

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: P233041

Luminaire Tested: **FCB-12-4-LD4-35-30-UNV-EDD1-WDA6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233041
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FCB-12-4-LD4-35-30-UNV-EDD1-WDA6
Description: FAILSAFE 1X4 FCB LED TROFFER
.060 ACRYLIC LENS
Light Source: (84)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

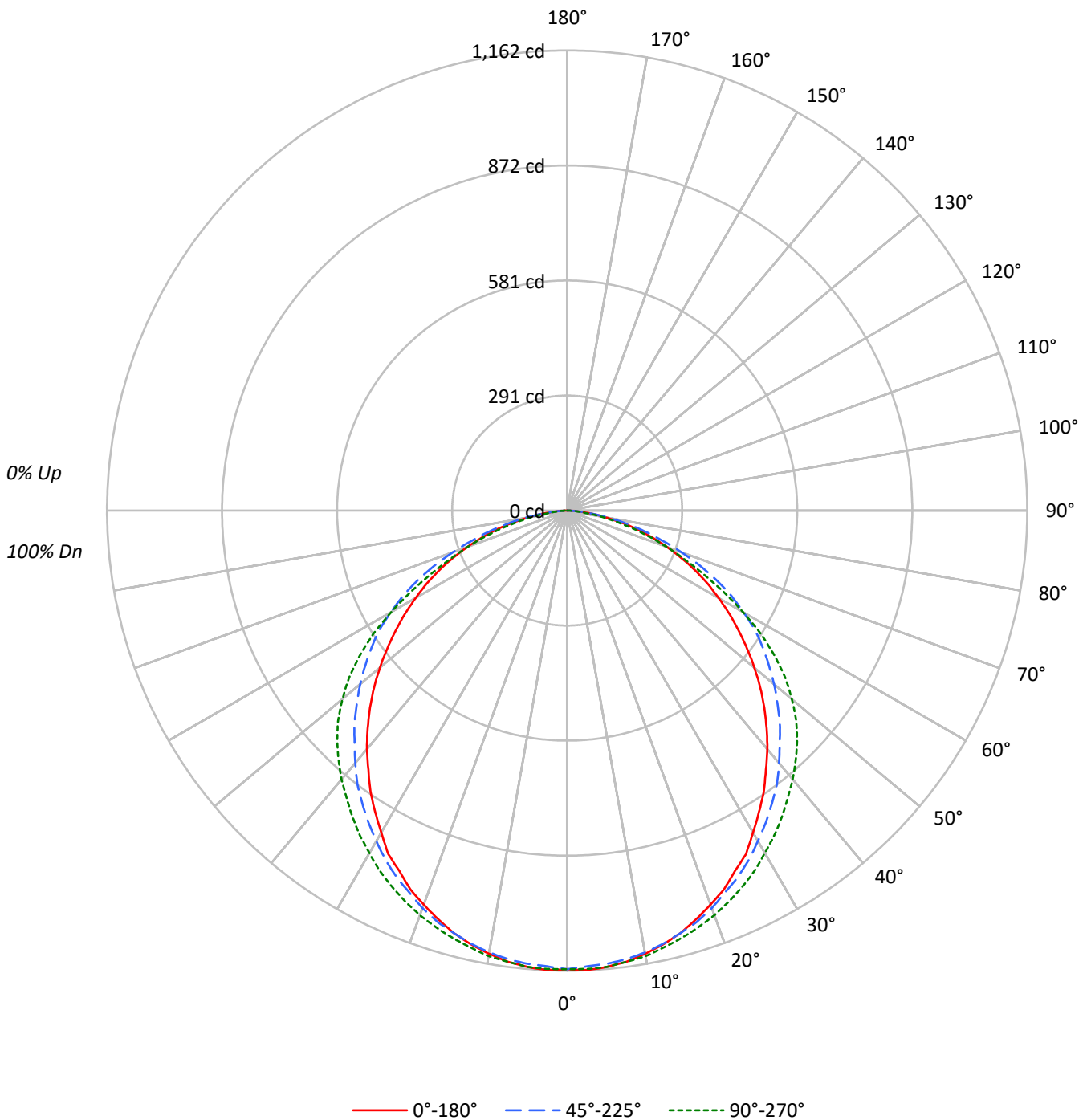
Lumens per Lamp: N/A
Luminaire Lumens: 3210.0 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.5
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: P233041

