

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: 14022

Luminaire Tested: **AI-WN-4T8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 14022  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: AI-WN-4T8  
Description: CORELITE FLUORESCENT INDIRECT INDOOR LUMINAIRE

WITH WHITE INTERIOR AND NO LENS

Light Source: FOUR 32 WATT PHILIPS LAMPS

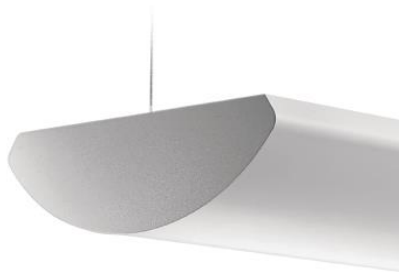
F32T8/TL841. LUMEN RATING = 3000 LMS.

Ballast/Driver: ONE MOTOROLA M4-IN-T8-GP-D-120 BALLAST OPERATING AT 120 VAC AND 107 WATTS

**Summary**

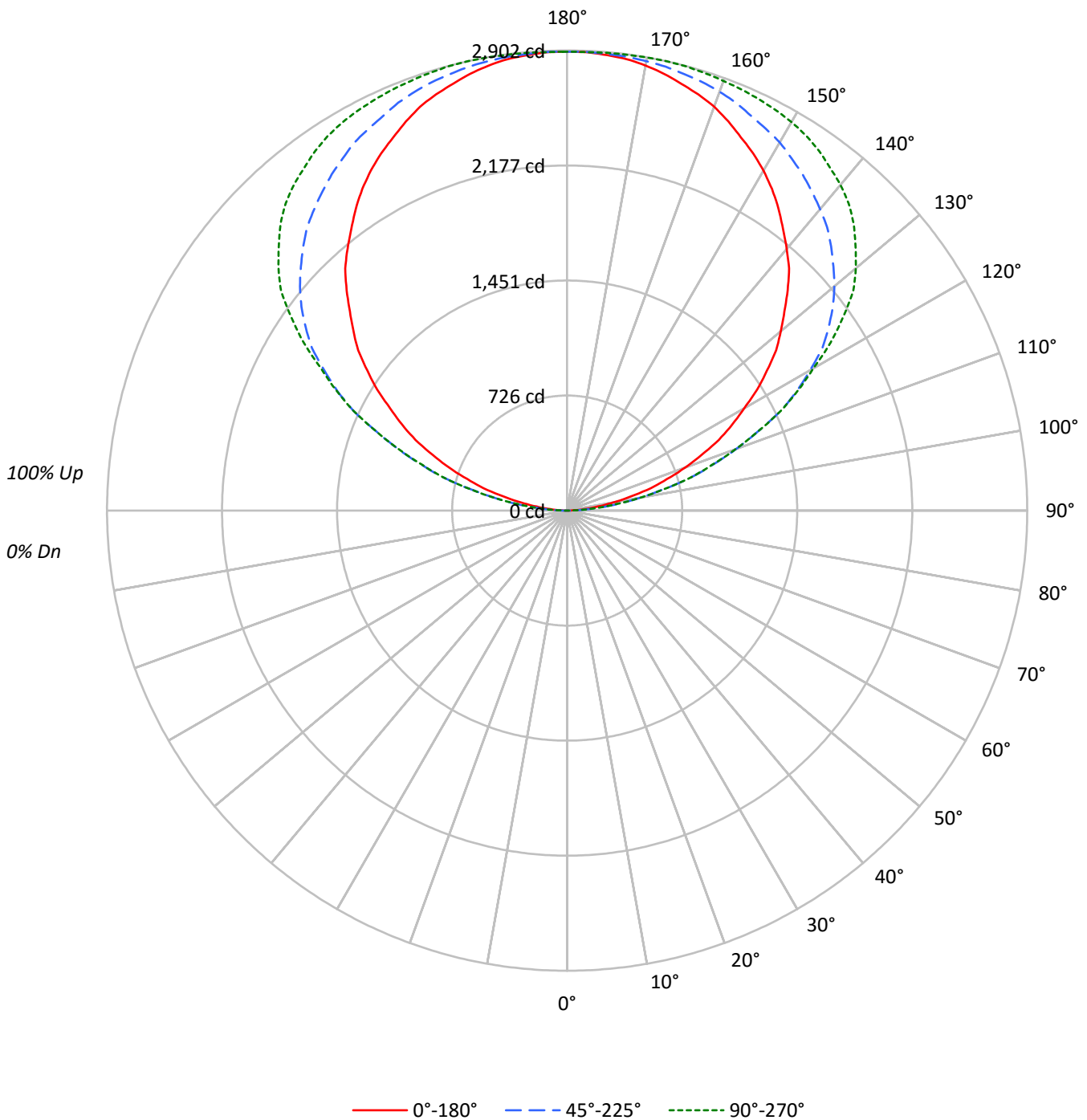
Lumens per Lamp: 3000 (4 lamps)  
Luminaire Lumens: 9833.3 lumens  
Efficiency: 81.9%  
Efficacy: 91.9 lumens/watt  
N/A  
Luminous Opening: Rectangular w/ Sides (W: 0.75' x L: 4' x H: 0.25')  
CIE Type: Indirect

