

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: P233061

Luminaire Tested: **FCB-12-4-LD4-25-30-UNV-EDD1-WDA12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233061
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FCB-12-4-LD4-25-30-UNV-EDD1-WDA12
Description: FAILSAFE 1X4 FCB LED TROFFER
.125 ACRYLIC LENS
Light Source: (84)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

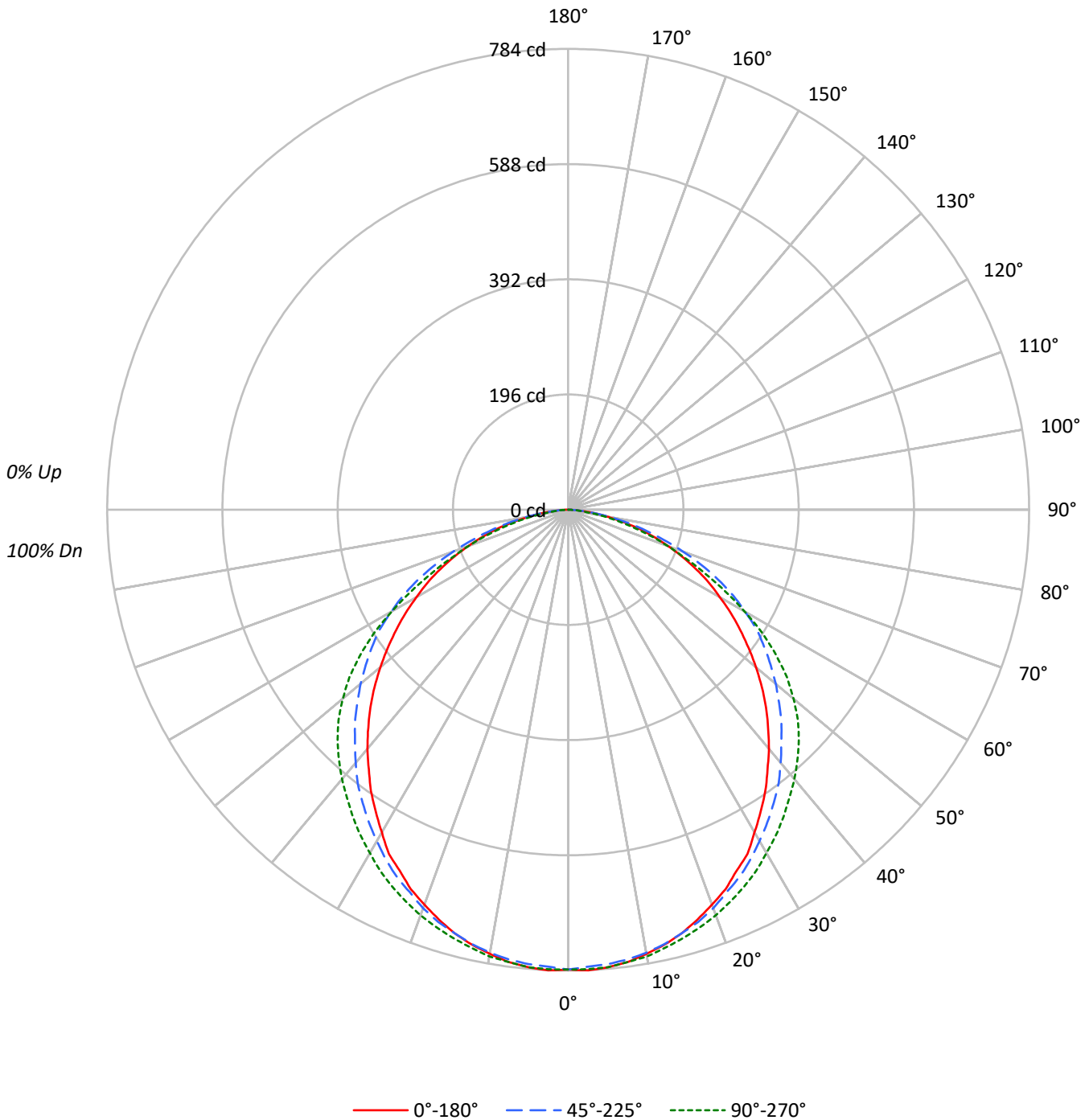
Lumens per Lamp: N/A
Luminaire Lumens: 2168.0 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 20.5
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: P233061

