

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: P557586

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-82-85-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: P557586
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-40-UNV-82-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

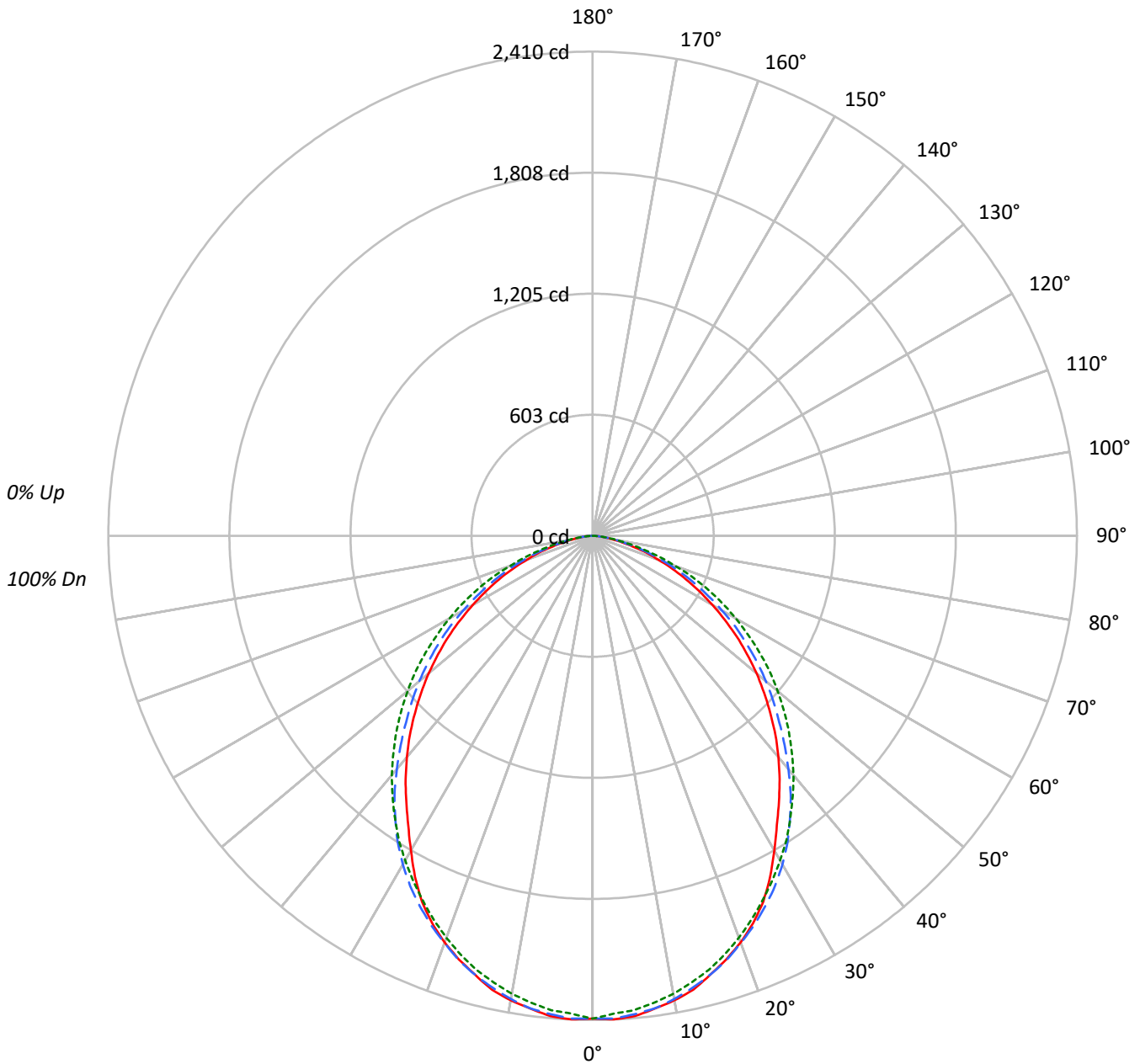
Lumens per Lamp: N/A
Luminaire Lumens: 5557.0 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	6467	6467	6467
5°	6484	6457	6402
10°	6416	6398	6325
15°	6302	6302	6230
20°	6168	6176	6097
25°	5965	6039	5943
30°	5617	5870	5798
35°	5308	5626	5635
40°	5050	5322	5462
45°	4761	5000	5256
50°	4456	4712	5032
55°	4111	4383	4761
60°	3702	4000	4427
65°	3268	3557	4027
70°	2724	3029	3422
75°	2141	2419	2678
80°	1531	1703	1889
85°	997	997	942



