

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: P558098

Luminaire Tested: **FUSL-12-4-LD4-3LO-40-UNV-82-85-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: P558098
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-LD4-3LO-40-UNV-82-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

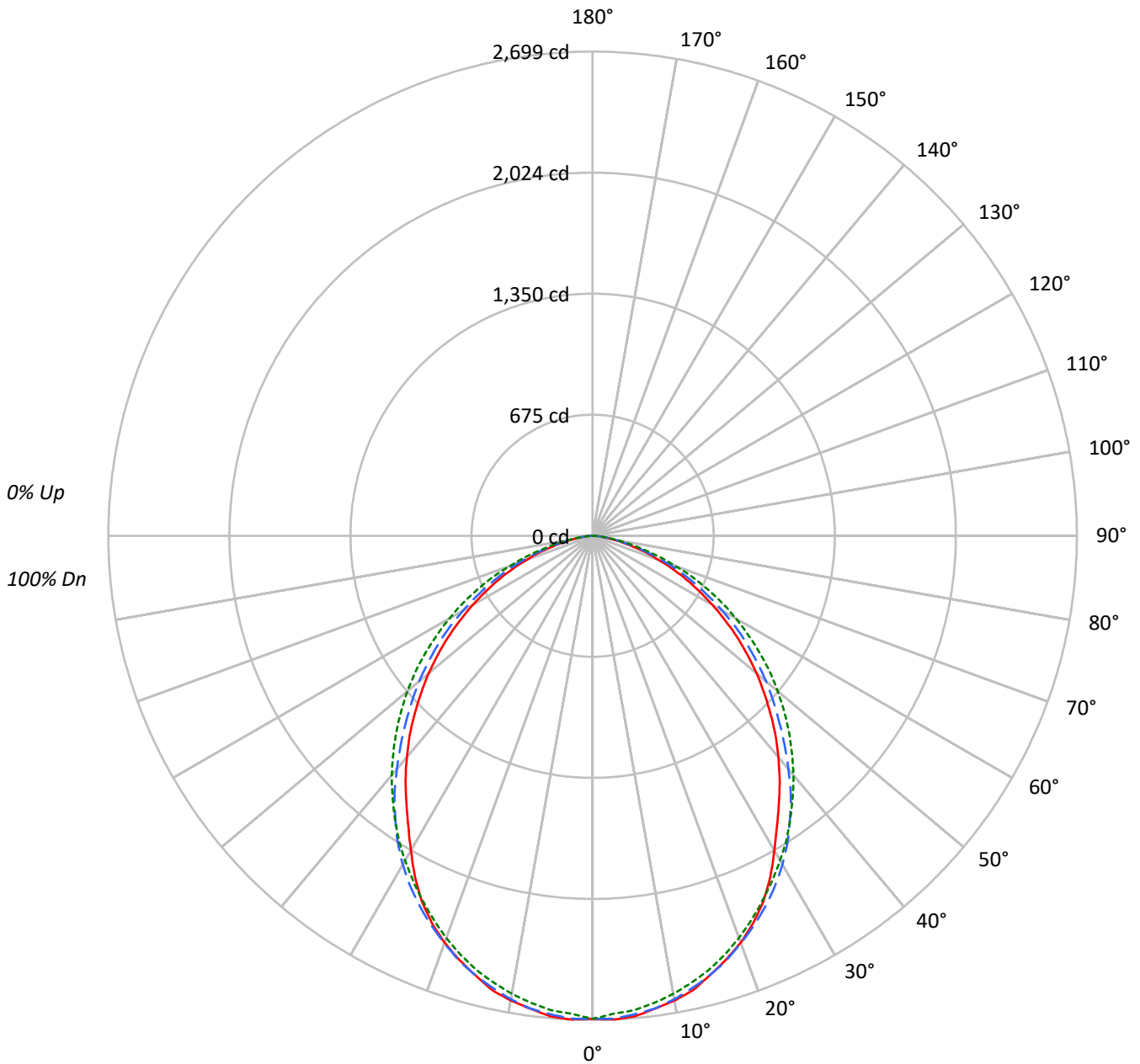
Lumens per Lamp: N/A
Luminaire Lumens: 6225.0 lumens
Efficiency: N/A
Efficacy: 88.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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

TEST NUMBER: P558098

CATALOG NUMBER: FUSL-12-4-LD4-3LO-40-UNV-82-85-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P558098

