

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: 89112

Luminaire Tested: **E2-SH-2T5-DL-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89112  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: E2-SH-2T5-DL-4  
Description: CORELITE ELEMENT SUSPENDED LUMINAIRE  
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 38 CELL HI PERFORMANCE LOUVER  
BLADE  
WITH DOWNLIGHT ISOLATORS  
Light Source: 54 WATT T5 LAMP  
FP54T5/841HO. LUMEN RATING = 4500 LMS.  
Ballast/Driver: -

**Summary**

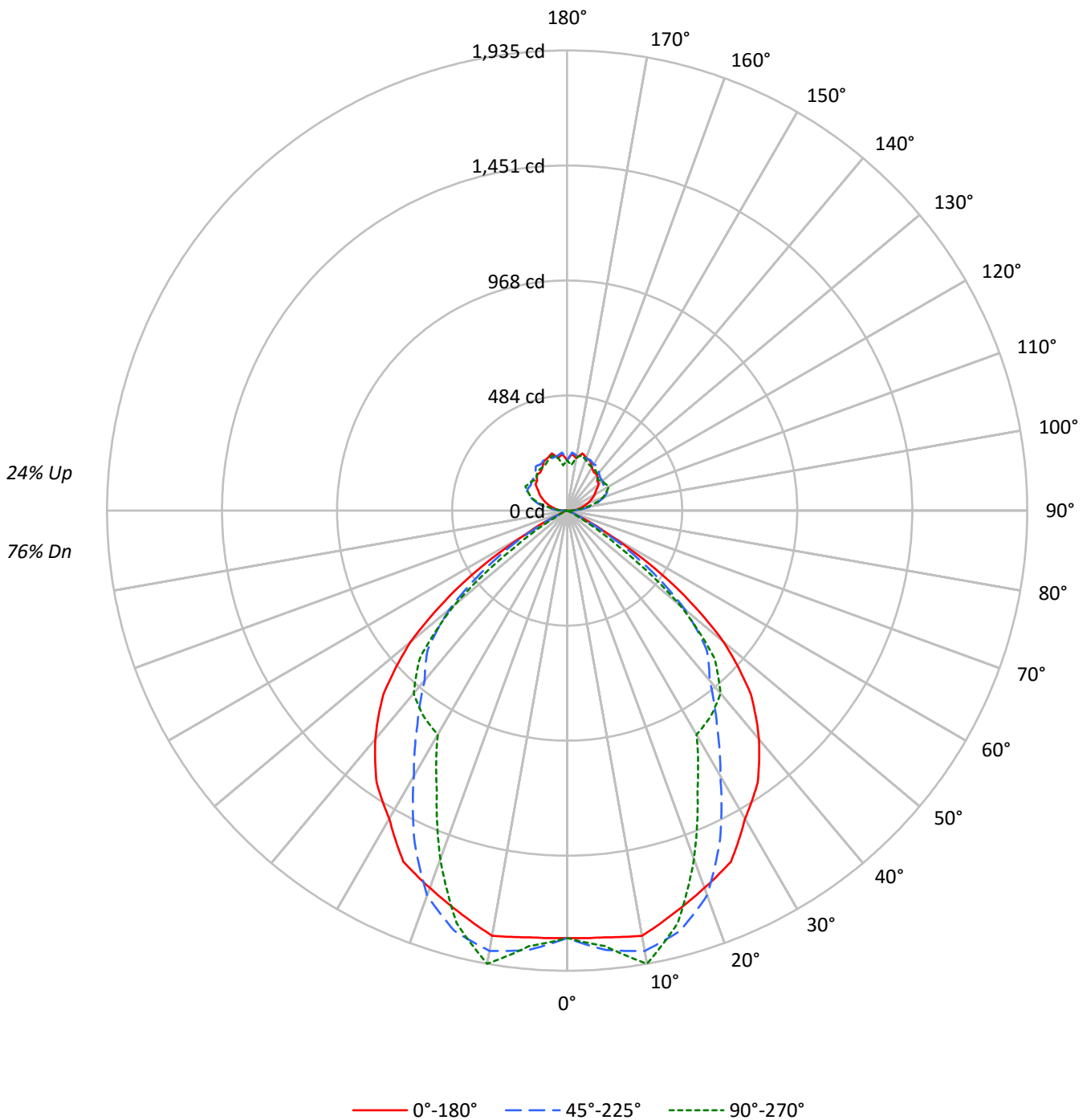
Lumens per Lamp: 4500 (2 lamps)  
Luminaire Lumens: 4213.5 lumens  
Efficiency: 46.8%  
Efficacy: 35.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 0.99 / 1.15  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 3.98' x H: 0.33')  
CIE Type: Semi-Direct

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	53	53	53	53	51	51	51	51	46	46	46	42	42	42	38	38	38	36
1	50	48	46	45	47	46	45	43	42	41	40	38	38	37	35	34	34	32
2	46	43	41	39	44	41	39	37	38	36	35	35	34	32	32	31	30	29
3	43	39	36	33	41	37	35	32	34	32	31	32	30	29	29	28	27	26
4	40	35	32	29	38	34	31	28	31	29	27	29	27	25	27	25	24	23
5	37	32	28	26	35	31	28	25	29	26	24	27	24	23	25	23	22	20
6	34	29	25	23	33	28	25	22	26	23	21	24	22	20	23	21	19	18
7	32	26	23	21	30	26	22	20	24	21	19	22	20	18	21	19	18	17
8	30	24	21	19	28	24	20	18	22	19	17	21	18	17	19	17	16	15
9	28	22	19	17	27	22	19	16	20	18	16	19	17	15	18	16	15	14
10	26	21	17	15	25	20	17	15	19	16	14	18	16	14	17	15	13	13

