

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: 16024

Luminaire Tested: **S1-WB-2T5 DL100**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 16024  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: S1-WB-2T5 DL100  
Description: CORELITE DIRECT/INDIRECT SUSPENDED LUMINAIRE - STELLAR 2T5  
  
WITH WHITE INTERIOR AND WHITE 31 CELL LOUVER AND SOLID TOP  
Light Source: TWO SYLVANIA 54 WATT T5 LAMPS  
  
FP54/841/HO. LUMEN RATING = 4500 LMS.  
  
Ballast/Driver: ONE SYLVANIA QT2X54/120PHO BALLAST OPERATING AT 120 VAC AND 123 WATTS

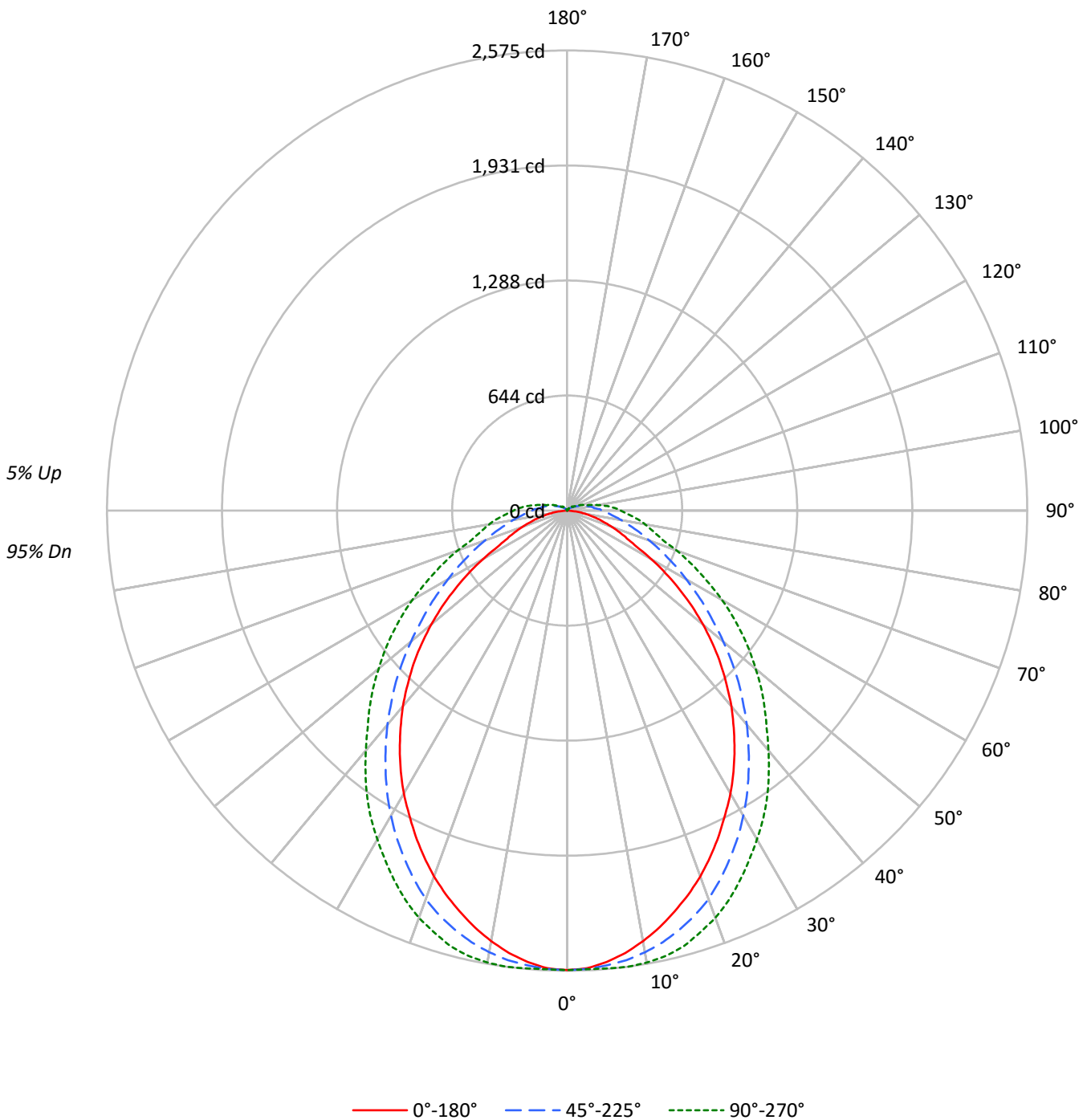
**Summary**

Lumens per Lamp: 4500 (2 lamps)  
Luminaire Lumens: 6548.5 lumens  
Efficiency: 72.8%  
Efficacy: 53.2 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4' x H: 0.25')  
CIE Type: Direct  
  
