

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: P233044

Luminaire Tested: **FCB-12-4-LD4-35-50-UNV-EDD1-WDA6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233044
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-LD4-35-50-UNV-EDD1-WDA6
Description: FAILSAFE 1X4 FCB LED TROFFER
.060 ACRYLIC LENS
Light Source: (84)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

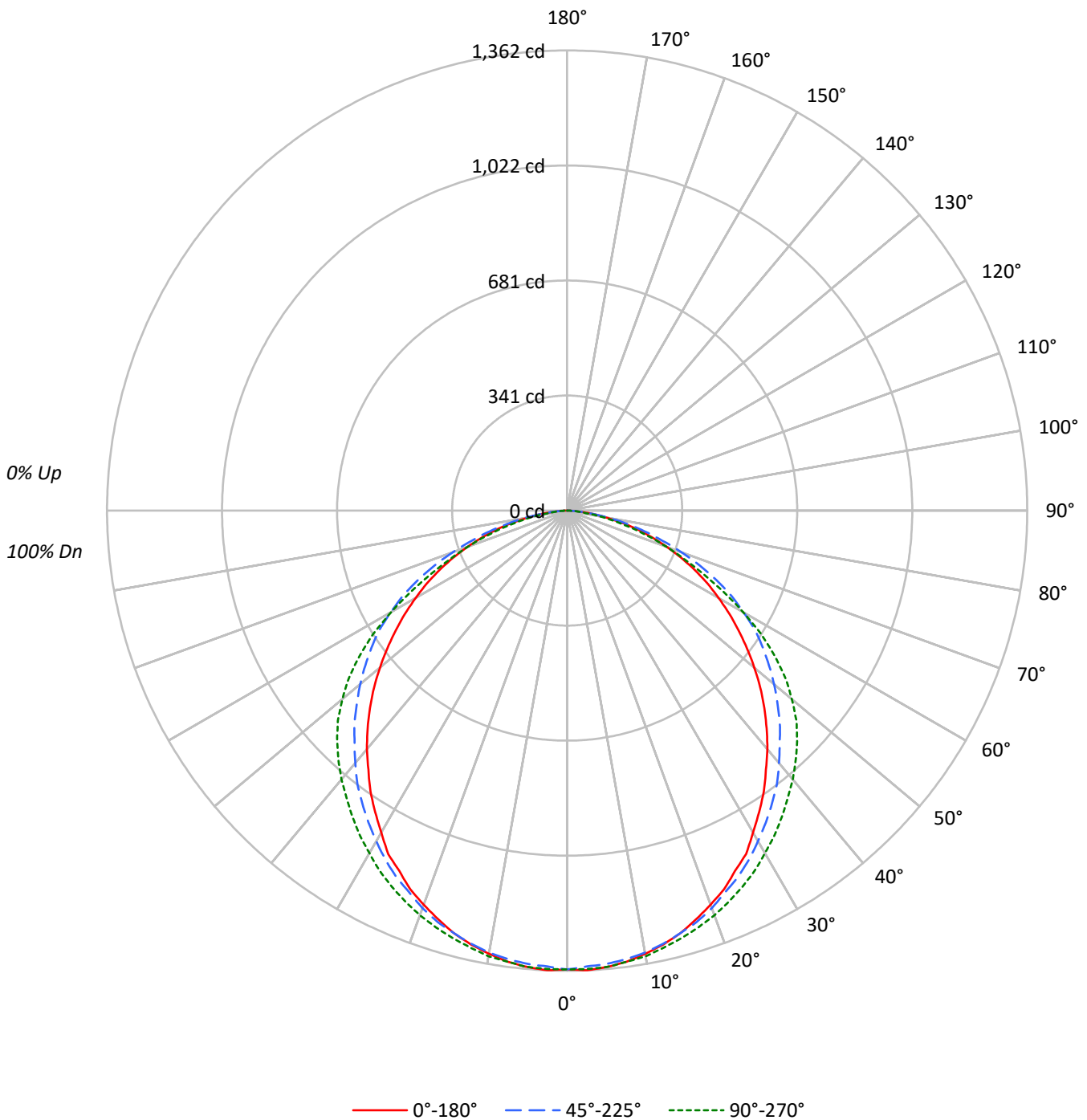
Lumens per Lamp: N/A
Luminaire Lumens: 3763.0 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70					70			
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59					59			
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51					51			
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44					44			
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38					38			
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34					34			
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30					30			
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3654	3654	3654
5°	3663	3638	3663
10°	3640	3630	3660
15°	3607	3607	3649
20°	3554	3586	3650
25°	3492	3553	3646
30°	3418	3511	3637
35°	3334	3474	3638
40°	3239	3428	3649
45°	3142	3389	3664
50°	3029	3347	3635
55°	2907	3316	3516
60°	2786	3245	3235
65°	2658	3107	2835
70°	2467	2832	2452
75°	2237	2469	2025
80°	1782	1954	1495
85°	1260	1087	858



