

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: P233241

Luminaire Tested: **FCB-24-4-LD4-75-30-UNV-EDD1-WDP12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233241
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-WDP12
Description: FAILSAFE 2X4 FCB LED TROFFER
.125 POLYCARBONATE LENS
Light Source: (168)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

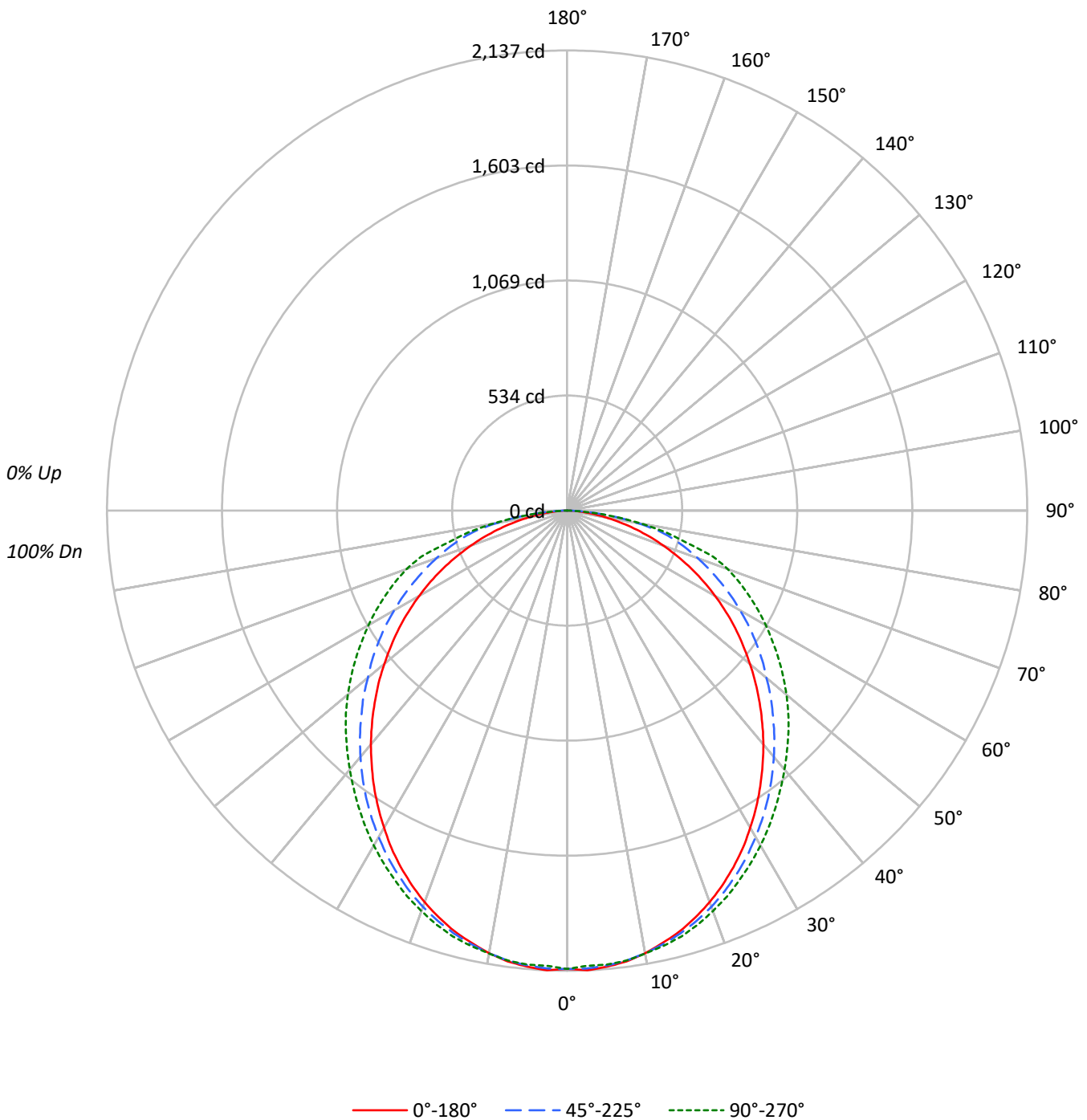
Lumens per Lamp: N/A
Luminaire Lumens: 6065.0 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P233241

