

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: 89108

Luminaire Tested: **E2-SH-2T5-DL-8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89108  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: E2-SH-2T5-DL-8  
Description: CORELITE ELEMENT SUSPENDED LUMINAIRE  
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 38 CELL HI PERFORMANCE LOUVER  
BLADE  
WITH DOWNLIGHT ISOLATORS  
Light Source: 54 WATT T5 LAMP  
FP54T5/841HO. LUMEN RATING = 4500 LMS.  
Ballast/Driver: -

**Summary**

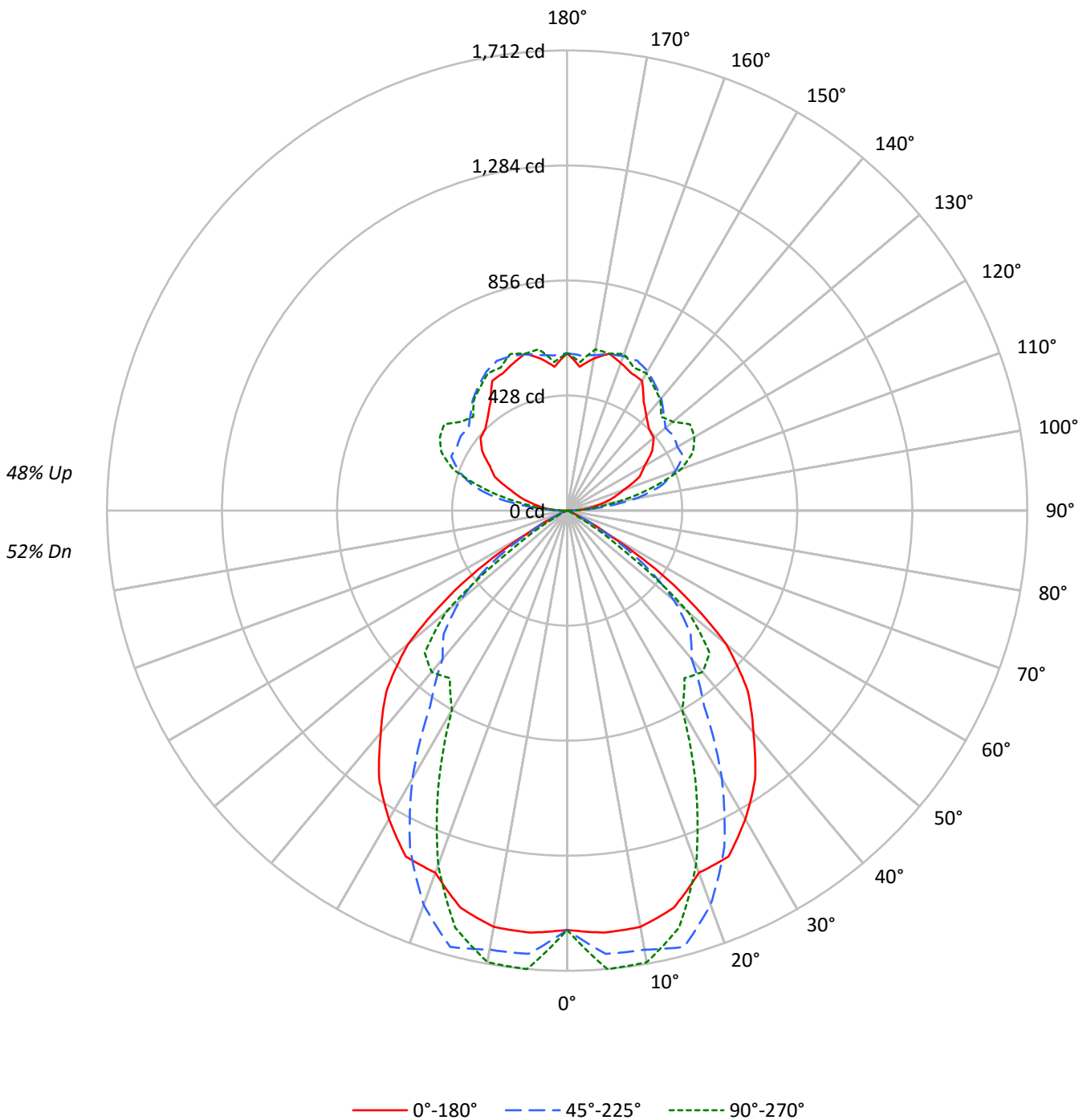
Lumens per Lamp: 4500 (2 lamps)  
Luminaire Lumens: 5315.2 lumens  
Efficiency: 59.1%  
Efficacy: 45.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 0.98 / 1.1  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 3.98' x H: 0.33')  
CIE Type: General Diffuse

