FCC TEST REPORT

For

ARTIKA FOR LIVING INC

Solar String Lights

Test Model: OUT-BZSO-C2BL-ZT

Additional Model No.: OUT-BZSO-C2BL-ZC, OUT-BZSO-XXXXXX("XXXXXX" can be A to Z and/or 0 to 9 and/or blank (commercial code))

Prepared for	:	ARTIKA FOR LIVING INC
Address	:	1756 50th avenue, Lachine, Qc, Canada H8T 2V5
Prepared by	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
Address	:	101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
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Web	:	www.lcs-cert.com
Mail	:	webmaster@lcs-cert.com
Date of receipt of test sample	:	December 23, 2024
Number of tested samples	:	1
Serial number	:	Prototype
Sample No.	:	B241212033001
Date of Test	:	December 23, 2024 to December 26, 2024
Date of Report	:	December 27, 2024

TEST REPORT

Report No.	:	**LCSA12094286E**
Date of Issue	:	December 27, 2024
Testing Laboratory Name	:	**Shenzhen LCS Compliance Testing Laboratory Ltd.**
Address	:	101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Testing Location/ Procedure	:	Full application of Harmonised standards ■ Partial application of Harmonised standards □ Other standard testing method □
Applicant's Name	:	**ARTIKA FOR LIVING INC**
Address	:	1756 50th avenue, Lachine, Qc, Canada H8T 2V5
Test Specification		
Standard	:	FCC 47 CFR Part 15, Subpart B ANSI C63.4-2014
Test Report Form No	:	TRF-4-E-010 A/0
TRF Originator	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
Master TRF	:	Dated 2011-03

Test Item Description.	:	**Solar String Lights**
Trade Mark	:	ARTIKA
Test Model	:	OUT-BZSO-C2BL-ZT
Result	:	**Positive**

Compiled by:	**Supervised by:**	**Approved by:**
Emma wang / File Administrator	Cary Luo/ Technique principal	Gavin Liang / Manager

TEST REPORT

Test Report No.: LCSA12094286E	December 27, 2024 Date of issue

Test Model	:	**OUT-BZSO-C2BL-ZT**
EUT	:	Solar String Lights
Applicant	:	**ARTIKA FOR LIVING INC**
Address	:	1756 50th avenue, Lachine, Qc, Canada H8T 2V5
Telephone	:	/
Fax	:	/
Manufacturer 1	:	**Zhongyuan Technology (Thailand) Co., Ltd.**
Address	:	7/554 Moo.6 T. Mapyangporn A. Pluakdeang Rayong, Thailand 21140
Manufacturer 2	:	**Haining Zhongyuan Plastic Co.,Ltd.**
Address	:	No. 7 Wanlong Road, Economic Development Zone, Haining City,Jiaxing City, Zhejiang Province China 314400
Telephone	:	/
Fax	:	/
Factory 1	:	**Zhongyuan Technology (Thailand) Co., Ltd.**
Address	:	7/554 Moo.6 T. Mapyangporn A. Pluakdeang Rayong, Thailand 21140
Factory 2	:	**Haining Zhongyuan Plastic Co.,Ltd.**
Address	:	No. 7 Wanlong Road, Economic Development Zone, Haining City,Jiaxing City, Zhejiang Province China 314400
Telephone	:	/
Fax	:	/

Test Result	Positive

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Revision History

Report Version	Issue Date	Revision Content	Revised By
000	December 27, 2024	Initial Issue	/

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Test Report Description Page

1. SUMMARY OF STANDARDS AND RESULTS

1.1 Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

Description of Test Item	Standard	Limits	Result
Conducted emissions on AC mains	FCC 47 CFR Part 15, Subpart B ANSI C63.4-2014	15.107, Class B	Pass
Radiated emissions (Below 1GHz)	FCC 47 CFR Part 15, Subpart B ANSI C63.4-2014	15.109, Class B	Pass

1.2 Description of Test Modes

No	Title	Description
TM1	Charging(DC 5V From USB Host Unit)	Record
TM2	Working(DC 3.7V*2 From battery)	Record

2. GENERAL INFORMATION

2.1 Description of Device (EUT)

EUT : Solar String Lights

Test Model : OUT-BZSO-C2BL-ZT

Additional Model : OUT-BZSO-C2BL-ZC, OUT-BZSO-XXXXXX("XXXXXX" can be A to Z and/or 0 to 9 and/or blank (commercial code))

Model Declaration : PCB board, structure and internal of these model(s) are the same, So no additional models were tested.

