

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: P558202

Luminaire Tested: **FUSL-12-4-LD4-3STD-30-UNV-80-94-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: P558202
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-30-UNV-80-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

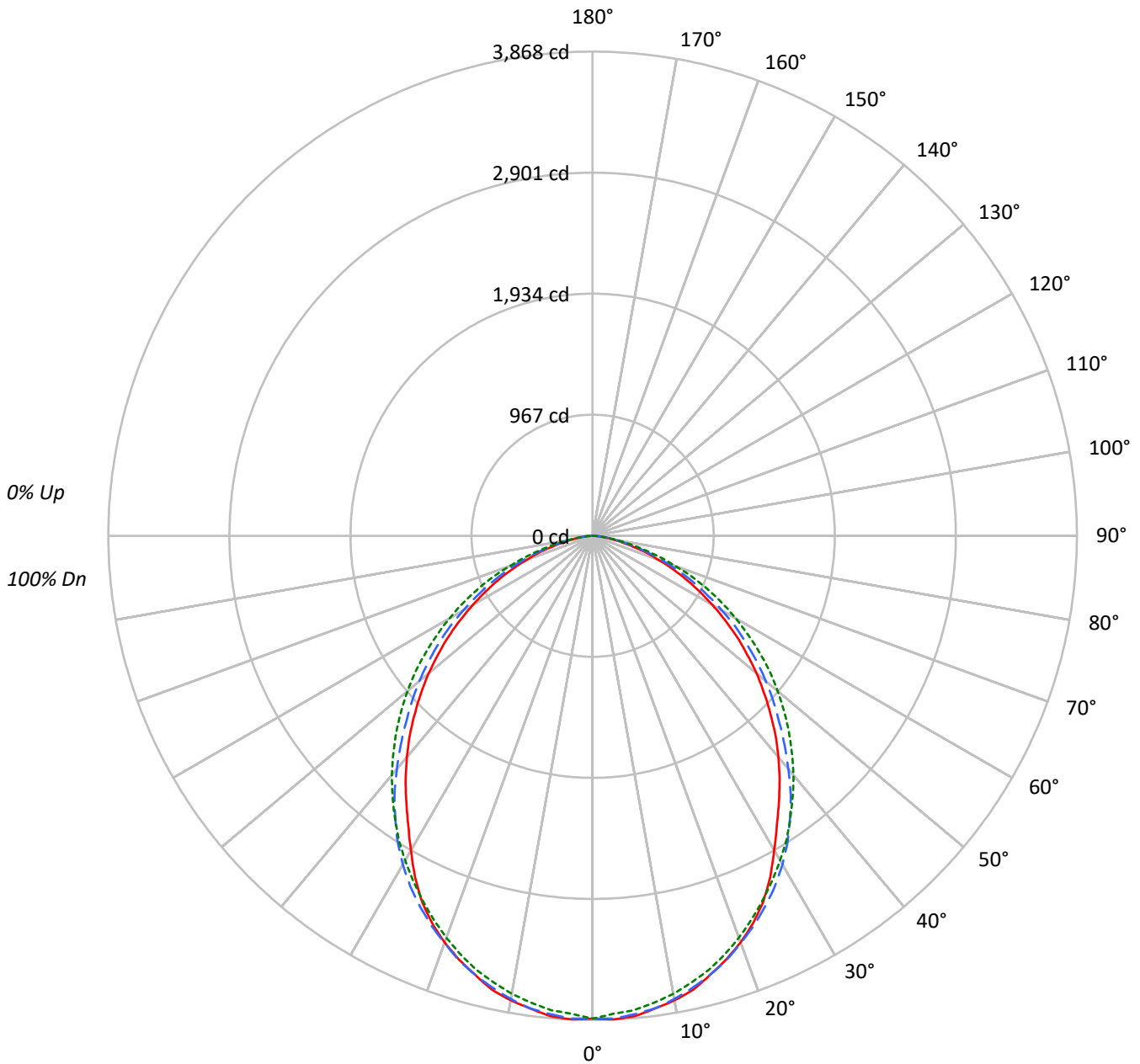
Lumens per Lamp: N/A
Luminaire Lumens: 8919.0 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
Input Voltage (V): NR
Input Current (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					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	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°	10380	10380	10380
5°	10407	10363	10275
10°	10297	10269	10151
15°	10114	10114	9999
20°	9900	9913	9785
25°	9574	9693	9539
30°	9015	9421	9306
35°	8519	9030	9045
40°	8105	8542	8766
45°	7641	8025	8436
50°	7153	7562	8077
55°	6598	7035	7640
60°	5942	6420	7106
65°	5246	5708	6464
70°	4372	4862	5491
75°	3436	3882	4298
80°	2458	2732	3031
85°	1602	1602	1510



