

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: 89080

Luminaire Tested: **E2-SB-1T5-DL-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89080  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: E2-SB-1T5-DL-4  
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**

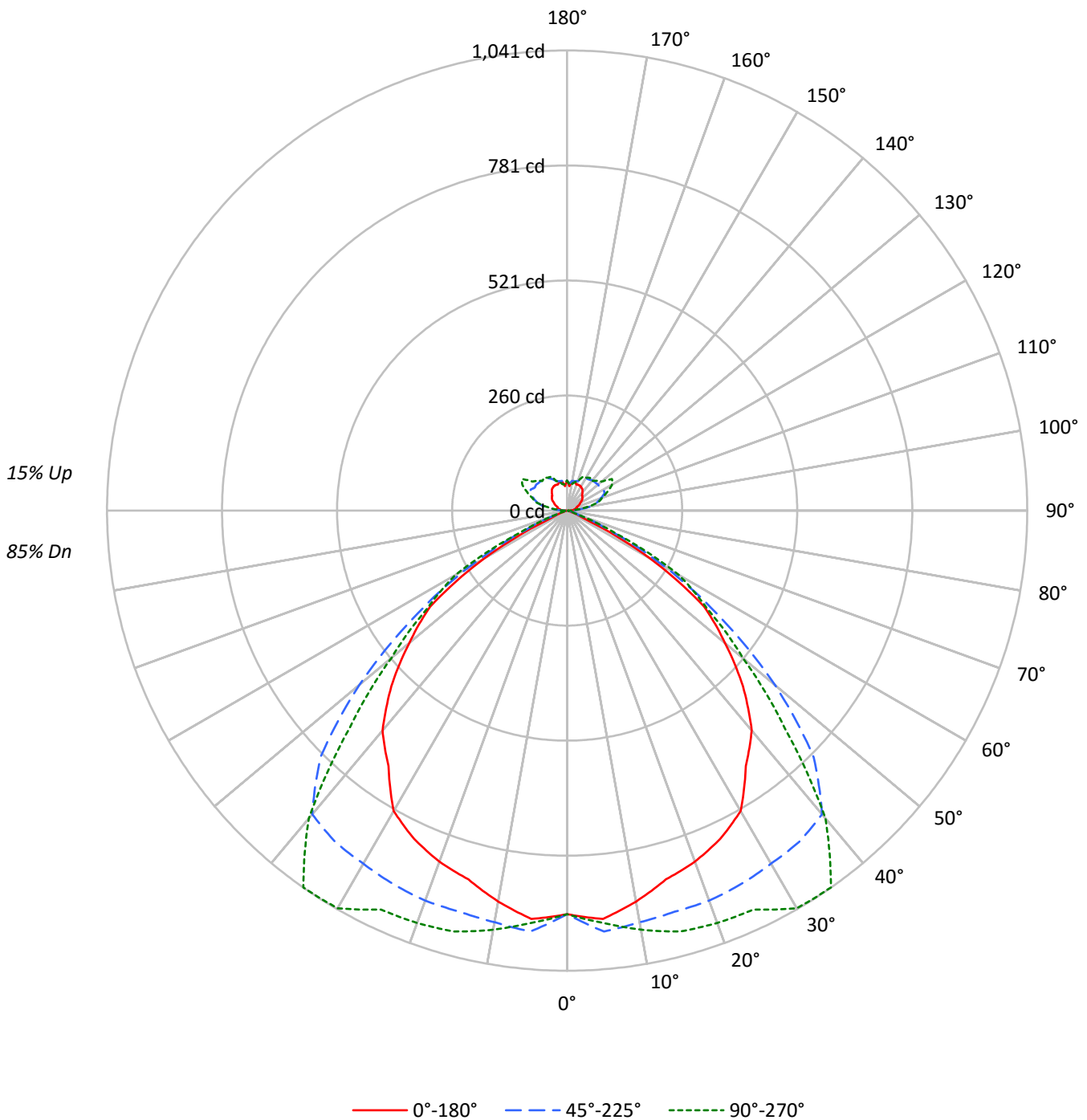
Lumens per Lamp: 4500 (1 lamp)  
Luminaire Lumens: 2804.9 lumens  
Efficiency: 62.3%  
Efficacy: 47.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.59 / 1.51  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: Semi-Direct

Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (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	72	72	72	72	69	69	69	69	64	64	64	59	59	59	55	55	55	53						53														
1	67	65	63	61	64	62	61	59	58	57	55	54	53	52	51	50	49	47						47														
2	62	58	54	51	59	56	53	50	52	50	47	49	47	45	46	44	43	41						41														
3	57	51	47	44	55	50	46	43	47	43	41	44	41	39	41	39	37	36						36														
4	53	46	41	38	50	45	40	37	42	38	35	39	36	34	37	35	33	31						31														
5	48	41	36	33	47	40	36	32	38	34	31	36	32	30	34	31	29	27						27														
6	45	37	32	29	43	36	32	28	34	30	27	32	29	26	31	28	25	24						24														
7	42	34	29	25	40	33	28	25	31	27	24	30	26	23	28	25	23	21						21														
8	39	31	26	23	37	30	25	22	29	25	22	27	24	21	26	23	20	19						19														
9	36	28	24	20	35	28	23	20	26	22	19	25	21	19	24	21	18	17						17														
10	34	26	21	18	33	25	21	18	24	20	18	23	20	17	22	19	17	16						16														

