

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: P557306

Luminaire Tested: **FUSL-12-4-LD4-2LO-40-UNV-80-94-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: P557306
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-LD4-2LO-40-UNV-80-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC 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

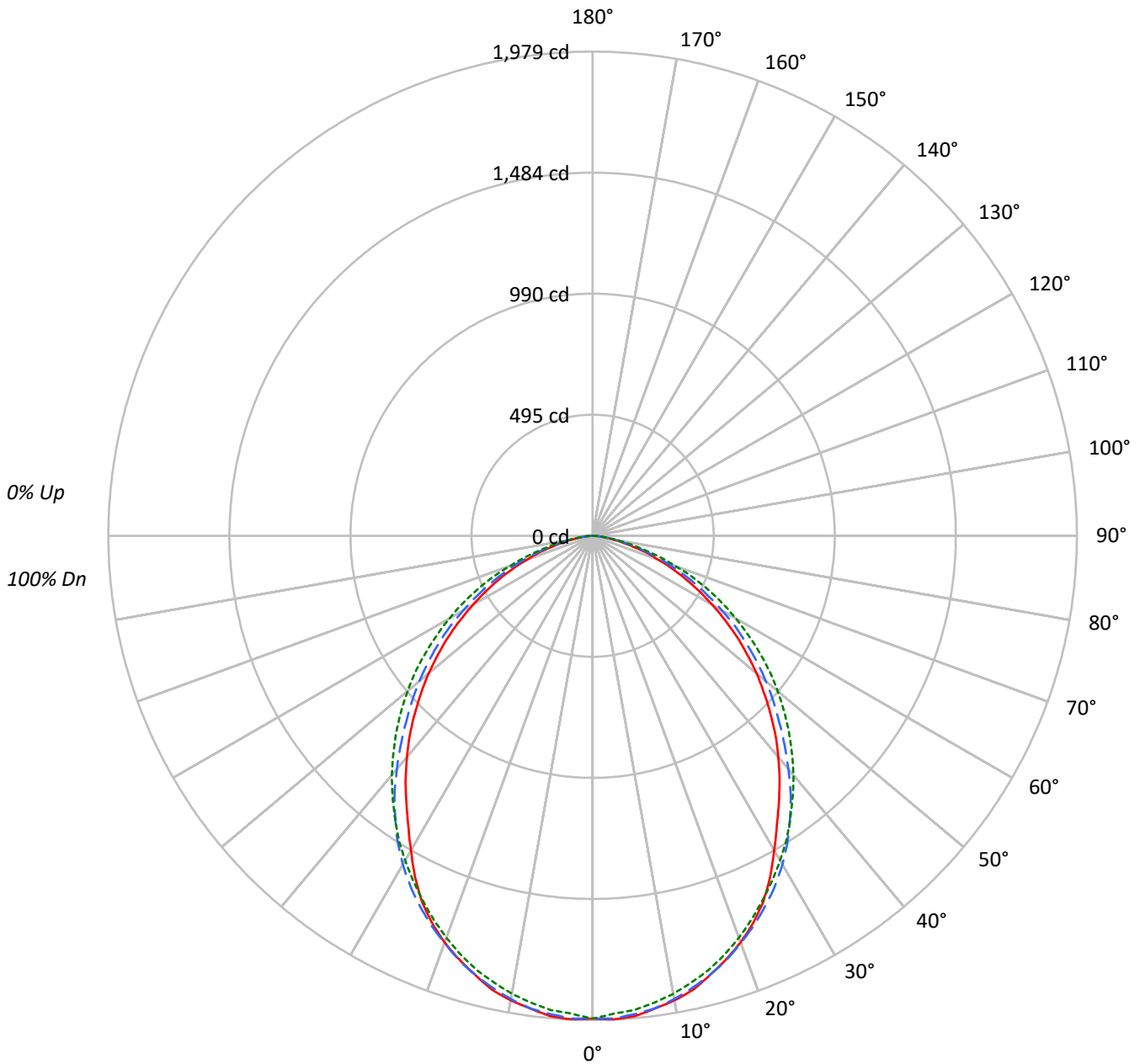
Lumens per Lamp: N/A
Luminaire Lumens: 4563.0 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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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CATALOG NUMBER: FUSL-12-4-LD4-2LO-40-UNV-80-94-EDD-90

