

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: P233129

Luminaire Tested: **FCB-24-2-LD4-44-30-UNV-EDD1-WDA12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233129
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-WDA12
Description: FAILSAFE 2X2 FCB LED TROFFER
.125 ACRYLIC LENS
Light Source: (84)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

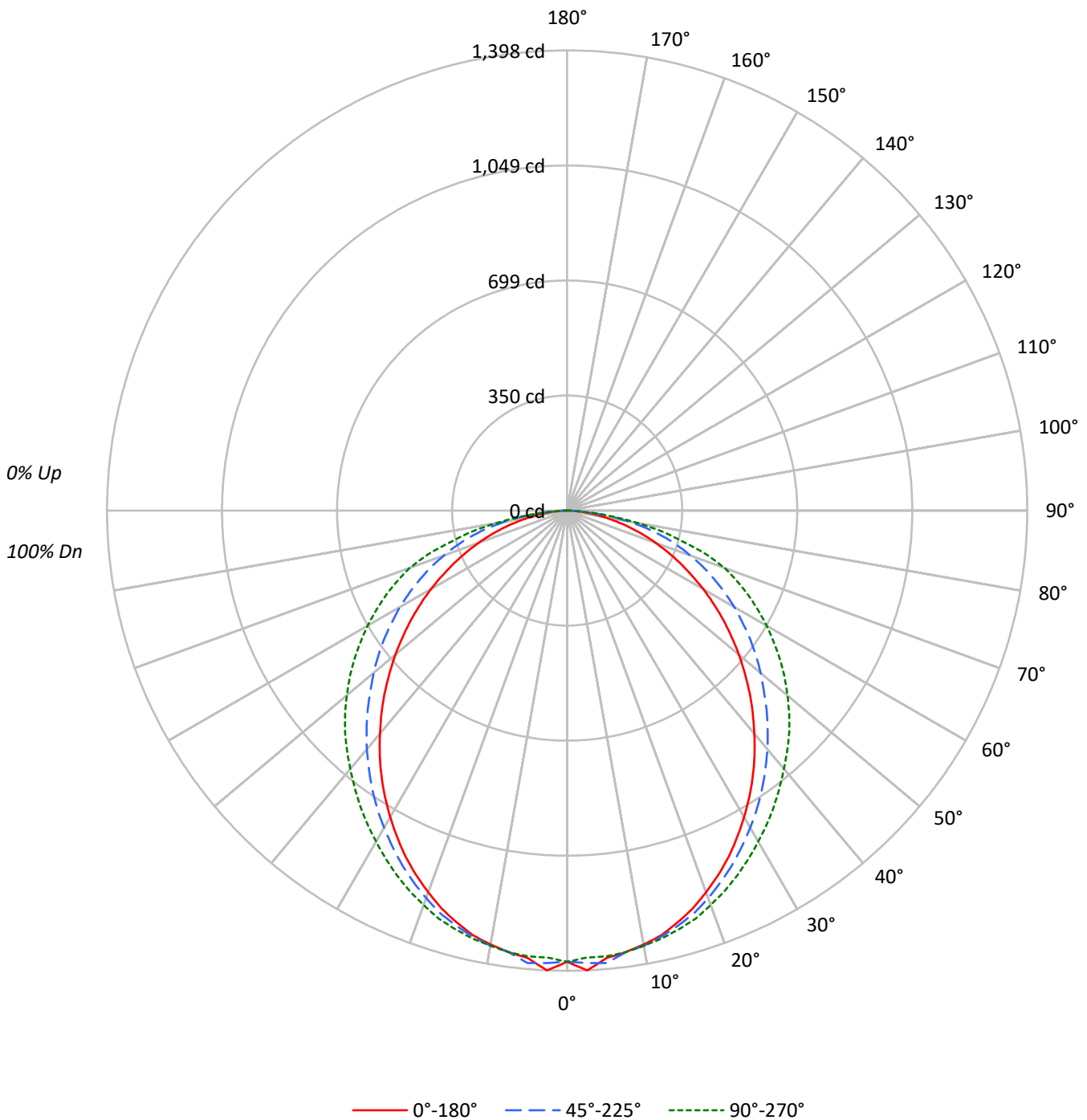
Lumens per Lamp: N/A
Luminaire Lumens: 3839.0 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	3687	3687	3687
5°	3686	3727	3671
10°	3657	3668	3668
15°	3609	3635	3667
20°	3534	3587	3651
25°	3448	3525	3631
30°	3341	3457	3608
35°	3232	3392	3600
40°	3108	3325	3600
45°	2984	3261	3631
50°	2853	3212	3658
55°	2715	3179	3705
60°	2572	3155	3768
65°	2413	3138	3863
70°	2247	3128	3995
75°	2038	3125	3785
80°	1765	2893	3357
85°	1497	2189	2133



