

Report No. : FA441033

RF Exposure Evaluation Report

APPLICANT: Jorjin Technologies

EQUIPMENT: Wireless Mirroring Adapter

BRAND NAME: EPSON

MODEL NAME: H695A

FCC ID : WS2- STM7C24EE

STANDARD : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC., would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1091, and pass the limit. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by: Eric Huang / Deputy Manager

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Approved by: Jones Tsai / Manager





SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: WS2- STM7C24EE Page Number : 1 of 7
Report Issued Date : May 05, 2014

Report Version : Rev. 01



RF Exposure Evaluation Report

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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA441033	Rev. 01	Initial issue of report	May 05, 2014

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1. Administration Data

1.1. Testing Laboratory

Test Site	SPORTON INTERNATIONAL INC.
	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park,
Test Site Location	Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
Test Site Location	TEL: +886-3-327-3456
	FAX: +886-3-328-4978

1.2. Applicant

Company Name	Jorjin Technologies			
Address	17F, No.239, Sec. 1, Datong Rd., Xizhi Dist., New Taipei City 22161, Taiwan			
	R.O.C.			

1.3. Manufacturer

Company Name	Jorjin Technologies
Address	17F, No.239, Sec. 1, Datong Rd., Xizhi Dist., New Taipei City 22161, Taiwan
	R.O.C.

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2. <u>Description of Equipment Under Test (EUT)</u>

Product Feature & Specification					
EUT Type	EUT Type Wireless Mirroring Adapter				
Brand Name	EPSON				
Model Name	H695A				
FCC ID	WS2- STM7C24EE				
Wireless Technology and Frequency Range	WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz				
Mode	• 802.11b/g/n HT20				
Antenna Type	Chip Antenna				
HW Version	JDT003-04				
SW Version	Alpha 6.5				
EUT Stage	Identical Prototype				

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

3. Maximum RF average output power among production units

Pand / Fraguency (MHz)	IEEE 802.11 Average Power (dBm)				
Band / Frequency (MHz)	11b	11g	HT20		
2.4GHz Band	21	17	17		

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4. 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)			Power density (mW/cm ²)	Averaging time (minutes)	
8.	(A) Limits for O	ccupational/Controlled Expos	ures	21	
0.3-3.0	614	1.63	*(100)	6	
3.0-30	1842/	f 4.89/1	*(900/f2)	6	
30-300	61.4	0.163	1.0	6	
300-1500			f/300	6	
1500-100,000			5	6	
	(B) Limits for Gene	ral Population/Uncontrolled I	xposure		
0.3-1.34	614	1.63	*(100)	30	
1.34-30	824/	f 2.19/1	*(180/f2)	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 22 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

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5. Radio Frequency Radiation Exposure Evaluation

5.1. Standalone Power Density Calculations

Band	Frequency (MHz)	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (W)	Average EIRP (mW)	Power Density at 22cm (mW/cm^2)	Limit (mW/cm^2)
WLNA2.4GHz Band	2412	2.5	21.0	23.5	0.22	223.87	0.037	1.000

Note: For conservativeness, the lowest uplink frequency and the max power of each band is used to determine the MPE limit of that band

Conclusion:

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

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