

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: P233049

Luminaire Tested: **FCB-12-4-LD4-25-30-UNV-EDD1-WDP6**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P233049
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-WDP6
Description: FAILSAFE 1X4 FCB LED TROFFER
.060 POLYCARBONATE LENS
Light Source: (84)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

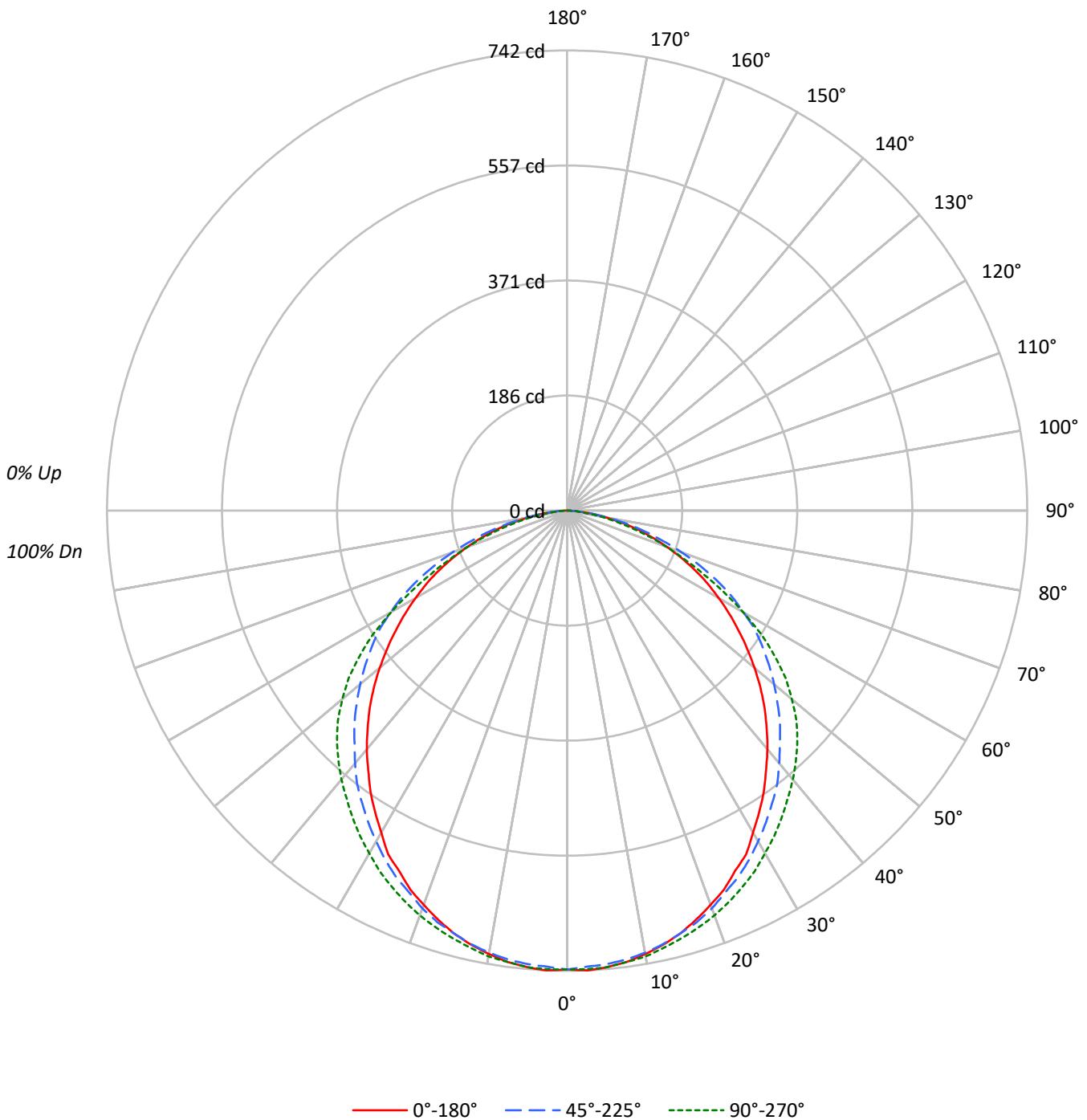
Lumens per Lamp: N/A
Luminaire Lumens: 2051.0 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	1992	1992	1992
5°	1996	1983	1996
10°	1984	1978	1995
15°	1966	1966	1989
20°	1937	1954	1989
25°	1904	1936	1988
30°	1863	1913	1982
35°	1817	1893	1983
40°	1765	1868	1989
45°	1713	1847	1997
50°	1651	1824	1981
55°	1584	1807	1917
60°	1518	1769	1763
65°	1449	1693	1545
70°	1345	1544	1337
75°	1220	1345	1104
80°	972	1066	815
85°	685	593	469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.0	3.4
10°-20°	200.1	9.8
20°-30°	301.6	14.7
30°-40°	361.6	17.6
40°-50°	375.2	18.3
50°-60°	338.4	16.5
60°-70°	246.9	12.0
70°-80°	129.5	6.3
80°-90°	27.6	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°	571.7	27.9
0°-40°	933.3	45.5
0°-60°	1647.0	80.3
0°-90°	2051.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2051.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	739	737	734	739	739	70
15°	706	706	706	714	714	199
25°	641	644	652	666	669	296
35°	553	559	576	598	604	345
45°	450	459	485	515	525	347
