



FCC EMI TEST REPORT

FCC ID : PY7-23855M
Equipment : GSM/WCDMA/LTE Phone with BT, DTS/UNII
a/b/g/n/ac/ax, 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 Class B

The product was received on Aug. 05, 2020 and testing was started from Aug. 08, 2020 and completed on Aug. 18, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI 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 of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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



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	16
Appendix A. AC Conducted Emission Test Result	
Appendix B. Radiated Emission Test Result	



History of this test report

Report No.	Version	Description	Issued Date
FC042245-02	01	Initial issue of report	Aug. 24, 2020
FC042245-02	02	Add test description.	Sep. 01, 2020

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 6.73 dB at 0.150 MHz
3.2	15.109	Radiated Emission	Pass	Under limit 5.45 dB at 47.460 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: Dara Chiu

Report Producer: Lucy Wu

1. General Description

1.1. Product Feature of Equipment Under Test

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

Product Specification subjective to this standard	
Antenna Type	WWAN: Loop Antenna WLAN: <Ant. 0>: Loop Antenna <Ant. 1>: Loop Antenna Bluetooth: Loop Antenna GPS/Glonass/Galileo/BDS: Loop Antenna NFC: Loop Antenna FM: Using earphone as Antenna

EUT Information List			
HW Version	SW Version	S/N	Performed Test Item
A	1.130	QV71008N3Z	Conducted Emission Radiated Emission

Accessory List	
AC Adapter	Model Name : UCH32
	S/N:
	6218W30200122 (for radiated emission) 6218W30200015 (for conducted emission)
Earphone	Model Name : STH40D
	S/N : N/A
Bluetooth Earphone	Model Name : SBH82D
	S/N : N/A
USB Cable	Model Name : UCB24
	S/N : N/A

Note:

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

1.2. Modification of EUT

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

1.3. Test Location

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No.
	CO05-HY

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No.
	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 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

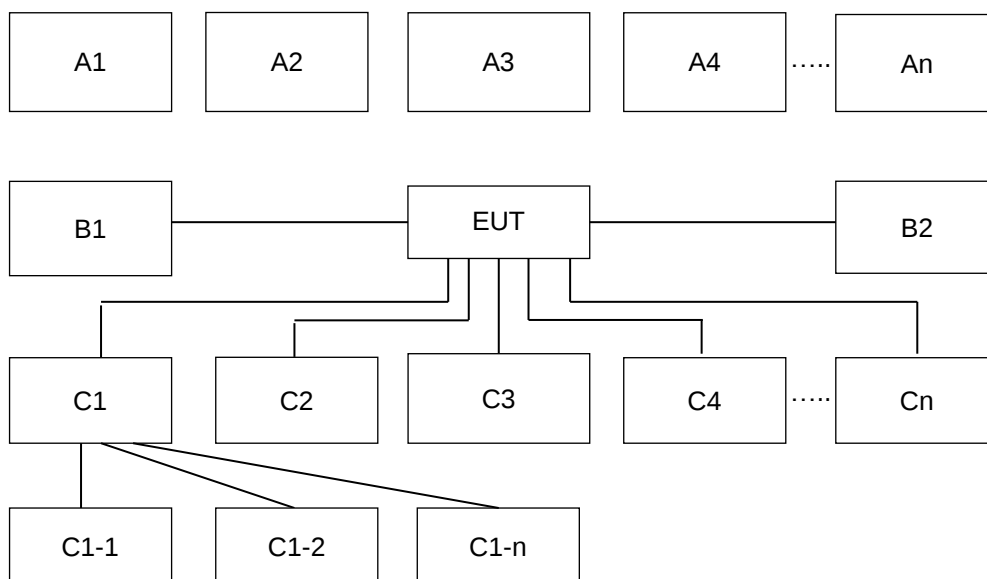
The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

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 (Low Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + Camera (Front) + Earphone + Battery + USB Cable (Charging from Adapter)
	Mode 2: GSM850 (Middle Channel) Idle+ Bluetooth Idle + WLAN (5GHz) Idle + Camera (Rear) + Earphone + Battery + USB Cable (Charging from Adapter)
	Mode 3: GSM850 (High Channel) Idle+ Bluetooth Idle + WLAN (2.4GHz) Idle + MPEG4 + Earphone + Battery + USB Cable (Charging from Adapter)
	Mode 4: LTE Band 12 (Middle Channel) Idle+ Bluetooth Idle + WLAN (5GHz) Idle + NFC On + Earphone + Battery + USB Cable (Charging from Adapter)
	Mode 5: LTE Band 12 (Middle Channel) Idle+ Bluetooth Idle + WLAN (2.4GHz) Idle + GPS Rx + Earphone + Battery + USB Cable (Charging from Adapter)
	Mode 6: Flight Mode + Earphone + Battery + USB Cable (Data Link with Notebook)
	Mode 7: LTE Band 12 (Middle Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + FM (98MHz) Rx + Earphone + Battery + USB Cable (Charging from Adapter)
Radiated Emissions	Mode 1: GSM850 (Low Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + Camera (Front) + Earphone + Battery + USB Cable (Charging from Adapter)
	Mode 2: GSM850 (Middle Channel) Idle+ Bluetooth Idle + WLAN (5GHz) Idle + Camera (Rear) + Earphone + Battery + USB Cable (Charging from Adapter)
	Mode 3: GSM850 (High Channel) Idle+ Bluetooth Idle + WLAN (2.4GHz) Idle + MPEG4 + Earphone + Battery + USB Cable (Charging from Adapter)
	Mode 4: LTE Band 12 (Middle Channel) Idle+ Bluetooth Idle + WLAN (5GHz) Idle + NFC On + Earphone + Battery + USB Cable (Charging from Adapter)
	Mode 5: LTE Band 12 (Middle Channel) Idle+ Bluetooth Idle + WLAN (2.4GHz) Idle + GPS Rx + Earphone + Battery + USB Cable (Charging from Adapter)
	Mode 6: Flight Mode + Earphone + Battery + USB Cable (Data Link with Notebook)
	Mode 7: GSM850 (Low Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + FM (98MHz) Rx + Earphone + Battery + USB Cable (Charging from Adapter)
Remark:	
1. For radiation emission after pre-scanned the cellular band between 30MHz ~ 960MHz (GSM850/ LTE Band 12/FM); only the worst case for cellular band test data of this mode was reported.	
2. Data Link with Notebook means data application transferred mode between EUT and Notebook.	

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
A2	System Simulator	GSM/LTE/FM	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	USB Cable	X	X	X	X	X	-	X
B2	Power From System	USB Cable	-	-	-	-	-	X	-
No.	Setup Peripherals	Connection Type	1	2	3	4	5	6	7
C1	Notebook	USB Cable	-	-	-	-	-	X	-
C1-1	iPod	USB Cable to C1	-	-	-	-	-	X	-
C1-2	AP router	RJ-45 Cable to C1	-	-	-	-	-	X	-
C2	Earphone	Earphone jack	X	X	X	X	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	X
A2	System Simulator	GSM /LTE/FM	X	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	USB Cable	-	-	-	-	-	X	-
No.	Setup Peripherals	Connection Type	1	2	3	4	5	6	7
C1	Notebook	USB cable	-	-	-	-	-	X	-
C1-1	iPod	USB Cable to C1	-	-	-	-	-	X	-
C1-2	AP router	RJ-45 Cable to C1	-	-	-	-	-	X	-
C2	Earphone	Earphone jack	X	X	X	X	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	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.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
5.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
6.	Notebook	DELL	Latitude E3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
7.	Notebook	DELL	Latitude E5480	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



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 "Video player" to play MPEG4 files.
4. Turn on camera to capture images.
5. Turn on NFC function.
6. Turn on FM 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.

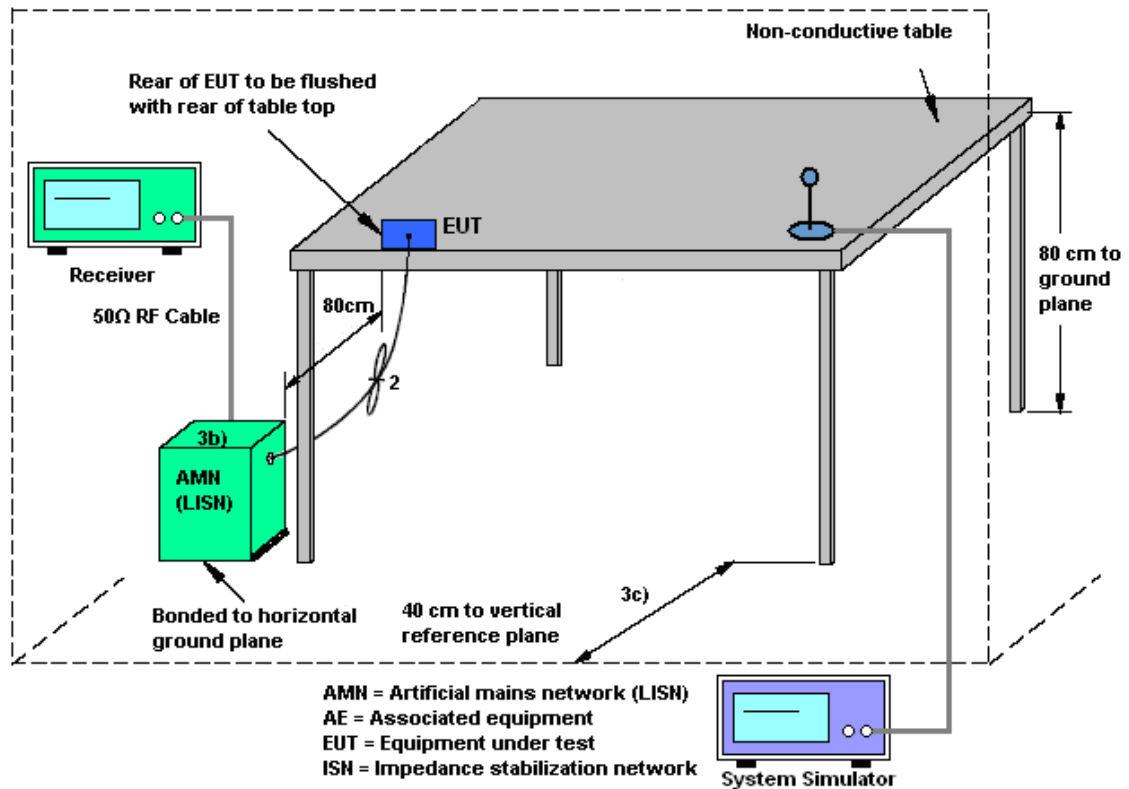
3.1.2. Measuring Instruments

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:

<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

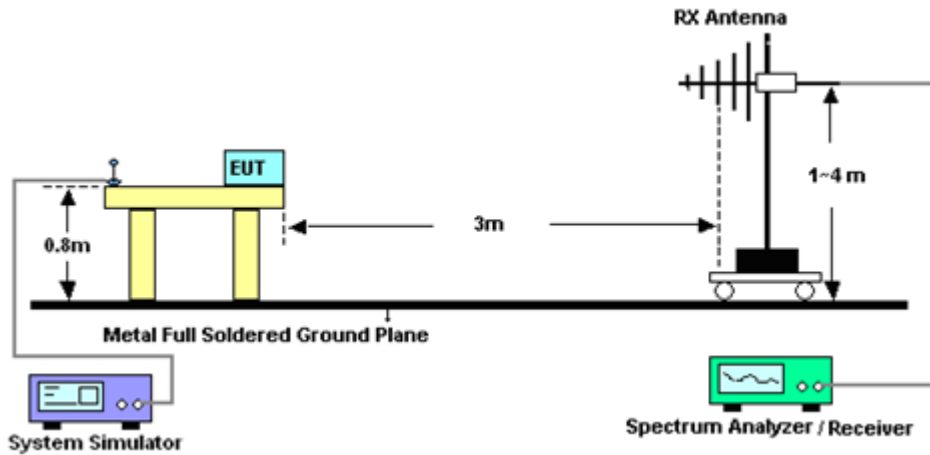
Refer a test equipment and calibration data table in this test report.

3.2.3. Test Procedures

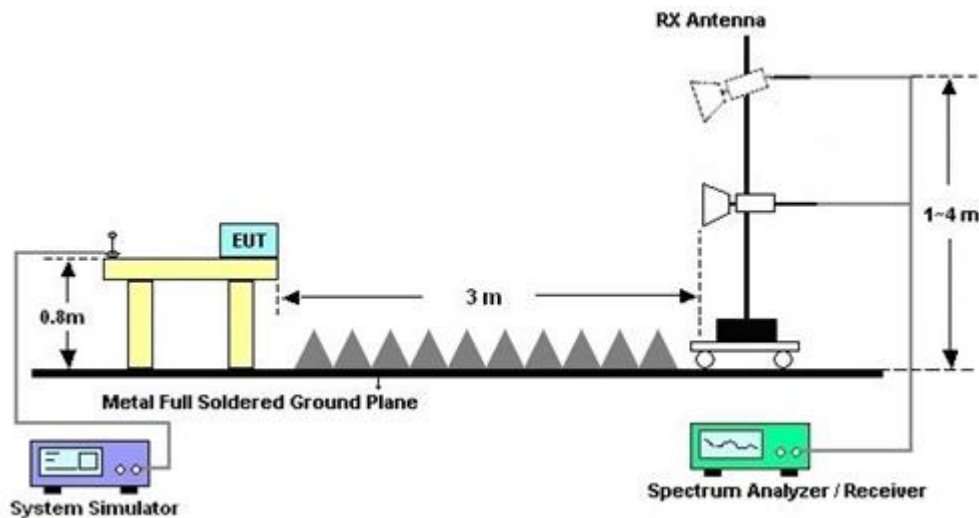
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna 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 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 (dBμV/m) = 20 log Emission level (μV/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	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Amplifier	SONOMA	310N	187311	9kHz~1GHz	Oct. 22, 2019	Aug. 11, 2020~ Aug. 17, 2020	Oct. 21, 2020	Radiation (03CH10-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35413 & 02	30MHz~1GHz	Feb. 11, 2020	Aug. 11, 2020~ Aug. 17, 2020	Feb. 10, 2021	Radiation (03CH10-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1325	1GHz~18GHz	Oct. 09, 2019	Aug. 11, 2020~ Aug. 17, 2020	Oct. 08, 2020	Radiation (03CH10-HY)
Preamplifier	Jet-Power	JAP00101800-30-10P	160118550004	1GHz~18GHz	Mar. 02, 2020	Aug. 11, 2020~ Aug. 17, 2020	Mar. 01, 2021	Radiation (03CH10-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200485	10Hz~44GHz	Feb. 10, 2020	Aug. 11, 2020~ Aug. 17, 2020	Feb. 09, 2021	Radiation (03CH10-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Aug. 11, 2020~ Aug. 17, 2020	N/A	Radiation (03CH10-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Aug. 11, 2020~ Aug. 17, 2020	N/A	Radiation (03CH10-HY)
Turn Table	EMEC	TT 2200	N/A	0~360 Degree	N/A	Aug. 11, 2020~ Aug. 17, 2020	N/A	Radiation (03CH10-HY)
Software	Audix	E3 6.2009-8-24	RK-001042	N/A	N/A	Aug. 11, 2020~ Aug. 17, 2020	N/A	Radiation (03CH10-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290045	20MHz~8.4GHz	Jan. 18, 2020	Aug. 11, 2020~ Aug. 17, 2020	Jan. 17, 2021	Radiation (03CH10-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104 / 102	MY11692/4PE, MY11693/4PE, MY2855/2	30MHz~1GHz	Nov. 07, 2019	Aug. 11, 2020~ Aug. 17, 2020	Nov. 06, 2020	Radiation (03CH10-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104 / 102	MY11692/4PE, MY11693/4PE, MY2855/2	1GHz~18GHz	Nov. 07, 2019	Aug. 11, 2020~ Aug. 17, 2020	Nov. 06, 2020	Radiation (03CH10-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 26, 2019	Aug. 11, 2020~ Aug. 17, 2020	Nov. 25, 2020	Radiation (03CH10-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 13, 2019	Aug. 11, 2020~ Aug. 17, 2020	Dec. 12, 2020	Radiation (03CH10-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 25, 2020	Aug. 11, 2020~ Aug. 17, 2020	Feb. 24, 2021	Radiation (03CH10-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30MHz~40GHz	Feb. 25, 2020	Aug. 11, 2020~ Aug. 17, 2020	Feb. 24, 2021	Radiation (03CH10-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Aug. 08, 2020~ Aug. 18, 2020	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 15, 2019	Aug. 08, 2020~ Aug. 18, 2020	Nov. 14, 2020	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 07, 2019	Aug. 08, 2020~ Aug. 18, 2020	Nov. 06, 2020	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 20, 2019	Aug. 08, 2020~ Aug. 18, 2020	Nov. 19, 2020	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 15, 2019	Aug. 08, 2020~ Aug. 18, 2020	Nov. 14, 2020	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Aug. 08, 2020~ Aug. 18, 2020	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 02, 2020	Aug. 08, 2020~ Aug. 18, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 02, 2020	Aug. 08, 2020~ Aug. 18, 2020	Jan. 01, 2021	Conduction (CO05-HY)



