DEKRA Testing and Certification (Suzhou) Co., Ltd.
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Test report No:
23C0382R-RF-US-P06V01

FCC TEST REPORT

Product Name	Wireless charging pad for OMBII Luminaire
Trademark	DEDON
Model and /or type reference	CFA0317CN0, CZG0317CN0
FCC ID	2AQLN-OMBII02
Applicant´s name / address	DEDON INC. 657-C BRIGHAM ROAD, GREENSBORO, North Carolina 27140, United States
Test method requested, standard	FCC CFR Title 47 Part 15 Subpart C
Verdict Summary	IN COMPLIANCE
Documented by (name / position & signature)	Feng Jiao / Project Engineer Feng Jiao
Approved by (name / position & signature)	Jack Zhang/ Manager Jack Zhang
Date of issue	2024-01-24
Report Version	V1.1
Report template No	Template_FCC Part 15C-RF-V1.0

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COMPETENCES AND GUARANTEES

DEKRA is a testing laboratory competent to carry out the tests described in this report.
In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA.

GENERAL CONDITIONS

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Date(receive sample)	Dec. 13, 2023
Date (start test)	Dec. 15, 2023
Date (finish test)	Dec. 30, 2023

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT : Equipment Under Test
QP : Quasi-Peak
CAV : CISPR Average
AV : Average
CDN : Coupling Decoupling Network
SAC : Semi-Anechoic Chamber
OATS : Open Area Test Site
BW : Bandwidth
AM : Amplitude Modulation
PM : Pulse Modulation
HCP : Horizontal Coupling Plane
VCP : Vertical Coupling Plane
U_N : Nominal voltage
*T*x : Transmitter
*R*x : Receiver
N/A : Not Applicable
N/M : Not Measured

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
23C0382R-RF-US-P06V01	V1.0	Initial issue of report.	2024-01-19
23C0382R-RF-US-P06V01	V1.1	P19 add note. P26~31 Add test data. (The test report No.: 23C0382R-RF-US-P06V01 V1.1 is to replace the test report No.: 23C0382R-RF-US-P06V01 V1.0, and test report 23C0382R-RF-US-P06V01 V1.0 is obsoleted.)	2024-01-24

REMARKS AND COMMENTS

1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
2. These test results on a sample of the device are for the purpose of demonstrating Compliance with FCC CFR Title 47 Part 15 Subpart C.
3. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to account the uncertainty associated with the measurement result.
4. The test results presented in this report relate only to the object tested.
5. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
6. This report will not be used for social proof function in China market.
7. DEKRA declines any responsibility with the following test data provided by customer that may affect the validity of result:
   - Chapter 1.1 General Description of the Item(s);
   - Chapter 1.2 Antenna Informaion;
   - Chapter 1.3 Channel List.

USED EQUIPMENT

Field Strength of Spurious/ Channel Bandwidth (9kHz-1GHz) / AC2

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100573	2023.09.17	2024.09.16
Loop Antenna	R&S	HFH2-Z2E	101149	2023.04.25	2024.04.24
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2023.02.10	2024.02.09
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2023.05.21	2024.05.20
Temperature/Humidity Meter	RTS	RTS-8S	AC2-TH	2023.05.19	2024.05.18
Dekra test software	Dekra	N/A	N/A	N/A	N/A

UNCERTAINTY

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95% .

Test item	Uncertainty
AC Power Line Conducted Emission	150kHz~30MHz: 2.40dB
Radiated Emission(9KHz~30MHz)	Horizontal: 9KHz~30MHz: 2.10 dB Vertical: 30MHz~200MHz: 2.30 dB
Radiated Emission(30MHz~1GHz)	± 3.80 dB
Occupied Bandwidth	±150Hz

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Product Name..... :	Wireless charging pad for OMBII Luminaire
Model No. ..... :	CFA0317CN0, CZG0317CN0
Trademark ..... :	DEDON
FCC ID ..... :	2AQLN-OMBII02
Software Version..... :	IP6826DEMO 2.230905
Hardware Version ..... :	DED003_CHARGE_V5.0
Manufacturer..... :	EI Dongguan Limited
Manufacturer Address..... :	No.3 Fukang West Road, Honghualin Industrial Zone, Chongkoushequ, Houjie Dongguan
Factory ..... :	EI Dongguan Limited
Factory Address..... :	No.3 Fukang West Road, Honghualin Industrial Zone, Chongkoushequ, Houjie Dongguan
Model differdnces..... :	The difference between the models is only the region of sale

Operating Frequency Range ..... :	147kHz
Type of Modulation..... :	ASK
Number of Channel..... :	1

Rated power supply .....:	Voltage and Frequency	
	☐	AC: 220 – 240 Vac, 50 / 60 Hz,
	☐	AC: 100 – 240 Vac, 50 / 60 Hz
	☒	DC: 9 Vdc , 2A
	☐	Battery: 12 Vdc
	☐	Adapter: 5V
Adapter.....:	N/A	
	N/A	
Mounting position.....:	☒	Table top equipment
	☐	Wall/Ceiling mounted equipment
	☐	Floor standing equipment
	☐	Hand-held equipment
	☐	Other: Equipment for vehicular use

1.2 Antenna Information

Antenna Model.....:	N/A			
Antenna Delivery .....:	☒	1TX + 1RX		
	☐	2TX + 2RX		
	☐	Others:……		
Antenna technology.....:	☒	SISO		
	☐	MIMO	☐	CDD
			☐	Beam-forming
Antenna Type.....:	☐	External	☐	Dipole
			☐	Sectorized
	☒	Internal	☐	Ceramic Chip
			☐	PIFA
			☐	PCB
			☒	Others: Coil antenna

1.3 Channel List

Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
01	147 kHz	--	--	--	--	--	--

Note: The General Description of the Item , antenna information and Channel List for the EUT in clause 1 are provided and confirmed by the client.

2 DESCRIPTION OF TEST SETUP

2.1 Operating mode(s) used for tests

During the tests the following operating mode(s) has(have) been used.

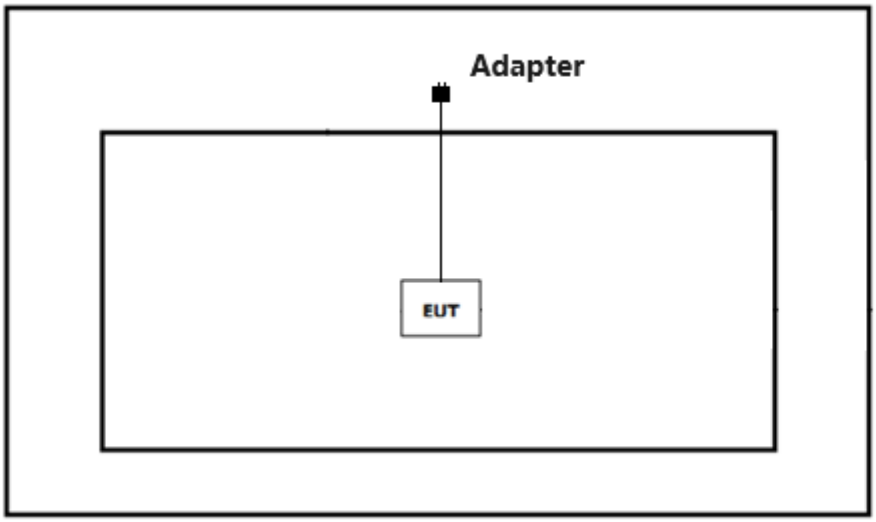
Test Mode For WPT	Mode 1: Transmit

2.2 Auxiliary equipment / Test software for the EUT

Auxiliary equipment	Type / Version	Manufacturer	Supplied by
Load resistance	N/A	N/A	N/A
software	Type / Version	Manufacturer	Supplied by
N/A	N/A	N/A	N/A

2.3 Test Configuration / Block diagram used for tests

Test setup Diagram- Radiated Test



2.4 Testing process

1	Setup the EUT as shown in Section 2.3.
2	Turn on the power of equipment.
3	Verify that the EUT works properly.

3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

3.1 Standards

Standard	Year	Description
CFR 47, FCC Part 15 C	2023	Intentional Radiators
ANSI C63.10	2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

3.2 Deviation(s) from the Standard(s) / Test Specification(s)

The following deviation(s) was / were made from the published requirements of the listed standards: N/A.