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

	0°	45°	90°
0°	4257	4257	4257
5°	4309	4298	4173
10°	4191	4137	4138
15°	4079	4031	4122
20°	4071	3984	4072
25°	4060	3939	4038
30°	4033	3914	4196
35°	3793	3927	4220
40°	3698	3926	3730
45°	3426	3549	2915
50°	3080	2860	2234
55°	2748	2079	1722
60°	1765	1335	1366
65°	374	562	594
70°	114	159	100
75°	69	86	34
80°	49	52	16
85°	55	35	11



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	88.6	3.2	2.0
10°-20°	264.1	9.4	5.9
20°-30°	428.4	15.3	9.5
30°-40°	557.1	19.9	12.4
40°-50°	541.7	19.3	12.0
50°-60°	372.8	13.3	8.3
60°-70°	115.4	4.1	2.6
70°-80°	12.1	0.4	0.3
80°-90°	4.6	0.2	0.1
90°-100°	26.7	1.0	0.6
100°-110°	63.5	2.3	1.4
110°-120°	78.2	2.8	1.7
120°-130°	78.5	2.8	1.7
130°-140°	63.1	2.2	1.4
140°-150°	50.2	1.8	1.1
150°-160°	34.6	1.2	0.8
160°-170°	19.1	0.7	0.4
170°-180°	6.1	0.2	0.1
0°-30°	781.1	27.8	17.4
0°-40°	1338.3	47.7	29.7
0°-60°	2252.7	80.3	50.1
0°-90°	2384.8	85.0	53.0
90°-120°	168.5	6.0	3.7
90°-150°	360.3	12.8	8.0
90°-180°	420.0	15.0	9.3
0°-180°	2804.9	100.0	62.3

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	913	913	913	913	913	
5°	927	915	956	901	936	87
15°	864	881	940	960	986	245
25°	820	876	932	972	996	378
35°	705	791	915	1010	1041	445
45°	562	681	789	724	697	432
55°	378	481	426	403	386	321
65°	40	60	102	127	120	75
75°	5	10	13	11	6	6
85°	2	3	4	4	2	2
90°	5	6	6	7	6	4
95°	15	25	26	25	20	11
105°	22	50	70	82	73	22
115°	30	60	94	96	101	29
125°	41	65	90	118	124	36
135°	48	64	90	98	95	38
145°	60	67	86	94	90	37
155°	64	63	78	84	85	29
165°	67	68	69	62	66	19
175°	55	69	62	60	59	6
180°	68	68	68	68	68	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	913.1	913.1	913.1	913.1	913.1
5°	927.4	915.2	955.9	900.6	936.5
10°	898.1	920.8	945.7	951.3	962.8
15°	863.8	880.9	939.5	960.3	985.8
20°	845.2	909.6	939.1	980.9	992.8
25°	819.6	876.3	932.1	972.5	995.9
30°	784.9	850.7	922.5	1003.2	1038.8
35°	705.0	790.7	915.0	1010.3	1040.7
40°	649.6	742.3	897.2	926.1	909.3
45°	562.5	681.1	789.1	723.7	696.9
50°	466.4	596.3	613.3	543.9	519.6
55°	377.9	480.7	426.0	403.3	386.3
60°	216.4	266.6	258.6	273.8	292.8
65°	39.9	60.2	101.9	127.3	120.4
70°	10.3	16.5	26.6	29.5	18.9
75°	5.0	9.5	13.1	10.7	5.9
80°	2.7	4.9	7.1	4.9	2.5
85°	2.0	2.7	4.1	3.6	1.6
90°	4.7	5.5	5.6	6.9	5.8
95°	14.7	24.9	26.1	24.6	20.2
100°	17.3	43.7	52.8	55.1	45.3
105°	22.3	49.9	69.8	82.5	72.7
110°	22.4	57.7	81.0	87.6	84.3
115°	30.0	59.7	93.6	96.5	100.6
120°	34.0	62.6	95.1	119.1	117.3
125°	41.0	64.9	89.8	117.7	124.1
130°	45.3	65.4	91.4	106.5	102.2
135°	47.6	63.7	89.7	97.5	95.2
140°	53.8	65.8	89.2	95.6	87.4
145°	59.7	67.2	85.7	93.9	90.3
150°	62.1	65.9	84.6	89.5	86.1
155°	63.6	62.9	78.4	83.7	84.7
160°	62.6	67.8	70.9	75.6	70.7
165°	67.0	67.9	68.7	62.1	66.5
170°	66.5	67.9	68.2	65.4	60.7
175°	55.2	68.7	61.8	60.0	59.0
180°	67.8	67.8	67.8	67.8	67.8

(END OF REPORT)