

Family Correlated Photometric Data

The following photometric information is developed using correlated data. Finelite considers a family to be a group of luminaires where critical performance metrics such as photometric performance, thermal performance, and electrical performance can be accurately projected via a combination of LM79 tests at the luminaire level and well-documented specifications at the component level.

For more information, please download [Finelite's Family Correlated White Paper](#)

Additional links:

- [Solid-State Lighting: Early Lessons Learned on the Way to Market](#)
(U.S. Department of Energy)
- [Lighting Facts®](#)
- [Design Lights Consortium®](#)

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP3-P-ID-4FT-V-S-835-F-F-KPL2008-50.003.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST] KPL2008-50.003 Family Correlation File
[TESTLAB] Northern Lights Testing Laboratories
[ISSUEDATE] 1/18/2024
[TESTDATE] 11/27/2024
[MANUFAC] Finelite, Inc.
[LUMCAT] HP3-P-ID-4ft-V-S-835-F-F
[LUMINAIRE] HP3 Series
[LAMPCAT] 320 LM561B+ LEDs with 80 CRI
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 53.4 WATTS
[ABSOLUTELUMENS]7185
[LAMP] Samsung
[BALLAST] Osram
[BALLASTCAT] x2 @ 700mA

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7188
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	135
Total Luminaire Watts	53.4
Ballast Factor	1.00
CIE Type	Semi-Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.25 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	8370	7988	7600
55	7615	7175	6807
65	6877	6462	6113
75	6136	5717	5517
85	5516	5176	4850