Power Supply : Battery:18650/3.7V/2000mAH*2Pcs
Charging voltage: 5.1V DC
Output: 3.5V 900mA MAX

Highest Internal Frequency : 1.705-108MHz

Classification of Equipment : Class B

Highest internal frequency (Fx)	Highest measured frequency
Fx ≤ 1.705MHz	30MHz
1.705MHz < Fx ≤ 108MHz	1GHz
108MHz < Fx ≤ 500MHz	2GHz
500MHz < Fx ≤ 1000MHz	5GHz
Fx > 1GHz	5 x Fx up to a maximum of 40GHz

2.2 Support equipment List

Manufacturer	Description	Model	Serial Number	Certificate
Xiaomi Communication Technology Co., LTD	Power adapter	MDY-12-EF	TA62305N201981G	/

2.3 Description of Test Facility

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the LCS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

NVLAP Accreditation Code is 600167-0.
FCC Designation Number is CN5024.
CAB identifier is CN0071.
CNAS Registration Number is L4595.
Test Firm Registration Number: 254912.

2.4 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Emission (150kHz to 30MHz)	± 2.35 dB
Radiated Emission (30MHz to 1000MHz)	± 3.48 dB
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95%	

confidence level using a coverage factor of k=2.

3. MEASURING DEVICES AND TEST EQUIPMENT

Conducted emissions on AC mains					
Equipment	**Manufacturer**	**Model No**	**Serial No.**	**Cal Date**	**Due Date**
EMI Test Software	Farad	EZ	/	/	/
Artificial Mains	R&S	ENV216	101288	2024-06-06	2025-06-05
Pulse Limiter	R&S	ESH3-Z2	102750-NB	2024-06-06	2025-06-05
EMI Test Receiver	R&S	ESR3	102312	2024-03-12	2025-03-11

Radiated emissions (Below 1GHz) (Above 1GHz)					
Equipment	**Manufacturer**	**Model No**	**Serial No.**	**Cal Date**	**Due Date**
EMI Test Software	AUDIX	E3	/	N/A	N/A
By-log Antenna	SCHWARZBECK	VULB9163	01143	2024-07-20	2027-07-19
Horn Antenna	SCHWARZBECK	3115	EABF-018	2024-07-20	2027-07-19
EMI Test Receiver	R&S	ESR3	102311	2024-06-06	2025-06-05
Broadband Preamplifier	/	BP-01M18G	P190501	2024-06-06	2025-06-05
EMI Test Receiver	R&S	ESCI7	101173	2024-10-06	2025-10-07
By-log Antenna	SchwarzZBECK	VULB9163	01565	2024-07-13	2027-07-12
EMI Test Software	Farad	EZ	/	N/A	N/A

4. EMISSION TEST RESULTS (EMI)

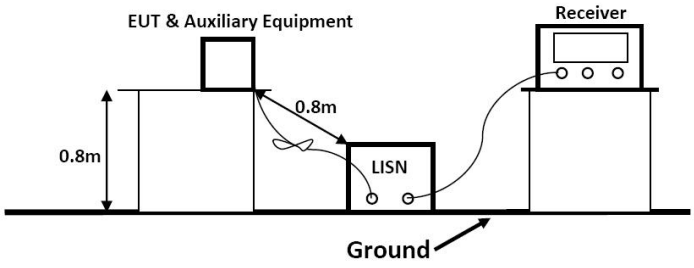
4.1 Conducted emissions on AC mains

Test Requirement:	15.107, Class B
Test Limit:	**Frequency of emission (MHz)** / **Conducted limit (dBμV)** (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.
Test Method:	ANSI C63.4-2014
Procedure:	An initial pre-scan was performed with peak detector.Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected. Remark: Level= Read Level+ Cable Loss+ LISN Factor

