

TEST REPORT

Report No.: BCTC2403263683E

Applicant: JEM ACCESSORIES INC.

Product Name: LED strip lighting

Test Model: MOW7-1005-ICM

Tested Date: 2024-03-15 to 2024-03-26

Issued Date: 2024-03-27



Shenzhen BCTC Testing Co., Ltd.

FCC ID: 2AHAS-MLEDB191
Product Name: LED strip lighting
Trademark: Moster
Model/Type Reference: MOW7-1005-ICM
Prepared For: JEM ACCESSORIES INC.
Address: 32 BRUNSWICK AVENUE, EDISON, NEW JERSEY, UNITED STATES, 08817
Manufacturer: JEM ACCESSORIES INC.
Address: No. 2 Keyuan East Road, High-tech Zone, Jiangmen City, Guangdong, China
Prepared By: Shenzhen BCTC Testing Co., Ltd.
Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China.
Sample Received Date: 2024-03-14
Sample Tested Date: 2024-03-15 to 2024-03-26
Issue Date: 2024-03-27
Report Number: BCTC2403263683E
Test Standards: FCC Part 15B
ANSI C63.4:2014
Test Results: PASS

Tested by:



Eric Yang/Project Handler

Approved by:



Zero Zhou/Reviewer

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(Note: N/A Means Not Applicable)

1. Version

Report No.	Issue Date	Description	Approved
BCTC2403263683E	2024-03-27	Original	Valid

2. Test Summary

The Product has been tested according to the following specifications:

Standard	Test Item	Test result
FCC Part 15B	Conducted Emission	Pass
FCC Part 15B	Radiated Emission	Pass



3. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Test item	Value (dB)
Conducted Emission (150kHz-30MHz)	3.10
Radiated Emission(30MHz~200MHz)	4.60
Radiated Emission(200MHz~1000MHz)	5.20
Radiated Emission(1GHz~6GHz)	5.20

4. Product Information And Test Setup

4.1 Product Information

Ratings: DC 24V 1A

4.2 Test Setup Configuration

See test photographs attached in EUT TEST SETUP PHOTOGRAPHS for the actual connections between Product and support equipment.

4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
1	Adapter	---	---	---	Auxiliary
2	LED light strip	---	---	---	Auxiliary

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.4 Test Mode

Test item	Test Mode	Test Voltage
Conducted emissions from the AC mains power ports (150KHz-30MHz) ☒ Class B	Working	AC 120V/60Hz
Radiated emissions(30MHz-1GHz) ☒ Class B	Working	AC 120V/60Hz
Radiated emissions(1GHz -6GHz) ☒ Class B	Working	AC 120V/60Hz

5. Test Facility And Test Instrument Used

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

5.2 Test Instrument Used

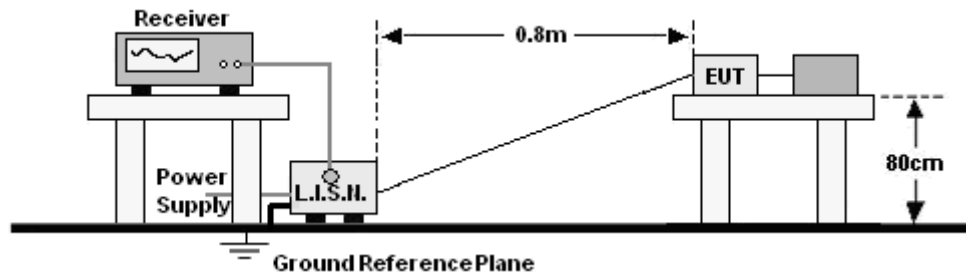
Conducted Emissions Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024
LISN	R&S	ENV216	101375	May 15, 2023	May 14, 2024
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Pulse limiter	Schwarzbeck	VTSD 9561-F	01323	Sept. 22, 2023	Sept. 21, 2024

Radiated Emissions Test (966 Chamber#02)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	SKET	966 Room	966	Nov. 02. 2021	Nov. 01.2024
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024
Receiver	R&S	ESRI7	100010	Nov. 13, 2023	Nov. 12, 2024
TRILOG Broadband Antenna	Schwarzbeck	VULB9168	1323	Feb. 28, 2024	Feb. 27, 2025
Amplifier	SKET	LNPA-30M01 G-30	SK2021082004	Nov. 13. 2023	Nov. 12, 2024
Software	SKET	EZ-EMC	FA-03A1	\	\
Horn Antenna	schwarzbeck	BBHA9120D	1541	May 31, 2023	May 30, 2024
Amplifier	SKET	LAPA_01G1 8G-45dB	SK2021040901	May 15, 2023	May 14, 2024

6. Conducted Emission At The Mains Terminals Test

6.1 Block Diagram Of Test Setup

For mains ports:



