

**FCC Part 1 Subpart I  
FCC Part 2 Subpart J**

**TEST REPORT**

**FOR**

**HEADPHONE CHARGER**

**MODEL: CBVS1**

**FCC ID: AL8-CBVS1**

**REPORT NUMBER: R14653036-S1**

**ISSUE DATE: 2023-09-11**

**Prepared for  
HP INC.  
1501 PAGE MILL ROAD,  
PALO ALTO, CA 94304 USA**

**Prepared by  
UL LLC  
12 LABORATORY DR.  
RESEARCH TRIANGLE PARK, NC 27709 USA  
TEL: (919) 549-1400**



## REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	2023-09-11	Initial Issue	Brian Kiewra

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# 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** HP, Inc.  
1501 Page Mill Road,  
Palo Alto, CA 94304 USA

**EUT DESCRIPTION:** Headphone Charger

**MODEL NUMBER:** CBVS1

**SERIAL NUMBER:** Charger: 00005A  
Loads: 2THH0D (50-100%), 2TERJ0(0%)

**SAMPLE RECEIPT DATE:** 2023-07-14

**DATE TESTED:** 2023-08-24 to 2023-08-25

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 1 SUBPART I & PART 2 SUBPART J	Compliant

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

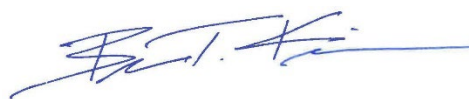
This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document.

Approved & Released  
For UL LLC By:



Francisco deAnda  
Staff Engineer  
Consumer, Medical and IT Segment  
UL Verification Services

Prepared By:



Brian Kiewra  
Project Engineer  
Consumer, Medical and IT Segment  
UL LLC

## 2. TEST METHODOLOGY

All testing / calculations were made in accordance with FCC KDB 447498 D01, KDB 447498 D03, KDB 680106 D01 v03 and FCC OET Bulletin 65 Edition 97-01.

## 3. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, Certificate Number 0751.06, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
<input type="checkbox"/>	Building 12 Laboratory Dr RTP, NC 27709, U.S.A	US0067	2180C	825374
<input checked="" type="checkbox"/>	Building 2800 Suite Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A	US0067	27265	825374

## 4. DECISION RULES AND MEASUREMENT UNCERTAINTY

### 4.1. METROLOGICAL TRACEABILITY

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

### 4.2. DECISION RULES

For all tests where the applicable  $U_{LAB} \leq U_{MAX}$  the Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2, where  $U_{MAX} = 30\%$  (0.3) for RF Exposure evaluations. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

For all tests where the applicable  $U_{LAB} > U_{MAX}$  the Decision Rule is based on Guarded Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.3.2, with a guard band equal to  $(U_{LAB} - U_{MAX})$ , where  $U_{MAX} = 30\%$  (0.3) for RF Exposure evaluations. (Test results are adjusted by the value of the guard band to determine conformity with a specified requirement.)

### 4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	$U_{Lab}$
Magnetic Field using Exposure Level Meter	$\pm 0.80\text{dB}$
Electric Field using Exposure Level Meter	$\pm 0.91\text{dB}$
Time	3.39%

Uncertainty figures are valid to a confidence level of 95%,  $k = 2$ .

## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

The EUT is a headphone charger that charges wirelessly at 13.56MHz.  
 Max power rating is 2.675W.

### 5.2. DESCRIPTION OF TEST SETUP

#### SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	Lite-On	PA-1270-06MX	0D130W05EGA13	N/A
Headphones	Poly	VS85T	2THH0M	N/A

#### I/O CABLES

I/O Cable List						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	Mains	1	Mains Connector	Shielded	<3m	Connects EUT to AC Adaptor

#### TEST SETUP

The following configurations are tested:

Configuration	Mode	Descriptions
1	Operating (Charger) Note: Measurements were made when the battery level of the load was at a state of <10%, 50%, 90%, and 100%.	Charger powered by AC/DC adapter charging headphones as load in desktop configuration

