

# 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 : S17-LED-VCF-PF-4FT-V-8-TW-ITL85157.900.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]ITL85157.900 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]09/04/15  
[ISSUE DATE]04/15/16  
[MANUFAC]FINELITE, INC.  
[LUMCAT]FINELITE S17-LED-VCF-PF-4ft-V-8-TW  
[OTHER]ies file is based on 3500K; see luminaire tech sheet at [www.finelite.com](http://www.finelite.com) for lumen adjustment factors for other CCT's & CRI  
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 40.9 WATTS  
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 41.7 WATTS  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL85157. 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](http://www.finelite.com/download_files/series_downloads/photometry_pdf/FL_Family_Correlation_WhitePaper.pdf)  
[\_ABSOLUTE LUMENS]3590

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3590
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	88
Total Luminaire Watts	40.9
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 w/Sides
Luminous Length (0-180)	0.26 ft
Luminous Width (90-270)	4.00 ft
Luminous Height	0.31 ft

**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3116	3526	5299
55	2377	2651	4551
65	1976	1974	3745
75	1874	1533	2879
85	2104	1501	1673

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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>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0.0	663	663	663	663	663	663	663	663	663
2.5	678	677	673	668	663	657	652	650	649
5.0	690	687	681	671	660	649	641	636	634
7.5	701	697	688	673	657	640	628	621	620
10.0	709	705	691	671	650	629	615	605	604
12.5	714	711	693	667	643	616	601	590	587
15.0	717	712	692	661	633	601	586	574	571
17.5	716	710	688	653	622	586	570	559	554
20.0	710	705	681	642	608	570	553	542	538
22.5	700	695	670	628	593	551	534	524	519
25.0	686	682	658	613	576	534	517	507	502
27.5	667	663	640	595	556	514	497	488	485
30.0	645	640	620	575	535	493	478	471	467
32.5	619	615	597	552	512	472	458	453	449
35.0	590	587	571	528	489	449	437	434	432
37.5	559	556	545	502	464	427	417	415	414
40.0	526	524	514	475	437	405	397	397	396
42.5	493	492	484	447	411	382	377	378	380
45.0	461	461	451	418	383	358	356	359	361
47.5	430	430	420	388	356	335	335	340	343
50.0	402	400	389	357	329	312	315	320	324
52.5	376	372	360	328	302	291	296	301	305
55.0	352	348	331	298	275	268	275	282	286
57.5	331	324	304	269	249	246	255	263	267
60.0	313	303	279	242	223	224	235	243	248
62.5	297	285	255	215	199	203	215	224	229
65.0	284	269	233	190	175	182	196	206	210
67.5	274	255	213	166	152	162	177	187	191
70.0	265	243	195	144	131	143	158	169	173
72.5	258	233	179	123	110	125	140	151	158
75.0	253	226	165	104	91	107	122	140	150
77.5	249	219	153	86	73	90	108	135	147
80.0	250	217	144	70	56	73	99	131	144
82.5	254	220	140	55	41	58	93	128	143
85.0	257	222	141	43	26	48	92	129	144
87.5	258	223	141	41	12	46	93	130	145
90.0	258	223	141	41	0	42	91	130	144
92.5	258	223	141	41	7	44	94	131	146
95.0	257	222	141	41	18	55	97	133	147
97.5	255	221	140	42	30	69	109	140	152
100.0	252	218	138	44	43	84	125	155	165
102.5	247	215	136	51	57	100	142	173	183
105.0	243	211	135	64	73	116	159	192	201
107.5	237	207	135	81	91	132	177	210	219
110.0	232	203	138	101	109	149	195	228	238
112.5	226	200	144	123	129	164	212	246	256
115.0	223	200	154	146	149	181	230	264	274
117.5	222	202	169	172	170	198	248	282	292
120.0	224	207	189	200	193	215	265	299	310
122.5	227	216	214	229	215	231	281	315	326
125.0	236	231	243	259	238	248	296	331	341
127.5	248	251	275	291	262	264	310	345	355
130.0	268	278	311	322	285	280	324	358	368
132.5	295	312	350	353	308	296	336	369	380