5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.3
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.7
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.1
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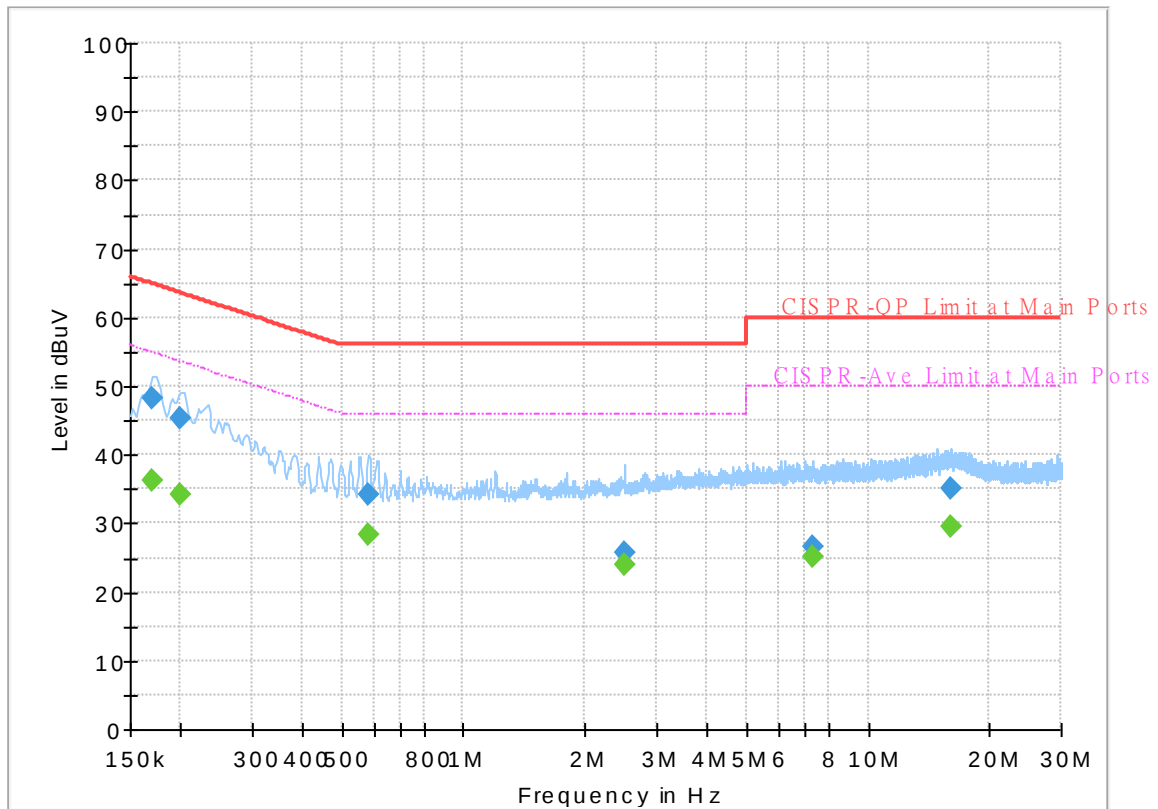
Appendix A. AC Conducted Emission Test Results

Test Engineer :	Howard Huang and Tom Lee	Temperature :	21~25℃
		Relative Humidity :	35~39%

EUT Information

Report NO : 042245-02
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



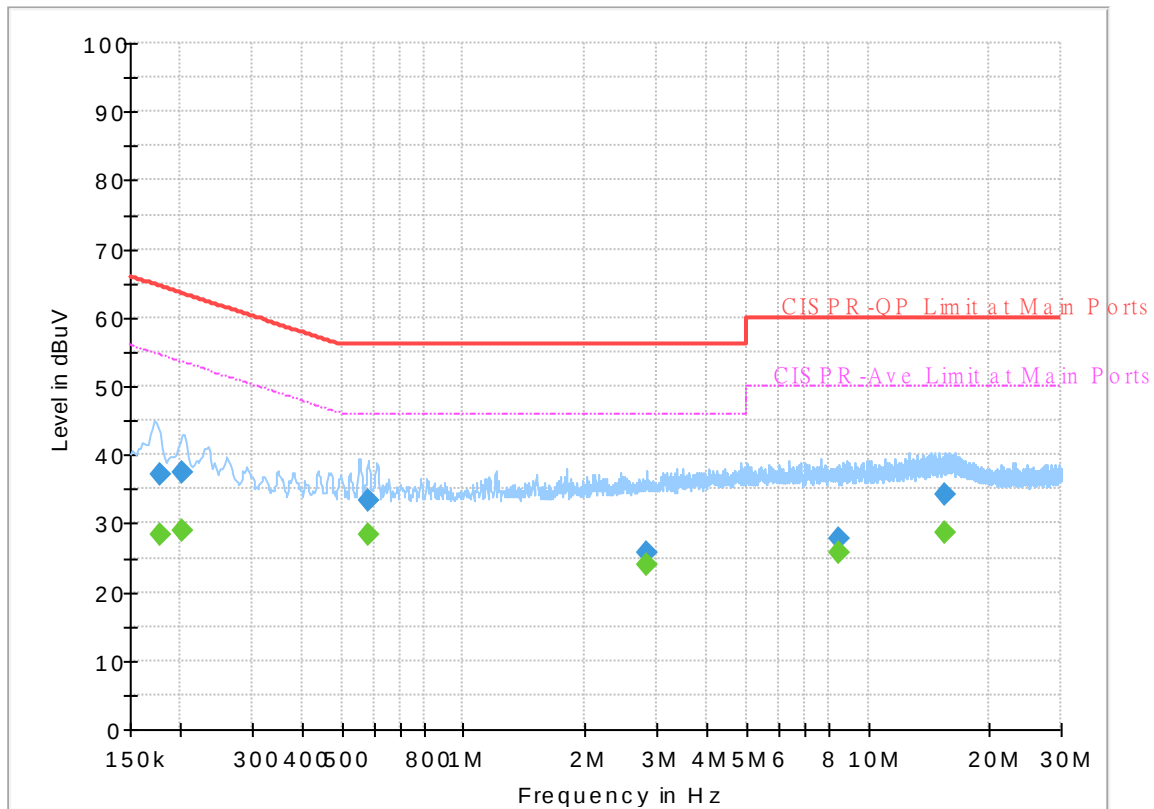
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.170250	---	36.28	54.95	18.67	L1	OFF	19.6
0.170250	48.14	---	64.95	16.81	L1	OFF	19.6
0.199860	---	34.06	53.62	19.56	L1	OFF	19.6
0.199860	45.36	---	63.62	18.26	L1	OFF	19.6
0.583440	---	28.41	46.00	17.59	L1	OFF	19.6
0.583440	34.12	---	56.00	21.88	L1	OFF	19.6
2.502600	---	23.93	46.00	22.07	L1	OFF	19.6
2.502600	25.76	---	56.00	30.24	L1	OFF	19.6
7.268190	---	25.28	50.00	24.72	L1	OFF	19.9
7.268190	26.53	---	60.00	33.47	L1	OFF	19.9
16.014750	---	29.44	50.00	20.56	L1	OFF	20.3
16.014750	35.10	---	60.00	24.90	L1	OFF	20.3

EUT Information

Report NO : 042245-02
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Neutral

Full Spectrum



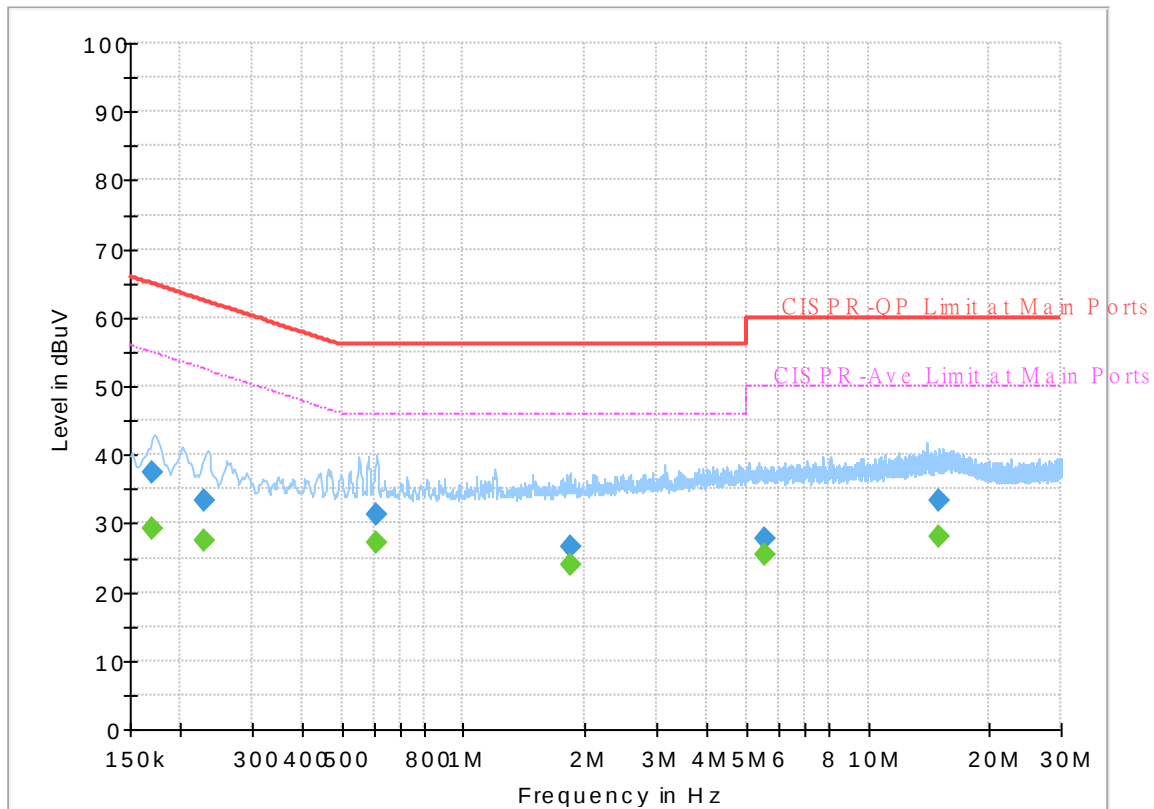
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.177000	---	28.25	54.63	26.38	N	OFF	19.5
0.177000	37.09	---	64.63	27.54	N	OFF	19.5
0.201750	---	28.99	53.54	24.55	N	OFF	19.5
0.201750	37.29	---	63.54	26.25	N	OFF	19.5
0.581730	---	28.28	46.00	17.72	N	OFF	19.5
0.581730	33.34	---	56.00	22.66	N	OFF	19.5
2.843880	---	24.10	46.00	21.90	N	OFF	19.6
2.843880	25.72	---	56.00	30.28	N	OFF	19.6
8.436750	---	25.63	50.00	24.37	N	OFF	19.8
8.436750	27.78	---	60.00	32.22	N	OFF	19.8
15.562770	---	28.62	50.00	21.38	N	OFF	19.9
15.562770	34.08	---	60.00	25.92	N	OFF	19.9

EUT Information

Report NO : 042245-02
 Test Mode : Mode 2
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



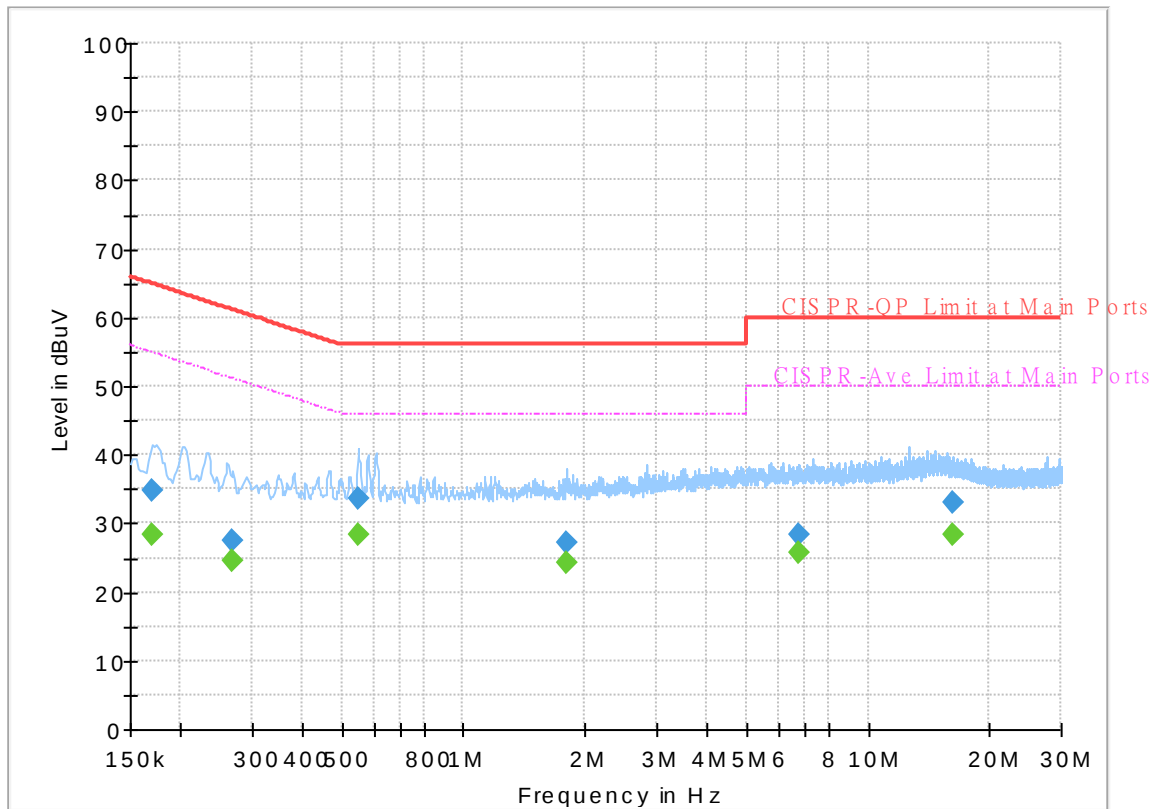
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.170340	---	29.36	54.94	25.58	L1	OFF	19.6
0.170340	37.42	---	64.94	27.52	L1	OFF	19.6
0.229290	---	27.40	52.48	25.08	L1	OFF	19.6
0.229290	33.25	---	62.48	29.23	L1	OFF	19.6
0.611970	---	27.20	46.00	18.80	L1	OFF	19.6
0.611970	31.25	---	56.00	24.75	L1	OFF	19.6
1.830390	---	23.93	46.00	22.07	L1	OFF	19.6
1.830390	26.60	---	56.00	29.40	L1	OFF	19.6
5.565390	---	25.47	50.00	24.53	L1	OFF	19.8
5.565390	27.82	---	60.00	32.18	L1	OFF	19.8
14.923770	---	27.94	50.00	22.06	L1	OFF	20.2
14.923770	33.25	---	60.00	26.75	L1	OFF	20.2

EUT Information

Report NO : 042245-02
Test Mode : Mode 2
Test Voltage : 120Vac/60Hz
Phase : Neutral

