



TEST REPORT



Report No. : **CHTEW19010037** Report verification:

Project No...... : **SHT1812058601EW**

FCC ID..... : **2AQUQGL52275**

Applicant's name : **Globe Electric Company Inc**

Address..... : **150 Oneida Quebec, Canada H9R 1A8**

Manufacturer..... : **Globe Electric Company Inc**

Address..... : **150 Oneida Quebec, Canada H9R 1A8**

Test item description : **Wireless charging desk lamp**

Trade Mark : **Globe**

Model/Type reference..... : **GL52275**

Listed Model(s) : **-**

Standard : **47 CFR FCC Part 18**

Date of receipt of test sample..... : **Dec.28,2018**

Date of testing..... : **Dec.28,2018 ~ Jan.09,2019**

Date of issue..... : **Jan.09,2019**

Result..... : **Pass**

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Testing Laboratory Name : **Shenzhen Huatongwei International Inspection Co., Ltd.**

Address..... : **1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China**

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The test report merely corresponds to the test sample.

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1. TEST STANDARDS AND REPORT VERSION

1.1. Test Standards

The tests were performed according to following standards:

[47 CFR FCC Part 15 Subpart B](#) - Unintentional Radiators

[FCC/OST MP-5](#) -Methods of Measurements of Radio Noise Emissions from Industrial, Scientific and Medical equipment (February 1986)

1.2. Report version information

Revision No.	Date of issue	Description
N/A	2019-01-09	Original

2. TEST DESCRIPTION

Test Item	Section in CFR 47	Result	Test Engineer
Conducted Emissions	PART 18.307(b)	Pass	Jeremy Zhang
Radiated Emissions	PART 18.305(b)	Pass	Pan Xie

Note: The measurement uncertainty is not included in the test result.

3. SUMMARY

3.1. Client Information

Applicant:	Globe Electric Company Inc
Address:	150 Oneida Quebec, Canada H9R 1A8
Manufacturer:	Globe Electric Company Inc
Address:	150 Oneida Quebec, Canada H9R 1A8

3.2. Product Description

Name of EUT:	Wireless charging desk lamp
Trade Mark:	Globe
Model No.:	GL52275
Listed Model(s)	-
Power supply:	AC 120V
Adapter information:	-
Wireless Charger	
Operation Frequency:	105kHz~205kHz
Rating output:	5W

3.3. Operation state

Keep the EUT in wireless charging mode.

3.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

- - supplied by the manufacturer
- - supplied by the lab

○	Mobile	Manufacturer :	APPLE
		Model No. :	Iphone X
○	N/A	Manufacturer :	N/A
		Model No. :	N/A

3.5. Modifications

No modifications were implemented to meet testing criteria.

4. TEST ENVIRONMENT

4.1. Address of the test laboratory

Laboratory: Shenzhen Huatongwei International Inspection Co., Ltd.

Address: 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China

Phone: 86-755-26748019 Fax: 86-755-26748089

4.2. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L1225

Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No. 3902.01

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 762235

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 762235.

IC-Registration No.: 5377B-1

Two 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377B-1.

ACA

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

4.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15~35°C
Relative Humidity:	30~60 %
Air Pressure:	950~1050mba

4.4. Statement of the measurement uncertainty

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 Shenzhen Huatongwei International Inspection Co., Ltd 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.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emissions	30~1000MHz	4.28 dB	(1)
Radiated Emissions	1~18GHz	5.16 dB	(1)
Conducted Disturbance	0.15~30MHz	3.35 dB	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=1.96$.

