

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: P558353

Luminaire Tested: **FUSL-12-4-LD4-3STD-40-UNV-82-84-EDD**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P558353
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSL-12-4-LD4-3STD-40-UNV-82-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

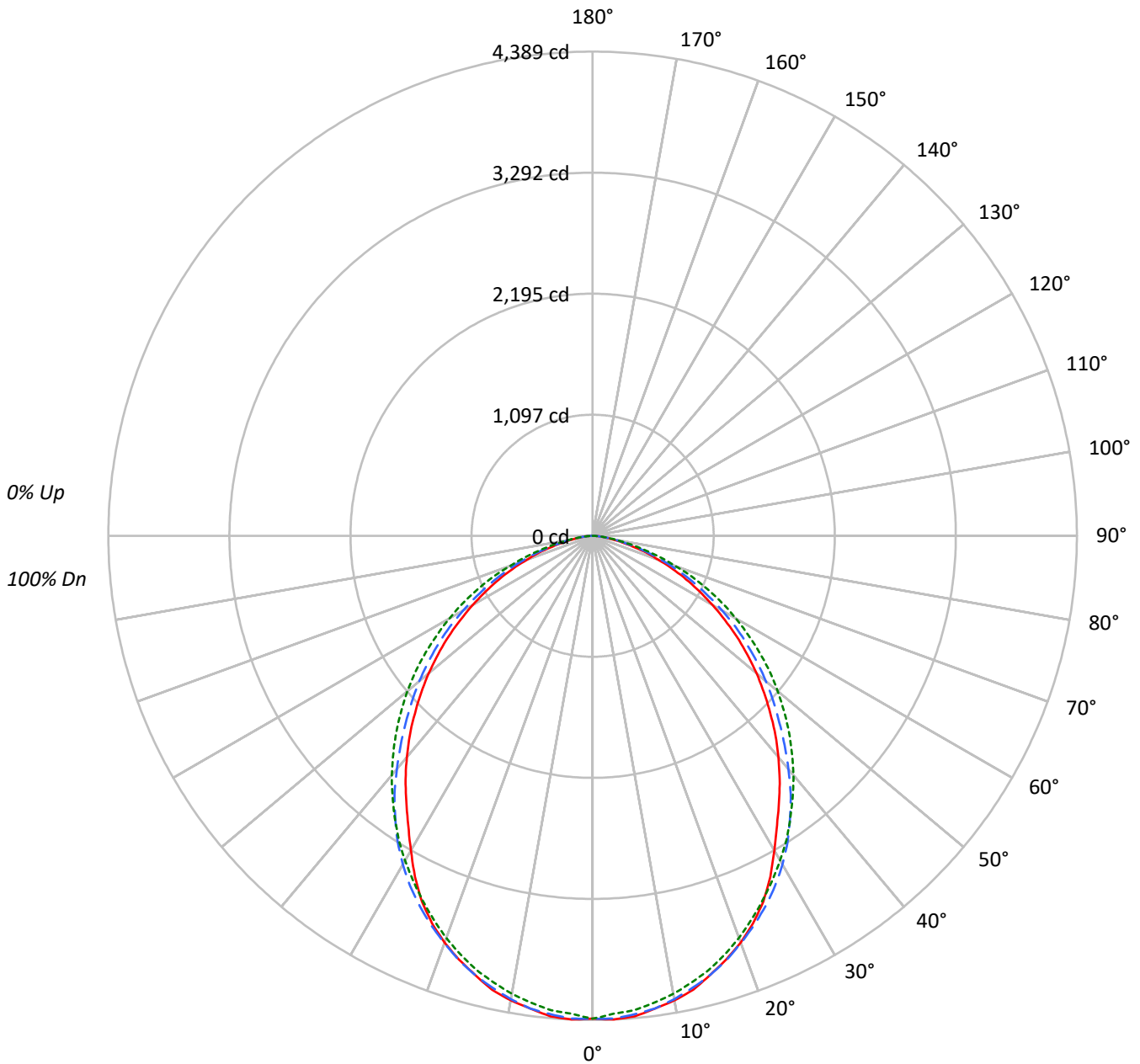
Lumens per Lamp: N/A
Luminaire Lumens: 10122.0 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
Input Voltage (V): NR
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	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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86								
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73								
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63								
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54								
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47								
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42								
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37								
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34								
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30								
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11780	11780	11780
5°	11811	11761	11661
10°	11686	11654	11520
15°	11478	11478	11347
20°	11235	11250	11105
25°	10865	11000	10826
30°	10232	10692	10561
35°	9668	10248	10265
40°	9198	9694	9948
45°	8672	9107	9574
50°	8117	8582	9167
55°	7487	7985	8671
60°	6743	7286	8064
65°	5954	6478	7335
70°	4961	5518	6232
75°	3899	4406	4878
80°	2788	3101	3440
85°	1819	1819	1714



