

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: P557652

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-82-86-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: P557652
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-50-UNV-82-86-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

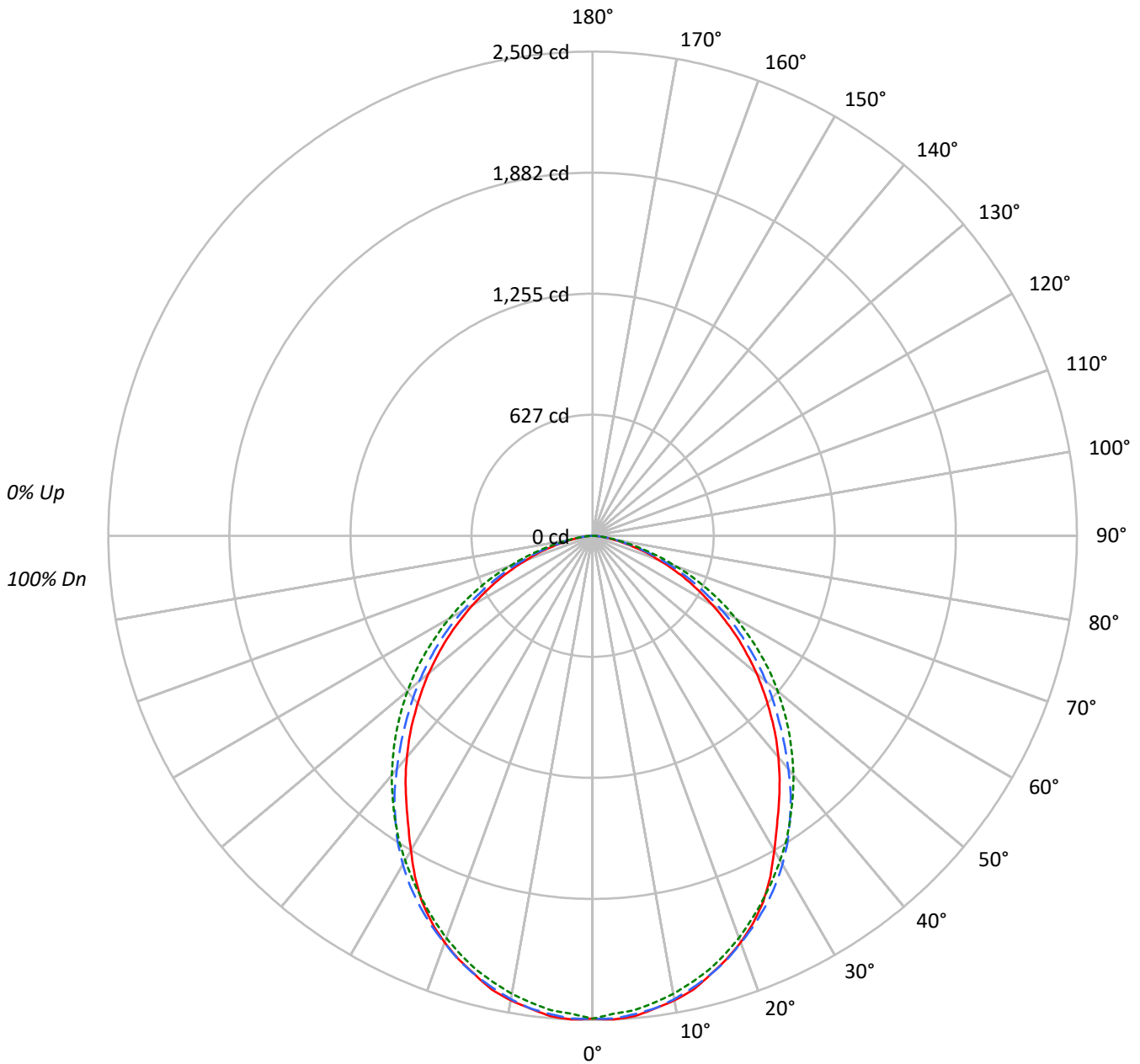
Lumens per Lamp: N/A
Luminaire Lumens: 5786.0 lumens
Efficiency: N/A
Efficacy: 86.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P557652

