TEST REPORT

Product Name	:	WIFI Motion Sensor
Brand Mark	:	Globe
Model No.	:	35872
FCC ID	:	2AQUQGB35872
Report Number	:	BLA-EMC-202205-A9403
Date of Sample Receipt	:	2022/5/31
Date of Test	:	2022/5/31 to 2022/6/14
Date of Issue	:	2022/6/14
Test Standard	:	47 CFR Part 1.1307, Part 1.1310
Test Result	:	Pass

Prepared for:

Globe Electric Company Inc.

150 Oneida, Montreal, Quebec, Canada, H9R 1A8

Prepared by:

BlueAsia of Technical Services(Shenzhen) Co.,Ltd.

Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China

TEL: +86-755-23059481

Compiled by: Jozu

Approved by: BlueZhong

Review by: Sweely

Date: 2022/6/14

BlueAsia of Technical Services(Shenzhen) Co., Ltd. BLA

REPORT REVISE RECORD

Version No.	Date	Description
00	2022/6/14	Original

TABLE OF CONTENTS

1 TEST SUMMARY

Test item	Test Requirement	Test Method	Class/Severity	Result
RF Exposure	47 CFR Part 1.1307, Part 1.1310 g	CFR 47 Part 1.1310	CFR 47 Part 1.1310	PASS

2 GENERAL INFORMATION

Applicant	Globe Electric Company Inc.
Address	150 Oneida, Montreal, Quebec, Canada, H9R 1A8
Manufacturer	Hangzhou Sky-Lighting Co.,Ltd
Address	No.161, North Star-bridge Road, Linping, Hangzhou，China, 311100
Factory	Hangzhou Sky-Lighting Co.,Ltd
Address	No.161, North Star-bridge Road, Linping, Hangzhou，China, 311100
Product Name	WIFI Motion Sensor
Test Model No.	35872

3 GENERAL DESCRIPTION OF E.U.T.

Hardware Version	1.0.0
Software Version	1.0.10
Supply power	AC120V

BLE

Operation Frequency:	2402MHz-2480MHz
Modulation Type:	GFSK
Channel Spacing:	2MHz
Number of Channels:	40
Antenna Type:	Integral Antenna
Antenna Gain:	2.2dBi(Provided by the applicant)

WIFI

Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz 802.11n(HT40): 2422MHz to 2452MHz
Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Channel Spacing:	5MHz
Number of Channels:	802.11b/g/n(HT20):11 802.11n(HT40):7
Antenna Type:	Integral Antenna
Antenna Gain:	2.2dBi(Provided by the applicant)

4 LABORATORY LOCATION

All tests were performed at:
BlueAsia of Technical Services(Shenzhen) Co., Ltd.
Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China
Telephone: TEL: +86-755-28682673 FAX: +86-755-28682673
No tests were sub-contracted.

5 RF EXPOSURE COMPLIANCE REQUIREMENT

5.1 LIMITS

According to FCC Part1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in part1.1307(b)

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*($900/f^2$)	6
30–300	61.4	0.163	1.0	6
300–1500	.....	.....	f/300	6
1500–100,000	.....	.....	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*($180/f^2$)	30
30–300	27.5	0.073	0.2	30
300–1500	.....	.....	f/1500	30
1500–100,000	.....	.....	1.0	30

F= Frequency in MHz
Friis Formula
Friis transmission formula: Pd = (Pout*G)/(4* Pi * R 2)
Where
Pd = power density in mW/cm2
Pout = output power to antenna in mW
G = gain of antenna in linear scale
Pi = 3.1416

R = distance between observation point and center of the radiator in cm
Pd id the limit of MPE, 1 mW/cm2 . If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

5.2 TEST PROCEDURE

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

5.3 EUT RF EXPOSURE EVALUATION

Antenna Gain: 2.2dBi
Antenna Gain: The maximum Gain measured in fully anechoic chamber is 1.660 in linear scale.
Output Power Into Antenna & RF Exposure Evaluation Distance:

BLE

Channel	Frequenc y (MHz)	Max Conducted Peak Output Power (dBm)	Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm^2)	Limit	Result
Highest	2480	3.156	2.068	0.0007	1.0	PASS

2.4G WIFI 802.11g

Channel	Frequenc y (MHz)	Max Conducted Peak Output Power (dBm)	Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm^2)	Limit	Result
Lowest	2412	15.093	32.307	0.0107	1.0	PASS

Note: Refer to report No. BLA-EMC-202205-A9401/02 for EUT test Max Conducted Peak Output Power value.
The distance r (4th column) calculated from the Fries transmission formula is far greater than 20 cm separation Requirement

----END OF REPORT----