

FCC PART 15.249 TEST REPORT

For

LEEDARSON LIGHTING CO., LTD.

Xingda Road, Xingtai Industrial Zone, Changtai County, Zhangzhou, Fujian, China

FCC ID: 2AB2QLZW45

Report Type: Original Report	Product Type: Lightstrip
Test Engineer: Jack Jiao	
Report Number: RXM201015057-00B	
Report Date: 2020-11-18	
Reviewed By: Oscar Ye EMC Manager	
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road,Kunshan,Jiangsu province,China Tel: +86-0512-86175000 Fax: +86-0512-88934268 www.baclcorp.com.cn

TABLE OF CONTENTS

GENERAL INFORMATION.....	3
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	3
OBJECTIVE	3
RELATED SUBMITTAL(S)/GRANT(S).....	3
TEST METHODOLOGY	4
MEASUREMENT UNCERTAINTY	4
TEST FACILITY	4
SYSTEM TEST CONFIGURATION	5
JUSTIFICATION	5
EUT EXERCISE SOFTWARE	5
SUPPORT EQUIPMENT LIST AND DETAILS	5
EXTERNAL I/O CABLE.....	5
BLOCK DIAGRAM OF TEST SETUP	6
SUMMARY OF TEST RESULTS	8
TEST EQUIPMENT LIST	9
FCC§15.203 - ANTENNA REQUIREMENT.....	10
APPLICABLE STANDARD	10
ANTENNA CONNECTOR CONSTRUCTION	10
FCC §15.207 (A) – AC LINE CONDUCTED EMISSIONS	11
APPLICABLE STANDARD	11
EUT SETUP	11
EMI TEST RECEIVER SETUP.....	11
TEST PROCEDURE	12
FACTOR & OVER LIMIT CALCULATION.....	12
TEST RESULTS SUMMARY	12
TEST DATA	12
FCC§15.205, §15.209&§15.249 - RADIATED EMISSIONS& OUT OF BAND EMISSION.....	15
APPLICABLE STANDARD	15
EUT SETUP	15
TEST EQUIPMENT SETUP	16
TEST PROCEDURE	16
CORRECTED AMPLITUDE & MARGIN CALCULATION	17
TEST RESULTS SUMMARY	17
TEST DATA	17
FCC §15.215(C) – 20 DB BANDWIDTH TESTING.....	23
APPLICABLE STANDARD	23
TEST PROCEDURE	23
TEST DATA	23

GENERAL INFORMATION**Product Description for Equipment under Test (EUT)**

Applicant	LEEDARSON LIGHTING CO., LTD.
Tested Model	LZW45
Product Type	Lightstrip
Power Supply	DC 12V from Adapter
RF Function	Z-wave
Operating Band/Frequency	908.4-916.0 MHz
Channel Number	3
Modulation Type	2-FSK
Antenna Type	PCB Antenna
*Maximum Antenna Gain	-1.0 dBi

Adapter information:

Model: IVP1200-2000

Input: AC 100-240V, 50/60Hz, 0.7A

Output: DC 12V, 2A

Note: The antenna gain was provided by the applicant.

**All measurement and test data in this report was gathered from production sample serial number: 20201015057.
(Assigned by the BACL. The EUT supplied by the applicant was received on 2020-10-15)*

Objective

This type approval report is prepared on behalf of *LEEDARSON LIGHTING CO., LTD.* in accordance with Part 2-Subpart J, and Part 15-Subparts A and C of the Federal Communication Commissions' 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 15.249 rules.

Related Submittal(s)/Grant(s)

No related submittal(s)/Grant(s).

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.

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

Measurement Uncertainty

Item		Uncertainty
AC Power Lines Conducted Emissions		3.19 dB
RF conducted test with spectrum		0.9dB
RF Output Power with Power meter		0.5dB
Radiated emission	30MHz~1GHz	6.11dB
	1GHz~6GHz	4.45dB
	6GHz~18GHz	5.23dB
	18GHz~40GHz	5.65dB
Occupied Bandwidth		0.5kHz
Temperature		1.0°C
Humidity		6%

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. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) Lab is accredited to ISO/IEC 17025 by A2LA (Lab code: 4323.01) and the FCC designation No. CN1185 under the FCC KDB 974614 D01 and CAB identifier CN0004 under the ISED requirement. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

SYSTEM TEST CONFIGURATION**Justification**

Channel list:

Channel	Frequency (MHz)
1	908.40
2	908.42
3	916.00

EUT Exercise Software

RF test tool: Com Tool

*Power Level Setting: 0

Note: The power level setting was declared by the applicant.