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**CANDELA TABULATION - (Cont.)**

<b>135.0</b>	330	351	389	383	330	311	347	380	390
<b>137.5</b>	372	392	429	412	352	325	358	389	398
<b>140.0</b>	419	439	468	440	372	339	367	396	405
<b>142.5</b>	467	485	503	464	392	352	374	402	410
<b>145.0</b>	516	530	537	486	410	365	382	406	414
<b>147.5</b>	561	568	564	503	427	378	389	410	417
<b>150.0</b>	597	601	585	518	441	390	395	412	418
<b>152.5</b>	628	626	600	530	454	402	401	414	418
<b>155.0</b>	650	643	611	539	466	414	407	415	418
<b>157.5</b>	660	651	615	545	476	425	414	417	419
<b>160.0</b>	662	652	614	548	485	436	421	421	421
<b>162.5</b>	656	646	609	550	493	447	430	425	424
<b>165.0</b>	644	633	600	548	499	457	438	430	428
<b>167.5</b>	628	616	589	546	503	467	448	439	435
<b>170.0</b>	607	598	575	542	507	478	459	450	446
<b>172.5</b>	585	579	561	537	511	488	472	463	460
<b>175.0</b>	561	557	545	530	512	497	485	478	474
<b>177.5</b>	537	535	530	522	514	506	499	495	493
<b>180.0</b>	515	515	515	515	515	515	515	515	515

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	242.77	N.A.	6.80
0-30	511.75	N.A.	14.30
0-40	824.70	N.A.	23.00
0-60	1401.61	N.A.	39.00
0-80	1767.17	N.A.	49.20
0-90	1891.61	N.A.	52.70
10-90	1828.77	N.A.	50.90
20-40	581.93	N.A.	16.20
20-50	890.43	N.A.	24.80
40-70	787.88	N.A.	21.90
60-80	365.55	N.A.	10.20
70-80	154.58	N.A.	4.30
80-90	124.45	N.A.	3.50
90-110	281.25	N.A.	7.80
90-120	477.10	N.A.	13.30
90-130	716.60	N.A.	20.00
90-150	1270.71	N.A.	35.40
90-180	1698.18	N.A.	47.30
110-180	1416.93	N.A.	39.50
0-180	3589.79	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	62.85
10-20	179.92
20-30	268.98
30-40	312.95
40-50	308.50
50-60	268.41
60-70	210.97
70-80	154.58
80-90	124.45
90-100	125.75
100-110	155.50
110-120	195.85
120-130	239.50
130-140	275.11
140-150	279.00
150-160	231.64
160-170	146.57
170-180	49.26

