

## **Exhibit 9. RF Exposure Information**

### **9.1 Determination of Need for Routine Environmental Evaluation for RF Exposure**

**Reference:** 47CFR §§2.1091, 1.1310 and FCC OET65.

**Applicability:** Our CD-1201 data transceiver fits the mobile device category described in §2.1091(b). It is used with an externally mounted antenna and is not to be worn on the body. Mobile devices that are subject to routine environmental evaluation for RF exposure are delineated in §2.1091(c).

**It is our view that the CD-1201 can be categorically excluded from routine environmental evaluation for RF exposure evaluation** because it falls outside two of the subject equipment categories listed in §2.1091(c):

1. As shown further below, the unit's ERP when used with a dipole type antenna and averaged over time is less than the 1.5 W ERP limit for units operating below 1.5 GHz.
2. The unit is subject to operation under Part 90 but it is not a Specialized Mobile Radio per the definition in §90.7.

### **9.2 Separation Distance Calculation**

The ERP and worst-case separation distance for uncontrolled exposure is calculated based on the information provided by FCC OET65.

Max. duty ratio of transmitter:	D= 30	%
Transmitter max power output:	P= 1000	mW PEP
Max. gain of mobile antenna:	G= 1.64	x isotropic (car top 1/4 wave)
Effective Radiated Power:	ERP= 0.492	W (Source-based time averaging)
Max. power density 30-300 MHz	S= 0.2	mW/cm <sup>2</sup> (30-300 MHz uncontrolled)
$S = PGD / (4\pi R^2)$		
$R = 0.5(PGD / (PIS))^{0.5}$	R= 14.0	cm separation
inches=cm/2.54	R= 5.5	in. separation