

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: P233137

Luminaire Tested: **FCB-24-2-LD4-34-30-UNV-EDD1-WDP12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233137
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-WDP12
Description: FAILSAFE 2X2 FCB LED TROFFER
.125 POLYCARBONATE LENS
Light Source: (84)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

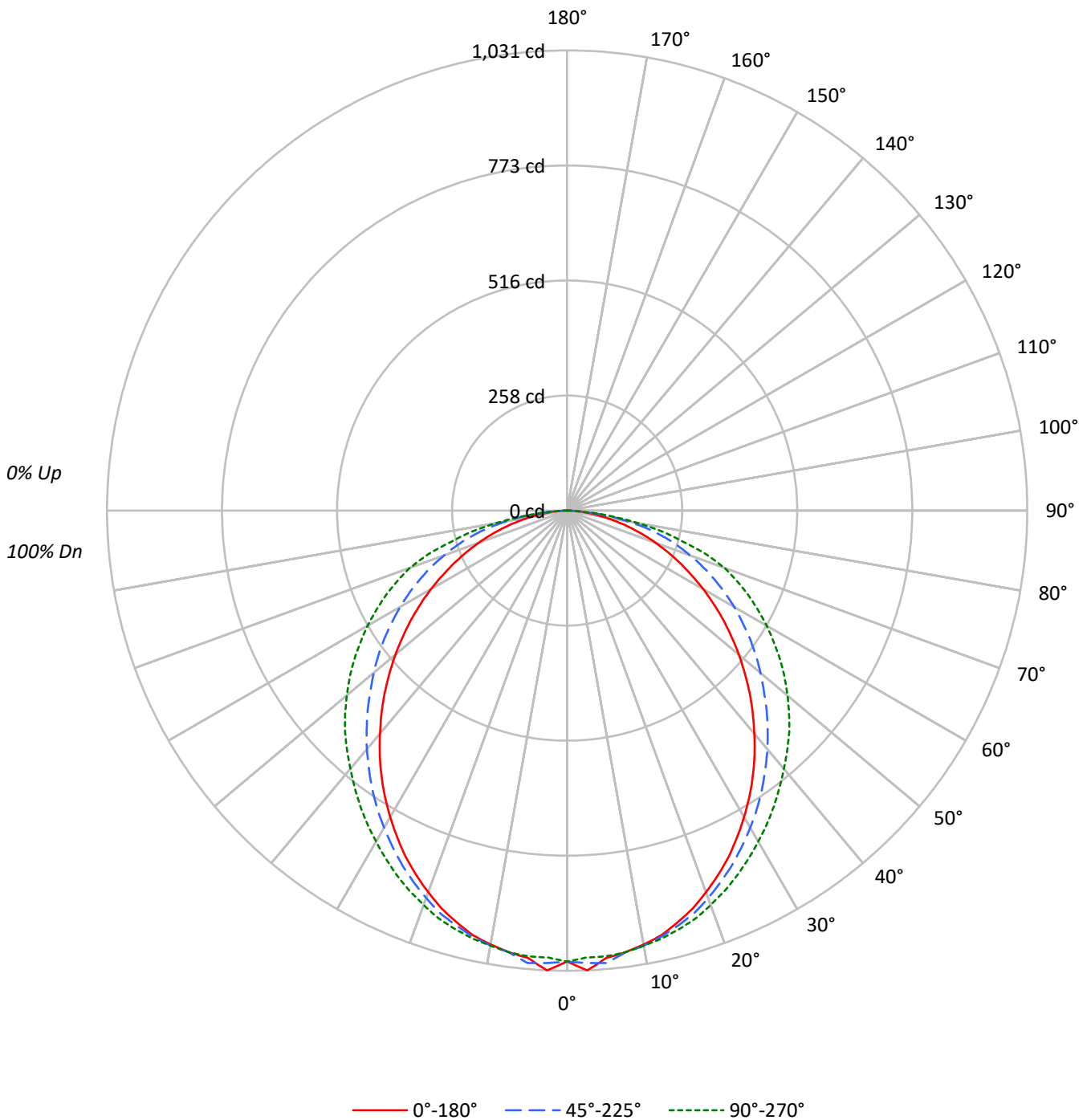
Lumens per Lamp: N/A
Luminaire Lumens: 2831.0 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	2719	2719	2719
5°	2718	2748	2707
10°	2697	2705	2705
15°	2662	2681	2704
20°	2606	2645	2693
25°	2542	2600	2677
30°	2464	2550	2661
35°	2383	2501	2655
40°	2292	2452	2655
45°	2200	2405	2677
50°	2104	2369	2697
55°	2002	2344	2732
60°	1897	2327	2779
65°	1780	2314	2849
70°	1657	2307	2947
75°	1503	2304	2792
80°	1302	2134	2475
85°	1105	1615	1572