CATALOG NUMBER: FCB-12-4-LD4-25-30-UNV-EDD1-WDA12

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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2105	2105	2105
5°	2110	2096	2110
10°	2097	2091	2109
15°	2078	2078	2102
20°	2048	2066	2103
25°	2012	2047	2101
30°	1969	2023	2096
35°	1920	2001	2096
40°	1866	1975	2102
45°	1810	1952	2111
50°	1745	1929	2094
55°	1675	1910	2026
60°	1605	1870	1864
65°	1531	1790	1633
70°	1421	1631	1413
75°	1289	1422	1167
80°	1027	1127	862
85°	726	627	494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	3.4
10°-20°	211.5	9.8
20°-30°	318.8	14.7
30°-40°	382.2	17.6
40°-50°	396.6	18.3
50°-60°	357.7	16.5
60°-70°	261.0	12.0
70°-80°	136.9	6.3
80°-90°	29.2	1.3
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°	604.4	27.9
0°-40°	986.5	45.5
0°-60°	1740.9	80.3
0°-90°	2168.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2168.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	782	782	782	782	782	
5°	781	779	776	781	781	74
15°	746	746	746	755	755	210
25°	678	681	689	704	708	313
35°	585	591	609	632	638	365
45°	476	485	513	544	555	367
55°	357	370	407	434	432	320
65°	240	254	281	270	256	238
75°	124	141	137	119	112	130
85°	24	29	20	17	16	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	782.4	782.4	782.4	782.4	782.4
2.5°	784.5	782.4	778.1	782.4	782.4
5°	781.3	779.2	776.0	781.3	781.3
7.5°	776.0	773.8	771.7	777.0	776.0
10°	767.4	766.3	765.3	771.7	771.7
12.5°	757.8	757.8	756.7	764.2	763.1
15°	746.0	746.0	746.0	754.6	754.6
17.5°	731.1	733.2	735.3	745.0	745.0
20°	715.0	717.2	721.4	733.2	734.3
22.5°	699.0	700.1	704.3	718.2	721.4
25°	677.6	680.8	689.4	704.3	707.6
27.5°	660.5	661.6	671.2	688.3	692.6
30°	633.8	641.3	650.9	670.1	674.4
32.5°	609.2	615.6	630.6	650.9	657.3
35°	584.6	591.1	609.2	631.7	638.1
37.5°	556.9	566.5	587.8	610.3	617.8
40°	531.2	539.7	562.2	590.0	598.5
42.5°	503.4	512.0	536.5	567.5	577.2
45°	475.6	485.2	513.0	544.0	554.7
47.5°	446.8	457.5	486.3	520.5	530.1
50°	416.8	428.6	460.7	495.9	500.2
52.5°	386.9	399.7	433.9	464.9	469.2
55°	357.0	369.8	407.2	433.9	431.8
57.5°	328.1	342.0	380.5	394.4	392.3
60°	298.2	313.2	347.4	353.8	346.3
62.5°	270.4	284.3	316.4	311.0	301.4
65°	240.5	254.4	281.1	270.4	256.5
67.5°	210.6	227.7	244.8	226.6	215.9
70°	180.6	199.9	207.3	189.2	179.6
72.5°	151.8	172.1	169.9	151.8	145.4
75°	124.0	141.1	136.8	118.6	112.2
77.5°	94.1	113.3	103.7	88.7	83.4
80°	66.3	83.4	72.7	59.9	55.6
82.5°	43.8	55.6	44.9	35.3	32.1
85°	23.5	28.9	20.3	17.1	16.0
87.5°	9.6	8.6	7.5	7.5	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)