



Test Report No.: SA170302W004



RF EXPOSURE REPORT

Product: Outdoor CPE

Model Name: WF824

FCC ID: SRQ-WF824

Applicant: ZTE Corporation

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

Manufacturer: ZTE Corporation

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

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Report No.: RF170302W004

Received Date: Aug. 26, 2016

Test Date: Mar. 03, 2017 ~ Mar. 19, 2017

Issued Date: Mar. 20, 2017

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA160620W003	Original release	Oct. 26, 2016
SA170302W004	Based on the original report SA160620W003 changing antenna.	Mar. 20, 2017



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1 CERTIFICATION

PRODUCT: Outdoor CPE
BRAND NAME: ZTE
MODEL NAME: WF824
APPLICANT: ZTE Corporation
TESTED: Mar. 03, 2017 ~ Mar. 19, 2017
TEST SAMPLE: Production Unit
STANDARDS: **FCC Part 2 (Section 2.1091)**
FCC OET Bulletin 65, Supplement C (01-01)
IEEE C95.1

The above equipment has been tested by **Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch** and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Yuqiang Yin , **DATE:** Mar. 20, 2017
(Yuqiang Yin / Engineer)

APPROVED BY : Bill Yao , **DATE:** Mar. 20, 2017
(Bill Yao / Manager)



2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

EUT	Outdoor CPE
MODEL NO.	WF824
POWER SUPPLY	48Vdc (POE adapter)
MODULATION TYPE	16QAM, QPSK
MODULATION TECHNOLOGY	OFDM
OPERATING FREQUENCY	5180 ~ 5240MHz
NUMBER OF CHANNEL	4
AVERAGE POWER	50.466mW for 5180 ~ 5240MHz
ANTENNA TYPE	Fixed Internal with 7dBi gain
HW VERSION	A1
SW VERSION	WF824_US_J100_V1.0.0B01
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	N/A

NOTE:

- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- The EUT was powered by the following adapter:

ADAPTER	
BRAND:	SHEN ZHEN GOSPELL DIGITAL TECHNOLOGY CO.,LTD
MODEL:	G0549-480-032
INPUT:	AC 100-240V, 500mA
OUTPUT:	DC 48V, 320mA

- For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.



3 RF EXPOSURE

3.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	F/1500	30
1500-100,000	1.0	30

F = Frequency in MHz

3.2 MPE CALCULATION FORMULA

$$Pd = (Pout * G) / (4 * pi * r^2)$$

where

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

3.3 CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Fixed Station**.



3.4 CONDUCTED POWER

OUTPUT POWER:

QPSK					
CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	40.926	16.12	30	PASS
42	5210	43.954	16.43	30	PASS
48	5240	50.466	17.03	30	PASS

16QAM					
CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	40.551	16.08	30	PASS
42	5210	43.451	16.38	30	PASS
48	5240	50.234	17.01	30	PASS

3.5 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

OPERATING BAND(MHz)	max. tune up power (dBm)	Output Power E.I.R.P. (dBm)	Output Power E.I.R.P. (mW)	Power Density (mW/cm ²)	limit (mW/cm ²)	PASS / FAIL
5180 ~ 5240	18	25	316.2	0.063	1.00	PASS