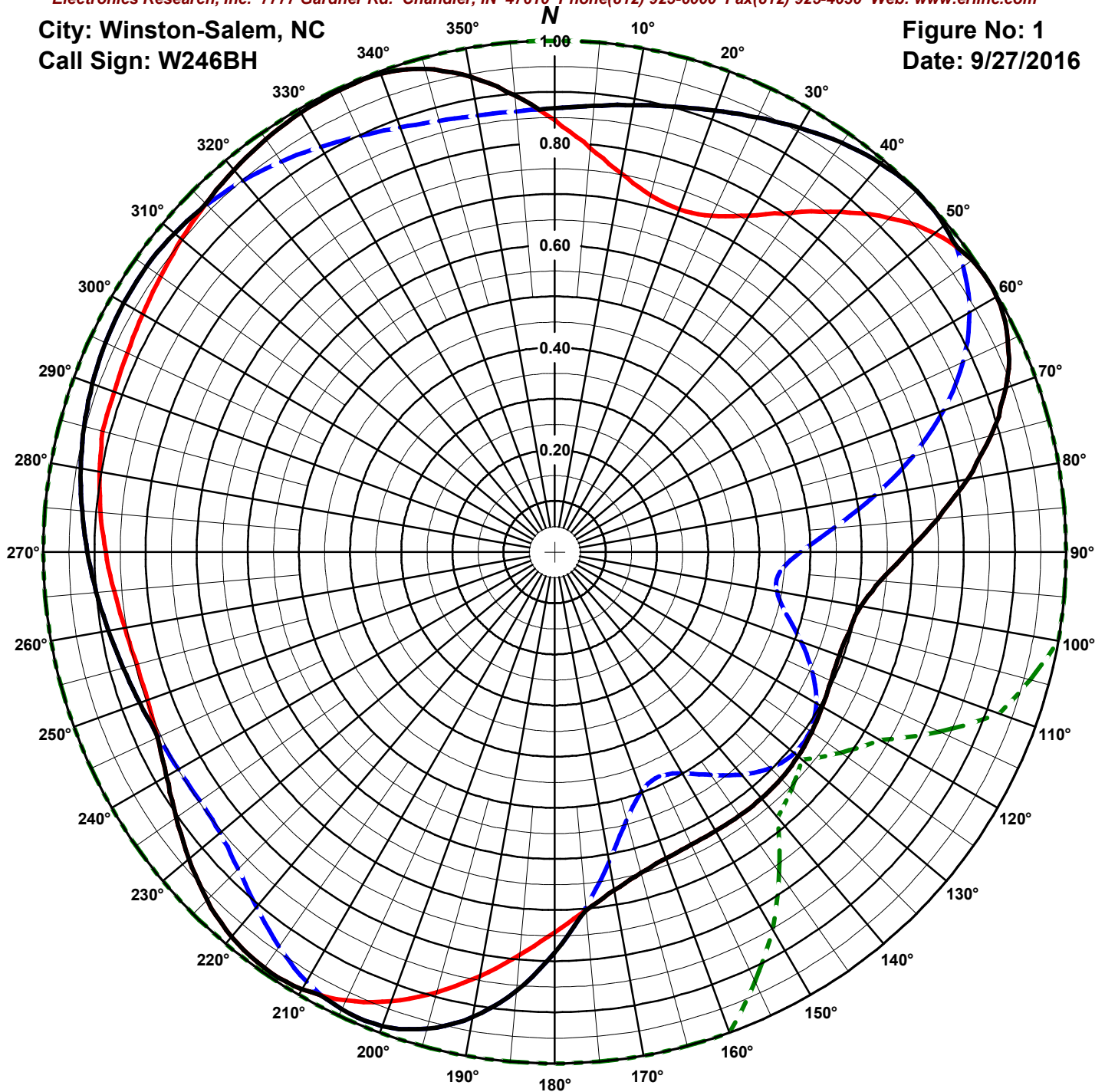


# ERI® Horizontal Plane Relative Field Pattern

Electronics Research, Inc. 7777 Gardner Rd. Chandler, IN 47610 Phone(812) 925-6000 Fax(812) 925-4030 Web: www.eriinc.com

