

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 : HP-4-ID-RG-4FT-B-B-835-ASYTG-F-ITL90353 ITL89988.002.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90353 ITL89988.002 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]04/03/18

[ISSUEDATE]06/05/18

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-4-ID-RG-4ft-B-B-835-ASYTG-F

[_INPUT_ELECTRICAL]120.0 VOLTS, 36.7 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 39.0 WATTS

[_ABSOLUTE]LUMENS]4072

[OTHER]see www.finelite.com for source files ITL90353 and ITL89988. For further details on Finelite family correlation files, go to

[more]http://www.finelite.com/download_files/series_downloads/photometry_pdf/FL_Family_Correlation_WhitePaper.pdf

[_CONVERT] Photometric web converted from original test data

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4072
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	111
Total Luminaire Watts	36.7
Ballast Factor	1.00
CIE Type	General Diffuse
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)	0.33 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5295	4839	4485
55	4936	4264	3800
65	4489	3533	2937
75	3914	2459	1844
85	2858	1582	1477

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CANDELA TABULATION

	<u>0</u>	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>	<u>60</u>	<u>70</u>	<u>80</u>	<u>90</u>
0.0	763.530	763.529	763.529	763.529	763.529	763.529	763.529	763.529	763.529	763.529
2.5	762.010	761.784	761.559	761.672	761.897	762.010	762.010	762.010	762.010	762.010
5.0	758.463	758.237	758.012	757.956	757.956	758.069	758.294	758.519	758.744	758.970
7.5	752.890	752.665	752.439	752.383	752.383	752.383	752.383	752.327	752.102	751.876
10.0	745.797	744.671	743.545	743.601	744.051	743.939	743.263	742.531	741.631	740.730
12.5	735.663	734.312	732.961	732.624	732.624	731.948	730.597	729.190	727.614	726.037
15.0	724.010	721.759	719.507	718.775	718.550	717.537	715.735	713.821	711.569	709.318
17.5	709.824	707.122	704.420	702.900	701.774	699.972	697.495	695.075	692.823	690.571
20.0	693.105	689.952	686.799	684.660	682.859	680.269	676.891	673.851	671.825	669.798
22.5	674.865	671.487	668.109	665.070	662.143	658.652	654.599	650.996	648.744	646.492
25.0	655.105	651.277	647.449	643.621	639.793	635.402	630.448	626.170	623.918	621.666
27.5	633.826	629.547	625.269	620.484	615.530	610.351	604.947	600.274	597.797	595.320
30.0	610.520	606.241	601.963	596.502	590.647	584.680	578.600	573.309	570.381	567.454
32.5	586.200	581.922	577.643	571.338	564.358	557.490	550.734	544.767	541.164	537.561
35.0	561.881	556.927	551.973	544.992	537.336	529.793	522.362	515.831	512.003	508.175
37.5	536.548	530.919	525.289	517.464	508.907	500.463	492.131	485.038	481.660	478.283
40.0	510.202	504.347	498.493	489.767	480.084	471.077	462.745	455.539	451.711	447.883
42.5	483.856	477.325	470.796	461.732	451.824	442.253	433.021	425.140	421.312	417.484
45.0	457.003	450.023	443.042	433.359	422.776	412.530	402.622	394.290	390.687	387.085
47.5	430.150	422.494	414.838	404.648	393.615	382.918	372.561	363.891	360.288	356.685
50.0	402.284	394.178	386.072	375.263	363.553	352.407	341.824	332.985	329.382	325.780
52.5	373.912	365.580	357.248	346.046	333.886	322.514	311.931	303.092	299.490	295.887
55.0	345.539	337.207	328.875	317.166	304.331	292.622	282.038	273.199	269.597	265.994
57.5	317.673	308.891	300.109	288.118	275.058	263.236	252.652	243.813	240.211	236.608
60.0	289.300	280.293	271.286	259.070	245.784	233.850	223.266	214.427	210.825	207.222
62.5	260.928	251.695	242.463	230.022	216.511	204.576	194.218	185.605	182.227	178.850
65.0	231.542	222.760	213.977	201.649	188.138	176.316	166.183	157.795	154.642	151.490
67.5	203.675	194.668	185.661	173.276	159.765	148.281	138.824	130.942	127.790	124.637
70.0	175.809	166.802	157.795	145.748	132.688	121.541	112.309	104.709	102.007	99.305
72.5	148.450	139.668	130.886	119.402	107.017	96.546	87.989	80.896	78.194	75.492
75.0	123.624	114.391	105.159	94.069	82.360	73.015	66.034	60.517	59.391	58.265
77.5	98.291	89.509	80.727	70.594	60.011	53.367	50.666	48.583	48.358	48.132
80.0	73.972	65.640	57.308	49.990	43.010	39.181	38.506	37.999	37.999	37.999
82.5	52.692	44.135	35.579	31.751	29.499	28.148	27.697	27.359	27.359	27.359
85.0	30.399	24.994	19.590	17.733	17.057	16.607	16.382	16.157	15.932	15.706
87.5	9.626	8.050	6.474	5.911	5.686	5.573	5.573	5.517	5.292	5.066
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	34.482	34.996	34.996	33.967	31.394	30.364	31.394	30.879	25.733	11.322
95.0	73.081	74.625	75.139	73.595	74.110	78.742	81.315	73.081	54.553	29.335
97.5	115.282	116.826	121.973	127.119	135.354	140.500	131.751	109.621	79.771	47.863
100.0	178.584	180.643	187.334	195.568	202.773	199.171	178.584	145.132	105.504	66.905
102.5	241.372	243.945	251.665	262.473	268.649	255.782	223.874	179.614	129.692	86.976
105.0	299.528	303.645	318.055	334.524	337.612	314.967	271.222	213.066	153.367	106.533
107.5	369.006	377.240	401.944	418.413	411.722	376.726	317.026	243.945	175.497	127.119
110.0	464.731	477.083	499.728	505.389	484.803	434.882	357.684	270.707	197.112	147.705
112.5	581.043	587.219	598.027	591.336	557.369	487.376	391.651	294.896	218.727	168.806
115.0	687.062	689.120	691.693	672.651	620.671	529.578	418.927	317.026	239.828	189.907
117.5	786.389	784.331	776.096	740.071	668.019	559.428	440.543	337.612	261.958	211.008
120.0	866.161	859.985	840.428	788.448	698.899	578.984	458.041	357.684	283.059	234.167
122.5	923.802	912.480	881.600	817.269	715.367	592.880	475.025	377.755	306.218	257.841
125.0	957.769	943.359	903.730	829.106	723.087	602.144	489.435	397.312	328.349	280.486
127.5	969.606	952.622	907.848	829.620	724.631	610.378	503.845	416.869	350.993	303.645
130.0	964.459	946.961	900.128	822.930	724.116	618.098	519.285	436.426	372.609	326.290
132.5	948.505	932.036	886.747	814.181	723.087	626.332	535.239	457.012	395.768	349.449

