

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: P557035

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-93-94-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: P557035
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-LD4-2HI-35-UNV-93-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

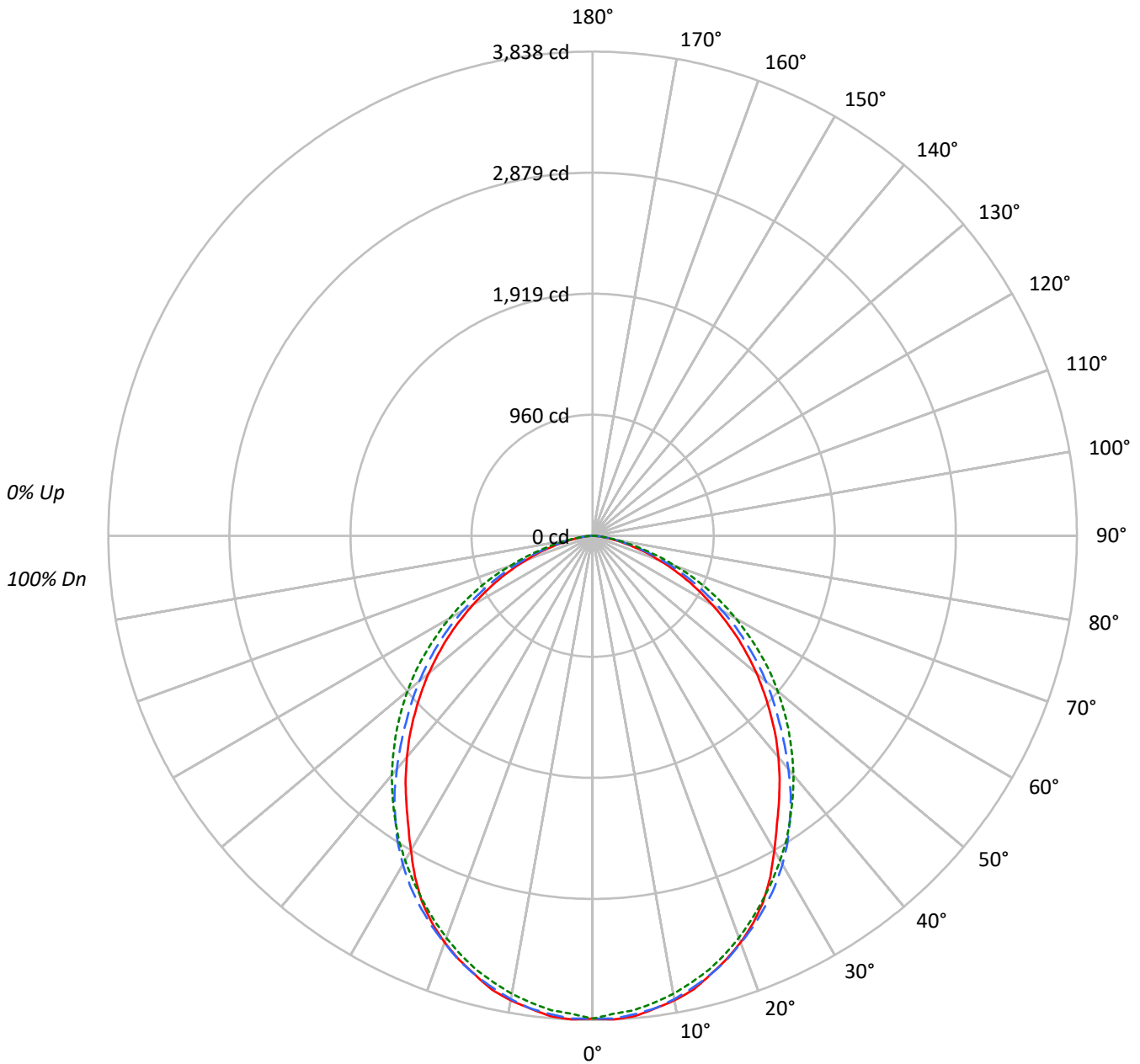
Lumens per Lamp: N/A
Luminaire Lumens: 8850.0 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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									
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°	10299	10299	10299
5°	10327	10283	10196
10°	10217	10189	10073
15°	10036	10036	9921
20°	9824	9836	9710
25°	9500	9618	9465
30°	8946	9348	9234
35°	8453	8960	8975
40°	8042	8476	8698
45°	7582	7962	8371
50°	7097	7504	8014
55°	6547	6981	7581
60°	5895	6371	7051
65°	5205	5664	6413
70°	4338	4824	5449
75°	3409	3852	4265
80°	2438	2712	3008
85°	1590	1590	1497



