

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: P557872

Luminaire Tested: **FUSL-12-4-LD4-3HI-50-UNV-80-84-EDD-90**

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: P557872
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-LD4-3HI-50-UNV-80-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

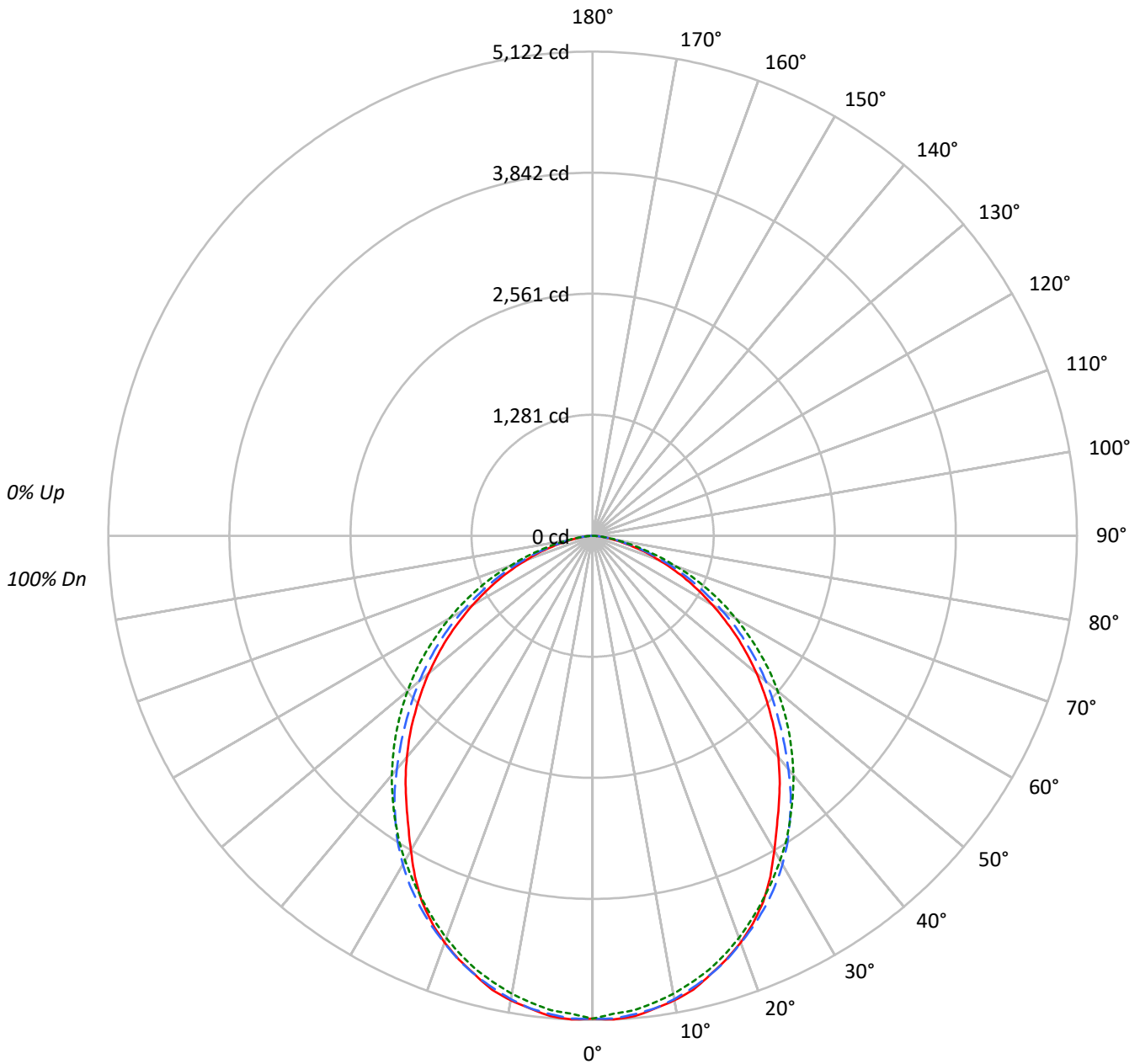
Lumens per Lamp: N/A
Luminaire Lumens: 11812.0 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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									
RC	80									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°	13747	13747	13747
5°	13783	13725	13608
10°	13637	13599	13444
15°	13395	13395	13242
20°	13111	13128	12960
25°	12680	12837	12633
30°	11940	12477	12324
35°	11282	11959	11978
40°	10734	11313	11609
45°	10120	10628	11173
50°	9473	10015	10697
55°	8738	9317	10119
60°	7869	8502	9411
65°	6947	7560	8560
70°	5790	6439	7272
75°	4550	5141	5692
80°	3254	3618	4014
85°	2121	2121	2001



