5. RF EXPOSURE EVALUATION

5.1 Applicable Standard

According to §1.1307(b)(3)(i)

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	1,920 R^2.
1.34-30	3,450 R^2/f^2.
30-300	3.83 R^2.
300-1,500	0.0128 R^2f.
1,500-100,000	19.2R^2.

5.2 Measurement Result

Frequency (GHz)	λ/2Π (mm)	Distance (mm)	Exemption ERP (mW)	Maximum EIRP (dBm)	Maximum ERP (dBm)	Maximum ERP (mW)	MPE-Based Exemption
24.050-24.200	1.99	200	768	4.02	1.87	1.54	Compliant

Note:
1. Chose the maximum power to do MPE analysis.
2. This device maximum E-Field level is 99.22 dBuV/m at 3m, so the EIRP power is 4.02 dBm.
3. Pout EIRP (dBm)=Field Strength of Fundamental(dBuV/m)-95.2
4. ERP [dBm]=EIRP[dBm]-2.15

Result: The device compliant the MPE-Based Exemption at 20cm distances.

===== END OF REPORT =====