



Compliance Testing, LLC

Previously Flom Test Lab

EMI, EMC, RF Testing Experts Since 1963

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Test Report

Prepared for: Beyond-HMI

Model: Reach

Description: BTLE Interface

Serial Number: N/A

FCC ID: 2AF59-REACH10

To

FCC Part 1.1310

Date of Issue: January 6, 2016

On the behalf of the applicant:

**Beyond-HMI
22419 Kendall Shay Court
Kety, TX 77450**

Attention of:

**Tom Mills, Engineer
Ph: (832)488-5745
Email: Tom@beyond-hmi.com**

**Prepared By
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Project No: p1580027**

**Alex Macon
Project Test Engineer**

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All results contained herein relate only to the sample tested

Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	October 9, 2015	Alex Macon	Original Document
2.0	January 6, 2016	Amanda Reed	Added FCC ID

ILAC / A2LA

Compliance Testing, LLC, has been accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer joint ISO-ILAC-IAF Communiqué dated January 2009)

The tests results contained within this test report all fall within our scope of accreditation, unless below

Please refer to <http://www.compliancetesting.com/labscope.html> for current scope of accreditation.

Testing Certificate Number: **2152.01**



FCC Site Reg. #349717

IC Site Reg. #2044A-2

Non-accredited tests contained in this report:

N/A

EUT Description

Model: Reach

Description: BTLE Interface

Firmware: N/A

Software: N/A

Serial Number: N/A

Additional Information:

The EUT is a BTLE Interface between phone or tablet and industrial control device

EUT Operation during Tests

The EUT was powered with an AC/DC Adapter supplying 12VDC. The device was placed into continuous transmission mode using test software supplied by the manufacturer.

Source Based Time Averaged Power Calculation

Average Power calculations

Average Power = Peak Power * duty-cycle%

Tuned Frequency (MHz)	Conducted Peak Output Power (mW)	Duty Cycle (%)	Average Power (mW)
2402	.678	100	.678

MPE Evaluation

This is a fixed device used in Uncontrolled Exposure environment.

Limits Uncontrolled Exposure 47 CFR 1.1310 Table 1, (B)

0.3-1.234 MHz:	Limit [mW/cm ²] = 100
1.34-30 MHz:	Limit [mW/cm ²] = (180/f ²)
30-300 MHz:	Limit [mW/cm ²] = 0.2
300-1500 MHz:	Limit [mW/cm ²] = f/1500
1500-100,000 MHz	Limit [mW/cm ²] = 1.0

Test Data

Test Frequency, MHz	2402
Power, Conducted, mW (P)	.678
Antenna Gain Isotropic	6 dBi
Antenna Gain Numeric (G)	3.98
Antenna Type	omni
Distance (R)	20 cm

$S = \frac{P * G}{4\pi r^2}$
Power Density (S) mw/cm ²

Formula	$S = P * G / 4 * \pi * r^2$		
Power Density (S) mw/cm ²	Power mW (P)	Numeric Gain (G)	Distance (r ²) cm
0.0005368534	0.678	3.98	20

Power Density (S) = .0005
Limit =(from above table) = 1.0

END OF TEST REPORT