

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: P556016

Luminaire Tested: **FUSL-12-2-LD4-3STD-40-UNV-80-84-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: P556016
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-12-2-LD4-3STD-40-UNV-80-84-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

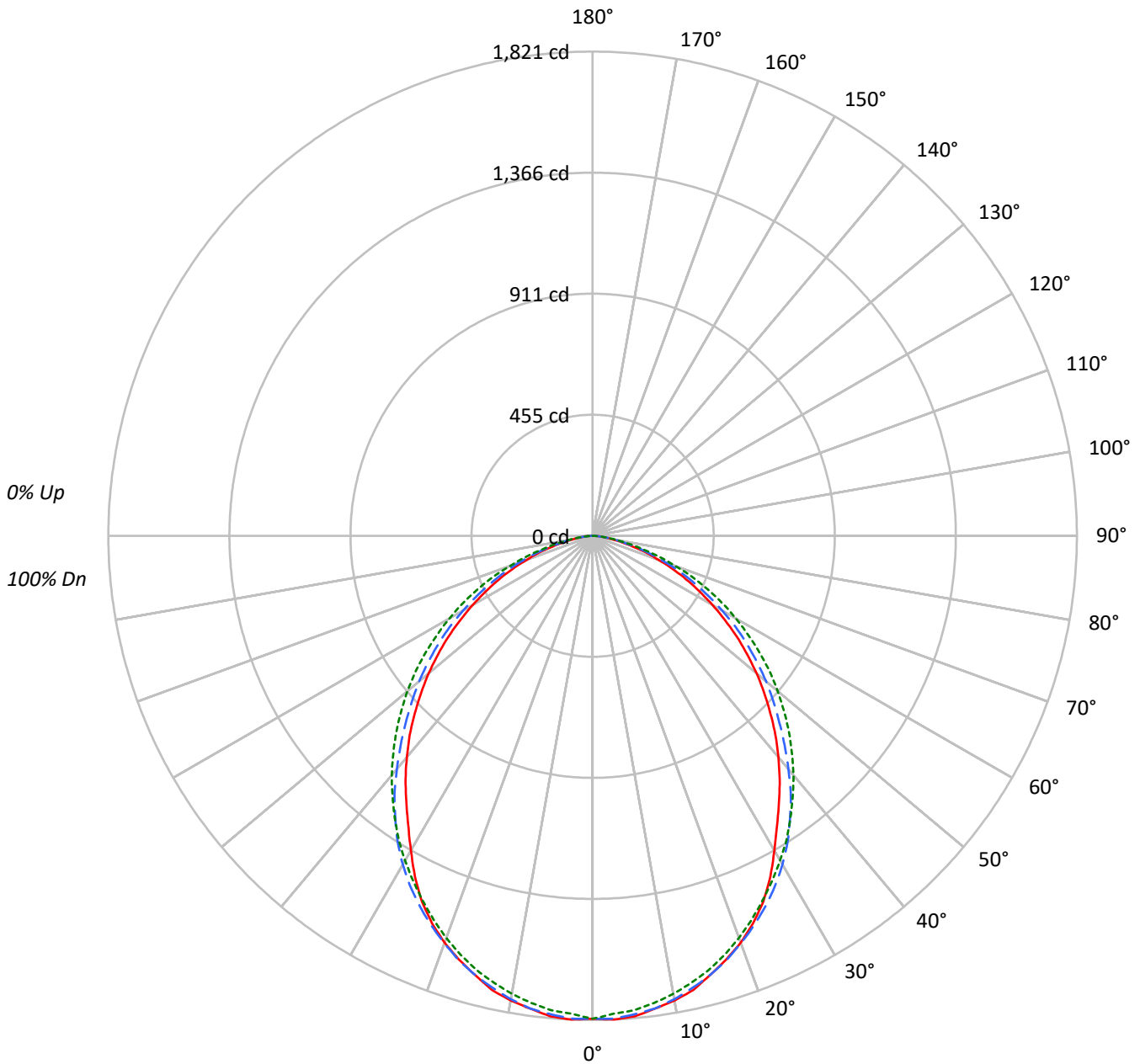
Lumens per Lamp: N/A
Luminaire Lumens: 4200.0 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
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°	9776	9776	9776
5°	9802	9760	9678
10°	9698	9671	9560
15°	9526	9526	9417
20°	9324	9336	9216
25°	9017	9129	8984
30°	8491	8873	8764
35°	8023	8504	8518
40°	7633	8045	8256
45°	7196	7558	7945
50°	6737	7122	7607
55°	6214	6626	7196
60°	5596	6046	6692
65°	4941	5377	6087
70°	4118	4579	5172
75°	3236	3656	4049
80°	2315	2572	2854
85°	1507	1507	1420



