

RF Exposure Report

Project Number: 4711959**Proposal Number: 11802****Report Number: 4711959EMC03****Revision Level: 0****Client: Coulomb, Inc.****Equipment Under Test: Lumin Smart Panel****Model: LS-100212****Contains FCC ID: 2AY52-LSPFN13WLAN****Applicable Standards: 47 CFR §§ 2.1091****FCC KDB 447498 D01 General RF Exposure Guidance v06****Report issued on: 18 June 2021****Result: Compliant**

FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 3212.01

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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: Coulomb, Inc.
Address: 212 E Main Street, Suite 202
City, State, Zip, Country: Charlottesville, VA 22902, 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

Equipment Under Test: Lumin Smart Panel
Model: LS-100212
Sample ID: 5877

Contains FCC ID: 2AY52-LSPFN13WLAN

Frequency Range: 2412 – 2462 MHz
Data Modes: WLAN IEEE 802.11b/g/n(HT20 & HT40) (DSSS, OFDM)
(Note: Module also has BLE capability, but it is disabled in this host.)
Max Power: 16.72 dBm (47 mW)
Antenna: External Omni-directional Dipole Antenna (2.8 dBi peak gain)

Rated Voltage: 120/240Vac 60Hz (single/dual phase)
Test Voltage: 120/240Vac 60Hz (dual phase)

Sample Received Date: 09 December 2020
Dates of testing: 02-19 March 2021

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 conducted power obtained from the original FCC grant for the module, the power density was calculated. The peak gain of the antenna used in the new host was assumed for this exercise.

2.3 Single transmission RF Exposure Levels (mW/cm²)

Band of Operation		Conducted Power w/tolerance	Antenna Gain	Cable Loss	Average EIRP		Distance (R)	Power Density EIRP _{avg} /(4πR ²)	FCC	% of Limit	Verdict
Type	MHz	dBm			dBm	mW	cm	mW/cm ²	mW/cm ²		
WLAN 2.4	2400-2483.5	16.7	2.8	0.0	19.5	90	20	0.018	1.00	2%	Pass

4 Revision History

Revision Level	Description of changes	Revision Date
0	Initial Release	18 June 2021