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	3.4
10°-20°	368.1	9.6
20°-30°	547.6	14.3
30°-40°	647.7	16.9
40°-50°	665.7	17.3
50°-60°	608.3	15.8
60°-70°	486.6	12.7
70°-80°	305.4	8.0
80°-90°	79.5	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°	1045.7	27.2
0°-40°	1693.4	44.1
0°-60°	2967.5	77.3
0°-90°	3839.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3839.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1370	1370	1370	1370	1370	
5°	1365	1365	1380	1370	1359	130
15°	1296	1298	1305	1312	1316	365
25°	1161	1169	1187	1208	1223	534
35°	984	997	1032	1072	1096	615
45°	784	805	857	920	954	605
55°	579	607	678	752	790	518
65°	379	413	493	568	607	376
75°	196	233	301	345	364	208
85°	48	62	71	69	69	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1370.3	1370.3	1370.3	1370.3	1370.3
2.5°	1398.3	1392.7	1375.9	1364.7	1359.1
5°	1364.7	1364.7	1379.6	1370.3	1359.1
7.5°	1353.5	1353.5	1353.5	1381.5	1353.5
10°	1338.5	1340.4	1342.3	1353.5	1342.3
12.5°	1321.7	1321.7	1325.5	1329.2	1331.1
15°	1295.6	1297.5	1304.9	1312.4	1316.1
17.5°	1267.6	1273.2	1282.5	1291.9	1299.3
20°	1234.0	1241.5	1252.7	1267.6	1275.1
22.5°	1198.5	1206.0	1220.9	1237.7	1250.8
25°	1161.2	1168.6	1187.3	1207.9	1222.8
27.5°	1118.2	1127.6	1150.0	1178.0	1192.9
30°	1075.3	1086.5	1112.6	1144.4	1161.2
32.5°	1030.5	1043.6	1073.4	1108.9	1129.4
35°	983.8	996.9	1032.4	1071.6	1095.8
37.5°	935.3	950.2	989.4	1034.2	1060.4
40°	884.9	901.7	946.5	995.0	1024.9
42.5°	834.5	853.2	901.7	959.6	989.4
45°	784.1	804.6	856.9	920.4	954.0
47.5°	731.8	756.1	810.2	881.2	914.8
50°	681.4	705.7	767.3	840.1	873.7
52.5°	629.1	657.1	722.5	797.1	832.6
55°	578.7	606.7	677.7	752.3	789.7
57.5°	528.3	556.3	631.0	707.5	744.9
60°	477.9	507.8	586.2	660.9	700.1
62.5°	427.5	459.2	539.5	616.1	653.4
65°	379.0	412.6	492.8	567.5	606.7
67.5°	332.3	367.8	446.2	519.0	558.2
70°	285.6	321.1	397.6	468.6	507.8
72.5°	240.8	276.3	351.0	414.4	444.3
75°	196.0	233.4	300.6	345.4	364.0
77.5°	153.1	190.4	248.3	278.2	298.7
80°	113.9	145.6	186.7	209.1	216.6
82.5°	78.4	104.5	130.7	136.3	140.0
85°	48.5	61.6	70.9	69.1	69.1
87.5°	22.4	24.3	20.5	14.9	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)