

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: P557513

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-81-88-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: P557513
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-81-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

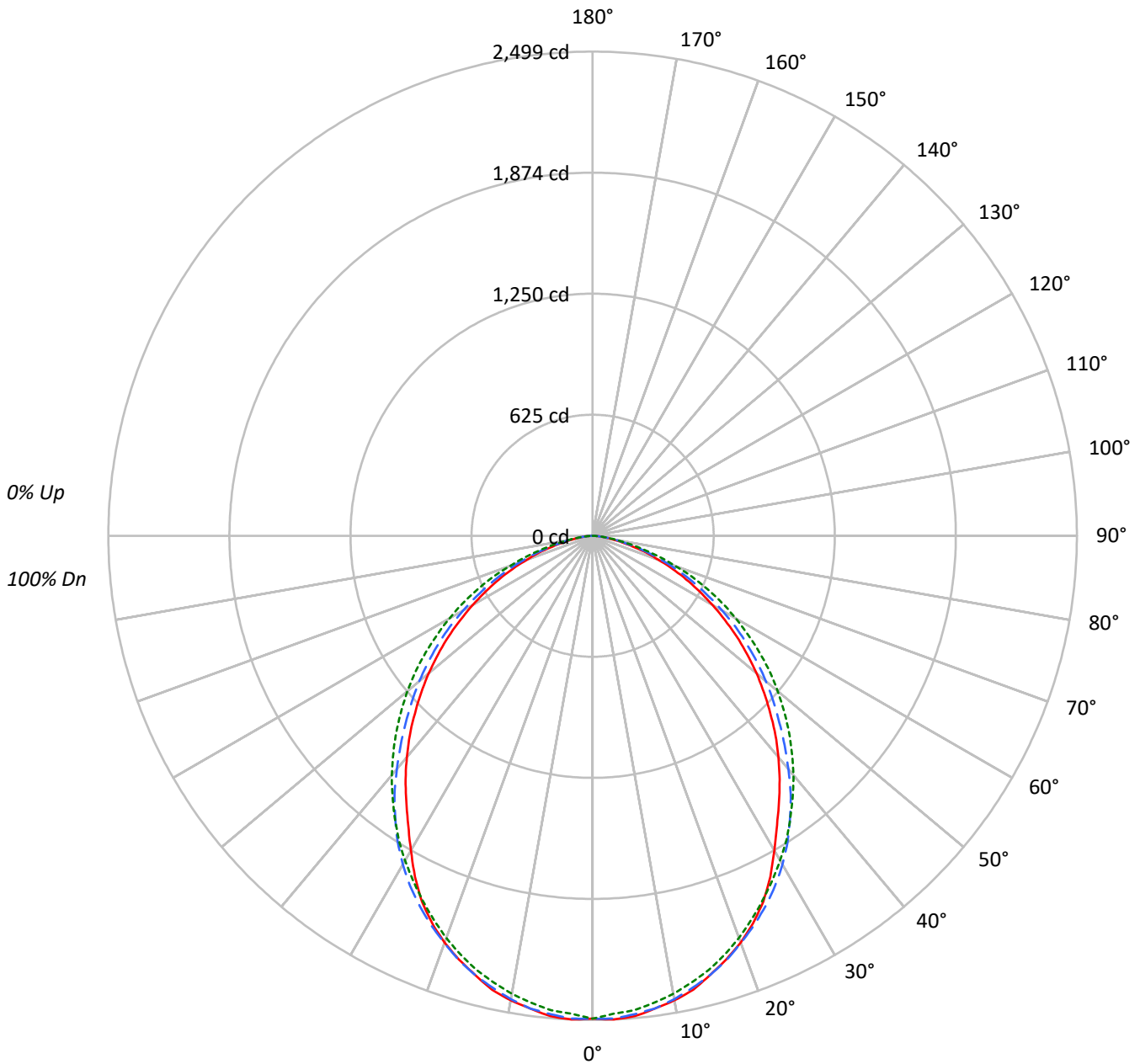
Lumens per Lamp: N/A
Luminaire Lumens: 5763.0 lumens
Efficiency: N/A
Efficacy: 86.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	6707	6707	6707
5°	6725	6696	6639
10°	6653	6635	6559
15°	6535	6535	6461
20°	6397	6405	6323
25°	6186	6263	6163
30°	5826	6087	6013
35°	5504	5835	5844
40°	5237	5519	5664
45°	4937	5185	5451
50°	4622	4886	5219
55°	4263	4546	4937
60°	3839	4148	4591
65°	3390	3689	4176
70°	2825	3142	3548
75°	2220	2509	2777
80°	1588	1765	1959
85°	1034	1034	976



