

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: P557712

Luminaire Tested: **FUSL-12-4-LD4-3HI-30-UNV-82-84-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: P557712
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-30-UNV-82-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

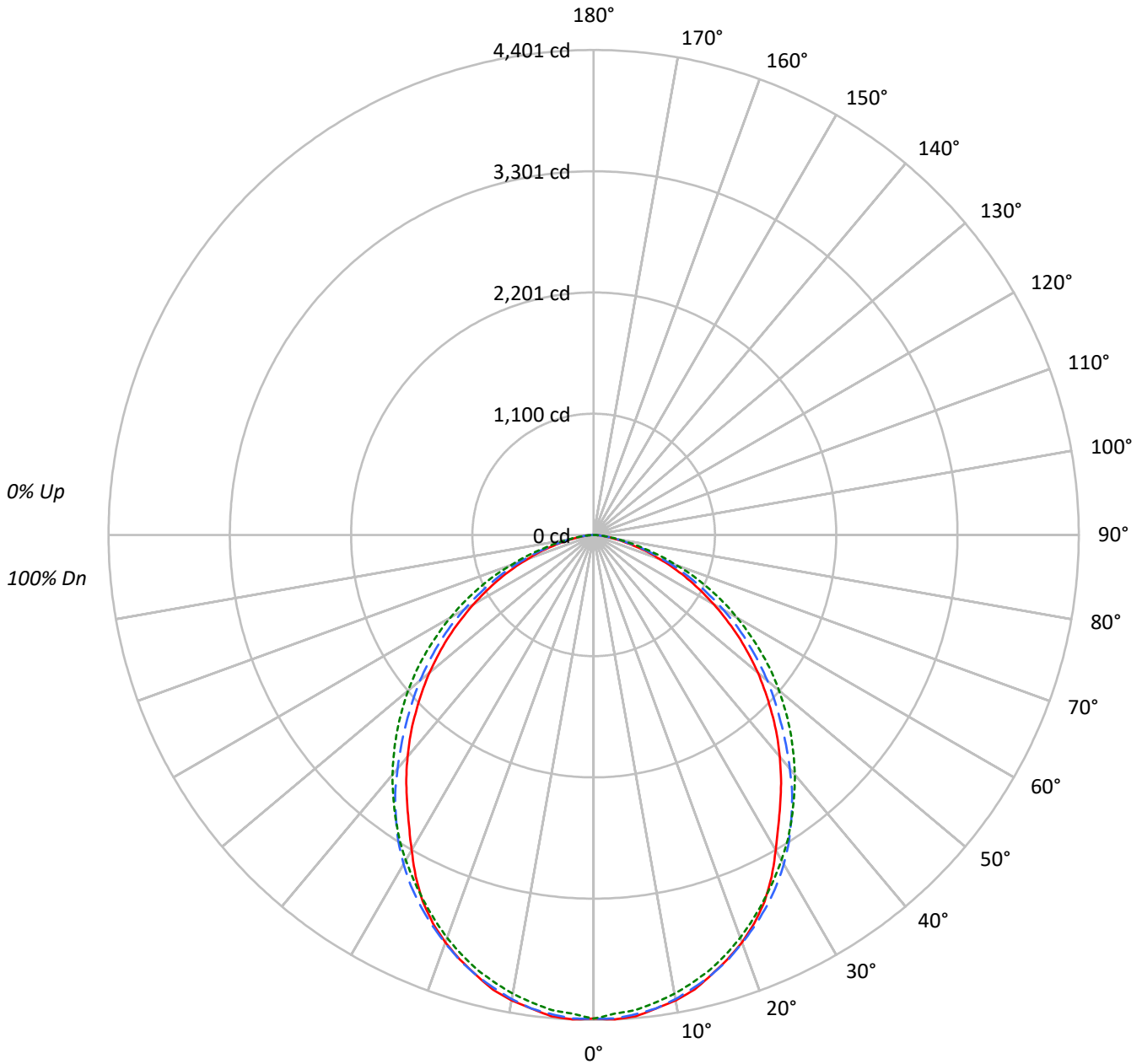
Lumens per Lamp: N/A
Luminaire Lumens: 10150.0 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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°	11812	11812	11812
5°	11844	11794	11693
10°	11718	11686	11552
15°	11510	11510	11379
20°	11267	11281	11136
25°	10895	11031	10855
30°	10260	10721	10590
35°	9695	10276	10293
40°	9224	9721	9976
45°	8696	9132	9601
50°	8140	8606	9192
55°	7508	8007	8695
60°	6761	7306	8087
65°	5970	6497	7356
70°	4976	5533	6249
75°	3910	4419	4892
80°	2796	3110	3450
85°	1822	1822	1720