Support Equipment List and Details

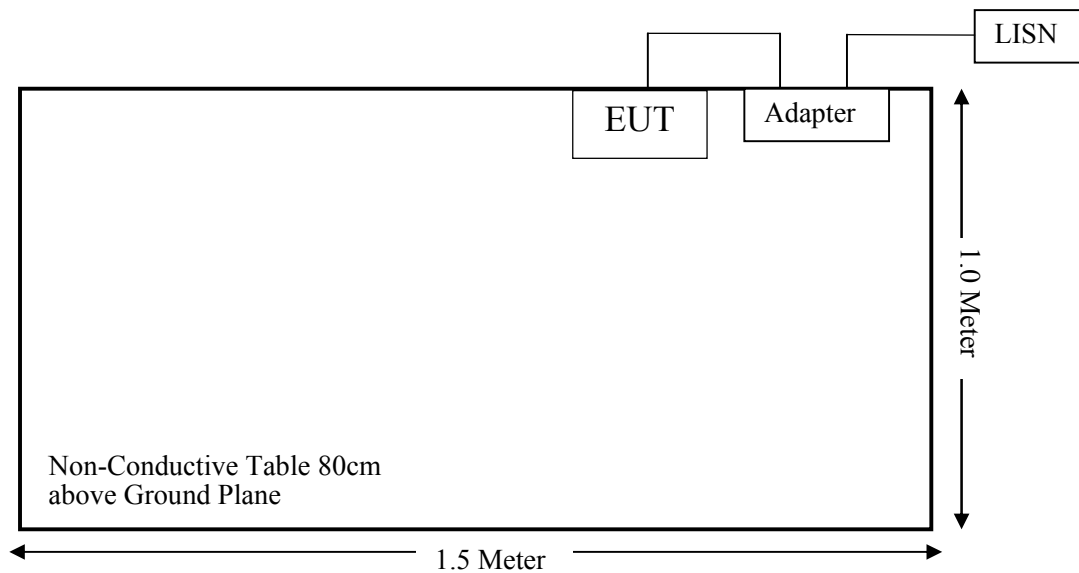
Manufacturer	Description	Model	Serial Number
/	/	/	/

External I/O Cable

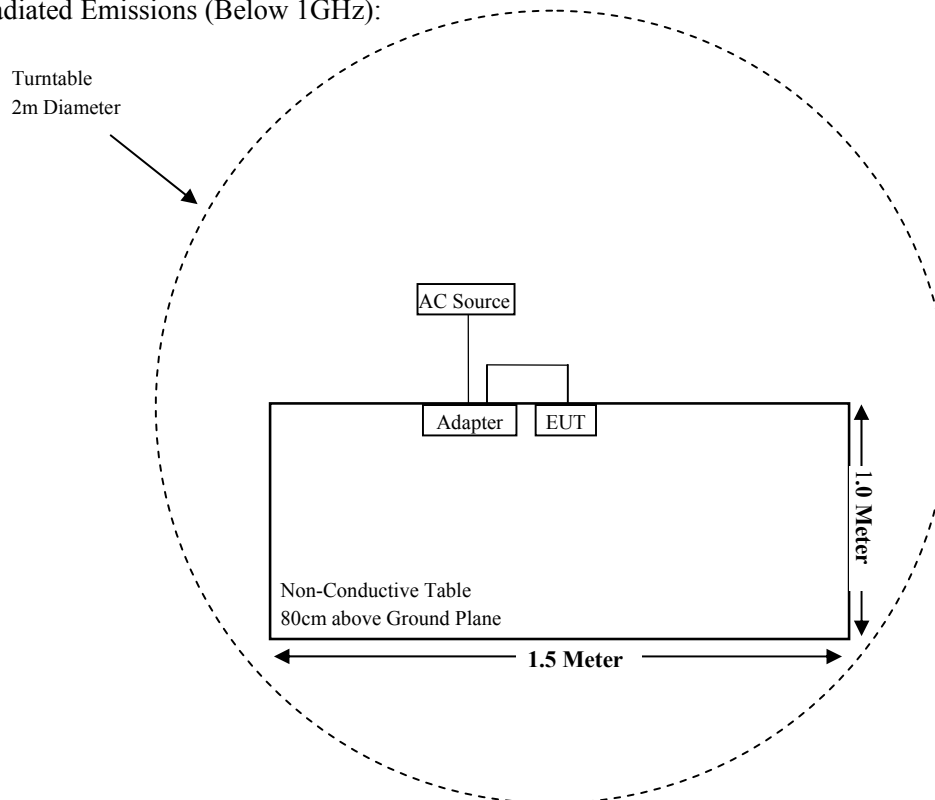
Cable Description	Length (m)	From Port	To
Power Cable	1.0	EUT	Adapter
Power Cable	1.0	Adapter	LISN/AC source

