

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: P233162

Luminaire Tested: **FCB-24-4-LD4-75-35-UNV-EDD1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233162
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-LD4-75-35-UNV-EDD1
Description: FAILSAFE 2X4 FCB LED TROFFER
OPAL DIFFUSER, NO LENS
Light Source: (168)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

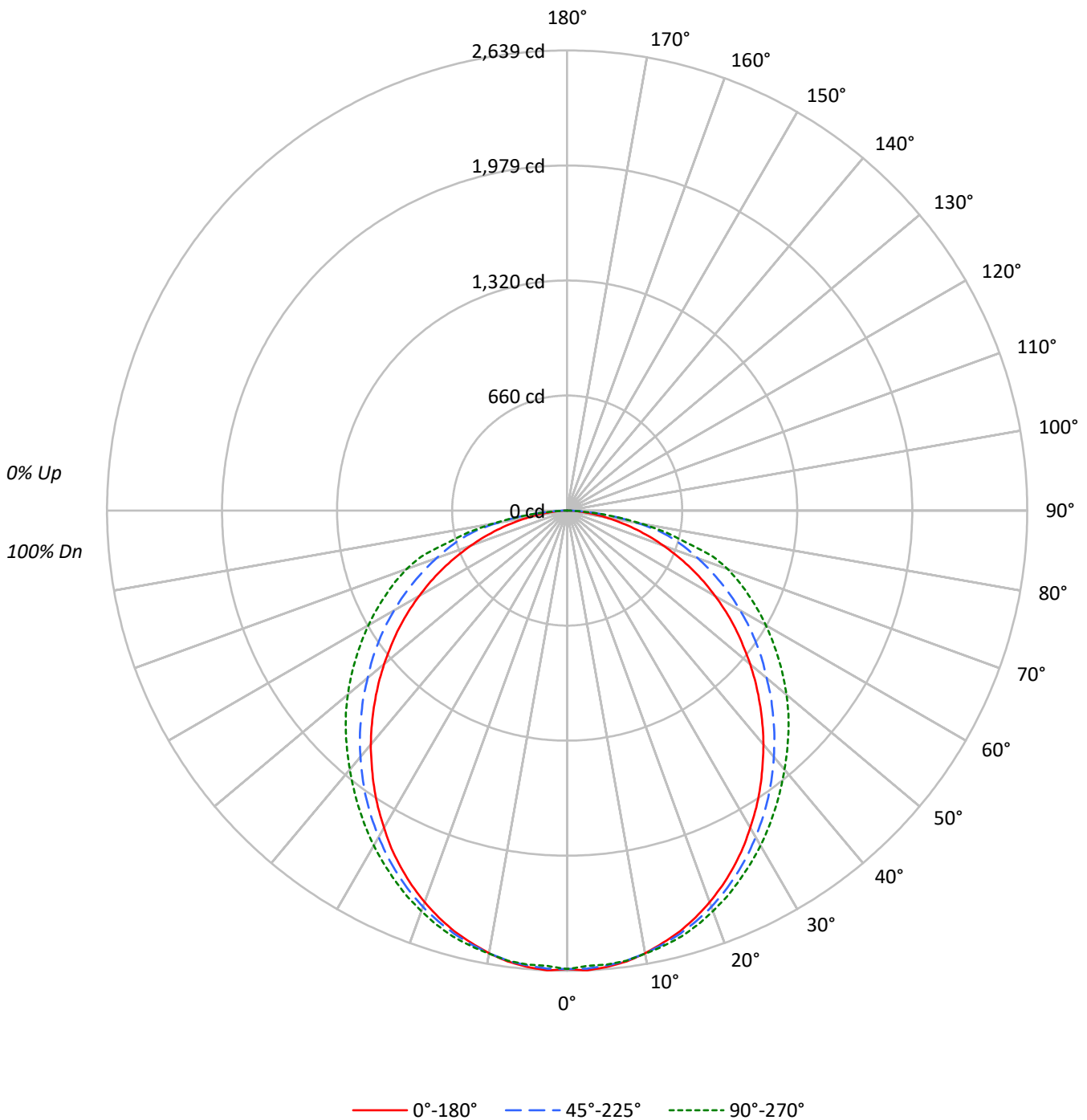
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7491.0 lumens
Efficiency: N/A
Efficacy: 108.4 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°	3537	3537	3537
5°	3547	3537	3530
10°	3522	3522	3525
15°	3480	3498	3523
20°	3423	3463	3500
25°	3351	3416	3473
30°	3264	3359	3447
35°	3172	3303	3421
40°	3077	3239	3406
45°	2972	3177	3416
50°	2867	3125	3436
55°	2762	3105	3472
60°	2637	3085	3541
65°	2499	3087	3658
70°	2310	3138	3854
75°	2066	3280	3667
80°	1729	3140	3359
85°	1306	2416	2297