CATALOG NUMBER: FUSL-12-4-LD4-2STD-50-UNV-82-86-EDD-90

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6734	6734	6734
5°	6752	6723	6666
10°	6680	6662	6585
15°	6561	6561	6486
20°	6422	6431	6348
25°	6211	6288	6188
30°	5849	6111	6037
35°	5526	5858	5867
40°	5258	5541	5687
45°	4957	5206	5473
50°	4640	4906	5240
55°	4280	4564	4957
60°	3855	4165	4610
65°	3403	3703	4193
70°	2836	3154	3563
75°	2229	2519	2789
80°	1595	1773	1967
85°	1037	1037	979



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.6	4.1
10°-20°	661.9	11.4
20°-30°	967.2	16.7
30°-40°	1097.9	19.0
40°-50°	1059.8	18.3
50°-60°	874.3	15.1
60°-70°	582.2	10.1
70°-80°	260.5	4.5
80°-90°	46.6	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°	1864.7	32.2
0°-40°	2962.5	51.2
0°-60°	4896.6	84.6
0°-90°	5786.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5786.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2502	2502	2502	2502	2502	
5°	2499	2498	2489	2475	2468	237
15°	2355	2361	2355	2345	2328	664
25°	2092	2108	2118	2102	2084	958
35°	1682	1705	1783	1793	1786	1054
45°	1303	1325	1368	1430	1438	1005
55°	912	928	973	1027	1056	814
65°	534	549	582	623	658	530
75°	214	226	242	254	268	234
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°	2502.3	2502.3	2502.3	2502.3	2502.3
2.5°	2509.0	2510.0	2504.2	2488.8	2479.2
5°	2499.4	2498.5	2488.8	2475.4	2467.7
7.5°	2471.5	2473.5	2470.6	2451.3	2440.8
10°	2444.6	2445.6	2437.9	2422.5	2410.0
12.5°	2410.0	2409.0	2398.5	2390.8	2370.6
15°	2355.2	2361.0	2355.2	2344.6	2328.3
17.5°	2302.3	2302.3	2306.2	2287.9	2275.4
20°	2242.7	2245.6	2245.6	2231.2	2216.8
22.5°	2173.5	2182.2	2185.1	2169.7	2152.4
25°	2091.8	2108.2	2117.8	2102.4	2084.1
27.5°	1992.8	2017.8	2046.6	2035.1	2014.9
30°	1882.2	1918.8	1966.8	1957.2	1942.8
32.5°	1777.5	1814.0	1880.3	1876.5	1868.8
35°	1682.3	1705.4	1783.2	1792.8	1786.1
37.5°	1591.9	1613.1	1686.1	1708.3	1702.5
40°	1496.8	1519.8	1577.5	1616.9	1618.8
42.5°	1402.6	1424.7	1471.8	1528.5	1528.5
45°	1302.6	1324.7	1367.9	1430.4	1438.1
47.5°	1204.5	1227.6	1269.9	1332.4	1344.9
50°	1108.4	1129.5	1171.8	1232.4	1251.6
52.5°	1008.4	1031.5	1072.8	1128.6	1156.5
55°	912.3	927.7	972.8	1026.7	1056.5
57.5°	812.3	826.7	877.7	923.8	954.6
60°	716.2	734.4	773.9	821.0	856.5
62.5°	623.9	643.1	676.8	718.1	758.5
65°	534.5	548.9	581.6	622.9	658.5
67.5°	448.0	460.5	493.2	522.0	559.5
70°	360.5	376.8	400.9	428.7	452.8
72.5°	290.3	297.0	317.2	337.4	362.4
75°	214.4	225.9	242.3	253.8	268.2
77.5°	153.8	160.5	170.2	179.8	193.2
80°	102.9	105.7	114.4	116.3	126.9
82.5°	62.5	64.4	66.3	67.3	71.1
85°	33.6	33.6	33.6	31.7	31.7
87.5°	19.2	19.2	16.3	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)