



Compliance Testing, LLC

Previously Flom Test Lab

EMI, EMC, RF Testing Experts Since 1963

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Test Report

Prepared for: Bird Technologies

Model: 3-25999-XX

Description: 800MHz Public Safety/CMRS Class B Signal Booster Module

Serial Number: N/A

FCC ID: EZZ25999

To

FCC Part 1.1310

Date of Issue: August 26, 2016

On the behalf of the applicant:

Bird Technologies
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Attention of:

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Prepared By
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Project No: p1680007

Alex Macon
Project Test Engineer

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Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	August 17, 2016	Alex Macon	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: 3-25999-XX

Description: 800MHz Public Safety/CMRS Class B Signal Booster Module

Firmware: N/A

Serial Number: N/A

Additional Information:

The EUT is classified as a Part 20 (CMRS 90-S) **Class B** industrial signal booster.

The EUT is a Bi-directional Amplifier that operates from 817 – 824 MHz (Mobile to Base) and 862 – 869 MHz (Base to Mobile).

System Power is 120 VAC @ 60 Hz. The device also has a selection for battery backup at 12 VDC

MPE calculations were using an antenna with 0 dBi gain.

MPE calculations were performed at the manufacturer's rated output power +20% using an antenna with 0 dBi gain.



Average Power calculations

Average Power = Peak Power * duty-cycle%

Tuned Frequency (MHz)	Conducted Peak Output Power (mW)	Duty Cycle (%)	Average Power (mW)
817.83	4150	100	4150 mW
868.93	2770	100	2770 mW



MPE Evaluation

This is a Fixed device used in an **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	817
Power, Conducted, mW (P)	4980
Antenna Gain Isotropic	0 dBi
Antenna Gain Numeric (G)	1
Antenna Type	
Distance (R)	20 cm

$S = \frac{P * G}{4\pi r^2}$
Power Density (S) mw/cm ²
0.99

Power Density (S) =1.0
Limit =(from above table) = 0.545

EUT does not meet the power density requirements at 20 cm, so the minimum safe distance was calculated below.

formula $R = \sqrt{(PG/4\pi L)}$			
Distance (R) (cm)	Power (mW)	Numeric Gain (G)	Limit (mW/cm)
26.97252477	4980	1	0.545

The minimum safe distance is 27cm

END OF TEST REPORT