

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 : S16-LED-ID-DCO-4FT-2E-V-8-TW-40U60D-ITL87822.900.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL87822.900 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/19/16

[ISSUEDATE]08/17/16

[MANUFAC]FINELITE, INC.

[LUMCAT]S16-LED-ID-DCO-4ft-2E-V-8-TW-40U60D

[OTHER]ies file is based on 3500K; see luminaire tech sheet at www.finelite.com

for lumen adjustment factors for other CCT's & CRI's

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 40.9 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 41.7 WATTS

[OTHER]see www.finelite.com for source file ITL87822. 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

[_ABSOLUTELUMENS]3675

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3675
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	90
Total Luminaire Watts	40.9
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.40
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.58 ft
Luminous Width (90-270)	0.29 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7523	7760	7938
55	7225	7463	7664
65	6753	6951	7125
75	5837	5999	6081
85	4213	4334	4093

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	763	763	763	763	763
2.5	762	762	763	762	763
5.0	760	760	761	761	761
7.5	756	757	757	758	758
10.0	750	749	753	753	753
12.5	743	742	746	749	748
15.0	736	732	740	743	742
17.5	725	721	730	734	734
20.0	713	708	719	725	725
22.5	699	693	707	713	714
25.0	683	678	692	699	700
27.5	666	662	676	684	686
30.0	647	644	658	667	670
32.5	627	624	640	649	651
35.0	605	603	618	628	631
37.5	582	582	597	607	610
40.0	559	559	574	584	587
42.5	534	535	549	559	562
45.0	507	509	523	532	535
47.5	480	482	496	505	507
50.0	453	454	468	476	479
52.5	424	426	438	446	448
55.0	395	396	408	415	419
57.5	364	367	377	384	387
60.0	335	337	345	352	354
62.5	304	306	313	318	321
65.0	272	274	280	285	287
67.5	240	241	247	251	252
70.0	208	209	214	217	218
72.5	176	177	181	183	184
75.0	144	145	148	149	150
77.5	115	115	117	118	118
80.0	87	86	88	88	88
82.5	60	60	60	60	60
85.0	35	36	36	36	34
87.5	14	14	13	13	12
90.0	0	0	0	0	0
92.5	8	7	4	3	2
95.0	19	20	22	23	22
97.5	30	34	39	45	46
100.0	43	49	59	68	72
102.5	56	65	81	95	100
105.0	71	84	104	123	130
107.5	87	103	130	154	163
110.0	103	123	156	186	197
112.5	120	143	184	219	232
115.0	136	164	212	252	268
117.5	152	183	239	284	303
120.0	169	204	267	317	337
122.5	185	223	293	348	370
125.0	199	241	317	376	400
127.5	214	258	339	402	427
130.0	228	273	359	425	450
132.5	240	287	375	443	469

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-V-8-TW-40U60D-ITL87822.900.IES****CANDELA TABULATION - (Cont.)**

135.0	251	298	388	457	483
137.5	261	307	397	466	492
140.0	269	314	403	471	495
142.5	276	318	405	472	495
145.0	282	321	404	468	491
147.5	287	323	401	461	482
150.0	291	323	395	451	470
152.5	294	322	387	439	456
155.0	297	320	378	424	440
157.5	298	318	368	408	423
160.0	300	315	357	391	404
162.5	300	313	347	374	385
165.0	301	310	336	358	367
167.5	302	308	326	342	349
170.0	302	306	318	329	334
172.5	302	304	311	318	321
175.0	302	303	306	309	311
177.5	302	302	303	304	304
180.0	302	302	302	302	302

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-V-8-TW-40U60D-ITL87822.900.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	280.71	N.A.	7.60
0-30	598.90	N.A.	16.30
0-40	984.98	N.A.	26.80
0-60	1750.27	N.A.	47.60
0-80	2183.4	N.A.	59.40
0-90	2224.9	N.A.	60.50
10-90	2152.57	N.A.	58.60
20-40	704.27	N.A.	19.20
20-50	1106.31	N.A.	30.10
40-70	1041.7	N.A.	28.30
60-80	433.13	N.A.	11.80
70-80	156.73	N.A.	4.30
80-90	41.49	N.A.	1.10
90-110	135.48	N.A.	3.70
90-120	340.37	N.A.	9.30
90-130	615.09	N.A.	16.70
90-150	1152.00	N.A.	31.40
90-180	1449.66	N.A.	39.50
110-180	1314.18	N.A.	35.80
0-180	3674.55	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	72.33
10-20	208.39
20-30	318.18
30-40	386.08
40-50	402.04
50-60	363.25
60-70	276.40
70-80	156.73
80-90	41.49
90-100	25.64
100-110	109.83
110-120	204.89
120-130	274.72
130-140	289.91
140-150	247.00
150-160	172.59
160-170	95.47
170-180	29.59

