

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: P233140

Luminaire Tested: **FCB-24-2-LD4-34-50-UNV-EDD1-WDP12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233140
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-WDP12
Description: FAILSAFE 2X2 FCB LED TROFFER
.125 POLYCARBONATE LENS
Light Source: (84)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

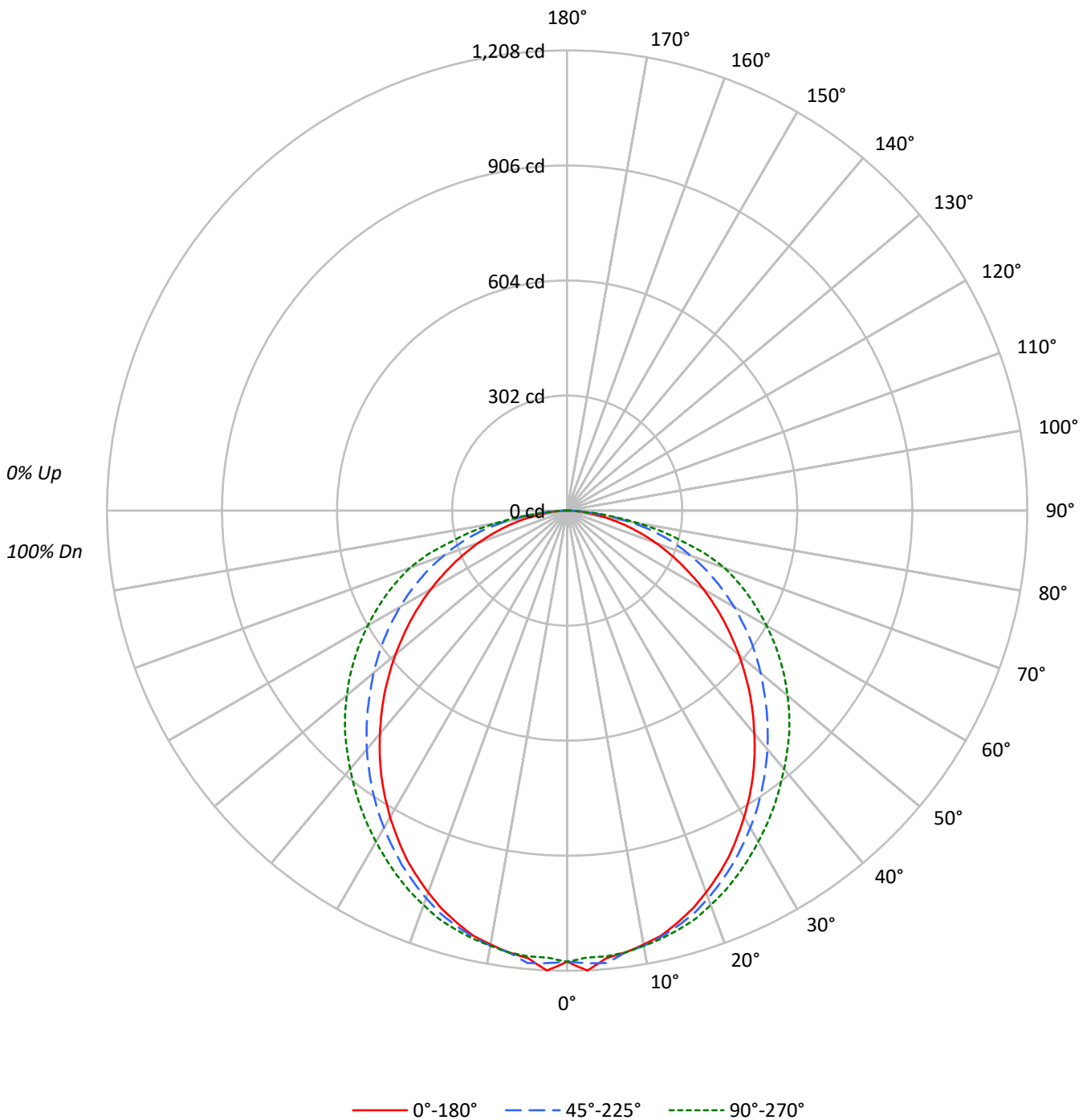
Lumens per Lamp: N/A
Luminaire Lumens: 3318.0 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 29.4
Input Voltage (V): 120
Input Current (A_{in}): 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°	3187	3187	3187
5°	3186	3221	3173
10°	3161	3170	3170
15°	3120	3142	3169
20°	3054	3101	3156
25°	2980	3047	3138
30°	2888	2988	3118
35°	2793	2931	3111
40°	2687	2873	3112
45°	2579	2818	3138
50°	2465	2776	3161
55°	2347	2748	3202
60°	2223	2726	3257
65°	2085	2713	3339
70°	1943	2704	3453
75°	1761	2701	3271
80°	1525	2500	2901
85°	1297	1893	1843



