

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: P233038

Luminaire Tested: **FCB-12-4-LD4-25-35-UNV-EDD1-WDA6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233038
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-WDA6
Description: FAILSAFE 1X4 FCB LED TROFFER
.060 ACRYLIC LENS
Light Source: (84)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

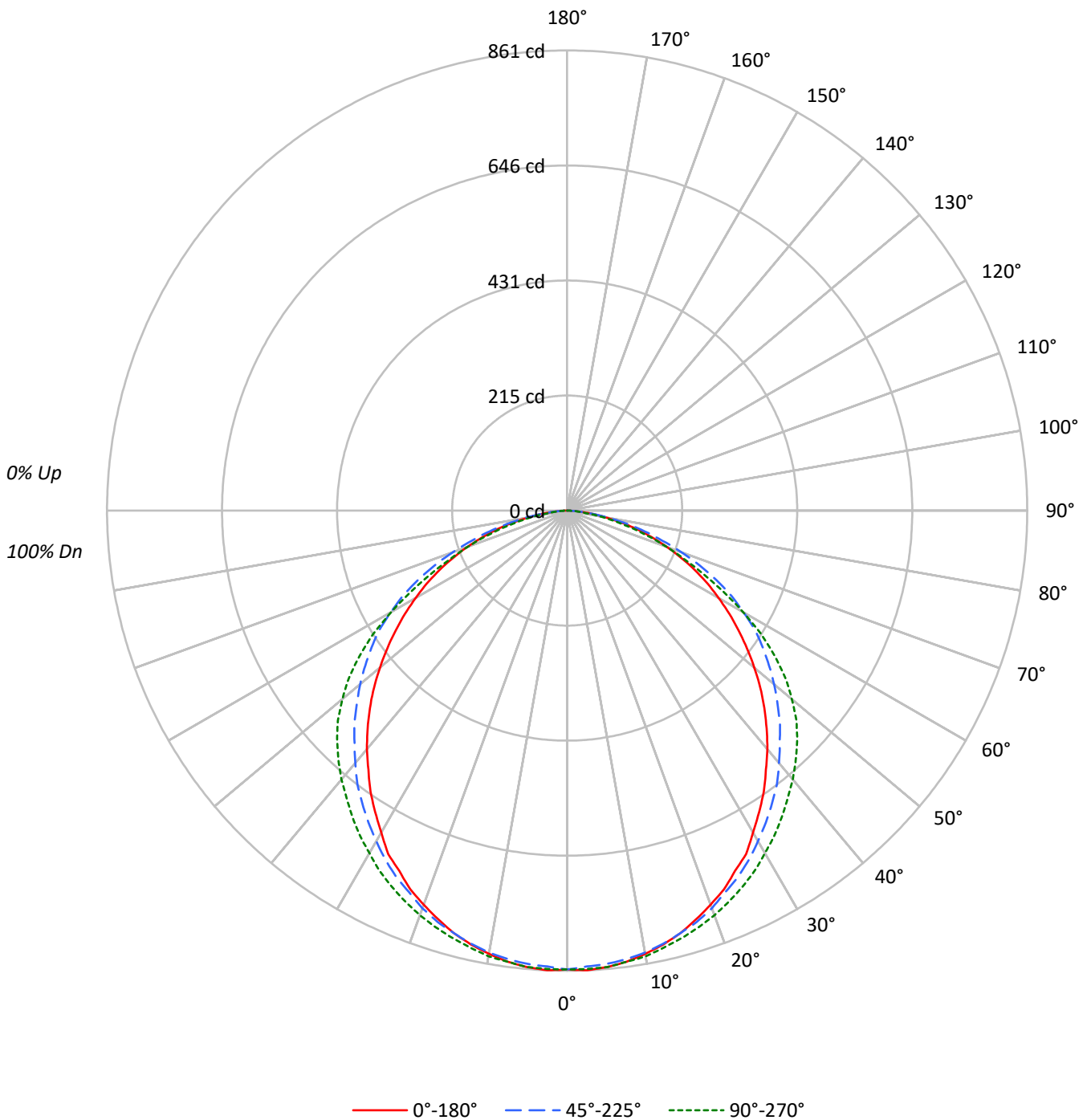
Lumens per Lamp: N/A
Luminaire Lumens: 2379.0 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	2310	2310	2310
5°	2316	2300	2316
10°	2301	2294	2314
15°	2281	2281	2307
20°	2247	2267	2307
25°	2208	2246	2305
30°	2161	2220	2300
35°	2107	2196	2300
40°	2048	2167	2307
45°	1986	2143	2316
50°	1915	2116	2298
55°	1838	2096	2223
60°	1761	2052	2045
65°	1680	1964	1792
70°	1559	1790	1550
75°	1414	1561	1280
80°	1127	1237	945
85°	797	689	543