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.5	3.4
10°-20°	367.1	9.8
20°-30°	553.4	14.7
30°-40°	663.4	17.6
40°-50°	688.4	18.3
50°-60°	620.9	16.5
60°-70°	452.9	12.0
70°-80°	237.6	6.3
80°-90°	50.7	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°	1049.0	27.9
0°-40°	1712.3	45.5
0°-60°	3021.7	80.3
0°-90°	3763.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3763.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1358	1358	1358	1358	1358	
5°	1356	1352	1347	1356	1356	129
15°	1295	1295	1295	1310	1310	365
25°	1176	1182	1197	1222	1228	543
35°	1015	1026	1057	1096	1108	634
45°	826	842	890	944	963	636
55°	620	642	707	753	750	555
65°	417	442	488	469	445	413
75°	215	245	238	206	195	226
85°	41	50	35	30	28	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1358.0	1358.0	1358.0	1358.0	1358.0
2.5°	1361.7	1358.0	1350.5	1358.0	1358.0
5°	1356.1	1352.4	1346.8	1356.1	1356.1
7.5°	1346.8	1343.1	1339.4	1348.7	1346.8
10°	1332.0	1330.1	1328.3	1339.4	1339.4
12.5°	1315.3	1315.3	1313.4	1326.4	1324.6
15°	1294.9	1294.9	1294.9	1309.7	1309.7
17.5°	1268.9	1272.6	1276.3	1293.0	1293.0
20°	1241.1	1244.8	1252.2	1272.6	1274.5
22.5°	1213.3	1215.1	1222.5	1246.7	1252.2
25°	1176.2	1181.7	1196.6	1222.5	1228.1
27.5°	1146.5	1148.3	1165.0	1194.7	1202.1
30°	1100.1	1113.1	1129.8	1163.2	1170.6
32.5°	1057.4	1068.6	1094.5	1129.8	1140.9
35°	1014.8	1025.9	1057.4	1096.4	1107.5
37.5°	966.5	983.2	1020.3	1059.3	1072.3
40°	922.0	936.8	975.8	1024.0	1038.9
42.5°	873.8	888.6	931.3	985.1	1001.8
45°	825.5	842.2	890.5	944.3	962.8
47.5°	775.4	794.0	844.1	903.5	920.1
50°	723.5	743.9	799.6	860.8	868.2
52.5°	671.6	693.8	753.2	807.0	814.4
55°	619.6	641.9	706.8	753.2	749.5
57.5°	569.5	593.6	660.4	684.5	680.8
60°	517.6	543.6	602.9	614.1	601.1
62.5°	469.3	493.5	549.1	539.8	523.1
65°	417.4	441.5	487.9	469.3	445.2
67.5°	365.5	395.1	424.8	393.3	374.7
70°	313.5	346.9	359.9	328.4	311.7
72.5°	263.4	298.7	295.0	263.4	252.3
75°	215.2	244.9	237.5	205.9	194.8
77.5°	163.3	196.6	179.9	154.0	144.7
80°	115.0	144.7	126.1	103.9	96.5
82.5°	76.1	96.5	77.9	61.2	55.7
85°	40.8	50.1	35.2	29.7	27.8
87.5°	16.7	14.8	13.0	13.0	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)