Full Spectrum



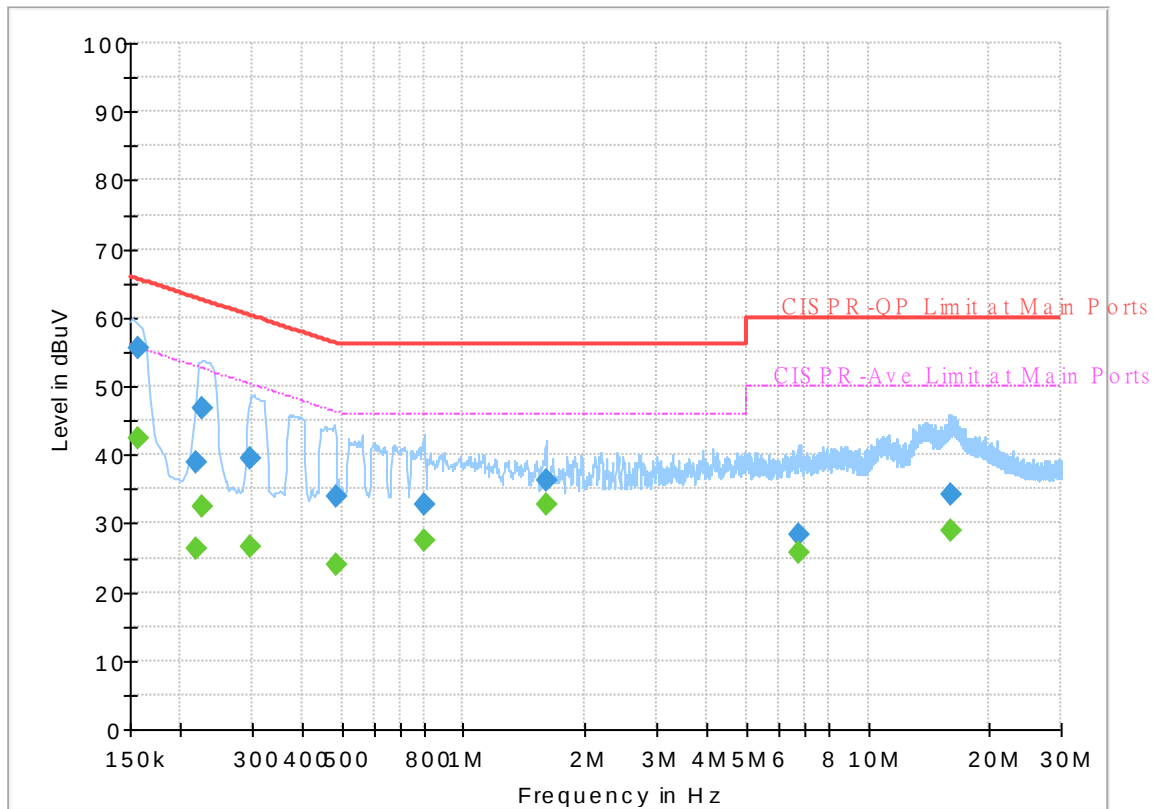
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.170250	---	28.24	54.95	26.71	N	OFF	19.5
0.170250	34.75	---	64.95	30.20	N	OFF	19.5
0.267000	---	24.68	51.21	26.53	N	OFF	19.5
0.267000	27.35	---	61.21	33.86	N	OFF	19.5
0.551400	---	28.47	46.00	17.53	N	OFF	19.5
0.551400	33.48	---	56.00	22.52	N	OFF	19.5
1.793670	---	24.19	46.00	21.81	N	OFF	19.6
1.793670	27.23	---	56.00	28.77	N	OFF	19.6
6.721080	---	25.66	50.00	24.34	N	OFF	19.7
6.721080	28.45	---	60.00	31.55	N	OFF	19.7
16.296000	---	28.27	50.00	21.73	N	OFF	19.9
16.296000	32.98	---	60.00	27.02	N	OFF	19.9

EUT Information

Report NO : 042245-02
Test Mode : Mode 3
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



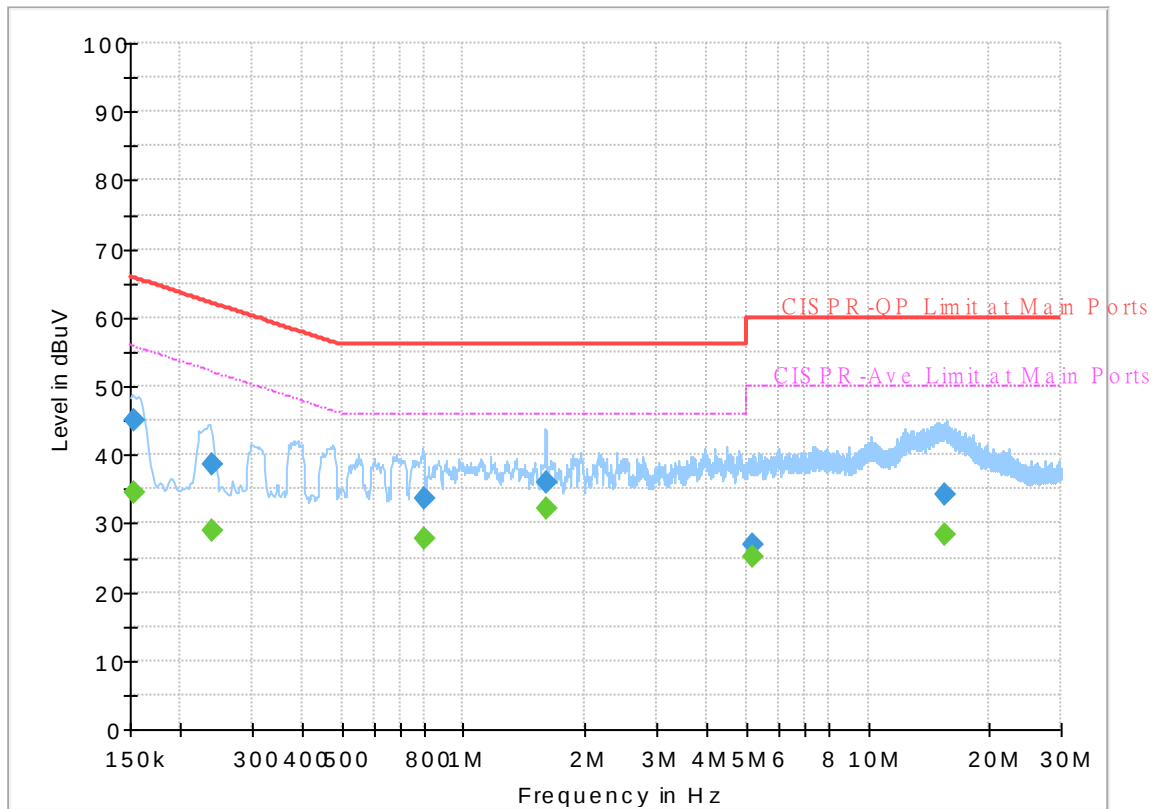
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.156750	---	42.50	55.63	13.13	L1	OFF	19.6
0.156750	55.68	---	65.63	9.95	L1	OFF	19.6
0.217500	---	26.25	52.91	26.66	L1	OFF	19.6
0.217500	38.86	---	62.91	24.05	L1	OFF	19.6
0.226500	---	32.44	52.58	20.14	L1	OFF	19.6
0.226500	46.69	---	62.58	15.89	L1	OFF	19.6
0.298500	---	26.75	50.28	23.53	L1	OFF	19.6
0.298500	39.61	---	60.28	20.67	L1	OFF	19.6
0.483000	---	23.99	46.29	22.30	L1	OFF	19.6
0.483000	33.97	---	56.29	22.32	L1	OFF	19.6
0.797010	---	27.62	46.00	18.38	L1	OFF	19.6
0.797010	32.74	---	56.00	23.26	L1	OFF	19.6
1.597470	---	32.60	46.00	13.40	L1	OFF	19.6
1.597470	36.21	---	56.00	19.79	L1	OFF	19.6
6.708930	---	25.78	50.00	24.22	L1	OFF	19.9
6.708930	28.42	---	60.00	31.58	L1	OFF	19.9
16.116000	---	29.08	50.00	20.92	L1	OFF	20.3
16.116000	34.10	---	60.00	25.90	L1	OFF	20.3

EUT Information

Report NO : 042245-02
Test Mode : Mode 3
Test Voltage : 120Vac/60Hz
Phase : Neutral

Full Spectrum



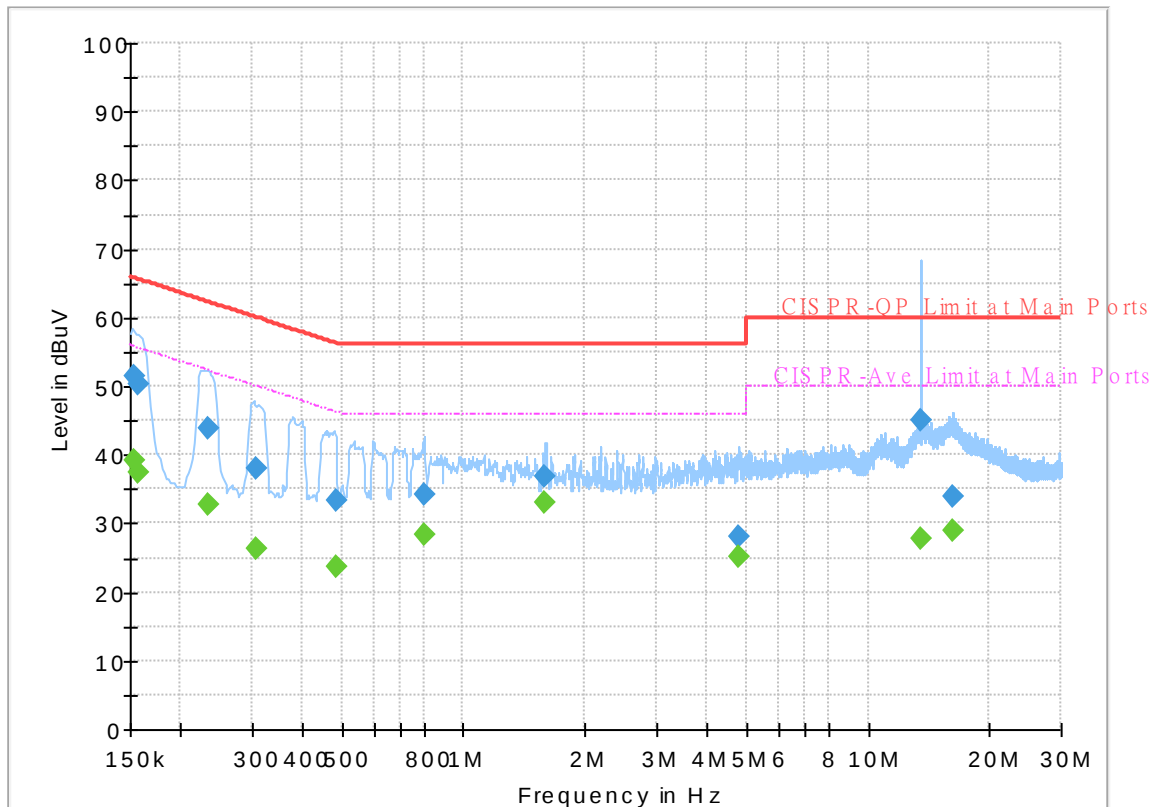
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.153240	---	34.57	55.82	21.25	N	OFF	19.5
0.153240	44.94	---	65.82	20.88	N	OFF	19.5
0.238110	---	28.85	52.16	23.31	N	OFF	19.5
0.238110	38.52	---	62.16	23.64	N	OFF	19.5
0.797280	---	27.70	46.00	18.30	N	OFF	19.6
0.797280	33.56	---	56.00	22.44	N	OFF	19.6
1.595940	---	32.16	46.00	13.84	N	OFF	19.6
1.595940	36.07	---	56.00	19.93	N	OFF	19.6
5.183250	---	25.12	50.00	24.88	N	OFF	19.7
5.183250	26.87	---	60.00	33.13	N	OFF	19.7
15.465750	---	28.36	50.00	21.64	N	OFF	19.9
15.465750	34.33	---	60.00	25.67	N	OFF	19.9

EUT Information

Report NO : 042245-02
Test Mode : Mode 4
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



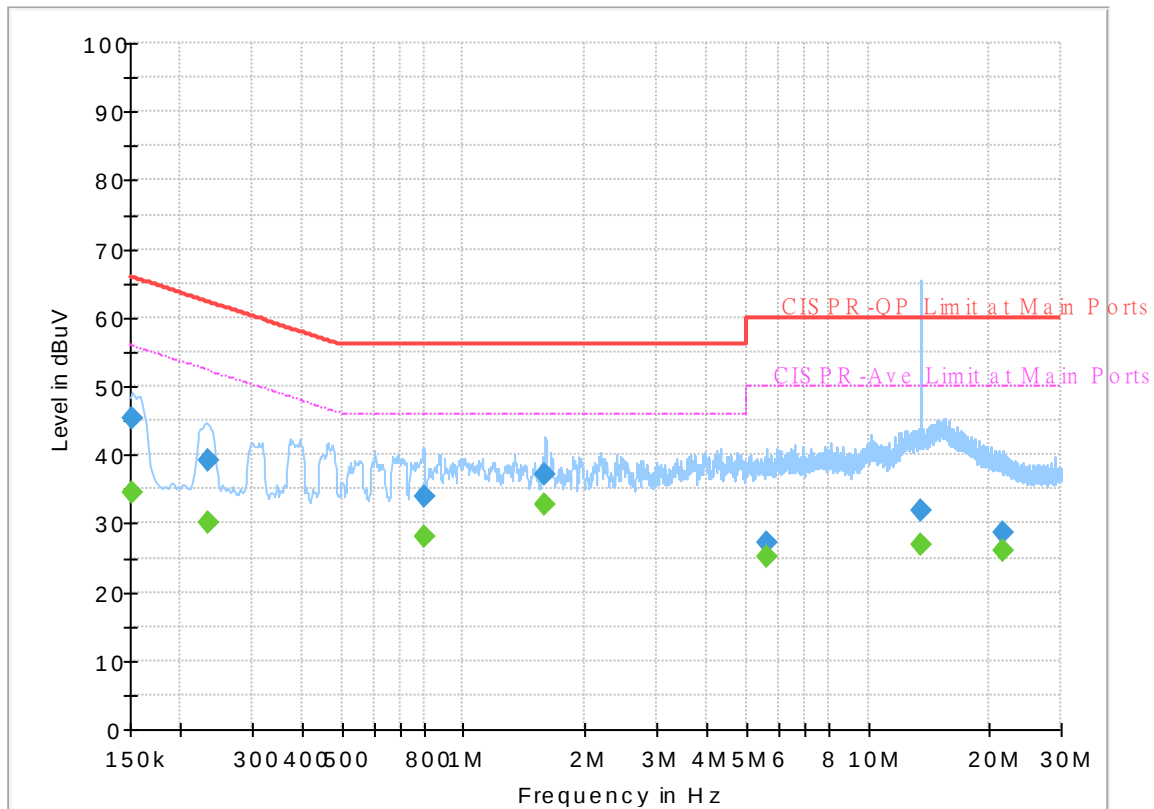
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.153645	---	39.26	55.80	16.54	L1	OFF	19.6
0.153645	51.57	---	65.80	14.23	L1	OFF	19.6
0.157020	---	37.55	55.62	18.07	L1	OFF	19.6
0.157020	50.42	---	65.62	15.20	L1	OFF	19.6
0.234690	---	32.83	52.28	19.45	L1	OFF	19.6
0.234690	43.95	---	62.28	18.33	L1	OFF	19.6
0.307500	---	26.40	50.04	23.64	L1	OFF	19.6
0.307500	37.95	---	60.04	22.09	L1	OFF	19.6
0.483000	---	23.68	46.29	22.61	L1	OFF	19.6
0.483000	33.38	---	56.29	22.91	L1	OFF	19.6
0.797100	---	28.45	46.00	17.55	L1	OFF	19.6
0.797100	34.29	---	56.00	21.71	L1	OFF	19.6
1.595490	---	33.16	46.00	12.84	L1	OFF	19.6
1.595490	36.82	---	56.00	19.18	L1	OFF	19.6
4.782750	---	25.22	46.00	20.78	L1	OFF	19.8
4.782750	28.19	---	56.00	27.81	L1	OFF	19.8
13.560000	---	27.90	50.00	22.10	L1	OFF	20.2
13.560000	44.97	---	60.00	15.03	L1	OFF	20.2
16.188000	---	28.82	50.00	21.18	L1	OFF	20.3
16.188000	33.93	---	60.00	26.07	L1	OFF	20.3

EUT Information

Report NO : 042245-02
Test Mode : Mode 4
Test Voltage : 120Vac/60Hz
Phase : Neutral

