

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: 89166

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89166  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: E2-SB-3T5-DXD-3  
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**

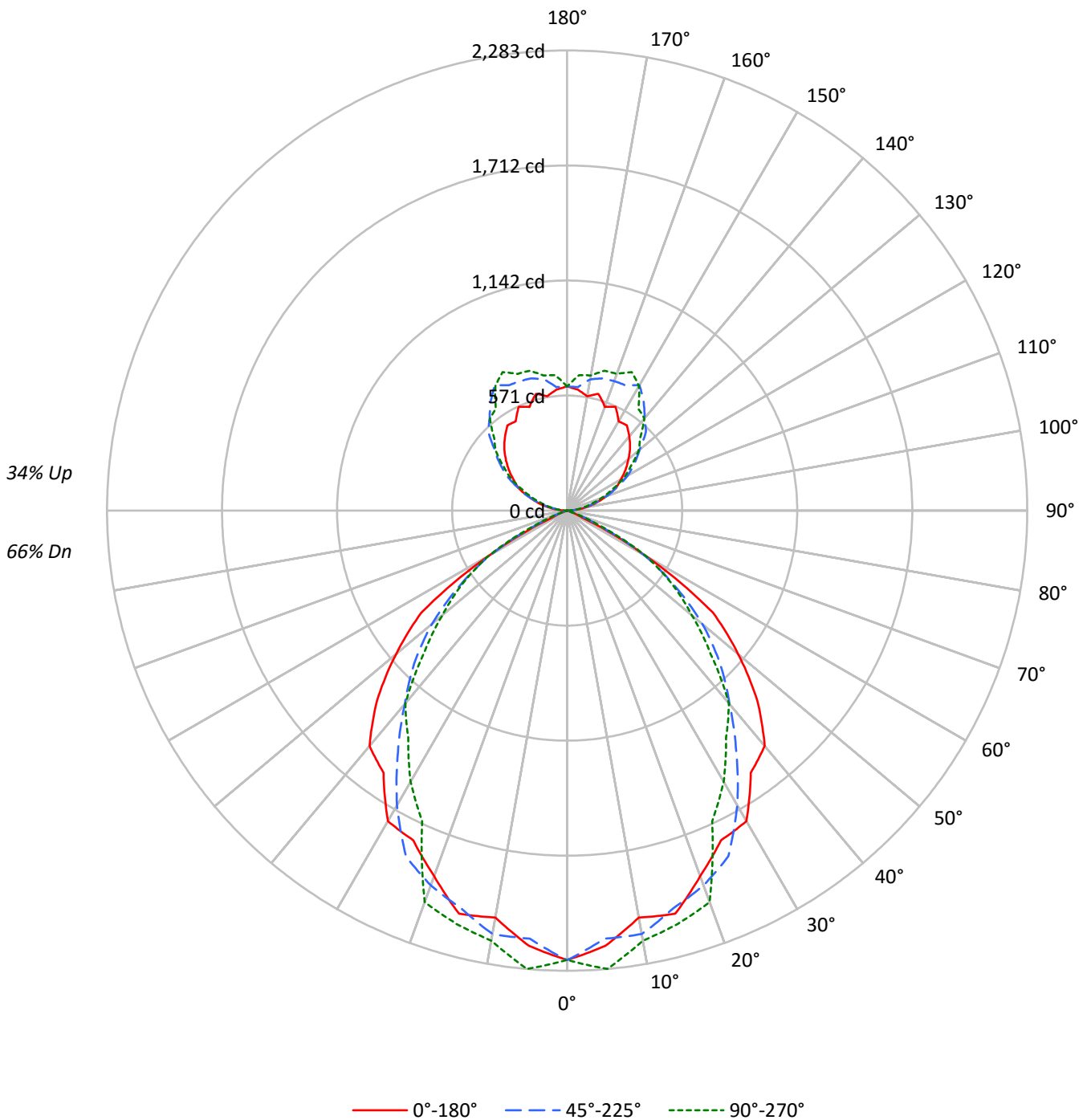
Lumens per Lamp: 4500 (3 lamps)  
Luminaire Lumens: 6447.5 lumens  
Efficiency: 47.8%  
Efficacy: 36.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.06 / 1.19  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: Semi-Direct

Input Watts (W): 177  
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



TEST NUMBER: 89166  
CATALOG NUMBER: E2-SB-3T5-DXD-3

### Luminous Intensity Polar Plot





TEST NUMBER: 89166

CATALOG NUMBER: E2-SB-3T5-DXD-3

**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	53	53	53	53	50	50	50	50	44	44	44	39	39	39	34	34	34	32	32	32	28	28	28	32														
1	49	47	46	44	46	45	43	42	40	39	38	35	35	34	31	31	30	28	28	28	25	25	25	28														
2	45	42	40	38	43	40	38	36	36	34	33	32	31	30	28	27	27	25	25	25	22	22	22	25														
3	42	38	35	32	39	36	33	31	32	30	28	29	27	26	26	25	23	22	22	22	20	20	20	22														
4	39	34	30	28	36	32	29	27	29	27	25	26	24	23	23	22	21	19	19	19	17	17	17	19														
5	36	30	27	24	34	29	26	23	26	24	22	24	22	20	21	20	18	17	17	17	15	15	15	17														
6	33	28	24	21	31	26	23	21	24	21	19	22	19	18	20	18	16	15	15	15	13	13	13	15														
7	31	25	21	19	29	24	21	18	22	19	17	20	18	16	18	16	15	14	14	14	12	12	12	14														
8	29	23	19	17	27	22	19	16	20	17	15	18	16	14	17	15	13	12	12	12	11	11	11	12														
9	27	21	18	15	25	20	17	15	18	16	14	17	15	13	15	13	12	11	11	11	10	10	10	11														
10	25	19	16	14	24	19	15	13	17	14	13	16	13	12	14	12	11	10	10	10	9	9	9	10														

