

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: P553958

Luminaire Tested: **FUSL-12-2-LD4-1HI-35-UNV-93-87-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: P553958
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-35-UNV-93-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

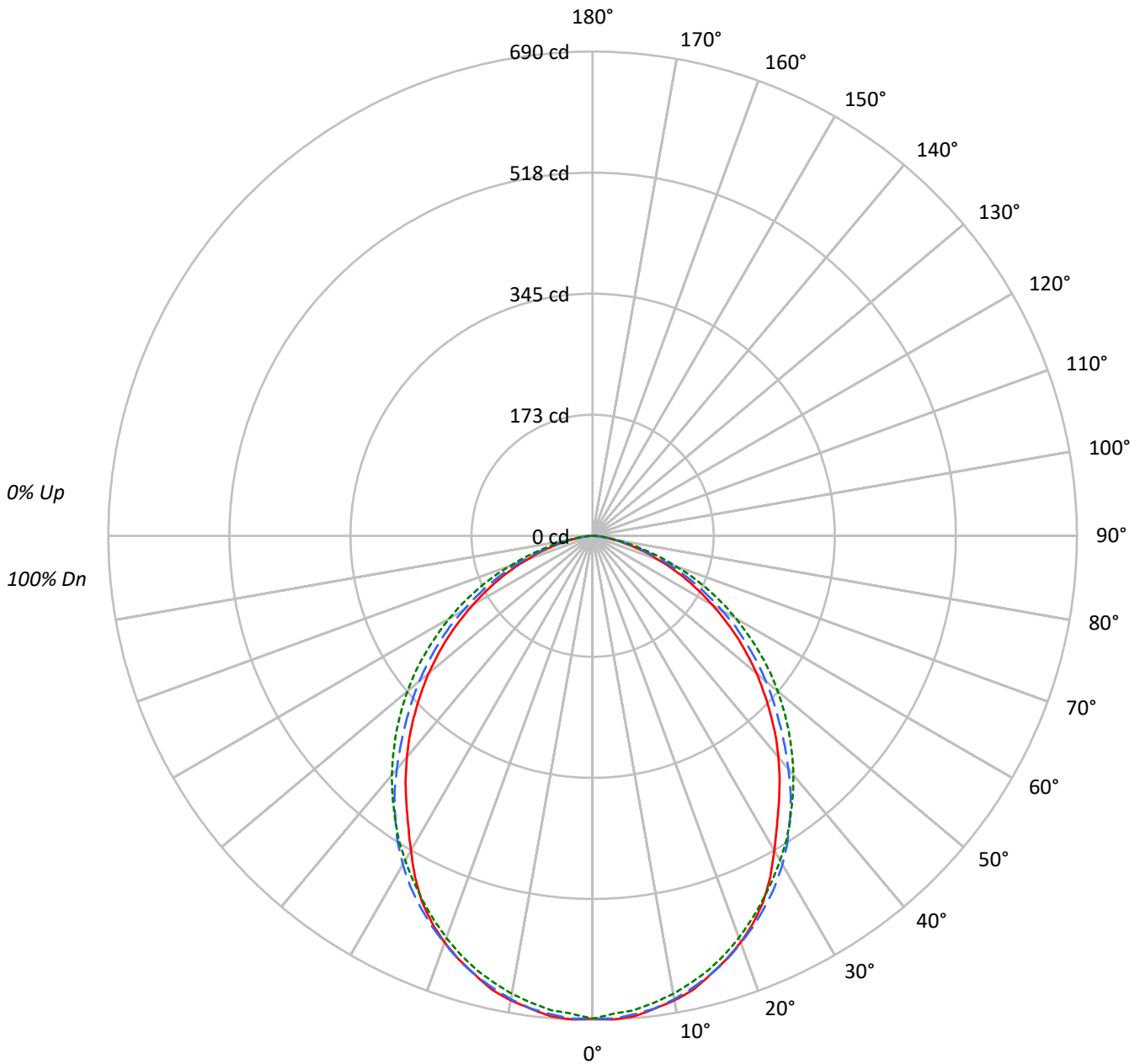
Lumens per Lamp: N/A
Luminaire Lumens: 1591.0 lumens
Efficiency: N/A
Efficacy: 73.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	3703	3703	3703
5°	3713	3697	3666
10°	3674	3664	3622
15°	3608	3608	3567
20°	3532	3537	3491
25°	3416	3458	3403
30°	3217	3361	3320
35°	3039	3221	3227
40°	2892	3048	3127
45°	2726	2863	3009
50°	2552	2698	2882
55°	2354	2510	2726
60°	2119	2291	2535
65°	1872	2036	2306
70°	1559	1734	1959
75°	1225	1385	1533
80°	877	976	1082
85°	574	574	537



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.8	4.1
10°-20°	182.0	11.4
20°-30°	266.0	16.7
30°-40°	301.9	19.0
40°-50°	291.4	18.3
50°-60°	240.4	15.1
60°-70°	160.1	10.1
70°-80°	71.6	4.5
80°-90°	12.8	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°	512.7	32.2
0°-40°	814.6	51.2
0°-60°	1346.4	84.6
0°-90°	1591.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1591.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	687	687	684	681	679	65
15°	648	649	648	645	640	183
25°	575	580	582	578	573	263
35°	463	469	490	493	491	290
45°	358	364	376	393	395	276
55°	251	255	268	282	290	224
65°	147	151	160	171	181	146
75°	59	62	67	70	74	64
85°	9	9	9	9	9	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	688.1	688.1	688.1	688.1	688.1
2.5°	689.9	690.2	688.6	684.4	681.7
5°	687.3	687.0	684.4	680.7	678.6
7.5°	679.6	680.1	679.3	674.1	671.1
10°	672.2	672.5	670.4	666.1	662.7
12.5°	662.7	662.4	659.5	657.4	651.9
15°	647.6	649.2	647.6	644.7	640.2
17.5°	633.1	633.1	634.1	629.1	625.7
20°	616.7	617.5	617.5	613.5	609.6
22.5°	597.7	600.0	600.8	596.6	591.8
25°	575.2	579.7	582.3	578.1	573.1
27.5°	548.0	554.8	562.8	559.6	554.0
30°	517.6	527.6	540.8	538.2	534.2
32.5°	488.8	498.8	517.0	516.0	513.9
35°	462.6	468.9	490.3	493.0	491.1
37.5°	437.7	443.6	463.6	469.7	468.1
40°	411.6	417.9	433.8	444.6	445.1
42.5°	385.7	391.7	404.7	420.3	420.3
45°	358.2	364.3	376.2	393.3	395.4
47.5°	331.2	337.6	349.2	366.4	369.8
50°	304.8	310.6	322.2	338.9	344.2
52.5°	277.3	283.6	295.0	310.3	318.0
55°	250.9	255.1	267.5	282.3	290.5
57.5°	223.4	227.3	241.3	254.0	262.5
60°	196.9	202.0	212.8	225.7	235.5
62.5°	171.6	176.8	186.1	197.5	208.6
65°	147.0	150.9	159.9	171.3	181.1
67.5°	123.2	126.6	135.6	143.5	153.8
70°	99.1	103.6	110.2	117.9	124.5
72.5°	79.8	81.7	87.2	92.8	99.7
75°	58.9	62.1	66.6	69.8	73.7
77.5°	42.3	44.1	46.8	49.4	53.1
80°	28.3	29.1	31.5	32.0	34.9
82.5°	17.2	17.7	18.2	18.5	19.6
85°	9.3	9.3	9.3	8.7	8.7
87.5°	5.3	5.3	4.5	3.7	2.6
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)