(Please define the deviations from the standard(s) if applicable)

3.3 Overview of results

Requirement – Test case	Basic standard(s)	Verdict
AC Power Line Conducted Emission	FCC CFR Title 47 Part 15 Subpart C Section 15.207	PASS
Field Strength of Spurious	FCC CFR Title 47 Part 15 Subpart C Section 15.209	PASS
Channel Bandwidth	FCC CFR Title 47 Part 15 Subpart C Section 15.215(c)	PASS
Antenna Requirement	FCC CFR Title 47 Part 15 Subpart C: Section 15.203	PASS
Note 1: Not applicable, this device supplied by DC.		

Performed Test Item	Remark
AC Power Line Conducted Emission	Test data please refer to **Appendix A**
Field Strength of Spurious	Test data please refer to **Appendix B**
Channel Bandwidth	Test data please refer to **Appendix C**

3.4 Test Matrix

Test item	Model: CZG0317CN0		
	1(#1)	2()	3()
AC Power Line Conducted Emission	☒	☐	☐
Field Strength of Spurious	☒	☐	☐
Channel Bandwidth	☒	☐	☐
Antenna Requirement	☒	☐	☐

3.5 Test Facility

USA	**:**	**FCC Designation Number: CN1199**

4 TEST RESULTS

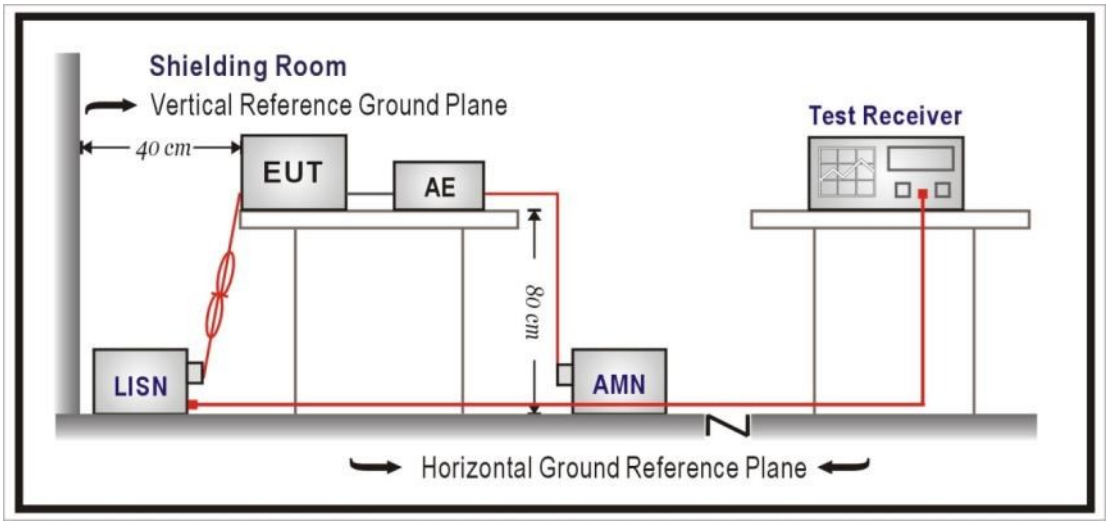
4.1 AC Power Line Conducted Emission	VERDICT: PASS

4.1.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.207	
Frequency range [MHz]	Limit: QP [dB(μV)[1)]]	Limit: AV [dB(μV) [1)]]
0,15 - 0,50	66 – 56 [2)]	56 - 46 [2)]
0,50 - 5,0	56	46
5,0 - 30	60	50

[1)] At the transition frequency, the lower limit applies.
[2)] The limit decreases linearly with the logarithm of the frequency.
NOTE 1: The exclusion band for transmitters shall be considered for transmitters operating at frequencies below 30 MHz.
NOTE 2: Where the AC output port is directly connected (or via a circuit breaker) to the AC power input port of the EUT the AC power output port need not to be tested.

4.1.2 Test Setup



4.1.3 Test Procedure

	References Rule	Chapter	Item
☒	ANSI C63.10:2013	6.2	Standard test method for ac power-line conducted emissions from unlicensed wireless devices

4.2 Field Strength of Spurious — VERDICT: PASS

4.2.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.209		
Frequency (MHz)	Field strength (μV/m)	Field strength (dBμV/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30(Note 1)
1.705 - 30	30	29.5	30(Note 1)
30 - 88	100	40	3(Note 2)
88 - 216	150	43.5	3(Note 2)
216 - 960	200	46	3(Note 2)
Above 960	500	54	3(Note 2)

Note 1: The tighter limits apply at the band edges.

Note 2: Measurements were performed at 10m and the data was extrapolated to the specified measurement distance of 300m using the square of an inverse linear distance extrapolation factor (40 dB/decade) as specified in §15.31(f)(2). Extrapolation Factor = 40 log10(300/10) = 59dB for example.

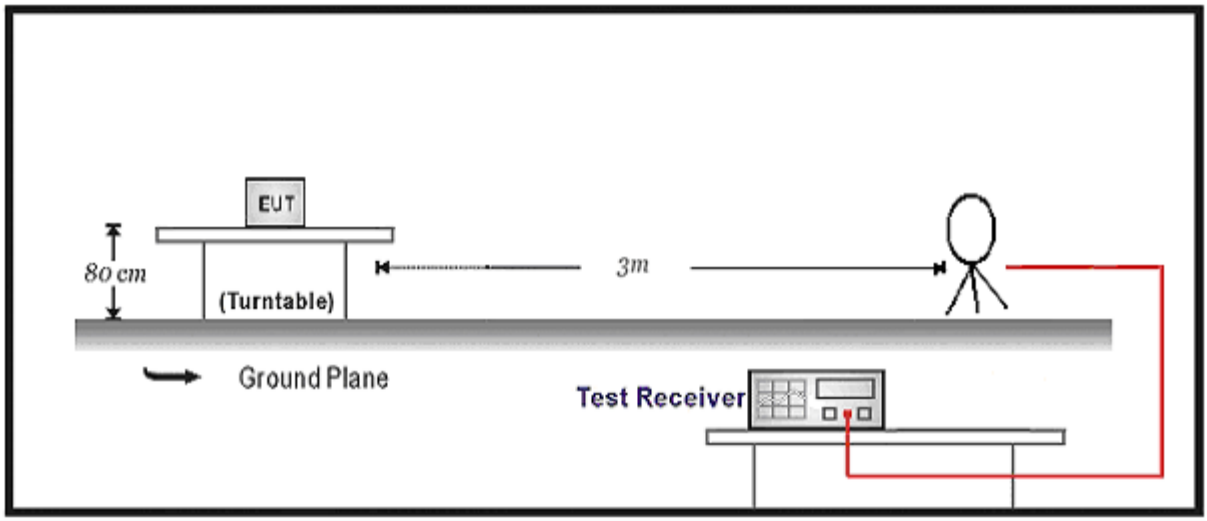
Measurements were performed at 10m and the data was extrapolated to the specified measurement distance of 30m using the square of an inverse linear distance extrapolation factor (40 dB/decade) as specified in §15.31(f)(2). Extrapolation Factor = 40 log10(30/10) = 19dB for example.

Measurements were performed at 3m and the data was extrapolated to the specified measurement distance of 10m using the square of an inverse linear distance extrapolation factor (40 dB/decade) as specified in §15.31(f)(2). Extrapolation Factor = 40 log10(10/3) = 20.9dB for example.

