

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: P233062

Luminaire Tested: **FCB-12-4-LD4-25-35-UNV-EDD1-WDA12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233062
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-WDA12
Description: FAILSAFE 1X4 FCB LED TROFFER
.125 ACRYLIC LENS
Light Source: (84)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

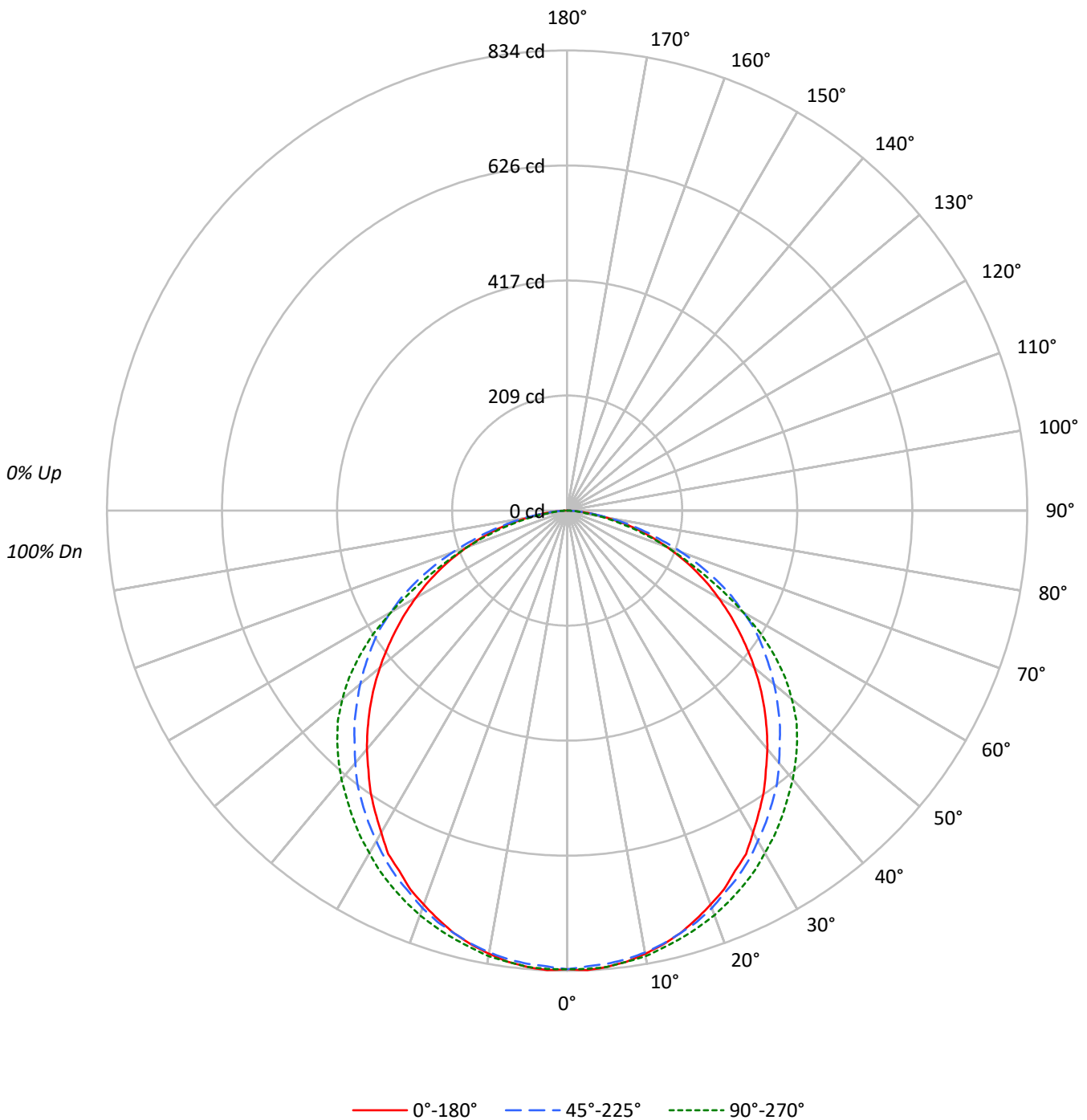
Lumens per Lamp: N/A
Luminaire Lumens: 2304.0 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	2237	2237	2237
5°	2243	2227	2243
10°	2228	2222	2241
15°	2209	2209	2234
20°	2176	2196	2235
25°	2138	2175	2233
30°	2093	2149	2227
35°	2041	2127	2228
40°	1983	2099	2235
45°	1924	2075	2243
50°	1855	2050	2226
55°	1780	2031	2153
60°	1706	1987	1981
65°	1628	1902	1736
70°	1511	1734	1501
75°	1370	1512	1240
80°	1091	1196	916
85°	772	667	525



