

TECHNICAL EXHIBIT  
APPLICATION FOR LICENSE  
TELEVISION STATION WIDP-DT  
GUAYAMA, PUERTO RICO  
CH 45 50.1 KW 631 M

Antenna Horizontal and Vertical Plane Pattern Data

*{ten sheets follow}*

***PRELIMINARY SPECIFICATION FOR  
ERI CARINA™ HORIZONTALLY POLARIZED  
COAXIAL SLOTTED ARRAY ANTENNA***

*Prepared For  
WIDP-DT - CP APPLICATION ANTENNA  
Channel 45  
GUAYAMA, PUERTO RICO  
May 31, 2007*

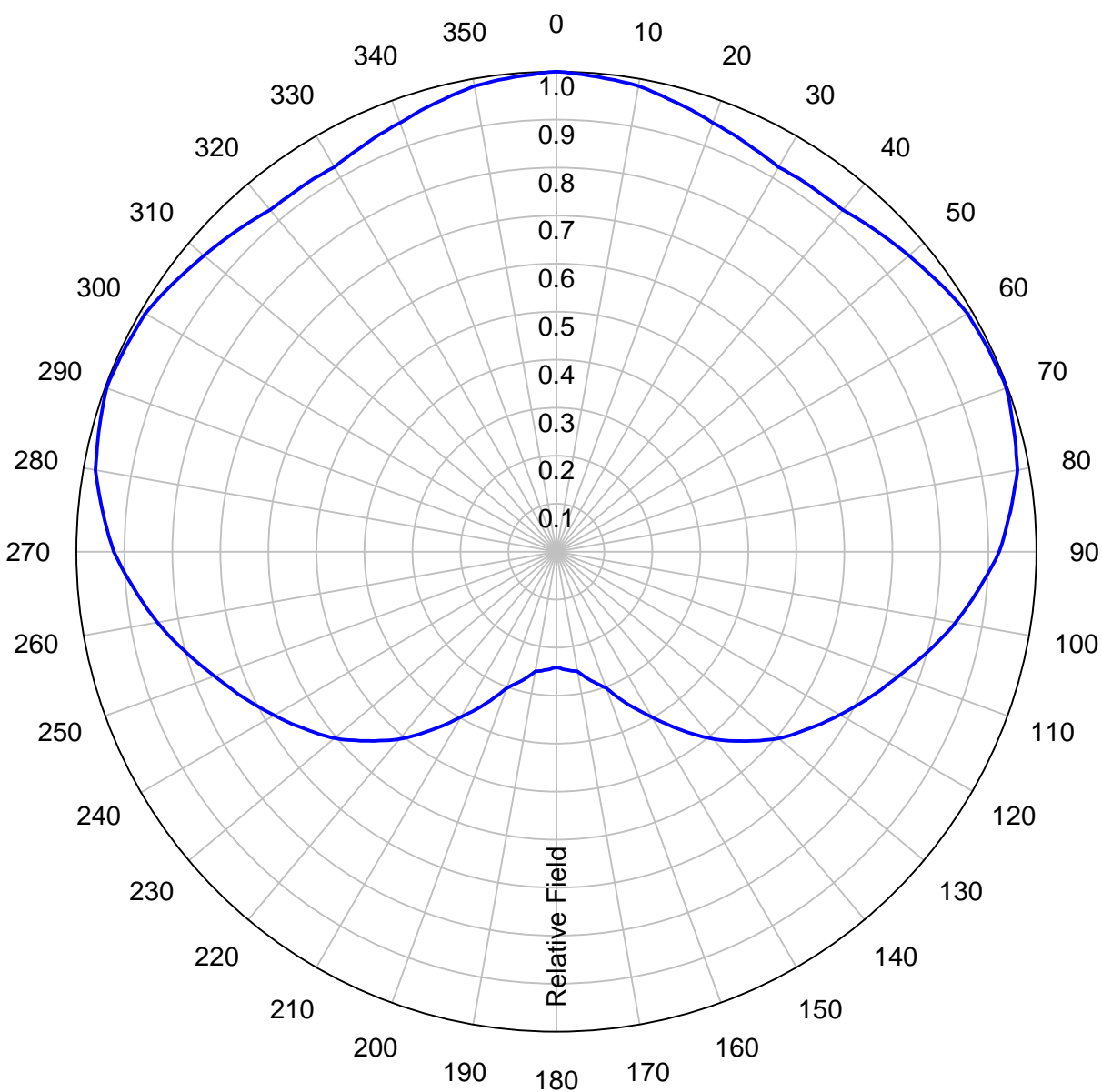
**ANTENNA TYPE:  
ALP16L2-HSW-45**

