

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: P556586

Luminaire Tested: **FUSL-12-4-LD4-1LO-40-UNV-93-94-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: P556586
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-93-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS 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

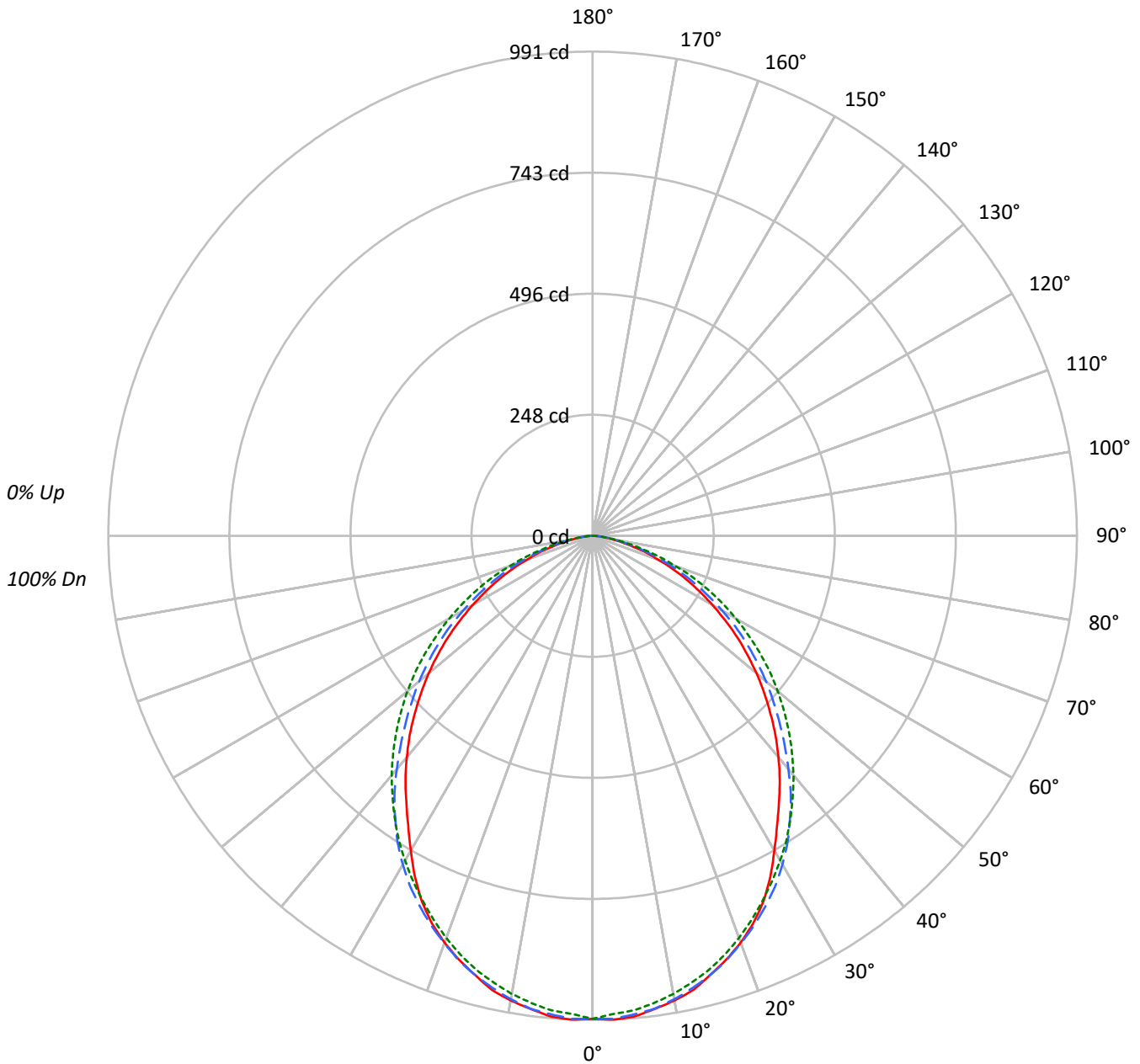
Lumens per Lamp: N/A
Luminaire Lumens: 2286.0 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	2660	2660	2660
5°	2667	2656	2634
10°	2639	2632	2602
15°	2592	2592	2563
20°	2538	2541	2508
25°	2454	2484	2445
30°	2311	2415	2385
35°	2184	2314	2318
40°	2077	2190	2247
45°	1958	2057	2162
50°	1833	1938	2070
55°	1691	1803	1958
60°	1523	1645	1821
65°	1345	1463	1657
70°	1120	1246	1408
75°	881	995	1102
80°	629	700	776
85°	411	411	386



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.1	4.1
10°-20°	261.5	11.4
20°-30°	382.1	16.7
30°-40°	433.8	19.0
40°-50°	418.7	18.3
50°-60°	345.4	15.1
60°-70°	230.0	10.1
70°-80°	102.9	4.5
80°-90°	18.4	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°	736.7	32.2
0°-40°	1170.5	51.2
0°-60°	1934.6	84.6
0°-90°	2286.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2286.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	989	989	989	989	989	
5°	988	987	983	978	975	93
15°	930	933	930	926	920	262
25°	826	833	837	831	823	378
35°	665	674	704	708	706	416
45°	515	523	540	565	568	397
55°	360	366	384	406	417	322
65°	211	217	230	246	260	209
75°	85	89	96	100	106	93
85°	13	13	13	12	12	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	988.6	988.6	988.6	988.6	988.6
2.5°	991.3	991.7	989.4	983.3	979.5
5°	987.5	987.1	983.3	978.0	975.0
7.5°	976.5	977.2	976.1	968.5	964.3
10°	965.8	966.2	963.2	957.1	952.2
12.5°	952.2	951.8	947.6	944.6	936.6
15°	930.5	932.8	930.5	926.3	919.9
17.5°	909.6	909.6	911.2	903.9	899.0
20°	886.1	887.2	887.2	881.5	875.8
22.5°	858.7	862.2	863.3	857.2	850.4
25°	826.5	832.9	836.7	830.6	823.4
27.5°	787.3	797.2	808.6	804.1	796.1
30°	743.7	758.1	777.1	773.3	767.6
32.5°	702.3	716.7	742.9	741.4	738.3
35°	664.7	673.8	704.5	708.3	705.7
37.5°	629.0	637.3	666.2	674.9	672.6
40°	591.4	600.5	623.3	638.8	639.6
42.5°	554.1	562.9	581.5	603.9	603.9
45°	514.6	523.4	540.5	565.2	568.2
47.5°	475.9	485.0	501.7	526.4	531.3
50°	437.9	446.3	463.0	486.9	494.5
52.5°	398.4	407.5	423.9	445.9	456.9
55°	360.4	366.5	384.4	405.6	417.4
57.5°	320.9	326.6	346.8	365.0	377.1
60°	283.0	290.2	305.7	324.4	338.4
62.5°	246.5	254.1	267.4	283.7	299.7
65°	211.2	216.9	229.8	246.1	260.2
67.5°	177.0	181.9	194.8	206.2	221.0
70°	142.4	148.9	158.4	169.4	178.9
72.5°	114.7	117.4	125.3	133.3	143.2
75°	84.7	89.3	95.7	100.3	106.0
77.5°	60.8	63.4	67.2	71.0	76.3
80°	40.6	41.8	45.2	46.0	50.1
82.5°	24.7	25.4	26.2	26.6	28.1
85°	13.3	13.3	13.3	12.5	12.5
87.5°	7.6	7.6	6.5	5.3	3.8
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)