



FCC EMI TEST REPORT

FCC ID : PY7-80422D
Equipment : GSM/WCDMA/LTE Phone with BT, DTS/UNII
a/b/g/n/ac, GPS and NFC
Brand Name : Sony
Applicant : Sony Mobile Communications Inc.
4-12-3 Higashi-Shinagawa, Shinagawa-ku,
Tokyo, 140-0002, Japan
Manufacturer : Sony Mobile Communications Inc.
4-12-3 Higashi-Shinagawa, Shinagawa-ku,
Tokyo, 140-0002, Japan
Standard : FCC 47 CFR FCC Part 15 Subpart B

The product was received on Nov. 02, 2018 and testing was started from Mar. 10, 2019 and completed on Apr. 23, 2019. 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this 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.

Approved by: Jones Tsai

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

History of this test report.....	3
Summary of Test Result	4
1. General Description	5
1.1. Product Feature of Equipment Under Test	5
1.2. Modification of EUT	5
1.3. Test Location.....	6
1.4. Applicable Standards	6
2. Test Configuration of Equipment Under Test	7
2.1. Test Mode	7
2.2. Connection Diagram of Test System	8
2.3. Support Unit used in test configuration and system.....	9
2.4. EUT Operation Test Setup	10
3. Test Result	11
3.1. Test of AC Conducted Emission Measurement	11
3.2. Test of Radiated Emission Measurement	13
4. List of Measuring Equipment.....	15
5. Uncertainty of Evaluation.....	17
Appendix A. AC Conducted Emission Test Result	
Appendix B. Radiated Emission Test Result	



History of this test report

Report No.	Version	Description	Issued Date
FC8O2425-03	01	Initial issue of report	Mar. 27, 2019
FC8O2425-03	02	Revising test data.	Apr. 23, 2019

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.107	AC Conducted Emission	Pass	Under limit 10.79 dB at 0.15225 MHz
3.2	15.109	Radiated Emission	Pass	Under limit 7.76 dB at 41.640 MHz

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: Louis Wu

Report Producer: Natasha Hsieh

1. General Description

1.1. Product Feature of Equipment Under Test

GSM/WCDMA/LTE, Bluetooth, DTS/UNII a/b/g/n/ac, NFC, and GNSS.

Product Specification subjective to this standard	
Antenna Type	WWAN: Monopole / Loop Antenna WLAN: <Ant. 1>: Loop Antenna <Ant. 2>: Monopole / Inverted-F Antenna Bluetooth: Loop Antenna GPS/Glonass/Galileo/ BDS: Loop Antenna NFC: Loop Antenna

EUT Information List			
HW Version	SW Version	S/N	Performed Test Item
A	0.203	BH970098FY	Conducted Emission Radiated Emission

Accessory List	
AC Adapter	Model Name : UCH32
	S/N:
	6218W30200140 (for radiated emission) 6218W30200197 (for conducted emission)
Earphone	Model Name.: MH750
	S/N : N/A
USB Cable	Model Name.: UCB24
	S/N : N/A
2 in 1 USB Audio Cable	Model Name: EC270
	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. Test Location

Test Site	SPORTON INTERNATIONAL INC.
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. CO05-HY

Test Site	SPORTON INTERNATIONAL INC.
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. 03CH10-HY

FCC Designation No.: TW1093 and TW1098

1.4. Applicable Standards

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

- ♦ FCC 47 CFR FCC Part 15 Subpart 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

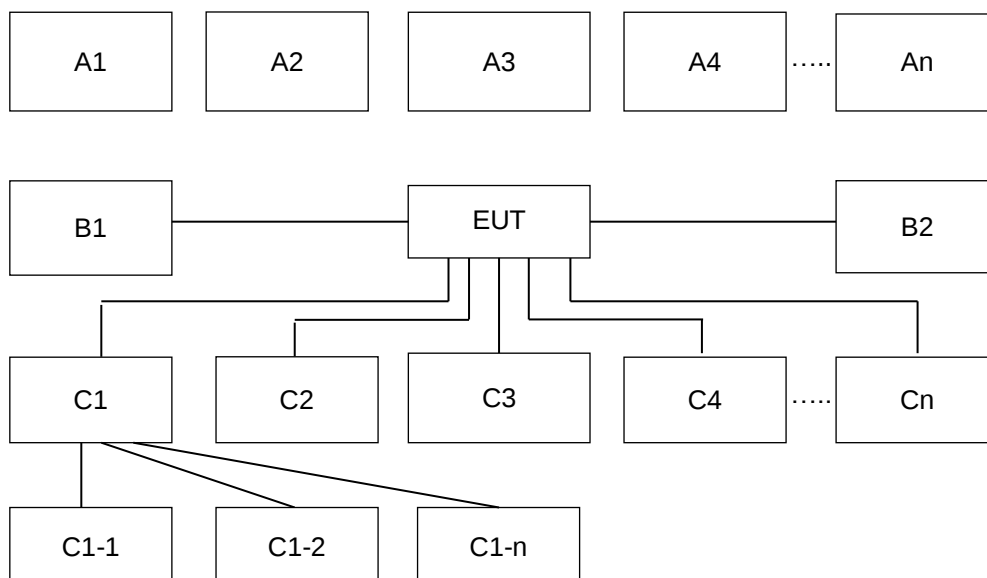
The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.

Test Items	Function Type
AC Conducted Emission	Mode 1: GSM850 (Middle Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + MPEG4 + USB Cable (Charging from Adapter) + Battery
	Mode 2: LTE Band 12 (Middle Channel) Idle + Bluetooth Idle + WLAN (5GHz) Idle + MP3 + USB Audio Cable + USB Cable (Charging from Adapter) + Battery + Earphone
	Mode 3: LTE Band 17 (Middle Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + GPS Rx + USB Cable (Charging from Adapter) + Battery
	Mode 4: GSM850 (Low Channel) Idle + Bluetooth Idle + WLAN (5GHz) Idle + Camera (Front) + USB Audio Cable + USB Cable (Charging from Adapter) + Battery + Earphone
	Mode 5: GSM850 (High Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + Camera (Rear) + USB Cable (Charging from Adapter) + Battery
	Mode 6: GSM850 (Low Channel) Idle + Bluetooth Idle + WLAN (5GHz) Idle + NFC On + USB Audio Cable + USB Cable (Charging from Adapter) + Battery + Earphone
	Mode 7: Flight Mode + USB Cable (Data Link with Notebook) + Battery
Radiated Emissions	Mode 1: GSM850 (Middle Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + MPEG4 + USB Cable (Charging from Adapter) + Battery
	Mode 2: LTE Band 12 (Middle Channel) Idle + Bluetooth Idle + WLAN (5GHz) Idle + MP3 + USB Audio Cable + USB Cable (Charging from Adapter) + Battery + Earphone
	Mode 3: LTE Band 17 (Middle Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + GPS Rx + USB Cable (Charging from Car Charger (12Vdc)) + Battery
	Mode 4: LTE Band 12 (Low Channel) Idle + Bluetooth Idle + WLAN (5GHz) Idle + Camera (Front) + USB Audio Cable + USB Cable (Charging from Car Charger (24Vdc)) + Battery + Earphone
	Mode 5: LTE Band 12 (High Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + Camera (Rear) + USB Cable (Charging from Adapter) + Battery
	Mode 6: LTE Band 12 (Middle Channel) Idle + Bluetooth Idle + WLAN (5GHz) Idle + NFC On + USB Audio Cable + USB Cable (Charging from Adapter) + Battery + Earphone
	Mode 7: Flight Mode + USB Cable (Data Link with Notebook) + Battery
Remark:	
1. Data Linking with Notebook means data application transferred mode between EUT and Notebook.	
2. For radiation emission after pre-scanned the cellular band between 30MHz ~ 960MHz (GSM850/LTE Band 12/17), the worst case is LTE Band 12; only the test data of this mode was reported.	

2.2. Connection Diagram of Test System



Conduction Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2	3	4	5	6	7
A1	BT Earphone	Bluetooth	X	X	X	X	X	X	X
A2	System Simulator	GSM/UMTS/CDMA/WCDMA/LTE	X	X	X	X	X	X	
A3	GPS Station	GPS			X				
A4	AP router	WiFi	X	X	X	X	X	X	X
No.	Power Source	Connection Type	1	2	3	4	5	6	7
B1	AC : 120V/60Hz	AC Power Cable	X	X	X	X	X	X	
B2	Power from system	AC Power Cable							X
No.	Setup Peripherals	Connection Type	1	2	3	4	5	6	7
C1	Notebook	USB Cable							X
C1-1	Music Player	USB Cable to C1							X
C1-2	AP router	RJ-45 Cable to C1							X
C2	Earphone	Earphone jack		X		X		X	
C3	SD card	SD I/O interface without Cable	X	X	X	X	X	X	X

Radiation Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2	3	4	5	6	7
A1	BT Earphone	Bluetooth	X	X	X	X	X	X	
A2	System Simulator	GSM/UMTS/CDMA/WCDMA/LTE	X	X	X	X	X	X	
A3	GPS Station	GPS			X				
A4	AP router	WiFi	X	X	X	X	X	X	
No.	Power Source	Connection Type	1	2	3	4	5	6	7
B1	AC : 120V/60Hz	AC Power Cable	X	X			X	X	
B2	DC : 12V	DC Power Cable			X	X			
B3	Power from system	AC Power Cable							X
No.	Setup Peripherals	Connection Type	1	2	3	4	5	6	7
C1	Notebook	USB cable							X
C1-1	Music Player	USB Cable to C1							X
C1-2	AP router	RJ-45 Cable to C1							X
C2	Earphone	Earphone jack		X		X		X	
C3	SD card	SD I/O interface without cable	X	X	X	X	X	X	X

2.3. Support Unit used in test configuration and system

Item	Equipment	Trade 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	Anritsu	8820C	N/A	N/A	Unshielded, 1.8 m
3.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
4.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8 m
5.	Bluetooth Earphone	Sony	SBH20	PY7-RD0010	N/A	N/A
6.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
7.	Music Player	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
8.	Notebook	DELL	Latitude E5480	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
9.	Car Battery	GS	65B24LS	FCC DoC	NA	NA
10.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A

2.4. EUT Operation Test Setup

The EUT was in GSM and LTE idle mode during the testing. The EUT was synchronized with the BCCH, and had been continuous receiving mode by setting paging reorganization of the system simulator.

At the same time, the EUT was attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT were 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. Execute "Music Player" to play MP3 files.
4. Execute "Video player" to play MPEG4 files.
5. Turn on camera to capture images.
6. Turn on NFC function
7. The data application (each file size is greater than 30Mbytes) is continuously transferred between the EUT and Notebook connected via USB cable, while Flight mode..

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.

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.

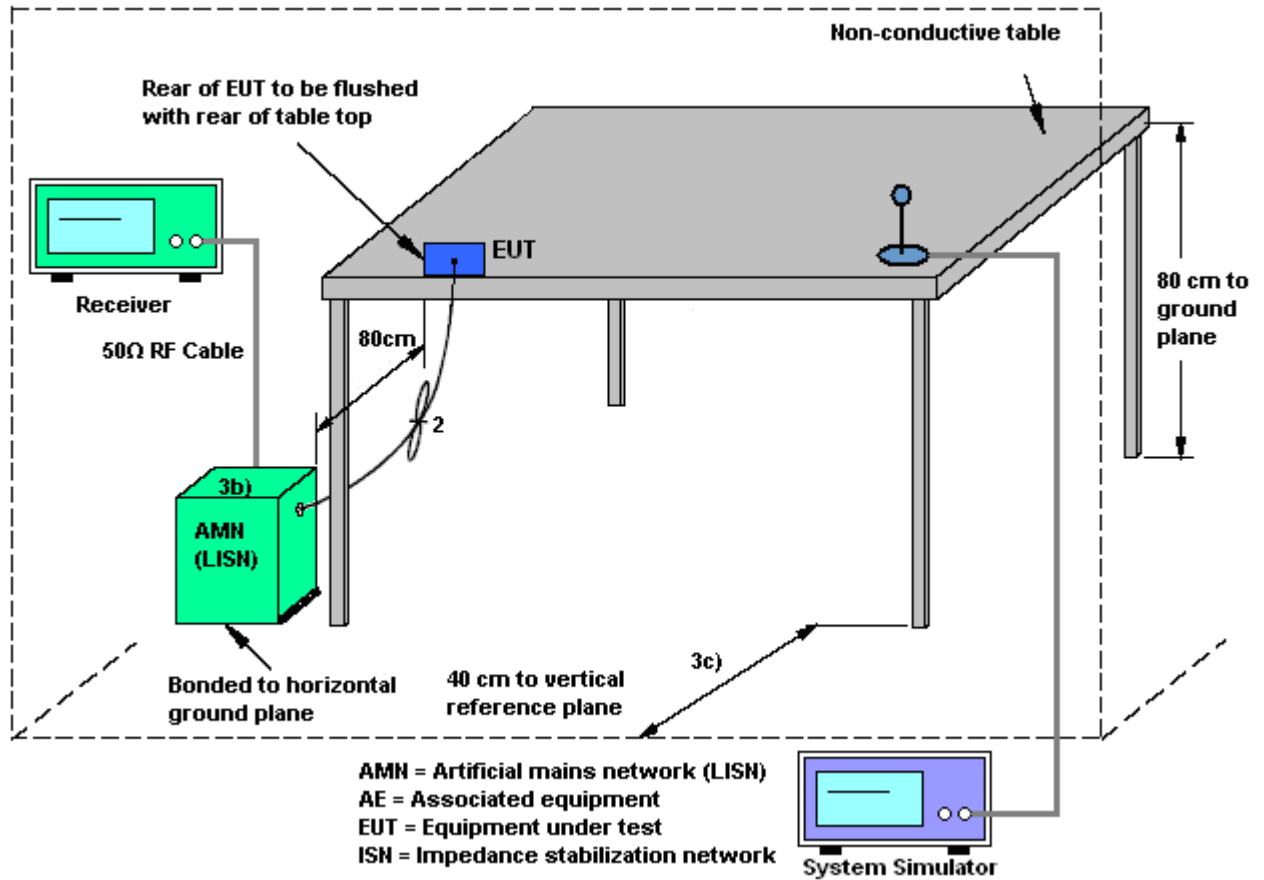
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedure

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was 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 should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) 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:

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

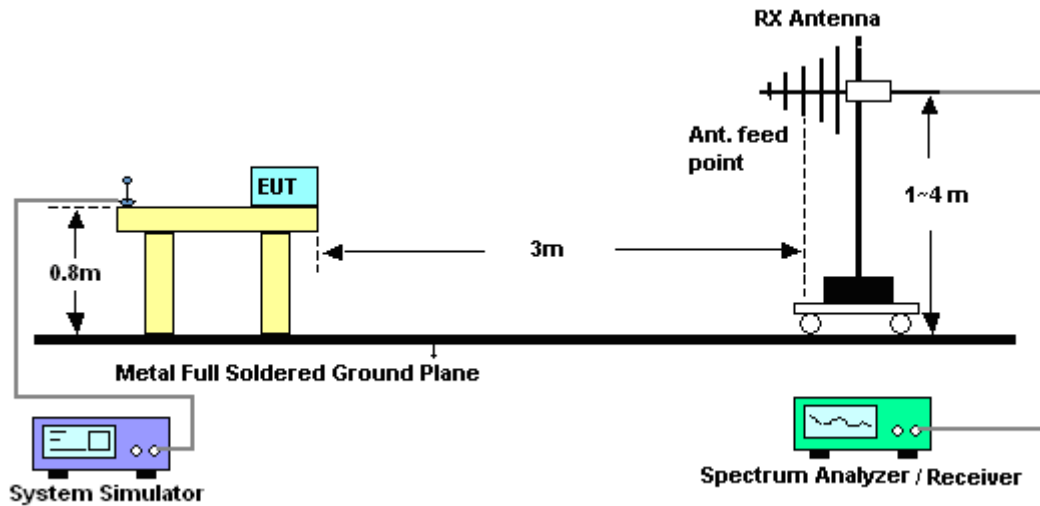
Refer a test equipment and calibration data table in this test report.