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.0	4.1
10°-20°	480.4	11.4
20°-30°	702.1	16.7
30°-40°	796.9	19.0
40°-50°	769.3	18.3
50°-60°	634.6	15.1
60°-70°	422.6	10.1
70°-80°	189.1	4.5
80°-90°	33.8	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°	1353.5	32.2
0°-40°	2150.5	51.2
0°-60°	3554.4	84.6
0°-90°	4200.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4200.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1816	1816	1816	1816	1816	
5°	1814	1814	1807	1797	1791	172
15°	1710	1714	1710	1702	1690	482
25°	1518	1530	1537	1526	1513	695
35°	1221	1238	1294	1301	1296	765
45°	946	962	993	1038	1044	730
55°	662	673	706	745	767	591
65°	388	398	422	452	478	385
75°	156	164	176	184	195	170
85°	24	24	24	23	23	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1816.4	1816.4	1816.4	1816.4	1816.4
2.5°	1821.3	1822.0	1817.8	1806.6	1799.6
5°	1814.3	1813.6	1806.6	1796.9	1791.3
7.5°	1794.1	1795.5	1793.4	1779.4	1771.7
10°	1774.5	1775.2	1769.6	1758.5	1749.4
12.5°	1749.4	1748.7	1741.0	1735.4	1720.8
15°	1709.6	1713.8	1709.6	1702.0	1690.1
17.5°	1671.2	1671.2	1674.0	1660.8	1651.7
20°	1628.0	1630.1	1630.1	1619.6	1609.1
22.5°	1577.7	1584.0	1586.1	1575.0	1562.4
25°	1518.4	1530.3	1537.3	1526.1	1512.8
27.5°	1446.6	1464.7	1485.6	1477.3	1462.6
30°	1366.3	1392.8	1427.7	1420.7	1410.3
32.5°	1290.2	1316.8	1364.9	1362.1	1356.5
35°	1221.2	1237.9	1294.4	1301.4	1296.5
37.5°	1155.6	1170.9	1224.0	1240.0	1235.8
40°	1086.5	1103.2	1145.1	1173.7	1175.1
42.5°	1018.1	1034.1	1068.3	1109.5	1109.5
45°	945.5	961.6	993.0	1038.3	1043.9
47.5°	874.4	891.1	921.8	967.2	976.2
50°	804.6	819.9	850.6	894.6	908.5
52.5°	732.0	748.7	778.8	819.2	839.5
55°	662.2	673.4	706.2	745.3	766.9
57.5°	589.6	600.1	637.1	670.6	692.9
60°	519.9	533.1	561.7	595.9	621.7
62.5°	452.9	466.8	491.3	521.3	550.6
65°	388.0	398.4	422.2	452.2	478.0
67.5°	325.2	334.2	358.0	378.9	406.1
70°	261.7	273.5	291.0	311.2	328.7
72.5°	210.7	215.6	230.3	244.9	263.1
75°	155.6	164.0	175.8	184.2	194.7
77.5°	111.6	116.5	123.5	130.5	140.3
80°	74.7	76.8	83.0	84.4	92.1
82.5°	45.4	46.8	48.1	48.8	51.6
85°	24.4	24.4	24.4	23.0	23.0
87.5°	14.0	14.0	11.9	9.8	7.0
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)