CANDELA TABULATION

	<u>0</u>	<u>15</u>	<u>30</u>	<u>45</u>	<u>60</u>	<u>75</u>	<u>90</u>	<u>105</u>	<u>120</u>	<u>135</u>
0.0	966.241	966.241	966.241	966.241	966.241	966.241	966.241	966.241	966.241	966.241
2.5	959.629	974.042	962.220	962.755	963.596	962.187	965.005	962.187	963.596	962.755
5.0	955.000	969.139	957.285	957.452	957.518	956.143	958.827	956.143	957.518	957.452
7.5	947.948	960.945	948.883	948.115	947.914	946.064	948.415	946.064	947.914	948.115
10.0	941.563	954.760	939.586	936.059	934.610	931.524	933.976	931.524	934.610	936.059
12.5	923.497	937.569	923.964	923.864	917.352	914.093	915.302	914.093	917.352	923.864
15.0	906.098	918.528	904.181	904.015	898.678	893.101	894.010	893.101	898.678	904.015
17.5	886.216	897.536	882.689	880.104	877.653	868.483	869.559	868.483	877.653	880.104
20.0	864.389	874.868	859.921	853.843	851.058	842.797	842.690	842.797	851.058	853.843
22.5	840.406	848.100	833.961	825.532	819.989	814.145	813.203	814.145	819.989	825.532
25.0	817.504	823.048	805.649	796.579	788.017	782.006	782.040	782.006	788.017	796.579
27.5	783.790	791.811	776.463	766.859	756.754	749.701	747.043	749.701	756.754	766.859
30.0	753.829	756.079	743.790	734.180	722.458	715.038	712.854	715.038	722.458	734.180
32.5	721.256	727.434	709.161	701.473	688.103	680.008	676.855	680.008	688.103	701.473
35.0	689.478	693.679	677.056	664.999	658.618	643.572	642.531	643.572	658.618	664.999
37.5	656.167	657.544	642.061	629.501	616.604	607.872	605.387	607.872	616.604	629.501
40.0	618.754	621.306	606.026	592.894	580.569	572.173	568.445	572.173	580.569	592.894
42.5	583.557	584.263	569.654	557.933	545.003	536.607	532.845	536.607	545.003	557.933
45.0	548.026	549.168	533.786	523.006	508.396	500.202	497.582	500.202	508.396	523.006
47.5	511.486	511.486	498.321	486.600	472.764	464.434	461.916	464.434	472.764	486.600
50.0	474.745	475.954	461.345	450.363	436.795	429.944	426.921	429.944	436.795	450.363
52.5	438.340	439.650	425.813	415.402	403.513	395.755	393.874	395.755	403.513	415.402
55.0	404.420	403.782	392.094	381.046	370.937	365.294	361.500	365.294	370.937	381.046
57.5	370.097	367.377	356.798	347.864	338.091	331.374	329.057	331.374	338.091	347.864
60.0	335.170	332.852	324.322	314.079	305.616	300.107	297.556	300.107	305.616	314.079
62.5	302.122	299.973	291.712	281.918	272.296	268.771	267.350	268.771	272.296	281.918
65.0	269.103	266.809	260.317	252.888	244.079	241.175	239.220	241.175	244.079	252.888
67.5	236.553	235.210	229.259	221.648	215.368	212.547	211.231	212.547	215.368	221.648
70.0	206.771	204.615	197.975	193.156	188.441	184.867	184.095	184.867	188.441	193.156
72.5	175.396	170.144	169.620	164.458	160.049	157.684	157.221	157.684	160.049	164.458
75.0	147.058	145.674	141.910	137.017	135.226	131.979	132.214	131.979	135.226	137.017
77.5	120.701	118.649	115.106	111.519	109.595	107.247	107.416	107.247	109.595	111.519
80.0	94.116	92.524	89.575	87.980	85.579	84.353	83.645	84.353	85.579	87.980
82.5	68.699	67.934	66.749	65.136	64.136	63.306	65.476	63.306	64.136	65.136
85.0	44.512	43.723	42.165	41.775	41.060	40.234	39.139	40.234	41.060	41.775
87.5	23.260	21.595	20.631	19.902	18.848	18.935	19.149	18.935	18.848	19.902
90.0	3.459	3.369	3.828	3.622	4.361	4.615	3.508	4.615	4.361	3.622
92.5	48.466	50.450	50.510	49.089	50.123	47.595	50.389	47.595	50.123	49.089
95.0	101.335	101.625	103.192	102.139	103.300	97.864	96.714	97.864	103.300	102.139
97.5	146.583	146.898	144.273	142.785	142.344	141.884	143.777	141.884	142.344	142.785
100.0	200.601	199.011	194.699	193.853	193.441	191.270	191.167	191.270	193.441	193.853
102.5	253.108	252.654	249.056	247.283	243.946	242.233	242.173	242.233	243.946	247.283
105.0	308.323	308.812	305.384	302.299	299.650	297.570	298.864	297.570	299.650	302.299
107.5	370.214	367.033	362.425	359.359	357.031	355.271	352.809	355.271	357.031	359.359
110.0	430.618	429.118	425.224	420.150	415.361	415.451	414.689	415.451	415.361	420.150
112.5	489.076	494.833	488.725	482.157	478.662	474.017	474.936	474.017	478.662	482.157
115.0	552.152	560.619	552.334	560.075	541.328	535.581	538.121	535.581	541.328	560.075
117.5	622.789	627.446	617.226	615.229	607.791	601.925	604.404	601.925	607.791	615.229
120.0	689.435	695.603	686.895	683.448	675.283	669.478	668.631	669.478	675.283	683.448
122.5	762.007	764.366	757.834	752.209	741.082	741.022	734.067	741.022	741.082	752.209
125.0	831.072	837.300	830.830	824.842	809.360	811.296	805.066	811.296	809.360	824.842
127.5	903.885	909.208	900.619	892.576	883.444	882.415	877.638	882.415	883.444	892.576
130.0	973.554	981.900	974.340	966.842	955.956	954.383	953.476	954.383	955.956	966.842
132.5	1043.949	1055.138	1043.405	1038.869	1027.621	1026.411	1032.096	1026.411	1027.621	1038.869

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CANDELA TABULATION - (Cont.)