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.4	3.3
10°-20°	707.1	9.4
20°-30°	1057.0	14.1
30°-40°	1253.9	16.7
40°-50°	1290.6	17.2
50°-60°	1184.0	15.8
60°-70°	957.3	12.8
70°-80°	621.3	8.3
80°-90°	171.3	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°	2012.5	26.9
0°-40°	3266.4	43.6
0°-60°	5741.1	76.6
0°-90°	7491.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7491.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2629	2629	2629	2629	2629	
5°	2626	2608	2619	2616	2614	249
15°	2498	2488	2511	2521	2529	704
25°	2257	2260	2301	2321	2339	1039
35°	1931	1947	2011	2054	2083	1208
45°	1562	1588	1670	1749	1795	1205
55°	1177	1213	1324	1431	1480	1052
65°	785	831	970	1098	1149	776
75°	398	472	631	705	705	423
85°	85	144	156	151	149	104
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2629.0	2629.0	2629.0	2629.0	2629.0
2.5°	2639.2	2618.7	2629.0	2626.4	2613.6
5°	2626.4	2608.4	2618.7	2616.1	2613.6
7.5°	2608.4	2590.5	2603.3	2600.7	2603.3
10°	2577.7	2562.3	2577.7	2580.2	2580.2
12.5°	2539.2	2526.4	2546.9	2552.0	2557.1
15°	2498.1	2487.9	2511.0	2521.2	2528.9
17.5°	2446.8	2439.2	2467.4	2480.2	2490.5
20°	2390.4	2387.9	2418.6	2431.5	2444.3
22.5°	2326.3	2326.3	2362.2	2377.6	2395.6
25°	2257.1	2259.6	2300.7	2321.2	2339.1
27.5°	2182.7	2185.2	2234.0	2259.6	2280.1
30°	2100.6	2110.9	2162.2	2195.5	2218.6
32.5°	2018.5	2031.3	2087.8	2126.2	2151.9
35°	1931.3	1946.7	2010.8	2054.4	2082.6
37.5°	1841.5	1859.5	1928.8	1977.5	2010.8
40°	1751.8	1772.3	1844.1	1900.5	1939.0
42.5°	1656.9	1680.0	1759.5	1826.2	1867.2
45°	1562.0	1587.6	1669.7	1749.2	1795.4
47.5°	1467.1	1497.9	1585.1	1672.3	1721.0
50°	1369.6	1400.4	1492.7	1592.8	1641.5
52.5°	1272.2	1308.1	1410.7	1513.3	1562.0
55°	1177.3	1213.2	1323.5	1431.2	1479.9
57.5°	1079.8	1115.7	1236.2	1349.1	1397.8
60°	979.8	1020.8	1146.5	1261.9	1315.8
62.5°	882.3	925.9	1059.3	1182.4	1233.7
65°	784.8	831.0	969.5	1097.7	1149.0
67.5°	684.8	738.7	882.3	1013.1	1067.0
70°	587.3	646.3	797.7	928.5	979.8
72.5°	492.4	556.6	713.0	846.4	877.2
75°	397.5	471.9	630.9	705.3	705.3
77.5°	307.8	389.9	538.6	566.8	582.2
80°	223.1	312.9	405.2	438.6	433.5
82.5°	148.8	238.5	289.8	289.8	282.1
85°	84.6	143.6	156.5	151.3	148.8
87.5°	35.9	53.9	48.7	38.5	33.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)