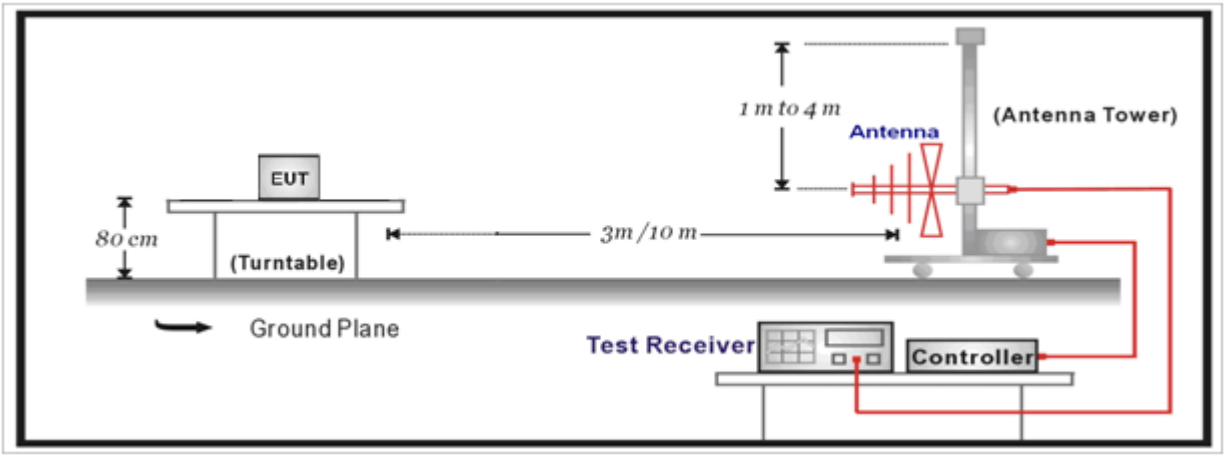
Note 3: All measurements were performed using a loop antenna. The antenna was positioned in three orthogonal positions (X front, Y side, Z top) and the position with the highest emission level was recorded.

4.2.2 Test Setup

Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



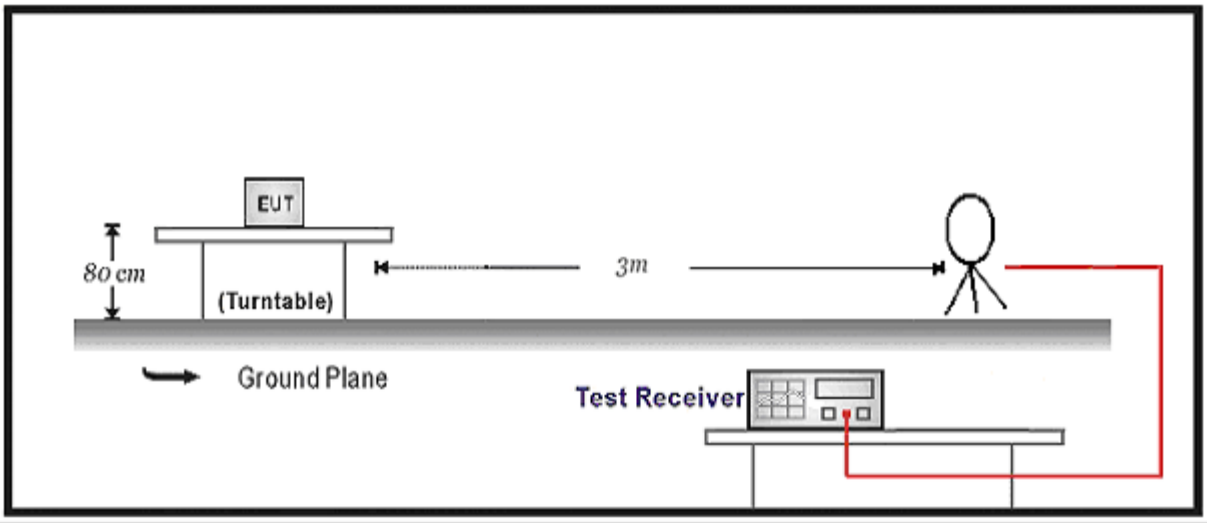
4.2.3 Test Procedure

	References Rule			Chapter	Description
☒	ANSI C63.10			11.12	Emissions in restricted frequency bands
	☒	ANSI C63.10		11.12.1	Radiated emission measurements
	☒	ANSI C63.10		11.12.2.7	Radiated spurious emission test
		☒	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
		☒	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
		☐	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

4.3 Channel Bandwidth	VERDICT: PASS

4.3.1 Limit	
Standard	FCC Part 15 Subpart C
Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§15.215(c), 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.	

4.3.2 Test Setup



4.3.3 Test Procedure

The bandwidth of the fundamental frequency was measured by spectrum analyzer with the RBW 1%~5% of 20dBc bandwidth and the VBW three times of the RBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

4.4 Antenna Requirement	VERDICT: PASS

4.4.1 Limit:	
Standard	FCC Part 15 Subpart C Paragraph 15.203
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsibby LE 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 use of a standard antenna jack or eby LEctrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally instalby LEd, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the instalby LEr shall be responsibby LE for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.	

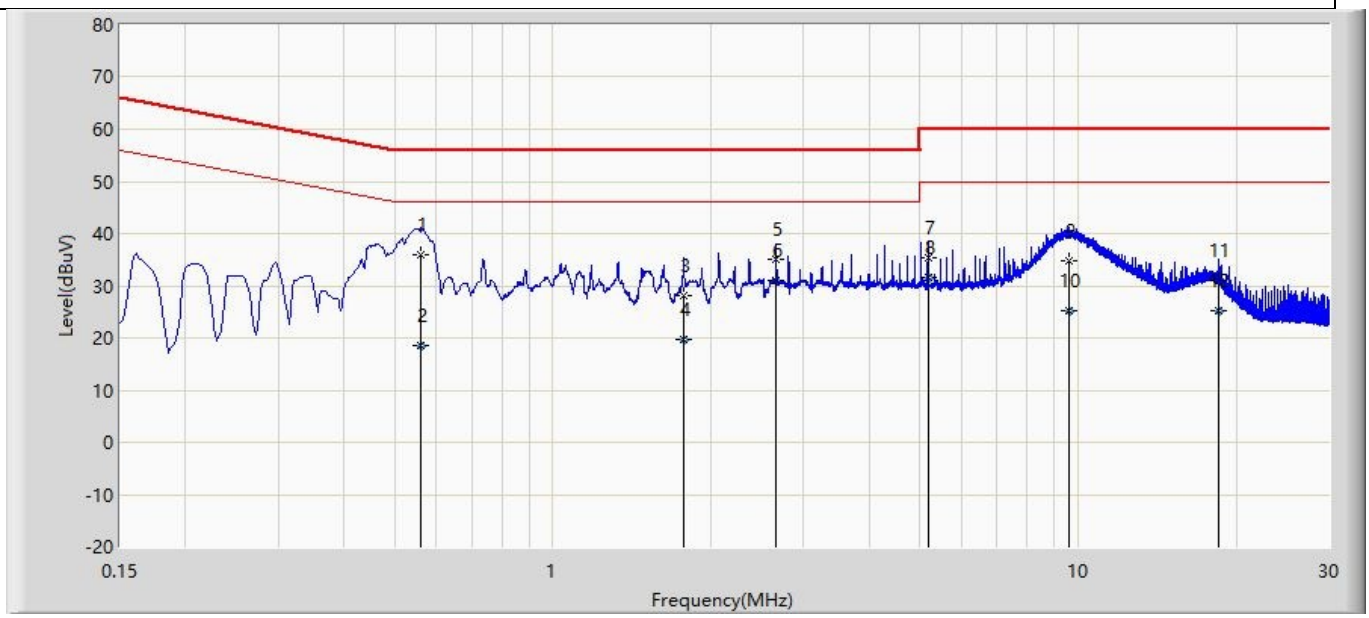
4.4.2 Antenna Connector Construction:	
☒	The use of a permanently attached antenna
☐	The antenna use of a unique coupling to the intentional radiator
☐	The use of a nonstandard antenna jack or eby LEctrical connector
Pby LEase refer to the attached document “Internal Photograph” to show the antenna connector.	

5 TEST SETUP PHOTO AND EUT PHOTO

Remark: The test setup photo and EUT Photo please see appendix.

