

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: P557694

Luminaire Tested: **FUSL-12-4-LD4-3HI-30-UNV-80-97-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: P557694
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-80-97-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

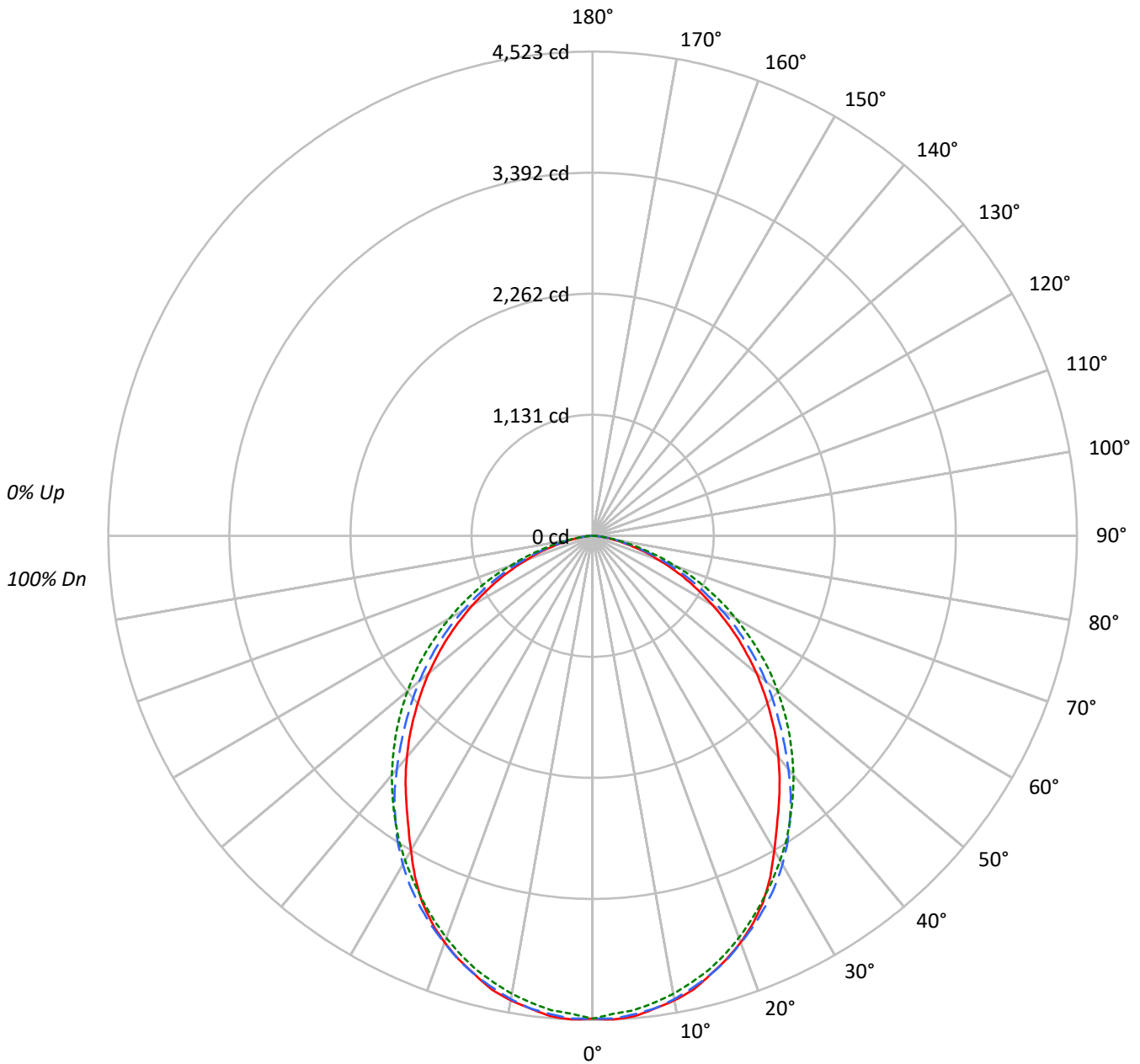
Lumens per Lamp: N/A
Luminaire Lumens: 10430.0 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P557694