6.2 Limit

Limits for Class B devices

Frequency range (MHz)	Limits dB(μV)	
	Quasi-peak	Average
0,15 to 0,50	66 to 56*	56 to 46*
0,50 to 5	56	46
5 to 30	60	50

Notes:

1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

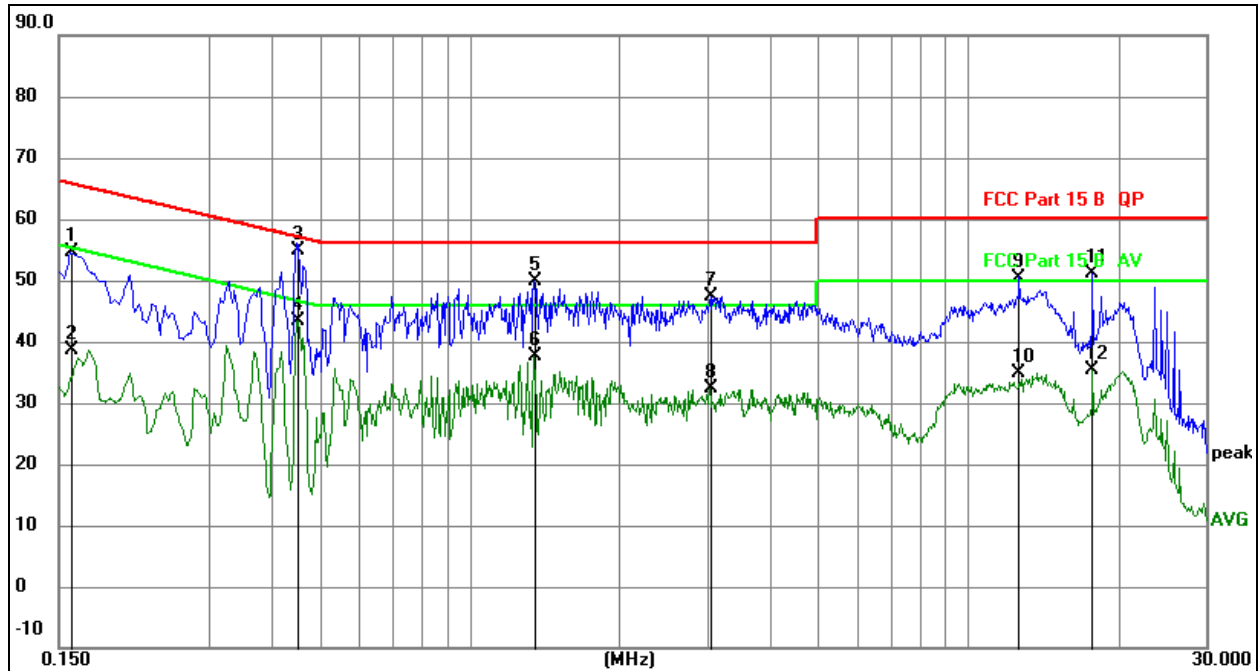
6.3 Test procedure

For mains ports:

- a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
- b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.
- c. For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

6.4 Test Result

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Phase:	Line
Test Voltage :	AC 120V/60Hz	Test Mode:	Working

