FCC PART 15.247

TEST REPORT

For

GL Technologies (Hong Kong) Limited

FLAT/RM 203 2/F BUILDING 19W 19 SCIENCE PARK WEST AVENUE SHATIN NT,
Shatin, Hong Kong

FCC ID: 2AFIW-AP1300

Report Type:	Product Type:
Original Report	AC1300 Wireless Access Point

Report Number: RDG200610003-00AA1

Report Date: 2020-06-30

Reviewed By: Jimmy Xiao RF Engineer

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	AC1300 Wireless Access Point
Tested Model	GL-AP1300
Frequency Range	Wi-Fi: 2412~2472MHz/2422-2462MHz BLE: 2402-2480MHz
Maximum Conducted Output Power	Wi-Fi(Average Power): 19.9dBm(802.11b), 20.1dBm(802.11g), 20.1dBm(802.11n20), 20.6dBm(802.11n40) BLE(Peak power): 8.70dBm
Modulation Technique	Wi-Fi: DSSS,OFDM BLE:GFSK
Antenna Specification	Wi-Fi:3.92dBi BLE:-0.042dBi
Voltage Range	DC 12V from adapter or DC48V from POE
Date of Test	2020-06-20
Sample serial number	RDG200610003-RFA1-S1 (Assigned by BACL, Shenzhen)
Received date	2020-06-10
Sample/EUT Status	Good condition
Adapter 1 information	Model: ICP30A-120-2000 Input: AC 100-240V, 50/60Hz, 0.8A Output: DC 12.0V, 2.0A
Adapter 2 information	Model:KA2401A-1202000DE Input: AC 100-240V, 50/60Hz, 0.65A Output: DC 12.0V, 2.0A

Objective

This report is prepared on behalf of *GL Technologies (Hong Kong) Limited* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commission's rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Related Submittal(s)/Grant(s)

FCC Part 15.407 NII submissions with FCC ID: 2AFIW-AP1300.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

And KDB 558074 D01 15.247 Meas Guidance v05r02.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		±5%
RF Output Power with Power meter		±0.73dB
RF conducted test with spectrum		±1.6dB
AC Power Lines Conducted Emissions		±1.95dB
Emissions, Radiated	Below 1GHz	±4.75dB
	Above 1GHz	±4.88dB
Temperature		±1℃
Humidity		±6%
Supply voltages		±0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 6/F., West Wing, Third Phase of Wanli Industrial Building, Shihua Road, Futian Free Trade Zone, Shenzhen, Guangdong, China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 342867, the FCC Designation No.: CN1221.

The test site has been registered with ISED Canada under ISED Canada Registration Number 3062B.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The device supports beamforming and non-beamforming mode for 2.4G Wi-Fi. And these two modes share the same power declared by the applicant.

For 802.11b, 802.11g and 802.11n-HT20 mode, 13 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	8	2447
2	2417	9	2452
3	2422	10	2457
4	2427	11	2462
5	2432	12	2467
6	2437	13	2472
7	2442	/	/

For 802.11b, 802.11g, 802.11n-HT20 mode, EUT was tested with Channel 1, 7 and 13

For 802.11n-HT40 mode, 9 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2422	6	2447
2	2427	7	2452
3	2432	8	2457
4	2437	9	2462
5	2442	/	/

EUT was tested with Channel 1, 5 and 9.

For BLE mode, 40 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2442
1	2404	21	2444
2	2406	22	2446
3	2408	23	2448
4	2410	24	2450
5	2412	25	2452
6	2414	26	2454
7	2416	27	2456
8	2418	28	2458
9	2420	29	2460
10	2422	30	2462
11	2424	31	2464
12	2426	32	2466
13	2428	33	2468
14	2430	34	2470
15	2432	35	2472
16	2434	36	2474
17	2436	37	2476
18	2438	38	2478
19	2440	39	2480

EUT was tested with Channel 0, 19 and 39.

Equipment Modifications

No modification was made to the EUT tested.

EUT Exercise Software

“QRCT” software was used to test for Wi-Fi Mode. “SecureCRT” software was used to test for BLE Mode.

The device was tested with the worst case was performed as below:

Mode	Data rate	Power level		
		Low channel	Middle channel	High channel
802.11b	1 Mbps	19	19	19
802.11g	6 Mbps	19	19	18
802.11n-HT20	MCS0	19	19	18
802.11n-HT40	MCS0	19	19	18
BLE	/	117	117	117

For Wi-Fi mode, the worse-case data rates are determined to be as follows for each mode based upon investigations by measuring the output power and PSD across all data rated bandwidths, and modulations.

The device supports SISO and MIMO in all modes, per pretest, the MIMO mode was the worst mode for all the modes. So the test data of the MIMO mode were reported.

Support Equipment List and Details

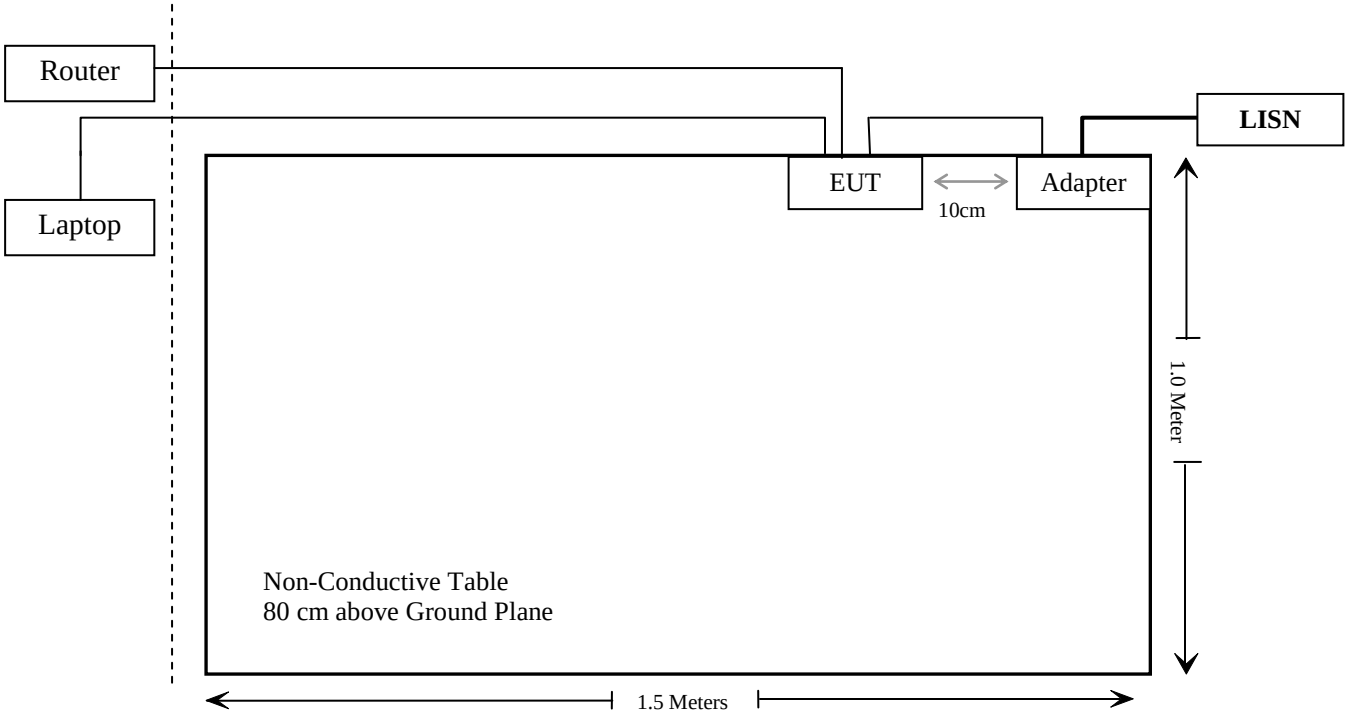
Manufacturer	Description	Model	Serial Number
GOSPELL	POE	G0720-480-050	G0720-480-050
Dell	PC	Latitude E5430	11429208685
Sagemcom	Wireless Router	1704N	3c81d839027c

