

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: P233223

Luminaire Tested: **FCB-24-4-LD4-75-40-UNV-EDD1-WDA12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233223
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-LD4-75-40-UNV-EDD1-WDA12
Description: FAILSAFE 2X4 FCB LED TROFFER
.125 ACRYLIC LENS
Light Source: (168)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

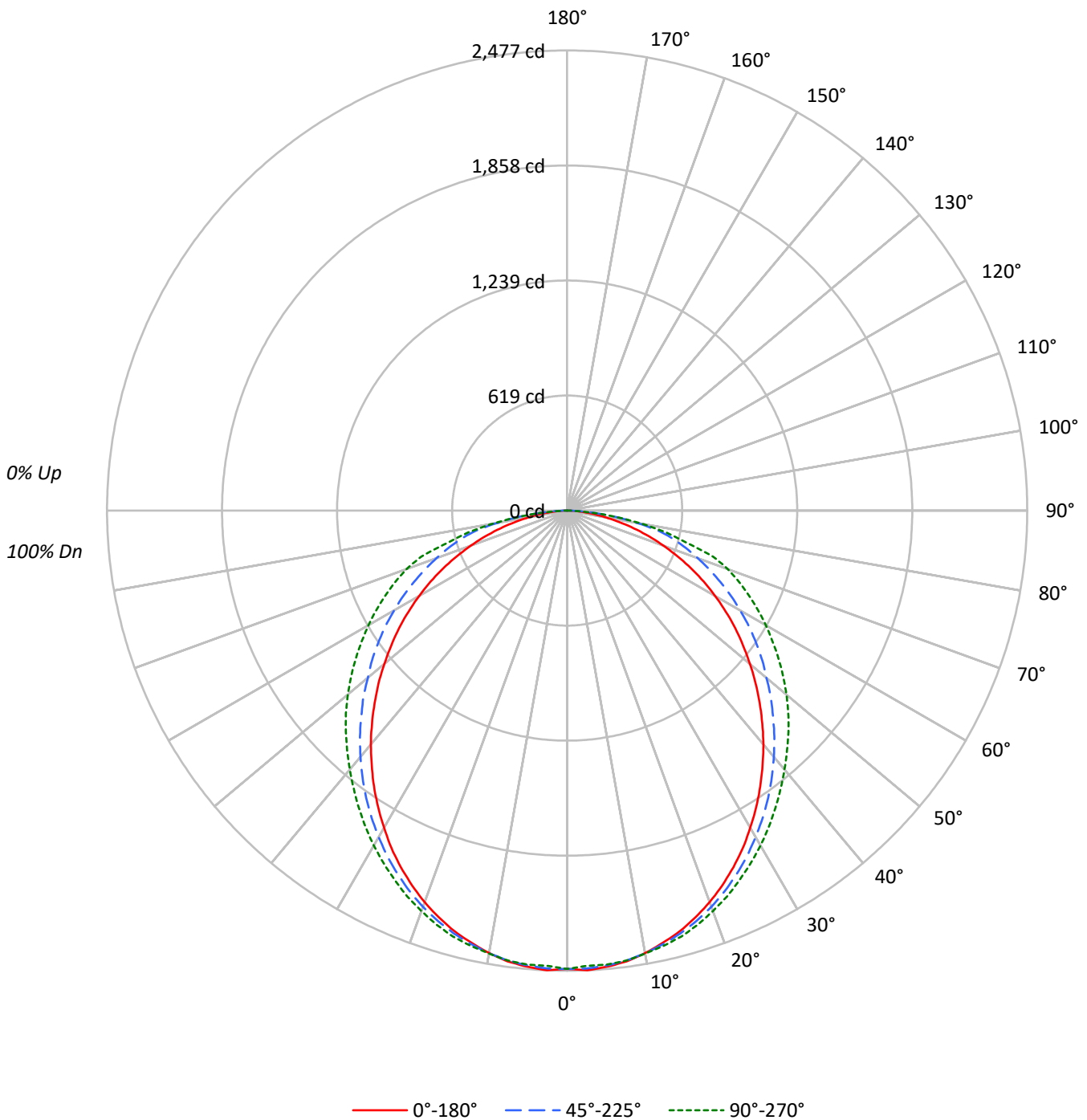
Lumens per Lamp: N/A
Luminaire Lumens: 7030.0 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	3320	3320	3320
5°	3329	3319	3313
10°	3305	3305	3308
15°	3266	3282	3306
20°	3212	3250	3284
25°	3145	3205	3259
30°	3063	3152	3235
35°	2977	3100	3210
40°	2888	3040	3196
45°	2789	2982	3206
50°	2690	2932	3225
55°	2592	2913	3258
60°	2474	2895	3323
65°	2345	2897	3433
70°	2168	2945	3617
75°	1940	3078	3441
80°	1623	2947	3152
85°	1226	2266	2155