Input Watts (W): 123  
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									
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	86	86	86	86	83	83	83	83	79	79	79	75	75	75	71	71	71	69																
1	78	74	71	68	76	72	70	67	69	66	64	65	63	62	62	61	59	57																
2	71	65	60	56	69	64	59	55	60	57	53	58	54	52	55	52	50	48																
3	65	58	52	47	63	56	51	47	54	49	45	51	47	44	49	46	43	41																
4	60	51	45	40	58	50	44	40	48	43	39	46	42	38	44	40	37	36																
5	55	46	40	35	54	45	39	35	43	38	34	41	37	33	40	36	33	31																
6	51	42	35	31	50	41	35	31	39	34	30	38	33	30	36	32	29	27																
7	48	38	32	27	46	37	31	27	36	31	27	35	30	26	33	29	26	24																
8	44	35	29	25	43	34	28	24	33	28	24	32	27	24	31	27	23	22																
9	42	32	26	22	40	31	26	22	30	25	22	29	25	22	28	24	21	20																
10	39	30	24	20	38	29	24	20	28	23	20	27	23	20	26	22	19	18																

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

	0°	45°	90°
0°	13839	13839	13839
5°	13627	13335	13309
10°	13223	12817	12899
15°	12727	12225	12398
20°	12197	11575	11751
25°	11584	10779	11009
30°	10965	9968	10245
35°	10276	9104	9501
40°	9547	8242	8672
45°	8710	7380	7933
50°	7738	6478	7226
55°	6600	5652	6520
60°	5294	4901	5773
65°	4149	4247	5015
70°	3559	3679	4314
75°	2981	3244	3766
80°	2313	2932	3583
85°	1196	2717	3362



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	242.8	3.7	2.7
10°-20°	683.7	10.4	7.6
20°-30°	989.5	15.1	11.0
30°-40°	1115.6	17.0	12.4
40°-50°	1058.6	16.2	11.8
50°-60°	863.5	13.2	9.6
60°-70°	613.2	9.4	6.8
70°-80°	400.7	6.1	4.5
80°-90°	254.2	3.9	2.8
90°-100°	155.6	2.4	1.7
100°-110°	84.7	1.3	0.9
110°-120°	44.3	0.7	0.5
120°-130°	23.5	0.4	0.3
130°-140°	12.7	0.2	0.1
140°-150°	4.6	0.1	0.1
150°-160°	1.1	0.0	0.0
160°-170°	0.1	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	1915.9	29.3	21.3
0°-40°	3031.5	46.3	33.7
0°-60°	4953.6	75.6	55.0
0°-90°	6221.8	95.0	69.1
90°-120°	284.6	4.3	3.2
90°-150°	325.4	5.0	3.6
90°-180°	327.0	5.0	3.6
0°-180°	6548.5	100.0	72.8

