

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: 89085

Luminaire Tested: **E2-SB-2T5-DL-7**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89085  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: E2-SB-2T5-DL-7  
Description: CORELITE ELEMENT SUSPENDED LUMINAIRE  
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 19 CELL SEMI-SPECULAR LOUVER  
BLADE  
WITH DOWNLIGHT ISOLATORS  
Light Source: 54 WATT T5 LAMPS  
FP54T5/841HO. LUMEN RATING = 4500 LMS.  
Ballast/Driver: -

**Summary**

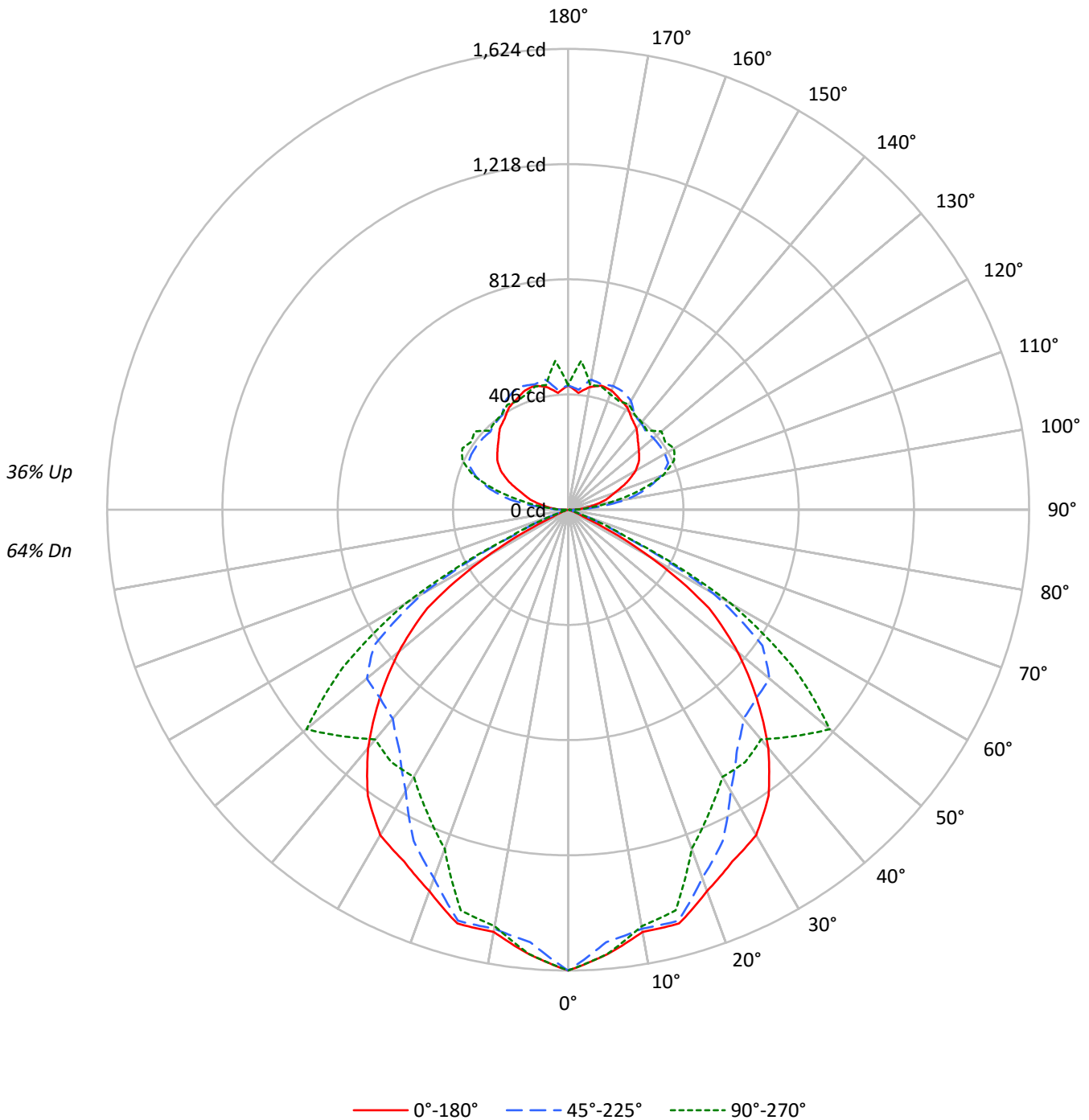
Lumens per Lamp: 4500 (2 lamps)  
Luminaire Lumens: 5536.4 lumens  
Efficiency: 61.5%  
Efficacy: 46.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.01 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: Semi-Direct

Input Watts (W): 118  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	68	68	68	68	64	64	64	64	56	56	56	49	49	49	43	43	43	39
1	63	60	58	56	59	57	55	53	50	49	48	44	43	42	39	38	37	35
2	58	53	50	47	54	50	47	45	45	42	40	40	38	36	35	34	32	30
3	53	47	43	40	50	45	41	38	40	37	35	35	33	31	31	30	28	26
4	49	42	37	34	46	40	36	32	36	32	30	32	29	27	28	26	24	23
5	45	38	33	29	42	36	31	28	32	29	26	29	26	24	25	23	21	20
6	41	34	29	25	39	32	28	25	29	25	23	26	23	21	23	21	19	17
7	38	31	26	22	36	29	25	22	26	23	20	24	21	18	21	19	17	15
8	35	28	23	20	33	27	22	19	24	20	18	22	19	16	19	17	15	14
9	33	26	21	18	31	24	20	17	22	18	16	20	17	15	18	15	14	12
10	31	23	19	16	29	22	18	16	20	17	14	18	15	13	17	14	12	11

