FCC RF EXPOSURE REPORT

For

Smart A19 Dimmable Bulb

MODEL NUMBER: 13aSB-A806ST-Q1R_NA，13aSB-A806ST-Q1R_NA-4P

FCC ID: 2AB2Q13ASBA806STQ1R

REPORT NUMBER: 4791380735-1-RF-3

ISSUE DATE: August 12, 2024

Prepared for

LEEDARSON LIGHTING CO., LTD
Xingtai Industrial Zone, Economic Development Zone, Changtai County, Zhangzhou city, Fujian Province, P.R.China

Prepared by

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China

Tel: +86 769 22038881
Fax: +86 769 33244054
Website: www.ul.com

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	August 12, 2024	Initial Issue	

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS 4

2. TEST METHODOLOGY 5

3. FACILITIES AND ACCREDITATION 5

4. REQUIREMENT 6

1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	LEEDARSON LIGHTING CO., LTD
Address:	Xingtai Industrial Zone, Economic Development Zone, Changtai County, Zhangzhou city, Fujian Province, P.R.China

Manufacturer Information

Company Name:	LEEDARSON LIGHTING CO., LTD
Address:	Xingtai Industrial Zone, Economic Development Zone, Changtai County, Zhangzhou city, Fujian Province, P.R.China

EUT Information

EUT Name:	Smart A19 Dimmable Bulb
Model:	13aSB-A806ST-Q1R_NA
Series Model:	13aSB-A806ST-Q1R_NA-4P
Model Difference:	13aSB-A806ST-Q1R_NA-4P have the same technical construction including circuit diagram, PCB Layout, components and component layout, all electrical construction and mechanical construction with 13aSB-A806ST-Q1R_NA. The difference lies only model name and package style. all these changes do not degrade the unwanted emissions of the certified product.
Sample Received Date:	June 27, 2024
Sample Status:	Normal
Sample ID:	7356126
Date of Tested:	June 27, 2024 to August 12, 2024

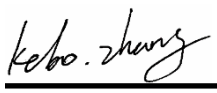
APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
447498 D04 Interim General RF Exposure Guidance v01	**PASS**

Prepared By:

Fanny Huang

Engineer Project Associate

Checked By:



Kebo Zhang

Senior Project Engineer

Approved By:

Stephen Guo

Operations Manager

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 1 Subpart I, section 1.1307 and KDB 447498 D04 Interim General RF Exposure Guidance v01.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	**A2LA (Certificate No.: 4102.01)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA. **FCC (FCC Designation No.: CN1187)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Delcaration of Conformity (DoC) and Certification rules **ISED (Company No.: 21320)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046. **VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011

Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30MHz had been correlated to measurements performed on an OFS.

4. REQUIREMENT

LIMIT AND CALCULATION METHOD

According to 447498 D04 Interim General RF Exposure Guidance v01,

2.1.4 MPE-Based Exemption

An alternative to the SAR-based exemption is provided in § 1.1307(b)(3)(i)(C), for a much wider frequency range, from 300 kHz to 100 GHz, applicable for separation distances greater or equal to λ/2π, where λ is the free-space operating wavelength in meters. The MPE-based test exemption condition is in terms of ERP, defined as the product of the maximum antenna gain and the delivered maximum time-averaged power.10 For this case, a RF source is an RF exempt device if its ERP (watts) is no more than a frequency-dependent value, as detailed tabular form in Appendix B. These limits have been derived based on the basic specifications on Maximum Permissible Exposure (MPE) considered for the FCC rules in § 1.1310(e)(1).

MPE-based Exemption

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

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

CALCULATED RESULTS

For Single RF Source

Operating Mode	Max. Tune up Power	Max. Antenna Gain	EIRP	ERP	ERP	Distance	Limit Threshold
	(dBm)	(dBi)	(dBm)	(dBm)	(mW)	(cm)	(mW)
BLE	14.5	1.58	16.08	13.93	24.717	20	3060
WIFI2.4G	19	1.58	20.58	18.43	69.663	20	3060

Note:
1. The calculated distance is 20 cm.
2. The power comes from operation description.
3. The EUT does not support simultaneous operation.

END OF REPORT