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	413.3	4.1
10°-20°	1161.1	11.4
20°-30°	1696.7	16.7
30°-40°	1925.9	19.0
40°-50°	1859.2	18.3
50°-60°	1533.7	15.1
60°-70°	1021.3	10.1
70°-80°	457.0	4.5
80°-90°	81.8	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°	3271.1	32.2
0°-40°	5197.0	51.2
0°-60°	8589.9	84.6
0°-90°	10150.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10150.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4390	4390	4390	4390	4390	
5°	4385	4383	4366	4342	4329	415
15°	4132	4142	4132	4113	4084	1165
25°	3670	3698	3715	3688	3656	1680
35°	2951	2992	3128	3145	3133	1849
45°	2285	2324	2400	2509	2523	1763
55°	1600	1627	1707	1801	1853	1428
65°	938	963	1020	1093	1155	930
75°	376	396	425	445	470	411
85°	59	59	59	56	56	80
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4389.6	4389.6	4389.6	4389.6	4389.6
2.5°	4401.4	4403.1	4393.0	4366.0	4349.1
5°	4384.6	4382.9	4366.0	4342.4	4328.9
7.5°	4335.6	4339.0	4334.0	4300.2	4281.7
10°	4288.4	4290.1	4276.6	4249.6	4227.7
12.5°	4227.7	4226.0	4207.5	4194.0	4158.6
15°	4131.6	4141.7	4131.6	4113.0	4084.4
17.5°	4038.8	4038.8	4045.6	4013.6	3991.6
20°	3934.3	3939.4	3939.4	3914.1	3888.8
22.5°	3812.9	3828.1	3833.1	3806.1	3775.8
25°	3669.5	3698.2	3715.1	3688.1	3656.0
27.5°	3495.8	3539.7	3590.3	3570.0	3534.6
30°	3301.9	3366.0	3450.3	3433.4	3408.1
32.5°	3118.1	3182.2	3298.5	3291.8	3278.3
35°	2951.1	2991.6	3128.2	3145.1	3133.3
37.5°	2792.6	2829.7	2957.9	2996.7	2986.6
40°	2625.7	2666.1	2767.3	2836.5	2839.8
42.5°	2460.4	2499.2	2581.8	2681.3	2681.3
45°	2285.0	2323.8	2399.7	2509.3	2522.8
47.5°	2113.0	2153.5	2227.7	2337.3	2359.2
50°	1944.4	1981.5	2055.7	2161.9	2195.6
52.5°	1769.0	1809.5	1882.0	1979.8	2028.7
55°	1600.4	1627.3	1706.6	1801.0	1853.3
57.5°	1425.0	1450.3	1539.7	1620.6	1674.6
60°	1256.3	1288.4	1357.5	1440.2	1502.6
62.5°	1094.5	1128.2	1187.2	1259.7	1330.5
65°	937.6	962.9	1020.3	1092.8	1155.2
67.5°	785.8	807.8	865.1	915.7	981.5
70°	632.4	661.1	703.2	752.1	794.3
72.5°	509.3	521.1	556.5	591.9	635.8
75°	376.1	396.3	425.0	445.2	470.5
77.5°	269.8	281.6	298.5	315.4	339.0
80°	180.4	185.5	200.7	204.1	222.6
82.5°	109.6	113.0	116.4	118.0	124.8
85°	59.0	59.0	59.0	55.7	55.7
87.5°	33.7	33.7	28.7	23.6	16.9
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)