



Test Report

Prepared for: Shenzhen SolidRF Communications Co., Ltd.

Model: SR35702701

Description: Pro 5 bands Signal Booster

FCC ID: A7V-SR35702701

To

FCC Part 1.1310

Date of Issue: October 21, 2016

On the behalf of the applicant:

Shenzhen SolidRF Communications Co., Ltd.
No. 8, Shop D, Block C, Shan Shui Ju, Longwei Road
Schenzhen, Guangdong 518049

Attention of:

Johnny Zhing, CMO
Ph: (213)995-7300
Email: ning0508@gmail.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: p1690015



Poona Saber
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	October 19, 2016	Poona Saber	Original Document



Compliance Testing, LLC

Testing since 1963

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: SR35702701

Description: Pro 5 Bands Signal Booster

Additional Information:

The EUT is an In-Building bi-directional amplifier for the boosting of cellular phone signals and data communication devices.

The following frequency bands and emission types are utilized.

Frequency Band (MHz)					
Uplink	698 - 716	776 - 787	824 - 849	1850 - 1915	1710 – 1755
Downlink	728 - 746	746 - 757	869 - 894	1930 - 1995	2110 - 2155

Antenna gains including the cable loss came from the Antenna Kitting document supplied with this filing. The lowest frequency and the highest output power for each band was used in the calculations.



Source Based Time Averaged Power Calculation

Average Power calculations

Average Power = Peak Power * duty-cycle%

Frequency (MHz)	Conducted Output Power (mW)	Duty Cycle (%)
698-716	0.0078	100
776-787	0.074	100
824-849	0.155	100
1710-1755	0.126	100
1850-1915	0.229	100



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	698
Power, Conducted, mW (P)	77.6
Antenna Gain Isotropic	5.1 dBi
Antenna Gain Numeric (G)	3.24
Antenna Type	Directional antenna
Distance (R)	20 cm

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

Power Density (S) = 0.05 mw/cm ²
Limit =(from above table) = 0.465 mw/cm ²

The EUT meets the power density requirements at 20 cm

Test Frequency, MHz	776
Power, Conducted, mW (P)	74.13
Antenna Gain Isotropic	5.1 dBi
Antenna Gain Numeric (G)	3.24
Antenna Type	Directional antenna
Distance (R)	20 cm

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

Power Density (S) = 0.0477 mw/cm ²
Limit =(from above table) = 0.517 mw/cm ²

The EUT meets the power density requirements at 20 cm



Test Frequency, MHz	824
Power, Conducted, mW (P)	154.8
Antenna Gain Isotropic	5.05 dBi
Antenna Gain Numeric (G)	3.20
Antenna Type	Directional antenna
Distance (R)	20 cm

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

Power Density (S) = 0.108 mw/cm ²
Limit =(from above table) = 0.549 mw/cm ²

The EUT meets the power density requirements at 20 cm

Test Frequency, MHz	1710
Power, Conducted, mW (P)	125.8
Antenna Gain Isotropic	5.45 dBi
Antenna Gain Numeric (G)	3.51
Antenna Type	Directional antenna
Distance (R)	20 cm

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

Power Density (S) = 0.0878 mw/cm ²
Limit =(from above table) = 1 mw/cm ²

The EUT meets the power density requirements at 20 cm

Test Frequency, MHz	1850
Power, Conducted, mW (P)	229
Antenna Gain Isotropic	5.1 dBi
Antenna Gain Numeric (G)	3.24
Antenna Type	Directional antenna
Distance (R)	20 cm

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

Power Density (S) = 0.147 mw/cm ²
Limit =(from above table) = 1 mw/cm ²

The EUT meets the power density requirements at 20 cm

END OF TEST REPORT