



**Neutron Engineering Inc.**

# **FCC RF EXPOSURE REPORT**

**FCC ID: VW3FAST2704N**

**Project No. : 1310C148**  
**Equipment : Wireless ADSL Router**  
**Model : F@ST 2704N**  
**Applicant : SAGEMCOM SAS**  
**Address : 250 Route de l'Empereur - 92848 RUEIL**  
**MALMAISON CEDEX- FRANCE**

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



## 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

ANT	Brand name	Model Name	Antenna Type	Connector	Gain (dBi)
1	Airgain	N2420M	Embedded	N/A	2.8
2	N/A	N/A	PIFA	N/A	2.8



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## TEST RESULTS

EUT :	Wireless ADSL Router	Model Name :	F@ST 2704N
Temperature :	25 °C	Relative Humidity :	58 °C
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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.8	1.9055	17.22	52.7230	0.01999633	1	Complies
2.8	1.9055	17.15	51.8800	0.01967661	1	Complies
2.8	1.9055	17.10	51.2861	0.01945138	1	Complies

EUT :	Wireless ADSL Router	Model Name :	F@ST 2704N
Temperature :	25 °C	Relative Humidity :	58 °C
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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.8	1.9055	14.24	26.5461	0.01006817	1	Complies
2.8	1.9055	14.37	27.3527	0.01037410	1	Complies
2.8	1.9055	14.33	27.1019	0.01027899	1	Complies

EUT :	Wireless ADSL Router	Model Name :	F@ST 2704N
Temperature :	25 °C	Relative Humidity :	58 °C
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE /CH01, CH06, CH11 – ANT 1 + ANT 2		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.8	1.9055	14.88	30.7610	0.01166676	1	Complies
2.8	1.9055	14.84	30.4789	0.01155980	1	Complies
2.8	1.9055	14.95	31.2608	0.01185633	1	Complies

Note: the calculation distance is 20cm.