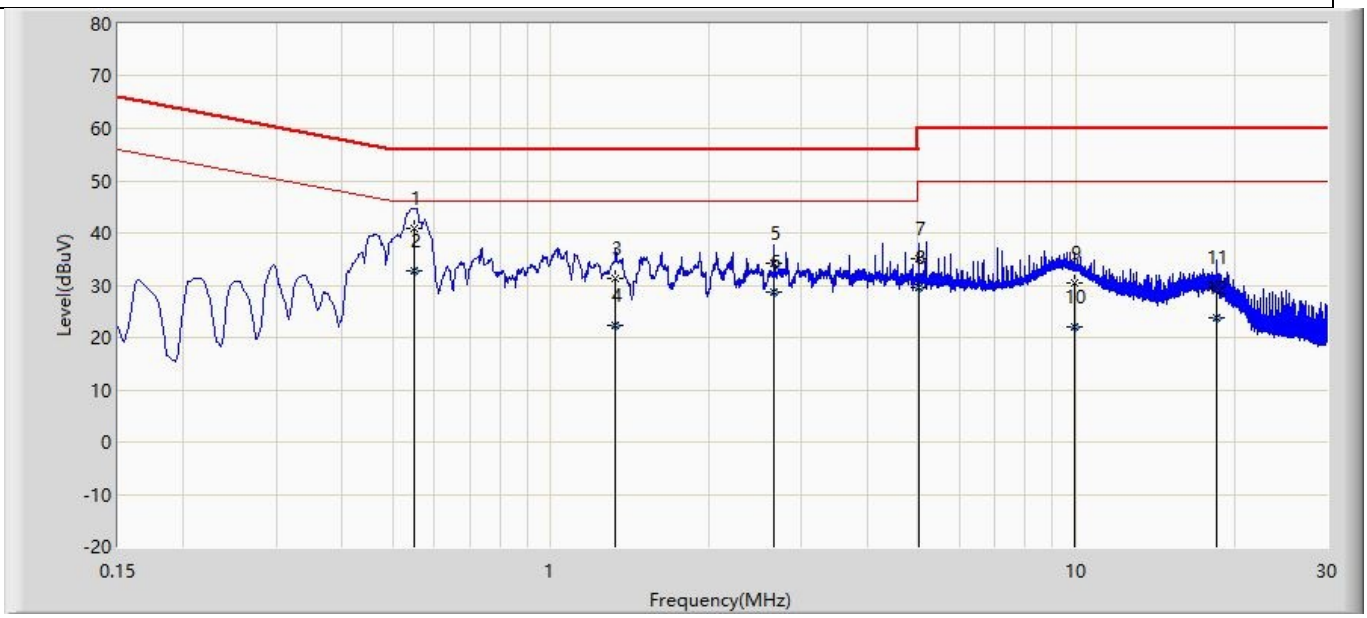
APPENDIX A: AC Power Line Conducted Emission

Profile: 23C0382R	Page No.: 5
Engineer: Pengchengyang	
Site: TR1	Time: 2023/12/19 - 14:26
Limit: FCC_Part 15.207_CE_AC Power_Class B	Margin: 0
Probe: NNLK 8129_(0.009-30MHz)	Polarity: Line
EUT: Wireless charging pad for OMBII Luminaire	Power: AC 120V/60Hz
Note: Mode 1: Transmit	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.562	35.887	35.807	-20.113	56.000	0.080	QP
2		0.562	18.438	18.358	-27.562	46.000	0.080	AV
3		1.772	28.099	27.979	-27.901	56.000	0.119	QP
4		1.772	19.676	19.557	-26.324	46.000	0.119	AV
5		2.661	35.163	35.022	-20.837	56.000	0.141	QP
6	*	2.661	30.981	30.840	-15.019	46.000	0.141	AV
7		5.172	35.415	35.233	-24.585	60.000	0.182	QP
8		5.172	31.719	31.537	-18.281	50.000	0.182	AV
9		9.609	34.709	34.465	-25.291	60.000	0.244	QP
10		9.609	25.227	24.983	-24.773	50.000	0.244	AV
11		18.476	31.041	30.716	-28.959	60.000	0.325	QP
12		18.476	25.349	25.024	-24.651	50.000	0.325	AV

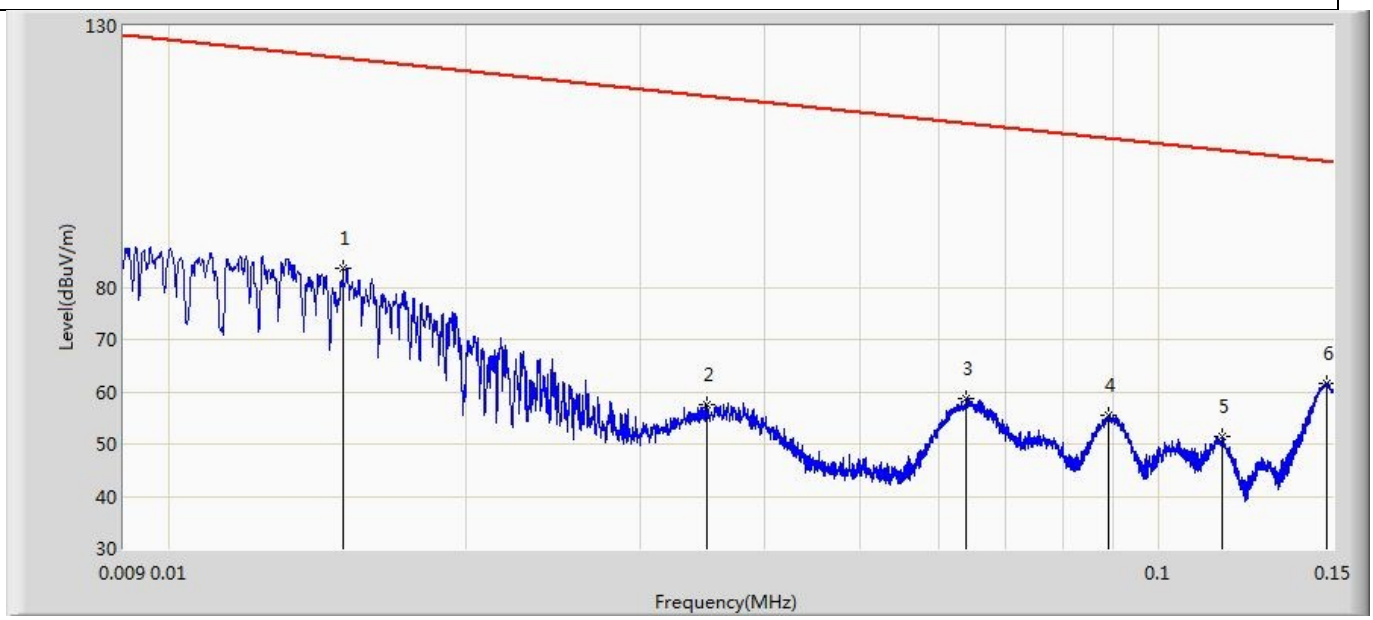
Profile: 23C0382R	Page No.: 6
Engineer: Pengchengyang	
Site: TR1	Time: 2023/12/19 - 14:28
Limit: FCC_Part 15.207_CE_AC Power_Class B	Margin: 0
Probe: NNLK 8129_(0.009-30MHz)	Polarity: Neutral
EUT: Wireless charging pad for OMBII Luminaire	Power: AC 120V/60Hz
Note: Mode 1: Transmit	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.550	40.826	40.707	-15.174	56.000	0.119	QP
2	*	0.550	32.759	32.640	-13.241	46.000	0.119	AV
3		1.329	31.346	31.181	-24.654	56.000	0.165	QP
4		1.329	22.385	22.219	-23.615	46.000	0.165	AV
5		2.661	34.230	34.006	-21.770	56.000	0.224	QP
6		2.661	28.629	28.404	-17.371	46.000	0.224	AV
7		5.026	35.021	34.720	-24.979	60.000	0.300	QP
8		5.026	29.653	29.352	-20.347	50.000	0.300	AV
9		9.904	30.524	30.047	-29.476	60.000	0.477	QP
10		9.904	22.094	21.618	-27.906	50.000	0.477	AV
11		18.476	29.523	28.853	-30.477	60.000	0.670	QP
12		18.476	23.715	23.045	-26.285	50.000	0.670	AV

