

# RF EXPOSURE EVALUATION REPORT

**FCC ID** : 2AW3A-1NAC21ACUCMR  
**Equipment** : EV Charger  
**Brand Name** : RIVIAN  
**Model Name** : PT00057325  
**Marketing Name** : RIVIAN WALL CHARGER  
**Applicant** : Rivian Automotive LLC.  
607 Hansen Way, Palo Alto, CA 94304  
**Manufacturer** : Lite-On Technology Corporation  
15F , No.555, Siyuan Rd., Xinzhuang Dist.,  
New Taipei City, Taiwan (R.O.C.)  
**Standard** : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part2.1091 and it complies with applicable limit.

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.

The results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full



Approved by: Cona Huang / Deputy Manager



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## History of this test report

Report No.	Version	Description	Issued Date
FA230117	Rev. 01	Initial issue of report	Sep. 14, 2022
FA230117	Rev. 02	Update section 4	Sep. 28, 2022

**1. Description of Equipment Under Test (EUT)**

Product Feature & Specification	
EUT Type	EV Charger
Brand Name	RIVIAN
Model Name	PT00057325
Marketing Name	RIVIAN WALL CHARGER
FCC ID	2AW3A-1NAC21ACUCMR
Wireless Technology and Frequency Range	WLAN 2.4GHz Band: 2400 MHz ~ 2483.5 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz
Mode	WLAN: 802.11b/g/n HT20 Bluetooth LE
HW Version	1
EUT Stage	Production Unit

**Reviewed by: Jason Wang****Report Producer: Carlie Tsai**

**2. Maximum RF average output power among production units****<WLAN>**

Mode		Tune-up Limit
2.4GHz WLAN	802.11b	17.50
	802.11g	20.50
	802.11n-HT20	21.00

**<Bluetooth>**

Mode	Tune-up Limit	
	LE	
	1Mbps	2Mbps
Bluetooth	-3.9	-10.0

### **3. RF Exposure Exemption Thresholds**

According to Part1.1307b, Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold Pth (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by:

$$P_{th} \text{ (mW)} = ERP_{20cm} (d / 20)^x \text{ for distance } d \leq 20cm$$

$$P_{th} \text{ (mW)} = ERP_{20cm} \text{ for distance } 20cm < d \leq 40cm$$

$$x = -\log_{10} \left( \frac{60}{ERP_{20cm} \sqrt{f}} \right)$$

ERP <sub>20cm</sub> (mW)	0.3 GHz ≤ f < 1.5 GHz:	2040 f
	1.5 GHz ≤ f ≤ 6 GHz:	3060

## **4. Radio Frequency Radiation Exposure Evaluation**

### **4.1. RF Exposure evaluation**

Band	Antenna Gain (dBi)	Maximum Conducted Power (dBm)	Maximum EIRP (dBm)	Maximum ERP (dBm)	Maximum EIRP (mW)	Maximum ERP (mW)	Pth	Pth (mW)	Maximum Output RF Power Limit (mW)	option(b) Threshold (mW)	option(b) P/Pth
WLAN2.4GHz Band	2.2	21.0	23.2	21.05	208.93	127.35	21.05	127.35	3981	3060.000	0.0416
Bluetooth	0.5	-3.9	-3.4	-5.55	0.46	0.28	-3.90	0.41	3981	3060.000	0.0001

### **4.2. Sim-Tx analysis**

WLAN 2.4GHz P/Pth Ratio	Bluetooth P/Pth Ratio	$\Sigma$ (P/Pth Ratio) of WLAN 2.4GHz + Bluetooth
0.0416	0.0001	0.0417

**Note:**

- According part1.1307b, the P/Pth Ratio is using for Sim-Tx analysis, above table was showing WLAN transmitting with Bluetooth and the summation ratio is smaller than 1

## **Conclusion:**

According to 47 CFR §1.1307, the RF exposure analysis concludes that the RF Exposure is FCC compliant.