

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: P556984

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-80-88-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: P556984
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-LD4-2HI-35-UNV-80-88-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

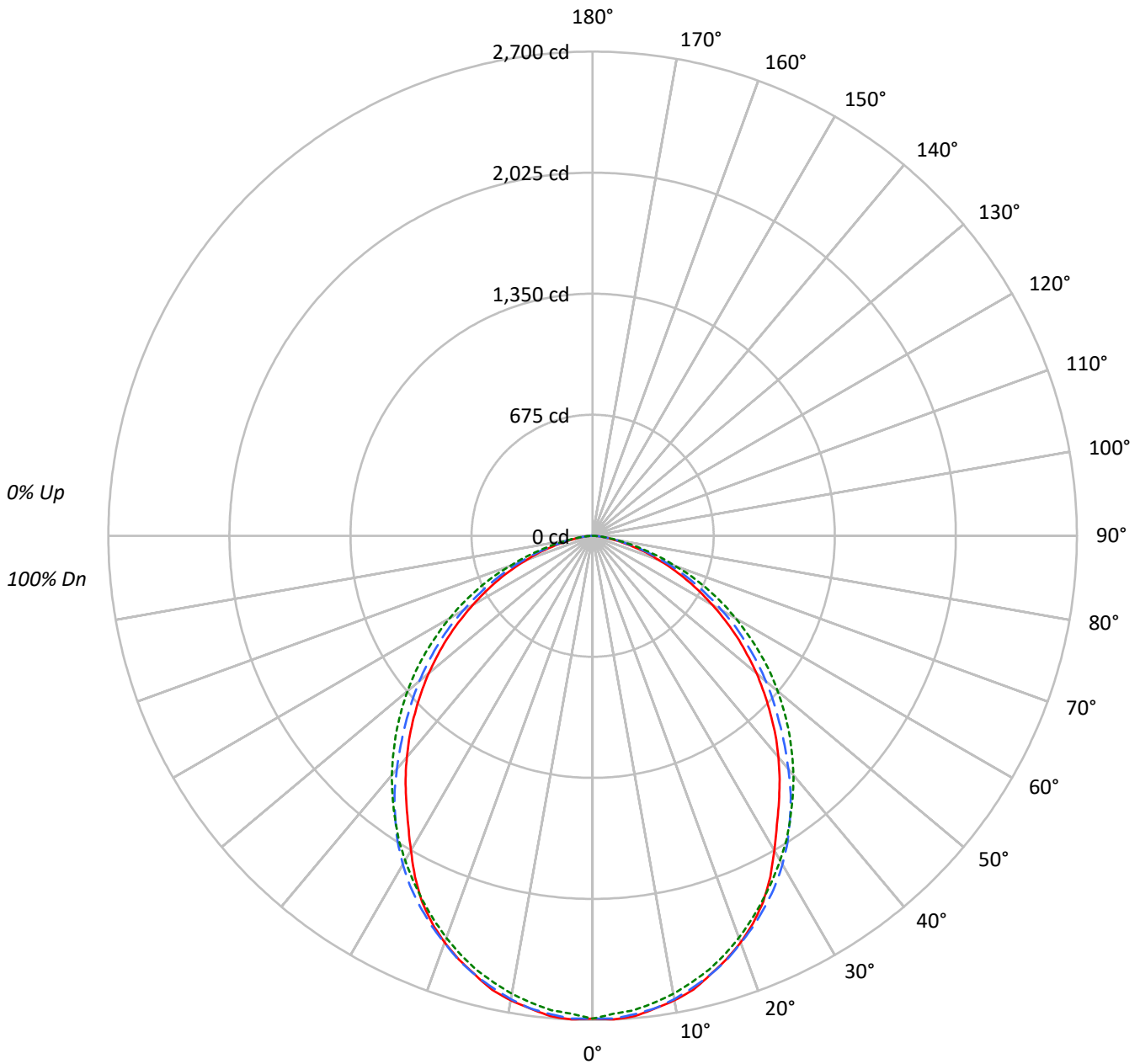
Lumens per Lamp: N/A
Luminaire Lumens: 6226.0 lumens
Efficiency: N/A
Efficacy: 72.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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	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°	7246	7246	7246
5°	7265	7234	7173
10°	7188	7168	7086
15°	7060	7060	6980
20°	6911	6920	6831
25°	6683	6766	6659
30°	6293	6576	6496
35°	5947	6303	6314
40°	5658	5963	6119
45°	5334	5602	5889
50°	4993	5279	5638
55°	4606	4911	5333
60°	4147	4482	4961
65°	3662	3985	4512
70°	3052	3394	3833
75°	2399	2711	3001
80°	1715	1908	2115
85°	1118	1118	1053