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.8	3.4
10°-20°	271.5	9.6
20°-30°	403.8	14.3
30°-40°	477.6	16.9
40°-50°	490.9	17.3
50°-60°	448.6	15.8
60°-70°	358.8	12.7
70°-80°	225.2	8.0
80°-90°	58.6	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°	771.2	27.2
0°-40°	1248.8	44.1
0°-60°	2188.3	77.3
0°-90°	2831.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2831.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1010	1010	1010	1010	1010	
5°	1006	1006	1017	1010	1002	96
15°	955	957	962	968	971	269
25°	856	862	876	891	902	394
35°	726	735	761	790	808	453
45°	578	593	632	679	704	446
55°	427	447	500	555	582	382
65°	280	304	363	418	447	277
75°	145	172	222	255	268	154
85°	36	45	52	51	51	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1010.5	1010.5	1010.5	1010.5	1010.5
2.5°	1031.1	1027.0	1014.6	1006.3	1002.2
5°	1006.3	1006.3	1017.4	1010.5	1002.2
7.5°	998.1	998.1	998.1	1018.7	998.1
10°	987.1	988.5	989.8	998.1	989.8
12.5°	974.7	974.7	977.4	980.2	981.6
15°	955.4	956.8	962.3	967.8	970.6
17.5°	934.8	938.9	945.8	952.7	958.2
20°	910.0	915.5	923.7	934.8	940.3
22.5°	883.8	889.3	900.3	912.7	922.4
25°	856.3	861.8	875.6	890.7	901.7
27.5°	824.6	831.5	848.0	868.7	879.7
30°	793.0	801.2	820.5	843.9	856.3
32.5°	759.9	769.6	791.6	817.7	832.9
35°	725.5	735.1	761.3	790.2	808.1
37.5°	689.7	700.7	729.6	762.7	782.0
40°	652.5	664.9	698.0	733.8	755.8
42.5°	615.4	629.1	664.9	707.6	729.6
45°	578.2	593.3	631.9	678.7	703.5
47.5°	539.7	557.6	597.5	649.8	674.6
50°	502.5	520.4	565.8	619.5	644.3
52.5°	463.9	484.6	532.8	587.8	614.0
55°	426.8	447.4	499.7	554.8	582.3
57.5°	389.6	410.2	465.3	521.8	549.3
60°	352.4	374.5	432.3	487.3	516.3
62.5°	315.3	338.7	397.9	454.3	481.8
65°	279.5	304.2	363.4	418.5	447.4
67.5°	245.0	271.2	329.0	382.7	411.6
70°	210.6	236.8	293.2	345.5	374.5
72.5°	177.6	203.7	258.8	305.6	327.6
75°	144.6	172.1	221.6	254.7	268.5
77.5°	112.9	140.4	183.1	205.1	220.3
80°	84.0	107.4	137.7	154.2	159.7
82.5°	57.8	77.1	96.4	100.5	103.3
85°	35.8	45.4	52.3	50.9	50.9
87.5°	16.5	17.9	15.1	11.0	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)