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°	5310	5310	5310
5°	5324	5302	5257
10°	5268	5253	5193
15°	5175	5175	5115
20°	5065	5072	5006
25°	4898	4959	4880
30°	4612	4820	4761
35°	4358	4620	4627
40°	4147	4370	4485
45°	3909	4106	4316
50°	3659	3869	4132
55°	3376	3599	3909
60°	3040	3285	3636
65°	2684	2921	3307
70°	2237	2487	2810
75°	1758	1986	2199
80°	1257	1398	1551
85°	818	818	772



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.8	4.1
10°-20°	522.0	11.4
20°-30°	762.8	16.7
30°-40°	865.8	19.0
40°-50°	835.8	18.3
50°-60°	689.5	15.1
60°-70°	459.1	10.1
70°-80°	205.5	4.5
80°-90°	36.8	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°	1470.5	32.2
0°-40°	2336.3	51.2
0°-60°	3861.7	84.6
0°-90°	4563.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4563.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1973	1973	1973	1973	1973	
5°	1971	1970	1963	1952	1946	187
15°	1857	1862	1857	1849	1836	524
25°	1650	1663	1670	1658	1644	755
35°	1327	1345	1406	1414	1409	831
45°	1027	1045	1079	1128	1134	793
55°	720	732	767	810	833	642
65°	422	433	459	491	519	418
75°	169	178	191	200	212	185
85°	26	26	26	25	25	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1973.4	1973.4	1973.4	1973.4	1973.4
2.5°	1978.7	1979.4	1974.9	1962.8	1955.2
5°	1971.1	1970.3	1962.8	1952.2	1946.1
7.5°	1949.1	1950.6	1948.4	1933.2	1924.9
10°	1927.9	1928.7	1922.6	1910.5	1900.6
12.5°	1900.6	1899.8	1891.5	1885.4	1869.5
15°	1857.4	1861.9	1857.4	1849.0	1836.2
17.5°	1815.7	1815.7	1818.7	1804.3	1794.5
20°	1768.7	1771.0	1771.0	1759.6	1748.2
22.5°	1714.1	1720.9	1723.2	1711.1	1697.4
25°	1649.7	1662.6	1670.1	1658.0	1643.6
27.5°	1571.6	1591.3	1614.0	1604.9	1589.0
30°	1484.4	1513.2	1551.1	1543.5	1532.2
32.5°	1401.8	1430.6	1482.9	1479.8	1473.8
35°	1326.7	1344.9	1406.3	1413.9	1408.6
37.5°	1255.4	1272.1	1329.7	1347.2	1342.6
40°	1180.4	1198.6	1244.1	1275.2	1276.7
42.5°	1106.1	1123.5	1160.7	1205.4	1205.4
45°	1027.2	1044.7	1078.8	1128.1	1134.1
47.5°	949.9	968.1	1001.5	1050.8	1060.6
50°	874.1	890.8	924.1	971.9	987.1
52.5°	795.3	813.5	846.1	890.0	912.0
55°	719.5	731.6	767.2	809.7	833.2
57.5°	640.6	652.0	692.2	728.6	752.8
60°	564.8	579.2	610.3	647.4	675.5
62.5°	492.0	507.2	533.7	566.3	598.2
65°	421.5	432.9	458.7	491.3	519.3
67.5°	353.3	363.1	388.9	411.7	441.2
70°	284.3	297.2	316.1	338.1	357.1
72.5°	229.0	234.3	250.2	266.1	285.8
75°	169.1	178.2	191.0	200.1	211.5
77.5°	121.3	126.6	134.2	141.8	152.4
80°	81.1	83.4	90.2	91.7	100.1
82.5°	49.3	50.8	52.3	53.1	56.1
85°	26.5	26.5	26.5	25.0	25.0
87.5°	15.2	15.2	12.9	10.6	7.6
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)