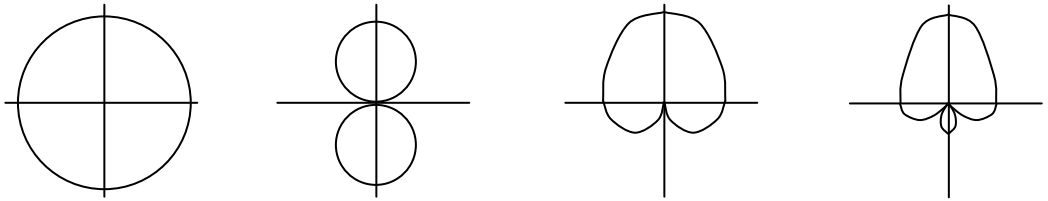
EE417: Microphone Characteristic Summary



	Omnidirectional	Bidirectional	Cardioid	Hypercardioid
Equation:	1	$\cos\theta$	$\frac{1}{2}(1+\cos\theta)$	$\frac{1}{4}(1+3\cdot\cos\theta)$
3dB Pickup Arc	(360°)	90°	131°	105°
6dB Pickup Arc	(360°)	120°	180°	141°
Ouput @ 90°	0dB	$-\infty$	-6dB	-12dB
Output @ 180°	0dB	0dB	$-\infty$	-6dB
Null Angle	--	90°	180°	110°
Random Energy Efficiency[1]	1 (0dB)	0.333 (-4.8dB)	0.333 (-4.8dB)	0.25 (-6dB)
Distance Factor[2]	1	1.7	1.7	2

[1] Random Energy Efficiency (REE): Response to *diffuse* energy relative to on-axis response.

[2] Distance Factor: Relative distance change of *critical distance* (equal direct-to-reverberant ratio)