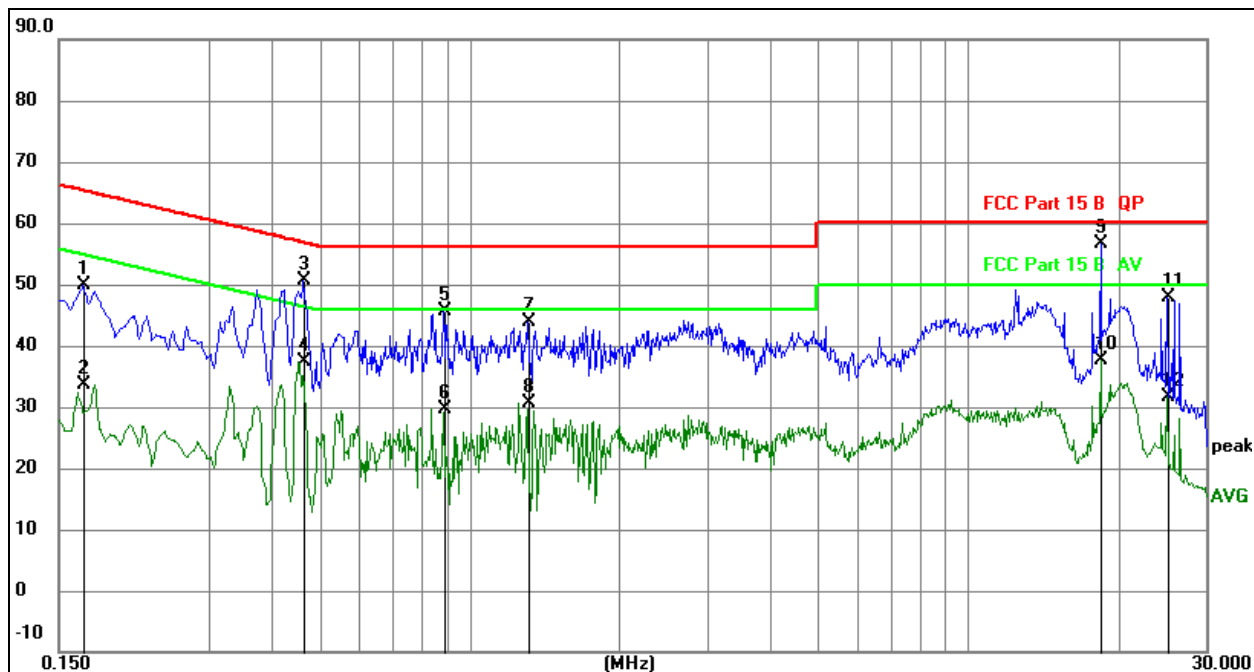


Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1582	34.80	19.75	54.55	65.56	-11.01	QP
2		0.1582	18.78	19.75	38.53	55.56	-17.03	AVG
3	*	0.4520	35.08	19.84	54.92	56.84	-1.92	QP
4		0.4520	23.56	19.84	43.40	46.84	-3.44	AVG
5		1.3450	30.01	19.95	49.96	56.00	-6.04	QP
6		1.3450	17.58	19.95	37.53	46.00	-8.47	AVG
7		3.0414	27.13	20.32	47.45	56.00	-8.55	QP
8		3.0414	12.02	20.32	32.34	46.00	-13.66	AVG
9		12.6489	30.62	19.88	50.50	60.00	-9.50	QP
10		12.6489	15.08	19.88	34.96	50.00	-15.04	AVG
11		17.7549	31.09	19.94	51.03	60.00	-8.97	QP
12		17.7549	15.37	19.94	35.31	50.00	-14.69	AVG

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Phase:	Neutral
Test Voltage :	AC 120V/60Hz	Test Mode:	Working



Remark:

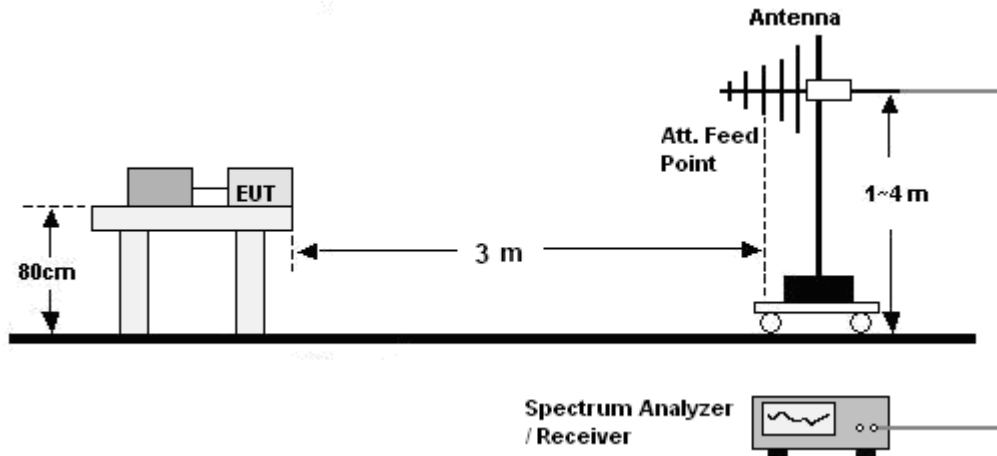
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1680	30.09	19.77	49.86	65.06	-15.20	QP
2		0.1680	13.77	19.77	33.54	55.06	-21.52	AVG
3		0.4650	30.83	19.84	50.67	56.60	-5.93	QP
4		0.4650	17.59	19.84	37.43	46.60	-9.17	AVG
5		0.8880	25.77	19.91	45.68	56.00	-10.32	QP
6		0.8880	9.62	19.91	29.53	46.00	-16.47	AVG
7		1.3110	23.85	19.95	43.80	56.00	-12.20	QP
8		1.3110	10.71	19.95	30.66	46.00	-15.34	AVG
9	*	18.5190	36.78	19.96	56.74	60.00	-3.26	QP
10		18.5190	17.67	19.96	37.63	50.00	-12.37	AVG
11		25.1835	27.94	19.99	47.93	60.00	-12.07	QP
12		25.1835	11.64	19.99	31.63	50.00	-18.37	AVG

