

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: P233125

Luminaire Tested: **FCB-24-2-LD4-34-30-UNV-EDD1-WDA12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233125
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-LD4-34-30-UNV-EDD1-WDA12
Description: FAILSAFE 2X2 FCB LED TROFFER
.125 ACRYLIC LENS
Light Source: (84)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

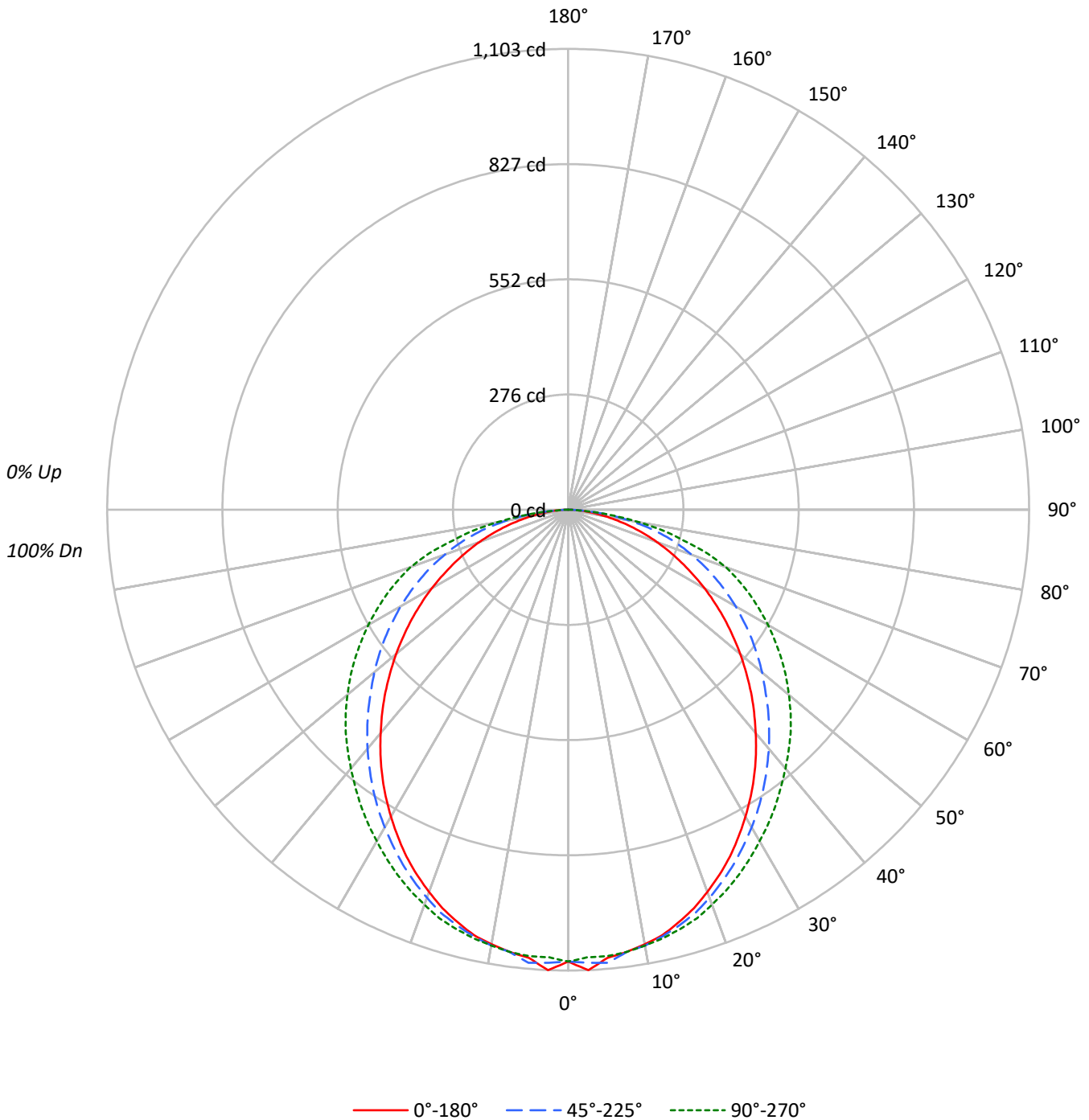
Lumens per Lamp: N/A
Luminaire Lumens: 3029.0 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 29.4
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	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°	2909	2909	2909
5°	2908	2940	2897
10°	2886	2894	2894
15°	2848	2868	2893
20°	2788	2830	2881
25°	2720	2782	2865
30°	2636	2728	2847
35°	2550	2676	2840
40°	2453	2623	2841
45°	2354	2573	2864
50°	2251	2534	2886
55°	2142	2509	2923
60°	2030	2489	2973
65°	1904	2476	3048
70°	1773	2468	3152
75°	1608	2465	2986
80°	1393	2283	2648
85°	1183	1729	1683



