

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

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, People's Republic of China

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Complies



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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

Tested By: Checked By:

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Engineer Project Associate

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Approved By:

Stephen Guo

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2. TEST METHODOLOGY

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

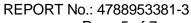
3. FACILITIES AND ACCREDITATION

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





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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.			
	Operation Frequency	2405 MHz ~ 2480 MHz		
Product Description	Modulation Type		Data Rate	
	O-QPSK		250kbps	
Power supply	AC 120V,60Hz			



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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/cm²)	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/f2)*	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	Max. Tune up Power		Antenna Gain		Power density	Limit	
Mode	(dBm)	(mW)	(dBi)	(num)	(mW/ cm ²)	Liiiii	
ZigBee	11	12.59	2	1.58	0.004	1	

Note: the calculated distance is 20cm.

END OF REPORT