

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: P233113

Luminaire Tested: **FCB-24-2-LD4-34-30-UNV-EDD1-WDP6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233113
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-LD4-34-30-UNV-EDD1-WDP6
Description: FAILSAFE 2X2 FCB LED TROFFER
.060 POLYCARBONATE LENS
Light Source: (84)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

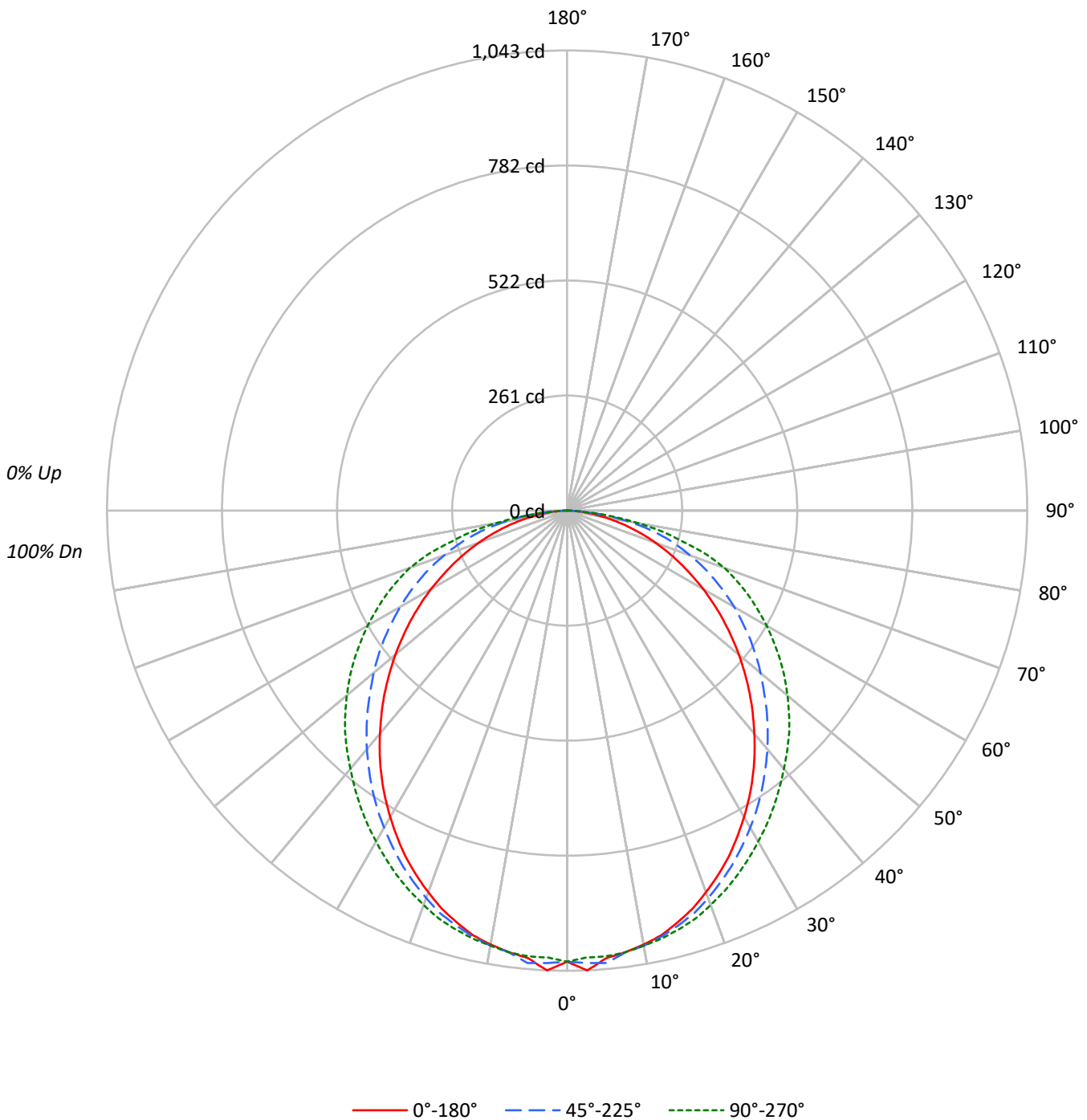
Lumens per Lamp: N/A
Luminaire Lumens: 2864.0 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P233113

