

LUMIA HEALTH, INC.

SAR EXEMPTION REPORT

SCOPE OF WORK

SAR EXEMPTION – LUMIA 2 / E20926

REPORT NUMBER

106673041ATL-003

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SAR EXEMPTION REPORT

Report Number: 106673041ATL-003

Project Number: G106673041

Report Revision Date: 21 September 2026

PMN: Lumia 2

Model/HVIN: E20926

FCC ID: 2BHMV-L20926

IC: 34184-L20926

Standards: FCC Title 47 CFR Part 2.1093
RSS-102, Issue 6

Test Location

Intertek
1950 Evergreen Blvd., Suite 100
Duluth, GA 30096 USA
FCC Designation: US1046
CAB Designator: US0128

Client

Lumia Health, Inc.
119 Braintree Street, Suite 601
Allston, MA 02134 USA

Report prepared by



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Report reviewed by



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1 Introduction and Conclusion

RF Exposure measurements were performed on the product constructed as described in Section 4.

Based on the results of our investigation, we have concluded the product under evaluation complies with the standard(s) indicated. The results obtained in this test report pertain only to the item(s) evaluated. Intertek does not make any claims of compliance for samples or variants which were not evaluated.

2 Evaluation Summary

Section	Test full name	Result
5	RF Exposure (FCC Title 47 CFR Part 2.1093)	Compliant
6	RF Exposure (RSS-102 Issue 6)	Compliant

3 Client Information

This evaluation was performed at the request of

Client: Lumia Health, Inc.
119 Braintree Street, Suite 601
Allston, MA 02134 USA

Contact: Paul Jin

Email: paul@lumiahealth.com

4 Description of Equipment Under Test

Manufacturer: Lumia Health, Inc.
119 Braintree Street, Suite 601
Allston, MA 02134 USA

Equipment Under Test			
Description	Manufacturer	Model Number	Serial Number
Biometric Earpiece	Lumia Health, Inc.	E20926	Not Labeled

Receive Date:	12 August 2026
Received Condition:	Good
Type:	Production

Description of Equipment Under Test (provided by client)

The device under consideration is a wearable earpiece designed for intermittent wireless communication with a user's smartphone. It employs a Bluetooth 6.0 chip (nRF54LM20A) from Nordic (FRN:0026827089) for data transmission. The earpiece sends biometric data to a user's smartphone intermittently as it is collected. The earpiece has a swappable battery pack architecture and comes with two battery packs and a USB-C powered battery pack charger.

Certification Purpose

Original Certification

Radio/Receiver Characteristics	
Frequency Range / Number of Channels	2402 -2480MHz, 40 Channels
Data Rate / Modulation Type(s)	1Mbps - GFSK
Channel Separation:	2MHz
Maximum Conducted Output Power:	4.21dBm (2.636mW)
Equipment Type	Portable – < 5mm Separation Distance
Antenna Type and Gain	PCB Antenna – -15.8dBi Gain <i>Note: (Provided by the applicant - Intertek takes no responsibility for the accuracy of this information.)</i>

4.1 Justification

For this evaluation, the conducted output power was used to show compliance with the exemption limits. Conducted power data was obtained from Intertek test report 106673041ATL-001.

5 Maximum Permissible Exposure Criteria

Per 447498 D01 General RF Exposure Guidance v06 Section 4.3.1, for frequencies between 100 MHz and 6GHz, the following may be considered for SAR test exclusion (also illustrated in Appendix A):

1) For test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$$\left[\frac{\text{Max. tune up Power (mW)}}{\text{Min. Test Separation Distance (mm)}} \right] * \sqrt{F(\text{GHz})} \leq 3 \quad \text{where}$$

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR,30

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation

5.1 Calculations

The maximum conducted power from Intertek report #106673041ATL-001 was 4.21dBm (2.636mW)

$$2.636\text{mW}/5\text{mm} * \sqrt{(2.45\text{GHz})} = 0.823 \text{ which is less than } 3$$

Note: For antenna gains less than 0dBi, 0 is used for the power calculation

5.2 Results

The calculated result complies with the FCC limit per 47 CFR 2.1093 for the RF Exposure and SAR Exclusion per KDB 447498 D01 v06 so a SAR evaluation is not required for this device.

6 ISED Routine Evaluation Exemption Criteria

RSS-102 Issue 6 § 6.3: SAR exemption limits

Devices operating at or below the applicable output power levels (adjusted for tune-up tolerance) specified in table 11, based on the separation distance, are exempt from SAR evaluation. The separation distance, defined as the distance between the user and/or bystander and the antenna and/or radiating element of the device or the outer surface of the device, shall be less than or equal to 20 cm for these exemption limits to apply.

Table 11: Power limits for exemption from routine SAR evaluation based on the separation distance

Frequency (MHz)	≤ 5 mm (mW)	10 mm (mW)	15 mm (mW)	20 mm (mW)	25 mm (mW)	30 mm (mW)	35 mm (mW)	40 mm (mW)	45 mm (mW)	> 50 mm (mW)
≤ 300	45	116	139	163	189	216	246	280	319	362
450	32	71	87	104	124	147	175	208	248	296
835	21	32	41	54	72	96	129	172	228	298
1900	6	10	18	33	57	92	138	194	257	323
2450	3	7	16	32	56	89	128	170	209	245
3500	2	6	15	29	50	72	94	114	134	158
5800	1	5	13	23	32	41	54	74	102	128

6.1 Calculations

Limit at a distance of <5mm at 2450MHz = 3mW
 $2.636\text{mW} < 3\text{mW}$

6.2 Results

The maximum output power is less than the SAR exclusion limits for any separation distance, and therefore, no RF exposure evaluation is required.

7 Revision History

Revision Level	Date	Prepared By	Reviewed By	Notes
0	10 September 2026	JOP	US	Original Issue
1	21 September 2026	JOP	US	• Updated antenna gain value

END OF REPORT