3.2.3. Test Procedures

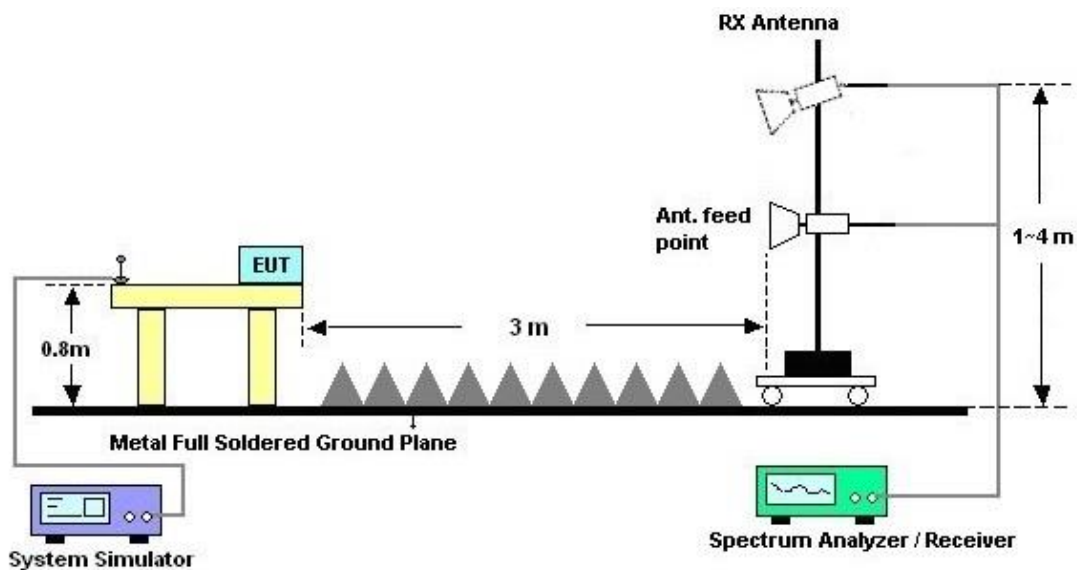
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna 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 was 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=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
7. If the emission level of the EUT in peak mode was 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 (dB μ V/m) = 20 log Emission level (μ V/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.2.5. Test Result of Radiated Emission

Please refer to Appendix B.



4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Mar. 10, 2019	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9KHz~3.6GHz	Nov. 12, 2018	Mar. 10, 2019	Nov. 11, 2019	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Mar. 15, 2018	Mar. 10, 2019	Mar. 14, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	Mar. 10, 2019	Nov. 13, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 09, 2018	Mar. 10, 2019	Nov. 08, 2019	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Mar. 10, 2019	N/A	Conduction (CO05-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Sep. 14, 2018	Mar. 10, 2019	Sep. 13, 2019	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	9561-F N00373	9kHz~200MHz	Nov. 08, 2018	Mar. 10, 2019	Nov. 07, 2019	Conduction (CO05-HY)
Amplifier	SONOMA	310N	187311	9kHz~1GHz	Oct. 23, 2018	Mar. 10, 2019~ Apr. 23, 2019	Oct. 22, 2019	Radiation (03CH10-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	35413&02	30MHz~1GHz	Feb. 12, 2019	Mar. 10, 2019~ Apr. 23, 2019	Feb. 11, 2020	Radiation (03CH10-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1325	1GHz ~ 18GHz	Oct. 02, 2018	Mar. 10, 2019~ Apr. 23, 2019	Oct. 01, 2019	Radiation (03CH10-HY)
Preamplifier	Jet-Power	JAP00101800 -30-10P	160118550004	1GHz~18GHz	Apr. 17, 2018	Mar. 10, 2019~ Mar. 11, 2019	Apr. 16, 2019	Radiation (03CH10-HY)
Preamplifier	Jet-Power	JAP00101800 -30-10P	160118550004	1GHz~18GHz	Apr. 16, 2019	Apr. 23, 2019	Apr. 15, 2020	Radiation (03CH10-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200485	10Hz ~ 44GHz	Nov. 02, 2018	Mar. 10, 2019~ Apr. 23, 2019	Nov. 01, 2019	Radiation (03CH10-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Mar. 10, 2019~ Apr. 23, 2019	N/A	Radiation (03CH10-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Mar. 10, 2019~ Apr. 23, 2019	N/A	Radiation (03CH10-HY)
Turn Table	EMEC	TT 2200	N/A	0~360 Degree	N/A	Mar. 10, 2019~ Apr. 23, 2019	N/A	Radiation (03CH10-HY)
Software	Audix	E3 6.2009-8-24	RK-001042	N/A	N/A	Mar. 10, 2019~ Apr. 23, 2019	N/A	Radiation (03CH10-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY54130085	20Hz ~ 8.4GHz	Nov. 01, 2018	Mar. 10, 2019~ Apr. 23, 2019	Oct. 31, 2019	Radiation (03CH10-HY)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
RF Cable	HUBER + SUHNER	SUCOFLEX 104 / 102	MY11692/4PE, MY11693/4PE, MY2855/2	30M-1G	Nov. 08, 2018	Mar. 10, 2019~ Apr. 23, 2019	Nov. 07, 2019	Radiation (03CH10-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104 / 102	MY11692/4PE, MY11693/4PE, MY2855/2	1G-18G	Nov. 08, 2018	Mar. 10, 2019~ Apr. 23, 2019	Nov. 07, 2019	Radiation (03CH10-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Oct. 16, 2018	Mar. 10, 2019~ Apr. 23, 2019	Oct. 15, 2019	Radiation (03CH10-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30M~40GHz	Oct. 16, 2018	Mar. 10, 2019~ Apr. 23, 2019	Oct. 15, 2019	Radiation (03CH10-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Dec. 05, 2018	Mar. 10, 2019~ Apr. 23, 2019	Dec. 04, 2019	Radiation (03CH10-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 06, 2018	Mar. 10, 2019~ Apr. 23, 2019	Dec. 05, 2019	Radiation (03CH10-HY)
Filter	Microwave	H1G013G1	SN477215	1.0G High Pass	Nov. 02, 2018	Mar. 10, 2019~ Apr. 23, 2019	Nov. 01, 2019	Radiation (03CH10-HY)
Filter	Wainwright	WLKS1200-8SS	SN3	1.2G Low Pass	Nov. 02, 2018	Mar. 10, 2019~ Apr. 23, 2019	Nov. 01, 2019	Radiation (03CH10-HY)

5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	2.20
---	------

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

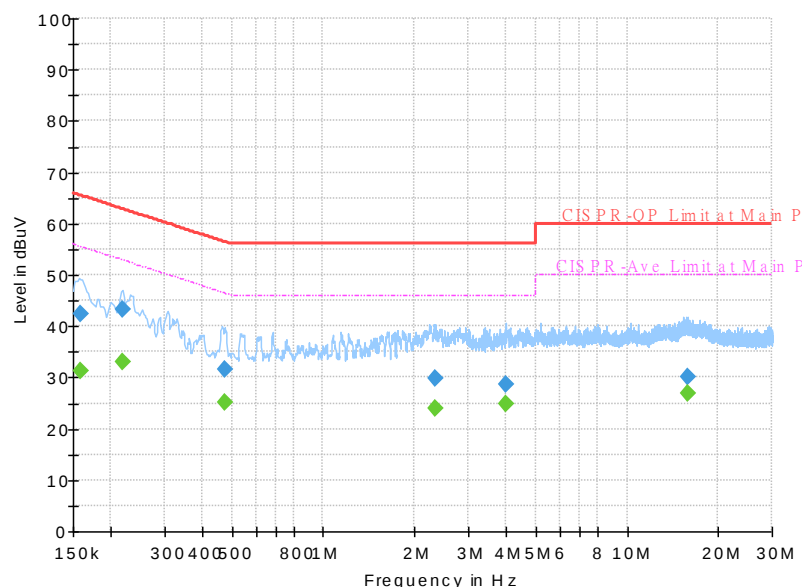
Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	5.60
---	------

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	5.20
---	------

Appendix A. AC Conducted Emission Test Results

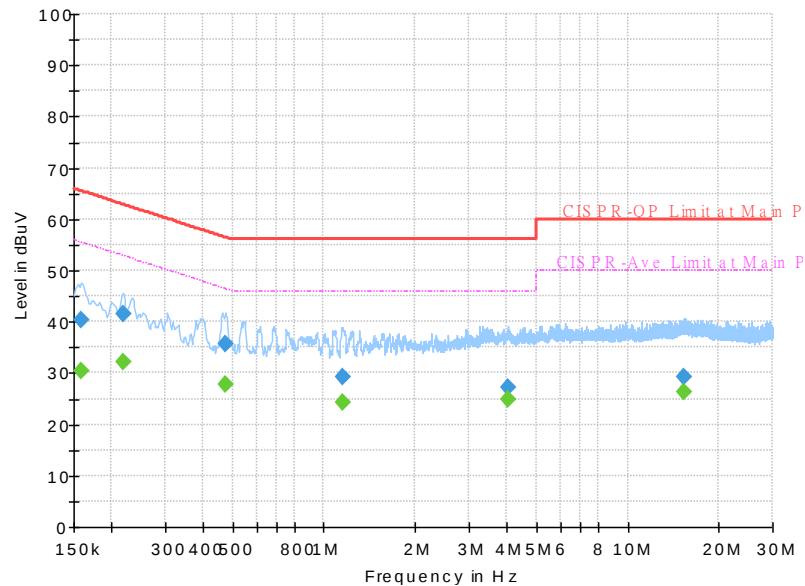
Test Mode :	Mode 1	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.159000	---	31.14	55.52	24.38	L1	OFF	19.5
0.159000	42.29	---	65.52	23.23	L1	OFF	19.5
0.217500	---	33.14	52.91	19.77	L1	OFF	19.5
0.217500	43.23	---	62.91	19.68	L1	OFF	19.5
0.474000	---	25.09	46.44	21.35	L1	OFF	19.5
0.474000	31.66	---	56.44	24.78	L1	OFF	19.5
2.337000	---	23.91	46.00	22.09	L1	OFF	19.5
2.337000	29.88	---	56.00	26.12	L1	OFF	19.5
3.977250	---	24.93	46.00	21.07	L1	OFF	19.7
3.977250	28.76	---	56.00	27.24	L1	OFF	19.7
15.900000	---	26.86	50.00	23.14	L1	OFF	20.1
15.900000	30.11	---	60.00	29.89	L1	OFF	20.1

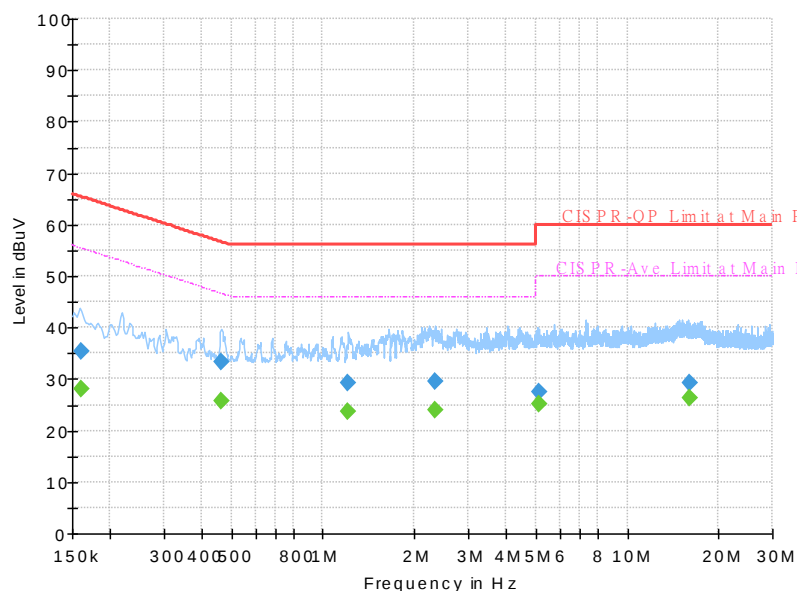
Test Mode :	Mode 1	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result