CATALOG NUMBER: FCB-24-2-LD4-34-30-UNV-EDD1-WDP6

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°	2751	2751	2751
5°	2750	2780	2739
10°	2729	2736	2736
15°	2693	2712	2735
20°	2636	2676	2724
25°	2572	2630	2708
30°	2493	2579	2692
35°	2411	2530	2686
40°	2319	2480	2686
45°	2226	2433	2708
50°	2128	2396	2729
55°	2025	2372	2764
60°	1919	2354	2811
65°	1800	2341	2882
70°	1677	2334	2980
75°	1520	2331	2824
80°	1317	2159	2504
85°	1118	1633	1590



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.0	3.4
10°-20°	274.6	9.6
20°-30°	408.5	14.3
30°-40°	483.2	16.9
40°-50°	496.6	17.3
50°-60°	453.8	15.8
60°-70°	363.0	12.7
70°-80°	227.8	8.0
80°-90°	59.3	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°	780.1	27.2
0°-40°	1263.3	44.1
0°-60°	2213.8	77.3
0°-90°	2864.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2864.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1022	1022	1022	1022	1022	
5°	1018	1018	1029	1022	1014	97
15°	966	968	974	979	982	272
25°	866	872	886	901	912	398
35°	734	744	770	799	818	459
45°	585	600	639	687	712	451
55°	432	453	506	561	589	386
65°	283	308	368	423	453	281
75°	146	174	224	258	272	155
85°	36	46	53	52	52	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1022.3	1022.3	1022.3	1022.3	1022.3
2.5°	1043.1	1039.0	1026.4	1018.1	1013.9
5°	1018.1	1018.1	1029.2	1022.3	1013.9
7.5°	1009.7	1009.7	1009.7	1030.6	1009.7
10°	998.6	1000.0	1001.4	1009.7	1001.4
12.5°	986.0	986.0	988.8	991.6	993.0
15°	966.5	967.9	973.5	979.1	981.9
17.5°	945.7	949.8	956.8	963.8	969.3
20°	920.6	926.2	934.5	945.7	951.2
22.5°	894.1	899.7	910.8	923.4	933.1
25°	866.3	871.8	885.8	901.1	912.2
27.5°	834.2	841.2	857.9	878.8	889.9
30°	802.2	810.6	830.1	853.7	866.3
32.5°	768.8	778.5	800.8	827.3	842.6
35°	734.0	743.7	770.2	799.4	817.5
37.5°	697.8	708.9	738.1	771.6	791.1
40°	660.2	672.7	706.1	742.3	764.6
42.5°	622.5	636.5	672.7	715.9	738.1
45°	584.9	600.3	639.3	686.6	711.7
47.5°	545.9	564.1	604.4	657.4	682.4
50°	508.3	526.4	572.4	626.7	651.8
52.5°	469.3	490.2	539.0	594.7	621.2
55°	431.7	452.6	505.6	561.3	589.1
57.5°	394.1	415.0	470.7	527.8	555.7
60°	356.5	378.8	437.3	493.0	522.3
62.5°	318.9	342.6	402.5	459.6	487.5
65°	282.7	307.8	367.7	423.4	452.6
67.5°	247.9	274.4	332.9	387.2	416.4
70°	213.1	239.5	296.6	349.6	378.8
72.5°	179.7	206.1	261.8	309.2	331.5
75°	146.2	174.1	224.2	257.7	271.6
77.5°	114.2	142.1	185.2	207.5	222.8
80°	85.0	108.6	139.3	156.0	161.6
82.5°	58.5	78.0	97.5	101.7	104.5
85°	36.2	46.0	52.9	51.5	51.5
87.5°	16.7	18.1	15.3	11.1	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)