External I/O Cable

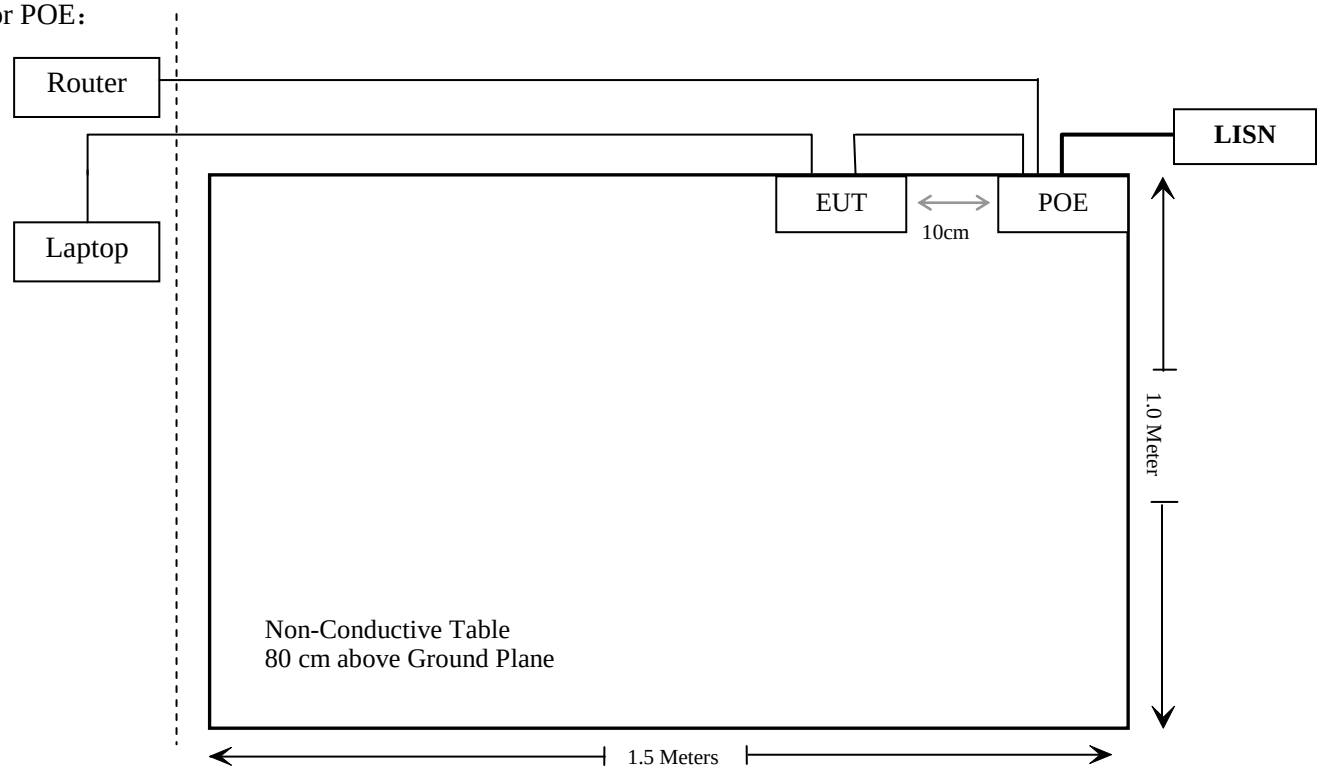
Cable Description	Length (m)	From/Port	To
Un-shielded Un-detachable DC Cable	1.0	EUT	Adapter
Un-shielded detachable AC Cable	1.0	LISN	POE
Un-shielded detachable RJ45 Cable	1.0	EUT	POE
Un-shielded detachable RJ45 Cable	10	EUT	PC
Un-shielded detachable RJ45 Cable	10	EUT	Router
Un-shielded detachable RJ45 Cable	10	POE	Router

Block Diagram of Test Setup

For conducted emissions
For Adapter：



For POE：



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.247 (i), §2.1091	Maximum Permissible Exposure(MPE)	Compliance
§15.203	Antenna Requirement	Compliance
§15.207 (a)	AC Line Conducted Emissions	Compliance
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliance
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliance*
§15.247(b)(3)	Maximum Conducted Output Power	Compliance*
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliance*
§15.247(e)	Power Spectral Density	Compliance*

Compliant*: The EUT is identical with the device (model: GL-AP1300LTEC4, FCC ID: 2AFIW-AP1300C4), the only difference is that the device (model: GL-AP1300LTEC4, FCC ID: 2AFIW-AP1300C4) removed the LTE modular and LTE antennas. The rest are all same. So the "spurious emission below 1GHz" and "AC line conducted emission" were retest. Please refer to the report RDG200416004-00A for the data of other test items.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emissions Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2019/7/9	2020/7/8
Rohde & Schwarz	LISN	ENV216	101613	2020/1/22	2021/1/21
Rohde & Schwarz	Transient Limitor	ESH3Z2	DE25985	2019/11/29	2020/11/28
Unknown	CE Cable	CE Cable	UF A210B-1-0720-504504	2019/11/29	2020/11/28
Rohde & Schwarz	CE Test software	EMC 32	V8.53.0	NCR	NCR
Radiated Emission Test					
R&S	EMI Test Receiver	ESR3	102455	2019/7/9	2020/7/8
Sonoma instrument	Pre-amplifier	310 N	186238	2020/4/20	2021/4/20
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2017/12/22	2020/12/21
Unknown	Cable 2	RF Cable 2	F-03-EM197	2019/11/29	2020/11/28
Unknown	Cable	Chamber Cable 1	F-03-EM236	2019/11/29	2020/11/28
Rohde & Schwarz	Auto test software	EMC 32	V9.10	NCR	NCR

