

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: 16868

Luminaire Tested: **AB-WO-4T5**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 16868  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: AB-WO-4T5  
Description: CORELITE - SUSPENDED DIRECT/INDIRECT LUMINAIRE

WITH WHITE LENS OVER TWO ROWS OF RECTANGULAR APERTURES

Light Source: FOUR OSRAM 54 WATT T5 LAMPS

FP54/841/HO. LUMEN RATING = 4500 LMS.

Ballast/Driver: TWO SYLVANIA QT2X54/120PHO BALLASTS OPERATING AT 120 VAC AND 242 WATTS

**Summary**

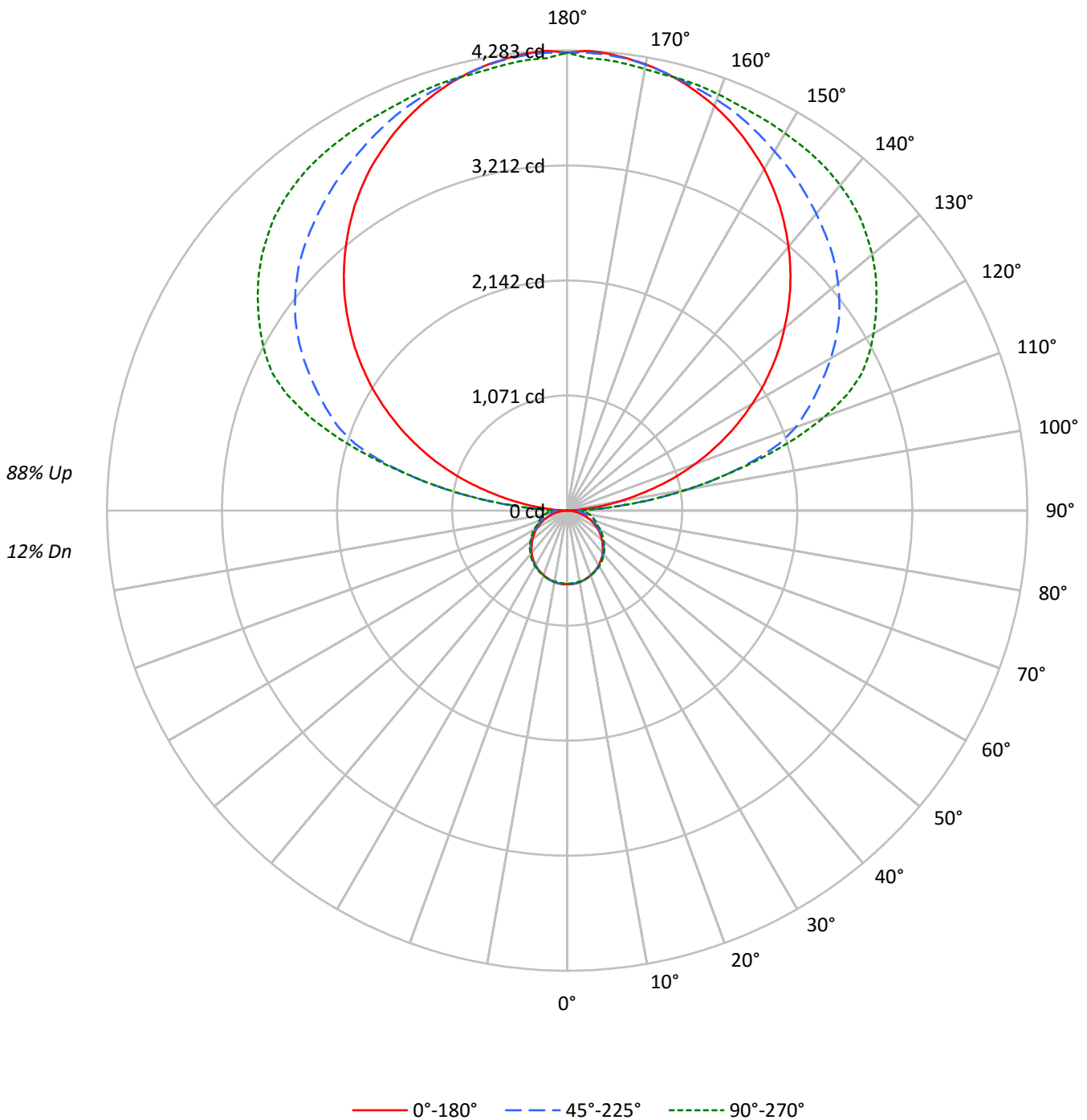
Lumens per Lamp: 4500 (4 lamps)  
Luminaire Lumens: 17932.8 lumens  
Efficiency: 99.6%  
Efficacy: 74.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.3 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.75' x L: 4' x H: 0.25')  
CIE Type: Semi-Indirect