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

	0°	45°	90°
0°	8456	8456	8456
5°	8444	8416	8266
10°	8546	8298	8390
15°	8335	7924	7575
20°	8203	7368	6453
25°	8141	6491	5306
30°	7753	5515	4436
35°	7578	4751	4314
40°	7205	4114	4155
45°	6714	3771	3693
50°	5718	3033	2695
55°	4026	1985	1226
60°	1704	890	284
65°	389	239	67
70°	171	119	33
75°	114	85	13
80°	98	57	6
85°	102	56	16



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	176.9	4.2	2.0
10°-20°	503.7	12.0	5.6
20°-30°	686.6	16.3	7.6
30°-40°	732.2	17.4	8.1
40°-50°	684.7	16.2	7.6
50°-60°	364.2	8.6	4.0
60°-70°	56.0	1.3	0.6
70°-80°	10.3	0.2	0.1
80°-90°	8.4	0.2	0.1
90°-100°	56.3	1.3	0.6
100°-110°	125.4	3.0	1.4
110°-120°	162.7	3.9	1.8
120°-130°	165.9	3.9	1.8
130°-140°	152.0	3.6	1.7
140°-150°	135.4	3.2	1.5
150°-160°	105.1	2.5	1.2
160°-170°	66.2	1.6	0.7
170°-180°	21.6	0.5	0.2
0°-30°	1367.3	32.4	15.2
0°-40°	2099.4	49.8	23.3
0°-60°	3148.3	74.7	35.0
0°-90°	3222.9	76.5	35.8
90°-120°	344.4	8.2	3.8
90°-150°	797.7	18.9	8.9
90°-180°	991.0	23.5	11.0
0°-180°	4213.5	100.0	46.8

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1798	1798	1798	1798	1798	
5°	1801	1831	1855	1903	1839	172
15°	1750	1805	1830	1768	1796	495
25°	1629	1652	1523	1332	1297	743
35°	1397	1330	1098	1006	1054	868
45°	1093	954	831	854	875	829
55°	549	452	403	332	272	481
65°	41	42	43	24	13	75
75°	8	12	13	7	2	10
85°	4	5	7	5	2	4
90°	14	15	15	18	14	10
95°	40	61	52	52	42	33
105°	74	110	134	137	125	78
115°	113	141	187	191	180	112
125°	149	168	187	214	196	135
135°	179	198	196	204	183	141
145°	196	217	229	227	207	125
155°	230	228	233	222	214	104
165°	249	232	230	238	240	68
175°	238	227	245	234	191	22
180°	212	212	212	212	212	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1797.5	1797.5	1797.5	1797.5	1797.5
5°	1801.2	1830.6	1854.9	1903.3	1838.7
10°	1815.4	1873.4	1880.0	1861.3	1935.0
15°	1749.7	1805.1	1830.4	1767.5	1795.6
20°	1688.3	1756.6	1721.6	1616.0	1559.5
25°	1629.3	1651.8	1522.6	1331.9	1297.0
30°	1496.0	1489.4	1288.7	1148.4	1088.5
35°	1396.6	1329.5	1097.6	1006.3	1054.3
40°	1255.2	1145.1	932.2	969.5	1003.8
45°	1093.3	954.0	831.1	853.8	875.1
50°	858.9	740.0	644.7	658.9	621.2
55°	549.3	452.5	403.3	331.6	272.5
60°	207.2	178.0	171.1	98.6	60.4
65°	41.2	41.5	42.9	23.6	13.4
70°	15.3	18.8	19.8	11.2	6.2
75°	8.2	12.1	12.8	6.7	2.2
80°	5.3	7.3	7.7	3.5	0.9
85°	3.7	4.8	6.6	5.0	2.2
90°	14.4	15.4	15.3	17.8	13.9
95°	39.5	60.7	52.4	51.6	42.3
100°	54.0	87.6	102.5	96.6	77.5
105°	74.3	109.7	134.1	137.4	125.3
110°	93.4	127.8	164.8	165.4	160.0
115°	113.2	140.7	186.9	190.6	180.3
120°	133.0	156.6	188.8	197.0	203.0
125°	148.6	168.2	186.7	213.9	196.2
130°	173.3	184.8	193.8	205.6	192.6
135°	178.7	197.8	196.2	203.9	182.6
140°	196.4	208.3	207.0	205.7	198.5
145°	196.0	216.8	228.6	226.7	207.3
150°	207.9	233.2	223.3	223.1	209.4
155°	229.6	228.2	233.1	222.0	214.5
160°	236.0	236.0	235.5	235.0	227.5
165°	249.0	231.6	229.7	237.7	240.4
170°	223.8	226.9	234.1	220.7	226.0
175°	237.9	227.1	245.0	233.9	190.9
180°	211.8	211.8	211.8	211.8	211.8

(END OF REPORT)