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.4	4.1
10°-20°	1012.4	11.4
20°-30°	1479.4	16.7
30°-40°	1679.3	19.0
40°-50°	1621.1	18.3
50°-60°	1337.3	15.1
60°-70°	890.5	10.1
70°-80°	398.5	4.5
80°-90°	71.3	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°	2852.1	32.2
0°-40°	4531.4	51.2
0°-60°	7489.7	84.6
0°-90°	8850.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8850.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3827	3827	3827	3827	3827	
5°	3823	3822	3807	3786	3774	362
15°	3602	3611	3602	3586	3561	1016
25°	3200	3224	3239	3216	3188	1465
35°	2573	2608	2728	2742	2732	1612
45°	1992	2026	2092	2188	2200	1537
55°	1395	1419	1488	1570	1616	1245
65°	818	840	890	953	1007	811
75°	328	346	370	388	410	359
85°	52	52	52	48	48	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3827.4	3827.4	3827.4	3827.4	3827.4
2.5°	3837.7	3839.2	3830.3	3806.8	3792.1
5°	3823.0	3821.5	3806.8	3786.2	3774.5
7.5°	3780.3	3783.3	3778.9	3749.5	3733.3
10°	3739.2	3740.6	3728.9	3705.4	3686.2
12.5°	3686.2	3684.8	3668.6	3656.8	3626.0
15°	3602.4	3611.3	3602.4	3586.3	3561.3
17.5°	3521.6	3521.6	3527.4	3499.5	3480.4
20°	3430.4	3434.8	3434.8	3412.7	3390.7
22.5°	3324.5	3337.8	3342.2	3318.6	3292.2
25°	3199.5	3224.5	3239.2	3215.7	3187.8
27.5°	3048.1	3086.3	3130.4	3112.8	3081.9
30°	2879.0	2934.9	3008.4	2993.7	2971.6
32.5°	2718.7	2774.6	2876.1	2870.2	2858.4
35°	2573.2	2608.5	2727.6	2742.3	2732.0
37.5°	2434.9	2467.3	2579.0	2612.9	2604.0
40°	2289.4	2324.7	2412.9	2473.2	2476.1
42.5°	2145.3	2179.1	2251.2	2337.9	2337.9
45°	1992.4	2026.2	2092.3	2187.9	2199.7
47.5°	1842.4	1877.7	1942.4	2037.9	2057.1
50°	1695.3	1727.7	1792.4	1885.0	1914.4
52.5°	1542.4	1577.7	1640.9	1726.2	1768.9
55°	1395.4	1418.9	1488.0	1570.4	1615.9
57.5°	1242.5	1264.5	1342.5	1413.0	1460.1
60°	1095.4	1123.4	1183.7	1255.7	1310.1
62.5°	954.3	983.7	1035.1	1098.4	1160.1
65°	817.5	839.6	889.6	952.8	1007.2
67.5°	685.2	704.3	754.3	798.4	855.8
70°	551.4	576.4	613.1	655.8	692.5
72.5°	444.1	454.3	485.2	516.1	554.3
75°	327.9	345.5	370.5	388.2	410.2
77.5°	235.3	245.6	260.3	275.0	295.5
80°	157.3	161.7	175.0	177.9	194.1
82.5°	95.6	98.5	101.5	102.9	108.8
85°	51.5	51.5	51.5	48.5	48.5
87.5°	29.4	29.4	25.0	20.6	14.7
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)