

	Location "A"	Location "B"	Location "C"	Location "A"	Location "B"	Location "C"
	Transmitter Power			Effective Radiated Power		
Freq (GHz)	45 Foot Range (Watts)	200 Foot Range (Watts)	9500 Foot Range (Watts)	45 Foot Range (Watts)	200 Foot Range (Watts)	9500 Foot Range (Watts)
0.375	0.005		0.13	0.01		16.46
0.420	0.01		0.13	0.01		20.64
0.435	0.01		0.13	0.02		22.14
0.450	0.01		0.13	0.02		23.7
0.500	0.01		0.14	0.02		29.25
0.600	0.01		0.14	0.03		42.13
0.700	0.02		0.15	0.04		57.34
0.800	0.03		0.16	0.05		74.89
0.890	0.04		0.17	0.07		92.69
0.905	0.04		0.17	0.07		95.84
0.920	0.04		0.17	0.07		99.04
1.000	0.05	0.01	0.22	0.08	0.02	13.13
1.100	0.01	0.01	0.23	0.01	0.02	15.89
1.230	0.01	0.02	0.25	0.01	0.03	19.86
1.360	0.01	0.02	0.26	0.02	0.03	24.28
1.480	0.02	0.03	0.28	0.02	0.04	28.76
1.550	0.02	0.03	0.28	0.02	0.04	31.54
1.700	0.02	0.04	0.3	0.03	0.05	37.94
2.600	0.03	0.07	0.23	0.04	0.07	49.91
2.900	0.04	0.09	0.26	0.04	0.09	62.09
3.100	0.05	0.1	0.27	0.05	0.1	70.95
3.400	0.07	0.13	0.3	0.06	0.12	85.35
3.700	0.08	0.16	0.33	0.07	0.14	101.08
3.950	0.1	0.19	0.35	0.08	0.16	115.2
4.200	0.11	0.22	0.38	0.09	0.18	130.24
4.500	0.13	0.27	0.41	0.11	0.21	149.51
4.800	0.16	0.31	0.45	0.12	0.24	170.11
5.100	0.19	0.37	0.49	0.14	0.27	192.04
5.500	0.23	0.45	0.54	0.16	0.31	223.35
5.800	0.26	0.52	0.59	0.18	0.35	248.38
8.200		0.51	0.41		0.44	193.14
9.300		0.71	0.53		0.49	248.44

	Lon/Lat NAD83	direction
Location A	75°55'32"W 42°55'38"N	E
Location B	75°55'27"W 42°55'38"N	W
Location C	75°53'18"W 42°55'46"N	W

Start date	length
9/18/2006	3 weeks (10/9/2006)

Purpose
Evaluate wideband radiation pattern for experime

Agilent 8753E Network analyzer with an amplifier
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10.400	0.98	0.57
11.000	1.45	0.62
11.900	1.94	0.4
12.400	3.04	0.62
13.500	2.75	0.4
15.300	6.05	0.52
16.100	8.5	0.57
17.300	14.05	0.66
18.000	18.74	0.72

Antennas

Antennas

AEL H-5000 (1-2.5 GHz)

AEL H-1498 (2-18 GHz)

self constructed cross dipole on an 18" diameter reflector

Watkins-Johnson AR7-18 Log Periodic mounted to AR176 reflector (1-18 GHz)

band	gain	BW
L & S	unknown	unknown
S, C, X, & Ku	unknown	unknown
UHF	20 dBi	7°
L, S, C, X, Ku	unknown	12°-0.7°

Antal Lockheed Martin RADAR antenna element

r on the output. Amplifier has not yet been determined

