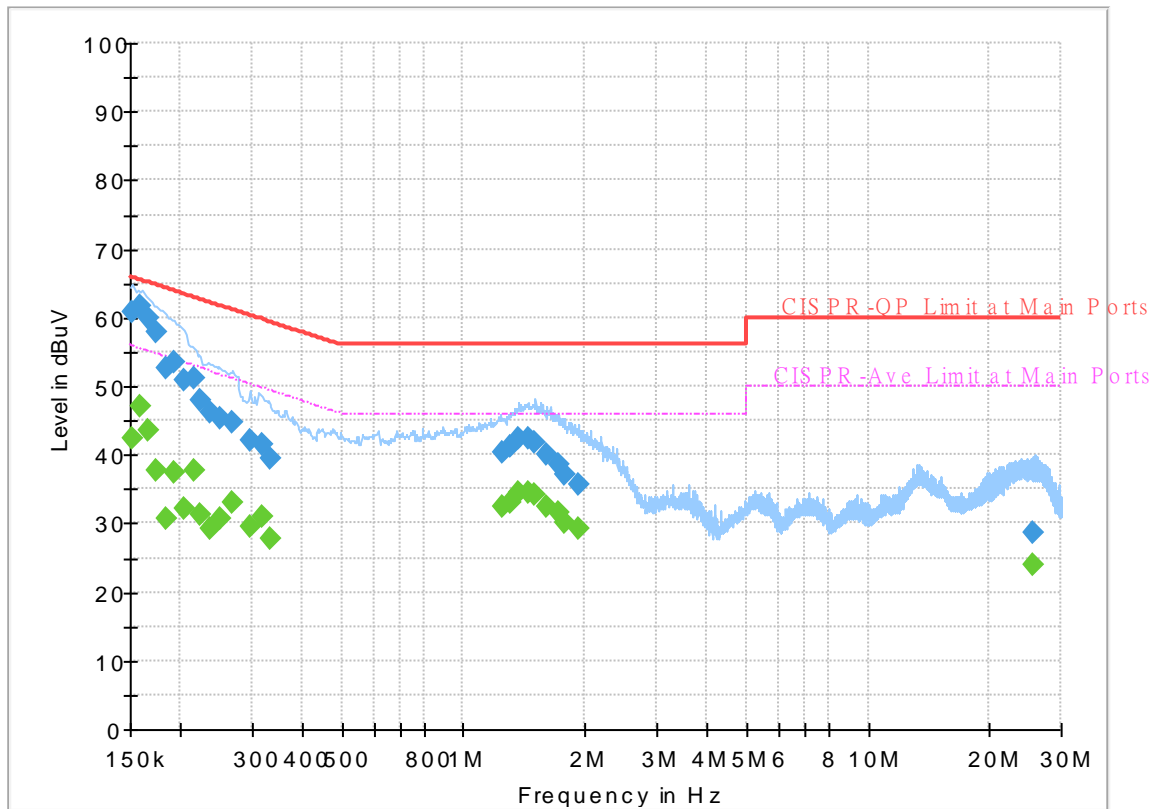
Appendix A. AC Conducted Emission Test Results

Test Engineer :	Calvin Wang	Temperature :	23~26°C
		Relative Humidity :	45~55%

EUT Information

Report NO : 211502-01
 Test Mode : Mode 5
 Test Voltage : Power From System
 Phase : Line