135.0	1113.739	1128.073	1114.284	1111.079	1104.184	1101.463	1106.362	1101.463	1104.184	1111.079
137.5	1187.521	1197.258	1181.594	1179.175	1180.566	1172.583	1179.780	1172.583	1180.566	1179.175
140.0	1255.376	1271.588	1252.718	1250.661	1251.563	1246.367	1252.357	1246.367	1251.563	1250.661
142.5	1321.896	1336.954	1322.389	1320.092	1320.453	1315.005	1317.061	1315.005	1320.453	1320.092
145.0	1390.966	1401.550	1387.876	1385.157	1386.252	1384.376	1386.853	1384.376	1386.252	1385.157
147.5	1453.013	1465.894	1454.108	1454.047	1453.987	1448.479	1451.810	1448.479	1453.987	1454.047
150.0	1516.755	1528.915	1512.883	1513.436	1513.797	1509.924	1515.180	1509.924	1513.797	1513.436
152.5	1569.613	1588.002	1573.005	1574.941	1573.005	1568.158	1574.809	1568.158	1573.005	1574.941
155.0	1623.434	1644.601	1627.366	1627.006	1627.727	1619.320	1628.401	1619.320	1627.727	1627.006
157.5	1674.115	1697.880	1678.889	1674.415	1675.450	1676.412	1675.450	1676.412	1675.450	1674.415
160.0	1722.739	1743.786	1721.044	1716.810	1719.167	1711.554	1715.848	1711.554	1719.167	1716.810
162.5	1760.119	1782.729	1760.179	1757.148	1759.626	1750.137	1755.525	1750.137	1759.626	1757.148
165.0	1794.828	1815.394	1795.129	1791.569	1793.493	1785.520	1791.689	1785.520	1793.493	1791.569
167.5	1823.368	1845.028	1825.124	1821.865	1823.548	1817.150	1823.861	1817.150	1823.548	1821.865
170.0	1846.965	1870.610	1849.803	1846.412	1849.984	1842.671	1850.344	1842.671	1849.984	1846.412
172.5	1865.582	1890.502	1869.936	1866.256	1870.116	1862.443	1870.550	1862.443	1870.116	1866.256
175.0	1879.257	1904.718	1884.392	1880.279	1884.332	1877.802	1885.787	1877.802	1884.332	1880.279
177.5	1887.724	1912.944	1892.499	1888.506	1893.040	1886.028	1894.856	1886.028	1893.040	1888.506
180.0	1896.756	1896.756	1896.756	1896.756	1896.756	1896.756	1896.756	1896.756	1896.756	1896.756

**Vert.
Angles**

Horizontal Angles

	<u>150</u>	<u>165</u>	<u>180</u>	<u>195</u>	<u>210</u>	<u>225</u>	<u>240</u>	<u>255</u>	<u>270</u>	<u>285</u>
0.0	966.241	966.241	966.241	966.241	966.241	966.241	966.241	966.241	966.241	966.241
2.5	962.220	974.042	959.629	974.042	962.220	962.755	963.596	962.187	965.005	962.187
5.0	957.285	969.139	955.000	969.139	957.285	957.452	957.518	956.143	958.827	956.143
7.5	948.883	960.945	947.948	960.945	948.883	948.115	947.914	946.064	948.415	946.064
10.0	939.586	954.760	941.563	954.760	939.586	936.059	934.610	931.524	933.976	931.524
