

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: P233242

Luminaire Tested: **FCB-24-4-LD4-75-35-UNV-EDD1-WDP12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233242
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-WDP12
Description: FAILSAFE 2X4 FCB LED TROFFER
.125 POLYCARBONATE LENS
Light Source: (168)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

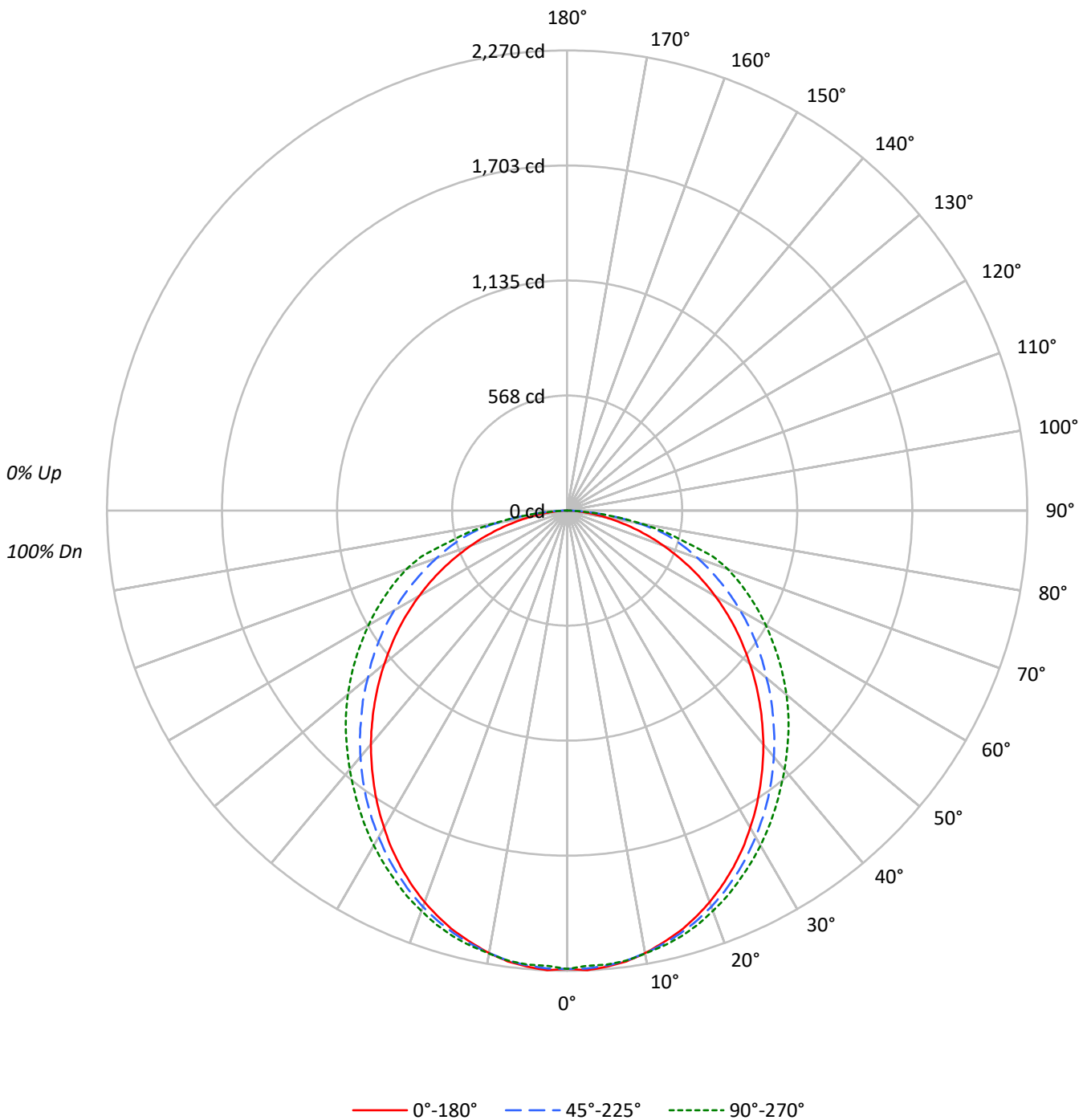
Lumens per Lamp: N/A
Luminaire Lumens: 6442.0 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	3042	3042	3042
5°	3051	3042	3036
10°	3029	3029	3032
15°	2992	3008	3029
20°	2943	2978	3010
25°	2882	2937	2986
30°	2806	2889	2964
35°	2728	2840	2942
40°	2646	2785	2929
45°	2556	2732	2938
50°	2465	2687	2955
55°	2375	2670	2985
60°	2267	2653	3045
65°	2149	2654	3146
70°	1987	2699	3315
75°	1777	2821	3153
80°	1487	2700	2889
85°	1124	2076	1974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.6	3.3
10°-20°	608.0	9.4
20°-30°	909.0	14.1
30°-40°	1078.4	16.7
40°-50°	1109.9	17.2
50°-60°	1018.2	15.8
60°-70°	823.2	12.8
70°-80°	534.3	8.3
80°-90°	147.3	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°	1730.7	26.9
0°-40°	2809.0	43.6
0°-60°	4937.1	76.6
0°-90°	6442.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6442.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2261	2261	2261	2261	2261	
5°	2259	2243	2252	2250	2248	214
15°	2148	2140	2159	2168	2175	605
25°	1941	1943	1978	1996	2012	893
35°	1661	1674	1729	1767	1791	1039
45°	1343	1365	1436	1504	1544	1037
55°	1012	1043	1138	1231	1273	904
65°	675	715	834	944	988	667
