

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-2-ID-RG-4FT-S-H-835-ASY-TG-ITL90352 ITL89599.014.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90352 ITL89599.014 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]04/04/18

[ISSUEDATE]05/31/18

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-2-ID-RG-4ft-S-H-835-ASY-F

[_INPUT_ELECTRICAL]120.0 VOLTS, 42.6 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 44.8 WATTS

[_ABSOLUTE]LUMENS]4006

[OTHER]see www.finelite.com for source files ITL90352 and ITL89599. 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	3248
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	76
Total Luminaire Watts	42.6
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)	0.18 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9449	6769	5327
55	8501	5422	4155
65	7526	4151	3162
75	6401	3200	2838
85	5111	2555	2331

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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	787.009	787.009	787.009	787.009	787.009	787.009	787.009	787.009	787.009	787.009
2.5	785.979	785.979	785.465	785.465	784.950	784.950	784.435	784.435	783.920	783.920
5.0	782.376	781.861	781.347	780.317	779.288	778.258	776.714	775.685	774.655	774.141
7.5	776.199	775.170	774.141	771.052	767.964	764.876	762.302	759.729	758.699	757.155
10.0	767.449	764.876	761.787	757.670	753.037	747.890	742.743	738.625	736.566	734.507
12.5	756.640	751.493	746.346	740.169	732.963	725.757	718.551	712.374	709.286	706.197
15.0	742.743	735.537	728.330	719.580	709.801	700.021	690.241	682.006	677.888	673.770
17.5	727.301	718.036	708.771	696.418	683.550	671.196	659.358	648.549	643.401	638.254
20.0	709.286	697.447	686.123	671.196	655.240	640.313	625.901	613.548	607.371	601.194
22.5	687.668	674.285	660.902	643.401	624.871	607.371	590.385	575.973	568.767	562.076
25.0	665.534	649.578	634.136	614.062	592.959	572.885	553.840	537.884	530.678	523.471
27.5	641.343	623.327	605.827	583.179	559.502	537.369	517.295	499.794	492.073	484.353
30.0	615.606	596.047	576.488	552.296	526.045	501.853	479.720	461.190	453.984	446.263
32.5	587.297	567.223	547.149	520.898	492.588	466.337	442.660	423.615	416.409	409.203
35.0	558.987	537.884	516.265	488.470	458.616	431.851	407.659	387.585	379.864	371.629
37.5	530.163	507.515	485.382	456.558	425.160	397.365	373.173	353.099	345.378	337.657
40.0	500.309	477.147	453.469	424.130	392.217	364.423	340.745	320.671	313.465	305.744
42.5	470.455	446.778	423.101	392.732	360.305	332.510	309.347	290.303	283.097	275.890
45.0	440.087	415.895	391.703	361.334	328.907	301.627	279.494	261.478	254.787	248.096
47.5	409.203	385.526	361.849	331.480	299.053	272.802	251.699	234.198	228.536	222.874
50.0	378.835	355.158	331.480	301.627	270.229	244.493	224.933	208.977	203.830	198.682
52.5	350.525	325.818	301.627	272.802	242.434	218.756	200.741	186.329	181.697	177.064
55.0	321.186	296.479	271.773	244.493	216.183	193.535	177.579	164.711	161.108	156.990
57.5	292.362	268.170	243.978	217.727	190.447	169.858	155.960	144.637	141.548	137.945
60.0	264.052	240.375	216.698	191.991	166.770	147.725	135.886	126.107	123.018	119.930
62.5	236.257	213.609	190.447	167.284	144.122	127.651	116.842	108.606	105.518	102.944
65.0	209.492	187.358	165.740	144.122	123.018	108.091	98.826	91.106	89.561	88.017
67.5	182.211	161.623	141.548	122.504	103.459	91.106	84.414	79.267	78.752	78.238
70.0	156.990	137.945	118.386	101.400	85.444	75.149	71.546	68.973	68.458	67.943
72.5	132.798	114.783	97.282	82.870	70.002	62.796	60.737	59.193	58.163	57.649
75.0	109.121	92.650	76.694	65.884	57.134	51.987	50.443	48.898	48.384	48.384
77.5	88.017	73.090	57.649	49.928	44.781	41.692	40.663	39.633	39.119	39.119
80.0	67.428	54.560	41.178	36.031	33.457	31.913	30.883	30.369	30.369	30.369
82.5	47.354	38.089	28.824	25.736	24.192	22.648	22.133	21.618	21.618	21.618
85.0	29.339	23.677	18.015	15.956	14.927	14.412	13.898	13.383	13.383	13.383
87.5	12.353	10.294	7.721	6.691	6.177	6.177	5.662	5.662	5.662	5.662
90.0	0.000	0.000	0.000	0.000	4.913	8.189	5.732	3.685	1.638	0.000
92.5	31.936	32.346	31.936	30.299	27.433	25.795	24.566	22.519	19.653	9.827
95.0	63.873	64.692	63.873	61.825	59.778	57.731	54.865	49.952	41.353	24.157
97.5	97.037	97.856	96.628	96.628	96.628	95.399	90.077	79.841	63.054	39.306
100.0	125.698	127.745	130.202	136.343	140.847	138.800	128.974	110.958	84.345	54.865
102.5	161.319	165.823	174.012	186.704	193.665	187.933	169.917	140.847	103.998	70.014
105.0	210.042	218.641	235.428	250.987	253.853	240.750	210.861	168.280	122.422	85.573
107.5	285.380	295.206	312.812	323.457	321.001	296.844	250.168	192.437	139.619	101.541
110.0	381.598	386.511	397.566	402.070	388.558	346.795	282.923	213.318	155.996	117.509
112.5	476.588	479.454	485.186	478.635	447.927	386.921	308.308	232.152	171.965	133.477
115.0	568.712	567.893	564.208	541.689	492.965	417.219	329.190	248.939	188.342	150.264
117.5	642.820	636.679	623.577	588.774	525.311	438.100	345.158	264.498	204.720	167.461
120.0	695.638	687.040	665.340	619.482	544.964	452.431	359.079	279.647	221.507	184.248
122.5	729.621	718.976	690.725	636.269	556.838	463.076	371.362	294.797	238.294	201.035
125.0	745.590	734.125	701.780	643.230	562.980	471.675	383.236	309.946	254.672	217.822
127.5	748.865	736.991	702.598	643.639	565.846	479.044	395.519	325.095	271.049	234.200
130.0	743.133	731.259	697.276	640.773	567.074	486.005	408.211	340.654	288.245	251.396
132.5	732.487	722.252	689.906	636.269	568.302	493.375	420.495	356.622	305.442	268.592

