

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: P557670

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-93-87-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: P557670
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-50-UNV-93-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

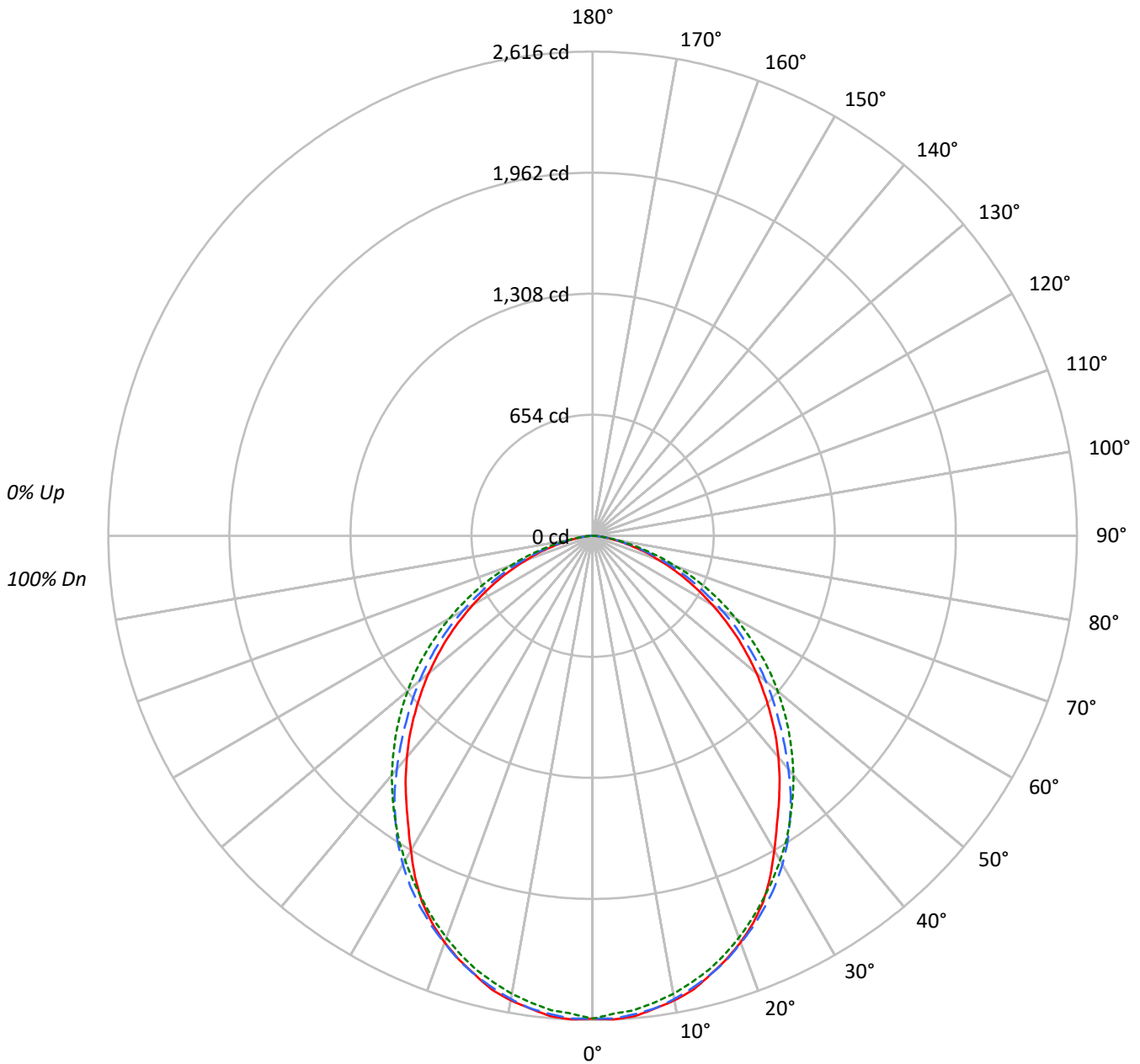
Lumens per Lamp: N/A
Luminaire Lumens: 6032.0 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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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CATALOG NUMBER: FUSL-12-4-LD4-2STD-50-UNV-93-87-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°	7020	7020	7020
5°	7039	7009	6949
10°	6964	6945	6865
15°	6841	6841	6762
20°	6696	6704	6618
25°	6475	6555	6451
30°	6097	6371	6293
35°	5761	6107	6117
40°	5481	5777	5929
45°	5168	5427	5706
50°	4837	5115	5462
55°	4462	4758	5167
60°	4018	4342	4806
65°	3548	3861	4371
70°	2957	3288	3714
75°	2324	2626	2907
80°	1661	1849	2050
85°	1084	1084	1022



