

RF Exposure Report

Project Number: 4134783

Report Number: 4134783EMC02 **Revision Level:** 2

Client: Crestron Electronics Inc.

Equipment Under Test: Zigbee Radio

Model: CWD7549

FCC ID: EROCWD7549

Applicable Standards: 47 C.F.R. §§ 2.1091 and 2.1093; FCC KDB 447498

FCC OET Bulletin 65 Supplement

Remarks: This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

TABLE OF CONTENTS

1	GENERAL INFORMATION	3
1.1	CLIENT INFORMATION	3
1.2	TEST LABORATORY	3
1.3	GENERAL INFORMATION OF EUT	3
1.4	OPERATING MODES AND CONDITIONS	3
2	RF EXPOSURE	4
2.1	TEST RESULT	4
2.2	TEST METHOD	4
2.3	SINGLE TRANSMISSION RF EXPOSURE LEVELS	4
2.4	SIMULTANEOUS TRANSMISSION RF EXPOSURE LEVELS	4

1 General Information

1.1 Client Information

Name: Crestron Electronics Inc
Address: 15 Volvo Drive
City, State, Zip, Country: Rockleigh, NJ 07647, USA

1.2 Test Laboratory

Name: SGS North America, Inc.
Address: 620 Old Peachtree Road NW, Suite 100
City, State, Zip, Country: Suwanee, GA 30024, USA

Accrediting Body: A2LA
Type of lab: Testing Laboratory
Certificate Number: 3212.01

1.3 General Information of EUT

Type of Product: Zigbee Radio
Model Number: CWD7549
Serial Number: CNA9255966

Frequency Range: 2405-2480MHz
Modulation: 802.15.4 (Zigbee)
Antenna: -2.0dBi Chip Antenna (Johanson Technology, P/N: 2450AT42E010B)

Rated Voltage: 5Vdc
Test Voltage: 5Vdc

Sample Received Date: 21 April 2017
Dates of testing: 05 February 2019

1.4 Operating Modes and Conditions

For this assessment, the EUT's maximum measured conducted power and peak antenna gain were considered.

2 RF Exposure

2.1 Test Result

Test Description	Product Specific Standard	Test Result
RF Exposure	FCC Part 1.1310	Compliant

2.2 Test Method

Using the maximum measured conducted power, the power density was calculated.

2.3 Single transmission RF Exposure Levels

Band of Operation		Conducted Power w/tolerance dBm	Antenna Gain	Cable Loss	Average EIRP		Distance (R) cm	Power Density EIRP _{avg} /(4πR ²) mW/cm ²	FCC mW/cm ²	% of Limit	Verdict
Type	MHz				dBm	mW					
Bluetooth LE	2400-2483.5	8.3	1.0	0.0	9.3	9	20	0.002	1.00	0%	Pass
Zigbee	2400-2483.5	20.9	-2.0	0.0	18.9	78	20	0.015	1.00	2%	Pass

2.4 Simultaneous transmission RF Exposure Levels

Expressed as a percentage of the limit:

Simultaneous Transmissions - Percent of Limit		
	Bluetooth LE	Zigbee
Bluetooth LE		2%
Zigbee	2%	