

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: P233114

Luminaire Tested: **FCB-24-2-LD4-34-35-UNV-EDD1-WDP6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233114
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-LD4-34-35-UNV-EDD1-WDP6
Description: FAILSAFE 2X2 FCB LED TROFFER
.060 POLYCARBONATE LENS
Light Source: (84)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

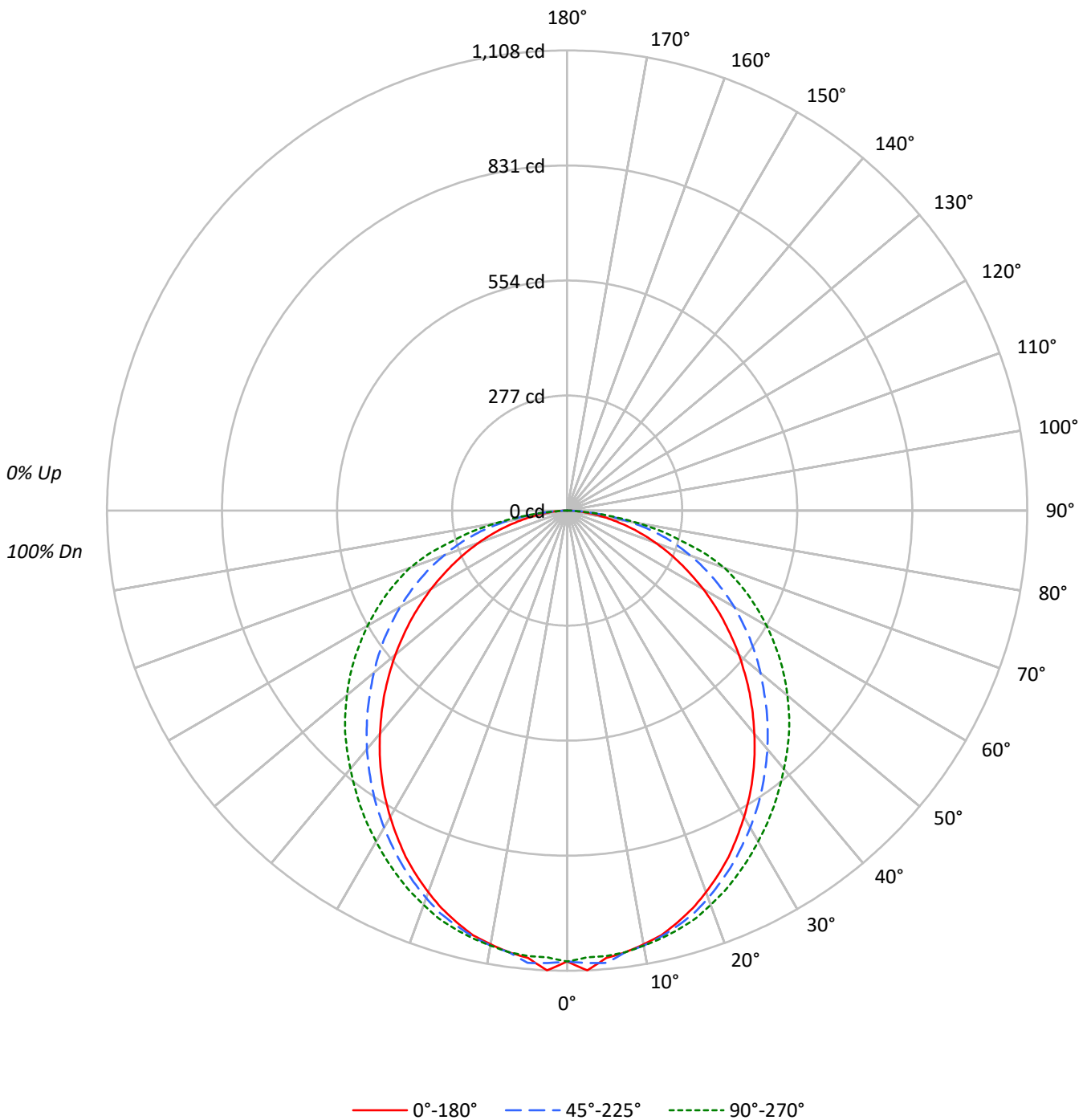
Lumens per Lamp: N/A
Luminaire Lumens: 3042.0 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	2922	2922	2922
5°	2921	2953	2909
10°	2898	2906	2906
15°	2860	2881	2905
20°	2800	2842	2893
25°	2732	2793	2877
30°	2648	2740	2859
35°	2561	2687	2852
40°	2463	2635	2853
45°	2364	2584	2877
50°	2260	2545	2898
55°	2152	2519	2936
60°	2038	2500	2985
65°	1912	2486	3061
70°	1781	2479	3166
75°	1615	2477	3000
80°	1398	2292	2659
85°	1189	1735	1689



