

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-H-8-35-20U80D-ITL87820.003.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL87820.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/18/16

[ISSUEDATE]07/26/16

[MANUFAC]FINELITE, INC.

[LUMCAT]S16-LED-ID-DCO-4ft-2E-H-8-35-20U80D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 28.5 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.2 WATTS

[ABSOLUTE]LUMENS]2560

[OTHER]see www.finelite.com for source file ITL87820. 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

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2560
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	90
Total Luminaire Watts	28.5
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.38
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	7270	7397	7524
55	6957	7071	7199
65	6468	6565	6662
75	5581	5644	5738
85	3932	3932	4120

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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	749.000	749.000	749.000	749.000	749.000
2.5	748.222	748.222	748.222	749.000	748.222
5.0	745.889	745.889	745.889	746.667	746.667
7.5	741.222	741.222	742.000	742.778	742.778
10.0	735.778	734.222	737.333	738.111	737.333
12.5	728.000	726.444	730.333	732.667	731.111
15.0	719.444	716.333	721.778	724.889	723.333
17.5	708.556	704.667	711.667	715.556	714.000
20.0	696.111	691.444	700.000	704.667	703.111
22.5	680.556	675.889	686.000	690.667	690.667
25.0	665.000	659.556	671.222	675.889	675.889
27.5	646.333	642.444	653.333	658.778	660.333
30.0	626.889	623.778	635.444	641.667	642.444
32.5	609.000	604.333	616.000	623.000	623.778
35.0	587.222	583.333	594.222	602.000	603.556
37.5	563.889	561.556	572.444	580.222	581.000
40.0	539.778	537.444	548.333	556.111	557.667
42.5	514.889	513.333	524.222	531.222	532.778
45.0	490.000	487.667	498.556	505.556	507.111
47.5	463.556	462.000	472.111	478.333	480.667
50.0	436.333	434.778	444.889	450.333	452.667
52.5	409.111	409.111	416.111	423.111	423.889
55.0	380.333	380.333	386.556	393.556	393.556
57.5	350.778	350.778	357.000	363.222	363.222
60.0	321.222	321.222	326.667	332.111	332.111
62.5	290.889	291.667	295.556	300.222	300.222
65.0	260.556	260.556	264.444	268.333	268.333
67.5	229.444	229.444	232.556	236.444	237.222
70.0	198.333	199.111	201.444	203.778	204.556
72.5	167.222	168.000	169.556	171.889	172.667
75.0	137.667	137.667	139.222	140.778	141.556
77.5	108.889	108.889	109.667	111.222	112.778
80.0	81.667	81.667	81.667	82.444	84.000
82.5	56.000	56.000	56.000	56.778	57.556
85.0	32.667	33.444	32.667	33.444	34.222
87.5	12.444	13.222	12.444	12.444	12.444
90.0	0.000	0.000	0.000	0.000	0.000
92.5	2.333	2.333	1.556	0.778	0.778
95.0	6.222	7.000	7.000	7.000	7.778
97.5	10.111	10.889	12.444	13.222	14.000
100.0	14.000	15.556	17.889	20.222	21.778
102.5	17.889	20.222	24.111	28.000	29.556
105.0	22.556	25.667	31.111	35.778	37.333
107.5	27.222	31.889	38.889	44.333	46.667
110.0	31.889	37.333	46.667	53.667	56.000
112.5	37.333	43.556	54.444	63.000	65.333
115.0	42.778	49.778	62.222	72.333	75.444
117.5	47.444	55.222	70.000	81.667	85.556
120.0	52.111	61.444	77.778	91.000	94.889
122.5	56.778	66.889	85.556	99.556	104.222
125.0	61.444	72.333	92.556	107.333	112.778
127.5	66.111	77.778	98.778	115.111	120.556
130.0	70.000	81.667	105.000	121.333	127.556
132.5	73.889	85.556	109.667	126.778	133.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-H-8-35-20U80D-ITL87820.003.IES****CANDELA TABULATION - (Cont.)**

135.0	77.000	89.444	112.778	130.667	136.889
137.5	80.111	91.778	115.889	133.778	140.000
140.0	83.222	94.111	117.444	135.333	141.556
142.5	85.556	95.667	118.222	136.111	142.333
145.0	87.889	97.222	118.222	135.333	141.556
147.5	89.444	97.222	117.444	133.778	139.222
150.0	91.000	98.000	115.889	131.444	136.889
152.5	91.778	98.000	114.333	127.556	133.000
155.0	92.556	97.222	112.000	124.444	128.333
157.5	93.333	97.222	109.667	119.778	124.444
160.0	93.333	96.444	106.556	115.111	119.000
162.5	94.111	96.444	104.222	111.222	113.556
165.0	94.111	95.667	101.889	106.556	109.667
167.5	94.111	95.667	99.556	103.444	105.000
170.0	94.111	94.889	98.000	100.333	101.111
172.5	94.889	94.889	96.444	98.000	98.778
175.0	94.889	94.889	95.667	95.667	96.444
177.5	94.889	94.889	94.889	94.889	94.889
180.0	94.889	94.889	94.889	94.889	94.889

