RF Exposure Evaluation Report

1. Product Information

FCC ID	2AAUI-MONDOCLASSIC
Product Name	Mondo Elite Classic Smart Internet Radio
Model Number	GDI-WHA8005
Series Models	GDI-WHA8021
Power supply:	DC 18V from adapter
Adapter information:	Model No: GM42-180220-1A Input: AC 100-240V 50/60Hz 1.5A Output: 18V⎓2.0A
Maximum Rated Power of WPT	10W
Modulation Type	ASK
Operation Frequency	From 110KHz~205KHz
Antenna Type	Coil Antenna
Hardware version	V1.0
Software version	V1.0
Exposure category	General population/uncontrolled environment
Test Sample ID:	CTL220705306-3-S002
EUT Type	Production Unit
Device Type	Mobile Device

2. Evaluation Limit

2.1 Refer Evaluation Method

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310 and §2.1091 RF exposure is calculated.

According KDB 680106 D01 RF Exposure Wireless Charging App v03

2.2 Limit

Limits for Maximum Permissible Exposure (MPE)/Controlled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm^2)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
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

Limits for Maximum Permissible Exposure (MPE)/Uncontrolled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm^2)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100) *	30
3.0 – 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

F=frequency in MHz

*=Plane-wave equivalent power density

3. Test Facility and Accreditation

Shenzhen CTL Testing Technology Co., Ltd.

Floor 1-A, Baisha Technology Park, No. 3011, Shahexi Road, Nanshan, Shenzhen 518055 China

FCC-Registration No.: 399832 Designation No.: CN1216.

A2LA-Lab Cert. No. 4343.01

4. Equipments Used during the Test

Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
B-Field Probe	Narda	ELT-400 Probe (1Hz~400kHz)	M-1154	2021/12/26	2022/12/25
E-Field Probe	HOLADAY	HI3637	00052130	2022/05/07	2023/05/06

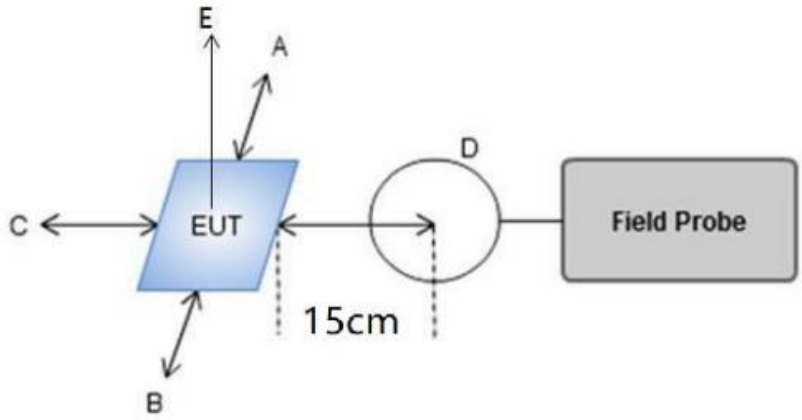
Wireless Load information	Equipment	Model No.	ID or Specification	Remark
	Wireless Load	N/A	10W	AE

5. Equipment Approval Considerations

Requirements of KDB 680106 D01	Yes / No	Description
Power transfer frequency is less than 1 MHz	Yes	The device operate in the frequency range 110KHz~205KHz
Output power from each primary coil is less than 15 watts	Yes	The maximum output power for each primary coil is 10W.
The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.	Yes	The transfer system includes only one primary coils.
Client device is placed directly in contact with the transmitter.	Yes	Client device is placed directly in contact with the transmitter.
Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).	Yes	Mobile exposure conditions only
The aggregate H-field strengths at 15 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.	Yes	The EUT H-field strengths at 15 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.

6. TEST CONDITIONS AND RESULTS

6.1 Test Setup



Note: A, B, C, D, E, F for six surfaces of the product.

6.2 Measurement Procedure

a) The RF exposure test was performed on table in anechoic chamber.

b) The measurement probe was placed at test distance (15cm) which is between the edge of the charger and the geometric centre of probe.

c) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.

d) The EUT were measured according to the dictates of KDB 680106 D01 RF Exposure Wireless Charging App v03.