12.5	923.964	937.569	923.497	937.569	923.964	923.864	917.352	914.093	915.302	914.093
15.0	904.181	918.528	906.098	918.528	904.181	904.015	898.678	893.101	894.010	893.101
17.5	882.689	897.536	886.216	897.536	882.689	880.104	877.653	868.483	869.559	868.483
20.0	859.921	874.868	864.389	874.868	859.921	853.843	851.058	842.797	842.690	842.797
22.5	833.961	848.100	840.406	848.100	833.961	825.532	819.989	814.145	813.203	814.145
25.0	805.649	823.048	817.504	823.048	805.649	796.579	788.017	782.006	782.040	782.006
27.5	776.463	791.811	783.790	791.811	776.463	766.859	756.754	749.701	747.043	749.701
30.0	743.790	756.079	753.829	756.079	743.790	734.180	722.458	715.038	712.854	715.038
32.5	709.161	727.434	721.256	727.434	709.161	701.473	688.103	680.008	676.855	680.008
35.0	677.056	693.679	689.478	693.679	677.056	664.999	658.618	643.572	642.531	643.572
37.5	642.061	657.544	656.167	657.544	642.061	629.501	616.604	607.872	605.387	607.872
40.0	606.026	621.306	618.754	621.306	606.026	592.894	580.569	572.173	568.445	572.173
42.5	569.654	584.263	583.557	584.263	569.654	557.933	545.003	536.607	532.845	536.607
45.0	533.786	549.168	548.026	549.168	533.786	523.006	508.396	500.202	497.582	500.202
47.5	498.321	511.486	511.486	511.486	498.321	486.600	472.764	464.434	461.916	464.434
50.0	461.345	475.954	474.745	475.954	461.345	450.363	436.795	429.944	426.921	429.944
52.5	425.813	439.650	438.340	439.650	425.813	415.402	403.513	395.755	393.874	395.755
55.0	392.094	403.782	404.420	403.782	392.094	381.046	370.937	365.294	361.500	365.294
57.5	356.798	367.377	370.097	367.377	356.798	347.864	338.091	331.374	329.057	331.374
60.0	324.322	332.852	335.170	332.852	324.322	314.079	305.616	300.107	297.556	300.107
62.5	291.712	299.973	302.122	299.973	291.712	281.918	272.296	268.771	267.350	268.771
65.0	260.317	266.809	269.103	266.809	260.317	252.888	244.079	241.175	239.220	241.175
67.5	229.259	235.210	236.553	235.210	229.259	221.648	215.368	212.547	211.231	212.547
70.0	197.975	204.615	206.771	204.615	197.975	193.156	188.441	184.867	184.095	184.867
72.5	169.620	170.144	175.396	170.144	169.620	164.458	160.049	157.684	157.221	157.684
75.0	141.910	145.674	147.058	145.674	141.910	137.017	135.226	131.979	132.214	131.979
77.5	115.106	118.649	120.701	118.649	115.106	111.519	109.595	107.247	107.416	107.247
80.0	89.575	92.524	94.116	92.524	89.575	87.980	85.579	84.353	83.645	84.353

