Exhibit D (38.6 GHz)
to Experimental License Application
File Number: 0262-EX-PL-2004

RADIATION CALCULATIONS FOR		0.30	meter TERRESTRIAL STATION
Nomenclature	Formula	Value	Unit
INPUT PARAMETERS			
M = Antenna Aperture Major Axis		0.30	meters
m = Antenna Aperture Minor Axis		0.30	meters
d = Diameter of Feed Mouth		0.029	meters
P = Max Power into Antenna		0.1	Watts
n = Apperture Effeciency		70%	
k = Wavelength @ 38.6 GHz		0.0078	meters
CALCULATED VALUES			
A = Area of Reflector	PIxMxm/4	0.071	meters^2
l = Length of Near Field	M^2/4k	3	meters
L = Beginning of Far Field	0.6M^2/k	7	meters
G = Antenna Gain @ 38.6 GHz	n(4xPIxA)/k^2	10,294	(40.1) dBi
a = Area of Feed Mouth	PI*d^2/4	0.0007	meters^2

POWER DENSITY CALCULATIONS

Region	Maximum Power Density in Region: Formula	Value (mW/cm^2)	Hazard Assessment (FCC MPE Limit = 5 mW/cm^2)
1 Near Field	4nP/A	0.40	< FCC MPE Limit
2 Far Field	GP/(4(PI)L^2)	0.17	< FCC MPE Limit
3 Transition	<= Nr Fld Region	0.40	< FCC MPE Limit
4 Near Reflector Surface	4P/A	0.57	< FCC MPE Limit
5 Between Reflector & Ground	P/A	0.14	< FCC MPE Limit
6 Between Reflector and Feed	4P/a	60.6	> FCC MPE Limit (See Attachment 1)