APPENDIX B: Field Strength of Spurious

Profile: 23C0382R	Page No.: 1
Engineer: Pengchengyang	
Site: AC2	Time: 2023/12/19 - 12:00
Limit: 15.209	Margin: 0
Probe: RF(0.009-30MHz)	Polarity: X
EUT: Wireless charging pad for OMBII Luminaire	Power: DC 9V
Note: Mode 1: Transmit	

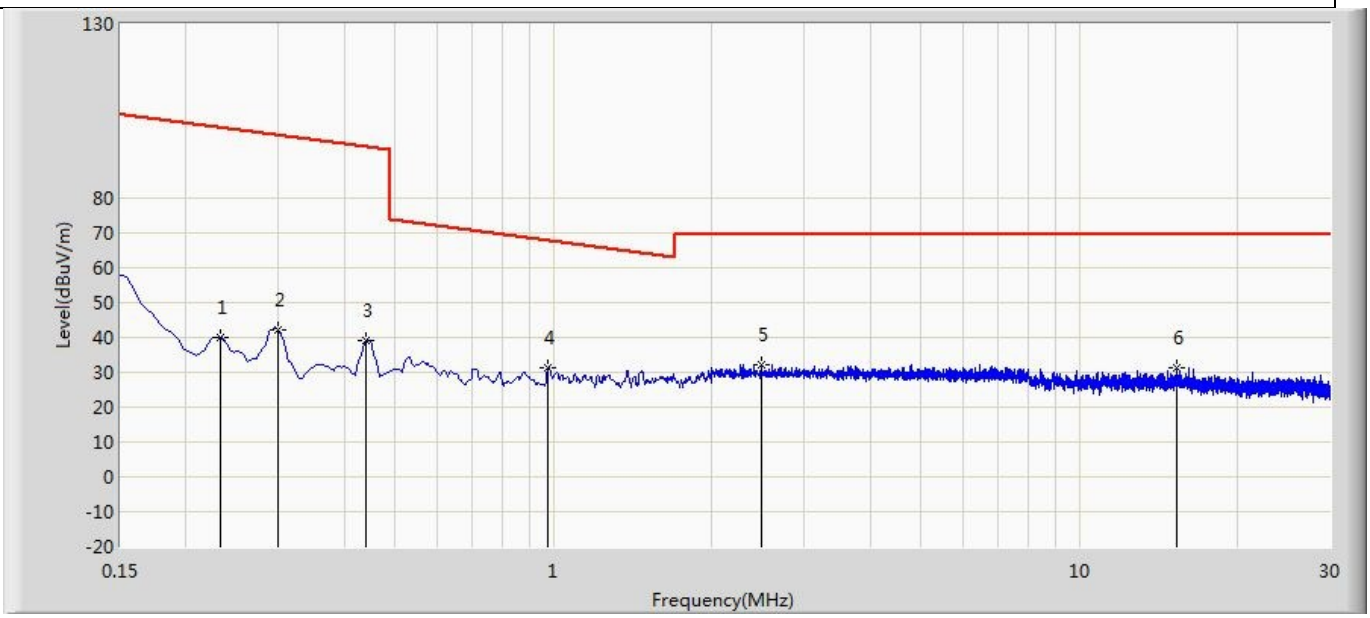


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	0.015	83.560	62.342	-40.406	123.965	21.218	PK
2		0.035	57.645	35.807	-58.965	116.610	21.838	PK
3		0.064	58.757	36.822	-52.614	111.371	21.935	PK
4		0.089	55.460	33.554	-53.048	108.508	21.906	PK
5		0.116	51.364	29.489	-54.844	106.208	21.875	PK
6		0.148	61.534	39.689	-42.559	104.093	21.845	PK

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Type
0.015	3.56	43.965	-40.405	PK
0.035	-22.355	36.61	-58.965	PK
0.064	-21.243	31.371	-52.614	PK
0.089	-24.54	28.508	-53.048	PK
0.116	-28.636	26.208	-54.844	PK
0.148	-18.466	24.093	-42.559	PK

Mark 6 is the fundamental emission.

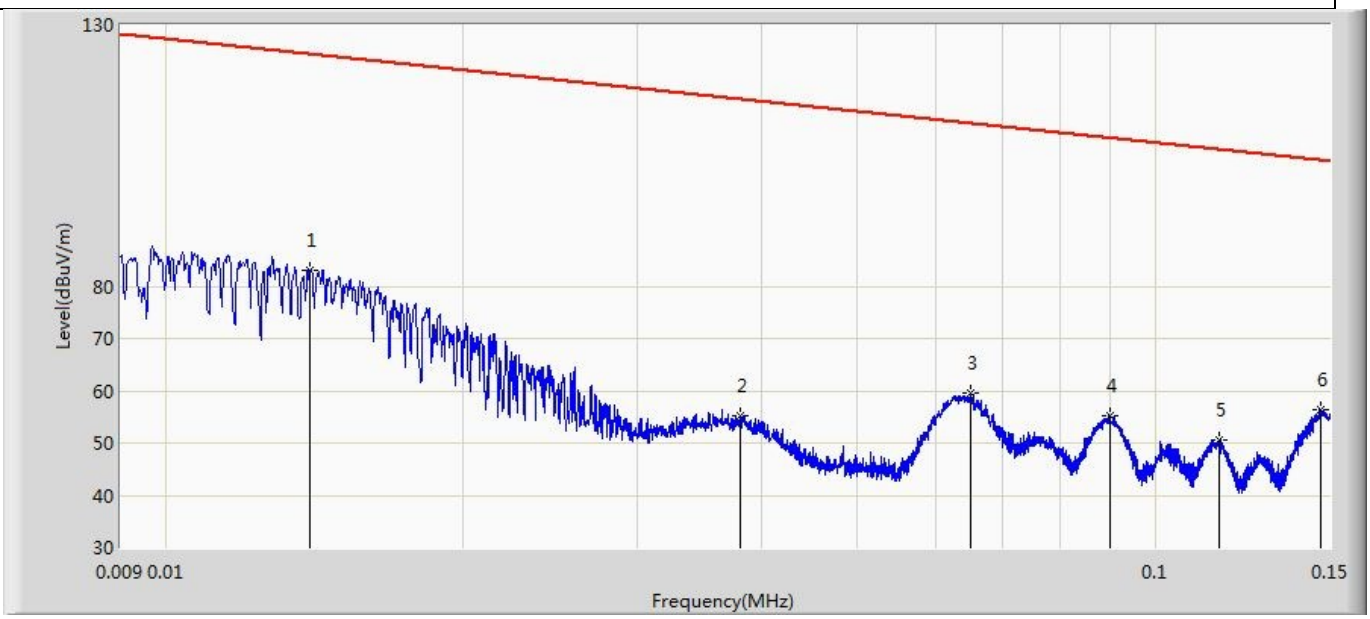
Profile: 23C0382R	Page No.: 2
Engineer: Pengchengyang	
Site: AC2	Time: 2023/12/19 - 12:03
Limit: 15.209	Margin: 0
Probe: RF(0.009-30MHz)	Polarity: X
EUT: Wireless charging pad for OMBII Luminaire	Power: DC 9V
Note: Mode 1: Transmit	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		0.232	39.969	18.207	-60.222	100.191	21.762	PK
2		0.299	42.222	20.532	-55.766	97.988	21.690	PK
3		0.441	39.283	17.734	-55.331	94.615	21.550	PK
4	*	0.978	31.517	11.508	-36.197	67.714	20.009	PK
5		2.486	32.032	11.138	-37.368	69.400	20.894	PK
6		15.318	31.493	10.305	-37.907	69.400	21.187	PK

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Type
0.232	-0.031	60.191	-60.222	PK
0.299	2.222	57.988	-55.766	PK
0.441	-0.717	54.615	-55.332	PK
0.978	-8.483	27.714	-36.197	PK
2.486	-7.968	29.4	-37.368	PK
15.318	-8.507	29.4	-37.907	PK

Profile: 23C0382R	Page No.: 3
Engineer: Pengchengyang	
Site: AC2	Time: 2023/12/19 - 12:08
Limit: 15.209	Margin: 0
Probe: RF(0.009-30MHz)	Polarity: Y
EUT: Wireless charging pad for OMBII Luminaire	Power: DC 9V
Note: Mode 1: Transmit	