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CANDELA TABULATION - (Cont.)

135.0	927.919	912.480	870.793	804.402	722.573	635.596	551.193	477.083	418.927	372.609
137.5	906.818	892.923	854.324	795.653	723.087	644.860	567.662	498.699	442.087	396.283
140.0	885.717	873.366	839.913	788.448	724.631	654.638	584.131	519.799	465.246	420.471
142.5	867.190	856.382	828.076	783.816	727.719	665.446	601.629	540.900	488.406	444.145
145.0	852.780	842.487	818.298	780.728	731.322	676.254	618.613	562.001	511.050	467.819
147.5	840.428	832.194	811.607	778.670	735.439	687.576	635.596	582.072	533.695	491.493
150.0	830.650	822.930	805.432	777.640	741.100	699.413	652.065	601.629	555.310	515.168
152.5	821.901	815.210	800.800	777.126	746.761	709.706	665.961	619.127	575.382	536.783
155.0	813.666	808.520	797.197	778.670	752.422	719.485	678.827	635.082	594.424	557.884
157.5	809.034	804.402	795.139	779.699	756.540	726.690	689.635	648.977	611.922	577.955
160.0	805.432	801.829	794.109	779.699	758.598	731.836	697.869	661.329	627.876	596.483
162.5	798.741	797.197	789.992	777.126	758.084	734.410	704.045	671.107	641.772	613.466
165.0	791.021	789.477	782.272	770.435	753.966	733.380	707.133	678.827	653.609	627.876
167.5	778.155	777.126	771.465	760.657	746.247	728.234	706.618	683.459	661.844	640.228
170.0	761.686	761.172	756.025	747.791	735.954	721.029	704.045	686.032	668.534	651.036
172.5	741.100	741.615	738.012	731.322	722.058	710.736	698.899	686.032	672.137	658.756
175.0	721.029	719.485	716.911	712.794	706.618	699.413	691.693	683.459	674.195	665.446
177.5	695.296	695.296	693.752	691.693	688.606	685.518	681.915	677.283	672.651	668.534
180.0	670.078	670.078	670.078	670.078	670.078	670.078	670.078	670.078	670.078	670.078