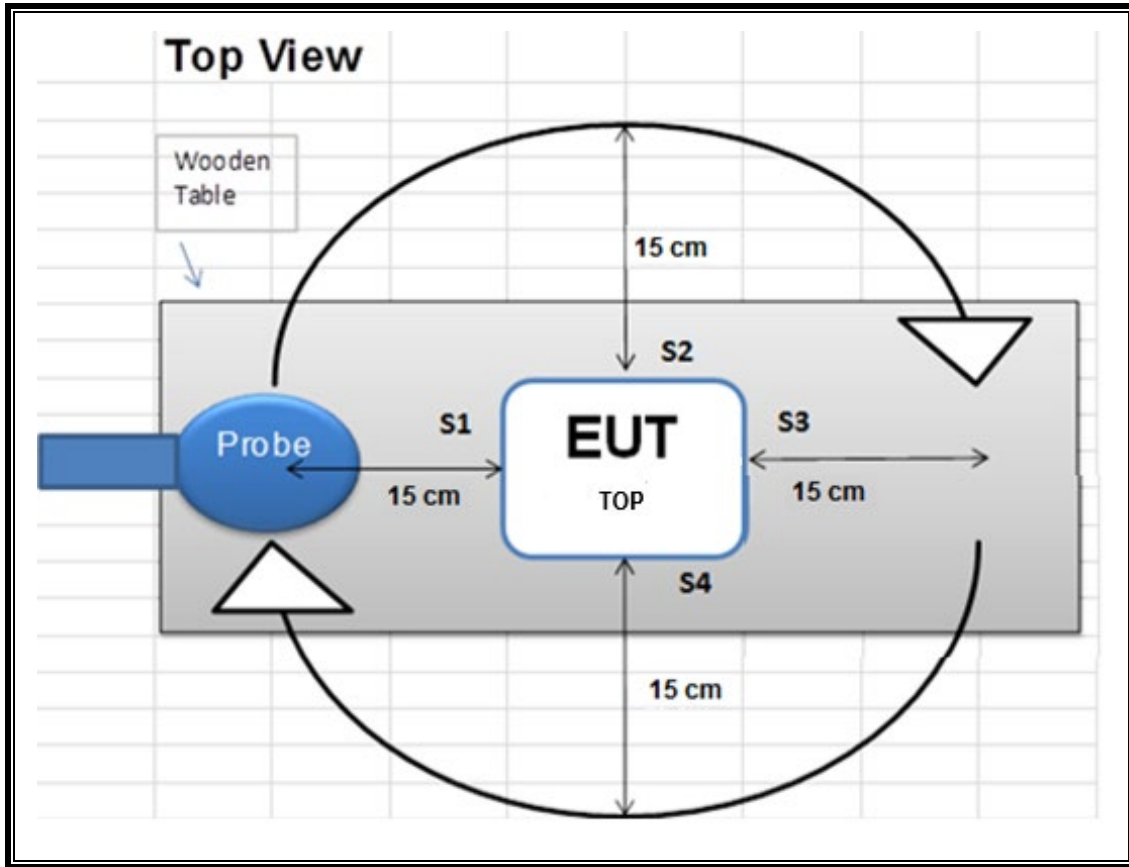
Note: No standby mode for this device.

#### MEASUREMENT SETUP

For desktop configuration, the measurement was taken using a probe placed 15cm surrounding the device and 20cm above the top surface of the EUT.

Measurements were taken from the top and all sides of the EUT per KDB 680106 D01 v03.

**CONFIGURATION 1**



Note: The headphones are placed directly on top of EUT as load.



## 6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment were used for the tests documented in this report:

Test Equipment List					
Description	Manufacturer	Model	Equip. ID	Cal Date	Cal Due
Electric and Magnetic Field Probe	Narda	EHP-200AC	FA0001	2023-07-31	2024-07-31
Spectrum Analyzer	Keysight	N9030A	90411	2023-08-02	2024-08-02

## 7. DUTY CYCLE

### LIMITS

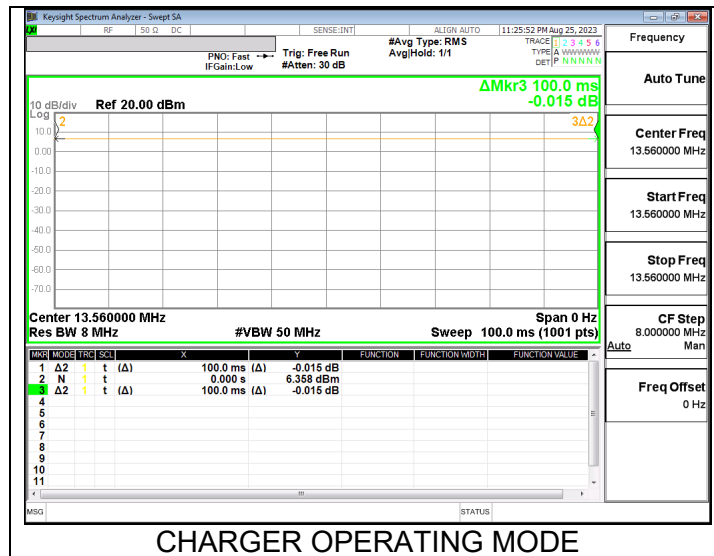
None; for reporting purposes only.