4.5. Equipments Used during the Test

Conducted Emissions						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. (mm-dd-yy)	Next Cal. (mm-dd-yy)
1	EMI Test Receiver	R&S	ESCI	101247	10/27/2018	10/26/2019
2	Artificial Mains	SCHWARZBECK	NNLK 8121	573	10/27/2018	10/26/2019
3	Pulse Limiter	R&S	ESH3-Z2	101488	10/27/2018	10/26/2019
4	RF Connection Cable	HUBER+SUHNER	EF400	N/A	11/14/2017	11/13/2019
5	Test Software	R&S	ES-K1	N/A	N/A	N/A
6	Temperature and Humidity Meter	MIAOXIN	TH10R	N/A	10/30/2018	10/29/2019

Radiated Emissions(Below 1GHz)						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. (mm-dd-yy)	Next Cal. (mm-dd-yy)
1	Semi-Anechoic Chamber	Albatross projects	SAC-3m-02	C11121	09/30/2018	09/29/2021
2	EMI Test Receiver	R&S	ESCI	100900	10/28/2018	10/27/2019
3	Loop Antenna	R&S	HFH2-Z2	100020	04/02/2018	04/02/2021
4	Ultra-Broadband Antenna	SCHWARZBECK	VULB9163	546	04/05/2017	04/04/2020
5	Pre-amplifier	SCHWARZBECK	BBV 9742	N/A	11/15/2018	11/14/2019
6	RF Connection Cable	HUBER+SUHNER	N/A	N/A	09/28/2018	09/27/2019
7	RF Connection Cable	HUBER+SUHNER	SUCOFLEX104	501184/4	09/28/2018	09/27/2019
8	Test Software	R&S	ES-K1	N/A	N/A	N/A
9	Turntable	Maturo Germany	TT2.0-1T	N/A	N/A	N/A
10	Antenna Mast	Maturo Germany	TAM-4.0-P	N/A	N/A	N/A
11	Temperature and Humidity Meter	KEJIAN	KJ03	N/A	10/30/2018	10/29/2019

Radiated Emissions(Above 1GHz)						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. (mm-dd-yy)	Next Cal. (mm-dd-yy)
1	Anechoic Chamber	Albatross projects	SAC-3m-01	C11121	09/30/2018	09/29/2021
2	Horn Antenna	SCHWARZBECK	9120D	1011	03/27/2017	03/26/2020
3	Preamplifier	BONN	BLWA0160-2M	1811887	11/14/2018	11/13/2019
4	Broadband Pre-amplifier	SCHWARZBECK	BBV 9718	9718-248	04/28/2018	04/27/2019
5	Spectrum Analyzer	R&S	FSP40	100597	10/27/2018	10/26/2019
6	RF Connection Cable	HUBER+SUHNER	RE-7-FL	N/A	11/15/2018	11/14/2019
7	RF Connection Cable	HUBER+SUHNER	RE-7-FH	N/A	11/15/2018	11/14/2019
8	Test Software	Audix	E3	N/A	N/A	N/A
9	Turntable	Maturo Germany	TT2.0-1T	N/A	N/A	N/A
10	Antenna Mast	Maturo Germany	CAM-4.0-P-12	N/A	N/A	N/A
11	Temperature and Humidity Meter	MINGLE	YH101	N/A	10/30/2018	10/29/2019

5. TEST CONDITIONS AND RESULTS

5.1. Conducted Emissions Test

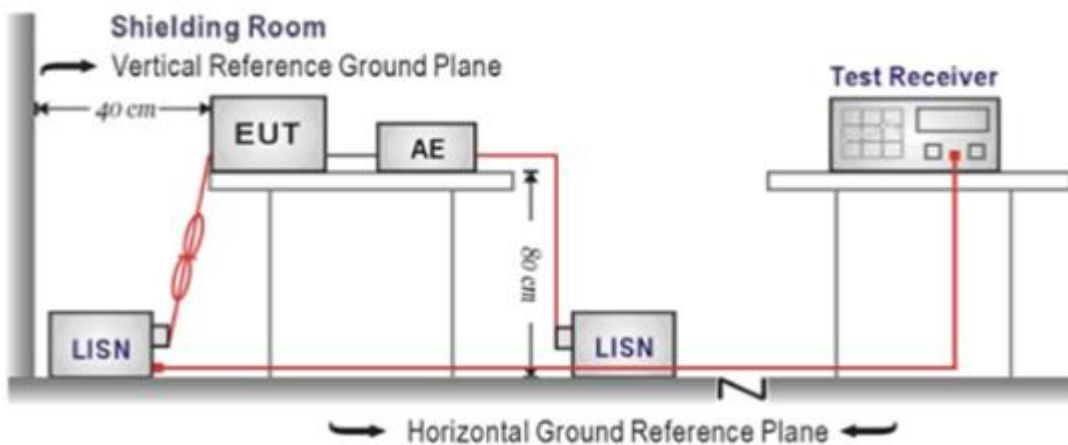
LIMIT

According to §18.307 (b):

