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RF EXPOSURE REPORT

Manufacturer: Hum Industrial Technology Inc.
4220 Duncan Avenue, Suite 201
St. Louis, Missouri 63110 USA

Applicant: Same as Above

Product Name: HUM Boomerang

Product Description: The Hum Boomerang provides vibrational analysis for health metrics of wheels and bearings of railcars.

Operating Voltage/Freq. of EUT During Testing: Battery-Operated (3.3V)

Model: Hum-Boomerang-V6-R10

Part No.: HI24030301

FCC ID: 2BUPV-BS01

IC: 35176-BS01

Testing Commenced: 2026-06-02

Testing Ended: 2026-06-03

Test Results: In Compliance

The EUT complies with the EMC requirements when manufactured identically as the unit tested in this report, including any required modifications. Any changes to the design or build of this unit subsequent to this testing may deem it non-compliant.

Standards:

- KDB447498
- FCC 1.1310
- FCC 1.1307(b)(3)(i)(A)
- Safety Code 6
- RSS-102, Issue 6



Order No(s): F2P28727A-3-C1

Applicant: Hum Industrial Technology Inc.
EUT: Model Hum-Boomerang-V6-R10 / Part No. HI24030301

Evaluation Conducted by:

Erik Tobin, EMC Engineer

Report Reviewed by:

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1 ADMINISTRATIVE INFORMATION

1.1 Measurement Location:

F2 Labs in Middlefield, Ohio.

Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

Site description and attenuation data are on file with the Certification and Engineering Bureau, Industry Canada, Site Number 4730B.

1.2 Measurement Procedure:

All measurements were performed according to:

- KDB558074
- FCC 15.249
- RSS-210

1.4 Document History

Document Number	Description	Issue Date	Approved By
F2P28727A-3-C1-02E	First Issue	2026-06-15	K. Littell



2 SUMMARY OF TEST RESULTS

Test Name	Standard(s)	Results
RF Exposure for Device <5mm from Human	KDB447498 FCC 1.1310 FCC 1.1307(b)(3)(i)(A) Safety Code 6 RSS-102, Issue 6	Complies

Modifications Made to the Equipment
None



3 ENGINEERING STATEMENT

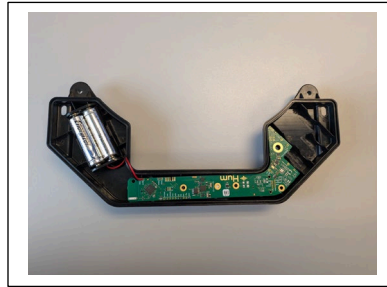
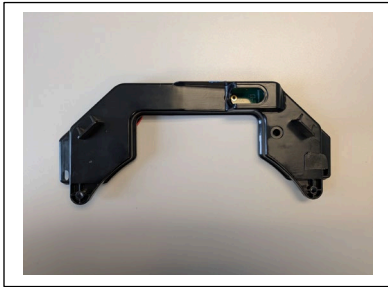
This report has been prepared on behalf of Hum Industrial Technology Inc. to provide documentation for the calculations described herein, based on the measurements taken in supporting Test Reports. This equipment has been tested, and calculations were found to comply with KDB447498, FCC 1.1310, FCC 1.1307(b)(3)(i)(A), Safety Code 6 and RSS-102 Issue 6. The test results found in this test report relate only to the item(s) tested.



4 EUT INFORMATION AND DATA

4.1 Equipment Under Test:

Product: HUM Boomerang
Model: Hum-Boomerang-V6-R10
Part No.: HI24030301
Serial No.: 594940340
Firmware Version: 2.4.1
Hardware Version: V6R10
FCC ID: 2BUPV-BS01



4.2 Trade Name:

Hum Industrial Technology Inc.

4.3 Power Supply:

Battery-Operated (3.3V)

4.4 Applicable Rules:

- KDB447498
- FCC 1.1310
- FCC 1.1307(b)(3)(i)(A)
- Safety Code 6
- RSS-102, Issue 6

4.5 Antenna:

Chip Antenna, -1.0dBi Gain

4.6 Accessories:

None

4.7 Test Item Condition:

The equipment to be tested was received in good condition.

**5. RF EXPOSURE FOR DEVICE <5mm FROM HUMAN****5.1 Requirements: Distance used is 5mm**

FCC	
Limit:	FCC 1.1307(b)(3)(i)(A) The available maximum time-averaged power is no more than 1 mW, regardless of separation distance.
Formula Used for Result:	$P(dBm) = E(dBuVm) + 20LOG(d) - G - 104.77$
Results:	903 MHz was the highest $91.2 + 9.542425 + 1.0 - 104.77 = -3.02Bm$ $P(dBm) = -3.02$ which is 0.499mW

IC	
Limit:	19mW per Table 11 in Section 6.3 of RSS-102 Issue 6
Formula Used for Result:	$P(dBm) = E(dBuVm) + 20LOG(d) - G - 104.77$
Results:	903 MHz was the highest $91.2 + 9.542425 + 1.0 - 104.77 = -3.02dBm$ $P(dBm) = -3.02$ which is 0.499mW