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §15.247 (i) & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart 15.247 (i) and subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm^2)**	**Averaging Time (Minutes)**
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*($180/f^2$)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz
* = Plane-wave equivalent power density

Result

Calculated Formulary:

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = power density (in appropriate units, e.g. mW/cm2)
P = power input to the antenna (in appropriate units, e.g., mW).
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \le 1$$

Mode	Frequency (MHz)	Antenna Gain		Max Tune Up Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
2.4G Wi-Fi	2412-2472	6.93	4.93	21.0	125.89	20	0.124	1.0
BLE	2402-2480	-0.042	0.99	9.0	7.94	20	0.002	1.0
5G Wi-Fi	5150-5250	8.56	7.18	20.0	100.0	20	0.143	1.0
5G Wi-Fi	5725-5850	7.53	5.66	20.0	100.0	20	0.113	1.0

Note: 1. the tune up conducted power was declared by the applicant
2. the BLE, 2.4G Wi-Fi functions can transmit at the same time with 5G Wi-Fi.
3. For the Wi-Fi, as it can support the beam-forming function, so the antenna gain should add the 10lg2.

So the worst simultaneous transmitting consideration:

The ratio=$MPE_{2.4GWi\text{-}Fi}$/limit + $MPE_{5GWi\text{-}Fi}$/limit + MPE_{BLE}/limit =0.124/1.0+0.143/1.0+0.002/1.0 =0.269＜1.0

so simultaneous exposure is not required.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliance

FCC §15.203 - ANTENNA REQUIREMENT

Applicable Standard

According to §15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

a. Antenna must be permanently attached to the unit.
b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.
And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The EUT has a PCB antenna for BLE and two internal antennas for Wi-Fi which were permanently attached. The antenna gain of BLE is -0.042dBi and 3.92dBi for Wi-Fi, fulfill the requirement of this section. Please refer to the EUT photos.

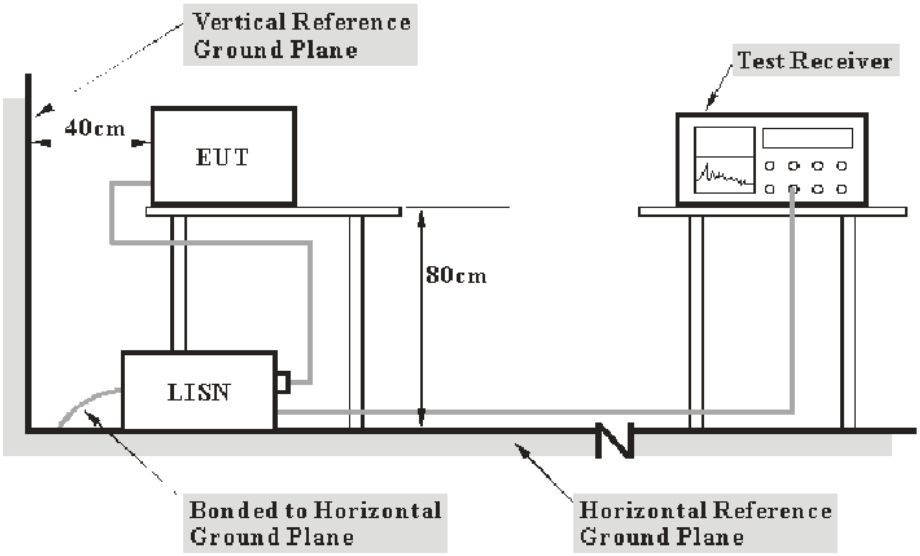
Result: Compliance.

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

Corrected Factor & Margin Calculation

The Corrected factor is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation. The basic equation is as follows:

Correction Factor = LISN VDF + Cable Loss + Transient Limiter Attenuation

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7 dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

Test Results Summary

According to the EUT complied with the FCC Part 15.207,

Test Data

Environmental Conditions

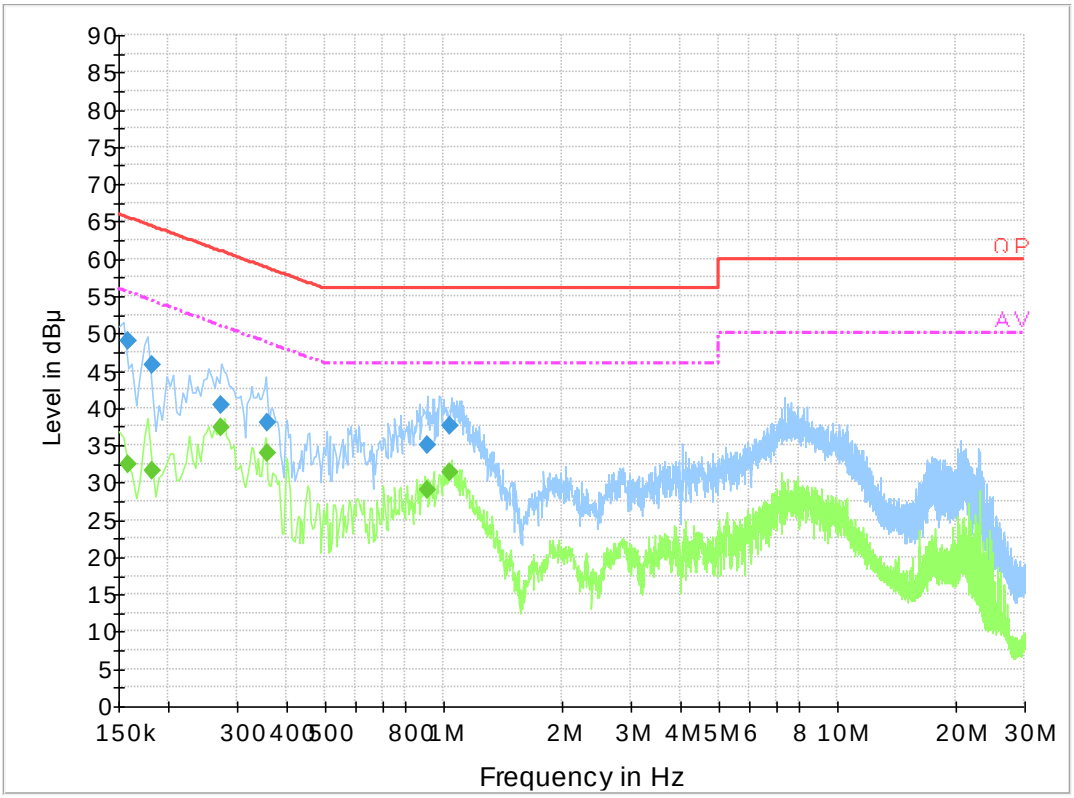
Temperature:	25 ℃
Relative Humidity:	65 %
ATM Pressure:	101.0 kPa

The testing was performed by Haiguo Li on 2020-06-20.

