

RF Exposure evaluation report

Applicant:	Ugreen Group Limited
Address of Applicant:	UGREEN Building, Longcheng Industrial Park, Longguanxi Road, Longhua, Shenzhen, Guangdong, 518000, China
Manufacturer:	Ugreen Group Limited
Address of Manufacturer:	UGREEN Building, Longcheng Industrial Park, Longguanxi Road, Longhua, Shenzhen, Guangdong, 518000, China
Product name:	Wireless Car Charger
Model:	CD256, 40118
Rating(s):	Input: 5Vdc, 2A ; 9Vdc, 2A; 12Vdc, 2A Output Power: 15W Max.
Trademark:	UGREEN
Standards:	FCC Part 1(1.1310) and Part 2(2.1091), KDB 680106 D01 RF Exposure Wireless Charging
FCC ID:	2AQI5-CD256
Data of Receipt:	2021-11-08
Date of Test:	2021-11-08~2021-11-26
Date of Issue:	2021-11-26
Test Result	Pass*

* In the configuration tested, the test item complied with the standards specified above.

Authorized for issue by:

Test by:

Reviewed by:

Nov. 26, 2021

Chivas Tsang

Chivas

Project Engineer

Nov. 26, 2021

Victor Meng

Victor

Project Manager

Date

Name/Position

Signature

Date

Name/Position

Signature

Possible test case verdicts:

test case does not apply to the test object ...: N/A

test object does meet the requirement: P (Pass)

test object does not meet the requirement ...: F (Fail)

Testing Laboratory information:

Testing Laboratory Name: ITL Co., Ltd

Address.....: No. 8 Jinqianling Street 5, Huangjiang Town, Dongguan,
Guangdong, 523757 P.R.C.

Testing location : Same as above

Tel : 0086-769-39001678

Fax : 0086-20-62824387

E-mail : itl@i-testlab.com

General remarks:

The test results presented in this report relate only to the object tested.

The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.

This report would be invalid test report without all the signatures of testing technician and approver.

This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

General product information:

The models CD256 and 40118 are identical to each other except the model name.

All tests were performed on the model CD256 as representative.

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2 General Information

2.1 Client Information

Applicant: Ugreen Group Limited
Address of Applicant: UGREEN Building, Longcheng Industrial Park, Longguanxi Road, Longhua, Shenzhen, Guangdong, 518000, China

2.2 General Description of E.U.T.

Name: Wireless Car Charger
Model No.: CD256
Trade Mark: UGREEN
Operating Frequency: 110-205KHz
Type of Modulation: FSK
Antenna Reference: Coil Antenna with 0dBi peak Gain
Function: Magnetic Wireless Car Charger

2.3 Details of E.U.T.

EUT Power Supply: 120Vac, 60Hz (For adapter)
Test mode: Mode 1: base station in stand-by, idle mode
Mode 2: Communication and charging

2.4 Description of Support Units

The EUT has been tested as an independent unit for fixed frequency by testing lab.

2.5 Test Location

All tests were performed at:

ITL Co., Ltd

No. 8 Jinqianling Street 5, Huangjiang Town, Dongguan, Guangdong, 523757 P.R.C.

0086-769-39001678

itl@i-testlab.com

No tests were sub-contracted.

2.6 Deviation from Standards

Biconical and log periodic antennas were used instead of dipole antennas.

2.7 Abnormalities from Standard Conditions

None.

2.8 Other Information Requested by the Customer

None.

2.9 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS Lab code:L9342**
- **FCC Designation No.:CN5035**
- **IC Registration NO.: 12593A**
- **NVLAP LAB CODE: 600199-0**

3 RF Exposure Evaluation

3.1 RF Exposure Compliance Requirement

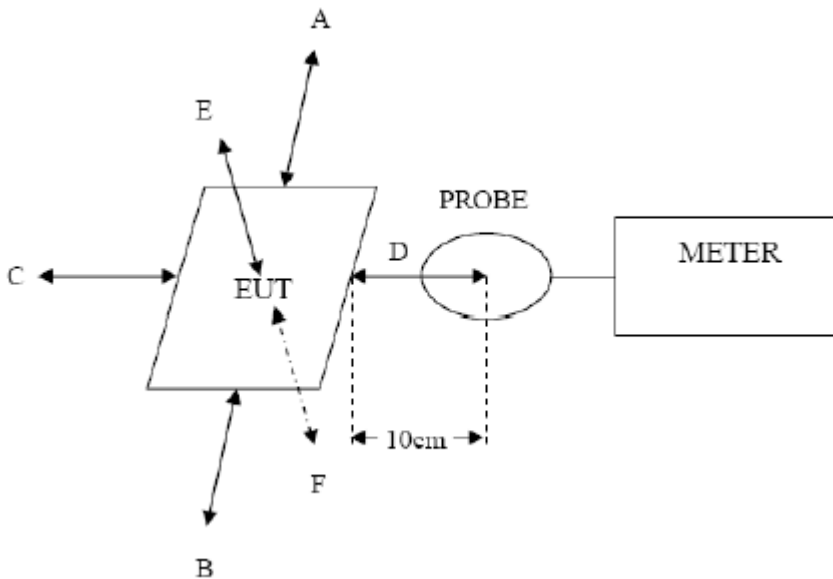
3.1.1 Standard Requirement

FCC Part 1(1.1310) and Part 2(2.1091), KDB 680106 D01 RF Exposure Wireless Charging App v03r01