Full Spectrum



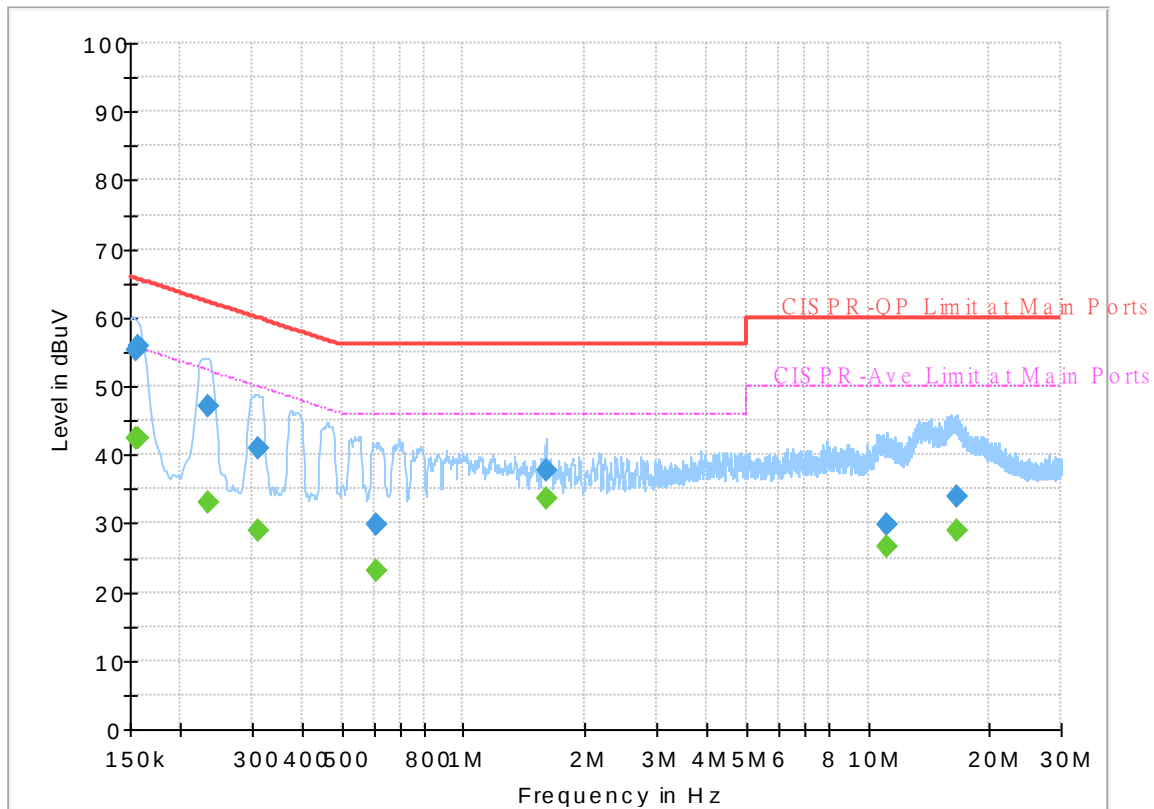
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152565	---	34.62	55.86	21.24	N	OFF	19.5
0.152565	45.36	---	65.86	20.50	N	OFF	19.5
0.235050	---	30.19	52.27	22.08	N	OFF	19.5
0.235050	39.31	---	62.27	22.96	N	OFF	19.5
0.797190	---	28.00	46.00	18.00	N	OFF	19.6
0.797190	33.82	---	56.00	22.18	N	OFF	19.6
1.594860	---	32.88	46.00	13.12	N	OFF	19.6
1.594860	37.25	---	56.00	18.75	N	OFF	19.6
5.606970	---	25.28	50.00	24.72	N	OFF	19.7
5.606970	27.20	---	60.00	32.80	N	OFF	19.7
13.560000	---	27.01	50.00	22.99	N	OFF	19.9
13.560000	31.94	---	60.00	28.06	N	OFF	19.9
21.639750	---	26.10	50.00	23.90	N	OFF	19.9
21.639750	28.79	---	60.00	31.21	N	OFF	19.9

EUT Information

Report NO : 042245-02
Test Mode : Mode 5
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



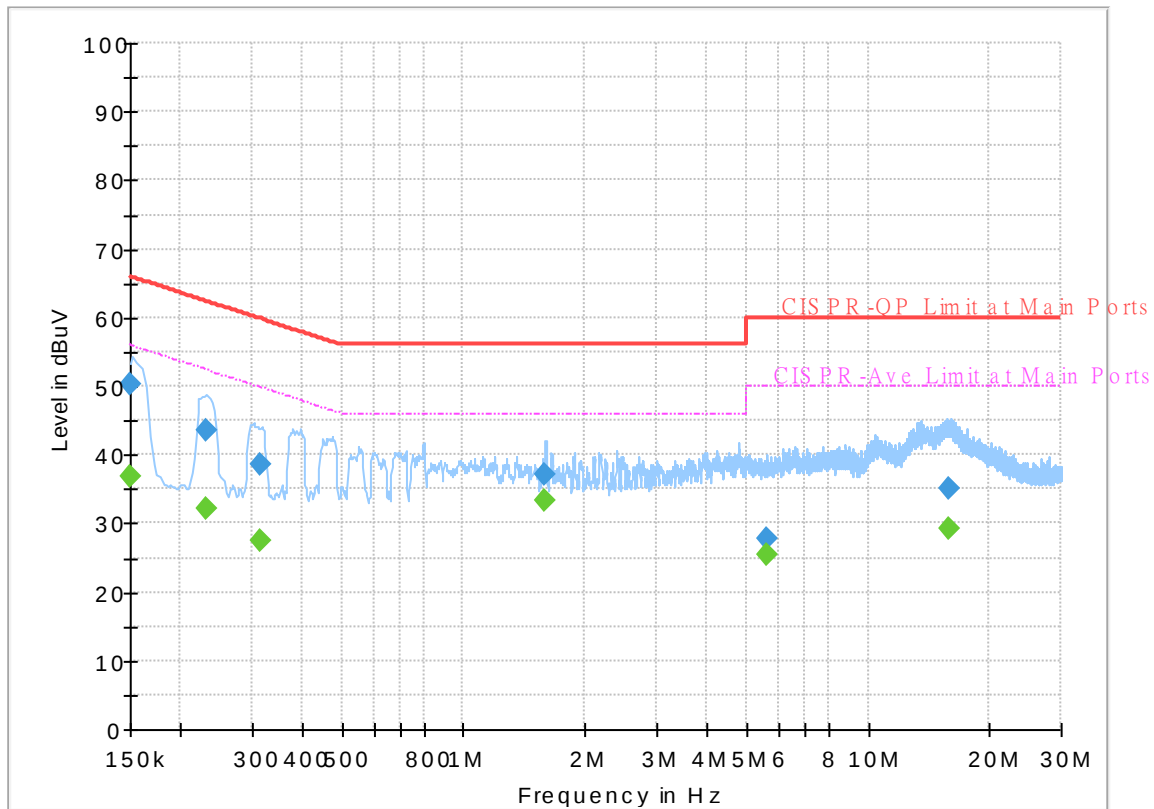
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154500	55.24	---	65.75	10.51	L1	OFF	19.6
0.154500	---	42.28	55.75	13.47	L1	OFF	19.6
0.156750	55.94	---	65.63	9.69	L1	OFF	19.6
0.156750	---	42.47	55.63	13.16	L1	OFF	19.6
0.234060	47.11	---	62.30	15.19	L1	OFF	19.6
0.234060	---	32.90	52.30	19.40	L1	OFF	19.6
0.311370	40.89	---	59.93	19.04	L1	OFF	19.6
0.311370	---	28.84	49.93	21.09	L1	OFF	19.6
0.611250	29.75	---	56.00	26.25	L1	OFF	19.6
0.611250	---	23.09	46.00	22.91	L1	OFF	19.6
1.595670	37.67	---	56.00	18.33	L1	OFF	19.6
1.595670	---	33.69	46.00	12.31	L1	OFF	19.6
11.112000	29.88	---	60.00	30.12	L1	OFF	20.1
11.112000	---	26.57	50.00	23.43	L1	OFF	20.1
16.675890	34.02	---	60.00	25.98	L1	OFF	20.3
16.675890	---	29.03	50.00	20.97	L1	OFF	20.3

EUT Information

Report NO : 042245-02
Test Mode : Mode 5
Test Voltage : 120Vac/60Hz
Phase : Neutral

Full Spectrum



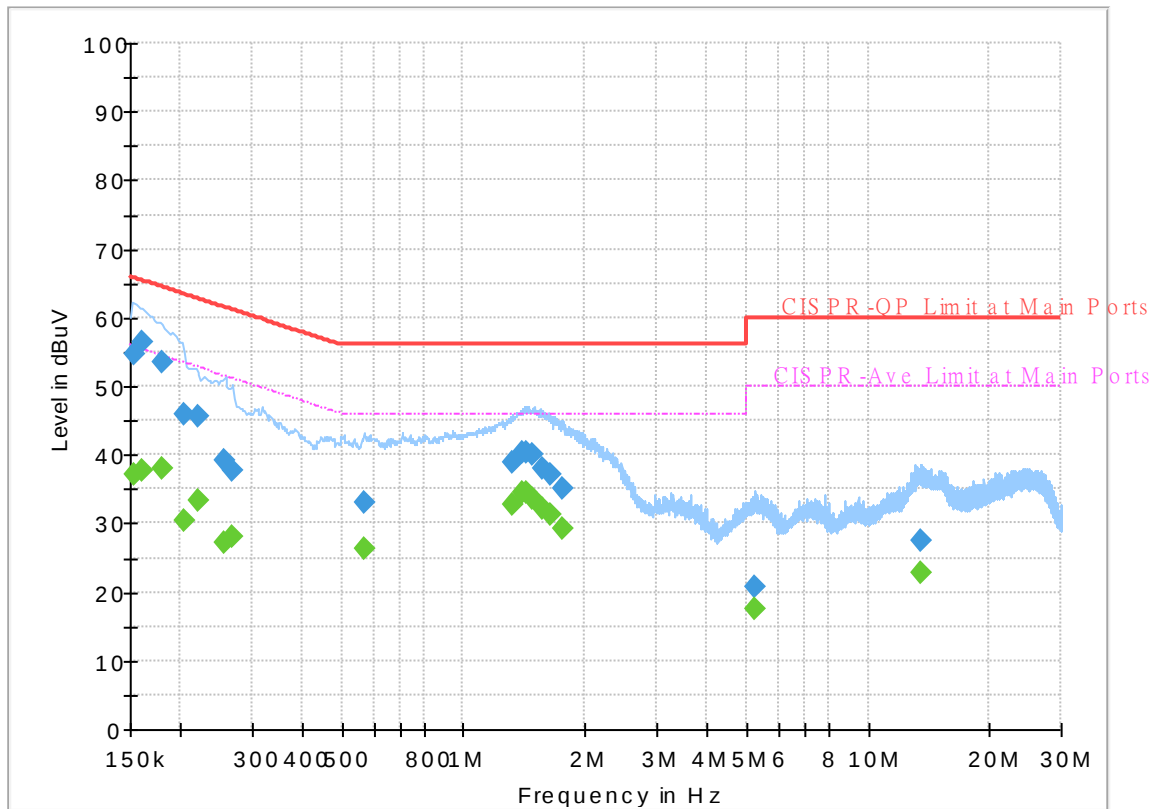
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	---	36.94	56.00	19.06	N	OFF	19.6
0.150000	50.23	---	66.00	15.77	N	OFF	19.6
0.231900	---	32.31	52.38	20.07	N	OFF	19.5
0.231900	43.67	---	62.38	18.71	N	OFF	19.5
0.313620	---	27.37	49.87	22.50	N	OFF	19.5
0.313620	38.46	---	59.87	21.41	N	OFF	19.5
1.594860	---	33.28	46.00	12.72	N	OFF	19.6
1.594860	37.14	---	56.00	18.86	N	OFF	19.6
5.644500	---	25.36	50.00	24.64	N	OFF	19.7
5.644500	27.90	---	60.00	32.10	N	OFF	19.7
15.783630	---	29.20	50.00	20.80	N	OFF	19.9
15.783630	34.99	---	60.00	25.01	N	OFF	19.9

EUT Information

Report NO : 042245-02
 Test Mode : Mode 6
 Test Voltage : Power From System
 Phase : Line

Full Spectrum



Final_Result

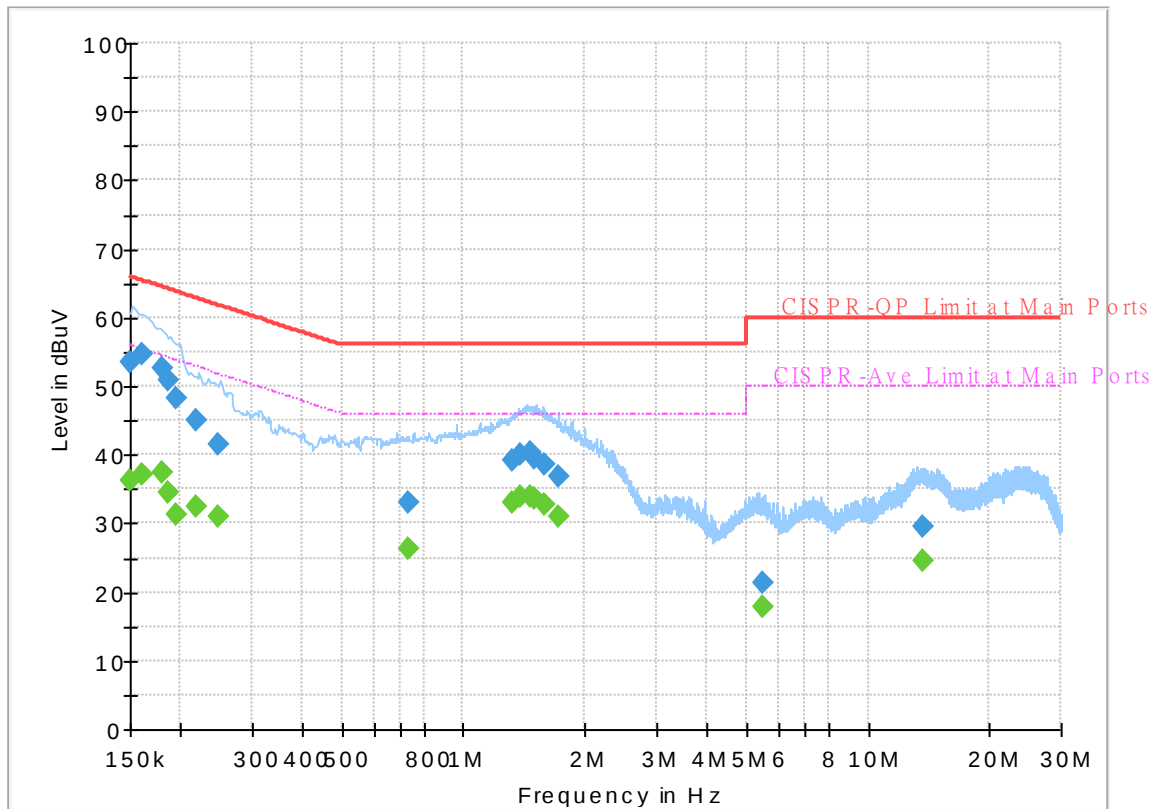
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152768	---	37.24	55.85	18.61	L1	OFF	19.5
0.152768	54.61	---	65.85	11.24	L1	OFF	19.5
0.161250	---	37.85	55.40	17.55	L1	OFF	19.5
0.161250	56.35	---	65.40	9.05	L1	OFF	19.5
0.180150	---	37.97	54.48	16.51	L1	OFF	19.5
0.180150	53.53	---	64.48	10.95	L1	OFF	19.5
0.204000	---	30.49	53.45	22.96	L1	OFF	19.5
0.204000	45.79	---	63.45	17.66	L1	OFF	19.5
0.222000	---	33.40	52.74	19.34	L1	OFF	19.5
0.222000	45.49	---	62.74	17.25	L1	OFF	19.5
0.256020	---	27.11	51.56	24.45	L1	OFF	19.5
0.256020	39.07	---	61.56	22.49	L1	OFF	19.5
0.269520	---	28.06	51.13	23.07	L1	OFF	19.5
0.269520	37.86	---	61.13	23.27	L1	OFF	19.5
0.570750	---	26.40	46.00	19.60	L1	OFF	19.5
0.570750	33.02	---	56.00	22.98	L1	OFF	19.5
1.317750	---	32.74	46.00	13.26	L1	OFF	19.6
1.317750	38.88	---	56.00	17.12	L1	OFF	19.6
1.398750	---	34.43	46.00	11.57	L1	OFF	19.6
1.398750	40.27	---	56.00	15.73	L1	OFF	19.6
1.437270	---	34.40	46.00	11.60	L1	OFF	19.6

1.437270	40.35	---	56.00	15.65	L1	OFF	19.6
1.484520	---	33.73	46.00	12.27	L1	OFF	19.6
1.484520	40.06	---	56.00	15.94	L1	OFF	19.6
1.575510	---	32.17	46.00	13.83	L1	OFF	19.6
1.575510	38.04	---	56.00	17.96	L1	OFF	19.6
1.632750	---	31.43	46.00	14.57	L1	OFF	19.6
1.632750	37.13	---	56.00	18.87	L1	OFF	19.6
1.756500	---	29.30	46.00	16.70	L1	OFF	19.6
1.756500	35.17	---	56.00	20.83	L1	OFF	19.6
5.250750	---	17.67	50.00	32.33	L1	OFF	19.6
5.250750	20.84	---	60.00	39.16	L1	OFF	19.6
13.440390	---	22.90	50.00	27.10	L1	OFF	19.8
13.440390	27.58	---	60.00	32.42	L1	OFF	19.8

