

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: P556570

Luminaire Tested: **FUSL-12-4-LD4-1LO-40-UNV-82-94-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: P556570
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-12-4-LD4-1LO-40-UNV-82-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

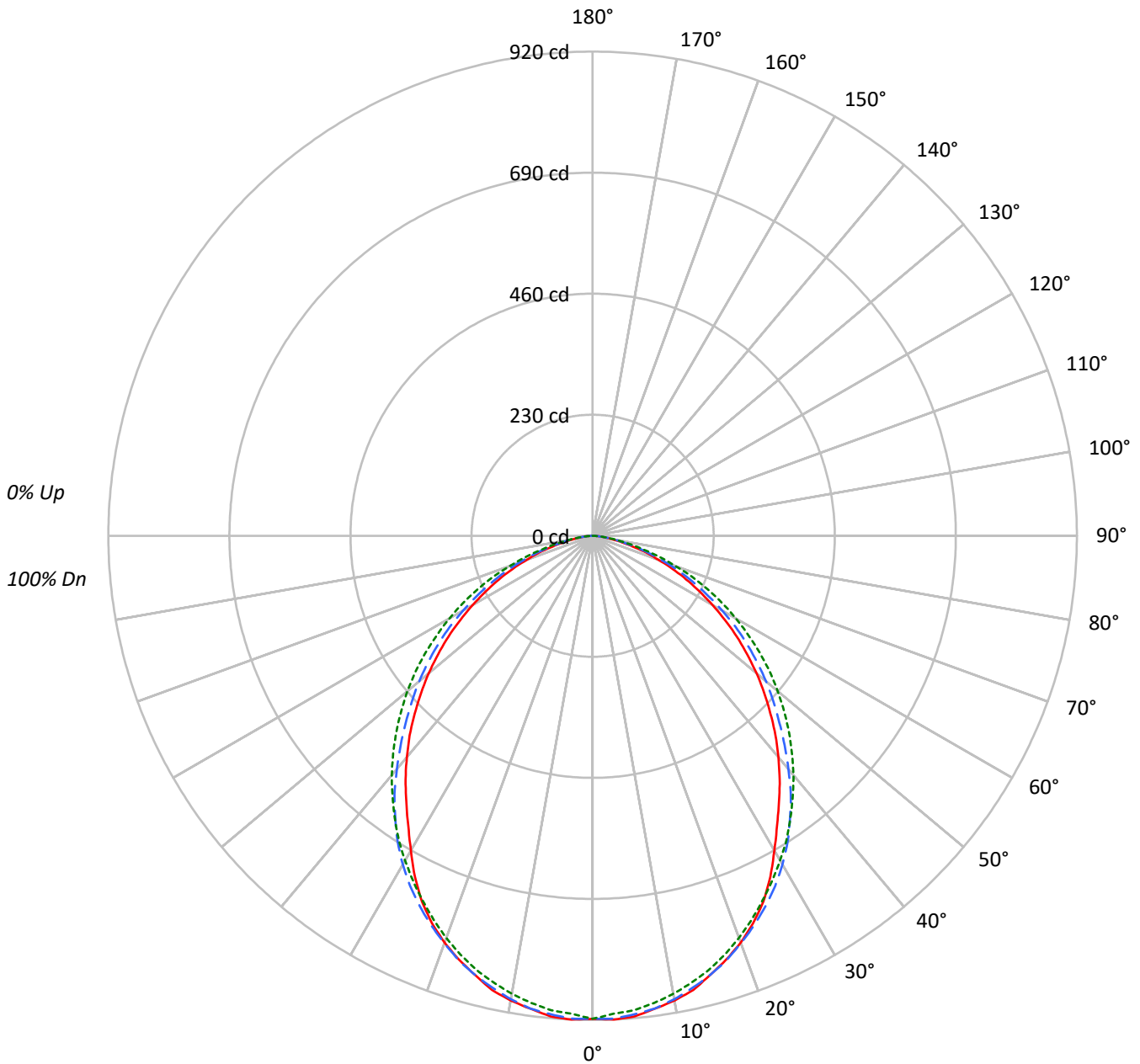
Lumens per Lamp: N/A
Luminaire Lumens: 2122.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	2470	2470	2470
5°	2476	2466	2445
10°	2450	2443	2415
15°	2406	2406	2379
20°	2355	2359	2328
25°	2278	2306	2269
30°	2145	2241	2214
35°	2027	2148	2152
40°	1928	2032	2086
45°	1818	1909	2007
50°	1702	1799	1922
55°	1570	1674	1818
60°	1414	1527	1690
65°	1248	1358	1538
70°	1040	1157	1307
75°	817	923	1023
80°	584	651	721
85°	380	380	358



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.4	4.1
10°-20°	242.7	11.4
20°-30°	354.7	16.7
30°-40°	402.6	19.0
40°-50°	388.7	18.3
50°-60°	320.6	15.1
60°-70°	213.5	10.1
70°-80°	95.5	4.5
80°-90°	17.1	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°	683.9	32.2
0°-40°	1086.5	51.2
0°-60°	1795.8	84.6
0°-90°	2122.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2122.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	917	916	913	908	905	87
15°	864	866	864	860	854	244
25°	767	773	777	771	764	351
35°	617	625	654	658	655	387
45°	478	486	502	525	527	369
55°	335	340	357	376	388	299
65°	196	201	213	228	242	194
75°	79	83	89	93	98	86
85°	12	12	12	12	12	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	917.7	917.7	917.7	917.7	917.7
2.5°	920.2	920.5	918.4	912.8	909.2
5°	916.7	916.3	912.8	907.8	905.0
7.5°	906.4	907.1	906.1	899.0	895.1
10°	896.6	896.9	894.1	888.4	883.9
12.5°	883.9	883.5	879.6	876.8	869.4
15°	863.8	865.9	863.8	859.9	853.9
17.5°	844.4	844.4	845.8	839.1	834.5
20°	822.5	823.6	823.6	818.3	813.0
22.5°	797.1	800.3	801.4	795.7	789.4
25°	767.2	773.2	776.7	771.0	764.3
27.5°	730.9	740.0	750.6	746.4	739.0
30°	690.3	703.7	721.3	717.8	712.5
32.5°	651.9	665.3	689.6	688.2	685.4
35°	617.0	625.4	654.0	657.5	655.1
37.5°	583.8	591.6	618.4	626.5	624.4
40°	548.9	557.4	578.5	593.0	593.7
42.5°	514.4	522.5	539.8	560.6	560.6
45°	477.7	485.8	501.7	524.6	527.4
47.5°	441.8	450.2	465.7	488.6	493.2
50°	406.5	414.3	429.8	452.0	459.0
52.5°	369.8	378.3	393.5	413.9	424.1
55°	334.6	340.2	356.8	376.5	387.5
57.5°	297.9	303.2	321.9	338.8	350.1
60°	262.7	269.4	283.8	301.1	314.1
62.5°	228.8	235.9	248.2	263.4	278.2
65°	196.0	201.3	213.3	228.5	241.5
67.5°	164.3	168.9	180.9	191.4	205.2
70°	132.2	138.2	147.0	157.2	166.1
72.5°	106.5	108.9	116.3	123.7	132.9
75°	78.6	82.9	88.8	93.1	98.4
77.5°	56.4	58.9	62.4	65.9	70.9
80°	37.7	38.8	42.0	42.7	46.5
82.5°	22.9	23.6	24.3	24.7	26.1
85°	12.3	12.3	12.3	11.6	11.6
87.5°	7.1	7.1	6.0	4.9	3.5
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)