
MPE REPORT

Report No.: SRMC2010-H024-E0034

Product Name: GSM Wireless Phone

Product Model: ZTE WP657

Applicant: ZTE Corporation

Manufacture: ZTE Corporation

Specification: FCC Part2.1093

OET Bulletin 65 Supplement C[June 2001]

FCC ID: Q78-ZTEWP657

The State Radio Monitoring Center

State Radio Spectrum Monitoring and Testing Center

No.80 Beilishi Road Xicheng District Beijing, China

Tel: 86-10-68009202 Fax: 86-10-68009205

CONTENTS

1. General information	3
1.1 Notes of the test report	3
1.2 Information about the testing laboratory	3
1.3 Applicant's details	3
1.4 Manufacturer's details	3
1.5 Application details	4
1.6 Reference specification	4
1.7 Information of EUT	4
1.7.1 General information	4
1.7.2 EUT details	5
1.7.3 Auxiliary equipment details	5
2. Test information	6
2.1 Summary of the calculation results	6
2.2 Calculation result	7
2.2.1 Maximum Permissible Exposure (MPE)	7

1. General information

1.1 Notes of the test report

The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written permission of The State Radio Monitoring Center.

The test results relate only to individual items of the samples which have been tested.

1.2 Information about the testing laboratory

Company: The State Radio Monitoring Center
State Radio Spectrum Monitoring and Testing Center
Address: No.80 Beilishi Road, Xicheng District, Beijing China
City: Beijing
Country or Region: China
Contacted person: Wang Junfeng
Tel: +86 10 68009181 +86 10 68009202
Fax: +86 10 68009195 +86 10 68009205
Email: wangjf@srrc.org.cn

1.3 Applicant's details

Company: ZTE Corporation
Address: 10# TangYan Road South, Hi-Tech Industrial Park, 710065
City: Xi'an
Country or Region: P.R.China
Grantee Code: Q78
Contacted person: Wang Lei
Tel: +86-029-88724011
Fax: +86-029-88723249
Email: wang.lei57@zte.com.cn

1.4 Manufacturer's details

Company: ZTE Corporation
Address: Zhongxing Bldg, Hi-Tech Park, NanShan, 518057
City: Shenzhen
Country or Region: P.R.China
Grantee Code: Q78
Contacted person: Li Dezi
Tel: +86-021-68895196
Fax: +86-021-50801070
Email: li.dezi@zte.com.cn

1.5 Application details

Date of reception of test sample: 7th May 2010

Date of test: 7th May 2010 to 14th May 2010

1.6 Reference specification

FCC Part2.1093, OET Bulletin 65 Supplement C [June 2001]

1.7 Information of EUT

1.7.1 General information

Name of EUT	GSM Wireless Phone
FCC ID	Q78-ZTEWP657
Frequency range	GSM850: Tx:824~849MHz Rx:869~894MHz PCS1900: Tx:1850~1910MHz Rx:1930~1990MHz
Rated output power	GSM850:33.0dBm PCS1900:30.0dBm
E.R.P. & E.I.R.P.	E.R.P.: 27.5dBm E.I.R.P.: 26.8dBm
Modulation type	GMSK
Emission Designator	300KGXW
Duplex mode	FDD
Duplex spacing	GSM850:45MHz PCS1900:80MHz
Antenna type	External
Antenna Gain	2dBi
Power Supply	Battery or charger
Rated Power Supply Voltage	3.6V
Extreme Temperature	Lowest: -30°C Highest: +50°C
Extreme Voltage	Minimum: 3.3V Maximum: 4.3V
HW Version	100301
SW Version	TLF_PER_WP657V1.0.0B01

1.7.2 EUT details

Name	Model	IMEI
GSM Wireless Phone	ZTE WP657	351789030034964

1.7.3 Auxiliary equipment details

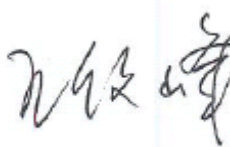
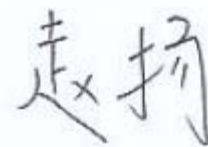
Equipment	Charger
Manufacturer	ZTE Corporation
Model Number	STC-A22O50C35-C

Equipment	Battery
Manufacturer	ZTE Corporation
Model Number	Ni3607T30P3S473211
Capacity	1200mAh
Rated Voltage	3.6V

2. Test information

2.1 Summary of the calculation results

No.	Test case	FCC reference	Verdict
1	MPE Calculation	FCC Part2.1093, OET Bulletin 65 Supplement [June 2001]	Pass

This Test Report Is Issued by: Mr. Song Qizhu, Director of the test lab 	Checked By: 
Tested By: 	Issued date: 2010.06.17

2.2 Calculation result

2.2.1 Maximum Permissible Exposure (MPE)

Limit:

FCC LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

(A) Limits for Occupational/Controlled Exposure ☐

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
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 ☒

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
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

f = frequency in MHz *Plane-wave equivalent power density

Calculation procedure:

In accordance with 47CFR FCC Part 2.1091, the product has been defined as a mobile device where a distance of 0.2m normally can be maintained between the user and product.

Calculation formula:

Power Density: $P_d (W/m^2) = E^2/377$

$E (V/m) = (30 \cdot P \cdot G)^{0.5} / d$

E: Electric Field Strength (V/m)

P: Peak RF Output Power (W)

G: Antenna Numeric Gain (Numeric)

d: Separation Distance Between the Radiator and Human Body (m)

So the calculation formula can be changed as:

$$P_d = (30 * P * G) / (377 * d^2)$$

Calculation result:

GSM850:

Channel No.	Effective Radiated Power (E.R.P.) (mW)	Power Density (S) (mW/cm2)	Limit of Power Density (S) (mW/cm2)	Verdict
128	512.9	0.1673	0.549	Pass
189	537.0	0.1752	0.558	Pass
251	562.3	0.1834	0.566	Pass

PCS1900:

Channel No.	Effective Isotropic Radiated Power (E.I.R.P.) (mW)	Power Density (S) (mW/cm2)	Limit of Power Density (S) (mW/cm2)	Verdict
512	446.7	0.0889	1.0	Pass
661	478.6	0.0952	1.0	Pass
810	467.7	0.0930	1.0	Pass