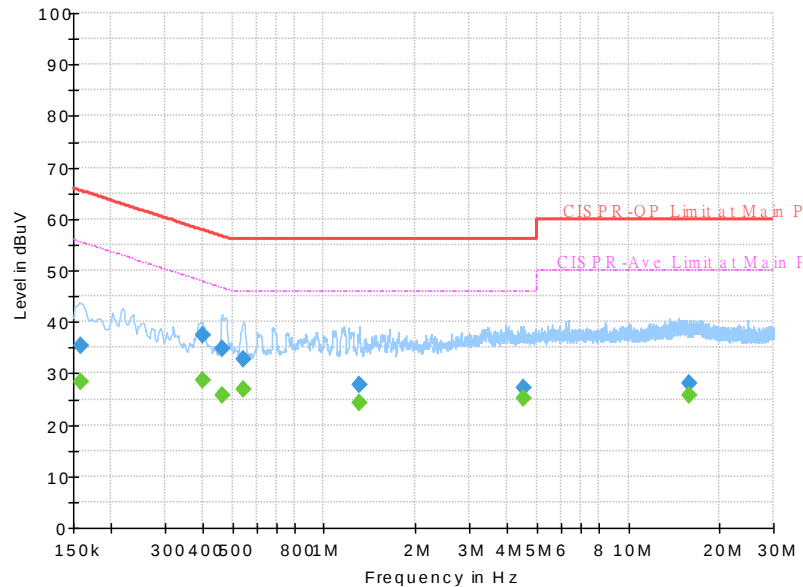
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.159000	---	30.26	55.52	25.26	N	OFF	19.5
0.159000	40.40	---	65.52	25.12	N	OFF	19.5
0.217500	---	32.11	52.91	20.80	N	OFF	19.5
0.217500	41.50	---	62.91	21.41	N	OFF	19.5
0.471750	---	27.80	46.48	18.68	N	OFF	19.5
0.471750	35.64	---	56.48	20.84	N	OFF	19.5
1.151250	---	24.23	46.00	21.77	N	OFF	19.6
1.151250	29.11	---	56.00	26.89	N	OFF	19.6
4.056000	---	24.89	46.00	21.11	N	OFF	19.7
4.056000	27.09	---	56.00	28.91	N	OFF	19.7
15.375750	---	26.44	50.00	23.56	N	OFF	20.1
15.375750	29.21	---	60.00	30.79	N	OFF	20.1

Test Mode :	Mode 2	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		


Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	---	27.93	55.40	27.47	L1	OFF	19.5
0.161250	35.24	---	65.40	30.16	L1	OFF	19.5
0.462750	---	25.84	46.64	20.80	L1	OFF	19.5
0.462750	33.48	---	56.64	23.16	L1	OFF	19.5
1.212000	---	23.73	46.00	22.27	L1	OFF	19.6
1.212000	29.17	---	56.00	26.83	L1	OFF	19.6
2.337000	---	23.88	46.00	22.12	L1	OFF	19.5
2.337000	29.50	---	56.00	26.50	L1	OFF	19.5
5.106750	---	25.28	50.00	24.72	L1	OFF	19.7
5.106750	27.58	---	60.00	32.42	L1	OFF	19.7
16.091250	---	26.31	50.00	23.69	L1	OFF	20.1
16.091250	29.28	---	60.00	30.72	L1	OFF	20.1

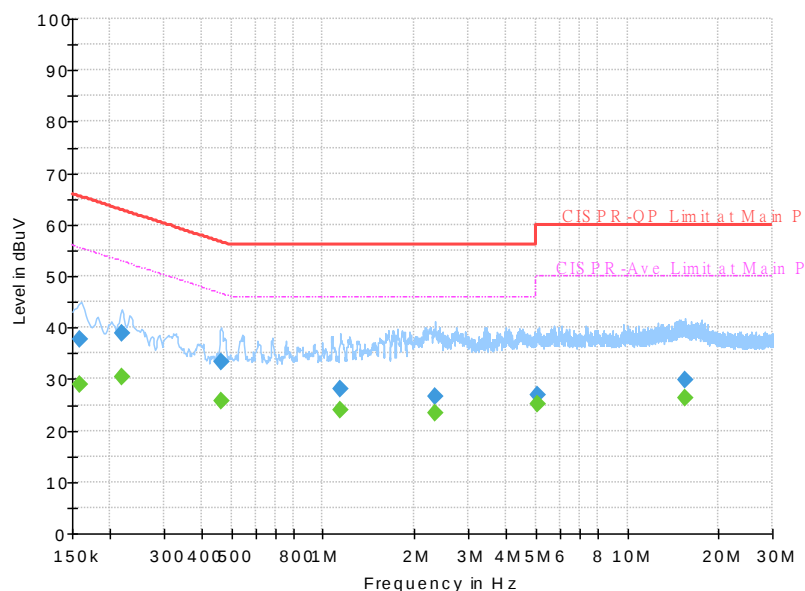
Test Mode :	Mode 2	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.159000	---	28.24	55.52	27.28	N	OFF	19.5
0.159000	35.41	---	65.52	30.11	N	OFF	19.5
0.397500	---	28.72	47.91	19.19	N	OFF	19.5
0.397500	37.54	---	57.91	20.37	N	OFF	19.5
0.462750	---	25.87	46.64	20.77	N	OFF	19.5
0.462750	34.69	---	56.64	21.95	N	OFF	19.5
0.543750	---	27.01	46.00	18.99	N	OFF	19.5
0.543750	32.61	---	56.00	23.39	N	OFF	19.5
1.306500	---	24.17	46.00	21.83	N	OFF	19.6
1.306500	27.90	---	56.00	28.10	N	OFF	19.6
4.519500	---	25.09	46.00	20.91	N	OFF	19.7
4.519500	27.06	---	56.00	28.94	N	OFF	19.7
15.765000	---	25.84	50.00	24.16	N	OFF	20.2
15.765000	28.02	---	60.00	31.98	N	OFF	20.2

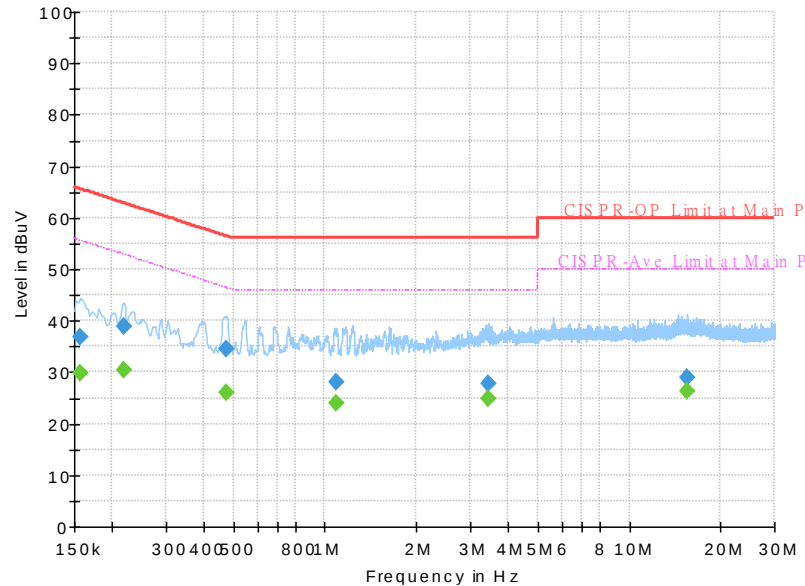
Test Mode :	Mode 3	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.159000	---	28.97	55.52	26.55	L1	OFF	19.5
0.159000	37.81	---	65.52	27.71	L1	OFF	19.5
0.217500	---	30.39	52.91	22.52	L1	OFF	19.5
0.217500	38.84	---	62.91	24.07	L1	OFF	19.5
0.462750	---	25.81	46.64	20.83	L1	OFF	19.5
0.462750	33.39	---	56.64	23.25	L1	OFF	19.5
1.140000	---	23.91	46.00	22.09	L1	OFF	19.6
1.140000	28.17	---	56.00	27.83	L1	OFF	19.6
2.334750	---	23.53	46.00	22.47	L1	OFF	19.5
2.334750	26.48	---	56.00	29.52	L1	OFF	19.5
5.057250	---	25.09	50.00	24.91	L1	OFF	19.7
5.057250	26.86	---	60.00	33.14	L1	OFF	19.7
15.463500	---	26.31	50.00	23.69	L1	OFF	20.1
15.463500	29.75	---	60.00	30.25	L1	OFF	20.1

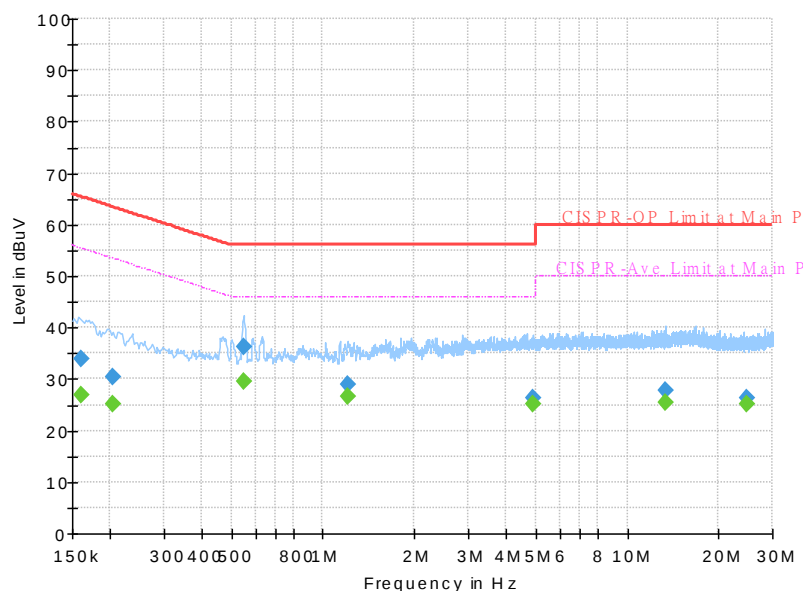
Test Mode :	Mode 3	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.156750	---	29.76	55.63	25.87	N	OFF	19.5
0.156750	36.94	---	65.63	28.69	N	OFF	19.5
0.217500	---	30.47	52.91	22.44	N	OFF	19.5
0.217500	38.93	---	62.91	23.98	N	OFF	19.5
0.476250	---	26.05	46.40	20.35	N	OFF	19.5
0.476250	34.62	---	56.40	21.78	N	OFF	19.5
1.090500	---	23.85	46.00	22.15	N	OFF	19.6
1.090500	28.21	---	56.00	27.79	N	OFF	19.6
3.435000	---	24.78	46.00	21.22	N	OFF	19.7
3.435000	27.80	---	56.00	28.20	N	OFF	19.7
15.411750	---	26.25	50.00	23.75	N	OFF	20.1
15.411750	28.84	---	60.00	31.16	N	OFF	20.1

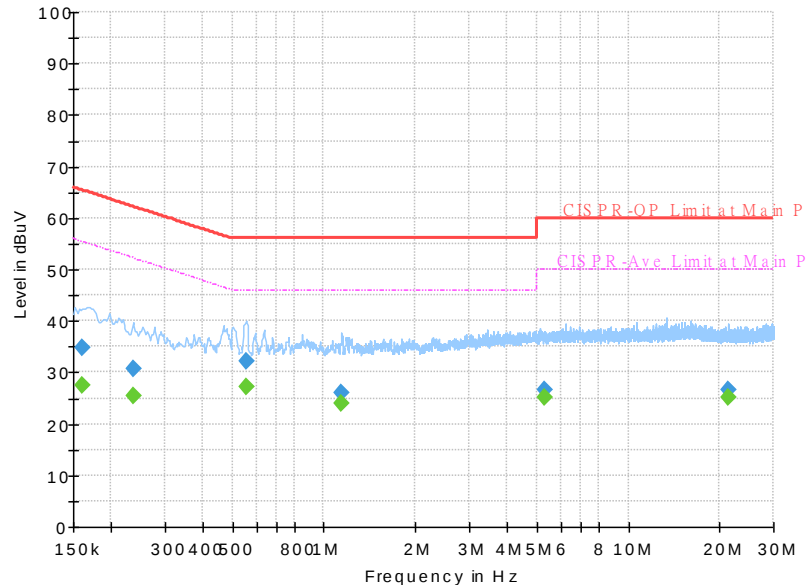
Test Mode :	Mode 4	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result

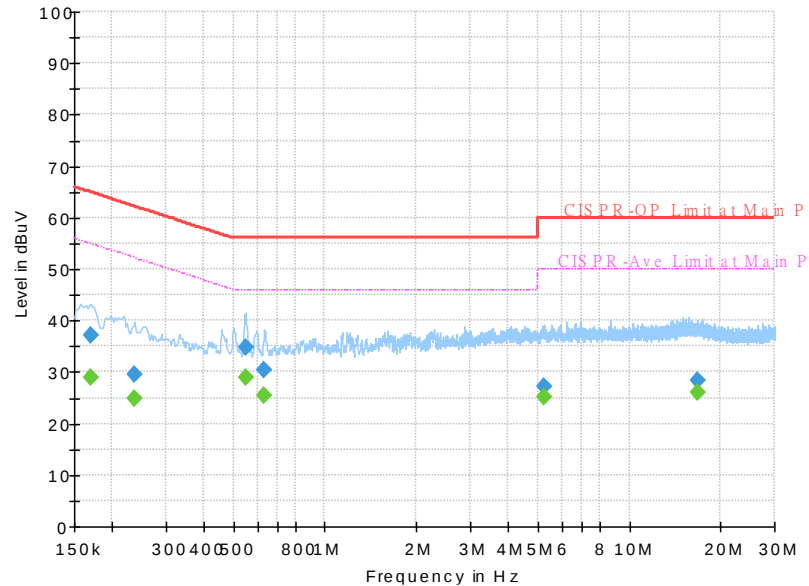
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	---	27.04	55.40	28.36	L1	OFF	19.5
0.161250	34.05	---	65.40	31.35	L1	OFF	19.5
0.204000	---	25.29	53.45	28.16	L1	OFF	19.5
0.204000	30.47	---	63.45	32.98	L1	OFF	19.5
0.548250	---	29.43	46.00	16.57	L1	OFF	19.5
0.548250	36.30	---	56.00	19.70	L1	OFF	19.5
1.200750	---	26.60	46.00	19.40	L1	OFF	19.6
1.200750	29.03	---	56.00	26.97	L1	OFF	19.6
4.886250	---	25.02	46.00	20.98	L1	OFF	19.7
4.886250	26.40	---	56.00	29.60	L1	OFF	19.7
13.366500	---	25.57	50.00	24.43	L1	OFF	20.0
13.366500	27.75	---	60.00	32.25	L1	OFF	20.0
24.792000	---	25.16	50.00	24.84	L1	OFF	20.4
24.792000	26.19	---	60.00	33.81	L1	OFF	20.4