Frequency range (MHz)	Limit (dBuV)	
	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 CONFIGURATION



TEST PROCEDURE

1. The EUT was setup according to test configuration
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 10 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 10 cm from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50ohm / 50uH coupling impedance for the measuring equipment.
4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
8. During the above scans, the emissions were maximized by cable manipulation.

TEST MODE:

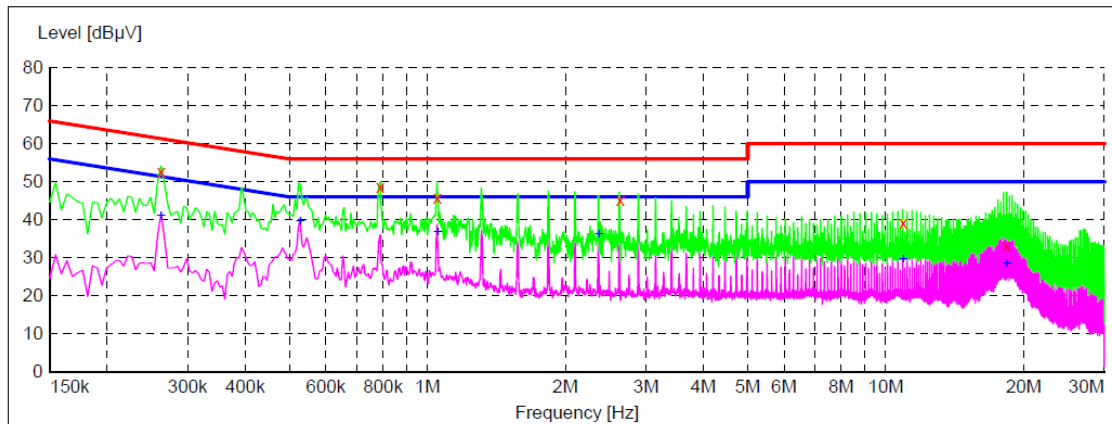
Please refer to the clause 3.3

TEST RESULTS

Passed Not Applicable

Test Line:

L



MEASUREMENT RESULT: "GM1901025046_fin"

1/3/2019 1:17PM

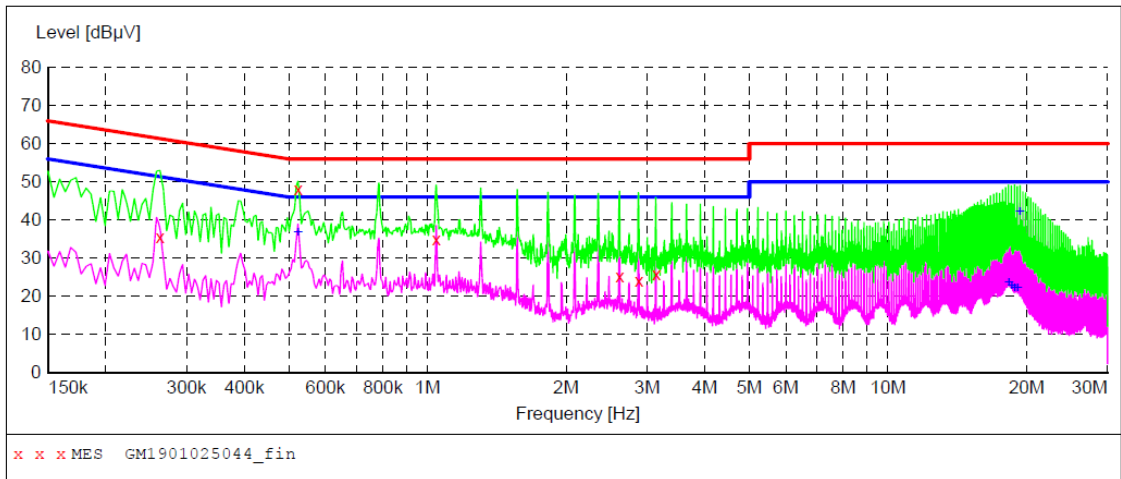
Frequency MHz	Level dBµV	dB	dBµV	dB	PE
0.262500	52.60	10.2	61	8.8	QP L1 GND
0.789000	48.80	9.9	56	7.2	QP L1 GND
1.050000	45.70	10.0	56	10.3	QP L1 GND
2.634000	45.20	10.0	56	10.8	QP L1 GND
10.923000	39.10	10.2	60	20.9	QP L1 GND
18.375000	33.20	10.3	60	26.8	QP L1 GND

