

Exhibit B
Walgreens

RADIATION CALCULATIONS FOR		0.98 meter EARTH STATION	
Nomenclature	Formula	Value	Unit
INPUT PARAMETERS			
M = Antenna Aperture Major Axis m = Antenna Aperture Minor Axis d = Diameter of Feed Mouth f = frequency		0.98 0.98 0.133 14.25	meters meters meters GHZ
P = Max Power into Antenna		2.0	Watts
n = Aperture Efficiency		63%	
k = Wavelength @ 14.25 GHz		0.0210	meters
CALCULATED VALUES			
A = Area of Reflector	$\pi M m / 4$	0.754	meters ²
l = Length of Near Field	$M^2 / 4k$	11	meters
L = Beginning of Far Field	$0.6M^2 / k$	27	meters
G = Antenna Gain @ 14.25 GHz	$n(4\pi M m) / k^2$	13,492	(41.3) dBi
a = Area of Feed Mouth	$\pi d^2 / 4$	0.0139	meters ²
POWER DENSITY CALCULATIONS			
Region	Maximum Power Density in Region		Hazard Assessment (FCC MPE Limit = 1 mW/cm ²)
	Formula	Value (mW/cm ²)	
1 Near Field	$4nP/A$	0.67	< FCC MPE Limit
2 Far Field	$GP / (4(\pi)L^2)$	0.29	< FCC MPE Limit
3 Transition	<= Nr Fld Region	0.67	< FCC MPE Limit
4 Near Reflector Surface	$4P/A$	1.06	> FCC MPE Limit (See Exhibit A)
5 Between Reflector & Ground	P/A	0.27	< FCC MPE Limit
6 Between Reflector and Feed	$4P/a$	57.6	> FCC MPE Limit (See Exhibit A)