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.3	3.4
10°-20°	318.2	9.6
20°-30°	473.3	14.3
30°-40°	559.8	16.9
40°-50°	575.4	17.3
50°-60°	525.8	15.8
60°-70°	420.6	12.7
70°-80°	263.9	8.0
80°-90°	68.7	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°	903.8	27.2
0°-40°	1463.6	44.1
0°-60°	2564.7	77.3
0°-90°	3318.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3318.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1180	1180	1192	1184	1175	112
15°	1120	1121	1128	1134	1138	315
25°	1004	1010	1026	1044	1057	461
35°	850	862	892	926	947	531
45°	678	695	741	796	824	522
55°	500	524	586	650	682	447
65°	328	357	426	490	524	325
75°	169	202	260	298	315	180
85°	42	53	61	60	60	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1184.3	1184.3	1184.3	1184.3	1184.3
2.5°	1208.5	1203.7	1189.1	1179.5	1174.6
5°	1179.5	1179.5	1192.4	1184.3	1174.6
7.5°	1169.8	1169.8	1169.8	1194.0	1169.8
10°	1156.9	1158.5	1160.1	1169.8	1160.1
12.5°	1142.4	1142.4	1145.6	1148.8	1150.4
15°	1119.8	1121.4	1127.8	1134.3	1137.5
17.5°	1095.6	1100.4	1108.5	1116.5	1123.0
20°	1066.5	1073.0	1082.7	1095.6	1102.0
22.5°	1035.9	1042.3	1055.2	1069.7	1081.0
25°	1003.6	1010.0	1026.2	1043.9	1056.8
27.5°	966.5	974.6	993.9	1018.1	1031.0
30°	929.4	939.1	961.6	989.1	1003.6
32.5°	890.6	901.9	927.8	958.4	976.2
35°	850.3	861.6	892.3	926.1	947.1
37.5°	808.4	821.3	855.2	893.9	916.5
40°	764.8	779.3	818.0	860.0	885.8
42.5°	721.2	737.4	779.3	829.3	855.2
45°	677.7	695.4	740.6	795.5	824.5
47.5°	632.5	653.5	700.3	761.6	790.6
50°	588.9	609.9	663.1	726.1	755.1
52.5°	543.7	568.0	624.4	689.0	719.6
55°	500.2	524.4	585.7	650.2	682.5
57.5°	456.6	480.8	545.4	611.5	643.8
60°	413.1	438.9	506.6	571.2	605.1
62.5°	369.5	396.9	466.3	532.5	564.7
65°	327.5	356.6	426.0	490.5	524.4
67.5°	287.2	317.9	385.6	448.6	482.4
70°	246.9	277.5	343.7	405.0	438.9
72.5°	208.1	238.8	303.3	358.2	384.0
75°	169.4	201.7	259.8	298.5	314.6
77.5°	132.3	164.6	214.6	240.4	258.2
80°	98.4	125.9	161.3	180.7	187.2
82.5°	67.8	90.4	112.9	117.8	121.0
85°	42.0	53.2	61.3	59.7	59.7
87.5°	19.4	21.0	17.7	12.9	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)