

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: P233201

Luminaire Tested: **FCB-24-4-LD4-75-30-UNV-EDD1-WDP6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233201
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FCB-24-4-LD4-75-30-UNV-EDD1-WDP6
Description: FAILSAFE 2X4 FCB LED TROFFER
.060 POLYCARBONATE LENS
Light Source: (168)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

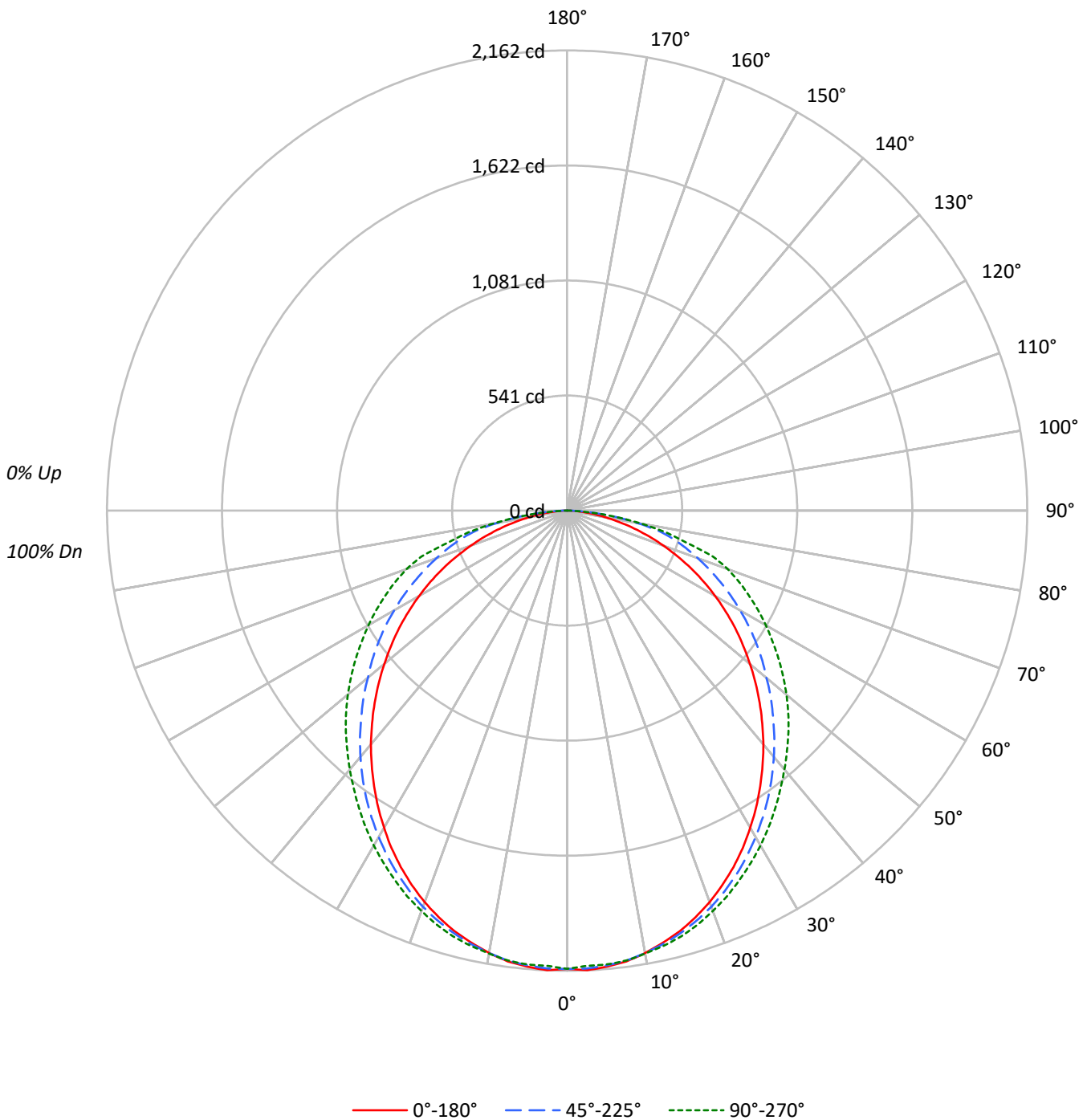
Lumens per Lamp: N/A
Luminaire Lumens: 6135.0 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 69.1
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	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2897	2897	2897
5°	2905	2897	2891
10°	2884	2884	2887
15°	2850	2864	2885
20°	2803	2836	2866
25°	2744	2797	2844
30°	2673	2751	2823
35°	2598	2705	2802
40°	2520	2653	2789
45°	2434	2602	2798
50°	2348	2559	2814
55°	2262	2543	2843
60°	2159	2527	2900
65°	2046	2528	2996
70°	1892	2570	3157
75°	1693	2686	3003
80°	1416	2572	2751
85°	1070	1978	1880