IES INDOOR REPORT

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CANDELA TABULATION - (Cont.)

135.0	720.614	710.378	680.489	631.765	569.940	501.154	432.778	371.771	322.639	286.198
137.5	708.740	698.913	671.890	628.080	572.397	509.343	445.880	387.330	339.425	303.804
140.0	696.047	688.268	664.521	625.214	574.853	517.532	458.572	402.889	356.212	321.001
142.5	685.812	679.260	658.379	623.577	577.719	525.721	471.265	418.038	373.409	338.197
145.0	677.213	671.481	652.647	621.529	580.995	534.319	483.548	432.368	389.377	355.394
147.5	669.434	664.111	647.734	619.892	584.270	542.098	495.012	446.289	405.345	372.181
150.0	660.836	656.741	642.820	618.663	587.546	549.468	504.839	458.982	420.495	389.377
152.5	653.875	650.190	638.726	618.254	590.003	555.200	513.847	470.856	434.825	405.345
155.0	648.143	644.458	634.631	616.616	591.231	559.295	520.807	481.092	447.927	420.495
157.5	642.411	638.726	630.128	613.750	590.003	560.932	526.130	490.509	460.620	434.825
160.0	634.631	630.947	622.758	608.427	587.136	560.932	529.815	497.879	471.265	447.927
162.5	624.395	621.120	613.750	600.648	581.404	558.885	531.862	504.430	481.092	459.801
165.0	611.293	608.018	601.057	590.003	574.034	554.791	532.271	508.933	489.280	470.446
167.5	595.735	592.869	587.136	577.719	564.617	549.059	531.043	511.800	495.422	479.454
170.0	577.719	575.263	570.759	563.389	553.972	542.098	527.768	513.028	500.335	486.414
172.5	559.295	557.657	554.381	549.468	542.098	533.091	523.264	512.619	502.792	492.147
175.0	539.641	538.413	535.957	533.091	528.587	523.264	517.122	510.162	503.611	497.060
177.5	519.579	519.169	518.351	516.713	515.075	512.619	509.343	506.067	502.792	499.516
180.0	500.335	500.335	500.335	500.335	500.335	500.335	500.335	500.335	500.335	500.335

