

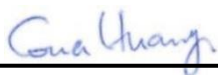
RF EXPOSURE EVALUATION REPORT

FCC ID : 2ASZK-2887
Equipment : Smart Plug
Model Name : C2YY37
Applicant : Chemistry Universe FX LLC
303 Wyman Street, Suite 300
Waltham, Massachusetts 02451-1208
United States Of America
Standard : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part 2.1091 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. EMC & Wireless Communications 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
FA000710-01	Rev. 01	Initial issue of report	Jan. 12, 2021

1. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Smart Plug
Model Name	C2YY37
FCC ID	2ASZK-2887
Wireless Technology and Frequency Range	WLAN 2.4GHz Band: 2400 MHz ~ 2483.5 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz
Mode	WLAN: 802.11a/b/g/n HT20 Bluetooth LE

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Reviewed by: Jason Wang

Report Producer: Carlie Tsai

2. Maximum RF average output power among production units

Band / Mode	Average Power (dBm)
	LE
Bluetooth	7

2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit
	802.11b	CH 1	2412	1Mbps	19.00
		CH 6	2437		19.00
		CH 11	2462		19.00
		CH 12	2467		19.00
		CH 13	2472		18.00
	802.11g	CH 1	2412	6Mbps	18.00
		CH 6	2437		18.00
		CH 11	2462		18.00
		CH 12	2467		15.50
		CH 13	2472		14.00
	802.11n-HT20	CH 1	2412	MCS0	17.50
		CH 6	2437		18.00
		CH 11	2462		17.50
		CH 12	2467		15.00
		CH 13	2472		13.50



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.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

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:

$$S = \frac{PG}{4\pi R^2}$$

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

Band	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (W)	Average EIRP (mW)	Power Density at 20cm (mW/cm ²)	Limit (mW/cm ²)	Power Density / Limit
WLAN2.4GHz Band	0.00	19.00	19.000	0.079	79.433	0.016	1.000	0.016
Bluetooth	0.00	7.00	7.000	0.005	5.012	0.001	1.000	0.001

Conclusion:

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.