

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: P557496

Luminaire Tested: **FUSL-12-4-LD4-2STD-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: P557496
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-LD4-2STD-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

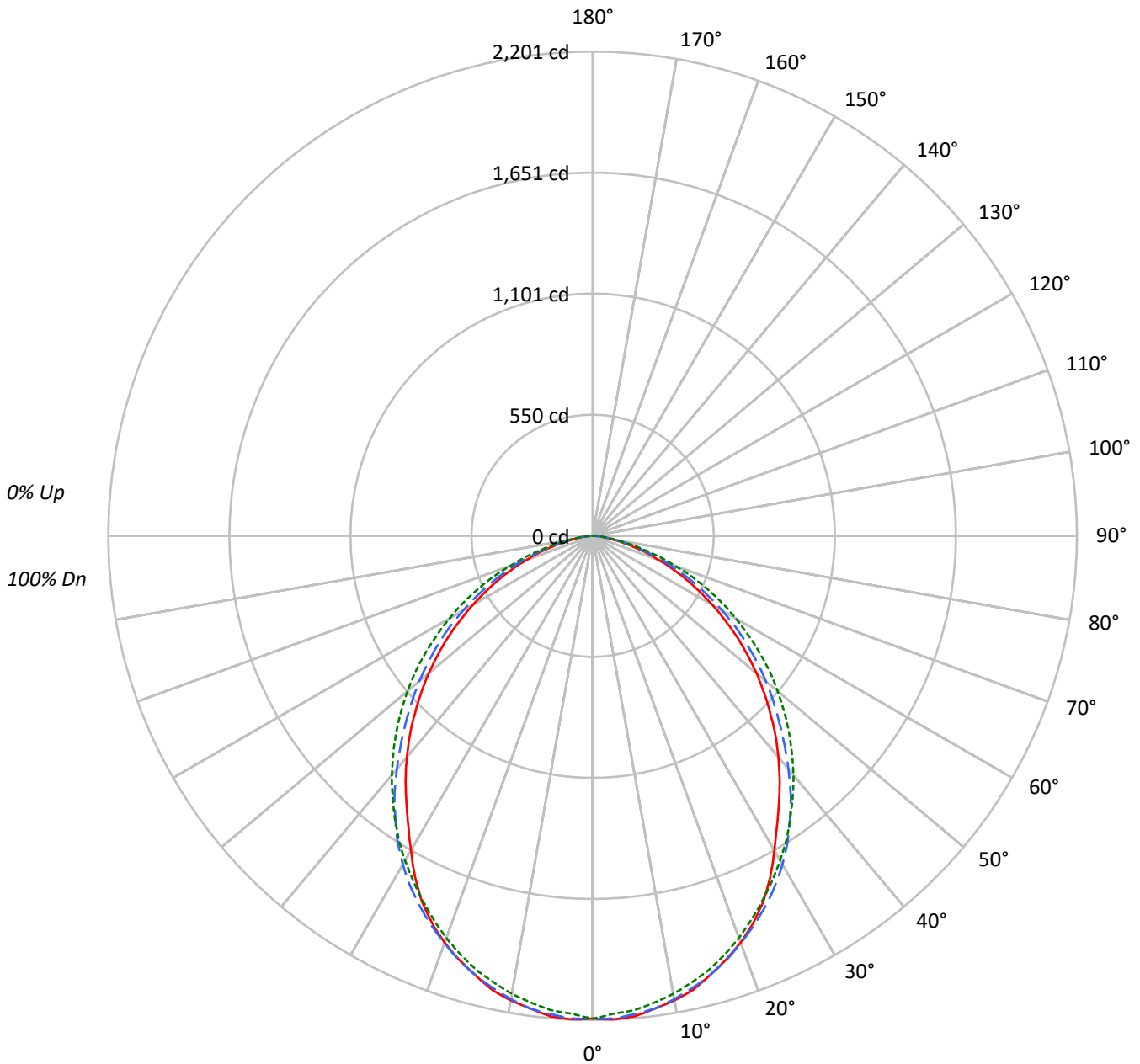
Lumens per Lamp: N/A
Luminaire Lumens: 5076.0 lumens
Efficiency: N/A
Efficacy: 76.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	5907	5907	5907
5°	5923	5898	5848
10°	5860	5844	5777
15°	5756	5756	5690
20°	5634	5642	5569
25°	5449	5516	5429
30°	5131	5362	5296
35°	4848	5139	5147
40°	4613	4861	4989
45°	4349	4567	4802
50°	4071	4304	4597
55°	3755	4004	4348
60°	3381	3654	4044
65°	2986	3249	3678
70°	2489	2767	3125
75°	1956	2209	2446
80°	1398	1556	1725
85°	911	911	858



