

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: P233134

Luminaire Tested: **FCB-24-2-LD4-24-35-UNV-EDD1-WDP12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233134
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FCB-24-2-LD4-24-35-UNV-EDD1-WDP12
Description: FAILSAFE 2X2 FCB LED TROFFER
.125 POLYCARBONATE LENS
Light Source: (84)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

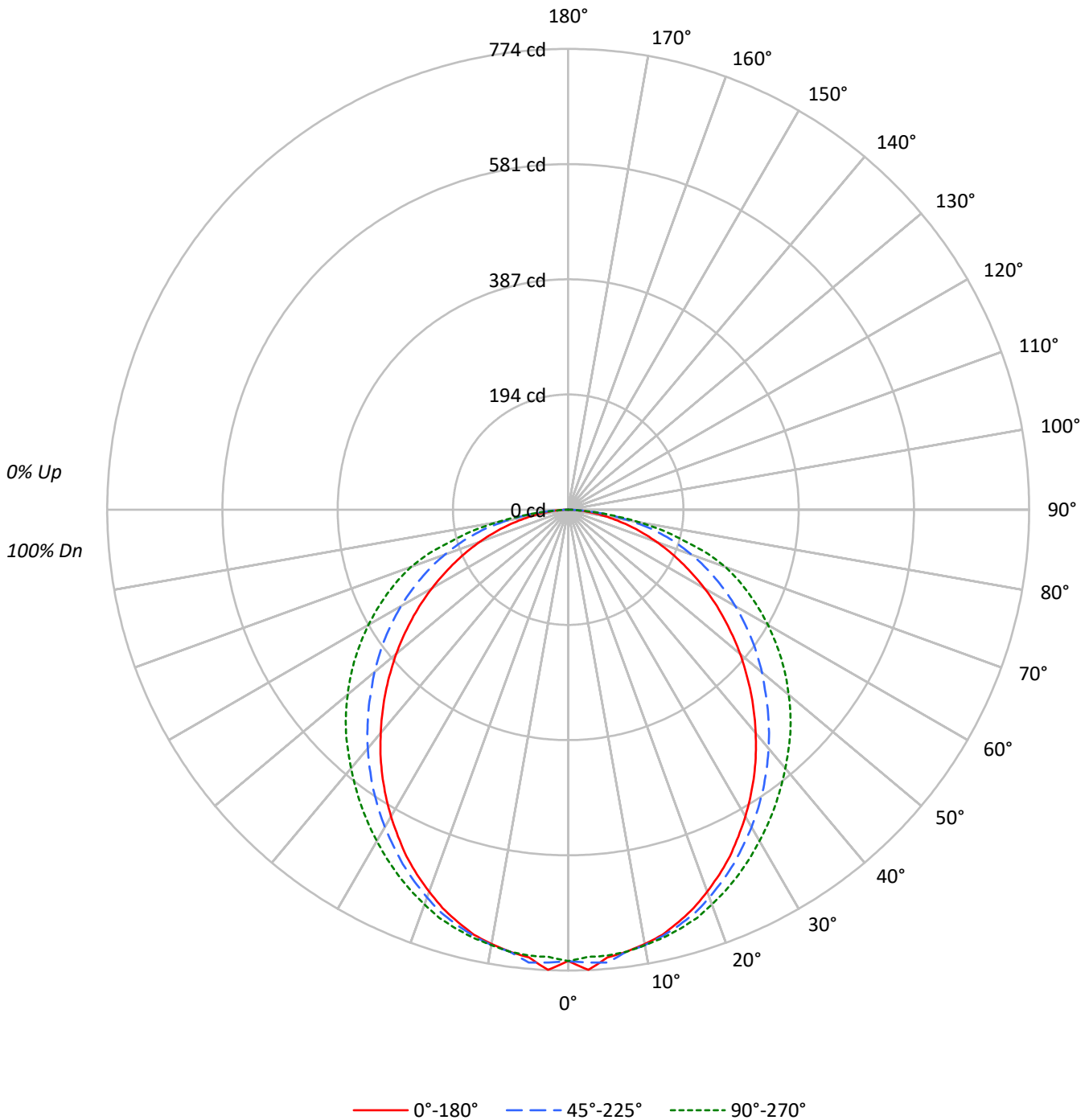
Lumens per Lamp: N/A
Luminaire Lumens: 2124.0 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2040	2040	2040
5°	2039	2062	2031
10°	2024	2029	2029
15°	1997	2011	2029
20°	1955	1985	2020
25°	1907	1950	2009
30°	1849	1913	1996
35°	1788	1876	1992
40°	1720	1840	1992
45°	1651	1804	2009
50°	1578	1777	2024
55°	1502	1759	2050
60°	1423	1745	2084
65°	1335	1736	2138
70°	1243	1731	2210
75°	1128	1729	2094
80°	976	1601	1857
85°	831	1210	1179