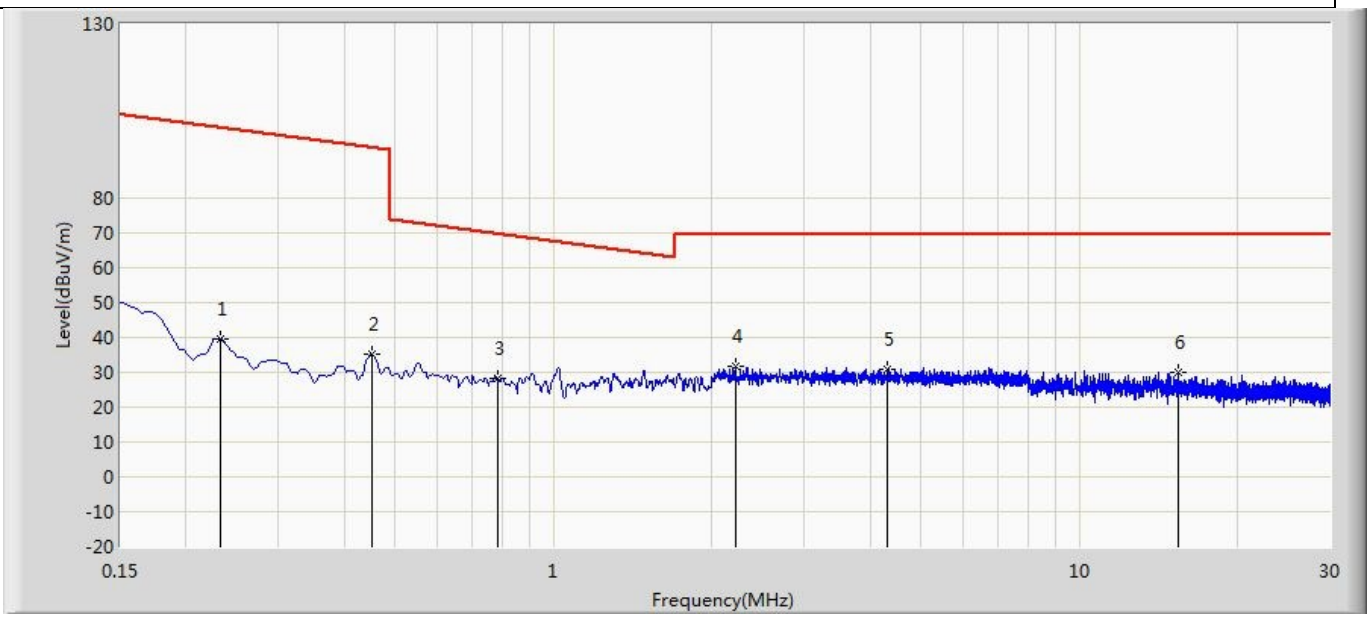


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	0.014	82.940	62.253	-41.625	124.564	20.687	PK
2		0.038	55.103	33.672	-60.793	115.896	21.431	PK
3		0.065	59.551	38.117	-51.685	111.236	21.434	PK
4		0.090	55.125	33.720	-53.286	108.411	21.405	PK
5		0.116	50.439	29.064	-55.769	106.208	21.375	PK
6		0.147	56.303	34.957	-47.849	104.152	21.346	PK

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Type
0.014	2.94	44.564	-41.624	PK
0.038	-24.897	35.896	-60.793	PK
0.065	-20.449	31.236	-51.685	PK
0.090	-24.875	28.411	-53.286	PK
0.116	-29.561	26.208	-55.769	PK
0.147	-23.697	24.152	-47.849	PK

Mark 6 is the fundamental emission.

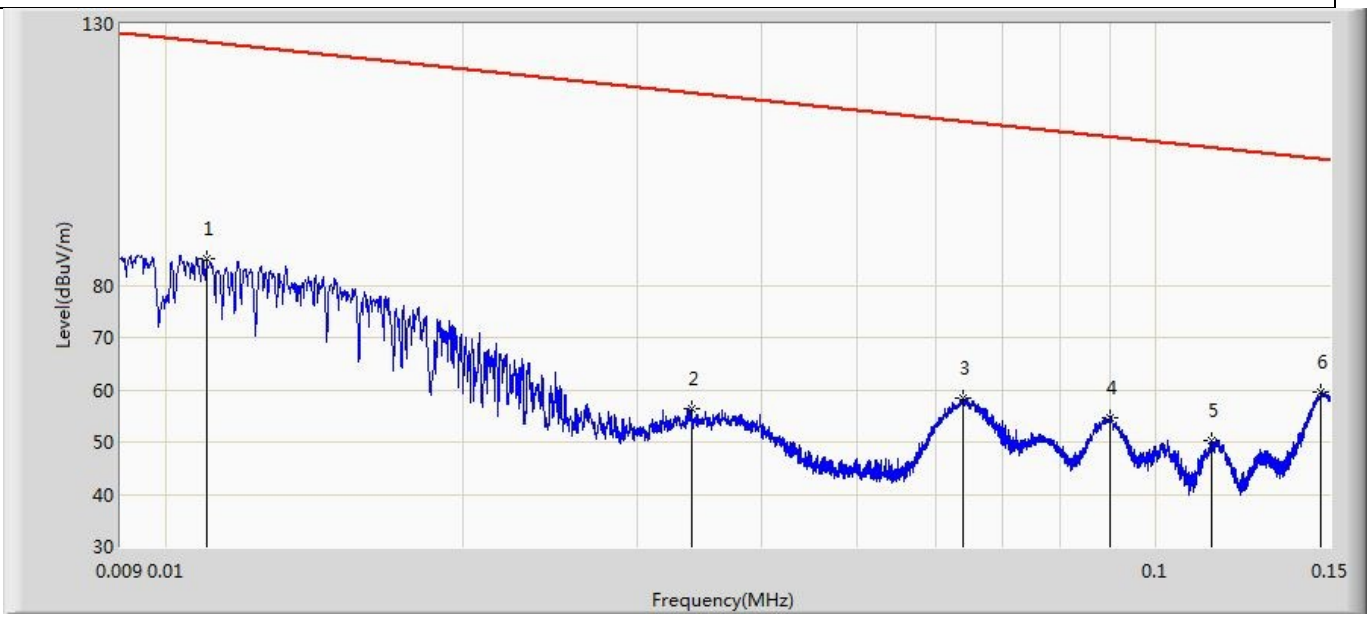
Profile: 23C0382R	Page No.: 4
Engineer: Pengchengyang	
Site: AC2	Time: 2023/12/19 - 12:11
Limit: 15.209	Margin: 0
Probe: RF(0.009-30MHz)	Polarity: Y
EUT: Wireless charging pad for OMBII Luminaire	Power: DC 9V
Note: Mode 1: Transmit	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		0.232	39.594	18.332	-60.597	100.191	21.262	PK
2		0.452	35.206	14.167	-59.195	94.401	21.039	PK
3		0.781	28.275	8.165	-41.388	69.662	20.109	PK
4	*	2.217	31.542	11.122	-37.858	69.400	20.420	PK
5		4.329	30.944	10.771	-38.456	69.400	20.173	PK
6		15.418	29.859	9.195	-39.541	69.400	20.664	PK

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Type
0.232	-0.406	60.191	-60.597	PK
0.452	-4.794	54.401	-59.195	PK
0.781	-11.725	29.662	-41.387	PK
2.217	-8.458	29.4	-37.858	PK
4.329	-9.056	29.4	-38.456	PK
15.418	-10.141	29.4	-39.541	PK

Profile: 23C0382R	Page No.: 5
Engineer: Pengchengyang	
Site: AC2	Time: 2023/12/19 - 12:15
Limit: 15.209	Margin: 0
Probe: RF(0.009-30MHz)	Polarity: Z
EUT: Wireless charging pad for OMBII Luminaire	Power: DC 9V
Note: Mode 1: Transmit	