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	481.0	4.1
10°-20°	1351.2	11.4
20°-30°	1974.5	16.7
30°-40°	2241.3	19.0
40°-50°	2163.6	18.3
50°-60°	1784.8	15.1
60°-70°	1188.6	10.1
70°-80°	531.9	4.5
80°-90°	95.2	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°	3806.7	32.2
0°-40°	6048.0	51.2
0°-60°	9996.4	84.6
0°-90°	11812.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11812.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5108	5108	5108	5108	5108	
5°	5102	5100	5081	5053	5038	483
15°	4808	4820	4808	4786	4753	1355
25°	4270	4304	4323	4292	4255	1956
35°	3434	3482	3640	3660	3646	2152
45°	2659	2704	2793	2920	2936	2052
55°	1862	1894	1986	2096	2157	1662
65°	1091	1121	1187	1272	1344	1082
75°	438	461	494	518	548	479
85°	69	69	69	65	65	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5108.4	5108.4	5108.4	5108.4	5108.4
2.5°	5122.1	5124.1	5112.3	5080.9	5061.3
5°	5102.5	5100.5	5080.9	5053.4	5037.7
7.5°	5045.6	5049.5	5043.6	5004.4	4982.8
10°	4990.6	4992.6	4976.9	4945.5	4920.0
12.5°	4920.0	4918.0	4896.4	4880.7	4839.5
15°	4808.1	4819.9	4808.1	4786.5	4753.2
17.5°	4700.2	4700.2	4708.0	4670.7	4645.2
20°	4578.5	4584.4	4584.4	4555.0	4525.5
22.5°	4437.2	4454.9	4460.8	4429.4	4394.0
25°	4270.4	4303.8	4323.4	4292.0	4254.7
27.5°	4068.3	4119.3	4178.2	4154.6	4113.4
30°	3842.6	3917.1	4015.3	3995.6	3966.2
32.5°	3628.7	3703.2	3838.6	3830.8	3815.1
35°	3434.4	3481.5	3640.4	3660.1	3646.3
37.5°	3249.9	3293.1	3442.2	3487.4	3475.6
40°	3055.6	3102.7	3220.5	3300.9	3304.8
42.5°	2863.3	2908.4	3004.6	3120.4	3120.4
45°	2659.2	2704.3	2792.6	2920.2	2935.9
47.5°	2459.0	2506.1	2592.5	2720.0	2745.5
50°	2262.8	2305.9	2392.3	2515.9	2555.2
52.5°	2058.7	2105.8	2190.1	2304.0	2360.9
55°	1862.4	1893.8	1986.0	2095.9	2156.8
57.5°	1658.3	1687.7	1791.8	1886.0	1948.8
60°	1462.1	1499.3	1579.8	1676.0	1748.6
62.5°	1273.7	1312.9	1381.6	1466.0	1548.4
65°	1091.1	1120.6	1187.3	1271.7	1344.3
67.5°	914.5	940.0	1006.8	1065.6	1142.2
70°	735.9	769.3	818.4	875.3	924.3
72.5°	592.7	606.4	647.6	688.8	739.9
75°	437.6	461.2	494.5	518.1	547.5
77.5°	314.0	327.7	347.4	367.0	394.5
80°	210.0	215.9	233.5	237.5	259.0
82.5°	127.6	131.5	135.4	137.4	145.2
85°	68.7	68.7	68.7	64.8	64.8
87.5°	39.2	39.2	33.4	27.5	19.6
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)