Vert. Angles

Horizontal Angles

	100	110	120	130	140	150	160	170	180
0.0	763.529	763.529	763.529	763.529	763.529	763.529	763.529	763.529	763.529
2.5	762.010	762.010	762.010	762.010	761.897	761.672	761.559	761.784	762.010
5.0	758.744	758.519	758.294	758.069	757.956	757.956	758.012	758.237	758.463
7.5	752.102	752.327	752.383	752.383	752.383	752.383	752.439	752.665	752.890
10.0	741.631	742.531	743.263	743.939	744.051	743.601	743.545	744.671	745.797
12.5	727.614	729.190	730.597	731.948	732.624	732.624	732.961	734.312	735.663
15.0	711.569	713.821	715.735	717.537	718.550	718.775	719.507	721.759	724.010
17.5	692.823	695.075	697.495	699.972	701.774	702.900	704.420	707.122	709.824
20.0	671.825	673.851	676.891	680.269	682.859	684.660	686.799	689.952	693.105
22.5	648.744	650.996	654.599	658.652	662.143	665.070	668.109	671.487	674.865
25.0	623.918	626.170	630.448	635.402	639.793	643.621	647.449	651.277	655.105
27.5	597.797	600.274	604.947	610.351	615.530	620.484	625.269	629.547	633.826
30.0	570.381	573.309	578.600	584.680	590.647	596.502	601.963	606.241	610.520
32.5	541.164	544.767	550.734	557.490	564.358	571.338	577.643	581.922	586.200
35.0	512.003	515.831	522.362	529.793	537.336	544.992	551.973	556.927	561.881
37.5	481.660	485.038	492.131	500.463	508.907	517.464	525.289	530.919	536.548
40.0	451.711	455.539	462.745	471.077	480.084	489.767	498.493	504.347	510.202
42.5	421.312	425.140	433.021	442.253	451.824	461.732	470.796	477.325	483.856
45.0	390.687	394.290	402.622	412.530	422.776	433.359	443.042	450.023	457.003
47.5	360.288	363.891	372.561	382.918	393.615	404.648	414.838	422.494	430.150
50.0	329.382	332.985	341.824	352.407	363.553	375.263	386.072	394.178	402.284
52.5	299.490	303.092	311.931	322.514	333.886	346.046	357.248	365.580	373.912
55.0	269.597	273.199	282.038	292.622	304.331	317.166	328.875	337.207	345.539
57.5	240.211	243.813	252.652	263.236	275.058	288.118	300.109	308.891	317.673
60.0	210.825	214.427	223.266	233.850	245.784	259.070	271.286	280.293	289.300
62.5	182.227	185.605	194.218	204.576	216.511	230.022	242.463	251.695	260.928
65.0	154.642	157.795	166.183	176.316	188.138	201.649	213.977	222.760	231.542
67.5	127.790	130.942	138.824	148.281	159.765	173.276	185.661	194.668	203.675
70.0	102.007	104.709	112.309	121.541	132.688	145.748	157.795	166.802	175.809
72.5	78.194	80.896	87.989	96.546	107.017	119.402	130.886	139.668	148.450
75.0	59.391	60.517	66.034	73.015	82.360	94.069	105.159	114.391	123.624
77.5	48.358	48.583	50.666	53.367	60.011	70.594	80.727	89.509	98.291
80.0	37.999	37.999	38.506	39.181	43.010	49.990	57.308	65.640	73.972

IES INDOOR REPORT

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CANDELA TABULATION - (Cont.)