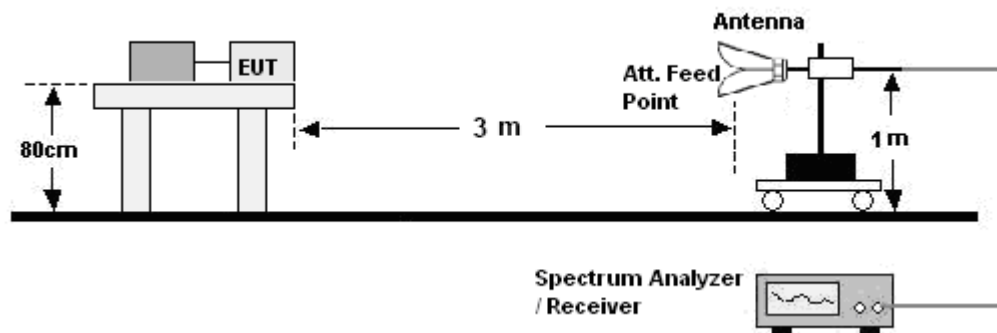
7. Radiation Emission Test

7.1 Block Diagram Of Test Setup

30MHz ~ 1GHz:



Above 1GHz:



7.2 Limit

Limits for Class B devices

Frequency (MHz)	limits at 3m dB(μ V/m)		
	QP Detector	PK Detector	AV Detector
30-88	40.0	--	--
88-216	43.5	--	--
216-960	46.0	--	--
960 to 1000	54.0	--	--
Above 1000	--	74.0	54.0

Note: The lower limit shall apply at the transition frequencies.

7.3 Test Procedure

30MHz ~ 1GHz:

- The Product was placed on the nonconductive turntable 0.8 m above the ground at a chamber.
- Set the spectrum analyzer/receiver in Peak detector, Max Hold mode, and 120 kHz RBW. Record the maximum field strength of all the pre-scan process in the full band when the antenna is varied between 1~4 m in both horizontal and vertical, and the turntable is rotated from 0 to 360 degrees.
- For each frequency whose maximum record was higher or close to limit, measure its QP value: vary the antenna's height and rotate the turntable from 0 to 360 degrees to find the height and degree where Product radiated the maximum emission, then set the test frequency analyzer/receiver to QP Detector and specified bandwidth with Maximum Hold Mode, and record the maximum value.

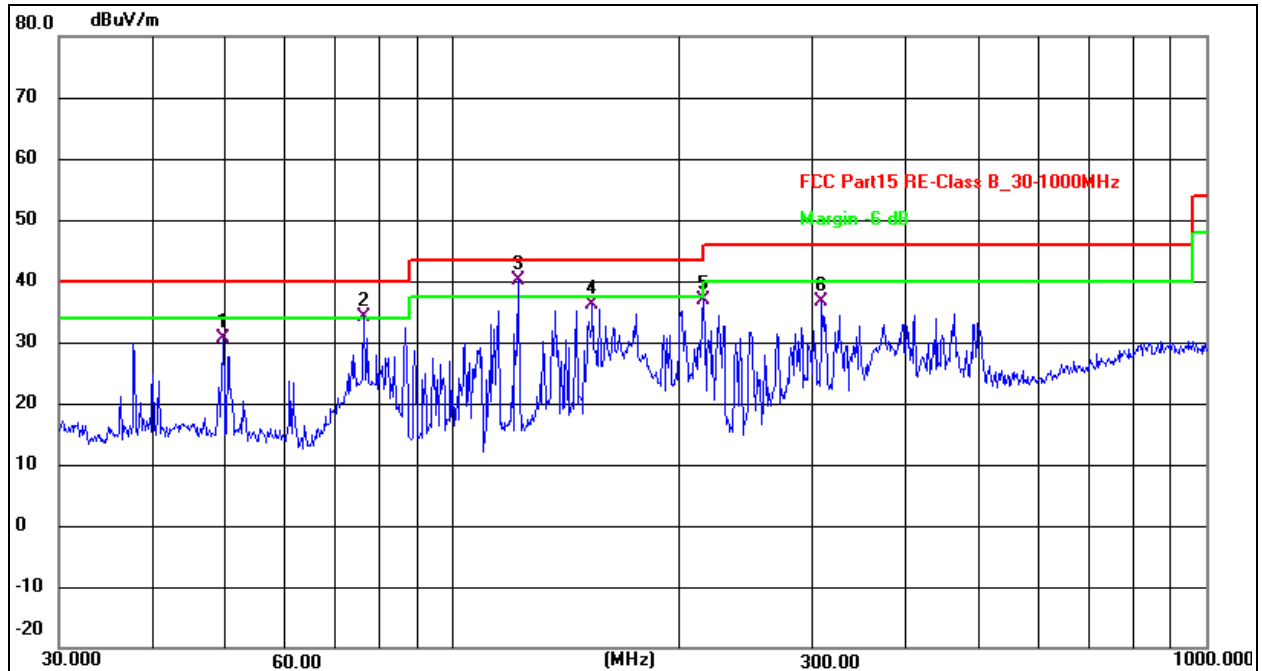
Above 1GHz:

- The Product was placed on the non-conductive turntable 0.8 m above the ground in a full anechoic chamber.
- Set the spectrum analyzer/receiver in Peak detector, Max Hold mode, and 1MHz RBW. Record the maximum field strength of all the pre-scan process in the full band when the antenna is varied in both horizontal and vertical, and the turntable is rotated from 0 to 360 degrees.
- For each frequency whose maximum record was higher or close to limit, measure its AV value: rotate the turntable from 0 to 360 degrees to find the degree where Product radiated the maximum emission, then set the test frequency analyzer/receiver to AV value and specified bandwidth with Maximum Hold Mode, and record the maximum value.

