

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: P233115

Luminaire Tested: **FCB-24-2-LD4-34-40-UNV-EDD1-WDP6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233115
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-LD4-34-40-UNV-EDD1-WDP6
Description: FAILSAFE 2X2 FCB LED TROFFER
.060 POLYCARBONATE LENS
Light Source: (84)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

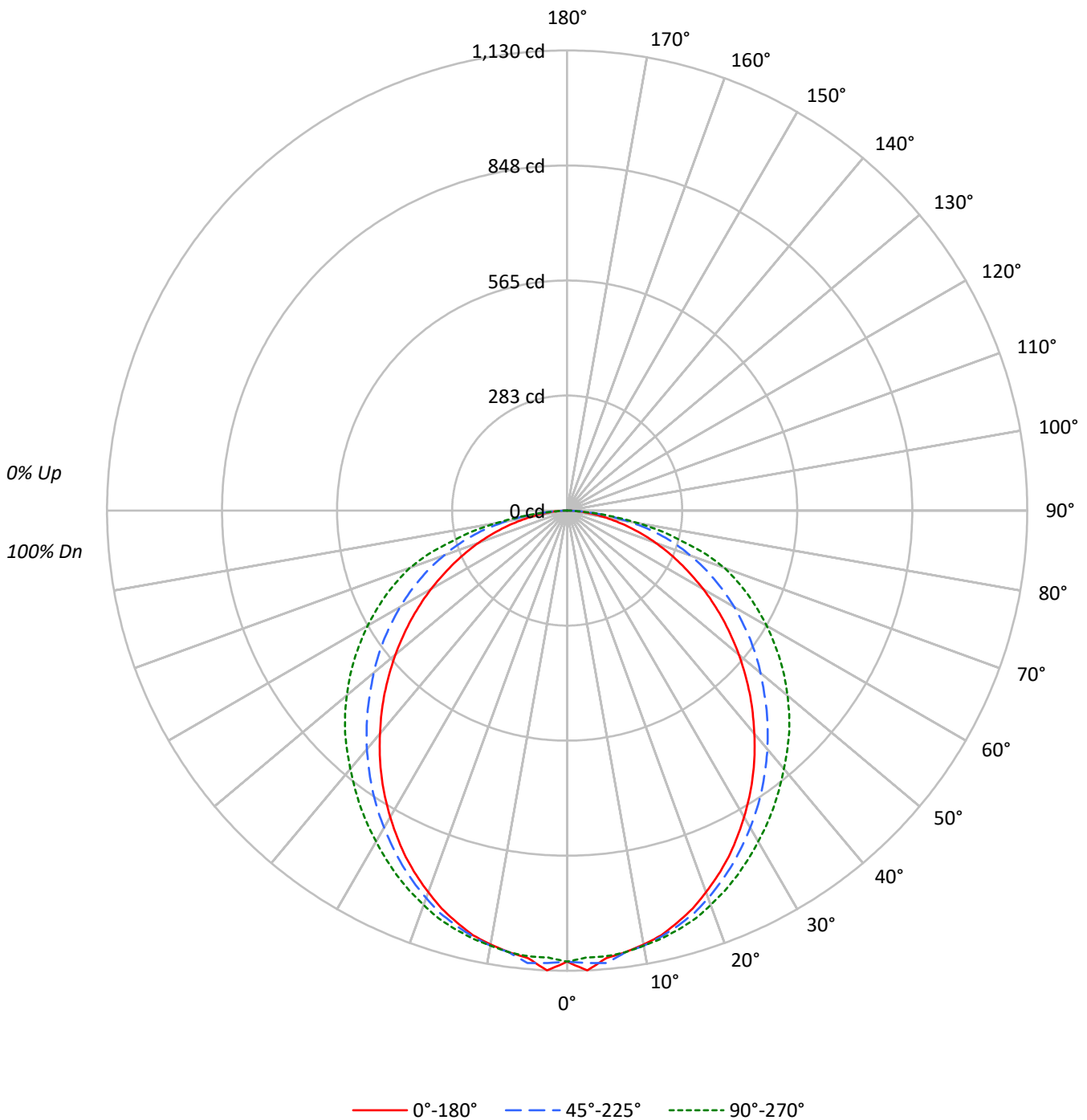
Lumens per Lamp: N/A
Luminaire Lumens: 3103.0 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	2981	2981	2981
5°	2979	3012	2967
10°	2956	2964	2964
15°	2917	2939	2964
20°	2856	2899	2951
25°	2787	2850	2935
30°	2701	2794	2916
35°	2612	2741	2910
40°	2512	2687	2910
45°	2412	2636	2935
50°	2306	2596	2956
55°	2195	2570	2995
60°	2079	2550	3046
65°	1950	2537	3123
70°	1817	2529	3229
75°	1647	2525	3059
80°	1426	2338	2712
85°	1210	1769	1723



