

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: P557741

Luminaire Tested: **FUSL-12-4-LD4-3HI-30-UNV-93-96-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: P557741
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-30-UNV-93-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

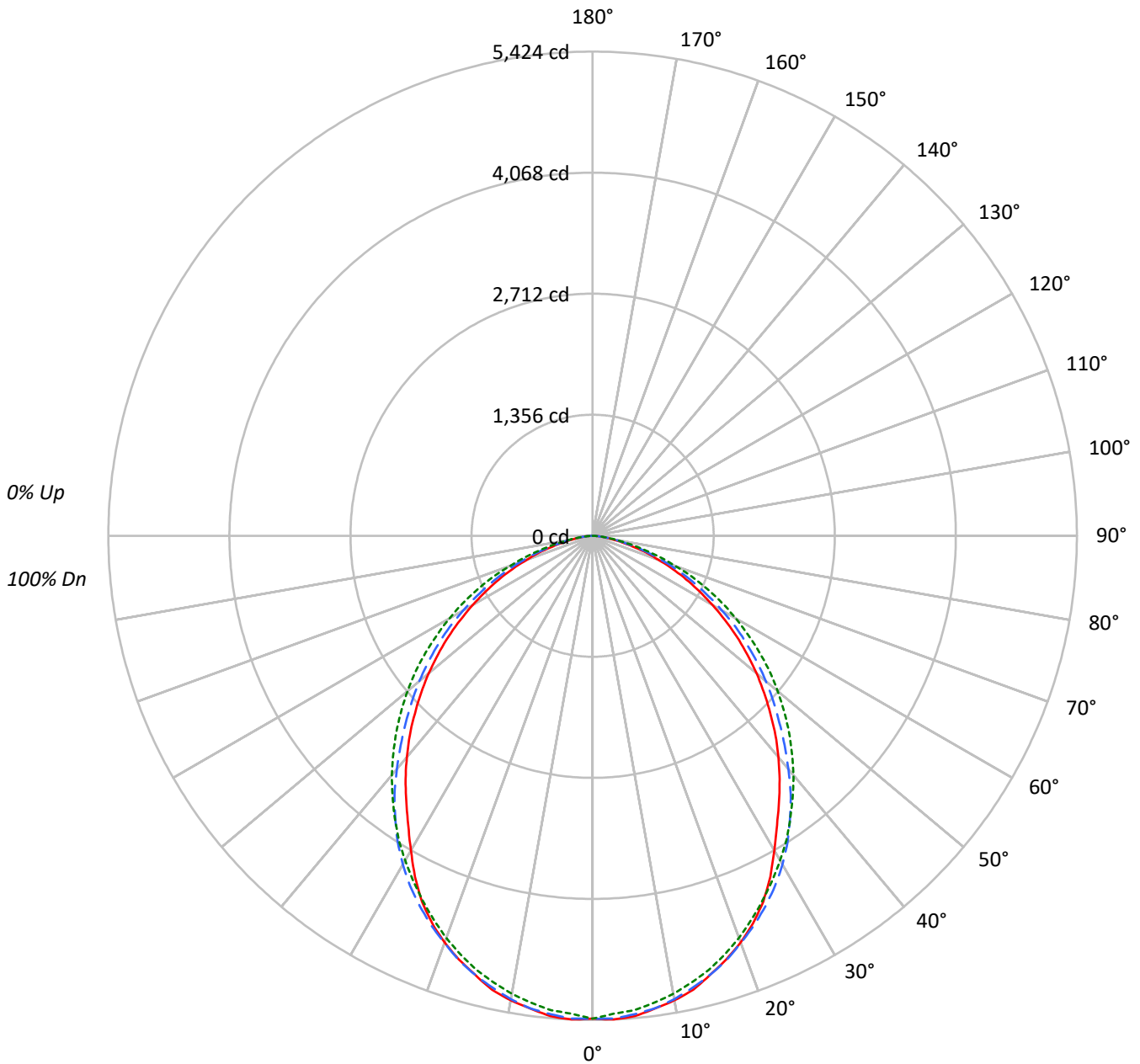
Lumens per Lamp: N/A
Luminaire Lumens: 12508.0 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P557741

