

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: P557807

Luminaire Tested: **FUSL-12-4-LD4-3HI-35-UNV-93-97-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: P557807
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-35-UNV-93-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

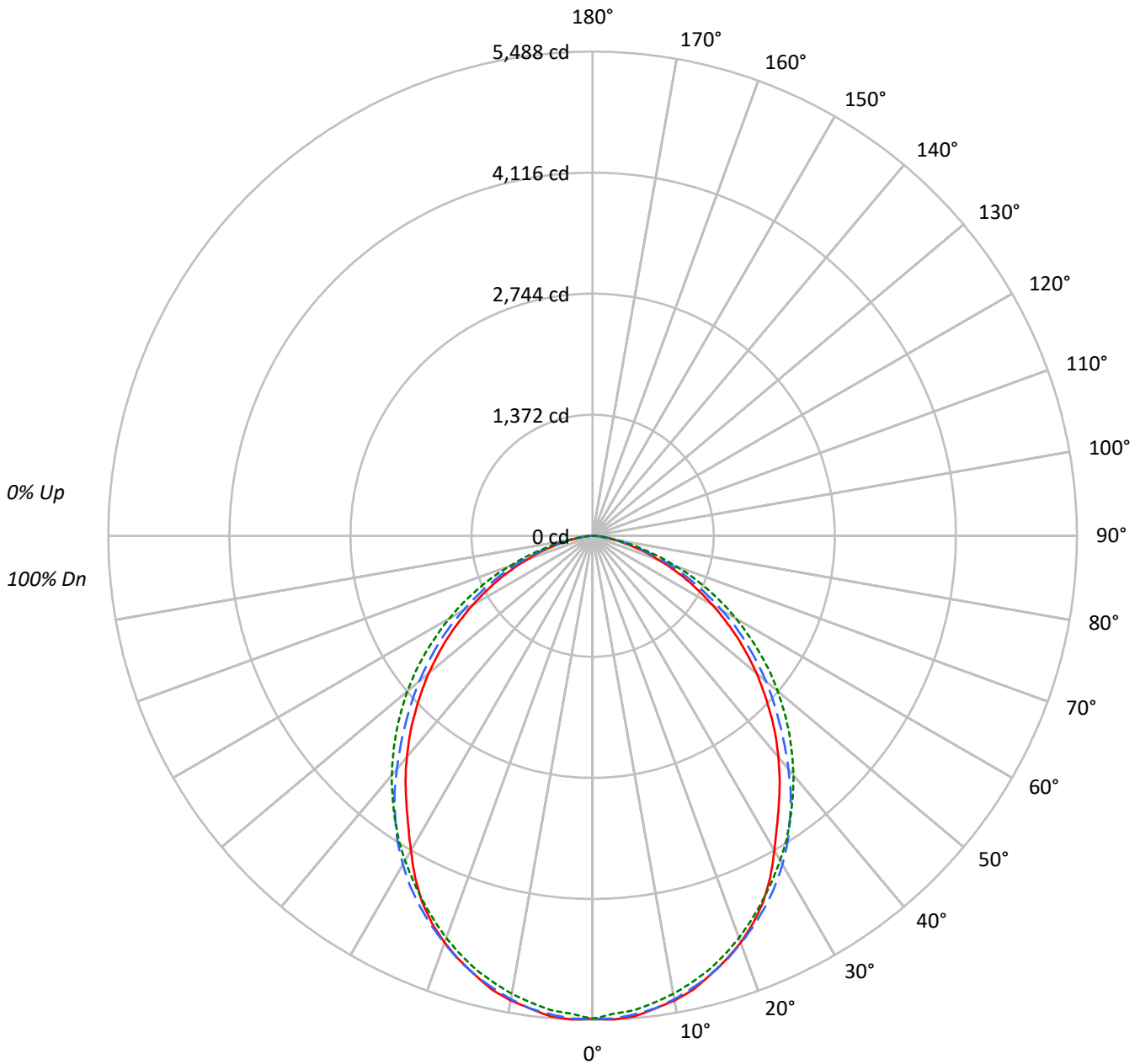
Lumens per Lamp: N/A
Luminaire Lumens: 12657.0 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
Input Voltage (V): NR
Input Current (A_{in}): 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: P557807

CATALOG NUMBER: FUSL-12-4-LD4-3HI-35-UNV-93-97-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557807