Input Watts (W): 107  
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	78	78	78	78	67	67	67	67	46	46	46	26	26	26	8	8	8	0
1	71	68	65	62	61	58	56	53	40	38	37	23	22	21	7	7	7	0
2	65	59	54	51	55	51	47	44	35	32	31	20	19	18	6	6	6	0
3	59	52	46	42	50	44	40	36	30	28	26	18	16	15	6	5	5	0
4	54	46	40	35	46	39	34	31	27	24	22	16	14	13	5	5	4	0
5	49	40	34	30	42	35	30	26	24	21	18	14	12	11	4	4	4	0
6	45	36	30	25	38	31	26	22	21	18	16	12	11	9	4	3	3	0
7	41	32	26	22	35	28	23	19	19	16	14	11	9	8	4	3	3	0
8	38	29	23	19	32	25	20	17	17	14	12	10	8	7	3	3	2	0
9	35	26	21	17	30	23	18	15	16	13	10	9	7	6	3	2	2	0
10	33	24	18	15	28	20	16	13	14	11	9	8	7	5	3	2	2	0

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

	0°	45°	90°
95°	2548	1799	1581
100°	4532	3764	3378
105°	6144	5498	4992
110°	7082	6717	6193
115°	7897	7885	7358
120°	8338	8551	8149
125°	8837	8997	9000
130°	9139	9208	9495
135°	9392	9334	9728
140°	9589	9414	9815
145°	9753	9480	9835
150°	9901	9565	9830
155°	9985	9616	9804
160°	10120	9739	9819
165°	10176	9848	9887
170°	10270	9991	9983
175°	10329	10162	10141



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	0.0	0.0	0.0
10°-20°	0.0	0.0	0.0
20°-30°	0.0	0.0	0.0
30°-40°	0.0	0.0	0.0
40°-50°	0.0	0.0	0.0
50°-60°	0.0	0.0	0.0
60°-70°	0.0	0.0	0.0
70°-80°	0.0	0.0	0.0
80°-90°	0.0	0.0	0.0
90°-100°	209.4	2.1	1.7
100°-110°	804.6	8.2	6.7
110°-120°	1367.6	13.9	11.4
120°-130°	1717.4	17.5	14.3
130°-140°	1778.7	18.1	14.8
140°-150°	1608.5	16.4	13.4
150°-160°	1265.9	12.9	10.5
160°-170°	805.6	8.2	6.7
170°-180°	275.6	2.8	2.3
0°-30°	0.0	0.0	0.0
0°-40°	0.0	0.0	0.0
0°-60°	0.0	0.0	0.0
0°-90°	0.0	0.0	0.0
90°-120°	2381.6	24.2	19.8
90°-150°	7486.2	76.1	62.4
90°-180°	9833.0	100.0	81.9
0°-180°	9833.3	100.0	81.9

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
90°	2	12	0	8	0	
95°	106	178	184	186	185	132
105°	547	795	811	788	808	570
115°	1055	1336	1486	1466	1486	1036
125°	1539	1757	2013	2105	2124	1374
135°	1967	2111	2354	2501	2556	1516
145°	2324	2425	2588	2715	2769	1453
155°	2596	2659	2746	2828	2862	1199
165°	2785	2818	2850	2885	2899	787
175°	2884	2892	2891	2892	2898	274
180°	2894	2894	2894	2894	2894	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
90°	2.1	12.5	0.5	8.1	0.5
92.5°	34.4	69.5	78.2	72.3	72.3
95°	106.1	177.9	183.5	186.3	184.7
97.5°	193.8	309.0	323.8	325.0	309.0
100°	297.1	460.5	471.3	469.7	472.5
102.5°	411.5	621.2	627.2	624.4	628.8
105°	546.6	795.4	810.9	787.8	808.1
107.5°	660.6	958.8	964.8	955.6	957.2
110°	791.0	1098.8	1132.6	1127.9	1131.0
112.5°	917.8	1223.1	1302.1	1297.7	1300.9
115°	1054.9	1335.5	1486.2	1465.5	1486.2
117.5°	1173.7	1449.6	1633.3	1630.1	1642.1
120°	1287.7	1558.8	1769.3	1800.0	1791.2
122.5°	1420.5	1661.2	1908.0	1961.8	1971.0
125°	1538.8	1757.3	2013.2	2104.9	2123.7
127.5°	1661.2	1851.0	2112.1	2232.1	2274.3
130°	1759.3	1938.3	2199.8	2334.5	2376.8
132.5°	1858.2	2023.6	2277.5	2421.8	2466.9
135°	1966.6	2110.9	2354.5	2500.8	2556.2
137.5°	2071.8	2191.4	2426.2	2566.5	2627.9
140°	2154.7	2273.1	2482.0	2625.1	2681.7
142.5°	2236.5	2350.5	2535.8	2675.8	2724.0
145°	2324.2	2424.6	2588.5	2715.2	2769.4
147.5°	2404.3	2492.0	2633.5	2754.7	2804.5
150°	2476.1	2551.8	2681.7	2782.6	2829.2
152.5°	2540.2	2607.2	2714.0	2807.3	2848.4
155°	2595.6	2658.6	2745.9	2828.0	2861.5
157.5°	2656.6	2703.7	2784.2	2844.0	2874.7
160°	2710.8	2747.5	2810.5	2860.3	2883.5
162.5°	2751.9	2782.6	2834.0	2873.1	2892.2
165°	2785.4	2817.7	2850.0	2885.1	2899.4
167.5°	2822.1	2842.8	2867.5	2889.0	2902.2
170°	2850.0	2865.9	2877.5	2890.6	2901.0
172.5°	2871.9	2882.3	2886.3	2892.2	2899.4
175°	2883.5	2892.2	2890.6	2892.2	2897.8
177.5°	2893.8	2899.4	2895.4	2891.0	2893.8
180°	2893.8	2893.8	2893.8	2893.8	2893.8

(END OF REPORT)