CATALOG NUMBER: FUSL-12-4-LD4-3HI-30-UNV-80-97-EDD-90

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°	12138	12138	12138
5°	12171	12119	12016
10°	12041	12008	11871
15°	11828	11828	11693
20°	11577	11592	11443
25°	11196	11335	11155
30°	10543	11017	10882
35°	9962	10560	10577
40°	9478	9989	10251
45°	8936	9384	9866
50°	8364	8843	9445
55°	7715	8228	8935
60°	6948	7508	8310
65°	6135	6676	7558
70°	5113	5685	6422
75°	4017	4540	5027
80°	2873	3195	3544
85°	1874	1874	1766



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.7	4.1
10°-20°	1193.1	11.4
20°-30°	1743.5	16.7
30°-40°	1979.1	19.0
40°-50°	1910.5	18.3
50°-60°	1576.0	15.1
60°-70°	1049.5	10.1
70°-80°	469.6	4.5
80°-90°	84.0	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°	3361.3	32.2
0°-40°	5340.4	51.2
0°-60°	8826.8	84.6
0°-90°	10430.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10430.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4511	4511	4511	4511	4511	
5°	4506	4504	4486	4462	4448	426
15°	4246	4256	4246	4226	4197	1197
25°	3771	3800	3818	3790	3757	1727
35°	3033	3074	3214	3232	3220	1900
45°	2348	2388	2466	2578	2592	1812
55°	1644	1672	1754	1851	1904	1468
65°	964	990	1048	1123	1187	955
75°	386	407	437	458	484	423
85°	61	61	61	57	57	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4510.7	4510.7	4510.7	4510.7	4510.7
2.5°	4522.8	4524.6	4514.2	4486.4	4469.1
5°	4505.5	4503.8	4486.4	4462.2	4448.3
7.5°	4455.3	4458.7	4453.5	4418.9	4399.8
10°	4406.7	4408.5	4394.6	4366.9	4344.3
12.5°	4344.3	4342.6	4323.6	4309.7	4273.3
15°	4245.6	4256.0	4245.6	4226.5	4197.1
17.5°	4150.3	4150.3	4157.2	4124.3	4101.7
20°	4042.8	4048.0	4048.0	4022.0	3996.0
22.5°	3918.1	3933.7	3938.9	3911.1	3879.9
25°	3770.8	3800.2	3817.6	3789.8	3756.9
27.5°	3592.3	3637.3	3689.3	3668.5	3632.1
30°	3393.0	3458.8	3545.5	3528.2	3502.2
32.5°	3204.1	3270.0	3389.5	3382.6	3368.7
35°	3032.6	3074.1	3214.5	3231.8	3219.7
37.5°	2869.7	2907.8	3039.5	3079.3	3068.9
40°	2698.1	2739.7	2843.7	2914.7	2918.2
42.5°	2528.3	2568.1	2653.1	2755.3	2755.3
45°	2348.1	2387.9	2465.9	2578.5	2592.4
47.5°	2171.3	2212.9	2289.1	2401.8	2424.3
50°	1998.0	2036.1	2112.4	2221.6	2256.2
52.5°	1817.8	1859.4	1933.9	2034.4	2084.7
55°	1644.5	1672.2	1753.7	1850.7	1904.4
57.5°	1464.3	1490.3	1582.1	1665.3	1720.8
60°	1291.0	1323.9	1395.0	1479.9	1544.0
62.5°	1124.6	1159.3	1220.0	1294.5	1367.2
65°	963.5	989.5	1048.4	1122.9	1187.0
67.5°	807.5	830.1	889.0	941.0	1008.5
70°	649.8	679.3	722.6	772.9	816.2
72.5°	523.3	535.5	571.9	608.2	653.3
75°	386.4	407.2	436.7	457.5	483.5
77.5°	277.3	289.4	306.7	324.0	348.3
80°	185.4	190.6	206.2	209.7	228.7
82.5°	112.6	116.1	119.6	121.3	128.2
85°	60.7	60.7	60.7	57.2	57.2
87.5°	34.7	34.7	29.5	24.3	17.3
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)