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	363.2	4.1
10°-20°	1020.2	11.4
20°-30°	1490.9	16.7
30°-40°	1692.4	19.0
40°-50°	1633.7	18.3
50°-60°	1347.7	15.1
60°-70°	897.4	10.1
70°-80°	401.6	4.5
80°-90°	71.8	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°	2874.3	32.2
0°-40°	4566.7	51.2
0°-60°	7548.1	84.6
0°-90°	8919.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8919.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3857	3857	3857	3857	3857	
5°	3853	3851	3836	3816	3804	365
15°	3630	3639	3630	3614	3589	1023
25°	3224	3250	3264	3241	3213	1477
35°	2593	2629	2749	2764	2753	1625
45°	2008	2042	2109	2205	2217	1549
55°	1406	1430	1500	1583	1628	1255
65°	824	846	896	960	1015	817
75°	330	348	373	391	413	361
85°	52	52	52	49	49	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3857.2	3857.2	3857.2	3857.2	3857.2
2.5°	3867.6	3869.1	3860.2	3836.5	3821.7
5°	3852.8	3851.3	3836.5	3815.7	3803.9
7.5°	3809.8	3812.8	3808.3	3778.7	3762.4
10°	3768.3	3769.8	3758.0	3734.2	3715.0
12.5°	3715.0	3713.5	3697.2	3685.3	3654.2
15°	3630.5	3639.4	3630.5	3614.2	3589.0
17.5°	3549.0	3549.0	3554.9	3526.8	3507.5
20°	3457.1	3461.6	3461.6	3439.4	3417.1
22.5°	3350.4	3363.8	3368.2	3344.5	3317.8
25°	3224.5	3249.7	3264.5	3240.8	3212.6
27.5°	3071.9	3110.4	3154.8	3137.1	3105.9
30°	2901.4	2957.8	3031.9	3017.0	2994.8
32.5°	2739.9	2796.2	2898.5	2892.6	2880.7
35°	2593.2	2628.8	2748.8	2763.6	2753.3
37.5°	2453.9	2486.5	2599.2	2633.2	2624.3
40°	2307.2	2342.8	2431.7	2492.5	2495.4
42.5°	2162.0	2196.1	2268.7	2356.1	2356.1
45°	2007.9	2042.0	2108.7	2205.0	2216.8
47.5°	1856.7	1892.3	1957.5	2053.8	2073.1
50°	1708.6	1741.2	1806.4	1899.7	1929.4
52.5°	1554.5	1590.0	1653.7	1739.7	1782.7
55°	1406.3	1430.0	1499.6	1582.6	1628.5
57.5°	1252.2	1274.4	1352.9	1424.1	1471.5
60°	1104.0	1132.1	1192.9	1265.5	1320.3
62.5°	961.7	991.4	1043.2	1106.9	1169.2
65°	823.9	846.1	896.5	960.2	1015.1
67.5°	690.5	709.8	760.2	804.6	862.4
70°	555.7	580.9	617.9	660.9	697.9
72.5°	447.5	457.9	489.0	520.1	558.7
75°	330.5	348.2	373.4	391.2	413.4
77.5°	237.1	247.5	262.3	277.1	297.9
80°	158.6	163.0	176.3	179.3	195.6
82.5°	96.3	99.3	102.2	103.7	109.7
85°	51.9	51.9	51.9	48.9	48.9
87.5°	29.6	29.6	25.2	20.7	14.8
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)