RF Exposure Evaluation Report

Product	:	Phone Mount with Wireless Charging
Trade mark	:	Vibe auto
Model/Type reference	:	See section 4.2
Serial Number	:	N/A
Report Number	:	EED32P82029502
FCC ID	:	2AANZCHGHDMT
Date of Issue	:	Jan. 11, 2024
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 1.1310 47 CFR Part 2.1091(mobile devices) 47 CFR Part 2.1093(portable devices) KDB 447498 D04 Interim General RF Exposure Guidance v01 KDB 680106 D01 Wireless Power Transfer v04
Test result	:	PASS

Prepared for:

DGL Group, Ltd.

2045 Lincoln Highway, 3rd floor, Edison, NJ 08817

Prepared by:

Centre Testing International Group Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District,

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Check No.: 8055131223

2 Version

Version No.	Date	Description
00	Jan. 11, 2024	Original

3 Contents

4 General Information

4.1 Client Information

Applicant:	DGL Group, Ltd.
Address of Applicant:	2045 Lincoln Highway, 3rd floor, Edison, NJ 08817
Manufacturer:	DGL Group, Ltd.
Address of Manufacturer:	2045 Lincoln Highway, 3rd floor, Edison, NJ 08817

4.2 General Description of EUT

Product Name:	Phone Mount with Wireless Charging
Model No.:	FB-CHGHDMT-MC1,FB-CHGHDMT1, FB-CHGHDMT-XXX,FB-CHGHDMT1-XXX, FB-CHGHDMT1-GRGR,FB-CHGHDMT1-PKPK, FB-CHGHDMT1-BKBK
Test Model No.:	FB-CHGHDMT-MC1
Trade Mark:	Vibe auto

4.3 Product Specification subjective to this standard

Frequency Range:	110kHz-205kHz	
Number of Channels:	1	
Center Frequency:	128kHz	
Test Power Grade:	Default	
Test Software of EUT:	RF test	
Antenna Type:	Coil antenna	
Device type:	Desktop applications device	
Power Supply:	USB port:	DC 5.0V/DC 9.0V
Sample Received Date:	Dec. 13, 2023	
Sample tested Date:	Dec. 13, 2023 to Dec. 29, 2023	

Remark:
Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.
Model No.: FB-CHGHDMT-MC1,FB-CHGHDMT1,FB-CHGHDMT-XXX,FB-CHGHDMT1-XXX, FB-CHGHDMT1-GRGR,FB-CHGHDMT1-PKPK, FB-CHGHDMT1-BKBK
Only the model FB-CHGHDMT-MC1 was tested. They have same electrical, PCB and BOM, only the model's names and colour are different.

4.4 Test Environment and Mode

Operating Environment:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar
Test mode: Transmitting mode	
Mode a:	Wireless charging mode(Null load)(Connect to adapter)
Mode b:	Wireless charging mode(33.3% load)(Connect to adapter)
Mode c:	Wireless charging mode(66.7% load)(Connect to adapter)
Mode d:	Wireless charging mode(Half load)(Connect to adapter)
Mode e:	Wireless charging mode(Full load)(Connect to adapter)
Note: 1.Wireless output:5W,7.5W,10W,15W(maximum wireless output 15W during charging); 2.Through Pre-scan,when EUT power by DC 9.0V was the worst case, only the worst case data was recorded in the report.	

4.5 Description of Support Units

The EUT has been tested with associated equipment below.

1）support equipment

Description	Manufacturer	Model No.	Certification	Supplied by
AC adapter	MI	MDY-11-EF	FCC ID and DOC	CTI
Intelligent wireless charging full function test module	YBZ	/	FCC ID and DOC	Client

4.6 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

4.7 Deviation from Standards

None.

4.8 Abnormalities from Standard Conditions

None.

4.9 Other Information Requested by the Customer

None.

5 Equipment List

Conducted disturbance Test					
Equipment	**Manufacturer**	**Model No.**	**Serial Number**	**Cal. date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
Receiver	R&S	ESCI	100435	04-25-2023	04-24-2024
LISN	R&S	ENV216	100098	09-22-2023	09-21-2024
Capacitive voltage probe	Schwarzbeck	CVP 9222C	00124	06-29-2023	06-28-2024
ISN	TESEQ	ISN T800	30297	01-04-2022 12-14-2023	12-29-2023 12-13-2024
Barometer	changchun	DYM3	1188	---	---
Temperature/ Humidity Indicator	Defu	TH128	---	---	---
Test software	Fara	EZ-EMC	EMC-CON 3A1.1	---	---