City: Winston-Salem, NC  
Call Sign: W246BH

Figure No: 1  
Date: 9/27/2016



Antenna Orientation: 303° True

Frequency: 106.9 MHz

Antenna Type: LP-2E-DA-HW

Antenna Mounting: Custom

Tower Type: 28" SQ Tower

## HORIZONTAL

RMS: .84

Maximum: 1 @ 58°

Minimum: .592 @ 109°

## VERTICAL

RMS: .83

Maximum: 1 @ 45°

Minimum: .437 @ 98°

## COMPOSITE

RMS: .871

Maximum: 1 @ 45°

Minimum: .592 @ 109°

## FCC ENVELOPE

RMS: .971

Maximum: 1 @ 0°

Minimum: .632 @ 130°

Patterns of the horizontal and vertical components, with the composite maximum of either the H or V components and the filed FCC envelope pattern BPFT-20160129AKL.

# ERI<sup>®</sup> Horizontal Plane Relative Field Pattern

Electronics Research, Inc. 7777 Gardner Rd. Chandler, IN 47610 Phone(812) 925-6000 Fax(812) 925-4030 Web: www.eriinc.com

Figure# 1

Date: 9/27/2016

Station: W246BH

Antenna: LP-2E-DA-HW

Location: Winston-Salem, NC

Antenna Orientation: 303° True

Frequency: 106.9 MHz

Number of Bays: 2

Azimuth	Envelope			Polarization	Azimuth	Envelope			Polarization
	Field	kW	dBk	Maximum		Field	kW	dBk	Maximum
0°	0.868	0.188	-7.251	Vertical	180°	0.783	0.153	-8.141	Vertical
5°	0.876	0.192	-7.171	Vertical	185°	0.861	0.185	-7.321	Vertical
10°	0.887	0.197	-7.061	Vertical	190°	0.923	0.213	-6.721	Vertical
15°	0.902	0.203	-6.921	Vertical	195°	0.965	0.233	-6.331	Vertical
20°	0.918	0.211	-6.761	Vertical	200°	0.986	0.243	-6.141	Vertical
25°	0.938	0.220	-6.581	Vertical	205°	0.986	0.243	-6.141	Vertical
30°	0.958	0.230	-6.391	Vertical	210°	0.987	0.244	-6.133	Horizontal
35°	0.977	0.239	-6.221	Vertical	215°	0.992	0.246	-6.093	Horizontal
40°	0.992	0.246	-6.091	Vertical	220°	0.983	0.241	-6.173	Horizontal
45°	1.000	0.250	-6.021	Vertical	225°	0.961	0.231	-6.363	Horizontal
50°	0.994	0.247	-6.071	Vertical	230°	0.933	0.218	-6.623	Horizontal
55°	0.996	0.248	-6.058	Horizontal	235°	0.903	0.204	-6.903	Horizontal
60°	0.998	0.249	-6.038	Horizontal	240°	0.877	0.192	-7.163	Horizontal
65°	0.978	0.239	-6.214	Horizontal	245°	0.857	0.184	-7.363	Horizontal
70°	0.939	0.220	-6.572	Horizontal	250°	0.863	0.186	-7.303	Vertical
75°	0.884	0.195	-7.095	Horizontal	255°	0.873	0.191	-7.196	Vertical
80°	0.820	0.168	-7.750	Horizontal	260°	0.886	0.196	-7.073	Vertical
85°	0.753	0.142	-8.484	Horizontal	265°	0.900	0.202	-6.939	Vertical
90°	0.689	0.119	-9.260	Horizontal	270°	0.914	0.209	-6.802	Vertical
95°	0.640	0.102	-9.902	Horizontal	275°	0.927	0.215	-6.678	Vertical
100°	0.608	0.092	-10.344	Horizontal	280°	0.940	0.221	-6.554	Vertical
105°	0.597	0.089	-10.503	Horizontal	285°	0.952	0.227	-6.445	Vertical
110°	0.592	0.088	-10.573	Horizontal	290°	0.962	0.231	-6.357	Vertical
115°	0.596	0.089	-10.513	Horizontal	295°	0.969	0.235	-6.294	Vertical
120°	0.604	0.091	-10.393	Horizontal	300°	0.973	0.237	-6.257	Vertical
125°	0.614	0.094	-10.263	Horizontal	305°	0.974	0.237	-6.249	Vertical
130°	0.621	0.097	-10.153	Horizontal	310°	0.970	0.235	-6.283	Vertical
135°	0.626	0.098	-10.083	Horizontal	315°	0.964	0.232	-6.336	Horizontal
140°	0.629	0.099	-10.053	Horizontal	320°	0.976	0.238	-6.235	Horizontal
145°	0.629	0.099	-10.043	Horizontal	325°	0.985	0.243	-6.150	Horizontal
150°	0.629	0.099	-10.043	Horizontal	330°	0.992	0.246	-6.089	Horizontal
155°	0.632	0.100	-10.013	Horizontal	335°	0.996	0.248	-6.055	Horizontal
160°	0.637	0.102	-9.933	Horizontal	340°	0.995	0.248	-6.064	Horizontal
165°	0.650	0.106	-9.763	Horizontal	345°	0.978	0.239	-6.216	Horizontal
170°	0.671	0.113	-9.483	Horizontal	350°	0.944	0.223	-6.519	Horizontal
175°	0.703	0.124	-9.083	Horizontal	355°	0.897	0.201	-6.970	Horizontal

