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SAR EXCLUSION REPORT

Manufacturer: Infinite Biomedical Technologies, LLC
1101 East 33rd Street, Suite E305
Baltimore, Maryland 21218 USA

Applicant: Same As Above

Product Name: morph2

Product Description: RFID Tag Reader with Bluetooth

Model: morph2-45LC*

**Denotes actual model tested as worst case of product family that includes the following models: morph2-45LC, morph2-50LC, morph2-54LC and morph2-MCLC.*

FCC ID: O7Q-MORPH2

Standards:

- KDB447498 Appendix A

Report Constructed by:

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TABLE OF CONTENTS

Section	Title	Page
1	ADMINISTRATIVE INFORMATION	3
2	SUMMARY OF TEST RESULTS/MODIFICATIONS	4
3	ENGINEERING STATEMENT	5
4	EUT INFORMATION AND DATA	6



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.

1.2 Document History

Document Number	Description	Issue Date	Approved By
F2LQ8149B-13E	First Issue	Nov. 2, 2016	K. Littell



2 SUMMARY OF RESULTS

	Standard(s)	Results
SAR Exclusion	KDB447498, Appendix A	Complies

Modifications Made to the Equipment
None



3 ENGINEERING STATEMENT

This report has been prepared on behalf of Infinite Biomedical Technologies, LLC to provide documentation for the SAR Exclusion herein. This equipment has been tested and found to comply with the SAR Exclusion levels listed in Appendix A of KDB447498. The minimum distance from the BT module antenna used inside of the morph2, is 10mm. The output power of the BT has been turned down to 9mW which is well below the exclusion limit of 19mW at 10mm.

Appendix A

SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	



4 EUT INFORMATION AND DATA

4.1 Equipment Under Test:

Product: morph2 RFID Tag Reader with Bluetooth

Model: morph2-45LC*

Part Number: 60201-0-1

FCC ID: O7Q-MORPH2

**Denotes actual model tested as worst case of product family that includes the following models: morph2-45LC, morph2-50LC, morph2-54LC and morph2-MCLC. Tests were performed to determine the worst case antenna and this was used for the testing.*

4.2 Trade Name:

Infinite Biomedical Technologies, LLC

4.3 Power Supply:

Battery-operated

4.4 Applicable Rules:

KDB447498

4.5 Equipment Category:

RFID Tag Reader with Bluetooth

4.6 Antenna:

Integral Antenna

4.7 Accessories:

N/A