

# Compliance Testing, LLC

Previously Flom Test Lab EMI, EMC, RF Testing Experts Since 1963 toll-free: (866)311-3268 fax: (480)926-3598

http://www.ComplanceTesting.com info@ComplanceTesting.com

# Test Report

Prepared for: CentraLite Systems

Model: 3315

#### **Description: 3-Series Water Sensor**

Serial Number: N/A

FCC ID: T3L-SS043

То

### FCC Part 1.1310

Date of Issue: January 11, 2018

On the behalf of the applicant:

Attention of:

CentraLite Systems 1000 Cody Road South Mobile, AL 36695

Adel A. Sakla, Senior Hardware Engineer Ph: (877)466-5483 Email: adel\_sakla@centralite.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: p17c0013

paineta

Poona Saber Project Test Engineer

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# **Test Report Revision History**

Revision	Date	Revised By	Reason for Revision
1.0	January 9, 2018	Poona Saber	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: 3310-G Description: Temp & Humidity Sensor Firmware: NA Software: NA Serial Number: NA The EUT implements Zigbee technology and it had different power setting for the high channel, channels 11-24 were set to -2 dBm, channel 25 was set to -6dBm and channel 26 was set to -26.

#### **EUT Operation during Tests**

The EUT was set to transmit at the lowest, middle and highest channel of operation at the maximum available output power for each channel. The control of the power and channel settings were done with a Silicon Labs ISA3 debugger.



# Source Based Time Averaged Power Calculation

### **Average Power calculations**

Average Power = Peak Power \* duty-cycle%

Tuned Frequency	Peak Output Power EIRP	Duty Cycle	Average Power
(MHz)	(mW)	(%)	(mW)
2445	9.88	100	9.88



# **Minimum Safe Distance Evaluation**

This is a mobile device used in Uncontrolled Exposure environment.

Limits Uncontrolled Exposure	0.3-1.234 MHz:	Limit $[mW/cm^2] = 100$
47 CFR 1.1310	1.34-30 MHz:	Limit $[mW/cm^2] = (180/f^2)$
Table 1, (B)	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	2445
Power, EIRP, mW (P)	9.88
Antenna Type	PCB trace Antenna
Limit (L)	1

R=√(PG/4πL)		
Distance (R) cm	Power mW (P)	Limit (L)
0.0019656215	9.88	1

Note: Max output power value is obtained from associated report.

END OF TEST REPORT