

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: 16855

Luminaire Tested: **AB-WO-4T8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 16855  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: AB-WO-4T8  
Description: CORELITE - SUSPENDED DIRECT/INDIRECT LUMINAIRE

WITH WHITE LENS OVER TWO ROWS OF RECTANGULAR APERTURES

Light Source: FOUR PHILIPS 32 WATT T8 LAMPS

F32T8/TL841. LUMEN RATING = 3000 LMS.

Ballast/Driver: TWO SYLVANIA QT2X32/120 IS-SC BALLASTS OPERATING AT 120 VAC AND 121 WATTS

**Summary**

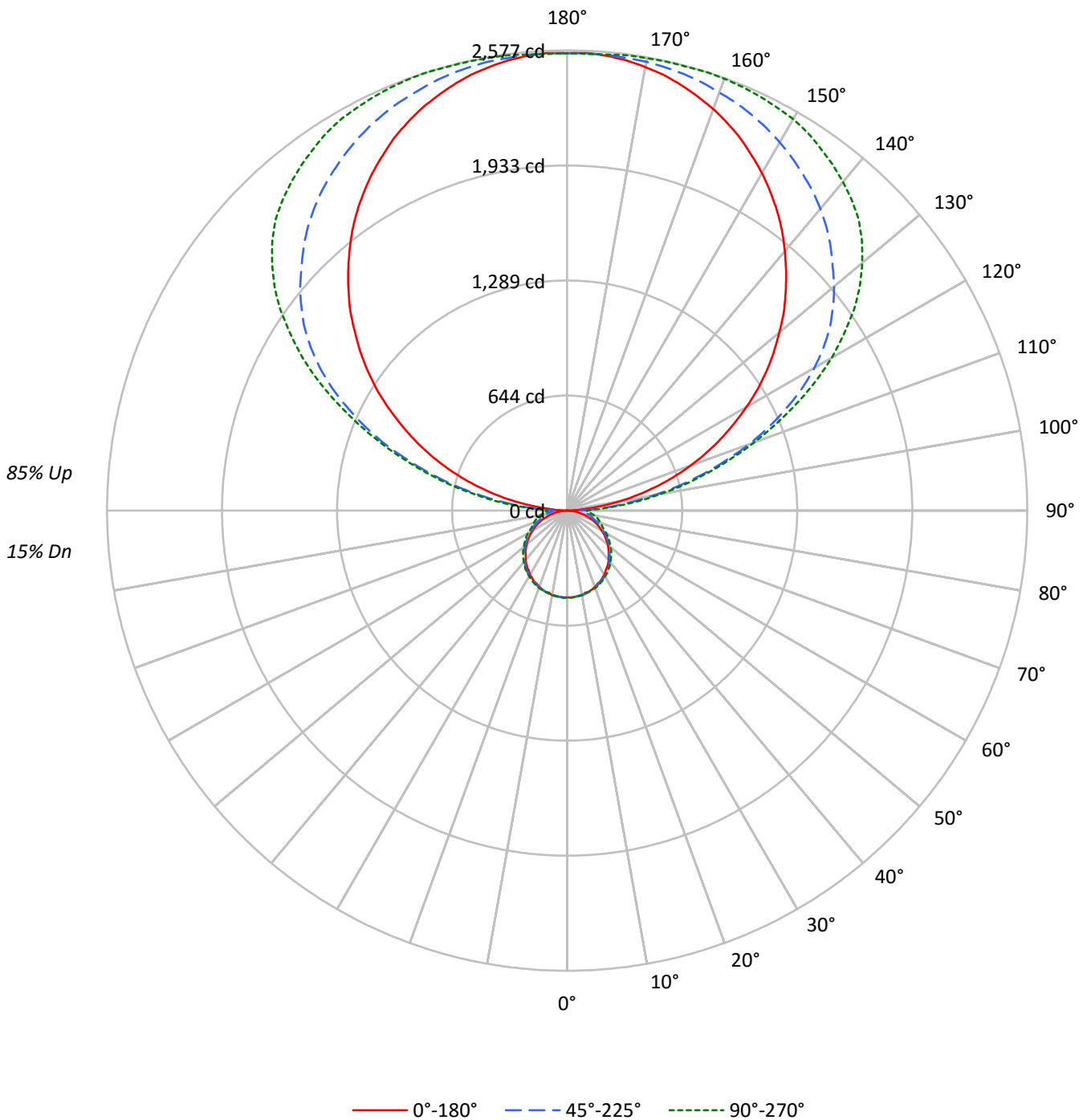
Lumens per Lamp: 3000 (4 lamps)  
Luminaire Lumens: 10536.5 lumens  
Efficiency: 87.8%  
Efficacy: 89.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 0.75' x L: 4' x H: 0.25')  
CIE Type: Semi-Indirect