IES INDOOR REPORT

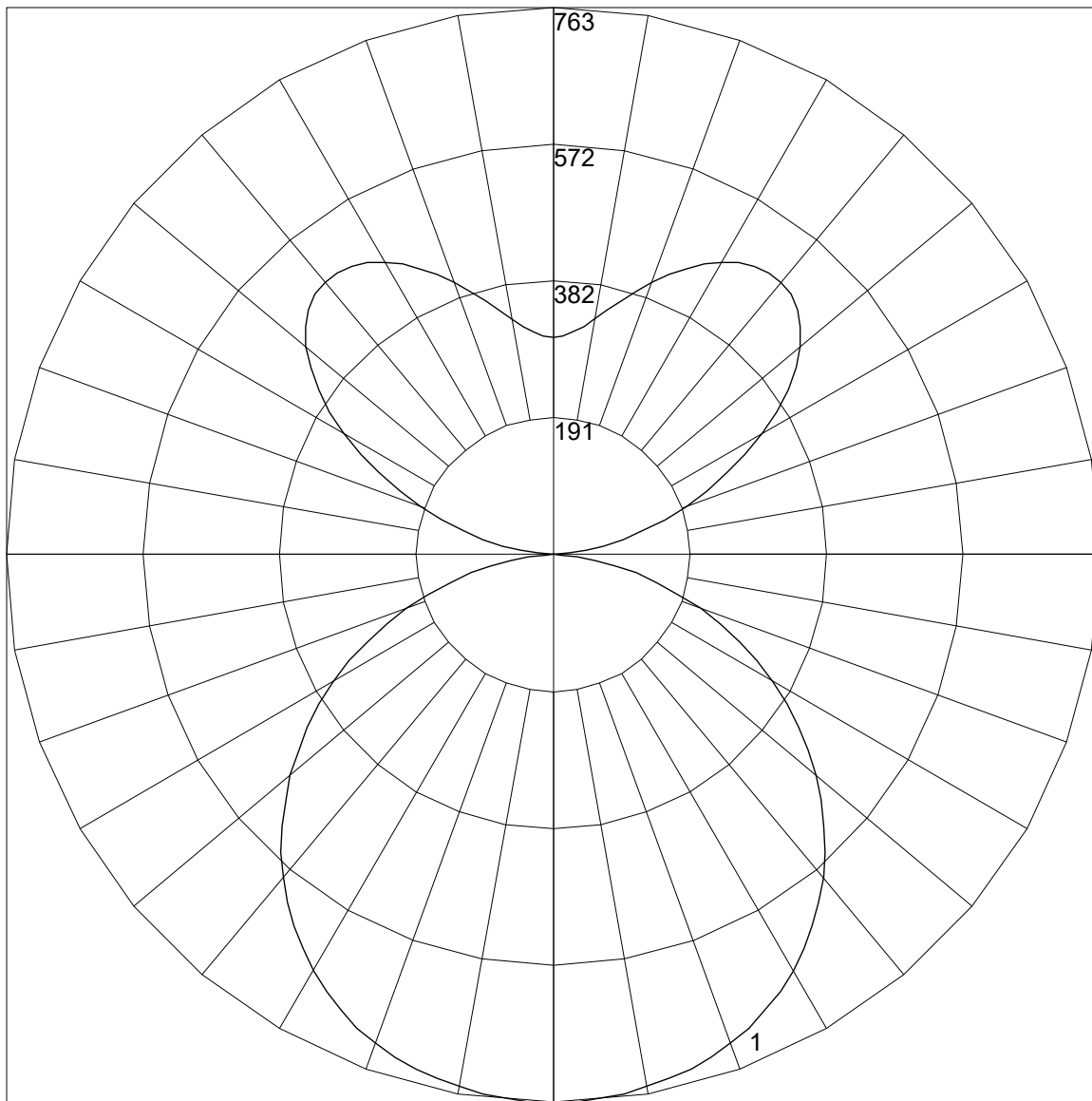
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66	61
1	100	95	91	88	93	89	86	83	78	75	73	68	66	64	58	56	55	51
2	91	83	77	71	85	78	72	68	68	64	60	59	56	53	51	48	46	42
3	83	73	65	59	77	68	62	56	60	55	50	52	48	45	45	42	39	35
4	76	64	56	50	70	60	53	47	53	47	43	46	42	38	40	36	33	30
5	69	57	49	43	65	54	46	41	47	41	37	41	37	33	36	32	29	26
6	64	51	43	37	59	48	41	35	43	37	32	37	32	29	32	28	25	23
7	59	46	38	32	55	44	36	31	39	33	28	34	29	25	29	26	22	20
8	55	42	34	29	51	40	32	27	35	29	25	31	26	22	27	23	20	18
9	51	38	31	25	48	36	29	24	32	26	22	28	24	20	25	21	18	16
10	48	35	28	23	45	33	27	22	30	24	20	26	22	18	23	19	16	14

POLAR GRAPH



Maximum Candela = 763 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)