

FCC RF EXPOSURE REPORT

FCC ID: X4YKRNS3V2

Project No. : 1605C184

Equipment: Universal Range Extender

Model : AEIEL304U1
Applicant : NEXXT SOLUTIONS

Address : 3505 N.W 107TH AVE, MIAMI, FL,33178

According: : FCC Guidelines for Human Exposure IEEE

C95.1

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MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

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

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	Model Name Antenna Type		Gain(dBi)	Note
1	N/A	N/A	Printed	N/A	2	TX/RX
2	N/A	N/A	Printed	N/A	2	TX/RX

Note:

(1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed two transmitters and two receivers (2T2R).

(2) ANT 1 was the worst case for 1TX.

Operating Mode	1TX	2TX
TX Mode	117	217
802.11b	V (ANT 1)	-
802.11g	V (ANT 1)	-
802.11n(20MHz)	-	V (ANT 1 + ANT 2)
802.11n(40MHz)	-	V (ANT 1 + ANT 2)



TEST RESULTS

EUT:	Universal Range Extender	Model Name :	AEIEL304U1
Temperature:	25 ℃	Relative Humidity:	55 %
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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
2	1.5849	23.76	237.6840	0.07498	1	Complies
2	1.5849	23.41	219.2805	0.06918	1	Complies
2	1.5849	22.20	165.9587	0.05235	1	Complies

EUT:	Universal Range Extender	Model Name :	AEIEL304U1
Temperature:	25 ℃	Relative Humidity:	55 %
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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
2	1.5849	24.5 0	281.8383	0.08891	1	Complies
2	1.5849	26.32	428.5485	0.13519	1	Complies
2	1.5849	25.1 0	323.5937	0.10208	1	Complies



EUT:	Universal Range Extender	Model Name :	AEIEL304U1	
Temperature:	25 ℃	Relative Humidity:	55 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	TX N-20M MODE_ Total /CH01, CH06, CH11			

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
2	1.5849	26.50	446.6836	0.14091	1	Complies
2	1.5849	28.87	770.9035	0.24319	1	Complies
2	1.5849	27.01	502.3426	0.15847	1	Complies

EUT:	Universal Range Extender	Model Name :	AEIEL304U1		
Temperature:	25 ℃	Relative Humidity:	55 %		
Test Voltage :	AC 120V/60Hz				
Test Mode :	TX N-40M MODE_Total /CH03, CH06, CH09				

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
2	1.5849	23.70	234.4229	0.07395	1	Complies
2	1.5849	25.10	323.5937	0.10208	1	Complies
2	1.5849	24.26	266.6859	0.08413	1	Complies

Note: the calculated distance is 20 cm.