**SPECIFICATION NO:**



**AZIMUTH PATTERN****Type:****ALP-W****Directivity:****Numeric****1.56****dBd****1.93****Peak(s) at:****Channel:****45****Location:****GUAYAMA, PUERTO RICO****Polarization:****Horizontal**

Note: Pattern shape and directivity may vary with channel and mouting configuration.



*Preliminary, subject to final design and review.*

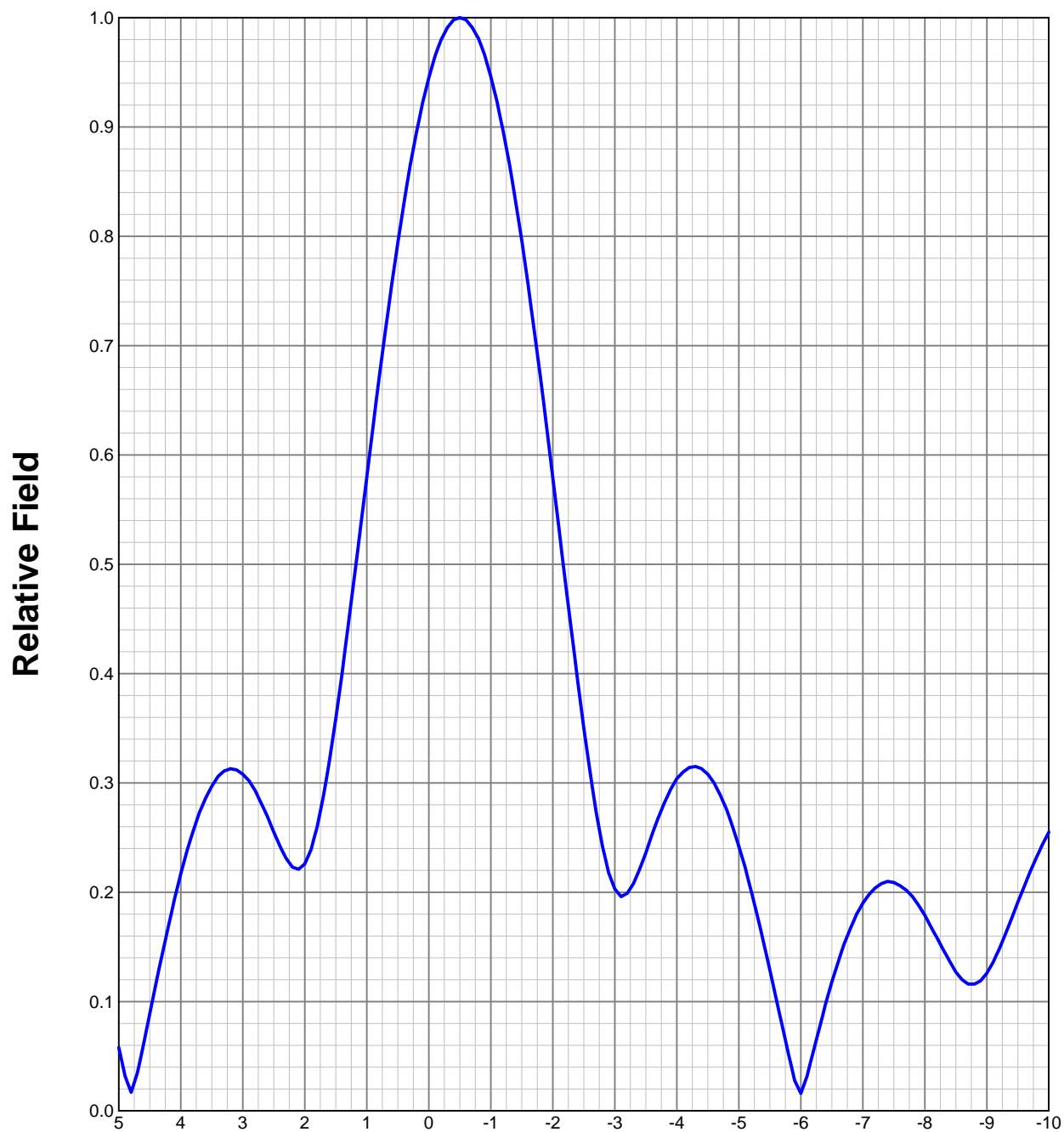
## **TABULATED DATA FOR AZIMUTH PATTERN FCC FILING FORMAT**

