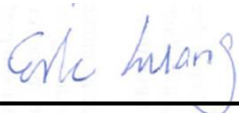


RF Exposure Evaluation Report

APPLICANT : Tecom Co., Ltd.
EQUIPMENT : 3G Femtocell Residential Access Point
BRAND NAME : CISCO
MODEL NAME : USC3330-BJ-K9
FCC ID : D6XUSC3330BJ
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



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.



Table of Contents

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

Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA482160	Rev. 01	Initial issue of report	Sep. 25, 2014

1. Administration Data

1.1. Testing Laboratory

Testing Laboratory	
Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	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

Applicant	
Company Name	Tecom Co., Ltd.
Address	23 R&D Road 2, Hsinchu Science-based Industrial Park, Hsin-Chu, Taiwan R.O.C.

Manufacturer	
Company Name	Global Brands Manufacture (DongGuan) Ltd.
Address	Yue Yuan Industrial Estate, Huang Jiang Zhen, DongGuan City, Guangdong Province, China.

2. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	3G Femtocell Residential Access Point
Brand Name	CISCO
Model Name	USC3330-BJ-K9
FCC ID	D6XUSC3330BJ
Wireless Technology and Frequency Range	WCDMA Band V: 871.4 MHz ~ 891.6 MHz WCDMA Band II: 1932.4 MHz ~ 1987.6 MHz
Mode	<ul style="list-style-type: none"> • RMC 12.2Kbps • HSDPA • HSUPA
Antenna Type	Omni Antenna
EUT Stage	Beta stage

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

Average power(dBm)	
WCDMA V	WCDMA II
13.0	13.0



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 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



5. Radio Frequency Radiation Exposure Evaluation

5.1. Standalone Power Density Calculation

Band	Frequency (MHz)	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)
WCDMA V	871.4	2.15	13.00	15.150	0.033	32.734	0.007	0.581
WCDMA II	1932.4	2.12	13.00	15.120	0.033	32.509	0.006	1.000

Note: For conservativeness, the lowest uplink frequency 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.