### PROCEDURE

Zero-Span Spectrum Analyzer Method.

### ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)
Charger Operating (Config 1)	100.00	100.00	1.00	100.00%



Tested by:84740/21193

## 8. MAXIMUM PERMISSIBLE RF EXPOSURE TEST RESULTS

### 8.1. FCC LIMITS

§1.1310 (e) (1)

Table 1 to § 1.1310(e)(1) sets forth limits for Maximum Permissible Exposure (MPE) to radiofrequency electromagnetic fields.

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 <sup>2</sup> )	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 <sup>2</sup> )	<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 <sup>2</sup> )	<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.

Limits at 13.56MHz:  
 E-Field: 60.8 V/m  
 H-Field: 0.162 A/m

This report contains data provided by the customer which can impact the validity of results. UL LLC is only responsible for the validity of results after the integration of the data provided by the customer.

**RESULTS**

<b>ID(s):</b>	84740/21193	<b>Date(s):</b>	2023-08-24 to 2023-08-25
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Note:

Both magnetic and electric field strengths have been investigated from 9 kHz to 30 MHz.

For desktop configuration, the measurement was taken using a probe placed 15cm surrounding the device and 20cm above the top surface of the EUT.

The inductive wireless power transfer device meets the following requirements:

- Power transfer frequency is less than 1 MHz
- Output power from each primary coil is less than or equal to 15 watts.
- 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.
- Client device is placed directly in contact with the transmitter.
- Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
- 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.

**Note:** Power transfer frequency is 13.56MHz which is > 1MHz. The TCB that applies for certification will need to submit a PAG filing through the KDB system.

**FCC RF EXPOSURE SUMMARY OF RESULTS**

Electric Field			Magnetic Field		
FCC Limit (V/m)	Maximum Average Reading (V/m)	Percentage (%)	FCC Limit (A/m)	Maximum Average Reading (A/m)	Percentage (%)
60.8	0.963	1.58%	0.162	0.027	16.67%