MEASUREMENT RESULT: "GM1901025046_fin2"

1/3/2019 1:17PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.262500	40.80	10.2	51	10.6	AV	L1	GND
0.528000	39.60	10.0	46	6.4	AV	L1	GND
1.054500	36.50	10.0	46	9.5	AV	L1	GND
2.368500	36.00	10.0	46	10.0	AV	L1	GND
10.923000	29.40	10.2	50	20.6	AV	L1	GND
18.366000	28.40	10.3	50	21.6	AV	L1	GND

Test Line: N



MEASUREMENT RESULT: "GM1901025044_fin"

1/3/2019 1:14PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.262500	35.50	10.2	61	25.9	QP	N	GND
0.523500	48.10	10.0	56	7.9	QP	N	GND
1.045500	34.80	10.0	56	21.2	QP	N	GND
2.616000	25.30	10.0	56	30.7	QP	N	GND
2.881500	24.20	10.0	56	31.8	QP	N	GND
3.142500	25.90	10.0	56	30.1	QP	N	GND

MEASUREMENT RESULT: "GM1901025044_fin2"

1/3/2019 1:14PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.523500	36.70	10.0	46	9.3	AV	N	GND
18.316500	23.40	10.3	50	26.6	AV	N	GND
18.577500	22.70	10.3	50	27.3	AV	N	GND
18.843000	22.20	10.3	50	27.8	AV	N	GND
19.104000	22.10	10.3	50	27.9	AV	N	GND
19.365000	42.10	10.3	50	7.9	AV	N	GND

5.2. Radiated Emissions Test

LIMIT

According to §18.307 (b):

Equipment	Operating frequency	RF Power generated by equipment (watts)	Field strength limit (µV/m)	Distance (meters)
Any type unless otherwise specified (miscellaneous)	Any ISM frequency	Below 500	25	300
		500 or more	$25 \times \text{SQRT}(\text{power}/500)$	¹ 300
	Any non-ISM frequency	Below 500	15	300
		500 or more	$15 \times \text{SQRT}(\text{power}/500)$	¹ 300
Industrial heaters and RF stabilized arc welders	On or below 5,725 MHz Above 5,725 MHz	Any	10	1,600
		Any	(²)	(²)
Medical diathermy	Any ISM frequency Any non-ISM frequency	Any	25	300
		Any	15	300
Ultrasonic	Below 490 kHz	Below 500	$2,400/F(\text{kHz})$	300
		500 or more	$2,400/F(\text{kHz}) \times \text{SQRT}(\text{power}/500)$	³ 300
	490 to 1,600 kHz Above 1,600 kHz	Any	$24,000/F(\text{kHz})$	30
		Any	15	30
Induction cooking ranges	Below 90 kHz On or above 90 kHz	Any	1,500	⁴ 30
		Any	300	⁴ 30