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.7	4.1
10°-20°	659.2	11.4
20°-30°	963.4	16.7
30°-40°	1093.5	19.0
40°-50°	1055.6	18.3
50°-60°	870.8	15.1
60°-70°	579.9	10.1
70°-80°	259.5	4.5
80°-90°	46.4	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°	1857.3	32.2
0°-40°	2950.8	51.2
0°-60°	4877.2	84.6
0°-90°	5763.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5763.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2492	2492	2492	2492	2492	
5°	2490	2488	2479	2466	2458	236
15°	2346	2352	2346	2335	2319	661
25°	2084	2100	2109	2094	2076	954
35°	1676	1699	1776	1786	1779	1050
45°	1297	1319	1362	1425	1432	1001
55°	909	924	969	1023	1052	811
65°	532	547	579	620	656	528
75°	214	225	241	253	267	233
85°	34	34	34	32	32	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2492.3	2492.3	2492.3	2492.3	2492.3
2.5°	2499.1	2500.0	2494.3	2478.9	2469.4
5°	2489.5	2488.5	2478.9	2465.5	2457.9
7.5°	2461.7	2463.6	2460.8	2441.6	2431.1
10°	2434.9	2435.9	2428.2	2412.9	2400.4
12.5°	2400.4	2399.5	2388.9	2381.3	2361.2
15°	2345.9	2351.6	2345.9	2335.3	2319.0
17.5°	2293.2	2293.2	2297.0	2278.8	2266.4
20°	2233.8	2236.7	2236.7	2222.3	2208.0
22.5°	2164.9	2173.5	2176.4	2161.1	2143.8
25°	2083.5	2099.8	2109.4	2094.0	2075.8
27.5°	1984.9	2009.8	2038.5	2027.0	2006.9
30°	1874.8	1911.2	1959.0	1949.5	1935.1
32.5°	1770.4	1806.8	1872.9	1869.0	1861.4
35°	1675.6	1698.6	1776.1	1785.7	1779.0
37.5°	1585.6	1606.7	1679.4	1701.5	1695.7
40°	1490.8	1513.8	1571.2	1610.5	1612.4
42.5°	1397.0	1419.0	1465.9	1522.4	1522.4
45°	1297.4	1319.4	1362.5	1424.7	1432.4
47.5°	1199.7	1222.7	1264.8	1327.1	1339.5
50°	1104.0	1125.1	1167.2	1227.5	1246.7
52.5°	1004.4	1027.4	1068.6	1124.1	1151.9
55°	908.7	924.0	969.0	1022.6	1052.3
57.5°	809.1	823.4	874.2	920.1	950.8
60°	713.3	731.5	770.8	817.7	853.1
62.5°	621.4	640.6	674.1	715.2	755.5
65°	532.4	546.7	579.3	620.5	655.9
67.5°	446.2	458.6	491.2	519.9	557.3
70°	359.1	375.3	399.3	427.0	451.0
72.5°	289.2	295.9	316.0	336.1	361.0
75°	213.5	225.0	241.3	252.8	267.1
77.5°	153.2	159.9	169.5	179.1	192.5
80°	102.5	105.3	113.9	115.9	126.4
82.5°	62.2	64.2	66.1	67.0	70.9
85°	33.5	33.5	33.5	31.6	31.6
87.5°	19.1	19.1	16.3	13.4	9.6
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)