



Neutron Engineering Inc.

FCC RF EXPOSURE REPORT

FCC ID: Q78-ZXW3512C

Project No. : 1202C182A
Equipment : Indoor Wireless AP
Model : ZXV10 W812N V2
Applicant : ZTE Corporation
**Address : ZTE Plaza, Keji Road South, Hi-Tech,
Industrial Park, Nanshan District, Shenzhen,
Guangdong, P.R. China**

According: : FCC Guidelines for Human Exposure IEEE C95.1

Neutron Engineering Inc.

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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)	Note
1	MAGLAYERS	EDA-1713-2G4R2-A9	Dipole	R-SMA	5	2.4G
2	MAGLAYERS	EDA-1713-2G4R2-A9	Dipole	R-SMA	5	2.4G

Note:

The antenna of EUT could be rotated, but the Antenna Polarity vertical is max.

(2) The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers (2T2R), all transmit signals are completely uncorrelated, then,

Direction gain = GANT, that is Directional gain=5.

Operating Mode	2TX
TX Mode	
802.11b	V (ANT B & ANT A)
802.11g	V (ANT B & ANT A)
802.11n(20MHz)	V (ANT B & ANT A)
802.11n(40MHz)	V (ANT B & ANT A)



TEST RESULTS

EUT:	Indoor Wireless AP	Model Name :	ZXV10 W812N V2
Temperature:	25 °C	Relative Humidity:	58 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5	3.1623	17.29	53.5797	0.03372488	1	Complies
5	3.1623	17.29	53.5797	0.03372488	1	Complies
5	3.1623	17.19	52.3600	0.03295720	1	Complies

EUT:	Indoor Wireless AP	Model Name :	ZXV10 W812N V2
Temperature:	25 °C	Relative Humidity:	58 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5	3.1623	19.88	97.2747	0.06122804	1	Complies
5	3.1623	19.90	97.7237	0.06151066	1	Complies
5	3.1623	19.93	98.4011	0.06193703	1	Complies



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EUT:	Indoor Wireless AP	Model Name :	ZXV10 W812N V2
Temperature:	25 °C	Relative Humidity:	58 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE /CH01, CH06, CH11		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5	3.1623	20.18	104.2317	0.06560703	1	Complies
5	3.1623	20.27	106.4143	0.06698081	1	Complies
5	3.1623	20.13	103.0386	0.06485603	1	Complies

EUT:	Indoor Wireless AP	Model Name :	ZXV10 W812N V2
Temperature:	25 °C	Relative Humidity:	58 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5	3.1623	19.67	92.6830	0.05833784	1	Complies
5	3.1623	19.74	94.1890	0.05928576	1	Complies
5	3.1623	19.62	91.6220	0.05767006	1	Complies