CATALOG NUMBER: FCB-12-4-LD4-35-30-UNV-EDD1-WDA6

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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3117	3117	3117
5°	3125	3103	3125
10°	3105	3096	3122
15°	3077	3077	3113
20°	3032	3059	3113
25°	2979	3031	3110
30°	2916	2994	3103
35°	2844	2963	3104
40°	2763	2924	3113
45°	2680	2891	3126
50°	2584	2856	3100
55°	2480	2829	2999
60°	2376	2768	2759
65°	2267	2650	2418
70°	2104	2415	2092
75°	1909	2106	1728
80°	1520	1667	1275
85°	1074	929	732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.6	3.4
10°-20°	313.1	9.8
20°-30°	472.1	14.7
30°-40°	565.9	17.6
40°-50°	587.3	18.3
50°-60°	529.7	16.5
60°-70°	386.4	12.0
70°-80°	202.7	6.3
80°-90°	43.2	1.3
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°	894.8	27.9
0°-40°	1460.7	45.5
0°-60°	2577.6	80.3
0°-90°	3210.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3210.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1158	1158	1158	1158	1158	
5°	1157	1154	1149	1157	1157	110
15°	1105	1105	1105	1117	1117	311
25°	1003	1008	1021	1043	1048	463
35°	866	875	902	935	945	541
45°	704	718	760	806	821	543
55°	529	548	603	642	639	473
65°	356	377	416	400	380	352
75°	184	209	203	176	166	193
85°	35	43	30	25	24	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1158.4	1158.4	1158.4	1158.4	1158.4
2.5°	1161.6	1158.4	1152.1	1158.4	1158.4
5°	1156.8	1153.7	1148.9	1156.8	1156.8
7.5°	1148.9	1145.7	1142.6	1150.5	1148.9
10°	1136.2	1134.7	1133.1	1142.6	1142.6
12.5°	1122.0	1122.0	1120.4	1131.5	1129.9
15°	1104.6	1104.6	1104.6	1117.3	1117.3
17.5°	1082.4	1085.6	1088.8	1103.0	1103.0
20°	1058.7	1061.9	1068.2	1085.6	1087.2
22.5°	1035.0	1036.5	1042.9	1063.4	1068.2
25°	1003.3	1008.1	1020.7	1042.9	1047.6
27.5°	978.0	979.6	993.8	1019.1	1025.5
30°	938.4	949.5	963.7	992.2	998.6
32.5°	902.0	911.5	933.7	963.7	973.2
35°	865.6	875.1	902.0	935.3	944.8
37.5°	824.5	838.7	870.4	903.6	914.7
40°	786.5	799.2	832.4	873.5	886.2
42.5°	745.4	758.0	794.4	840.3	854.6
45°	704.2	718.5	759.6	805.5	821.3
47.5°	661.5	677.3	720.0	770.7	784.9
50°	617.2	634.6	682.1	734.3	740.6
52.5°	572.9	591.9	642.5	688.4	694.7
55°	528.6	547.5	602.9	642.5	639.3
57.5°	485.8	506.4	563.4	583.9	580.8
60°	441.5	463.7	514.3	523.8	512.7
62.5°	400.4	420.9	468.4	460.5	446.3
65°	356.1	376.6	416.2	400.4	379.8
67.5°	311.8	337.1	362.4	335.5	319.7
70°	267.4	295.9	307.0	280.1	265.9
72.5°	224.7	254.8	251.6	224.7	215.2
75°	183.6	208.9	202.6	175.7	166.2
77.5°	139.3	167.7	153.5	131.3	123.4
80°	98.1	123.4	107.6	88.6	82.3
82.5°	64.9	82.3	66.5	52.2	47.5
85°	34.8	42.7	30.1	25.3	23.7
87.5°	14.2	12.7	11.1	11.1	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)