

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: P233100

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233100
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-LD4-24-50-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

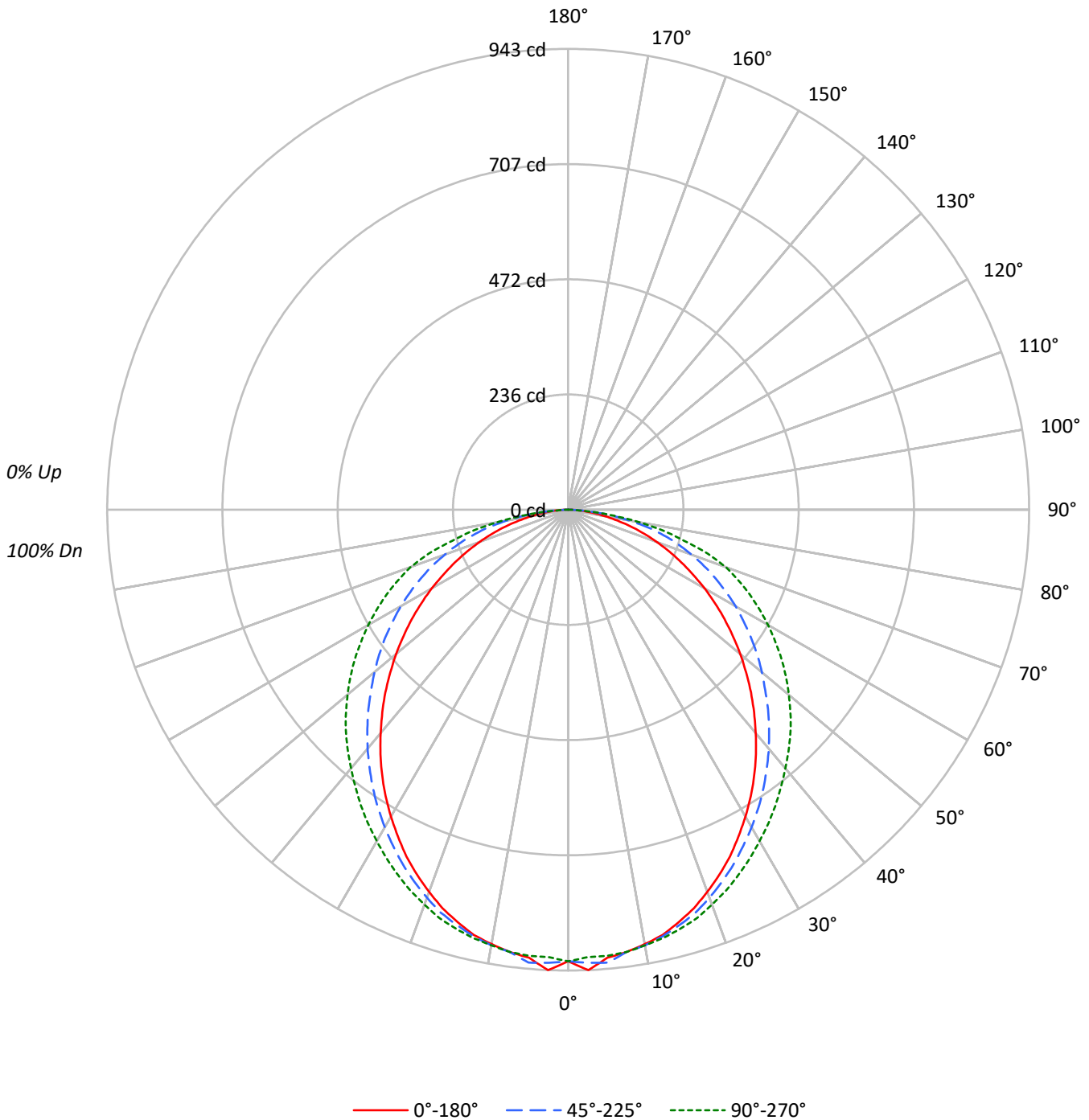
Lumens per Lamp: N/A
Luminaire Lumens: 2589.0 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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°	2487	2487	2487
5°	2486	2513	2476
10°	2467	2473	2473
15°	2434	2452	2473
20°	2383	2419	2462
25°	2325	2377	2448
30°	2253	2332	2433
35°	2180	2287	2428
40°	2096	2242	2428
45°	2012	2199	2448
50°	1924	2166	2467
55°	1831	2144	2499
60°	1735	2127	2541
65°	1628	2117	2606
70°	1515	2110	2694
75°	1375	2108	2552
80°	1190	1951	2263
85°	1010	1476	1439



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.7	3.4
10°-20°	248.3	9.6
20°-30°	369.3	14.3
30°-40°	436.8	16.9
40°-50°	448.9	17.3
50°-60°	410.2	15.8
60°-70°	328.2	12.7
70°-80°	205.9	8.0
80°-90°	53.6	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°	705.2	27.2
0°-40°	1142.0	44.1
0°-60°	2001.2	77.3
0°-90°	2589.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2589.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	924	924	924	924	924	
5°	920	920	930	924	916	87
15°	874	875	880	885	888	246
25°	783	788	801	815	825	360
35°	664	672	696	723	739	415
45°	529	543	578	621	643	408
55°	390	409	457	507	533	349
65°	256	278	332	383	409	254
75°	132	157	203	233	246	140
85°	33	42	48	47	47	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	924.1	924.1	924.1	924.1	924.1
2.5°	943.0	939.2	927.9	920.3	916.5
5°	920.3	920.3	930.4	924.1	916.5
7.5°	912.8	912.8	912.8	931.7	912.8
10°	902.7	904.0	905.2	912.8	905.2
12.5°	891.4	891.4	893.9	896.4	897.7
15°	873.7	875.0	880.0	885.1	887.6
17.5°	854.9	858.6	864.9	871.2	876.3
20°	832.2	837.2	844.8	854.9	859.9
22.5°	808.3	813.3	823.4	834.7	843.5
25°	783.1	788.1	800.7	814.6	824.6
27.5°	754.1	760.4	775.5	794.4	804.5
30°	725.2	732.7	750.4	771.8	783.1
32.5°	695.0	703.8	723.9	747.8	761.7
35°	663.5	672.3	696.2	722.7	739.0
37.5°	630.8	640.8	667.3	697.5	715.1
40°	596.8	608.1	638.3	671.0	691.2
42.5°	562.8	575.4	608.1	647.1	667.3
45°	528.8	542.6	577.9	620.7	643.3
47.5°	493.5	509.9	546.4	594.2	616.9
50°	459.5	475.9	517.4	566.5	589.2
52.5°	424.3	443.2	487.2	537.6	561.5
55°	390.3	409.2	457.0	507.4	532.6
57.5°	356.3	375.2	425.5	477.2	502.3
60°	322.3	342.4	395.3	445.7	472.1
62.5°	288.3	309.7	363.8	415.5	440.6
65°	255.6	278.2	332.4	382.7	409.2
67.5°	224.1	248.0	300.9	350.0	376.4
70°	192.6	216.5	268.2	316.0	342.4
72.5°	162.4	186.3	236.7	279.5	299.6
75°	132.2	157.4	202.7	232.9	245.5
77.5°	103.2	128.4	167.4	187.6	201.4
80°	76.8	98.2	125.9	141.0	146.0
82.5°	52.9	70.5	88.1	91.9	94.4
85°	32.7	41.5	47.8	46.6	46.6
87.5°	15.1	16.4	13.8	10.1	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)