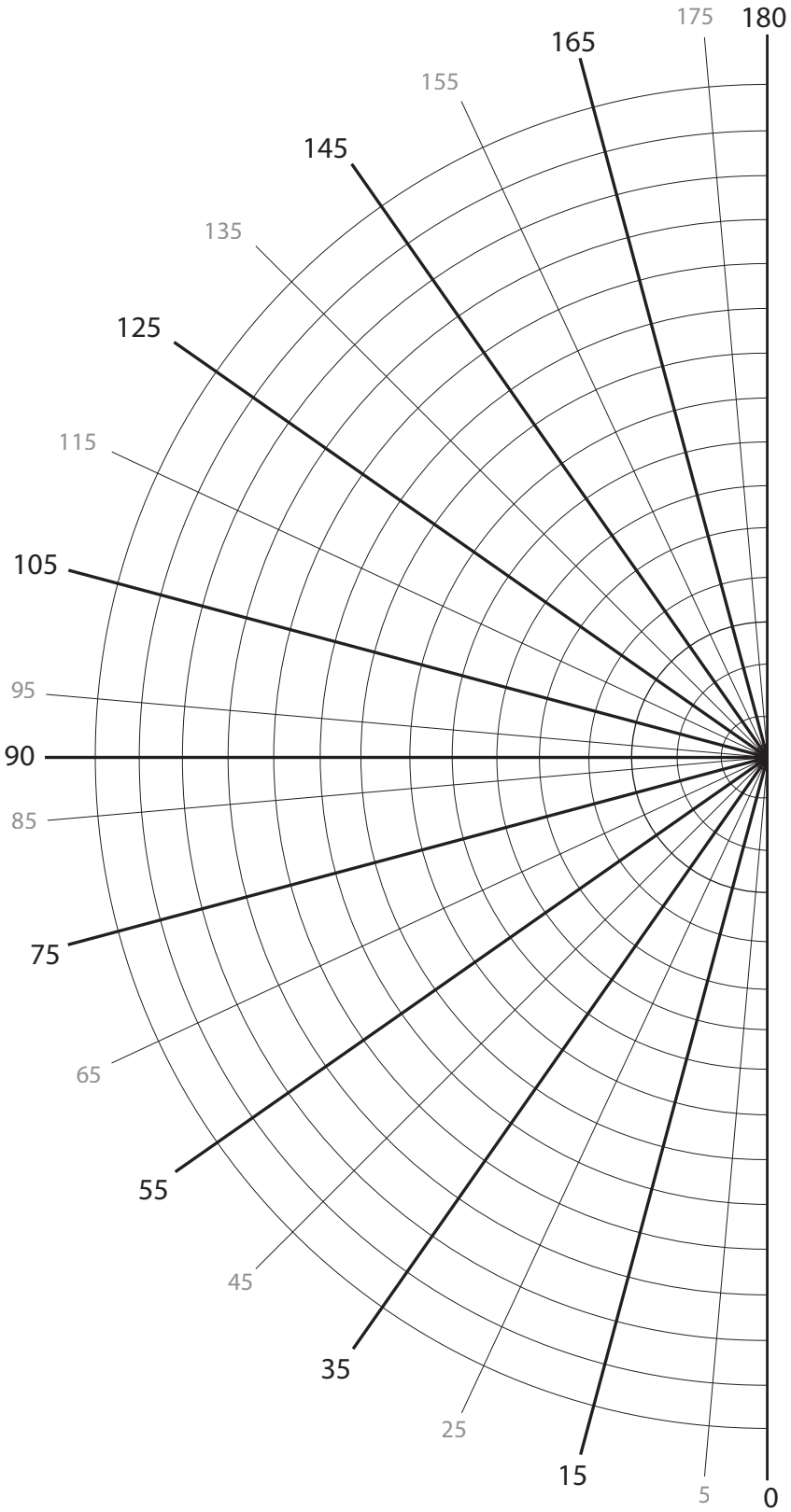
Photometric Graph

University of Oregon's Baker Lighting Lab



Inner Ring

Angle	Reading
0	
15	
35	
55	
75	
90	
105	
125	
145	
165	
180	

Outer Ring

Angle	Reading
5	
25	
45	
65	
85	
95	
115	
135	
155	
175	
180	

Designate your own scale as appropriate to your light level readings

Marietta's Wall

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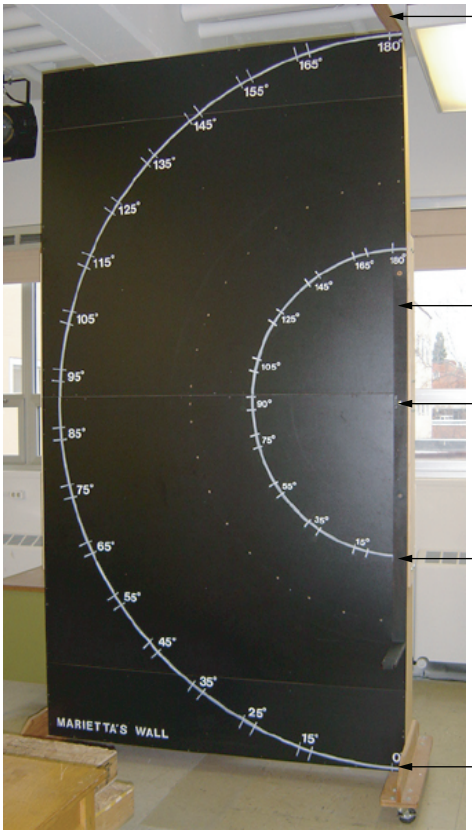
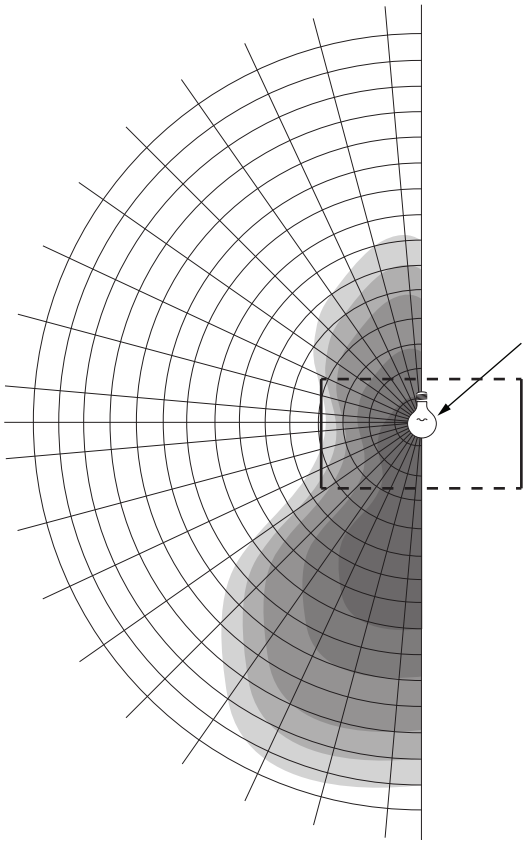
Marietta's Wall is used to obtain photometric data from luminaires. A luminaire is placed in the center of the wall, and a photometer sensor is placed on the end of the arm. This arm is then swung around and the light meter measures candelas. Once recorded on a graph (see back side) a photometric curve is created. This represents the intensity of light given off by the luminaire as placed on the wall.

Come prepared with a functioning luminaire that is ready to be hung on the wall and a partner. It takes at least two people to coordinate using the wall. If your luminaire is not intended to hang, it may be possible to mount it on the wall if it is too heavy to hold in place.

Instructions for use:

1. Gather necessary equipment:
   a. LiCor photometer sensor and light meter
   b. Photometric Graph (back of this sheet)
2. Attach LiCor photometer to end of swing arm.
3. Consider your required orientation for measuring and place luminaire by hanging on the chain provided or using a shelf attachment. Position center of lamp at center of pivot arm (over bolt head).
4. Plug in/turn on luminaire, turn off overhead lights and shut black-out blinds.





5. Take measurements at appropriate angle intervals. Measure with inner ring for smaller luminaires, and use outer ring for larger luminaires. One teammate operates the pivot arm while the other records the light meter readings.
6. Turn on lights and return equipment.
7. Connect dots on graph to create the photometric curve for your luminaire. Use curves and transparency as shown to the left to create a useful photometric chart.