Type: ALP-W

PolarizationHorizontal

<b>ANGLE</b>	<b>FIELD</b>	<b>ERP (kW)</b>	<b>ERP (dBk)</b>
0	1.000	38.375	15.841
10	0.985	37.233	15.709
20	0.951	34.707	15.404
30	0.925	32.835	15.163
40	0.929	33.119	15.201
50	0.959	35.293	15.477
60	0.990	37.611	15.753
70	0.997	38.145	15.814
80	0.975	36.480	15.621
90	0.922	32.622	15.135
100	0.845	27.401	14.378
110	0.758	22.049	13.434
120	0.680	17.745	12.491
130	0.605	14.046	11.476
140	0.510	9.981	9.992
150	0.397	6.048	7.816
160	0.302	3.500	5.441
170	0.253	2.456	3.903
180	0.241	2.229	3.481
190	0.253	2.456	3.903
200	0.302	3.500	5.441
210	0.397	6.048	7.816
220	0.510	9.981	9.992
230	0.605	14.046	11.476
240	0.680	17.745	12.491
250	0.758	22.049	13.434
260	0.845	27.401	14.378
270	0.922	32.622	15.135
280	0.975	36.480	15.621
290	0.997	38.145	15.814
300	0.990	37.611	15.753
310	0.959	35.293	15.477
320	0.929	33.119	15.201
330	0.925	32.835	15.163
340	0.951	34.707	15.404
350	0.985	37.233	15.709

*Preliminary, subject to final design and review.*

**ELEVATION PATTERN****Type:****ALP16L2****Channel:****45****Directivity:****Numeric****dBd****Main Lobe:****16.59****12.20****Horizontal:****14.82****11.71****Location:****GUAYAMA, PUERTO RICO****Beam Tilt:****-0.50****Polarization:****Horizontal**