EUT Information

Report NO : 042245-02
 Test Mode : Mode 6
 Test Voltage : Power From System
 Phase : Neutral

Full Spectrum



Final_Result

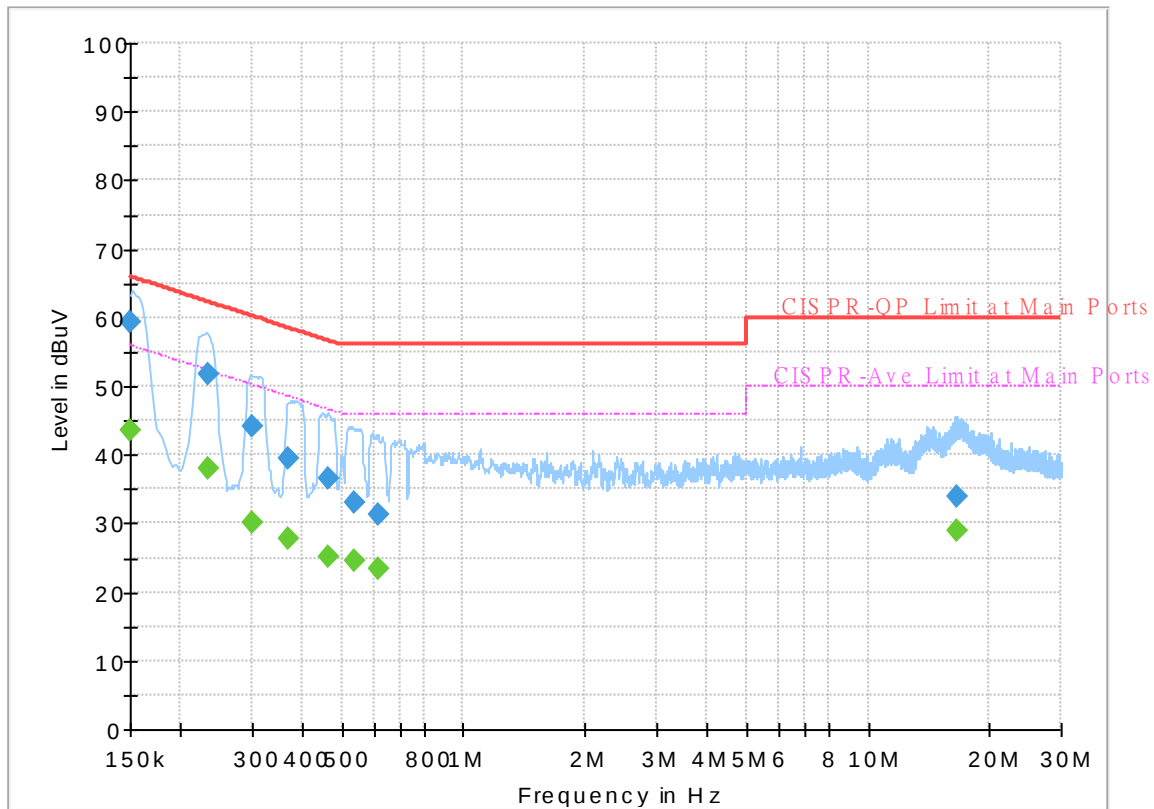
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	---	36.12	56.00	19.88	N	OFF	19.5
0.150000	53.45	---	66.00	12.55	N	OFF	19.5
0.159810	---	37.21	55.47	18.26	N	OFF	19.5
0.159810	54.58	---	65.47	10.89	N	OFF	19.5
0.179250	---	37.56	54.52	16.96	N	OFF	19.5
0.179250	52.50	---	64.52	12.02	N	OFF	19.5
0.186000	---	34.44	54.21	19.77	N	OFF	19.5
0.186000	50.87	---	64.21	13.34	N	OFF	19.5
0.195000	---	31.16	53.82	22.66	N	OFF	19.5
0.195000	48.12	---	63.82	15.70	N	OFF	19.5
0.217500	---	32.44	52.91	20.47	N	OFF	19.5
0.217500	45.08	---	62.91	17.83	N	OFF	19.5
0.248730	---	31.09	51.80	20.71	N	OFF	19.5
0.248730	41.62	---	61.80	20.18	N	OFF	19.5
0.730500	---	26.39	46.00	19.61	N	OFF	19.5
0.730500	32.90	---	56.00	23.10	N	OFF	19.5
1.321530	---	33.09	46.00	12.91	N	OFF	19.6
1.321530	39.15	---	56.00	16.85	N	OFF	19.6
1.376250	---	33.88	46.00	12.12	N	OFF	19.6
1.376250	40.18	---	56.00	15.82	N	OFF	19.6
1.461750	---	33.84	46.00	12.16	N	OFF	19.6

1.461750	40.21	---	56.00	15.79	N	OFF	19.6
1.501530	---	33.73	46.00	12.27	N	OFF	19.6
1.501530	39.38	---	56.00	16.62	N	OFF	19.6
1.581000	---	32.84	46.00	13.16	N	OFF	19.6
1.581000	38.50	---	56.00	17.50	N	OFF	19.6
1.709250	---	31.14	46.00	14.86	N	OFF	19.6
1.709250	36.93	---	56.00	19.07	N	OFF	19.6
5.523000	---	17.84	50.00	32.16	N	OFF	19.7
5.523000	21.46	---	60.00	38.54	N	OFF	19.7
13.713990	---	24.48	50.00	25.52	N	OFF	19.9
13.713990	29.42	---	60.00	30.58	N	OFF	19.9

EUT Information

Report NO : 042245-02
Test Mode : Mode 7
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



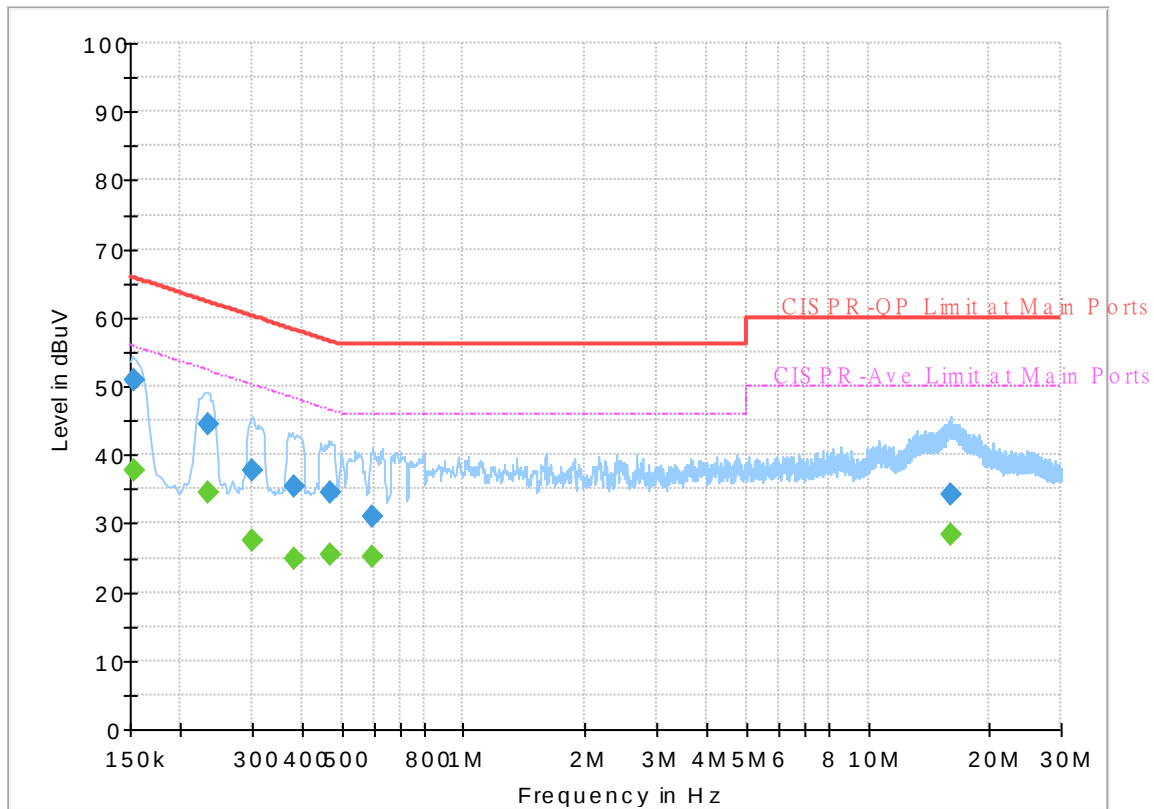
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	---	43.49	56.00	12.51	L1	OFF	19.6
0.150000	59.27	---	66.00	6.73	L1	OFF	19.6
0.233700	---	37.88	52.32	14.44	L1	OFF	19.6
0.233700	51.64	---	62.32	10.68	L1	OFF	19.6
0.300750	---	30.09	50.22	20.13	L1	OFF	19.6
0.300750	44.15	---	60.22	16.07	L1	OFF	19.6
0.370500	---	27.67	48.49	20.82	L1	OFF	19.6
0.370500	39.52	---	58.49	18.97	L1	OFF	19.6
0.461850	---	25.29	46.66	21.37	L1	OFF	19.6
0.461850	36.51	---	56.66	20.15	L1	OFF	19.6
0.535560	---	24.46	46.00	21.54	L1	OFF	19.6
0.535560	32.97	---	56.00	23.03	L1	OFF	19.6
0.618000	---	23.44	46.00	22.56	L1	OFF	19.6
0.618000	31.28	---	56.00	24.72	L1	OFF	19.6
16.509750	---	28.81	50.00	21.19	L1	OFF	20.3
16.509750	33.94	---	60.00	26.06	L1	OFF	20.3

EUT Information

Report NO : 042245-02
Test Mode : Mode 7
Test Voltage : 120Vac/60Hz
Phase : Neutral

Full Spectrum

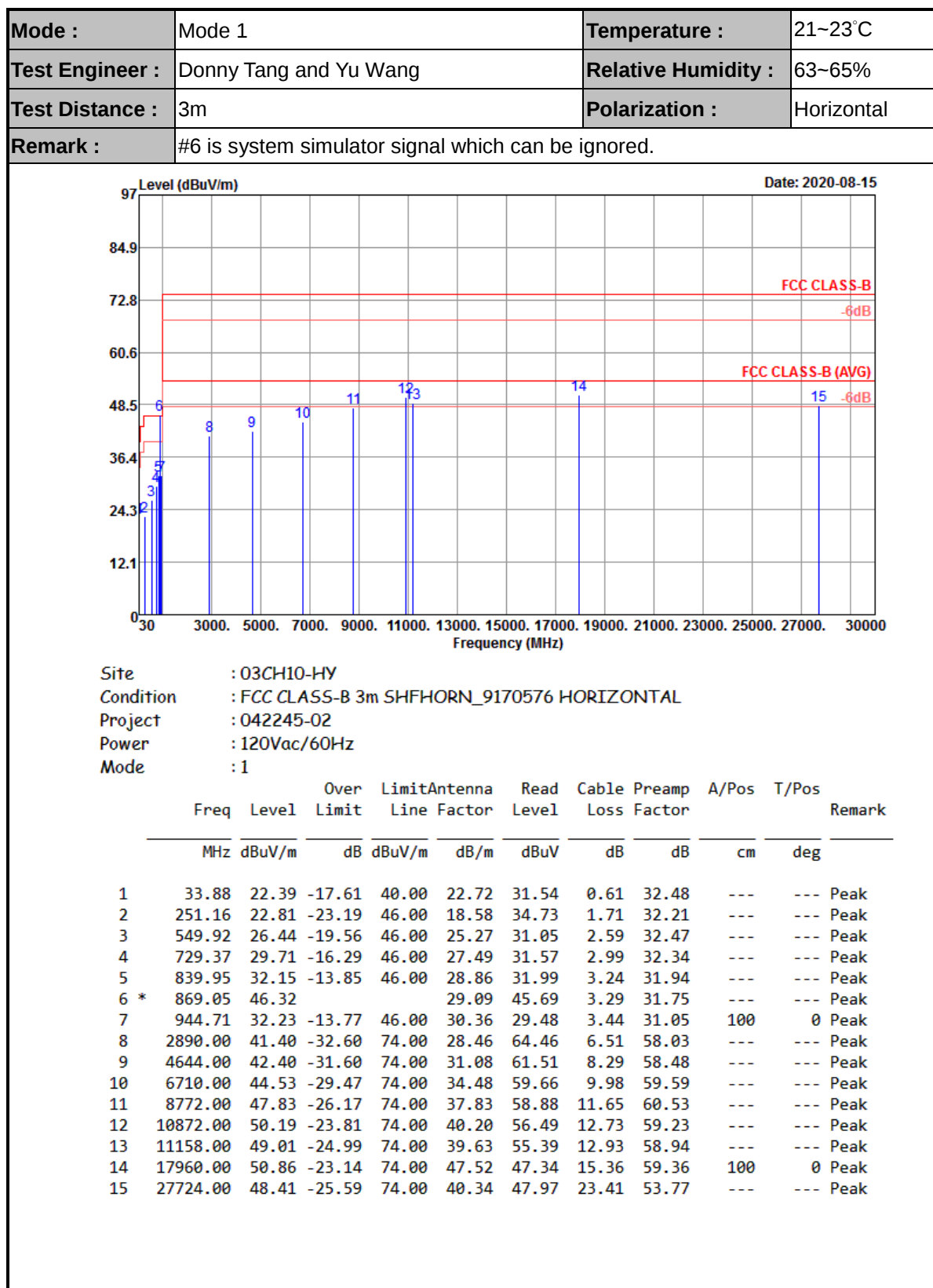


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.153038	---	37.85	55.83	17.98	N	OFF	19.5
0.153038	50.86	---	65.83	14.97	N	OFF	19.5
0.234240	---	34.65	52.30	17.65	N	OFF	19.5
0.234240	44.30	---	62.30	18.00	N	OFF	19.5
0.301560	---	27.56	50.20	22.64	N	OFF	19.5
0.301560	37.85	---	60.20	22.35	N	OFF	19.5
0.381750	---	24.77	48.24	23.47	N	OFF	19.5
0.381750	35.52	---	58.24	22.72	N	OFF	19.5
0.469860	---	25.52	46.52	21.00	N	OFF	19.5
0.469860	34.40	---	56.52	22.12	N	OFF	19.5
0.594780	---	25.05	46.00	20.95	N	OFF	19.5
0.594780	30.91	---	56.00	25.09	N	OFF	19.5
15.971730	---	28.30	50.00	21.70	N	OFF	19.9
15.971730	34.14	---	60.00	25.86	N	OFF	19.9

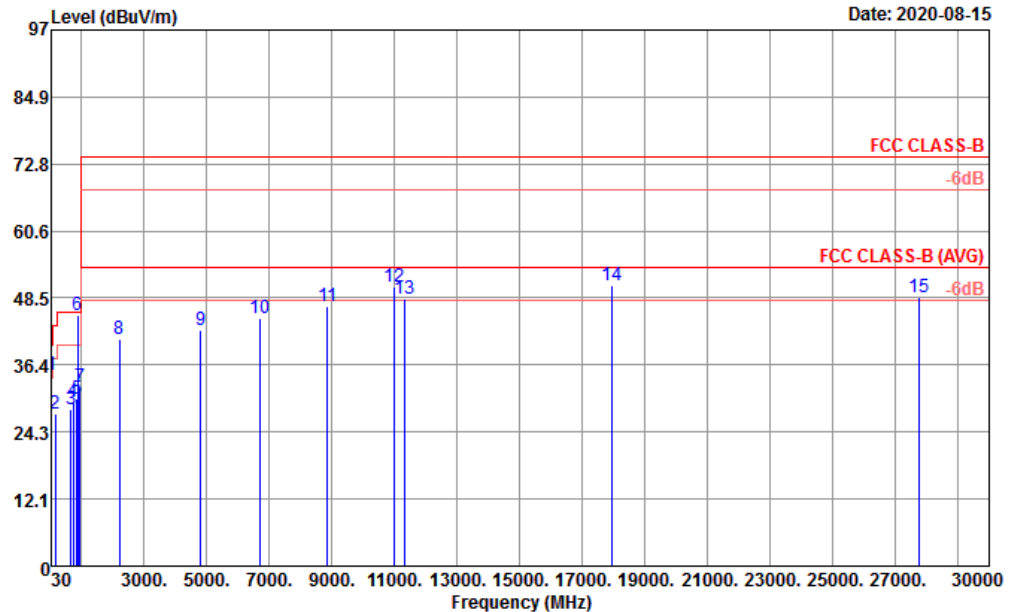


Appendix B. Radiated Emission Test Result





Mode :	Mode 1	Temperature :	23~26°C
Test Engineer :	Donny Tang and Yu Wang	Relative Humidity :	62~65%
Test Distance :	3m	Polarization :	Vertical
Remark :	#6 s system simulator signal which can be ignored.		

