

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: P557749

Luminaire Tested: **FUSL-12-4-LD4-3HI-35-UNV-80-86-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: P557749
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-80-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

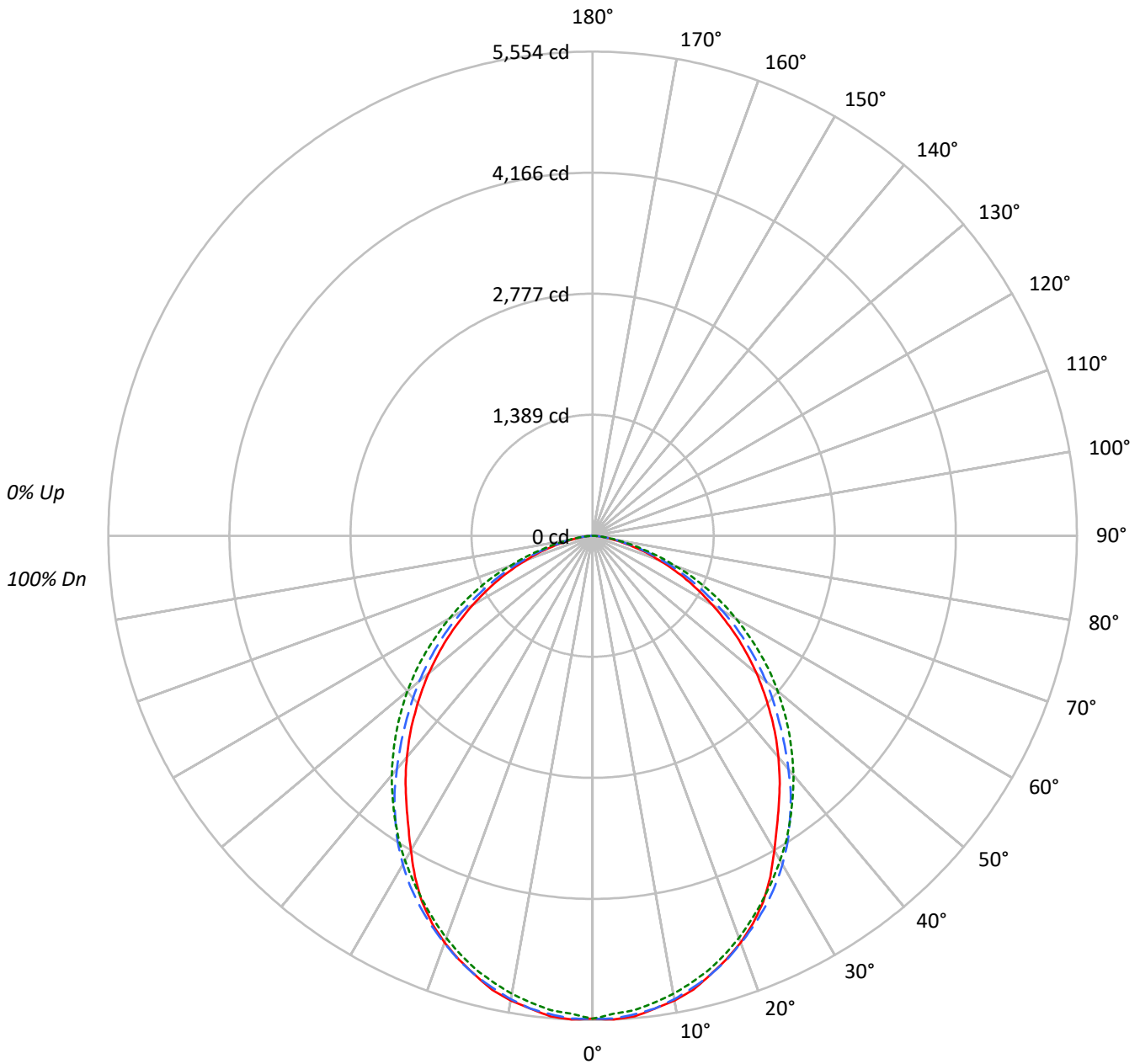
Lumens per Lamp: N/A
Luminaire Lumens: 12809.0 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P557749

CATALOG NUMBER: FUSL-12-4-LD4-3HI-35-UNV-80-86-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557749

