

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: P553894

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-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: P553894
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-30-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 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

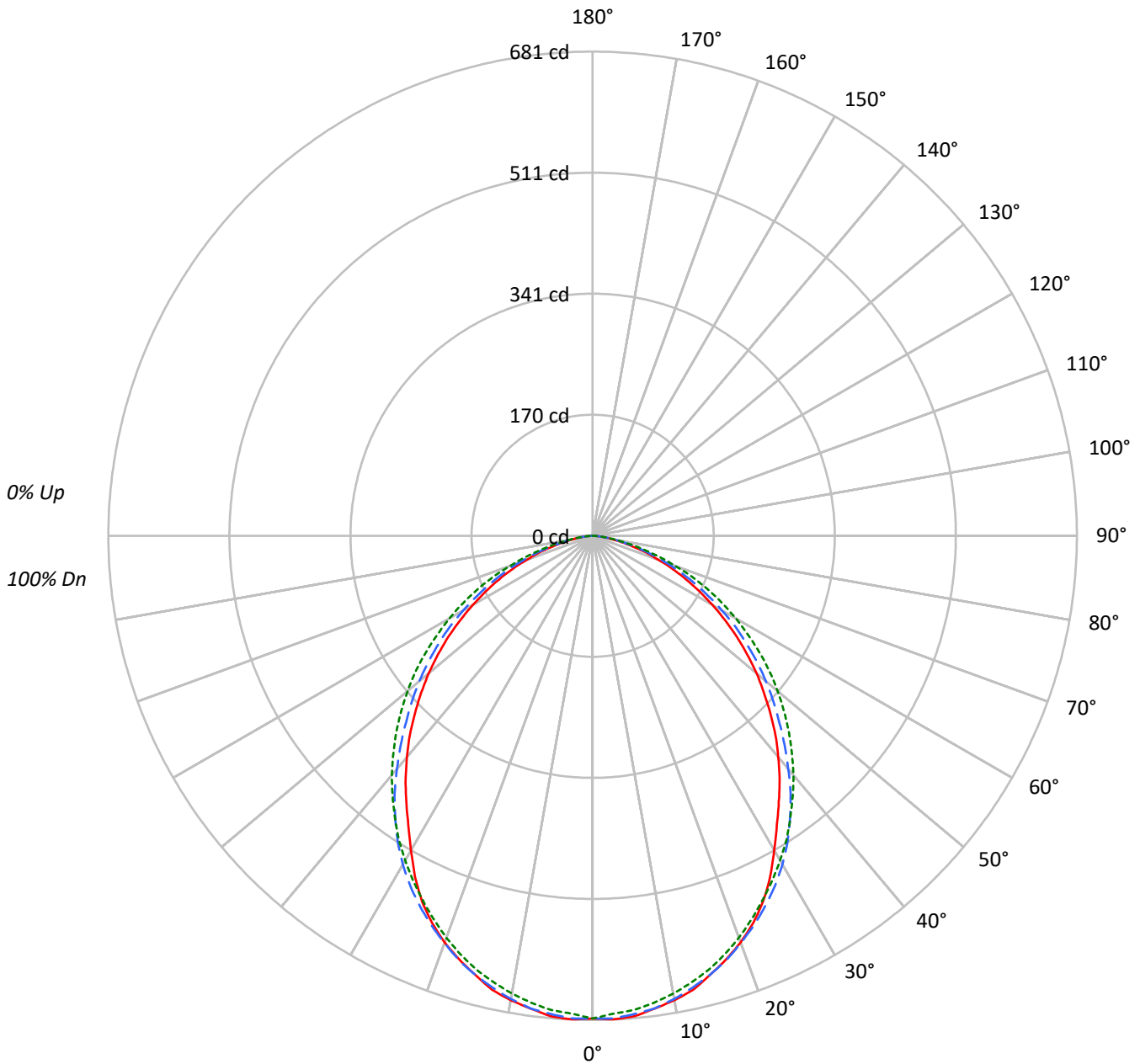
Lumens per Lamp: N/A
Luminaire Lumens: 1570.0 lumens
Efficiency: N/A
Efficacy: 72.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	3654	3654	3654
5°	3664	3648	3618
10°	3625	3615	3574
15°	3561	3561	3520
20°	3486	3490	3445
25°	3371	3412	3358
30°	3174	3317	3276
35°	2999	3179	3185
40°	2853	3007	3086
45°	2690	2825	2970
50°	2519	2663	2843
55°	2322	2477	2690
60°	2091	2260	2502
65°	1847	2010	2276
70°	1539	1712	1934
75°	1210	1366	1514
80°	865	961	1066
85°	562	562	531



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	4.1
10°-20°	179.6	11.4
20°-30°	262.4	16.7
30°-40°	297.9	19.0
40°-50°	287.6	18.3
50°-60°	237.2	15.1
60°-70°	158.0	10.1
70°-80°	70.7	4.5
80°-90°	12.6	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°	506.0	32.2
0°-40°	803.9	51.2
0°-60°	1328.7	84.6
0°-90°	1570.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1570.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	679	679	679	679	679	
5°	678	678	675	672	670	64
15°	639	641	639	636	632	180
25°	568	572	575	570	566	260
35°	456	463	484	486	485	286
45°	353	359	371	388	390	273
55°	248	252	264	279	287	221
65°	145	149	158	169	179	144
75°	58	61	66	69	73	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°	679.0	679.0	679.0	679.0	679.0
2.5°	680.8	681.1	679.5	675.3	672.7
5°	678.2	677.9	675.3	671.7	669.6
7.5°	670.6	671.2	670.4	665.2	662.3
10°	663.3	663.6	661.5	657.3	653.9
12.5°	653.9	653.7	650.8	648.7	643.2
15°	639.1	640.6	639.1	636.2	631.8
17.5°	624.7	624.7	625.8	620.8	617.4
20°	608.6	609.3	609.3	605.4	601.5
22.5°	589.8	592.1	592.9	588.7	584.0
25°	567.6	572.0	574.6	570.5	565.5
27.5°	540.7	547.5	555.3	552.2	546.7
30°	510.7	520.7	533.7	531.1	527.2
32.5°	482.3	492.2	510.2	509.2	507.1
35°	456.5	462.7	483.9	486.5	484.7
37.5°	432.0	437.7	457.5	463.5	462.0
40°	406.1	412.4	428.0	438.7	439.3
42.5°	380.6	386.6	399.4	414.7	414.7
45°	353.4	359.4	371.2	388.1	390.2
47.5°	326.8	333.1	344.6	361.5	364.9
50°	300.8	306.5	318.0	334.4	339.6
52.5°	273.6	279.9	291.1	306.2	313.8
55°	247.5	251.7	264.0	278.6	286.7
57.5°	220.4	224.3	238.2	250.7	259.0
60°	194.3	199.3	210.0	222.8	232.4
62.5°	169.3	174.5	183.6	194.9	205.8
65°	145.0	148.9	157.8	169.0	178.7
67.5°	121.6	124.9	133.8	141.6	151.8
70°	97.8	102.3	108.8	116.3	122.9
72.5°	78.8	80.6	86.1	91.6	98.3
75°	58.2	61.3	65.7	68.9	72.8
77.5°	41.7	43.6	46.2	48.8	52.4
80°	27.9	28.7	31.0	31.6	34.4
82.5°	17.0	17.5	18.0	18.3	19.3
85°	9.1	9.1	9.1	8.6	8.6
87.5°	5.2	5.2	4.4	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)