



# MPE REPORT

**Report No.:** SET2022-06263

**Product Name:** M300z

**Model No. :** M300z

**FCC ID:** SRQ-M300Z

**Applicant:** ZTE CORPORATION.

**Address:** ZTE Plaza, #55 Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, China

**Dates of Testing:** 2022.04.22-2022.05.16

**Issued by:** CCIC Southern Testing Co., Ltd.

**Lab Location:** Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China.

**Tel:** 86 755 26627338      **Fax:** 86 755 26627238

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## Test Report

**Product**.....: M300z  
**Brand Name**.....: ZTE  
**Trade Name**.....: ZTE  
**Applicant**.....: ZTE CORPORATION  
**Applicant Address**.....: ZTE Plaza, #55 Keji Road South, Hi-Tech Industrial Park,  
Nanshan District, Shenzhen, China  
**Manufacturer**.....: ZTE CORPORATION  
**Manufacturer Address**.....: ZTE Plaza, #55 Keji Road South, Hi-Tech Industrial Park,  
Nanshan District, Shenzhen, China  
**Test Standards**.....: FCC Part 2.1091: Radio Frequency (RF) Exposure Compliance of  
Radio communication Apparatus (All Frequency Bands)  
**Test Result**.....: PASS

**Tested by**.....: Sun 2022.05.17  
Sun, Test Engineer

**Reviewed by**.....: Chris You 2022.05.17  
Chris You, Senior Engineer

**Approved by**.....: Shuangwen Zhang 2022.05.17  
Shuangwen Zhang, Manager



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Change History		
Issue	Date	Reason for change
1.0	2022.05.17	First edition



## 1. GENERAL INFORMATION

### 1.1 EUT Description

Model No.	M300z	
EUT supports Radios application	GSM 850/1900MHz LTE Band 7	
Antenna Type	Internal Antenna	
Power supply	DC 5V from Adapter	
Antenna Gain	GSM	850MHz: 0.3dBi 1900MHz: 2.2dBi
	LTE	Band 7: 2.7dBi



## 1.2 Test Standards and Results

The EUT has been tested according to the following specifications

Standard	Test Type	Result
FCC Part 2.1091	Radio Frequency (RF) Exposure Compliance of Radio communication Apparatus (All Frequency Bands)	PASS

## 1.3 Identification of the Responsible Testing Laboratory

<b>Company Name:</b>	CCIC Southern Testing Co., Ltd.
<b>Address:</b>	Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China



## 2. RF exposure evaluation

### 2.1 FCC MPE Limited

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

### 2.2 Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

Where

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)



## 2.3 Evaluation Results

### Worst-Case mode Conducted Output Power Results for WWAN

Band	Channel	Frequency (MHz)	Max Tune up power(dBm)	Max Tune up power(W)	Duty cycle(%)	Average power(W)
GSM850	Low	824.2	32.00	1.585	100	1.585
	Mid	836.6	32.00	1.585	100	1.585
	High	848.8	32.00	1.585	100	1.585
GSM1900	Low	1850.2	29.00	0.794	100	0.794
	Mid	1880.0	29.00	0.794	100	0.794
	High	1909.8	29.00	0.794	100	0.794
LTE Band 7	Low	2510.0	23.00	0.200	100	0.200
	Mid	2535.0	23.00	0.200	100	0.200
	High	2560.0	23.00	0.200	100	0.200

Note: for power tolerance please refer to tune up for detail.

### Calculation results (for WWAN): Worst-Case mode

Band	Channel	Frequency (MHz)	Result (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Ratio	Results
GSM850	Low	824.2	0.3379	0.55	0.6144	PASS
	Mid	836.6	0.3379	0.56	0.6034	PASS
	High	848.8	0.3379	0.57	0.5928	PASS
GSM1900	Low	1850.2	0.2623	1.00	0.2623	PASS
	Mid	1880.0	0.2623	1.00	0.2623	PASS
	High	1909.8	0.2623	1.00	0.2623	PASS
LTE Band 7	Low	2510.0	0.0739	1.00	0.0739	PASS
	Mid	2535.0	0.0739	1.00	0.0739	PASS
	High	2560.0	0.0739	1.00	0.0739	PASS

\*\* END OF REPORT \*\*