

COMPARISON OF HORNS

Freq. (GHz)	Linear Taper Horn				Compact Horn			
	Taper at 15 deg. (dB)		Effic.	PC (ins)	Taper at 15 deg. (dB)		Effic.	PC (ins)
	H	E			H	E		
26.5	-13.0	-13.0	0.7233		-12.0	-11.6	0.7045	1.42
32.0	-13.2	-13.5	0.7619	4.3	-13.3	-13.4	0.6923	2.38
40.0	-12.9	-11.5	0.7832		-12.8	-14.0	0.7246	2.62

Ap.OD = aperture outside diameter

$\Delta\theta$ = beam separation

Linear Taper: OD = 4.370 ins.; length = 6.45 ins.

Compact horn: OD = 2.607 ins.; length = 4.95 ins.