

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: P233101

Luminaire Tested: **FCB-24-2-LD4-34-30-UNV-EDD1-WDA6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233101
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-WDA6
Description: FAILSAFE 2X2 FCB LED TROFFER
.060 ACRYLIC LENS
Light Source: (84)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

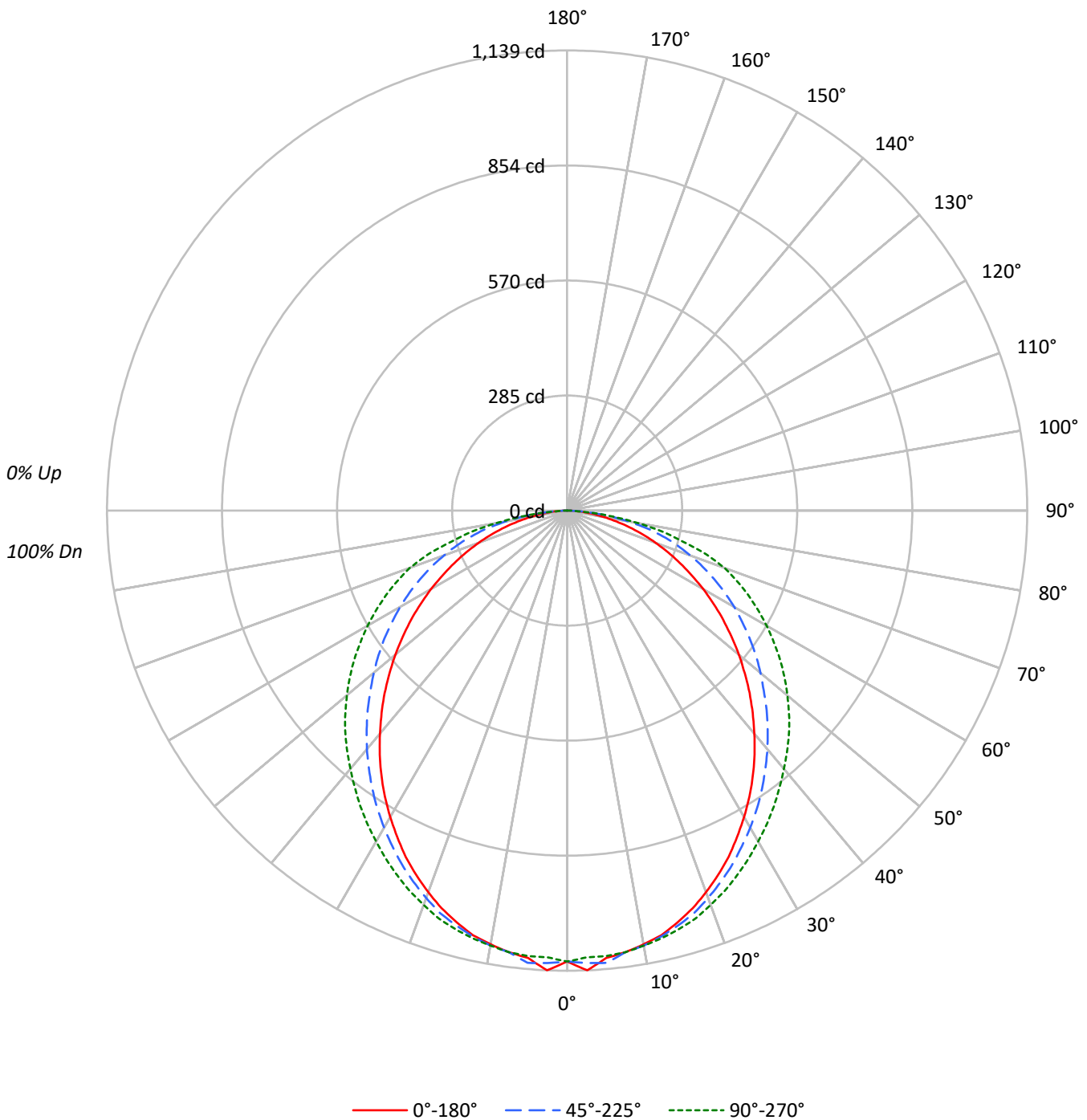
Lumens per Lamp: N/A
Luminaire Lumens: 3127.0 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P233101

