

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: P556006

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-UNV-93-87-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: P556006
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-35-UNV-93-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

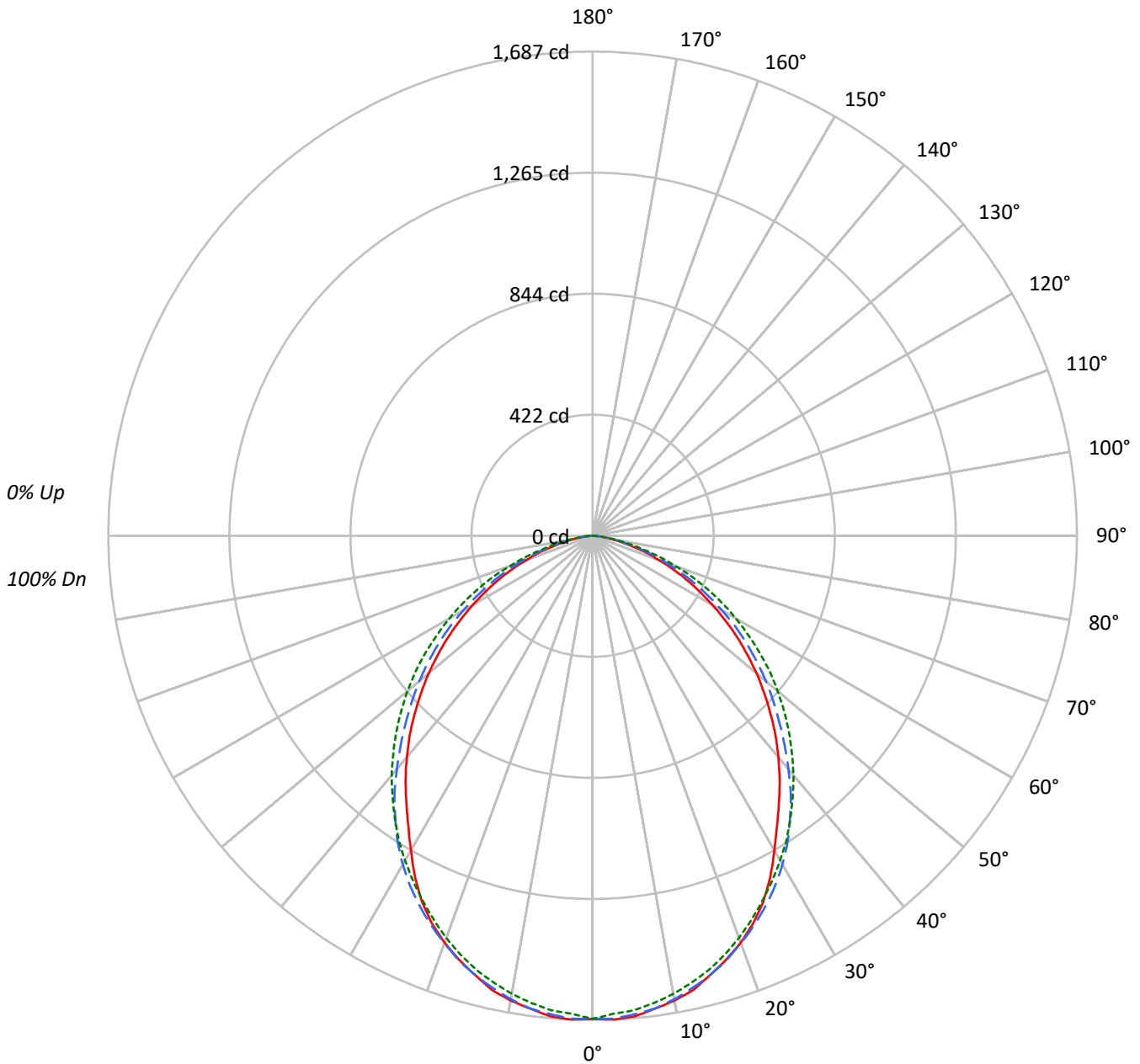
Lumens per Lamp: N/A
Luminaire Lumens: 3891.0 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
Input Voltage (V): NR
Input Current (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°	9057	9057	9057
5°	9081	9042	8965
10°	8984	8959	8857
15°	8825	8825	8724
20°	8638	8649	8538
25°	8353	8457	8323
30°	7866	8220	8119
35°	7433	7879	7891
40°	7072	7454	7649
45°	6667	7002	7361
50°	6241	6598	7047
55°	5757	6138	6667
60°	5184	5602	6200
65°	4577	4981	5639
70°	3814	4242	4792
75°	2999	3387	3751
80°	2145	2383	2644
85°	1396	1396	1315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.4	4.1
10°-20°	445.1	11.4
20°-30°	650.4	16.7
30°-40°	738.3	19.0
40°-50°	712.7	18.3
50°-60°	587.9	15.1
60°-70°	391.5	10.1
70°-80°	175.2	4.5
80°-90°	31.3	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°	1254.0	32.2
0°-40°	1992.3	51.2
0°-60°	3292.9	84.6
0°-90°	3891.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3891.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1683	1683	1683	1683	1683	
5°	1681	1680	1674	1665	1660	159
15°	1584	1588	1584	1577	1566	446
25°	1407	1418	1424	1414	1402	644
35°	1131	1147	1199	1206	1201	709
45°	876	891	920	962	967	676
55°	614	624	654	690	710	548
