

# ERI<sup>®</sup> *Horizontal Plane Relative Field List*

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**Station: KNYD**

**Location: Broken Arrow, Ok**

**Frequency: 90.5 MHz**

**Antenna: LP-12AC-DA-SP**

**Orientation: 295° True**

**Tower: 24'' face tower**

**Figure: 1**

**Date: 11/10/08**

**Reference: kny2e.fig**

Angle	Envelope			Polarization	Angle	Envelope			Polarization
	Field	kW	dBk			Field	kW	dBk	
0°	1.000	100.00	20.00	H (and/or) V	180°	1.000	100.00	20.00	H (and/or) V
5°	1.000	100.00	20.00	H (and/or) V	185°	1.000	100.00	20.00	H (and/or) V
10°	1.000	100.00	20.00	H (and/or) V	190°	1.000	100.00	20.00	H (and/or) V
15°	1.000	100.00	20.00	H (and/or) V	195°	1.000	100.00	20.00	H (and/or) V
20°	1.000	100.00	20.00	H (and/or) V	200°	1.000	100.00	20.00	H (and/or) V
25°	1.000	100.00	20.00	H (and/or) V	205°	1.000	100.00	20.00	H (and/or) V
30°	1.000	100.00	20.00	H (and/or) V	210°	1.000	100.00	20.00	H (and/or) V
35°	1.000	100.00	20.00	H (and/or) V	215°	1.000	100.00	20.00	H (and/or) V
40°	1.000	100.00	20.00	H (and/or) V	220°	1.000	100.00	20.00	H (and/or) V
45°	1.000	100.00	20.00	H (and/or) V	225°	1.000	100.00	20.00	H (and/or) V
50°	1.000	100.00	20.00	H (and/or) V	230°	1.000	100.00	20.00	H (and/or) V
55°	1.000	100.00	20.00	H (and/or) V	235°	1.000	100.00	20.00	H (and/or) V
60°	1.000	100.00	20.00	H (and/or) V	240°	1.000	100.00	20.00	H (and/or) V
65°	1.000	100.00	20.00	H (and/or) V	245°	1.000	100.00	20.00	H (and/or) V
70°	1.000	100.00	20.00	H (and/or) V	250°	1.000	100.00	20.00	H (and/or) V
75°	1.000	100.00	20.00	H (and/or) V	255°	1.000	100.00	20.00	H (and/or) V
80°	1.000	100.00	20.00	H (and/or) V	260°	1.000	100.00	20.00	H (and/or) V
85°	1.000	100.00	20.00	H (and/or) V	265°	1.000	100.00	20.00	H (and/or) V
90°	1.000	100.00	20.00	H (and/or) V	270°	1.000	100.00	20.00	H (and/or) V
95°	0.921	84.73	19.28	H (and/or) V	275°	1.000	100.00	20.00	H (and/or) V
100°	0.841	70.73	18.50	H (and/or) V	280°	1.000	100.00	20.00	H (and/or) V
105°	0.755	56.93	17.55	H (and/or) V	285°	1.000	100.00	20.00	H (and/or) V
110°	0.668	44.62	16.50	H (and/or) V	290°	1.000	100.00	20.00	H (and/or) V
115°	0.668	44.62	16.50	H (and/or) V	295°	1.000	100.00	20.00	H (and/or) V
120°	0.668	44.62	16.50	H (and/or) V	300°	1.000	100.00	20.00	H (and/or) V
125°	0.755	56.93	17.55	H (and/or) V	305°	1.000	100.00	20.00	H (and/or) V
130°	0.841	70.73	18.50	H (and/or) V	310°	1.000	100.00	20.00	H (and/or) V
135°	0.921	84.73	19.28	H (and/or) V	315°	1.000	100.00	20.00	H (and/or) V
140°	1.000	100.00	20.00	H (and/or) V	320°	1.000	100.00	20.00	H (and/or) V
145°	1.000	100.00	20.00	H (and/or) V	325°	1.000	100.00	20.00	H (and/or) V
150°	1.000	100.00	20.00	H (and/or) V	330°	1.000	100.00	20.00	H (and/or) V
155°	1.000	100.00	20.00	H (and/or) V	335°	1.000	100.00	20.00	H (and/or) V
160°	1.000	100.00	20.00	H (and/or) V	340°	1.000	100.00	20.00	H (and/or) V
165°	1.000	100.00	20.00	H (and/or) V	345°	1.000	100.00	20.00	H (and/or) V
170°	1.000	100.00	20.00	H (and/or) V	350°	1.000	100.00	20.00	H (and/or) V
175°	1.000	100.00	20.00	H (and/or) V	355°	1.000	100.00	20.00	H (and/or) V

**Polarization:**

**Maximum Field:**

**Minimum Field:**

**RMS:**

**Maximum ERP:**

**Maximum Power Gain:**

**Horizontal Plane Gain:**

**Envelope**

**1.000 @ 0° True**

**0.668 @ 110° True**

**0.976**

**100.000 kW**

**5.787 (7.625 dB)**

**4.857 (6.864 dB)**

**Total Input Power: 17.280 kW**

ELECTRONICS RESEARCH, INC.  
7777 GARDNER ROAD  
CHANDLER, IN. 47610

FIGURE 3

----THEORETICAL----  
VERTICAL PLANE RELATIVE FIELD

ERI TYPE LP-12C-DA-SP BROADCAST ANTENNA  
-1.25 DEGREE(S) ELECTRICAL BEAM TILT  
10 PERCENT FIRST NULL FILL

ELEMENT SPACING:  
0.9-WAVELENGTH

