



Neutron Engineering Inc.

FCC RF EXPOSURE REPORT

FCC ID: I38WL580E

Project No. : 1312C200
Equipment : Wireless Repeater
Model Name : WL580E
Applicant : Aztech Technologies Pte Ltd.
Address : 31 UBI Road 1, Aztech Building, Singapore 408694
Manufacturer : Aztech Technologies Pte Ltd.
Address : 31 UBI Road 1, Aztech Building, Singapore 408694

According: : **FCC Guidelines for Human Exposure IEEE C92.76**

Neutron Engineering Inc.

No.3, Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.

TEL : (0769) 8318-3000 FAX : (0769) 8319-6000



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

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	N/A	N/A	Internal	N/A	2	TX/RX
2	N/A	N/A	Internal	N/A	2	TX/RX

Operating Mode / TX Mode	1TX	2TX
802.11a	V (ANT 1 or ANT 2)	-
802.11n(20MHz)	-	V (ANT 1 + ANT 2)
802.11n(40MHz)	-	V (ANT 1 + ANT 2)



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TEST RESULTS

EUT:	Wireless Repeater	Model Name :	WL580E
Temperature:	25 °C	Relative Humidity:	55 %
Pressure:	AC 120V/60Hz		
Test Mode :	Band 1/TX A Mode		

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
2	1.5849	16.89	48.8652	0.01541524	1	Complies
2	1.5849	16.7	46.7735	0.01475538	1	Complies
2	1.5849	16.95	49.5450	0.01562969	1	Complies

EUT:	Wireless Repeater	Model Name :	WL580E
Temperature:	25 °C	Relative Humidity:	55 %
Pressure:	AC 120V/60Hz		
Test Mode :	Band 1/TX N20 Mode-Total		

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
2	1.5849	16.87	48.6407	0.01534442	1	Complies
2	1.5849	16.91	49.0908	0.01548640	1	Complies
2	1.5849	16.9	48.9779	0.01545078	1	Complies

EUT:	Wireless Repeater	Model Name :	WL580E
Temperature:	25 °C	Relative Humidity:	55 %
Pressure:	AC 120V/60Hz		
Test Mode :	Band 1/TX N40 Mode		

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
2	1.5849	16.9	48.9779	0.01545078	1	Complies
2	1.5849	16.97	49.7737	0.01570183	1	Complies

Note: The calculated distance is 20cm.