65°	359	369	391	419	443	356
75°	144	152	163	171	180	158
85°	23	23	23	21	21	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1682.8	1682.8	1682.8	1682.8	1682.8
2.5°	1687.3	1687.9	1684.0	1673.7	1667.2
5°	1680.8	1680.2	1673.7	1664.7	1659.5
7.5°	1662.1	1663.4	1661.4	1648.5	1641.4
10°	1644.0	1644.6	1639.4	1629.1	1620.7
12.5°	1620.7	1620.0	1612.9	1607.8	1594.2
15°	1583.8	1587.7	1583.8	1576.7	1565.7
17.5°	1548.3	1548.3	1550.9	1538.6	1530.2
20°	1508.2	1510.1	1510.1	1500.5	1490.8
22.5°	1461.7	1467.5	1469.4	1459.1	1447.4
25°	1406.7	1417.7	1424.2	1413.8	1401.5
27.5°	1340.1	1356.9	1376.3	1368.6	1355.0
30°	1265.8	1290.4	1322.7	1316.2	1306.5
32.5°	1195.3	1219.9	1264.5	1261.9	1256.7
35°	1131.3	1146.8	1199.2	1205.7	1201.1
37.5°	1070.6	1084.8	1133.9	1148.8	1144.9
40°	1006.6	1022.1	1060.9	1087.4	1088.7
42.5°	943.2	958.1	989.7	1027.9	1027.9
45°	876.0	890.8	919.9	961.9	967.1
47.5°	810.0	825.5	854.0	896.0	904.4
50°	745.4	759.6	788.0	828.8	841.7
52.5°	678.1	693.7	721.5	759.0	777.7
55°	613.5	623.8	654.2	690.4	710.5
57.5°	546.3	556.0	590.2	621.3	641.9
60°	481.6	493.9	520.4	552.1	576.0
62.5°	419.6	432.5	455.1	482.9	510.1
65°	359.4	369.1	391.1	418.9	442.8
67.5°	301.3	309.7	331.6	351.0	376.2
70°	242.4	253.4	269.6	288.3	304.5
72.5°	195.2	199.8	213.3	226.9	243.7
75°	144.2	151.9	162.9	170.7	180.4
77.5°	103.4	108.0	114.4	120.9	129.9
80°	69.2	71.1	76.9	78.2	85.3
82.5°	42.0	43.3	44.6	45.3	47.8
85°	22.6	22.6	22.6	21.3	21.3
87.5°	12.9	12.9	11.0	9.1	6.5
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)