

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: 16023

Luminaire Tested: **S1-WB-2T5 DL70**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 16023  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: S1-WB-2T5 DL70  
Description: CORELITE DIRECT/INDIRECT SUSPENDED LUMINAIRE - STELLAR 2T5  
  
WITH WHITE INTERIOR AND WHITE 31 CELL LOUVER AND SLOTTED TOP  
Light Source: TWO SYLVANIA 54 WATT T5 LAMPS  
  
FP54/841/HO. LUMEN RATING = 4500 LMS.  
  
Ballast/Driver: -

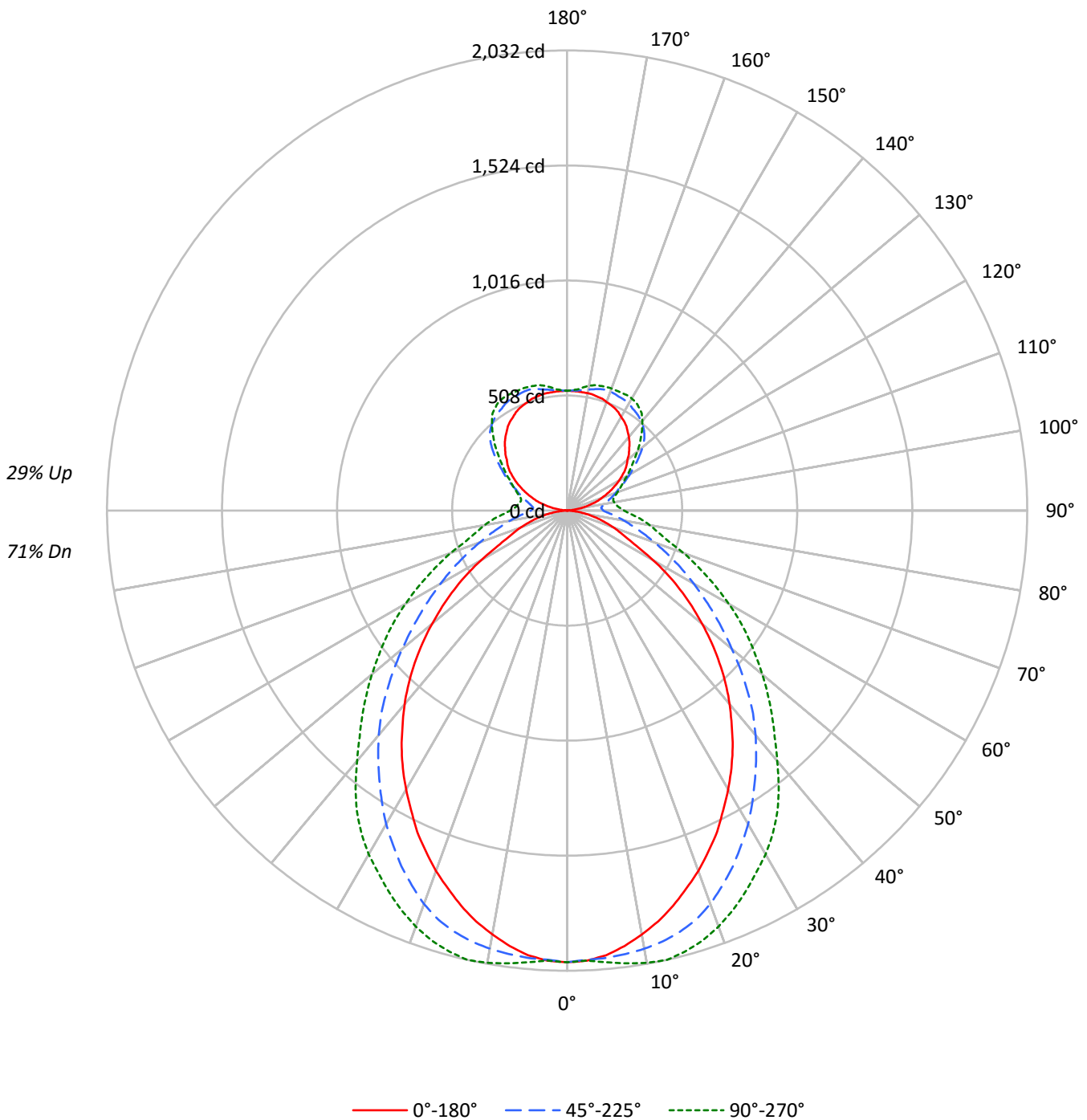
**Summary**

Lumens per Lamp: 4500 (2 lamps)  
Luminaire Lumens: 7123.0 lumens  
Efficiency: 79.1%  
Efficacy: 57.9 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.29 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4' x H: 0.25')  
CIE Type: Semi-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				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	89	89	89	89	84	84	84	84	75	75	75	67	67	67	60	60	60	56
1	81	77	74	71	76	73	70	67	65	63	61	59	57	55	52	51	50	47
2	74	67	62	58	69	64	59	55	57	54	51	52	49	46	46	44	42	39
3	67	59	53	48	63	56	51	47	51	46	43	46	42	39	41	38	36	33
4	62	53	46	41	58	50	44	40	45	41	37	41	37	34	37	34	31	29
5	57	47	40	36	54	45	39	34	41	36	32	37	33	30	33	30	27	25
6	52	43	36	31	49	41	34	30	37	32	28	33	29	26	30	27	24	22