Full Spectrum



Final_Result

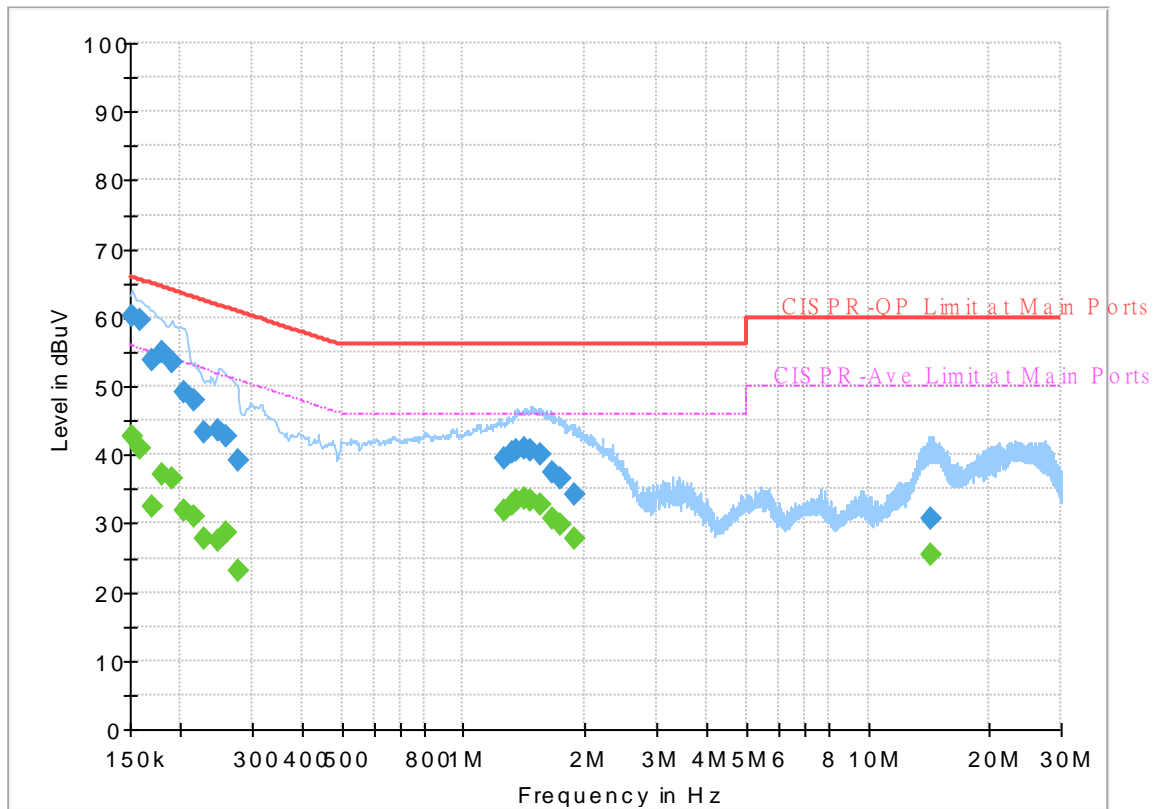
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	42.48	55.88	13.40	L1	OFF	19.6
0.152250	60.91	---	65.88	4.97	L1	OFF	19.6
0.159000	---	47.00	55.52	8.52	L1	OFF	19.6
0.159000	61.61	---	65.52	3.91	L1	OFF	19.6
0.165750	---	43.58	55.17	11.59	L1	OFF	19.6
0.165750	59.90	---	65.17	5.27	L1	OFF	19.6
0.174750	---	37.77	54.73	16.96	L1	OFF	19.6
0.174750	57.87	---	64.73	6.86	L1	OFF	19.6
0.183750	---	30.65	54.31	23.66	L1	OFF	19.6
0.183750	52.62	---	64.31	11.69	L1	OFF	19.6
0.192750	---	37.45	53.92	16.47	L1	OFF	19.6
0.192750	53.48	---	63.92	10.44	L1	OFF	19.6
0.204000	---	32.19	53.45	21.26	L1	OFF	19.6
0.204000	50.89	---	63.45	12.56	L1	OFF	19.6
0.215250	---	37.61	53.00	15.39	L1	OFF	19.6
0.215250	51.14	---	63.00	11.86	L1	OFF	19.6
0.224250	---	31.43	52.66	21.23	L1	OFF	19.6
0.224250	48.06	---	62.66	14.60	L1	OFF	19.6
0.237750	---	29.18	52.17	22.99	L1	OFF	19.6
0.237750	46.24	---	62.17	15.93	L1	OFF	19.6
0.251250	---	30.82	51.72	20.90	L1	OFF	19.6

