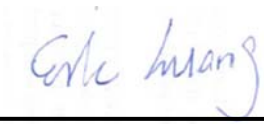
RF Exposure Evaluation Report

APPLICANT	**:**	**ZTE CORPORATION**
EQUIPMENT	**:**	**Wireless Access Terminal**
BRAND NAME	**:**	**ZTE**
MODEL NAME	**:**	**WF721**
FCC ID	**:**	**SRQ-WF721**
STANDARD	**:**	**47 CFR Part 2.1091**

We, SPORTON INTERNATIONAL (KUNSHAN) 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 (KUNSHAN) INC., the test report shall not be reproduced except in full.



Reviewed by: Eric Huang / Deputy Manager

Approved by: Jones Tsai / Manager

SPORTON INTERNATIONAL (KUNSHAN) INC.
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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA3N2101-05	Rev. 01	Initial issue of report	Apr. 10, 2014

1. Administration Data

1.1. Testing Laboratory

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C. TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958

1.2. Applicant

Company Name	ZTE CORPORATION
Address	ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.3. Manufacturer

Company Name	ZTE CORPORATION
Address	ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

2. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Wireless Access Terminal
Brand Name	ZTE
Model Name	WF721
FCC ID	SRQ-WF721
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz
Mode	・GSM ・RMC 12.2Kbps Rel 99
Antenna Type	PCB Antenna
HW Version	dekA
SW Version	WF721 1.0.1
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

Maximum Target Burst Average Power for Production Unit (dBm)		
Mode / Band	GSM 850	GSM 1900
GSM (GMSK, 1 Tx slot)	32.5	29

Maximum Target Power for Production Unit (dBm)		
Mode / Band	WCDMA Band V	WCDMA Band II
RMC 12.2K	22.5	22.5

4. Conducted RF Output Power (Unit: dBm)

<GSM Conducted Power>

Conducted Power (*Unit: dBm)						
Band	GSM850			GSM1900		
Channel	128	189	251	512	661	810
Frequency	824.2	836.4	848.8	1850.2	1880.0	1909.8
GSM	**32.14**	32.08	32.00	**28.49**	28.70	28.24

<WCDMA Conducted Power>

Conducted Power (*Unit: dBm)						
Band	WCDMA Band V			WCDMA Band II		
Channel	4132	4182	4233	9262	9400	9538
Frequency	826.4	836.4	846.6	1852.4	1880.0	1907.6
RMC 12.2K	21.84	**21.87**	21.69	**21.85**	21.68	21.65

5. 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/f2)	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/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 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

6. Radio Frequency Radiation Exposure Evaluation

6.1. Standalone Power Density Calculations

Band	Frequency (MHz)	Antenna Gain (dBi)	Maximum Power (dBm)	Average EIRP (mW)	Power Density at 20cm (mW/cm2)	Limit (mW/cm2)
GSM 850 (1 Tx slot)	824.2	1.41	32.5	309.74	0.06	0.55
GSM 1900 (1 Tx slot)	1850.2	3.02	29.0	200.45	0.04	1.00
WCDMA Band V	826.4	1.41	22.5	246.04	0.05	0.55
WCDMA Band II	1852.4	3.02	22.5	356.45	0.07	1.00

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.