Horizontal Polarization:

Maximum: 0.957 (-0.190 dB)

Horizontal Plane: 0.957 (-0.190 dB)

Maximum ERP: 0.250 kW

Vertical Polarization:

Maximum: 0.957 (-0.190 dB)

Horizontal Plane: 0.957 (-0.190 dB)

Maximum ERP: 0.250 kW

Total Input Power: 0.261 kW

Reference: W246BH1M.FIG

This list shows the the maximum azimuth values of either the horizontal or vertical components.

# ERI<sup>®</sup> Horizontal Plane Relative Field Pattern

Electronics Research, Inc. 7777 Gardner Rd. Chandler, IN 47610 Phone(812) 925-6000 Fax(812) 925-4030 Web: www.eriinc.com

Figure# 1A

Date: 9/27/2016

Station: W246BH

Antenna: LP-2E-DA-HW

Location: Winston-Salem, NC

Antenna Orientation: 303° True

Frequency: 106.9 MHz

Number of Bays: 2

Azimuth	Horizontal			Vertical			Azimuth	Horizontal			Vertical		
	Field	kW	dBk	Field	kW	dBk		Field	kW	dBk	Field	kW	dBk
0°	0.845	0.179	-7.481	0.868	0.188	-7.251	180°	0.744	0.138	-8.593	0.783	0.153	-8.141
5°	0.793	0.157	-8.035	0.876	0.192	-7.171	185°	0.791	0.157	-8.053	0.861	0.185	-7.321
10°	0.752	0.141	-8.502	0.887	0.197	-7.061	190°	0.842	0.177	-7.513	0.923	0.213	-6.721
15°	0.723	0.131	-8.839	0.902	0.203	-6.921	195°	0.891	0.198	-7.023	0.965	0.233	-6.331
20°	0.714	0.127	-8.953	0.918	0.211	-6.761	200°	0.934	0.218	-6.613	0.986	0.243	-6.141
25°	0.726	0.132	-8.803	0.938	0.220	-6.581	205°	0.967	0.234	-6.313	0.986	0.243	-6.141
30°	0.759	0.144	-8.415	0.958	0.230	-6.391	210°	0.987	0.244	-6.133	0.969	0.235	-6.291
35°	0.810	0.164	-7.850	0.977	0.239	-6.221	215°	0.992	0.246	-6.093	0.941	0.221	-6.551
40°	0.869	0.189	-7.238	0.992	0.246	-6.091	220°	0.983	0.241	-6.173	0.907	0.206	-6.871
45°	0.924	0.213	-6.707	1.000	0.250	-6.021	225°	0.961	0.231	-6.363	0.876	0.192	-7.171
50°	0.970	0.235	-6.289	0.994	0.247	-6.071	230°	0.933	0.218	-6.623	0.854	0.182	-7.391
55°	0.996	0.248	-6.058	0.975	0.238	-6.241	235°	0.903	0.204	-6.903	0.847	0.179	-7.460
60°	0.998	0.249	-6.038	0.936	0.219	-6.591	240°	0.877	0.192	-7.163	0.849	0.180	-7.438
65°	0.978	0.239	-6.214	0.881	0.194	-7.121	245°	0.857	0.184	-7.363	0.855	0.183	-7.385
70°	0.939	0.220	-6.572	0.809	0.164	-7.861	250°	0.847	0.179	-7.463	0.863	0.186	-7.303
