

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: P557799

Luminaire Tested: **FUSL-12-4-LD4-3HI-35-UNV-93-87-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: P557799
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-LD4-3HI-35-UNV-93-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

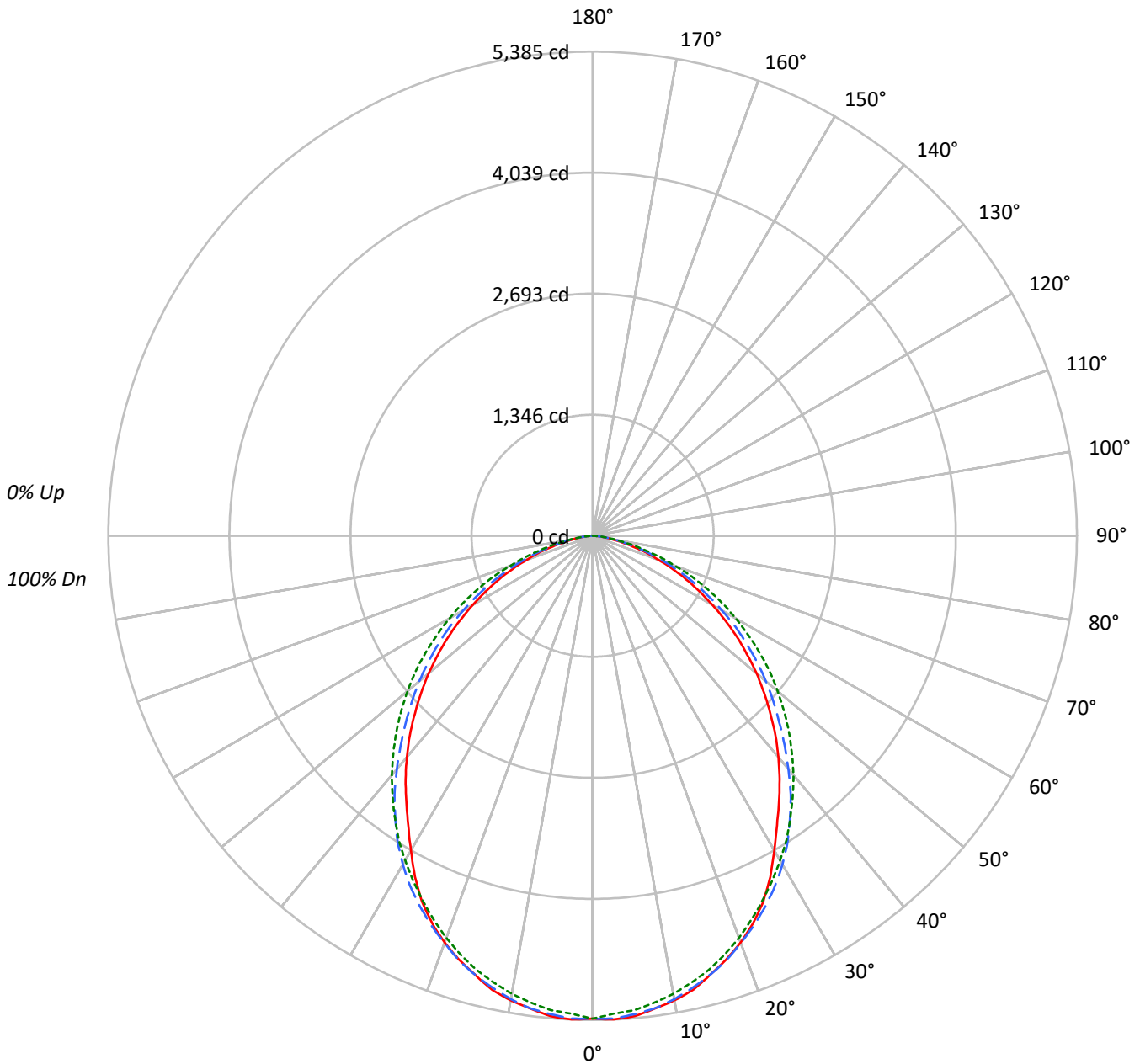
Lumens per Lamp: N/A
Luminaire Lumens: 12418.0 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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

