



FCC RF EXPOSURE REPORT

For

Lighting

MODEL NUMBER: 8Zy-BR650ST-A4R, BE 220

FCC ID: 2AB2Q8ZB650STA4R

REPORT NUMBER: 4788953381-3

ISSUE DATE: April 16, 2019

Prepared for

LEEDARSON LIGHTING CO., LTD.

**Xingtai Industrial Zone, Economic Development Zone, Changtai County, Zhangzhou
City, Fujian Province, P.R.China**

Prepared by

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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: Lighting
Model: 8Zy-BR650ST-A4R
Series Model: BE 220
Model Difference: All the same except for the model name.
Brand: LEEDARSON
Sample Status: Normal
Sample Received Date: April 9, 2019
Date of Tested: April 10 ~ April 16, 2019

APPLICABLE STANDARDS

STANDARD

TEST RESULTS

FCC 47CFR§2.1091
KDB-447498 D01 V06

Complies

Tested By:

Checked By:



Kebo Zhang
Engineer Project Associate

Shawn Wen
Laboratory Leader

Approved By:



Stephen Guo
Laboratory Manager

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v06.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p>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.</p> <p>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</p> <p>IC(Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with Industry Canada. The Company Number is 21320.</p> <p>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.</p> <p>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</p>
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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. DESCRIPTION OF EUT

EUT Name	Lighting	
Model	8Zy-BR650ST-A4R	
Series Model:	BE 220	
Model Difference:	All the same except for the model name.	
Product Description	Operation Frequency	2405 MHz ~ 2480 MHz
	Modulation Type	Data Rate
	O-QPSK	250kbps
Power supply	AC 120V,60Hz	

5. REQUIREMENT

LIMIT

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
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/150	30
1500-100,000	--	--	1.0	30

Note 1: f = frequency in MHz, * means Plane-wave equivalent power density

Note 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Note 3: The limit value 1.0mW/cm² is available for this EUT.

MPE CALCULATION METHOD

$$S = PG/(4\pi R^2)$$

where: S = power density (in appropriate units, e.g. mW/ cm²)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

CALCULATED RESULTS

Radio Frequency Radiation Exposure Evaluation

ZigBee (Worst case)						
Operating Mode	Max. Tune up Power		Antenna Gain		Power density (mW/ cm ²)	Limit
	(dBm)	(mW)	(dBi)	(num)		
ZigBee	11	12.59	2	1.58	0.004	1

Note: the calculated distance is 20cm.

END OF REPORT