Block Diagram of Test Setup

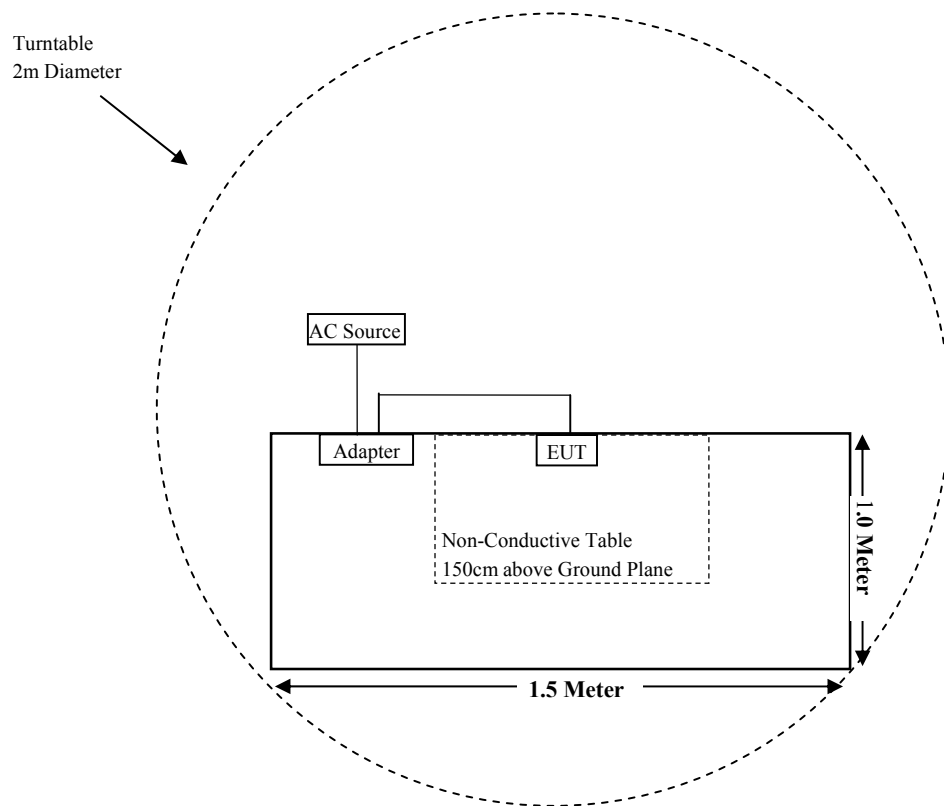
For Conducted Emissions:



For Radiated Emissions (Below 1GHz):



For Radiated Emissions (Above 1GHz):



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliant
§15.207(a)	Conduction Emissions	Compliant
15.205, §15.209, §15.249	Radiated Emissions& Out of Band Emission	Compliant
§15.215 (c)	20 dB Bandwidth	Compliant

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test (Chamber 1#)					
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2019-12-14	2020-12-13
Sunol Sciences	Broadband Antenna	JB3	A090413-1	2017-12-26	2020-12-25
Sonoma Instrument	Pre-amplifier	310N	171205	2020-08-14	2021-08-13
Rohde & Schwarz	Auto test Software	EMC32	100361	--	--
MICRO-TRONICS	Band Reject Filter	BRC50722	G013	2020-08-05	2021-08-04
MICRO-COAX	Coaxial Cable	Cable-8	008	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-9	009	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-10	010	2020-08-15	2021-08-14
Radiated Emission Test (Chamber 2#)					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207	2020-04-01	2021-03-31
MICRO-TRONICS	Band Reject Filter	BRM50702	G024	2020-08-05	2021-08-04
ETS-LINDGREN	Horn Antenna	3115	9207-3900	2020-07-15	2023-07-14
A.H.Systems,inc	Amplifier	PAM-0118P	512	2020-02-20	2021-02-19
Rohde & Schwarz	Auto test Software	EMC32	100361	/	/
MICRO-COAX	Coaxial Cable	Cable-6	006	2019-12-12	2020-12-11
MICRO-COAX	Coaxial Cable	Cable-11	011	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-12	012	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-13	013	2020-08-15	2021-08-14
RF Conducted Test					
Agilent	Spectrum Analyzer	N9020A	MY51110139	2020-02-20	2021-2-19
Leedarson Lighting Co., Ltd	RF Cable	Leedarson Lighting Co., Ltd 01	C01	Each Time	/
Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR	1316.3003K03-101746-zn	2020-08-05	2021-08-04
Rohde & Schwarz	LISN	ENV216	101115	2019-12-14	2020-12-13
Audix	Test Software	e3	V9	/	/
Rohde & Schwarz	Pulse limiter	ESH3-Z2	0357.8810.54	2020-08-10	2021-08-09
MICRO-COAX	Coaxial Cable	Cable-15	015	2020-08-15	2021-08-14

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

FCC§15.203 - ANTENNA REQUIREMENT

Applicable Standard

For intentional device, 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.

Antenna Connector Construction

The EUT has a PCB antenna for Z-wave and the antenna gain is -1.0 dBi, which was permanently attached, fulfill the requirement of this section, please refer to the EUT photos.

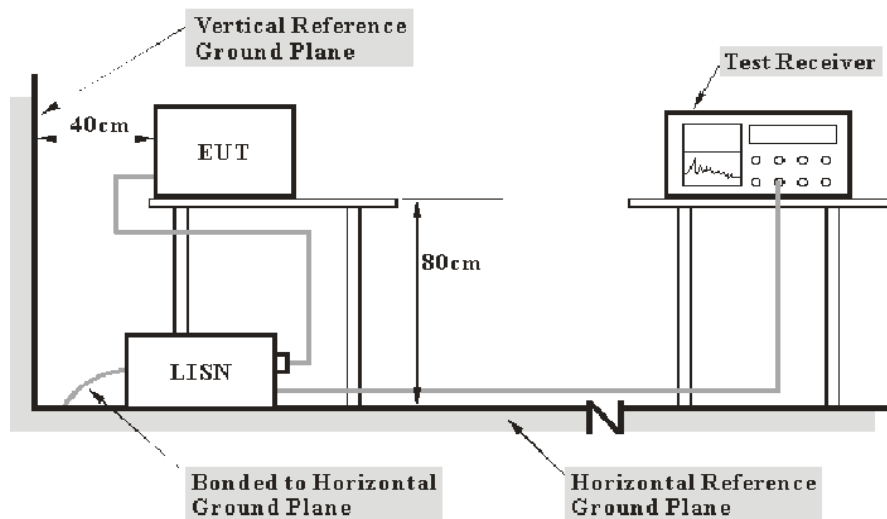
Result: Compliant.