CATALOG NUMBER: FUSL-12-4-LD4-3LO-40-UNV-82-85-EDD-90

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7245	7245	7245
5°	7264	7233	7172
10°	7187	7167	7085
15°	7059	7059	6979
20°	6910	6919	6830
25°	6682	6765	6658
30°	6293	6575	6495
35°	5946	6302	6313
40°	5657	5962	6118
45°	5333	5601	5888
50°	4992	5278	5637
55°	4605	4911	5332
60°	4147	4481	4959
65°	3661	3984	4511
70°	3051	3393	3832
75°	2398	2709	3001
80°	1715	1908	2115
85°	1118	1118	1053



TEST NUMBER: P558098

CATALOG NUMBER: FUSL-12-4-LD4-3LO-40-UNV-82-85-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.5	4.1
10°-20°	712.1	11.4
20°-30°	1040.6	16.7
30°-40°	1181.2	19.0
40°-50°	1140.2	18.3
50°-60°	940.6	15.1
60°-70°	626.4	10.1
70°-80°	280.3	4.5
80°-90°	50.1	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°	2006.1	32.2
0°-40°	3187.3	51.2
0°-60°	5268.2	84.6
0°-90°	6225.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6225.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2692	2692	2692	2692	2692	
5°	2689	2688	2678	2663	2655	255
15°	2534	2540	2534	2522	2505	714
25°	2250	2268	2278	2262	2242	1031
35°	1810	1835	1918	1929	1922	1134
45°	1401	1425	1472	1539	1547	1081
55°	982	998	1047	1105	1137	876
65°	575	591	626	670	708	570
75°	231	243	261	273	289	252
85°	36	36	36	34	34	49
90°	0	0	0	0	0	



TEST NUMBER: P558098

CATALOG NUMBER: FUSL-12-4-LD4-3LO-40-UNV-82-85-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2692.2	2692.2	2692.2	2692.2	2692.2
2.5°	2699.4	2700.4	2694.2	2677.7	2667.3
5°	2689.0	2688.0	2677.7	2663.2	2654.9
7.5°	2659.1	2661.1	2658.0	2637.3	2626.0
10°	2630.1	2631.1	2622.9	2606.3	2592.9
12.5°	2592.9	2591.8	2580.5	2572.2	2550.5
15°	2533.9	2540.1	2533.9	2522.5	2505.0
17.5°	2477.0	2477.0	2481.2	2461.5	2448.1
20°	2412.9	2416.0	2416.0	2400.5	2385.0
22.5°	2338.4	2347.7	2350.8	2334.3	2315.7
25°	2250.5	2268.1	2278.5	2261.9	2242.3
27.5°	2144.0	2170.9	2201.9	2189.5	2167.8
30°	2025.1	2064.4	2116.1	2105.7	2090.2
32.5°	1912.3	1951.6	2023.0	2018.9	2010.6
35°	1809.9	1834.8	1918.5	1928.9	1921.6
37.5°	1712.7	1735.5	1814.1	1837.9	1831.7
40°	1610.3	1635.1	1697.2	1739.6	1741.7
42.5°	1509.0	1532.8	1583.4	1644.5	1644.5
45°	1401.4	1425.2	1471.7	1539.0	1547.2
47.5°	1295.9	1320.7	1366.2	1433.5	1446.9
50°	1192.5	1215.2	1260.8	1325.9	1346.6
52.5°	1084.9	1109.7	1154.2	1214.2	1244.2
55°	981.5	998.1	1046.7	1104.6	1136.6
57.5°	873.9	889.5	944.3	993.9	1027.0
60°	770.5	790.2	832.6	883.2	921.5
62.5°	671.2	691.9	728.1	772.6	816.0
65°	575.0	590.6	625.7	670.2	708.5
67.5°	482.0	495.4	530.6	561.6	601.9
70°	387.8	405.4	431.3	461.3	487.1
72.5°	312.3	319.6	341.3	363.0	389.9
75°	230.6	243.0	260.6	273.0	288.6
77.5°	165.5	172.7	183.1	193.4	207.9
80°	110.7	113.8	123.1	125.1	136.5
82.5°	67.2	69.3	71.4	72.4	76.5
85°	36.2	36.2	36.2	34.1	34.1
87.5°	20.7	20.7	17.6	14.5	10.3
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)