

Bureau Veritas Consumer Product Services, Inc.	Test Report Number:
One Distribution Center Circle #1, Littleton, MA 01460	EY0069-9 Issue 2



CFR Title 47 FCC Parts

1.1307, 1.1310, 2.1091

Report Exhibit

Prepared for Hydration Labs, Inc.

This report presents the environmental impact of human exposure to radiofrequency radiation for

Bevi V2 Standup

Prepared by Nisha Patel Wireless Engineer I	Approved by Yunus Faziloglu Wireless Manager
	
Issue Date:	July 16, 2025



This test result relates only to the described test object.

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The test is traceable to national standard or related international standard

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1 Device Under Test Information

1.1 Product Information

Project Number:	EY0069
Applicant Information:	Hydration Labs, Inc.
	529 Main Street Suite 304, Boston, MA 02129
Test Item Description:	Bevi Standup 2.0
Model Number:	700-0012
Separation Distance:	20cm
Exposure Category of DUT:	Mobile
Multiple Simultaneous RF Sources:	No
Type of Evaluation:	MPE Calculation
Evaluation Method:	447498 D01 General RF Exposure Guidance v06
Deviations from Standard:	None

1.2 Technical Information

Radio Function: 13.56MHz RFID	
FCC ID:	2AMTV-103838B
Exposure Category of Transmitter:	Mobile
Maximum Field Strength (dBµV/m@3m)	67.2 dBµV/m at 3m
Maximum EIRP(mW)	0.002mW
Maximum Tune-up Tolerance(dB)	N/A

In addition, Bevi Standup 2.0 system includes a certified radio module (FCC ID: 2AMTV-4000029) with 2.4GHz/5GHz WiFi and LTE functionality. Applicant declares that 13.56MHz RFID can operate simultaneously with any of these radios. However WiFi 2.4GHz, WiFi 5GHz or any of the LTE bands do not have simultaneous transmission capability among themselves.

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2 Test Laboratory Information

Location of Test Lab:	One Distribution Center Circle #1 Littleton, MA 01460 (978) 486-8880
Key Contact:	Yunus Faziloglu Yunus.faziloglu@bureauveritas.com
Laboratory Accreditations:	BUREAU VERITAS CONSUMER PRODUCTS SERVICES, INC is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories.
ISO/IEC 17025:2017:	1627-01
FCC Test Site Number:	US1028

3 RF Exposure – Limit

According to CFR Title 47 FCC 1.1310, Below table mentions 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 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.

4 RF Exposure – MPE Evaluation

13.56MHz RFID EIRP can be calculated from its measured field strength

Electric Field Strength: 67.2dBuV/m at 3m

EIRP = 67.2-104.77 + 20log(3) = -28.03dBm

Power density can be calculated as follows

$$S = EIRP/4\pi r^2$$

where,

S Power Density in mW/cm²

EIRP Effective Isotropic Radiated Power in mW

r Separation Distance from Antenna in cm

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Power densities and limit ratios for each radio can be calculated as follows

Radio	f(MHz)	Distance (cm)	AntGain (dBi)	Power (dBm)	EIRP (dBm)	EIRP (mW)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Power Density / Limit Ratio
RFID	13.56	20	0	-	-28.03	0.001574	0.0000003	0.98	0.00000032
2.4GHz WiFi	2437	20	1.25	19	20.25	105.9254	0.0210732	1	0.02107318
5GHz WiFi	5200	20	2.17	17	19.17	82.60379	0.0164335	1	0.01643350
2	1850	20	5.93	25	30.93	1238.797	0.2464508	1	0.24645075
4	1710	20	5.93	25	30.93	1238.7966	0.2464508	1	0.24645075
12	699	20	2.6	25	27.6	575.4399	0.1144801	0.466	0.24566553

Simultaneous Transmission Evaluation

RFID + 2.4GHz WiFi

Power Density to Limit

Ratios

RFID 0.00000032

2.4GHz WiFi 0.02107318

Sum 0.02107350 < 1 Complies

RFID + 5GHz WiFi

Power Density to Limit

Ratios

RFID 0.00000032

5GHz WiFi 0.01643350

Sum 0.01643382 < 1 Complies

RFID + Worst-Case LTE Band

Power Density to Limit Ratios

RFID 0.00000032

LTE Band 2/4 0.24645075

Sum 0.24645107 < 1 Complies

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5 Conclusion

Therefore device complies with 1.1307, 1.1310 and 2.1091 of the FCC rules for RF radiation exposure limits for general population as a mobile device (d>20cm).

6 Document Revisions

Issue No.	Summary of Changes	Date Issued	Prepared by	Approved by
1	Original Release	Sep 3, 2024	YF	AA
2	To address TCB comments: - Removed unused LTE bands from the evaluation	July 16, 2025	NP	YF

End of Report