

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: P233126

Luminaire Tested: **FCB-24-2-LD4-34-35-UNV-EDD1-WDA12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233126
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-WDA12
Description: FAILSAFE 2X2 FCB LED TROFFER
.125 ACRYLIC LENS
Light Source: (84)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

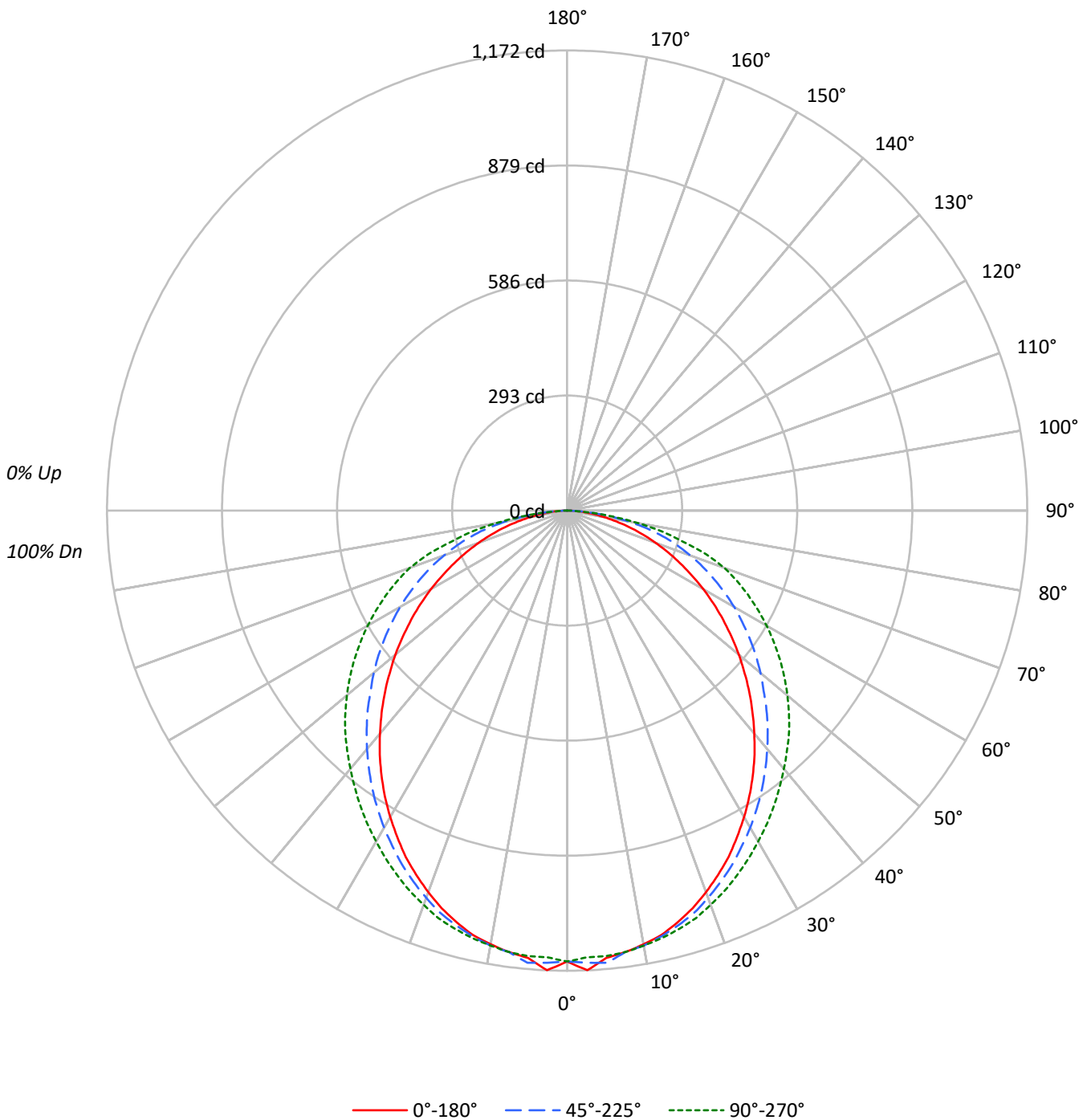
Lumens per Lamp: N/A
Luminaire Lumens: 3217.0 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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			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°	3090	3090	3090
5°	3089	3123	3076
10°	3065	3074	3074
15°	3025	3046	3073
20°	2961	3006	3060
25°	2889	2954	3043
30°	2800	2897	3023
35°	2708	2842	3017
40°	2605	2786	3017
45°	2500	2733	3042
50°	2390	2692	3065
55°	2275	2664	3104
60°	2155	2644	3157
65°	2022	2630	3237
70°	1884	2622	3348
75°	1708	2619	3172
80°	1478	2424	2813
85°	1257	1834	1788