Vert. Angles

Horizontal Angles

	100	110	120	130	140	150	160	170	180
0.0	787.009	787.009	787.009	787.009	787.009	787.009	787.009	787.009	787.009
2.5	783.920	784.435	784.435	784.950	784.950	785.465	785.465	785.979	785.979
5.0	774.655	775.685	776.714	778.258	779.288	780.317	781.347	781.861	782.376
7.5	758.699	759.729	762.302	764.876	767.964	771.052	774.141	775.170	776.199
10.0	736.566	738.625	742.743	747.890	753.037	757.670	761.787	764.876	767.449
12.5	709.286	712.374	718.551	725.757	732.963	740.169	746.346	751.493	756.640
15.0	677.888	682.006	690.241	700.021	709.801	719.580	728.330	735.537	742.743
17.5	643.401	648.549	659.358	671.196	683.550	696.418	708.771	718.036	727.301
20.0	607.371	613.548	625.901	640.313	655.240	671.196	686.123	697.447	709.286
22.5	568.767	575.973	590.385	607.371	624.871	643.401	660.902	674.285	687.668
25.0	530.678	537.884	553.840	572.885	592.959	614.062	634.136	649.578	665.534
27.5	492.073	499.794	517.295	537.369	559.502	583.179	605.827	623.327	641.343
30.0	453.984	461.190	479.720	501.853	526.045	552.296	576.488	596.047	615.606
32.5	416.409	423.615	442.660	466.337	492.588	520.898	547.149	567.223	587.297
35.0	379.864	387.585	407.659	431.851	458.616	488.470	516.265	537.884	558.987
37.5	345.378	353.099	373.173	397.365	425.160	456.558	485.382	507.515	530.163
40.0	313.465	320.671	340.745	364.423	392.217	424.130	453.469	477.147	500.309
42.5	283.097	290.303	309.347	332.510	360.305	392.732	423.101	446.778	470.455
45.0	254.787	261.478	279.494	301.627	328.907	361.334	391.703	415.895	440.087
47.5	228.536	234.198	251.699	272.802	299.053	331.480	361.849	385.526	409.203
50.0	203.830	208.977	224.933	244.493	270.229	301.627	331.480	355.158	378.835
52.5	181.697	186.329	200.741	218.756	242.434	272.802	301.627	325.818	350.525
55.0	161.108	164.711	177.579	193.535	216.183	244.493	271.773	296.479	321.186
57.5	141.548	144.637	155.960	169.858	190.447	217.727	243.978	268.170	292.362
60.0	123.018	126.107	135.886	147.725	166.770	191.991	216.698	240.375	264.052
62.5	105.518	108.606	116.842	127.651	144.122	167.284	190.447	213.609	236.257
65.0	89.561	91.106	98.826	108.091	123.018	144.122	165.740	187.358	209.492
67.5	78.752	79.267	84.414	91.106	103.459	122.504	141.548	161.623	182.211
70.0	68.458	68.973	71.546	75.149	85.444	101.400	118.386	137.945	156.990
72.5	58.163	59.193	60.737	62.796	70.002	82.870	97.282	114.783	132.798
75.0	48.384	48.898	50.443	51.987	57.134	65.884	76.694	92.650	109.121
77.5	39.119	39.633	40.663	41.692	44.781	49.928	57.649	73.090	88.017
80.0	30.369	30.369	30.883	31.913	33.457	36.031	41.178	54.560	67.428

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-S-H-835-ASY-TG-ITL90352 ITL89599.014.IES****CANDELA TABULATION - (Cont.)**