0.251250	45.38	---	61.72	16.34	L1	OFF	19.6
0.269250	---	33.01	51.14	18.13	L1	OFF	19.6
0.269250	44.86	---	61.14	16.28	L1	OFF	19.6
0.296250	---	29.53	50.35	20.82	L1	OFF	19.6
0.296250	42.01	---	60.35	18.34	L1	OFF	19.6
0.318750	---	31.03	49.74	18.71	L1	OFF	19.6
0.318750	41.38	---	59.74	18.36	L1	OFF	19.6
0.332250	---	27.86	49.40	21.54	L1	OFF	19.6
0.332250	39.34	---	59.40	20.06	L1	OFF	19.6
1.252500	---	32.60	46.00	13.40	L1	OFF	19.6
1.252500	40.50	---	56.00	15.50	L1	OFF	19.6
1.302000	---	33.06	46.00	12.94	L1	OFF	19.6
1.302000	41.15	---	56.00	14.85	L1	OFF	19.6
1.369500	---	34.63	46.00	11.37	L1	OFF	19.6
1.369500	42.28	---	56.00	13.72	L1	OFF	19.6
1.441500	---	34.45	46.00	11.55	L1	OFF	19.6
1.441500	42.39	---	56.00	13.61	L1	OFF	19.6
1.506750	---	34.20	46.00	11.80	L1	OFF	19.6
1.506750	41.76	---	56.00	14.24	L1	OFF	19.6
1.605750	---	32.58	46.00	13.42	L1	OFF	19.6
1.605750	40.13	---	56.00	15.87	L1	OFF	19.6
1.711500	---	31.46	46.00	14.54	L1	OFF	19.6
1.711500	38.57	---	56.00	17.43	L1	OFF	19.6
1.781250	---	30.21	46.00	15.79	L1	OFF	19.6
1.781250	37.04	---	56.00	18.96	L1	OFF	19.6
1.918500	---	29.12	46.00	16.88	L1	OFF	19.6
1.918500	35.76	---	56.00	20.24	L1	OFF	19.6
25.440000	---	23.89	50.00	26.11	L1	OFF	19.8
25.440000	28.73	---	60.00	31.27	L1	OFF	19.8

EUT Information

Report NO : 211502-01
 Test Mode : Mode 5
 Test Voltage : Power From System
 Phase : Neutral

Full Spectrum



Final_Result

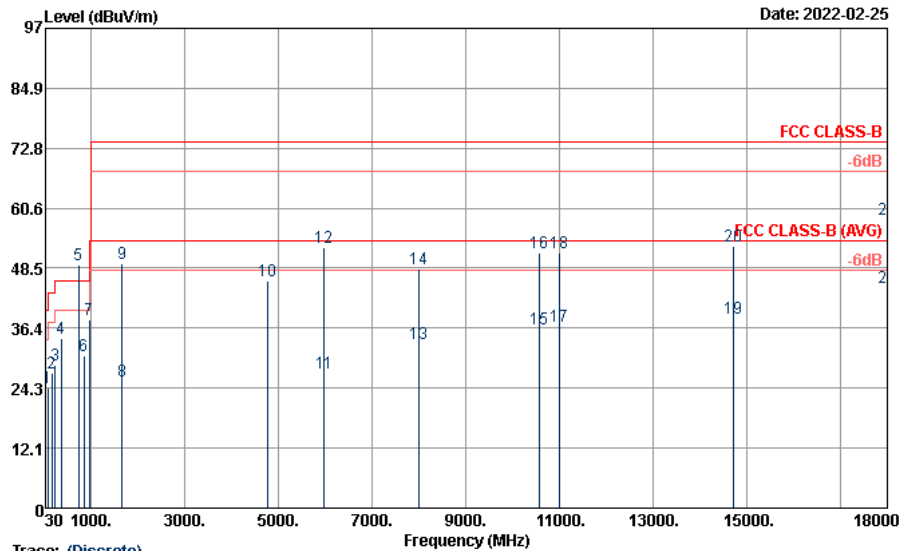
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	42.62	55.88	13.26	N	OFF	19.6
0.152250	60.34	---	65.88	5.54	N	OFF	19.6
0.159000	---	40.89	55.52	14.63	N	OFF	19.6
0.159000	59.64	---	65.52	5.88	N	OFF	19.6
0.170250	---	32.36	54.95	22.59	N	OFF	19.6
0.170250	53.72	---	64.95	11.23	N	OFF	19.6
0.179250	---	37.06	54.52	17.46	N	OFF	19.6
0.179250	54.93	---	64.52	9.59	N	OFF	19.6
0.190500	---	36.58	54.02	17.44	N	OFF	19.6
0.190500	53.42	---	64.02	10.60	N	OFF	19.6
0.204000	---	31.77	53.45	21.68	N	OFF	19.6
0.204000	49.16	---	63.45	14.29	N	OFF	19.6
0.215250	---	30.92	53.00	22.08	N	OFF	19.6
0.215250	47.88	---	63.00	15.12	N	OFF	19.6
0.228750	---	27.91	52.50	24.59	N	OFF	19.6
0.228750	43.15	---	62.50	19.35	N	OFF	19.6
0.249000	---	27.54	51.79	24.25	N	OFF	19.6
0.249000	43.65	---	61.79	18.14	N	OFF	19.6
0.258000	---	28.58	51.50	22.92	N	OFF	19.6
0.258000	42.64	---	61.50	18.86	N	OFF	19.6
0.276000	---	22.99	50.94	27.95	N	OFF	19.6

