

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-V-V-835-ASY-TG-ITL90352 ITL89599.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90352 ITL89599

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]04/04/18

[ISSUEDATE]05/17/18

[MANUFAC]FINELITE, INC.

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

[_INPUT_ELECTRICAL]120.0 VOLTS, 73.2 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 74.8 WATTS

[_ABSOLUTE]LUMENS]7191

[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	7191
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	98
Total Luminaire Watts	73.2
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	18357	13151	10349
55	16517	10535	8073
65	14621	8065	6143
75	12436	6218	5514
85	9929	4964	4529

IES INDOOR REPORT

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

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	1529	1529	1529	1529	1529	1529	1529	1529	1529	1529
2.5	1527	1527	1526	1526	1525	1525	1524	1524	1523	1523
5.0	1520	1519	1518	1516	1514	1512	1509	1507	1505	1504
7.5	1508	1506	1504	1498	1492	1486	1481	1476	1474	1471
10.0	1491	1486	1480	1472	1463	1453	1443	1435	1431	1427
12.5	1470	1460	1450	1438	1424	1410	1396	1384	1378	1372
15.0	1443	1429	1415	1398	1379	1360	1341	1325	1317	1309
17.5	1413	1395	1377	1353	1328	1304	1281	1260	1250	1240
20.0	1378	1355	1333	1304	1273	1244	1216	1192	1180	1168
22.5	1336	1310	1284	1250	1214	1180	1147	1119	1105	1092
25.0	1293	1262	1232	1193	1152	1113	1076	1045	1031	1017
27.5	1246	1211	1177	1133	1087	1044	1005	971	956	941
30.0	1196	1158	1120	1073	1022	975	932	896	882	867
32.5	1141	1102	1063	1012	957	906	860	823	809	795
35.0	1086	1045	1003	949	891	839	792	753	738	722
37.5	1030	986	943	887	826	772	725	686	671	656
40.0	972	927	881	824	762	708	662	623	609	594
42.5	914	868	822	763	700	646	601	564	550	536
45.0	855	808	761	702	639	586	543	508	495	482
47.5	795	749	703	644	581	530	489	455	444	433
50.0	736	690	644	586	525	475	437	406	396	386
52.5	681	633	586	530	471	425	390	362	353	344
55.0	624	576	528	475	420	376	345	320	313	305
57.5	568	521	474	423	370	330	303	281	275	268
60.0	513	467	421	373	324	287	264	245	239	233
62.5	459	415	370	325	280	248	227	211	205	200
65.0	407	364	322	280	239	210	192	177	174	171
67.5	354	314	275	238	201	177	164	154	153	152
70.0	305	268	230	197	166	146	139	134	133	132
72.5	258	223	189	161	136	122	118	115	113	112
75.0	212	180	149	128	111	101	98	95	94	94
77.5	171	142	112	97	87	81	79	77	76	76
80.0	131	106	80	70	65	62	60	59	59	59
82.5	92	74	56	50	47	44	43	42	42	42
85.0	57	46	35	31	29	28	27	26	26	26
87.5	24	20	15	13	12	12	11	11	11	11
90.0	0	0	0	0	12	20	14	9	4	0
92.5	78	79	78	74	67	63	60	55	48	24
95.0	156	158	156	151	146	141	134	122	101	59
97.5	237	239	236	236	236	233	220	195	154	96
100.0	307	312	318	333	344	339	315	271	206	134
102.5	394	405	425	456	473	459	415	344	254	171
105.0	513	534	575	613	620	588	515	411	299	209
107.5	697	721	764	790	784	725	611	470	341	248
110.0	932	944	971	982	949	847	691	521	381	287
112.5	1164	1171	1185	1169	1094	945	753	567	420	326
115.0	1389	1387	1378	1323	1204	1019	804	608	460	367
117.5	1570	1555	1523	1438	1283	1070	843	646	500	409
120.0	1699	1678	1625	1513	1331	1105	877	683	541	450
122.5	1782	1756	1687	1554	1360	1131	907	720	582	491
125.0	1821	1793	1714	1571	1375	1152	936	757	622	532
127.5	1829	1800	1716	1572	1382	1170	966	794	662	572
130.0	1815	1786	1703	1565	1385	1187	997	832	704	614
132.5	1789	1764	1685	1554	1388	1205	1027	871	746	656

IES INDOOR REPORT

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

CANDELA TABULATION - (Cont.)

