

# Low Electric Fittings Company

## MPE ASSESSMENT REPORT

**Report Type:**

FCC Part §2.1091 and §1.1307(b) assessment report

**Model:**

PUR/xx/xxxx/BTWC-xxxx,  
PUR/xx/xxxx/BTFMRWC-xxxx  
UCPDR/xx/xxxx/BTWC-xxxx,  
PUR/xx/xxxx/BTD-xxxx,  
PUR/xx/xxxx/BTFMRD-xxxx,  
UCPDR/xx/xxxx/BTD-xxxx

**REPORT NUMBER:**

240800127SHA-002

**ISSUE DATE:**

November 1, 2024

**DOCUMENT CONTROL NUMBER:**

TTRFFCCMPE-01\_V1 © 2018 Intertek



**Applicant:** Lew Electric Fittings Company  
1626 Tobacco Rd, Augusta, GA 30906

**Manufacturer:** Zhejiang Sino Electro-Technical Co.,Ltd.  
A5 Building, Sulv Industrial Zone,Yueqing City, Zhejiang Province 325604

**Manufacturer Site:** Zhejiang Sino Electro-Technical Co.,Ltd.  
A5 Building, Sulv Industrial Zone,Yueqing City, Zhejiang Province 325604

**Product Name:** Furniture Power Distribution Units, Attachment Plugs and Receptacles  
PUR/xx/xxxx/BTWC-xxxx, PUR/xx/xxxx/BTFMRWC-xxxx,

**Type/Model:** UCPDR/xx/xxxx/BTWC-xxxx, PUR/xx/xxxx/BTD-xxxx,  
PUR/xx/xxxx/BTFMRD-xxxx, UCPDR/xx/xxxx/BTD-xxxx

**FCC ID:** 2A7NLPURBTWC

**SUMMARY:**

The equipment complies with the requirements according to the following standard(s) or Specification:

KDB447498 D01 General RF Exposure Guidance v06  
FCC Part2.1091, FCC Part1.1307(b)

**PREPARED BY:**

Project Engineer  
Dylan Tang

**REVIEWED BY:**

Reviewer  
Wakeyou Wang

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## Revision History

Report No.	Version	Description	Issued Date
240800127SHA-002	Rev. 01	Initial issue of report	November 1, 2024

## 1 GENERAL INFORMATION

### 1.1 Description of Equipment Under Test (EUT)

Product name:	Furniture Power Distribution Units, Attachment Plugs and Receptacles PUR/xx/xxxx/BTWC-xxxx, PUR/xx/xxxx/BTFMRWC-xxxx, UCPDR/xx/xxxx/BTWC-xxxx, PUR/xx/xxxx/BTD-xxxx, PUR/xx/xxxx/BTFMRD-xxxx, UCPDR/xx/xxxx/BTD-xxxx "xx": denotes the current specification of receptacles, can be 15=15amp, 20=20amp "xxxx" denotes installed with different type receptacles, can be G=with a GFCI, DS=with a decora receptacle, AC=with an A/C receptacle, GAC=with a GFCI and an A/C receptacle, AC2P= with two A/C receptacles, no code=without receptacles "xxxx": denotes different kind of tops, can be B=Brass top; SS=Stainless steel top; BK= Black painting top; WT= White painting top;DB= Dark bronze painting top; OW = Off white painting top; AWT= White painting top and white housing; NS= Nickel silver top; BS= Black stainless top; SN= Stain-nickel top; G=Graphite top; CB=Champagne Bronze top; RBK=Black PC top; RWT=White pc top; RSS=Silver PC top; ROW= Off white PC top; RDB=Dark bronze pc top; RBR=Brass colored pc top; RAWT=White PC top base and white housing
Type/Model:	(XXXX can be 1 character, 2 characters, 3 characters or 4 characters)
Description of EUT:	The EUT is a Bluetooth Module which supports Bluetooth function. There are some series model and they are same except the appearance shape and color. So choose PUR20AACBTQWC-RBK to test as representative.
Rating:	125V 15A for 15A receptacle 125V/120V 20A for 20A receptacle
Category of EUT:	Class B
EUT type:	<input checked="" type="checkbox"/> Table top <input type="checkbox"/> Floor standing
Software Version:	V1.0
Hardware Version:	V1.0
Serial numbers:	0240325-06-001(for radiation sample), 0240325-06-001(for conduction sample)
Sample received date:	January 15, 2024
Date of test:	January 15, 2024 ~ March 5, 2024

## 1.2 Technical Specification

Frequency Range:	2400MHz ~ 2483.5MHz
Support Standards:	Bluetooth 5.2 (BR+EDR)
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)
Type of Modulation:	GFSK, $\pi/4$ DQPSK, 8DPSK
Channel Number:	79 (0 - 78)
Data Rate:	1Mbps
Channel Separation:	1 MHz
Antenna:	PCB antenna, 0.27dBi gain

### 1.3 Description of Test Facility

Name:	Intertek Testing Services (Shanghai FTZ) Co., Ltd.
Address:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L21189
	FCC Accredited Lab Designation Number: CN0175
	IC Registration Lab CAB identifier.: CN0014
	VCCI Registration Lab Registration No.: R-14243, G-10845, C-14723, T-12252
	A2LA Accreditation Lab Certificate Number: 3309.02

## 2 MPE Assessment

Test result: Pass

### 2.1 MPE Assessment Limit

Mobile device exposure for standalone operations:

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (uT)	Equivalent plane wave power density $S_{eq}$ (W/m <sup>2</sup> )
0-1 Hz	-	$3,2 \times 10^4$	$4 \times 10^4$	-
1-8 Hz	10 000	$3,2 \times 10^4/f^2$	$4 \times 10^4/f^2$	-
8-25 Hz	10 000	4 000/f	5 000/f	-
0,025-0,8 kHz	250/f	4/f	5/f	-
0,8-3 kHz	250/f	5	6,25	-
3-150 kHz	87	5	6,25	-
0,15-1 MHz	87	0,73/f	0,92/f	-
1-10 MHz	$87/f^{1/2}$	0,73/f	0,92/f	-
10-400 MHz	28	0,073	0,092	2
400-2 000 MHz	$1,375 f^{1/2}$	$0,0037 f^{1/2}$	$0,0046 f^{1/2}$	f/200
2-300 GHz	61	0,16	0,20	10

Mobile device exposure for simultaneous transmission operations: **the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in a host device is  $\leq 1.0$**

## 2.2 Assessment Results

Power density (S) is calculated according to the formula:

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

Where S = power density in mW/cm<sup>2</sup>

P = Radiated transmit power in mW

G = numeric gain of transmit antenna

R = distance (cm)

As we can see from the test report: 240800127SHA-001.

The calculations in the table below use the highest gain of antenna for client EUT. These calculations represent worst case in terms of the exposure levels.

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Frequency band	Power		Antenna Gain		R	S	Limits
(MHz)	dBm	mW	dBi	(Numeric)	(cm)	(mW/cm <sup>2</sup> )	(mW/cm <sup>2</sup> )
2402 – 2480	2.56	1.80	0.27	1.06	20	0.00038	1

Note: 1 mW/cm<sup>2</sup> from 1.310 Table 1.



## Appendix I

Definition below must be outlined in the User Manual:

To satisfy FCC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.

To ensure compliance, operations at closer than this distance is not recommended.

\*\*\*\*\*END\*\*\*\*\*