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.6	4.1
10°-20°	690.0	11.4
20°-30°	1008.3	16.7
30°-40°	1144.6	19.0
40°-50°	1104.9	18.3
50°-60°	911.5	15.1
60°-70°	606.9	10.1
70°-80°	271.6	4.5
80°-90°	48.6	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°	1943.9	32.2
0°-40°	3088.5	51.2
0°-60°	5104.9	84.6
0°-90°	6032.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6032.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2609	2609	2609	2609	2609	
5°	2606	2605	2595	2581	2573	247
15°	2455	2461	2455	2444	2427	692
25°	2181	2198	2208	2192	2173	999
35°	1754	1778	1859	1869	1862	1099
45°	1358	1381	1426	1491	1499	1048
55°	951	967	1014	1070	1101	849
65°	557	572	606	649	686	552
75°	224	236	253	265	280	244
85°	35	35	35	33	33	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2608.7	2608.7	2608.7	2608.7	2608.7
2.5°	2615.7	2616.7	2610.7	2594.7	2584.6
5°	2605.7	2604.7	2594.7	2580.6	2572.6
7.5°	2576.6	2578.6	2575.6	2555.6	2544.5
10°	2548.6	2549.6	2541.5	2525.5	2512.5
12.5°	2512.5	2511.5	2500.4	2492.4	2471.4
15°	2455.4	2461.4	2455.4	2444.3	2427.3
17.5°	2400.2	2400.2	2404.2	2385.2	2372.2
20°	2338.1	2341.1	2341.1	2326.1	2311.0
22.5°	2265.9	2275.0	2278.0	2261.9	2243.9
25°	2180.8	2197.8	2207.8	2191.8	2172.7
27.5°	2077.5	2103.6	2133.6	2121.6	2100.6
30°	1962.3	2000.4	2050.5	2040.4	2025.4
32.5°	1853.0	1891.1	1960.3	1956.3	1948.2
35°	1753.8	1777.9	1859.1	1869.1	1862.1
37.5°	1659.6	1681.7	1757.8	1780.9	1774.9
40°	1560.4	1584.5	1644.6	1685.7	1687.7
42.5°	1462.2	1485.2	1534.3	1593.5	1593.5
45°	1358.0	1381.0	1426.1	1491.2	1499.3
47.5°	1255.7	1279.8	1323.9	1389.0	1402.1
50°	1155.5	1177.6	1221.7	1284.8	1304.8
52.5°	1051.3	1075.3	1118.4	1176.6	1205.6
55°	951.1	967.1	1014.2	1070.3	1101.4
57.5°	846.8	861.9	915.0	963.1	995.2
60°	746.6	765.7	806.8	855.9	892.9
62.5°	650.4	670.5	705.5	748.6	790.7
65°	557.2	572.2	606.3	649.4	686.5
67.5°	467.0	480.0	514.1	544.2	583.3
70°	375.8	392.9	417.9	447.0	472.0
72.5°	302.7	309.7	330.7	351.8	377.8
75°	223.5	235.5	252.6	264.6	279.6
77.5°	160.3	167.4	177.4	187.4	201.4
80°	107.2	110.2	119.3	121.3	132.3
82.5°	65.1	67.1	69.2	70.2	74.2
85°	35.1	35.1	35.1	33.1	33.1
87.5°	20.0	20.0	17.0	14.0	10.0
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)