

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: P233053

Luminaire Tested: **FCB-12-4-LD4-35-30-UNV-EDD1-WDP6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233053
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FCB-12-4-LD4-35-30-UNV-EDD1-WDP6
Description: FAILSAFE 1X4 FCB LED TROFFER
.060 POLYCARBONATE LENS
Light Source: (84)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

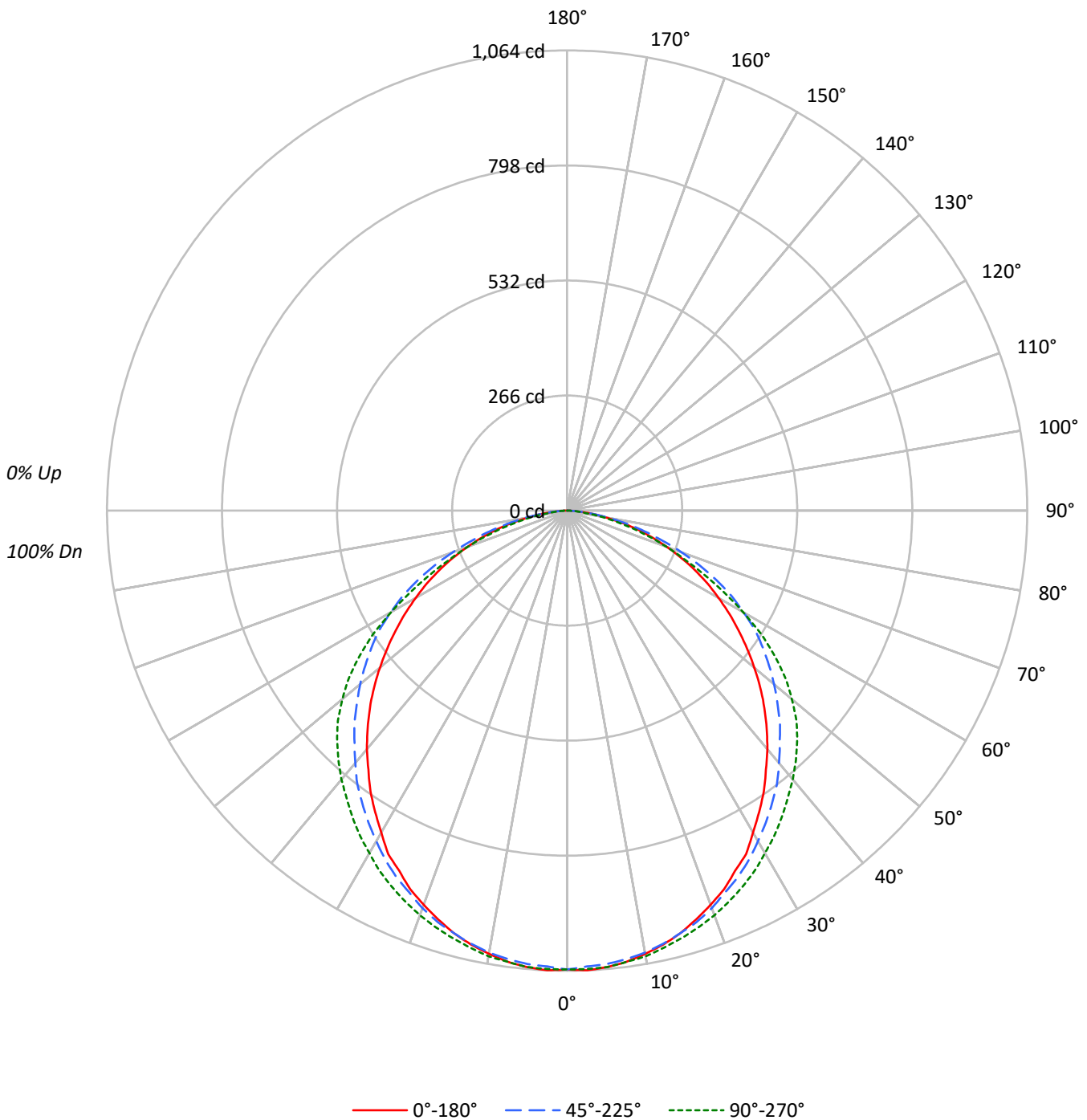
Lumens per Lamp: N/A
Luminaire Lumens: 2940.0 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (A_{in}): 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	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70					70			
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59					59			
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51					51			
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44					44			
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38					38			
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34					34			
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30					30			
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2855	2855	2855
5°	2862	2843	2862
10°	2844	2836	2860
15°	2819	2819	2851
20°	2777	2802	2851
25°	2728	2776	2849
30°	2671	2743	2842
35°	2604	2714	2843
40°	2531	2678	2851
45°	2455	2648	2863
50°	2367	2615	2840
55°	2271	2591	2747
60°	2176	2535	2527
65°	2076	2427	2215
70°	1927	2212	1916
75°	1748	1929	1582
80°	1393	1528	1168
85°	985	849	670