135.0	1760	1735	1662	1543	1392	1224	1057	908	788	699
137.5	1731	1707	1641	1534	1398	1244	1089	946	829	742
140.0	1700	1681	1623	1527	1404	1264	1120	984	870	784
142.5	1675	1659	1608	1523	1411	1284	1151	1021	912	826
145.0	1654	1640	1594	1518	1419	1305	1181	1056	951	868
147.5	1635	1622	1582	1514	1427	1324	1209	1090	990	909
150.0	1614	1604	1570	1511	1435	1342	1233	1121	1027	951
152.5	1597	1588	1560	1510	1441	1356	1255	1150	1062	990
155.0	1583	1574	1550	1506	1444	1366	1272	1175	1094	1027
157.5	1569	1560	1539	1499	1441	1370	1285	1198	1125	1062
160.0	1550	1541	1521	1486	1434	1370	1294	1216	1151	1094
162.5	1525	1517	1499	1467	1420	1365	1299	1232	1175	1123
165.0	1493	1485	1468	1441	1402	1355	1300	1243	1195	1149
167.5	1455	1448	1434	1411	1379	1341	1297	1250	1210	1171
170.0	1411	1405	1394	1376	1353	1324	1289	1253	1222	1188
172.5	1366	1362	1354	1342	1324	1302	1278	1252	1228	1202
175.0	1318	1315	1309	1302	1291	1278	1263	1246	1230	1214
177.5	1269	1268	1266	1262	1258	1252	1244	1236	1228	1220
180.0	1222	1222	1222	1222	1222	1222	1222	1222	1222	1222

Vert. Angles

Horizontal Angles

	<u>100</u>	<u>110</u>	<u>120</u>	<u>130</u>	<u>140</u>	<u>150</u>	<u>160</u>	<u>170</u>	<u>180</u>
0.0	1529	1529	1529	1529	1529	1529	1529	1529	1529
2.5	1523	1524	1524	1525	1525	1526	1526	1527	1527
5.0	1505	1507	1509	1512	1514	1516	1518	1519	1520
7.5	1474	1476	1481	1486	1492	1498	1504	1506	1508
10.0	1431	1435	1443	1453	1463	1472	1480	1486	1491
12.5	1378	1384	1396	1410	1424	1438	1450	1460	1470
15.0	1317	1325	1341	1360	1379	1398	1415	1429	1443
17.5	1250	1260	1281	1304	1328	1353	1377	1395	1413
20.0	1180	1192	1216	1244	1273	1304	1333	1355	1378
22.5	1105	1119	1147	1180	1214	1250	1284	1310	1336
25.0	1031	1045	1076	1113	1152	1193	1232	1262	1293
27.5	956	971	1005	1044	1087	1133	1177	1211	1246
30.0	882	896	932	975	1022	1073	1120	1158	1196
32.5	809	823	860	906	957	1012	1063	1102	1141
35.0	738	753	792	839	891	949	1003	1045	1086
37.5	671	686	725	772	826	887	943	986	1030
40.0	609	623	662	708	762	824	881	927	972
42.5	550	564	601	646	700	763	822	868	914
45.0	495	508	543	586	639	702	761	808	855
47.5	444	455	489	530	581	644	703	749	795
50.0	396	406	437	475	525	586	644	690	736
52.5	353	362	390	425	471	530	586	633	681
55.0	313	320	345	376	420	475	528	576	624
57.5	275	281	303	330	370	423	474	521	568
60.0	239	245	264	287	324	373	421	467	513
62.5	205	211	227	248	280	325	370	415	459
65.0	174	177	192	210	239	280	322	364	407
67.5	153	154	164	177	201	238	275	314	354
70.0	133	134	139	146	166	197	230	268	305
72.5	113	115	118	122	136	161	189	223	258
75.0	94	95	98	101	111	128	149	180	212
77.5	76	77	79	81	87	97	112	142	171
80.0	59	59	60	62	65	70	80	106	131

IES INDOOR REPORT

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

CANDELA TABULATION - (Cont.)