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	412.2	4.1
10°-20°	1157.9	11.4
20°-30°	1692.0	16.7
30°-40°	1920.6	19.0
40°-50°	1854.1	18.3
50°-60°	1529.5	15.1
60°-70°	1018.5	10.1
70°-80°	455.8	4.5
80°-90°	81.5	0.8
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°	3262.0	32.2
0°-40°	5182.7	51.2
0°-60°	8566.2	84.6
0°-90°	10122.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10122.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4378	4378	4378	4378	4378	
5°	4372	4371	4354	4330	4317	414
15°	4120	4130	4120	4102	4073	1162
25°	3659	3688	3705	3678	3646	1676
35°	2943	2983	3120	3136	3125	1844
45°	2279	2317	2393	2502	2516	1758
55°	1596	1623	1702	1796	1848	1424
65°	935	960	1017	1090	1152	927
75°	375	395	424	444	469	410
85°	59	59	59	56	56	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4377.5	4377.5	4377.5	4377.5	4377.5
2.5°	4389.3	4391.0	4380.9	4354.0	4337.1
5°	4372.5	4370.8	4354.0	4330.4	4317.0
7.5°	4323.7	4327.1	4322.0	4288.4	4269.9
10°	4276.6	4278.3	4264.8	4237.9	4216.1
12.5°	4216.1	4214.4	4195.9	4182.4	4147.1
15°	4120.2	4130.3	4120.2	4101.7	4073.1
17.5°	4027.7	4027.7	4034.4	4002.5	3980.6
20°	3923.4	3928.5	3928.5	3903.3	3878.0
22.5°	3802.4	3817.5	3822.5	3795.6	3765.4
25°	3659.4	3688.0	3704.8	3677.9	3646.0
27.5°	3486.2	3529.9	3580.4	3560.2	3524.9
30°	3292.8	3356.7	3440.8	3424.0	3398.7
32.5°	3109.5	3173.4	3289.4	3282.7	3269.3
35°	2943.0	2983.4	3119.6	3136.4	3124.6
37.5°	2784.9	2821.9	2949.7	2988.4	2978.3
40°	2618.4	2658.8	2759.7	2828.6	2832.0
42.5°	2453.6	2492.3	2574.7	2673.9	2673.9
45°	2278.7	2317.4	2393.1	2502.4	2515.8
47.5°	2107.2	2147.5	2221.5	2330.9	2352.7
50°	1939.0	1976.0	2050.0	2156.0	2189.6
52.5°	1764.1	1804.5	1876.8	1974.3	2023.1
55°	1595.9	1622.9	1701.9	1796.1	1848.2
57.5°	1421.0	1446.3	1535.4	1616.1	1669.9
60°	1252.9	1284.8	1353.8	1436.2	1498.4
62.5°	1091.4	1125.1	1183.9	1256.2	1326.9
65°	935.0	960.3	1017.4	1089.8	1152.0
67.5°	783.7	805.5	862.7	913.2	978.8
70°	630.6	659.2	701.3	750.0	792.1
72.5°	507.9	519.6	555.0	590.3	634.0
75°	375.0	395.2	423.8	444.0	469.2
77.5°	269.1	280.8	297.7	314.5	338.0
80°	179.9	185.0	200.1	203.5	222.0
82.5°	109.3	112.7	116.0	117.7	124.4
85°	58.9	58.9	58.9	55.5	55.5
87.5°	33.6	33.6	28.6	23.5	16.8
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)