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.2	3.4
10°-20°	232.1	9.8
20°-30°	349.9	14.7
30°-40°	419.4	17.6
40°-50°	435.2	18.3
50°-60°	392.6	16.5
60°-70°	286.4	12.0
70°-80°	150.2	6.3
80°-90°	32.1	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°	663.2	27.9
0°-40°	1082.6	45.5
0°-60°	1910.4	80.3
0°-90°	2379.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2379.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	858	858	858	858	858	
5°	857	855	852	857	857	81
15°	819	819	819	828	828	231
25°	744	747	756	773	776	343
35°	642	649	668	693	700	401
45°	522	532	563	597	609	402
55°	392	406	447	476	474	351
65°	264	279	308	297	282	261
75°	136	155	150	130	123	143
85°	26	32	22	19	18	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	858.5	858.5	858.5	858.5	858.5
2.5°	860.9	858.5	853.8	858.5	858.5
5°	857.3	855.0	851.5	857.3	857.3
7.5°	851.5	849.1	846.8	852.6	851.5
10°	842.1	840.9	839.7	846.8	846.8
12.5°	831.5	831.5	830.4	838.6	837.4
15°	818.6	818.6	818.6	828.0	828.0
17.5°	802.2	804.6	806.9	817.5	817.5
20°	784.6	787.0	791.7	804.6	805.7
22.5°	767.0	768.2	772.9	788.1	791.7
25°	743.6	747.1	756.5	772.9	776.4
27.5°	724.8	726.0	736.5	755.3	760.0
30°	695.5	703.7	714.3	735.4	740.1
32.5°	668.5	675.6	692.0	714.3	721.3
35°	641.5	648.6	668.5	693.1	700.2
37.5°	611.0	621.6	645.1	669.7	677.9
40°	582.9	592.3	616.9	647.4	656.8
42.5°	552.4	561.8	588.8	622.8	633.3
45°	521.9	532.5	563.0	597.0	608.7
47.5°	490.2	502.0	533.6	571.2	581.7
50°	457.4	470.3	505.5	544.2	548.9
52.5°	424.6	438.6	476.2	510.2	514.9
55°	391.7	405.8	446.8	476.2	473.8
57.5°	360.1	375.3	417.5	432.8	430.4
60°	327.2	343.6	381.2	388.2	380.0
62.5°	296.7	312.0	347.2	341.3	330.7
65°	263.9	279.1	308.5	296.7	281.5
67.5°	231.0	249.8	268.6	248.6	236.9
70°	198.2	219.3	227.5	207.6	197.0
72.5°	166.5	188.8	186.5	166.5	159.5
75°	136.0	154.8	150.1	130.2	123.1
77.5°	103.2	124.3	113.8	97.3	91.5
80°	72.7	91.5	79.8	65.7	61.0
82.5°	48.1	61.0	49.3	38.7	35.2
85°	25.8	31.7	22.3	18.8	17.6
87.5°	10.6	9.4	8.2	8.2	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)