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	3.4
10°-20°	203.7	9.6
20°-30°	303.0	14.3
30°-40°	358.3	16.9
40°-50°	368.3	17.3
50°-60°	336.6	15.8
60°-70°	269.2	12.7
70°-80°	169.0	8.0
80°-90°	44.0	2.1
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°	578.6	27.2
0°-40°	936.9	44.1
0°-60°	1641.8	77.3
0°-90°	2124.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2124.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	755	755	763	758	752	72
15°	717	718	722	726	728	202
25°	642	647	657	668	676	295
35°	544	552	571	593	606	340
45°	434	445	474	509	528	334
55°	320	336	375	416	437	286
65°	210	228	273	314	336	208
75°	108	129	166	191	201	115
85°	27	34	39	38	38	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	758.1	758.1	758.1	758.1	758.1
2.5°	773.6	770.5	761.2	755.0	751.9
5°	755.0	755.0	763.3	758.1	751.9
7.5°	748.8	748.8	748.8	764.3	748.8
10°	740.6	741.6	742.6	748.8	742.6
12.5°	731.3	731.3	733.3	735.4	736.4
15°	716.8	717.8	722.0	726.1	728.2
17.5°	701.3	704.4	709.6	714.7	718.9
20°	682.7	686.9	693.1	701.3	705.5
22.5°	663.1	667.2	675.5	684.8	692.0
25°	642.4	646.6	656.9	668.3	676.5
27.5°	618.7	623.9	636.2	651.7	660.0
30°	594.9	601.1	615.6	633.1	642.4
32.5°	570.1	577.4	593.9	613.5	624.9
35°	544.3	551.6	571.2	592.9	606.3
37.5°	517.5	525.7	547.4	572.2	586.7
40°	489.6	498.9	523.7	550.5	567.0
42.5°	461.7	472.0	498.9	530.9	547.4
45°	433.8	445.2	474.1	509.2	527.8
47.5°	404.9	418.3	448.3	487.5	506.1
50°	377.0	390.4	424.5	464.8	483.4
52.5°	348.1	363.6	399.7	441.0	460.7
55°	320.2	335.7	374.9	416.2	436.9
57.5°	292.3	307.8	349.1	391.5	412.1
60°	264.4	280.9	324.3	365.6	387.3
62.5°	236.5	254.1	298.5	340.8	361.5
65°	209.7	228.3	272.7	314.0	335.7
67.5°	183.9	203.5	246.9	287.1	308.8
70°	158.0	177.7	220.0	259.3	280.9
72.5°	133.2	152.9	194.2	229.3	245.8
75°	108.5	129.1	166.3	191.1	201.4
77.5°	84.7	105.4	137.4	153.9	165.3
80°	63.0	80.6	103.3	115.7	119.8
82.5°	43.4	57.8	72.3	75.4	77.5
85°	26.9	34.1	39.2	38.2	38.2
87.5°	12.4	13.4	11.4	8.3	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)