RF EXPOSURE REPORT

Report No.: 16020292-FCC-H1
Supersede Report No.: N/A

Applicant	Digium, Inc.
Product Name	IP Phone
Main Model No.	D80
Serial Model No.	N/A
Test Standard	FCC 2.1093
Test Date	July 07 to July 21, 2016
Issue Date	July 21, 2016
Test Result	☑ **Pass** ☐ **Fail**
Equipment complied with the specification	☑
Equipment did not comply with the specification	☐

Amos. Xia	Miro Bao	
Amos Xia **Test Engineer**	**Miro Bao** **Checked By**	

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Test result presented in this test report is applicable to the tested sample only

Issued by:
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Laboratories Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.

In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety

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1 Report Revision History

Report No.	Report Version	Description	Issue Date
16020292-FCC-H1	NONE	Original	July 21, 2016

2 Customer information

Applicant Name	Digium, Inc.
Applicant Add	445 jan davis dr nw, Huntsville, Alabama, United States
Manufacturer	Hong Kong JXD Corp. Ltd.
Manufacturer Add	B702-706 zhuoyue Bldg No.126, ZhongKang Rd, Futian District, Shen Zhen 518049, Guang Dong P.R, China

3 Test site information

Lab performing tests	SIEMIC (Nanjing-China) Laboratories
Lab Address	2-1 Longcang Avenue Yuhua Economic and Technology Development Park, Nanjing, China
FCC Test Site No.	986914
IC Test Site No.	4842B-1
Test Software	Labview of SIEMIC version 1.0

4 Equipment under Test (EUT) Information

Description of EUT:	IP Phone
Main Model:	D80
Serial Model:	N/A
Date EUT received:	June 23, 2016
Test Date(s):	July 07 to July 21, 2016
Output power	-0.595 dBm
Antenna Gain:	2dBi
Type of Modulation:	Bluetooth: GFSK, π/4DQPSK, 8DPSK
RF Operating Frequency (ies):	Bluetooth: 2402-2480 MHz
Number of Channels:	Bluetooth: 79CH
Port:	Power Port, Earphone Port, LAN Port, PHONE Port, EHS Port
Input Power:	DC 5V
Trade Name :	Rostech
FCC ID:	2AI4X-D80

5 FCC §2.1093 - RF Exposure

Standard Requirement:

According to §15.247 (i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:

[(*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)] · [$\sqrt{f_{(GHz)}}$] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,[16] where

- $f_{(GHz)}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation[17]
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum *test separation distance* is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum *test separation*

diatance is ≤5mm, a distance of 5mm is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

Test Result:

Type	Test mode	CH	Freq (MHz)	Conducted Power (dBm)	Tune Up Power (dBm)
Output power	BT-8DPSK	Low	2402	-0.595	-1.5±1
		Mid	2441	-0.831	
		High	2480	-1.970	

One antenna is available for the EUT (BT antenna).

BT-8DPSK Mode

The maximum average output power (turn-up power) in low channel of BT is -0.5 dBm=0.89mW

The calculation results= 0.89/5* √ 2.402 = 0.28< 3

The maximum average output power (turn-up power) in middle channel of BT is -0.5 dBm=0.89mW

The calculation results= 0.89/5* √ 2.441 = 0.28< 3

The maximum average output power (turn-up power) in high channel of BT is -0.5 dBm=0.89mW

The calculation results= 0.89/5* √ 2.480 = 0.28< 3

Test Result: Pass