

FCC 47 CFR PART 15 SUBPART B

TEST REPORT

Shenzhen Margotan Tech Co.,Ltd.

Intelligent Eye Beauty Massager

Model No.: IF-1203

Prepared for : Shenzhen Margotan Tech Co.,Ltd.
Address : 406 Building B Rongchao Binhai Mansion, No.2021 Haixiu Road, Bao'an District, Shenzhen, China

Prepared by : Guangzhou LCS Compliance Testing Laboratory Ltd.
Address : No 44-1, Qianfeng North Road, Shiqi town, Panyu District, Guangzhou City, China

Tel : (+86) 020-39166689
Fax : (+86) 020-39166619
Web : www.LCS-cert.com
Mail : webmaster@LCS-cert.com

Date of receipt of test sample : November 22, 2018
Number of tested samples : 1
Serial number : Prototype
Date of Test : November 22, 2018 ~ November 27, 2018
Date of Report : December 3, 2018



**FCC TEST REPORT
FCC 47 CFR PART 15 SUBPART B**

Report Reference No. : LCS181122001CE

Date Of Issue : December 3, 2018

Testing Laboratory Name..... : **Guangzhou LCS Compliance Testing Laboratory Ltd.**

Address : No 44-1, Qianfeng North Road, Shiqi town, Panyu District,
Guangzhou City, China

Testing Location/ Procedure..... : Full application of Harmonised standards
Partial application of Harmonised standards
Other standard testing method

Applicant's Name : **Shenzhen Margotan Tech Co.,Ltd.**

Address : 406 Building B Rongchao Binhai Mansion, No.2021 Haixiu
Road, Bao'an District, Shenzhen, China

Test Specification

Standard..... : FCC 47 CFR Part 15 Subpart B, ANSI C63.4 -2014

Test Report Form No..... : GLCSEMC-1.0

TRF Originator : Guangzhou LCS Compliance Testing Laboratory Ltd.

Master TRF..... : Dated 2017-08

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Test Item Description..... : **Intelligent Eye Beauty Massager**

Trade Mark : N/A

Model/ Type Reference : IF-1203

Ratings..... : For Product: DC 5V, 0.5A

Result : **Positive**

Compiled by:

Lylian Li

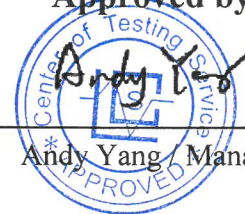
Lylian Li / File administrators

Supervised by:

Zilu Jian

Zilu Jian / Technique principal

Approved by:



Andy Yang / Manager

FCC -- TEST REPORT

Test Report No. : LCS181122001CE

December 3, 2018

Date of issue

Type / Model..... : IF-1203 EUT..... : Intelligent Eye Beauty Massager	
Applicant..... : Shenzhen Margotan Tech Co.,Ltd. Address..... : 406 Building B Rongchao Binhai Mansion, No.2021 Haixiu Road, Bao'an District, Shenzhen, China Telephone..... : / Fax..... : /	
Manufacturer..... : Shenzhen Margotan Tech Co.,Ltd. Address..... : 406 Building B Rongchao Binhai Mansion, No.2021 Haixiu Road, Bao'an District, Shenzhen, China Telephone..... : / Fax..... : /	
Factory..... : Shenzhen Margotan Tech Co.,Ltd. Address..... : 406 Building B Rongchao Binhai Mansion, No.2021 Haixiu Road, Bao'an District, Shenzhen, China Telephone..... : / Fax..... : /	

Test Result according to the standards on page 6: Positive
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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

Revision	Issue Date	Revisions	Revised By
000	December 3, 2018	Initial Issue	Andy Yang

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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.

EMISSION			
Description of Test Item	Standard	Limits	Results
Radiated disturbance	FCC 47 CFR Part 15 Subpart B	Class B	PASS
Conducted disturbance at Antenna terminals	FCC 47 CFR Part 15 Subpart B	-----	N/A
N/A is an abbreviation for Not Applicable.			

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

EUT : Intelligent Eye Beauty Massager

Trade Mark : N/A

Model Number : IF-1203

Power Supply : For Product: DC 5V, 0.5A

EUT Clock Frequency : $\leq 15\text{MHz}$

2.2. 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 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.

