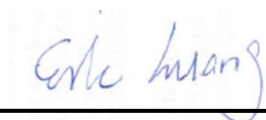


RF Exposure Evaluation Report

APPLICANT : TECOM CO., LTD.
EQUIPMENT : 3G FEMTO OUTDOOR AP
BRAND NAME : TECOM
MODEL NAME : FC1080-B1G-US
FCC ID : D6XFC1080
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.



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**Revision History**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA441829	Rev. 01	Initial issue of report	Jun. 05, 2014

1. Administration Data

1.1. Testing Laboratory

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No. 52, Hwa Ya 1 st 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

1.2. Applicant

Company Name	TECOM CO., LTD.
Address	23, R&D ROAD 2 SCIENCE-BASED INDUSTRIAL PARK HSIN-CHU TAIWAN R. O. C.

1.3. Manufacturer

Company Name	TECOM CO., LTD.
Address	23, R&D ROAD 2 SCIENCE-BASED INDUSTRIAL PARK HSIN-CHU TAIWAN R. O. C.

2. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	3G FEMTO OUTDOOR AP
Brand Name	TECOM
Model Name	FC1080-B1G-US
FCC ID	D6XFC1080
Wireless Technology and Frequency Range	WCDMA Band V: 869 MHz ~ 894 MHz WCDMA Band II: 1930 MHz ~ 1990 MHz
Mode	RMC 12.2Kbps Rel 99
Antenna Type	Collinear 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

Mode	Average Power (dBm)	
	WCDMA Band V	WCDMA Band II
RMC 12.2Kbps	31.0	31.0



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 Calculations

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)	Power Density / Limity
WCDMA Band 5	869.0	2.15	31.00	33.150	2.065	2065.380	0.411	0.579	0.710
WCDMA Band 2	1930.0	2.12	31.00	33.120	2.051	2051.162	0.408	1.000	0.408

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.