

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: P233026

Luminaire Tested: **FCB-12-4-LD4-25-35-UNV-EDD1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233026
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-LD4-25-35-UNV-EDD1
Description: FAILSAFE 1X4 FCB LED TROFFER
OPAL DIFFUSER, NO LENS
Light Source: (84)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

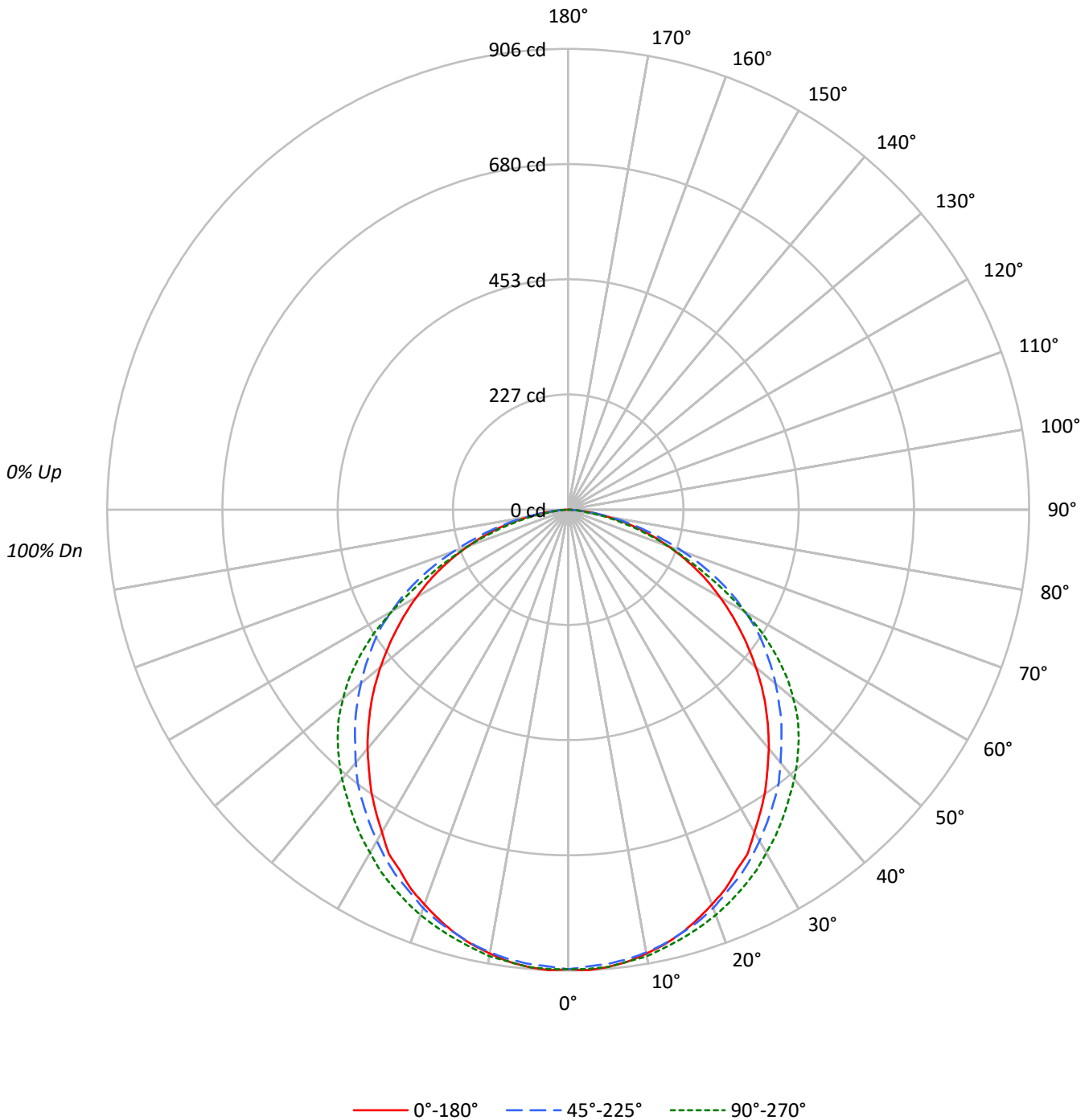
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2504.0 lumens
Efficiency: N/A
Efficacy: 122.1 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: P233026
CATALOG NUMBER: FCB-12-4-LD4-25-35-UNV-EDD1

