

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: P233104

Luminaire Tested: **FCB-24-2-LD4-34-50-UNV-EDD1-WDA6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233104
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-WDA6
Description: FAILSAFE 2X2 FCB LED TROFFER
.060 ACRYLIC LENS
Light Source: (84)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

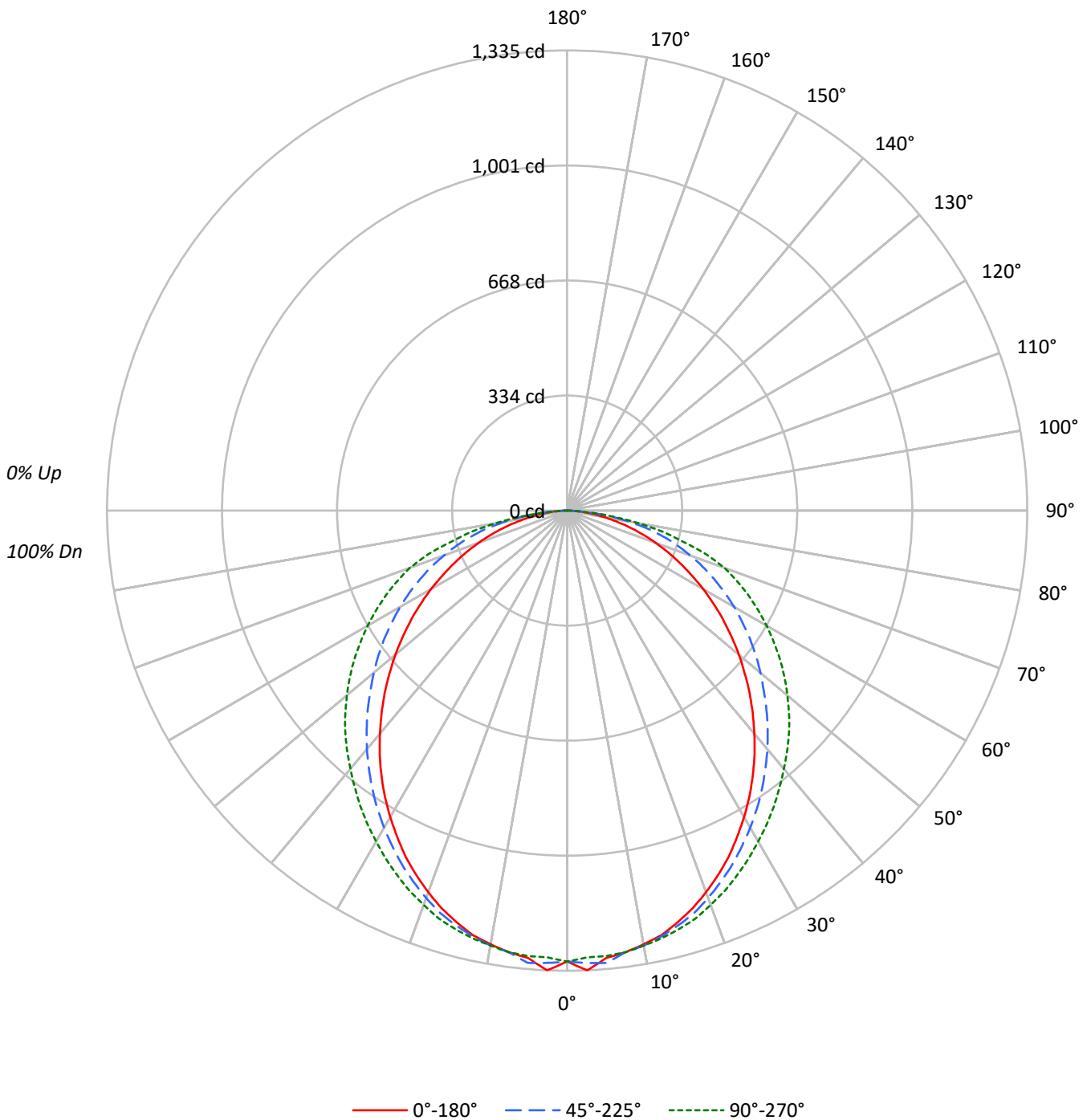
Lumens per Lamp: N/A
Luminaire Lumens: 3665.0 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33					33			
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3520	3520	3520
5°	3519	3558	3505
10°	3492	3501	3501
15°	3446	3471	3500
20°	3374	3425	3486
25°	3292	3366	3466
30°	3190	3301	3445
35°	3085	3238	3437
40°	2968	3174	3437
45°	2849	3113	3466
50°	2723	3067	3492
55°	2592	3035	3537
60°	2456	3012	3597
65°	2304	2996	3688
70°	2146	2987	3814
75°	1945	2983	3613
80°	1684	2762	3203
85°	1430	2090	2035



