

# **RF Exposure Report**

Applicant	: OneMore Co., Ltd.
Address	: No.254, Ruibei Rd., Qianzhen Dist., Kaohsiung City, Taiwan 80647
Equipment	: Allite USB C Watch Earphone Charger
Model No.	: WA1
Trade Name	E C
FCC ID.	: 2BDUX-WA1
Standard	FCC CFR 47 part1, 1.1310 KDB680106 D01v04

## I HEREBY CERTIFY THAT :

The sample was received on Nov. 06, 2023 and the test items were conducted Nov. 13, 2023 at Cerpass Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of Cerpass Technology Corp., the test report shall not be reproduced except in full.

Approved by:

Leevin Li / Supervisor



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# 1. Test Configuration of Equipment under Test

## 1.1. Feature of Equipment under Test

Product	Allite USB C Watch Earphone Charger
Test Model	WA1
Model Discrepancy	N/A
	Watch Wireless Charging: 326.5kHz
r requericy range	Earphone Wireless Charging: 111-205kHz
Antenna Type	Coil Antenna
Modulation Type	Watch Wireless Charging: ASK
Modulation Type	Earphone Wireless Charging: ASK
Power Poting	USB-C Power Input: 5V1A
rower Raling	Total Output: 5W(Max)
Temperature	Operating Temp:0℃~+35℃

Note: For more details, please refer to the User's manual of the EUT.

#### 1.2. Test Mode and Test Software

Test Mode	Operating Description
Mode 1	Wireless1 Charging for Standby+Wireless2 Charging for Standby
Mode 2	Wireless1 Charging for Apple watch +Wireless2 Charging for AirPods

Note: The EUT Have two coils, the specific location is shown below:







## 1.3. Description of Test System

Product		Manufacturer	Model No.	Serial No.	Power Cord	
1	Adapter	XIAOMI	HA832	N/A	N/A	
2	Apple watch	Apple	Apple watch 3	N/A	N/A	
3	Apple watch	Apple	AirPods	N/A	N/A	





## 1.4. General Information of Test

Test Site	Cerpass Technology Corporation(Cerpass Laboratory) Address: Room 102, No. 5, Xing'an Road, Chang'an Town, Dongguan City, Guangdong Province Tel: +86-769-8547-1212 Fax: +86-769-8547-1912
FCC Designation No.:	CN1288

Test Item	Test Site	Test period	Environmental Conditions	Tested By
RF Exposure	3M01-DG	2023/11/13	24℃ / 54%	Amos Zhang

## **1.5. Measurement Uncertainty**

Measurement Item	Uncertainty
Magnetic Field measurements	±1.60
Electric Field measurements	±1.60



# 2. Summary Of Standards And Results

### 2.1. Measuring Standard

The EUT have been tested according to the applicable standards as referenced below:

Test Item	Normative References	Remarks
RF Exposure	FCC CFR 47 part1, 1.1310 KDB680106 D01v04	PASS

## 2.2. Requirements

According to the item 5 of KDB 680106 D01v04:

Requirements of KDB 680106 D01 v03r01 section 5b	Yes/No	Description
Power transfer frequency is less than 1 MHz	Yes	The maximum operating frequency is 326.5KHz
Output power from each primary coil is less than or equal to 15 watts	Yes	The maximum output power for each primary coil is $5W \leqslant 15W$
A client device providing the maximum permitted load is placed in physical contact with the transmitter	Yes	A client device providing the maximum permitted load is placed in physical contact with the transmitter
Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion)	Yes	Mobile exposure conditions only
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	Yes	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
The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.	Yes	The transfer system includes two separated individual coils and each of them only allows for capable wireless power transfer between one source and one client at any given time.



## 2.3. Duty cycle

#### <u>Limits</u>

None; for reporting purposes only.

#### **Procedure**

Duty cycle zero-span mode Method

#### <u>Result</u>

Mode	On Time (msec)	Period Time (msec)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
Mode1: Standby @326.5KHz	19.80	199.80	9.91%	10.04
Mode2: Wireless1-Operating Frequency @ 326.5kHz	100.00	100.00	100.00%	0.00
Mode2: Wireless2-Operating Frequency @ 140.4kHz	100.00	100.00	100.00%	0.00
Standby @326.5KHz	·	Operating Free	quency @ 326.5kHz	

eysight Spec	trum Ar	Nelyzer - Swept SA			SENSE:	NT		AL	IGN AUTO			09:24	28 AM Nov 08, 20
rker 3 /	Δ 18	0.000 ms	P	NO: Wide H Gain:Low	- Tri At	g: Free en: 6 d	Run B		Avg Ty	pe: Log-F	wr		TYPE WWWW DET P NNN
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#### Operating Frequency @ 140.4kHz

📕 Keysight Sp	ectrum Ar	nølyzer - Swept SA									
Marker 1	173.4	400 ms		SEN	SE:INT	Run	ALIGN AU Av	g Type:	Log-Pwr	09:06	04 AM Nov 08, 2023 TRACE 1 2 3 4 5 6 TYPE
			IFG	D: Wide +++ ain:Low	Atten: 24	dB					DET P NNNN
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## 2.4. Typical test Setup



Note: Position A: Front of EUT; Position B: Left of EUT; Position C: back of EUT; Position D: Right of EUT; Position E: Top of EUT(20 cm measure distance);

## 2.5. Specification Limits

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b) Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric field strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm2)	Averaging time (minutes)					
(A) Limits for Occupational/Controlled Exposure									
0.3-3.0	614	1.63	*100	6					
3.0-30	1842/f	4.89/f	*900/f2	6					
30-300	61.4	0.163	1.0	6					
300-1,500			f/300	6					
1,500-100,000			5	6					
	(B) Limits for Gene	ral Population/Uncont	rolled Exposure						
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					
300-1,500			f/1500	30					
1,500-100,000			1.0	30					

