

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: P233105

Luminaire Tested: **FCB-24-2-LD4-44-30-UNV-EDD1-WDA6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233105
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-LD4-44-30-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

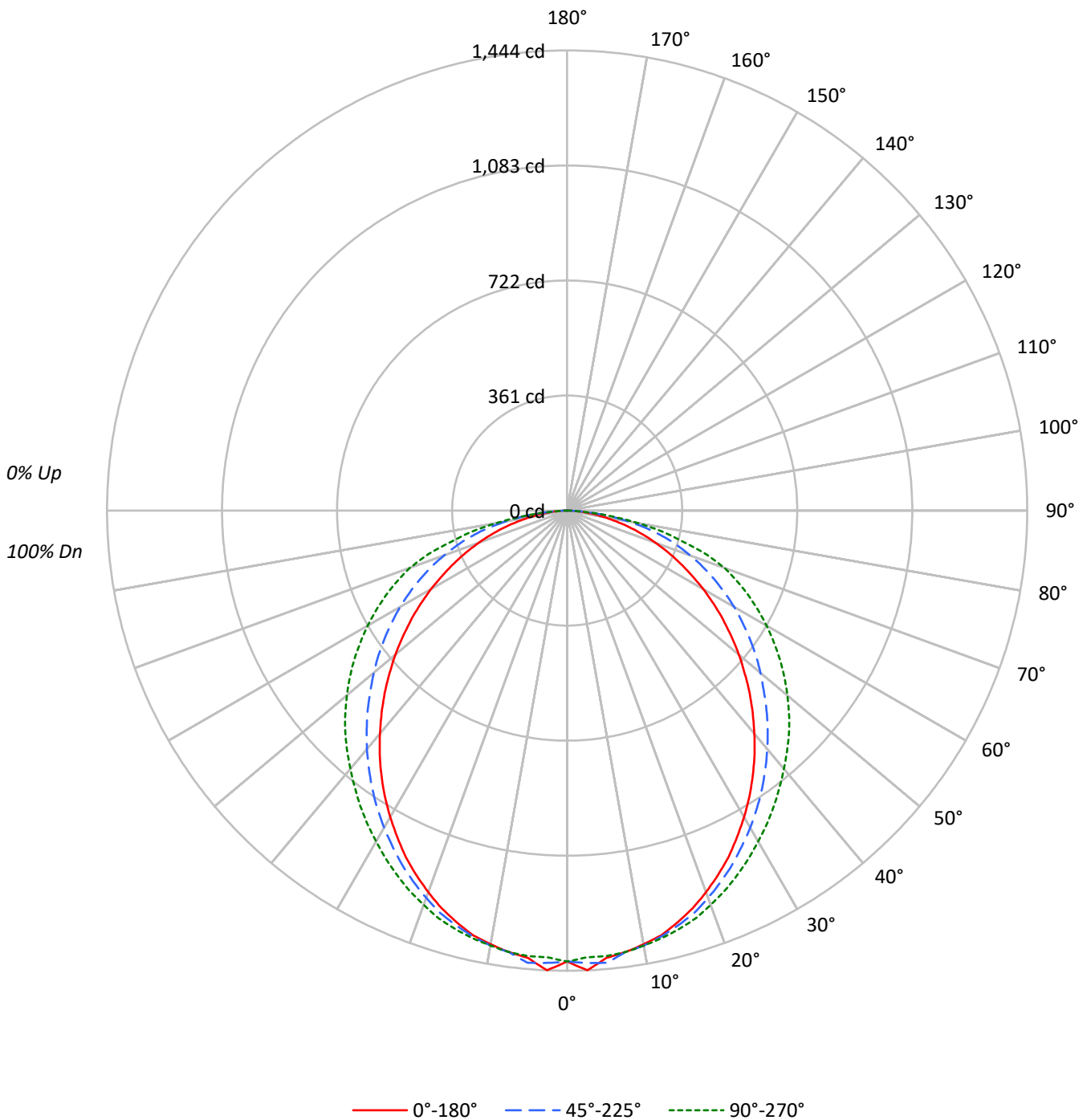
Lumens per Lamp: N/A
Luminaire Lumens: 3964.0 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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°	3807	3807	3807
5°	3806	3848	3791
10°	3777	3787	3787
15°	3727	3754	3786
20°	3649	3704	3770
25°	3560	3640	3749
30°	3450	3570	3726
35°	3337	3502	3717
40°	3210	3433	3718
45°	3081	3367	3749
50°	2946	3317	3777
55°	2804	3283	3826
60°	2656	3258	3891
65°	2492	3240	3989
70°	2320	3231	4125
75°	2104	3226	3908
80°	1822	2988	3465
85°	1547	2263	2201