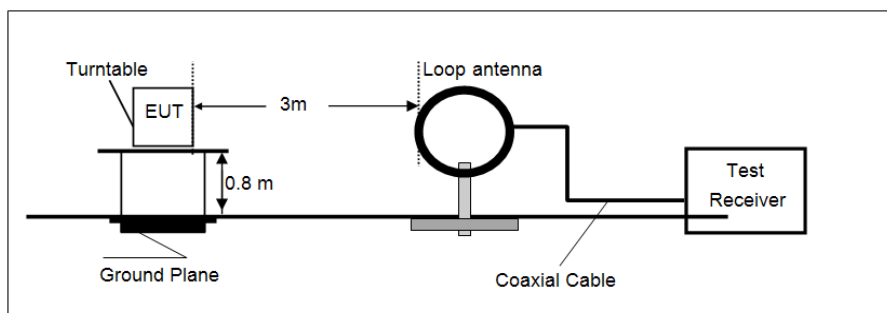
¹Field strength may not exceed 10 µV/m at 1600 meters. Consumer equipment operating below 1000 MHz is not permitted the increase in field strength otherwise permitted here for power over 500 watts.

²Reduced to the greatest extent possible.

³Field strength may not exceed 10 µV/m at 1600 meters. Consumer equipment is not permitted the increase in field strength otherwise permitted here for over 500 watts.

⁴Induction cooking ranges manufactured prior to February 1, 1980, shall be subject to the field strength limits for miscellaneous ISM equipment.

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT is placed on a turn table which is 0.8 meter above ground.
2. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna.
5. Use the following spectrum analyzer settings
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Below 30MHz
RBW=9kHz, VBW=30kHz Sweep=auto, Detector function=peak, Trace=max hold;

TEST MODE:

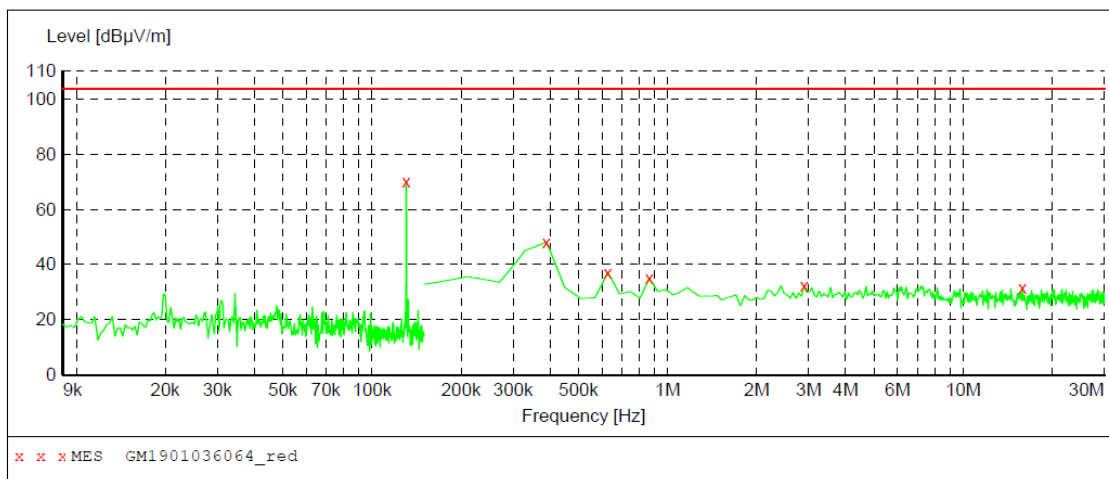
Please refer to the clause 3.3

TEST RESULTS

Passed **Not Applicable**

Note:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor
2. This product belong to any non-ISM frequency equipment, the field strength limit is 15uV/m at 300 meter
3. Emission level dBµV/m for 0.009~30MHz = 20log (15) + 40log (300/3) dBµV/m;



MEASUREMENT RESULT: "GM1901036064_red"

