

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: P556156

Luminaire Tested: **FUSL-12-4-LD4-1HI-30-UNV-80-96-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: P556156
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-LD4-1HI-30-UNV-80-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

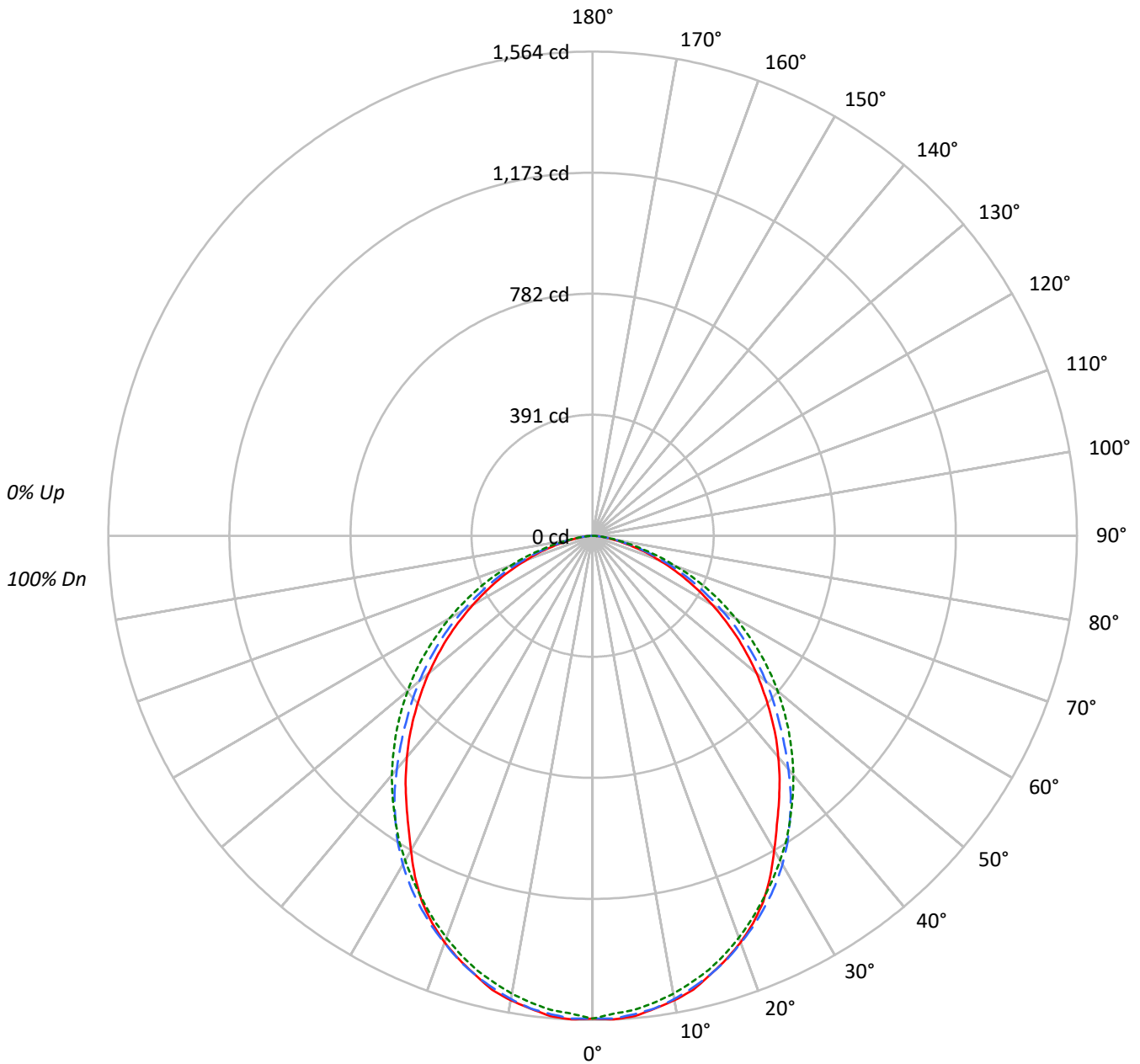
Lumens per Lamp: N/A
Luminaire Lumens: 3606.0 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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