EUT operation mode: Transmitting (Wi-Fi High channel in 802.11n40 mode was the worst case)

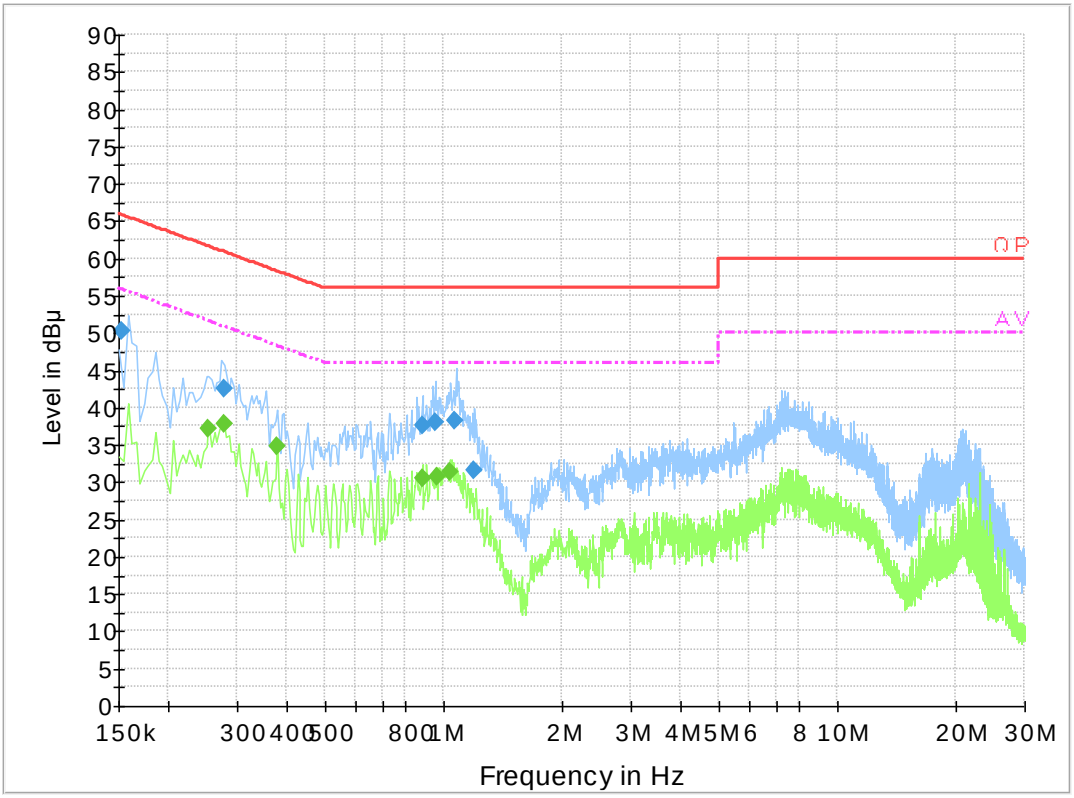
For Adapter 1

AC 120V/60 Hz, Line



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/Ave./QP)
0.158000	49.1	19.8	65.6	16.5	QP
0.182500	45.8	19.8	64.4	18.5	QP
0.273500	40.4	19.8	61.0	20.6	QP
0.359310	38.0	19.9	58.7	20.7	QP
0.916350	34.9	19.8	56.0	21.1	QP
1.046250	37.6	19.9	56.0	18.4	QP
0.158000	32.4	19.8	55.6	23.1	Ave.
0.182500	31.6	19.8	54.4	22.8	Ave.
0.273500	37.4	19.8	51.0	13.6	Ave.
0.359310	34.0	19.9	48.7	14.8	Ave.
0.916350	28.9	19.8	46.0	17.1	Ave.
1.046250	31.3	19.9	46.0	14.7	Ave.

