

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: P557596

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-82-96-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: P557596
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-82-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

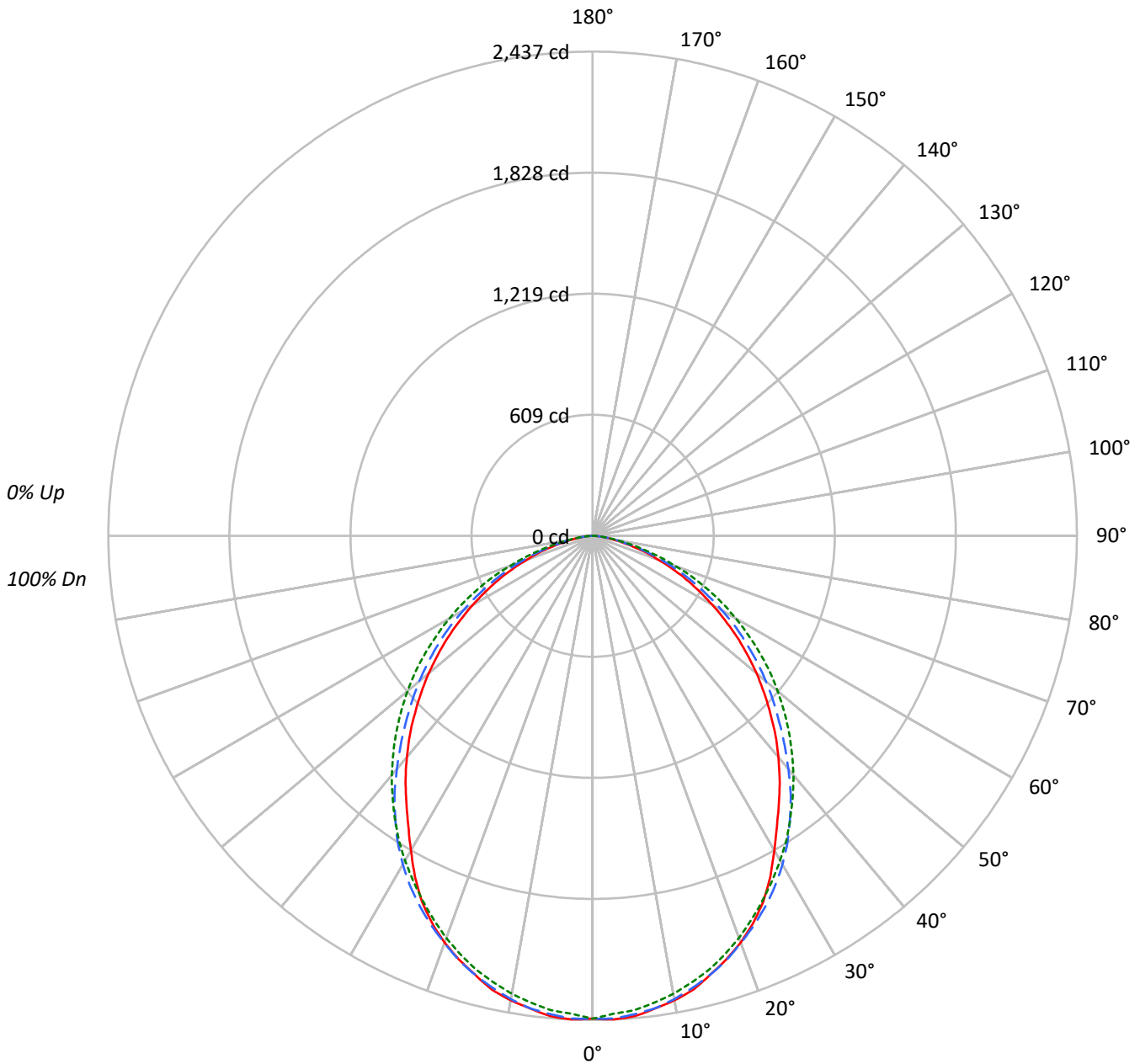
Lumens per Lamp: N/A
Luminaire Lumens: 5620.0 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	6540	6540	6540
5°	6558	6530	6475
10°	6488	6470	6396
15°	6373	6373	6300
20°	6238	6246	6166
25°	6033	6108	6010
30°	5681	5936	5864
35°	5368	5690	5699
40°	5107	5383	5524
45°	4815	5057	5316
50°	4507	4765	5089
55°	4157	4433	4814
60°	3744	4046	4478
65°	3306	3597	4073
70°	2755	3064	3460
75°	2165	2446	2708
80°	1548	1722	1911
85°	1010	1010	951