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.1	3.4
10°-20°	351.4	9.6
20°-30°	522.8	14.3
30°-40°	618.3	16.9
40°-50°	635.5	17.3
50°-60°	580.7	15.8
60°-70°	464.6	12.7
70°-80°	291.6	8.0
80°-90°	75.9	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°	998.3	27.2
0°-40°	1616.7	44.1
0°-60°	2832.9	77.3
0°-90°	3665.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3665.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1308	1308	1308	1308	1308	
5°	1303	1303	1317	1308	1298	124
15°	1237	1239	1246	1253	1256	348
25°	1109	1116	1134	1153	1167	510
35°	939	952	986	1023	1046	587
45°	748	768	818	879	911	577
55°	552	579	647	718	754	494
65°	362	394	470	542	579	359
75°	187	223	287	330	348	199
85°	46	59	68	66	66	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1308.2	1308.2	1308.2	1308.2	1308.2
2.5°	1334.9	1329.5	1313.5	1302.8	1297.5
5°	1302.8	1302.8	1317.1	1308.2	1297.5
7.5°	1292.1	1292.1	1292.1	1318.9	1292.1
10°	1277.9	1279.6	1281.4	1292.1	1281.4
12.5°	1261.8	1261.8	1265.4	1269.0	1270.7
15°	1236.9	1238.7	1245.8	1252.9	1256.5
17.5°	1210.1	1215.5	1224.4	1233.3	1240.4
20°	1178.1	1185.2	1195.9	1210.1	1217.3
22.5°	1144.2	1151.3	1165.6	1181.6	1194.1
25°	1108.6	1115.7	1133.5	1153.1	1167.4
27.5°	1067.6	1076.5	1097.9	1124.6	1138.8
30°	1026.6	1037.3	1062.2	1092.5	1108.6
32.5°	983.8	996.3	1024.8	1058.6	1078.3
35°	939.2	951.7	985.6	1023.0	1046.2
37.5°	892.9	907.2	944.6	987.4	1012.3
40°	844.8	860.8	903.6	949.9	978.4
42.5°	796.7	814.5	860.8	916.1	944.6
45°	748.5	768.1	818.0	878.6	910.7
47.5°	698.6	721.8	773.5	841.2	873.3
50°	650.5	673.7	732.5	802.0	834.1
52.5°	600.6	627.3	689.7	761.0	794.9
55°	552.5	579.2	647.0	718.2	753.9
57.5°	504.4	531.1	602.4	675.5	711.1
60°	456.3	484.8	559.6	630.9	668.3
62.5°	408.1	438.4	515.1	588.1	623.8
65°	361.8	393.9	470.5	541.8	579.2
67.5°	317.2	351.1	426.0	495.5	532.9
70°	272.7	306.5	379.6	447.3	484.8
72.5°	229.9	263.8	335.1	395.7	424.2
75°	187.1	222.8	286.9	329.7	347.5
77.5°	146.1	181.8	237.0	265.6	285.2
80°	108.7	139.0	178.2	199.6	206.7
82.5°	74.9	99.8	124.8	130.1	133.7
85°	46.3	58.8	67.7	65.9	65.9
87.5°	21.4	23.2	19.6	14.3	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)