CATALOG NUMBER: FUSL-12-4-LD4-3HI-35-UNV-80-86-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°	14907	14907	14907
5°	14947	14883	14757
10°	14788	14747	14579
15°	14526	14526	14360
20°	14218	14236	14054
25°	13750	13920	13699
30°	12948	13530	13364
35°	12235	12969	12990
40°	11640	12268	12589
45°	10974	11525	12116
50°	10273	10860	11600
55°	9475	10104	10973
60°	8533	9220	10205
65°	7534	8198	9282
70°	6279	6982	7887
75°	4934	5576	6174
80°	3529	3924	4353
85°	2300	2300	2167



TEST NUMBER: P557749

CATALOG NUMBER: FUSL-12-4-LD4-3HI-35-UNV-80-86-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	521.6	4.1
10°-20°	1465.2	11.4
20°-30°	2141.2	16.7
30°-40°	2430.5	19.0
40°-50°	2346.3	18.3
50°-60°	1935.5	15.1
60°-70°	1288.9	10.1
70°-80°	576.8	4.5
80°-90°	103.2	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°	4128.0	32.2
0°-40°	6558.4	51.2
0°-60°	10840.2	84.6
0°-90°	12809.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12809.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5540	5540	5540	5540	5540	
5°	5533	5531	5510	5480	5463	524
15°	5214	5227	5214	5190	5154	1470
25°	4631	4667	4688	4654	4614	2121
35°	3724	3775	3948	3969	3954	2333
45°	2884	2933	3028	3167	3184	2225
55°	2020	2054	2154	2273	2339	1803
65°	1183	1215	1288	1379	1458	1173
75°	475	500	536	562	594	519
85°	74	74	74	70	70	100
90°	0	0	0	0	0	



TEST NUMBER: P557749

CATALOG NUMBER: FUSL-12-4-LD4-3HI-35-UNV-80-86-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5539.6	5539.6	5539.6	5539.6	5539.6
2.5°	5554.5	5556.6	5543.8	5509.8	5488.5
5°	5533.2	5531.0	5509.8	5480.0	5462.9
7.5°	5471.5	5475.7	5469.3	5426.8	5403.4
10°	5411.9	5414.0	5397.0	5362.9	5335.3
12.5°	5335.3	5333.1	5309.7	5292.7	5248.0
15°	5214.0	5226.7	5214.0	5190.5	5154.4
17.5°	5096.9	5096.9	5105.4	5065.0	5037.3
20°	4965.0	4971.3	4971.3	4939.4	4907.5
22.5°	4811.7	4830.9	4837.3	4803.2	4764.9
25°	4630.8	4667.0	4688.3	4654.3	4613.8
27.5°	4411.6	4467.0	4530.8	4505.3	4460.6
30°	4166.9	4247.8	4354.2	4332.9	4301.0
32.5°	3934.9	4015.8	4162.7	4154.1	4137.1
35°	3724.3	3775.3	3947.7	3969.0	3954.1
37.5°	3524.2	3571.0	3732.8	3781.7	3768.9
40°	3313.5	3364.6	3492.3	3579.5	3583.8
42.5°	3105.0	3153.9	3258.2	3383.8	3383.8
45°	2883.6	2932.6	3028.4	3166.7	3183.7
47.5°	2666.6	2717.6	2811.3	2949.6	2977.3
50°	2453.8	2500.6	2594.2	2728.3	2770.8
52.5°	2232.4	2283.5	2375.0	2498.4	2560.2
55°	2019.6	2053.7	2153.7	2272.9	2338.8
57.5°	1798.3	1830.2	1943.0	2045.1	2113.2
60°	1585.5	1625.9	1713.2	1817.4	1896.2
62.5°	1381.2	1423.7	1498.2	1589.7	1679.1
65°	1183.2	1215.2	1287.5	1379.0	1457.8
67.5°	991.7	1019.4	1091.7	1155.6	1238.6
70°	798.1	834.2	887.4	949.2	1002.4
72.5°	642.7	657.6	702.3	747.0	802.3
75°	474.6	500.1	536.3	561.8	593.8
77.5°	340.5	355.4	376.7	398.0	427.8
80°	227.7	234.1	253.2	257.5	280.9
82.5°	138.3	142.6	146.8	149.0	157.5
85°	74.5	74.5	74.5	70.2	70.2
87.5°	42.6	42.6	36.2	29.8	21.3
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)