0.276000	39.07	---	60.94	21.87	N	OFF	19.6
1.263750	---	31.84	46.00	14.16	N	OFF	19.6
1.263750	39.48	---	56.00	16.52	N	OFF	19.6
1.315500	---	32.69	46.00	13.31	N	OFF	19.6
1.315500	40.34	---	56.00	15.66	N	OFF	19.6
1.358250	---	33.29	46.00	12.71	N	OFF	19.6
1.358250	40.58	---	56.00	15.42	N	OFF	19.6
1.410000	---	33.68	46.00	12.32	N	OFF	19.6
1.410000	40.88	---	56.00	15.12	N	OFF	19.6
1.466250	---	33.36	46.00	12.64	N	OFF	19.6
1.466250	40.59	---	56.00	15.41	N	OFF	19.6
1.556250	---	32.77	46.00	13.23	N	OFF	19.6
1.556250	40.02	---	56.00	15.98	N	OFF	19.6
1.668750	---	30.57	46.00	15.43	N	OFF	19.6
1.668750	37.33	---	56.00	18.67	N	OFF	19.6
1.745250	---	29.72	46.00	16.28	N	OFF	19.6
1.745250	36.44	---	56.00	19.56	N	OFF	19.6
1.889250	---	27.84	46.00	18.16	N	OFF	19.6
1.889250	34.28	---	56.00	21.72	N	OFF	19.6
14.325000	---	25.45	50.00	24.55	N	OFF	19.9
14.325000	30.75	---	60.00	29.25	N	OFF	19.9



Appendix B. Radiated Emission Test Result

Test Engineer :	You Xian Chen	Temperature :	20~24°C
		Relative Humidity :	47~53%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#5 is system simulator signal which can be ignored.		

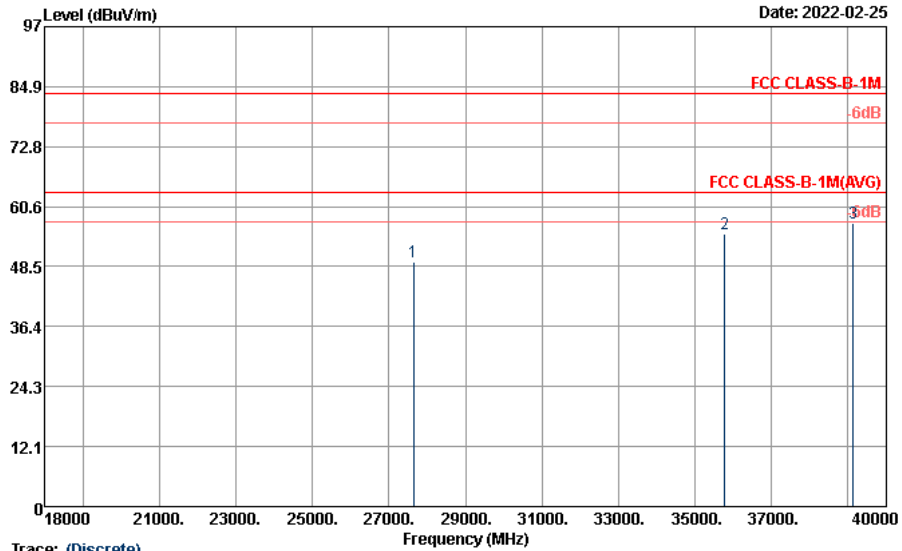


Trace: (Discrete)
 Site : 03CHO6-HY
 Condition : FCC CLASS-B 3m 9120D_1156 HORIZONTAL
 Project : 211502-01
 Power : From System
 Memo : Mode 6
 : NB to eMMC