Test Mode :	Mode 4	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		


Final Result

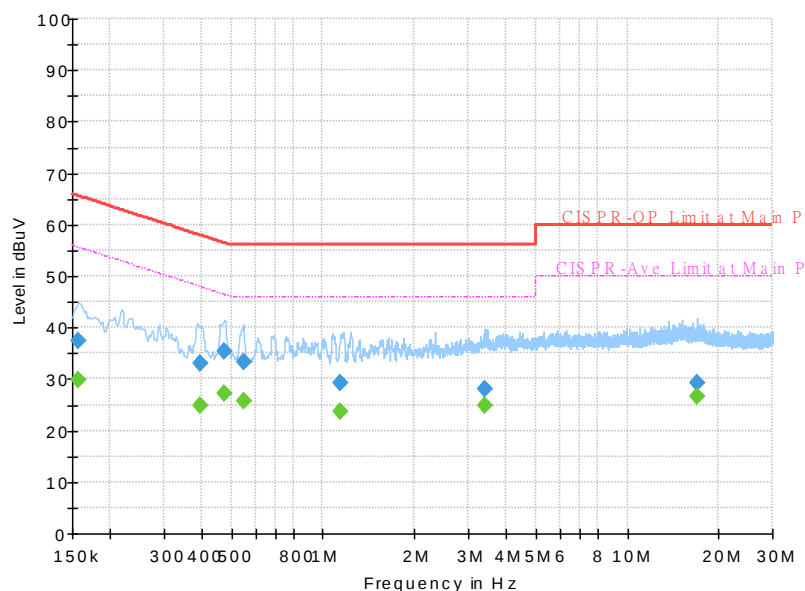
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	---	27.37	55.40	28.03	N	OFF	19.5
0.161250	34.86	---	65.40	30.54	N	OFF	19.5
0.235500	---	25.45	52.25	26.80	N	OFF	19.5
0.235500	30.59	---	62.25	31.66	N	OFF	19.5
0.557250	---	27.15	46.00	18.85	N	OFF	19.5
0.557250	32.20	---	56.00	23.80	N	OFF	19.5
1.142250	---	23.90	46.00	22.10	N	OFF	19.6
1.142250	26.14	---	56.00	29.86	N	OFF	19.6
5.336250	---	25.11	50.00	24.89	N	OFF	19.7
5.336250	26.48	---	60.00	33.52	N	OFF	19.7
21.243750	---	25.22	50.00	24.78	N	OFF	20.4
21.243750	26.62	---	60.00	33.38	N	OFF	20.4

Test Mode :	Mode 5	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		


Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.170250	---	28.87	54.95	26.08	L1	OFF	19.5
0.170250	37.16	---	64.95	27.79	L1	OFF	19.5
0.237750	---	24.84	52.17	27.33	L1	OFF	19.5
0.237750	29.53	---	62.17	32.64	L1	OFF	19.5
0.550500	---	28.93	46.00	17.07	L1	OFF	19.5
0.550500	34.87	---	56.00	21.13	L1	OFF	19.5
0.633750	---	25.40	46.00	20.60	L1	OFF	19.6
0.633750	30.30	---	56.00	25.70	L1	OFF	19.6
5.226000	---	25.14	50.00	24.86	L1	OFF	19.7
5.226000	27.05	---	60.00	32.95	L1	OFF	19.7
16.831500	---	25.97	50.00	24.03	L1	OFF	20.2
16.831500	28.40	---	60.00	31.60	L1	OFF	20.2

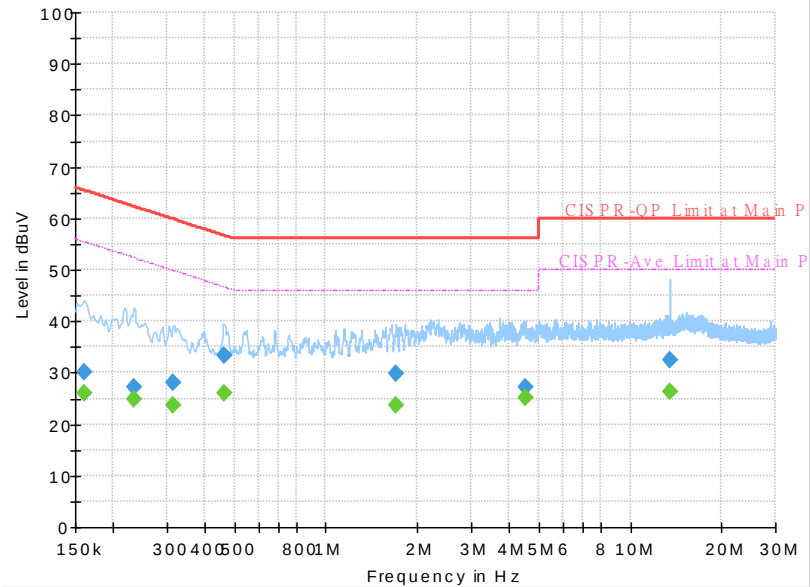
Test Mode :	Mode 5	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.156750	---	29.78	55.63	25.85	N	OFF	19.5
0.156750	37.32	---	65.63	28.31	N	OFF	19.5
0.393000	---	24.98	48.00	23.02	N	OFF	19.5
0.393000	32.94	---	58.00	25.06	N	OFF	19.5
0.474000	---	27.31	46.44	19.13	N	OFF	19.5
0.474000	35.45	---	56.44	20.99	N	OFF	19.5
0.548250	---	25.67	46.00	20.33	N	OFF	19.5
0.548250	33.37	---	56.00	22.63	N	OFF	19.5
1.142250	---	23.60	46.00	22.40	N	OFF	19.6
1.142250	29.36	---	56.00	26.64	N	OFF	19.6
3.417000	---	24.86	46.00	21.14	N	OFF	19.7
3.417000	28.20	---	56.00	27.80	N	OFF	19.7
16.953000	---	26.60	50.00	23.40	N	OFF	20.2
16.953000	29.35	---	60.00	30.65	N	OFF	20.2

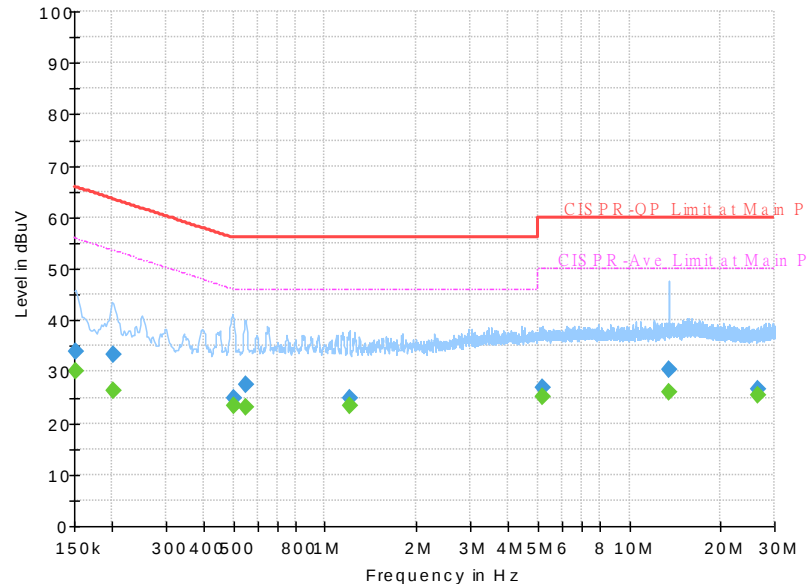
Test Mode :	Mode 6	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	---	26.12	55.40	29.28	L1	OFF	19.5
0.161250	30.01	---	65.40	35.39	L1	OFF	19.5
0.233250	---	24.73	52.33	27.60	L1	OFF	19.5
0.233250	27.24	---	62.33	35.09	L1	OFF	19.5
0.314250	---	23.82	49.86	26.04	L1	OFF	19.5
0.314250	27.98	---	59.86	31.88	L1	OFF	19.5
0.462750	---	25.91	46.64	20.73	L1	OFF	19.5
0.462750	33.43	---	56.64	23.21	L1	OFF	19.5
1.704750	---	23.67	46.00	22.33	L1	OFF	19.6
1.704750	29.85	---	56.00	26.15	L1	OFF	19.6
4.519500	---	25.03	46.00	20.97	L1	OFF	19.7
4.519500	27.30	---	56.00	28.70	L1	OFF	19.7
13.560000	---	26.19	50.00	23.81	L1	OFF	20.0
13.560000	32.44	---	60.00	27.56	L1	OFF	20.0

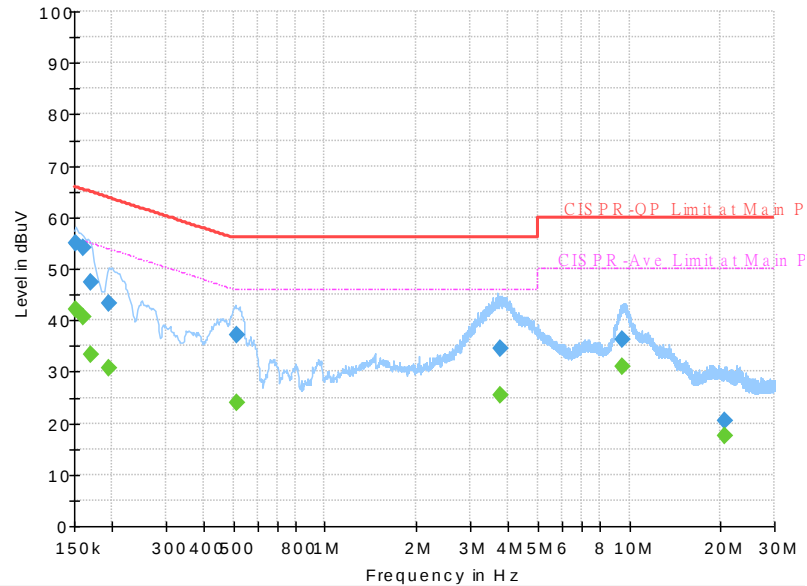
Test Mode :	Mode 6	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result

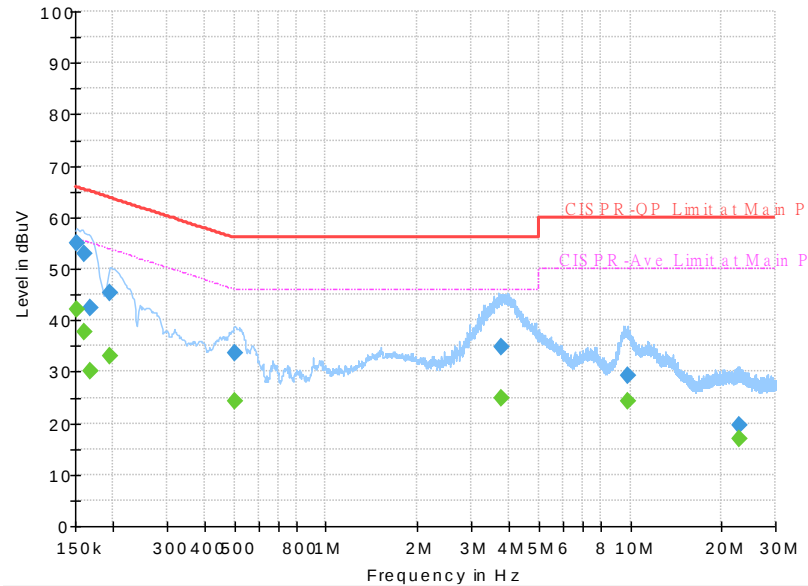
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	30.07	55.88	25.81	N	OFF	19.5
0.152250	33.77	---	65.88	32.11	N	OFF	19.5
0.201750	---	26.35	53.54	27.19	N	OFF	19.5
0.201750	33.27	---	63.54	30.27	N	OFF	19.5
0.501000	---	23.32	46.00	22.68	N	OFF	19.5
0.501000	24.90	---	56.00	31.10	N	OFF	19.5
0.552750	---	23.05	46.00	22.95	N	OFF	19.5
0.552750	27.47	---	56.00	28.53	N	OFF	19.5
1.203000	---	23.41	46.00	22.59	N	OFF	19.6
1.203000	24.87	---	56.00	31.13	N	OFF	19.6
5.172000	---	25.27	50.00	24.73	N	OFF	19.7
5.172000	26.80	---	60.00	33.20	N	OFF	19.7
13.560000	---	26.14	50.00	23.86	N	OFF	20.1
13.560000	30.53	---	60.00	29.47	N	OFF	20.1
26.612250	---	25.45	50.00	24.55	N	OFF	20.6
26.612250	26.60	---	60.00	33.40	N	OFF	20.6

Test Mode :	Mode 7	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		


Final Result

Frequency	QuasiPeak	CAverage	Limit	Margin	Line	Filter	Corr.
0.152250	---	42.21	55.88	13.67	L1	OFF	19.5
0.152250	55.09	---	65.88	10.79	L1	OFF	19.5
0.161250	---	40.61	55.40	14.79	L1	OFF	19.5
0.161250	54.07	---	65.40	11.33	L1	OFF	19.5
0.170250	---	33.46	54.95	21.49	L1	OFF	19.5
0.170250	47.32	---	64.95	17.63	L1	OFF	19.5
0.195000	---	30.75	53.82	23.07	L1	OFF	19.5
0.195000	43.33	---	63.82	20.49	L1	OFF	19.5
0.512250	---	24.10	46.00	21.90	L1	OFF	19.5
0.512250	37.21	---	56.00	18.79	L1	OFF	19.5
3.761250	---	25.50	46.00	20.50	L1	OFF	19.6
3.761250	34.60	---	56.00	21.40	L1	OFF	19.6
9.478500	---	30.94	50.00	19.06	L1	OFF	19.7
9.478500	36.22	---	60.00	23.78	L1	OFF	19.7
20.600250	---	17.47	50.00	32.53	L1	OFF	19.8
20.600250	20.54	---	60.00	39.46	L1	OFF	19.8