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.4	3.4
10°-20°	286.8	9.8
20°-30°	432.4	14.7
30°-40°	518.3	17.6
40°-50°	537.9	18.3
50°-60°	485.1	16.5
60°-70°	353.9	12.0
70°-80°	185.7	6.3
80°-90°	39.6	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	819.6	27.9
0°-40°	1337.9	45.5
0°-60°	2360.9	80.3
0°-90°	2940.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2940.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1060	1057	1052	1060	1060	101
15°	1012	1012	1012	1023	1023	285
25°	919	923	935	955	960	424
35°	793	802	826	857	865	495
45°	645	658	696	738	752	497
55°	484	502	552	588	586	433
65°	326	345	381	367	348	322
75°	168	191	186	161	152	176
85°	32	39	28	23	22	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1061.0	1061.0	1061.0	1061.0	1061.0
2.5°	1063.9	1061.0	1055.2	1061.0	1061.0
5°	1059.5	1056.6	1052.3	1059.5	1059.5
7.5°	1052.3	1049.4	1046.5	1053.7	1052.3
10°	1040.7	1039.2	1037.8	1046.5	1046.5
12.5°	1027.6	1027.6	1026.2	1036.3	1034.9
15°	1011.7	1011.7	1011.7	1023.3	1023.3
17.5°	991.4	994.3	997.2	1010.2	1010.2
20°	969.7	972.5	978.3	994.3	995.7
22.5°	947.9	949.4	955.2	974.0	978.3
25°	918.9	923.3	934.9	955.2	959.5
27.5°	895.7	897.2	910.2	933.4	939.2
30°	859.5	869.6	882.7	908.8	914.6
32.5°	826.2	834.9	855.1	882.7	891.4
35°	792.8	801.5	826.2	856.6	865.3
37.5°	755.1	768.2	797.2	827.6	837.8
40°	720.4	731.9	762.4	800.1	811.7
42.5°	682.7	694.3	727.6	769.6	782.7
45°	645.0	658.0	695.7	737.7	752.2
47.5°	605.9	620.3	659.5	705.9	718.9
50°	565.3	581.2	624.7	672.5	678.3
52.5°	524.7	542.1	588.5	630.5	636.3
55°	484.1	501.5	552.2	588.5	585.6
57.5°	445.0	463.8	516.0	534.8	531.9
60°	404.4	424.7	471.1	479.8	469.6
62.5°	366.7	385.5	429.0	421.8	408.7
65°	326.1	345.0	381.2	366.7	347.9
67.5°	285.5	308.7	331.9	307.3	292.8
70°	244.9	271.0	281.2	256.5	243.5
72.5°	205.8	233.4	230.5	205.8	197.1
75°	168.1	191.3	185.5	160.9	152.2
77.5°	127.5	153.6	140.6	120.3	113.1
80°	89.9	113.1	98.6	81.2	75.4
82.5°	59.4	75.4	60.9	47.8	43.5
85°	31.9	39.1	27.5	23.2	21.7
87.5°	13.0	11.6	10.1	10.1	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)