

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: P233050

Luminaire Tested: **FCB-12-4-LD4-25-35-UNV-EDD1-WDP6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233050
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-LD4-25-35-UNV-EDD1-WDP6
Description: FAILSAFE 1X4 FCB LED TROFFER
.060 POLYCARBONATE LENS
Light Source: (84)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

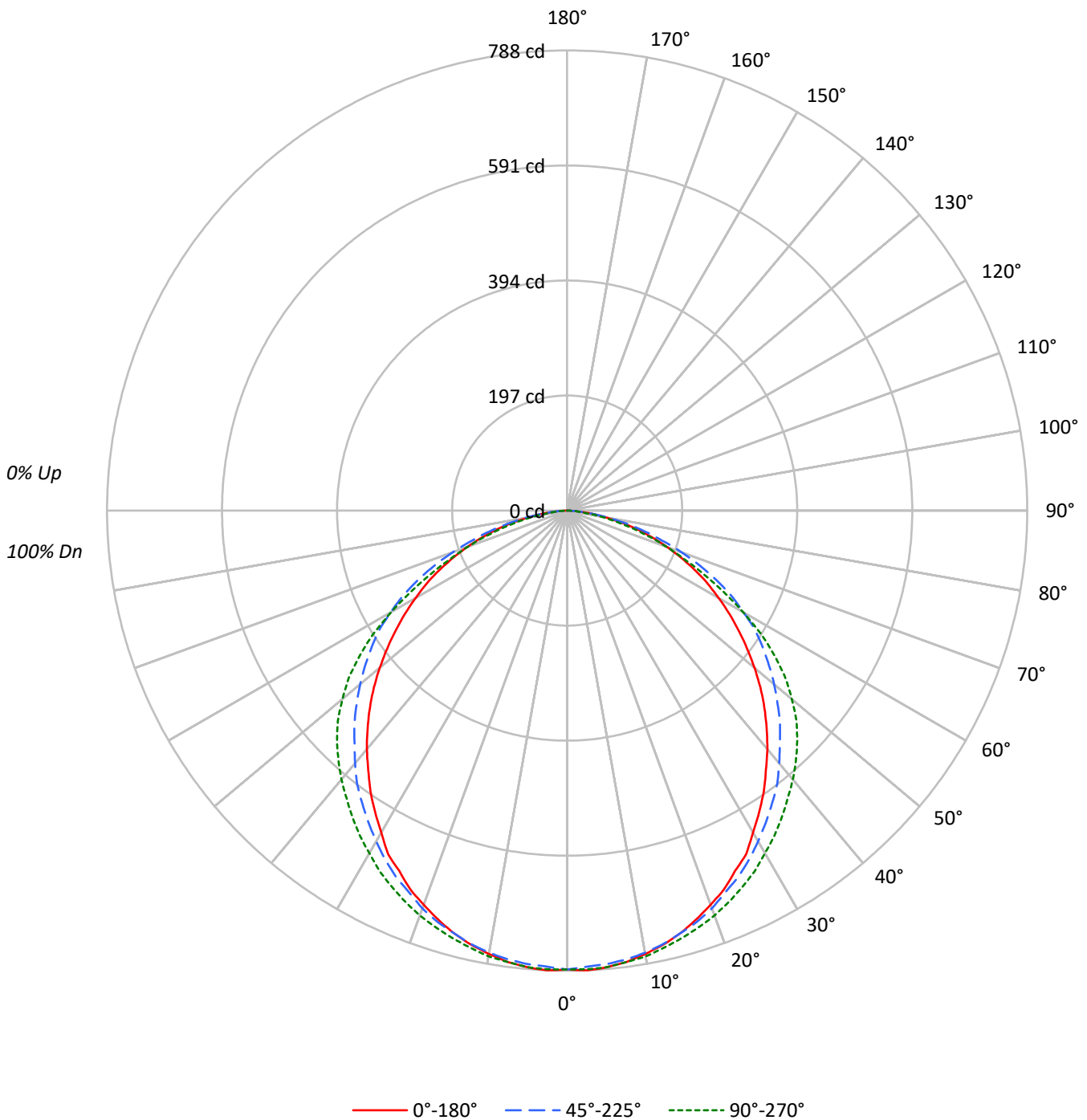
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2178.0 lumens
Efficiency: N/A
Efficacy: 106.2 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): 20.5
Input Voltage (V): 120
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2115	2115	2115
5°	2120	2106	2120
10°	2106	2101	2118
15°	2088	2088	2112
20°	2057	2076	2113
25°	2021	2056	2110
30°	1978	2032	2105
35°	1929	2010	2106
40°	1874	1984	2112
45°	1818	1961	2121
50°	1753	1937	2104
55°	1682	1919	2035
60°	1612	1878	1872
65°	1538	1798	1641
70°	1428	1639	1419
75°	1295	1429	1172
80°	1032	1131	865
85°	729	630	497



