



Certificate #5376.01

# RF EXPOSURE TEST REPORT

APPLICANT	:	GODOX PHOTO EQUIPMENT CO.,LTD
PRODUCT NAME	:	Eight-light Charging Case for C5R
MODEL NAME	:	C5R-C8
BRAND NAME	:	./.
FCC ID	:	2ABYN117
		47 CFR Part 1.1310
STANDARD(S)	:	KDB 680106 D01 Wireless Power Transfer v04
Report No.		EFGX23100320-IE-02-E02
RECEIPT DATE	:	2023-10-23
TEST DATE	:	2023-10-23 to 2023-12-29
ISSUE DATE	:	2024-01-12

Test Report No.: EFGX23100320-IE-02-E02 Eurofins Electrical Testing Service (Shenzhen) Co., Ltd. 1st Floor, Building 2, Chungu, Meisheng Huigu Science and Technology Park, No. 83 Dabao Road, Bao'an District, Shenzhen. P.R.China. Telephone: +86-755-82911867, Fax : +86-755-82910749



1. Ge	neral information	3
1.1.	Notes	3
1.2.	Testing laboratory	4
1.3.	Details of applicant	4
1.4.	Details of manufacturer	4
1.5.	Test item	5
1.6.	Test methodology	5
2. Re	quirement	6
2.1.	Limit	6
2.2.	Method of measurement	6
2.3.	Block diagram of test setup	. 7
2.4.	Equipment approval considerations	7
2.4. 2.5.	Equipment approval considerations Measuring instrument used	7 9



## 1. General information

#### 1.1. Notes

The results of this test report relate exclusively to the item tested as specified in chapter "Description of test item" and are not transferable to any other test items.

Eurofins Electrical Testing Service (Shenzhen) Co., Ltd. is not responsible for any generalisations and conclusions drawn from this report. Any modification of the test item can lead to invalidity of test results and this test report may therefore be not applicable to the modified test item. The test report may only be reproduced or published in full. Reproducing or publishing extracts of the report requires the prior written approval of the Eurofins Electrical Testing Service (Shenzhen) Co., Ltd. This document is subject to the General Terms and Conditions and the Testing and Certification

System of Eurofins Electrical Testing Service (Shenzhen) Co., Ltd., available on request or accessible at www.eurofins.com.

#### **Operator:**

2024-01-12		Bruce Zheng / Project Engineer	Enve Zhong
Date	Eurofins-Lab.	Name / Title	Signature

#### Technical responsibility for area of testing:

2024-01-12		Albert Xu / Lab Manager	Athere Xu
Date	Eurofins	Name / Title	Signature

Test Report No.: EFGX23100320-IE-02-E02 Eurofins Electrical Testing Service (Shenzhen) Co., Ltd. 1st Floor, Building 2, Chungu, Meisheng Huigu Science and Technology Park, No. 83 Dabao Road, Bao'an District, Shenzhen. P.R.China. Telephone: +86-755-82911867, Fax : +86-755-82910749



#### 1.2. Testing laboratory

Eurofins Electrical Testing Service (Shenzhen) Co., Ltd.

1st Floor, Building 2, Chungu, Meisheng Huigu Science and Technology Park, No. 83 Dabao Road, Bao'an District, Shenzhen. P.R.China.

Telephone : +86-755-82911867

Fax : +86-755-82910749

The Laboratory has passed the Accreditation by the American Association for Laboratory Accrediation (A2LA). The Accreditation number is 5376.01

The Laboratory has been listed by industry Canada to perform electromagnetic emission measurements, The CAB identifier is CN0088

#### 1.3. Details of applicant

Name	:	GODOX PHOTO EQUIPMENT CO., LTD
Address	:	1st to 4th Floor, Building 2/1st to 4th Floor, Building 4,
		Yaochuan Industrial Zone, Tangwei Community, Fuhai Street, Baoan District, Shenzhen, 518103 China
Telephone	:	./.
Fax	:	./.

#### **1.4.** Details of manufacturer

Name Address	:	GODOX PHOTO EQUIPMENT CO.,LTD 4th Floor of Building 1, 1st to 4th Floor of Building 2, 4th Floor of Building 3,1st to 4th Floor of Building 4,Yaochuan Industria Zone, Tangwei Community, Fuhai Street, Bao'an District Shenzhen 518103,China	
Telephone Fax	:	./. ./.	



