

Report on the Testing of the

iKeyless LLC
HNSSL-G070

FCC ID: X32-HNSSLG070

In accordance with:
FCC Rule Part: 47 CFR Part 2.1091

RF Exposure Certification Exhibit

Prepared for: iKeyless LLC
12101 Sycamore Station Pl. Ste 140
Louisville, KY 40299



America

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SIGNATURE

NAME	JOB TITLE	RESPONSIBLE FOR	ISSUE DATE
Sean Sellergren	Sr. EMC Engineer	Authorized Signatory	09 August 2022

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD America, Inc. document control rules.

FCC Accreditation Designation Number US1148 New Brighton, MN Test Laboratory	Innovation, Science, and Economic Development Canada Accreditation Site Number 4512A New Brighton, MN Test Laboratory
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EXECUTIVE SUMMARY

A sample of this product was tested and found to be compliant with the standards listed above.



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1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Table 1.1-1 – Modification Record

Issue	Description of Change	Date of Issue
1	First Issue	12 AUG 2022

General Information:

Applicant: iKeyless LLC
FCC ID: X32-HNSSLG070

Exposure Conditions:

Frequency: 313.55 – 314.15 MHz; 433.66 – 434.18 MHz
Antenna Type: PCB Trace
Antenna Gain: 313.55 – 314.15 MHz: -13.90 dBi; 433.66 – 434.18 MHz: -10.22 dBi
Simultaneous TX: No
Modality: Portable
Separation: ≥ 5 mm
Environment: General Public/Uncontrolled Exposure
FCC Evaluation: Assessed to “1-g Body” exposure conditions



RF Exposure Calculation – FCC

313.55 – 314.15 MHz Variant = “Device 1”

433.66 – 434.18 MHz Variant = “Device 2”

Device Characteristics:		
Technical Parameters	Device 1	Device 2
Frequency (GHz)	0.31415	0.43418
Frequency (MHz)	314.15	434.18
Separation Distance (cm)	0.50	0.50
Separation Distance (m)	0.0050	0.0050
Antenna Gain (dBi)	-13.90	-10.22
ERP Easily Determined	YES	YES
1-g body or 10-g extremity	Body	Body
Conducted Power (dBm)	11.35	8.66
Conducted Power (mW)	13.65	7.35
Duty Factor (Source-Based) %	100.0	100.0
Maximum (Source-Based) Time-Averaged Conducted Power (mW)	13.65	7.35
Maximum (Source-Based) Time-Averaged ERP (mW)	0.34	0.43
Maximum (Source-Based) Time-Averaged EIRP (mW)	0.56	0.70
Maximum Output (mW)	13.65	7.35

47 CFR 1.1307(b)(3)(i)(B) SAR-Based Exemption P_{th} (mW)		
Technical Parameters	Device 1	Device 2
x	0.78	0.99
ERP _{20cm} (mW)	640.87	885.73
Maximum Output (mW)	13.646	7.345
P_{th} (mW)	36.448	23.147
Exemption	YES	YES
Contribution Ratio (P / P_{th})	0.374	0.317
Distance to Limit (cm)	0.141	0.156