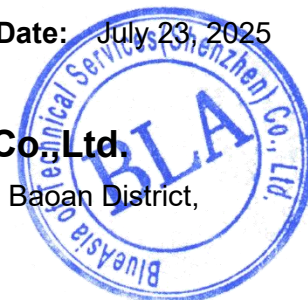


RF Exposure

Applicant : GLOBE ELECTRIC COMPANY INC.
Room H-I, 10th floor, International Trade Commercial
Address : Building, No.3005 Nanhu Road, Lowu District,
Shenzhen City, Guangdong, China
Product Name : SK509-W-2S-A
Brand Mark : GLOBE
Model : 50333*
FCC ID : 2AQUQGE50333A
Report Number : BLA-EMC-202507-A3003
Date of Receipt : July 9, 2025
Date of Test : July 9, 2025 to July 23, 2025
Test Standard : KDB447498D04 General RF Exposure Guidance v01
Test Result : Pass

Compiled by: *Hugh*Review by: *Xavier*Approved by: *Blue Zheng*

Issued Date: July 23, 2025

BlueAsia of Technical Services(Shenzhen) Co., Ltd.Address: Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District,
Shenzhen, Guangdong Province, China

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Revise Record

Version No.	Date	Description
01	July 23, 2025	Original

1 General information

1.1 General information

Applicant	GLOBE ELECTRIC COMPANY INC.
Address	Room H-I, 10th floor, International Trade Commercial Building, No.3005 Nanhu Road, Lowu District, Shenzhen City, Guangdong, China
Manufacturer	GLOBE ELECTRIC COMPANY INC.
Address	Room H-I, 10th floor, International Trade Commercial Building, No.3005 Nanhu Road, Lowu District, Shenzhen City, Guangdong, China
Factory	GLOBE ELECTRIC COMPANY INC.
Address	Room H-I, 10th floor, International Trade Commercial Building, No.3005 Nanhu Road, Lowu District, Shenzhen City, Guangdong, China

1.2 General description of EUT

Product name	SK509-W-2S-A
Model no.	50333*
Series model	N/A
Test engineer sample no.	BLA-EMC-202507-A30
Power supply or adapter information	DC3.3V
Hardware Version	N1
Software Version	2.0
<i>Note: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.</i>	

BLE:

Operation Frequency:	2402MHz-2480MHz
Modulation Type:	GFSK
Rate data:	1Mbps; 2Mbps
Channel Spacing:	2MHz
Number of Channels:	40
Antenna Type:	PCB antenna
Antenna Gain:	-0.74dBi (Provided by customer)

2.4G WIFI:

Operation Frequency:	2412MHz-2462MHz
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:	PCB antenna
Antenna Gain:	-0.74dBi (Provided by customer)

2 RF Exposure Compliance Requirement

2.1 Standard Requirement

According to 447498 D04 Interim General RF Exposure Guidance v01

Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

2.2 Limits

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \quad (\text{B. 2})$$

where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20 \text{ cm}}$ is per Formula (B.1).

Example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)										
	5	10	15	20	25	30	35	40	45	50	
	300	39	65	88	110	129	148	166	184	201	217
	450	22	44	67	89	112	135	158	180	203	226
	835	9	25	44	66	90	116	145	175	207	240
	1900	3	12	26	44	66	92	122	157	195	236
	2450	3	10	22	38	59	83	111	143	179	219
	3600	2	8	18	32	49	71	96	125	158	195
	5800	1	6	14	25	40	58	80	106	136	169

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B. 1})$$

2.3 Result

$$\text{EIRP} = \text{pt} \times \text{gt} = (\text{E} \times \text{d})^2 / 30$$

Where:

pt = transmitter output power in watts,

gt = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m, --- $10((\text{dBuV/m})/20)/106$

d = measurement distance in meters (m) ---3m

$$\text{Spot} = (\text{EXd})^2 / 30 \times \text{gt}$$

$$\text{Ant gain} = -0.74 \text{ dBi}$$

BLE

$$\text{Max Output power} = -0.493 \text{ dBm} @ 2402 \text{ MHz} = 0.893 \text{ mW} < 3060 \text{ mW}$$

$$\text{ERP} = -0.493 - 0.74 - 2.15 = -3.383 \text{ dBm}$$

So

ERP is worse case

$$10^{-0.3383} = 0.459 \text{ mW} < 3060 \text{ mW}$$

Comply with RF exposure exemption limit.

2.4 GWIFI

$$\text{Max Output power} = 13.739 \text{ dBm} @ 2437 \text{ MHz} = 23.654 \text{ mW} < 3060 \text{ mW}$$

$$\text{ERP} = 13.739 - 0.74 - 2.15 = 10.849 \text{ dBm}$$

So

ERP is worse case

$$10^{1.0849} = 12.159 \text{ mW} < 3060 \text{ mW}$$

Comply with RF exposure exemption limit.

----END OF REPORT----

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