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	A/Pos	T/Pos	Remark
	MHz	dBUV/m	dB	dBUV/m	dBUV	dB/m	cm	deg	
1	79.41	24.22	-15.78	40.00	40.87	-16.65	---	---	Peak
2	166.62	27.28	-16.22	43.50	40.81	-13.53	---	---	Peak
3	239.79	28.84	-17.16	46.00	40.41	-11.57	---	---	Peak
4	366.50	34.32	-11.68	46.00	41.90	-7.58	---	---	Peak
5 *	741.00	49.18			48.32	0.86	---	---	Peak
6	856.50	30.74	-15.26	46.00	28.04	2.70	---	---	Peak
7	960.00	38.06	-7.94	46.00	32.75	5.31	---	---	Peak
8	1660.00	25.61	-28.39	54.00	56.40	-30.79	202	349	Average
9	1660.00	49.34	-24.66	74.00	80.13	-30.79	202	349	Peak
10	4776.00	46.00	-28.00	74.00	64.55	-18.55	---	---	Peak
11	5978.00	27.41	-26.59	54.00	44.49	-17.08	122	313	Average
12	5978.00	52.67	-21.33	74.00	69.75	-17.08	122	313	Peak
13	8000.00	33.29	-20.71	54.00	44.40	-11.11	---	---	Average
14	8000.00	48.32	-25.68	74.00	59.43	-11.11	---	---	Peak
15	10582.00	36.28	-17.72	54.00	42.00	-5.72	---	---	Average
16	10582.00	51.65	-22.35	74.00	57.37	-5.72	---	---	Peak
17	11000.00	36.69	-17.31	54.00	40.91	-4.22	---	---	Average
18	11000.00	51.55	-22.45	74.00	55.77	-4.22	---	---	Peak
19	14710.00	38.30	-15.70	54.00	38.69	-0.39	---	---	Average
20	14710.00	52.93	-21.07	74.00	53.32	-0.39	---	---	Peak
21	17995.00	44.69	-9.31	54.00	32.39	12.30	---	---	Average
22	17995.00	58.38	-15.62	74.00	46.08	12.30	---	---	Peak



Test Engineer :	You Xian Chen	Temperature :	20~24°C
		Relative Humidity :	47~53%
Test Distance :	1m	Polarization :	Horizontal



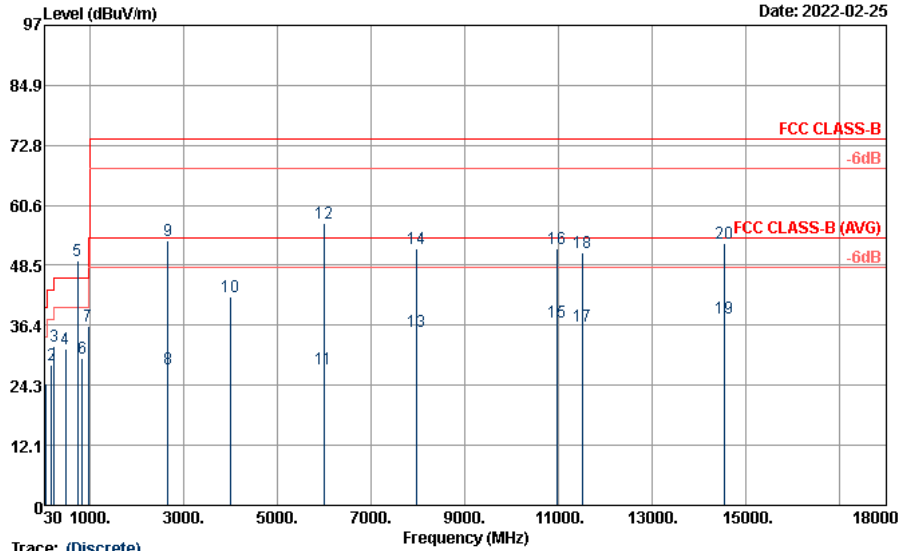
Trace: (Discrete)

Site : 03CH06-HY
 Condition : FCC CLASS-B-1M 1m BBHA_9170251_211130 HORIZONTAL
 Project : 211502-01
 Power : From System
 Memo : Mode 6
 : NB to eMMC

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	cm	deg	
1	27636.00	49.45	-34.09	83.54	40.07	9.38	---	---	Peak
2	35776.00	54.99	-28.55	83.54	41.56	13.43	---	---	Peak
3	39142.00	57.24	-26.30	83.54	38.59	18.65	---	---	Peak



Test Engineer :	You Xian Chen	Temperature :	20~24°C
		Relative Humidity :	47~53%
Test Distance :	3m	Polarization :	Vertical
Remark :	#5 is system simulator signal which can be ignored.		

