



Compliance Testing, LLC

Previously Flom Test Lab

EMI, EMC, RF Testing Experts Since 1963

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Test Report

Prepared for: Samtec, Inc.

Model: OSM-1-1313

Description: nMode Smart Modules

Serial Number: N/A

FCC ID: 2ALII-OSM-1-1313

To

FCC Part 1.1310

Date of Issue: May 4, 2017

On the behalf of the applicant:

Samtec, Inc.
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Attention of:

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Project No: p1720020

Kenneth Lee
Project Test Engineer

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Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	March 6, 2017	Kenneth Lee	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: OSM-1-1313

Description: nMode Smart Modules

Firmware: N/A

Software: N/A

Serial Number: N/A

Additional Information: None



SAR Exclusion

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:

$$\left[\frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \right] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR,}^{25} \text{ where}$$

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation²⁶
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

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 distance* is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

Max Power in mW = 1.8 mW
Min. Test Separation Distance = 5 mm
Frequency of Operation = 2480

$$\frac{1.8 \text{ mW}}{5 \text{ mm}} \times [\sqrt{f(2.48)}] = 0.567$$

END OF TEST REPORT