Calculation and sample for Confirmation

The maximum measured power output is 770 mW（1900MHz）/1440mW（850MHz）, the maximum antenna gain is 3 dBi.

The maximum permissible exposure is defined in 47 CFR 1.1310 with 1 mW/cm^2.

The transmitter is using indoor antennas that operate at 20 cm or more from nearby persons.

The maximum permitted level is calculated using the general equation:

$$S = P*G/4\pi R^2$$

P = 12mW（1900MHz）24 mW（850MHz）

G = 3 dBi

R = 20 cm

π = 3.1416

Solving for S, the power density at 20 cm is **0.4596** mW/cm^2.（1900MHz），the power density at 20 cm is **0.8594** mW/cm^2.（850MHz）

So The power density limit is 1 mW/cm^2 for GSM1900 and f/1500 mW/cm^2 for GSM850 is kept.

Please contact us if you have any additional questions.

Best Regards

Morlab

Lan Ya Qin