

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: P557543

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-93-87-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: P557543
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-35-UNV-93-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

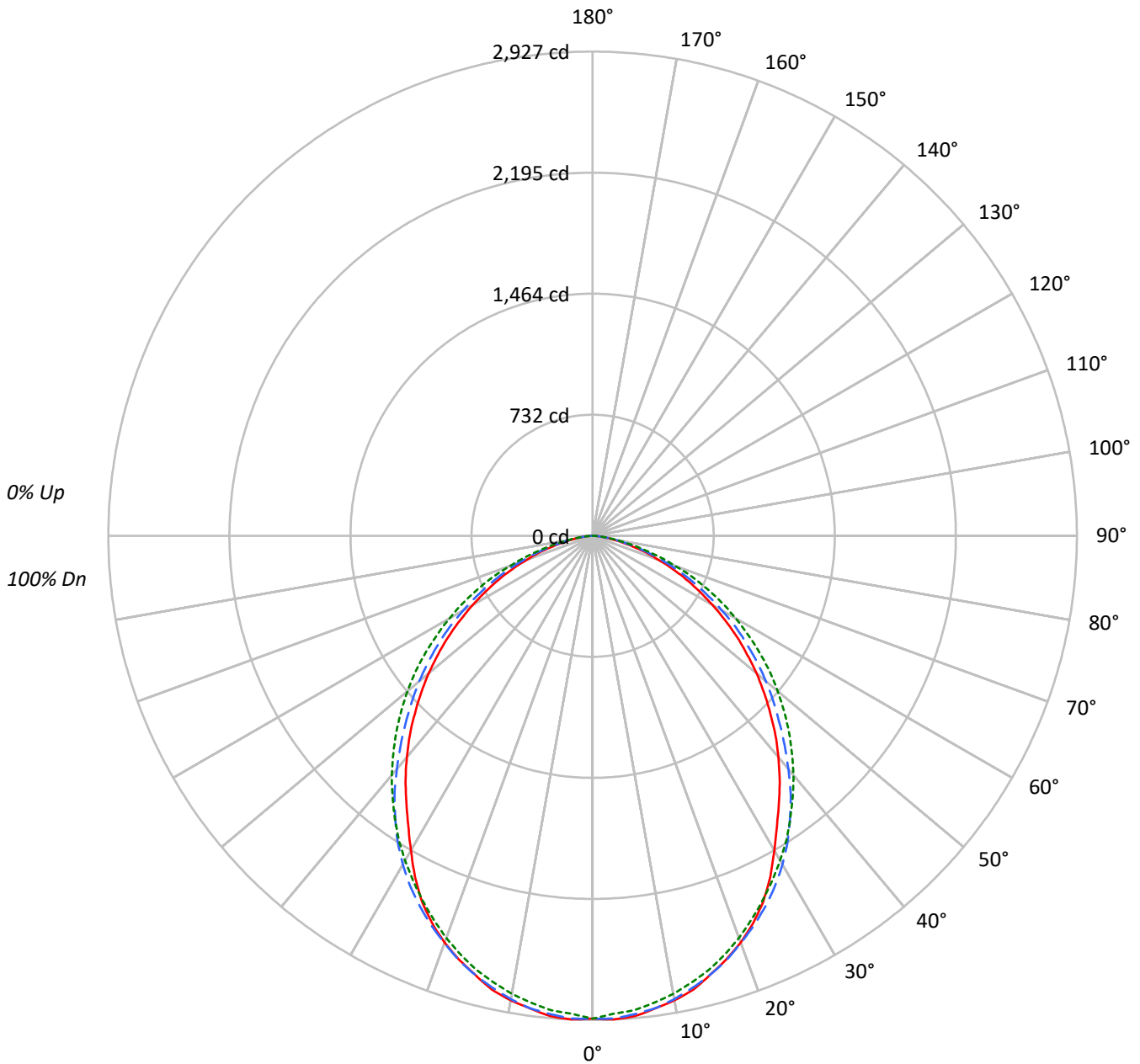
Lumens per Lamp: N/A
Luminaire Lumens: 6750.0 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (Ain): 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°	7856	7856	7856
5°	7876	7843	7776
10°	7793	7771	7682
15°	7655	7655	7567
20°	7493	7502	7406
25°	7246	7336	7219
30°	6823	7130	7043
35°	6447	6834	6845
40°	6134	6465	6634
45°	5783	6073	6385
50°	5413	5723	6113
55°	4993	5324	5782
60°	4497	4859	5378
65°	3970	4320	4891
70°	3309	3680	4156
75°	2600	2938	3253
80°	1860	2069	2294
85°	1213	1213	1142