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a)

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 measurement procedure of EUT setup is according with ANSI C63.10-2013. The related limit was specified in FCC Part 15.207.

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

ANSI C63.10-2013 clause 6.2

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.

Factor & Over Limit Calculation

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

Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)

The “**Over Limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit of 7 dB means the emission is 7 dB above the limit. The equation for Over Limit calculation is as follows:

Over Limit (dB) = Read level (dBμV) + Factor (dB) - Limit (dBμV)

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

Test Data

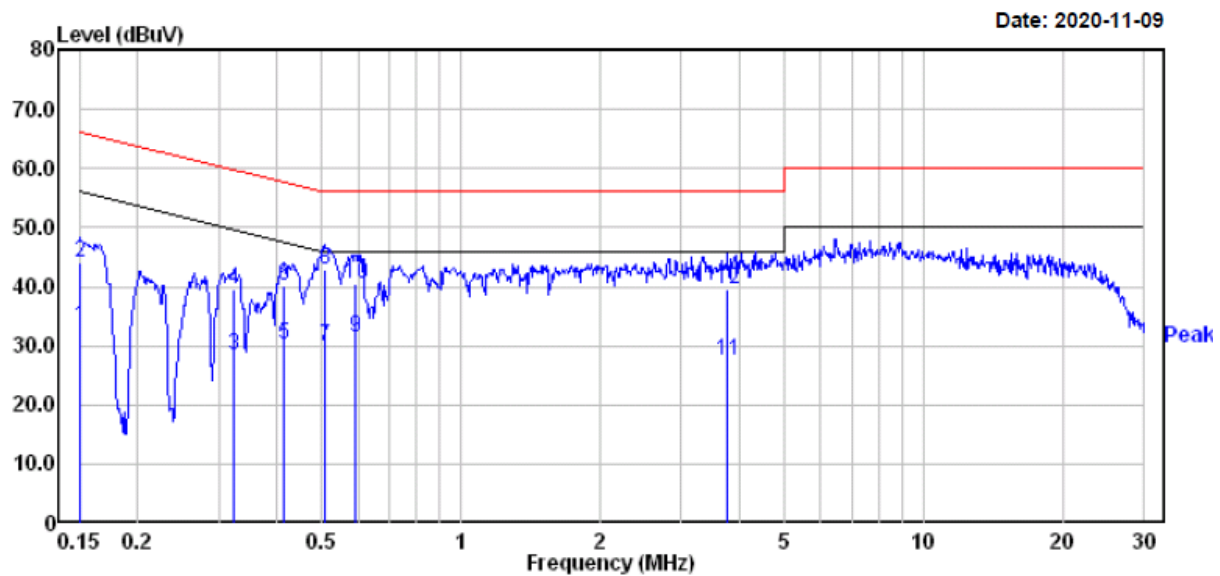
Environmental Conditions

Temperature:	25.4 °C
Relative Humidity:	53 %
ATM Pressure:	101.3 kPa

The testing was performed by Jack Jiao on 2020-11-09.

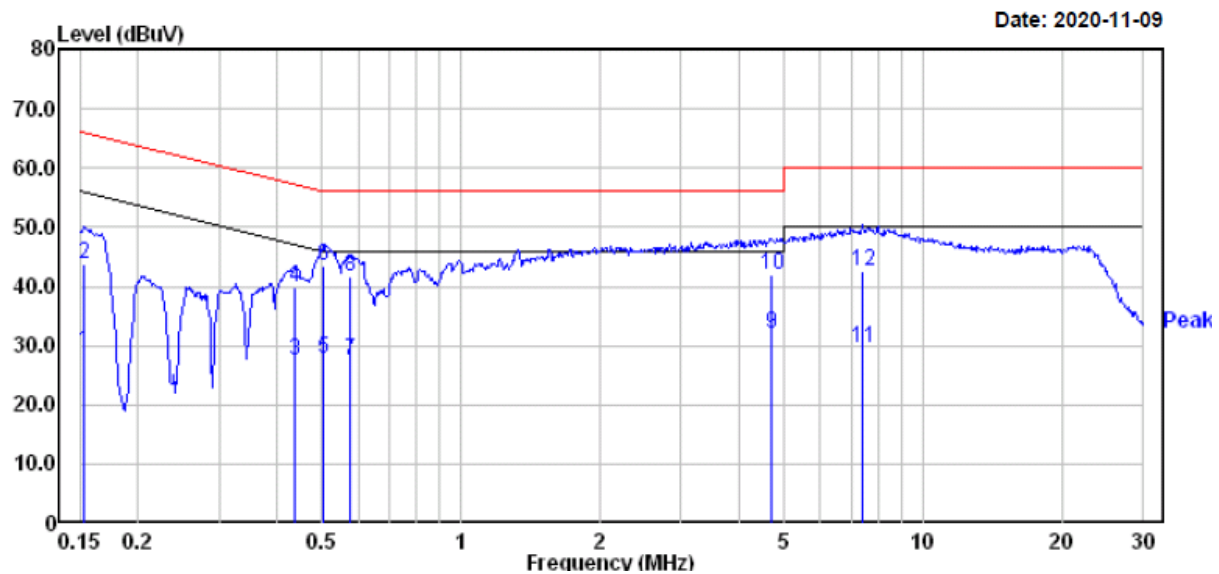
Test Result: Compliant.

