

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: P558419

Luminaire Tested: **FUSL-12-4-LD4-3STD-50-UNV-82-85-EDD**

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: P558419
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-LD4-3STD-50-UNV-82-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

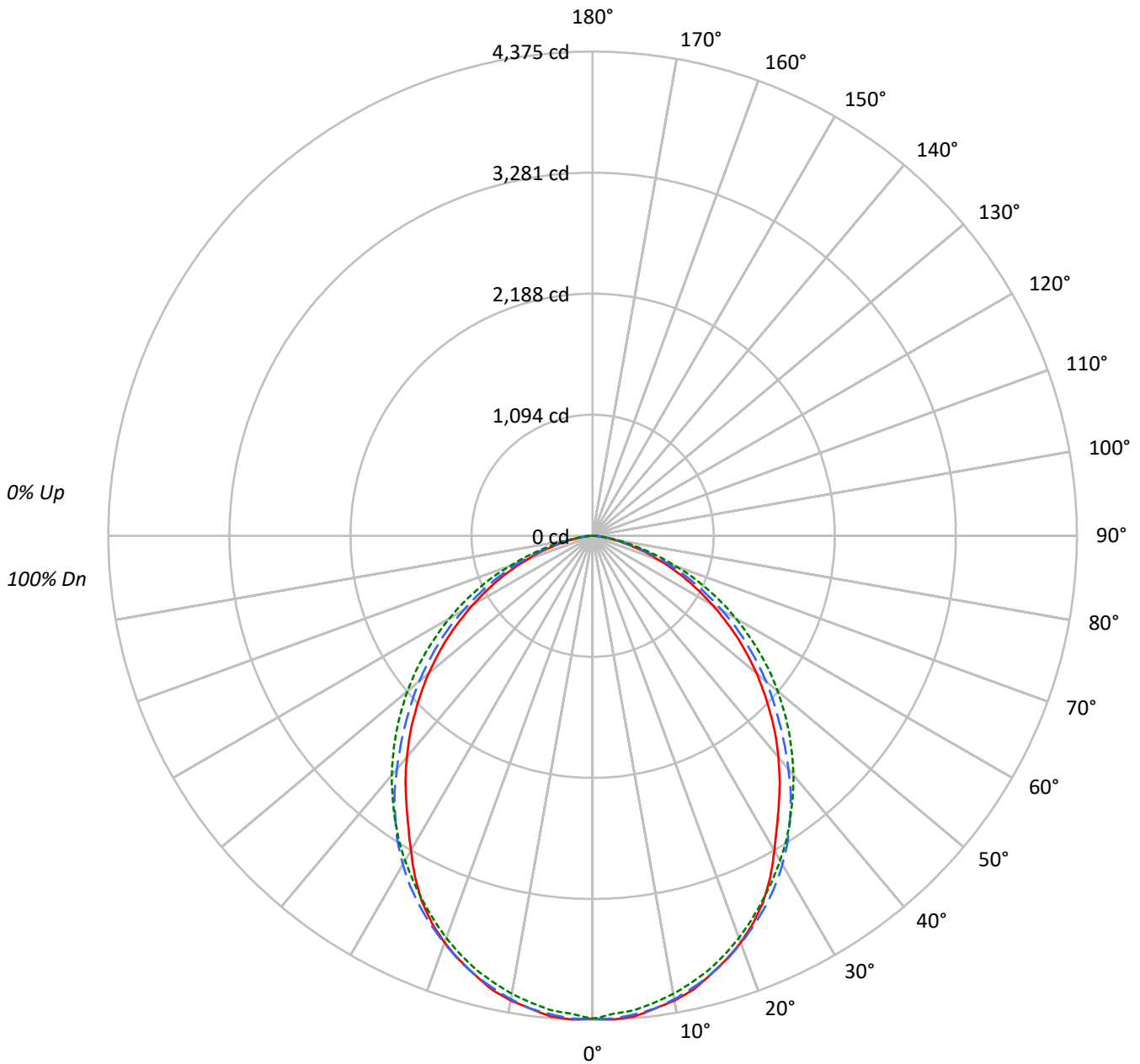
Lumens per Lamp: N/A
Luminaire Lumens: 10090.0 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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