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.9	4.1
10°-20°	772.1	11.4
20°-30°	1128.3	16.7
30°-40°	1280.8	19.0
40°-50°	1236.4	18.3
50°-60°	1019.9	15.1
60°-70°	679.2	10.1
70°-80°	303.9	4.5
80°-90°	54.4	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°	2175.3	32.2
0°-40°	3456.1	51.2
0°-60°	5712.5	84.6
0°-90°	6750.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6750.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2919	2919	2919	2919	2919	
5°	2916	2915	2904	2888	2879	276
15°	2748	2754	2748	2735	2716	775
25°	2440	2459	2471	2453	2431	1118
35°	1963	1990	2080	2092	2084	1230
45°	1520	1545	1596	1669	1678	1172
55°	1064	1082	1135	1198	1232	950
65°	624	640	678	727	768	618
75°	250	264	283	296	313	273
85°	39	39	39	37	37	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2919.2	2919.2	2919.2	2919.2	2919.2
2.5°	2927.1	2928.2	2921.4	2903.5	2892.3
5°	2915.8	2914.7	2903.5	2887.8	2878.8
7.5°	2883.3	2885.6	2882.2	2859.8	2847.4
10°	2851.9	2853.0	2844.1	2826.1	2811.5
12.5°	2811.5	2810.4	2798.1	2789.1	2765.6
15°	2747.6	2754.3	2747.6	2735.3	2716.2
17.5°	2685.9	2685.9	2690.4	2669.1	2654.5
20°	2616.4	2619.8	2619.8	2602.9	2586.1
22.5°	2535.7	2545.7	2549.1	2531.2	2511.0
25°	2440.3	2459.4	2470.6	2452.7	2431.4
27.5°	2324.8	2354.0	2387.6	2374.2	2350.6
30°	2195.8	2238.5	2294.5	2283.3	2266.5
32.5°	2073.6	2116.2	2193.6	2189.1	2180.1
35°	1962.6	1989.5	2080.3	2091.6	2083.7
37.5°	1857.2	1881.8	1967.1	1992.9	1986.1
40°	1746.1	1773.1	1840.3	1886.3	1888.6
42.5°	1636.2	1662.0	1717.0	1783.1	1783.1
45°	1519.6	1545.4	1595.9	1668.8	1677.7
47.5°	1405.2	1432.1	1481.5	1554.4	1568.9
50°	1293.1	1317.7	1367.1	1437.7	1460.2
52.5°	1176.4	1203.3	1251.6	1316.6	1349.1
55°	1064.3	1082.2	1134.9	1197.7	1232.5
57.5°	947.6	964.5	1023.9	1077.7	1113.6
60°	835.5	856.8	902.8	957.7	999.2
62.5°	727.8	750.3	789.5	837.7	884.8
65°	623.5	640.4	678.5	726.7	768.2
67.5°	522.6	537.2	575.3	609.0	652.7
70°	420.6	439.6	467.7	500.2	528.2
72.5°	338.7	346.5	370.1	393.6	422.8
75°	250.1	263.5	282.6	296.1	312.9
77.5°	179.4	187.3	198.5	209.7	225.4
80°	120.0	123.4	133.5	135.7	148.0
82.5°	72.9	75.1	77.4	78.5	83.0
85°	39.3	39.3	39.3	37.0	37.0
87.5°	22.4	22.4	19.1	15.7	11.2
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)