4.1.1 E.U.T. Operation:

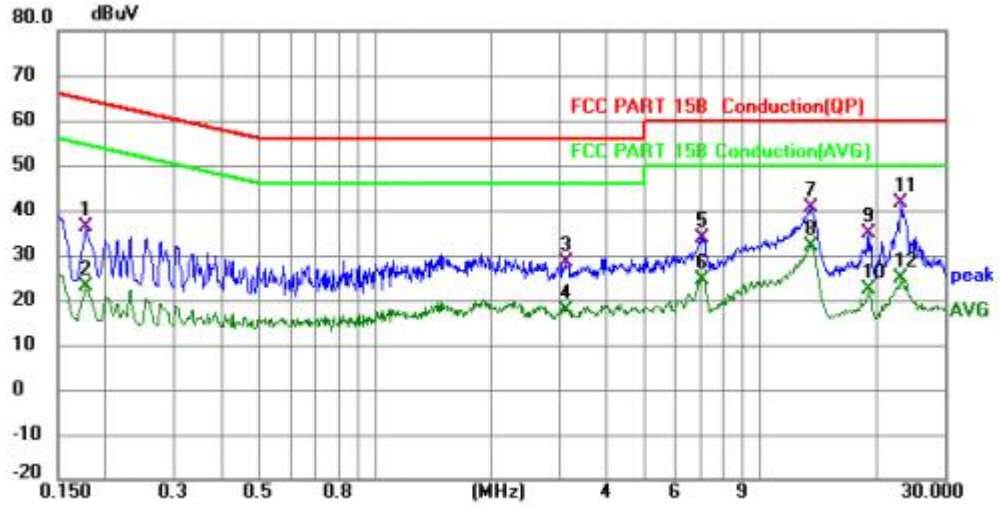
Operating Environment:			
Temperature:	24.4 °C	Humidity:	53.0 %
Pre test mode:	TM1		
Final test mode:	TM1		

4.1.2 Test Setup Diagram:



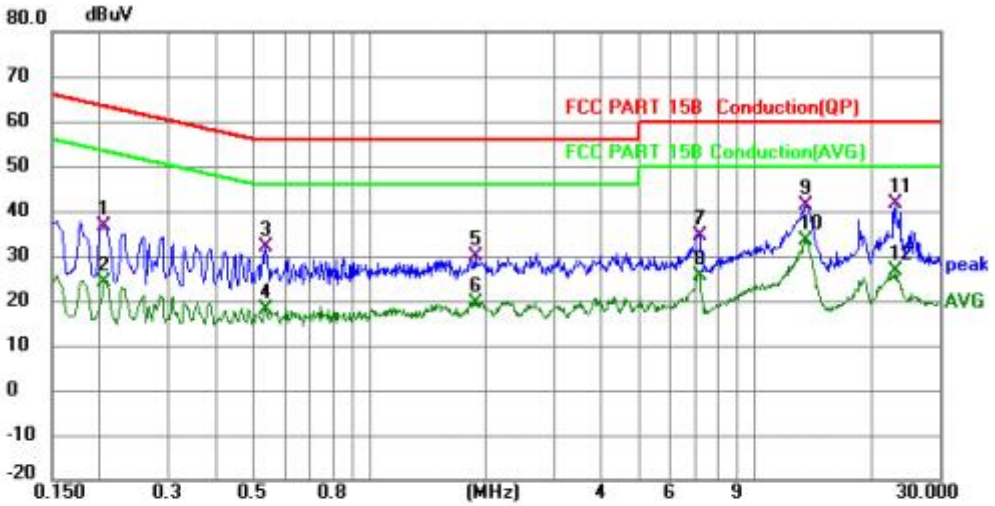
4.1.3 Test Data:

TM1 / Line: Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.177	16.67	19.63	36.30	64.63	-28.33	QP	
2		0.177	3.23	19.63	22.86	54.63	-31.77	AVG	
3		3.129	8.37	19.88	28.25	56.00	-27.75	QP	
4		3.129	-2.37	19.88	17.51	46.00	-28.49	AVG	
5		7.035	14.17	19.55	33.72	60.00	-26.28	QP	
6		7.035	4.79	19.55	24.34	50.00	-25.66	AVG	
7		13.492	20.90	19.81	40.71	60.00	-19.29	QP	
8	*	13.492	12.25	19.81	32.06	50.00	-17.94	AVG	
9		19.136	14.84	19.85	34.69	60.00	-25.31	QP	
10		19.136	2.41	19.85	22.26	50.00	-27.74	AVG	
11		23.226	21.64	19.92	41.56	60.00	-18.44	QP	
12		23.226	4.92	19.92	24.84	50.00	-25.16	AVG	

