

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: P557697

Luminaire Tested: **FUSL-12-4-LD4-3HI-30-UNV-81-84-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: P557697
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-81-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

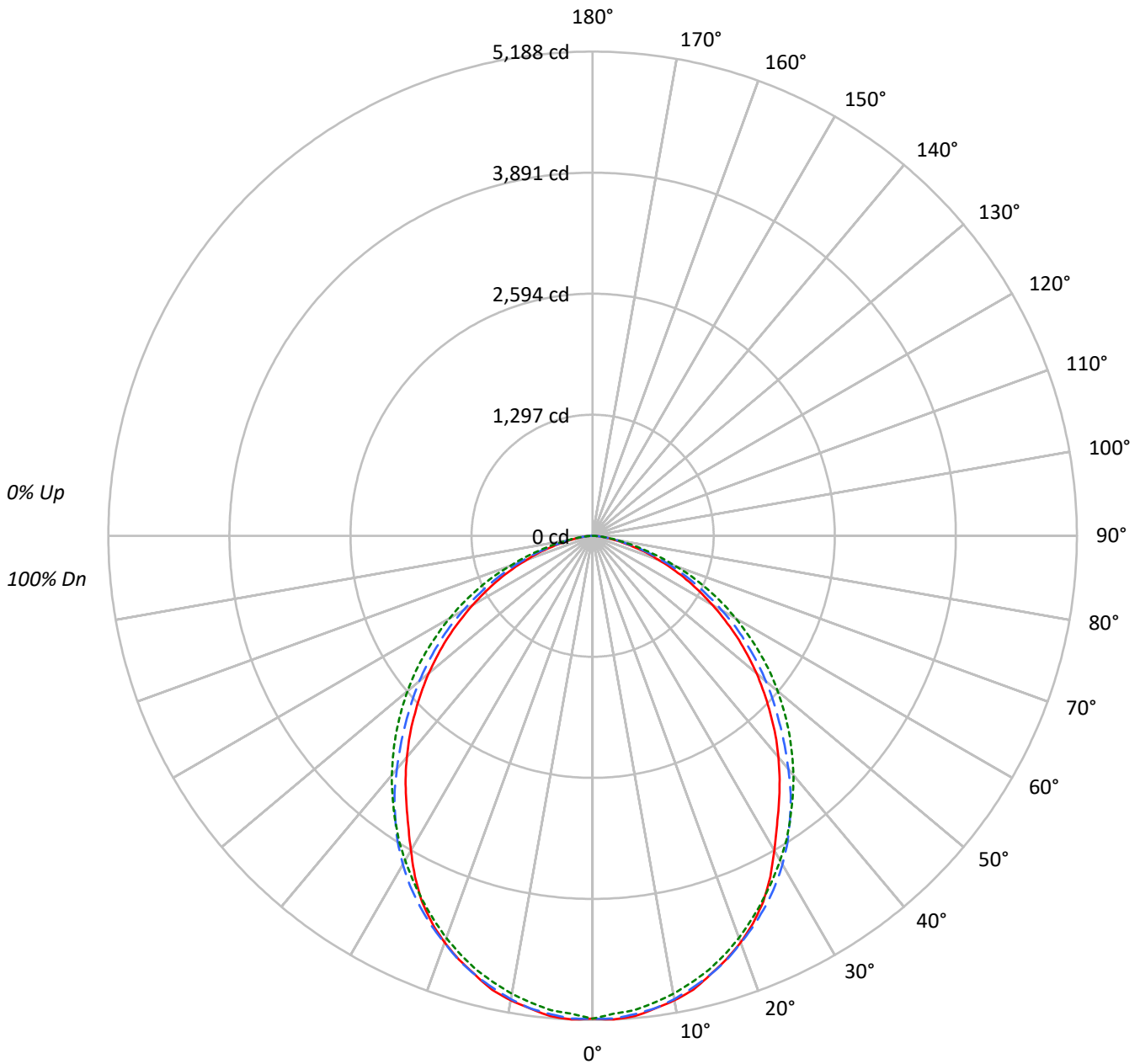
Lumens per Lamp: N/A
Luminaire Lumens: 11964.0 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	13923	13923	13923
5°	13961	13901	13783
10°	13812	13774	13617
15°	13567	13567	13412
20°	13280	13297	13127
25°	12843	13002	12795
30°	12094	12637	12483
35°	11427	12113	12132
40°	10872	11458	11759
45°	10250	10765	11317
50°	9595	10144	10835
55°	8850	9438	10249
60°	7970	8612	9532
65°	7037	7657	8670
70°	5865	6522	7366
75°	4609	5208	5766
80°	3296	3665	4066
85°	2149	2149	2025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	487.2	4.1
10°-20°	1368.6	11.4
20°-30°	1999.9	16.7
30°-40°	2270.1	19.0
40°-50°	2191.5	18.3
50°-60°	1807.8	15.1
60°-70°	1203.8	10.1
70°-80°	538.7	4.5
80°-90°	96.4	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°	3855.7	32.2
0°-40°	6125.8	51.2
0°-60°	10125.1	84.6
0°-90°	11964.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11964.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5174	5174	5174	5174	5174	
5°	5168	5166	5146	5118	5103	489
15°	4870	4882	4870	4848	4814	1373
25°	4325	4359	4379	4347	4309	1981
35°	3479	3526	3687	3707	3693	2180
45°	2693	2739	2829	2958	2974	2078
55°	1886	1918	2012	2123	2184	1684
65°	1105	1135	1203	1288	1362	1096
