

FCC RF EXPOSURE REPORT

FCC ID: Q78-ZXHNH167A

Project No. : 1902H001
Equipment : VDSL CPE
Model : ZXHN H167A
Applicant : ZTE Corporation
**Address : ZTE Plaza, Hi-Tech Park, Nanshan District,
Shenzhen, Guangdong, P.R.China**

**According: : FCC Guidelines for Human Exposure IEEE
C95.1 & FCC Part 2.1091**

B T L I N C .

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Certificate # 5123. 03

1. GENERAL SUMMARY

Equipment : VDSL CPE
 Brand Name : ZTE
 Test Model : ZXHN H167A
 Series Model : N/A
 Applicant : ZTE Corporation
 Manufacturer : ZTE Corporation
 Address : ZTE Plaza, Hi-Tech Park, Nanshan District, Shenzhen, Guangdong, P.R.China
 Date of Test : Feb. 13, 2019~Mar. 08, 2019
 Test Sample : Engineering Sample No.: B190200035
 Standards : FCC Title 47 Part 2.1091, OET Bulletin 65 Supplement C

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-3-1902H001) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of A2LA according to the ISO/IEC 17025 quality assessment standard and technical standard(s).

2. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

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

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

R = distance to the center of radiation of the antenna

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)
1	N/A	N/A	PIFA	IPEX	3
2	N/A	N/A	PIFA	IPEX	3

Note:

This EUT supports MIMO 2X2, any transmit signals are correlated with each other,
 so Directional gain = $G_{ANT} + 10\log(N)$ dBi, that is Directional gain = $3 + 10\log(2)$ dBi = 6.01;
 Antenna Gain = 6.01 dBi. So, the out power limit is $30 - 6.01 + 6 = 29.99$,
 the power density limit is $8 - 6.01 + 6 = 7.99$.

3. TEST RESULTS

For 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
6.01	3.99	26.53	449.78	0.35721	1	Complies

For 5GHz UNII-1:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
6.01	3.99	26.21	0.24886	0.33184	1	Complies

For 5GHz UNII-2A:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
6.01	3.99	23.89	244.9063	0.19450	1	Complies

For 5GHz UNII-2C:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
6.01	3.99	23.83	241.5461	0.19183	1	Complies

For 5GHz UNII-3:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
6.01	3.99	26.82	480.8393	0.38190	1	Complies

Note: The calculated distance is 20 cm.
Output power including tune up tolerance.

For the max simultaneous transmission MPE:

Power Density (S) (mW/cm ²)	Power Density (S) (mW/cm ²)	Total	Limit of Power Density (S) (mW/cm ²)	Test Result
2.4GHz	5GHz			
0.35721	0.38190	0.73911	1	Complies

End of Test Report