

EXHIBIT 10

RF EXPOSURE ASSESSMENT

Section 15.247(i) RF Exposure Requirement for 2.4GHz DTS Device

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. See 1.1307(b)(1) of this chapter.

Section 15.407(f) RF Exposure Requirement for 5GHz UNII Device

U-NII devices are subject to the radio frequency radiation exposure requirements specified in 1.1307(b), 2.1091 and 2.1093 of this chapter, as appropriate. All equipment shall be considered to operate in a "general population/uncontrolled" environment. Applications for equipment authorization of devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

Section 1.1310 Radio Frequency Radiation Exposure Limits

The criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in Section 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter. Further information on evaluating compliance with these limits can be found in the FCC's OST/OET Bulletin Number 65, "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation."

Response

The 9764 MCO Wi-Fi AP module is mounted to the underside of the 9764 MCO LTE/WCDMA module. The 9764 MCO is typically installed in fixed locations with three options: pole mounted, wall mounted or floor mounted via floor stand. Therefore, the 9764 MCO Wi-Fi AP is thus neither a portable nor a mobile wireless device.

The limits specified in Section 1.1310 Table 1 (B) for general population/uncontrolled exposure, which are tabulated below, shall be met.

Table 10.1 Limits for General Population/Uncontrolled Exposure (Section 1.1310 Table 1 (B))

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Average Time E ² , H ² or S (minutes)
0.3 - 1.34	614	1.63	(100)*	30
1.34 - 30	824/f	2.19/f	(180/f)*	
30 - 300	27.5	0.073	0.2	
300 - 1500			F/1500	
1500 - 100,000			1.0	

Note: f = frequency om MHz; *Plane-wave equivalent power density.

The 9764 MCO Wi-Fi AP operates in the frequency 2.4GHz or 5GHz. The maximum power density needs to be less than 1.0 mW/cm².

Per FCC’s OST/OET Bulletin Number 65, the appropriate EIRP (equivalent or effective isotropically radiated power) limits can be calculated based on the relationship between power density and EIRP, i.e.,

$$S = \frac{EIRP}{4\pi R^2}, \tag{1}$$

where S is the power density in mW/cm², R is the distance to the center of radiation of the antenna in cm and EIRP is in mW.

There are two different types of antenna modules equipped for this AP product: high-gain antenna module and medium-gain antenna module. Each antenna module consists of a 2.4GHz antenna and a 5GHz antenna. Each antenna has two built-in ports and two antenna elements for 2x2MIMO. The power level for the Wi-Fi AP with the lower gain antennas is equal or lower than the Wi-Fi AP with higher gain antennas.

The maximum EIRP for both 2.4GHz and 5.8GHz bands can be found from the test reports presented in Exhibit 9, respectively. The minimum RF safety distance thus can be calculated from the above equation 1 in accordance with Maximum Permissible Exposure (MPE) requirement.

Table 10.2 Minimum RF Safety Distances

Freq Band	Antenna	Maximum Total EIRP (dBm)	Maximum Total EIRP (mW)	Limit of Power Density S (mW/cm²)	RF Safety Distance (cm)
2.4 GHz	MG	29.7	933	1	8.6
	HG	31.1	1288	1	10.1
5.8 GHz	MG	27.3	537	1	6.5
	HG	29.2	832	1	8.1

Therefore, the minimum RF safety distance for the 9764 MCO Wi-Fi AP is 9cm for with medium-gain antenna and 10cm for with high-gain antenna module.