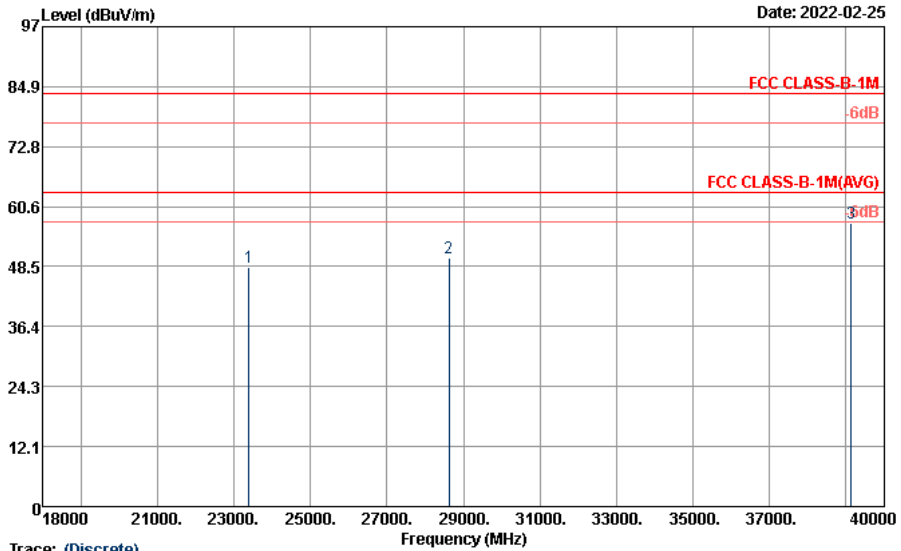


Site : 03CHO6-HY
 Condition : FCC CLASS-B 3m 9120B_1156 VERTICAL
 Project : 211502-01
 Power : From Syatem
 Memo : Mode 6
 : NB to eMMC

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	cm	deg	
1	57.54	24.67	-15.33	40.00	42.82	-18.15	---	---	Peak
2	182.01	28.44	-15.06	43.50	42.74	-14.30	---	---	Peak
3	240.60	32.27	-13.73	46.00	43.74	-11.47	---	---	Peak
4	479.90	31.56	-14.44	46.00	35.71	-4.15	---	---	Peak
5 *	741.00	49.34			48.48	0.86	---	---	Peak
6	832.00	29.69	-16.31	46.00	27.63	2.06	---	---	Peak
7	960.00	36.27	-9.73	46.00	30.96	5.31	---	---	Peak
8	2664.00	27.63	-26.37	54.00	53.60	-25.97	100	26	Average
9	2664.00	53.43	-20.57	74.00	79.40	-25.97	100	26	Peak
10	3988.00	42.22	-31.78	74.00	63.64	-21.42	---	---	Peak
11	5998.00	27.56	-26.44	54.00	44.59	-17.03	100	253	Average
12	5998.00	56.96	-17.04	74.00	73.99	-17.03	100	253	Peak
13	7970.00	35.14	-18.86	54.00	46.40	-11.26	106	281	Average
14	7970.00	51.84	-22.16	74.00	63.10	-11.26	106	281	Peak
15	10970.00	36.91	-17.09	54.00	41.19	-4.28	---	---	Average
16	10970.00	51.98	-22.02	74.00	56.26	-4.28	---	---	Peak
17	11514.00	36.25	-17.75	54.00	40.80	-4.55	---	---	Average
18	11514.00	51.19	-22.81	74.00	55.74	-4.55	---	---	Peak
19	14545.00	37.74	-16.26	54.00	38.10	-0.36	---	---	Average
20	14545.00	52.97	-21.03	74.00	53.33	-0.36	---	---	Peak
21	18000.00	44.83	-9.17	54.00	32.40	12.43	---	---	Average
22	18000.00	58.59	-15.41	74.00	46.16	12.43	---	---	Peak



Test Engineer :	You Xian Chen	Temperature :	20~24°C
		Relative Humidity :	47~53%
Test Distance :	1m	Polarization :	Vertical



Trace: (Discrete)
 Site : 03CHO6-HY
 Condition : FCC CLASS-B-1M 1m BBHA_9170251_211130 VERTICAL
 Project : 211502-01
 Power : From System
 Memo : Mode 6
 : NB to eMMC

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	cm	deg	
1	23390.00	48.40	-35.14	83.54	42.53	5.87	---	---	Peak
2	28626.00	50.17	-33.37	83.54	40.57	9.60	---	---	Peak
3	39142.00	57.24	-26.30	83.54	38.59	18.65	---	---	Peak