

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: P233130

Luminaire Tested: **FCB-24-2-LD4-44-35-UNV-EDD1-WDA12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233130
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-LD4-44-35-UNV-EDD1-WDA12
Description: FAILSAFE 2X2 FCB LED TROFFER
.125 ACRYLIC LENS
Light Source: (84)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

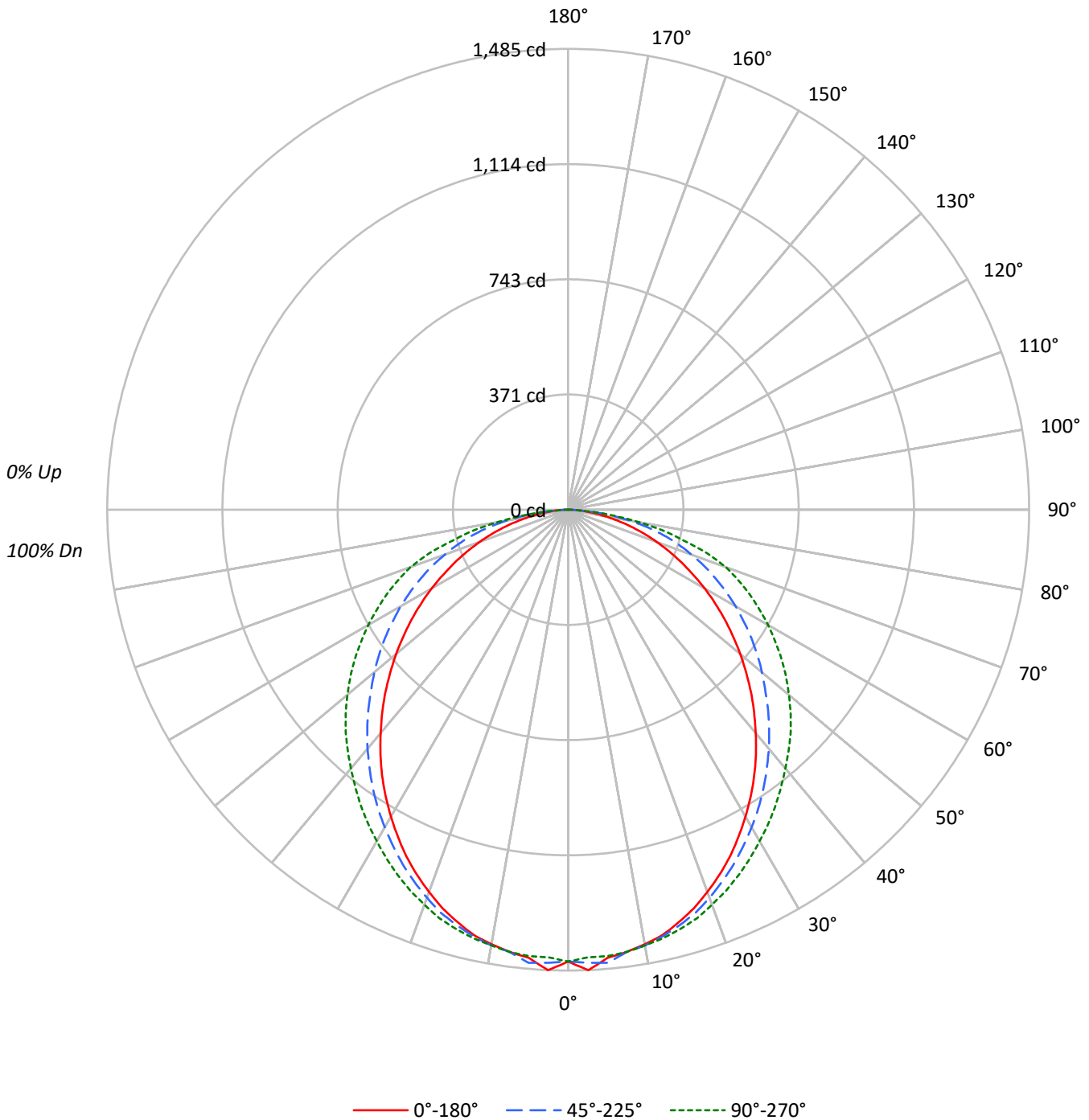
Lumens per Lamp: N/A
Luminaire Lumens: 4078.0 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	3917	3917	3917
5°	3916	3959	3900
10°	3885	3896	3896
15°	3834	3862	3895
20°	3754	3810	3879
25°	3662	3745	3857
30°	3549	3672	3833
35°	3433	3602	3824
40°	3302	3532	3824
45°	3170	3464	3857
50°	3030	3412	3885
55°	2884	3377	3935
60°	2732	3351	4003
65°	2564	3333	4104
70°	2387	3323	4244
75°	2165	3320	4021
80°	1875	3073	3564
85°	1593	2328	2266



