

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: P557246

Luminaire Tested: **FUSL-12-4-LD4-2LO-35-UNV-80-97-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: P557246
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-35-UNV-80-97-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

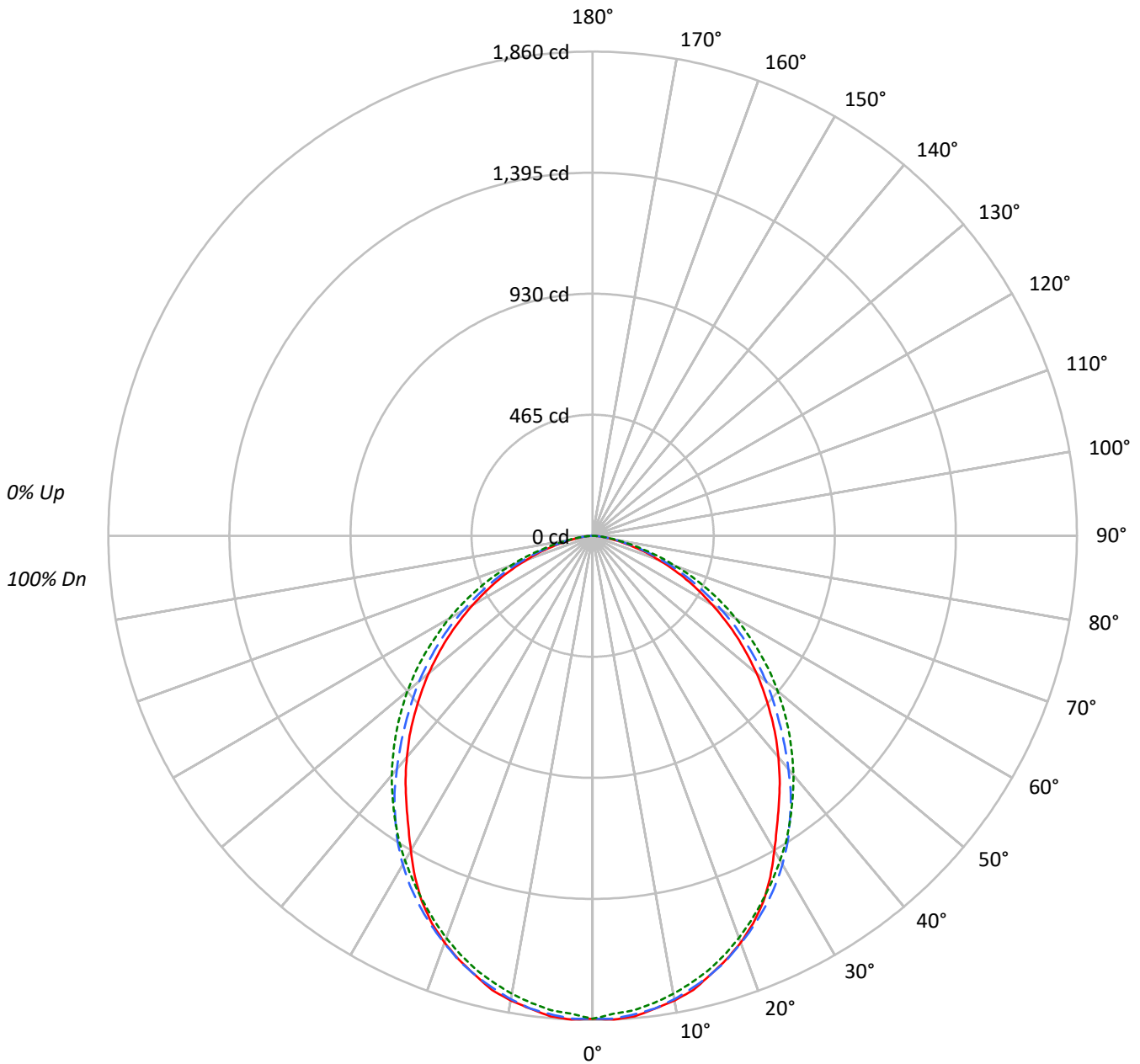
Lumens per Lamp: N/A
Luminaire Lumens: 4290.0 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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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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°	4993	4993	4993
5°	5006	4985	4942
10°	4953	4939	4883
15°	4865	4865	4809
20°	4762	4768	4707
25°	4605	4662	4588
30°	4337	4531	4476
35°	4097	4344	4350
40°	3899	4109	4216
45°	3675	3860	4058
50°	3440	3638	3885
55°	3173	3384	3675
60°	2858	3088	3418
65°	2523	2746	3109
70°	2103	2338	2641
75°	1652	1867	2068
80°	1182	1314	1458
85°	769	769	726



