

# 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.*

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## 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

Type	Band of Operation MHz	Conducted Power w/tolerance dBm	Antenna Gain	Cable Loss	Average EIRP		Distance (R) cm	Power Density EIRP <sub>Avg</sub> (4πR <sup>2</sup> ) mW/cm <sup>2</sup>	FCC mW/cm <sup>2</sup>	% of Limit	Verdict
					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%	