

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: P554500

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-81-86-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: P554500
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-40-UNV-81-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

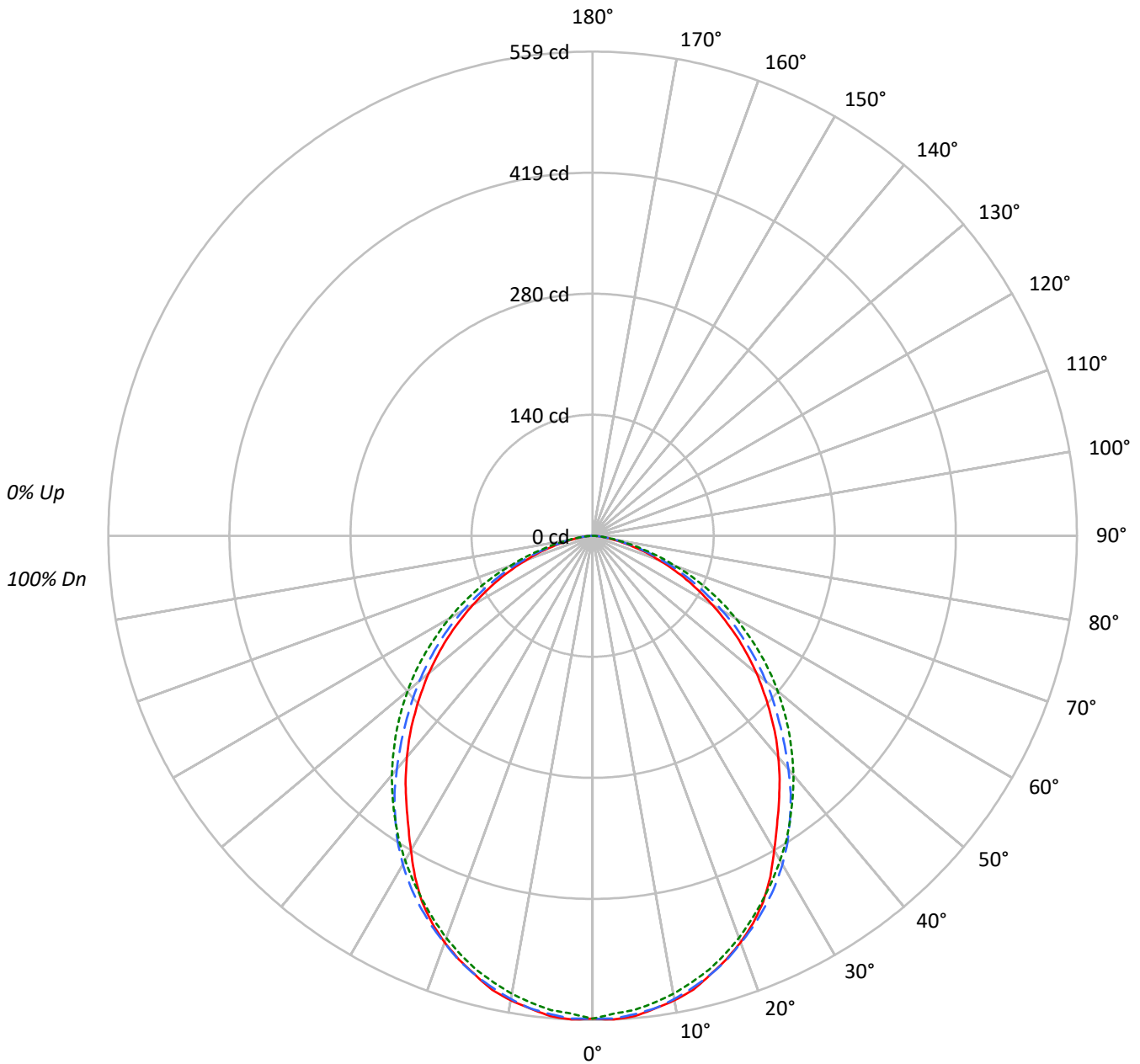
Lumens per Lamp: N/A
Luminaire Lumens: 1289.0 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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°	3000	3000	3000
5°	3008	2996	2970
10°	2976	2968	2934
15°	2924	2924	2890
20°	2861	2865	2829
25°	2767	2802	2757
30°	2606	2723	2690
35°	2462	2610	2614
40°	2342	2469	2533
45°	2209	2320	2439
50°	2067	2186	2334
55°	1907	2033	2209
60°	1717	1856	2054
65°	1517	1650	1868
70°	1264	1405	1588
75°	994	1123	1243
80°	710	790	877
85°	463	463	438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.5	4.1
10°-20°	147.4	11.4
20°-30°	215.5	16.7
30°-40°	244.6	19.0
40°-50°	236.1	18.3
50°-60°	194.8	15.1
60°-70°	129.7	10.1
70°-80°	58.0	4.5
80°-90°	10.4	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°	415.4	32.2
0°-40°	660.0	51.2
0°-60°	1090.9	84.6
0°-90°	1289.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1289.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	557	557	554	552	550	53
15°	525	526	525	522	519	148
25°	466	470	472	468	464	213
35°	375	380	397	399	398	235
45°	290	295	305	319	320	224
55°	203	207	217	229	235	181
65°	119	122	130	139	147	118
75°	48	50	54	56	60	52
85°	8	8	8	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	557.5	557.5	557.5	557.5	557.5
2.5°	559.0	559.2	557.9	554.5	552.3
5°	556.8	556.6	554.5	551.5	549.7
7.5°	550.6	551.0	550.4	546.1	543.8
10°	544.6	544.8	543.1	539.7	536.9
12.5°	536.9	536.7	534.3	532.6	528.1
15°	524.7	526.0	524.7	522.3	518.7
17.5°	512.9	512.9	513.8	509.7	506.9
20°	499.6	500.3	500.3	497.1	493.9
22.5°	484.2	486.1	486.8	483.4	479.5
25°	466.0	469.7	471.8	468.4	464.3
27.5°	444.0	449.5	455.9	453.4	448.9
30°	419.3	427.5	438.2	436.0	432.8
32.5°	396.0	404.1	418.9	418.0	416.3
35°	374.8	379.9	397.3	399.4	397.9
37.5°	354.6	359.4	375.6	380.6	379.3
40°	333.4	338.6	351.4	360.2	360.6
42.5°	312.5	317.4	327.9	340.5	340.5
45°	290.2	295.1	304.8	318.7	320.4
47.5°	268.3	273.5	282.9	296.8	299.6
50°	246.9	251.6	261.1	274.6	278.8
52.5°	224.7	229.8	239.0	251.4	257.6
55°	203.2	206.7	216.7	228.7	235.4
57.5°	181.0	184.2	195.5	205.8	212.7
60°	159.5	163.6	172.4	182.9	190.8
62.5°	139.0	143.3	150.8	160.0	169.0
65°	119.1	122.3	129.6	138.8	146.7
67.5°	99.8	102.6	109.9	116.3	124.6
70°	80.3	84.0	89.3	95.5	100.9
72.5°	64.7	66.2	70.7	75.2	80.7
75°	47.8	50.3	54.0	56.5	59.8
77.5°	34.3	35.8	37.9	40.0	43.0
80°	22.9	23.6	25.5	25.9	28.3
82.5°	13.9	14.3	14.8	15.0	15.8
85°	7.5	7.5	7.5	7.1	7.1
87.5°	4.3	4.3	3.6	3.0	2.1
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)