7	49	39	32	27	46	37	31	27	34	29	25	31	26	23	28	24	22	20
8	45	35	29	24	43	34	28	24	31	26	22	28	24	21	25	22	19	18
9	42	32	26	22	40	31	25	21	28	23	20	26	22	19	24	20	18	16
10	40	30	24	20	37	28	23	19	26	21	18	24	20	17	22	18	16	15

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

	0°	45°	90°
0°	10732	10732	10732
5°	10590	10351	10364
10°	10273	10032	10186
15°	9902	9695	9902
20°	9484	9249	9469
25°	9036	8678	8957
30°	8532	8080	8450
35°	8023	7432	7880
40°	7455	6817	7144
45°	6815	6131	6492
50°	6065	5390	5906
55°	5247	4719	5344
60°	4273	4113	4760
65°	3343	3568	4158
70°	2914	3072	3623
75°	2472	2708	3160
80°	1922	2425	2997
85°	1066	2215	2809



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	189.0	2.7	2.1
10°-20°	540.6	7.6	6.0
20°-30°	793.6	11.1	8.8
30°-40°	907.3	12.7	10.1
40°-50°	865.0	12.1	9.6
50°-60°	711.7	10.0	7.9
60°-70°	511.2	7.2	5.7
70°-80°	335.8	4.7	3.7
80°-90°	211.0	3.0	2.3
90°-100°	155.8	2.2	1.7
100°-110°	191.9	2.7	2.1
110°-120°	258.9	3.6	2.9
120°-130°	318.8	4.5	3.5
130°-140°	349.1	4.9	3.9
140°-150°	324.9	4.6	3.6
150°-160°	251.8	3.5	2.8
160°-170°	155.6	2.2	1.7
170°-180°	51.2	0.7	0.6
0°-30°	1523.2	21.4	16.9
0°-40°	2430.4	34.1	27.0
0°-60°	4007.1	56.3	44.5
0°-90°	5065.1	71.1	56.3
90°-120°	606.5	8.5	6.7
90°-150°	1599.3	22.5	17.8
90°-180°	2058.0	28.9	22.9
0°-180°	7123.0	100.0	79.1