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.4	3.4
10°-20°	212.5	9.8
20°-30°	320.3	14.7
30°-40°	384.0	17.6
40°-50°	398.5	18.3
50°-60°	359.4	16.5
60°-70°	262.2	12.0
70°-80°	137.6	6.3
80°-90°	29.3	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°	607.1	27.9
0°-40°	991.1	45.5
0°-60°	1749.0	80.3
0°-90°	2178.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2178.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	786	786	786	786	786	
5°	785	783	780	785	785	74
15°	750	750	750	758	758	211
25°	681	684	693	708	711	314
35°	587	594	612	635	641	367
45°	478	488	515	546	557	368
55°	359	372	409	436	434	321
65°	242	256	282	272	258	239
75°	125	142	137	119	113	131
85°	24	29	20	17	16	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	786.0	786.0	786.0	786.0	786.0
2.5°	788.1	786.0	781.7	786.0	786.0
5°	784.9	782.8	779.5	784.9	784.9
7.5°	779.5	777.4	775.2	780.6	779.5
10°	770.9	769.9	768.8	775.2	775.2
12.5°	761.3	761.3	760.2	767.7	766.7
15°	749.5	749.5	749.5	758.1	758.1
17.5°	734.4	736.6	738.7	748.4	748.4
20°	718.3	720.5	724.8	736.6	737.7
22.5°	702.2	703.3	707.6	721.6	724.8
25°	680.8	684.0	692.6	707.6	710.8
27.5°	663.6	664.6	674.3	691.5	695.8
30°	636.7	644.2	653.9	673.2	677.5
32.5°	612.0	618.5	633.5	653.9	660.4
35°	587.3	593.8	612.0	634.6	641.0
37.5°	559.4	569.1	590.6	613.1	620.6
40°	533.6	542.2	564.8	592.7	601.3
42.5°	505.7	514.3	539.0	570.2	579.8
45°	477.8	487.5	515.4	546.5	557.3
47.5°	448.8	459.6	488.6	522.9	532.6
50°	418.8	430.6	462.8	498.2	502.5
52.5°	388.7	401.6	435.9	467.1	471.4
55°	358.6	371.5	409.1	435.9	433.8
57.5°	329.6	343.6	382.3	396.2	394.1
60°	299.6	314.6	349.0	355.4	347.9
62.5°	271.7	285.6	317.8	312.5	302.8
65°	241.6	255.6	282.4	271.7	257.7
67.5°	211.5	228.7	245.9	227.6	216.9
70°	181.5	200.8	208.3	190.1	180.4
72.5°	152.5	172.9	170.7	152.5	146.0
75°	124.6	141.7	137.4	119.2	112.7
77.5°	94.5	113.8	104.2	89.1	83.8
80°	66.6	83.8	73.0	60.1	55.8
82.5°	44.0	55.8	45.1	35.4	32.2
85°	23.6	29.0	20.4	17.2	16.1
87.5°	9.7	8.6	7.5	7.5	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)