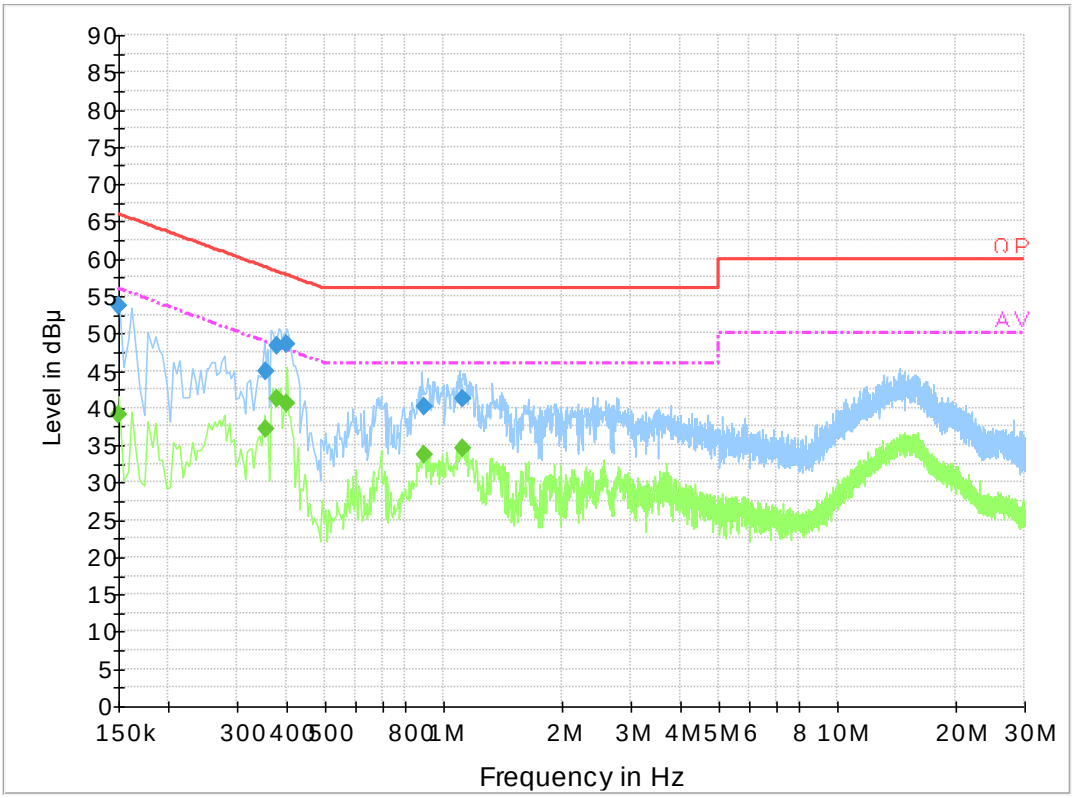
AC 120V/60 Hz, Neutral



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/Ave./QP)
0.153500	50.3	19.8	65.8	15.5	QP
0.277500	42.6	19.7	60.9	18.3	QP
0.884710	37.6	19.7	56.0	18.4	QP
0.959690	38.0	19.8	56.0	18.0	QP
1.069830	38.2	19.8	56.0	17.8	QP
1.195970	31.6	19.8	56.0	24.4	QP
0.254000	37.1	19.8	51.6	14.6	Ave.
0.278000	37.9	19.7	50.9	13.0	Ave.
0.378000	34.9	19.8	48.3	13.5	Ave.
0.886000	30.6	19.7	46.0	15.4	Ave.
0.962000	30.8	19.8	46.0	15.2	Ave.
1.038000	31.3	19.8	46.0	14.7	Ave.

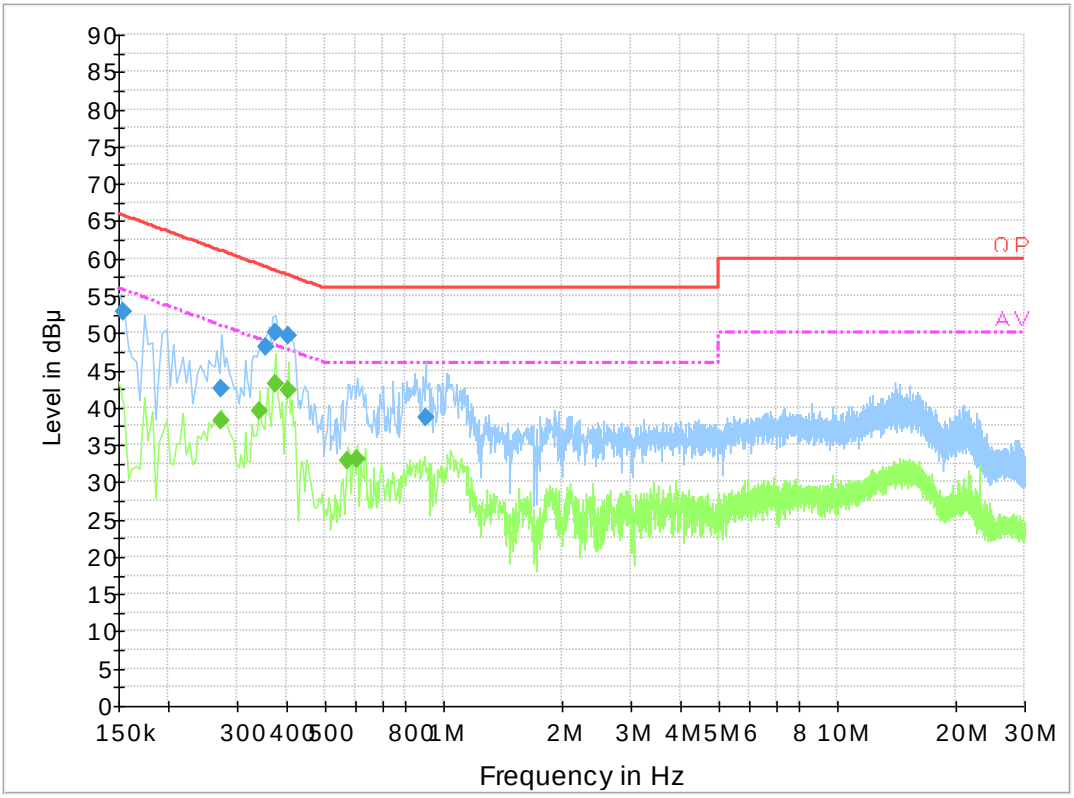
For Adapter 2

AC 120V/60 Hz, Line



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/Ave./QP)
0.150000	53.6	19.8	66.0	12.4	QP
0.355250	44.9	19.9	58.8	14.0	QP
0.380270	48.3	19.9	58.3	10.0	QP
0.399970	48.5	19.9	57.9	9.4	QP
0.892770	40.3	19.8	56.0	15.7	QP
1.118530	41.2	19.8	56.0	14.8	QP
0.150000	39.1	19.8	56.0	16.9	Ave.
0.355250	37.1	19.9	48.8	11.7	Ave.
0.380270	41.2	19.9	48.3	7.1	Ave.
0.399970	40.6	19.9	47.9	7.2	Ave.
0.892770	33.6	19.8	46.0	12.4	Ave.
1.118530	34.6	19.8	46.0	11.4	Ave.

