Compliance Testing, LLC
Previously Flom Test Lab
EMI, EMC, RF Testing Experts Since 1963

toll-free: (866) 311-3268
fax: (480) 926-3598
http://www.ComplianceTesting.com
info@ComplianceTesting.com

Test Report

Prepared for: G-Wave Incorporated

Model: BDA-LTE/LABC-33/33-90-R3U15

Description: Bi-Directional Amplifier

Serial Number: 18091001

FCC ID: Q8KLABC3390R

To

FCC Part 1.1310

Date of Issue: October 9, 2018

On the behalf of the applicant:	**G-Way Incorporated** **38 Leuning St.** **South Hackensack, NJ 07606**
Attention of:	**Greg David, VP of Engineering** **Ph: (201)343-6388** **E-Mail: tech-support@gwaverf.com**

Prepared By
Compliance Testing, LLC
1724 S. Nevada Way
Mesa, AZ 85204
(480) 926-3100 phone / (480) 926-3598 fax
www.compliancetesting.com
Project No: p1890002

Christian Pawlak
Project Test Engineer

Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	September 17, 2018	Christian Pawlak	Original Document

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: BDA-LTE/LABC-33/33-90-R3U15
Description: 700 MHz Industrial LTE Booster
Serial Number: 18091001

Additional Information: The EUT is a Part 27 industrial signal booster.

Antennas specified for the EUT:

Port	Frequency Range (MHz)	Antenna Model	Gain (dBi)	Gain (unitless)
Uplink	698 - 716	TDJ-700/2500YG	7.5	5.6
Downlink	728 – 746	TQI-4FC-5	2.0	1.6

EUT Operation during Tests
Uplink MPE calculations were performed at the manufacturer's rated output of +33 dBm using an antenna with 7.5 dBi gain.

Downlink MPE calculations were performed at the manufacturer's rated output of +33 dBm using an antenna with 2 dBi gain.

The lowest frequency in each band was used to compute the "worst case" limit.

Minimum Safe Distance Evaluation - Limits

This is a Fixed device used in Uncontrolled Exposure environment.

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

Frequency Range (MHz)	Limit (mW/cm²)
0.3-1.234	100
1.34-30	180/f²
30-300	0.2
300-1500	f/1500
1500-100,000	1.0

Minimum Safe Distance Evaluation - Uplink

$$r = \sqrt{\frac{PG}{4\pi S}} = \sqrt{\frac{(2000)(5.6)}{4\pi(\frac{698}{1500})}} = 43.8\ cm$$

For the maximum rated output power and highest gain antenna, the minimum safe distance is **44 cm**.

Minimum Safe Distance Evaluation - Downlink

$$r = \sqrt{\frac{PG}{4\pi S}} = \sqrt{\frac{(2000)(1.6)}{4\pi(\frac{728}{1500})}} = 22.9\ cm$$

For the maximum rated output power and highest gain antenna, the minimum safe distance is **23 cm**.

END OF TEST REPORT