

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: P557431

Luminaire Tested: **FUSL-12-4-LD4-2STD-30-UNV-80-87-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: P557431
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-LD4-2STD-30-UNV-80-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

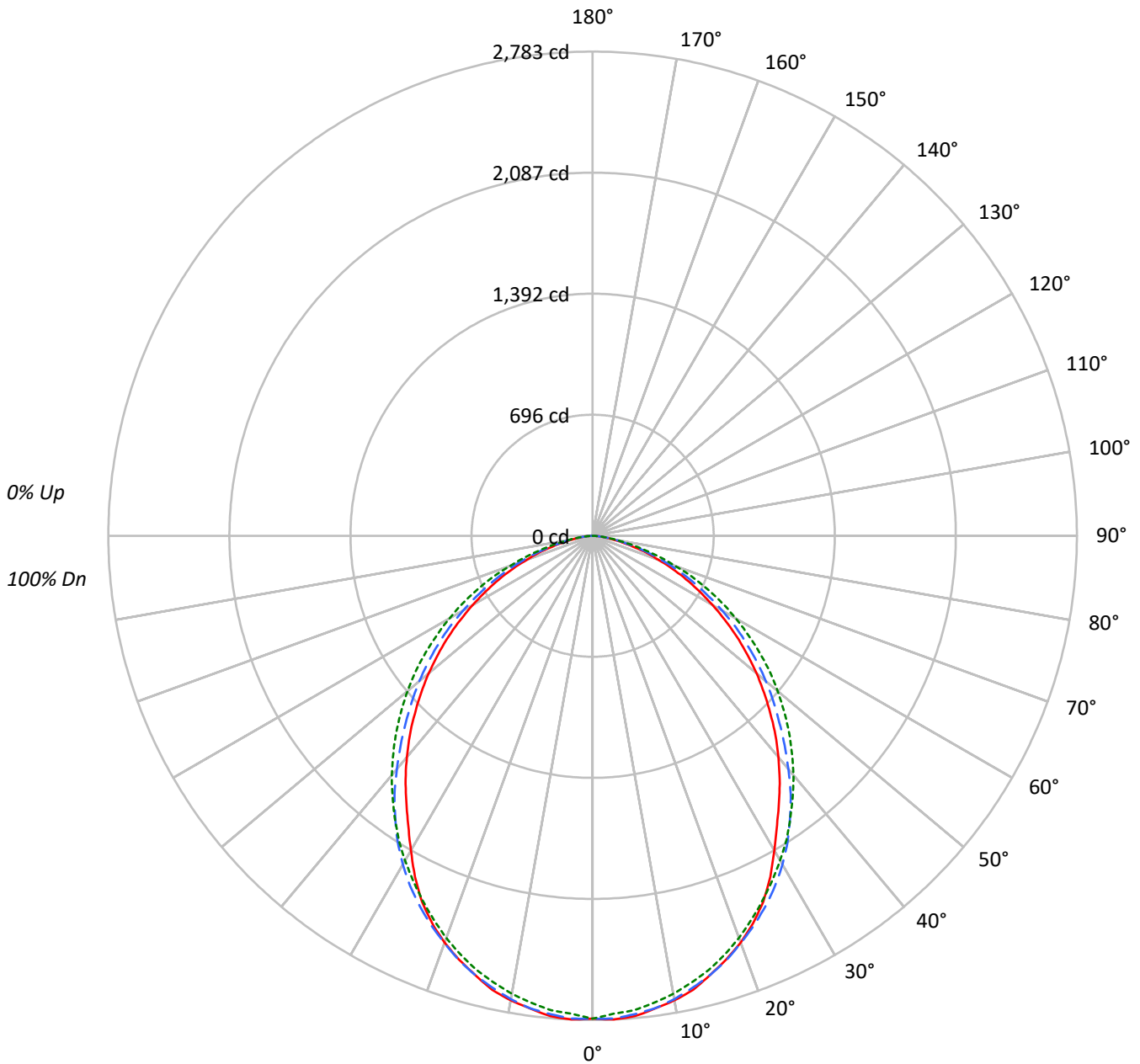
Lumens per Lamp: N/A
Luminaire Lumens: 6418.0 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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

