



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.

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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

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 :	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	25.65	367.2823	0.11586449	1	Complies
2	1.5849	25.55	358.9219	0.11322710	1	Complies
2	1.5849	25.51	355.6313	0.11218902	1	Complies

EUT:	Wireless Repeater	Model Name :	WL580E
Temperature:	25 °C	Relative Humidity:	55 %
Pressure:	AC 120V/60Hz		
Test Mode :	TX N-20M 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	25.76	376.7038	0.11883664	1	Complies
2	1.5849	25.56	359.7493	0.11348811	1	Complies
2	1.5849	25.71	372.3917	0.11747633	1	Complies

EUT:	Wireless Repeater	Model Name :	WL580E
Temperature:	25 °C	Relative Humidity:	55 %
Pressure:	AC 120V/60Hz		
Test Mode :	TX N-40M 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	25.31	339.6253	0.10713969	1	Complies
2	1.5849	25.27	336.5116	0.10615742	1	Complies

Note: The calculated distance is 20cm.