



**Multiplying Factors to determine the size of a light:**

Diameter = Distance (from Light to the "plane of illumination", usually the performer's head)  
 Multiplying Factor

**Ellipsoidals**

<b>Lens</b>	<b>Multiplying Factor</b>
5 degree	0.13
10 degree	0.19
14 degree	0.27
19 degree	0.34
26 degree	0.49
36 degree	0.63
50 degree	0.93
70 degree	1.41
90 degree	1.92

example: a 36degree Ellipsoidal with a throw distance of 20 feet will create a beam of light 12.6 feet diameter. (20 feet X .63 = 12.6 feet)

<b>Standard PARS Lens</b>	<b>short axis Multiplying Factors</b>	<b>long axis Multiplying Factors</b>
VNSP Lens (very Narrow Spot) (16deg x 16deg)	0.29	0.29
NSP Lens (Narrow Spot) (17deg x 17deg)	0.3	0.3
MFL (Medium Flood) (23deg x 31deg)	0.41	0.57
WFL (Wide Flood) (37deg x 51deg)	0.67	0.96

|

d) x

t that has a