

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: P233122

Luminaire Tested: **FCB-24-2-LD4-24-35-UNV-EDD1-WDA12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233122
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-LD4-24-35-UNV-EDD1-WDA12
Description: FAILSAFE 2X2 FCB LED TROFFER
.125 ACRYLIC LENS
Light Source: (84)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

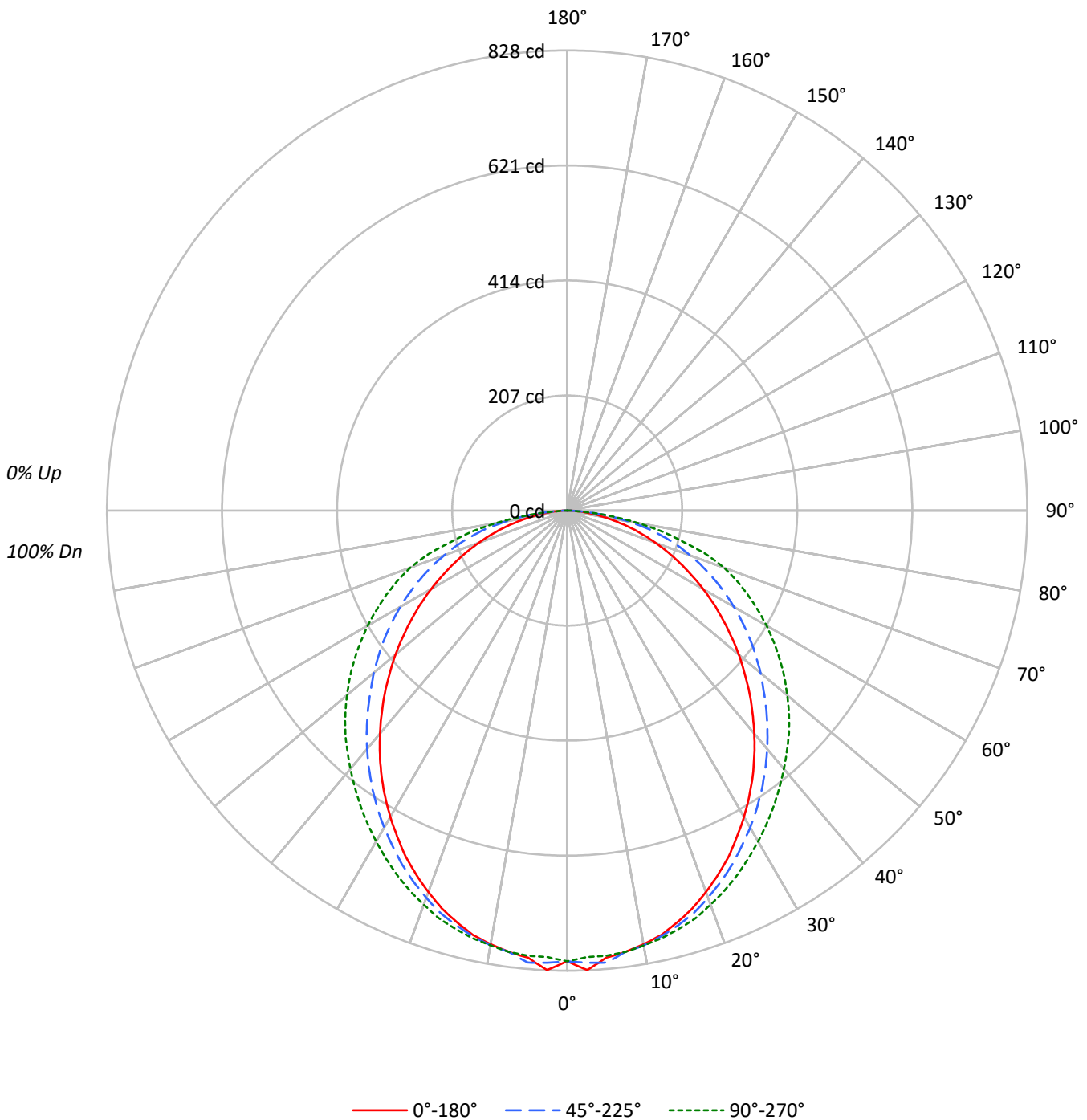
Lumens per Lamp: N/A
Luminaire Lumens: 2272.0 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P233122