Input Watts (W): 242  
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				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	98	98	98	98	85	85	85	85	62	62	62	41	41	41	22	22	22	12
1	89	85	81	77	77	74	71	68	54	52	50	35	34	33	19	18	18	10
2	81	74	68	63	70	64	60	55	47	44	41	31	29	28	16	15	15	8
3	73	64	58	52	64	56	51	46	41	37	34	27	25	23	14	13	12	7
4	67	57	49	44	58	50	44	39	36	32	29	24	22	20	13	11	10	6
5	61	50	43	37	53	44	38	33	32	28	25	21	19	17	11	10	9	5
6	56	45	37	32	49	39	33	28	29	25	21	19	17	14	10	9	8	4
7	52	40	33	27	45	35	29	24	26	22	18	17	15	13	9	8	7	4
8	48	36	29	24	42	32	26	21	24	19	16	16	13	11	8	7	6	3
9	44	33	26	21	39	29	23	19	21	17	14	14	12	10	8	6	5	3
10	41	30	23	19	36	26	21	17	20	15	13	13	11	9	7	6	5	3

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

	0°	45°	90°
0°	2456	2456	2456
5°	2452	2407	2369
10°	2440	2347	2308
15°	2418	2287	2249
20°	2392	2219	2190
25°	2372	2177	2134
30°	2353	2118	2076
35°	2320	2058	2014
40°	2285	1983	1936
45°	2225	1911	1867
50°	2190	1832	1774
55°	2143	1748	1700
60°	2080	1626	1635
65°	1997	1543	1509
70°	1880	1448	1510
75°	1731	1382	1515
80°	1521	1365	1518
85°	876	1313	1505



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	64.8	0.4	0.4
10°-20°	186.4	1.0	1.0
20°-30°	285.3	1.6	1.6
30°-40°	350.0	2.0	1.9
40°-50°	369.9	2.1	2.1
50°-60°	347.4	1.9	1.9
60°-70°	287.7	1.6	1.6
70°-80°	213.5	1.2	1.2
80°-90°	134.3	0.7	0.7
90°-100°	518.4	2.9	2.9
100°-110°	1668.0	9.3	9.3
110°-120°	2425.5	13.5	13.5
120°-130°	2683.6	15.0	14.9
130°-140°	2645.0	14.7	14.7
140°-150°	2342.4	13.1	13.0
150°-160°	1834.1	10.2	10.2
160°-170°	1172.3	6.5	6.5
170°-180°	404.3	2.3	2.2
0°-30°	536.5	3.0	3.0
0°-40°	886.5	4.9	4.9
0°-60°	1603.8	8.9	8.9
0°-90°	2239.3	12.5	12.4
90°-120°	4611.9	25.7	25.6
90°-150°	12282.8	68.5	68.2
90°-180°	15694.0	87.5	87.2
0°-180°	17932.8	100.0	99.6