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.5	3.3
10°-20°	579.1	9.4
20°-30°	865.7	14.1
30°-40°	1027.0	16.7
40°-50°	1057.0	17.2
50°-60°	969.7	15.8
60°-70°	784.0	12.8
70°-80°	508.8	8.3
80°-90°	140.3	2.3
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°	1648.2	26.9
0°-40°	2675.2	43.6
0°-60°	4701.8	76.6
0°-90°	6135.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6135.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2153	2153	2153	2153	2153	
5°	2151	2136	2145	2143	2140	204
15°	2046	2038	2056	2065	2071	576
25°	1848	1851	1884	1901	1916	851
35°	1582	1594	1647	1682	1706	989
45°	1279	1300	1368	1433	1470	987
55°	964	994	1084	1172	1212	861
65°	643	681	794	899	941	635
75°	326	386	517	578	578	346
85°	69	118	128	124	122	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2153.1	2153.1	2153.1	2153.1	2153.1
2.5°	2161.5	2144.7	2153.1	2151.0	2140.5
5°	2151.0	2136.3	2144.7	2142.6	2140.5
7.5°	2136.3	2121.6	2132.1	2130.0	2132.1
10°	2111.1	2098.5	2111.1	2113.2	2113.2
12.5°	2079.5	2069.0	2085.8	2090.0	2094.3
15°	2045.9	2037.5	2056.4	2064.8	2071.1
17.5°	2003.9	1997.6	2020.7	2031.2	2039.6
20°	1957.7	1955.6	1980.8	1991.3	2001.8
22.5°	1905.2	1905.2	1934.6	1947.2	1961.9
25°	1848.5	1850.6	1884.2	1901.0	1915.7
27.5°	1787.6	1789.7	1829.6	1850.6	1867.4
30°	1720.4	1728.8	1770.8	1798.1	1817.0
32.5°	1653.1	1663.6	1709.8	1741.4	1762.4
35°	1581.7	1594.3	1646.8	1682.5	1705.6
37.5°	1508.2	1522.9	1579.6	1619.5	1646.8
40°	1434.7	1451.5	1510.3	1556.5	1588.0
42.5°	1357.0	1375.9	1441.0	1495.6	1529.2
45°	1279.2	1300.2	1367.5	1432.6	1470.4
47.5°	1201.5	1226.7	1298.1	1369.6	1409.5
50°	1121.7	1146.9	1222.5	1304.4	1344.4
52.5°	1041.9	1071.3	1155.3	1239.3	1279.2
55°	964.2	993.6	1083.9	1172.1	1212.0
57.5°	884.3	913.7	1012.5	1104.9	1144.8
60°	802.4	836.0	938.9	1033.5	1077.6
62.5°	722.6	758.3	867.5	968.4	1010.4
65°	642.8	680.6	794.0	899.0	941.0
67.5°	560.8	605.0	722.6	829.7	873.8
70°	481.0	529.3	653.3	760.4	802.4
72.5°	403.3	455.8	584.0	693.2	718.4
75°	325.6	386.5	516.7	577.7	577.7
77.5°	252.1	319.3	441.1	464.2	476.8
80°	182.7	256.3	331.9	359.2	355.0
82.5°	121.8	195.4	237.4	237.4	231.1
85°	69.3	117.6	128.1	123.9	121.8
87.5°	29.4	44.1	39.9	31.5	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)