

FCC RF EXPOSURE REPORT

FCC ID: 2ACNIRTSA04NU

Project No. : 1407C202
Equipment : ADSL Home Station
Model : BHS-RTA S
Applicant : OBSERVA Telecom
Address : Monte Esquinza, 28 - 1st floor - Right hand, Madrid, Spain

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

BTL 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.	Manufacturer	Model Name	Antenna Type	Connector	Gain(dBi)
1	Airgain	N2420DS	Internal	N/A	3.10
2	Airgain	N2420DS	Internal	N/A	3.10

Note:

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

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

TEST RESULTS

EUT :	ADSL Home Station	Model Name :	BHS-RTA S
Temperature :	25 °C	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/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
3.1	2.0417	17.15	51.8390	0.02106722	1	Complies
3.1	2.0417	17.22	52.7246	0.02142713	1	Complies
3.1	2.0417	17.33	54.0793	0.02197766	1	Complies

EUT :	ADSL Home Station	Model Name :	BHS-RTA S
Temperature :	25 °C	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/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
3.1	2.0417	22.15	164.0801	0.06668166	1	Complies
3.1	2.0417	22.63	183.3716	0.07452163	1	Complies
3.1	2.0417	22.75	188.3909	0.07656146	1	Complies

EUT :	ADSL Home Station	Model Name :	BHS-RTA S
Temperature:	25 °C	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/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
3.1	2.0417	22.29	169.4338	0.06885736	1	Complies
3.1	2.0417	22.63	183.2314	0.07446469	1	Complies
3.1	2.0417	22.43	174.9847	0.07111322	1	Complies

EUT :	ADSL Home Station	Model Name :	BHS-RTA S
Temperature:	25 °C	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/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
3.1	2.0417	21.30	134.8963	0.05482143	1	Complies
3.1	2.0417	22.19	165.5770	0.06728998	1	Complies
3.1	2.0417	21.85	153.1087	0.06222292	1	Complies

Note: the calculated distance is 20 cm.