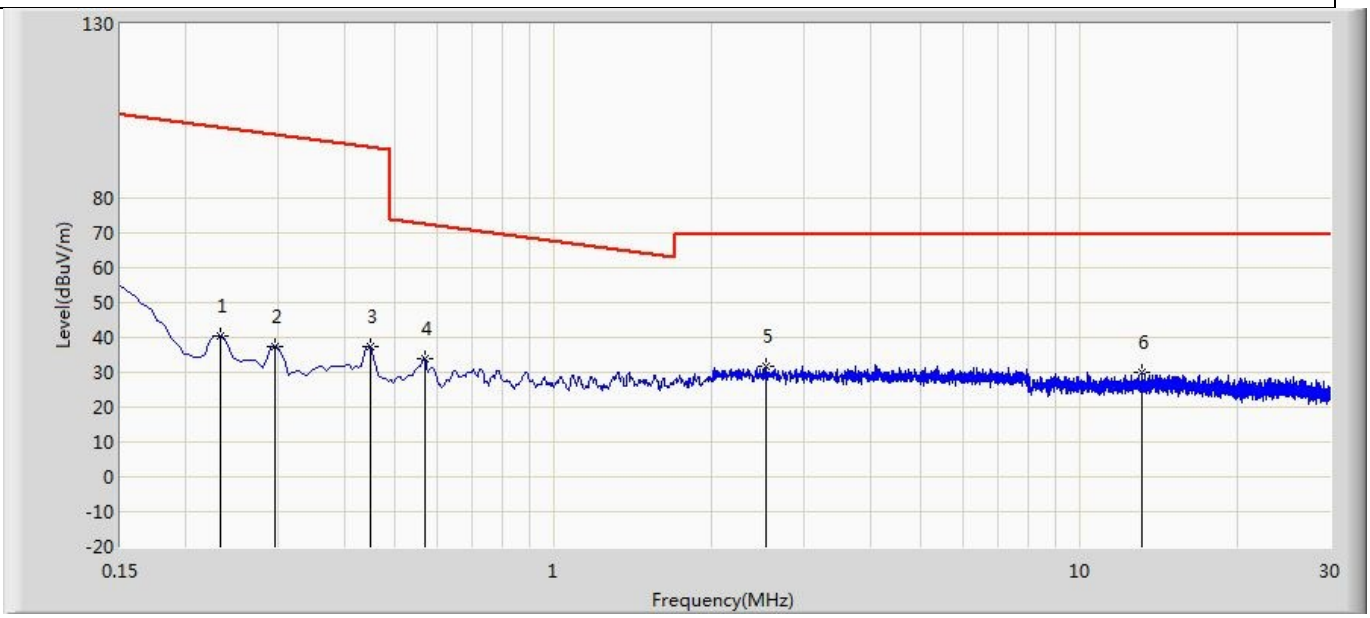


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	0.011	85.164	64.571	-41.493	126.658	20.594	PK
2		0.034	56.339	35.032	-60.522	116.862	21.308	PK
3		0.064	58.333	36.898	-53.038	111.371	21.435	PK
4		0.090	54.759	33.354	-53.652	108.411	21.405	PK
5		0.114	50.373	28.996	-55.986	106.359	21.377	PK
6		0.147	59.517	38.171	-44.635	104.152	21.346	PK

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Type
0.011	5.164	46.658	-41.494	PK
0.034	-23.661	36.862	-60.523	PK
0.064	-21.667	31.371	-53.038	PK
0.090	-25.241	28.411	-53.652	PK
0.114	-29.627	26.359	-55.986	PK
0.147	-20.483	24.152	-44.635	PK

Mark 6 is the fundamental emission.

Profile: 23C0382R	Page No.: 6
Engineer: Pengchengyang	
Site: AC2	Time: 2023/12/19 - 12:18
Limit: 15.209	Margin: 0
Probe: RF(0.009-30MHz)	Polarity: Z
EUT: Wireless charging pad for OMBII Luminaire	Power: DC 9V
Note: Mode 1: Transmit	

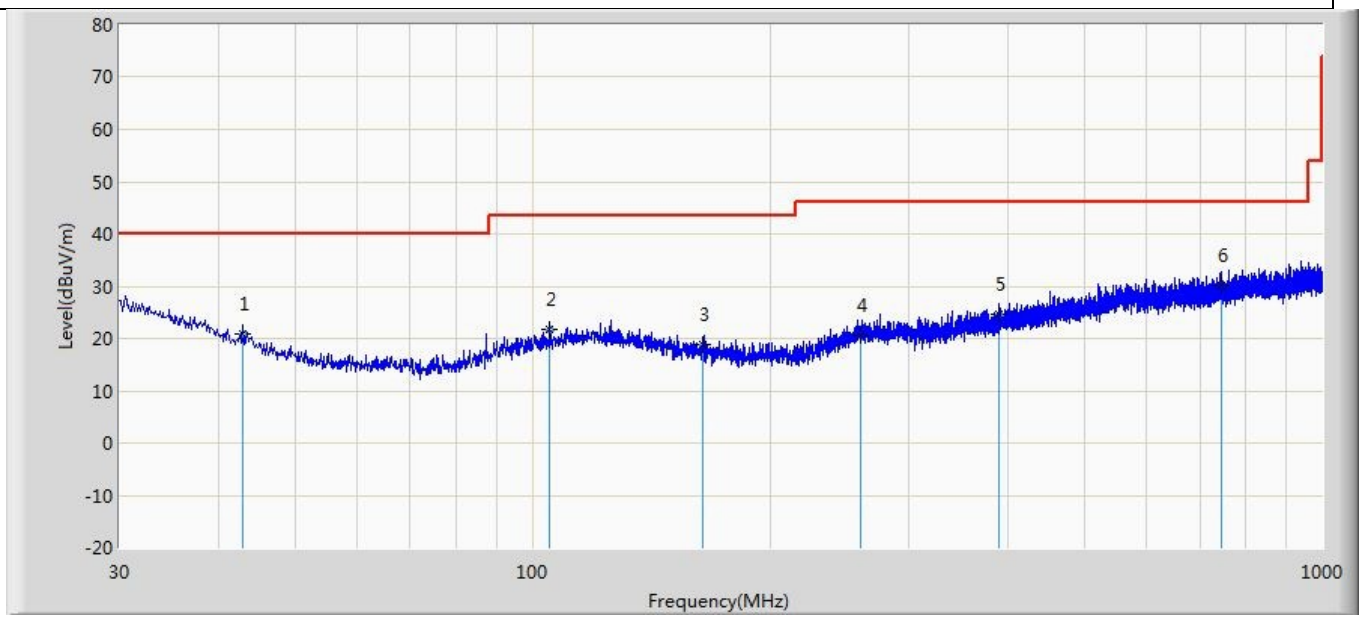


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		0.232	40.363	19.101	-59.828	100.191	21.262	PK
2		0.296	37.540	16.348	-60.536	98.076	21.192	PK
3		0.449	37.266	16.224	-57.193	94.459	21.042	PK
4		0.568	33.717	12.952	-38.704	72.421	20.764	PK
5	*	2.531	31.720	11.345	-37.680	69.400	20.375	PK
6		13.180	30.009	9.504	-39.391	69.400	20.505	PK

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Type
0.232	0.363	60.191	-59.828	PK
0.296	-2.46	58.076	-60.536	PK
0.449	-2.734	54.459	-57.193	PK
0.568	-6.283	32.421	-38.704	PK
2.531	-8.28	29.4	-37.68	PK
13.180	-9.991	29.4	-39.391	PK