TEST NUMBER: P558419

CATALOG NUMBER: FUSL-12-4-LD4-3STD-50-UNV-82-85-EDD

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°	11743	11743	11743
5°	11774	11724	11624
10°	11649	11617	11484
15°	11442	11442	11311
20°	11200	11214	11070
25°	10831	10965	10791
30°	10199	10658	10527
35°	9637	10216	10232
40°	9169	9664	9917
45°	8644	9078	9544
50°	8092	8555	9138
55°	7464	7959	8644
60°	6722	7263	8039
65°	5935	6458	7312
70°	4946	5500	6212
75°	3886	4393	4863
80°	2780	3092	3429
85°	1812	1812	1707



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	410.9	4.1
10°-20°	1154.2	11.4
20°-30°	1686.7	16.7
30°-40°	1914.6	19.0
40°-50°	1848.2	18.3
50°-60°	1524.6	15.1
60°-70°	1015.3	10.1
70°-80°	454.3	4.5
80°-90°	81.3	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°	3251.7	32.2
0°-40°	5166.3	51.2
0°-60°	8539.1	84.6
0°-90°	10090.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10090.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4364	4364	4364	4364	4364	
5°	4359	4357	4340	4317	4303	413
15°	4107	4117	4107	4089	4060	1158
25°	3648	3676	3693	3666	3634	1671
35°	2934	2974	3110	3126	3115	1838
45°	2272	2310	2386	2494	2508	1753
55°	1591	1618	1696	1790	1842	1420
65°	932	957	1014	1086	1148	924
75°	374	394	422	443	468	409
85°	59	59	59	55	55	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4363.7	4363.7	4363.7	4363.7	4363.7
2.5°	4375.4	4377.1	4367.0	4340.2	4323.4
5°	4358.6	4357.0	4340.2	4316.7	4303.3
7.5°	4310.0	4313.4	4308.3	4274.8	4256.4
10°	4263.1	4264.8	4251.3	4224.5	4202.7
12.5°	4202.7	4201.1	4182.6	4169.2	4134.0
15°	4107.2	4117.2	4107.2	4088.7	4060.2
17.5°	4015.0	4015.0	4021.7	3989.8	3968.0
20°	3911.0	3916.1	3916.1	3890.9	3865.8
22.5°	3790.3	3805.4	3810.5	3783.6	3753.5
25°	3647.8	3676.3	3693.1	3666.3	3634.4
27.5°	3475.2	3518.8	3569.1	3548.9	3513.7
30°	3282.4	3346.1	3429.9	3413.1	3388.0
32.5°	3099.7	3163.4	3279.0	3272.3	3258.9
35°	2933.7	2973.9	3109.7	3126.5	3114.7
37.5°	2776.1	2813.0	2940.4	2979.0	2968.9
40°	2610.2	2650.4	2751.0	2819.7	2823.1
42.5°	2445.9	2484.4	2566.6	2665.5	2665.5
45°	2271.5	2310.1	2385.5	2494.5	2507.9
47.5°	2100.5	2140.8	2214.5	2323.5	2345.3
50°	1932.9	1969.8	2043.5	2149.1	2182.7
52.5°	1758.5	1798.8	1870.9	1968.1	2016.7
55°	1590.9	1617.7	1696.5	1790.4	1842.4
57.5°	1416.6	1441.7	1530.6	1611.0	1664.7
60°	1248.9	1280.8	1349.5	1431.6	1493.7
62.5°	1088.0	1121.5	1180.2	1252.3	1322.7
65°	932.1	957.2	1014.2	1086.3	1148.3
67.5°	781.2	803.0	860.0	910.3	975.7
70°	628.6	657.1	699.1	747.7	789.6
72.5°	506.3	518.0	553.2	588.4	632.0
75°	373.8	394.0	422.5	442.6	467.7
77.5°	268.2	280.0	296.7	313.5	337.0
80°	179.4	184.4	199.5	202.8	221.3
82.5°	109.0	112.3	115.7	117.3	124.1
85°	58.7	58.7	58.7	55.3	55.3
87.5°	33.5	33.5	28.5	23.5	16.8
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)