Input Watts (W): 118  
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	87	87	87	87	76	76	76	76	56	56	56	38	38	38	21	21	21	13
1	79	75	72	69	69	66	63	60	48	47	45	33	32	31	18	18	17	10
2	71	65	60	56	62	57	53	49	42	39	37	28	27	25	16	15	14	9
3	65	57	51	46	57	50	45	41	37	34	31	25	23	21	14	13	12	7
4	59	50	44	39	52	44	39	34	33	29	26	22	20	18	12	11	10	6
5	54	45	38	33	47	39	34	29	29	25	22	20	17	15	11	10	9	5
6	50	40	33	28	43	35	29	25	26	22	19	18	15	13	10	9	8	4
7	46	36	29	24	40	31	26	22	23	20	17	16	13	12	9	8	7	4
8	42	32	26	21	37	28	23	19	21	17	15	15	12	10	8	7	6	4
9	39	29	23	19	34	26	20	17	19	16	13	13	11	9	8	6	5	3
10	37	27	21	17	32	23	18	15	18	14	11	12	10	8	7	6	5	3

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

	0°	45°	90°
0°	1747	1747	1747
5°	1739	1702	1699
10°	1736	1668	1648
15°	1719	1622	1606
20°	1701	1589	1571
25°	1685	1534	1524
30°	1664	1504	1474
35°	1632	1464	1434
40°	1608	1407	1382
45°	1569	1329	1328
50°	1543	1295	1263
55°	1501	1225	1213
60°	1445	1139	1146
65°	1398	1091	1074
70°	1317	1010	1087
75°	1176	987	1103
80°	1010	954	1089
85°	567	930	1080



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	46.1	0.4	0.4
10°-20°	132.6	1.3	1.1
20°-30°	202.9	1.9	1.7
30°-40°	248.4	2.4	2.1
40°-50°	261.2	2.5	2.2
50°-60°	244.3	2.3	2.0
60°-70°	202.3	1.9	1.7
70°-80°	150.7	1.4	1.3
80°-90°	95.5	0.9	0.8
90°-100°	259.2	2.5	2.2
100°-110°	783.8	7.4	6.5
110°-120°	1266.1	12.0	10.6
120°-130°	1545.9	14.7	12.9
130°-140°	1585.5	15.0	13.2
140°-150°	1429.6	13.6	11.9
150°-160°	1124.4	10.7	9.4
160°-170°	714.0	6.8	6.0
170°-180°	243.9	2.3	2.0
0°-30°	381.6	3.6	3.2
0°-40°	630.0	6.0	5.3
0°-60°	1135.5	10.8	9.5
0°-90°	1584.1	15.0	13.2
90°-120°	2309.0	21.9	19.2
90°-150°	6870.0	65.2	57.2
90°-180°	8952.0	85.0	74.6
0°-180°	10536.5	100.0	87.8