CANDELA TABULATION - (Cont.)

82.5	66.749	67.934	68.699	67.934	66.749	65.136	64.136	63.306	65.476	63.306
85.0	42.165	43.723	44.512	43.723	42.165	41.775	41.060	40.234	39.139	40.234
87.5	20.631	21.595	23.260	21.595	20.631	19.902	18.848	18.935	19.149	18.935
90.0	3.828	3.369	3.459	3.369	3.828	3.622	4.361	4.615	3.508	4.615
92.5	50.510	50.450	48.466	50.450	50.510	49.089	50.123	47.595	50.389	47.595
95.0	103.192	101.625	101.335	101.625	103.192	102.139	103.300	97.864	96.714	97.864
97.5	144.273	146.898	146.583	146.898	144.273	142.785	142.344	141.884	143.777	141.884
100.0	194.699	199.011	200.601	199.011	194.699	193.853	193.441	191.270	191.167	191.270
102.5	249.056	252.654	253.108	252.654	249.056	247.283	243.946	242.233	242.173	242.233
105.0	305.384	308.812	308.323	308.812	305.384	302.299	299.650	297.570	298.864	297.570
107.5	362.425	367.033	370.214	367.033	362.425	359.359	357.031	355.271	352.809	355.271
110.0	425.224	429.118	430.618	429.118	425.224	420.150	415.361	415.451	414.689	415.451
112.5	488.725	494.833	489.076	494.833	488.725	482.157	478.662	474.017	474.936	474.017
115.0	552.334	560.619	552.152	560.619	552.334	560.075	541.328	535.581	538.121	535.581
117.5	617.226	627.446	622.789	627.446	617.226	615.229	607.791	601.925	604.404	601.925
120.0	686.895	695.603	689.435	695.603	686.895	683.448	675.283	669.478	668.631	669.478
122.5	757.834	764.366	762.007	764.366	757.834	752.209	741.082	741.022	734.067	741.022
125.0	830.830	837.300	831.072	837.300	830.830	824.842	809.360	811.296	805.066	811.296
127.5	900.619	909.208	903.885	909.208	900.619	892.576	883.444	882.415	877.638	882.415
130.0	974.340	981.900	973.554	981.900	974.340	966.842	955.956	954.383	953.476	954.383
132.5	1043.405	1055.138	1043.949	1055.138	1043.405	1038.869	1027.621	1026.411	1032.096	1026.411
135.0	1114.284	1128.073	1113.739	1128.073	1114.284	1111.079	1104.184	1101.463	1106.362	1101.463
137.5	1181.594	1197.258	1187.521	1197.258	1181.594	1179.175	1180.566	1172.583	1179.780	1172.583
140.0	1252.718	1271.588	1255.376	1271.588	1252.718	1250.661	1251.563	1246.367	1252.357	1246.367
142.5	1322.389	1336.954	1321.896	1336.954	1322.389	1320.092	1320.453	1315.005	1317.061	1315.005
145.0	1387.876	1401.550	1390.966	1401.550	1387.876	1385.157	1386.252	1384.376	1386.853	1384.376
147.5	1454.108	1465.894	1453.013	1465.894	1454.108	1454.047	1453.987	1448.479	1451.810	1448.479
150.0	1512.883	1528.915	1516.755	1528.915	1512.883	1513.436	1513.797	1509.924	1515.180	1509.924
152.5	1573.005	1588.002	1569.613	1588.002	1573.005	1574.941	1573.005	1568.158	1574.809	1568.158
155.0	1627.366	1644.601	1623.434	1644.601	1627.366	1627.006	1627.727	1619.320	1628.401	1619.320
157.5	1678.889	1697.880	1674.115	1697.880	1678.889	1674.415	1675.450	1676.412	1675.450	1676.412
160.0	1721.044	1743.786	1722.739	1743.786	1721.044	1716.810	1719.167	1711.554	1715.848	1711.554
162.5	1760.179	1782.729	1760.119	1782.729	1760.179	1757.148	1759.626	1750.137	1755.525	1750.137
165.0	1795.129	1815.394	1794.828	1815.394	1795.129	1791.569	1793.493	1785.520	1791.689	1785.520
167.5	1825.124	1845.028	1823.368	1845.028	1825.124	1821.865	1823.548	1817.150	1823.861	1817.150
170.0	1849.803	1870.610	1846.965	1870.610	1849.803	1846.412	1849.984	1842.671	1850.344	1842.671
172.5	1869.936	1890.502	1865.582	1890.502	1869.936	1866.256	1870.116	1862.443	1870.550	1862.443
175.0	1884.392	1904.718	1879.257	1904.718	1884.392	1880.279	1884.332	1877.802	1885.787	1877.802
177.5	1892.499	1912.944	1887.724	1912.944	1892.499	1888.506	1893.040	1886.028	1894.856	1886.028
180.0	1896.756	1896.756	1896.756	1896.756	1896.756	1896.756	1896.756	1896.756	1896.756	1896.756