1/3/2019 3:00PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg
0.130542	70.00	20.1	103.5	33.5	PK	100.0	0.00
0.388800	48.10	20.4	103.5	55.4	PK	100.0	0.00
0.627600	37.20	19.3	103.5	66.3	PK	100.0	0.00
0.866400	35.10	19.4	103.5	68.4	PK	100.0	0.00
2.896200	32.40	19.7	103.5	71.1	PK	100.0	0.00
15.851100	31.60	19.0	103.5	71.9	PK	100.0	0.00

6. TEST SETUP PHOTOS OF THE EUT

Conducted Emissions (AC Mains)

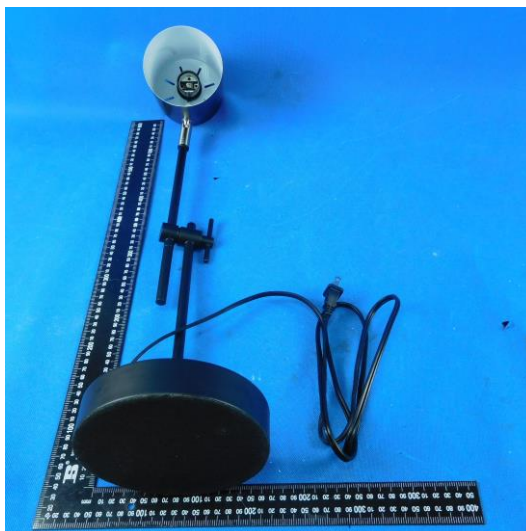
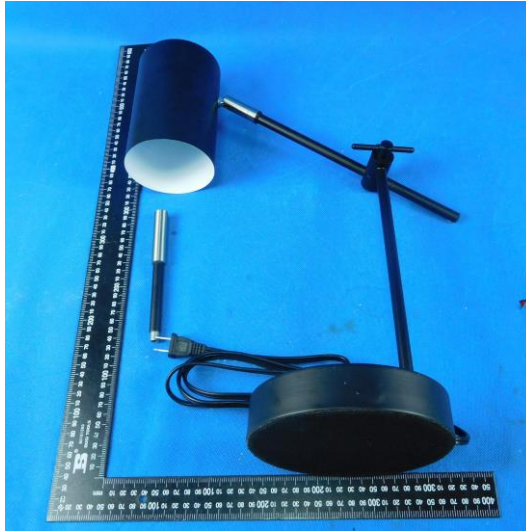


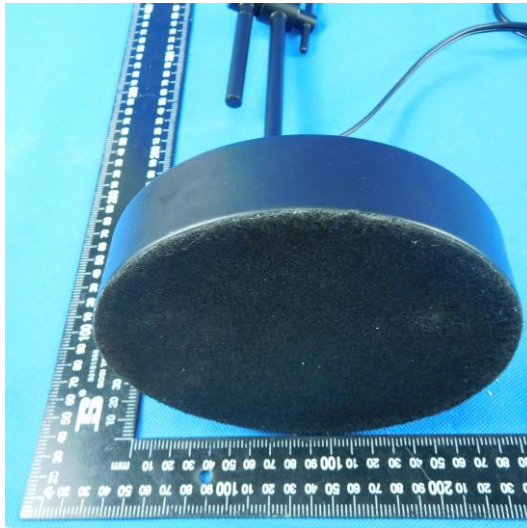
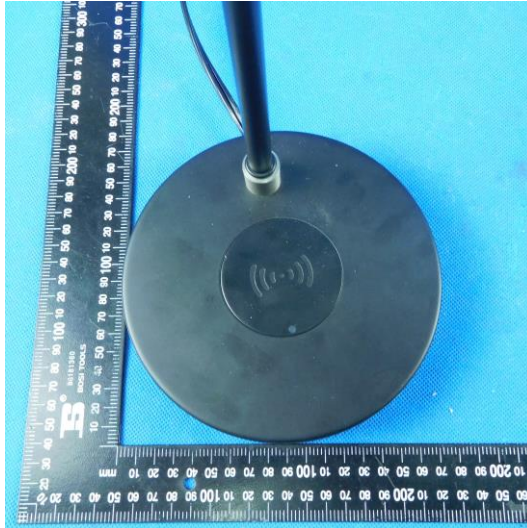
Radiated Emissions (Below 30MHz)