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

	0°	45°	90°
0°	10396	10396	10396
5°	10073	9587	10172
10°	9566	9333	9311
15°	9780	8759	8875
20°	9296	8394	8478
25°	8943	7997	6898
30°	9142	7162	6273
35°	8548	6280	5574
40°	8679	5482	5119
45°	8132	4826	4215
50°	7318	4087	3477
55°	6418	3180	2831
60°	3684	2263	2099
65°	729	914	943
70°	200	218	155
75°	96	124	59
80°	53	80	26
85°	11	32	11



TEST NUMBER: 89166

CATALOG NUMBER: E2-SB-3T5-DXD-3

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	205.9	3.2	1.5
10°-20°	581.0	9.0	4.3
20°-30°	842.8	13.1	6.2
30°-40°	939.9	14.6	7.0
40°-50°	875.5	13.6	6.5
50°-60°	619.1	9.6	4.6
60°-70°	190.0	2.9	1.4
70°-80°	18.3	0.3	0.1
80°-90°	4.4	0.1	0.0
90°-100°	43.7	0.7	0.3
100°-110°	148.9	2.3	1.1
110°-120°	269.7	4.2	2.0
120°-130°	361.8	5.6	2.7
130°-140°	403.3	6.3	3.0
140°-150°	385.7	6.0	2.9
150°-160°	309.5	4.8	2.3
160°-170°	187.5	2.9	1.4
170°-180°	60.5	0.9	0.4
0°-30°	1629.6	25.3	12.1
0°-40°	2569.5	39.9	19.0
0°-60°	4064.2	63.0	30.1
0°-90°	4276.9	66.3	31.7
90°-120°	462.3	7.2	3.4
90°-150°	1613.1	25.0	11.9
90°-180°	2171.0	33.7	16.1
0°-180°	6447.5	100.0	47.8

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2230	2230	2230	2230	2230	
5°	2168	2154	2132	2202	2283	203
15°	2071	2078	2041	2033	2123	574
25°	1805	1865	1892	1804	1701	845
35°	1589	1639	1463	1400	1375	1015
45°	1335	1267	1073	1042	1008	1023
55°	883	792	651	628	635	741
65°	78	107	166	193	191	153
75°	7	15	19	16	10	9
85°	0	2	4	3	2	1
90°	4	4	4	4	4	7
95°	45	38	34	35	37	49
105°	149	156	138	128	119	158
115°	268	305	270	254	246	259
125°	354	446	408	395	387	316
135°	442	547	552	518	512	340
145°	516	586	661	645	616	317
155°	568	652	686	697	758	254
165°	600	633	679	693	718	164
175°	602	649	615	639	674	57
180°	615	615	615	615	615	



TEST NUMBER: 89166

CATALOG NUMBER: E2-SB-3T5-DXD-3

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2229.9	2229.9	2229.9	2229.9	2229.9
5°	2167.9	2153.7	2131.9	2202.5	2283.0
10°	2050.0	2103.9	2133.3	2075.6	2166.6
15°	2071.1	2078.4	2041.1	2033.1	2122.7
20°	1929.9	1970.5	1978.6	2000.6	2067.1
25°	1805.3	1865.3	1892.3	1804.5	1701.3
30°	1779.1	1757.2	1688.1	1561.1	1552.8
35°	1588.6	1639.1	1463.2	1399.7	1374.6
40°	1524.7	1497.8	1252.9	1242.4	1247.9
45°	1335.1	1266.8	1073.0	1042.4	1007.7
50°	1108.1	1040.7	876.3	801.0	808.6
55°	882.6	791.5	651.4	627.6	635.0
60°	451.6	443.9	438.5	431.5	449.9
65°	77.8	107.4	165.6	192.7	191.2
70°	18.0	26.5	36.5	44.4	29.4
75°	7.0	15.1	18.9	15.9	10.4
80°	2.9	7.5	10.9	7.9	4.2
85°	0.4	2.1	3.8	2.8	1.5
90°	4.1	3.9	3.8	3.8	3.8
95°	44.6	37.8	34.5	35.1	37.3
100°	96.3	92.8	78.3	74.3	74.0
105°	149.1	156.5	138.0	128.2	119.1
110°	204.1	221.4	207.8	192.6	179.5
115°	267.9	304.6	270.1	253.5	246.0
120°	306.8	372.1	344.8	342.6	323.7
125°	353.5	445.5	408.3	394.7	386.7
130°	397.5	500.0	469.0	455.7	462.8
135°	441.5	547.1	552.5	518.5	512.1
140°	479.4	583.0	597.9	587.4	596.4
145°	516.2	585.6	660.9	645.2	616.1
150°	510.8	606.1	717.5	687.3	712.4
155°	568.2	652.5	685.6	697.4	757.9
160°	547.0	619.5	683.3	748.0	721.4
165°	599.6	632.7	679.0	692.8	718.0
170°	575.5	592.9	660.5	666.9	680.7
175°	602.2	649.3	614.6	639.0	673.9
180°	615.4	615.4	615.4	615.4	615.4

(END OF REPORT)