

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: P554454

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-82-87-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: P554454
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-LD4-1STD-35-UNV-82-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC 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

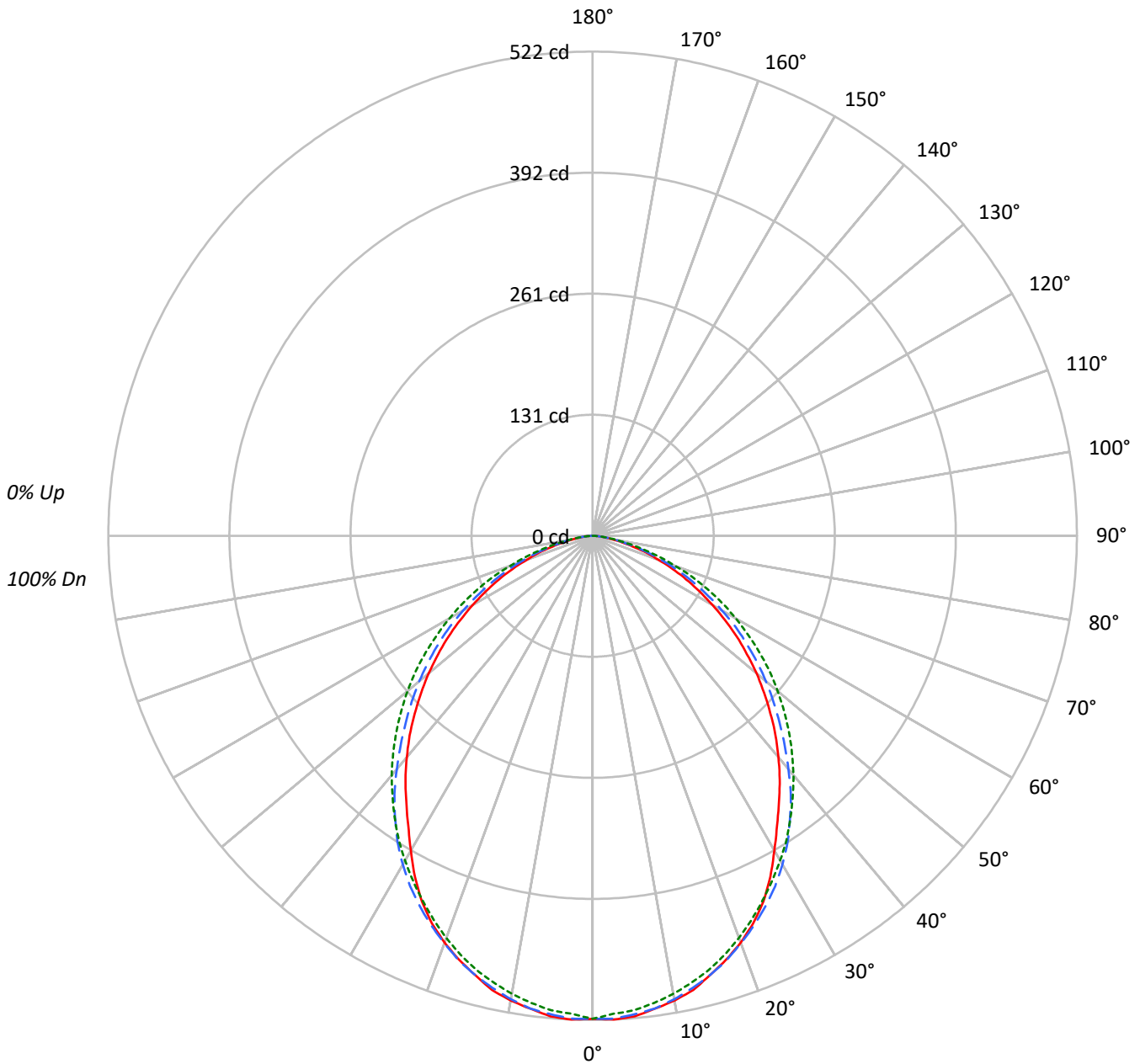
Lumens per Lamp: N/A
Luminaire Lumens: 1204.0 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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	66	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°	2802	2802	2802
5°	2810	2798	2774
10°	2780	2772	2741
15°	2731	2731	2700
20°	2673	2676	2642
25°	2585	2617	2575
30°	2434	2544	2513
35°	2300	2438	2442
40°	2188	2307	2367
45°	2063	2167	2278
50°	1931	2041	2180
55°	1781	1899	2062
60°	1604	1733	1918
65°	1416	1541	1745
70°	1180	1312	1482
75°	927	1048	1160
80°	663	738	818
85°	432	432	408



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.0	4.1
10°-20°	137.7	11.4
20°-30°	201.3	16.7
30°-40°	228.5	19.0
40°-50°	220.6	18.3
50°-60°	181.9	15.1
60°-70°	121.1	10.1
70°-80°	54.2	4.5
80°-90°	9.7	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°	388.0	32.2
0°-40°	616.5	51.2
0°-60°	1019.0	84.6
0°-90°	1204.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1204.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	520	520	518	515	514	49
15°	490	491	490	488	484	138
25°	435	439	441	438	434	199
35°	350	355	371	373	372	219
45°	271	276	285	298	299	209
55°	190	193	202	214	220	169
65°	111	114	121	130	137	110
75°	45	47	50	53	56	49
85°	7	7	7	7	7	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	520.7	520.7	520.7	520.7	520.7
2.5°	522.1	522.3	521.1	517.9	515.9
5°	520.1	519.9	517.9	515.1	513.5
7.5°	514.3	514.7	514.1	510.1	507.9
10°	508.7	508.9	507.3	504.1	501.5
12.5°	501.5	501.3	499.1	497.5	493.3
15°	490.1	491.3	490.1	487.9	484.5
17.5°	479.1	479.1	479.9	476.1	473.5
20°	466.7	467.3	467.3	464.3	461.3
22.5°	452.3	454.1	454.7	451.5	447.9
25°	435.3	438.7	440.7	437.5	433.7
27.5°	414.7	419.9	425.9	423.5	419.3
30°	391.7	399.3	409.3	407.3	404.3
32.5°	369.9	377.5	391.3	390.5	388.9
35°	350.1	354.9	371.1	373.1	371.7
37.5°	331.3	335.7	350.9	355.5	354.3
40°	311.5	316.3	328.3	336.5	336.9
42.5°	291.9	296.5	306.3	318.1	318.1
45°	271.1	275.7	284.7	297.7	299.3
47.5°	250.6	255.4	264.3	277.3	279.9
50°	230.6	235.0	243.8	256.4	260.4
52.5°	209.8	214.6	223.2	234.8	240.6
55°	189.8	193.0	202.4	213.6	219.8
57.5°	169.0	172.0	182.6	192.2	198.6
60°	149.0	152.8	161.0	170.8	178.2
62.5°	129.8	133.8	140.8	149.4	157.8
65°	111.2	114.2	121.0	129.6	137.0
67.5°	93.2	95.8	102.6	108.6	116.4
70°	75.0	78.4	83.4	89.2	94.2
72.5°	60.4	61.8	66.0	70.2	75.4
75°	44.6	47.0	50.4	52.8	55.8
77.5°	32.0	33.4	35.4	37.4	40.2
80°	21.4	22.0	23.8	24.2	26.4
82.5°	13.0	13.4	13.8	14.0	14.8
85°	7.0	7.0	7.0	6.6	6.6
87.5°	4.0	4.0	3.4	2.8	2.0
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)