



A Test Lab Techno Corp.

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SAR Test Exclusion Evaluation



Test Report No.	: 1503FS11
Applicant	: Mobile Action Technology, Inc.
Manufacturer	: Heisei Electronics Co., Ltd.
Product Type	: Bluetooth 4.0 Low Energy Wristband
Trade Name	: i-gotU
Model Number	: Q-62, Q-62x, Q-62a, Q-62c, Q-62e, Q-62g
Dates of Received	: Feb. 25, 2015
Dates of Test	: Mar. 03, 2015
Dates of Issued	: Mar. 04, 2015
Test Specification	: 47 CFR § 2.1093 KDB 447498 D01 General RF Exposure Guidance v05r02 KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r03 KDB 865664 D02 RF Exposure Reporting v01r01
Location of Test Lab.	: Chang-an Lab.

1. The test operations have to be performed with cautious behavior, the test results are as attached.
2. The test results are under chamber environment of A Test Lab Techno Corp. A Test Lab Techno Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples.
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Approved By : Bill Hu
(Bill Hu)

Tested By : Sky Chou
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1. Description of Equipment under Test (EUT)

Applicant	Mobile Action Technology, Inc.
Applicant Address	5F., No.205-3, Sec.3, Beishin Rd., Shindian City Taipei Taiwan 231
Manufacturer	Heisei Electronics Co., Ltd.
Manufacturer Address	2F, No 5, Alley 8, Lane 45, Pao Hsin Road, Hsin-Tien City, Taipei Hsien, Taiwan, R.O.C.
Product Type	Bluetooth 4.0 Low Energy Wristband
Trade Name	i-gotU
Model Number	Q-62, Q-62x, Q-62a, Q-62c, Q-62e, Q-62g
Different Description	Those model numbers differ from each other in selling region.
Hardware Version	1.0
Software Version	1.0
FCC ID	Q7Z-15062R1
Frequency Range	2402 - 2480 MHz
Transmit Power (conducted power)	0.001 W / 0.03 dBm
Antenna Specification	2.51 dBi
Antenna Designation	Chip Antenna

The above equipment was tested by A Test Lab Techno Corp. For compliance with the requirements set forth in 47 CFR § 2.1093. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.



2. SAR Test Exclusion

As RF exposure evaluation of portable device, SAR test is not required when the evaluation results . According to KDB 447498 4.3.1, unless excluded by specific FCC test procedures, portable devices shall include SAR data for equipment approval. SAR test necessity will be based on the exclusion result.

The test exclusion refers KDB 447498 as below:

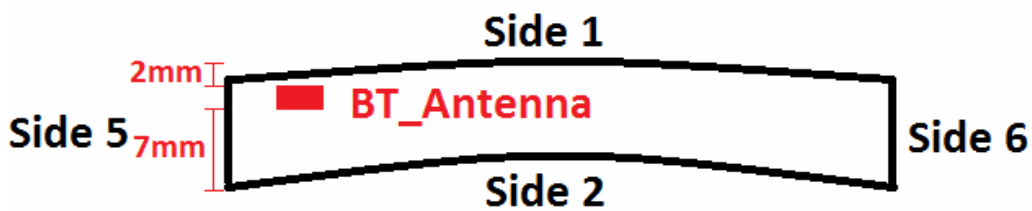
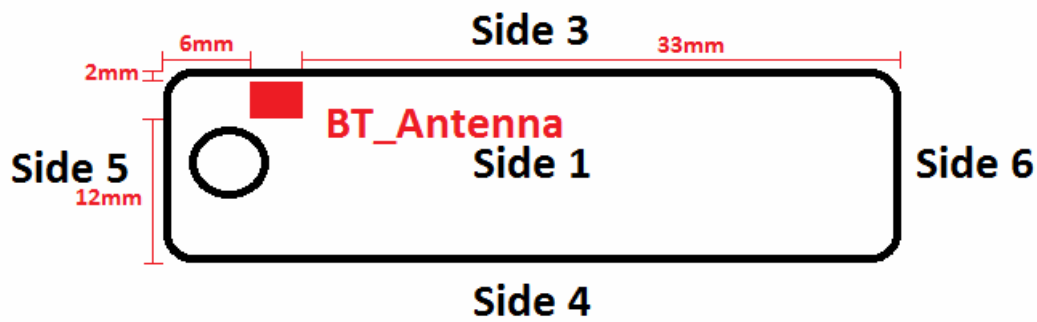
≤50mm:

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

2.1 Antenna Distance

Antenna to Side (The evaluated distance available extremity SAR as below):

Distance of Antenna to edge		
Antenna	Side	Distance (mm)
Bluetooth	Side 1	2
Bluetooth	Side 2	7
Bluetooth	Side 3	2
Bluetooth	Side 4	12
Bluetooth	Side 5	6
Bluetooth	Side 6	33





2.2 Conducted Power

Band	CH	Frequency (MHz) Packet Type	Average Power (dBm)
Bluetooth v4.0 LE	0	2402	-2.79
	19	2440	-1.34
	39	2480	0.03

2.3 Evaluation Results

The evaluation of SAR test reduction according to KDB447498

SAR test is not required when the results showed “SAR is not required”.

Extremity SAR:

≤ 50 mm										
Antenna	Side	Band	Channel	Power (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Result	Limit	Exclusion considerations SAR _{1g}
Bluetooth	1	Bluetooth v4.0 LE	39	1	2.480	5	1	0.3	3	SAR is not required
	2		39	1	2.480	7	1	0.2	3	SAR is not required
	3		39	1	2.480	5	1	0.3	3	SAR is not required
	4		39	1	2.480	12	1	0.1	3	SAR is not required
	5		39	1	2.480	6	1	0.3	3	SAR is not required
	6		39	1	2.480	33	1	0.0	3	SAR is not required

Transmitter and antenna implementation as below:

Band	Bluetooth Antenna
Bluetooth v4.0LE	V