Vert.
Angles

Horizontal Angles

	<u>300</u>	<u>315</u>	<u>330</u>	<u>345</u>	<u>360</u>
0.0	966.241	966.241	966.241	966.241	966.241
2.5	963.596	962.755	962.220	974.042	959.629
5.0	957.518	957.452	957.285	969.139	955.000
7.5	947.914	948.115	948.883	960.945	947.948
10.0	934.610	936.059	939.586	954.760	941.563
12.5	917.352	923.864	923.964	937.569	923.497
15.0	898.678	904.015	904.181	918.528	906.098
17.5	877.653	880.104	882.689	897.536	886.216
20.0	851.058	853.843	859.921	874.868	864.389
22.5	819.989	825.532	833.961	848.100	840.406
25.0	788.017	796.579	805.649	823.048	817.504
27.5	756.754	766.859	776.463	791.811	783.790

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

30.0	722.458	734.180	743.790	756.079	753.829
32.5	688.103	701.473	709.161	727.434	721.256
35.0	658.618	664.999	677.056	693.679	689.478
37.5	616.604	629.501	642.061	657.544	656.167
40.0	580.569	592.894	606.026	621.306	618.754
42.5	545.003	557.933	569.654	584.263	583.557
45.0	508.396	523.006	533.786	549.168	548.026
47.5	472.764	486.600	498.321	511.486	511.486
50.0	436.795	450.363	461.345	475.954	474.745
52.5	403.513	415.402	425.813	439.650	438.340
55.0	370.937	381.046	392.094	403.782	404.420
57.5	338.091	347.864	356.798	367.377	370.097
60.0	305.616	314.079	324.322	332.852	335.170
62.5	272.296	281.918	291.712	299.973	302.122
65.0	244.079	252.888	260.317	266.809	269.103
67.5	215.368	221.648	229.259	235.210	236.553
70.0	188.441	193.156	197.975	204.615	206.771
72.5	160.049	164.458	169.620	170.144	175.396
75.0	135.226	137.017	141.910	145.674	147.058
77.5	109.595	111.519	115.106	118.649	120.701
80.0	85.579	87.980	89.575	92.524	94.116
82.5	64.136	65.136	66.749	67.934	68.699
85.0	41.060	41.775	42.165	43.723	44.512
87.5	18.848	19.902	20.631	21.595	23.260
90.0	4.361	3.622	3.828	3.369	3.459
92.5	50.123	49.089	50.510	50.450	48.466
95.0	103.300	102.139	103.192	101.625	101.335
97.5	142.344	142.785	144.273	146.898	146.583
100.0	193.441	193.853	194.699	199.011	200.601
102.5	243.946	247.283	249.056	252.654	253.108
105.0	299.650	302.299	305.384	308.812	308.323
107.5	357.031	359.359	362.425	367.033	370.214
110.0	415.361	420.150	425.224	429.118	430.618
112.5	478.662	482.157	488.725	494.833	489.076
115.0	541.328	560.075	552.334	560.619	552.152
117.5	607.791	615.229	617.226	627.446	622.789
120.0	675.283	683.448	686.895	695.603	689.435
122.5	741.082	752.209	757.834	764.366	762.007
125.0	809.360	824.842	830.830	837.300	831.072
127.5	883.444	892.576	900.619	909.208	903.885
130.0	955.956	966.842	974.340	981.900	973.554
132.5	1027.621	1038.869	1043.405	1055.138	1043.949
135.0	1104.184	1111.079	1114.284	1128.073	1113.739
137.5	1180.566	1179.175	1181.594	1197.258	1187.521
140.0	1251.563	1250.661	1252.718	1271.588	1255.376
142.5	1320.453	1320.092	1322.389	1336.954	1321.896
145.0	1386.252	1385.157	1387.876	1401.550	1390.966
147.5	1453.987	1454.047	1454.108	1465.894	1453.013
150.0	1513.797	1513.436	1512.883	1528.915	1516.755
152.5	1573.005	1574.941	1573.005	1588.002	1569.613
155.0	1627.727	1627.006	1627.366	1644.601	1623.434
157.5	1675.450	1674.415	1678.889	1697.880	1674.115
160.0	1719.167	1716.810	1721.044	1743.786	1722.739
162.5	1759.626	1757.148	1760.179	1782.729	1760.119
165.0	1793.493	1791.569	1795.129	1815.394	1794.828
167.5	1823.548	1821.865	1825.124	1845.028	1823.368

CANDELA TABULATION - (Cont.)

170.0	1849.984	1846.412	1849.803	1870.610	1846.965
172.5	1870.116	1866.256	1869.936	1890.502	1865.582
175.0	1884.332	1880.279	1884.392	1904.718	1879.257
177.5	1893.040	1888.506	1892.499	1912.944	1887.724
180.0	1896.756	1896.756	1896.756	1896.756	1896.756

IES INDOOR REPORT
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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	345.10	N.A.	4.80
0-30	712.61	N.A.	9.90
0-40	1129.15	N.A.	15.70
0-60	1874.56	N.A.	26.10
0-80	2272.42	N.A.	31.60
0-90	2319.7	N.A.	32.30
10-90	2228.8	N.A.	31.00
20-40	784.06	N.A.	10.90
20-50	1187.36	N.A.	16.50
40-70	996.34	N.A.	13.90
60-80	397.86	N.A.	5.50
70-80	146.93	N.A.	2.00
80-90	47.27	N.A.	0.70
90-110	428.58	N.A.	6.00
90-120	972.35	N.A.	13.50
90-130	1707.78	N.A.	23.80
90-150	3433.49	N.A.	47.80
90-180	4868.2	N.A.	67.70
110-180	4439.62	N.A.	61.80
0-180	7187.89	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