AC 120V/60 Hz, Line



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	13.34	19.82	33.16	56.00	-22.84	Average
2	0.150	24.34	19.82	44.16	66.00	-21.84	QP
3	0.323	8.67	19.82	28.49	49.62	-21.13	Average
4	0.323	19.67	19.82	39.49	59.62	-20.13	QP
5	0.415	10.32	19.74	30.06	47.55	-17.49	Average
6	0.415	20.32	19.74	40.06	57.55	-17.49	QP
7	0.507	10.18	19.76	29.94	46.00	-16.06	Average
8	0.507	23.18	19.76	42.94	56.00	-13.06	QP
9	0.592	11.65	19.75	31.40	46.00	-14.60	Average
10	0.592	20.65	19.75	40.40	56.00	-15.60	QP
11	3.779	8.08	19.47	27.55	46.00	-18.45	Average
12	3.779	20.08	19.47	39.55	56.00	-16.45	QP

AC 120V/60 Hz, Neutral



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.153	9.30	19.82	29.12	55.82	-26.70	Average
2	0.153	24.10	19.82	43.92	65.82	-21.90	QP
3	0.437	7.60	19.75	27.35	47.11	-19.76	Average
4	0.437	20.20	19.75	39.95	57.11	-17.16	QP
5	0.505	8.00	19.76	27.76	46.00	-18.24	Average
6	0.505	23.60	19.76	43.36	56.00	-12.64	QP
7	0.576	7.60	19.75	27.35	46.00	-18.65	Average
8	0.576	21.90	19.75	41.65	56.00	-14.35	QP
9	4.696	12.40	19.49	31.89	46.00	-14.11	Average
10	4.696	22.40	19.49	41.89	56.00	-14.11	QP
11	7.407	10.00	19.52	29.52	50.00	-20.48	Average
12	7.407	22.90	19.52	42.42	60.00	-17.58	QP

Note:

1) Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)

2) Over Limit (dB) = Read level (dBUV) + Factor (dB) - Limit (dBUV)

FCC§15.205, §15.209&§15.249 - RADIATED EMISSIONS& OUT OF BAND EMISSION

Applicable Standard

As per FCC§15.249 (a), except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

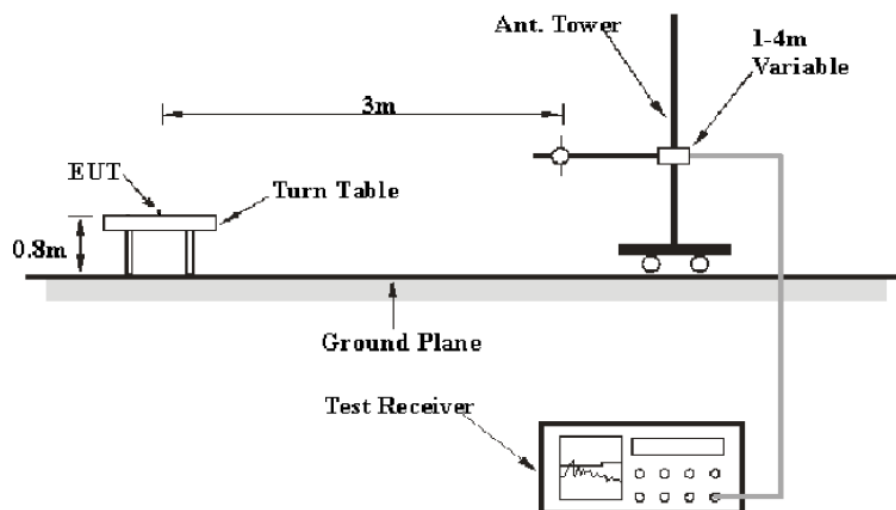
Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24GHz-24.25GHz	250	2500

As per FCC§15.249 (c), Field strength limits are specified at a distance of 3 meters.