6.3 Description of the test mode

Equipment under test was operated during the measurement under the following conditions:

☒ Charging and communication mode

Test Modes	Description	
1	AC/DC Adapter + EUT + Wireless Charger tester (Load 10W)	Recorded
2	AC/DC Adapter + EUT + Wireless Charger tester (Load 7.5W)	Recorded
3	AC/DC Adapter+ EUT + Wireless Charger tester (Load 5W)	Recorded
4	AC/DC Adapter+ EUT	Recorded

Note: Full load, half load and empty load were tested. Only the worst case empty load was record in this report.

6.4 Test Result of E and H field Strength

E-Field Strength at 15 cm from the edges surrounding the EUT and 20cm from the top surface of the EUT

Test Modes	Unit	Frequency Range (KHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
			Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1	v/m	110-205	4.49	6.05	4.30	4.87	3.44	307.0	614.0
2	v/m	110-205	3.61	5.34	3.16	3.92	2.53	307.0	614.0
3	v/m	110-205	2.54	3.92	2.34	3.36	2.28	307.0	614.0
4	v/m	110-205	1.22	1.95	1.06	1.45	0.70	307.0	614.0

H-Field Strength at 15 cm from the edges surrounding the EUT and 20cm from the top surface of the EUT

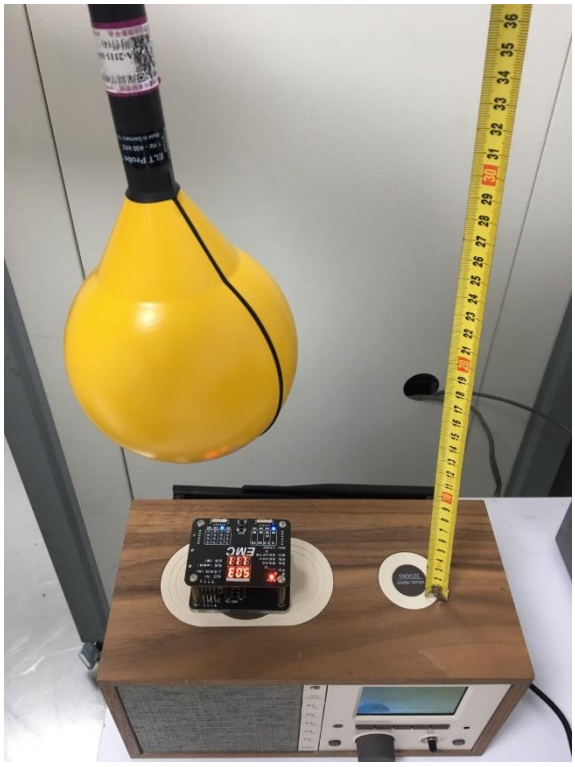
Test Modes	Unit	Frequency Range (KHz)	Measured H-Field Strength Values (A/m)					FCC H-Field Strength50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
			Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1	uT	110-205	0.362	0.470	0.368	0.302	0.454	--	--
1	A/m	110-205	0.290	0.376	0.294	0.242	0.363	0.815	1.63
2	uT	110-205	0.275	0.308	0.330	0.293	0.387	--	--
2	A/m	110-205	0.220	0.246	0.264	0.234	0.310	0.815	1.63
3	uT	110-205	0.242	0.244	0.268	0.229	0.305	--	--
3	A/m	110-205	0.194	0.195	0.214	0.183	0.244	0.815	1.63
4	uT	110-205	0.103	0.155	0.117	0.098	0.129	--	--
4	A/m	110-205	0.082	0.124	0.094	0.078	0.103	0.815	1.63

Note:A/m=uT/1.25

7. Conclusion

A minimum safety distance of at 15 cm surrounding the device and 20 cm above the top surface of the device is required when the device is charging a wireless charger tester. The detected emissions with a distance of 15 cm surrounding the device and 20 cm above the top surface of the device are below the limitations according to FCC KDB 680106 D01 Section 3. RF Exposure Requirement Clause 3.

8. Test Setup Photos of the EUT



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