Test Mode :	Mode 7	Temperature :	22~23°C
Test Engineer :	Jimmy Chang	Relative Humidity :	53~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

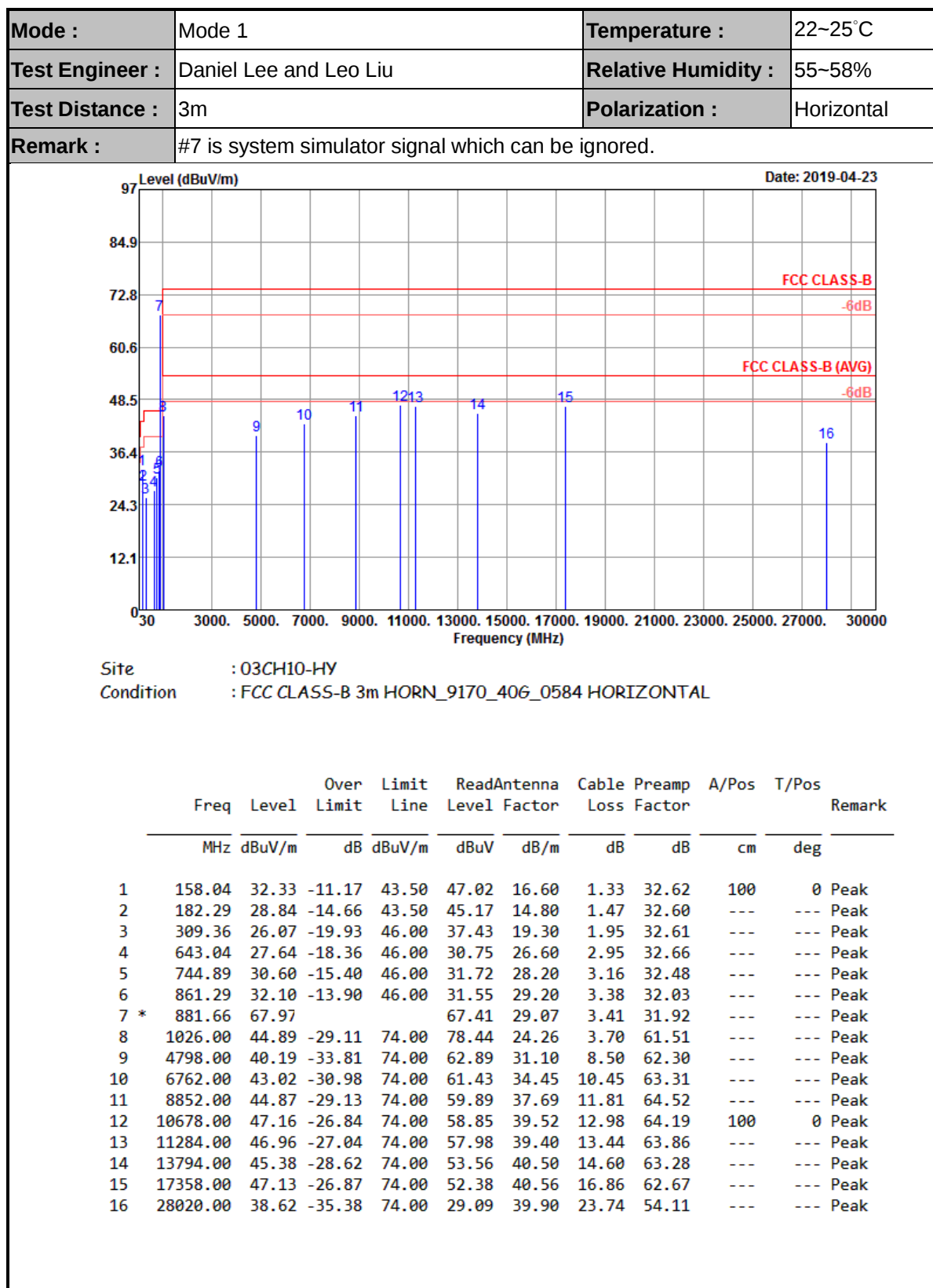


Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	42.21	55.88	13.67	N	OFF	19.5
0.152250	54.97	---	65.88	10.91	N	OFF	19.5
0.161250	---	37.57	55.40	17.83	N	OFF	19.5
0.161250	52.90	---	65.40	12.50	N	OFF	19.5
0.168000	---	30.01	55.06	25.05	N	OFF	19.5
0.168000	42.31	---	65.06	22.75	N	OFF	19.5
0.195000	---	33.04	53.82	20.78	N	OFF	19.5
0.195000	45.31	---	63.82	18.51	N	OFF	19.5
0.501000	---	24.18	46.00	21.82	N	OFF	19.5
0.501000	33.53	---	56.00	22.47	N	OFF	19.5
3.759000	---	24.92	46.00	21.08	N	OFF	19.6
3.759000	34.79	---	56.00	21.21	N	OFF	19.6
9.771000	---	24.31	50.00	25.69	N	OFF	19.7
9.771000	29.35	---	60.00	30.65	N	OFF	19.7
22.809750	---	16.95	50.00	33.05	N	OFF	19.9
22.809750	19.54	---	60.00	40.46	N	OFF	19.9

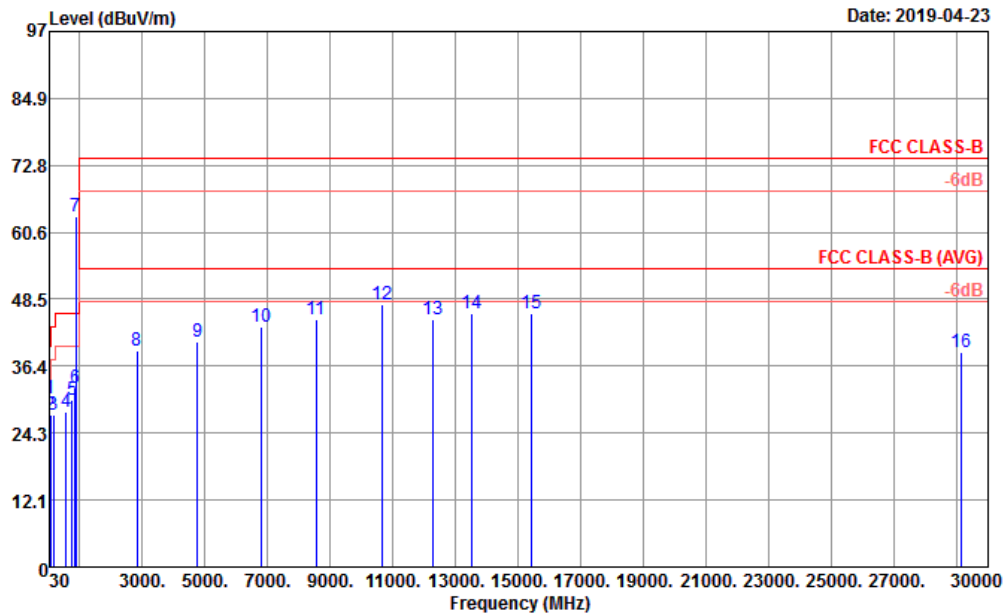


Appendix B. Radiated Emission Test Result





Mode :	Mode 1	Temperature :	22~25°C
Test Engineer :	Daniel Lee and Leo Liu	Relative Humidity :	55~58%
Test Distance :	3m	Polarization :	Vertical
Remark :	#7 is system simulator signal which can be ignored.		



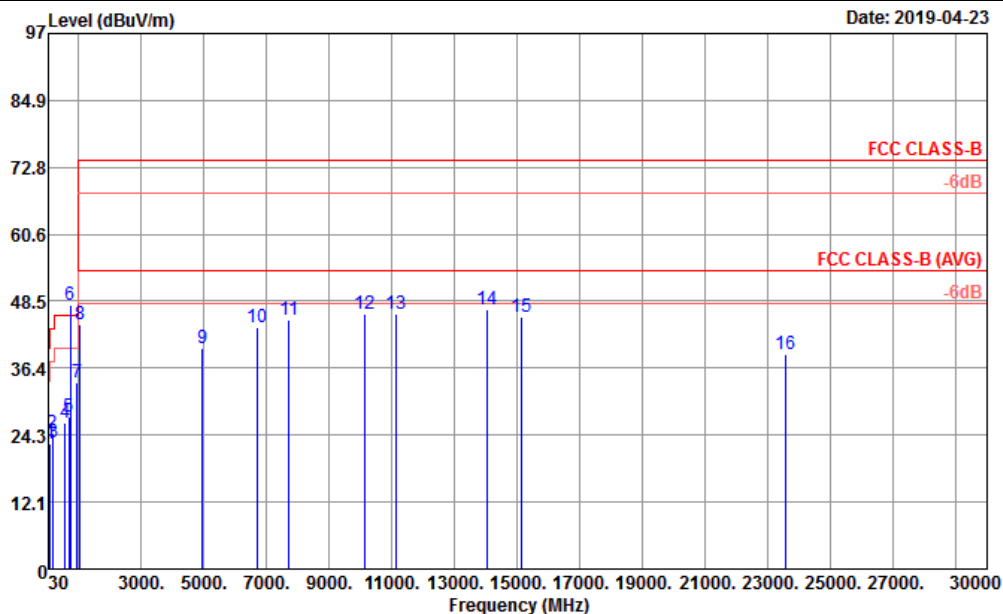
Site : 03CH10-HY

Condition : FCC CLASS-B 3m HORN_9170_40G_0584 VERTICAL

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	41.64	30.44	-9.56	40.00	43.88	18.71	0.61	32.76	100	0 Peak
2	74.62	27.63	-12.37	40.00	46.69	12.79	0.86	32.71	---	--- Peak
3	156.10	27.51	-15.99	43.50	41.32	17.50	1.32	32.63	---	--- Peak
4	565.44	27.97	-18.03	46.00	31.69	26.28	2.69	32.69	---	--- Peak
5	745.86	30.24	-15.76	46.00	31.34	28.22	3.16	32.48	---	--- Peak
6	856.44	32.38	-13.62	46.00	31.79	29.27	3.38	32.06	---	--- Peak
7 *	881.66	63.62			63.06	29.07	3.41	31.92	---	--- Peak
8	2822.00	39.22	-34.78	74.00	65.71	27.99	7.38	61.86	---	--- Peak
9	4770.00	40.73	-33.27	74.00	63.34	31.16	8.53	62.30	---	--- Peak
10	6806.00	43.62	-30.38	74.00	61.90	34.60	10.49	63.37	---	--- Peak
11	8552.00	44.84	-29.16	74.00	60.53	37.00	11.47	64.16	---	--- Peak
12	10666.00	47.43	-26.57	74.00	59.13	39.53	12.97	64.20	100	0 Peak
13	12262.00	44.91	-29.09	74.00	56.33	38.68	14.04	64.14	---	--- Peak
14	13500.00	46.05	-27.95	74.00	54.99	40.10	14.36	63.40	---	--- Peak
15	15402.00	45.97	-28.03	74.00	54.70	38.79	15.50	63.02	---	--- Peak
16	29124.00	38.98	-35.02	74.00	29.40	40.15	24.28	54.85	---	--- Peak



Mode :	Mode 2	Temperature :	22~25°C
Test Engineer :	Daniel Lee and Leo Liu	Relative Humidity :	55~58%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#6 is system simulator signal which can be ignored.		



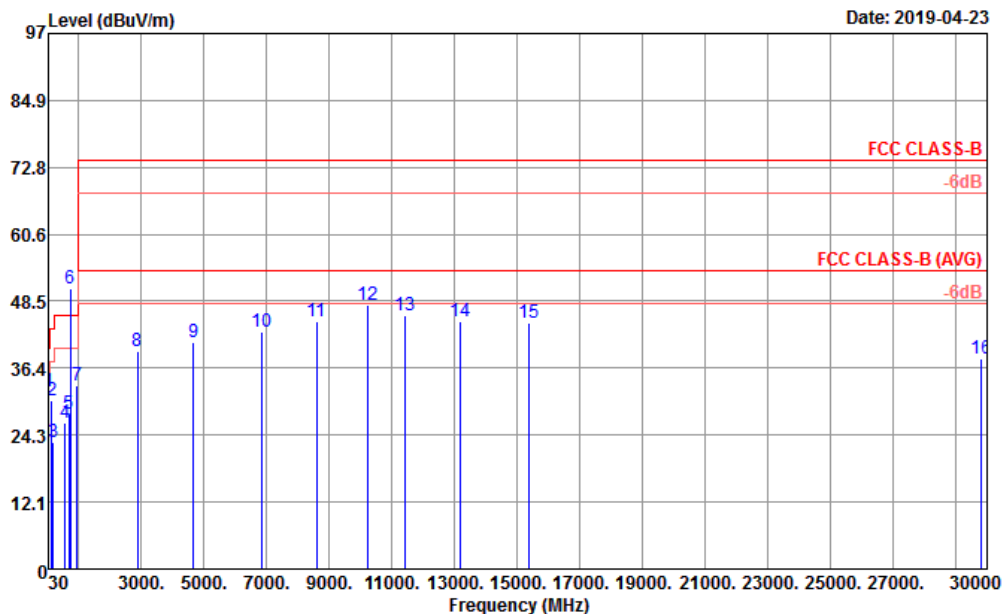
Site : 03CH10-HY

Condition : FCC CLASS-B 3m HORN_9170_406_0584 HORIZONTAL

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamplifier Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	79.47	22.63	-17.37	40.00	40.97	13.45	0.91	32.70	---	Peak
2	152.22	24.66	-18.84	43.50	39.09	16.88	1.32	32.63	---	Peak
3	176.47	22.87	-20.63	43.50	38.88	15.15	1.45	32.61	---	Peak
4	560.59	26.55	-19.45	46.00	30.26	26.30	2.68	32.69	---	Peak
5	682.81	27.63	-18.37	46.00	30.66	26.56	3.01	32.60	---	Peak
6 *	737.50	47.72			49.08	28.00	3.13	32.49	---	Peak
7	954.41	33.89	-12.11	46.00	30.48	31.18	3.52	31.29	100	0 Peak
8	1034.00	44.39	-29.61	74.00	77.88	24.30	3.72	61.51	---	Peak
9	4960.00	40.10	-33.90	74.00	62.31	31.14	8.95	62.30	---	Peak
10	6682.00	43.74	-30.26	74.00	62.18	34.43	10.35	63.22	---	Peak
11	7716.00	45.09	-28.91	74.00	61.72	36.00	11.03	63.66	---	Peak
12	10120.00	46.23	-27.77	74.00	59.72	38.66	12.55	64.70	---	Peak
13	11150.00	46.29	-27.71	74.00	57.28	39.50	13.34	63.83	---	Peak
14	14034.00	47.06	-26.94	74.00	54.65	40.84	14.78	63.21	100	0 Peak
15	15156.00	45.73	-28.27	74.00	53.62	39.81	15.37	63.07	---	Peak
16	23544.00	38.81	-35.19	74.00	31.69	39.23	21.11	53.22	---	Peak



Mode :	Mode 2	Temperature :	22~25°C
Test Engineer :	Daniel Lee and Leo Liu	Relative Humidity :	55~58%
Test Distance :	3m	Polarization :	Vertical
Remark :	#6 is system simulator signal which can be ignored.		