**Note:** The E and H field are lower than the limit by more than 50% of the limit.

## 8.2. DETAILED TEST RESULTS

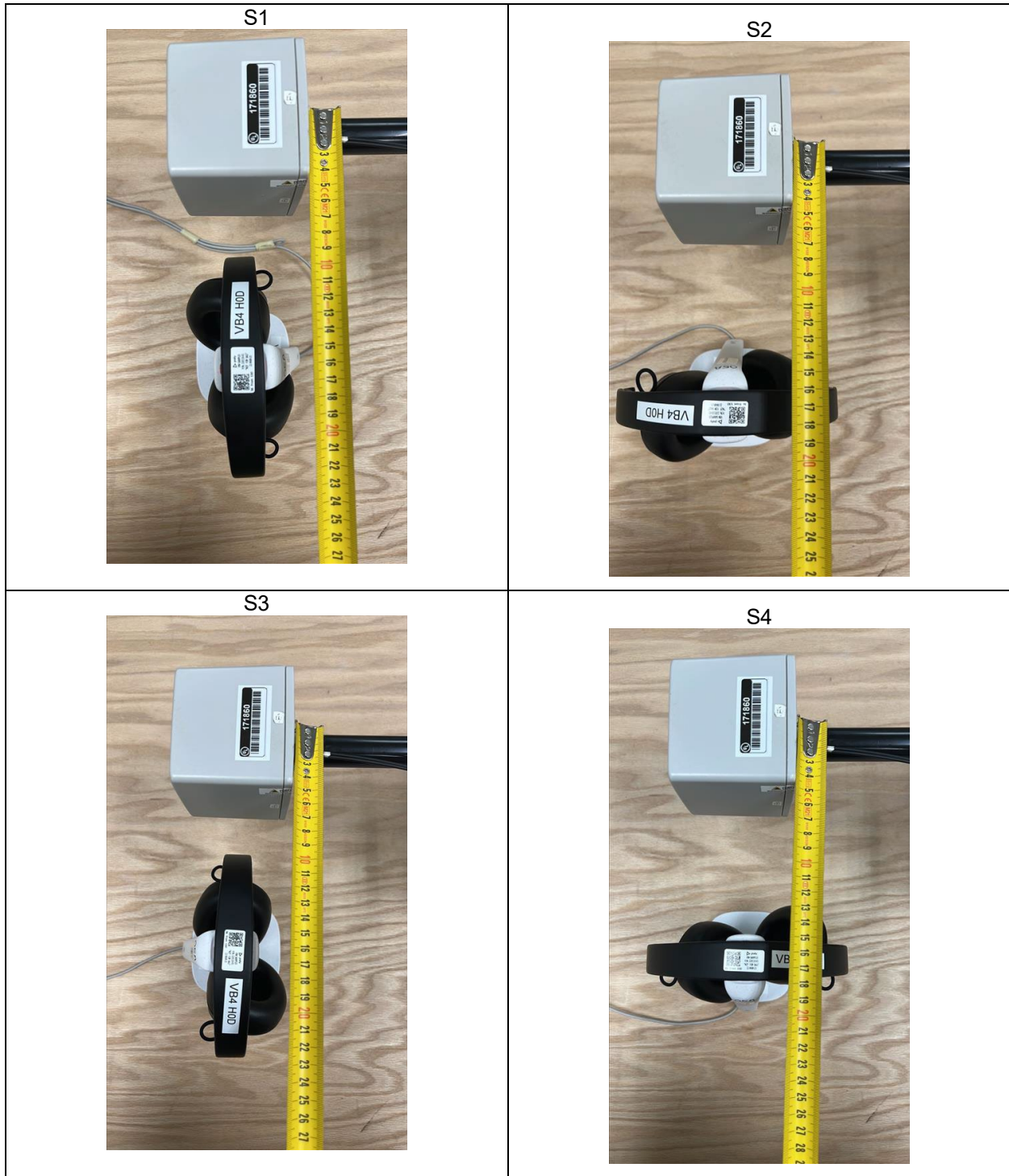
### E- FIELD AND H- FIELD MEASUREMENTS

Note: Peak measurements were performed. RMS values were calculated from the peak measurement. Please refer to the formula for calculating the RMS values: [Field Strength x √Duty Cycle].

Config	Test Mode	Meas Dist (cm)	E field Limit	Electric Field Reading				Magnetic Field Limit	Magnetic Field Reading			
			(V/m)	(V/m)				(A/m)	(A/m)			
			FCC	Location	Value	Duty Cycle %	FCC Average	FCC	Location	Value	Duty Cycle %	FCC Average
1	Operating Power ~ 0% Charging	15 cm from edges and 20 cm from top surface	60.8	1	0.673	100.0	0.673	0.162	1	0.018	100.0	0.018
				2	0.589				2	0.018		
				3	0.802				3	0.018		
				4	0.779				4	0.017		
				Top	0.863				Top	0.026		
				Max	0.863				Max	0.026		
	Operating Power 50% Charging			1	0.390	100.0	0.390		1	0.017	100.0	0.017
				2	0.366		0.366		2	0.017		0.017
				3	0.440		0.440		3	0.017		0.017
				4	0.376		0.376		4	0.017		0.017
				Top	0.875		0.875		Top	0.026		0.026
				Max	0.875		0.875		Max	0.026		0.026
	Operating Power >90% Charging			S1	0.657	100.0	0.657		S1	0.018	100.0	0.018
				S2	0.603		0.603		S2	0.018		0.018
				S3	0.670		0.670		S3	0.018		0.018
				S4	0.608		0.608		S4	0.018		0.018
				Top	0.906		0.906		Top	0.027		0.027
				Max	0.906		0.906		Max	0.027		0.027
	Operating Power 100 % Charged			S1	0.617	100.0	0.617		S1	0.018	100.0	0.018
				S2	0.593		0.593		S2	0.018		0.018
				S3	0.647		0.647		S3	0.018		0.018
				S4	0.605		0.605		S4	0.018		0.018
				Top	0.963		0.963		Top	0.026		0.026
				Max	0.963		0.963		Max	0.026		0.026

## 9. SETUP PHOTO

### 9.1. CONFIGURATION 1





**END OF REPORT**