75°	443	467	501	525	555	485
85°	70	70	70	66	66	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5174.1	5174.1	5174.1	5174.1	5174.1
2.5°	5188.0	5190.0	5178.1	5146.3	5126.4
5°	5168.2	5166.2	5146.3	5118.5	5102.6
7.5°	5110.5	5114.5	5108.5	5068.8	5046.9
10°	5054.9	5056.8	5040.9	5009.1	4983.3
12.5°	4983.3	4981.3	4959.4	4943.5	4901.8
15°	4870.0	4881.9	4870.0	4848.1	4814.3
17.5°	4760.7	4760.7	4768.6	4730.9	4705.0
20°	4637.4	4643.4	4643.4	4613.6	4583.8
22.5°	4494.3	4512.2	4518.2	4486.4	4450.6
25°	4325.4	4359.1	4379.0	4347.2	4309.4
27.5°	4120.6	4172.3	4231.9	4208.1	4166.3
30°	3892.0	3967.6	4066.9	4047.1	4017.2
32.5°	3675.4	3750.9	3888.0	3880.1	3864.2
35°	3478.6	3526.3	3687.3	3707.2	3693.2
37.5°	3291.7	3335.4	3486.5	3532.2	3520.3
40°	3094.9	3142.6	3261.9	3343.4	3347.4
42.5°	2900.1	2945.8	3043.2	3160.5	3160.5
45°	2693.4	2739.1	2828.6	2957.8	2973.7
47.5°	2490.7	2538.4	2625.8	2755.0	2780.9
50°	2291.9	2335.6	2423.1	2548.3	2588.1
52.5°	2085.2	2132.9	2218.3	2333.6	2391.3
55°	1886.4	1918.2	2011.6	2122.9	2184.5
57.5°	1679.7	1709.5	1814.8	1910.2	1973.8
60°	1480.9	1518.6	1600.1	1697.5	1771.1
62.5°	1290.1	1329.8	1399.4	1484.9	1568.3
65°	1105.2	1135.0	1202.6	1288.1	1361.6
67.5°	926.3	952.1	1019.7	1079.3	1156.9
70°	745.4	779.2	828.9	886.5	936.2
72.5°	600.3	614.2	656.0	697.7	749.4
75°	443.3	467.1	500.9	524.8	554.6
77.5°	318.0	332.0	351.8	371.7	399.5
80°	212.7	218.7	236.5	240.5	262.4
82.5°	129.2	133.2	137.2	139.1	147.1
85°	69.6	69.6	69.6	65.6	65.6
87.5°	39.8	39.8	33.8	27.8	19.9
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)