75°	0.884	0.195	-7.095	0.725	0.132	-8.811	255°	0.846	0.179	-7.473	0.873	0.191	-7.196
80°	0.820	0.168	-7.750	0.635	0.101	-9.961	260°	0.853	0.182	-7.403	0.886	0.196	-7.073
85°	0.753	0.142	-8.484	0.550	0.075	-11.221	265°	0.865	0.187	-7.283	0.900	0.202	-6.939
90°	0.689	0.119	-9.260	0.481	0.058	-12.381	270°	0.878	0.193	-7.153	0.914	0.209	-6.802
95°	0.640	0.102	-9.902	0.443	0.049	-13.101	275°	0.891	0.198	-7.023	0.927	0.215	-6.678
100°	0.608	0.092	-10.344	0.441	0.049	-13.131	280°	0.903	0.204	-6.903	0.940	0.221	-6.554
105°	0.597	0.089	-10.503	0.469	0.055	-12.591	285°	0.915	0.209	-6.793	0.952	0.227	-6.445
110°	0.592	0.088	-10.573	0.513	0.066	-11.821	290°	0.917	0.210	-6.776	0.962	0.231	-6.357
115°	0.596	0.089	-10.513	0.557	0.077	-11.111	295°	0.922	0.212	-6.727	0.969	0.235	-6.294
120°	0.604	0.091	-10.393	0.591	0.087	-10.591	300°	0.930	0.216	-6.650	0.973	0.237	-6.257
125°	0.614	0.094	-10.263	0.610	0.093	-10.311	305°	0.941	0.221	-6.553	0.974	0.237	-6.249
130°	0.621	0.097	-10.153	0.612	0.094	-10.291	310°	0.952	0.227	-6.445	0.970	0.235	-6.283
135°	0.626	0.098	-10.083	0.597	0.089	-10.501	315°	0.964	0.232	-6.336	0.961	0.231	-6.362
140°	0.629	0.099	-10.053	0.568	0.081	-10.931	320°	0.976	0.238	-6.235	0.948	0.225	-6.485
145°	0.629	0.099	-10.043	0.532	0.071	-11.501	325°	0.985	0.243	-6.150	0.932	0.217	-6.630
150°	0.629	0.099	-10.043	0.499	0.062	-12.051	330°	0.992	0.246	-6.089	0.914	0.209	-6.798
155°	0.632	0.100	-10.013	0.484	0.059	-12.321	335°	0.996	0.248	-6.055	0.898	0.202	-6.955
160°	0.637	0.102	-9.933	0.497	0.062	-12.091	340°	0.995	0.248	-6.064	0.884	0.195	-7.093
165°	0.650	0.106	-9.763	0.543	0.074	-11.321	345°	0.978	0.239	-6.216	0.873	0.190	-7.203
170°	0.671	0.113	-9.483	0.614	0.094	-10.251	350°	0.944	0.223	-6.519	0.867	0.188	-7.261
175°	0.703	0.124	-9.083	0.698	0.122	-9.141	355°	0.897	0.201	-6.970	0.865	0.187	-7.281

Horizontal Polarization:

Maximum: 0.957 (-0.190 dB)

Horizontal Plane: 0.957 (-0.190 dB)

Maximum ERP: 0.250 kW

Vertical Polarization:

Maximum: 0.957 (-0.190 dB)

Horizontal Plane: 0.957 (-0.190 dB)

Maximum ERP: 0.250 kW

Total Input Power: 0.261 kW

Reference: W246BH1M.FIG

This list shows the azimuth values for the horizontal and vertical components.

