

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: P233128

Luminaire Tested: **FCB-24-2-LD4-34-50-UNV-EDD1-WDA12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233128
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-LD4-34-50-UNV-EDD1-WDA12
Description: FAILSAFE 2X2 FCB LED TROFFER
.125 ACRYLIC LENS
Light Source: (84)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

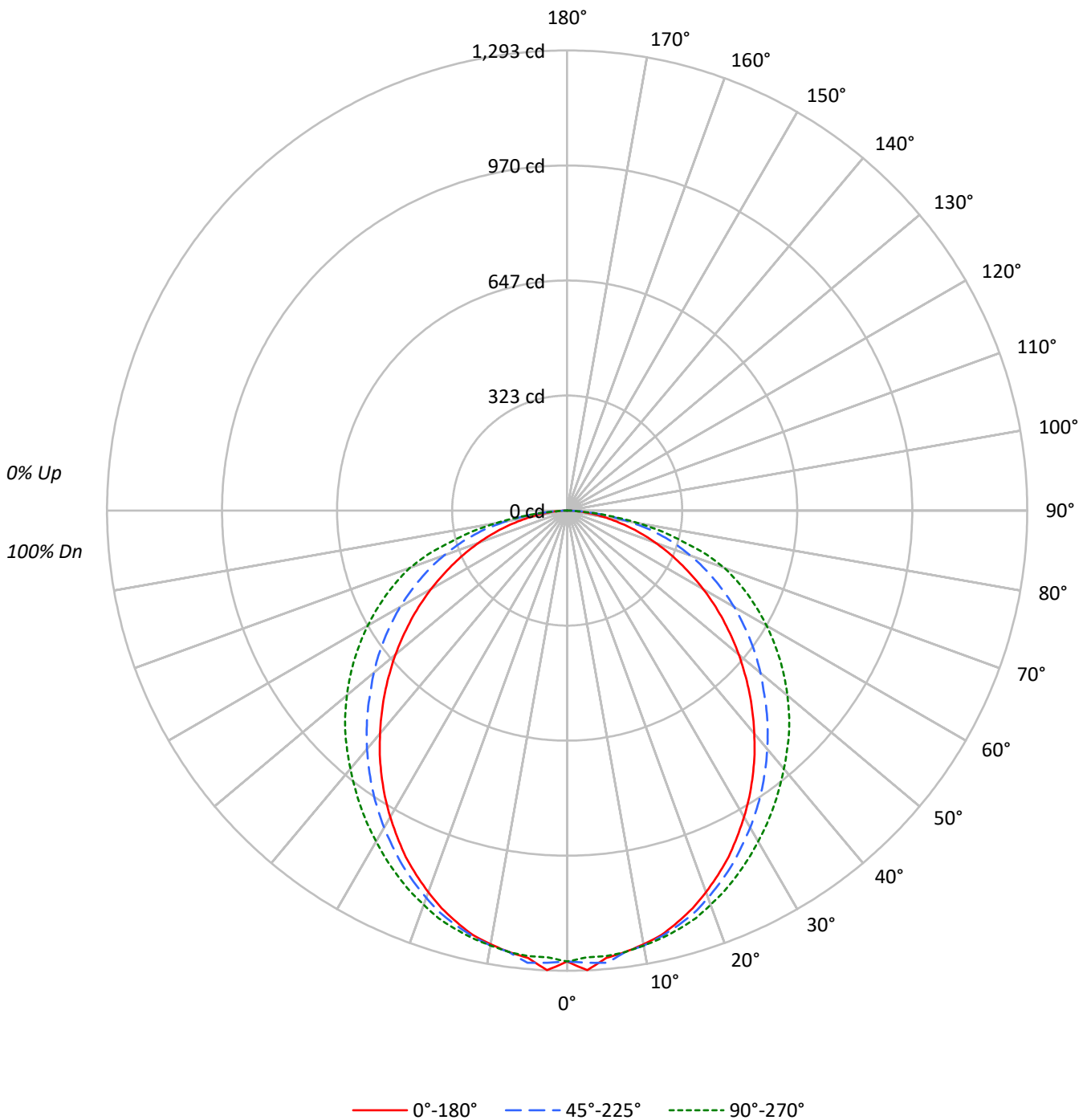
Lumens per Lamp: N/A
Luminaire Lumens: 3549.0 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 29.4
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°	3409	3409	3409
5°	3408	3445	3394
10°	3381	3391	3391
15°	3337	3361	3390
20°	3267	3316	3375
25°	3187	3259	3356
30°	3089	3196	3336
35°	2988	3135	3328
40°	2873	3074	3328
45°	2758	3015	3356
50°	2637	2969	3381
55°	2510	2939	3425
60°	2378	2916	3483
65°	2230	2901	3571
70°	2078	2892	3693
75°	1884	2889	3499
80°	1632	2675	3102
85°	1386	2025	1973