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.1	3.3
10°-20°	663.5	9.4
20°-30°	992.0	14.1
30°-40°	1176.8	16.7
40°-50°	1211.2	17.2
50°-60°	1111.1	15.8
60°-70°	898.4	12.8
70°-80°	583.1	8.3
80°-90°	160.8	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°	1888.6	26.9
0°-40°	3065.4	43.6
0°-60°	5387.8	76.6
0°-90°	7030.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7030.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2467	2467	2467	2467	2467	
5°	2465	2448	2458	2455	2453	234
15°	2344	2335	2356	2366	2373	660
25°	2118	2121	2159	2178	2195	975
35°	1812	1827	1887	1928	1954	1133
45°	1466	1490	1567	1642	1685	1131
55°	1105	1138	1242	1343	1389	987
65°	736	780	910	1030	1078	728
75°	373	443	592	662	662	397
85°	79	135	147	142	140	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2467.2	2467.2	2467.2	2467.2	2467.2
2.5°	2476.8	2457.5	2467.2	2464.8	2452.7
5°	2464.8	2447.9	2457.5	2455.1	2452.7
7.5°	2447.9	2431.1	2443.1	2440.7	2443.1
10°	2419.0	2404.6	2419.0	2421.4	2421.4
12.5°	2382.9	2370.9	2390.1	2395.0	2399.8
15°	2344.4	2334.8	2356.4	2366.1	2373.3
17.5°	2296.3	2289.0	2315.5	2327.6	2337.2
20°	2243.3	2240.9	2269.8	2281.8	2293.9
22.5°	2183.1	2183.1	2216.8	2231.3	2248.1
25°	2118.2	2120.6	2159.1	2178.3	2195.2
27.5°	2048.3	2050.8	2096.5	2120.6	2139.8
30°	1971.3	1981.0	2029.1	2060.4	2082.0
32.5°	1894.3	1906.3	1959.3	1995.4	2019.5
35°	1812.5	1826.9	1887.1	1928.0	1954.5
37.5°	1728.2	1745.1	1810.1	1855.8	1887.1
40°	1644.0	1663.2	1730.6	1783.6	1819.7
42.5°	1554.9	1576.6	1651.2	1713.8	1752.3
45°	1465.9	1489.9	1567.0	1641.6	1684.9
47.5°	1376.8	1405.7	1487.5	1569.4	1615.1
50°	1285.3	1314.2	1400.9	1494.7	1540.5
52.5°	1193.9	1227.6	1323.8	1420.1	1465.9
55°	1104.8	1138.5	1242.0	1343.1	1388.8
57.5°	1013.3	1047.0	1160.2	1266.1	1311.8
60°	919.5	958.0	1075.9	1184.2	1234.8
62.5°	828.0	868.9	994.1	1109.6	1157.8
65°	736.5	779.9	909.8	1030.2	1078.3
67.5°	642.7	693.2	828.0	950.8	1001.3
70°	551.2	606.6	748.6	871.3	919.5
72.5°	462.1	522.3	669.1	794.3	823.2
75°	373.1	442.9	592.1	661.9	661.9
77.5°	288.8	365.9	505.5	531.9	546.4
80°	209.4	293.7	380.3	411.6	406.8
82.5°	139.6	223.9	272.0	272.0	264.8
85°	79.4	134.8	146.8	142.0	139.6
87.5°	33.7	50.5	45.7	36.1	31.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)