Test configuration

- 1, The field strength of both E-field and H-field was measured at 10cm using the equipment list above for determining compliance with the MPE requirements of FCC Part 1.1310.
- 2, The RF power density was measured at Under maximum load test
- 3, Maximum E-field and H-field measurements were made 10cm from each side of the EUT. Along the side of the EUT and still 10cm away from the edge of the EUT, the field probes were positioned at the location where there is maximum field strength. The maximum E-field and H-field is reported below.
- 4, This device uses a wireless charging circuit for power transfer operating at the frequency of 100 –205kHz. Thus, the 300kHz limits were used: E-field Limit = 614 (V/m); H-field limit = 1.63 (A/m).

Test Setup



Limits

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	f/300	6
1500-100,000	/	/	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30
F=frequency in MHz *=Plane-wave equivalent power density RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).				

3.1.2 EUT RF Exposure

This device has been tested the worst status of full load and the device has been tested with mobile phone at zero charge, intermediate charge, and full charge.

Mode: Max load

E-Filed Strength at 10cm from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position 1	Test Position 2	Test Position 3	Test Position 4	Test Position 5	Test Position 6	Limits Test (V/m)
0.11-0.205	0.87	1.05	1.12	0.86	1.01	0.80	614

H-Filed Strength at 10cm from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position 1	Test Position 2	Test Position 3	Test Position 4	Test Position 5	Test Position 6	Limits Test (A/m)
0.11-0.205	0.57	0.53	0.52	0.56	0.51	0.56	1.63

Mode: Mid load

E-Filed Strength at 10cm from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position 1	Test Position 2	Test Position 3	Test Position 4	Test Position 5	Test Position 6	Limits Test (V/m)
0.11-0.205	0.72	0.87	0.91	0.83	0.93	0.77	614

H-Filed Strength at 10cm from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position 1	Test Position 2	Test Position 3	Test Position 4	Test Position 5	Test Position 6	Limits Test (A/m)
0.11-0.205	0.48	0.47	0.45	0.51	0.47	0.50	1.63

Mode: Min load

E-Filed Strength at 10cm from the edges surrounding the EUT (V/m)

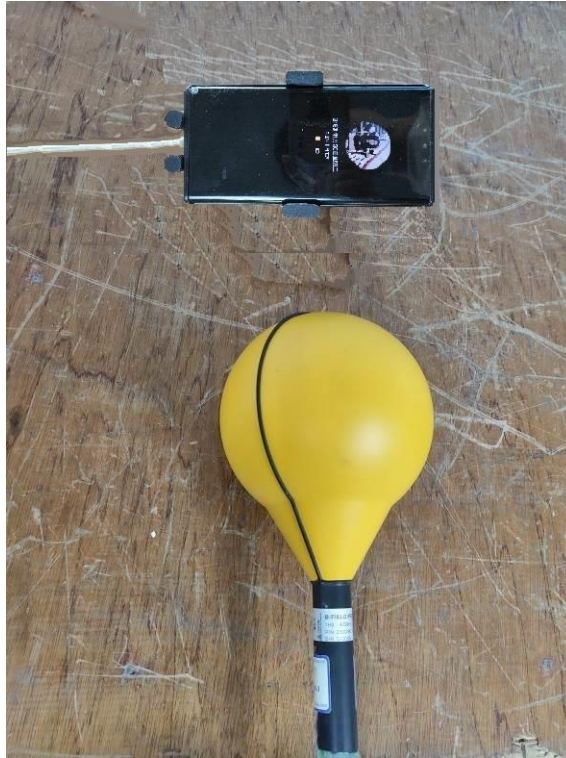
Frequency Range (MHz)	Test Position 1	Test Position 2	Test Position 3	Test Position 4	Test Position 5	Test Position 6	Limits Test (V/m)
0.11-0.205	0.58	0.67	0.71	0.63	0.76	0.61	614

H-Filed Strength at 10cm from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position 1	Test Position 2	Test Position 3	Test Position 4	Test Position 5	Test Position 6	Limits Test (A/m)
0.11-0.205	0.38	0.41	0.43	0.41	0.39	0.43	1.63

Manufacturer declares that this product is not to be used as a portable device.

Photographs of test set-up



-- End --