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.9	3.4
10°-20°	308.5	9.6
20°-30°	458.9	14.3
30°-40°	542.8	16.9
40°-50°	557.8	17.3
50°-60°	509.8	15.8
60°-70°	407.8	12.7
70°-80°	255.9	8.0
80°-90°	66.6	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°	876.3	27.2
0°-40°	1419.1	44.1
0°-60°	2486.7	77.3
0°-90°	3217.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3217.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1148	1148	1148	1148	1148	
5°	1144	1144	1156	1148	1139	109
15°	1086	1087	1094	1100	1103	306
25°	973	979	995	1012	1025	447
35°	824	835	865	898	918	515
45°	657	674	718	771	799	507
55°	485	508	568	630	662	434
65°	318	346	413	476	508	315
75°	164	196	252	289	305	174
85°	41	52	59	58	58	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1148.3	1148.3	1148.3	1148.3	1148.3
2.5°	1171.7	1167.0	1152.9	1143.6	1138.9
5°	1143.6	1143.6	1156.1	1148.3	1138.9
7.5°	1134.2	1134.2	1134.2	1157.6	1134.2
10°	1121.7	1123.2	1124.8	1134.2	1124.8
12.5°	1107.6	1107.6	1110.7	1113.8	1115.4
15°	1085.7	1087.2	1093.5	1099.8	1102.9
17.5°	1062.2	1066.9	1074.7	1082.6	1088.8
20°	1034.1	1040.3	1049.7	1062.2	1068.5
22.5°	1004.3	1010.6	1023.1	1037.2	1048.1
25°	973.0	979.3	994.9	1012.2	1024.7
27.5°	937.1	944.9	963.7	987.1	999.6
30°	901.1	910.5	932.4	959.0	973.0
32.5°	863.5	874.5	899.5	929.2	946.5
35°	824.4	835.4	865.1	898.0	918.3
37.5°	783.8	796.3	829.1	866.7	888.6
40°	741.5	755.6	793.1	833.8	858.8
42.5°	699.3	714.9	755.6	804.1	829.1
45°	657.0	674.2	718.1	771.2	799.4
47.5°	613.2	633.6	678.9	738.4	766.5
50°	571.0	591.3	643.0	704.0	732.1
52.5°	527.2	550.7	605.4	668.0	697.7
55°	485.0	508.4	567.9	630.4	661.7
57.5°	442.7	466.2	528.8	592.9	624.2
60°	400.5	425.5	491.2	553.8	586.6
62.5°	358.2	384.8	452.1	516.2	547.5
65°	317.6	345.7	413.0	475.6	508.4
67.5°	278.5	308.2	373.9	434.9	467.7
70°	239.4	269.1	333.2	392.7	425.5
72.5°	201.8	231.5	294.1	347.3	372.3
75°	164.3	195.5	251.9	289.4	305.1
77.5°	128.3	159.6	208.1	233.1	250.3
80°	95.4	122.0	156.4	175.2	181.5
82.5°	65.7	87.6	109.5	114.2	117.3
85°	40.7	51.6	59.4	57.9	57.9
87.5°	18.8	20.3	17.2	12.5	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)