



Neutron Engineering Inc.

FCC RF EXPOSURE REPORT

FCC ID: T58EIR

Project No. : 1406C021
Equipment : 300Mbps Wireless N Range Extender
Model : E1
Applicant : NETIS SYSTEMS CO., LTD
Address : 4F&5F R&D Building, Oriental Cyberport,
High-Tech Industrial Park, Nanshan, Shenzhen,
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	PSA	RGFRA1903041A1T	Internal	N/A	2	-
2	PSA	RGFRA1903041A1T	Internal	N/A	2	TX/RX
3	PSA	RGFRA1903041A1T	Internal	N/A	2	TX/RX
4	PSA	RGFRA1903041A1T	Internal	N/A	2	-
5	PSA	RGFRA1903041A1T	Internal	N/A	2	-



TEST RESULTS

EUT:	300Mbps Wireless N Range Extender	Model Name :	E1
Temperature:	25°C	Relative Humidity:	55 %
Pressure:	1016 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
2	1.5849	20.30	107.1519	0.03380262	1	Complies
2	1.5849	20.07	101.6249	0.03205903	1	Complies
2	1.5849	20.08	101.8591	0.03213293	1	Complies

EUT:	300Mbps Wireless N Range Extender	Model Name :	E1
Temperature:	25°C	Relative Humidity:	55 %
Pressure:	1016 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
2	1.5849	21.08	128.2331	0.04045297	1	Complies
2	1.5849	22.16	164.4372	0.05187408	1	Complies
2	1.5849	22.49	177.4189	0.05596936	1	Complies



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EUT:	300Mbps Wireless N Range Extender	Model Name :	E1
Temperature:	25°C	Relative Humidity:	55 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M Mode/CH01, CH06, CH11 – Ant 2 +Ant 3		

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	23.50	223.8721	0.07062368	1	Complies
2	1.5849	25.05	319.8895	0.10091376	1	Complies
2	1.5849	23.99	250.6109	0.07905883	1	Complies

EUT:	300Mbps Wireless N Range Extender	Model Name :	E1
Temperature:	25°C	Relative Humidity:	55 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M Mode/CH03, CH06, CH09 – Ant 2 +Ant 3		

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	23.32	214.7830	0.06775641	1	Complies
2	1.5849	23.32	214.7830	0.06775641	1	Complies
2	1.5849	23.68	233.3458	0.07361230	1	Complies

Note: the calculate distance is 20cm.