

# RF Exposure Report

**Project Number:** 4175716

**Report Number:** 4175716EMC01      **Revision Level:** 0

**Client:** Wistron NeWeb Corporation

**Equipment Under Test:** LTE CAT-M1 Device

**Model:** IMS2

**FCC ID:** NKRIMS2

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

**FCC OET Bulletin 65 Supplement**

**Report issued on:** 24 August 2017

**Test Result:** Compliant

**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 report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or Testing done by SGS International Electrical Approvals in connection with distribution or use of the product described in this report must be approved by SGS international Electrical Approvals in writing.

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## 1 General Information

### 1.1 Client Information

Name: Wistron NeWeb Corporation  
Address: 3322 Route 22 West, Building 10, Suite 1007  
City, State, Zip, Country: Branchburg, NJ 08876, 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: Wireless Modem Module  
Model Number: IMS2  
Serial Number: 11  
IMEI: 353180080000345

Rated Voltage: 3.3 – 4.2 Vdc,  
Test Voltage: 3.8 Vdc,

Tx Frequency Range: 1850 - 1910 MHz (LTE Band 2)  
1710 – 1755 MHz (LTE Band 4)  
699 – 716MHz (LTE Band 12)

FCC Classification: PCS Licensed Transmitter PCB  
Type: Pre Production

Sample Received Date: 07 July 2017  
Dates of testing: 20 – 25 July 2017

### 1.4 Operating Modes and Conditions

For this assessment, the EUT's maximum conducted power was 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

Because the IMS2 is provided with a coaxial port but no antenna, ERP/EIRP and RF Exposure calculations were performed by measuring the conducted output power and defining the maximum gain antenna that may be used while maintaining compliance with the applicable ERP/EIRP and RF Exposure limits at 20cm.

### 2.3 Single transmission RF Exposure Levels

Band of Operation		Conducted Power dBm	Antenna Gain	Cable Loss	Average EIRP		Distance (R) cm	Power Density $EIRP_{Avg}/(4\pi R^2)$ mW/cm <sup>2</sup>	FCC mW/cm <sup>2</sup>	% of Limit	Verdict
Type	MHz				dBm	mW					
LTE Band 2	1850-1910	25.7	7.0	0.0	32.7	1862	20	0.370	1.00	37%	Pass
LTE Band 4	1710-1755	25.7	4.0	0.0	29.7	933	20	0.186	1.00	19%	Pass
LTE Band 12	699-716	25.7	7.0	0.0	32.7	1862	20	0.370	0.47	79%	Pass

### 3 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	24 August 2017