82.5	21.618	21.618	22.133	22.648	24.192	25.736	28.824	38.089	47.354
85.0	13.383	13.383	13.898	14.412	14.927	15.956	18.015	23.677	29.339
87.5	5.662	5.662	5.662	6.177	6.177	6.691	7.721	10.294	12.353
90.0	1.638	3.685	5.323	7.370	8.598	9.827	10.645	11.055	11.055
92.5	12.693	13.511	15.149	16.378	17.606	18.015	18.425	18.834	18.834
95.0	26.614	27.842	29.889	32.346	33.574	33.983	33.983	33.165	32.346
97.5	40.125	41.763	45.038	48.723	51.180	52.408	53.227	52.408	51.999
100.0	54.046	56.093	59.778	64.282	67.558	70.424	72.471	72.061	72.061
102.5	68.376	71.652	76.156	81.069	85.163	88.029	90.077	90.486	90.486
105.0	82.297	86.801	93.352	100.313	104.407	106.454	107.683	107.273	107.273
107.5	97.037	101.132	107.683	115.462	120.785	123.651	125.698	124.879	124.060
110.0	111.368	113.824	121.604	131.021	137.162	140.028	142.485	142.485	142.485
112.5	125.698	126.517	135.115	146.170	153.540	157.634	160.500	160.500	160.500
115.0	140.028	139.209	147.808	160.091	169.099	174.831	178.925	179.335	179.744
117.5	154.359	150.674	159.681	173.193	183.429	190.799	196.122	196.940	197.759
120.0	169.099	162.957	171.555	185.067	196.122	205.129	212.499	213.318	214.546
122.5	183.429	174.831	182.610	196.122	207.995	218.641	227.239	228.467	230.105
125.0	198.578	187.523	194.074	206.358	218.641	231.333	241.160	242.798	244.435
127.5	213.318	199.397	204.310	215.365	228.058	241.979	253.034	255.490	257.947
130.0	228.058	211.271	214.137	223.554	235.837	250.168	262.041	266.136	269.821
132.5	243.617	223.145	223.964	231.743	242.388	256.309	267.774	273.096	278.010
135.0	258.766	235.018	233.381	239.113	248.530	261.223	271.868	277.191	282.104
137.5	274.325	247.302	243.207	246.073	253.443	264.908	274.734	279.238	283.742
140.0	290.293	260.813	253.443	253.853	258.766	268.183	276.372	280.466	284.561
142.5	306.670	275.962	265.317	261.632	263.679	271.049	277.191	280.466	283.742
145.0	323.867	291.930	278.010	270.230	268.592	273.915	278.010	280.466	282.923
147.5	340.654	308.308	290.702	278.419	273.915	276.781	279.647	281.285	282.923
150.0	357.031	323.457	303.395	287.427	280.057	281.285	282.104	282.923	283.332
152.5	373.409	340.244	317.316	298.072	287.427	286.198	284.970	284.970	284.970
155.0	389.377	357.031	332.875	311.584	298.481	293.568	289.474	288.655	287.427
157.5	404.936	373.000	349.661	328.780	313.631	304.214	296.844	294.797	293.159
160.0	420.495	391.424	368.905	348.843	332.056	318.954	308.308	305.033	301.757
162.5	435.234	409.440	388.149	368.496	352.118	339.016	327.961	322.639	317.725
165.0	449.565	427.864	407.802	388.558	373.000	361.945	352.528	347.205	342.292
167.5	461.848	443.833	426.227	409.030	395.109	384.464	375.866	371.771	368.086
170.0	472.493	458.163	444.651	431.140	419.676	409.440	401.251	397.156	393.471
172.5	481.911	471.675	461.848	452.431	443.833	436.463	430.321	427.455	424.180
175.0	490.099	483.139	476.997	470.856	465.533	461.029	457.344	455.297	453.659
177.5	496.241	492.556	489.690	486.824	484.777	482.729	480.682	479.863	478.635
180.0	500.335	500.335	500.335	500.335	500.335	500.335	500.335	500.335	500.335

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-S-H-835-ASY-TG-ITL90352 ITL89599.014.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	271.45	N.A.	8.40
0-30	540.94	N.A.	16.70
0-40	823.93	N.A.	25.40
0-60	1272.16	N.A.	39.20
0-80	1468.49	N.A.	45.20
0-90	1487.9	N.A.	45.80
10-90	1414.5	N.A.	43.50
20-40	552.49	N.A.	17.00
20-50	804.90	N.A.	24.80
40-70	576.87	N.A.	17.80
60-80	196.33	N.A.	6.00
70-80	67.69	N.A.	2.10
80-90	19.42	N.A.	0.60
90-110	211.58	N.A.	6.50
90-120	491.86	N.A.	15.10
90-130	813.33	N.A.	25.00
90-150	1375.91	N.A.	42.40
90-180	1760.52	N.A.	54.20
110-180	1548.94	N.A.	47.70
0-180	3248.42	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	73.41
10-20	198.04
20-30	269.50
30-40	282.99
40-50	252.41
50-60	195.82
60-70	128.64
70-80	67.69
80-90	19.42
90-100	49.15
100-110	162.43
110-120	280.28
120-130	321.48
130-140	302.25
140-150	260.32
150-160	204.06
160-170	133.45
170-180	47.10

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-S-H-835-ASY-TG-ITL90352 ITL89599.014.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