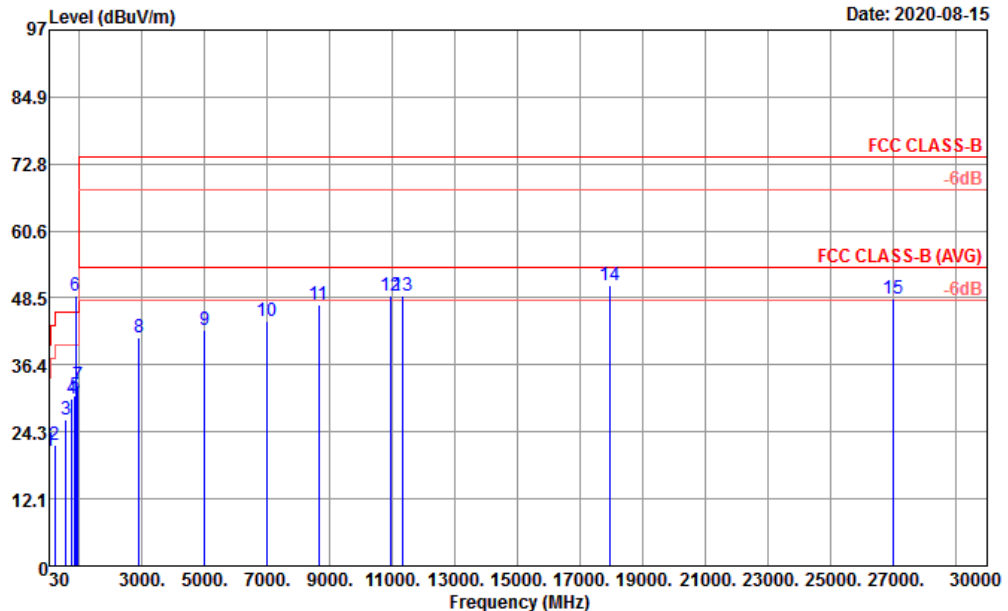


Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHFHORN_9170576 VERTICAL
Project : 042245-02
Power : 120Vac/60Hz
Mode : 1

	Freq	Level	Over Limit	Antenna Line	Read Level	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dB/m	dBuV	dB	dB	cm	deg
1	47.46	34.55	-5.45	40.00	15.61	50.68	0.73	32.47	100	0 Peak
2	149.31	27.68	-15.82	43.50	17.22	41.46	1.31	32.31	---	---
3	652.74	28.46	-17.54	46.00	26.42	31.66	2.84	32.46	---	---
4	738.10	29.79	-16.21	46.00	27.79	31.32	3.00	32.32	---	---
5	843.83	30.38	-15.62	46.00	28.78	30.27	3.25	31.92	---	---
6	869.05	45.48			29.09	44.85	3.29	31.75	---	---
7	951.50	32.42	-13.58	46.00	30.75	29.19	3.45	30.97	---	---
8	2204.00	41.14	-32.86	74.00	27.99	65.28	5.65	57.78	---	---
9	4800.00	42.64	-31.36	74.00	31.20	61.47	8.46	58.49	---	---
10	6686.00	44.79	-29.21	74.00	34.47	59.92	9.99	59.59	---	---
11	8858.00	47.07	-26.93	74.00	37.98	58.14	11.62	60.67	---	---
12	10974.00	50.58	-23.42	74.00	40.20	56.59	12.80	59.01	---	---
13	11306.00	48.41	-25.59	74.00	39.61	54.70	13.03	58.93	---	---
14	17955.00	50.87	-23.13	74.00	47.38	47.49	15.36	59.36	100	0 Peak
15	27746.00	48.63	-25.37	74.00	40.35	48.18	23.44	53.80	---	---



Mode :	Mode 2	Temperature :	23~26°C
Test Engineer :	Donny Tang and Yu Wang	Relative Humidity :	62~65%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#6 is system simulator signal which can be ignored.		

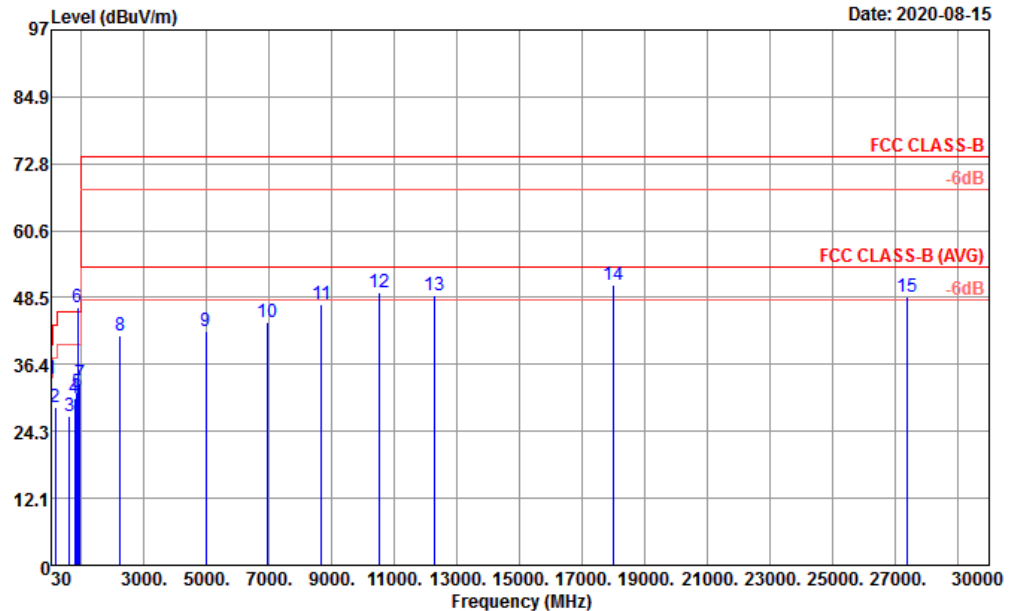


Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHFHORN_9170576 HORIZONTAL
Project : 042245-02
Power : 120Vac/60Hz
Mode : 2

	Freq	Level	Over	Limit	Antenna	Read	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	dB	Line	Factor	Level	Loss	Factor		
					dBuV/m	dB/m	dBuV	dB	dB	cm	deg
1	30.97	20.91	-19.09	40.00	23.74	29.06	0.59	32.48	---	---	Peak
2	208.48	21.90	-21.60	43.50	15.18	37.42	1.55	32.25	---	---	Peak
3	565.44	26.59	-19.41	46.00	26.25	30.22	2.62	32.50	---	---	Peak
4	748.77	30.29	-15.71	46.00	28.05	31.52	3.02	32.30	---	---	Peak
5	856.44	30.76	-15.24	46.00	28.98	30.34	3.27	31.83	---	---	Peak
6 *	881.66	49.03			28.98	48.39	3.32	31.66	---	---	Peak
7	955.38	32.74	-13.26	46.00	30.81	29.40	3.46	30.93	100	0	Peak
8	2890.00	41.27	-32.73	74.00	28.46	64.33	6.51	58.03	---	---	Peak
9	4996.00	42.78	-31.22	74.00	31.38	61.16	8.74	58.50	---	---	Peak
10	6976.00	44.35	-29.65	74.00	35.30	58.37	10.27	59.59	---	---	Peak
11	8640.00	47.29	-26.71	74.00	37.48	58.55	11.58	60.32	---	---	Peak
12	10954.00	48.79	-25.21	74.00	40.20	54.85	12.79	59.05	---	---	Peak
13	11328.00	48.77	-25.23	74.00	39.66	55.00	13.04	58.93	---	---	Peak
14	17945.00	50.81	-23.19	74.00	47.12	47.67	15.36	59.34	100	0	Peak
15	26998.00	48.35	-25.65	74.00	40.10	48.31	22.58	53.10	---	---	Peak



Mode :	Mode 2	Temperature :	23~26°C
Test Engineer :	Donny Tang and Yu Wang	Relative Humidity :	62~65%
Test Distance :	3m	Polarization :	Vertical
Remark :	#6 is system simulator signal which can be ignored.		

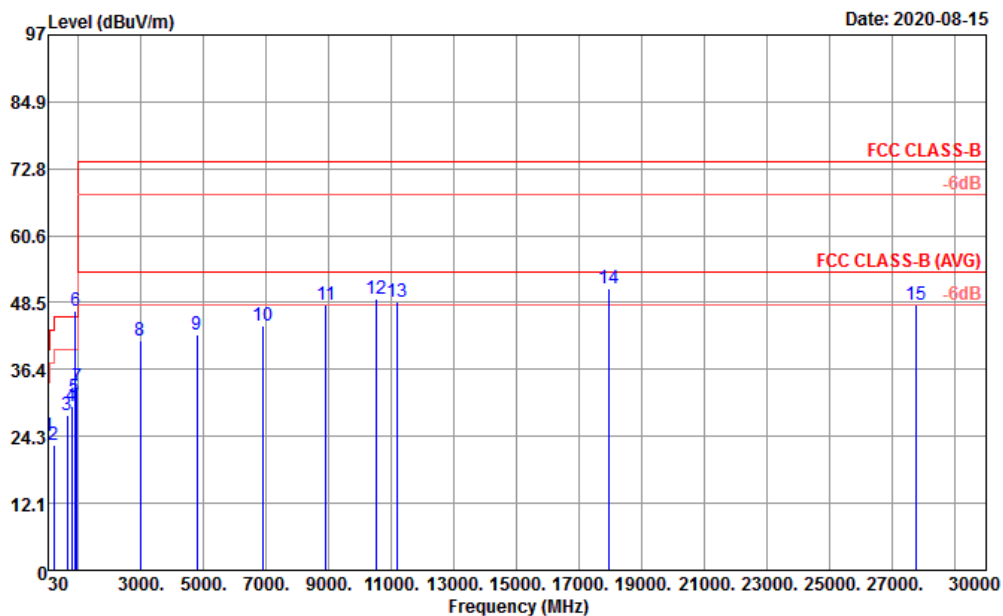


Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHFHORN_9170576 VERTICAL
Project : 042245-02
Power : 120Vac/60Hz
Mode : 2

	Freq	Level	Over	Limit	Antenna	Read	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	dB	Line Factor	Level	Loss	Factor	cm	deg	
1	47.46	33.86	-6.14	40.00	15.61	49.99	0.73	32.47	100	0	Peak
2	172.59	28.68	-14.82	43.50	15.52	44.04	1.41	32.29	---	---	Peak
3	607.15	27.13	-18.87	46.00	25.53	31.42	2.71	32.53	---	---	Peak
4	781.75	30.38	-15.62	46.00	28.07	31.45	3.10	32.24	---	---	Peak
5	861.29	31.21	-14.79	46.00	29.11	30.62	3.28	31.80	---	---	Peak
6 *	881.66	46.67			28.98	46.03	3.32	31.66	---	---	Peak
7	949.56	32.84	-13.16	46.00	30.68	29.70	3.45	30.99	---	---	Peak
8	2244.00	41.65	-32.35	74.00	27.91	65.81	5.71	57.78	---	---	Peak
9	4962.00	42.53	-31.47	74.00	31.25	61.09	8.69	58.50	---	---	Peak
10	6916.00	43.96	-30.04	74.00	35.13	58.27	10.15	59.59	---	---	Peak
11	8664.00	47.21	-26.79	74.00	37.53	58.45	11.59	60.36	---	---	Peak
12	10504.00	49.56	-24.44	74.00	39.89	57.20	12.49	60.02	---	---	Peak
13	12258.00	48.80	-25.20	74.00	38.88	55.68	13.59	59.35	---	---	Peak
14	17975.00	50.81	-23.19	74.00	47.92	46.90	15.37	59.38	100	0	Peak
15	27372.00	48.51	-25.49	74.00	40.25	48.19	23.01	53.40	---	---	Peak



Mode :	Mode 3	Temperature :	23~26°C
Test Engineer :	Donny Tang and Yu Wang	Relative Humidity :	62~65%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#6 is system simulator signal which can be ignored.		

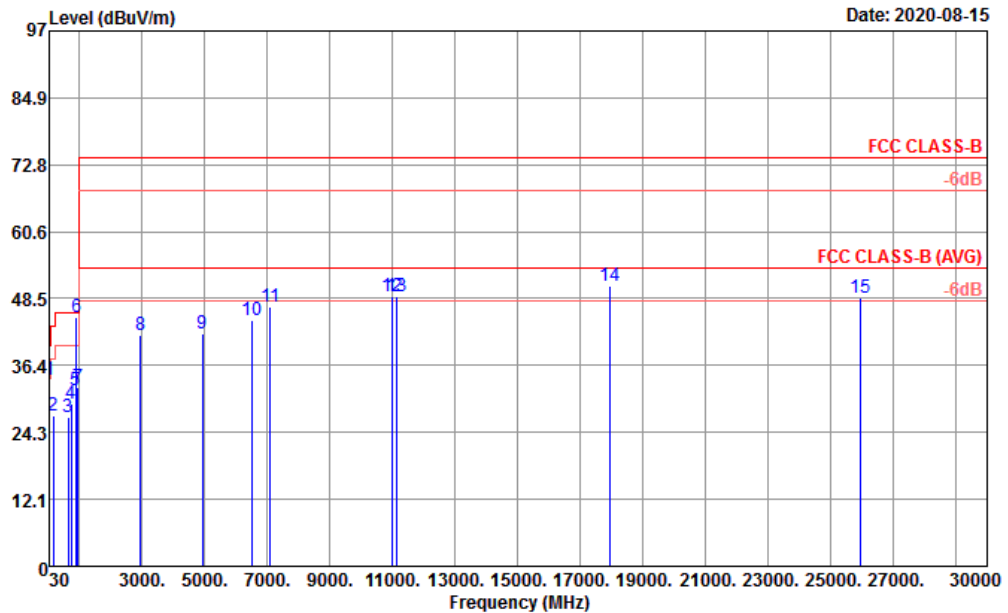


Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHFHORN_9170576 HORIZONTAL
Project : 042245-02
Power : 120Vac/60Hz
Mode : 3

	Freq	Level	Over	Limit	Antenna	Read	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	Line	Factor	Level	Loss	Factor	cm	deg	
1	46.49	24.38	-15.62	40.00	16.14	39.99	0.72	32.47	---	---	Peak
2	210.42	22.75	-20.75	43.50	15.14	38.30	1.56	32.25	---	---	Peak
3	647.89	27.98	-18.02	46.00	26.41	31.22	2.82	32.47	---	---	Peak
4	791.45	29.64	-16.36	46.00	28.06	30.69	3.12	32.23	---	---	Peak
5	866.14	31.39	-14.61	46.00	29.20	30.67	3.29	31.77	---	---	Peak
6 *	893.30	46.90			28.92	46.22	3.34	31.58	---	---	Peak
7	953.44	33.25	-12.75	46.00	30.79	29.95	3.46	30.95	100	0	Peak
8	2974.00	41.63	-32.37	74.00	28.40	64.71	6.60	58.08	---	---	Peak
9	4786.00	42.72	-31.28	74.00	31.20	61.57	8.44	58.49	---	---	Peak
10	6876.00	44.41	-29.59	74.00	34.96	58.96	10.08	59.59	---	---	Peak
11	8904.00	47.97	-26.03	74.00	37.88	59.25	11.58	60.74	---	---	Peak
12	10524.00	49.23	-24.77	74.00	39.85	56.86	12.50	59.98	---	---	Peak
13	11156.00	48.59	-25.41	74.00	39.63	54.98	12.92	58.94	---	---	Peak
14	17945.00	50.98	-23.02	74.00	47.12	47.84	15.36	59.34	100	0	Peak
15	27746.00	48.10	-25.90	74.00	40.35	47.65	23.44	53.80	---	---	Peak



Mode :	Mode 3	Temperature :	23~26°C
Test Engineer :	Donny Tang and Yu Wang	Relative Humidity :	62~65%
Test Distance :	3m	Polarization :	Vertical
Remark :	#6 is system simulator signal which can be ignored.		