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.5	4.1
10°-20°	712.2	11.4
20°-30°	1040.8	16.7
30°-40°	1181.4	19.0
40°-50°	1140.4	18.3
50°-60°	940.8	15.1
60°-70°	626.5	10.1
70°-80°	280.3	4.5
80°-90°	50.2	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°	2006.5	32.2
0°-40°	3187.8	51.2
0°-60°	5269.0	84.6
0°-90°	6226.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6226.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2693	2693	2693	2693	2693	
5°	2690	2688	2678	2664	2655	255
15°	2534	2540	2534	2523	2505	714
25°	2251	2268	2279	2262	2243	1031
35°	1810	1835	1919	1929	1922	1134
45°	1402	1425	1472	1539	1548	1081
55°	982	998	1047	1105	1137	876
65°	575	591	626	670	709	570
75°	231	243	261	273	289	252
85°	36	36	36	34	34	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2692.6	2692.6	2692.6	2692.6	2692.6
2.5°	2699.8	2700.9	2694.7	2678.1	2667.8
5°	2689.5	2688.4	2678.1	2663.6	2655.3
7.5°	2659.5	2661.6	2658.4	2637.8	2626.4
10°	2630.5	2631.6	2623.3	2606.7	2593.3
12.5°	2593.3	2592.2	2580.9	2572.6	2550.9
15°	2534.3	2540.5	2534.3	2522.9	2505.4
17.5°	2477.4	2477.4	2481.6	2461.9	2448.5
20°	2413.3	2416.4	2416.4	2400.9	2385.4
22.5°	2338.8	2348.1	2351.2	2334.7	2316.1
25°	2250.9	2268.5	2278.8	2262.3	2242.6
27.5°	2144.3	2171.2	2202.3	2189.9	2168.1
30°	2025.4	2064.7	2116.4	2106.1	2090.6
32.5°	1912.6	1951.9	2023.3	2019.2	2010.9
35°	1810.2	1835.1	1918.8	1929.2	1921.9
37.5°	1713.0	1735.7	1814.4	1838.2	1832.0
40°	1610.6	1635.4	1697.5	1739.9	1742.0
42.5°	1509.2	1533.0	1583.7	1644.7	1644.7
45°	1401.6	1425.4	1472.0	1539.2	1547.5
47.5°	1296.1	1320.9	1366.5	1433.7	1447.1
50°	1192.7	1215.4	1261.0	1326.1	1346.8
52.5°	1085.1	1109.9	1154.4	1214.4	1244.4
55°	981.7	998.2	1046.8	1104.8	1136.8
57.5°	874.1	889.6	944.4	994.1	1027.2
60°	770.6	790.3	832.7	883.4	921.7
62.5°	671.3	692.0	728.2	772.7	816.2
65°	575.1	590.7	625.8	670.3	708.6
67.5°	482.0	495.5	530.7	561.7	602.0
70°	387.9	405.5	431.4	461.3	487.2
72.5°	312.4	319.6	341.4	363.1	390.0
75°	230.7	243.1	260.7	273.1	288.6
77.5°	165.5	172.7	183.1	193.4	207.9
80°	110.7	113.8	123.1	125.2	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)