3M Semi-anechoic Chamber (2)- Radiated disturbance Test					
Equipment	Manufacturer	Model	Serial No.	Cal. Date	Due Date
3M Chamber & Accessory Equipment	TDK	SAC-3	---	05/22/2022	05/21/2025
Receiver	R&S	ESCI7	100938-003	09-22-2023	09-21-2024
Spectrum Analyzer	R&S	FSV40	101200	07/25/2023	07/24/2024
TRILOG Broadband Antenna	schwarzbeck	VULB 9163	9163-618	05/22/2022	05/21/2025
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-076	04/15/2021	04/14/2024
Microwave Preamplifier	Tonscend	EMC051845SE	980380	12/23/2022 12/14/2023	12/23/2023 12/13/2024
Horn Antenna	A.H.SYSTEMS	SAS-574	374	05/29/2021	05/28/2024
Horn Antenna	ETS-LINGREN	BBHA 9120D	9120D-1869	04/15/2021	04/14/2024
Preamplifier	Agilent	11909A	12-1	03/28/2023	03/27/2024
Preamplifier	CD	PAP-1840-60	6041.6042	07/03/2023	07/02/2024
Test software	Fara	EZ-EMC	EMEC-3A1-Pre	---	---
Cable line	Fulai(7M)	SF106	5219/6A	---	---
Cable line	Fulai(6M)	SF106	5220/6A	---	---
Cable line	Fulai(3M)	SF106	5216/6A	---	---
Cable line	Fulai(3M)	SF106	5217/6A	---	---

6 SAR Evaluation

6.1 RF Exposure Compliance Requirement

6.1.1 Limits

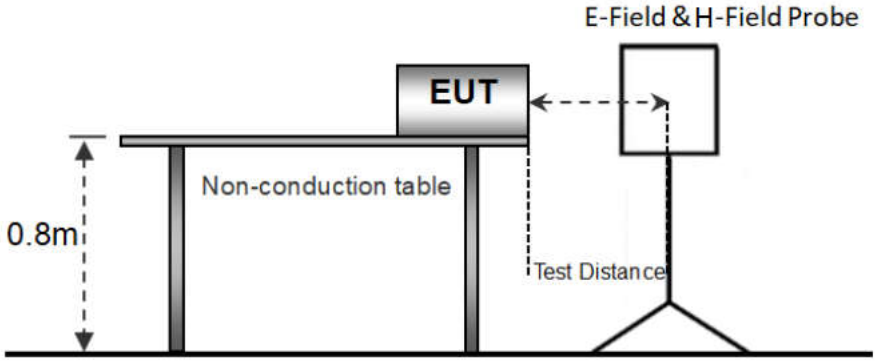
§ 1.1310 The criteria listed in table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency(RF) radiation as specified in § 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter.

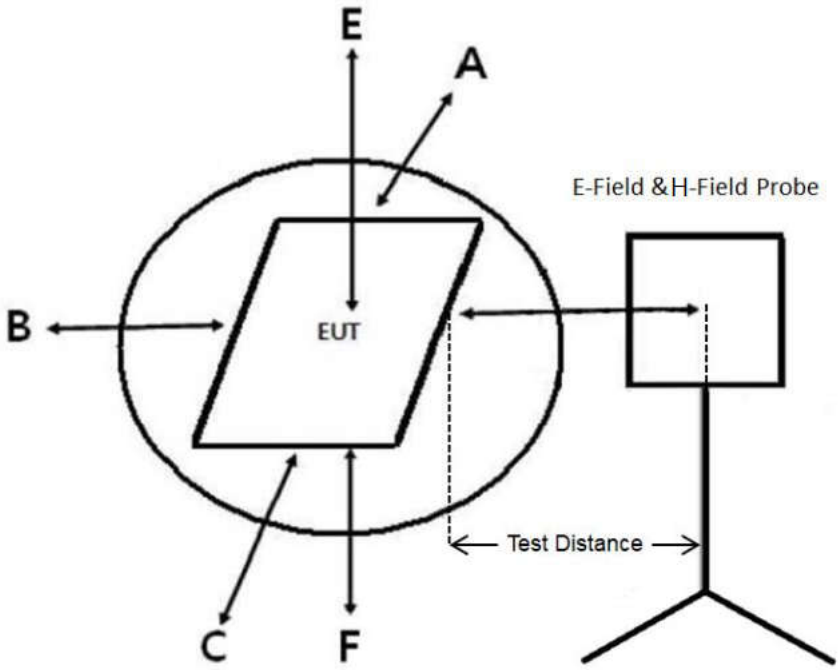
Table 1 to § 1.1310(e)(1)—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(i) Limits for Occupational/Controlled Exposure				
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
300–1,500			f/300	<6
1,500–100,000			5	<6
(ii) 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
300–1,500			f/1500	<30
1,500–100,000			1.0	<30

f = frequency in MHz. * = Plane-wave equivalent power density.