#### 1.5. Test item

Product type Model name Brand Serial number Ratings		Eight-light Charging Case for C5R C5R-C8 ./. N/A Input: 100V-240V~50/60Hz 1.3A Output: 5V=2A Wireless Output: 8*5W
Test voltage FCC ID Additional information	:	120V 2ABYN117 ./.
RadioTechnical data		
Operating Frequency Modulation	:	110 ~ 300kHz FSK

APPLICABLE STANDARDS				
STANDARD	TEST RESULTS			
FCC 47CFR§1.1310	PASS			
FCC 47CFR§2.1091	PASS			

#### 1.6. Test methodology

The tests documented in this report were performed in accordance with FCC 47CFR§1.1310, FCC 47CFR§2.1091, KDB 680106 D01 Wireless Power Transfer v04.



# 2. Requirement

### 2.1. Limit

Frequency Range (MHz)	E-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/1500	30
1500 100,000			1.0	30

Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.

#### 2.2. Method of measurement

- a) The RF exposure test was performed in shielded chamber.
- b) The aggregate H-field strengths at 20 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit
- c) The measurement probe used to search of highest strength.
- d) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.
- e) The EUT were measured according to the dictates of KDB 680106D01v04.



2.3. Block diagram of test setup



Note: As bottom point is not required to test for desktop devices, so we scanning all the surfaces and recorded the worst level in F.

#### 2.4. Equipment approval considerations

The EUT does comply with KDB 680106D01v04r01.

- 1) Power transfer frequency is less than 1MHz. Yes; The device operated in the frequency range from 110kHz to 300kHz.
- 2) Output power from each primary coil is less than or equal to 15 watts. Yes; The maximum output power of each primary coil is 5 watts.
- 3) A client device providing the maximum permitted load is placed in physical contact with the transmitter (i.e., the surfaces of the transmitter and client device enclosures need to be in physical contact)

Yes; In the test setup, the maximum load has been provided and placed in physical contact with the transmitter.

 4) Only. §2.1091-Mobile exposure conditions apply (i.e., this provision dos not cover § 2.1093-Protable exposure conditions)

Yes; The EUT belong to mobile device.



- 5) The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a 1/d (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used for test reduction purposes. The device shall be operated in documented worst-case compliance scenarios (i.e., the ones that lead to the maximum field components), and while all the radiating structures (e.g., coils or antennas) that by design can simultaneously transmit are energized at their nominal maximum power. Yes; The EUT -field and H-field strengths levels are less than 50% of the MPE limit and the data for the worst mode is recorded in the following table.
- 6) For systems with more than one radiating structure, the conditions specified in (5) must be met when the system is fully loaded (i.e., clients absorbing maximum power available), and with all the radiating structures operating at maximum power at the same time, as per design conditions. If the design allows one or more radiating structures to be powered at a higher level while other radiating structures are not powered, then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W, or one coil powered at 15 W: in this case, both scenarios shall be tested.

Yes; The test mode is full load.



#### 2.5. Measuring instrument used

EQUIPMENT ID	EQUIPMENT NAME	MODEL NO.	CAL. DUE DATE
23-1-16-007	Exposure Lever Tester	ELT-400	2024-06-12

#### 2.6. E field and H field strength test result

Test mode for wireless charger:

Config	Test Mode	Description
Mode 1	Standby	Wireless Charger powered by adapter.
Mode 2 Operating		Wireless Charger powered by adapter and with wireless charging load at center.

Note:

1. Load 8\*5W.



H-Filed Strength at 20 cm from the edges surrounding the EUT and 20 cm above the top surface of the EUT  $\,$ 

	H-Filed Strength Measure Result			
Test Position	Mode 1	Mode 2	Limits (A/m)	
	A/	/m		
A	0.5215	0.0345	1.63	
В	0.1210	0.1346	1.63	
С	0.4235	0.0408	1.63	
D	0.0954	0.0751	1.63	
E	0.0271	0.0284	1.63	
F	0.5231	0.1431	1.63	

E-Filed Strength at 20 cm from the edges surrounding the EUT and 20 cm above the top surface of the EUT

	E-Filed Strength Measure Result		
Test Position	Mode 1	Mode 2	Limits (V/m)
	V/m		
A	0.5337	1.1111	614
В	0.4268	0.9196	614
С	0.5570	0.8191	614
D	0.4566	0.7205	614
E	0.5794	0.7755	614
F	0.5806	1.1245	614

Three points per axis has been tested and the report only recorded worst case.

End