*Preliminary, subject to final design and review.*

## TABULATED DATA FOR ELEVATION PATTERN

Type: ALP16L2

PolarizationHorizontal

ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB
5.00	0.058	-24.73	-6.75	0.160	-15.92	-27.00	0.043	-27.33	-50.50
4.75	0.026	-31.70	-7.00	0.190	-14.42	-27.50	0.031	-30.17	-51.00
4.50	0.089	-21.01	-7.25	0.206	-13.72	-28.00	0.017	-35.39	-51.50
4.25	0.156	-16.14	-7.50	0.209	-13.60	-28.50	0.004	-47.96	-52.00
4.00	0.217	-13.27	-7.75	0.199	-14.02	-29.00	0.003	-50.46	-52.50
3.75	0.265	-11.55	-8.00	0.179	-14.94	-29.50	0.004	-47.96	-53.00
3.50	0.297	-10.54	-8.25	0.152	-16.33	-30.00	0.000	-40.00	-53.50
3.25	0.312	-10.12	-8.50	0.127	-17.92	-30.50	0.007	-43.10	-54.00
3.00	0.308	-10.23	-8.75	0.116	-18.71	-31.00	0.012	-38.42	-54.50
2.75	0.287	-10.84	-9.00	0.126	-17.99	-31.50	0.014	-37.08	-55.00
2.50	0.255	-11.87	-9.25	0.155	-16.19	-32.00	0.017	-35.39	-55.50
2.25	0.227	-12.88	-9.50	0.191	-14.38	-32.50	0.031	-30.17	-56.00
2.00	0.226	-12.92	-9.75	0.226	-12.94	-33.00	0.055	-25.19	-56.50
1.75	0.274	-11.24	-10.00	0.255	-11.87	-33.50	0.085	-21.41	-57.00
1.50	0.359	-8.90	-10.50	0.289	-10.78	-34.00	0.115	-18.79	-57.50
1.25	0.467	-6.62	-11.00	0.284	-10.93	-34.50	0.140	-17.08	-58.00
1.00	0.580	-4.73	-11.50	0.246	-12.18	-35.00	0.156	-16.14	-58.50
0.75	0.693	-3.19	-12.00	0.186	-14.61	-35.50	0.159	-15.97	-59.00
0.50	0.794	-2.00	-12.50	0.120	-18.42	-36.00	0.149	-16.54	-59.50
0.25	0.880	-1.11	-13.00	0.063	-24.01	-36.50	0.128	-17.86	-60.00
0.00	0.945	-0.49	-13.50	0.024	-32.40	-37.00	0.098	-20.18	-60.50
-0.25	0.986	-0.13	-14.00	0.007	-43.10	-37.50	0.066	-23.61	-61.00
-0.50	1.000	0.00	-14.50	0.000	-40.00	-38.00	0.043	-27.33	-61.50
-0.75	0.986	-0.12	-15.00	0.013	-37.72	-38.50	0.045	-26.94	-62.00
-1.00	0.946	-0.48	-15.50	0.025	-32.04	-39.00	0.058	-24.73	-62.50
-1.25	0.881	-1.10	-16.00	0.029	-30.75	-39.50	0.068	-23.35	-63.00
-1.50	0.796	-1.98	-16.50	0.021	-33.56	-40.00	0.068	-23.35	-63.50
-1.75	0.693	-3.19	-17.00	0.003	-50.46	-40.50	0.059	-24.58	-64.00
-2.00	0.579	-4.75	-17.50	0.027	-31.37	-41.00	0.042	-27.54	-64.50
-2.25	0.462	-6.71	-18.00	0.053	-25.51	-41.50	0.021	-33.56	-65.00
-2.50	0.350	-9.12	-18.50	0.069	-23.22	-42.00	0.004	-47.96	-65.50
-2.75	0.258	-11.78	-19.00	0.071	-22.97	-42.50	0.021	-33.56	-66.00
-3.00	0.203	-13.85	-19.50	0.059	-24.58	-43.00	0.035	-29.12	-66.50
-3.25	0.204	-13.83	-20.00	0.057	-24.88	-43.50	0.042	-27.54	-67.00
-3.50	0.236	-12.54	-20.50	0.090	-20.92	-44.00	0.042	-27.54	-67.50
-3.75	0.275	-11.21	-21.00	0.141	-17.02	-44.50	0.037	-28.64	-68.00
-4.00	0.304	-10.34	-21.50	0.190	-14.42	-45.00	0.029	-30.75	-68.50
-4.25	0.315	-10.05	-22.00	0.224	-13.00	-45.50	0.021	-33.56	-69.00
-4.50	0.308	-10.23	-22.50	0.237	-12.51	-46.00	0.018	-34.89	-69.50
-4.75	0.282	-10.98	-23.00	0.227	-12.88	-46.50	0.021	-33.56	-70.00
-5.00	0.242	-12.32	-23.50	0.196	-14.15	-47.00	0.023	-32.77	-70.50
-5.25	0.190	-14.45	-24.00	0.150	-16.48	-47.50	0.021	-33.56	-71.00
-5.50	0.129	-17.79	-24.50	0.100	-20.00	-48.00	0.014	-37.08	-71.50
-5.75	0.065	-23.74	-25.00	0.056	-25.04	-48.50	0.002	-53.98	-72.00
-6.00	0.016	-35.92	-25.50	0.036	-28.87	-49.00	0.012	-38.42	-72.50
-6.25	0.065	-23.74	-26.00	0.042	-27.54	-49.50	0.027	-31.37	-73.00
-6.50	0.118	-18.56	-26.50	0.047	-26.56	-50.00	0.041	-27.74	-73.50