7.4 Test Result

30MHz ~ 1GHz:

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Horizontal
Test Voltage :	AC 120V/60Hz	Test Mode:	Working

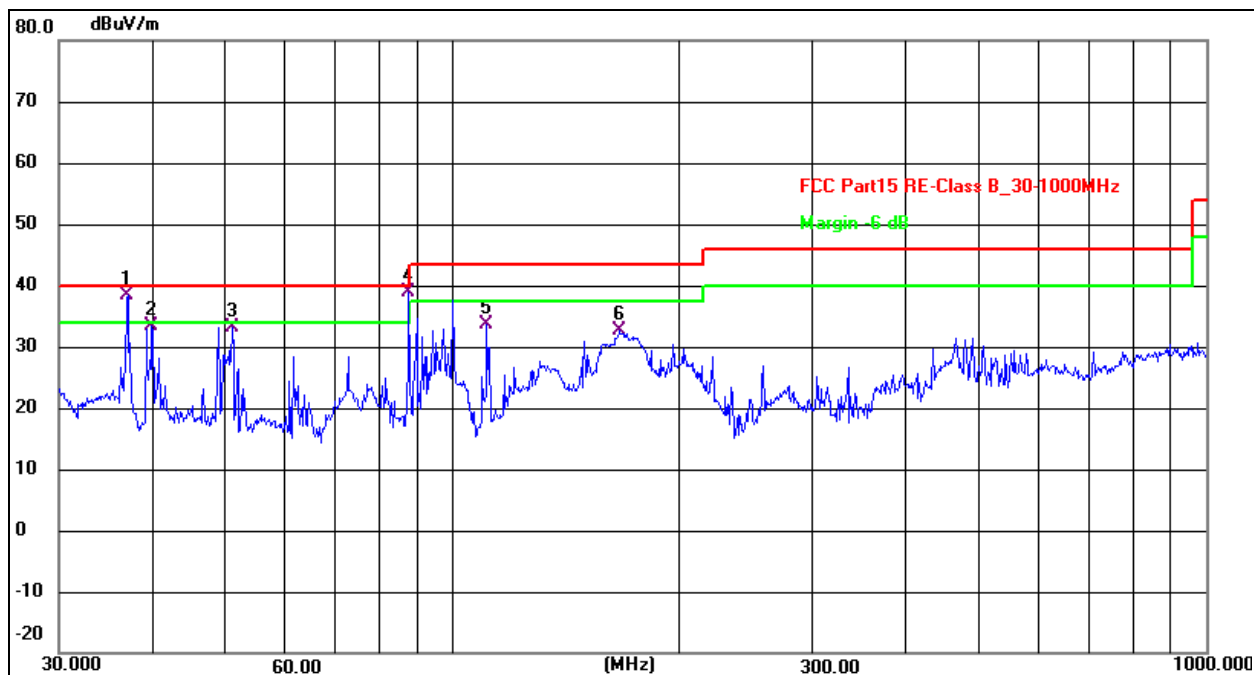


Remark:

- Factor = Antenna Factor + Cable Loss – Pre-amplifier.
- Measurement = Reading Level + Correct Factor
- Over = Measurement - Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	49.5328	41.31	-10.68	30.63	40.00	-9.37	QP
2 !	76.2442	49.15	-15.00	34.15	40.00	-5.85	QP
3 *	121.9755	52.14	-11.98	40.16	43.50	-3.34	QP
4	153.2003	46.76	-10.60	36.16	43.50	-7.34	QP
5	215.2678	49.77	-12.96	36.81	43.50	-6.69	QP
6	308.9125	45.67	-9.06	36.61	46.00	-9.39	QP

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Vertical
Test Voltage :	AC 120V/60Hz	Test Mode:	Working