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.3	4.1
10°-20°	635.7	11.4
20°-30°	928.9	16.7
30°-40°	1054.4	19.0
40°-50°	1017.9	18.3
50°-60°	839.7	15.1
60°-70°	559.2	10.1
70°-80°	250.2	4.5
80°-90°	44.8	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°	1790.9	32.2
0°-40°	2845.3	51.2
0°-60°	4702.8	84.6
0°-90°	5557.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5557.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2403	2403	2403	2403	2403	
5°	2400	2400	2390	2377	2370	227
15°	2262	2268	2262	2252	2236	638
25°	2009	2025	2034	2019	2002	920
35°	1616	1638	1713	1722	1715	1012
45°	1251	1272	1314	1374	1381	965
55°	876	891	934	986	1015	782
65°	513	527	559	598	632	509
75°	206	217	233	244	258	225
85°	32	32	32	30	30	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2403.3	2403.3	2403.3	2403.3	2403.3
2.5°	2409.7	2410.6	2405.1	2390.3	2381.1
5°	2400.5	2399.6	2390.3	2377.4	2370.0
7.5°	2373.7	2375.6	2372.8	2354.3	2344.2
10°	2347.9	2348.8	2341.4	2326.6	2314.6
12.5°	2314.6	2313.7	2303.5	2296.2	2276.8
15°	2262.0	2267.5	2262.0	2251.8	2236.1
17.5°	2211.2	2211.2	2214.9	2197.4	2185.4
20°	2154.0	2156.7	2156.7	2142.9	2129.0
22.5°	2087.5	2095.8	2098.6	2083.8	2067.2
25°	2009.0	2024.7	2034.0	2019.2	2001.6
27.5°	1913.9	1937.9	1965.6	1954.6	1935.2
30°	1807.8	1842.8	1889.0	1879.8	1865.9
32.5°	1707.1	1742.2	1805.9	1802.2	1794.8
35°	1615.7	1637.9	1712.7	1721.9	1715.4
37.5°	1528.9	1549.2	1619.4	1640.6	1635.1
40°	1437.5	1459.7	1515.1	1552.9	1554.8
42.5°	1347.0	1368.3	1413.5	1468.0	1468.0
45°	1251.0	1272.3	1313.8	1373.8	1381.2
47.5°	1156.9	1179.0	1219.6	1279.6	1291.6
50°	1064.5	1084.8	1125.5	1183.6	1202.1
52.5°	968.5	990.7	1030.4	1083.9	1110.7
55°	876.2	891.0	934.3	986.0	1014.7
57.5°	780.2	794.0	842.9	887.3	916.8
60°	687.8	705.4	743.2	788.5	822.6
62.5°	599.2	617.7	650.0	689.7	728.5
65°	513.3	527.2	558.6	598.3	632.4
67.5°	430.2	442.2	473.6	501.3	537.3
70°	346.2	361.9	385.0	411.8	434.9
72.5°	278.8	285.3	304.7	324.1	348.1
75°	205.9	217.0	232.7	243.7	257.6
77.5°	147.7	154.2	163.4	172.7	185.6
80°	98.8	101.6	109.9	111.7	121.9
82.5°	60.0	61.9	63.7	64.6	68.3
85°	32.3	32.3	32.3	30.5	30.5
87.5°	18.5	18.5	15.7	12.9	9.2
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)