82.5	27.359	27.359	27.697	28.148	29.499	31.751	35.579	44.135	52.692
85.0	15.932	16.157	16.382	16.607	17.057	17.733	19.590	24.994	30.399
87.5	5.292	5.517	5.573	5.573	5.686	5.911	6.474	8.050	9.626
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	19.557	27.791	35.511	43.231	48.892	53.009	56.612	58.156	59.700
95.0	35.511	44.775	55.583	66.905	75.654	81.315	86.462	88.006	90.064
97.5	51.465	60.729	73.595	88.520	99.843	108.592	115.797	118.370	120.943
100.0	68.449	77.713	91.608	107.048	119.914	130.722	139.986	143.588	147.191
102.5	85.432	94.696	109.621	126.605	139.986	149.764	157.998	161.601	165.204
105.0	103.445	110.650	125.575	142.559	156.969	168.292	177.555	180.129	182.702
107.5	121.458	126.090	140.500	157.998	172.923	185.275	195.053	197.627	199.685
110.0	138.956	141.015	155.425	173.438	189.392	202.773	213.066	215.639	217.698
112.5	156.454	155.425	169.835	188.878	205.861	219.757	230.565	233.652	236.226
115.0	174.982	170.865	184.246	203.288	220.786	235.711	247.548	250.636	253.724
117.5	194.539	186.819	198.656	217.184	234.682	251.665	265.046	268.134	271.222
120.0	214.610	203.288	213.066	230.050	247.548	265.561	279.971	284.088	288.206
122.5	235.196	219.757	227.477	242.401	259.385	278.942	294.896	300.043	304.675
125.0	255.268	235.711	240.343	253.209	269.678	289.750	306.733	312.909	319.085
127.5	275.339	252.180	253.724	263.502	278.942	299.013	316.512	324.231	331.951
130.0	295.411	268.134	266.590	273.795	286.662	305.704	322.173	330.922	339.671
132.5	315.482	284.088	279.971	284.603	294.896	311.880	326.290	334.010	342.244
135.0	337.098	302.616	294.381	294.896	302.616	316.512	328.863	336.068	343.273
137.5	359.228	322.173	310.336	306.733	310.336	321.658	331.951	337.612	343.273
140.0	381.872	343.273	326.805	318.055	317.541	326.290	334.010	338.642	343.273
142.5	404.517	364.889	344.303	329.378	325.261	330.922	336.583	339.671	343.273
145.0	427.676	386.504	361.286	341.215	332.980	336.583	339.671	341.729	343.788
147.5	450.321	408.120	379.299	355.111	343.273	343.788	344.303	345.332	346.361
150.0	473.995	431.794	399.885	371.579	355.625	352.537	349.964	350.479	350.479
152.5	497.669	455.982	423.045	392.680	373.123	363.860	357.169	356.140	355.111
155.0	520.829	481.715	448.777	418.413	395.253	379.814	367.462	365.404	363.345
157.5	543.473	507.448	476.054	445.689	420.471	400.915	385.475	380.843	376.726
160.0	565.089	532.666	502.301	472.966	448.777	429.735	413.781	407.605	401.429
162.5	585.160	556.854	528.548	500.757	478.113	460.614	446.204	440.543	434.367
165.0	603.173	578.984	554.796	531.122	510.536	493.037	478.627	473.481	468.334
167.5	619.127	599.056	579.499	559.942	542.444	527.005	513.624	508.477	503.330
170.0	633.538	617.583	602.144	587.219	573.838	562.516	553.252	549.135	545.017
172.5	645.889	633.538	622.215	611.408	602.144	594.424	588.248	585.160	582.587
175.0	656.697	647.948	640.743	634.052	627.876	623.245	619.127	617.583	615.525
177.5	664.417	659.785	656.182	652.580	650.006	647.433	645.375	644.345	643.316
180.0	670.078	670.078	670.078	670.078	670.078	670.078	670.078	670.078	670.078

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-B-B-835-ASYTG-F-ITL90353 ITL89988.002.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	273.76	N.A.	6.70
0-30	567.00	N.A.	13.90
0-40	900.66	N.A.	22.10
0-60	1493.19	N.A.	36.70
0-80	1767.52	N.A.	43.40
0-90	1789.5	N.A.	43.90
10-90	1717.58	N.A.	42.20
20-40	626.90	N.A.	15.40
20-50	950.08	N.A.	23.30
40-70	776.77	N.A.	19.10
60-80	274.33	N.A.	6.70
70-80	90.09	N.A.	2.20
80-90	21.98	N.A.	0.50
90-110	297.32	N.A.	7.30
90-120	653.48	N.A.	16.00
90-130	1063.74	N.A.	26.10
90-150	1777.81	N.A.	43.70
90-180	2282.96	N.A.	56.10
110-180	1985.64	N.A.	48.80
0-180	4072.45	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	71.92
10-20	201.84
20-30	293.24
30-40	333.66
40-50	323.18
50-60	269.35
60-70	184.24
70-80	90.09
80-90	21.98
90-100	75.33
100-110	221.99
110-120	356.16
120-130	410.26
130-140	383.40
140-150	330.68
150-160	264.28
160-170	177.64
170-180	63.22

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-B-B-835-ASYTG-F-ITL90353 ITL89988.002.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