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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°	7469	7469	7469
5°	7489	7457	7394
10°	7409	7389	7305
15°	7278	7278	7195
20°	7124	7133	7042
25°	6889	6975	6864
30°	6487	6779	6696
35°	6130	6498	6508
40°	5832	6147	6308
45°	5499	5775	6071
50°	5147	5442	5812
55°	4747	5063	5498
60°	4275	4620	5113
65°	3775	4108	4651
70°	3146	3499	3951
75°	2472	2794	3093
80°	1768	1967	2182
85°	1152	1152	1087



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.3	4.1
10°-20°	734.2	11.4
20°-30°	1072.8	16.7
30°-40°	1217.8	19.0
40°-50°	1175.6	18.3
50°-60°	969.8	15.1
60°-70°	645.8	10.1
70°-80°	289.0	4.5
80°-90°	51.7	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°	2068.3	32.2
0°-40°	3286.1	51.2
0°-60°	5431.5	84.6
0°-90°	6418.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6418.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2776	2776	2776	2776	2776	
5°	2772	2771	2761	2746	2737	262
15°	2612	2619	2612	2601	2583	736
25°	2320	2338	2349	2332	2312	1063
35°	1866	1892	1978	1989	1981	1169
45°	1445	1469	1517	1587	1595	1115
55°	1012	1029	1079	1139	1172	903
65°	593	609	645	691	730	588
75°	238	251	269	282	298	260
85°	37	37	37	35	35	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2775.6	2775.6	2775.6	2775.6	2775.6
2.5°	2783.1	2784.1	2777.8	2760.7	2750.0
5°	2772.4	2771.4	2760.7	2745.8	2737.2
7.5°	2741.5	2743.6	2740.4	2719.1	2707.4
10°	2711.6	2712.7	2704.2	2687.1	2673.3
12.5°	2673.3	2672.2	2660.5	2651.9	2629.5
15°	2612.5	2618.9	2612.5	2600.7	2582.6
17.5°	2553.8	2553.8	2558.1	2537.8	2524.0
20°	2487.7	2490.9	2490.9	2474.9	2458.9
22.5°	2410.9	2420.5	2423.7	2406.7	2387.5
25°	2320.3	2338.4	2349.1	2332.0	2311.8
27.5°	2210.5	2238.2	2270.2	2257.4	2235.0
30°	2087.8	2128.4	2181.7	2171.0	2155.0
32.5°	1971.6	2012.1	2085.7	2081.4	2072.9
35°	1866.1	1891.6	1978.0	1988.7	1981.2
37.5°	1765.8	1789.3	1870.3	1894.8	1888.4
40°	1660.3	1685.8	1749.8	1793.5	1795.7
42.5°	1555.8	1580.3	1632.5	1695.4	1695.4
45°	1444.9	1469.4	1517.4	1586.7	1595.2
47.5°	1336.1	1361.7	1408.6	1477.9	1491.8
50°	1229.5	1252.9	1299.8	1367.0	1388.3
52.5°	1118.6	1144.2	1190.0	1251.9	1282.8
55°	1011.9	1029.0	1079.1	1138.8	1171.9
57.5°	901.0	917.0	973.5	1024.7	1058.9
60°	794.4	814.7	858.4	910.6	950.1
62.5°	692.0	713.4	750.7	796.5	841.3
65°	592.9	608.9	645.1	691.0	730.4
67.5°	496.9	510.8	547.0	579.0	620.6
70°	399.9	418.0	444.7	475.6	502.2
72.5°	322.0	329.5	351.9	374.3	402.0
75°	237.8	250.6	268.7	281.5	297.5
77.5°	170.6	178.1	188.7	199.4	214.3
80°	114.1	117.3	126.9	129.0	140.8
82.5°	69.3	71.4	73.6	74.6	78.9
85°	37.3	37.3	37.3	35.2	35.2
87.5°	21.3	21.3	18.1	14.9	10.7
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)