55°	338	350	385	410	408	302
65°	228	241	266	256	243	225
75°	117	134	129	112	106	123
85°	22	27	19	16	15	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	740.1	740.1	740.1	740.1	740.1
2.5°	742.2	740.1	736.1	740.1	740.1
5°	739.1	737.1	734.1	739.1	739.1
7.5°	734.1	732.1	730.0	735.1	734.1
10°	726.0	725.0	724.0	730.0	730.0
12.5°	716.9	716.9	715.9	723.0	721.9
15°	705.8	705.8	705.8	713.9	713.9
17.5°	691.6	693.6	695.7	704.8	704.8
20°	676.4	678.5	682.5	693.6	694.6
22.5°	661.3	662.3	666.3	679.5	682.5
25°	641.1	644.1	652.2	666.3	669.4
27.5°	624.9	625.9	635.0	651.2	655.2
30°	599.6	606.7	615.8	634.0	638.0
32.5°	576.3	582.4	596.6	615.8	621.8
35°	553.1	559.2	576.3	597.6	603.6
37.5°	526.8	535.9	556.1	577.4	584.4
40°	502.5	510.6	531.9	558.1	566.2
42.5°	476.2	484.3	507.6	536.9	546.0
45°	450.0	459.1	485.3	514.7	524.8
47.5°	422.7	432.8	460.1	492.4	501.5
50°	394.3	405.5	435.8	469.2	473.2
52.5°	366.0	378.2	410.5	439.8	443.9
55°	337.7	349.9	385.2	410.5	408.5
57.5°	310.4	323.6	360.0	373.1	371.1
60°	282.1	296.3	328.6	334.7	327.6
62.5°	255.8	269.0	299.3	294.2	285.1
65°	227.5	240.6	265.9	255.8	242.7
67.5°	199.2	215.4	231.5	214.4	204.2
70°	170.9	189.1	196.2	179.0	169.9
72.5°	143.6	162.8	160.8	143.6	137.5
75°	117.3	133.5	129.4	112.2	106.2
77.5°	89.0	107.2	98.1	83.9	78.9
80°	62.7	78.9	68.8	56.6	52.6
82.5°	41.5	52.6	42.5	33.4	30.3
85°	22.2	27.3	19.2	16.2	15.2
87.5°	9.1	8.1	7.1	7.1	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)