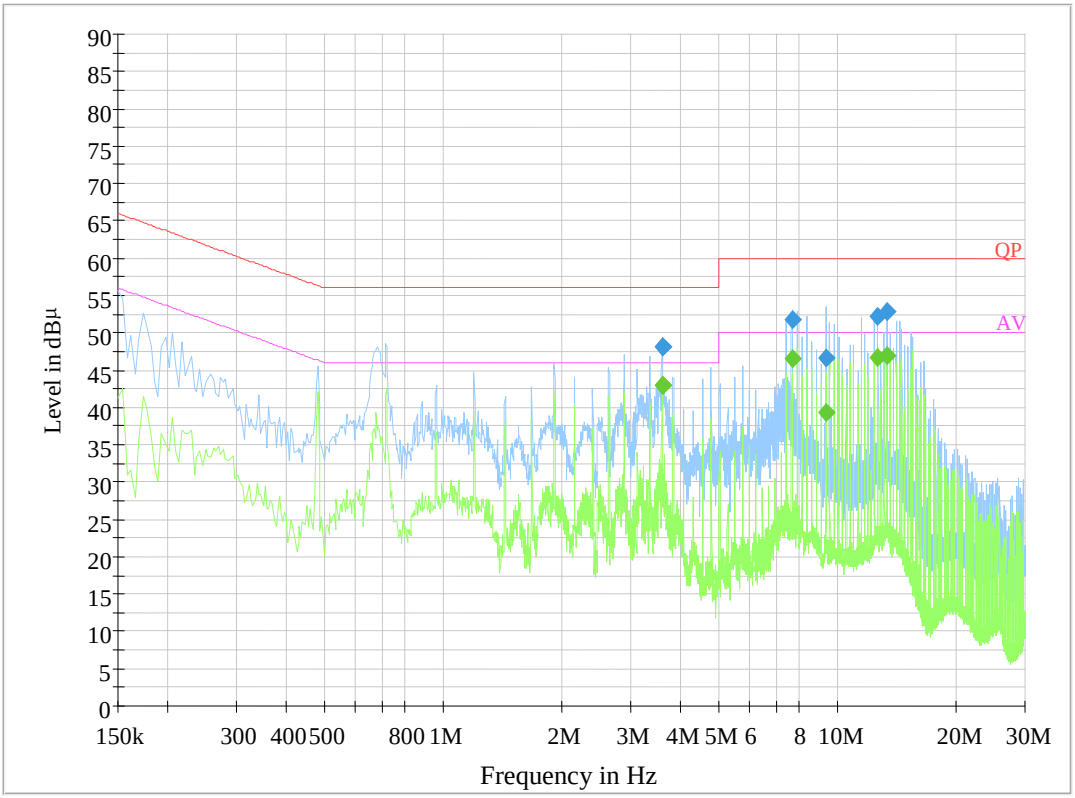
AC 120V/60 Hz, Neutral



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/Ave./QP)
0.154000	52.9	19.8	65.8	12.9	QP
0.273500	42.6	19.7	61.0	18.4	QP
0.355250	48.2	19.9	58.8	10.7	QP
0.376390	50.1	19.8	58.4	8.2	QP
0.403910	49.6	19.8	57.8	8.1	QP
0.908470	38.7	19.7	56.0	17.3	QP
0.274000	38.2	19.7	51.0	12.8	Ave.
0.342000	39.5	19.8	49.2	9.6	Ave.
0.374000	43.1	19.8	48.4	5.3	Ave.
0.406000	42.2	19.8	47.7	5.5	Ave.
0.574000	32.8	19.8	46.0	13.2	Ave.
0.606000	33.1	19.8	46.0	12.9	Ave.

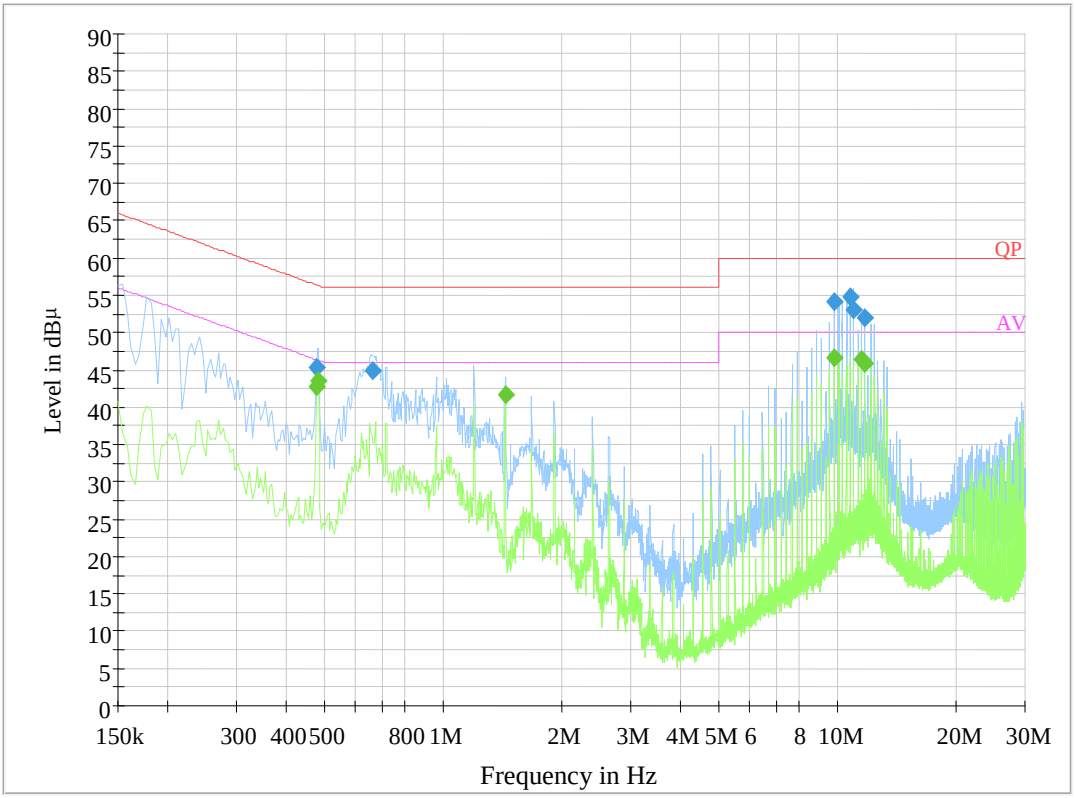
For POE:

AC 120V/60 Hz, Line



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/Ave./QP)
3.603910	48.1	19.9	56.0	7.9	QP
3.603970	48.1	19.9	56.0	7.9	QP
7.686710	51.7	19.9	60.0	8.3	QP
9.373450	46.5	20.0	60.0	13.5	QP
12.730990	52.1	20.0	60.0	7.9	QP
13.452190	52.8	20.0	60.0	7.2	QP
3.603910	42.9	19.9	46.0	3.1	Ave.
3.603970	42.9	19.9	46.0	3.1	Ave.
7.686710	46.2	19.9	50.0	3.8	Ave.
9.373450	39.4	20.0	50.0	10.6	Ave.
12.730990	46.5	20.0	50.0	3.5	Ave.
13.452190	46.8	20.0	50.0	3.2	Ave.

AC 120V/60 Hz, Neutral



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/Ave./QP)
0.478770	45.3	19.8	56.4	11.0	QP
0.664130	45.0	19.8	56.0	11.0	QP
9.850250	54.1	20.0	60.0	5.9	QP
10.811790	54.8	20.0	60.0	5.2	QP
11.052130	53.1	20.0	60.0	6.9	QP
11.773390	52.0	20.0	60.0	8.0	QP
0.478000	42.7	19.8	46.4	3.7	Ave.
0.482000	43.4	19.8	46.3	2.9	Ave.
1.442000	41.7	19.8	46.0	4.3	Ave.
9.850000	46.7	20.0	50.0	3.3	Ave.
11.534000	46.3	20.0	50.0	3.7	Ave.
11.774000	46.0	20.0	50.0	4.0	Ave.