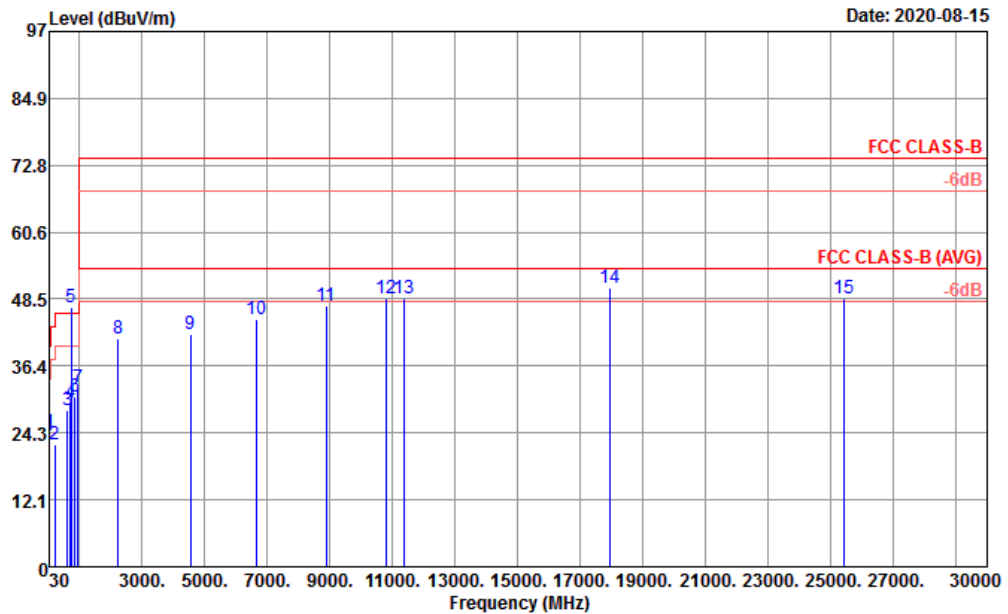


Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHFHORN_9170576 VERTICAL
Project : 042245-02
Power : 120Vac/60Hz
Mode : 3

	Freq	Level	Over	Limit	Antenna	Read	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	dB	Line	Factor	Level	Loss	Factor	cm	deg
1	47.46	33.65	-6.35	40.00	15.61	49.78	0.73	32.47	100	0	Peak
2	149.31	27.40	-16.10	43.50	17.22	41.18	1.31	32.31	---	---	Peak
3	640.13	27.06	-18.94	46.00	26.45	30.29	2.80	32.48	---	---	Peak
4	738.10	29.53	-16.47	46.00	27.79	31.06	3.00	32.32	---	---	Peak
5	869.05	31.78	-14.22	46.00	29.09	31.15	3.29	31.75	---	---	Peak
6	893.30	45.11			28.92	44.43	3.34	31.58	---	---	Peak
7	945.68	32.40	-13.60	46.00	30.42	29.58	3.44	31.04	---	---	Peak
8	2952.00	41.79	-32.21	74.00	28.40	64.88	6.58	58.07	---	---	Peak
9	4932.00	42.17	-31.83	74.00	31.20	60.82	8.65	58.50	---	---	Peak
10	6492.00	44.66	-29.34	74.00	34.17	60.10	9.97	59.58	---	---	Peak
11	7096.00	46.89	-27.11	74.00	35.88	60.11	10.47	59.57	---	---	Peak
12	10990.00	48.97	-25.03	74.00	40.20	54.93	12.81	58.97	---	---	Peak
13	11148.00	48.81	-25.19	74.00	39.66	55.17	12.92	58.94	---	---	Peak
14	17965.00	50.80	-23.20	74.00	47.65	47.16	15.36	59.37	100	0	Peak
15	25964.00	48.61	-25.39	74.00	39.14	50.90	21.42	53.31	---	---	Peak



Mode :	Mode 4	Temperature :	23~26°C
Test Engineer :	Donny Tang and Yu Wang	Relative Humidity :	62~65%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#5 is system simulator signal which can be ignored.		

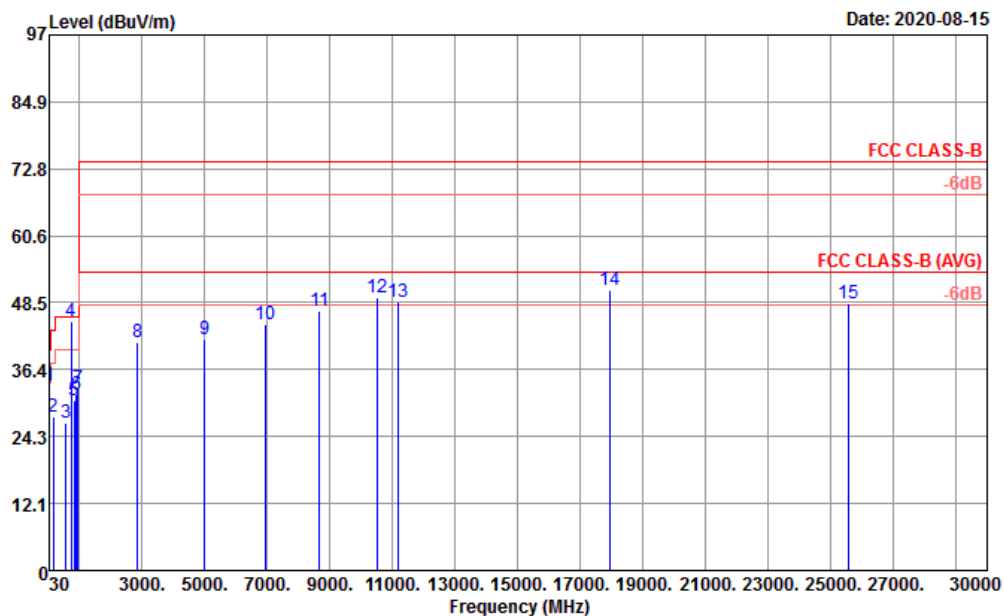


Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHFHORN_9170576 HORIZONTAL
Project : 042245-02
Power : 120Vac/60Hz
Mode : 4

	Freq	Level	Over	Limit	Antenna	Read	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	dB	Line	Factor	Level	Loss	Factor		
					dBuV/m	dB/m	dBuV	dB	dB	cm	deg
1	46.49	24.19	-15.81	40.00	16.14	39.80	0.72	32.47	---	---	Peak
2	206.54	22.28	-21.22	43.50	15.21	37.78	1.54	32.25	---	---	Peak
3	607.15	28.32	-17.68	46.00	25.53	32.61	2.71	32.53	---	---	Peak
4	702.21	29.67	-16.33	46.00	26.60	32.52	2.94	32.39	---	---	Peak
5 *	737.50	47.14			27.75	48.71	3.00	32.32	---	---	Peak
6	854.50	30.85	-15.15	46.00	28.96	30.46	3.27	31.84	---	---	Peak
7	952.47	32.42	-13.58	46.00	30.77	29.16	3.45	30.96	100	158	Peak
8	2236.00	41.47	-32.53	74.00	27.93	65.62	5.70	57.78	---	---	Peak
9	4548.00	42.06	-31.94	74.00	30.79	61.59	8.15	58.47	---	---	Peak
10	6630.00	44.76	-29.24	74.00	34.44	59.90	10.01	59.59	---	---	Peak
11	8872.00	47.17	-26.83	74.00	37.96	58.29	11.61	60.69	---	---	Peak
12	10818.00	48.55	-25.45	74.00	40.20	54.99	12.70	59.34	---	---	Peak
13	11354.00	48.71	-25.29	74.00	39.71	54.87	13.06	58.93	---	---	Peak
14	17955.00	50.40	-23.60	74.00	47.38	47.02	15.36	59.36	100	160	Peak
15	25414.00	48.70	-25.30	74.00	39.63	50.76	21.33	53.48	---	---	Peak



Mode :	Mode 4	Temperature :	23~26°C
Test Engineer :	Donny Tang and Yu Wang	Relative Humidity :	62~65%
Test Distance :	3m	Polarization :	Vertical
Remark :	#4 is system simulator signal which can be ignored.		

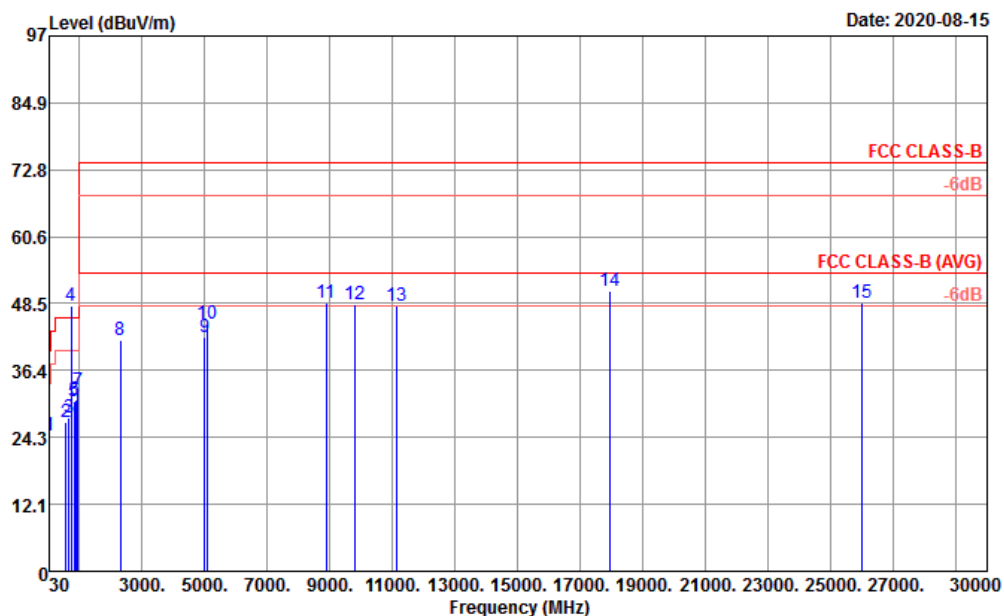


Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHFHORN_9170576 VERTICAL
Project : 042245-02
Power : 120Vac/60Hz
Mode : 4

	Freq	Level	Over	Limit	Antenna	Read	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	dB	Line	Factor	Level	Loss	Factor	cm	deg
1	47.46	33.64	-6.36	40.00	15.61	49.77	0.73	32.47	100	0	Peak
2	150.28	27.79	-15.71	43.50	17.26	41.53	1.31	32.31	---	---	Peak
3	567.38	26.79	-19.21	46.00	26.17	30.50	2.62	32.50	---	---	Peak
4	737.50	45.02			27.75	46.59	3.00	32.32	---	---	Peak
5	835.10	30.91	-15.09	46.00	28.53	31.13	3.22	31.97	---	---	Peak
6	890.39	32.01	-13.99	46.00	28.96	31.32	3.33	31.60	---	---	Peak
7	954.41	32.96	-13.04	46.00	30.82	29.62	3.46	30.94	---	---	Peak
8	2852.00	41.28	-32.72	74.00	28.31	64.50	6.47	58.00	---	---	Peak
9	4990.00	41.84	-32.16	74.00	31.36	60.24	8.74	58.50	---	---	Peak
10	6948.00	44.62	-29.38	74.00	35.20	58.80	10.21	59.59	---	---	Peak
11	8666.00	47.09	-26.91	74.00	37.53	58.33	11.59	60.36	---	---	Peak
12	10522.00	49.47	-24.53	74.00	39.86	57.09	12.50	59.98	---	---	Peak
13	11170.00	48.71	-25.29	74.00	39.59	55.13	12.93	58.94	---	---	Peak
14	17960.00	50.85	-23.15	74.00	47.52	47.33	15.36	59.36	100	0	Peak
15	25568.00	48.36	-25.64	74.00	39.53	50.49	21.35	53.47	---	---	Peak



Mode :	Mode 5	Temperature :	23~26°C
Test Engineer :	Donny Tang and Yu Wang	Relative Humidity :	62~65%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#4 is system simulator signal which can be ignored.		

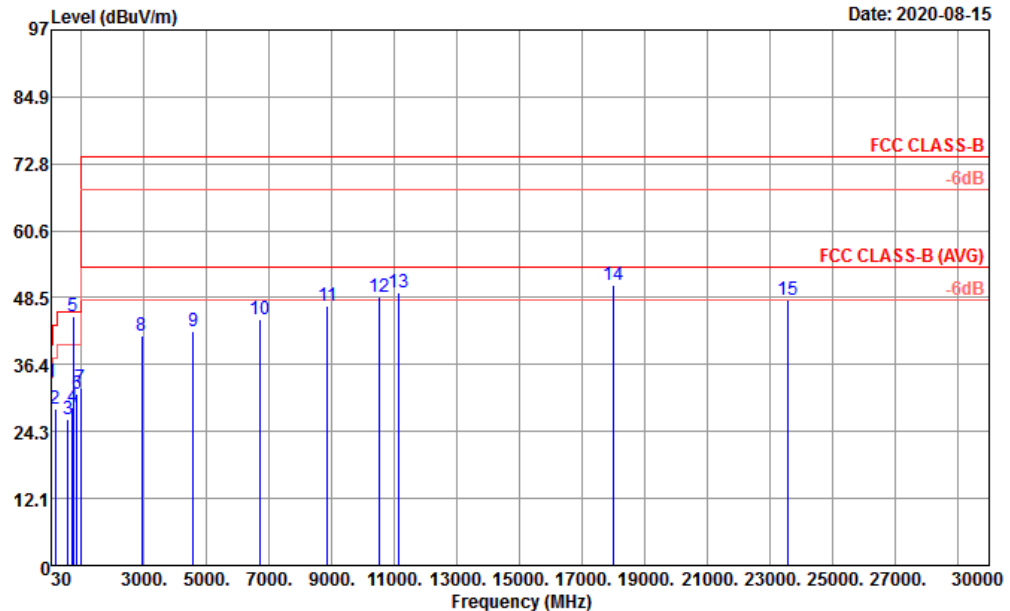


Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHFHORN_9170576 HORIZONTAL
Project : 042245-02
Power : 120Vac/60Hz
Mode : 5

	Freq	Level	Over	Limit	Antenna	Read	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	Line	Factor	Level	Loss	Factor	cm	deg	
1	46.49	24.57	-15.43	40.00	16.14	40.18	0.72	32.47	---	---	Peak
2	561.56	27.09	-18.91	46.00	26.28	30.69	2.61	32.49	---	---	Peak
3	650.80	27.74	-18.26	46.00	26.40	30.97	2.83	32.46	---	---	Peak
4 *	737.50	48.00			27.75	49.57	3.00	32.32	---	---	Peak
5	838.01	30.71	-15.29	46.00	28.72	30.72	3.23	31.96	---	---	Peak
6	874.87	31.05	-14.95	46.00	28.91	30.55	3.30	31.71	---	---	Peak
7	950.53	32.58	-13.42	46.00	30.72	29.39	3.45	30.98	100	0	Peak
8	2316.00	41.81	-32.19	74.00	27.80	65.97	5.82	57.78	---	---	Peak
9	4992.00	42.36	-31.64	74.00	31.37	60.75	8.74	58.50	---	---	Peak
10	5092.00	44.94	-29.06	74.00	31.97	62.62	8.86	58.51	---	---	Peak
11	8878.00	48.53	-25.47	74.00	37.94	59.69	11.60	60.70	---	---	Peak
12	9810.00	48.47	-25.53	74.00	39.14	57.70	12.26	60.63	---	---	Peak
13	11148.00	48.21	-25.79	74.00	39.66	54.57	12.92	58.94	---	---	Peak
14	17950.00	50.82	-23.18	74.00	47.25	47.56	15.36	59.35	100	0	Peak
15	26008.00	48.56	-25.44	74.00	39.12	50.85	21.43	53.30	---	---	Peak



Mode :	Mode 5	Temperature :	23~26°C
Test Engineer :	Donny Tang and Yu Wang	Relative Humidity :	62~65%
Test Distance :	3m	Polarization :	Vertical
Remark :	#5 is system simulator signal which can be ignored.		

