



## Distribution - Goniophotometer

### Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.5 °C	120.0 VAC	0.4767 A	56.99 W	0.996	60 Hz	7.25 %

### Summary of Results

#### Spacing Criteria

0-180: 7.80

90-270: 7.80

#### Total Lumen Output:

4722 Lumens

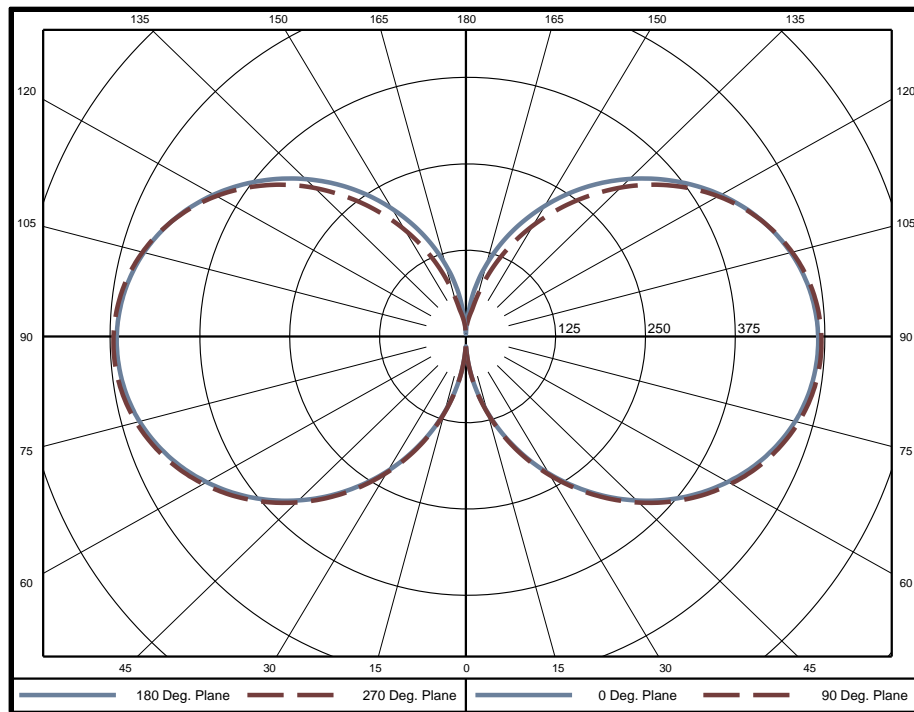
#### Luminaire Efficacy:

82.9 lm/w

#### Maximum Candela:

496 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.7	0.0%	60-65	211.7	4.5%	120-125	183.5	3.9%
5-10	4.2	0.1%	65-70	230.5	4.9%	125-130	160.0	3.4%
10-15	11.2	0.2%	70-75	246.3	5.2%	130-135	136.0	2.9%
15-20	21.9	0.5%	75-80	258.4	5.5%	135-140	112.0	2.4%
20-25	36.1	0.8%	80-85	266.4	5.6%	140-145	89.1	1.9%
25-30	53.3	1.1%	85-90	270.1	5.7%	145-150	67.8	1.4%
30-35	73.3	1.6%	90-95	269.4	5.7%	150-155	48.6	1.0%
35-40	95.4	2.0%	95-100	264.4	5.6%	155-160	32.2	0.7%
40-45	119.0	2.5%	100-105	255.2	5.4%	160-165	18.8	0.4%
45-50	143.2	3.0%	105-110	242.0	5.1%	165-170	9.0	0.2%
50-55	167.3	3.5%	110-115	225.2	4.8%	170-175	3.0	0.1%
55-60	190.4	4.0%	115-120	205.5	4.4%	175-180	0.3	0.0%

Zone	Lumens	% of Luminaire
0-40	296	6.3%
0-60	916	19.4%
0-90	2399	50.8%
90-180	2322	49.2%