*Preliminary, subject to final design and review.*

***PRELIMINARY SPECIFICATION FOR  
ERI CARINA™ HORIZONTALLY POLARIZED  
COAXIAL SLOTTED ARRAY ANTENNA***

*Prepared For  
WIDP-DT - LICENSE APPLICATION  
Channel 45  
GUAYAMA, PUERTO RICO  
May 31, 2007*

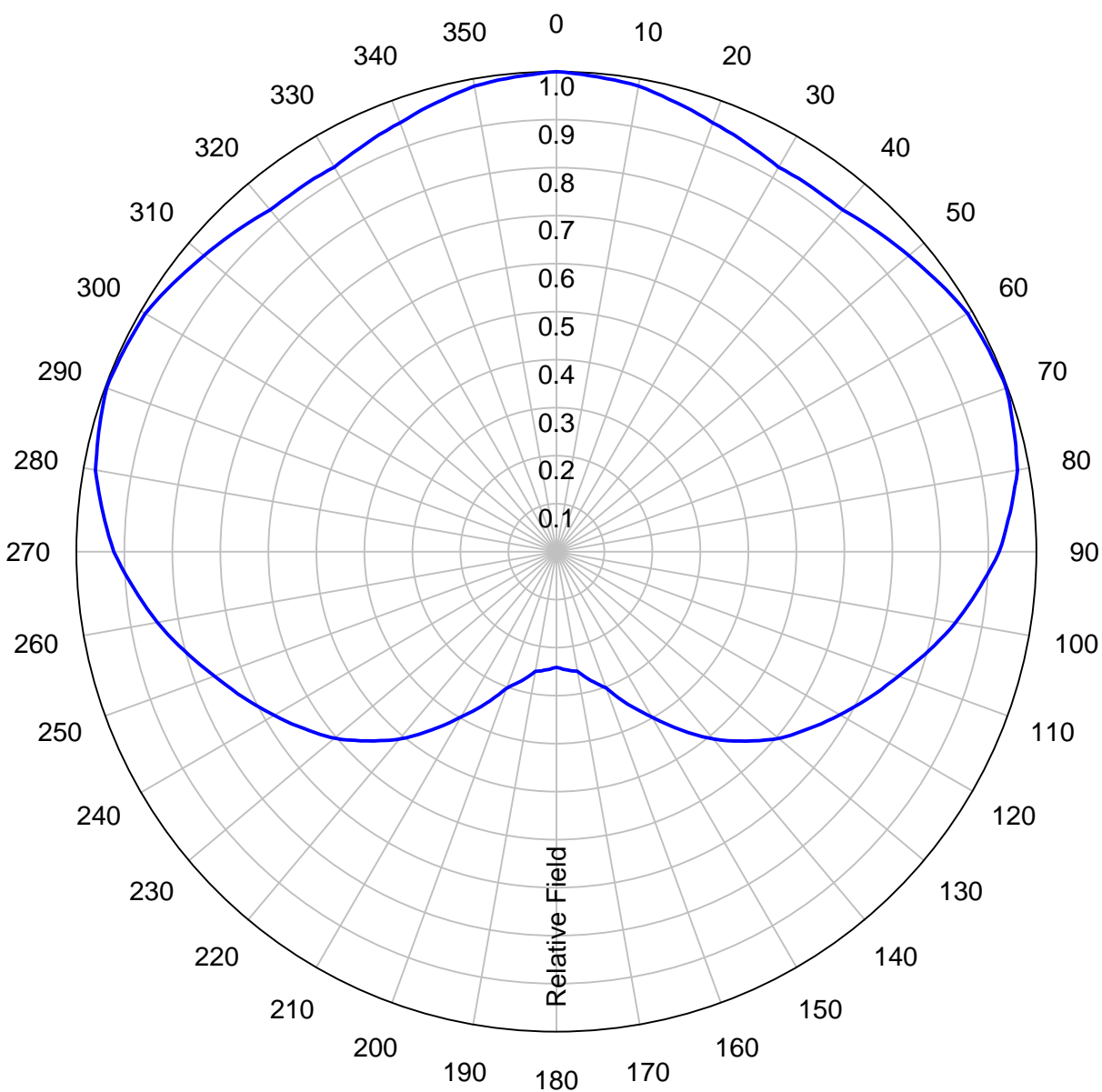
**ANTENNA TYPE:  
ALP32L2-HSW-45**

**SPECIFICATION NO:**



**AZIMUTH PATTERN****Type:**ALP-W**Channel:**45**Directivity:**NumericdBd**Peak(s) at:**1.561.93**Location:**GUAYAMA, PUERTO RICO**Polarization:**Horizontal

Note: Pattern shape and directivity may vary with channel and mouting configuration.