CATALOG NUMBER: FUSL-12-4-LD4-3HI-30-UNV-93-96-EDD

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°	14557	14557	14557
5°	14595	14534	14410
10°	14440	14401	14236
15°	14184	14184	14022
20°	13884	13902	13723
25°	13427	13593	13377
30°	12644	13212	13050
35°	11947	12664	12684
40°	11366	11979	12293
45°	10716	11254	11831
50°	10031	10605	11327
55°	9253	9867	10715
60°	8332	9003	9965
65°	7357	8006	9064
70°	6131	6818	7701
75°	4818	5445	6028
80°	3446	3832	4251
85°	2245	2245	2118



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	509.3	4.1
10°-20°	1430.8	11.4
20°-30°	2090.9	16.7
30°-40°	2373.3	19.0
40°-50°	2291.1	18.3
50°-60°	1890.0	15.1
60°-70°	1258.6	10.1
70°-80°	563.2	4.5
80°-90°	100.8	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°	4031.0	32.2
0°-40°	6404.3	51.2
0°-60°	10585.4	84.6
0°-90°	12508.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12508.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5409	5409	5409	5409	5409	
5°	5403	5401	5380	5351	5335	511
15°	5091	5104	5091	5069	5033	1435
25°	4522	4557	4578	4545	4505	2071
35°	3637	3687	3855	3876	3861	2279
45°	2816	2864	2957	3092	3109	2173
55°	1972	2005	2103	2219	2284	1760
65°	1155	1187	1257	1347	1424	1146
75°	463	488	524	549	580	507
85°	73	73	73	69	69	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5409.4	5409.4	5409.4	5409.4	5409.4
2.5°	5423.9	5426.0	5413.5	5380.3	5359.5
5°	5403.2	5401.1	5380.3	5351.2	5334.6
7.5°	5342.9	5347.0	5340.8	5299.2	5276.4
10°	5284.7	5286.8	5270.2	5236.9	5209.9
12.5°	5209.9	5207.8	5184.9	5168.3	5124.7
15°	5091.4	5103.9	5091.4	5068.6	5033.2
17.5°	4977.1	4977.1	4985.4	4946.0	4918.9
20°	4848.3	4854.5	4854.5	4823.4	4792.2
22.5°	4698.7	4717.4	4723.6	4690.4	4652.9
25°	4522.0	4557.4	4578.1	4544.9	4505.4
27.5°	4308.0	4362.0	4424.4	4399.4	4355.8
30°	4069.0	4148.0	4251.9	4231.1	4199.9
32.5°	3842.5	3921.4	4064.8	4056.5	4039.9
35°	3636.7	3686.6	3854.9	3875.7	3861.2
37.5°	3441.4	3487.1	3645.0	3692.8	3680.4
40°	3235.7	3285.5	3410.2	3495.4	3499.6
42.5°	3032.0	3079.8	3181.6	3304.2	3304.2
45°	2815.9	2863.7	2957.2	3092.3	3108.9
47.5°	2603.9	2653.8	2745.2	2880.3	2907.3
50°	2396.1	2441.8	2533.2	2664.2	2705.7
52.5°	2180.0	2229.8	2319.2	2439.7	2500.0
55°	1972.2	2005.4	2103.1	2219.4	2283.9
57.5°	1756.0	1787.2	1897.3	1997.1	2063.6
60°	1548.2	1587.7	1672.9	1774.7	1851.6
62.5°	1348.7	1390.3	1463.0	1552.4	1639.6
65°	1155.4	1186.6	1257.3	1346.6	1423.5
67.5°	968.4	995.4	1066.1	1128.4	1209.5
70°	779.3	814.6	866.6	926.8	978.8
72.5°	627.6	642.1	685.8	729.4	783.5
75°	463.4	488.4	523.7	548.6	579.8
77.5°	332.5	347.0	367.8	388.6	417.7
80°	222.4	228.6	247.3	251.5	274.3
82.5°	135.1	139.2	143.4	145.5	153.8
85°	72.7	72.7	72.7	68.6	68.6
87.5°	41.6	41.6	35.3	29.1	20.8
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)