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

	0°	45°	90°
0°	7572	7572	7572
5°	7309	6880	7003
10°	7049	6560	6405
15°	7129	6435	6111
20°	6889	5861	5215
25°	6776	5442	4768
30°	6804	4856	4392
35°	6620	4444	4405
40°	6240	4207	4335
45°	5719	4218	4718
50°	5143	4316	5174
55°	4408	4074	4321
60°	2749	3057	3084
65°	571	1131	1099
70°	166	261	207
75°	107	129	74
80°	73	86	30
85°	83	74	25



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	148.5	2.7	1.6
10°-20°	414.2	7.5	4.6
20°-30°	588.0	10.6	6.5
30°-40°	690.5	12.5	7.7
40°-50°	756.9	13.7	8.4
50°-60°	693.1	12.5	7.7
60°-70°	228.7	4.1	2.5
70°-80°	20.7	0.4	0.2
80°-90°	11.5	0.2	0.1
90°-100°	103.2	1.9	1.1
100°-110°	259.4	4.7	2.9
110°-120°	340.8	6.2	3.8
120°-130°	344.0	6.2	3.8
130°-140°	301.6	5.4	3.4
140°-150°	260.1	4.7	2.9
150°-160°	204.2	3.7	2.3
160°-170°	128.1	2.3	1.4
170°-180°	43.1	0.8	0.5
0°-30°	1150.7	20.8	12.8
0°-40°	1841.1	33.3	20.5
0°-60°	3291.2	59.4	36.6
0°-90°	3552.0	64.2	39.5
90°-120°	703.3	12.7	7.8
90°-150°	1609.0	29.1	17.9
90°-180°	1984.0	35.8	22.0
0°-180°	5536.4	100.0	61.5

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1624	1624	1624	1624	1624	
5°	1573	1557	1530	1620	1572	149
15°	1510	1517	1500	1450	1462	421
25°	1368	1333	1288	1189	1176	634
35°	1230	1159	1036	1064	1086	764
45°	939	854	938	1076	1128	724
55°	606	639	835	974	969	519
65°	61	104	205	257	223	116
75°	8	14	20	21	13	9
85°	3	5	9	8	4	3
90°	12	18	19	33	16	12
95°	58	104	95	103	68	51
105°	138	229	287	289	259	143
115°	227	295	389	394	411	223
125°	305	350	393	443	417	271
135°	347	380	388	403	394	269
145°	391	430	406	420	408	246
155°	430	441	459	433	422	199
165°	452	454	457	441	449	127
175°	413	462	424	474	526	41
180°	438	438	438	438	438	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1624.1	1624.1	1624.1	1624.1	1624.1
5°	1573.1	1557.4	1530.0	1619.9	1571.9
10°	1510.6	1512.8	1499.4	1537.5	1490.4
15°	1509.6	1517.2	1499.6	1450.2	1461.5
20°	1430.2	1461.4	1381.6	1318.8	1271.6
25°	1367.8	1332.9	1287.7	1188.7	1176.0
30°	1324.1	1274.4	1144.7	1099.6	1087.2
35°	1230.4	1159.2	1035.6	1063.9	1086.2
40°	1096.2	1008.9	961.5	1021.4	1056.6
45°	938.9	853.7	937.8	1075.7	1127.9
50°	778.8	724.9	925.3	1140.0	1203.2
55°	606.2	638.9	834.7	973.9	969.1
60°	337.0	439.9	592.4	627.8	660.8
65°	60.9	104.5	205.0	257.2	222.8
70°	14.9	24.6	43.6	55.6	39.3
75°	7.8	13.6	19.6	21.0	12.9
80°	4.0	7.6	11.7	11.1	4.8
85°	3.0	4.8	8.8	7.7	3.6
90°	11.7	17.7	19.0	33.3	16.3
95°	58.2	103.6	94.8	103.0	67.7
100°	90.7	178.7	209.2	193.4	152.4
105°	138.2	228.7	287.4	288.9	259.2
110°	173.0	265.0	346.6	342.1	356.2
115°	227.4	295.0	388.6	394.0	411.4
120°	273.7	318.9	393.4	421.8	431.1
125°	305.3	350.5	393.2	443.3	416.7
130°	324.8	367.3	392.1	417.4	428.8
135°	346.7	379.6	388.1	403.3	393.7
140°	374.2	395.5	399.1	413.7	402.5
145°	390.7	429.8	406.0	420.0	408.3
150°	416.2	430.1	442.4	432.0	427.6
155°	429.5	440.6	458.7	432.9	422.3
160°	446.9	483.0	463.7	438.6	432.7
165°	452.5	453.9	457.4	441.4	449.2
170°	438.9	436.2	465.2	448.2	446.4
175°	413.2	461.7	424.2	474.4	526.4
180°	437.9	437.9	437.9	437.9	437.9

(END OF REPORT)