

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: P233085

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233085
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-LD4-24-30-UNV-EDD1
Description: FAILSAFE 2X2 FCB LED TROFFER
OPAL DIFFUSER, NO LENS
Light Source: (84)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

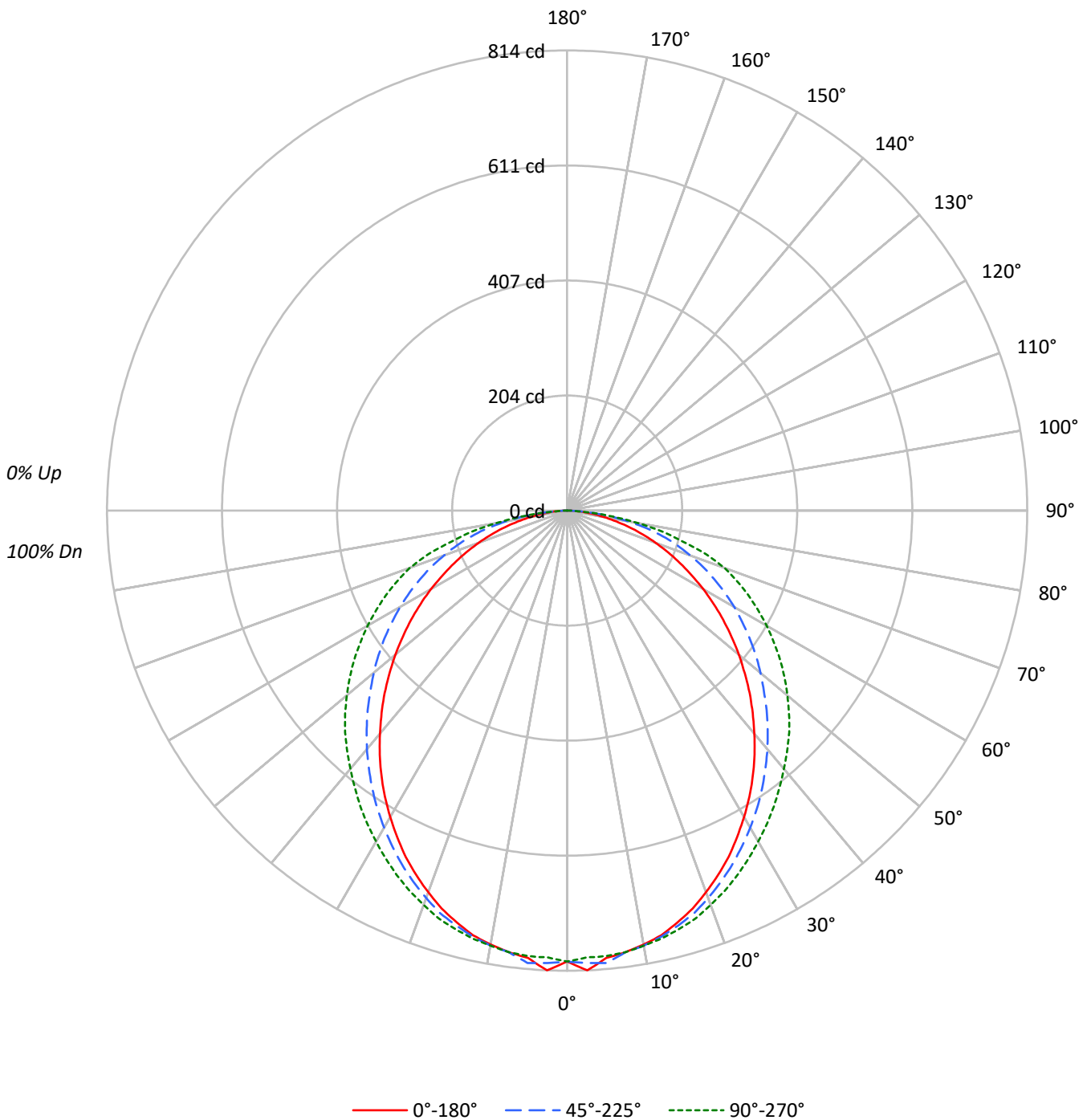
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2235.0 lumens
Efficiency: N/A
Efficacy: 114.0 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): 19.6
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°	2147	2147	2147
5°	2146	2170	2137
10°	2129	2135	2135
15°	2101	2116	2135
20°	2057	2088	2126
25°	2007	2052	2114
30°	1945	2013	2101
35°	1882	1974	2096
40°	1810	1936	2096
45°	1737	1899	2114
50°	1661	1870	2129
55°	1581	1851	2157
60°	1497	1837	2194
65°	1405	1827	2249
70°	1308	1821	2326
75°	1186	1820	2203
80°	1027	1684	1954
85°	874	1275	1241