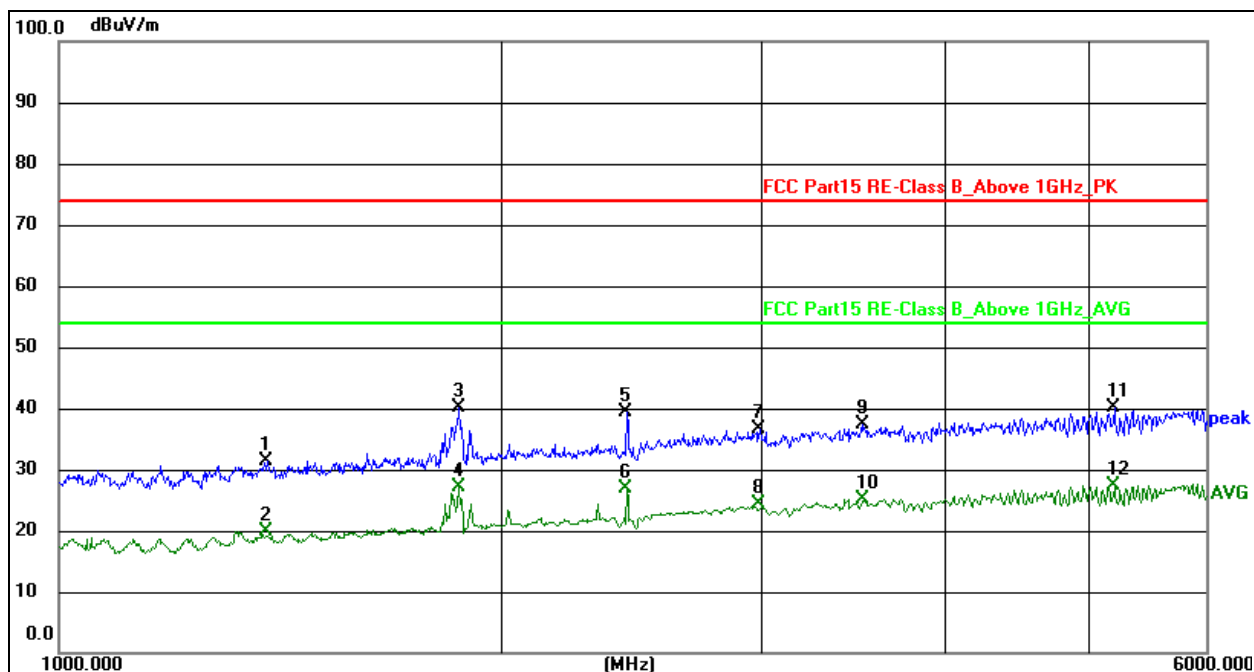
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement = Reading Level + Correct Factor
3. Over = Measurement - Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 !	37.0248	49.20	-10.80	38.40	40.00	-1.60	QP
2	39.8542	43.76	-10.27	33.49	40.00	-6.51	QP
3	50.9419	43.96	-10.79	33.17	40.00	-6.83	QP
4 *	87.4176	55.18	-16.23	38.95	40.00	-1.05	QP
5	110.9570	47.12	-13.54	33.58	43.50	-9.92	QP
6	166.6513	43.47	-10.91	32.56	43.50	-10.94	QP

Above 1GHz:

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Horizontal
Test Voltage :	AC 120V/60Hz	Test Mode:	Working

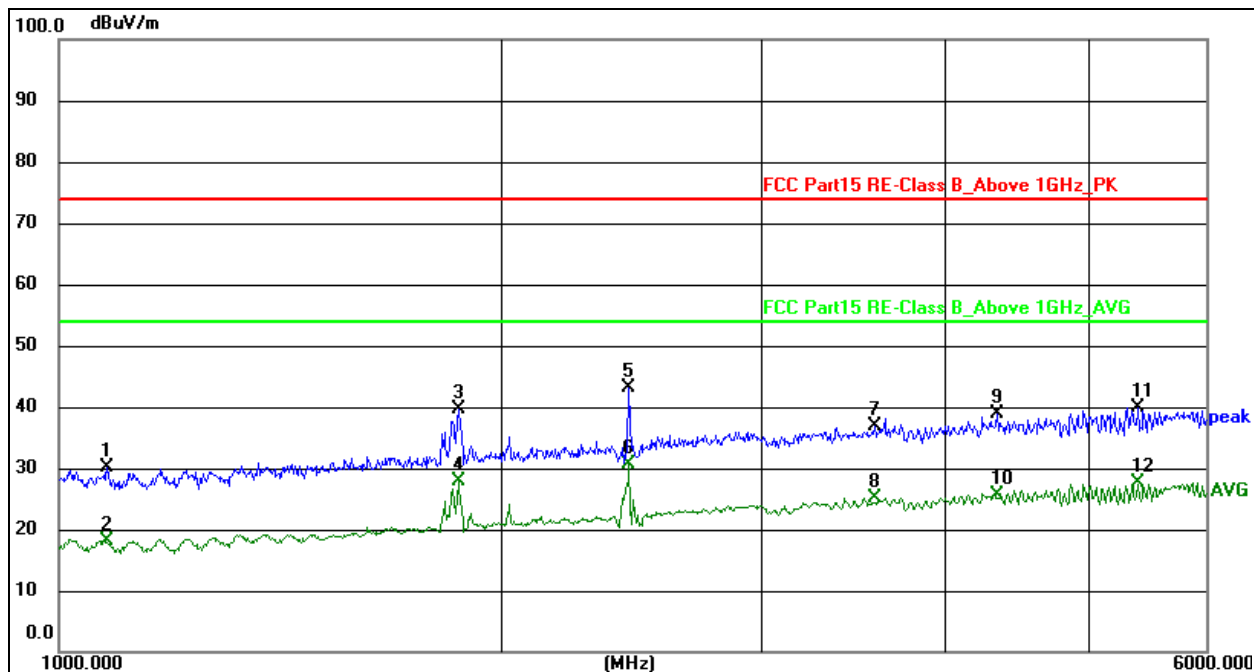


Remark:

- Factor = Antenna Factor + Cable Loss – Pre-amplifier.
- Measurement = Reading Level + Correct Factor
- Over = Measurement - Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1385.554	59.29	-28.03	31.26	74.00	-42.74	peak
2	1385.554	47.94	-28.03	19.91	54.00	-34.09	AVG
3	1868.851	66.61	-26.50	40.11	74.00	-33.89	peak
4	1868.851	53.72	-26.50	27.22	54.00	-26.78	AVG
5	2427.643	64.31	-24.84	39.47	74.00	-34.53	peak
6	2427.643	51.81	-24.84	26.97	54.00	-27.03	AVG
7	2988.480	59.79	-23.21	36.58	74.00	-37.42	peak
8	2988.480	47.47	-23.21	24.26	54.00	-29.74	AVG
9	3505.144	59.83	-22.33	37.50	74.00	-36.50	peak
10	3505.144	47.56	-22.33	25.23	54.00	-28.77	AVG
11	5198.752	59.40	-19.24	40.16	74.00	-33.84	peak
12 *	5198.752	46.67	-19.24	27.43	54.00	-26.57	AVG

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Vertical
AC 120V/60Hz	Test Mode:	Working	Working



Remark:

- Factor = Antenna Factor + Cable Loss – Pre-amplifier.
- Measurement = Reading Level + Correct Factor
- Over = Measurement - Limit

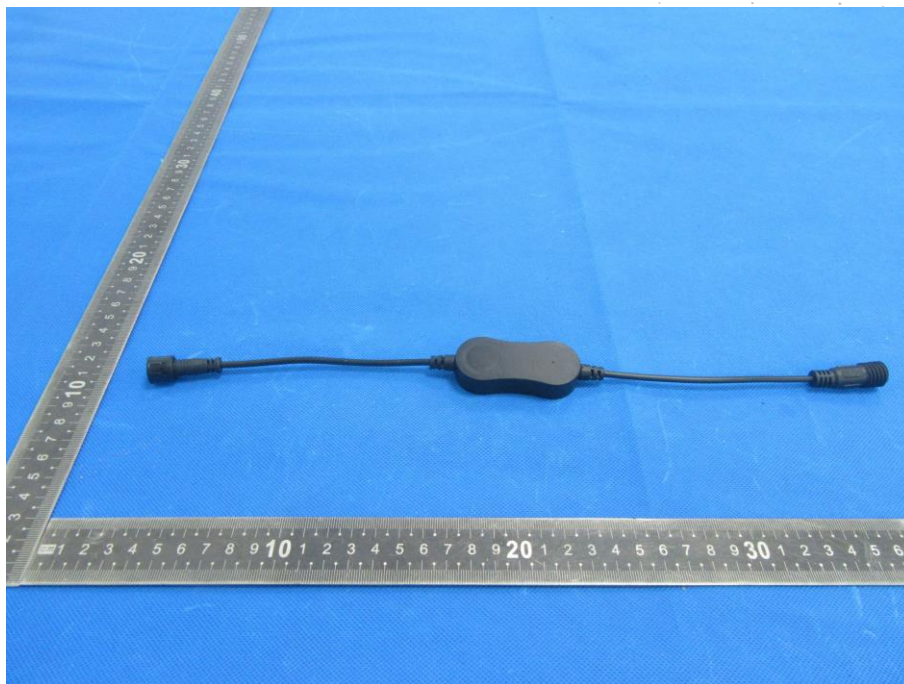
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1078.158	59.03	-29.01	30.02	74.00	-43.98	peak
2	1078.158	47.25	-29.01	18.24	54.00	-35.76	AVG
3	1865.506	66.19	-26.51	39.68	74.00	-34.32	peak
4	1865.506	54.37	-26.51	27.86	54.00	-26.14	AVG
5	2431.997	68.05	-24.83	43.22	74.00	-30.78	peak
6 *	2431.997	55.34	-24.83	30.51	54.00	-23.49	AVG
7	3574.914	59.02	-22.21	36.81	74.00	-37.19	peak
8	3574.914	47.44	-22.21	25.23	54.00	-28.77	AVG
9	4330.397	59.63	-20.81	38.82	74.00	-35.18	peak
10	4330.397	46.43	-20.81	25.62	54.00	-28.38	AVG
11	5398.093	58.95	-19.05	39.90	74.00	-34.10	peak
12	5398.093	46.61	-19.05	27.56	54.00	-26.44	AVG

