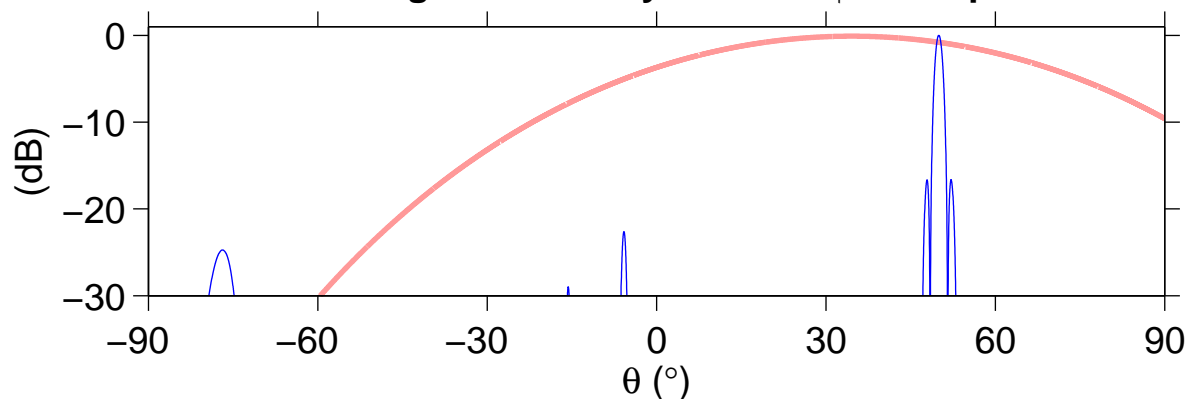
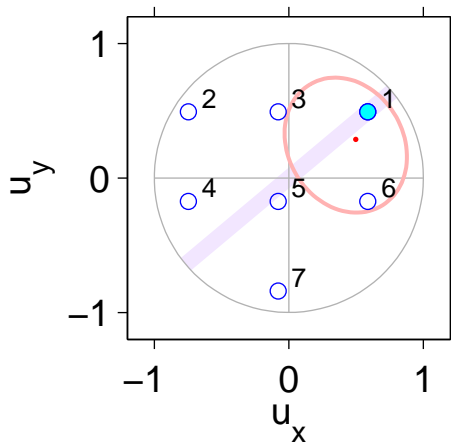


ARRAY $M \times M_y = 50 \times 20$ $D_x = 1.50$ $D_y = 1.50$ Steering $\delta x = 316.9^\circ$ $\delta y = 265.9^\circ$
 ELEMENT $\phi = 30.0^\circ$ $\theta = 35.0^\circ$ $w = 63.2^\circ$ $G = 10.0$ dBi $A_{\text{eff}}/A = 0.30$
 BEAM 1 $\phi = 40.0^\circ$ $\theta = 50.0^\circ$ $w = 1.31^\circ$ $D1 = -0.8$ dB $D6 = -2.2$ $G_{\text{ref}} = 40.0$ dBi
 GRATING [1] $\phi = 40^\circ$ $\theta = 50^\circ$ $G/G_{\text{ref}} = -0.8$ dB [2] 147 63 -22.1
 [3] 99 30 -3.8 [4] -167 50 -23.2 [5] -115 11 -6.0
 [6] -17 38 -2.2 [7] -95 58 -21.4

Element gain and array factor in $\phi = 40.0^\circ$ plane



Grating



Gain at $\phi = 40.0^\circ$ $\theta \approx 50.0^\circ$

