# **RF Exposure Evaluation Report**

APPLICANT : FUJITSU LIMITED

**EQUIPMENT**: Port Replicator (Cradle)

**BRAND NAME : FUJITSU** 

MODEL NAME: FPCPR374, FPCPR375

FCC ID : EJE-SBC001

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 / Manager

Approved by: Jones Tsai / Manager

lac-MRA



Report No.: FA7N2705

#### SPORTON INTERNATIONAL INC.

No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.)

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: EJE-SBC001 Page Number : 1 of 7

Report Issued Date : Mar. 09, 2018
Report Version : Rev. 01

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### SPORTON LAB. RF Exposure Evaluation Report

#### **Revision History**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA7N2705	Rev. 01	Initial issue of report	Mar. 09, 2018

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### 1. Administration Data

#### 1.1. <u>Testing Laboratory</u>

Testing Laboratory			
Test Site	SPORTON INTERNATIONAL INC.		
Test Site Location	No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978		

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Applicant		
Company Name	FUJITSU LIMITED	
Address	1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki 211-8588, Japan	

Manufacturer		
Company Name	FUJITSU LIMITED	
Address	1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki 211-8588, Japan	

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#### 2. Description of Equipment Under Test (EUT)

Product Feature & Specification			
EUT Type	Port Replicator (Cradle)		
Brand Name	FUJITSU		
Model Name	FPCPR374, FPCPR375		
FCC ID EJE-SBC001			
Wireless Technology and Frequency Range	WiGig : 57GHz ~71GHz		
Mode	802.11ad		
HW Version	С		
SW Version	MFI		
EUT Stage	Production Unit		

**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

Band	EIRP Average Power (dBm)	
WiGig	-2.65	

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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)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
800 St.	(A) Limits for O	ccupational/Controlled Expos	sures	W
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	Exposure	
0.3-1.34	614	1.63	*(100)	30
1.34-30 824		f 2.19/1	*(180/f2)	30
30-300 27.3		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

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### 5. Radio Frequency Radiation Exposure Evaluation

#### 5.1. Standalone Power Density Calculation

Band	Maximum EIRP (dBm)	Maximum EIRP (W)	Average EIRP (mW)	Power Density at 20cm (mW/cm^2)	Limit (mW/cm^2)
WiGig	-2.650	0.001	0.543	0.0001	1.000

#### **Conclusion:**

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

SPORTON INTERNATIONAL INC.

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