

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: 89076

Luminaire Tested: **E2-SB-1T5-DL-8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89076  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: E2-SB-1T5-DL-8  
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 LAMP  
FP54T5/841HO. LUMEN RATING = 4500 LMS.  
Ballast/Driver: -

**Summary**

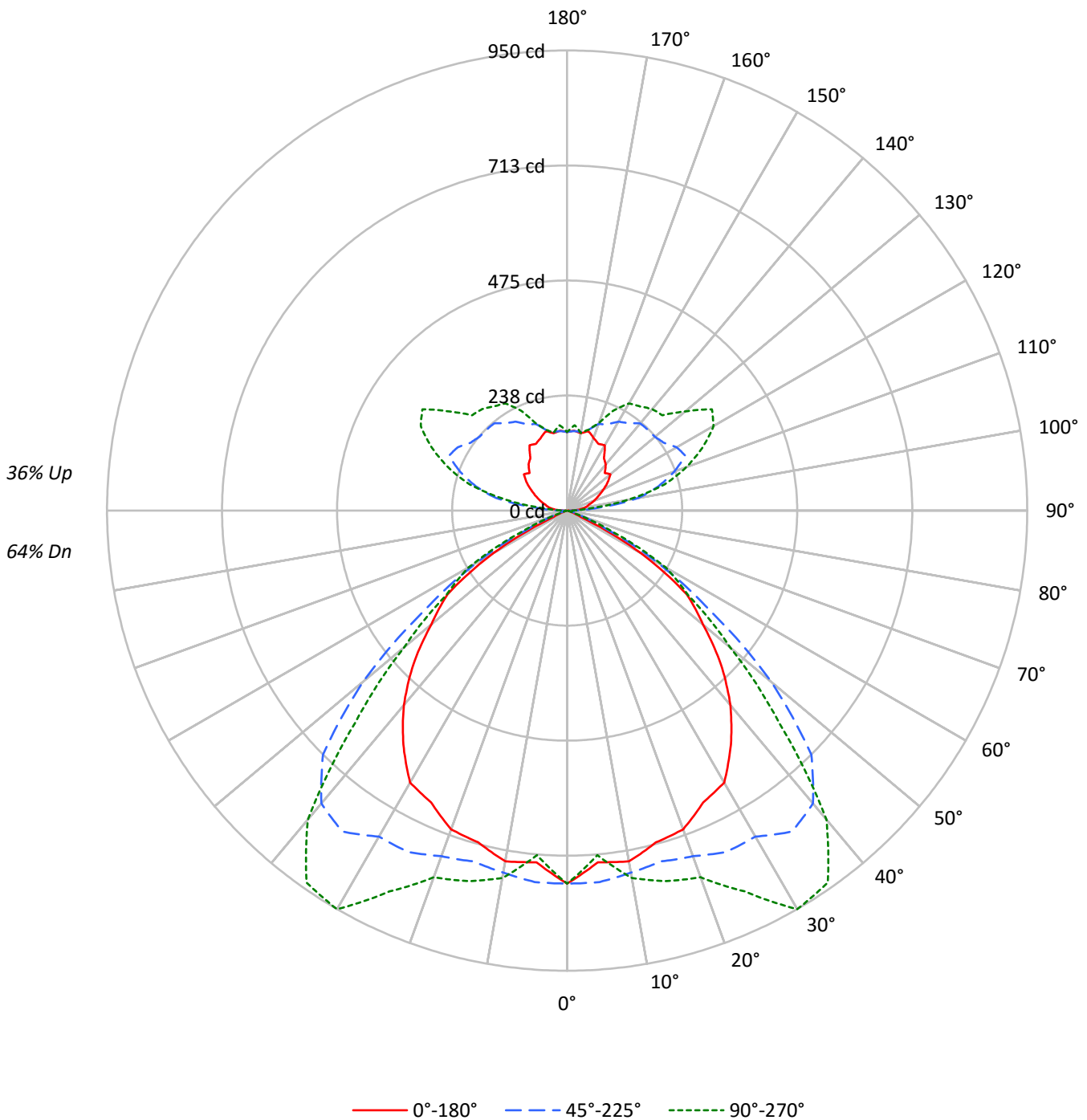
Lumens per Lamp: 4500 (1 lamp)  
Luminaire Lumens: 3166.3 lumens  
Efficiency: 70.4%  
Efficacy: 53.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.65 / 1.54  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: Semi-Direct

Input Watts (W): 59  
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	78	78	78	78	73	73	73	73	64	64	64	56	56	56	49	49	49	45
1	72	69	67	65	68	65	63	61	58	56	55	51	50	49	45	44	43	40
2	66	61	58	54	62	58	55	52	52	49	47	46	44	42	40	39	37	35
3	61	55	50	46	57	52	47	44	46	43	40	41	38	36	36	34	33	30
4	56	49	43	39	52	46	41	38	41	38	35	37	34	32	33	30	29	26
5	51	44	38	34	48	41	36	33	37	33	30	33	30	28	29	27	25	23
6	48	39	34	30	45	37	32	29	34	29	26	30	27	24	27	24	22	20
7	44	35	30	26	41	34	29	25	30	26	23	27	24	21	24	22	20	18
8	41	32	27	23	38	31	26	22	28	24	21	25	22	19	22	20	18	16
9	38	29	24	21	36	28	23	20	25	21	19	23	20	17	21	18	16	14
10	35	27	22	19	33	26	21	18	23	19	17	21	18	16	19	16	14	13

