



Antenna Specifications

PROPOSAL NUMBER:	PR1472-A	DATE:	3/9/09
CUSTOMER:	Liberty University, Inc.	ANTENNA TYPE:	PSILP12AOC-43-CP
CALL LETTERS:	WTLU-LD	CHANNEL:	43
LOCATION:	Lynchburg, VA	REVISION:	0.

Electrical Specifications

RMS GAIN MAIN LOBE	H-Pol	6.32	8.01	dB
	V-Pol	6.32	8.01	dB
RMS GAIN AT HORIZONTAL	H-Pol	4.66	6.69	dB
	V-Pol	4.66	6.69	dB
AZIMUTH DIRECTIVITY	H-Pol	1.70	2.30	dB
	V-Pol	1.70	2.30	dB
PEAK DIRECTIONAL GAIN	H-Pol	10.74	10.31	dB
	V-Pol	10.74	10.31	dB
BEAM TILT	1.5 Degree			
AVERAGE INPUT POWER RATING	5 kW			
INPUT SIZE	1-5/8" EIA end fed			
INPUT IMPEDANCE	50 Ohm			

Mechanical Specifications

HEIGHT WITH LIGHTNING PROTECTION	NA	Ft	NA	M
ANTENNA LENGTH	19.7	Ft	6.0	M
CENTER OF RADIATION	9.85	Ft	3.0	M
WIND AREA	13.2	Sq Ft	1.23	Sq M
WEIGHT	111	LB	50.3	Kg

PROPAGATION SYSTEMS INC.

Relative Field Tabulation

Elevation Pattern

Antenna: PSILP12AOC-43-CP

Channel: 43

Liberty University, Inc.

Angle	Relative Field	Angle	Relative Field	Angle	Relative Field
-90	0.001	-50	0.055	-10	0.224
-89	0.001	-49	0.060	-9	0.269
-88	0.003	-48	0.056	-8	0.276
-87	0.006	-47	0.042	-7	0.245
-86	0.008	-46	0.021	-6	0.267
-85	0.011	-45	0.009	-5	0.431
-84	0.014	-44	0.033	-4	0.660
-83	0.017	-43	0.053	-3	0.865
-82	0.019	-42	0.063	-2	0.984
-81	0.020	-41	0.060	-1	0.984
-80	0.021	-40	0.043	0	0.859
-79	0.021	-39	0.018	1	0.637
-78	0.020	-38	0.015	2	0.367
-77	0.019	-37	0.041	3	0.108
-76	0.017	-36	0.058	4	0.092
-75	0.016	-35	0.059	5	0.200
-74	0.017	-34	0.044	6	0.212
-73	0.020	-33	0.015	7	0.149
-72	0.024	-32	0.020	8	0.048
-71	0.030	-31	0.051	9	0.053
-70	0.035	-30	0.068	10	0.116
-69	0.040	-29	0.066	11	0.130
-68	0.042	-28	0.042	12	0.096
-67	0.043	-27	0.002	13	0.035
-66	0.041	-26	0.042	14	0.033
-65	0.036	-25	0.079	15	0.079
-64	0.029	-24	0.096	16	0.092
-63	0.022	-23	0.089	17	0.072
-62	0.019	-22	0.066	18	0.028
-61	0.026	-21	0.063	19	0.021
-60	0.036	-20	0.095	20	0.058
-59	0.046	-19	0.125	21	0.072
-58	0.052	-18	0.134	22	0.060
-57	0.053	-17	0.125	23	0.027
-56	0.049	-16	0.123	24	0.014
-55	0.038	-15	0.147	25	0.048
-54	0.022	-14	0.176	26	0.066
-53	0.010	-13	0.186	27	0.063
-52	0.023	-12	0.177	28	0.040
-51	0.042	-11	0.182	29	0.007