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1994	1994	1994	1994	1994	
5°	1971	1977	1983	1998	2002	186
15°	1807	1852	1925	1992	2015	508
25°	1566	1646	1732	1810	1860	719
35°	1274	1370	1446	1557	1619	795
45°	951	1037	1126	1204	1280	732
55°	609	698	789	895	976	544
65°	298	420	519	626	677	305
75°	147	213	324	429	436	156
85°	30	108	199	296	306	35
90°	0	69	159	241	252	1
95°	13	67	150	216	222	21
105°	113	137	194	223	212	118
115°	214	254	270	284	266	212
125°	312	348	374	359	350	277
135°	388	432	482	477	462	299
145°	456	496	529	555	554	284
155°	498	526	552	567	572	229
165°	520	533	555	566	570	147
175°	528	529	532	535	537	50
180°	529	529	529	529	529	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1994.1	1994.1	1994.1	1994.1	1994.1
2.5°	1989.4	1995.8	1985.5	1990.4	1989.0
5°	1970.9	1977.3	1982.6	1998.3	2002.2
7.5°	1939.6	1954.2	1974.8	2007.5	2016.4
10°	1900.5	1926.5	1964.5	2010.0	2028.1
12.5°	1857.8	1892.7	1948.8	2010.0	2032.4
15°	1807.0	1852.5	1925.4	1991.5	2015.3
17.5°	1749.8	1810.6	1893.7	1961.6	1990.4
20°	1693.6	1758.7	1848.6	1916.1	1954.2
22.5°	1630.0	1705.0	1791.4	1865.7	1910.8
25°	1566.0	1645.6	1732.4	1809.5	1860.0
27.5°	1491.7	1580.2	1664.8	1746.9	1804.5
30°	1422.4	1520.5	1598.7	1689.4	1752.3
32.5°	1349.9	1444.8	1523.0	1622.2	1691.1
35°	1274.5	1370.5	1446.2	1556.8	1619.3
37.5°	1193.5	1284.8	1370.8	1469.3	1534.7
40°	1116.7	1209.1	1294.1	1389.0	1443.4
42.5°	1036.0	1122.0	1214.4	1291.2	1356.3
45°	951.4	1037.4	1125.9	1203.8	1279.5
47.5°	865.7	952.8	1038.5	1125.9	1201.6
50°	778.3	857.9	948.9	1043.8	1125.6
52.5°	693.7	780.8	867.9	974.9	1047.7
55°	609.1	697.6	788.6	895.2	976.3
57.5°	527.0	621.9	715.7	831.6	901.6
60°	439.9	541.2	645.3	753.4	825.2
62.5°	354.9	476.1	581.7	687.3	749.5
65°	297.7	420.3	519.1	625.8	676.6
67.5°	254.7	360.2	463.0	567.1	608.7
70°	217.0	306.9	408.6	514.9	546.5
72.5°	180.7	250.8	364.1	471.1	479.7
75°	146.6	213.1	323.6	429.2	435.6
77.5°	114.3	177.9	285.9	394.0	399.3
80°	84.0	146.6	254.7	358.8	370.9
82.5°	55.2	126.0	224.8	325.0	339.3
85°	29.6	107.9	198.9	296.3	305.5
87.5°	5.8	85.5	175.4	261.1	272.8
90°	0.5	68.8	159.0	240.8	251.8
92.5°	0.5	59.2	153.4	224.8	236.2
95°	12.6	67.0	150.5	215.6	222.3
97.5°	33.2	79.1	158.3	210.6	218.0
100°	59.5	101.1	167.6	210.2	210.6
102.5°	85.5	107.5	180.7	216.6	208.1
105°	112.8	137.4	193.5	223.4	211.7
107.5°	140.2	169.0	211.7	233.7	223.4
110°	162.2	192.1	228.7	249.3	236.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	188.2	222.0	245.4	262.5	249.7
115°	214.5	253.6	270.3	283.5	266.4
117.5°	239.0	282.0	292.3	299.1	283.1
120°	265.0	309.4	319.7	319.7	304.1
122.5°	288.4	339.3	344.6	347.1	326.1
125°	311.9	348.5	374.5	358.8	349.9
127.5°	331.8	374.5	404.7	389.0	375.9
130°	347.4	394.4	434.5	417.8	403.3
132.5°	369.5	412.1	461.5	444.8	434.5
135°	387.6	432.0	482.5	477.2	461.9
137.5°	407.2	450.2	498.2	500.7	490.3
140°	424.2	464.0	511.0	524.1	516.6
142.5°	439.5	478.6	521.6	543.7	541.2
145°	455.5	495.7	529.4	555.4	554.3
147.5°	467.9	499.2	535.8	558.2	566.1
150°	477.2	511.3	545.1	566.1	571.0
152.5°	489.3	517.7	550.4	567.5	573.9
155°	498.2	525.5	551.5	567.1	572.5
157.5°	504.6	529.4	555.7	568.5	572.5
160°	509.9	529.4	559.3	568.5	573.9
162.5°	517.7	530.9	559.7	568.5	572.5
165°	520.2	533.4	555.4	565.7	570.0
167.5°	524.5	532.3	549.0	560.7	567.1
170°	526.6	530.5	542.6	556.8	559.7
172.5°	526.6	529.4	537.3	542.6	549.0
175°	528.0	529.4	531.9	534.8	537.3
177.5°	528.0	528.0	530.9	529.4	532.3
180°	528.9	528.9	528.9	528.9	528.9

(END OF REPORT)