

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

OCTOBER 26, 1999

FIGURE 1

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

4 ERI TYPE SHP, SHPX, LP, OR LPX ELEMENTS
-2 DEGREE(S) ELECTRICAL BEAM TILT
0 PERCENT FIRST NULL FILL
0 PERCENT SECOND NULL FILL

ELEMENT SPACING
0.5 WAVELENGTH

POWER GAIN IS 1.389 IN THE HORIZONTAL PLANE(1.334 IN THE MAX.)

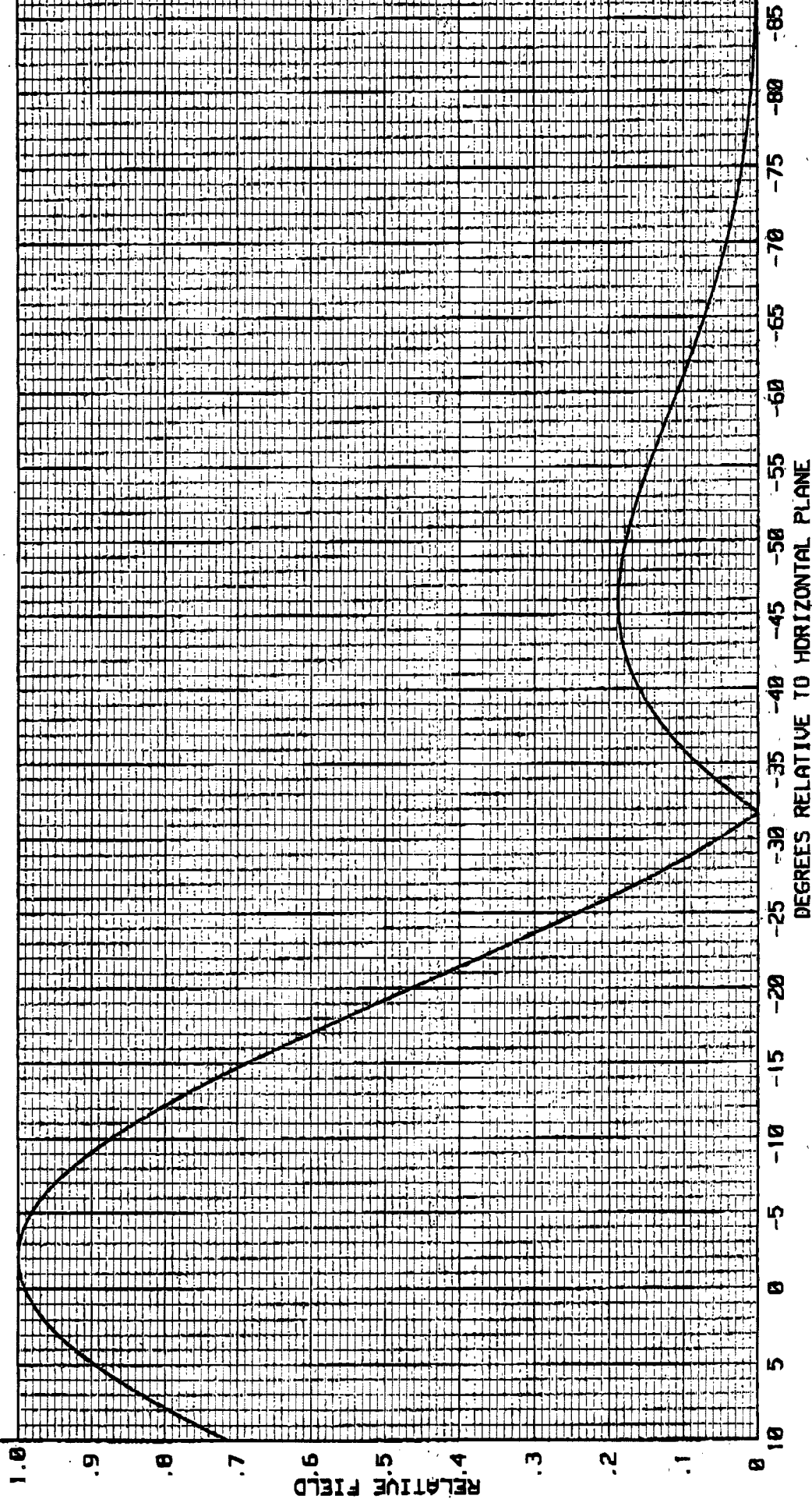


Exhibit 13