Luminous Intensity Polar Plot





TEST NUMBER: P233026

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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°	2432	2432	2432
5°	2438	2421	2438
10°	2422	2415	2435
15°	2401	2401	2428
20°	2365	2386	2429
25°	2324	2364	2426
30°	2275	2336	2420
35°	2218	2311	2421
40°	2155	2281	2428
45°	2090	2255	2438
50°	2015	2228	2418
55°	1934	2206	2340
60°	1854	2159	2153
65°	1769	2067	1887
70°	1641	1884	1632
75°	1489	1643	1347
80°	1185	1300	995
85°	840	726	571



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CATALOG NUMBER: FCB-12-4-LD4-25-35-UNV-EDD1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	3.4
10°-20°	244.2	9.8
20°-30°	368.3	14.7
30°-40°	441.4	17.6
40°-50°	458.1	18.3
50°-60°	413.2	16.5
60°-70°	301.4	12.0
70°-80°	158.1	6.3
80°-90°	33.7	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°	698.0	27.9
0°-40°	1139.4	45.5
0°-60°	2010.7	80.3
0°-90°	2504.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2504.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	902	900	896	902	902	86
15°	862	862	862	872	872	243
25°	783	786	796	814	817	361
35°	675	683	704	730	737	422
45°	549	560	592	628	641	423
55°	412	427	470	501	499	369
65°	278	294	325	312	296	275
75°	143	163	158	137	130	150
85°	27	33	24	20	18	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	903.6	903.6	903.6	903.6	903.6
2.5°	906.1	903.6	898.7	903.6	903.6
5°	902.4	899.9	896.2	902.4	902.4
7.5°	896.2	893.7	891.3	897.5	896.2
10°	886.3	885.1	883.9	891.3	891.3
12.5°	875.2	875.2	874.0	882.6	881.4
15°	861.7	861.7	861.7	871.5	871.5
17.5°	844.4	846.8	849.3	860.4	860.4
20°	825.9	828.3	833.3	846.8	848.1
22.5°	807.3	808.6	813.5	829.6	833.3
25°	782.6	786.3	796.2	813.5	817.2
27.5°	762.9	764.1	775.2	795.0	799.9
30°	732.0	740.7	751.8	774.0	778.9
32.5°	703.6	711.0	728.3	751.8	759.2
35°	675.2	682.7	703.6	729.6	737.0
37.5°	643.2	654.3	679.0	704.9	713.5
40°	613.5	623.4	649.3	681.4	691.3
42.5°	581.4	591.3	619.7	655.5	666.6
45°	549.3	560.4	592.5	628.3	640.7
47.5°	516.0	528.3	561.7	601.2	612.3
50°	481.4	495.0	532.1	572.8	577.7
52.5°	446.9	461.7	501.2	537.0	541.9
55°	412.3	427.1	470.3	501.2	498.7
57.5°	379.0	395.0	439.5	455.5	453.0
60°	344.4	361.7	401.2	408.6	400.0
62.5°	312.3	328.4	365.4	359.2	348.1
65°	277.8	293.8	324.7	312.3	296.3
67.5°	243.2	262.9	282.7	261.7	249.4
70°	208.6	230.8	239.5	218.5	207.4
72.5°	175.3	198.7	196.3	175.3	167.9
75°	143.2	162.9	158.0	137.0	129.6
77.5°	108.6	130.9	119.7	102.5	96.3
80°	76.5	96.3	83.9	69.1	64.2
82.5°	50.6	64.2	51.8	40.7	37.0
85°	27.2	33.3	23.5	19.8	18.5
87.5°	11.1	9.9	8.6	8.6	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)