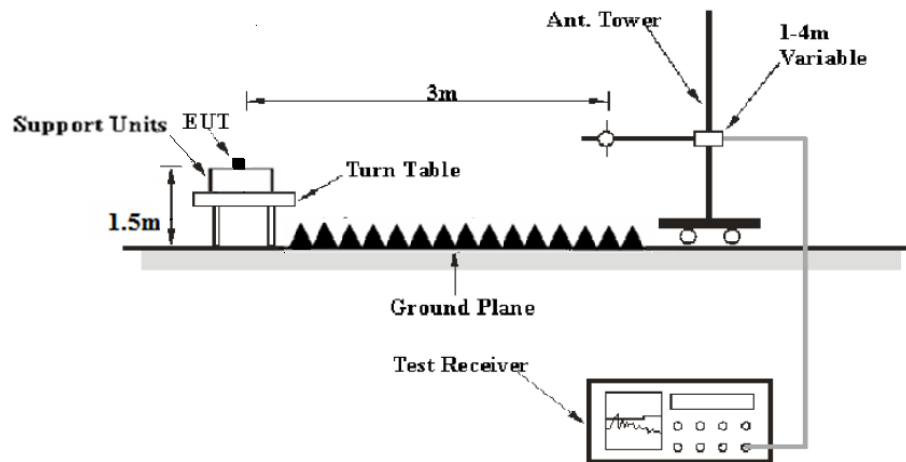
(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

EUT Setup

Below 1 GHz:



Above 1 GHz:



The radiated emission and out of band emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209/15.205 and FCC 15.249 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

Test Equipment Setup

The system was investigated from 30 MHz to 10 GHz.

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

Frequency Range	RBW	Video B/W	IF B/W	Detector
30 MHz – 1000 MHz	120 kHz	300 kHz	120 kHz	QP
Above 1GHz	1MHz	3 MHz	/	PK
	1MHz	3 MHz	/	Ave

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, peak and Average detection modes for frequencies above 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 (dB μ V/m) = Meter Reading (dB μ V) + Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

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 (dB) = Limit (dB μ V/m) - Corrected Amplitude (dB μ V/m)

Test Results Summary

According to the data in the following table, the EUT complied with the FCC Part 15.209 &15.205 & 15.249.

Test Data

Environmental Conditions

Temperature:	25.3 °C
Relative Humidity:	52 %
ATM Pressure:	101.3 kPa

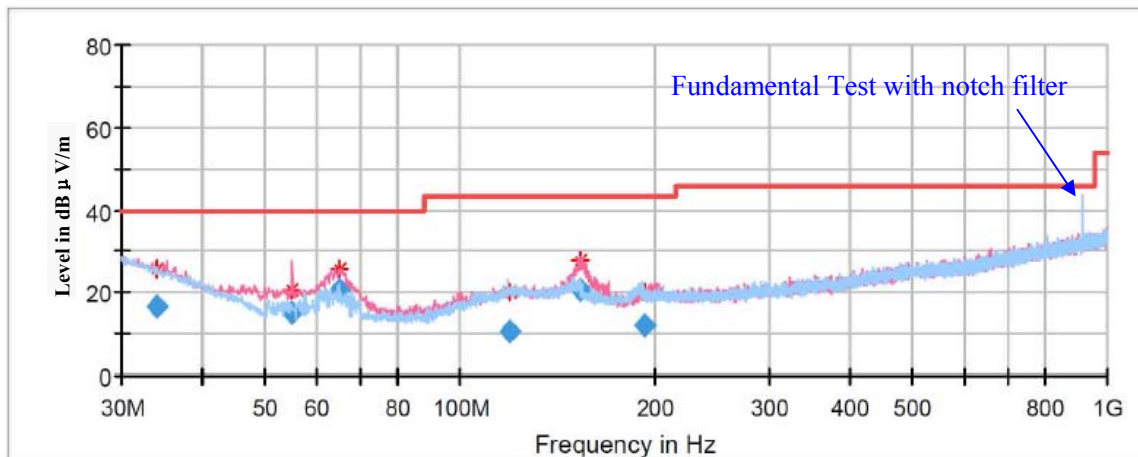
The testing was performed by Jack Jiao on 2020-11-04.

Test Mode: Transmitting

Spurious Emission Test:**30 MHz - 1 GHz**

(Pre-scan in the X,Y and Z axes of orientation, the worst case **in Z-axis of orientation** was recorded.)