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.8	4.1
10°-20°	642.9	11.4
20°-30°	939.5	16.7
30°-40°	1066.4	19.0
40°-50°	1029.4	18.3
50°-60°	849.2	15.1
60°-70°	565.5	10.1
70°-80°	253.0	4.5
80°-90°	45.3	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°	1811.2	32.2
0°-40°	2877.5	51.2
0°-60°	4756.2	84.6
0°-90°	5620.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5620.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2430	2430	2430	2430	2430	
5°	2428	2427	2417	2404	2397	230
15°	2288	2293	2288	2277	2262	645
25°	2032	2048	2057	2042	2024	930
35°	1634	1656	1732	1741	1735	1024
45°	1265	1287	1329	1389	1397	976
55°	886	901	945	997	1026	791
65°	519	533	565	605	640	515
75°	208	219	235	246	260	228
85°	33	33	33	31	31	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2430.5	2430.5	2430.5	2430.5	2430.5
2.5°	2437.0	2438.0	2432.4	2417.4	2408.1
5°	2427.7	2426.8	2417.4	2404.4	2396.9
7.5°	2400.6	2402.5	2399.7	2381.0	2370.7
10°	2374.5	2375.4	2367.9	2353.0	2340.9
12.5°	2340.9	2339.9	2329.7	2322.2	2302.6
15°	2287.6	2293.2	2287.6	2277.4	2261.5
17.5°	2236.3	2236.3	2240.0	2222.3	2210.1
20°	2178.4	2181.2	2181.2	2167.2	2153.2
22.5°	2111.2	2119.6	2122.4	2107.4	2090.6
25°	2031.8	2047.7	2057.0	2042.1	2024.3
27.5°	1935.6	1959.9	1987.9	1976.7	1957.1
30°	1828.2	1863.7	1910.4	1901.1	1887.1
32.5°	1726.5	1762.0	1826.4	1822.6	1815.2
35°	1634.0	1656.4	1732.1	1741.4	1734.9
37.5°	1546.3	1566.8	1637.8	1659.2	1653.6
40°	1453.8	1476.2	1532.3	1570.5	1572.4
42.5°	1362.3	1383.8	1429.5	1484.6	1484.6
45°	1265.2	1286.7	1328.7	1389.4	1396.9
47.5°	1170.0	1192.4	1233.5	1294.2	1306.3
50°	1076.6	1097.1	1138.2	1197.0	1215.7
52.5°	979.5	1001.9	1042.0	1096.2	1123.3
55°	886.1	901.1	944.9	997.2	1026.2
57.5°	789.0	803.0	852.5	897.3	927.2
60°	695.6	713.4	751.7	797.4	832.0
62.5°	606.0	624.7	657.3	697.5	736.7
65°	519.2	533.2	564.9	605.1	639.6
67.5°	435.1	447.3	479.0	507.0	543.4
70°	350.1	366.0	389.4	416.4	439.8
72.5°	282.0	288.5	308.1	327.7	352.0
75°	208.2	219.4	235.3	246.5	260.5
77.5°	149.4	155.9	165.3	174.6	187.7
80°	99.9	102.7	111.1	113.0	123.3
82.5°	60.7	62.6	64.4	65.4	69.1
85°	32.7	32.7	32.7	30.8	30.8
87.5°	18.7	18.7	15.9	13.1	9.3
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)