75°	342	406	543	607	607	363
85°	73	124	134	130	128	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2260.8	2260.8	2260.8	2260.8	2260.8
2.5°	2269.6	2252.0	2260.8	2258.6	2247.6
5°	2258.6	2243.2	2252.0	2249.8	2247.6
7.5°	2243.2	2227.7	2238.8	2236.5	2238.8
10°	2216.7	2203.5	2216.7	2218.9	2218.9
12.5°	2183.6	2172.6	2190.2	2194.6	2199.0
15°	2148.3	2139.5	2159.3	2168.2	2174.8
17.5°	2104.2	2097.6	2121.9	2132.9	2141.7
20°	2055.7	2053.5	2079.9	2091.0	2102.0
22.5°	2000.5	2000.5	2031.4	2044.7	2060.1
25°	1941.0	1943.2	1978.5	1996.1	2011.6
27.5°	1877.0	1879.2	1921.1	1943.2	1960.8
30°	1806.4	1815.3	1859.4	1888.0	1907.9
32.5°	1735.9	1746.9	1795.4	1828.5	1850.6
35°	1660.9	1674.1	1729.2	1766.7	1791.0
37.5°	1583.7	1599.1	1658.7	1700.6	1729.2
40°	1506.5	1524.1	1585.9	1634.4	1667.5
42.5°	1424.9	1444.7	1513.1	1570.4	1605.7
45°	1343.3	1365.3	1435.9	1504.3	1544.0
47.5°	1261.6	1288.1	1363.1	1438.1	1480.0
50°	1177.8	1204.3	1283.7	1369.7	1411.6
52.5°	1094.0	1124.9	1213.1	1301.3	1343.3
55°	1012.4	1043.3	1138.1	1230.8	1272.7
57.5°	928.6	959.5	1063.1	1160.2	1202.1
60°	842.6	877.9	985.9	1085.2	1131.5
62.5°	758.7	796.2	910.9	1016.8	1060.9
65°	674.9	714.6	833.7	944.0	988.1
67.5°	588.9	635.2	758.7	871.2	917.6
70°	505.1	555.8	686.0	798.5	842.6
72.5°	423.5	478.6	613.2	727.9	754.3
75°	341.9	405.8	542.6	606.6	606.6
77.5°	264.7	335.3	463.2	487.5	500.7
80°	191.9	269.1	348.5	377.2	372.8
82.5°	127.9	205.1	249.2	249.2	242.6
85°	72.8	123.5	134.5	130.1	127.9
87.5°	30.9	46.3	41.9	33.1	28.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)