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	3.4
10°-20°	340.3	9.6
20°-30°	506.3	14.3
30°-40°	598.8	16.9
40°-50°	615.4	17.3
50°-60°	562.4	15.8
60°-70°	449.9	12.7
70°-80°	282.3	8.0
80°-90°	73.5	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°	966.7	27.2
0°-40°	1565.5	44.1
0°-60°	2743.3	77.3
0°-90°	3549.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3549.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1267	1267	1267	1267	1267	
5°	1262	1262	1275	1267	1256	120
15°	1198	1200	1206	1213	1217	337
25°	1074	1080	1098	1117	1130	494
35°	910	922	954	991	1013	568
45°	725	744	792	851	882	559
55°	535	561	626	696	730	479
65°	350	381	456	525	561	348
75°	181	216	278	319	336	192
85°	45	57	66	64	64	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1266.8	1266.8	1266.8	1266.8	1266.8
2.5°	1292.6	1287.5	1271.9	1261.6	1256.4
5°	1261.6	1261.6	1275.4	1266.8	1256.4
7.5°	1251.2	1251.2	1251.2	1277.1	1251.2
10°	1237.4	1239.1	1240.9	1251.2	1240.9
12.5°	1221.9	1221.9	1225.3	1228.8	1230.5
15°	1197.7	1199.5	1206.4	1213.3	1216.7
17.5°	1171.8	1177.0	1185.6	1194.3	1201.2
20°	1140.8	1147.7	1158.0	1171.8	1178.7
22.5°	1108.0	1114.9	1128.7	1144.2	1156.3
25°	1073.5	1080.4	1097.6	1116.6	1130.4
27.5°	1033.8	1042.4	1063.1	1089.0	1102.8
30°	994.1	1004.4	1028.6	1057.9	1073.5
32.5°	952.7	964.7	992.4	1025.1	1044.1
35°	909.5	921.6	954.4	990.6	1013.1
37.5°	864.6	878.4	914.7	956.1	980.3
40°	818.0	833.6	875.0	919.9	947.5
42.5°	771.4	788.7	833.6	887.1	914.7
45°	724.8	743.8	792.2	850.8	881.9
47.5°	676.5	699.0	749.0	814.6	845.7
50°	629.9	652.4	709.3	776.6	807.7
52.5°	581.6	607.5	667.9	736.9	769.7
55°	535.0	560.9	626.5	695.5	730.0
57.5°	488.4	514.3	583.3	654.1	688.6
60°	441.8	469.4	541.9	610.9	647.2
62.5°	395.2	424.6	498.8	569.5	604.0
65°	350.3	381.4	455.6	524.7	560.9
67.5°	307.2	340.0	412.5	479.8	516.0
70°	264.1	296.8	367.6	433.2	469.4
72.5°	222.6	255.4	324.5	383.1	410.7
75°	181.2	215.7	277.9	319.3	336.5
77.5°	141.5	176.0	229.5	257.1	276.1
80°	105.3	134.6	172.6	193.3	200.2
82.5°	72.5	96.6	120.8	126.0	129.4
85°	44.9	57.0	65.6	63.9	63.9
87.5°	20.7	22.4	19.0	13.8	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)