TM1 / Line: Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.204	17.00	19.65	36.65	63.45	-26.80	QP	
2		0.204	4.28	19.65	23.93	53.45	-29.52	AVG	
3		0.537	12.04	19.89	31.93	56.00	-24.07	QP	
4		0.537	-1.98	19.89	17.91	46.00	-28.09	AVG	
5		1.883	9.97	19.78	29.75	56.00	-26.25	QP	
6		1.883	-0.14	19.78	19.64	46.00	-26.36	AVG	
7		7.179	14.95	19.55	34.50	60.00	-25.50	QP	
8		7.179	5.95	19.55	25.50	50.00	-24.50	AVG	
9		13.520	21.58	19.81	41.39	60.00	-18.61	QP	
10	*	13.520	13.47	19.81	33.28	50.00	-16.72	AVG	
11		23.131	21.64	19.92	41.56	60.00	-18.44	QP	
12		23.131	6.57	19.92	26.49	50.00	-23.51	AVG	

***Note: 1) Pre-scan all modes and recorded the worst case results in this report.

2) Margin= Reading level + Correct factor–Limit

Correct Factor=Lisn Factor+Cable Factor+Insertion loss of Pulse Limitter

4.2 Radiated emissions (Below 1GHz)

Test Requirement:	15.109, Class B
Test Limit:	Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

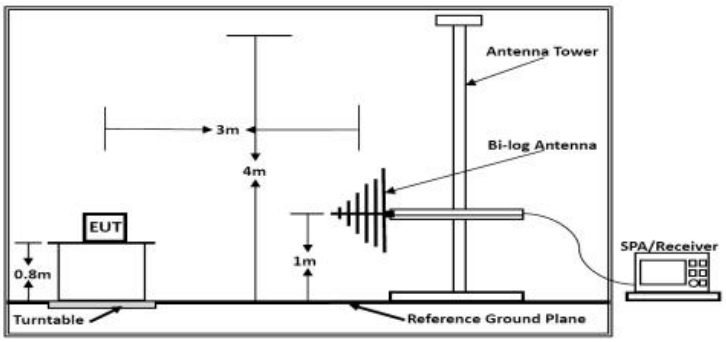
Frequency of emission (MHz)	Field strength @3m		Field strength @10m	
	(uV/m)	(dBuV/m)	(uV/m)	(dBuV/m)
30 – 88	100	40	30	29.5
88 – 216	150	43.5	45	33.1
216 – 960	200	46	60	35.6
Above 960	500	54	150	43.5

Test Method:	ANSI C63.4-2014
Procedure:	An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities. Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

4.2.1 E.U.T. Operation:

Operating Environment:			
Temperature:	26.4 °C	Humidity:	54.2 %
Pre test mode:	TM1,TM2		
Final test mode:	TM1,TM2		