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2571	2571	2571	2571	2571	
5°	2536	2549	2554	2573	2571	239
15°	2322	2366	2428	2497	2523	654
25°	2008	2075	2152	2232	2286	923
35°	1632	1712	1772	1878	1952	1020
45°	1216	1283	1355	1463	1564	935
55°	766	841	945	1093	1191	685
65°	370	495	618	750	816	377
75°	177	248	388	518	519	189
85°	33	128	244	352	366	42
90°	0	84	196	286	300	1
95°	0	56	152	234	243	0
105°	0	13	101	136	118	1
115°	0	6	57	78	67	1
125°	2	7	33	46	36	2
135°	3	5	18	25	30	2
145°	3	0	8	11	10	1
155°	0	2	2	0	3	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2571.3	2571.3	2571.3	2571.3	2571.3
2.5°	2563.5	2573.8	2567.4	2573.8	2568.8
5°	2536.1	2549.2	2554.2	2572.7	2571.3
7.5°	2497.0	2519.0	2537.2	2568.4	2575.2
10°	2446.2	2474.9	2509.8	2555.6	2568.4
12.5°	2388.9	2429.1	2473.5	2533.2	2552.8
15°	2322.4	2365.5	2428.0	2497.0	2523.3
17.5°	2253.5	2309.3	2375.8	2449.0	2474.9
20°	2178.1	2232.5	2313.6	2383.6	2425.2
22.5°	2094.9	2157.2	2236.4	2316.0	2361.5
25°	2007.5	2075.0	2151.8	2232.5	2286.2
27.5°	1916.1	1981.5	2065.8	2140.1	2205.1
30°	1828.0	1900.5	1972.3	2058.3	2124.4
32.5°	1732.7	1805.6	1874.6	1967.0	2042.7
35°	1632.5	1711.7	1771.5	1878.5	1952.4
37.5°	1530.8	1599.8	1667.3	1769.3	1853.6
40°	1430.2	1500.6	1564.6	1676.6	1752.3
42.5°	1321.1	1387.6	1456.5	1566.0	1653.1
45°	1215.9	1283.4	1355.2	1463.3	1563.5
47.5°	1105.3	1172.8	1246.8	1373.0	1473.2
50°	993.0	1051.6	1140.5	1270.2	1377.2
52.5°	881.0	951.4	1037.4	1183.2	1285.9
55°	766.2	840.8	944.6	1093.2	1191.0
57.5°	654.6	738.8	855.1	1004.7	1095.7
60°	545.1	645.7	769.0	910.9	1000.8
62.5°	437.0	568.5	693.3	830.5	904.5
65°	369.5	495.3	618.0	749.5	816.0
67.5°	316.2	421.4	550.4	684.4	732.8
70°	265.0	361.7	489.3	621.9	650.7
72.5°	218.4	296.3	437.0	562.1	568.5
75°	176.8	247.9	387.6	517.7	519.1
77.5°	137.4	205.3	343.5	467.9	477.5
80°	101.1	174.0	308.0	429.2	443.4
82.5°	68.4	148.0	272.8	390.1	407.2
85°	33.2	128.5	244.0	352.4	365.6
87.5°	8.3	105.0	215.6	318.6	329.0
90°	0.5	83.7	196.4	285.6	300.2
92.5°	0.5	67.0	181.8	263.9	274.2
95°	0.5	55.6	151.9	234.0	242.9
97.5°	0.5	42.4	144.1	206.3	210.6
100°	0.5	27.9	129.9	174.3	176.5
102.5°	0.5	21.5	116.7	163.7	144.1
105°	0.5	12.6	101.1	136.3	117.8
107.5°	0.5	8.3	85.5	120.6	106.1
110°	0.5	7.3	75.1	105.0	91.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	7.3	64.5	91.9	80.1
115°	0.5	6.2	56.7	77.6	67.3
117.5°	0.5	7.3	47.4	68.4	55.2
120°	1.9	6.2	42.4	58.1	48.8
122.5°	3.3	5.8	36.0	48.8	42.4
125°	1.9	7.3	33.2	46.4	36.0
127.5°	1.9	7.3	26.8	38.5	34.6
130°	0.5	8.3	21.5	36.0	34.6
132.5°	1.9	7.3	19.0	29.3	30.7
135°	3.3	4.8	17.6	25.4	29.6
137.5°	3.3	7.3	15.1	22.9	24.0
140°	1.9	5.8	8.7	20.1	20.4
142.5°	1.9	3.3	8.7	15.1	16.1
145°	3.3	0.5	8.3	11.2	10.1
147.5°	1.9	0.5	7.3	9.7	7.3
150°	1.9	0.5	3.3	7.3	6.2
152.5°	0.5	1.9	4.8	7.3	4.8
155°	0.5	1.9	1.9	0.5	3.3
157.5°	0.5	0.5	1.9	0.5	0.5
160°	0.5	0.5	0.5	0.5	0.5
162.5°	0.5	0.5	0.5	0.5	0.5
165°	0.5	0.5	0.5	0.5	0.5
167.5°	0.5	0.5	0.5	0.5	0.5
170°	0.5	0.5	0.5	0.5	0.5
172.5°	0.5	0.5	0.5	0.5	0.5
175°	0.5	0.5	0.5	0.5	0.5
177.5°	0.5	0.5	0.5	0.5	0.5
180°	0.5	0.5	0.5	0.5	0.5

(END OF REPORT)