Frequency: 908.4 MHz



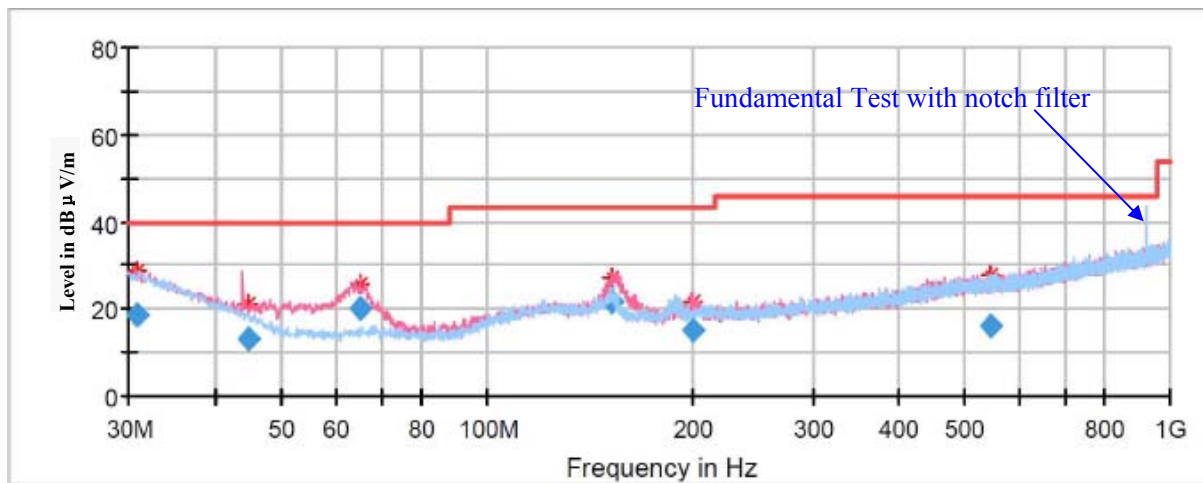
Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corr. (dB)	Limit (dBμV/m)	Margin (dB)
	QuasiPeak (dB μ V/m)	Height (cm)	Polar (H/V)				
34.026050	16.69	101.0	V	228.0	-7.1	40.00	23.31
55.042650	14.86	101.0	V	218.0	-18.2	40.00	25.14
64.948500	20.41	101.0	V	77.0	-18.1	40.00	19.59
119.306250	10.35	101.0	H	315.0	-11.7	43.50	33.15
152.915750	20.66	101.0	V	8.0	-12.9	43.50	22.84
192.774200	11.91	1198	H	359.0	-13.3	43.50	31.59

Note:

Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)

Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)

Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV /m)

Frequency: 916.0 MHz

Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corr. (dB)	Limit (dBμV/m)	Margin (dB)
	QuasiPeak (dB μ V/m)	Height (cm)	Polar (H/V)				
30.906166	18.83	103.0	V	228.0	-5.0	40.00	21.17
44.530800	13.03	100.0	V	176.0	-14.3	40.00	26.97
64.973150	19.90	105.0	V	245.0	-18.1	40.00	20.10
152.589800	21.52	105.0	V	13.0	-12.9	43.50	21.98
199.439600	14.97	110.0	V	70.0	-12.8	43.50	28.53
545.606350	16.12	118.0	V	187.0	-5.8	46.00	29.88

Note:

Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)

Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)

Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV /m)

1 GHz - 10 GHz

(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)

Note:

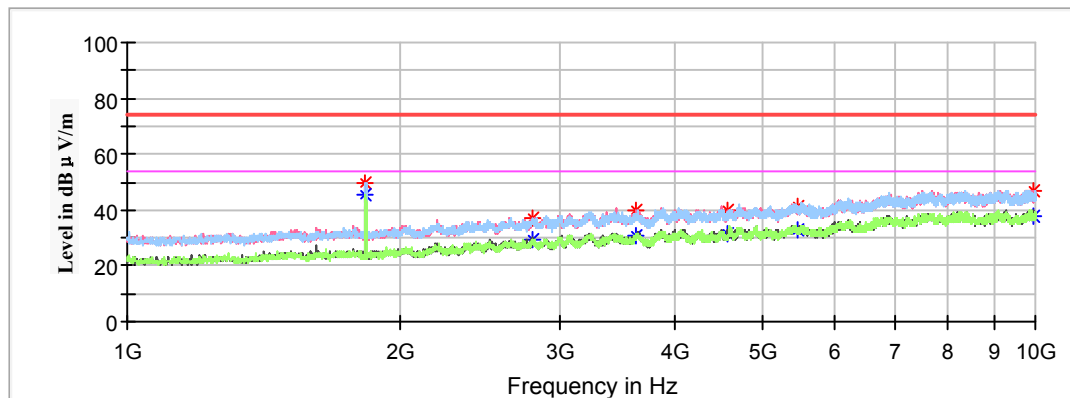
Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)

Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)

Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Frequency: 908.4 MHz

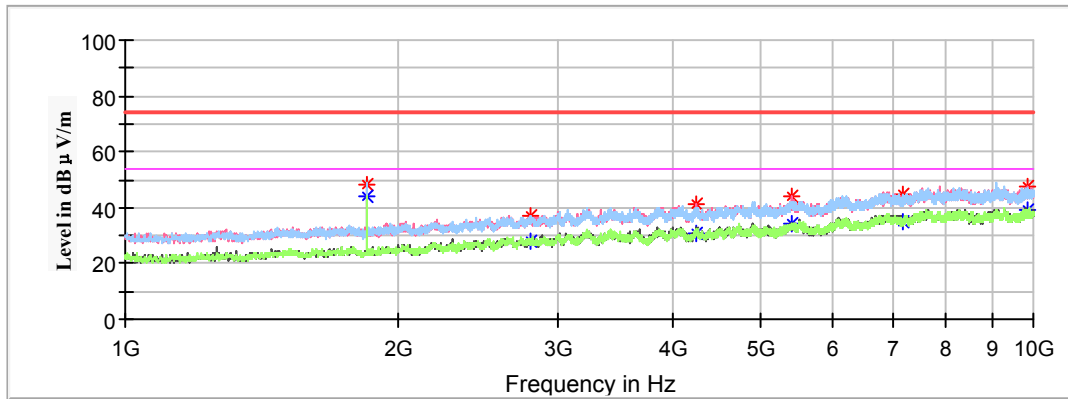
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1816.800000	49.22	---	150.0	H	243.0	-15.1	74.00	24.78
1816.800000	---	44.71	150.0	H	243.0	-15.1	54.00	9.29
2801.900000	---	29.06	200.0	H	255.0	-11.0	54.00	24.94
2801.900000	36.97	---	200.0	H	255.0	-11.0	74.00	37.03
3636.900000	39.82	---	200.0	V	222.0	-8.3	74.00	34.18
3636.900000	---	30.45	200.0	V	222.0	-8.3	54.00	23.55
4592.900000	40.21	---	200.0	V	184.0	-6.0	74.00	33.79
4592.900000	---	31.38	200.0	V	184.0	-6.0	54.00	22.62
5480.200000	41.09	---	150.0	H	205.0	-4.0	74.00	32.91
5480.200000	---	32.62	150.0	H	205.0	-4.0	54.00	21.38
9973.700000	---	37.79	150.0	V	123.0	1.9	54.00	16.21
9973.700000	46.80	---	150.0	V	123.0	1.9	74.00	27.20