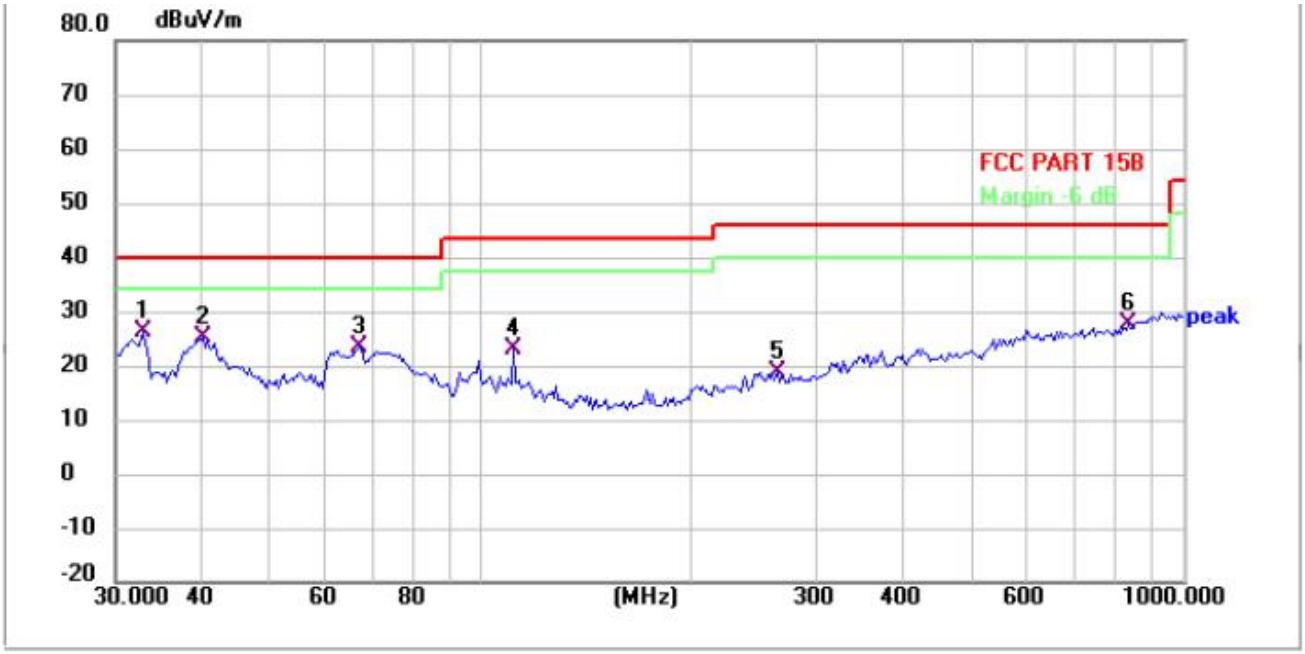
4.2.2 Test Setup Diagram:



Below 1GHz

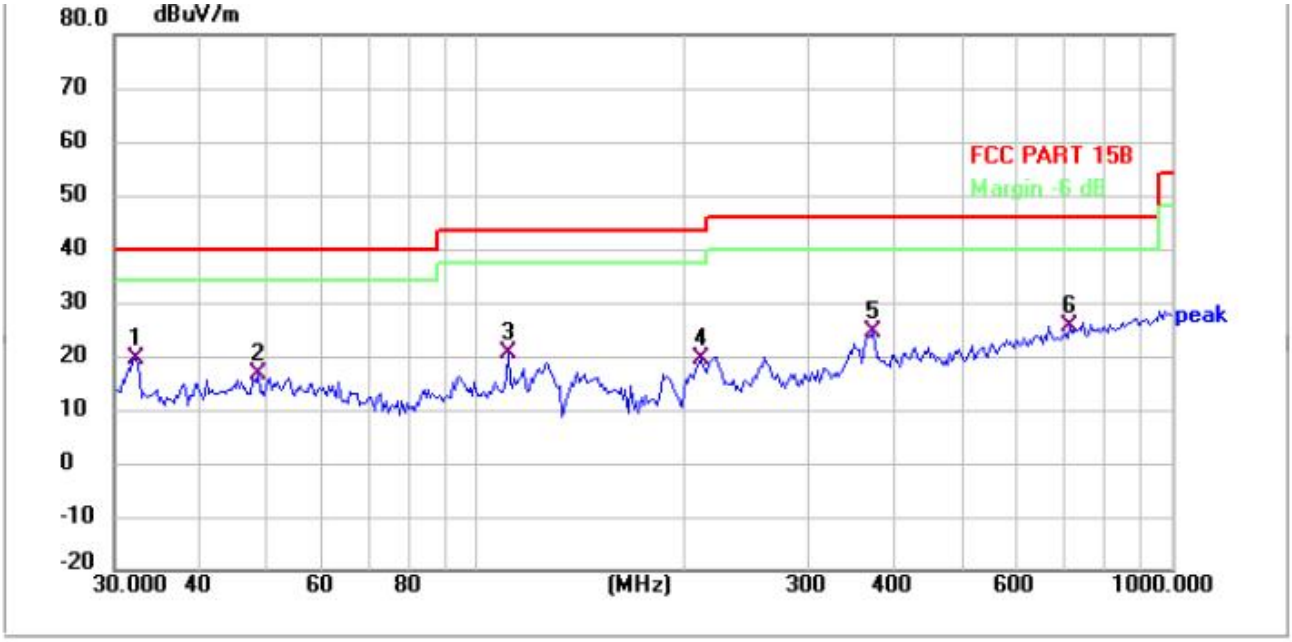
4.2.3 Test Data:

TM1 / Polarization: Horizontal



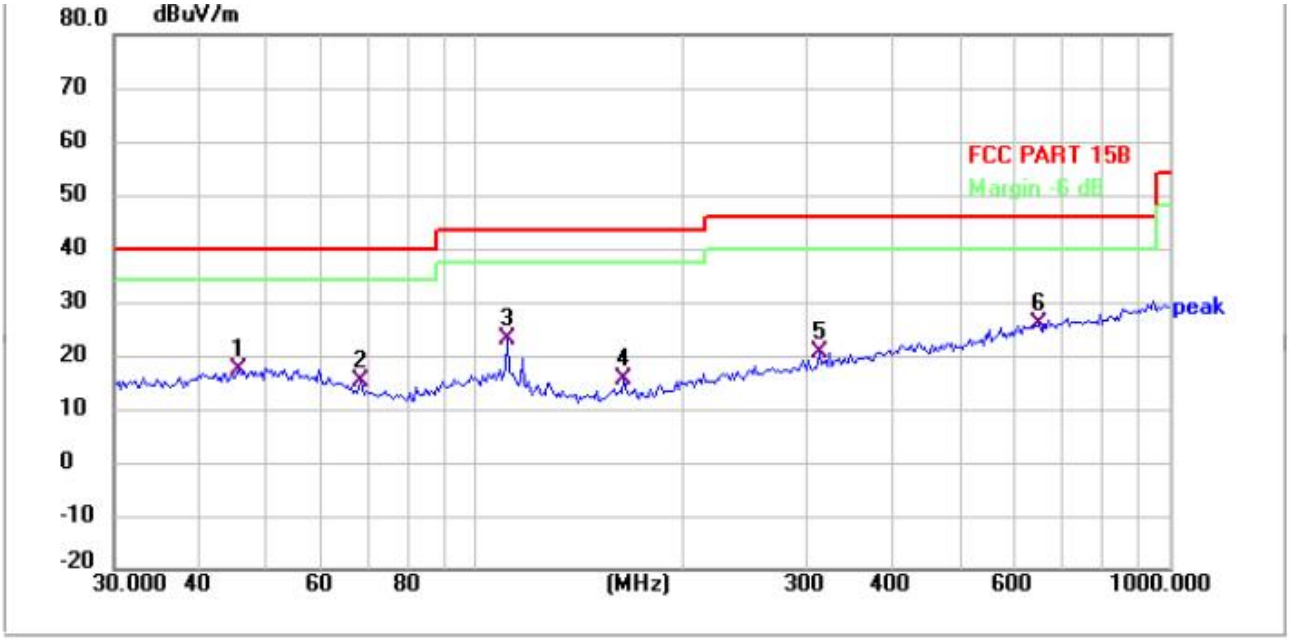
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	32.870	38.63	-12.54	26.09	40.00	-13.91	QP	P	
2	40.017	36.76	-11.72	25.04	40.00	-14.96	QP	P	
3	66.840	37.20	-13.80	23.40	40.00	-16.60	QP	P	
4	110.858	34.38	-11.49	22.89	43.50	-20.61	QP	P	
5	263.115	29.84	-11.12	18.72	46.00	-27.28	QP	P	
6	833.013	30.20	-2.53	27.67	46.00	-18.33	QP	P	

