

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: 89165

Luminaire Tested: **E2-SB-3T5-DXD-2**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89165  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: E2-SB-3T5-DXD-2  
Description: CORELITE ELEMENT SUSPENDED LUMINAIRE  
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 19 CELL SEMI-SPECULAR LOUVER  
BLADE  
WITH LAMP ISOLATORS  
Light Source: 54 WATT T5 LAMPS  
FP54T5/841HO. LUMEN RATING = 4500 LMS.  
Ballast/Driver: -

**Summary**

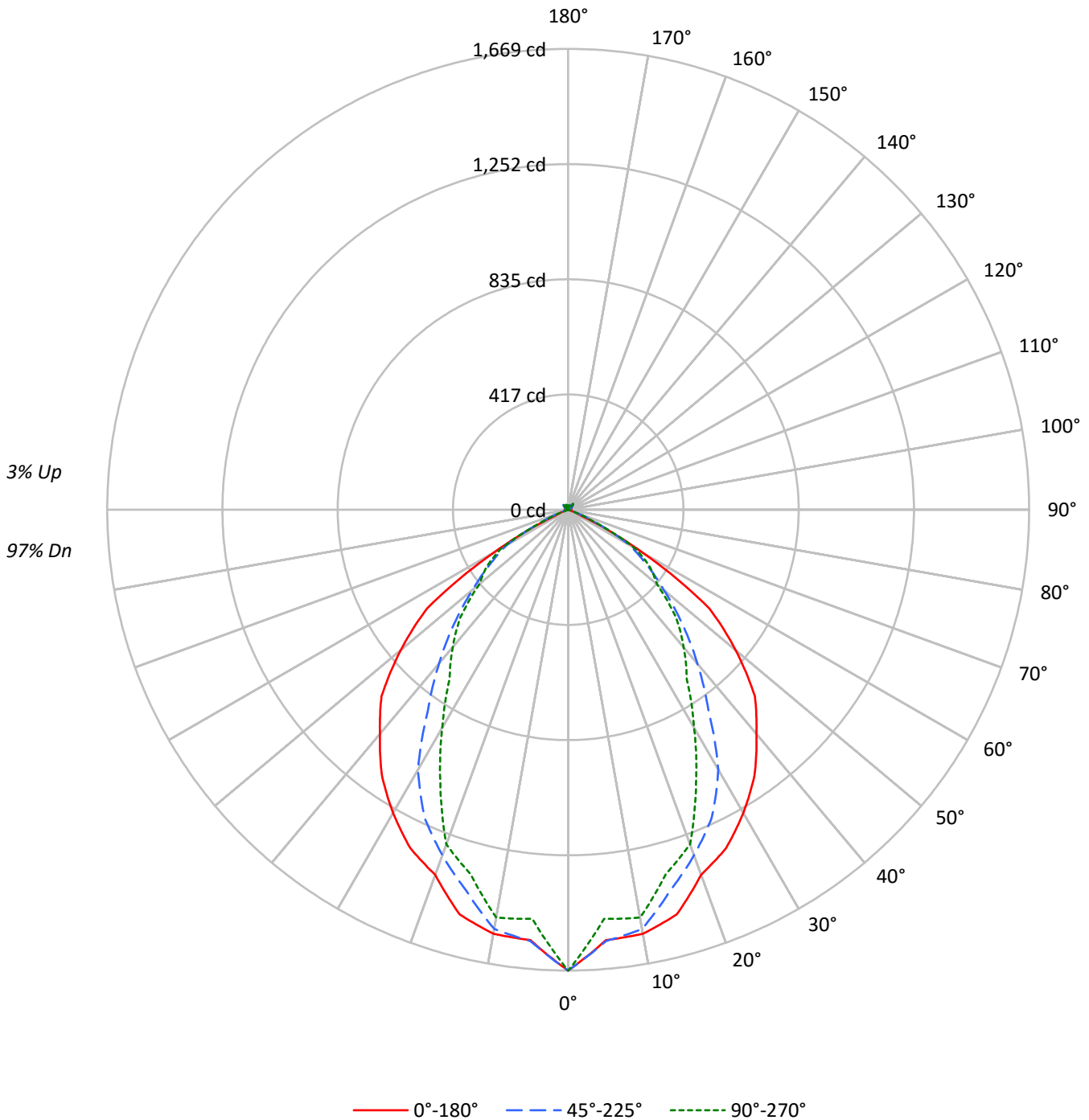
Lumens per Lamp: 4500 (2 lamps)  
Luminaire Lumens: 2773.0 lumens  
Efficiency: 30.8%  
Efficacy: 23.5 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 0.92 / 1.06  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: Direct

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										
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	50	30	10	50	30	10	0														
RCR																																						
0	36	36	36	36	36	36	36	36	34	34	34	32	32	32	31	31	31	30	30	30	28	28	28	27														
1	34	33	32	31	33	32	31	31	31	30	30	30	29	29	28	28	28	27	27	27	26	26	26	24														
2	32	30	28	27	31	29	28	26	28	27	26	27	26	25	26	25	24	24	24	24	23	23	22	21														
3	30	27	25	23	29	26	25	23	25	24	23	25	23	22	24	23	22	21	21	21	20	20	19	19														
4	27	24	22	20	27	24	22	20	23	21	20	22	21	20	22	20	19	19	19	18	18	17	17	17														
5	25	22	20	18	25	22	20	18	21	19	18	20	19	17	20	18	17	17	17	16	16	15	15	15														
6	24	20	18	16	23	20	18	16	19	17	16	19	17	16	18	17	15	15	15	14	14	13	13	13														
7	22	19	16	15	22	18	16	14	18	16	14	17	15	14	17	15	14	14	14	13	13	12	12	12														
8	21	17	15	13	20	17	15	13	16	14	13	16	14	13	16	14	13	13	13	12	12	11	11	11														
9	19	16	14	12	19	16	13	12	15	13	12	15	13	12	14	13	12	12	12	11	11	10	10	10														
10	18	15	12	11	18	14	12	11	14	12	11	14	12	11	14	12	11	11	11	10	10	9	9	9														