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.7	3.4
10°-20°	224.7	9.8
20°-30°	338.8	14.7
30°-40°	406.2	17.6
40°-50°	421.5	18.3
50°-60°	380.2	16.5
60°-70°	277.3	12.0
70°-80°	145.5	6.3
80°-90°	31.1	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°	642.3	27.9
0°-40°	1048.4	45.5
0°-60°	1850.1	80.3
0°-90°	2304.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2304.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	831	831	831	831	831	
5°	830	828	825	830	830	79
15°	793	793	793	802	802	223
25°	720	724	733	748	752	332
35°	621	628	647	671	678	388
45°	506	516	545	578	590	390
55°	379	393	433	461	459	340
65°	256	270	299	287	273	253
75°	132	150	145	126	119	138
85°	25	31	22	18	17	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	831.4	831.4	831.4	831.4	831.4
2.5°	833.7	831.4	826.9	831.4	831.4
5°	830.3	828.0	824.6	830.3	830.3
7.5°	824.6	822.4	820.1	825.8	824.6
10°	815.5	814.4	813.3	820.1	820.1
12.5°	805.3	805.3	804.2	812.1	811.0
15°	792.8	792.8	792.8	801.9	801.9
17.5°	776.9	779.2	781.5	791.7	791.7
20°	759.9	762.2	766.7	779.2	780.3
22.5°	742.9	744.0	748.5	763.3	766.7
25°	720.1	723.5	732.6	748.5	751.9
27.5°	702.0	703.1	713.3	731.5	736.0
30°	673.6	681.5	691.7	712.2	716.7
32.5°	647.4	654.3	670.2	691.7	698.6
35°	621.3	628.1	647.4	671.3	678.1
37.5°	591.8	602.0	624.7	648.6	656.5
40°	564.5	573.6	597.5	627.0	636.1
42.5°	535.0	544.1	570.2	603.1	613.4
45°	505.5	515.7	545.2	578.2	589.5
47.5°	474.8	486.1	516.8	553.2	563.4
50°	443.0	455.5	489.6	527.0	531.6
52.5°	411.2	424.8	461.2	494.1	498.6
55°	379.4	393.0	432.8	461.2	458.9
57.5°	348.7	363.5	404.4	419.1	416.9
60°	316.9	332.8	369.2	376.0	368.0
62.5°	287.4	302.1	336.2	330.5	320.3
65°	255.6	270.3	298.7	287.4	272.6
67.5°	223.8	241.9	260.1	240.8	229.4
70°	192.0	212.4	220.4	201.0	190.8
72.5°	161.3	182.9	180.6	161.3	154.5
75°	131.8	149.9	145.4	126.1	119.3
77.5°	100.0	120.4	110.2	94.3	88.6
80°	70.4	88.6	77.2	63.6	59.1
82.5°	46.6	59.1	47.7	37.5	34.1
85°	25.0	30.7	21.6	18.2	17.0
87.5°	10.2	9.1	8.0	8.0	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)