# ERI<sup>®</sup> Vertical Plane Relative Field Pattern

Electronics Research, Inc. 7777 Gardner Rd. Chandler, IN 47610 Phone(812) 925-6000 Fax(812) 925-4030 Web: [www.eriinc.com](http://www.eriinc.com)

Figure No: 3

Call Sign: W246BH

Location: Winston-Salem, NC

Frequency: 106.9 MHz

Antenna: 2 bay LP-2E-DA-HW

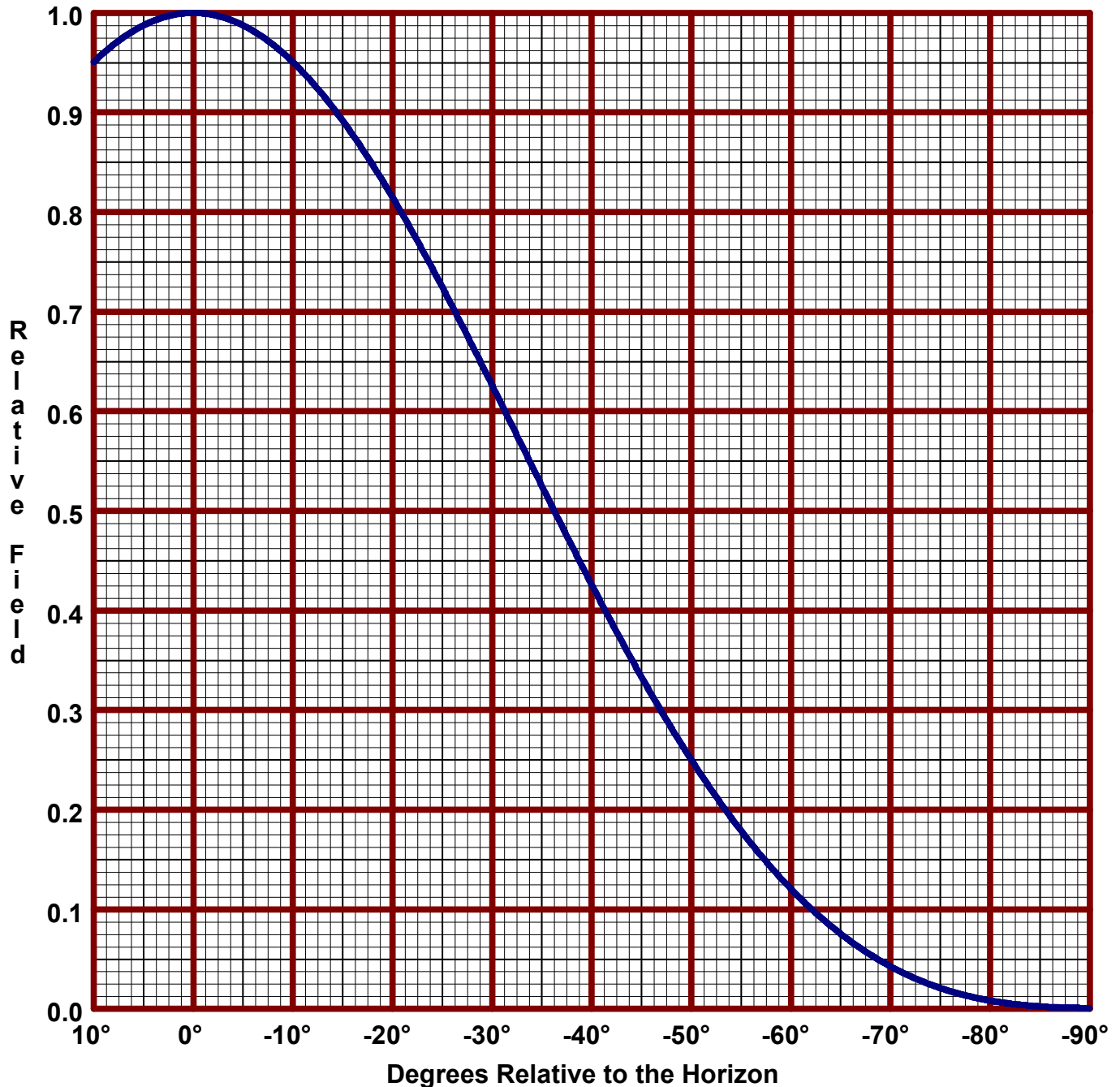
Date: 9/27/2016

H/V Power Ratio: 1

.5 Wave-length Spacing

0° Beam Tilt

0% First Null Fill



Horizontal Polarization:

Maximum: 0.957 (-0.190 dB)

Horizontal Plane: 0.957 (-0.190 dB)

Maximum ERP: 0.250 kW

Vertical Polarization:

Maximum: 0.957 (-0.190 dB)

Horizontal Plane: 0.957 (-0.190 dB)

Maximum ERP: 0.250 kW