

TEST REPORT		
Report Number.....:	90122-24-72-24-PP002	
Date of issue.....:	2024-01-29	
Prepared by (+signature)	Pale	
Reviewer (+signature)	Duke	
Approved by (+signature)	Jason	
Testing Laboratory name	SLG-CPC Testlaboratory Co., Ltd.	
Address.....:	No. 11, Wu Song Road, Dongcheng District, Dongguan, Guangdong Province, China 523117	
Applicant's name	Dongguan Yunyang Innovation Electronics Co., Ltd	
Address.....:	Room 504, No. 63 Tanglong East Road, Tangxia Town, Dongguan City, Guangdong Province, China	
Manufacturer's name	Dongguan Yunyang Innovation Electronics Co., Ltd	
Address.....:	Room 504, No. 63 Tanglong East Road, Tangxia Town, Dongguan City, Guangdong Province, China	
Factory's name	Dongguan Yunyang Innovation Electronics Co., Ltd	
Address.....:	Room 504, No. 63 Tanglong East Road, Tangxia Town, Dongguan City, Guangdong Province, China	
Standard(s)	FCC Part 1(1.1310) and Part 2(2.1091)	
Test item description	3-in-1 Magnetic Wireless Charger	
Trade Mark		
Model/Type reference	Y308	
FCC ID	2BDND-Y308	
Date of receipt of test item....:	2024-01-18	
Date (s) of performance of test.....:	2024-01-18 to 2024-01-26	
Summary of Test Results.....:	Pass	
The Summary of Test Results based on a technical opinion belongs to the standard(s).		
General disclaimer: This report shall not be reproduced except in full, without the written approval of SLG-CPC Testlaboratory Co., Ltd. The test results in the report only apply to the tested sample.		

TABLE OF CONTENT

1. SUMMARY OF TEST RESULT	4
2. GENERAL INFORMATION	5
2.1. DESCRIPTION OF DEVICE (EUT)	5
2.2. DESCRIPTION OF TEST MODES	6
2.3. DESCRIPTION OF SUPPORT DEVICE	6
2.4. DESCRIPTION OF TEST FACILITY	6
2.5. MEASUREMENT UNCERTAINTY	7
3. MEASURING DEVICE AND TEST EQUIPMENT	8
3.1. FOR MPE MEASUREMENT	8
4. RF EXPOSURE	9
4.1. MEASURING STANDARD	9
4.2. REQUIREMENTS	9
4.3. TEST CONFIGURATION	10
4.4. BLOCK DIAGRAM OF TEST SETUP	10
4.5. LIMITS	11
4.6. MEASURING RESULTS	12

Modified Information

Report No.	Revision Data	Summary
90122-24-72-24-PP002	2024-01-29	Original Version

1. SUMMARY OF TEST RESULT

EMISSION		
Description of Test Item	Standard & Limits	Results
MPE	FCC Part 1(1.1310) and Part 2(2.1091) KDB680106 D01 Wireless Power Transfer v04	Pass
Note: N/A is an abbreviation for Not Applicable.		

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

Product Name	3-in-1 Magnetic Wireless Charger
Trade Name	
Model Name	Y308
Series Model	/
Output	5W/7.5W/10W/15W for Phone 5W for AirPods 2.5W for Watch
Operation frequency	110-205kHz for Phone and AriPods 326kHz for Watch
Modulation Type	FSK
Antenna Type	Inductive Loop Antenna with 0dBi
Power Supply	Input: DC 5V 3A or 9V 2A
Hardware version number	Y308_V1.3
Software version number	64BBH
Connecting I/O Port(s)	Please refer to the User's Manual

2.2. Description of test modes

All the test modes were carried out with the EUT in normal operation, the final test mode of the EUT was the worst test mode for emission test, which was shown in this report and defined as:

Mode:	TEST MODE DESCRIPTIION
1	EUT + Wireless Output: 7.5W for Phone + Wireless Output: 5W for AirPods + Wireless Output: 2.5W for Watch
2	EUT + Wireless Output: 5W for Phone + Wireless Output: 5W for AirPods + Wireless Output: 2.5W for Watch
3	EUT + Wireless Output: 15W for Phone + Wireless Output: 2.5W for Watch
4	EUT + Wireless Output: 10W for Phone + Wireless Output: 5W for AirPods
5	EUT + Wireless Output: 10W for Phone + Wireless Output: 2.5W for Watch
6	EUT + Wireless Output: 7.5W for Phone + Wireless Output: 5W for AirPods
7	EUT + Wireless Output: 7.5W for Phone + Wireless Output: 2.5W for Watch
8	EUT + Wireless Output: 5W for Phone + Wireless Output: 5W for AirPods
9	EUT + Wireless Output: 5W for Phone + Wireless Output: 2.5W for Watch
10	EUT + Wireless Output: 5W for AirPods + Wireless Output: 2.5W for Watch
11	EUT + Wireless Output: 15W for Phone
12	EUT + Wireless Output: 10W for Phone
13	EUT + Wireless Output: 7.5W for Phone
14	EUT + Wireless Output: 5W for Phone
15	EUT + Wireless Output: 5W for AirPods
16	EUT + Wireless Output: 2.5W for Watch

