

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: P556991

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-80-97-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: P556991
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-80-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

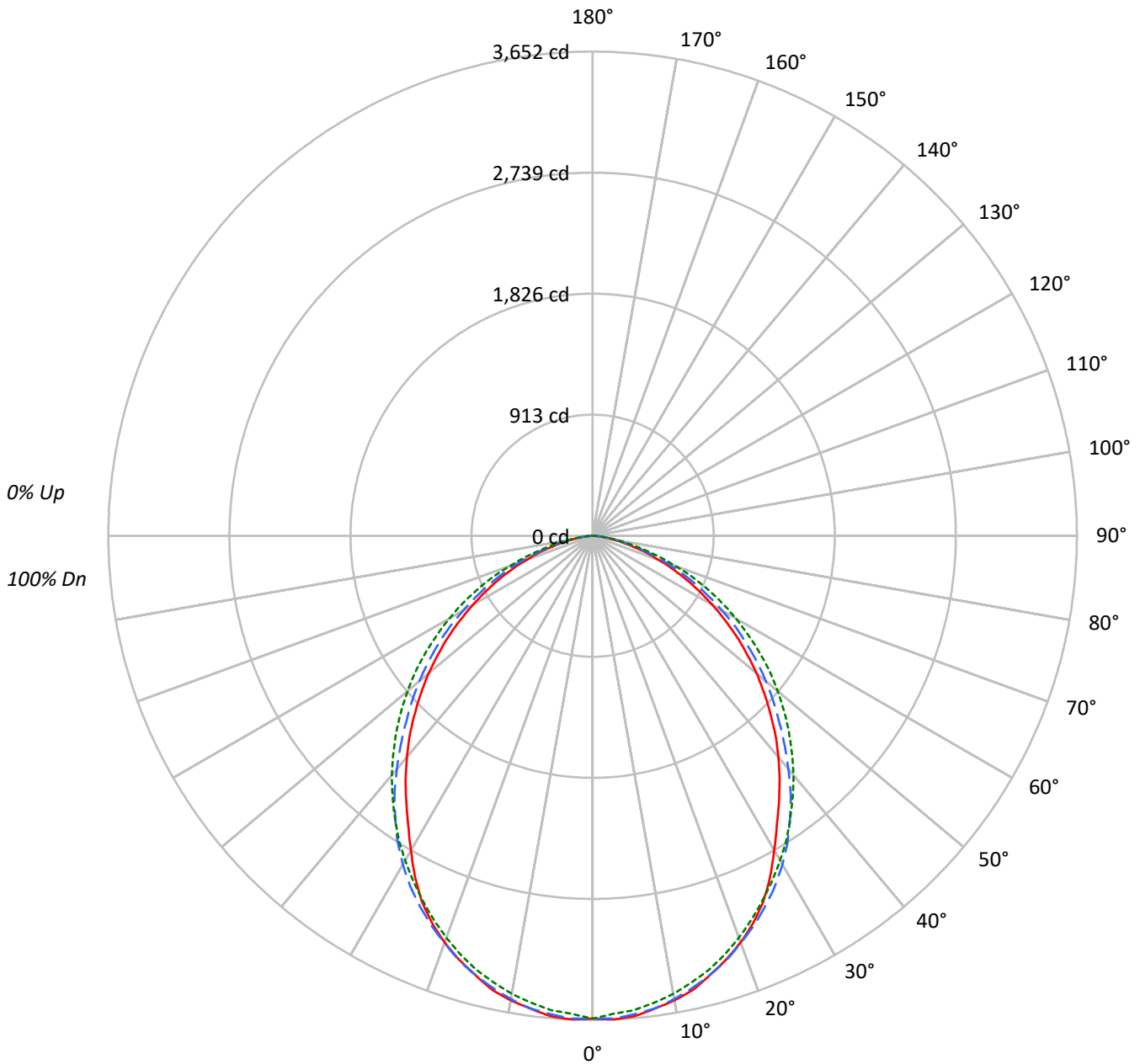
Lumens per Lamp: N/A
Luminaire Lumens: 8421.0 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	9800	9800	9800
5°	9826	9785	9702
10°	9722	9695	9584
15°	9550	9550	9440
20°	9347	9359	9239
25°	9039	9152	9006
30°	8512	8895	8786
35°	8043	8526	8540
40°	7652	8065	8277
45°	7215	7577	7966
50°	6754	7140	7626
55°	6229	6643	7214
60°	5610	6062	6709
65°	4953	5390	6103
70°	4128	4590	5185
75°	3244	3666	4058
80°	2320	2580	2862
85°	1513	1513	1426