2.3. Measurement Uncertainty

Test	Parameters	Expanded uncertainty (U_{lab})	Expanded uncertainty (U_{cispr})
Conducted Emission	Level accuracy (9kHz to 150kHz)	± 2.63 dB	± 4.0 dB
	(150kHz to 30MHz)	± 2.35 dB	± 3.6 dB
Power disturbance	Level accuracy (30MHz to 300MHz)	± 2.90 dB	± 4.5 dB
Electromagnetic Radiated Emission (3-loop)	Level accuracy (9kHz to 30MHz)	± 3.60 dB	± 2.63 dB
Radiated Emission	Level accuracy (9kHz to 30MHz)	± 3.68 dB	± 2.63 dB
Radiated Emission	Level accuracy (30MHz to 1000MHz)	± 3.48 dB	± 2.63 dB
Radiated Emission	Level accuracy (above 1000MHz)	± 3.90 dB	N/A
Mains Harmonic	Voltage	$\pm 0.510\%$	N/A
Voltage Fluctuations & Flicker	Voltage	$\pm 0.510\%$	N/A
EMF		$\pm 21.59\%$	N/A

- (1) Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus.
- (2) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

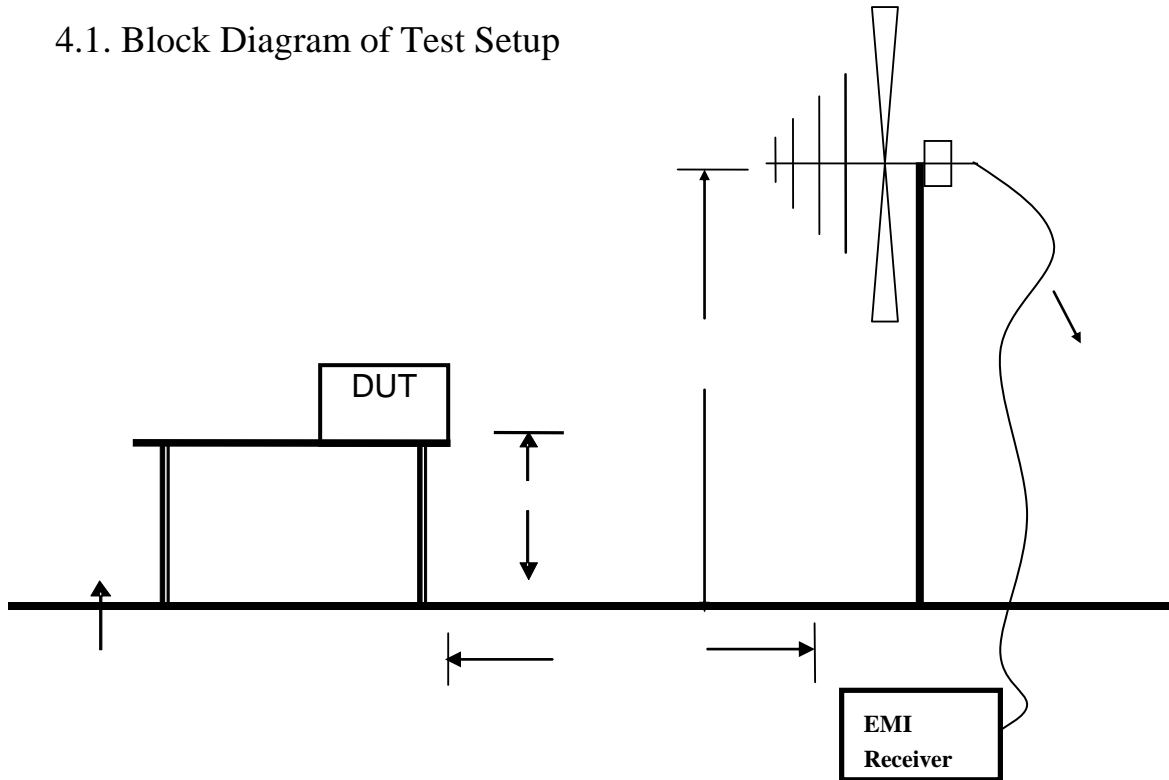
3. MEASURING DEVICE AND TEST EQUIPMENT

3.1. Radiated Disturbance (Electric Field)

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	3m Semi Anechoic Chamber	Mao Rui	/	/	2018.01.04
2	EMI Test Receiver	ROHDE & SCHWARZ	ESR 3	102311	2018.06.29
3	Biconical Antenna	ROHDE & SCHWARZ	VHBB 9124	01015	2018.09.21
4	Log Periodic Broadband Antenna	ROHDE & SCHWARZ	VULP 9118B	873	2018.09.21
5	EMI Test Software	Farad	EZ-EMC	/	/

4. RADIATED EMISSION MEASUREMENT

4.1. Block Diagram of Test Setup