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

	0°	45°	90°
0°	3590	3590	3590
5°	3386	3461	3182
10°	3431	3319	3309
15°	3349	3217	3311
20°	3373	3222	3304
25°	3292	3286	3518
30°	3332	3297	3838
35°	3172	3472	3803
40°	2985	3455	3416
45°	2735	3206	2588
50°	2417	2565	1893
55°	2193	1761	1362
60°	1433	1113	1096
65°	306	476	512
70°	96	131	83
75°	61	74	29
80°	44	47	11
85°	44	36	12



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	71.6	2.3	1.6
10°-20°	213.6	6.7	4.7
20°-30°	358.3	11.3	8.0
30°-40°	485.8	15.3	10.8
40°-50°	474.0	15.0	10.5
50°-60°	313.4	9.9	7.0
60°-70°	96.7	3.1	2.1
70°-80°	10.3	0.3	0.2
80°-90°	5.2	0.2	0.1
90°-100°	64.0	2.0	1.4
100°-110°	174.4	5.5	3.9
110°-120°	223.2	7.0	5.0
120°-130°	216.2	6.8	4.8
130°-140°	170.0	5.4	3.8
140°-150°	133.2	4.2	3.0
150°-160°	90.2	2.8	2.0
160°-170°	50.0	1.6	1.1
170°-180°	15.9	0.5	0.4
0°-30°	643.5	20.3	14.3
0°-40°	1129.3	35.7	25.1
0°-60°	1916.8	60.5	42.6
0°-90°	2029.0	64.1	45.1
90°-120°	461.6	14.6	10.3
90°-150°	981.1	31.0	21.8
90°-180°	1137.0	35.9	25.3
0°-180°	3166.3	100.0	70.4

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	770	770	770	770	770	
5°	729	730	770	762	714	70
15°	709	742	750	774	792	202
25°	665	703	778	841	868	309
35°	590	660	809	906	938	368
45°	449	579	713	657	619	345
55°	302	419	361	325	305	255
65°	33	50	86	109	104	61
75°	4	8	11	9	5	5
85°	2	2	4	4	2	2
90°	4	7	8	14	7	5
95°	25	61	61	59	37	22
105°	46	133	196	224	208	50
115°	71	165	269	282	309	71
125°	102	166	244	331	365	91
135°	110	164	236	267	278	89
145°	132	162	220	266	262	85
155°	152	171	196	221	228	72
165°	170	174	173	185	173	47
175°	166	168	165	161	177	16
180°	162	162	162	162	162	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	770.1	770.1	770.1	770.1	770.1
5°	728.7	730.3	769.7	761.6	714.2
10°	735.3	716.1	758.7	768.7	770.1
15°	709.1	742.3	749.8	773.6	792.0
20°	700.3	719.6	759.4	792.6	805.6
25°	664.6	702.9	777.5	840.7	867.6
30°	648.4	700.3	777.1	895.8	950.2
35°	589.6	660.2	809.1	906.5	937.9
40°	524.5	628.3	789.5	840.4	832.8
45°	449.0	579.3	712.8	657.3	618.8
50°	366.0	523.5	550.0	457.4	440.3
55°	301.6	418.7	360.7	324.7	305.4
60°	175.6	226.9	215.7	224.7	234.9
65°	32.6	49.9	86.3	109.3	103.7
70°	8.6	13.8	21.9	27.0	15.7
75°	4.4	7.8	11.3	8.6	5.1
80°	2.4	4.6	6.4	4.4	1.7
85°	1.6	2.5	4.2	3.9	1.7
90°	4.1	7.2	7.5	14.5	6.6
95°	25.4	61.0	60.9	59.0	37.3
100°	39.1	103.5	148.9	146.0	127.8
105°	46.0	133.2	195.6	223.8	208.2
110°	58.8	158.4	235.6	245.7	261.8
115°	71.4	165.0	268.7	282.4	308.6
120°	86.1	166.5	261.2	343.5	349.0
125°	102.3	166.5	243.7	330.9	364.7
130°	116.6	170.0	236.5	292.1	318.1
135°	109.6	164.1	235.6	267.0	278.2
140°	123.9	169.6	234.9	271.2	273.2
145°	132.3	161.6	219.8	266.4	262.5
150°	155.5	170.9	211.9	237.5	255.3
155°	152.1	170.7	196.2	221.0	228.3
160°	159.5	170.0	190.0	191.9	192.2
165°	169.7	174.3	172.8	185.3	173.1
170°	161.9	178.6	164.7	171.7	162.8
175°	165.7	167.9	164.8	160.7	177.0
180°	162.2	162.2	162.2	162.2	162.2

(END OF REPORT)