Note 1: f = frequency in MHz ; \*Plane-wave equivalent power density Note 2: For the applicable limit, see FCC 1.1310



Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
Electric and Magnetic field probe-analyzer	Narda	EHP-200AC	180ZX00632	2023/08/03	2024/08/02
MXA Signal Analyzer	KEYSIGHT	N9020A	US46220290	2023/05/06	2024/05/05

### 2.6. Test Equipment List and Details

## 2.7. Test Result

#### Mode 1: Wireless1 Charging for Standby+Wireless2 Charging for Standby

Standby @326.5KHz

a) Electric Field Strength Measurement

Measured Distant	Distance	Me	asured Value (V/	50% of Limit	Limit (V/m)	
Side	Side (cm)	Peak	Duty Cycle %	AVG	(V/m)	
А	20	0.55	10.04	0.17	307.00	614.00
В	15	0.38	10.04	0.12	307.00	614.00
С	15	0.30	10.04	0.10	307.00	614.00
D	15	0.49	10.04	0.16	307.00	614.00
E	20	0.39	10.04	0.12	307.00	614.00

b) Magnetic Field Strength Measurement

Measured Distance	Distance	Me	asured Value (A/	50% of Limit	Limit (A/m)	
Side	Side (cm)	Peak	Duty Cycle %	AVG	(A/m)	
A	15	0.021	10.04	0.007	0.815	1.63
В	15	0.024	10.04	0.008	0.815	1.63
С	15	0.026	10.04	0.008	0.815	1.63
D	15	0.020	10.04	0.006	0.815	1.63
E	20	0.015	10.04	0.005	0.815	1.63

Note: 1: Peak measurements were performed. RMS values were calculated from the peak measurement. Please refer to the formula for calculating the RMS values: [Filed Strength\*√Duty cycle]

2: 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. Test results for the worst position (20cm) are reported.



#### Mode 2: Wireless1 Charging for Apple watch +Wireless2 Charging for AirPods

Operating @140.4KHz

a) Electric Field Strength Measurement

Power	<10%	Charging

Measured Side	Distance (cm)	Me	asured Value (V/	50% of Limit	Limit (V/m)					
		Peak	Duty Cycle %	AVG	(V/m)					
A	10	0.73	100	0.73	307	614.00				
В	10	0.41	100	0.41	307	614.00				
С	10	0.33	100	0.33	307	614.00				
D	10	0.54	100	0.54	307	614.00				
E	10	0.43	100	0.43	307	614.00				

Power 20%~60% Charging									
Measured Side	Distance (cm)	Me	asured Value (V/	50% of Limit	Limit (V/m)				
		Peak	Duty Cycle %	AVG	(V/m)				
A	10	0.71	100	0.71	307.00	614.00			
В	10	0.39	100	0.39	307.00	614.00			
С	10	0.31	100	0.31	307.00	614.00			
D	10	0.52	100	0.52	307.00	614.00			
E	10	0.41	100	0.41	307.00	614.00			

Power >75% Charging									
Measured Distance Side (cm)	Distance	Me	asured Value (V/	50% of Limit (V/m)	Limit (V/m)				
	Peak	Duty Cycle %	AVG						
А	10	0.69	100	0.69	307.00	614.00			
В	10	0.35	100	0.35	307.00	614.00			
С	10	0.29	100	0.29	307.00	614.00			
D	10	0.51	100	0.51	307.00	614.00			
E	10	0.39	100	0.39	307.00	614.00			

1: Peak measurements were performed. RMS values were calculated from the peak measurement. Please refer to the formula for calculating the RMS values: [Filed Strength\*√Duty cycle]

2: 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. Test results for the worst position (20cm) are reported.



#### b) Magnetic Field Strength Measurement

Power <10% Charging										
Measured Dista Side (cr	Distance	Me	asured Value (A/	50% of Limit	Limit (A/m)					
	(cm)	Peak	Duty Cycle %	AVG	(A/m)					
А	10	0.026	100	0.026	0.815	1.63				
В	10	0.027	100	0.027	0.815	1.63				
С	10	0.03	100	0.03	0.815	1.63				
D	10	0.022	100	0.022	0.815	1.63				
E	10	0.017	100	0.017	0.815	1.63				

Power 20%~60% Charging									
Measured Side	Distance (cm)	Me	asured Value (A/	50% of Limit	Limit (A/m)				
		Peak	Duty Cycle %	AVG	(A/m)				
A	10	0.025	100	0.025	0.815	1.63			
В	10	0.026	100	0.026	0.815	1.63			
С	10	0.029	100	0.029	0.815	1.63			
D	10	0.019	100	0.019	0.815	1.63			
E	10	0.015	100	0.015	0.815	1.63			

Power >75% Charging						
Measured Side	Distance (cm)	Measured Value (A/m)			50% of Limit	Limit (A/m)
		Peak	Duty Cycle %	AVG	(A/m)	
A	10	0.022	100	0.022	0.815	1.63
В	10	0.025	100	0.025	0.815	1.63
С	10	0.27	100	0.27	0.815	1.63
D	10	0.016	100	0.016	0.815	1.63
E	10	0.013	100	0.013	0.815	1.63

1: Peak measurements were performed. RMS values were calculated from the peak measurement. Please refer to the formula for calculating the RMS values: [Filed Strength\*√Duty cycle]

2: 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. Test results for the worst position (20cm) are reported.



## 2.8. Photographs of test setup



-----THE END OF REPORT------