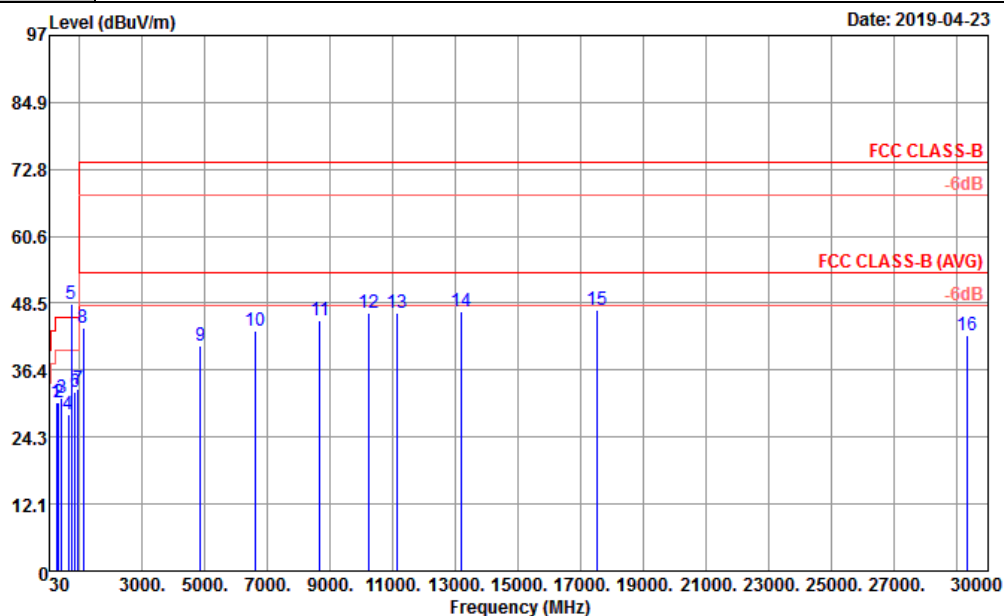
Site : 03CH10-HY

Condition : FCC CLASS-B 3m HORN_9170_40G_0584 VERTICAL

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor		
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	41.64	32.24	-7.76	40.00	45.68	18.71	0.61	32.76	100	0 Peak
2	148.34	30.46	-13.04	43.50	44.78	17.00	1.31	32.63	---	--- Peak
3	178.41	23.05	-20.45	43.50	39.14	15.06	1.46	32.61	---	--- Peak
4	572.23	26.35	-19.65	46.00	30.29	26.06	2.70	32.70	---	--- Peak
5	694.45	27.99	-18.01	46.00	30.95	26.60	3.02	32.58	---	--- Peak
6 *	737.50	50.69			52.05	28.00	3.13	32.49	---	--- Peak
7	945.68	33.17	-12.83	46.00	30.39	30.65	3.50	31.37	---	--- Peak
8	2868.00	39.49	-34.51	74.00	65.74	28.14	7.48	61.87	---	--- Peak
9	4674.00	41.20	-32.80	74.00	63.79	31.10	8.61	62.30	---	--- Peak
10	6852.00	42.89	-31.11	74.00	61.23	34.62	10.46	63.42	---	--- Peak
11	8604.00	44.93	-29.07	74.00	60.57	37.12	11.46	64.22	---	--- Peak
12	10214.00	47.72	-26.28	74.00	60.79	38.94	12.62	64.63	100	0 Peak
13	11434.00	45.80	-28.20	74.00	56.64	39.50	13.55	63.89	---	--- Peak
14	13188.00	44.74	-29.26	74.00	54.79	39.18	14.11	63.34	---	--- Peak
15	15378.00	44.60	-29.40	74.00	53.30	38.84	15.48	63.02	---	--- Peak
16	29832.00	38.09	-35.91	74.00	28.32	40.34	24.63	55.20	---	--- Peak



Mode :	Mode 3	Temperature :	22~25°C
Test Engineer :	Daniel Lee and Leo Liu	Relative Humidity :	55~58%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#5 is system simulator signal which can be ignored.		



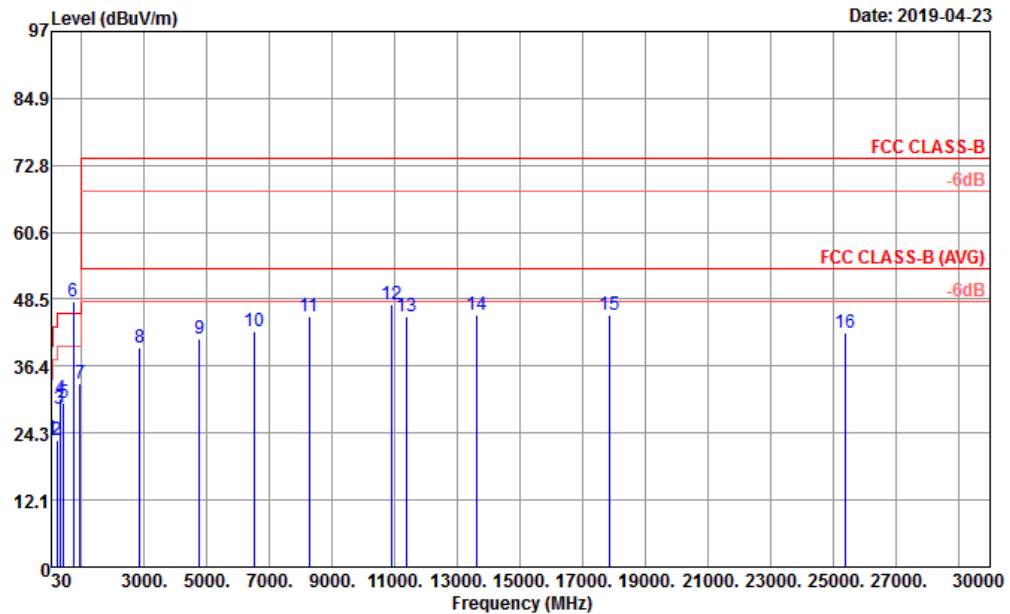
Site : 03CH10-HY

Condition : FCC CLASS-B 3m HORN_9170_406_0584 HORIZONTAL

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	264.74	30.51	-15.49	46.00	41.49	19.81	1.81	32.60	---	Peak
2	335.55	30.50	-15.50	46.00	41.21	19.92	1.98	32.61	---	Peak
3	413.15	31.39	-14.61	46.00	39.37	22.33	2.31	32.62	---	Peak
4	634.31	28.45	-17.55	46.00	31.62	26.59	2.91	32.67	---	Peak
5 *	740.00	48.45			49.70	28.10	3.14	32.49	---	Peak
6	852.56	32.37	-13.63	46.00	31.78	29.30	3.37	32.08	---	Peak
7	946.65	32.98	-13.02	46.00	30.11	30.73	3.50	31.36	100	0 Peak
8	1122.00	44.05	-29.95	74.00	76.98	24.65	3.97	61.55	---	Peak
9	4844.00	40.87	-33.13	74.00	63.45	31.10	8.62	62.30	---	Peak
10	6586.00	43.49	-30.51	74.00	61.98	34.37	10.24	63.10	---	Peak
11	8664.00	45.29	-28.71	74.00	60.70	37.33	11.56	64.30	---	Peak
12	10234.00	46.76	-27.24	74.00	59.73	39.00	12.64	64.61	---	Peak
13	11112.00	46.79	-27.21	74.00	57.72	39.58	13.31	63.82	---	Peak
14	13182.00	47.15	-26.85	74.00	57.22	39.16	14.11	63.34	---	Peak
15	17508.00	47.25	-26.75	74.00	51.51	41.26	16.98	62.50	100	0 Peak
16	29316.00	42.60	-31.40	74.00	33.07	40.08	24.38	54.93	---	Peak



Mode :	Mode 3	Temperature :	22~25°C
Test Engineer :	Daniel Lee and Leo Liu	Relative Humidity :	55~58%
Test Distance :	3m	Polarization :	Vertical
Remark :	#6 is system simulator signal which can be ignored.		



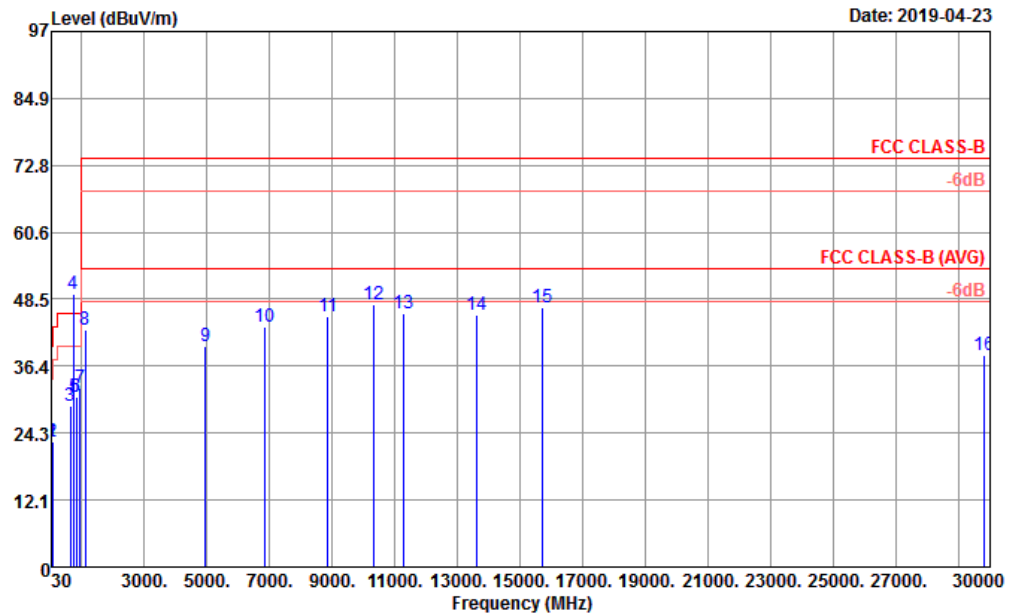
Site : 03CH10-HY

Condition : FCC CLASS-B 3m HORN_9170_40G_0584 VERTICAL

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor		
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	37.76	23.25	-16.75	40.00	34.60	20.92	0.50	32.77	---	Peak
2	203.63	22.99	-20.51	43.50	38.93	15.15	1.50	32.59	---	Peak
3	295.78	28.73	-17.27	46.00	40.22	19.20	1.92	32.61	---	Peak
4	337.49	30.62	-15.38	46.00	41.25	20.00	1.98	32.61	---	Peak
5	411.21	29.69	-16.31	46.00	37.76	22.25	2.30	32.62	---	Peak
6 *	740.00	48.18			49.43	28.10	3.14	32.49	---	Peak
7	957.32	33.37	-12.63	46.00	29.85	31.25	3.53	31.26	100	0 Peak
8	2848.00	39.68	-34.32	74.00	66.03	28.09	7.43	61.87	---	Peak
9	4750.00	41.42	-32.58	74.00	63.98	31.20	8.54	62.30	---	Peak
10	6500.00	42.61	-31.39	74.00	61.31	34.20	10.10	63.00	---	Peak
11	8254.00	45.28	-28.72	74.00	61.21	36.58	11.34	63.85	---	Peak
12	10902.00	47.55	-26.45	74.00	58.32	40.00	13.15	63.92	100	0 Peak
13	11376.00	45.46	-28.54	74.00	56.35	39.48	13.51	63.88	---	Peak
14	13602.00	45.74	-28.26	74.00	54.36	40.30	14.44	63.36	---	Peak
15	17832.00	45.63	-28.37	74.00	46.69	44.08	17.23	62.37	---	Peak
16	25380.00	42.49	-31.51	74.00	35.02	39.63	21.32	53.48	---	Peak



Mode :	Mode 4	Temperature :	22~25°C
Test Engineer :	Daniel Lee and Leo Liu	Relative Humidity :	55~58%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#4 is system simulator signal which can be ignored.		