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

	0°	45°	90°
0°	7783	7783	7783
5°	7272	7052	6628
10°	7276	6745	6447
15°	7167	6128	5711
20°	6778	5651	5290
25°	6700	5200	4442
30°	6517	4612	3682
35°	6328	3795	3037
40°	6038	3180	2670
45°	5821	2621	2311
50°	5228	2101	1802
55°	4536	1688	1612
60°	2549	1322	1301
65°	518	588	494
70°	118	122	67
75°	61	61	23
80°	24	38	11
85°	11	18	5



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	149.3	5.4	1.7
10°-20°	405.1	14.6	4.5
20°-30°	562.7	20.3	6.3
30°-40°	585.4	21.1	6.5
40°-50°	514.2	18.5	5.7
50°-60°	357.5	12.9	4.0
60°-70°	112.6	4.1	1.3
70°-80°	9.2	0.3	0.1
80°-90°	1.9	0.1	0.0
90°-100°	2.9	0.1	0.0
100°-110°	7.0	0.3	0.1
110°-120°	10.9	0.4	0.1
120°-130°	13.6	0.5	0.2
130°-140°	15.2	0.5	0.2
140°-150°	12.9	0.5	0.1
150°-160°	7.8	0.3	0.1
160°-170°	3.8	0.1	0.0
170°-180°	0.9	0.0	0.0
0°-30°	1117.1	40.3	12.4
0°-40°	1702.6	61.4	18.9
0°-60°	2574.2	92.8	28.6
0°-90°	2697.9	97.3	30.0
90°-120°	20.9	0.8	0.2
90°-150°	62.6	2.3	0.7
90°-180°	75.0	2.7	0.8
0°-180°	2773.0	100.0	30.8

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1669	1669	1669	1669	1669	
5°	1565	1639	1568	1554	1488	150
15°	1518	1473	1428	1393	1366	424
25°	1353	1313	1230	1144	1096	621
35°	1176	1102	884	792	749	733
45°	956	817	583	533	553	726
55°	624	442	346	344	362	524
65°	55	61	106	112	100	106
75°	4	9	9	6	4	5
85°	0	2	2	2	1	1
90°	1	0	0	0	0	2
95°	9	3	2	1	1	6
105°	10	9	6	4	3	11
115°	13	16	10	8	6	13
125°	15	21	16	12	9	13
135°	14	21	24	20	16	11
145°	12	17	21	26	25	8
155°	9	14	18	20	22	4
165°	11	11	15	14	16	3
175°	8	8	8	8	10	1
180°	6	6	6	6	6	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1669.3	1669.3	1669.3	1669.3	1669.3
5°	1565.0	1639.2	1568.3	1553.5	1487.6
10°	1559.3	1498.4	1541.7	1505.3	1500.1
15°	1517.6	1473.4	1428.1	1393.2	1366.0
20°	1407.2	1403.9	1332.0	1341.4	1289.8
25°	1352.6	1313.0	1230.4	1143.5	1095.5
30°	1268.3	1210.6	1087.0	919.8	911.4
35°	1176.0	1101.9	884.3	791.5	748.8
40°	1060.7	969.7	726.8	640.5	650.8
45°	955.7	817.2	582.8	532.7	552.6
50°	791.7	626.9	450.4	422.3	419.0
55°	623.8	442.4	345.9	343.9	361.6
60°	312.4	235.3	256.1	265.3	278.7
65°	55.3	61.1	106.5	112.5	100.2
70°	10.6	16.1	20.4	19.4	12.7
75°	4.4	9.1	9.3	6.2	4.1
80°	1.3	4.7	5.1	3.4	1.8
85°	0.4	1.5	2.1	1.5	0.7
90°	0.9	0.4	0.3	0.2	0.0
95°	8.8	3.4	1.9	1.1	0.7
100°	10.9	6.2	4.1	2.5	1.7
105°	9.7	9.1	6.1	4.2	3.3
110°	11.2	12.1	8.9	6.4	4.7
115°	12.9	16.3	10.4	7.8	5.7
120°	14.5	19.9	12.5	9.6	8.7
125°	14.8	20.7	16.3	12.1	9.1
130°	15.8	20.1	20.5	13.1	11.8
135°	13.7	20.6	24.3	20.5	15.7
140°	14.1	17.7	23.2	26.5	27.2
145°	11.7	16.8	21.1	26.1	25.2
150°	10.8	15.6	19.3	22.7	23.4
155°	9.3	14.1	17.9	19.6	22.4
160°	8.3	13.8	15.5	17.3	16.1
165°	11.1	11.1	15.1	14.4	15.9
170°	7.2	8.0	11.4	13.7	15.5
175°	7.8	7.7	8.2	8.5	9.9
180°	5.7	5.7	5.7	5.7	5.7

(END OF REPORT)