RF Exposure

FCC ID: LLB2021006

This calculation is based on the highest EIRP possible from the EUT considering maximum power and antenna gain. The highest peak output power of the EUT is 29.6 and the max gain of the antenna is 5 dBi.

There is only one frequency at a time transmitting.

1.0 RF EXPOSURE PER FCC 1.1310

MHz	Max Power dBm	Tune up Tolerance dB	Max Ant Gain dBi	Duty Cycle %	EIRP Watts	(S) GP Limit mW/cm^2	Declared Minimum separation Distance (cm)	EUT power Density mW/cm2	Result
451	29.60	1.5	5	100	4.074	0.300	100.0	0.0320	Pass
458	29.50	1.5	5	100	3.981	0.307	100.0	0.0306	Pass
468	29.10	1.5	5	100	3.631	0.313	100.0	0.0289	Pass
901.5	28.70	1.5	5	100	3.311	0.601	100.0	0.0263	Pass

Notes on the above table:

a. S is the power density General Population Limit from FCC 1.1310 Table 1
b. EIRP Power is the Peak Effective Radiated Power.
   EIRP = (Average Conducted Power + Antenna gain) * Duty Cycle.

POWER DENSITY

Power density is given by:

$S = EIRP / (4 * Pi * D^2)$

Where

S = Power density in mW/cm^2
EIRP = Equivalent Isotropic Radiated Power in mW
D = Separation distance in cm

Since the calculated power density is less than the limit, this product fully meets the FCC requirements for the general population.