

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: P554087

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-93-87-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: P554087
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-12-2-LD4-1HI-50-UNV-93-87-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

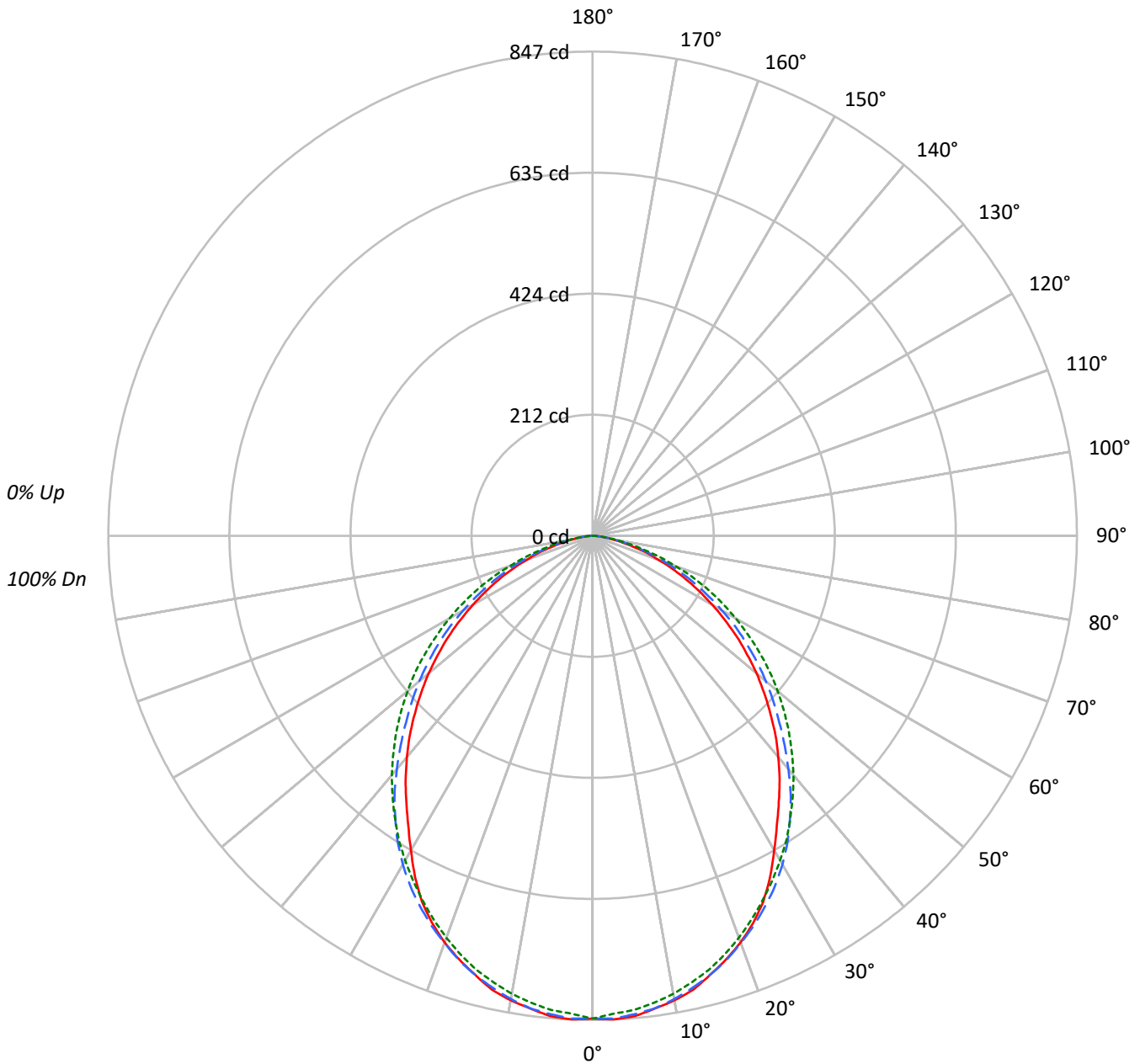
Lumens per Lamp: N/A
Luminaire Lumens: 1953.0 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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°	4546	4546	4546
5°	4558	4539	4500
10°	4510	4497	4446
15°	4430	4430	4379
20°	4336	4341	4286
25°	4193	4245	4178
30°	3948	4126	4076
35°	3731	3955	3961
40°	3549	3741	3839
45°	3347	3514	3694
50°	3132	3311	3538
55°	2889	3081	3346
60°	2602	2812	3112
65°	2297	2500	2831
70°	1915	2129	2404
75°	1506	1701	1882
80°	1075	1196	1327
85°	704	704	661



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.5	4.1
10°-20°	223.4	11.4
20°-30°	326.5	16.7
30°-40°	370.6	19.0
40°-50°	357.7	18.3
50°-60°	295.1	15.1
60°-70°	196.5	10.1
70°-80°	87.9	4.5
80°-90°	15.7	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°	629.4	32.2
0°-40°	1000.0	51.2
0°-60°	1652.8	84.6
0°-90°	1953.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1953.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	845	845	845	845	845	
5°	844	843	840	836	833	80
15°	795	797	795	791	786	224
25°	706	712	715	710	704	323
35°	568	576	602	605	603	356
45°	440	447	462	483	485	339
55°	308	313	328	346	357	275
65°	180	185	196	210	222	179
75°	72	76	82	86	90	79
85°	11	11	11	11	11	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	844.6	844.6	844.6	844.6	844.6
2.5°	846.9	847.2	845.3	840.1	836.8
5°	843.6	843.3	840.1	835.5	832.9
7.5°	834.2	834.9	833.9	827.4	823.9
10°	825.2	825.5	822.9	817.7	813.5
12.5°	813.5	813.1	809.6	807.0	800.2
15°	795.0	796.9	795.0	791.4	785.9
17.5°	777.1	777.1	778.4	772.3	768.0
20°	757.0	758.0	758.0	753.1	748.3
22.5°	733.6	736.6	737.5	732.4	726.5
25°	706.1	711.6	714.8	709.6	703.5
27.5°	672.6	681.1	690.8	686.9	680.1
30°	635.3	647.7	663.9	660.6	655.8
32.5°	600.0	612.3	634.7	633.4	630.8
35°	567.8	575.6	601.9	605.2	602.9
37.5°	537.3	544.5	569.1	576.6	574.7
40°	505.2	513.0	532.5	545.8	546.4
42.5°	473.4	480.9	496.8	515.9	515.9
45°	439.7	447.1	461.7	482.8	485.4
47.5°	406.6	414.4	428.6	449.7	453.9
50°	374.1	381.3	395.5	416.0	422.5
52.5°	340.4	348.2	362.1	380.9	390.3
55°	307.9	313.1	328.4	346.5	356.6
57.5°	274.2	279.1	296.3	311.8	322.2
60°	241.7	247.9	261.2	277.1	289.1
62.5°	210.6	217.1	228.4	242.4	256.0
65°	180.4	185.3	196.3	210.3	222.3
67.5°	151.2	155.4	166.5	176.2	188.8
70°	121.7	127.2	135.3	144.7	152.8
72.5°	98.0	100.3	107.1	113.9	122.3
75°	72.4	76.3	81.8	85.7	90.5
77.5°	51.9	54.2	57.4	60.7	65.2
80°	34.7	35.7	38.6	39.3	42.8
82.5°	21.1	21.7	22.4	22.7	24.0
85°	11.4	11.4	11.4	10.7	10.7
87.5°	6.5	6.5	5.5	4.5	3.2
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)