*Preliminary, subject to final design and review.*



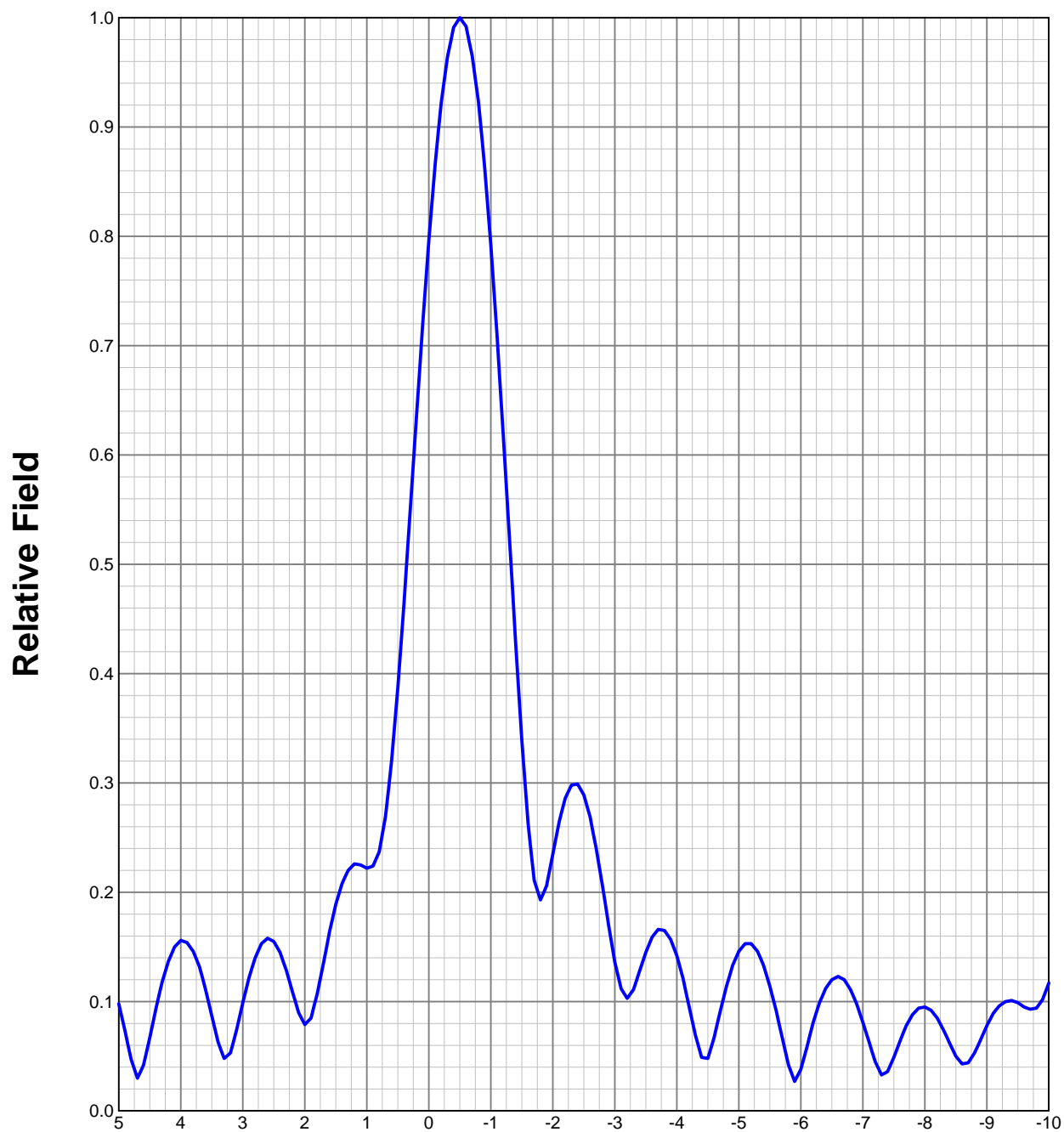
## **TABULATED DATA FOR AZIMUTH PATTERN FCC FILING FORMAT**

Type: ALP-W

PolarizationHorizontal

<b>ANGLE</b>	<b>FIELD</b>	<b>ERP (kW)</b>	<b>ERP (dBk)</b>
0	1.000	50.100	16.998
10	0.985	48.608	16.867
20	0.951	45.310	16.562
30	0.925	42.867	16.321
40	0.929	43.238	16.359
50	0.959	46.076	16.635
60	0.990	49.103	16.911
70	0.997	49.800	16.972
80	0.975	47.626	16.778
90	0.922	42.589	16.293
100	0.845	35.773	15.536
110	0.758	28.786	14.592
120	0.680	23.166	13.649
130	0.605	18.338	12.633
140	0.510	13.031	11.150
150	0.397	7.896	8.974
160	0.302	4.569	6.599
170	0.253	3.207	5.061
180	0.241	2.910	4.639
190	0.253	3.207	5.061
200	0.302	4.569	6.599
210	0.397	7.896	8.974
220	0.510	13.031	11.150
230	0.605	18.338	12.633
240	0.680	23.166	13.649
250	0.758	28.786	14.592
260	0.845	35.773	15.536
270	0.922	42.589	16.293
280	0.975	47.626	16.778
290	0.997	49.800	16.972
300	0.990	49.103	16.911
310	0.959	46.076	16.635
320	0.929	43.238	16.359
330	0.925	42.867	16.321
340	0.951	45.310	16.562
350	0.985	48.608	16.867

*Preliminary, subject to final design and review.*

**ELEVATION PATTERN****Type:****ALP32L2****Channel:****45****Directivity:****Numeric****dBd****Location:** **GUAYAMA, PUERTO RICO****Main Lobe:****31.93****15.04****Beam Tilt:****-0.50****Horizontal:****20.23****13.06****Polarization:****Horizontal***Preliminary, subject to final design and review.*