4.2. Radiated Emission Limit (Class B)

Limits for radiated disturbance Blow 1GHz

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46
960 ~ 1000	3	500	54

Remark : (1) Emission level (dB)μV = 20 log Emission level μV/m
 (2) The smaller limit shall apply at the cross point between two frequency bands.
 (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

4.3. EUT Configuration on Measurement

The following equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.4. Operating Condition of EUT

- 3.5.1. Setup the EUT as shown in Section 3.2.
- 3.5.2. Let the EUT work in test mode (ON) and measure it.

4.5. Test Procedure

EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated by-log antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2009 on radiated emission measurement.

The bandwidth of the EMI test receiver is set at 120kHz, 1000kHz.

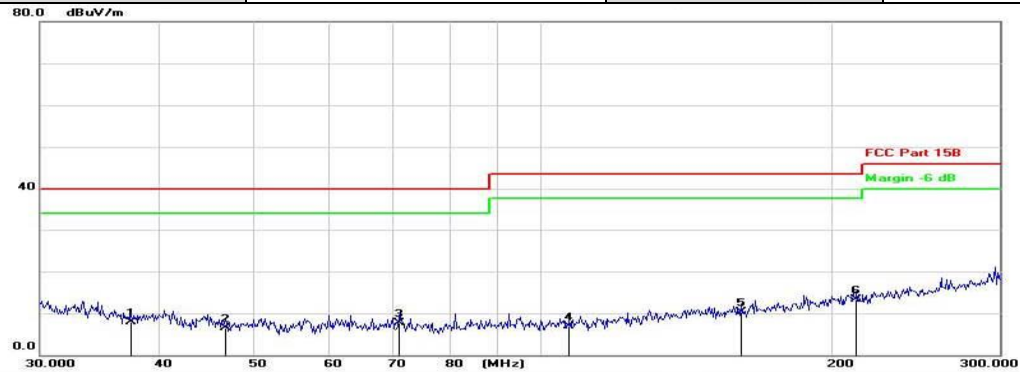
The frequency range from 30MHz to 1000MHz is checked.

4.6. Radiated Emission Noise Measurement Result

PASS.

The scanning waveforms please refer to the next page.

Model No.	IF-1203	Test Mode	ON
Environmental Conditions	23.5°C, 52.9% RH	Detector Function	Quasi-peak
Pol	Vertical	Distance	3m
Test Engineer	Zilu Jian		



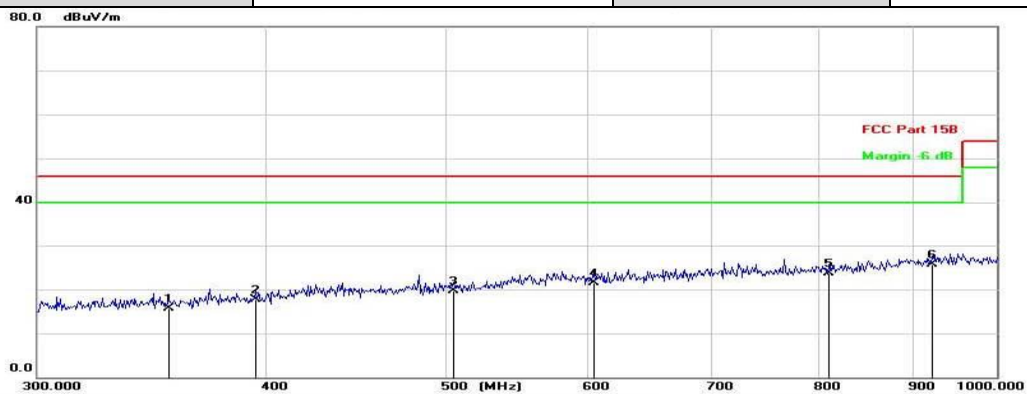
Site: LAB
 Limit: FCC Part 15B
 EUT: 智能美眼仪
 M/N: IF-1203
 Mode: ON
 Note:

Polarization: *Vertical*
 Power: DC5V
 Distance: 3m

Temperature: 23.5
 Humidity: 52.9 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dB/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1		37.3354	-5.21	13.02	7.81	40.00	-32.19	QP			
2		46.8935	-4.87	11.30	6.43	40.00	-33.57	QP			
3		70.9367	-2.68	10.31	7.63	40.00	-32.37	QP			
4		106.7508	-3.98	10.83	6.85	43.50	-36.65	QP			
5		161.4488	-3.45	13.66	10.21	43.50	-33.29	QP			
6	*	211.7733	-2.93	16.22	13.29	43.50	-30.21	QP			

Model No.	IF-1203	Test Mode	ON
Environmental Conditions	23.5°C, 52.9% RH	Detector Function	Quasi-peak
Pol	Vertical	Distance	3m
Test Engineer	Zilu Jian		



Site: LAB
 Limit: FCC Part 15B
 EUT: 智能美眼仪
 M/N: IF-1203
 Mode: ON
 Note:

Polarization: *Vertical*
 Power: DC5V
 Distance: 3m

Temperature: 23.5
 Humidity: 52.9 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dB/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1		354.0846	-4.28	19.93	15.65	46.00	-30.35	QP			
2		395.1207	-3.29	20.92	17.63	46.00	-28.37	QP			
3		505.7314	-2.99	22.61	19.62	46.00	-26.38	QP			
4		603.1022	-2.99	24.56	21.57	46.00	-24.43	QP			
5		809.8073	-3.10	26.72	23.62	46.00	-22.38	QP			
6	*	920.5600	-2.61	28.30	25.69	46.00	-20.31	QP			

Model No.	IF-1203	Test Mode	ON
Environmental Conditions	23.5°C, 52.9% RH	Detector Function	Quasi-peak
Pol	Horizontal	Distance	3m
Test Engineer	Zilu Jian		



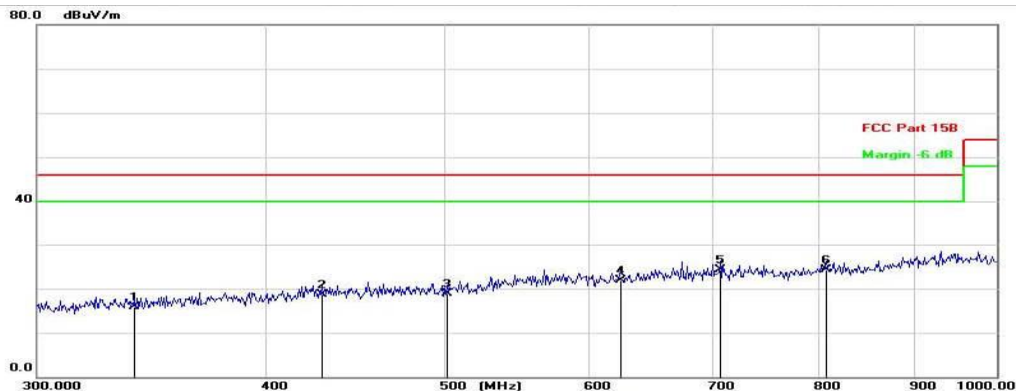
Site: LAB
 Limit: FCC Part 15B
 EUT: 智能美眼仪
 M/N: IF-1203
 Mode: ON
 Note:

Polarization: **Horizontal**
 Power: DC5V
 Distance: 3m

Temperature: 23.5
 Humidity: 52.9%

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dB/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	35.6627	-3.43	13.25	9.82	40.00	-30.18	QP		
2		51.9841	-5.01	10.64	5.63	40.00	-34.37	QP		
3		79.3636	-2.90	9.81	6.91	40.00	-33.09	QP		
4		117.7257	-3.14	11.39	8.25	43.50	-35.25	QP		
5		156.9897	-2.87	13.47	10.60	43.50	-32.90	QP		
6		239.6067	-2.24	17.44	15.20	46.00	-30.80	QP		

Model No.	IF-1203	Test Mode	ON
Environmental Conditions	23.5°C, 52.9% RH	Detector Function	Quasi-peak
Pol	Horizontal	Distance	3m
Test Engineer	Zilu Jian		



Site: LAB
 Limit: FCC Part 15B
 EUT: 智能美眼仪
 M/N: IF-1203
 Mode: ON
 Note:

Polarization: **Horizontal**
 Power: DC5V
 Distance: 3m

Temperature: 23.5
 Humidity: 52.9%

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dB/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1		339.4558	-3.78	19.75	15.97	46.00	-30.03	QP		
2		429.2178	-3.08	21.80	18.72	46.00	-27.28	QP		
3		501.1853	-3.61	22.57	18.96	46.00	-27.04	QP		
4		623.9755	-3.03	24.86	21.83	46.00	-24.17	QP		
5		706.3481	-1.36	25.60	24.24	46.00	-21.76	QP		
6	*	806.3720	-2.34	26.72	24.38	46.00	-21.62	QP		

5. PHOTOGRAPH

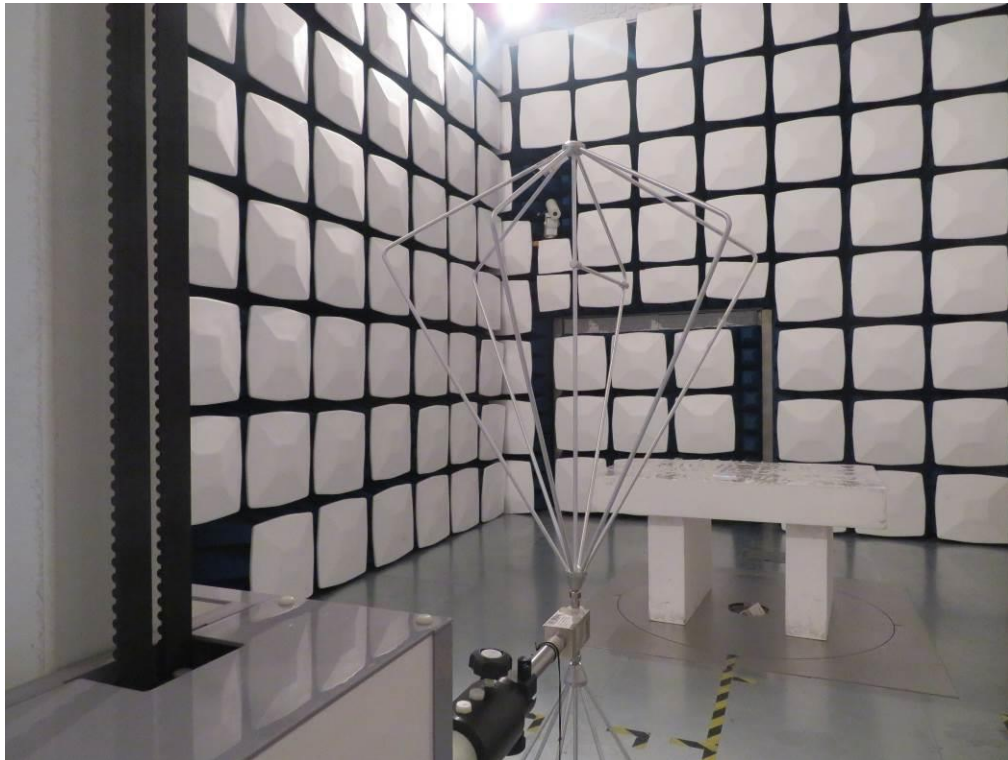


Fig.1



Fig.2

6. EXTERNAL AND INTERNAL PHOTOS OF THE EUT



Fig.1



Fig.2



Fig.3



Fig.4



Fig.5



Fig.6

-----THE END OF TEST REPORT-----