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.5	3.4
10°-20°	290.5	9.6
20°-30°	432.1	14.3
30°-40°	511.0	16.9
40°-50°	525.2	17.3
50°-60°	480.0	15.8
60°-70°	383.9	12.7
70°-80°	241.0	8.0
80°-90°	62.8	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°	825.1	27.2
0°-40°	1336.1	44.1
0°-60°	2341.3	77.3
0°-90°	3029.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3029.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1081	1081	1081	1081	1081	
5°	1077	1077	1088	1081	1072	102
15°	1022	1024	1030	1036	1038	288
25°	916	922	937	953	965	421
35°	776	787	814	846	865	485
45°	619	635	676	726	753	477
55°	457	479	535	594	623	408
65°	299	326	389	448	479	297
75°	155	184	237	272	287	164
85°	38	49	56	54	54	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1081.2	1081.2	1081.2	1081.2	1081.2
2.5°	1103.2	1098.8	1085.6	1076.7	1072.3
5°	1076.7	1076.7	1088.5	1081.2	1072.3
7.5°	1067.9	1067.9	1067.9	1090.0	1067.9
10°	1056.1	1057.6	1059.1	1067.9	1059.1
12.5°	1042.9	1042.9	1045.8	1048.7	1050.2
15°	1022.2	1023.7	1029.6	1035.5	1038.4
17.5°	1000.1	1004.6	1011.9	1019.3	1025.2
20°	973.6	979.5	988.4	1000.1	1006.0
22.5°	945.6	951.5	963.3	976.6	986.9
25°	916.2	922.1	936.8	953.0	964.8
27.5°	882.3	889.7	907.3	929.4	941.2
30°	848.4	857.3	877.9	902.9	916.2
32.5°	813.1	823.4	847.0	874.9	891.1
35°	776.2	786.6	814.5	845.5	864.6
37.5°	738.0	749.7	780.7	816.0	836.6
40°	698.2	711.4	746.8	785.1	808.7
42.5°	658.4	673.1	711.4	757.1	780.7
45°	618.6	634.8	676.1	726.2	752.7
47.5°	577.4	596.5	639.3	695.2	721.8
50°	537.6	556.8	605.4	662.8	689.3
52.5°	496.4	518.5	570.0	629.0	656.9
55°	456.6	478.7	534.7	593.6	623.1
57.5°	416.8	438.9	497.9	558.3	587.7
60°	377.1	400.6	462.5	521.4	552.4
62.5°	337.3	362.3	425.7	486.1	515.5
65°	299.0	325.5	388.9	447.8	478.7
67.5°	262.2	290.2	352.0	409.5	440.4
70°	225.4	253.3	313.7	369.7	400.6
72.5°	190.0	218.0	276.9	327.0	350.6
75°	154.7	184.1	237.1	272.5	287.2
77.5°	120.8	150.2	195.9	219.5	235.7
80°	89.9	114.9	147.3	165.0	170.9
82.5°	61.9	82.5	103.1	107.5	110.5
85°	38.3	48.6	56.0	54.5	54.5
87.5°	17.7	19.1	16.2	11.8	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)