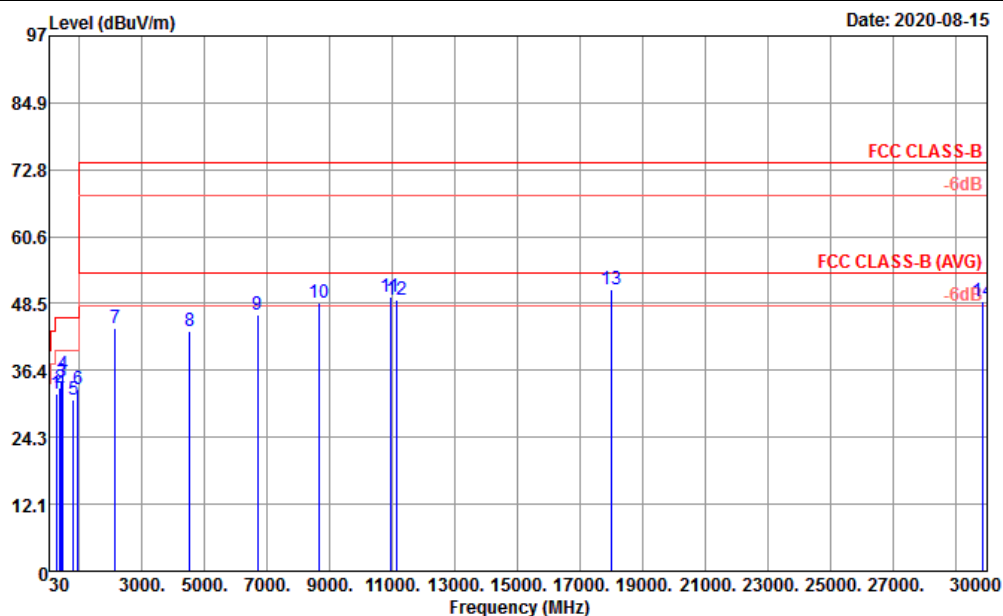


Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHFHORN_9170576 VERTICAL
Project : 042245-02
Power : 120Vac/60Hz
Mode : 5

	Freq	Level	Over	Limit	Antenna	Read	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	Line	Factor	Level	Loss	Factor	cm	deg	
1	47.46	33.19	-6.81	40.00	15.61	49.32	0.73	32.47	100	0	Peak
2	149.31	28.33	-15.17	43.50	17.22	42.11	1.31	32.31	---	---	Peak
3	567.38	26.59	-19.41	46.00	26.17	30.30	2.62	32.50	---	---	Peak
4	700.27	28.63	-17.37	46.00	26.57	31.51	2.94	32.39	---	---	Peak
5	737.50	45.17			27.75	46.74	3.00	32.32	---	---	Peak
6	844.80	31.09	-14.91	46.00	28.76	30.99	3.25	31.91	---	---	Peak
7	959.26	32.04	-13.96	46.00	30.58	28.88	3.47	30.89	---	---	Peak
8	2934.00	41.48	-32.52	74.00	28.43	64.55	6.56	58.06	---	---	Peak
9	4580.00	42.40	-31.60	74.00	30.86	61.80	8.21	58.47	---	---	Peak
10	6698.00	44.51	-29.49	74.00	34.50	59.62	9.98	59.59	---	---	Peak
11	8864.00	46.89	-27.11	74.00	37.97	57.99	11.61	60.68	---	---	Peak
12	10526.00	48.76	-25.24	74.00	39.85	56.38	12.50	59.97	---	---	Peak
13	11154.00	49.57	-24.43	74.00	39.64	55.95	12.92	58.94	---	---	Peak
14	17975.00	50.71	-23.29	74.00	47.92	46.80	15.37	59.38	100	0	Peak
15	23566.00	48.19	-25.81	74.00	38.90	50.95	21.11	53.23	---	---	Peak



Mode :	Mode 6	Temperature :	23~26°C
Test Engineer :	Donny Tang and Yu Wang	Relative Humidity :	62~65%
Test Distance :	3m	Polarization :	Horizontal

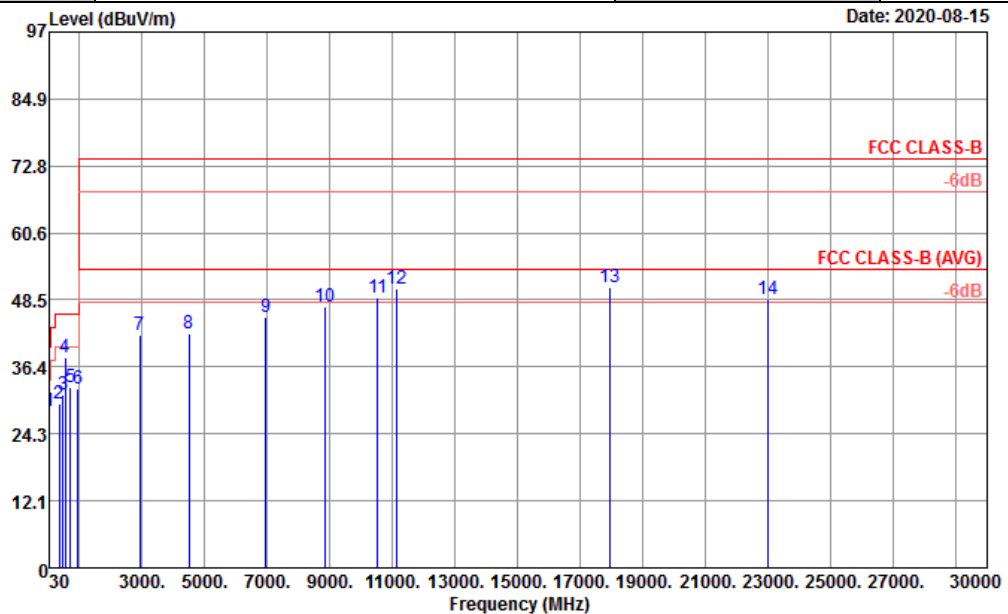


Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHFHORN_9170576 HORIZONTAL
Project : 042245-02
Power : From System
Mode : 6

	Freq	Level	Over Limit	Limit	Antenna Line Factor	Read Level	Cable Loss	Preamplifier	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dB/m	dBuV	dB	dB	cm	deg	
1	267.65	32.25	-13.75	46.00	19.38	43.29	1.77	32.19	---	---	Peak
2	366.59	33.16	-12.84	46.00	20.79	42.53	2.09	32.25	---	---	Peak
3	412.18	34.27	-11.73	46.00	22.35	42.00	2.22	32.30	---	---	Peak
4	480.08	35.59	-10.41	46.00	23.71	41.87	2.40	32.39	100	0	Peak
5	794.36	31.03	-14.97	46.00	28.05	32.07	3.13	32.22	---	---	Peak
6	945.68	33.06	-12.94	46.00	30.42	30.24	3.44	31.04	---	---	Peak
7	2128.00	43.93	-30.07	74.00	27.29	68.89	5.53	57.78	---	---	Peak
8	4514.00	43.49	-30.51	74.00	30.66	63.20	8.10	58.47	---	---	Peak
9	6678.00	46.35	-27.65	74.00	34.46	61.49	9.99	59.59	---	---	Peak
10	8672.00	48.56	-25.44	74.00	37.54	59.79	11.60	60.37	---	---	Peak
11	10938.00	49.83	-24.17	74.00	40.20	55.93	12.78	59.08	---	---	Peak
12	11148.00	49.29	-24.71	74.00	39.66	55.65	12.92	58.94	---	---	Peak
13	17980.00	50.97	-23.03	74.00	48.06	46.93	15.37	59.39	100	0	Peak
14	29858.00	48.92	-25.08	74.00	40.66	48.36	24.65	55.21	---	---	Peak



Mode :	Mode 6	Temperature :	23~26°C
Test Engineer :	Donny Tang and Yu Wang	Relative Humidity :	62~65%
Test Distance :	3m	Polarization :	Vertical

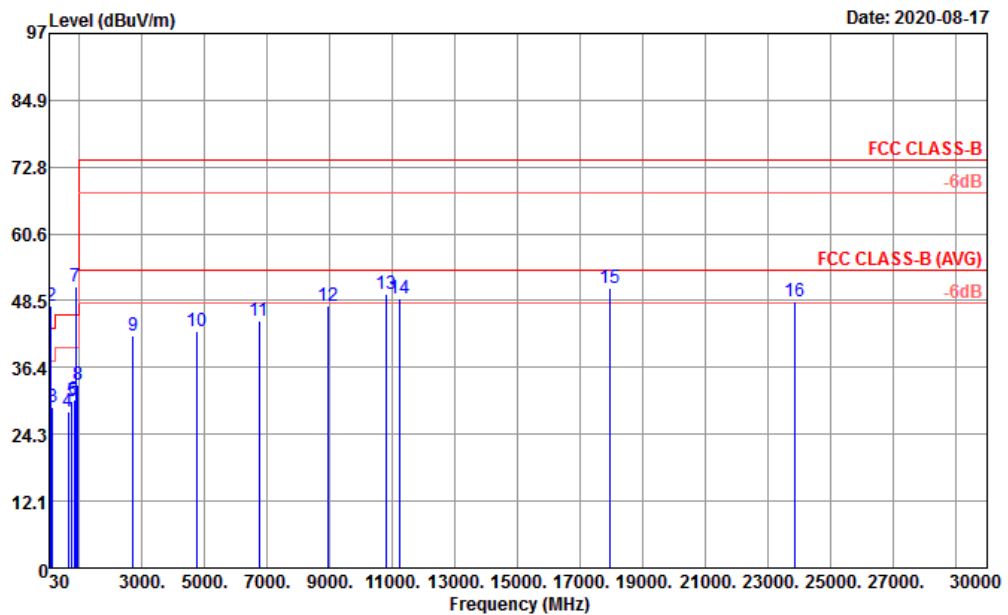


Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHFHORN_9170576 VERTICAL
Project : 042245-02
Power : From System
Mode : 6

	Freq	Level	Over Limit	LimitAntenna Line	Factor	Read Level	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dB/m	dBuV	dB	dB	cm	deg	
1	37.76	28.45	-11.55	40.00	20.62	39.66	0.65	32.48	---	---	Peak
2	362.71	29.65	-16.35	46.00	20.76	39.05	2.08	32.24	---	---	Peak
3	480.08	31.38	-14.62	46.00	23.71	37.66	2.40	32.39	---	---	Peak
4	533.43	38.07	-7.93	46.00	24.20	43.78	2.54	32.45	100	0	Peak
5	713.85	32.57	-13.43	46.00	26.80	35.18	2.96	32.37	---	---	Peak
6	950.53	32.43	-13.57	46.00	30.72	29.24	3.45	30.98	---	---	Peak
7	2914.00	42.16	-31.84	74.00	28.47	65.19	6.54	58.04	---	---	Peak
8	4506.00	42.46	-31.54	74.00	30.62	62.23	8.08	58.47	---	---	Peak
9	6954.00	45.29	-28.71	74.00	35.22	59.44	10.22	59.59	---	---	Peak
10	8858.00	47.33	-26.67	74.00	37.98	58.40	11.62	60.67	---	---	Peak
11	10526.00	49.04	-24.96	74.00	39.85	56.66	12.50	59.97	---	---	Peak
12	11138.00	50.52	-23.48	74.00	39.69	56.86	12.91	58.94	---	---	Peak
13	17950.00	50.92	-23.08	74.00	47.25	47.66	15.36	59.35	100	0	Peak
14	22994.00	48.67	-25.33	74.00	39.00	51.48	21.13	53.40	---	---	Peak



Mode :	Mode 7	Temperature :	23~26°C
Test Engineer :	Donny Tang and Yu Wang	Relative Humidity :	62~65%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#2 is FM signal which can be ignored. #7 is system simulator signal which can be ignored.		

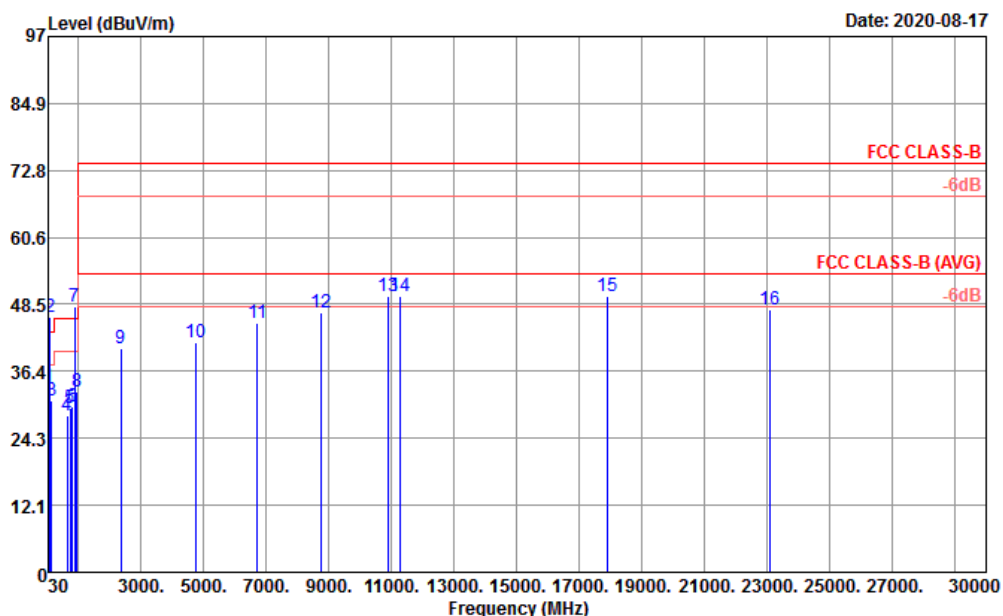


Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHFHORN_9170576 HORIZONTAL
Project : 042245-02
Power : 120Vac/60Hz
Mode : 7

	Freq	Level	Over	Limit	Antenna	Read	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	dB	Line	Factor	Level	Loss	Factor	cm	deg
1	45.52	23.88	-16.12	40.00	16.74	38.89	0.72	32.47	---	---	Peak
2 *	98.00	47.57			15.82	63.06	1.05	32.36	---	---	Peak
3	141.55	29.23	-14.27	43.50	17.37	42.90	1.28	32.32	---	---	Peak
4	627.52	28.41	-17.59	46.00	26.19	31.95	2.77	32.50	---	---	Peak
5	755.56	30.37	-15.63	46.00	27.92	31.71	3.03	32.29	---	---	Peak
6	839.95	30.47	-15.53	46.00	28.86	30.31	3.24	31.94	---	---	Peak
7 *	869.05	50.94			29.09	50.31	3.29	31.75	---	---	Peak
8	952.47	33.18	-12.82	46.00	30.77	29.92	3.45	30.96	100	0	Peak
9	2718.00	42.02	-31.98	74.00	27.84	65.76	6.33	57.91	---	---	Peak
10	4752.00	43.00	-31.00	74.00	31.20	61.88	8.41	58.49	---	---	Peak
11	6736.00	44.96	-29.04	74.00	34.43	60.15	9.97	59.59	---	---	Peak
12	8930.00	47.69	-26.31	74.00	37.78	59.14	11.56	60.79	---	---	Peak
13	10790.00	49.63	-24.37	74.00	40.15	56.20	12.68	59.40	---	---	Peak
14	11204.00	48.79	-25.21	74.00	39.50	55.27	12.96	58.94	---	---	Peak
15	17965.00	50.86	-23.14	74.00	47.65	47.22	15.36	59.37	100	0	Peak
16	23852.00	48.29	-25.71	74.00	38.90	51.17	21.10	53.34	---	---	Peak



Mode :	Mode 7	Temperature :	23~26°C
Test Engineer :	Donny Tang and Yu Wang	Relative Humidity :	62~65%
Test Distance :	3m	Polarization :	Vertical
Remark :	#2 is FM signal which can be ignored. #7 is system simulator signal which can be ignored.		



Site : 03CH10-HY
Condition : FCC CLASS-B 3m SHFHORN_9170576 VERTICAL
Project : 042245-02
Power : 120Vac/60Hz
Mode : 7

	Freq	Level	Over	Limit	Antenna	Read	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	dB	Line	Factor	Level	Loss	Factor	cm	deg
1	47.46	33.43	-6.57	40.00	15.61	49.56	0.73	32.47	100	0	Peak
2 *	98.00	46.07			15.82	61.56	1.05	32.36	---	---	Peak
3	145.43	31.06	-12.44	43.50	17.34	44.74	1.29	32.31	---	---	Peak
4	643.04	28.31	-17.69	46.00	26.43	31.55	2.81	32.48	---	---	Peak
5	740.04	29.64	-16.36	46.00	27.91	31.05	3.00	32.32	---	---	Peak
6	812.79	30.09	-15.91	46.00	27.79	31.25	3.17	32.12	---	---	Peak
7 *	869.05	48.12			29.09	47.49	3.29	31.75	---	---	Peak
8	958.29	32.68	-13.32	46.00	30.64	29.47	3.47	30.90	---	---	Peak
9	2360.00	40.46	-33.54	74.00	27.76	64.59	5.89	57.78	---	---	Peak
10	4770.00	41.59	-32.41	74.00	31.20	60.45	8.43	58.49	---	---	Peak
11	6722.00	45.08	-28.92	74.00	34.46	60.24	9.97	59.59	---	---	Peak
12	8764.00	46.95	-27.05	74.00	37.78	58.05	11.64	60.52	---	---	Peak
13	10900.00	50.04	-23.96	74.00	40.20	56.26	12.75	59.17	---	---	Peak
14	11282.00	49.87	-24.13	74.00	39.58	56.21	13.01	58.93	---	---	Peak
15	17900.00	50.05	-23.95	74.00	45.90	48.09	15.35	59.29	100	165	Peak
16	23104.00	47.43	-26.57	74.00	38.98	50.22	21.13	53.36	---	---	Peak

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