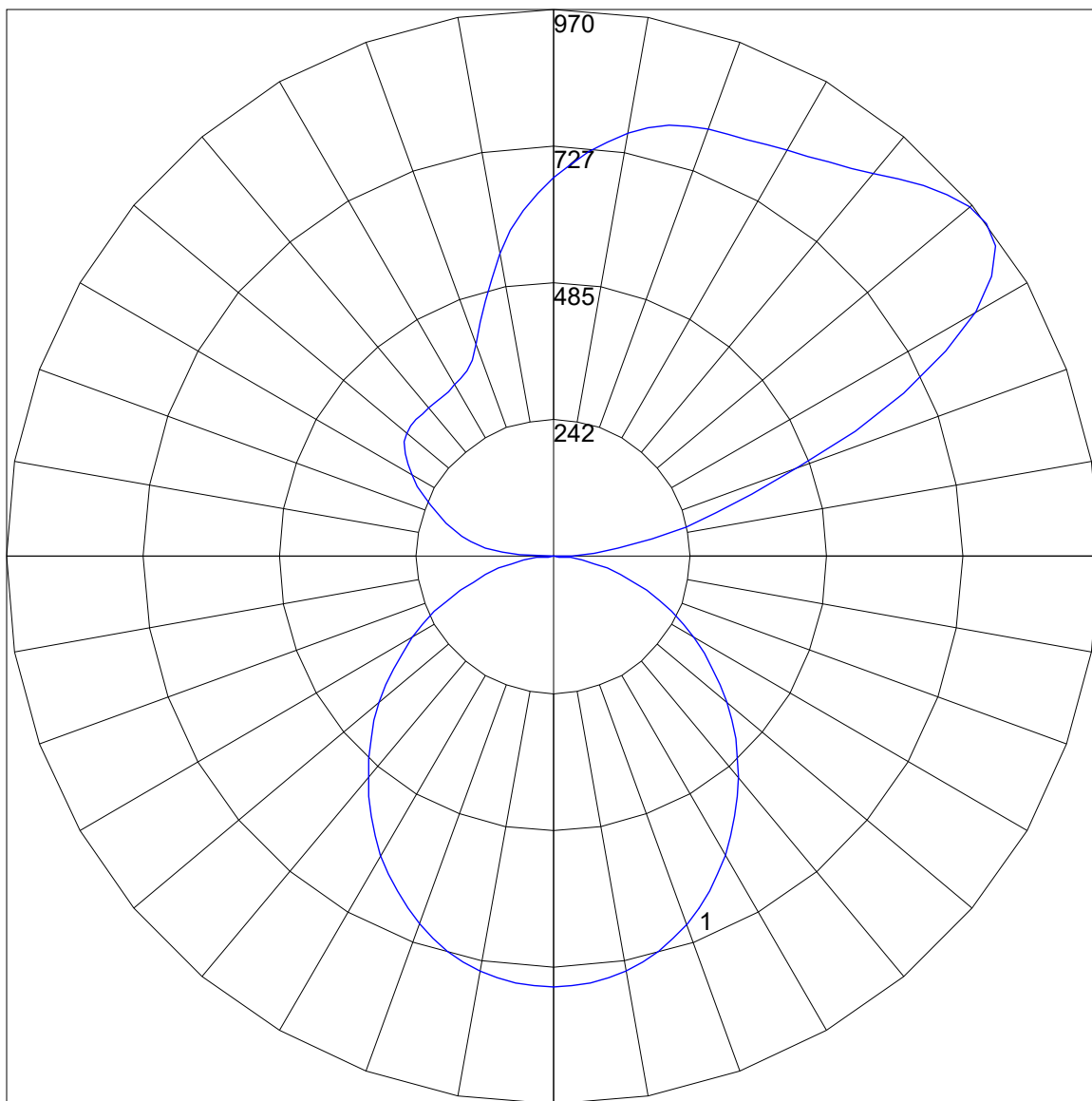
Effective Floor Cavity Reflectance 0.20

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	93	89	85	88	85	82	79	70	68	66	57	56	54	45	44	43	38
2	88	81	75	70	81	74	69	65	62	58	55	51	48	46	40	38	37	32
3	81	71	64	59	74	66	60	55	55	50	47	45	42	39	36	33	32	27
4	74	63	56	50	67	58	52	46	49	44	40	40	36	33	32	29	27	24
5	68	56	49	43	62	52	45	40	44	39	34	36	32	29	29	26	24	21
6	62	51	43	37	57	47	40	35	39	34	30	33	29	26	26	23	21	18
7	58	46	38	33	53	42	35	31	36	30	27	30	26	23	24	21	19	16
8	54	42	34	29	49	38	32	27	33	27	24	27	23	20	22	19	17	15
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	20	17	15	13
10	47	35	28	23	43	32	26	22	28	23	19	23	19	16	19	16	14	12

IES INDOOR REPORT

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POLAR GRAPH



Maximum Candela = 969.606 Located At Horizontal Angle = 0, Vertical Angle = 127.5

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)