Note:

1) Correction Factor =LISN VDF (Voltage Division Factor) + Cable Loss + Transient Limiter Attenuation
2) Corrected Amplitude = Reading + Correction Factor
3) Margin = Limit – Corrected Amplitude

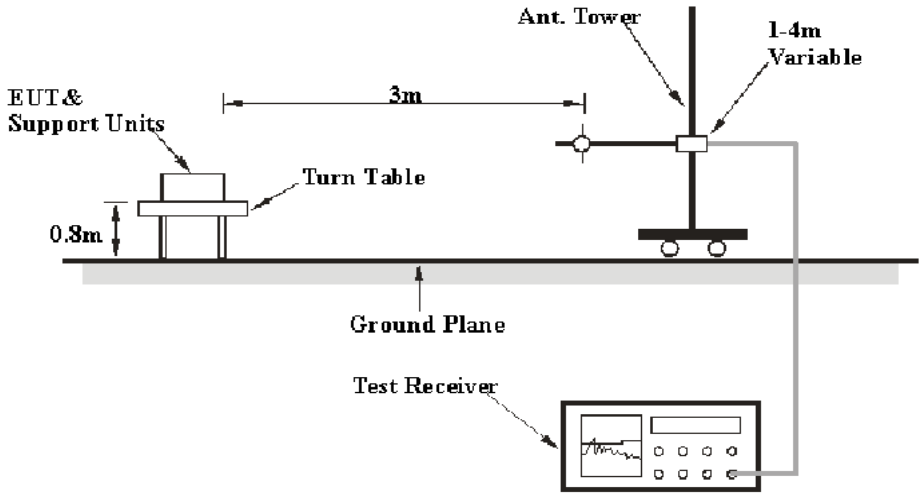
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

Applicable Standard

FCC §15.247 (d); §15.209; §15.205;

EUT Setup

Below 1 GHz:



The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, and FCC 15.247 limits.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 1 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1 GHz.

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude = Meter Reading + Antenna Factor + Cable Loss - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

Test Results Summary

According to the EUT complied with the FCC Title 47, Part 15, Subpart C, section 15.205, 15.209 and 15.247.

Test Data

Environmental Conditions

Temperature:	25 ℃
Relative Humidity:	60 %
ATM Pressure:	101.0 kPa

The testing was performed by Holland Yang on 2020-06-20 for below 1G.
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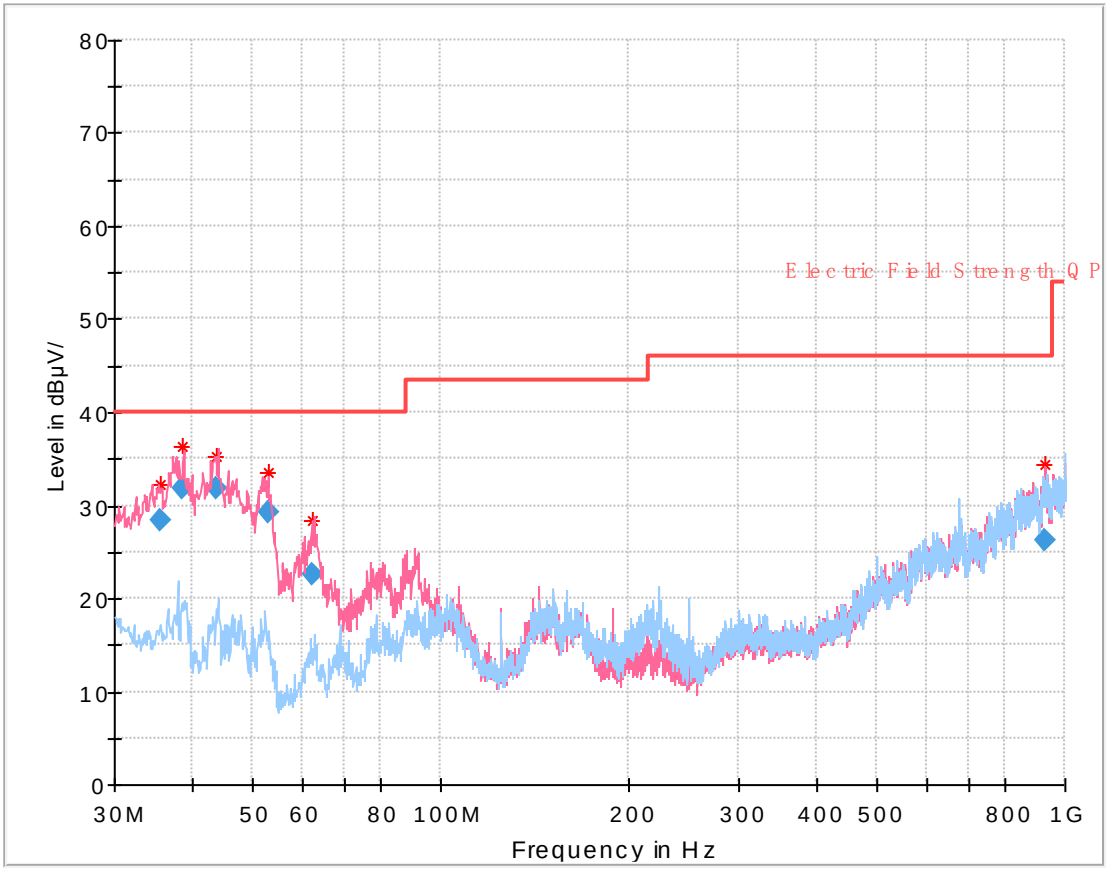
EUT operation mode: Transmitting

For Adapter 1：

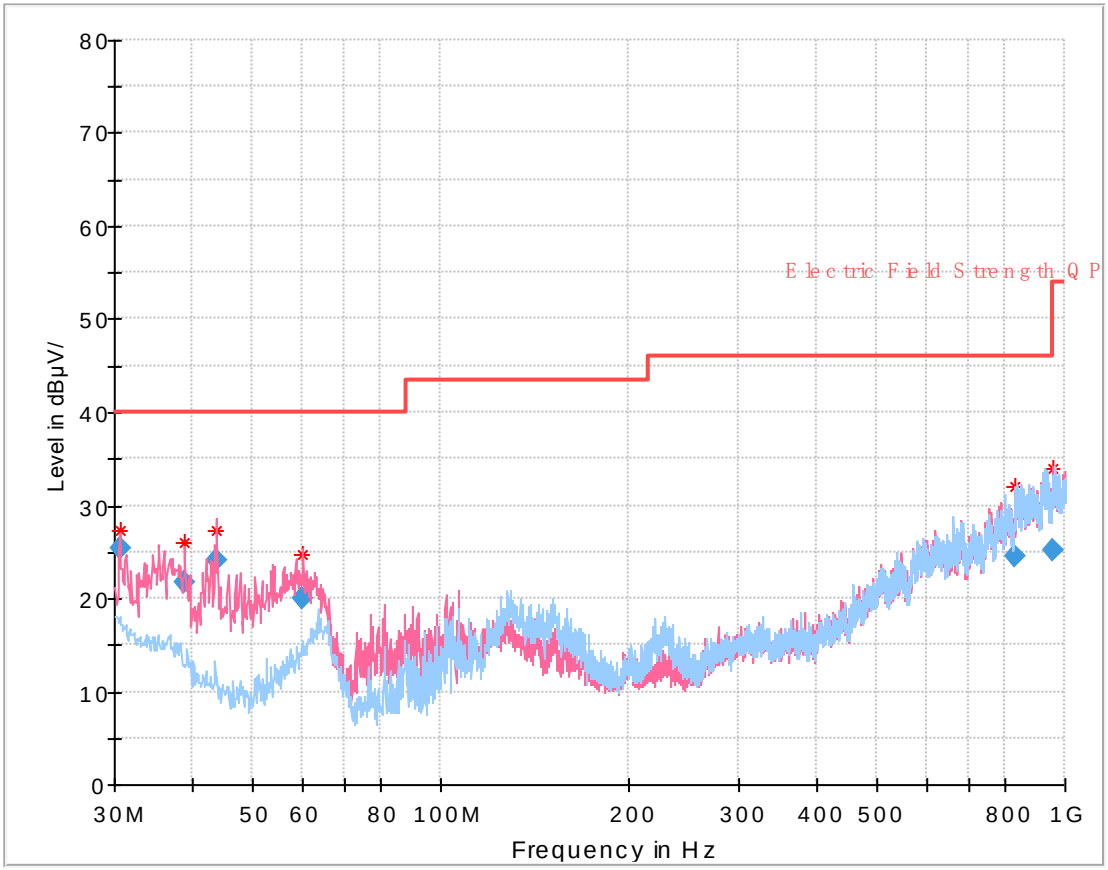
30 MHz~1 GHz (*Wi-Fi High channel in 802.11n40 mode was the worst case*):



