



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
30303 Aurora Road
Cleveland, OH 44139

Attention of:

Tim O'Brien, Technical Product Manager
Ph: (440)519-2194
Email: tobrien@bird-technologies.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: p1680007



Alex Macon
Project Test Engineer

This report may not be reproduced, except in full, without written permission from Compliance Testing
All results contained herein relate only to the sample tested



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=√(PG/4πL)	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