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.2	3.4
10°-20°	380.1	9.6
20°-30°	565.5	14.3
30°-40°	668.8	16.9
40°-50°	687.4	17.3
50°-60°	628.1	15.8
60°-70°	502.5	12.7
70°-80°	315.3	8.0
80°-90°	82.1	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°	1079.8	27.2
0°-40°	1748.6	44.1
0°-60°	3064.0	77.3
0°-90°	3964.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3964.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1415	1415	1415	1415	1415	
5°	1409	1409	1424	1415	1403	134
15°	1338	1340	1347	1355	1359	377
25°	1199	1207	1226	1247	1263	551
35°	1016	1029	1066	1106	1132	635
45°	810	831	885	950	985	624
55°	598	626	700	777	815	535
65°	391	426	509	586	626	388
75°	202	241	310	357	376	215
85°	50	64	73	71	71	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1414.9	1414.9	1414.9	1414.9	1414.9
2.5°	1443.8	1438.0	1420.7	1409.1	1403.3
5°	1409.1	1409.1	1424.5	1414.9	1403.3
7.5°	1397.5	1397.5	1397.5	1426.5	1397.5
10°	1382.1	1384.0	1386.0	1397.5	1386.0
12.5°	1364.8	1364.8	1368.6	1372.5	1374.4
15°	1337.8	1339.7	1347.4	1355.1	1359.0
17.5°	1308.9	1314.6	1324.3	1333.9	1341.6
20°	1274.2	1281.9	1293.4	1308.9	1316.6
22.5°	1237.5	1245.3	1260.7	1278.0	1291.5
25°	1199.0	1206.7	1226.0	1247.2	1262.6
27.5°	1154.7	1164.3	1187.4	1216.3	1231.8
30°	1110.3	1121.9	1148.9	1181.6	1199.0
32.5°	1064.1	1077.5	1108.4	1145.0	1166.2
35°	1015.9	1029.4	1066.0	1106.5	1131.5
37.5°	965.7	981.2	1021.6	1067.9	1094.9
40°	913.7	931.0	977.3	1027.4	1058.3
42.5°	861.7	880.9	931.0	990.8	1021.6
45°	809.6	830.8	884.8	950.3	985.0
47.5°	755.6	780.7	836.6	909.8	944.5
50°	703.6	728.6	792.3	867.4	902.1
52.5°	649.6	678.5	746.0	823.1	859.7
55°	597.6	626.5	699.7	776.8	815.4
57.5°	545.5	574.4	651.5	730.6	769.1
60°	493.5	524.3	605.3	682.4	722.9
62.5°	441.4	474.2	557.1	636.1	674.7
65°	391.3	426.0	508.9	586.0	626.5
67.5°	343.1	379.7	460.7	535.9	576.4
70°	294.9	331.6	410.6	483.8	524.3
72.5°	248.7	285.3	362.4	427.9	458.8
75°	202.4	241.0	310.3	356.6	375.9
77.5°	158.1	196.6	256.4	287.2	308.4
80°	117.6	150.4	192.8	215.9	223.6
82.5°	81.0	107.9	134.9	140.7	144.6
85°	50.1	63.6	73.3	71.3	71.3
87.5°	23.1	25.1	21.2	15.4	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)