

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: FAIL-SAFE

Report Number: ITL36036

Luminaire Tested: **CFL-24-440**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: ITL36036  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: CFL-24-440  
Description: FAIL-SAFE  
Light Source: 3150 LUMENS  
F40T12/CW  
Ballast/Driver: -

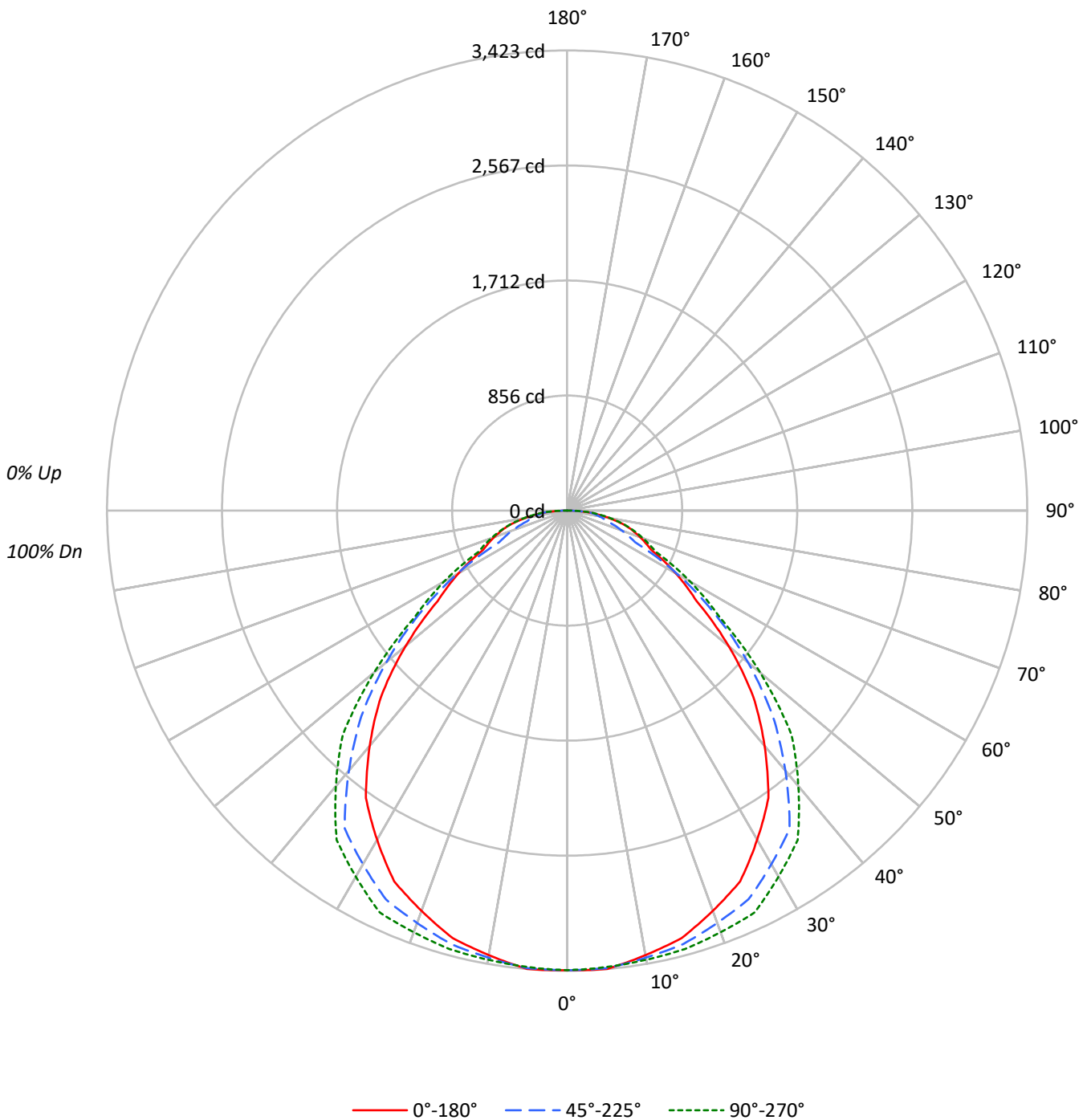
**Summary**

Lumens per Lamp: 3150 (4 lamps)  
Luminaire Lumens: 8582.3 lumens  
Efficiency: 68.1%  
Efficacy: 54.3 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.36 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.25')  
CIE Type: Direct

Input Watts (W): 158  
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	81	81	81	81	79	79	79	79	76	76	76	72	72	72	70	70	70	68
1	75	72	69	67	73	70	68	65	67	65	63	65	63	62	62	61	60	58
2	68	63	59	55	67	62	58	55	60	56	53	57	55	52	55	53	51	50
3	63	56	51	47	61	55	50	46	53	49	46	51	48	45	50	47	44	43
4	58	50	45	40	56	49	44	40	48	43	39	46	42	39	45	41	38	37
5	53	45	39	35	52	44	39	35	43	38	34	42	37	34	40	37	34	32
6	49	41	35	31	48	40	35	31	39	34	30	38	33	30	37	33	30	29
7	46	37	31	27	45	37	31	27	36	31	27	35	30	27	34	30	27	25
8	43	34	28	25	42	34	28	24	33	28	24	32	27	24	31	27	24	23
9	40	31	26	22	39	31	26	22	30	25	22	29	25	22	29	25	22	21
10	38	29	24	20	37	29	24	20	28	23	20	27	23	20	27	23	20	19

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

	0°	45°	90°
0°	4600	4600	4600
5°	4598	4561	4553
10°	4537	4508	4535
15°	4510	4490	4552
20°	4435	4459	4571
25°	4391	4461	4628
30°	4239	4384	4557
35°	4107	4336	4516
40°	3813	3991	4254
45°	3508	3637	3995
50°	3055	3171	3414
55°	2535	2651	2759
60°	2265	2081	2338
65°	1934	1383	1828
70°	1937	1251	1757
75°	1960	1078	1673
80°	1816	1070	1492
85°	1531	1068	1182



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	324.7	3.8	2.6	0°	3419	3419	3419	3419	3419	
10°-20°	940.1	11.0	7.5	5°	3423	3419	3416	3416	3408	324
20°-30°	1450.0	16.9	11.5	15°	3292	3299	3338	3365	3377	925
30°-40°	1727.7	20.1	13.7	25°	3044	3094	3191	3265	3299	1387
40°-50°	1635.9	19.1	13.0	35°	2610	2699	2885	2959	2990	1606
50°-60°	1214.7	14.2	9.6	45°	1959	2006	2165	2265	2362	1492
60°-70°	734.0	8.6	5.8	55°	1177	1243	1344	1394	1386	1122
70°-80°	409.9	4.8	3.3	65°	689	620	558	655	728	749
80°-90°	148.1	1.7	1.2	75°	465	352	310	356	472	473
90°-100°	0.0	0.0	0.0	85°	170	163	174	170	186	173
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	2714.7	31.6	21.5							
0°-40°	4442.5	51.8	35.3							
0°-60°	7293.1	85.0	57.9							
0°-90°	8585.1	100.0	68.1							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	8582.3	100.0	68.1							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3419	3419	3419	3419	3419
5°	3423	3419	3416	3416	3408
15°	3292	3299	3338	3365	3377
25°	3044	3094	3191	3265	3299
35°	2610	2699	2885	2959	2990
45°	1959	2006	2165	2265	2362
55°	1177	1243	1344	1394	1386
65°	689	620	558	655	728
75°	465	352	310	356	472
85°	170	163	174	170	186
90°	0	0	0	0	0

(END OF REPORT)