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.1	3.4
10°-20°	391.0	9.6
20°-30°	581.7	14.3
30°-40°	688.0	16.9
40°-50°	707.2	17.3
50°-60°	646.2	15.8
60°-70°	516.9	12.7
70°-80°	324.4	8.0
80°-90°	84.5	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°	1110.8	27.2
0°-40°	1798.8	44.1
0°-60°	3152.2	77.3
0°-90°	4078.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4078.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1456	1456	1456	1456	1456	
5°	1450	1450	1466	1456	1444	138
15°	1376	1378	1386	1394	1398	388
25°	1234	1241	1261	1283	1299	567
35°	1045	1059	1097	1138	1164	653
45°	833	855	910	978	1013	642
55°	615	644	720	799	839	550
65°	403	438	524	603	644	400
75°	208	248	319	367	387	221
85°	52	65	75	73	73	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1455.6	1455.6	1455.6	1455.6	1455.6
2.5°	1485.3	1479.4	1461.5	1449.6	1443.7
5°	1449.6	1449.6	1465.5	1455.6	1443.7
7.5°	1437.7	1437.7	1437.7	1467.5	1437.7
10°	1421.9	1423.8	1425.8	1437.7	1425.8
12.5°	1404.0	1404.0	1408.0	1411.9	1413.9
15°	1376.3	1378.2	1386.2	1394.1	1398.1
17.5°	1346.5	1352.5	1362.4	1372.3	1380.2
20°	1310.8	1318.7	1330.6	1346.5	1354.4
22.5°	1273.1	1281.1	1296.9	1314.8	1328.7
25°	1233.5	1241.4	1261.2	1283.0	1298.9
27.5°	1187.9	1197.8	1221.6	1251.3	1267.2
30°	1142.3	1154.1	1181.9	1215.6	1233.5
32.5°	1094.7	1108.5	1140.3	1177.9	1199.8
35°	1045.1	1059.0	1096.6	1138.3	1164.1
37.5°	993.5	1009.4	1051.0	1098.6	1126.4
40°	940.0	957.8	1005.4	1057.0	1088.7
42.5°	886.4	906.3	957.8	1019.3	1051.0
45°	832.9	854.7	910.2	977.7	1013.4
47.5°	777.4	803.1	860.7	936.0	971.7
50°	723.8	749.6	815.0	892.4	928.1
52.5°	668.3	698.0	767.4	846.8	884.5
55°	614.8	644.5	719.9	799.2	838.8
57.5°	561.2	591.0	670.3	751.6	791.2
60°	507.7	539.4	622.7	702.0	743.7
62.5°	454.1	487.8	573.1	654.4	694.1
65°	402.6	438.3	523.5	602.9	644.5
67.5°	353.0	390.7	474.0	551.3	592.9
70°	303.4	341.1	422.4	497.8	539.4
72.5°	255.8	293.5	372.8	440.2	472.0
75°	208.2	247.9	319.3	366.9	386.7
77.5°	162.6	202.3	263.7	295.5	317.3
80°	121.0	154.7	198.3	222.1	230.0
82.5°	83.3	111.1	138.8	144.8	148.7
85°	51.6	65.4	75.4	73.4	73.4
87.5°	23.8	25.8	21.8	15.9	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)