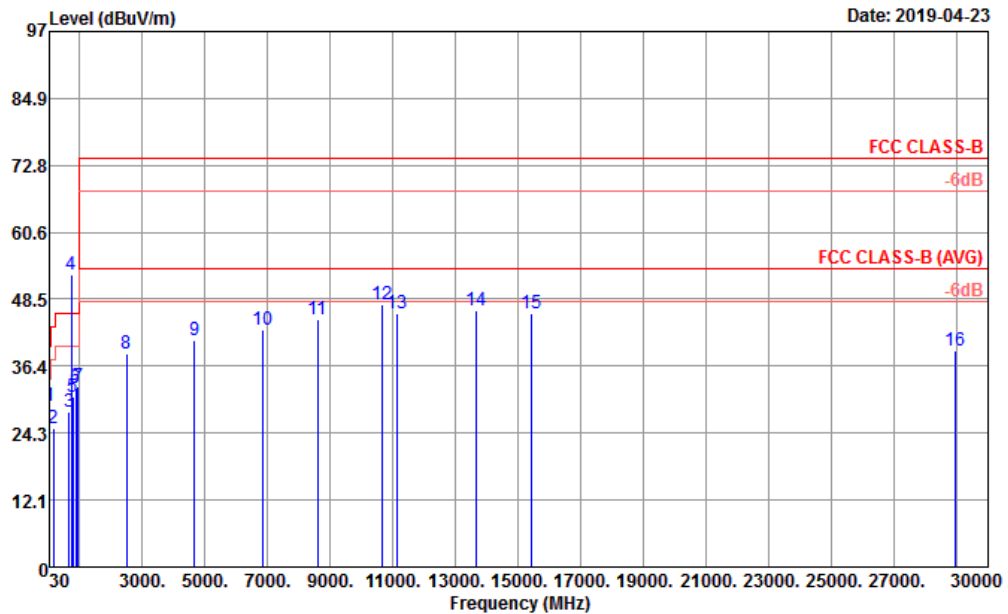


Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 HORIZONTAL

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Preamp	A/Pos	T/Pos			
					Factor	Loss	Factor		Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	22.74	-17.26	40.00	29.77	25.30	0.45	32.78	---	---	Peak
2	70.74	22.72	-17.28	40.00	42.07	12.52	0.85	32.72	---	---	Peak
3	631.40	29.09	-16.91	46.00	32.33	26.53	2.90	32.67	---	---	Peak
4 *	734.00	49.43			50.94	27.86	3.13	32.50	---	---	Peak
5	746.83	30.72	-15.28	46.00	31.80	28.24	3.16	32.48	---	---	Peak
6	831.22	30.72	-15.28	46.00	31.05	28.55	3.32	32.20	---	---	Peak
7	942.77	32.48	-13.52	46.00	29.91	30.47	3.50	31.40	100	0	Peak
8	1122.00	43.05	-30.95	74.00	75.98	24.65	3.97	61.55	---	---	Peak
9	4960.00	40.10	-33.90	74.00	62.31	31.14	8.95	62.30	---	---	Peak
10	6862.00	43.40	-30.60	74.00	61.67	34.70	10.46	63.43	---	---	Peak
11	8866.00	45.36	-28.64	74.00	60.45	37.64	11.81	64.54	---	---	Peak
12	10342.00	47.49	-26.51	74.00	59.93	39.37	12.72	64.53	100	0	Peak
13	11256.00	45.88	-28.12	74.00	56.91	39.40	13.42	63.85	---	---	Peak
14	13602.00	45.62	-28.38	74.00	54.24	40.30	14.44	63.36	---	---	Peak
15	15726.00	46.96	-27.04	74.00	57.00	37.47	15.67	63.18	---	---	Peak
16	29832.00	38.30	-35.70	74.00	28.53	40.34	24.63	55.20	---	---	Peak



Mode :	Mode 4	Temperature :	22~25°C
Test Engineer :	Daniel Lee and Leo Liu	Relative Humidity :	55~58%
Test Distance :	3m	Polarization :	Vertical
Remark :	#4 is system simulator signal which can be ignored.		



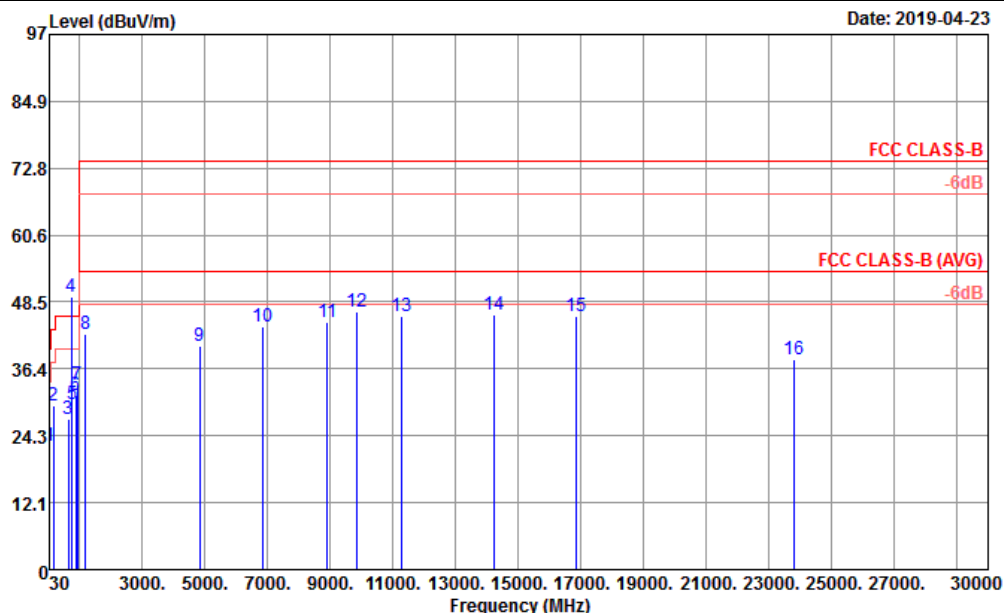
Site : 03CH10-HY

Condition : FCC CLASS-B 3m HORN_9170_40G_0584 VERTICAL

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor		
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	45.52	29.15	-10.85	40.00	44.58	16.64	0.69	32.76	100	0 Peak
2	158.04	25.13	-18.37	43.50	39.82	16.60	1.33	32.62	---	--- Peak
3	668.26	28.03	-17.97	46.00	31.15	26.50	3.00	32.62	---	--- Peak
4 *	734.00	52.95			54.46	27.86	3.13	32.50	---	--- Peak
5	783.69	30.88	-15.12	46.00	31.73	28.33	3.22	32.40	---	--- Peak
6	874.87	32.40	-13.60	46.00	31.76	29.20	3.40	31.96	---	--- Peak
7	948.59	32.80	-13.20	46.00	29.74	30.89	3.51	31.34	---	--- Peak
8	2484.00	38.71	-35.29	74.00	66.23	27.26	7.02	61.80	---	--- Peak
9	4674.00	41.20	-32.80	74.00	63.79	31.10	8.61	62.30	---	--- Peak
10	6852.00	42.89	-31.11	74.00	61.23	34.62	10.46	63.42	---	--- Peak
11	8604.00	44.93	-29.07	74.00	60.57	37.12	11.46	64.22	---	--- Peak
12	10666.00	47.43	-26.57	74.00	59.13	39.53	12.97	64.20	100	0 Peak
13	11138.00	45.81	-28.19	74.00	56.79	39.52	13.33	63.83	---	--- Peak
14	13680.00	46.42	-27.58	74.00	54.79	40.46	14.50	63.33	---	--- Peak
15	15402.00	45.97	-28.03	74.00	54.70	38.79	15.50	63.02	---	--- Peak
16	28956.00	39.25	-34.75	74.00	29.62	40.19	24.20	54.76	---	--- Peak



Mode :	Mode 5	Temperature :	22~25°C
Test Engineer :	Daniel Lee and Leo Liu	Relative Humidity :	55~58%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#4 is system simulator signal which can be ignored.		



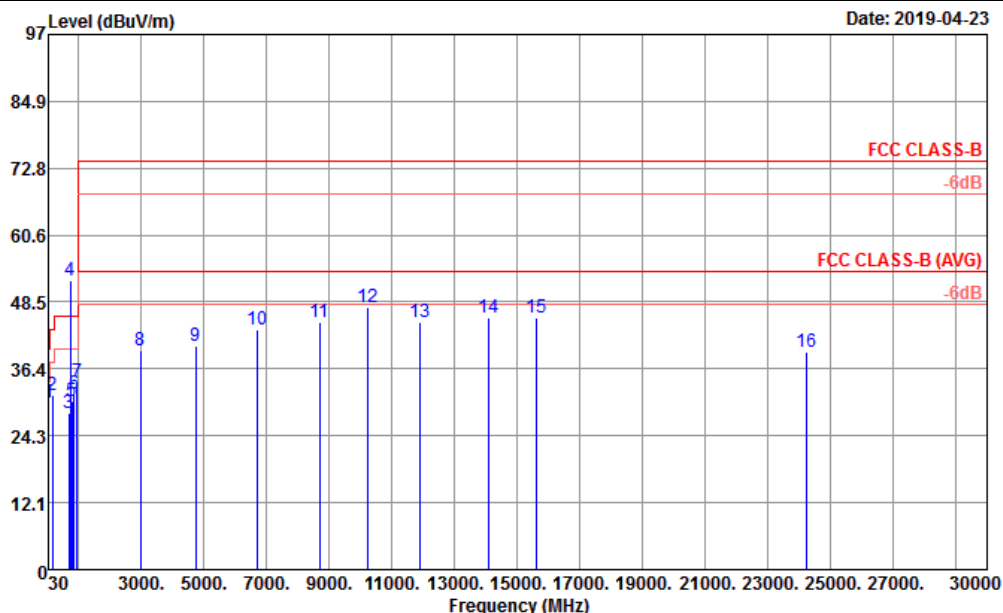
Site : 03CH10-HY

Condition : FCC CLASS-B 3m HORN_9170_40G_0584 HORIZONTAL

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	cm	deg
			dB	dBuV/m	dBuV	dB/m	dB	dB		
1	30.00	22.43	-17.57	40.00	29.46	25.30	0.45	32.78	---	Peak
2	152.22	29.65	-13.85	43.50	44.08	16.88	1.32	32.63	---	Peak
3	632.37	27.31	-18.69	46.00	30.53	26.55	2.90	32.67	---	Peak
4 *	741.00	49.34			50.57	28.12	3.14	32.49	---	Peak
5	764.29	30.11	-15.89	46.00	31.06	28.30	3.19	32.44	---	Peak
6	885.54	31.69	-14.31	46.00	31.19	28.99	3.41	31.90	---	Peak
7	934.04	33.53	-12.47	46.00	31.60	29.94	3.48	31.49	100	0 Peak
8	1176.00	42.71	-31.29	74.00	75.05	25.10	4.13	61.57	---	Peak
9	4820.00	40.48	-33.52	74.00	63.12	31.10	8.56	62.30	---	Peak
10	6862.00	44.00	-30.00	74.00	62.27	34.70	10.46	63.43	---	Peak
11	8912.00	44.86	-29.14	74.00	60.18	37.45	11.82	64.59	---	Peak
12	9844.00	46.67	-27.33	74.00	60.15	39.06	12.23	64.77	100	0 Peak
13	11256.00	45.88	-28.12	74.00	56.91	39.40	13.42	63.85	---	Peak
14	14226.00	46.16	-27.84	74.00	53.40	41.13	14.88	63.25	---	Peak
15	16860.00	45.80	-28.20	74.00	52.89	39.70	16.48	63.27	---	Peak
16	23784.00	38.12	-35.88	74.00	30.95	39.37	21.11	53.31	---	Peak



Mode :	Mode 5	Temperature :	22~25°C
Test Engineer :	Daniel Lee and Leo Liu	Relative Humidity :	55~58%
Test Distance :	3m	Polarization :	Vertical
Remark :	#4 is system simulator signal which can be ignored.		



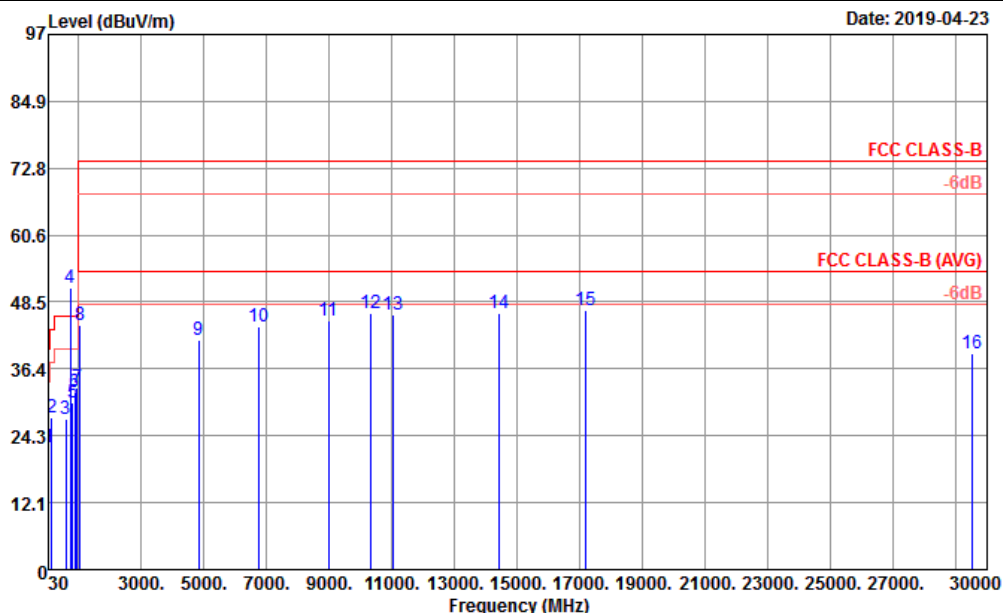
Site : 03CH10-HY

Condition : FCC CLASS-B 3m HORN_9170_406_0584 VERTICAL

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	30.97	30.39	-9.61	40.00	37.91	24.81	0.45	32.78	100	0 Peak
2	152.22	31.50	-12.00	43.50	45.93	16.88	1.32	32.63	---	---
3	679.90	28.27	-17.73	46.00	31.36	26.50	3.01	32.60	---	---
4 *	741.00	52.42			53.65	28.12	3.14	32.49	---	---
5	773.02	30.56	-15.44	46.00	31.42	28.36	3.20	32.42	---	---
6	857.41	31.96	-14.04	46.00	31.38	29.25	3.38	32.05	---	---
7	952.47	34.04	-11.96	46.00	30.73	31.10	3.52	31.31	---	---
8	2972.00	39.82	-34.18	74.00	65.67	28.34	7.70	61.89	---	---
9	4726.00	40.62	-33.38	74.00	63.21	31.15	8.56	62.30	---	---
10	6722.00	43.54	-30.46	74.00	61.95	34.46	10.40	63.27	---	---
11	8700.00	44.91	-29.09	74.00	60.23	37.40	11.62	64.34	---	---
12	10232.00	47.43	-26.57	74.00	60.40	39.00	12.64	64.61	100	0 Peak
13	11896.00	44.94	-29.06	74.00	56.65	38.60	13.91	64.22	---	---
14	14070.00	45.65	-28.35	74.00	53.08	40.98	14.80	63.21	---	---
15	15630.00	45.72	-28.28	74.00	55.63	37.57	15.62	63.10	---	---
16	24240.00	39.45	-34.55	74.00	31.76	39.95	21.14	53.40	---	---