Input Watts (W): 118  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				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
RCR																		
0	64	64	64	64	59	59	59	59	50	50	50	42	42	42	34	34	34	31
1	59	57	55	53	55	53	51	50	45	44	43	38	37	37	32	31	31	28
2	54	51	48	45	50	47	44	42	41	39	37	35	33	32	29	28	27	25
3	50	45	42	38	47	42	39	36	37	34	32	31	30	28	27	25	24	22
4	46	41	37	33	43	38	34	32	33	30	28	29	27	25	24	23	22	20
5	43	37	32	29	40	34	31	28	30	27	25	26	24	22	22	21	19	18
6	40	33	29	26	37	31	27	24	27	24	22	24	22	20	21	19	18	16
7	37	30	26	23	34	28	25	22	25	22	20	22	20	18	19	17	16	14
8	34	28	23	20	32	26	22	20	23	20	18	20	18	16	18	16	14	13
9	32	25	21	18	30	24	20	18	21	18	16	19	16	15	16	15	13	12
10	30	23	19	17	28	22	18	16	20	17	15	17	15	13	15	13	12	11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7338	7338	7338
5°	7389	7511	7698
10°	7404	7323	7397
15°	7289	7275	6778
20°	6966	6678	5804
25°	7096	5897	4638
30°	6870	4926	3490
35°	6618	3848	3115
40°	6189	3180	3244
45°	5842	2944	3162
50°	5140	2440	2550
55°	3559	1714	1112
60°	1432	809	248
65°	330	214	59
70°	146	106	28
75°	87	74	12
80°	85	50	6
85°	69	58	16



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	155.3	2.9	1.7
10°-20°	450.9	8.5	5.0
20°-30°	610.1	11.5	6.8
30°-40°	608.7	11.5	6.8
40°-50°	571.5	10.8	6.3
50°-60°	316.0	5.9	3.5
60°-70°	48.3	0.9	0.5
70°-80°	8.8	0.2	0.1
80°-90°	10.0	0.2	0.1
90°-100°	125.5	2.4	1.4
100°-110°	322.0	6.1	3.6
110°-120°	427.7	8.0	4.8
120°-130°	428.9	8.1	4.8
130°-140°	386.2	7.3	4.3
140°-150°	345.3	6.5	3.8
150°-160°	274.0	5.2	3.0
160°-170°	170.4	3.2	1.9
170°-180°	55.5	1.0	0.6
0°-30°	1216.3	22.9	13.5
0°-40°	1825.1	34.3	20.3
0°-60°	2712.6	51.0	30.1
0°-90°	2779.6	52.3	30.9
90°-120°	875.2	16.5	9.7
90°-150°	2035.7	38.3	22.6
90°-180°	2536.0	47.7	28.2
0°-180°	5315.2	100.0	59.1

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1560	1560	1560	1560	1560	
5°	1576	1608	1656	1630	1712	150
15°	1530	1612	1681	1628	1607	428
25°	1420	1455	1383	1221	1134	647
35°	1220	1180	889	755	761	758
45°	951	816	649	705	749	724
55°	486	373	348	308	247	426
65°	35	35	38	21	12	63
75°	6	10	11	6	2	8
85°	2	4	7	6	2	3
90°	11	17	20	38	16	13
95°	73	123	115	128	79	64
105°	171	279	365	345	326	180
115°	297	367	476	510	517	284
125°	386	444	483	541	558	341
135°	430	497	508	512	494	336
145°	496	540	571	540	562	314
155°	564	598	615	583	586	262
165°	604	588	602	659	604	168
175°	537	608	579	596	554	53
180°	585	585	585	585	585	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1560.0	1560.0	1560.0	1560.0	1560.0
5°	1576.1	1607.9	1655.5	1630.3	1712.4
10°	1572.7	1555.4	1659.1	1698.0	1706.0
15°	1530.2	1612.3	1680.6	1627.5	1606.8
20°	1433.8	1547.5	1560.4	1485.1	1402.7
25°	1420.2	1455.4	1383.2	1221.1	1133.6
30°	1325.5	1377.7	1151.0	924.2	856.4
35°	1219.7	1180.0	889.0	754.6	761.3
40°	1078.3	1005.2	720.4	746.7	783.7
45°	951.3	816.5	649.0	705.4	749.3
50°	772.0	623.9	518.7	582.0	587.8
55°	485.6	372.9	348.1	308.3	247.2
60°	174.1	139.7	155.4	90.0	52.6
65°	34.9	35.2	38.4	21.2	11.9
70°	13.0	15.8	17.5	9.8	5.2
75°	6.3	10.2	11.1	5.5	2.0
80°	4.6	6.8	6.7	2.8	0.9
85°	2.5	4.4	6.8	5.5	2.3
90°	11.0	17.3	20.5	37.5	15.9
95°	73.1	123.2	115.0	128.5	78.7
100°	115.6	216.7	262.5	235.3	194.2
105°	170.9	279.2	365.0	344.7	325.5
110°	222.8	330.5	427.5	439.1	451.8
115°	296.6	366.6	476.3	510.0	516.6
120°	332.0	403.0	473.8	531.0	546.4
125°	385.5	444.0	483.3	540.7	558.5
130°	420.1	464.5	477.9	515.8	513.6
135°	430.0	496.9	507.5	512.0	493.5
140°	458.3	526.1	543.9	536.5	539.6
145°	495.6	539.9	570.7	539.7	562.2
150°	557.3	579.3	598.4	595.6	590.0
155°	564.5	597.8	615.4	583.1	586.2
160°	584.0	563.8	610.9	609.3	619.8
165°	604.3	587.5	602.0	659.0	604.0
170°	574.3	553.3	587.0	584.6	609.4
175°	537.0	608.3	579.0	596.1	554.5
180°	585.4	585.4	585.4	585.4	585.4

(END OF REPORT)