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.7	4.1
10°-20°	490.7	11.4
20°-30°	717.1	16.7
30°-40°	814.0	19.0
40°-50°	785.8	18.3
50°-60°	648.2	15.1
60°-70°	431.7	10.1
70°-80°	193.2	4.5
80°-90°	34.6	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°	1382.6	32.2
0°-40°	2196.6	51.2
0°-60°	3630.6	84.6
0°-90°	4290.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4290.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1855	1855	1855	1855	1855	
5°	1853	1852	1845	1835	1830	175
15°	1746	1750	1746	1738	1726	492
25°	1551	1563	1570	1559	1545	710
35°	1247	1264	1322	1329	1324	782
45°	966	982	1014	1061	1066	745
55°	676	688	721	761	783	604
65°	396	407	431	462	488	393
75°	159	168	180	188	199	174
85°	25	25	25	24	24	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1855.3	1855.3	1855.3	1855.3	1855.3
2.5°	1860.3	1861.0	1856.7	1845.3	1838.2
5°	1853.2	1852.5	1845.3	1835.4	1829.7
7.5°	1832.5	1833.9	1831.8	1817.5	1809.7
10°	1812.5	1813.3	1807.6	1796.2	1786.9
12.5°	1786.9	1786.2	1778.3	1772.6	1757.7
15°	1746.3	1750.5	1746.3	1738.4	1726.3
17.5°	1707.1	1707.1	1709.9	1696.4	1687.1
20°	1662.9	1665.0	1665.0	1654.3	1643.6
22.5°	1611.6	1618.0	1620.1	1608.7	1595.9
25°	1551.0	1563.1	1570.2	1558.8	1545.3
27.5°	1477.6	1496.1	1517.5	1508.9	1493.9
30°	1395.6	1422.7	1458.3	1451.2	1440.5
32.5°	1317.9	1345.0	1394.2	1391.3	1385.6
35°	1247.3	1264.4	1322.2	1329.3	1324.3
37.5°	1180.3	1196.0	1250.2	1266.6	1262.3
40°	1109.8	1126.9	1169.6	1198.9	1200.3
42.5°	1039.9	1056.3	1091.2	1133.3	1133.3
45°	965.8	982.2	1014.3	1060.6	1066.3
47.5°	893.1	910.2	941.6	987.9	997.2
50°	821.8	837.5	868.9	913.8	928.0
52.5°	747.7	764.8	795.4	836.8	857.5
55°	676.4	687.8	721.3	761.2	783.3
57.5°	602.3	613.0	650.7	685.0	707.8
60°	531.0	544.5	573.8	608.7	635.1
62.5°	462.6	476.8	501.8	532.4	562.4
65°	396.3	407.0	431.2	461.9	488.2
67.5°	332.1	341.4	365.6	387.0	414.8
70°	267.3	279.4	297.2	317.9	335.7
72.5°	215.3	220.2	235.2	250.2	268.7
75°	158.9	167.5	179.6	188.2	198.9
77.5°	114.0	119.0	126.2	133.3	143.3
80°	76.3	78.4	84.8	86.2	94.1
82.5°	46.3	47.8	49.2	49.9	52.7
85°	24.9	24.9	24.9	23.5	23.5
87.5°	14.3	14.3	12.1	10.0	7.1
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)