TM1 / Polarization: Vertical



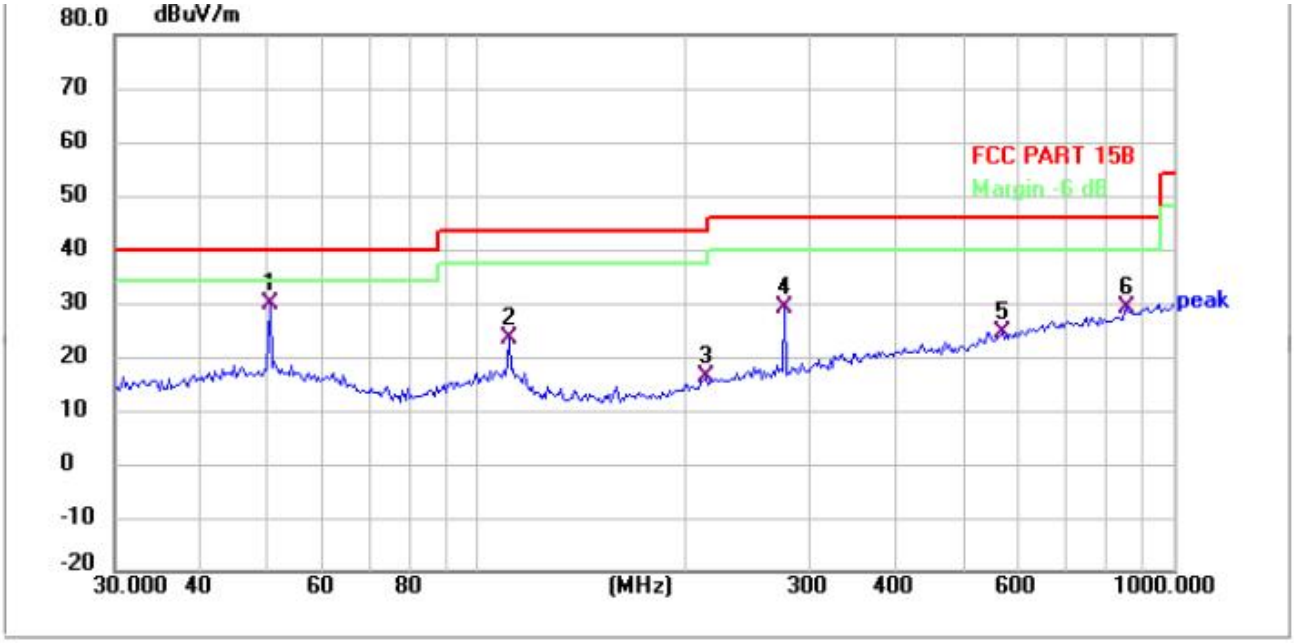
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	32.184	31.97	-12.51	19.46	40.00	-20.54	QP	P	
2	48.378	27.43	-10.95	16.48	40.00	-23.52	QP	P	
3	110.858	32.08	-11.49	20.59	43.50	-22.91	QP	P	
4	210.129	32.35	-12.98	19.37	43.50	-24.13	QP	P	
5	371.268	32.86	-8.54	24.32	46.00	-21.68	QP	P	
6 *	713.692	29.33	-3.67	25.66	46.00	-20.34	QP	P	

TM2 / Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	45.413	28.43	-11.08	17.35	40.00	-22.65	QP	P	
2	68.264	29.41	-14.16	15.25	40.00	-24.75	QP	P	
3	110.858	34.57	-11.49	23.08	43.50	-20.42	QP	P	
4	163.162	30.63	-15.15	15.48	43.50	-28.02	QP	P	
5	313.648	30.61	-9.98	20.63	46.00	-25.37	QP	P	
6 *	646.822	30.21	-4.32	25.89	46.00	-20.11	QP	P	

TM2 / Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	50.108	40.54	-10.89	29.65	40.00	-10.35	QP	P	
2	110.858	34.74	-11.49	23.25	43.50	-20.25	QP	P	
3	213.103	29.01	-12.87	16.14	43.50	-27.36	QP	P	
4	276.382	39.82	-10.83	28.99	46.00	-17.01	QP	P	
5	565.978	29.99	-5.65	24.34	46.00	-21.66	QP	P	
6	856.760	31.03	-2.02	29.01	46.00	-16.99	QP	P	

Note:1).Pre-Scan all mode, Thus record worse case mode result in this report.

2) Margin= Reading level + Correct factor – Limit

Correct Factor=Antenna Factor+Cable Factor- Pre-amplifier Factor

5. TEST SETUP PHOTOS

Refer to Appendix - Test Setup Photos for LCSA12094286E.docx

6. EUT CONSTRUCTIONAL DETAILS (EUT PHOTOS)

Refer to Appendix - EUT Photos for LCSA12094286E.docx

--- End of Report ---