CATALOG NUMBER: FCB-24-2-LD4-34-30-UNV-EDD1-WDA6

Luminous Intensity Polar Plot





TEST NUMBER: P233101

CATALOG NUMBER: FCB-24-2-LD4-34-30-UNV-EDD1-WDA6

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°	3003	3003	3003
5°	3003	3035	2990
10°	2979	2987	2987
15°	2940	2961	2986
20°	2878	2922	2974
25°	2808	2871	2957
30°	2722	2816	2939
35°	2633	2762	2932
40°	2532	2708	2933
45°	2431	2656	2957
50°	2323	2617	2979
55°	2212	2590	3018
60°	2095	2570	3069
65°	1966	2556	3147
70°	1831	2548	3254
75°	1660	2545	3083
80°	1438	2357	2734
85°	1220	1785	1738



TEST NUMBER: P233101

CATALOG NUMBER: FCB-24-2-LD4-34-30-UNV-EDD1-WDA6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.9	3.4
10°-20°	299.9	9.6
20°-30°	446.1	14.3
30°-40°	527.6	16.9
40°-50°	542.2	17.3
50°-60°	495.5	15.8
60°-70°	396.4	12.7
70°-80°	248.8	8.0
80°-90°	64.8	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°	851.8	27.2
0°-40°	1379.3	44.1
0°-60°	2417.1	77.3
0°-90°	3127.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3127.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1112	1112	1124	1116	1107	106
15°	1055	1057	1063	1069	1072	297
25°	946	952	967	984	996	435
35°	801	812	841	873	893	501
45°	639	655	698	750	777	492
55°	471	494	552	613	643	422
65°	309	336	401	462	494	306
75°	160	190	245	281	296	170
85°	40	50	58	56	56	46
90°	0	0	0	0	0	



TEST NUMBER: P233101

CATALOG NUMBER: FCB-24-2-LD4-34-30-UNV-EDD1-WDA6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1116.1	1116.1	1116.1	1116.1	1116.1
2.5°	1138.9	1134.4	1120.7	1111.6	1107.0
5°	1111.6	1111.6	1123.7	1116.1	1107.0
7.5°	1102.4	1102.4	1102.4	1125.3	1102.4
10°	1090.3	1091.8	1093.3	1102.4	1093.3
12.5°	1076.6	1076.6	1079.6	1082.7	1084.2
15°	1055.3	1056.8	1062.9	1069.0	1072.0
17.5°	1032.5	1037.1	1044.7	1052.3	1058.3
20°	1005.1	1011.2	1020.3	1032.5	1038.6
22.5°	976.2	982.3	994.5	1008.2	1018.8
25°	945.8	951.9	967.1	983.8	996.0
27.5°	910.8	918.5	936.7	959.5	971.7
30°	875.9	885.0	906.3	932.1	945.8
32.5°	839.4	850.0	874.4	903.2	920.0
35°	801.4	812.0	840.9	872.8	892.6
37.5°	761.8	774.0	805.9	842.4	863.7
40°	720.8	734.5	771.0	810.5	834.8
42.5°	679.7	694.9	734.5	781.6	805.9
45°	638.7	655.4	698.0	749.7	777.0
47.5°	596.1	615.8	659.9	717.7	745.1
50°	555.0	574.8	625.0	684.3	711.6
52.5°	512.4	535.3	588.5	649.3	678.2
55°	471.4	494.2	552.0	612.8	643.2
57.5°	430.3	453.1	514.0	576.3	606.7
60°	389.3	413.6	477.5	538.3	570.2
62.5°	348.2	374.1	439.5	501.8	532.2
65°	308.7	336.1	401.4	462.3	494.2
67.5°	270.7	299.6	363.4	422.7	454.7
70°	232.7	261.5	323.9	381.7	413.6
72.5°	196.2	225.1	285.9	337.6	361.9
75°	159.7	190.1	244.8	281.3	296.5
77.5°	124.7	155.1	202.2	226.6	243.3
80°	92.8	118.6	152.1	170.3	176.4
82.5°	63.9	85.2	106.4	111.0	114.0
85°	39.5	50.2	57.8	56.3	56.3
87.5°	18.2	19.8	16.7	12.2	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)