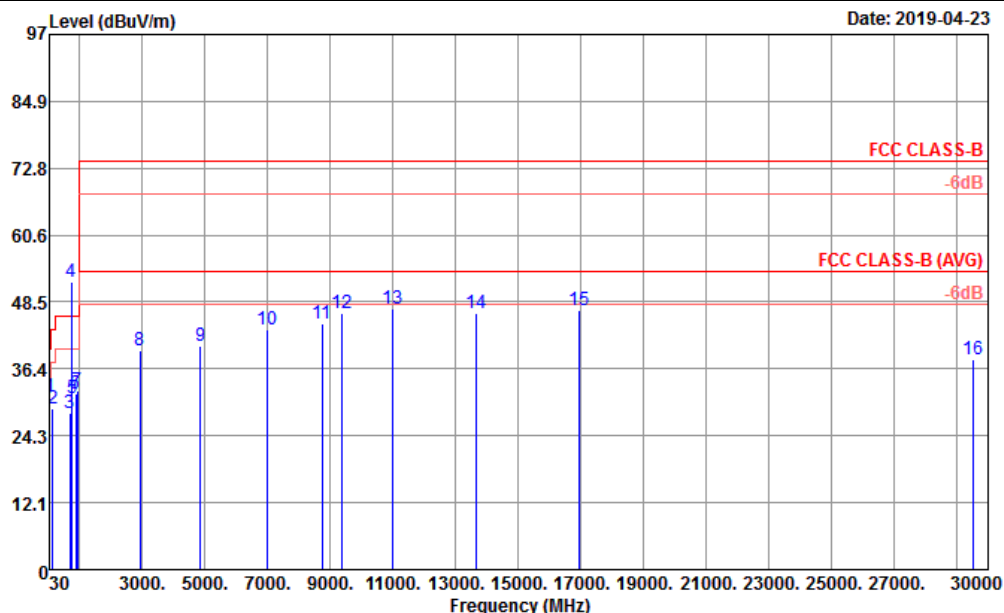
Mode :	Mode 6	Temperature :	22~25°C
Test Engineer :	Daniel Lee and Leo Liu	Relative Humidity :	55~58%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#4 is system simulator signal which can be ignored.		



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	cm	deg
			dB	dBuV/m	dBuV	dB/m	dB	dB		
1	30.00	22.07	-17.93	40.00	29.10	25.30	0.45	32.78	---	Peak
2	148.34	27.46	-16.04	43.50	41.78	17.00	1.31	32.63	---	Peak
3	585.81	27.22	-18.78	46.00	31.32	25.88	2.73	32.71	---	Peak
4 *	737.50	50.94			52.30	28.00	3.13	32.49	---	Peak
5	796.30	30.32	-15.68	46.00	31.20	28.27	3.23	32.38	---	Peak
6	868.08	32.16	-13.84	46.00	31.57	29.20	3.39	32.00	---	Peak
7	946.65	32.96	-13.04	46.00	30.09	30.73	3.50	31.36	100	0 Peak
8	1034.00	44.39	-29.61	74.00	77.88	24.30	3.72	61.51	---	Peak
9	4820.00	41.48	-32.52	74.00	64.12	31.10	8.56	62.30	---	Peak
10	6762.00	43.92	-30.08	74.00	62.33	34.45	10.45	63.31	---	Peak
11	8982.00	45.02	-28.98	74.00	60.50	37.36	11.84	64.68	---	Peak
12	10342.00	46.49	-27.51	74.00	58.93	39.37	12.72	64.53	100	0 Peak
13	11032.00	46.17	-27.83	74.00	56.80	39.94	13.24	63.81	---	Peak
14	14412.00	46.38	-27.62	74.00	53.47	41.21	14.98	63.28	---	Peak
15	17196.00	47.14	-26.86	74.00	53.27	39.99	16.74	62.86	---	Peak
16	29532.00	39.10	-34.90	74.00	29.62	40.02	24.48	55.02	---	Peak



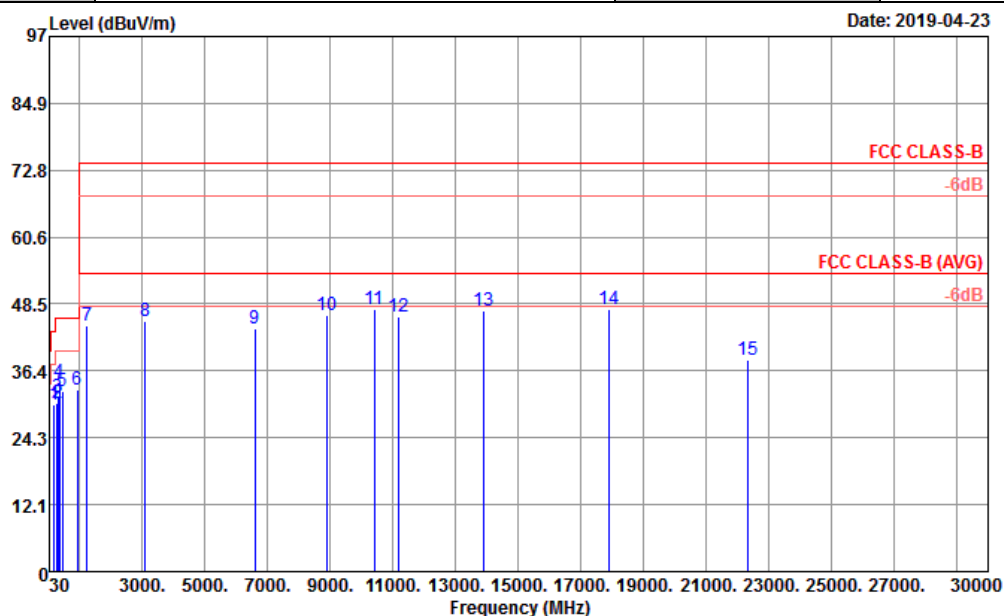
Mode :	Mode 6	Temperature :	22~25°C
Test Engineer :	Daniel Lee and Leo Liu	Relative Humidity :	55~58%
Test Distance :	3m	Polarization :	Vertical
Remark :	#4 is system simulator signal which can be ignored.		



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	38.73	31.28	-8.72	40.00	43.09	20.43	0.53	32.77	100	0 Peak
2	146.40	29.17	-14.33	43.50	43.29	17.20	1.31	32.63	---	---
3	679.90	28.25	-17.75	46.00	31.34	26.50	3.01	32.60	---	---
4 *	737.50	52.15			53.51	28.00	3.13	32.49	---	---
5	746.83	31.04	-14.96	46.00	32.12	28.24	3.16	32.48	---	---
6	885.54	31.87	-14.13	46.00	31.37	28.99	3.41	31.90	---	---
7	935.01	32.35	-13.65	46.00	30.34	30.00	3.49	31.48	---	---
8	2934.00	39.63	-34.37	74.00	65.63	28.27	7.62	61.89	---	---
9	4860.00	40.66	-33.34	74.00	63.21	31.08	8.67	62.30	---	---
10	6980.00	43.44	-30.56	74.00	61.31	35.32	10.39	63.58	---	---
11	8748.00	44.59	-29.41	74.00	59.70	37.59	11.70	64.40	---	---
12	9388.00	46.54	-27.46	74.00	60.47	38.58	12.19	64.70	---	---
13	11010.00	47.40	-26.60	74.00	57.92	40.05	13.23	63.80	100	0 Peak
14	13680.00	46.42	-27.58	74.00	54.79	40.46	14.50	63.33	---	---
15	16962.00	47.05	-26.95	74.00	54.02	39.62	16.56	63.15	---	---
16	29520.00	38.05	-35.95	74.00	28.56	40.02	24.48	55.01	---	---



Mode :	Mode 7	Temperature :	22~25°C
Test Engineer :	Daniel Lee and Leo Liu	Relative Humidity :	55~58%
Test Distance :	3m	Polarization :	Horizontal



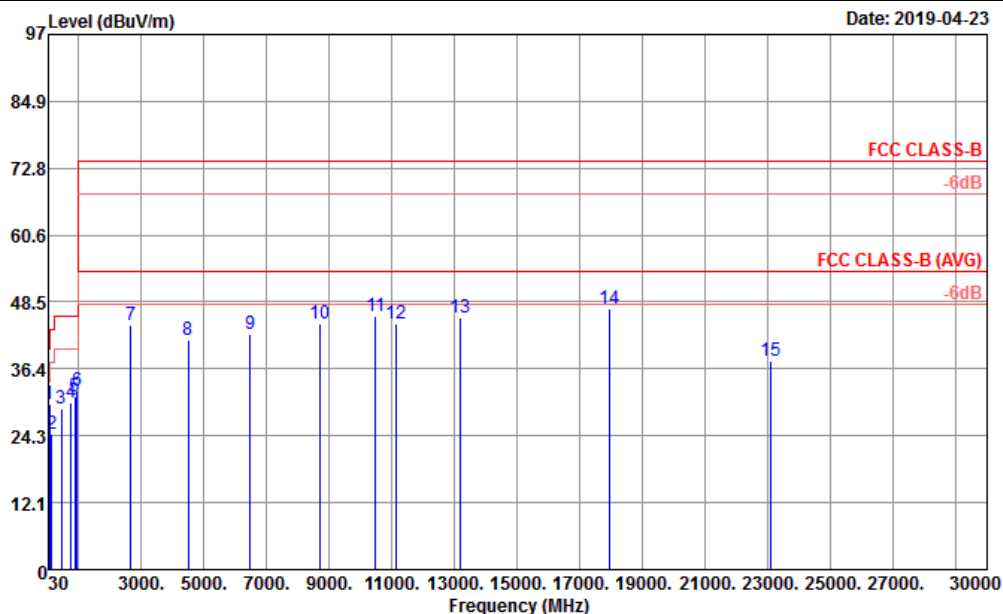
Site : 03CH10-HY

Condition : FCC CLASS-B 3m HORN_9170_406_0584 HORIZONTAL

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	A/Pos	T/Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	175.50	30.25	-13.25	43.50	46.17	15.25	1.44	32.61	---	---	Peak
2	269.59	30.59	-15.41	46.00	42.39	18.97	1.83	32.60	---	---	Peak
3	304.51	31.72	-14.28	46.00	43.10	19.29	1.94	32.61	---	---	Peak
4	355.92	34.41	-11.59	46.00	44.47	20.54	2.02	32.62	100	0	Peak
5	450.01	32.58	-13.42	46.00	39.80	23.00	2.41	32.63	---	---	Peak
6	921.43	33.09	-12.91	46.00	31.81	29.43	3.46	31.61	---	---	Peak
7	1242.00	44.55	-29.45	74.00	76.60	25.27	4.28	61.60	---	---	Peak
8	3100.00	45.29	-28.71	74.00	70.71	28.70	7.84	61.96	---	---	Peak
9	6602.00	44.03	-29.97	74.00	62.49	34.40	10.26	63.12	---	---	Peak
10	8912.00	46.55	-27.45	74.00	61.87	37.45	11.82	64.59	---	---	Peak
11	10404.00	47.46	-26.54	74.00	59.57	39.60	12.77	64.48	---	---	Peak
12	11172.00	46.27	-27.73	74.00	57.29	39.46	13.35	63.83	---	---	Peak
13	13902.00	47.32	-26.68	74.00	55.38	40.50	14.68	63.24	---	---	Peak
14	17886.00	47.54	-26.46	74.00	47.57	45.05	17.27	62.35	100	0	Peak
15	22308.00	38.37	-35.63	74.00	31.84	38.44	21.15	53.06	---	---	Peak



Mode :	Mode 7	Temperature :	22~25°C
Test Engineer :	Daniel Lee and Leo Liu	Relative Humidity :	55~58%
Test Distance :	3m	Polarization :	Vertical



Site : 03CH10-HY

Condition : FCC CLASS-B 3m HORN_9170_406_0584 VERTICAL

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	64.92	30.00	-10.00	40.00	49.90	12.01	0.82	32.73	100	0 Peak
2	147.37	24.71	-18.79	43.50	38.83	17.20	1.31	32.63	---	---
3	452.92	29.30	-16.70	46.00	36.45	23.06	2.42	32.63	---	---
4	759.44	30.36	-15.64	46.00	31.33	28.30	3.18	32.45	---	---
5	884.57	31.35	-14.65	46.00	30.83	29.01	3.41	31.90	---	---
6	944.71	32.54	-13.46	46.00	29.84	30.58	3.50	31.38	---	---
7	2662.00	44.26	-29.74	74.00	71.34	27.52	7.23	61.83	---	---
8	4506.00	41.63	-32.37	74.00	64.70	30.51	8.72	62.30	---	---
9	6478.00	42.70	-31.30	74.00	61.57	34.07	10.06	63.00	---	---
10	8692.00	44.55	-29.45	74.00	59.89	37.38	11.61	64.33	---	---
11	10478.00	45.86	-28.14	74.00	57.94	39.52	12.82	64.42	---	---
12	11152.00	44.62	-29.38	74.00	55.61	39.50	13.34	63.83	---	---
13	13188.00	45.74	-28.26	74.00	55.79	39.18	14.11	63.34	---	---
14	17958.00	47.23	-26.77	74.00	45.53	46.69	17.33	62.32	100	0 Peak
15	23100.00	37.93	-36.07	74.00	31.04	39.12	21.13	53.36	---	---

—THE END—