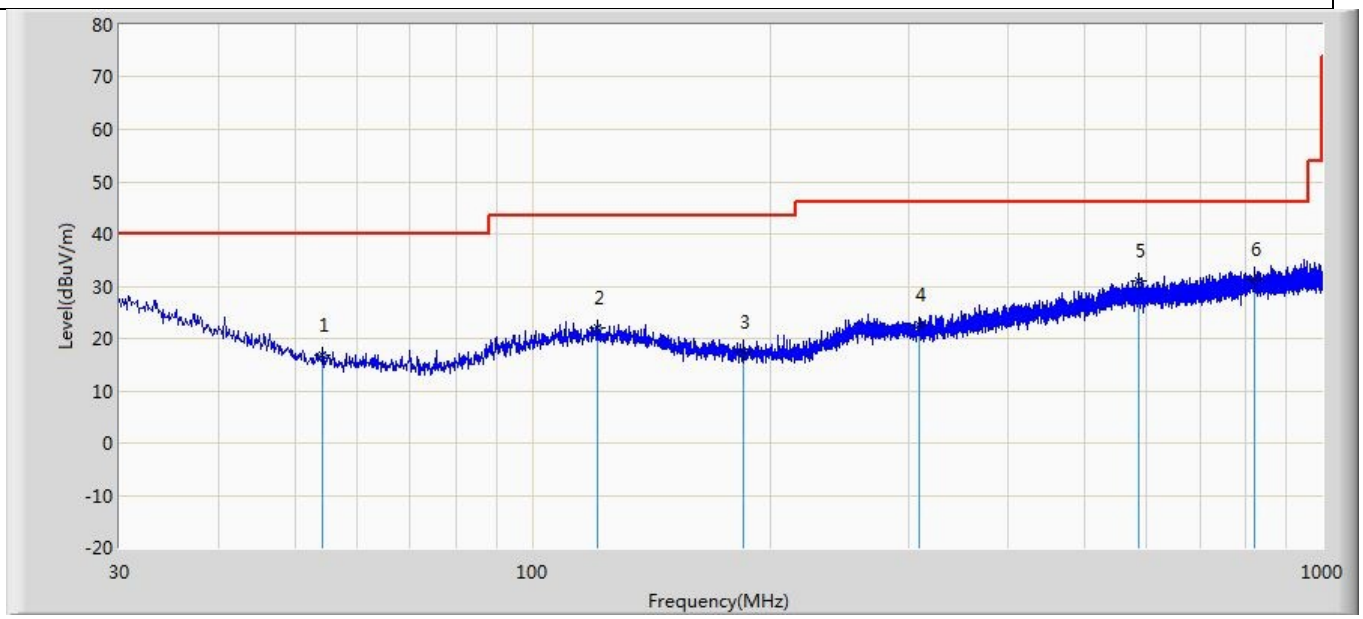
Note: Pk values were already below ,Avg limits Average limits also apply.

Profile: 23C0382R	Page No.: 51
Engineer: Pengchengyang	
Site: AC2	Time: 2023/12/19 - 12:50
Limit: FCC_Part 15.209_RE (3m)_Class B	Margin: 0
Probe: CBL6112D_27613(30-1000MHz)	Polarity: Horizontal
EUT: Wireless charging pad for OMBII Luminaire	Power: DC 9V
Note: Mode 1：Transmit	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		42.974	20.854	2.846	-19.146	40.000	18.009	QP
2		105.296	21.751	3.063	-21.749	43.500	18.687	QP
3		164.587	18.912	2.039	-24.588	43.500	16.873	QP
4		260.011	20.634	-0.230	-25.366	46.000	20.864	QP
5		390.476	24.557	1.274	-21.443	46.000	23.284	QP
6	*	745.254	30.278	1.885	-15.722	46.000	28.393	QP

Profile: 23C0382R	Page No.: 52
Engineer: Pengchengyang	
Site: AC2	Time: 2023/12/19 - 12:50
Limit: FCC_Part 15.209_RE (3m)_Class B	Margin: 0
Probe: CBL6112D_27613(30-1000MHz)	Polarity: Vertical
EUT: Wireless charging pad for OMBII Luminaire	Power: DC 9V
Note: Mode 1：Transmit	

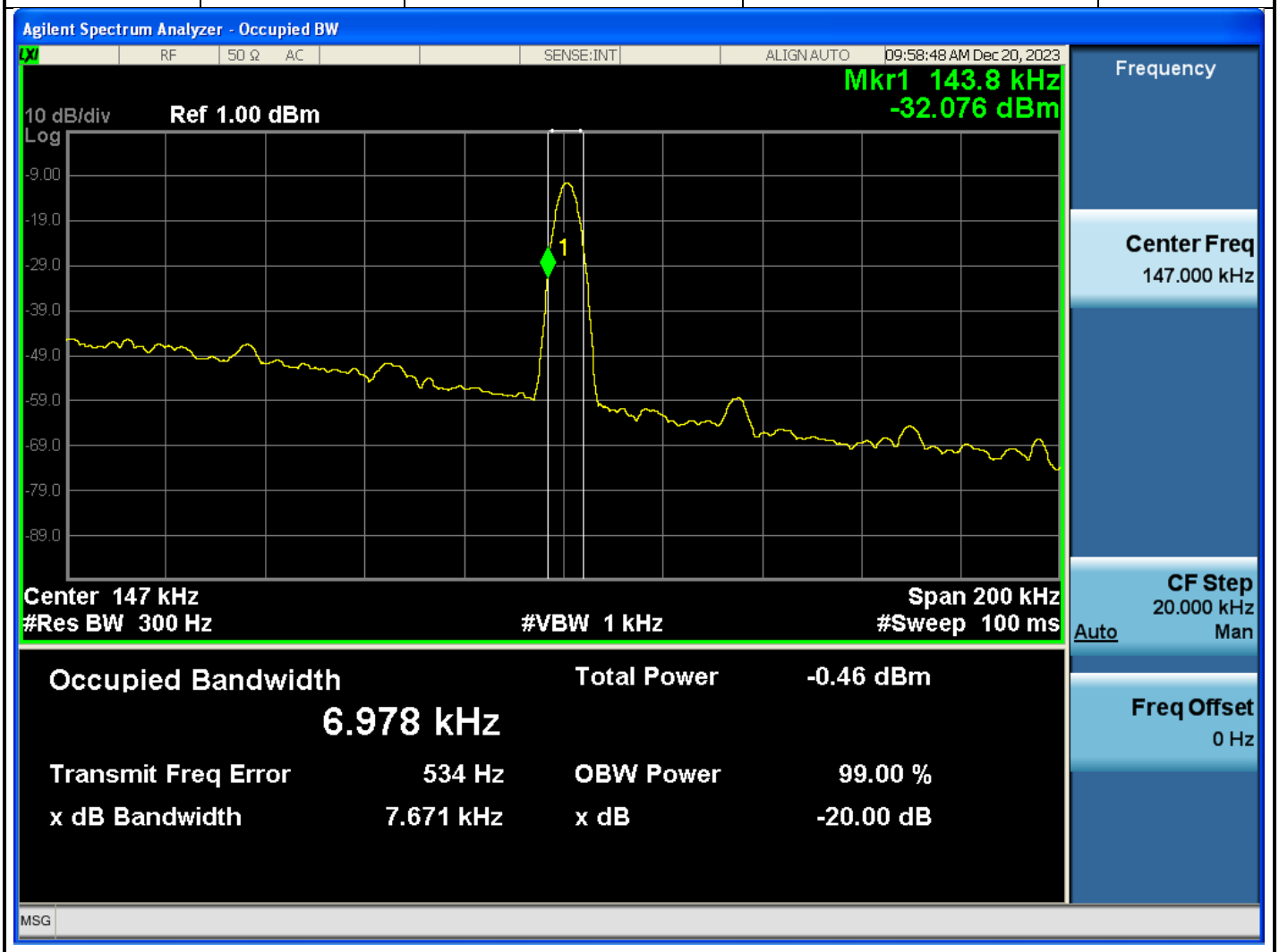


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		54.250	16.934	3.126	-23.066	40.000	13.808	QP
2		120.816	21.987	2.655	-21.513	43.500	19.331	QP
3		184.836	17.526	1.228	-25.974	43.500	16.298	QP
4		308.875	22.610	1.544	-23.390	46.000	21.065	QP
5		586.780	30.981	3.829	-15.019	46.000	27.152	QP
6	*	822.490	31.447	2.081	-14.553	46.000	29.366	QP

Note 1: " * ", means this data is the worst emission level.
Note 2: Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

APPENDIX C: Channel Bandwidth

Mode	Test Freq. (kHz)	20dB Occupied Bandwidth (kHz)	99% Occupied Bandwidth (kHz)	Result
1	147	7.637	6.978	Pass



Note: Because the measured signal is CW or CW-like adjusting the RBW per C63.10 would not be practical since measured bandwidth will always follow the RBW and the result will be approximately twice the RBW. And the signal was narrowband, therefore it was impossible to set RBW within 1% – 5%.

The End