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.1	3.4
10°-20°	297.6	9.6
20°-30°	442.6	14.3
30°-40°	523.5	16.9
40°-50°	538.1	17.3
50°-60°	491.7	15.8
60°-70°	393.3	12.7
70°-80°	246.8	8.0
80°-90°	64.3	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°	845.2	27.2
0°-40°	1368.8	44.1
0°-60°	2398.5	77.3
0°-90°	3103.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3103.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1108	1108	1108	1108	1108	
5°	1103	1103	1115	1108	1098	105
15°	1047	1049	1055	1061	1064	295
25°	939	945	960	976	988	432
35°	795	806	834	866	886	497
45°	634	650	693	744	771	489
55°	468	490	548	608	638	418
65°	306	334	398	459	490	304
75°	158	189	243	279	294	168
85°	39	50	57	56	56	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1107.6	1107.6	1107.6	1107.6	1107.6
2.5°	1130.2	1125.7	1112.1	1103.0	1098.5
5°	1103.0	1103.0	1115.1	1107.6	1098.5
7.5°	1094.0	1094.0	1094.0	1116.6	1094.0
10°	1081.9	1083.4	1084.9	1094.0	1084.9
12.5°	1068.3	1068.3	1071.4	1074.4	1075.9
15°	1047.2	1048.7	1054.8	1060.8	1063.8
17.5°	1024.6	1029.1	1036.6	1044.2	1050.2
20°	997.4	1003.4	1012.5	1024.6	1030.6
22.5°	968.7	974.8	986.8	1000.4	1011.0
25°	938.6	944.6	959.7	976.3	988.4
27.5°	903.9	911.4	929.5	952.1	964.2
30°	869.2	878.2	899.3	925.0	938.6
32.5°	832.9	843.5	867.6	896.3	912.9
35°	795.2	805.8	834.4	866.1	885.8
37.5°	756.0	768.1	799.7	836.0	857.1
40°	715.2	728.8	765.0	804.3	828.4
42.5°	674.5	689.6	728.8	775.6	799.7
45°	633.8	650.4	692.6	743.9	771.1
47.5°	591.5	611.1	654.9	712.2	739.4
50°	550.8	570.4	620.2	679.0	706.2
52.5°	508.5	531.1	584.0	644.3	673.0
55°	467.8	490.4	547.7	608.1	638.3
57.5°	427.0	449.7	510.0	571.9	602.1
60°	386.3	410.4	473.8	534.2	565.9
62.5°	345.5	371.2	436.1	498.0	528.1
65°	306.3	333.5	398.4	458.7	490.4
67.5°	268.6	297.3	360.6	419.5	451.2
70°	230.9	259.5	321.4	378.7	410.4
72.5°	194.7	223.3	283.7	335.0	359.1
75°	158.4	188.6	242.9	279.2	294.2
77.5°	123.7	153.9	200.7	224.8	241.4
80°	92.0	117.7	150.9	169.0	175.0
82.5°	63.4	84.5	105.6	110.2	113.2
85°	39.2	49.8	57.3	55.8	55.8
87.5°	18.1	19.6	16.6	12.1	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)