82.5	42	42	43	44	47	50	56	74	92
85.0	26	26	27	28	29	31	35	46	57
87.5	11	11	11	12	12	13	15	20	24
90.0	4	9	13	18	21	24	26	27	27
92.5	31	33	37	40	43	44	45	46	46
95.0	65	68	73	79	82	83	83	81	79
97.5	98	102	110	119	125	128	130	128	127
100.0	132	137	146	157	165	172	177	176	176
102.5	167	175	186	198	208	215	220	221	221
105.0	201	212	228	245	255	260	263	262	262
107.5	237	247	263	282	295	302	307	305	303
110.0	272	278	297	320	335	342	348	348	348
112.5	307	309	330	357	375	385	392	392	392
115.0	342	340	361	391	413	427	437	438	439
117.5	377	368	390	423	448	466	479	481	483
120.0	413	398	419	452	479	501	519	521	524
122.5	448	427	446	479	508	534	555	558	562
125.0	485	458	474	504	534	565	589	593	597
127.5	521	487	499	526	557	591	618	624	630
130.0	557	516	523	546	576	611	640	650	659
132.5	595	545	547	566	592	626	654	667	679
135.0	632	574	570	584	607	638	664	677	689
137.5	670	604	594	601	619	647	671	682	693
140.0	709	637	619	620	632	655	675	685	695
142.5	749	674	648	639	644	662	677	685	693
145.0	791	713	679	660	656	669	679	685	691
147.5	832	753	710	680	669	676	683	687	691
150.0	872	790	741	702	684	687	689	691	692
152.5	912	831	775	728	702	699	696	696	696
155.0	951	872	813	761	729	717	707	705	702
157.5	989	911	854	803	766	743	725	720	716
160.0	1027	956	901	852	811	779	753	745	737
162.5	1063	1000	948	900	860	828	801	788	776
165.0	1098	1045	996	949	911	884	861	848	836
167.5	1128	1084	1041	999	965	939	918	908	899
170.0	1154	1119	1086	1053	1025	1000	980	970	961
172.5	1177	1152	1128	1105	1084	1066	1051	1044	1036
175.0	1197	1180	1165	1150	1137	1126	1117	1112	1108
177.5	1212	1203	1196	1189	1184	1179	1174	1172	1169
180.0	1222	1222	1222	1222	1222	1222	1222	1222	1222

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

Zone	Lumens	%Lamp	%Fixt
0-20	527.37	N.A.	7.30
0-30	1050.95	N.A.	14.60
0-40	1600.74	N.A.	22.30
0-60	2471.56	N.A.	34.40
0-80	2852.98	N.A.	39.70
0-90	2891.03	N.A.	40.20
10-90	2748.42	N.A.	38.20
20-40	1073.37	N.A.	14.90
20-50	1563.76	N.A.	21.70
40-70	1120.74	N.A.	15.60
60-80	381.42	N.A.	5.30
70-80	131.50	N.A.	1.80
80-90	38.06	N.A.	0.50
90-110	516.75	N.A.	7.20
90-120	1201.29	N.A.	16.70
90-130	1986.46	N.A.	27.60
90-150	3360.47	N.A.	46.70
90-180	4299.82	N.A.	59.80
110-180	3783.07	N.A.	52.60
0-180	7190.85	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	142.62
10-20	384.75
20-30	523.58
30-40	549.79
40-50	490.39
50-60	380.43
60-70	249.92
70-80	131.50
80-90	38.06
90-100	120.04
100-110	396.71
110-120	684.55
120-130	785.16
130-140	738.21
140-150	635.80
150-160	498.39
160-170	325.94
170-180	115.02