CATALOG NUMBER: FUSL-12-4-LD4-3HI-35-UNV-93-97-EDD

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°	14730	14730	14730
5°	14769	14707	14582
10°	14613	14572	14405
15°	14353	14353	14189
20°	14049	14068	13887
25°	13587	13755	13537
30°	12794	13369	13206
35°	12089	12815	12835
40°	11502	12122	12440
45°	10844	11388	11972
50°	10150	10731	11462
55°	9363	9984	10843
60°	8432	9111	10084
65°	7445	8101	9172
70°	6205	6899	7793
75°	4875	5509	6100
80°	3487	3877	4302
85°	2272	2272	2143



TEST NUMBER: P557807

CATALOG NUMBER: FUSL-12-4-LD4-3HI-35-UNV-93-97-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	515.4	4.1
10°-20°	1447.8	11.4
20°-30°	2115.8	16.7
30°-40°	2401.6	19.0
40°-50°	2318.4	18.3
50°-60°	1912.5	15.1
60°-70°	1273.6	10.1
70°-80°	569.9	4.5
80°-90°	102.0	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°	4079.0	32.2
0°-40°	6480.6	51.2
0°-60°	10711.5	84.6
0°-90°	12657.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12657.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5474	5474	5474	5474	5474	
5°	5468	5465	5444	5415	5398	517
15°	5152	5165	5152	5129	5093	1452
25°	4576	4612	4633	4599	4559	2096
35°	3680	3730	3901	3922	3907	2306
45°	2849	2898	2992	3129	3146	2198
55°	1996	2029	2128	2246	2311	1781
65°	1169	1201	1272	1363	1440	1159
75°	469	494	530	555	587	513
85°	74	74	74	69	69	99
90°	0	0	0	0	0	



TEST NUMBER: P557807

CATALOG NUMBER: FUSL-12-4-LD4-3HI-35-UNV-93-97-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5473.8	5473.8	5473.8	5473.8	5473.8
2.5°	5488.5	5490.6	5478.0	5444.4	5423.4
5°	5467.5	5465.4	5444.4	5414.9	5398.1
7.5°	5406.5	5410.7	5404.4	5362.4	5339.2
10°	5347.7	5349.8	5332.9	5299.3	5271.9
12.5°	5271.9	5269.8	5246.7	5229.9	5185.7
15°	5152.1	5164.7	5152.1	5129.0	5093.2
17.5°	5036.4	5036.4	5044.8	5004.9	4977.5
20°	4906.0	4912.4	4912.4	4880.8	4849.3
22.5°	4754.6	4773.6	4779.9	4746.2	4708.4
25°	4575.9	4611.6	4632.7	4599.0	4559.1
27.5°	4359.3	4414.0	4477.1	4451.8	4407.7
30°	4117.5	4197.4	4302.5	4281.5	4249.9
32.5°	3888.2	3968.2	4113.3	4104.8	4088.0
35°	3680.1	3730.5	3900.9	3921.9	3907.2
37.5°	3482.4	3528.7	3688.5	3736.8	3724.2
40°	3274.2	3324.7	3450.8	3537.1	3541.3
42.5°	3068.1	3116.5	3219.5	3343.6	3343.6
45°	2849.4	2897.8	2992.4	3129.1	3145.9
47.5°	2634.9	2685.4	2777.9	2914.6	2941.9
50°	2424.6	2470.9	2563.4	2695.9	2738.0
52.5°	2205.9	2256.4	2346.8	2468.8	2529.8
55°	1995.6	2029.3	2128.1	2245.9	2311.1
57.5°	1776.9	1808.5	1919.9	2020.9	2088.2
60°	1566.7	1606.6	1692.8	1795.9	1873.7
62.5°	1364.8	1406.8	1480.4	1570.9	1659.2
65°	1169.2	1200.8	1272.2	1362.7	1440.5
67.5°	979.9	1007.3	1078.8	1141.9	1223.9
70°	788.6	824.3	876.9	937.9	990.5
72.5°	635.1	649.8	694.0	738.1	792.8
75°	468.9	494.2	529.9	555.2	586.7
77.5°	336.5	351.2	372.2	393.2	422.7
80°	225.0	231.3	250.2	254.4	277.6
82.5°	136.7	140.9	145.1	147.2	155.6
85°	73.6	73.6	73.6	69.4	69.4
87.5°	42.1	42.1	35.7	29.4	21.0
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)