TEST NUMBER: P557799

CATALOG NUMBER: FUSL-12-4-LD4-3HI-35-UNV-93-87-EDD

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°	14452	14452	14452
5°	14490	14429	14306
10°	14337	14297	14134
15°	14082	14082	13921
20°	13784	13802	13625
25°	13330	13495	13281
30°	12552	13117	12956
35°	11861	12573	12593
40°	11285	11893	12205
45°	10639	11173	11746
50°	9959	10529	11246
55°	9186	9796	10638
60°	8273	8939	9894
65°	7304	7948	8999
70°	6087	6769	7646
75°	4784	5405	5985
80°	3422	3804	4220
85°	2229	2229	2103



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	505.6	4.1
10°-20°	1420.5	11.4
20°-30°	2075.8	16.7
30°-40°	2356.3	19.0
40°-50°	2274.6	18.3
50°-60°	1876.4	15.1
60°-70°	1249.5	10.1
70°-80°	559.2	4.5
80°-90°	100.0	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°	4002.0	32.2
0°-40°	6358.2	51.2
0°-60°	10509.3	84.6
0°-90°	12418.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12418.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5370	5370	5370	5370	5370	
5°	5364	5362	5342	5313	5296	508
15°	5055	5067	5055	5032	4997	1425
25°	4490	4525	4545	4512	4473	2056
35°	3611	3660	3827	3848	3833	2262
45°	2796	2843	2936	3070	3086	2157
55°	1958	1991	2088	2204	2267	1748
65°	1147	1178	1248	1337	1413	1137
75°	460	485	520	545	576	503
85°	72	72	72	68	68	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5370.5	5370.5	5370.5	5370.5	5370.5
2.5°	5384.9	5387.0	5374.6	5341.6	5320.9
5°	5364.3	5362.2	5341.6	5312.7	5296.2
7.5°	5304.4	5308.6	5302.4	5261.1	5238.4
10°	5246.7	5248.7	5232.2	5199.2	5172.4
12.5°	5172.4	5170.3	5147.6	5131.1	5087.8
15°	5054.8	5067.2	5054.8	5032.1	4997.0
17.5°	4941.3	4941.3	4949.6	4910.4	4883.6
20°	4813.4	4819.6	4819.6	4788.6	4757.7
22.5°	4664.9	4683.4	4689.6	4656.6	4619.5
25°	4489.5	4524.6	4545.2	4512.2	4473.0
27.5°	4277.0	4330.6	4392.5	4367.8	4324.4
30°	4039.7	4118.1	4221.3	4200.6	4169.7
32.5°	3814.8	3893.2	4035.6	4027.3	4010.8
35°	3610.6	3660.1	3827.2	3847.8	3833.4
37.5°	3416.6	3462.0	3618.8	3666.3	3653.9
40°	3212.4	3261.9	3385.7	3470.3	3474.4
42.5°	3010.2	3057.6	3158.7	3280.5	3280.5
45°	2795.6	2843.1	2935.9	3070.0	3086.5
47.5°	2585.2	2634.7	2725.5	2859.6	2886.4
50°	2378.8	2424.2	2515.0	2645.0	2686.3
52.5°	2164.3	2213.8	2302.5	2422.2	2482.0
55°	1958.0	1991.0	2087.9	2203.5	2267.4
57.5°	1743.4	1774.3	1883.7	1982.7	2048.7
60°	1537.1	1576.3	1660.9	1762.0	1838.3
62.5°	1339.0	1380.3	1452.5	1541.2	1627.9
65°	1147.1	1178.1	1248.2	1336.9	1413.3
67.5°	961.4	988.3	1058.4	1120.3	1200.8
70°	773.7	808.8	860.3	920.2	971.8
72.5°	623.1	637.5	680.9	724.2	777.8
75°	460.1	484.8	519.9	544.7	575.6
77.5°	330.1	344.6	365.2	385.8	414.7
80°	220.8	227.0	245.5	249.6	272.3
82.5°	134.1	138.2	142.4	144.4	152.7
85°	72.2	72.2	72.2	68.1	68.1
87.5°	41.3	41.3	35.1	28.9	20.6
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)