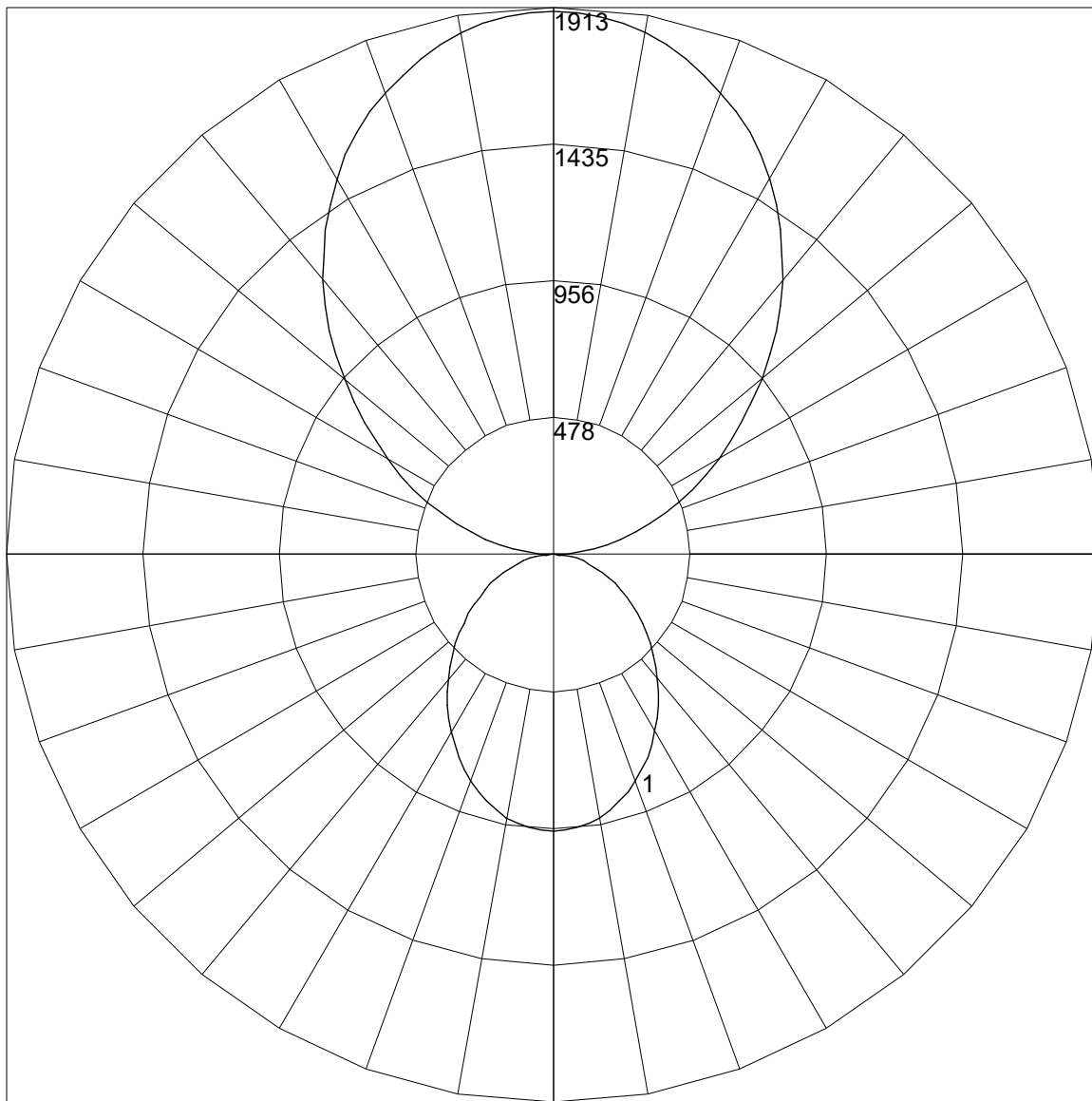
Zone	Lumens
0-10	90.89
10-20	254.20
20-30	367.51
30-40	416.54
40-50	403.30
50-60	342.11
60-70	250.93
70-80	146.93
80-90	47.27
90-100	107.20
100-110	321.38
110-120	543.78
120-130	735.42
130-140	857.08
140-150	868.63
150-160	749.59
160-170	506.23
170-180	178.90

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	94	90	86	82	84	81	78	75	64	62	60	49	48	47	35	34	34	27
2	85	78	72	67	77	71	66	61	56	53	50	43	41	39	31	30	28	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	19
4	71	61	53	47	64	55	49	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	41	59	49	42	37	40	35	31	31	27	24	22	20	18	15
6	60	49	41	35	54	44	37	32	36	31	27	28	24	21	20	18	16	13
7	56	44	36	31	50	40	33	28	32	27	24	25	22	19	18	16	14	11
8	52	40	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	13	12	9
10	45	33	26	21	40	30	24	20	25	20	17	19	16	14	15	12	11	8

POLAR GRAPH



Maximum Candela = 1912.944 Located At Horizontal Angle = 15, Vertical Angle = 177.5
1 - Vertical Plane Through Horizontal Angles (90 - 270)