**Candela Tabulation**  
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
	0	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
	5	38.5	38.9	39.0	39.0	39.0	39.0	38.9	38.5	38.9	39.0	39.0	38.9	39.0	39.0	38.9
	10	74.1	74.5	75.1	75.0	74.8	75.0	75.1	74.5	74.1	74.5	75.1	75.0	74.8	75.0	74.5
	15	111.4	111.8	112.7	113.2	113.2	113.2	112.7	111.8	111.4	111.8	112.7	113.2	113.2	112.7	111.8
	20	150.3	150.8	151.8	152.5	152.8	152.5	151.8	150.8	150.3	150.8	151.8	152.5	152.8	151.8	150.8
	25	189.2	189.6	191.0	191.9	192.3	191.9	191.0	189.6	189.2	189.6	191.0	191.9	192.3	191.9	189.6
	30	228.0	228.1	229.6	230.6	230.9	230.6	229.6	228.1	228.0	228.1	229.6	230.6	230.9	230.6	228.1
	35	265.3	265.8	267.5	268.6	269.0	268.6	267.5	265.8	265.3	265.8	267.5	268.6	269.0	268.6	265.8
	40	301.8	302.2	304.0	305.1	305.7	305.1	304.0	302.2	301.8	302.2	304.0	305.1	305.7	305.1	302.2
	45	335.8	336.2	338.3	339.5	340.1	339.5	338.3	336.2	335.8	336.2	338.3	339.5	340.1	339.5	336.2
	50	367.5	368.1	370.2	371.6	372.2	371.6	370.2	368.1	367.5	368.1	370.2	371.6	372.2	371.6	368.1
	55	396.1	396.9	398.9	400.5	401.3	400.5	398.9	396.9	396.1	396.9	398.9	400.5	401.3	400.5	396.9
	60	421.5	422.1	424.4	425.8	426.6	425.8	424.4	422.1	421.5	422.1	424.4	425.8	426.6	425.8	422.1
	65	443.4	443.9	446.2	447.8	448.4	447.8	446.2	443.9	443.4	443.9	446.2	447.8	448.4	447.8	443.9
	70	461.2	461.9	464.0	465.7	466.1	465.7	464.0	461.9	461.2	461.9	464.0	465.7	466.1	465.7	461.9
	75	475.1	475.7	477.9	479.4	479.9	479.4	477.9	475.7	475.1	475.7	477.9	479.4	479.9	479.4	475.7
	80	484.6	485.3	487.6	489.1	489.5	489.1	487.6	485.3	484.6	485.3	487.6	489.1	489.5	489.1	485.3
	85	489.8	490.6	492.8	494.2	494.5	494.2	492.8	490.6	489.8	490.6	492.8	494.2	494.5	494.2	490.6
	90	491.1	491.6	493.7	495.2	495.4	495.2	493.7	491.6	491.1	491.6	493.7	495.2	495.4	495.2	493.7
	95	487.6	488.4	490.3	491.6	491.6	491.6	490.3	488.4	487.6	488.4	490.3	491.6	491.6	491.6	488.4
	100	480.3	481.0	482.6	483.7	483.5	483.7	482.6	481.0	480.3	481.0	482.6	483.7	483.5	483.7	481.0
	105	468.8	469.5	471.2	471.8	470.7	471.8	471.2	469.5	468.8	469.5	471.2	471.8	470.7	471.8	469.5
	110	453.2	453.7	455.2	455.3	453.5	455.3	455.2	453.7	453.2	453.7	455.2	455.3	453.5	455.3	453.7
	115	433.6	434.1	435.5	434.9	432.0	434.9	435.5	434.1	433.6	434.1	435.5	434.9	432.0	434.9	435.5
	120	410.2	410.8	412.1	410.5	405.7	410.5	412.1	410.8	410.2	410.8	412.1	410.5	405.7	410.5	412.1
	125	383.5	384.1	385.3	382.4	375.4	382.4	385.3	384.1	383.5	384.1	385.3	382.4	375.4	382.4	385.3
	130	354.1	354.8	356.1	351.1	341.6	351.1	356.1	354.8	354.1	354.8	356.1	351.1	341.6	351.1	356.1
	135	322.5	323.3	324.3	317.3	304.6	317.3	324.3	323.3	322.5	323.3	324.3	317.3	304.6	317.3	324.3
	140	289.1	289.9	290.7	281.1	265.0	281.1	290.7	289.9	289.1	289.9	290.7	281.1	265.0	281.1	290.7
	145	254.0	255.4	255.7	243.5	224.7	243.5	255.7	255.4	254.0	255.4	255.7	243.5	224.7	243.5	255.7
	150	217.3	219.1	218.7	204.7	183.8	204.7	218.7	219.1	217.3	219.1	218.7	204.7	183.8	204.7	219.1
	155	180.1	181.7	180.9	165.5	142.5	165.5	180.9	181.7	180.1	181.7	180.9	165.5	142.5	165.5	180.9
	160	142.8	144.0	142.6	125.1	100.6	125.1	142.6	144.0	142.8	144.0	142.6	125.1	100.6	125.1	142.6
	165	104.9	105.8	103.1	82.9	58.4	82.9	103.1	105.8	104.9	105.8	103.1	82.9	58.4	82.9	103.1
	170	68.8	68.0	64.4	45.8	31.0	45.8	64.4	68.0	68.8	68.0	64.4	45.8	31.0	45.8	64.4
	175	27.5	27.4	25.7	20.2	16.7	20.2	25.7	27.4	27.5	27.4	25.7	20.2	16.7	20.2	27.4
	180	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8

**Average Luminance (cd/m<sup>2</sup>)**  
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	800	800
	45	2292	2309
	55	2397	2414
	65	2478	2494
	75	2538	2553
	85	2581	2597



### Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	5068	5068	5068	5068	4680	4680	4680	4680	3956	3956	3956	3294	3294	3294	2685	2685	2685	2399
1	4349	4026	3737	3476	3972	3688	3432	3200	3055	2857	2675	2474	2322	2181	1938	1824	1717	1452
2	3850	3363	2960	2620	3498	3071	2713	2409	2522	2242	2001	2016	1801	1612	1547	1385	1240	1003
3	3448	2867	2417	2058	3124	2613	2212	1889	2136	1821	1561	1694	1450	1245	1285	1098	939	727
4	3114	2481	2017	1662	2818	2260	1845	1524	1844	1515	1255	1458	1200	992	1098	900	737	548
5	2832	2172	1711	1371	2561	1979	1565	1256	1615	1284	1030	1276	1015	810	959	757	595	427
6	2589	1921	1472	1150	2343	1751	1347	1053	1430	1105	862	1131	872	675	850	648	491	340
7	2381	1713	1281	978	2156	1564	1173	895	1279	962	732	1013	760	571	763	564	412	277
8	2198	1540	1126	841	1993	1407	1031	770	1153	847	628	915	669	489	691	497	351	229
9	2039	1393	998	730	1851	1274	914	668	1047	752	545	833	595	423	632	442	303	193
10	1898	1268	890	639	1725	1161	817	585	957	673	477	764	533	370	581	397	264	164

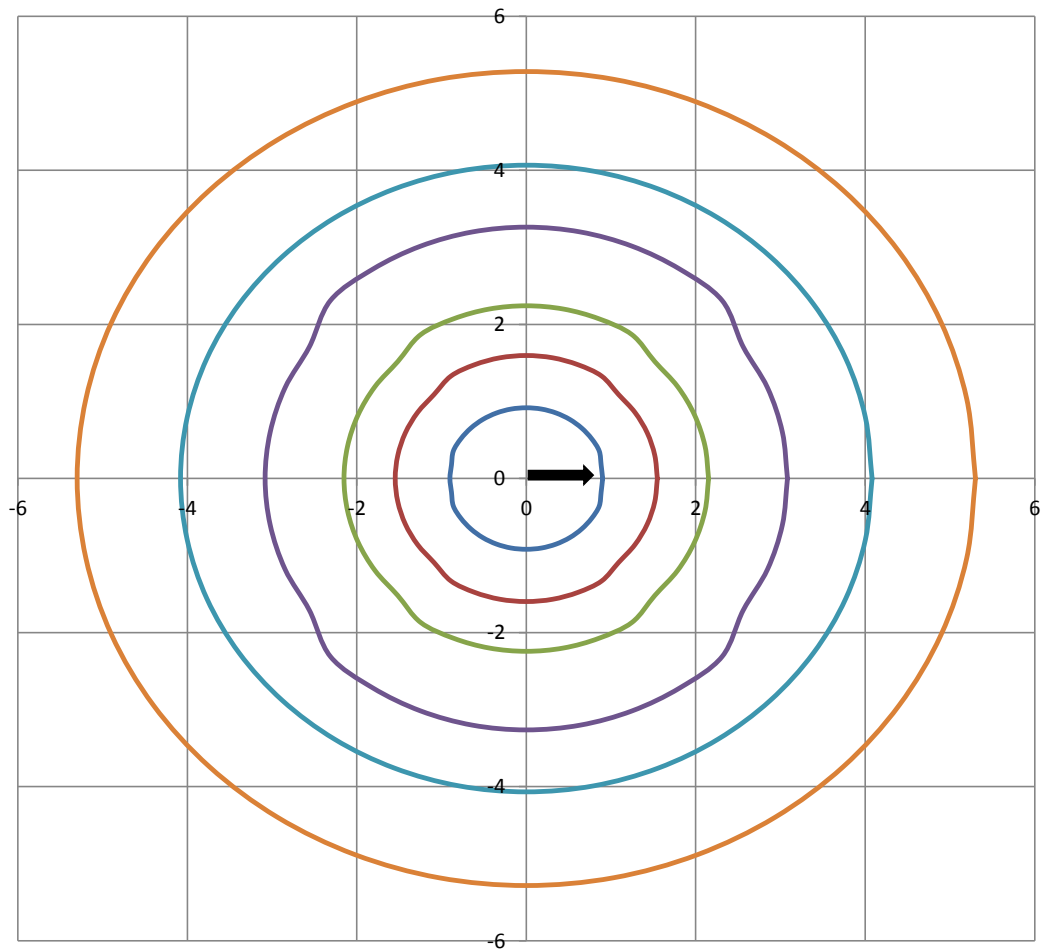
Beam and Field Information	
CIE Type:	Direct/Indirect
Center Beam Intensity:	14.6 Candela
Central Cone Intensity:	24 Candela
Beam Flux:	4721.6 Lumens
Beam Angle (0-180):	356.1 Degrees
Beam Angle (90-270):	354.9 Degrees
Field Angle (0-180):	#REF! Degrees
Field Angle (90-270):	#REF! Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		0.912	31.3
6.00		0.406	46.9
8.00		0.228	62.5
10.0		0.146	78.2
12.0		0.101	93.8
14.0		0.0745	109
16.0		0.0570	125



## ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

— 2 fc    — 1 fc    — 0.5 fc    — 0.2 fc    — 0.1 fc    — 0.05 fc