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-H-8-35-20U80D-ITL87820.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	274.42	N.A.	10.70
0-30	582.76	N.A.	22.80
0-40	954.08	N.A.	37.30
0-60	1683.35	N.A.	65.80
0-80	2092.85	N.A.	81.80
0-90	2131.84	N.A.	83.30
10-90	2060.93	N.A.	80.50
20-40	679.66	N.A.	26.60
20-50	1063.37	N.A.	41.50
40-70	990.83	N.A.	38.70
60-80	409.50	N.A.	16.00
70-80	147.94	N.A.	5.80
80-90	38.99	N.A.	1.50
90-110	40.83	N.A.	1.60
90-120	100.93	N.A.	3.90
90-130	181.01	N.A.	7.10
90-150	338.26	N.A.	13.20
90-180	427.84	N.A.	16.70
110-180	387.01	N.A.	15.10
0-180	2559.68	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	70.91
10-20	203.51
20-30	308.34
30-40	371.32
40-50	383.71
50-60	345.57
60-70	261.56
70-80	147.94
80-90	38.99
90-100	8.06
100-110	32.77
110-120	60.10
120-130	80.08
130-140	84.56
140-150	72.70
150-160	51.43
160-170	28.96
170-180	9.19

IES INDOOR REPORT

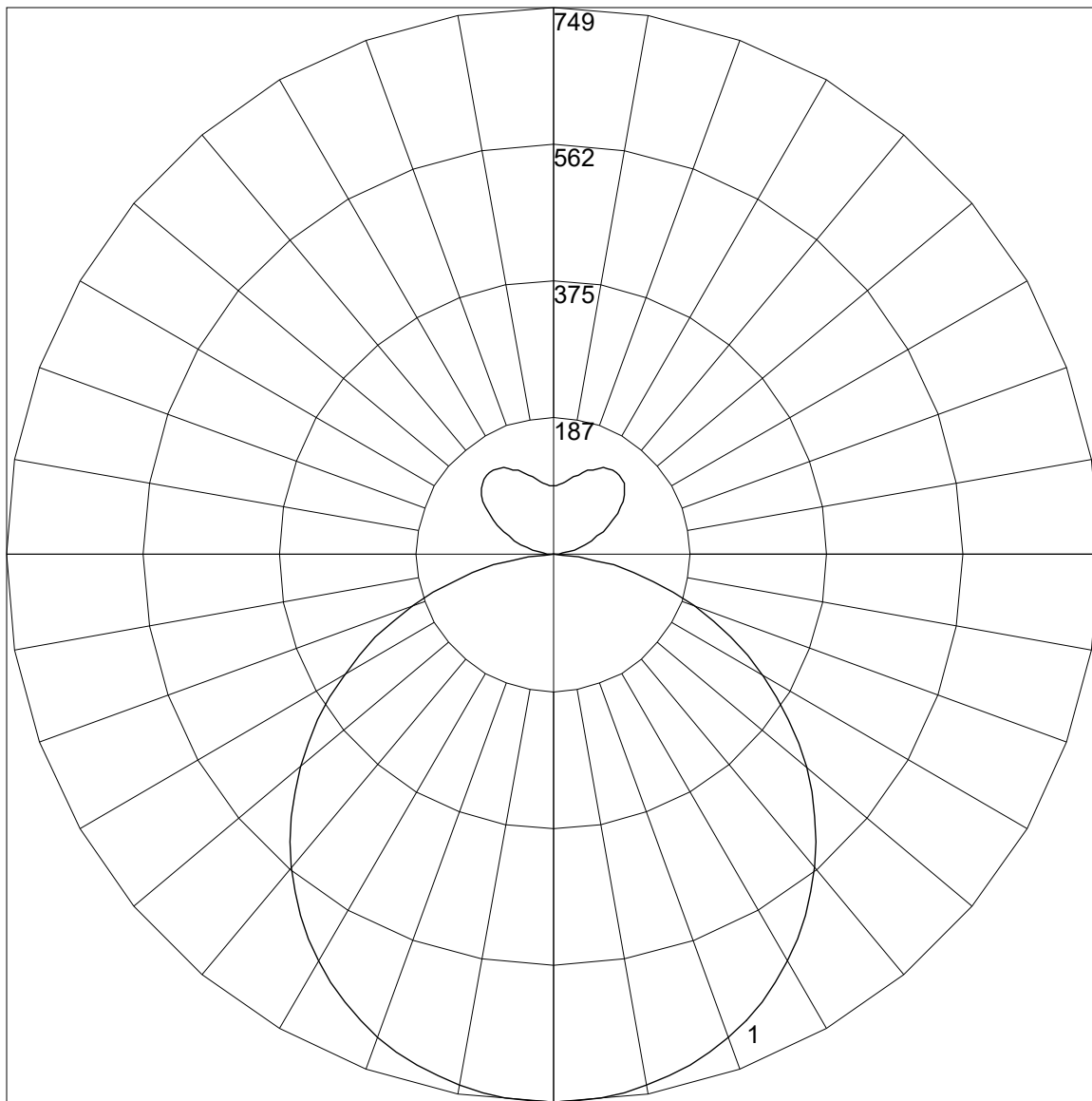
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	115	115	115	115	110	110	110	110	102	102	102	94	94	94	87	87	87	83
1	105	100	96	92	101	96	93	89	89	86	84	82	80	78	76	75	73	70
2	95	87	81	75	91	84	78	73	78	73	69	72	68	65	67	64	61	58
3	87	77	69	62	83	74	67	61	69	63	58	64	59	55	59	55	52	49
4	80	68	59	53	76	65	58	52	61	54	49	57	51	47	53	48	44	42
5	73	61	52	45	70	58	50	44	54	48	42	51	45	40	47	42	38	36
6	67	54	46	39	64	53	44	39	49	42	37	46	40	35	43	38	34	31
7	62	49	41	35	60	48	40	34	45	38	33	42	36	31	39	34	30	28
8	58	45	37	31	56	43	36	30	41	34	29	38	32	28	36	31	27	25
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	33	28	24	22
10	51	38	30	25	49	37	29	25	35	28	24	33	27	23	31	26	22	20

POLAR GRAPH



Maximum Candela = 749 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)