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.9	4.1
10°-20°	963.3	11.4
20°-30°	1407.7	16.7
30°-40°	1597.9	19.0
40°-50°	1542.5	18.3
50°-60°	1272.4	15.1
60°-70°	847.3	10.1
70°-80°	379.2	4.5
80°-90°	67.8	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°	2713.8	32.2
0°-40°	4311.7	51.2
0°-60°	7126.6	84.6
0°-90°	8421.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8421.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3642	3642	3642	3642	3642	
5°	3638	3636	3622	3603	3592	344
15°	3428	3436	3428	3412	3389	966
25°	3044	3068	3082	3060	3033	1394
35°	2448	2482	2595	2609	2600	1534
45°	1896	1928	1991	2082	2093	1463
55°	1328	1350	1416	1494	1538	1185
65°	778	799	846	907	958	771
75°	312	329	353	369	390	341
85°	49	49	49	46	46	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3641.9	3641.9	3641.9	3641.9	3641.9
2.5°	3651.7	3653.1	3644.7	3622.3	3608.3
5°	3637.7	3636.3	3622.3	3602.7	3591.5
7.5°	3597.1	3599.9	3595.7	3567.7	3552.3
10°	3557.9	3559.3	3548.1	3525.7	3507.6
12.5°	3507.6	3506.2	3490.8	3479.6	3450.2
15°	3427.8	3436.2	3427.8	3412.4	3388.6
17.5°	3350.9	3350.9	3356.4	3329.9	3311.7
20°	3264.1	3268.3	3268.3	3247.3	3226.3
22.5°	3163.4	3176.0	3180.2	3157.8	3132.6
25°	3044.4	3068.2	3082.2	3059.8	3033.3
27.5°	2900.3	2936.7	2978.7	2961.9	2932.5
30°	2739.4	2792.6	2862.6	2848.6	2827.6
32.5°	2586.9	2640.1	2736.6	2731.0	2719.9
35°	2448.4	2482.0	2595.3	2609.3	2599.5
37.5°	2316.9	2347.7	2454.0	2486.2	2477.8
40°	2178.4	2212.0	2295.9	2353.3	2356.1
42.5°	2041.3	2073.5	2142.0	2224.6	2224.6
45°	1895.8	1928.0	1990.9	2081.9	2093.1
47.5°	1753.1	1786.7	1848.2	1939.2	1957.3
50°	1613.2	1643.9	1705.5	1793.7	1821.6
52.5°	1467.7	1501.2	1561.4	1642.5	1683.1
55°	1327.7	1350.1	1415.9	1494.2	1537.6
57.5°	1182.2	1203.2	1277.4	1344.5	1389.3
60°	1042.3	1068.9	1126.3	1194.8	1246.6
62.5°	908.0	936.0	985.0	1045.1	1103.9
65°	777.9	798.9	846.5	906.6	958.4
67.5°	652.0	670.2	717.7	759.7	814.3
70°	524.7	548.4	583.4	624.0	659.0
72.5°	422.5	432.3	461.7	491.1	527.5
75°	312.0	328.8	352.6	369.4	390.3
77.5°	223.9	233.7	247.6	261.6	281.2
80°	149.7	153.9	166.5	169.3	184.7
82.5°	90.9	93.7	96.5	97.9	103.5
85°	49.0	49.0	49.0	46.2	46.2
87.5°	28.0	28.0	23.8	19.6	14.0
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)