

MPE TEST REPORT

Equipment Under Test : Mobile Cam
Model No. : MF68
Market name: MF68
Applicant : ZTE CORPORATION
Address of Applicant : ZTE Plaza, Keji Road South, Hi-Tech Industrial Park,
Nanshan District, Shenzhen, Guangdong, 518057,
P.R.China
Date of Issue : 2008.03.05

Standards:

**COUNCIL RECOMMENDATION
Of 12 July 1999**

**On the limitation of exposure of the general public to electromagnetic
fields (0 Hz to 300 Ghz)**

In the configuration tested, the EUT complied with the standards specified above.

Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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Tested by :

Zeng Zhang

Date :

2008.03.05

Approved by :

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Date :

2008.03.05

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1. General Information

1.1 Test Laboratory

GSM Lab

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1.2 Details of Applicant

Name: ZTE CORPORATION

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

1.3 Description of EUT(s)

Brand name	ZTE	
Model No.	MF68	
Market Name	MF68	
Antenna Type	Inner Antenna	
Frequency range	WCDMA FDD Band V	Tx: 824~849 MHz Rx: 869~894MHz
	WCDMA FDD Band II	Tx: 1850~1910 MHz Rx: 1930~1990 MHz
Maximum RF Conducted Power	WCDMA FDD Band V: 22.93dBm, WCDMA FDD Band II: 22.70dBm	



Fig.1 Photographs of the EUT

1.4 Test Standards and Limits

Table 2

Reference levels for electric, magnetic and electromagnetic fields
(0 Hz to 300 GHz, unperturbed rms values)

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (μ T)	Equivalent plane wave power density S_{eq} (W/m ²)
0-1 Hz	—	$3,2 \times 10^4$	4×10^4	—
1-8 Hz	10 000	$3,2 \times 10^4/f^2$	$4 \times 10^4/f^2$	—
8-25 Hz	10 000	$4\,000/f$	$5\,000/f$	—
0,025-0,8 kHz	$250/f$	$4/f$	$5/f$	—
0,8-3 kHz	$250/f$	5	6,25	—
3-150 kHz	87	5	6,25	—
0,15-1 MHz	87	$0,73/f$	$0,92/f$	—
1-10 MHz	$87/f^{1/2}$	$0,73/f$	$0,92/f$	—
10-400 MHz	28	0,073	0,092	2
400-2 000 MHz	$1,375 f^{1/2}$	$0,0037 f^{1/2}$	$0,0046 f^{1/2}$	$f/200$
2-300 GHz	61	0,16	0,20	10

2. Test Results

2.1 Summary of Results

Frequency range	Limit (W/ m ²)	Result (W/ m ²)	Verdict
WCDMA FDD Band V	4.12	0.196	Pass
WCDMA FDD Band II	9.25	0.275	Pass

2.2 Instruments List

Instrument	Model	Serial number	NO.	Date of last Calibration
R&S Universal radio communication tester	CMU200	103633	GSM-AUD-002	2008.01.18

2.3 Result of WCDMA FDD Band V

Test Results: MPE Limit Calculation: the EUT's operating frequencies @ 824 - 894 MHz; as per the original test report the highest power is WCDMA FDD Band V , channel . 4132 The maximum conducted power is 22.93 dBm . The maximum gain is -3.01dBi. Therefore, maximum limit for general public RF exposure: 4.12W/m²

$$S = PG / 4\pi R^2$$

P =Power Input to antenna (0.197Watts)

G =Antenna Gain (0.5 numeric)

R = distance to the center of radiation of antenna (in meter) = 0.20 m

$$S = (0.197 * 0.5) / (4\pi * 0.2^2) = 0.196W/m^2$$

Therefore, at 20 cm the spectral power density is less than the 4.12 W/m² limit for uncontrolled exposure.

2.4 Result of WCDMA FDD Band II

Test Results: MPE Limit Calculation: the EUT's operating frequencies @ 1850 - 1990 MHz; as per the original test report the highest power is WCDMA FDD Band II, channel . 12 The maximum conducted power is 22.70 dBm . The maximum gain is -1.31dBi. Therefore, maximum limit for general public RF exposure: 9.25W/m²

$$S = PG / 4\pi R^2$$

P = Power Input to antenna (0.186 Watts)

G = Antenna Gain (0.741 numeric)

R = distance to the center of radiation of antenna (in meter) = 0.20 m

$$S = (0.186 * 0.741) / (4\pi * 0.2^2) = 0.275W/m^2$$

Therefore, at 20 cm the spectral power density is less than the 9.25 W/m² limit for uncontrolled exposure.