# IES INDOOR REPORT

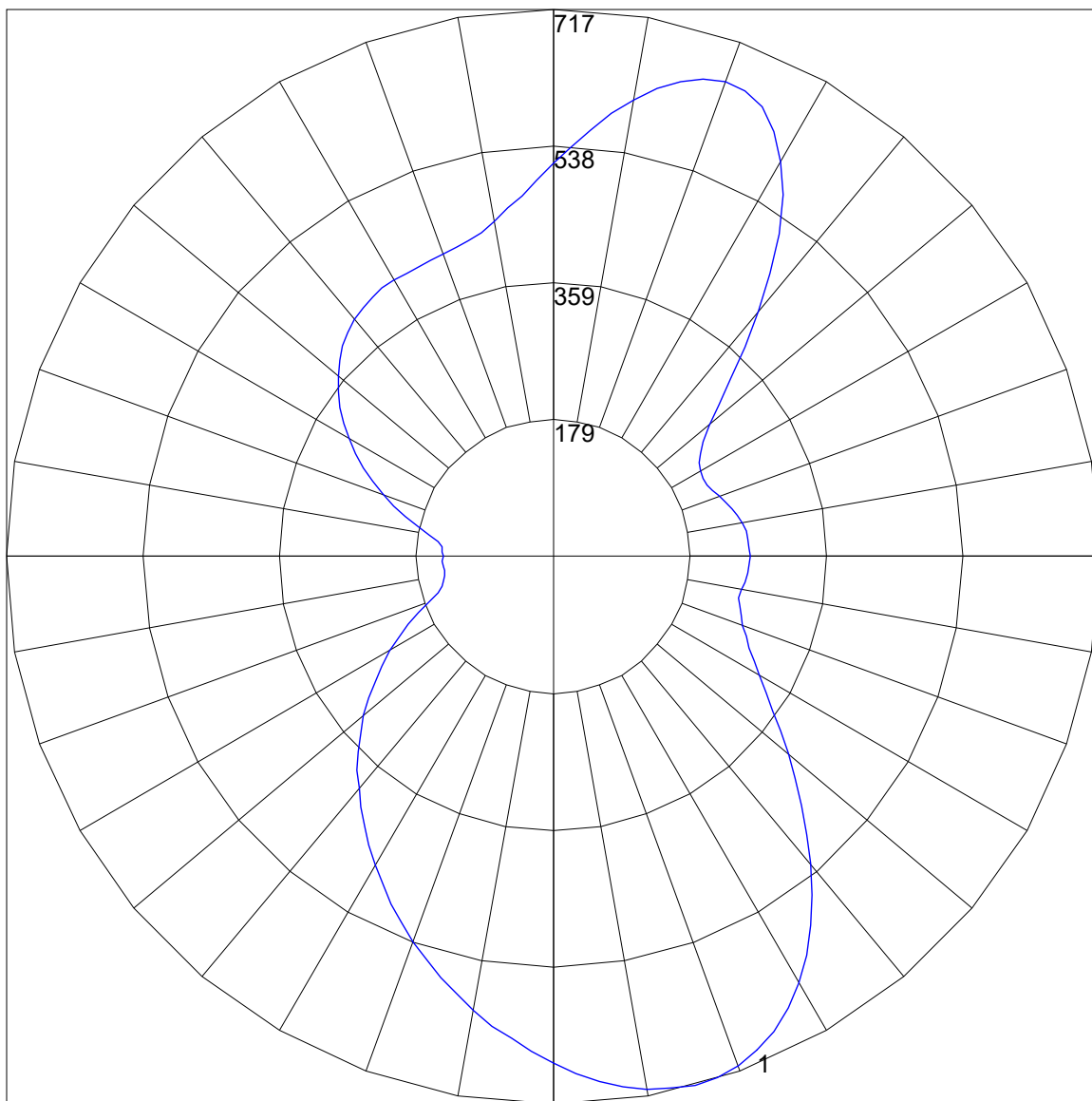
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	97	92	88	84	90	86	82	78	73	70	67	61	59	57	50	49	47	42
2	88	80	74	68	81	74	69	64	63	59	55	53	50	47	44	41	39	35
3	80	71	63	57	74	65	59	53	56	51	46	47	43	40	39	36	33	29
4	74	62	54	48	68	58	51	45	50	44	39	42	37	34	34	31	29	25
5	68	56	47	41	62	52	44	39	44	38	34	37	33	29	31	28	25	22
6	62	50	42	36	57	46	39	34	40	34	30	34	29	26	28	25	22	19
7	58	45	37	31	53	42	35	29	36	30	26	31	26	23	26	22	20	17
8	53	41	33	28	49	38	31	26	33	27	23	28	24	20	24	20	17	15
9	50	37	30	25	46	35	28	23	30	25	21	26	21	18	22	18	16	14
10	47	34	27	22	43	32	25	21	28	22	19	24	20	17	20	17	14	12

POLAR GRAPH



Maximum Candela = 717 Located At Horizontal Angle = 0, Vertical Angle = 15  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)