

Lew Electric Fittings Company MPE ASSESSMENT REPORT

Report Type:

FCC Part §2.1091, §2.1093 and §1.1307(b) assessment report

Model:

PUR/xx/xxxx/BTQWC-xxxx, PUR/xx/xxxx/BTQD-xxxx

REPORT NUMBER: 240800131SHA-003

ISSUE DATE: November 1, 2024

DOCUMENT CONTROL NUMBER: TTRFFCCMPE-01 V1 © 2018 Intertek





Intertek Testing Services (Shanghai FTZ) Co., Ltd. Building No.86, 1198 Qinzhou Road (North) Caohejing Development Zone Shanghai 200233, China

> Telephone: 86 21 6127 8200 www.intertek.com

Report no.: 240800131SHA-003

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
Type/Model:	PUR/xx/xxxx/BTQWC-xxxx, PUR/xx/xxxx/BTQD-xxxx
FCC ID:	2A7NLPURBTQWC

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 Part2.1093 FCC Part1.1307(b)

PREPARED BY:

Vylan tang

Project Engineer Dylan Tang

REVIEWED BY:

Wakeyou

Reviewer Wakeyou Wang

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.



Revision History

Report No.	Version	Description	Issued Date	
240800131SHA-003	Rev. 01	Initial issue of report	November 1, 2024	

Intertek Total Quality. Assured. TEST REPORT

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Product name:	Furniture Power Distribution Units, Attachment Plugs and Receptacles				
	PUR/xx/xxxx/BTQWC-xxxx, PUR/xx/xxxx/BTQD-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				
	"vvvv": denotes different kind of tons, can be				
	B-Brass top: SS-Stainless steel top: RK- Black painting top:				
	WT = White painting ton: DB = Dark bronze painting ton:				
	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=Whtie pc top; RSS=Silver PC top;				
	ROW= Off white PC top; RDB=Dark bronze pc top; RBR=Brass colored				
- (1.4.1.1	pc top; RAWT=White PC top base and white housing				
Type/Model:	(XXXX can be 1 character, 2 characters, 3 characters or 4 characters)				
	the EOT is a Bluetooth Module which supports Bluetooth and Wireless				
	line, and their circuitry is the same exactly. The model				
Description of EUT:	PUR/xx/xxxx/BTQWC-xxxx was chosen to test.				
	125V 15A for 15A receptacle				
Rating:	125V/120V 20A for 20A receptacle				
Category of EUT:	Class B				
EUT type:	Table top 🔲 Floor standing				
Software Version:	V1.0				
Hardware Version:	V1.0				
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, π/4 DQPSK, 8DPSK			
Channel Number:	79 (0 - 78)			
Data Rate:	1Mbps			
Channel Separation:	1 MHz			
Antenna:	PCB antenna, 0.27dBi gain			

Total Quality. Assured. TEST REPORT

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	CNAS Accreditation Lab
recognized,	Registration No. CNAS L21189
certified, or accredited by these organizations:	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

Total Quality. Assured.

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 ²)	
0-1 Hz	-	3,2 × 10 ⁴	4×10^{4}	-	
1-8 Hz	10 000	3,2 × 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

Report No.: 240800131SHA-003

intertek Total Quality. Assured.

TEST REPORT

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/cm² P = Radiated transmit power in mW G = numeric gain of transmit antennaR = 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.

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.

Frequency band	Power		Antenna Gain		R	S	Limits
(MHz)	dBm	mW	dBi	(Numeric)	(cm)	(mW/cm2)	(mW/cm2)
2402 – 2480	1.56	1.43	0.27	1.06	20	0.00031	1

Note: 1 mW/cm2 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.