

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: P554082

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-93-85-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: P554082
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-93-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

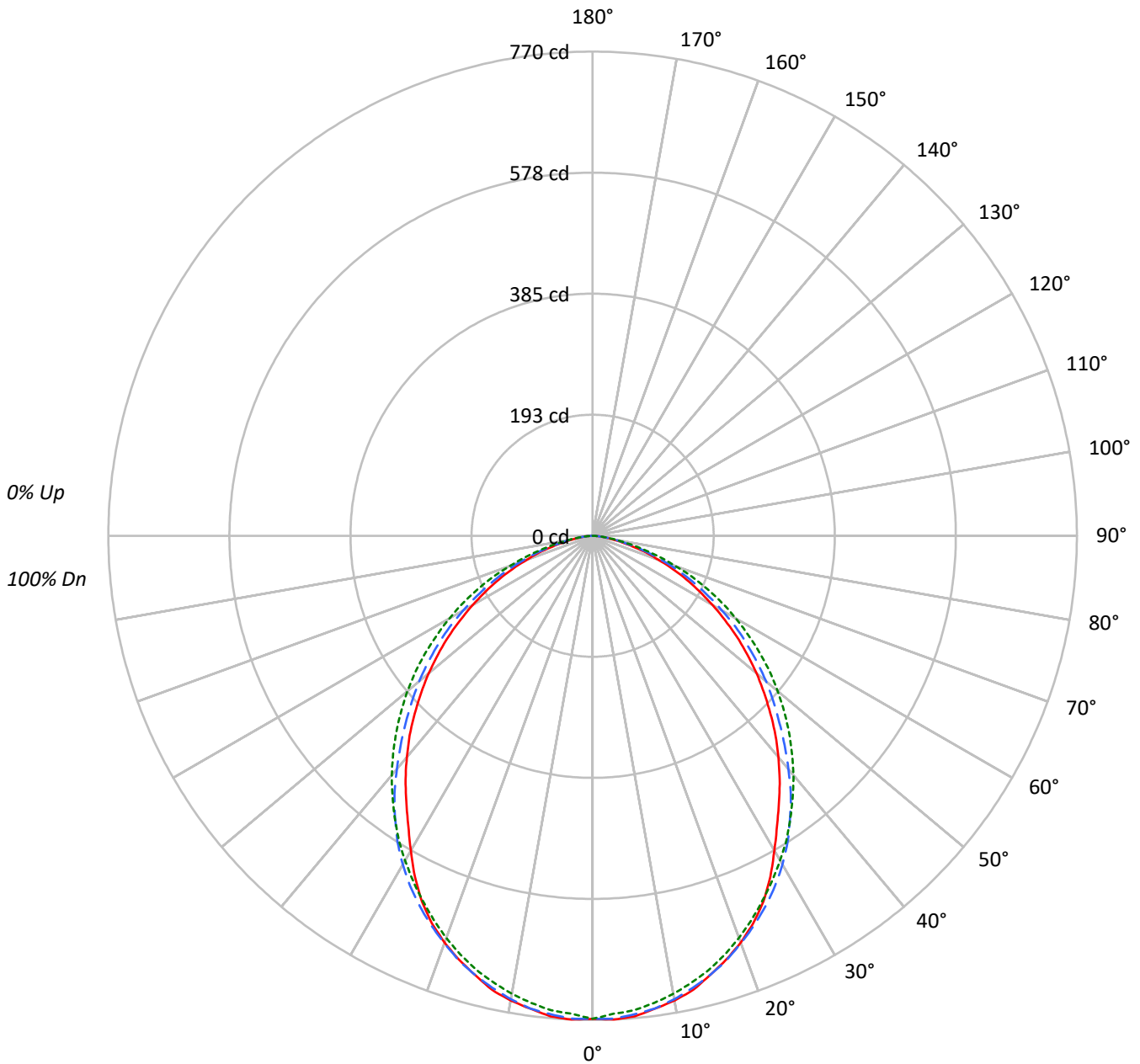
Lumens per Lamp: N/A
Luminaire Lumens: 1776.0 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
Input Voltage (V): NR
Input Current (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°	4134	4134	4134
5°	4145	4127	4092
10°	4101	4089	4042
15°	4028	4028	3982
20°	3943	3948	3897
25°	3813	3860	3799
30°	3591	3752	3706
35°	3393	3597	3602
40°	3228	3402	3491
45°	3043	3196	3360
50°	2848	3012	3217
55°	2627	2802	3043
60°	2366	2556	2830
65°	2090	2273	2574
70°	1742	1936	2187
75°	1368	1547	1711
80°	979	1088	1206
85°	636	636	599



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.3	4.1
10°-20°	203.2	11.4
20°-30°	296.9	16.7
30°-40°	337.0	19.0
40°-50°	325.3	18.3
50°-60°	268.4	15.1
60°-70°	178.7	10.1
70°-80°	80.0	4.5
80°-90°	14.3	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°	572.4	32.2
0°-40°	909.3	51.2
0°-60°	1503.0	84.6
0°-90°	1776.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1776.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	768	768	768	768	768	
5°	767	767	764	760	758	73
15°	723	725	723	720	715	204
25°	642	647	650	645	640	294
35°	516	524	547	550	548	324
45°	400	407	420	439	441	308
55°	280	285	299	315	324	250
65°	164	168	178	191	202	163
75°	66	69	74	78	82	72
85°	10	10	10	10	10	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	768.1	768.1	768.1	768.1	768.1
2.5°	770.1	770.4	768.7	763.9	761.0
5°	767.2	766.9	763.9	759.8	757.5
7.5°	758.6	759.2	758.3	752.4	749.2
10°	750.4	750.7	748.3	743.6	739.7
12.5°	739.7	739.5	736.2	733.8	727.6
15°	722.9	724.7	722.9	719.7	714.7
17.5°	706.7	706.7	707.9	702.3	698.4
20°	688.4	689.3	689.3	684.9	680.4
22.5°	667.2	669.8	670.7	666.0	660.7
25°	642.1	647.1	650.0	645.3	639.7
27.5°	611.7	619.4	628.2	624.7	618.5
30°	577.8	589.0	603.7	600.8	596.3
32.5°	545.6	556.8	577.2	576.0	573.6
35°	516.4	523.5	547.4	550.3	548.2
37.5°	488.6	495.1	517.6	524.3	522.6
40°	459.4	466.5	484.2	496.3	496.9
42.5°	430.5	437.3	451.8	469.2	469.2
45°	399.8	406.6	419.9	439.1	441.4
47.5°	369.7	376.8	389.8	409.0	412.8
50°	340.2	346.7	359.7	378.3	384.2
52.5°	309.5	316.6	329.3	346.4	355.0
55°	280.0	284.7	298.6	315.1	324.3
57.5°	249.3	253.8	269.4	283.6	293.0
60°	219.8	225.4	237.5	252.0	262.9
62.5°	191.5	197.4	207.7	220.4	232.8
65°	164.1	168.5	178.5	191.2	202.1
67.5°	137.5	141.3	151.4	160.2	171.7
70°	110.7	115.7	123.0	131.6	139.0
72.5°	89.1	91.2	97.4	103.6	111.2
75°	65.8	69.3	74.4	77.9	82.3
77.5°	47.2	49.3	52.2	55.2	59.3
80°	31.6	32.5	35.1	35.7	38.9
82.5°	19.2	19.8	20.4	20.7	21.8
85°	10.3	10.3	10.3	9.7	9.7
87.5°	5.9	5.9	5.0	4.1	3.0
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)