6.1.2 Test Procedure





a. The measurement probe was placed at test distance(15 cm for A,B,C,D,E,F) which is between the edge of the charger and the geometric center of probe.
b. The highest emission level was recorded at the measurement points(A, B, C, D, E, F).
c. The EUT was measured according to the distance of KDB 680106 D01 Wireless Power Transfer v04.

6.1.3 RF Exposure Evaluation

6.1.3.1 Field strengths Evaluation

1.According to April 27,2022 TCB Workshop, for portable devices that do not physically attach to phone, desktop WPT testing guidance from FCC KDB 680106 D01 Wireless Power Transfer v04 is applied.
2.The equipment under test was placed on a wooden desk inside of shield room. The isotropic field probe was used to measure the field strength for 6 EUT surfaces. The detailed setup photo please refer to Appendix A.
3.Per KDB 680106 D01 Wireless Power Transfer v04 and April 27,2022 TCB Workshop, For devices designed for typical desktop applications, such a wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device. 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. And aggregate H-field strengths and E-field strengths from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

Test data:

Mode a						
Test position	Test distance (cm)	Electric Field Strength (V/m)	50% Limit (V/m)	Magnetic Field Strength (A/m)	50%Limit (A/m)	Result
Front	15	0.3906	307	0.1729	0.815	Pass
Top	15	0.3984	307	0.1774	0.815	Pass
Left	15	0.3834	307	0.1775	0.815	Pass
Right	15	0.1729	307	0.1728	0.815	Pass
Bottom	15	0.3887	307	0.1727	0.815	Pass
Rear*	15	/	/	/	/	/
*Consumers will not touch the rear of the product during use,therefore it doesn't apply.						

Mode b						
Test position	Test distance (cm)	Electric Field Strength (V/m)	50% Limit (V/m)	Magnetic Field Strength (A/m)	50%Limit (A/m)	Result
Front	15	1.2188	307	0.3518	0.815	Pass
Top	15	0.8551	307	0.2990	0.815	Pass
Left	15	1.0239	307	0.2961	0.815	Pass
Right	15	0.9397	307	0.2857	0.815	Pass
Bottom	15	0.7618	307	0.2074	0.815	Pass
Rear*	15	/	/	/	/	/
*Consumers will not touch the rear of the product during use,therefore it doesn't apply.						

Mode c						
Test position	Test distance (cm)	Electric Field Strength (V/m)	50% Limit (V/m)	Magnetic Field Strength (A/m)	50%Limit (A/m)	Result
Front	15	1.2802	307	0.4998	0.815	Pass
Top	15	0.9252	307	0.2843	0.815	Pass
Left	15	1.0387	307	0.3036	0.815	Pass
Right	15	0.9944	307	0.3143	0.815	Pass
Bottom	15	0.8042	307	0.2314	0.815	Pass
Rear*	15	/	/	/	/	/
*Consumers will not touch the rear of the product during use,therefore it doesn't apply.						

Mode d						
Test position	Test distance (cm)	Electric Field Strength (V/m)	50% Limit (V/m)	Magnetic Field Strength (A/m)	50%Limit (A/m)	Result
Front	15	1.6534	307	0.2260	0.815	Pass
Top	15	1.0790	307	0.3185	0.815	Pass
Left	15	1.3203	307	0.3913	0.815	Pass
Right	15	1.3112	307	0.3334	0.815	Pass
Bottom	15	1.1103	307	0.2772	0.815	Pass
Rear*	15	/	/	/	/	/
*Consumers will not touch the rear of the product during use,therefore it doesn't apply.						

Mode e						
Test position	Test distance (cm)	Electric Field Strength (V/m)	50% Limit (V/m)	Magnetic Field Strength (A/m)	50%Limit (A/m)	Result
Front	15	1.5419	307	0.6351	0.815	Pass
Top	15	1.2679	307	0.3262	0.815	Pass
Left	15	1.2950	307	0.4126	0.815	Pass
Right	15	1.2040	307	0.3458	0.815	Pass
Bottom	15	1.0672	307	0.3018	0.815	Pass
Rear*	15	/	/	/	/	/
*Consumers will not touch the rear of the product during use,therefore it doesn't apply.						

Conclusions:

From the measurement data obtained, the tested sample was considered to have complied with the requirements for the relevant §1.1310 Radio frequency radiation exposure limits and KDB 680106 D01 Wireless Power Transfer v04.