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.7	4.1
10°-20°	580.6	11.4
20°-30°	848.5	16.7
30°-40°	963.2	19.0
40°-50°	929.8	18.3
50°-60°	767.0	15.1
60°-70°	510.8	10.1
70°-80°	228.6	4.5
80°-90°	40.9	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°	1635.9	32.2
0°-40°	2599.0	51.2
0°-60°	4295.8	84.6
0°-90°	5076.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5076.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2195	2195	2195	2195	2195	
5°	2193	2192	2183	2172	2165	208
15°	2066	2071	2066	2057	2043	582
25°	1835	1850	1858	1844	1828	840
35°	1476	1496	1564	1573	1567	925
45°	1143	1162	1200	1255	1262	882
55°	800	814	854	901	927	714
65°	469	482	510	546	578	465
75°	188	198	212	223	235	206
85°	30	30	30	28	28	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2195.2	2195.2	2195.2	2195.2	2195.2
2.5°	2201.1	2202.0	2196.9	2183.4	2175.0
5°	2192.7	2191.9	2183.4	2171.6	2164.9
7.5°	2168.3	2169.9	2167.4	2150.5	2141.3
10°	2144.6	2145.5	2138.7	2125.2	2114.3
12.5°	2114.3	2113.4	2104.2	2097.4	2079.7
15°	2066.2	2071.3	2066.2	2056.9	2042.6
17.5°	2019.8	2019.8	2023.2	2007.2	1996.2
20°	1967.5	1970.1	1970.1	1957.4	1944.8
22.5°	1906.8	1914.4	1916.9	1903.4	1888.3
25°	1835.1	1849.5	1857.9	1844.4	1828.4
27.5°	1748.3	1770.2	1795.5	1785.4	1767.7
30°	1651.3	1683.3	1725.5	1717.1	1704.4
32.5°	1559.4	1591.4	1649.6	1646.2	1639.5
35°	1475.9	1496.1	1564.4	1572.8	1566.9
37.5°	1396.6	1415.1	1479.2	1498.6	1493.6
40°	1313.1	1333.3	1383.9	1418.5	1420.2
42.5°	1230.4	1249.8	1291.2	1340.9	1340.9
45°	1142.7	1162.1	1200.1	1254.9	1261.7
47.5°	1056.7	1077.0	1114.1	1168.9	1179.8
50°	972.4	990.9	1028.0	1081.2	1098.0
52.5°	884.7	904.9	941.2	990.1	1014.5
55°	800.3	813.8	853.5	900.7	926.8
57.5°	712.6	725.3	770.0	810.5	837.4
60°	628.3	644.3	678.9	720.2	751.4
62.5°	547.3	564.2	593.7	630.0	665.4
65°	468.9	481.6	510.2	546.5	577.7
67.5°	393.0	404.0	432.6	457.9	490.8
70°	316.3	330.6	351.7	376.1	397.2
72.5°	254.7	260.6	278.3	296.0	317.9
75°	188.1	198.2	212.5	222.6	235.3
77.5°	134.9	140.8	149.3	157.7	169.5
80°	90.2	92.8	100.4	102.0	111.3
82.5°	54.8	56.5	58.2	59.0	62.4
85°	29.5	29.5	29.5	27.8	27.8
87.5°	16.9	16.9	14.3	11.8	8.4
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)