

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: P557578

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-81-94-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: P557578
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-81-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

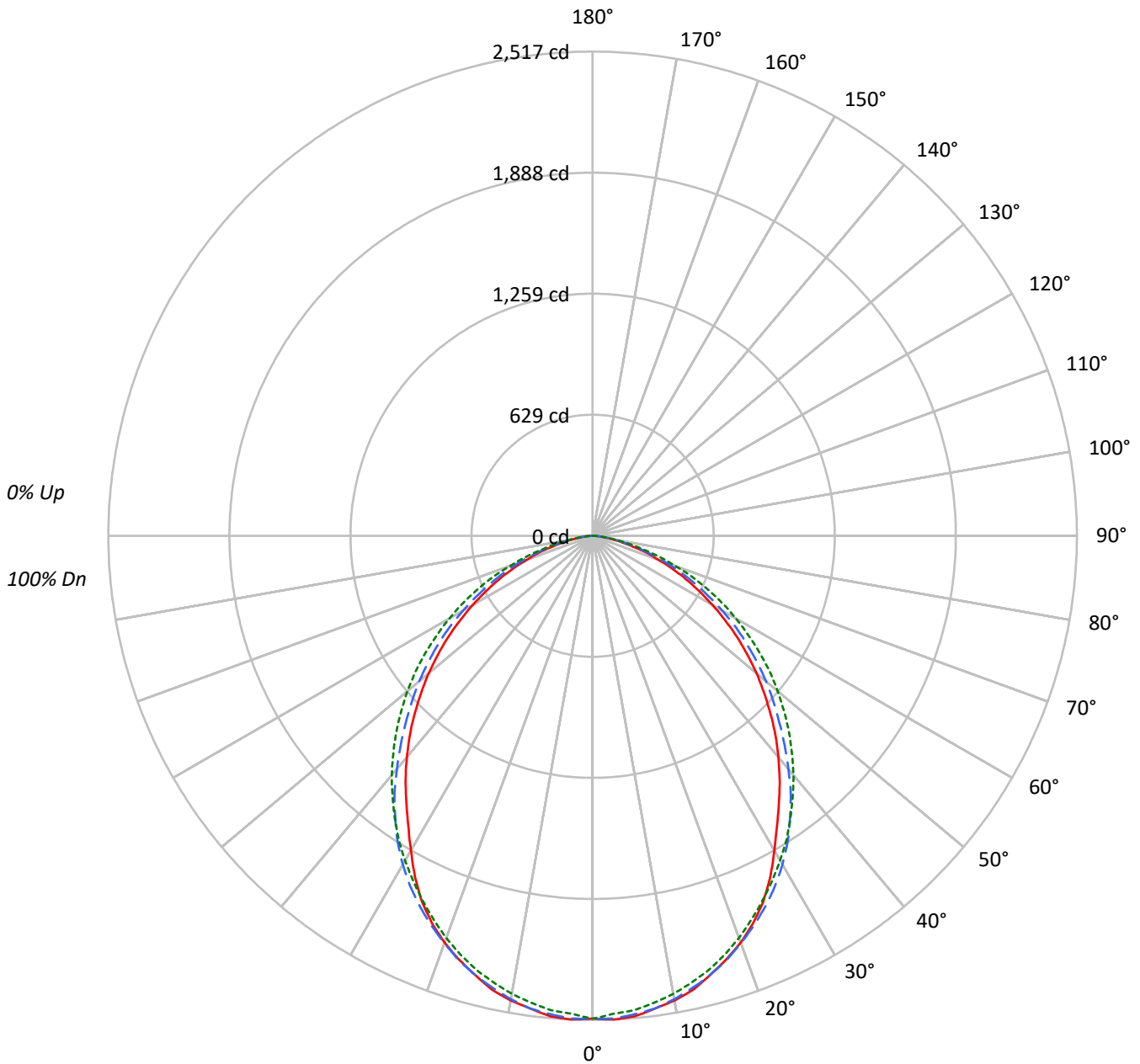
Lumens per Lamp: N/A
Luminaire Lumens: 5805.0 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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									
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°	6756	6756	6756
5°	6774	6745	6688
10°	6702	6683	6607
15°	6583	6583	6508
20°	6444	6452	6369
25°	6231	6309	6209
30°	5868	6132	6057
35°	5545	5877	5887
40°	5275	5560	5706
45°	4974	5223	5491
50°	4655	4922	5257
55°	4294	4579	4973
60°	3867	4179	4625
65°	3414	3715	4207
70°	2846	3164	3574
75°	2236	2527	2798
80°	1599	1779	1973
85°	1044	1044	982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.4	4.1
10°-20°	664.0	11.4
20°-30°	970.4	16.7
30°-40°	1101.5	19.0
40°-50°	1063.3	18.3
50°-60°	877.2	15.1
60°-70°	584.1	10.1
70°-80°	261.4	4.5
80°-90°	46.8	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°	1870.8	32.2
0°-40°	2972.3	51.2
0°-60°	4912.7	84.6
0°-90°	5805.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5805.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2510	2510	2510	2510	2510	
5°	2508	2507	2497	2484	2476	237
15°	2363	2369	2363	2352	2336	666
25°	2099	2115	2125	2109	2091	961
35°	1688	1711	1789	1799	1792	1058
45°	1307	1329	1372	1435	1443	1008
55°	915	931	976	1030	1060	817