## TABULATED DATA FOR ELEVATION PATTERN

Type: ALP32L2

PolarizationHorizontal

ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB
5.00	0.098	-20.18	-6.75	0.116	-18.75	-27.00	0.018	-34.89	-50.50
4.75	0.039	-28.29	-7.00	0.081	-21.83	-27.50	0.018	-34.89	-51.00
4.50	0.067	-23.48	-7.25	0.039	-28.18	-28.00	0.006	-44.44	-51.50
4.25	0.128	-17.89	-7.50	0.049	-26.20	-28.50	0.006	-44.44	-52.00
4.00	0.156	-16.14	-7.75	0.083	-21.62	-29.00	0.007	-43.10	-52.50
3.75	0.139	-17.14	-8.00	0.095	-20.45	-29.50	0.002	-53.98	-53.00
3.50	0.087	-21.21	-8.25	0.080	-21.99	-30.00	0.000	-40.00	-53.50
3.25	0.051	-25.93	-8.50	0.050	-26.02	-30.50	0.003	-50.46	-54.00
3.00	0.099	-20.09	-8.75	0.049	-26.29	-31.00	0.005	-46.02	-54.50
2.75	0.147	-16.68	-9.00	0.078	-22.16	-31.50	0.006	-44.44	-55.00
2.50	0.155	-16.19	-9.25	0.098	-20.18	-32.00	0.016	-35.92	-55.50
2.25	0.119	-18.49	-9.50	0.099	-20.09	-32.50	0.020	-33.98	-56.00
2.00	0.079	-22.05	-9.75	0.094	-20.58	-33.00	0.038	-28.40	-56.50
1.75	0.121	-18.34	-10.00	0.117	-18.64	-33.50	0.085	-21.41	-57.00
1.50	0.189	-14.47	-10.50	0.233	-12.65	-34.00	0.128	-17.86	-57.50
1.25	0.223	-13.03	-11.00	0.287	-10.84	-34.50	0.139	-17.14	-58.00
1.00	0.222	-13.07	-11.50	0.222	-13.07	-35.00	0.108	-19.33	-58.50
0.75	0.253	-11.94	-12.00	0.100	-20.00	-35.50	0.052	-25.68	-59.00
0.50	0.387	-8.25	-12.50	0.031	-30.17	-36.00	0.039	-28.18	-59.50
0.25	0.592	-4.55	-13.00	0.036	-28.87	-36.50	0.056	-25.04	-60.00
0.00	0.796	-1.98	-13.50	0.016	-35.92	-37.00	0.044	-27.13	-60.50
-0.25	0.943	-0.51	-14.00	0.004	-47.96	-37.50	0.022	-33.15	-61.00
-0.50	1.000	0.00	-14.50	0.000	-40.00	-38.00	0.032	-29.90	-61.50
-0.75	0.944	-0.50	-15.00	0.003	-50.46	-38.50	0.033	-29.63	-62.00
-1.00	0.792	-2.03	-15.50	0.008	-41.94	-39.00	0.014	-37.08	-62.50
-1.25	0.572	-4.86	-16.00	0.019	-34.42	-39.50	0.021	-33.56	-63.00
-1.50	0.339	-9.40	-16.50	0.011	-39.17	-40.00	0.035	-29.12	-63.50
-1.75	0.202	-13.89	-17.00	0.016	-35.92	-40.50	0.028	-31.06	-64.00
-2.00	0.235	-12.58	-17.50	0.030	-30.46	-41.00	0.007	-43.10	-64.50
-2.25	0.292	-10.69	-18.00	0.016	-35.92	-41.50	0.021	-33.56	-65.00
-2.50	0.289	-10.78	-18.50	0.023	-32.77	-42.00	0.029	-30.75	-65.50
-2.75	0.223	-13.03	-19.00	0.036	-28.87	-42.50	0.020	-33.98	-66.00
-3.00	0.136	-17.33	-19.50	0.019	-34.42	-43.00	0.008	-41.94	-66.50
-3.25	0.107	-19.41	-20.00	0.042	-27.54	-43.50	0.018	-34.89	-67.00
-3.50	0.145	-16.77	-20.50	0.055	-25.19	-44.00	0.021	-33.56	-67.50
-3.75	0.166	-15.62	-21.00	0.075	-22.50	-44.50	0.012	-38.42	-68.00
-4.00	0.142	-16.95	-21.50	0.164	-15.70	-45.00	0.011	-39.17	-68.50
-4.25	0.082	-21.72	-22.00	0.235	-12.58	-45.50	0.018	-34.89	-69.00
-4.50	0.048	-26.38	-22.50	0.224	-13.00	-46.00	0.017	-35.39	-69.50
-4.75	0.103	-19.79	-23.00	0.138	-17.20	-46.50	0.015	-36.48	-70.00
-5.00	0.146	-16.71	-23.50	0.049	-26.20	-47.00	0.021	-33.56	-70.50
-5.25	0.150	-16.51	-24.00	0.060	-24.44	-47.50	0.024	-32.40	-71.00
-5.50	0.114	-18.86	-24.50	0.056	-25.04	-48.00	0.017	-35.39	-71.50
-5.75	0.055	-25.27	-25.00	0.024	-32.40	-48.50	0.003	-50.46	-72.00
-6.00	0.038	-28.40	-25.50	0.027	-31.37	-49.00	0.010	-40.00	-72.50
-6.25	0.090	-20.92	-26.00	0.026	-31.70	-49.50	0.016	-35.92	-73.00
-6.50	0.120	-18.42	-26.50	0.008	-41.94	-50.00	0.012	-38.42	-73.50

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