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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°	4197	4197	4197
5°	4208	4190	4154
10°	4163	4152	4104
15°	4089	4089	4043
20°	4003	4008	3956
25°	3871	3919	3857
30°	3645	3809	3762
35°	3444	3651	3657
40°	3277	3454	3544
45°	3089	3244	3411
50°	2892	3057	3266
55°	2668	2845	3089
60°	2402	2596	2873
65°	2121	2308	2613
70°	1768	1965	2220
75°	1389	1570	1738
80°	993	1105	1226
85°	648	648	611



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.8	4.1
10°-20°	412.5	11.4
20°-30°	602.8	16.7
30°-40°	684.2	19.0
40°-50°	660.5	18.3
50°-60°	544.9	15.1
60°-70°	362.8	10.1
70°-80°	162.4	4.5
80°-90°	29.1	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°	1162.1	32.2
0°-40°	1846.3	51.2
0°-60°	3051.7	84.6
0°-90°	3606.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3606.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1560	1560	1560	1560	1560	
5°	1558	1557	1551	1543	1538	147
15°	1468	1471	1468	1461	1451	414
25°	1304	1314	1320	1310	1299	597
35°	1048	1063	1111	1117	1113	657
45°	812	826	852	892	896	626
55°	569	578	606	640	658	507
65°	333	342	362	388	410	330
75°	134	141	151	158	167	146
85°	21	21	21	20	20	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1559.5	1559.5	1559.5	1559.5	1559.5
2.5°	1563.7	1564.3	1560.7	1551.1	1545.1
5°	1557.7	1557.1	1551.1	1542.7	1537.9
7.5°	1540.3	1541.5	1539.7	1527.7	1521.2
10°	1523.6	1524.2	1519.4	1509.8	1502.0
12.5°	1502.0	1501.4	1494.8	1490.0	1477.4
15°	1467.8	1471.4	1467.8	1461.2	1451.1
17.5°	1434.9	1434.9	1437.3	1425.9	1418.1
20°	1397.7	1399.5	1399.5	1390.6	1381.6
22.5°	1354.6	1360.0	1361.8	1352.2	1341.4
25°	1303.7	1313.9	1319.9	1310.3	1298.9
27.5°	1242.0	1257.5	1275.5	1268.3	1255.7
30°	1173.1	1195.8	1225.8	1219.8	1210.8
32.5°	1107.8	1130.5	1171.9	1169.5	1164.7
35°	1048.5	1062.8	1111.4	1117.4	1113.2
37.5°	992.1	1005.3	1050.9	1064.6	1061.0
40°	932.8	947.2	983.2	1007.7	1008.9
42.5°	874.1	887.9	917.2	952.6	952.6
45°	811.8	825.6	852.5	891.5	896.3
47.5°	750.7	765.1	791.4	830.4	838.2
50°	690.8	704.0	730.3	768.1	780.1
52.5°	628.5	642.9	668.6	703.4	720.7
55°	568.6	578.1	606.3	639.9	658.4
57.5°	506.3	515.2	547.0	575.8	594.9
60°	446.3	457.7	482.3	511.6	533.8
62.5°	388.8	400.8	421.8	447.5	472.7
65°	333.1	342.1	362.5	388.2	410.4
67.5°	279.2	287.0	307.3	325.3	348.7
70°	224.7	234.9	249.8	267.2	282.2
72.5°	180.9	185.1	197.7	210.3	225.9
75°	133.6	140.8	151.0	158.2	167.2
77.5°	95.9	100.1	106.0	112.0	120.4
80°	64.1	65.9	71.3	72.5	79.1
82.5°	38.9	40.1	41.3	41.9	44.3
85°	21.0	21.0	21.0	19.8	19.8
87.5°	12.0	12.0	10.2	8.4	6.0
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)