IES INDOOR REPORT

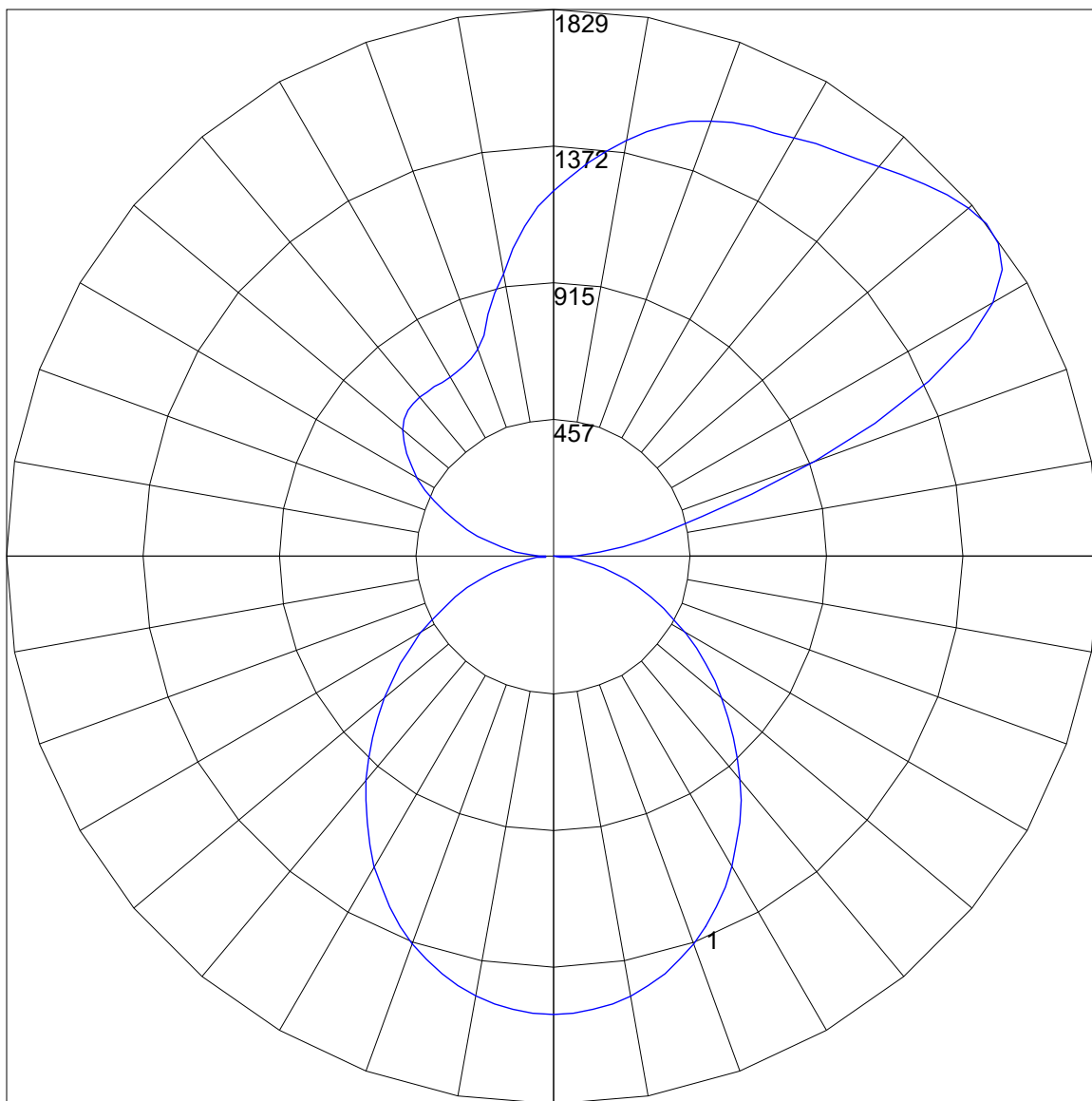
PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-V-V-835-ASY-TG-ITL90352 ITL89599.IES

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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	42	41	41	35
2	88	81	75	70	80	74	69	65	61	57	54	49	46	44	38	36	35	30
3	80	71	64	59	73	65	59	55	54	50	46	44	41	38	34	32	30	26
4	74	63	56	50	67	58	52	47	48	44	40	39	36	33	31	28	26	23
5	68	57	49	43	62	52	45	40	43	38	35	35	32	29	28	25	23	20
6	63	51	43	38	57	47	40	35	39	34	30	32	28	26	25	23	21	18
7	58	46	39	33	53	43	36	31	36	31	27	29	26	23	23	21	19	16
8	54	42	35	29	49	39	32	28	33	28	24	27	23	20	22	19	17	14
9	50	38	31	26	46	36	29	25	30	25	22	25	21	18	20	17	15	13
10	47	35	28	24	43	33	27	22	28	23	20	23	19	17	19	16	14	12

POLAR GRAPH



Maximum Candela = 1829 Located At Horizontal Angle = 0, Vertical Angle = 127.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)