

	Transmitter Power		Effective Radiated Power	
	Location "A"	Location "B"	Location "A"	Location "B"
Freq (GHz)	45 Foot Range (Watts)	9500 Foot Range (Watts)	45 Foot Range (Watts)	9500 Foot Range (Watts)
0.375	0.00	0.13	0.01	16.5
0.425	0.01	0.13	0.01	21.1
0.435	0.01	0.13	0.02	22.1
0.449	0.01	0.13	0.02	23.6
0.500	0.01	0.14	0.02	29.3
0.600	0.01	0.14	0.03	42.1
0.700	0.02	0.15	0.04	57.3
0.800	0.03	0.16	0.05	74.9
0.890	0.04	0.17	0.07	92.7
0.905	0.04	0.17	0.07	95.8
0.920	0.04	0.17	0.07	99.0
1.395	0.01	0.27	0.02	25.6
1.480	0.02	0.28	0.02	28.8
1.565	0.02	0.29	0.02	32.2
1.700	0.02	0.30	0.03	37.9
2.600	0.03	0.23	0.04	49.9
3.010	0.05	0.27	0.05	66.9
3.100	0.05	0.27	0.05	71.0
3.400	0.07	0.30	0.06	85.4
3.700	0.08	0.33	0.07	101.1
3.950	0.10	0.35	0.08	115.2
4.200	0.11	0.38	0.09	130.2
4.500	0.13	0.41	0.11	149.5
4.800	0.16	0.45	0.12	170.1
5.258	0.20	0.51	0.14	204.1
5.500	0.23	0.54	0.16	223.3
5.800	0.26	0.59	0.18	248.4
8.510		0.44		208.0
9.300		0.53		248.4
10.400		0.82		310.7
11.000		0.98		347.6
11.900		1.28		406.8
12.400		1.49		441.7
13.500		1.13		287.7
15.360		1.98		372.4
16.210		2.55		414.8
17.300		3.53		472.4
18.000		4.35		511.4

Lon/Lat NAD83		direction
Location A	75°55'32"W 42°55'38"N	W
Location B	75°53'18"W 42°55'46"N	W

Antennas

Antennas	band	gain	BW
AEL H-5000 (1-2.5 GHz)	L & S	unknown	unknown
AEL H-1498 (2-18 GHz)	S, C, X, & Ku	unknown	unknown
self constructed cross dipole on an 18" diameter reflector	UHF	20 dBi	7°
Watkins-Johnson AR7-18 Log Periodic mounted to AR176 reflector (1-18 GHz)	L, S, C, X, Ku	unknown	12°-0.7°

Start date length

9/18/2006 3 weeks (10/9/2006)

Purpose

Evaluate wideband radiation pattern for experimental Lockheed Martin RADAR antenna element

Emission Designator

NON

General Radiation Comments

Radiation will be 50% duty cycle, 2 minutes on, 2 minutes off; all antennas are directional, pointing at the side of a hill.