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	3.4
10°-20°	291.7	9.6
20°-30°	433.9	14.3
30°-40°	513.2	16.9
40°-50°	527.5	17.3
50°-60°	482.0	15.8
60°-70°	385.6	12.7
70°-80°	242.0	8.0
80°-90°	63.0	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°	828.6	27.2
0°-40°	1341.9	44.1
0°-60°	2351.4	77.3
0°-90°	3042.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3042.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1086	1086	1086	1086	1086	
5°	1081	1081	1093	1086	1077	103
15°	1027	1028	1034	1040	1043	289
25°	920	926	941	957	969	423
35°	780	790	818	849	868	487
45°	621	638	679	729	756	479
55°	459	481	537	596	626	410
65°	300	327	390	450	481	298
75°	155	185	238	274	288	165
85°	38	49	56	55	55	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1085.8	1085.8	1085.8	1085.8	1085.8
2.5°	1108.0	1103.5	1090.2	1081.4	1076.9
5°	1081.4	1081.4	1093.2	1085.8	1076.9
7.5°	1072.5	1072.5	1072.5	1094.7	1072.5
10°	1060.6	1062.1	1063.6	1072.5	1063.6
12.5°	1047.3	1047.3	1050.3	1053.2	1054.7
15°	1026.6	1028.1	1034.0	1039.9	1042.9
17.5°	1004.4	1008.9	1016.3	1023.7	1029.6
20°	977.8	983.7	992.6	1004.4	1010.3
22.5°	949.7	955.6	967.4	980.8	991.1
25°	920.1	926.0	940.8	957.1	968.9
27.5°	886.1	893.5	911.2	933.4	945.3
30°	852.1	860.9	881.7	906.8	920.1
32.5°	816.6	826.9	850.6	878.7	895.0
35°	779.6	789.9	818.0	849.1	868.3
37.5°	741.1	753.0	784.0	819.5	840.2
40°	701.2	714.5	750.0	788.5	812.1
42.5°	661.2	676.0	714.5	760.4	784.0
45°	621.3	637.6	679.0	729.3	755.9
47.5°	579.9	599.1	642.0	698.2	724.8
50°	539.9	559.2	608.0	665.7	692.3
52.5°	498.5	520.7	572.5	631.7	659.8
55°	458.6	480.8	537.0	596.2	625.7
57.5°	418.6	440.8	500.0	560.6	590.2
60°	378.7	402.4	464.5	523.7	554.7
62.5°	338.8	363.9	427.5	488.2	517.7
65°	300.3	326.9	390.5	449.7	480.8
67.5°	263.3	291.4	353.5	411.2	442.3
70°	226.3	254.4	315.1	371.3	402.4
72.5°	190.8	218.9	278.1	328.4	352.1
75°	155.3	184.9	238.2	273.7	288.5
77.5°	121.3	150.9	196.7	220.4	236.7
80°	90.2	115.4	147.9	165.7	171.6
82.5°	62.1	82.8	103.5	108.0	110.9
85°	38.5	48.8	56.2	54.7	54.7
87.5°	17.8	19.2	16.3	11.8	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)