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	487	487	487	487	487	
5°	486	482	484	486	486	46
15°	471	468	470	468	471	132
25°	438	434	438	442	445	201
35°	389	390	400	401	404	244
45°	328	329	335	346	349	254
55°	261	262	274	278	286	234
65°	187	192	206	212	217	184
75°	105	120	146	166	178	111
85°	24	59	95	118	126	29
90°	0	39	75	98	110	5
95°	96	193	237	258	266	123
105°	513	724	785	799	812	543
115°	949	1175	1354	1418	1418	937
125°	1363	1527	1798	1897	1960	1217
135°	1731	1868	2088	2251	2308	1335
145°	2049	2152	2301	2438	2476	1282
155°	2298	2349	2445	2521	2558	1059
165°	2467	2486	2530	2558	2574	696
175°	2556	2553	2562	2559	2563	243
180°	2562	2562	2562	2562	2562	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	487.0	487.0	487.0	487.0	487.0
2.5°	487.0	485.5	487.0	484.0	488.5
5°	485.5	481.8	484.0	485.5	485.5
7.5°	481.4	481.8	484.0	481.8	484.0
10°	481.8	477.7	480.3	477.7	478.8
12.5°	470.6	472.1	477.7	476.2	476.2
15°	470.6	468.4	469.5	468.4	471.0
17.5°	462.8	461.3	465.4	465.4	465.4
20°	455.7	454.2	458.7	457.2	461.3
22.5°	443.4	447.8	450.5	450.5	454.6
25°	438.1	434.0	438.1	441.9	444.9
27.5°	425.8	424.3	431.4	432.5	436.7
30°	416.1	416.1	421.7	429.6	424.3
32.5°	400.8	405.3	412.0	413.1	416.1
35°	388.9	390.0	399.7	401.2	403.8
37.5°	376.2	376.6	385.9	388.9	391.5
40°	361.3	362.8	371.0	372.1	377.7
42.5°	344.9	346.4	353.1	363.9	362.8
45°	328.5	328.8	335.2	346.4	349.0
47.5°	313.5	314.6	324.7	327.3	334.0
50°	297.1	301.2	309.4	312.4	316.1
52.5°	279.2	282.2	290.0	297.1	301.2
55°	261.3	261.7	274.0	278.1	286.3
57.5°	243.8	250.8	257.6	264.3	269.9
60°	223.2	231.4	235.6	247.9	252.0
62.5°	204.6	209.8	221.0	234.1	232.9
65°	186.7	192.3	205.7	212.4	216.9
67.5°	165.8	174.4	189.3	201.6	209.8
70°	147.1	152.4	170.3	190.8	198.6
72.5°	124.7	135.9	155.0	178.5	186.7
75°	104.6	119.5	145.6	166.2	178.5
77.5°	85.2	97.5	134.4	156.5	166.2
80°	66.2	84.1	119.5	142.7	152.4
82.5°	48.6	71.4	105.7	129.2	140.0
85°	23.6	59.4	94.9	118.4	126.2
87.5°	6.1	44.5	81.5	107.2	112.8
90°	0.5	38.6	75.1	97.5	109.8
92.5°	30.7	92.3	133.3	150.9	153.8
95°	96.4	193.4	237.0	257.6	265.8
97.5°	190.8	317.6	361.3	384.8	398.2
100°	298.6	495.2	496.7	555.3	528.1
102.5°	405.3	560.9	638.9	626.6	671.7
105°	513.1	723.6	785.1	798.9	812.4
107.5°	623.6	849.3	931.4	957.1	960.1
110°	734.4	963.8	1083.2	1110.5	1114.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	841.1	1075.0	1222.4	1263.1	1264.9
115°	948.9	1174.6	1353.7	1417.9	1417.9
117.5°	1051.5	1272.8	1483.6	1561.2	1569.4
120°	1159.7	1368.6	1598.5	1692.5	1710.4
122.5°	1264.6	1486.2	1703.3	1845.5	1835.8
125°	1363.4	1527.2	1797.7	1897.3	1960.4
127.5°	1458.9	1627.2	1876.8	2027.5	2067.1
130°	1550.3	1710.4	1952.2	2113.7	2157.0
132.5°	1646.2	1793.6	2017.8	2187.2	2239.1
135°	1730.9	1867.5	2087.6	2251.4	2307.7
137.5°	1815.6	1937.2	2150.3	2300.6	2359.6
140°	1896.2	2009.6	2206.3	2347.3	2403.2
142.5°	1976.8	2077.9	2257.0	2390.9	2441.7
145°	2049.2	2151.8	2300.6	2437.6	2475.6
147.5°	2117.5	2180.5	2343.2	2452.5	2508.5
150°	2182.0	2249.9	2381.2	2483.5	2531.6
152.5°	2240.2	2300.6	2415.6	2504.4	2545.0
155°	2298.0	2348.8	2445.4	2520.8	2557.7
157.5°	2347.3	2390.9	2471.5	2538.7	2567.4
160°	2393.5	2427.9	2491.7	2546.5	2574.1
162.5°	2430.9	2459.2	2513.7	2553.2	2576.7
165°	2467.4	2486.4	2530.1	2557.7	2574.1
167.5°	2498.8	2514.1	2542.8	2562.9	2574.1
170°	2522.3	2524.9	2552.1	2565.9	2572.6
172.5°	2542.4	2545.0	2556.2	2564.4	2571.5
175°	2556.2	2553.2	2561.8	2558.8	2563.3
177.5°	2564.4	2561.8	2562.9	2556.2	2558.8
180°	2561.7	2561.7	2561.7	2561.7	2561.7

(END OF REPORT)