8. EUT Photographs

EUT Photo 1



EUT Photo 2

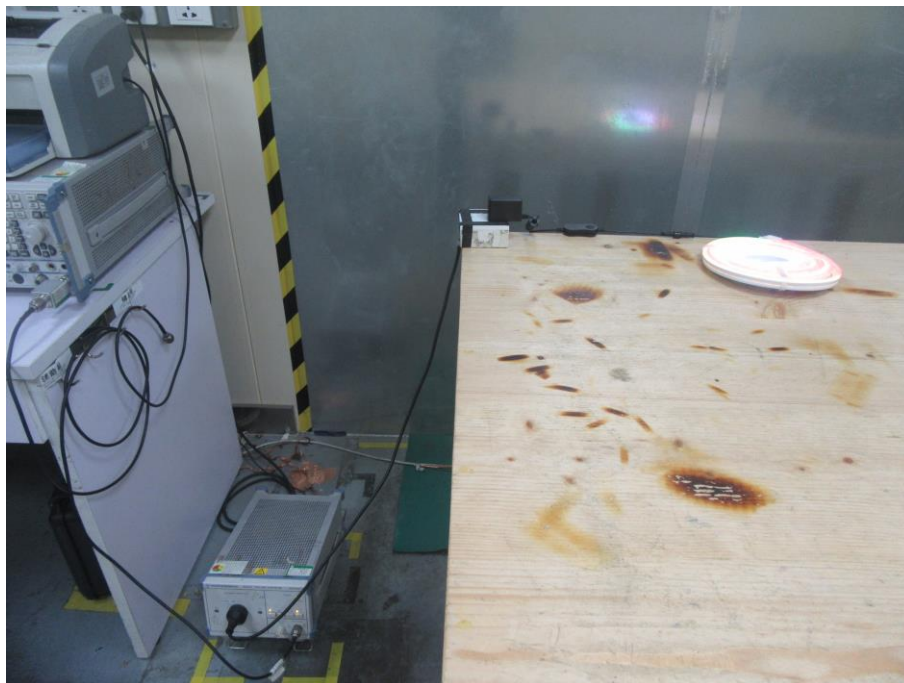


EUT Photo 3



9. EUT Test Setup Photographs

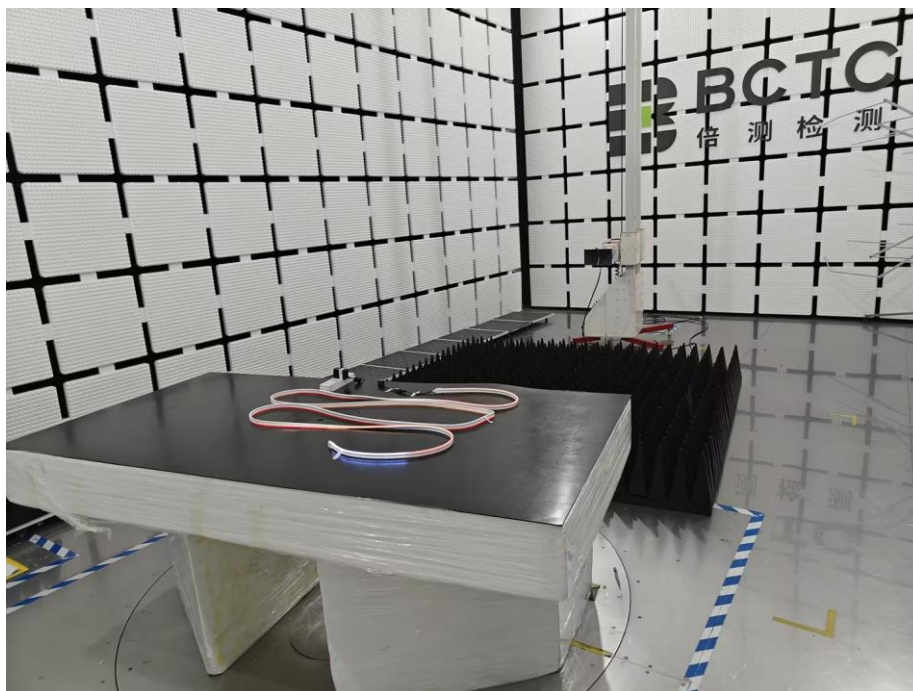
Conducted emissions



Radiated emissions Below 1G



Radiated emissions Above1G



STATEMENT

1. The equipment lists are traceable to the national reference standards.
2. The test report can not be partially copied unless prior written approval is issued from our lab.
3. The test report is invalid without the "special seal for inspection and testing".
4. The test report is invalid without the signature of the approver.
5. The test process and test result is only related to the Unit Under Test.
6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.
7. The quality system of our laboratory is in accordance with ISO/IEC17025.
8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

Address:

1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

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***** END *****