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna height (cm)	Antenna Polarity	Turntable position (degree)	Correction Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
35.672750	28.36	164.0	V	354.0	-11.0	40.00	11.64
38.672500	31.83	110.0	V	117.0	-13.1	40.00	8.17
43.577250	31.81	101.0	V	15.0	-16.3	40.00	8.19
53.022250	29.25	122.0	V	54.0	-19.8	40.00	10.75
62.456750	22.66	199.0	V	100.0	-20.3	40.00	17.34
931.565125	26.18	381.0	V	353.0	4.8	46.00	19.82

For Adapter 2 :

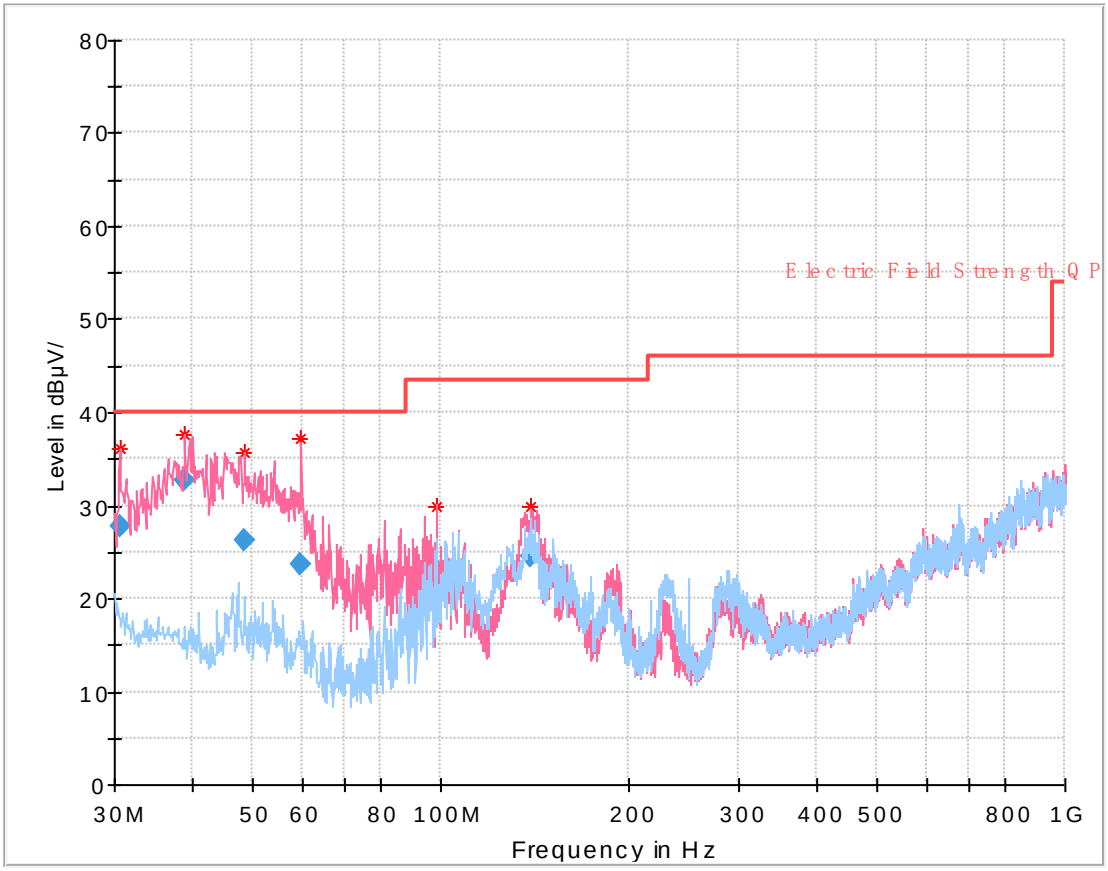
30 MHz~1 GHz (*Wi-Fi High channel in 802.11n40 mode was the worst case*):



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna height (cm)	Antenna Polarity	Turntable position (degree)	Correction Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
30.603375	25.38	108.0	V	272.0	-8.0	40.00	14.62
38.928750	21.68	137.0	V	332.0	-13.1	40.00	18.32
43.818375	24.13	129.0	V	20.0	-16.5	40.00	15.87
60.204875	20.08	101.0	V	335.0	-20.2	40.00	19.92
834.527875	24.46	141.0	H	0.0	2.7	46.00	21.54
958.581875	25.12	342.0	V	233.0	5.3	46.00	20.88

For POE:

30 MHz~1 GHz (*Wi-Fi High channel in 802.11n40 mode was the worst case*):



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna height (cm)	Antenna Polarity	Turntable position (degree)	Correction Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
30.585250	27.76	102.0	V	238.0	-8.0	40.00	12.24
38.915500	32.69	103.0	V	235.0	-13.1	40.00	7.31
59.417750	23.72	118.0	V	15.0	-20.1	40.00	16.28
48.430000	26.13	133.0	V	15.0	-20.2	40.00	13.87
98.485875	23.11	124.0	V	71.0	-17.5	43.50	20.39
139.269125	24.54	112.0	V	127.0	-14.2	43.50	18.96

******* END OF REPORT *******