CATALOG NUMBER: FCB-24-2-LD4-24-35-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	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°	2182	2182	2182
5°	2182	2206	2173
10°	2165	2171	2171
15°	2136	2152	2170
20°	2091	2123	2161
25°	2040	2086	2149
30°	1977	2046	2135
35°	1913	2007	2130
40°	1840	1968	2131
45°	1766	1930	2149
50°	1688	1901	2165
55°	1607	1882	2192
60°	1522	1867	2230
65°	1428	1857	2287
70°	1330	1851	2364
75°	1206	1850	2240
80°	1044	1712	1987
85°	886	1297	1263



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.9	3.4
10°-20°	217.9	9.6
20°-30°	324.1	14.3
30°-40°	383.3	16.9
40°-50°	394.0	17.3
50°-60°	360.0	15.8
60°-70°	288.0	12.7
70°-80°	180.7	8.0
80°-90°	47.1	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°	618.9	27.2
0°-40°	1002.2	44.1
0°-60°	1756.2	77.3
0°-90°	2272.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2272.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	811	811	811	811	811	
5°	808	808	816	811	804	77
15°	767	768	772	777	779	216
25°	687	692	703	715	724	316
35°	582	590	611	634	648	364
45°	464	476	507	545	565	358
55°	342	359	401	445	467	306
65°	224	244	292	336	359	223
75°	116	138	178	204	215	123
85°	29	36	42	41	41	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	811.0	811.0	811.0	811.0	811.0
2.5°	827.5	824.2	814.3	807.6	804.3
5°	807.6	807.6	816.5	811.0	804.3
7.5°	801.0	801.0	801.0	817.6	801.0
10°	792.2	793.3	794.4	801.0	794.4
12.5°	782.2	782.2	784.4	786.6	787.8
15°	766.8	767.9	772.3	776.7	778.9
17.5°	750.2	753.5	759.0	764.6	769.0
20°	730.3	734.7	741.3	750.2	754.6
22.5°	709.3	713.7	722.6	732.5	740.2
25°	687.2	691.6	702.7	714.8	723.7
27.5°	661.8	667.3	680.6	697.2	706.0
30°	636.4	643.0	658.5	677.3	687.2
32.5°	609.9	617.6	635.3	656.3	668.4
35°	582.3	590.0	611.0	634.2	648.5
37.5°	553.5	562.4	585.6	612.1	627.5
40°	523.7	533.6	560.2	588.9	606.6
42.5°	493.9	504.9	533.6	567.9	585.6
45°	464.0	476.2	507.1	544.7	564.6
47.5°	433.1	447.5	479.5	521.5	541.4
50°	403.3	417.6	454.1	497.2	517.1
52.5°	372.3	388.9	427.6	471.8	492.8
55°	342.5	359.1	401.1	445.3	467.3
57.5°	312.7	329.2	373.4	418.7	440.8
60°	282.8	300.5	346.9	391.1	414.3
62.5°	253.0	271.8	319.3	364.6	386.7
65°	224.3	244.2	291.7	335.9	359.1
67.5°	196.7	217.7	264.1	307.1	330.3
70°	169.0	190.0	235.3	277.3	300.5
72.5°	142.5	163.5	207.7	245.3	263.0
75°	116.0	138.1	177.9	204.4	215.4
77.5°	90.6	112.7	146.9	164.6	176.8
80°	67.4	86.2	110.5	123.7	128.2
82.5°	46.4	61.9	77.3	80.7	82.9
85°	28.7	36.5	42.0	40.9	40.9
87.5°	13.3	14.4	12.2	8.8	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)