



## **Compliance Testing, LLC**

Previously Flom Test Lab

EMI, EMC, RF Testing Experts Since 1963

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### **Test Report**

**Prepared for: PCI Race Radios, Inc.**

**Model: Intercom and Two Way Radio**

**Description: Comlink RTX**

**Serial Number: 1512000001**

**FCC ID: 2AEVE-PCI-CL-RTX**

**To**

**FCC Part 1.1310**

**Date of Issue: November 4, 2015**

**On the behalf of the applicant:**

**PCI Race Radios, Inc.  
2888 Gundry Avenue  
Signal Hill, CA 90755**

**Attention of:**

**Dimitrios Spyrs, Operations Manager  
Ph: (562)427-8177  
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Project No: p1550025**

**Alex Macon  
Project Test Engineer**

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### Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	October 16, 2015	Alex Macon	Original Document
2.0	November 4, 2015	Alex Macon	Added minimum safe distance calculation



## 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:** Comlink RTX

**Description:** Intercom and Two Way Radio

**Firmware:** N/A

**Software:** N/A

**Serial Number:** 1512000001

### **Additional Information:**

EUT was powered with a 12VDC power supply. All conducted measurements were taken with the loss of the supplied antenna cable in mind.



## 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)
154.60	1950	100	1950



## MPE Evaluation

This is a mobile device used in Uncontrolled Exposure environment.

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

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

## Test Data

Test Frequency, MHz	154.6
Power, Conducted, mW (P)	1950
Antenna Gain Isotropic	0dBi
Antenna Gain Numeric (G)	1
Antenna Type	omni
Distance (R)	20 cm

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

Power Density (S) = 0.3879
Limit =(from above table) = 0.2

The power spectral density of 0.3879 mw/cm<sup>2</sup> is over the limit of 0.2 mw/cm<sup>2</sup>. The Minimum safe distance was calculated as follows

formula $R = \sqrt{(PG/4\pi L)}$			
Distance (R) (cm)	Power (mW)	Numeric Gain (G)	Limit (mW/cm)
27.86169208	1950	1	0.2

The minimum safe distance is 27.8 cm.

END OF TEST REPORT