

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: P557472

Luminaire Tested: **FUSL-12-4-LD4-2STD-30-UNV-93-84-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: P557472
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-93-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

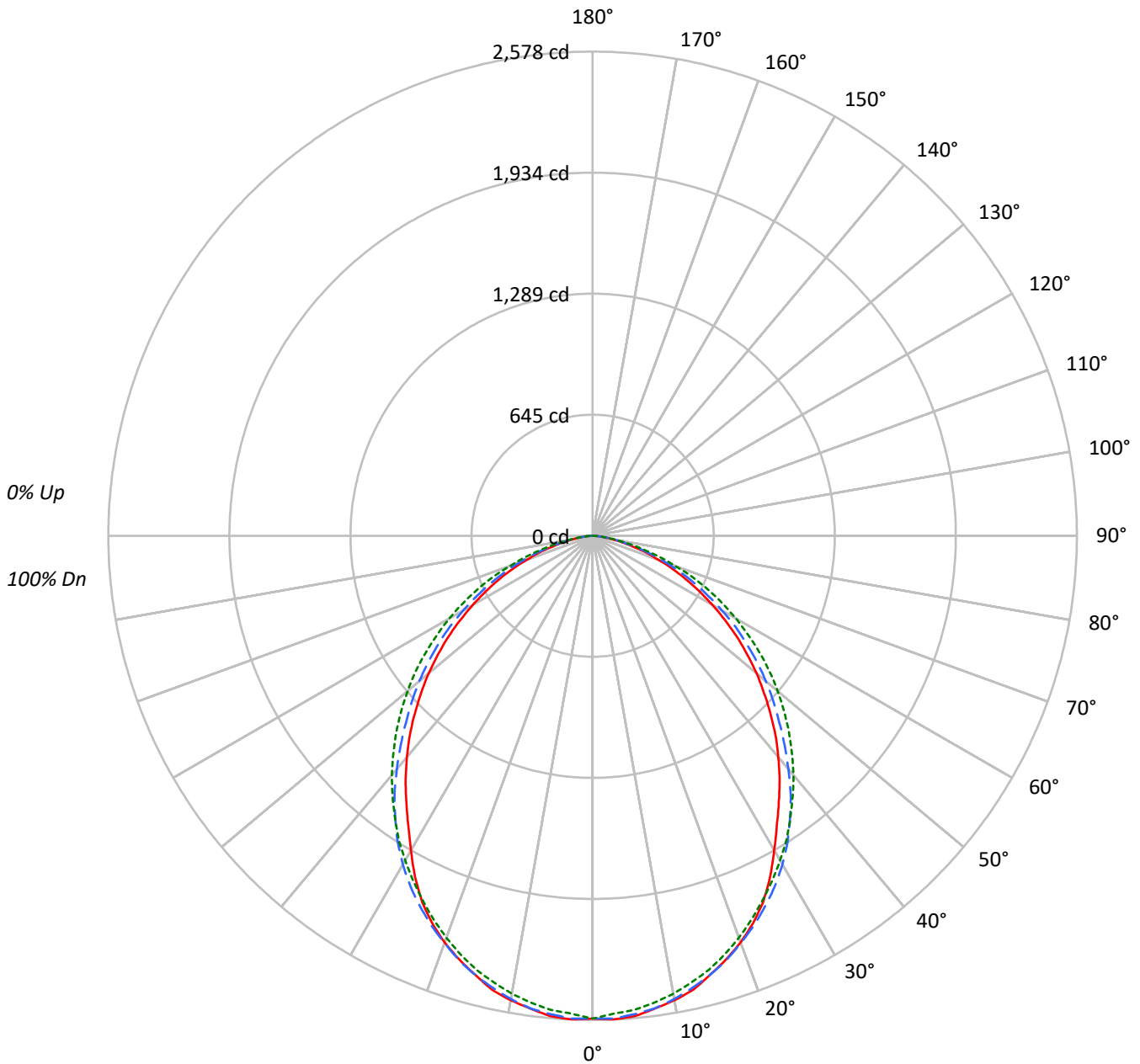
Lumens per Lamp: N/A
Luminaire Lumens: 5944.0 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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					20					
RC	80					70					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°	6917	6917	6917
5°	6936	6907	6848
10°	6862	6844	6765
15°	6741	6741	6664
20°	6598	6606	6521
25°	6380	6460	6357
30°	6008	6279	6202
35°	5677	6018	6028
40°	5401	5693	5842
45°	5092	5348	5622
50°	4767	5040	5383
55°	4397	4689	5092
60°	3960	4279	4736
65°	3496	3805	4308
70°	2913	3240	3659
75°	2289	2588	2864
80°	1638	1821	2021
85°	1068	1068	1007