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	684	684	684	684	684	
5°	685	681	685	679	677	65
15°	662	657	662	659	659	187
25°	616	615	622	620	623	284
35°	553	552	562	566	567	346
45°	466	470	482	490	491	361
55°	373	379	391	397	401	334
65°	267	276	291	305	305	263
75°	154	168	204	234	245	164
85°	36	86	134	160	176	43
90°	0	59	102	135	141	8
95°	153	434	472	471	474	201
105°	873	1351	1802	1864	1857	925
115°	1638	2036	2550	2918	3028	1618
125°	2327	2537	3087	3397	3516	2080
135°	2937	3070	3464	3773	3856	2264
145°	3453	3545	3743	3964	4018	2159
155°	3853	3869	3976	4071	4085	1776
165°	4130	4134	4140	4166	4153	1166
175°	4271	4267	4258	4240	4211	406
180°	4261	4261	4261	4261	4261	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	684.4	684.4	684.4	684.4	684.4
2.5°	687.0	682.2	685.6	679.4	679.4
5°	684.6	680.8	684.6	679.4	677.0
7.5°	682.2	677.0	680.8	675.9	673.2
10°	677.0	670.4	675.9	669.4	670.8
12.5°	669.4	665.6	667.0	665.6	668.3
15°	661.8	656.9	661.8	659.4	659.4
17.5°	650.4	650.7	654.5	654.2	654.5
20°	640.7	637.9	640.3	645.5	643.1
22.5°	628.9	626.5	632.7	634.1	630.3
25°	616.5	615.1	621.7	620.3	622.7
27.5°	602.3	598.5	606.1	609.9	610.3
30°	588.5	583.7	593.7	597.5	597.5
32.5°	569.5	569.5	577.1	583.7	582.3
35°	552.9	551.9	561.9	565.7	567.1
37.5°	535.3	531.5	541.5	547.7	549.1
40°	513.5	511.1	522.8	530.4	529.0
42.5°	491.0	489.6	503.5	511.1	511.4
45°	465.8	469.6	482.0	489.6	490.7
47.5°	445.4	448.8	459.2	464.4	464.4
50°	421.5	424.0	437.8	440.2	444.0
52.5°	398.7	403.6	416.3	421.5	421.5
55°	373.1	379.4	391.1	397.3	401.1
57.5°	349.3	352.7	364.2	376.9	378.3
60°	321.3	327.5	336.5	353.1	359.3
62.5°	292.2	299.9	315.1	331.3	330.3
65°	266.7	275.7	290.9	305.0	304.7
67.5°	239.0	246.6	269.4	283.3	292.2
70°	210.0	221.4	244.2	268.1	275.7
72.5°	184.7	193.4	220.0	250.1	262.9
75°	154.0	168.2	203.8	233.8	245.2
77.5°	127.7	144.3	187.2	218.6	228.6
80°	99.7	121.1	170.9	201.0	212.4
82.5°	68.3	99.7	151.6	182.0	194.8
85°	36.5	85.9	133.9	160.5	175.8
87.5°	8.5	65.5	116.3	148.1	155.7
90°	0.5	59.3	102.1	135.0	141.2
92.5°	46.5	174.4	208.6	223.8	218.6
95°	152.9	434.0	472.0	471.0	474.4
97.5°	313.7	744.0	796.2	789.7	792.4
100°	497.2	1053.1	1147.8	1231.8	1139.2
102.5°	679.4	1139.2	1482.4	1401.5	1486.2
105°	873.3	1350.7	1801.5	1863.7	1857.1
107.5°	1073.5	1538.4	2073.5	2214.2	2219.4
110°	1267.1	1714.4	2263.6	2525.7	2547.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1454.4	1881.3	2409.2	2763.8	2822.2
115°	1638.3	2035.8	2549.5	2918.3	3028.3
117.5°	1816.7	2178.6	2691.6	3070.1	3170.3
120°	1991.2	2313.1	2834.7	3195.6	3293.1
122.5°	2164.8	2477.6	2965.0	3345.3	3407.1
125°	2326.9	2537.4	3086.7	3397.1	3515.7
127.5°	2490.4	2693.0	3193.2	3526.0	3617.3
130°	2639.7	2824.3	3293.1	3620.1	3705.8
132.5°	2791.5	2948.8	3384.3	3704.8	3783.2
135°	2937.0	3070.1	3464.2	3773.2	3855.5
137.5°	3073.9	3188.0	3536.1	3836.5	3909.7
140°	3205.9	3304.5	3607.3	3884.5	3952.6
142.5°	3331.1	3414.7	3675.4	3923.6	3990.6
145°	3452.8	3545.1	3742.8	3964.0	4017.6
147.5°	3562.7	3589.6	3803.6	3979.2	4037.6
150°	3669.2	3696.8	3860.3	4016.2	4055.6
152.5°	3761.8	3785.6	3919.8	4045.2	4072.9
155°	3852.7	3869.3	3975.8	4070.8	4084.7
157.5°	3935.0	3945.3	4027.6	4098.5	4099.9
160°	4008.3	4017.6	4069.1	4127.5	4122.3
162.5°	4071.9	4078.4	4104.7	4148.9	4140.0
165°	4130.3	4133.7	4140.3	4165.5	4152.8
167.5°	4178.3	4189.4	4178.3	4181.8	4156.6
170°	4217.4	4208.4	4213.6	4194.6	4171.8
172.5°	4246.4	4246.4	4241.6	4225.0	4194.6
175°	4270.6	4266.8	4257.8	4240.2	4210.8
177.5°	4283.1	4278.2	4265.8	4247.8	4216.0
180°	4260.6	4260.6	4260.6	4260.6	4260.6

(END OF REPORT)