RF Exposure Report

Project Number: 5046586 **Offer Number:** SUW-202304004536

Report Number: 5046586EMC02 **Revision Level:** 1

Client: iKeyless, LLC

Equipment Under Test: Keyless Entry Remote Control

Model Number: FDHKL-G050

FCC ID: X32-FDHKG050

Applicable Standards: 47 CFR §§ 2.1093 (Portable)

FCC KDB 447498 D01 General RF Exposure Guidance v06

Report revised on: 28 September 2023

Result: Exempt from SAR evaluation

FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 3212.01
This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, or any agency of the Federal Government.

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1 General Information

1.1 *Client Information*

Name:	iKeyless LLC
Address:	12101 Sycamore Station Place, Suite 101
City, State, Zip, Country:	Louisville, KY 40299

1.2 *Test Laboratory*

Name:	SGS North America, Inc.
Address:	620 Old Peachtree Road NW, Suite 100
City, State, Zip, Country:	Suwanee, GA 30024, USA
Accrediting Body:	A2LA
Type of lab:	Testing Laboratory
Certificate Number:	3212.01

1.3 *General Information of EUT*

Type of Product:	Keyless Entry Remote Control
Model Number:	FDHKL-G050
Firmware Version:	FDHKL-G050
Sample ID:	SUWEM2301000004
FCC ID:	X32-FDHKG050
Frequency Range:	315.0 MHz
Modulation:	FSK
Antenna:	PCB trace loop (-5.6 dBi)*
Max Average EIRP:	-34.5 dBm (derived from 60.7 dBuV/m max avg field strength at 3m)
Sample Received Date:	08 May 2023
Dates of testing:	10 May 2023 to 05 June 2023

**Data was not measured by SGS laboratory and therefore not responsible for accuracy. Data obtained via customer, specification sheet, previous regulatory filing or other.*

1.4 *Separation Distance*

The worst-case RF exposure occurs when a user places the remote control key in his or her pocket, such that there is close to no separation distance between the device and the user's body. A distance of 5mm is used if the distance is 5mm or less.

2 SAR Exclusion Calculations

The highest output power in conjunction with the transmit frequency has been used to demonstrate compliance.

The highest power level was obtained from the radio test report.

The EUT is considered a body application. Note that it can be held in the hand (extremity) as well, but the body application is the worst case for exclusion limits.

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SAR test exclusion calculations

Section 4.3: General SAR test exclusion guidance / Section 4.3.1: Standalone SAR test exclusion considerations

	Input	Select Units	
Max Power:	-34.5	dBm	
Duty Cycle:	100.0%		*<== Source based time average duty cycle*
Min separation distance:	5	mm	
Frequency, f:	315	MHz	

Value reference Number	Values used for Calculation		Reference number definition
v1	0	mW	*[max. power of channel, including tune-up tolerance, mW] 'Rounded to nearest mW*
v2	5	mm	*[min. test separation distance, mm] 'Rounded to nearest mm*
v3	0.561		*[√f(GHz)]*

a) For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR,

Exclusion Calculation(1g):	0.0000	number	<== *[v2 / v3] must be less than 3*
Exclusion Calculation(10g):	0.0000	number	<== *[v2 / v3] must be less than 7.5*

Conclusions (Body):	The EUT max power is BELOW the threshold. SAR Testing is NOT required for Body applications
Conclusions (Extremity):	The EUT max power is BELOW the threshold. SAR Testing is NOT required for Extremity applications

3 Revision History

Revision Level	Description of changes	Revision Date
0	Initial Release	16 June 2023
1	Corrected FCC ID number on cover page	28 September 2023