Note:

1. All test modes were pre - tested, but we only recorded the worst case in this report. The worst case is Mode 1
2. All voltage inputs have been tested, with only the worst voltage recorded.
3. Product folding has been evaluated for use.

2.3. Description of Support Device

No.	Equipment	Trade name	Model	S/N	Power Cord
1.	Cellphone	Apple	iPhone12pro max		
2	Power adapter	/	LBY-P2006		
3	Watch	Apple	S8		
4	Earbuds	Apple	A2190		

2.4. Description of Test Facility

Site Description

EMC Lab.	: Accredited by ISED, October 31 2023 CAB identifier: CN0126 Company Number: 27767
	Accredited by A2LA, October 31 2023 The Certificate Registration Number is 6325.01
	Accredited by FCC Designation Number: CN1287 Test Firm Registration Number: 394054
Name of Firm Site Location	: SLG-CPC Testlaboratory Co., Ltd. : No. 11, Wu Song Road, Dongcheng District, Dongguan, Guangdong Province, China 523117

2.5. Measurement Uncertainty

Test Item	Uncertainty
Magnetic field measurements(9kHz~30MHz)	±2.3%
Electric field measurements(9kHz~30MHz)	±2.1%

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3. MEASURING DEVICE AND TEST EQUIPMENT

3.1. For MPE Measurement

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
<input checked="" type="checkbox"/>	EMF Electromagnetic Field Probe	Narda	EHP-200A	1802X11012	Jun. 01, 2023	3 Year

4. RF EXPOSURE

4.1. Measuring Standard

FCC Part 1(1.1310) and Part 2(2.1091)

4.2. Requirements

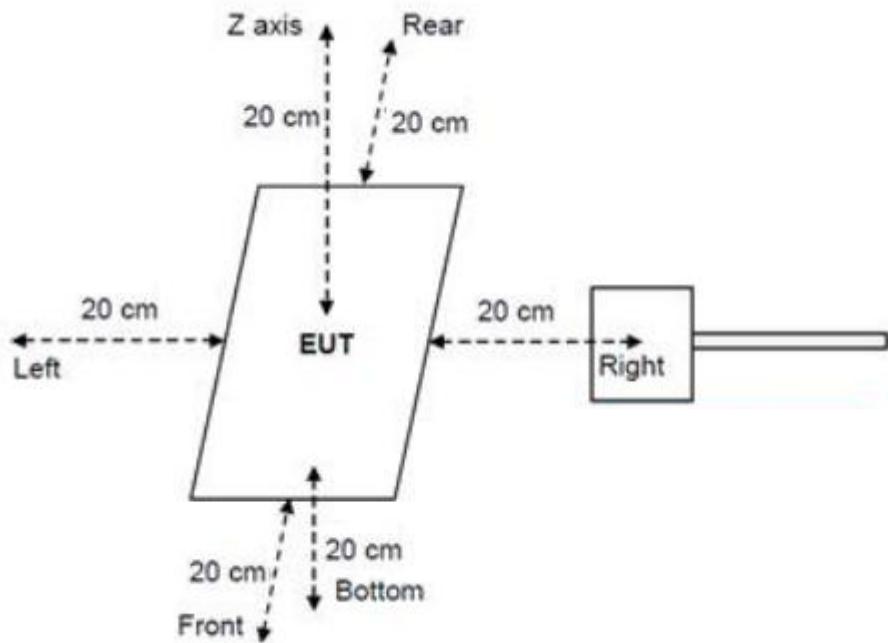
Three different categories of transmitters are defined by the FCC in OET Bulletin 65. These categories are fixed installation, mobile, and portable and are defined as follows:

- o Fixed Installations: fixed location means that the device, including its antenna, is physically secured at a permanent location and is not able to be easily moved to another location. Additionally, distance to humans from the antenna is maintained to at least 2 meters.
- o Mobile Devices: a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to be generally used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structures and the body of the user or nearby persons. Transmitters designed to be used by consumers or workers that can be easily re-located, such as a wireless modem operating in a laptop computer, are considered mobile devices if they meet the 20 centimeter separation requirement. The FCC rules for evaluating mobile devices for RF compliance are found in 47 CFR §2.1091.
- o Portable Devices: a portable device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user. Portable device requirements are found in Section 2.1093 of the FCC's Rules (47 CFR§2.1093). The FCC also categorizes the use of the device as based upon the user's awareness and ability to exercise control over his or her exposure. The two categories defined are Occupational/ Controlled Exposure and General Population/Uncontrolled Exposure. These two categories are defined as follows:
 - Occupational/Controlled Exposure: In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means. Awareness of the potential for RF exposure in a workplace or similar environment can be provided through specific training as part of a RF safety program. If appropriate, warning signs and labels can also be used to establish such awareness by providing prominent information on the risk of potential exposure and instructions on methods to minimize such exposure risks.
 - General Population/Uncontrolled Exposure: The general population / uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity. Warning labels placed on low-power consumer devices such as cellular telephones are not considered sufficient to allow the device to be considered under the occupational/controlled category, and the general population/uncontrolled exposure limits apply to these devices.

4.3. Test configuration

- 1, The field strength of both E-field and H-field was measured at 20cm(the 20 cm measured from the center of the probe(s) to the edge of the device) 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 3 different charge conditions:.. min load, mid load, max load.
- 3, Maximum E-field and H-field measurements were made 20cm from each side of the EUT. Along the side of the EUT and still 20cm 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 3-in-1 Magnetic Wireless Charger circuit for power transfer operating at the frequency of 110-205kHz and 326kHz. Thus, the 300kHz limits were used: E-field Limit = 614 (V/m); H-field limit = 1.63 (A/m).
5. The EUT were measured according to the dictates of KDB680106 D01 Wireless Power Transfer v04

4.4. Block Diagram of Test Setup



4.5. Limits

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	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

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	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/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; *Plane-wave equivalent power density

4.6. Measuring Results

TEST Data:

Test Mode: Mode 1(100% Load)

Electric Field Emissions		
Test Position	Measure Value (V/m)	Limit(V/m)
Top	2.57	614
Left	2.58	614
Right	2.52	614
Rear	2.74	614
Front	2.57	614
Bottom	2.51	614

Magnetic Field Emissions		
Test Position	Measure Value (A/m)	Limit(A/m)
Top	0.0810	1.63
Left	0.0751	1.63
Right	0.0785	1.63
Rear	0.0800	1.63
Front	0.0703	1.63
Bottom	0.0805	1.63

Test Mode: Mode 1(50% Load)

Electric Field Emissions		
Test Position	Measure Value (V/m)	Limit(V/m)
Top	2.18	614
Left	2.12	614
Right	2.45	614
Rear	2.45	614
Front	2.33	614
Bottom	2.49	614

Magnetic Field Emissions		
Test Position	Measure Value (A/m)	Limit(A/m)
Top	0.0609	1.63
Left	0.0500	1.63
Right	0.0571	1.63
Rear	0.0597	1.63
Front	0.0588	1.63
Bottom	0.0588	1.63

*Test Mode: Mode 1(1% Load)***Electric Field Emissions**

Test Position	Measure Value (V/m)	Limit(V/m)
Top	1.68	614
Left	1.70	614
Right	1.80	614
Rear	1.72	614
Front	2.00	614
Bottom	1.94	614

Magnetic Field Emissions

Test Position	Measure Value (A/m)	Limit(A/m)
Top	0.0117	1.63
Left	0.0132	1.63
Right	0.0233	1.63
Rear	0.0154	1.63
Front	0.0229	1.63
Bottom	0.0160	1.63

THE END

声 明

Statement

1. 本报告无授权批准人签字无效；

This report will be void without authorized signature for testing report.

2. 未经许可本报告不得部分复制；

This report shall not be copied partly without authorization.

3. 本报告的检测结果仅对送测样品有效，委托方对样品的代表性和资料的真实性负责；

The test results or observations are applicable only to tested sample. Client shall be responsible for representativeness of the sample and authenticity of the material.

4. 本检测报告中检测项目标注有特殊符号则该项目不在资质认定范围内，仅作为客户委托、科研、教学或内部质量控制等目的使用；

The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.

5. 本检测报告以实测值进行符合性判定，未考虑不确定度所带来的风险，本实验室不承担相关责任，特别约定、标准或规范中有明确规定的除外；

The test results or observations are provided in accordance with measured value, without taking risks caused by uncertainty into account. Without explicit stipulation in special agreements, standards or regulations, SLG-CPC shall not assume any responsibility.

6. 对本检测报告若有异议，请于收到报告之日起 20 日内提出；

Objections shall be raised within 20 days from the date receiving the report.