Antenna Type

	2FT Parab.	4FT Parab	6FT Parab	8FT Parab	10FT Parab	1FT Flat
Diameter, D in ft	2	4	6	8	10	1.41
Diamete, D in m	0.61	1.22	1.83	2.44	3.05	0.43
Near Field Region, Rnf in ft	5.9	23.59	53.08	94.36	147.43	2.93
Near Field Region, Rnf in m	1.8	7.19	16.18	28.76	44.94	0.89
Gain, G in dBi	29	35	38	41	42.5	23
Efficiency, n	0.58	0.58	0.51	0.57	0.52	0.55
Power Density, Wnf in mW/cm2	**0.8**	**0.2**	**0.08**	**0.05**	**0.03**	**1.52**
Power Density at 5ft, Wff in mW/cm2	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.89072**

Based on OET Bulletin 65 formulas:

Near Field Power Density: W_{nf}=16nP/Pi*D^2

Near Field region(ft): Rnf=D^2*F/3.934

Transition Field Power Density: W_{ff}=Wnf*Rnf/R

Efficiency for parabolic antennas: n=(G*(wavelngth)^2)/((Pi*D^2)/4)

For flat panel antennas efficiency was considered n=0.55

All calculations were made at F=5.8Ghz and P=1000mW

2FT Flat

2.82

0.86

11.72

3.57

28

0.55

0.38

N/A