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.7	3.4
10°-20°	214.3	9.6
20°-30°	318.8	14.3
30°-40°	377.1	16.9
40°-50°	387.6	17.3
50°-60°	354.1	15.8
60°-70°	283.3	12.7
70°-80°	177.8	8.0
80°-90°	46.3	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°	608.8	27.2
0°-40°	985.9	44.1
0°-60°	1727.6	77.3
0°-90°	2235.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2235.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	798	798	798	798	798	
5°	794	794	803	798	791	76
15°	754	755	760	764	766	212
25°	676	680	691	703	712	311
35°	573	580	601	624	638	358
45°	456	468	499	536	555	352
55°	337	353	394	438	460	301
65°	221	240	287	330	353	219
75°	114	136	175	201	212	121
85°	28	36	41	40	40	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	797.7	797.7	797.7	797.7	797.7
2.5°	814.0	810.8	801.0	794.5	791.2
5°	794.5	794.5	803.2	797.7	791.2
7.5°	788.0	788.0	788.0	804.3	788.0
10°	779.3	780.4	781.4	788.0	781.4
12.5°	769.5	769.5	771.7	773.8	774.9
15°	754.3	755.4	759.7	764.1	766.2
17.5°	738.0	741.2	746.7	752.1	756.4
20°	718.4	722.8	729.3	738.0	742.3
22.5°	697.8	702.1	710.8	720.6	728.2
25°	676.0	680.4	691.2	703.2	711.9
27.5°	651.0	656.5	669.5	685.8	694.5
30°	626.0	632.5	647.8	666.2	676.0
32.5°	599.9	607.5	624.9	645.6	657.5
35°	572.8	580.4	601.0	623.9	638.0
37.5°	544.5	553.2	576.0	602.1	617.3
40°	515.2	524.9	551.0	579.3	596.7
42.5°	485.8	496.7	524.9	558.6	576.0
45°	456.5	468.4	498.9	535.8	555.4
47.5°	426.0	440.2	471.7	513.0	532.6
50°	396.7	410.8	446.7	489.1	508.6
52.5°	366.3	382.6	420.6	464.1	484.7
55°	336.9	353.2	394.5	438.0	459.7
57.5°	307.6	323.9	367.4	411.9	433.7
60°	278.2	295.6	341.3	384.7	407.6
62.5°	248.9	267.4	314.1	358.7	380.4
65°	220.6	240.2	286.9	330.4	353.2
67.5°	193.5	214.1	259.8	302.1	325.0
70°	166.3	186.9	231.5	272.8	295.6
72.5°	140.2	160.9	204.3	241.3	258.7
75°	114.1	135.9	175.0	201.1	211.9
77.5°	89.1	110.9	144.6	161.9	173.9
80°	66.3	84.8	108.7	121.7	126.1
82.5°	45.6	60.9	76.1	79.3	81.5
85°	28.3	35.9	41.3	40.2	40.2
87.5°	13.0	14.1	12.0	8.7	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)