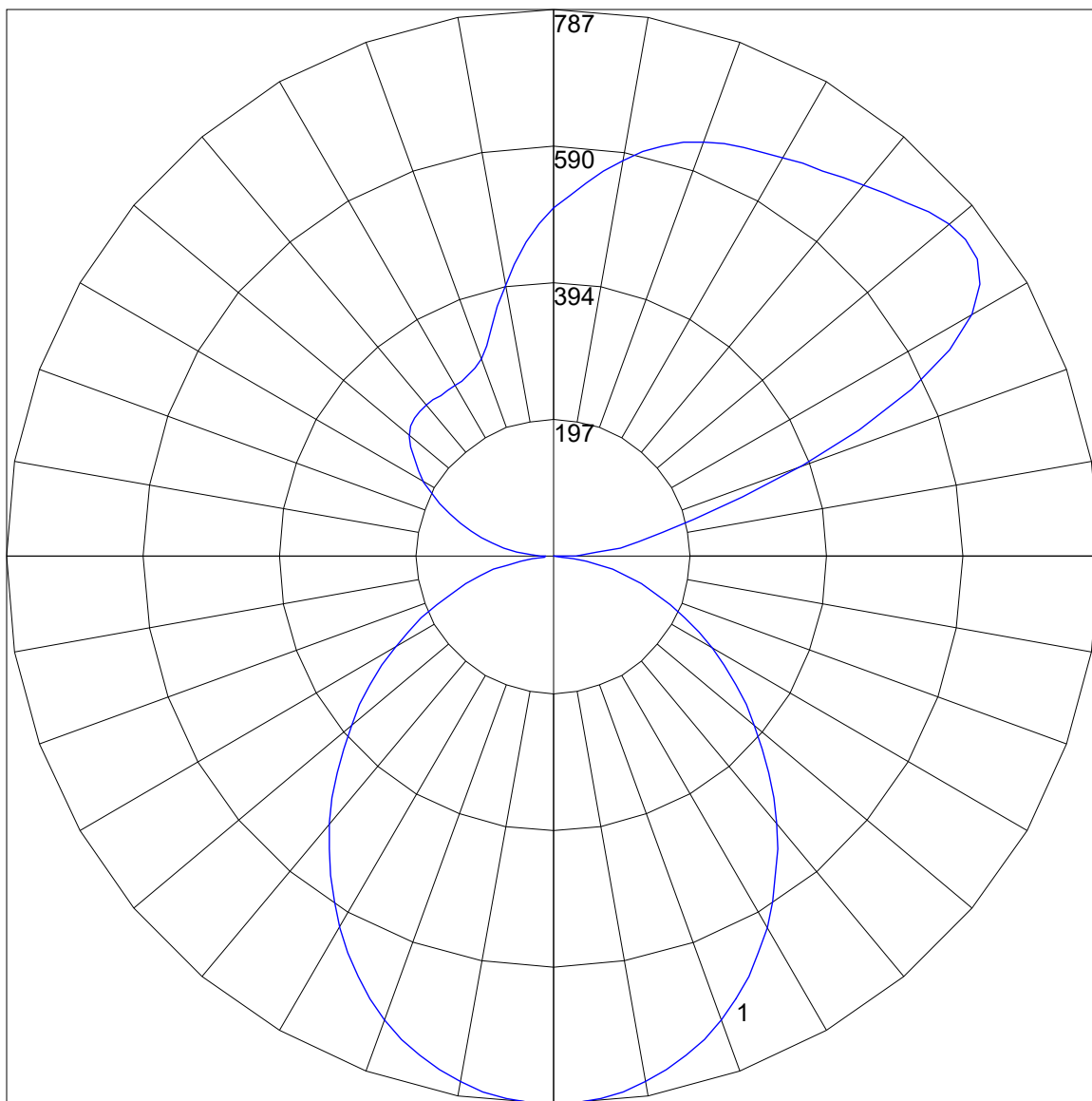
Effective Floor Cavity Reflectance 0.20

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	81	81	81	66	66	66	52	52	52	46
1	97	93	90	86	89	86	83	80	72	70	67	59	57	56	47	46	45	40
2	89	82	76	71	82	76	71	66	63	60	57	52	50	48	42	40	39	34
3	82	73	66	60	75	67	61	56	56	52	48	47	44	41	38	35	34	29
4	75	65	57	51	69	60	53	48	51	46	42	42	38	35	34	32	29	26
5	69	58	50	44	63	54	47	42	45	40	36	38	34	31	31	28	26	23
6	64	52	44	39	58	48	41	36	41	36	32	35	31	28	28	25	23	20
7	59	47	40	34	54	44	37	32	38	32	28	32	28	25	26	23	21	18
8	55	43	35	30	50	40	33	29	34	29	25	29	25	22	24	21	19	17
9	51	39	32	27	47	37	30	26	32	26	23	27	23	20	22	19	17	15
10	48	36	29	25	44	34	27	23	29	24	21	25	21	18	21	18	16	14

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-S-H-835-ASY-TG-ITL90352 ITL89599.014.IES

POLAR GRAPH



Maximum Candela = 787.009 Located At Horizontal Angle = 0, Vertical Angle = 0

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