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.0	4.1
10°-20°	679.9	11.4
20°-30°	993.6	16.7
30°-40°	1127.9	19.0
40°-50°	1088.8	18.3
50°-60°	898.2	15.1
60°-70°	598.1	10.1
70°-80°	267.6	4.5
80°-90°	47.9	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°	1915.6	32.2
0°-40°	3043.4	51.2
0°-60°	5030.4	84.6
0°-90°	5944.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5944.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2571	2571	2571	2571	2571	
5°	2568	2567	2557	2543	2535	243
15°	2420	2426	2420	2409	2392	682
25°	2149	2166	2176	2160	2141	984
35°	1728	1752	1832	1842	1835	1083
45°	1338	1361	1405	1470	1477	1032
55°	937	953	999	1055	1085	836
65°	549	564	598	640	676	544
75°	220	232	249	261	276	241
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°	2570.6	2570.6	2570.6	2570.6	2570.6
2.5°	2577.5	2578.5	2572.6	2556.8	2546.9
5°	2567.7	2566.7	2556.8	2543.0	2535.1
7.5°	2539.0	2541.0	2538.0	2518.3	2507.4
10°	2511.4	2512.4	2504.5	2488.7	2475.8
12.5°	2475.8	2474.8	2464.0	2456.1	2435.3
15°	2419.5	2425.5	2419.5	2408.7	2391.9
17.5°	2365.2	2365.2	2369.2	2350.4	2337.6
20°	2304.0	2306.9	2306.9	2292.1	2277.3
22.5°	2232.9	2241.8	2244.7	2228.9	2211.2
25°	2148.9	2165.7	2175.6	2159.8	2141.0
27.5°	2047.2	2072.9	2102.5	2090.7	2069.9
30°	1933.6	1971.2	2020.6	2010.7	1995.9
32.5°	1826.0	1863.5	1931.7	1927.7	1919.8
35°	1728.2	1751.9	1831.9	1841.8	1834.9
37.5°	1635.4	1657.1	1732.2	1754.9	1749.0
40°	1537.6	1561.3	1620.6	1661.1	1663.1
42.5°	1440.9	1463.6	1512.0	1570.2	1570.2
45°	1338.1	1360.9	1405.3	1469.5	1477.4
47.5°	1237.4	1261.1	1304.6	1368.8	1381.6
50°	1138.7	1160.4	1203.8	1266.1	1285.8
52.5°	1036.0	1059.7	1102.1	1159.4	1188.0
55°	937.2	953.0	999.4	1054.7	1085.3
57.5°	834.5	849.3	901.6	949.0	980.7
60°	735.7	754.5	795.0	843.4	879.9
62.5°	640.9	660.7	695.2	737.7	779.2
65°	549.1	563.9	597.5	639.9	676.5
67.5°	460.2	473.0	506.6	536.2	574.8
70°	370.3	387.1	411.8	440.5	465.1
72.5°	298.2	305.2	325.9	346.6	372.3
75°	220.2	232.1	248.9	260.7	275.5
77.5°	158.0	164.9	174.8	184.7	198.5
80°	105.7	108.6	117.5	119.5	130.4
82.5°	64.2	66.2	68.1	69.1	73.1
85°	34.6	34.6	34.6	32.6	32.6
87.5°	19.8	19.8	16.8	13.8	9.9
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)