CATALOG NUMBER: FCB-24-4-LD4-75-30-UNV-EDD1-WDP12

Luminous Intensity Polar Plot





TEST NUMBER: P233241

CATALOG NUMBER: FCB-24-4-LD4-75-30-UNV-EDD1-WDP12

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°	2864	2864	2864
5°	2872	2864	2858
10°	2851	2851	2854
15°	2817	2832	2852
20°	2771	2804	2834
25°	2713	2765	2812
30°	2642	2720	2791
35°	2568	2674	2770
40°	2491	2622	2757
45°	2406	2572	2766
50°	2321	2530	2782
55°	2236	2514	2811
60°	2135	2498	2867
65°	2023	2499	2962
70°	1871	2541	3121
75°	1673	2655	2969
80°	1400	2542	2719
85°	1057	1956	1859



TEST NUMBER: P233241

CATALOG NUMBER: FCB-24-4-LD4-75-30-UNV-EDD1-WDP12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.1	3.3
10°-20°	572.5	9.4
20°-30°	855.8	14.1
30°-40°	1015.2	16.7
40°-50°	1044.9	17.2
50°-60°	958.6	15.8
60°-70°	775.1	12.8
70°-80°	503.0	8.3
80°-90°	138.7	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°	1629.4	26.9
0°-40°	2644.6	43.6
0°-60°	4648.2	76.6
0°-90°	6065.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6065.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2128	2128	2128	2128	2128	
5°	2126	2112	2120	2118	2116	202
15°	2023	2014	2033	2041	2048	570
25°	1827	1830	1863	1879	1894	841
35°	1564	1576	1628	1663	1686	978
45°	1265	1285	1352	1416	1454	976
55°	953	982	1072	1159	1198	852
65°	635	673	785	889	930	628
75°	322	382	511	571	571	342
85°	68	116	127	122	120	84
90°	0	0	0	0	0	



TEST NUMBER: P233241

CATALOG NUMBER: FCB-24-4-LD4-75-30-UNV-EDD1-WDP12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2128.5	2128.5	2128.5	2128.5	2128.5
2.5°	2136.8	2120.2	2128.5	2126.4	2116.0
5°	2126.4	2111.9	2120.2	2118.1	2116.0
7.5°	2111.9	2097.4	2107.7	2105.7	2107.7
10°	2087.0	2074.5	2087.0	2089.0	2089.0
12.5°	2055.8	2045.4	2062.0	2066.2	2070.4
15°	2022.6	2014.3	2033.0	2041.3	2047.5
17.5°	1981.1	1974.8	1997.7	2008.1	2016.4
20°	1935.4	1933.3	1958.2	1968.6	1979.0
22.5°	1883.5	1883.5	1912.5	1925.0	1939.5
25°	1827.4	1829.5	1862.7	1879.3	1893.8
27.5°	1767.2	1769.3	1808.7	1829.5	1846.1
30°	1700.7	1709.0	1750.6	1777.6	1796.2
32.5°	1634.3	1644.7	1690.3	1721.5	1742.3
35°	1563.7	1576.1	1628.0	1663.3	1686.2
37.5°	1491.0	1505.5	1561.6	1601.0	1628.0
40°	1418.3	1434.9	1493.1	1538.7	1569.9
42.5°	1341.5	1360.2	1424.5	1478.5	1511.8
45°	1264.6	1285.4	1351.9	1416.2	1453.6
47.5°	1187.8	1212.7	1283.3	1353.9	1393.4
50°	1108.9	1133.8	1208.6	1289.6	1329.0
52.5°	1030.0	1059.1	1142.1	1225.2	1264.6
55°	953.2	982.2	1071.5	1158.7	1198.2
57.5°	874.2	903.3	1000.9	1092.3	1131.7
60°	793.3	826.5	928.2	1021.7	1065.3
62.5°	714.3	749.6	857.6	957.3	998.8
65°	635.4	672.8	784.9	888.8	930.3
67.5°	554.4	598.1	714.3	820.3	863.9
70°	475.5	523.3	645.8	751.7	793.3
72.5°	398.7	450.6	577.3	685.3	710.2
75°	321.9	382.1	510.8	571.1	571.1
77.5°	249.2	315.6	436.1	458.9	471.4
80°	180.7	253.3	328.1	355.1	350.9
82.5°	120.4	193.1	234.7	234.7	228.4
85°	68.5	116.3	126.7	122.5	120.4
87.5°	29.1	43.6	39.5	31.1	27.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)