Frequency: 916.0 MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1832.000000	---	44.36	150.0	H	248.0	-15.0	54.00	9.64
1832.000000	48.33	---	150.0	H	248.0	-15.0	74.00	25.67
2791.000000	---	28.16	200.0	H	311.0	-11.1	54.00	25.84
2791.000000	36.76	---	200.0	H	311.0	-11.1	74.00	37.24
4255.300000	---	31.06	150.0	V	138.0	-6.6	54.00	22.94
4255.300000	41.04	---	150.0	V	138.0	-6.6	74.00	32.96
5424.400000	---	34.21	150.0	V	239.0	-4.1	54.00	19.79
5424.400000	43.99	---	150.0	V	239.0	-4.1	74.00	30.01
7199.200000	---	35.13	150.0	H	273.0	0.4	54.00	18.87
7199.200000	44.66	---	150.0	H	273.0	0.4	74.00	29.34
9835.300000	---	39.07	100.0	V	247.0	2.0	54.00	14.93
9835.300000	47.21	---	100.0	V	247.0	2.0	74.00	26.79

Fundamental Test & Band edge Test:

(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)

Note:

- Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)
 Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Frequency (MHz)	Corrected Amplitude (dBμV /m)	Detector (PK/QP/Ave.)	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
			Height (cm)	Polar (H/V)				
Channel Frequency: 908.4MHz								
902.0	35.47	QP	200	H	69	0.2	46	10.53
902.0	34.22	QP	150	V	198	0.2	46	11.78
908.4	90.53	QP	100	H	224	0.2	94	3.47
908.4	89.12	QP	100	V	121	0.2	94	4.88
Channel Frequency: 916.0MHz								
916.0	91.02	QP	100	H	224	0.2	94	2.98
916.0	90.36	QP	100	V	121	0.2	94	3.64
928.0	33.31	QP	200	H	208	1.3	46	12.69
928.0	32.89	QP	200	V	84	1.3	46	13.11

FCC §15.215(c) – 20 dB BANDWIDTH TESTING**Applicable Standard**

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT on the test table without connection to measurement instrument. Turn on the EUT. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
3. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.
4. Repeat above procedures until all frequencies measured were complete.

Test Data**Environmental Conditions**

Temperature:	25.3 °C
Relative Humidity:	52 %
ATM Pressure:	101.3 kPa

The testing was performed by Jack Jiao on 2020-11-13.

Test Result: Compliant.

Test Mode: Transmitting

Frequency (MHz)	20 dB Bandwidth (kHz)
908.4	84.847
916.0	114.367

Spectrum

Ref Level 22.00 dBm Offset 13.00 dB RBW 3 kHz
 Att 20 dB SWT 631.7 μ s VBW 10 kHz Mode Auto FFT

1Pk Max

D1[1] 0.56 dB
 M1[1] 84.8470 kHz
 908.3570850 MHz

D1 -2.670 dBm
 D2 -22.670 dBm

CF 908.4 MHz 30001 pts Span 500.0 kHz

Spectrum

Ref Level 10.57 dBm Offset 13.00 dB RBW 3 kHz
 Att 20 dB SWT 631.7 μ s VBW 10 kHz Mode Auto FFT

1Pk Max

0 dBm
 -10 dBm
 -20 dBm
 -30 dBm
 -40 dBm
 -50 dBm
 -60 dBm
 -70 dBm
 -80 dBm

D1[1] 1.05 dB
 M1[1] 114.3670 kHz
 -23.08 dBm
 915.9404250 MHz

D1 -2.440 dBm
 D2 -22.440 dBm

CF 916.0 MHz 30000 pts Span 500.0 kHz

Page 24 of 25

Declarations

1: BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with an asterisk '*'. Customer model name, addresses, names, trademarks etc. are not considered data.

2: Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

3: Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

4: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

5: This report cannot be reproduced except in full, without prior written approval of the Company.

6: This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

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