65°	536	551	584	625	661	532
75°	215	227	243	255	269	235
85°	34	34	34	32	32	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2510.5	2510.5	2510.5	2510.5	2510.5
2.5°	2517.3	2518.2	2512.4	2497.0	2487.4
5°	2507.6	2506.7	2497.0	2483.5	2475.8
7.5°	2479.6	2481.6	2478.7	2459.4	2448.8
10°	2452.6	2453.6	2445.9	2430.5	2417.9
12.5°	2417.9	2417.0	2406.3	2398.6	2378.4
15°	2362.9	2368.7	2362.9	2352.3	2335.9
17.5°	2309.9	2309.9	2313.8	2295.4	2282.9
20°	2250.1	2253.0	2253.0	2238.5	2224.1
22.5°	2180.7	2189.3	2192.2	2176.8	2159.4
25°	2098.7	2115.1	2124.7	2109.3	2091.0
27.5°	1999.3	2024.4	2053.4	2041.8	2021.5
30°	1888.4	1925.1	1973.3	1963.7	1949.2
32.5°	1783.3	1820.0	1886.5	1882.6	1874.9
35°	1687.8	1711.0	1789.1	1798.7	1792.0
37.5°	1597.2	1618.4	1691.7	1713.9	1708.1
40°	1501.7	1524.8	1582.7	1622.2	1624.2
42.5°	1407.2	1429.3	1476.6	1533.5	1533.5
45°	1306.9	1329.0	1372.4	1435.1	1442.8
47.5°	1208.5	1231.6	1274.1	1336.8	1349.3
50°	1112.0	1133.3	1175.7	1236.4	1255.7
52.5°	1011.7	1034.9	1076.3	1132.3	1160.3
55°	915.3	930.7	976.0	1030.1	1060.0
57.5°	815.0	829.4	880.6	926.9	957.7
60°	718.5	736.9	776.4	823.7	859.3
62.5°	625.9	645.2	679.0	720.5	761.0
65°	536.2	550.7	583.5	625.0	660.7
67.5°	449.4	462.0	494.8	523.7	561.3
70°	361.7	378.1	402.2	430.2	454.3
72.5°	291.3	298.0	318.3	338.5	363.6
75°	215.1	226.7	243.0	254.6	269.1
77.5°	154.3	161.1	170.7	180.4	193.9
80°	103.2	106.1	114.8	116.7	127.3
82.5°	62.7	64.6	66.5	67.5	71.4
85°	33.8	33.8	33.8	31.8	31.8
87.5°	19.3	19.3	16.4	13.5	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)