



RF EXPOSURE EVALUATION REPORT

FCC ID : 2AEIM-1470138
Equipment : Wall Connector 3
Brand Name : Tesla
Model Name : 1470138-XX-Y
Applicant : Tesla, Inc.
3500 DEER CREEK ROAD PALO ALTO, CA 94304
Manufacturer : Tesla, Inc.
3500 DEER CREEK ROAD PALO ALTO, CA 94304
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



SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

1. DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)	4
2. MAXIMUM RF AVERAGE OUTPUT POWER AMONG PRODUCTION UNITS	4
3. RF EXPOSURE LIMIT INTRODUCTION	5
4. RADIO FREQUENCY RADIATION EXPOSURE EVALUATION	5
4.1. Standalone Power Density Calculation	5



History of this test report

Report No.	Version	Description	Issued Date
FA230726002	Rev. 01	Initial issue of report	Aug. 18, 2023
FA230726002	Rev. 02	Update Model Name	Aug. 24, 2023

1. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Wall Connector 3
Brand Name	Tesla
Model Name	1470138-XX-Y
FCC ID	2AEIM-1470138
Wireless Technology and Frequency Range	NFC : 13.56 MHz
Mode	NFC: ASK
Remark:	
1. This device also contains a WLAN Module, the details of this WLAN module are provided in the table below. For the WLAN RF Exposure Report (MPE), please refer to BUREAU VERITAS, Report Number SA150528E05K (FCC ID: TLZ-CU300). 2. The WLAN transmitter and NFC transmitter cannot transmit simultaneously.	

WLAN Module information	
Product	IEEE 802.11b/g/n WLAN Microcontroller Module
Brand	AzureWave
Test Model	AW-CU300
Series Model	AW-CU300A
Status of EUT	ENGINEERING SAMPLE
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK for OFDM
Modulation Technology	DSSS, OFDM
Transfer Rate	802.11b : up to 11Mbps 802.11g : up to 54Mbps 802.11n : up to 72.2Mbps
Operating Frequency	2.412 ~ 2.462GHz

Reviewed by: **Jason Wang**

Report Producer: **Daisy Peng**

2. Maximum RF average output power among production units

Mode	Maximum EIRP(dBm)
NFC	-20.65

Note : EIRP is calculated using 3-meter field strength conversion.



3. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Table with 5 columns: Frequency range (MHz), Electric field strength (V/m), Magnetic field strength (A/m), Power density (mW/cm^2), Averaging time (minutes). It is divided into two sections: (A) Limits for Occupational/Controlled Exposures and (B) Limits for General Population/Uncontrolled Exposure.

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

S = PG / (4 * pi * R^2)

Where:

- S = Power Density
P = Output Power at Antenna Terminals
G = Gain of Transmit Antenna (linear gain)
R = Distance from Transmitting Antenna

4. Radio Frequency Radiation Exposure Evaluation

4.1. Standalone Power Density Calculation

Table with 6 columns: Band, Maximum EIRP (dBm), Maximum EIRP (W), Average EIRP (mW), Power Density at 20cm (mW/cm^2), Limit (mW/cm^2). Row for NFC band.

Conclusion:

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