

Prüfbericht-Nr.: Test report no.:	CN22JPD6 003	Auftrags-Nr.: Order no.:	168394818	Seite 1 von 3 Page 1 of 3
Kunden-Referenz-Nr.: Client reference no.:	N/A	Auftragsdatum: Order date:	2022-10-17	
Auftraggeber: Client:	DONGGUAN CASTLE MARK FURNITURE CO., LTD. 267 Guan Chang road, DongCheng, Dong Guan 523128, Guangdong, China.			
Prüfgegenstand: Test item:	ZG CHAIR			
Bezeichnung / Typ-Nr.: Identification / Type no.:	CIRCA			
Auftrags-Inhalt: Order content:	Test Report			
Prüfgrundlage: Test specification:	CFR47 FCC Part 2: Section 2.1091 CFR47 FCC Part 1: Section 1.1310 KDB 447498 D01 General RF Exposure Guidance v06 FCC KDB Publication 865664 D02 v01r02			
Wareneingangsdatum: Date of sample receipt:	2022-12-14	Please refer to Photo Document		
Prüfmuster-Nr.: Test sample no.:	A003388414-003			
Prüfzeitraum: Testing period:	2022-12-14 to 2022-12-30			
Ort der Prüfung: Place of testing:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von: tested by:	genehmigt von: authorized by:			
Datum: Date: 2023-01-16	Ausstellungsdatum: Issue date: 2023-01-16			
Stellung / Position: Assistant Project Manager	Stellung / Position: Reviewer			
Sonstiges / Other: FCC ID: 2A87F-CIRCA				
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:		Prüfmuster vollständig und unbeschädigt Test item complete and undamaged		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet * Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.				

1. Radio Frequency Exposure

RESULT:**Pass**

Test standard : FCC Part 2: Section 2.1091
CFR47 FCC Part 1: Section 1.1310
KDB 447498 D01 General RF Exposure Guidance v06
FCC KDB Publication 865664 D02 v01r02

1.1 Product Technical Information

The EUT is a ZG CHAIR, it supports Bluetooth BLE(1Mbps) wireless technology.

For details refer to the User Manual, Technical Description and Circuit Diagram.

General Information of EUT	Value
Kind of Equipment	ZG CHAIR
Type Designation	CIRCA
Operating Voltage	AC 110-120V 60Hz
FCC ID	2A87F-CIRCA
Technical Specification of Bluetooth	
Operating Frequency	2402-2480MHz
Type of Modulation	GFSK
Data Rate	1Mbps
Channel Number	40 channels for Bluetooth BLE
Channel Separation	1MHz
Antenna Type	PCB Antenna
Antenna Number	1
Antenna Gain	5.3 dBi

➤ Product Classification

This device defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at 20 cm is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons.

Max 3.0 dBi for 2.4GHz Bluetooth antenna

➤ Radio Frequency Exposure Limit

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)
300-1,500	--	--	f/1500
1,500-100,000	--	--	1.0

➤ Radio Frequency Exposure Calculation Formula

$$S = \frac{PG}{4\pi R^2}$$

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)

or:

$$S = \frac{EIRP}{4\pi R^2}$$

where: EIRP = equivalent (or effective) isotropically radiated power

a) RF Exposure Evaluation (worse case)

Mode	*Measured RF Output Power (dBm)	EIRP (dBm)	Distance (cm)	Power Density (mW/cm ²)	FCC Limit (mW/cm ²)
BLE	8.32	13.62	20	0.0046	1.0

➤ Conclusion

Therefore the maximum calculations result of above are meet the requirement of Radio Frequency Exposure (MPE) limit.