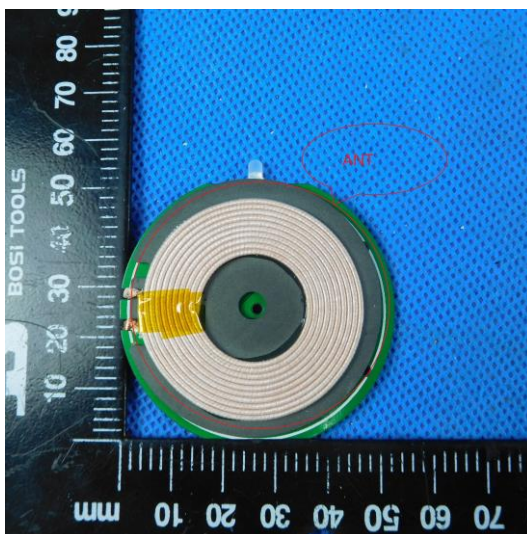
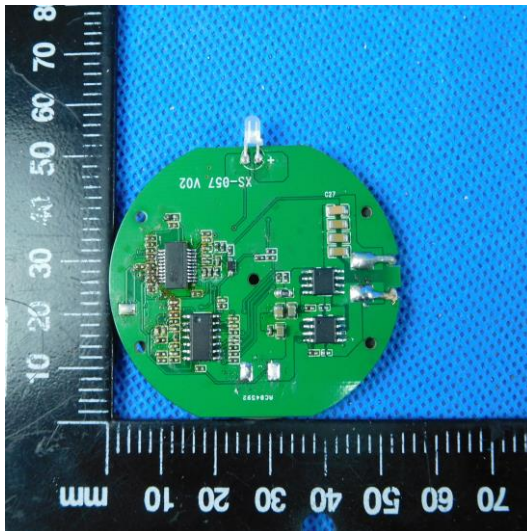
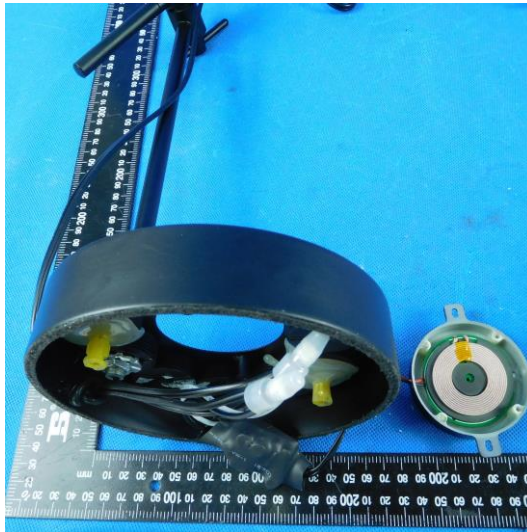
7. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

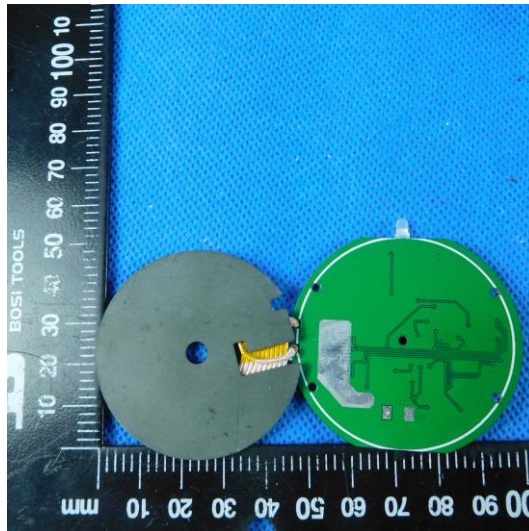
External Photo





Internal Photo





-----End of Report-----