

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: P556066

Luminaire Tested: **FUSL-12-2-LD4-3STD-40-UNV-93-85-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: P556066
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-93-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

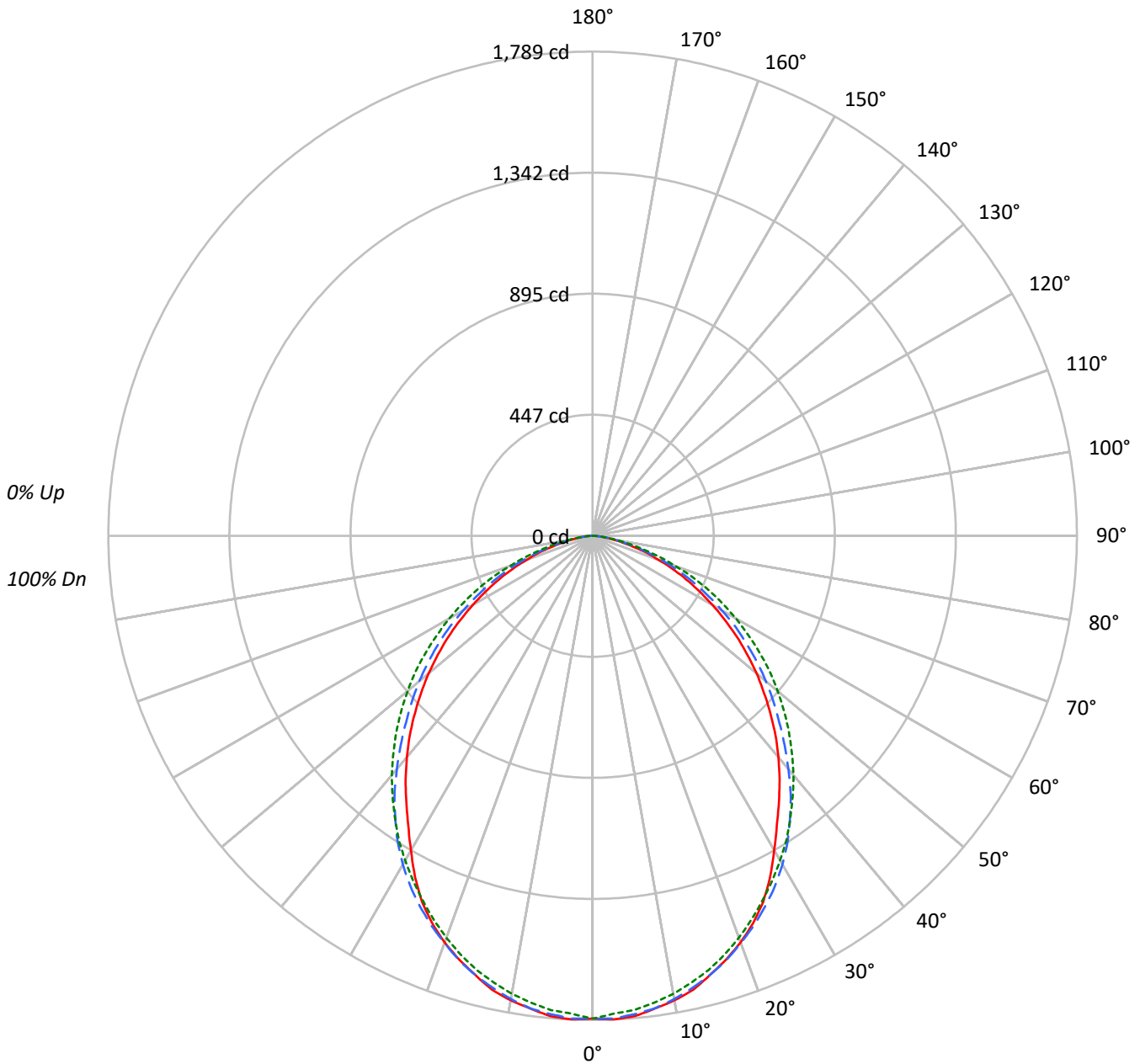
Lumens per Lamp: N/A
Luminaire Lumens: 4125.0 lumens
Efficiency: N/A
Efficacy: 82.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	9601	9601	9601
5°	9627	9586	9505
10°	9524	9498	9390
15°	9356	9356	9249
20°	9157	9170	9052
25°	8856	8966	8823
30°	8339	8714	8608
35°	7880	8353	8366
40°	7497	7902	8108
45°	7068	7422	7804
50°	6616	6995	7471
55°	6103	6508	7067
60°	5496	5938	6572
65°	4853	5280	5979
70°	4044	4497	5080
75°	3177	3591	3976
80°	2272	2529	2805
85°	1482	1482	1396



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.0	4.1
10°-20°	471.9	11.4
20°-30°	689.5	16.7
30°-40°	782.7	19.0
40°-50°	755.6	18.3
50°-60°	623.3	15.1
60°-70°	415.1	10.1
70°-80°	185.8	4.5
80°-90°	33.2	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°	1329.4	32.2
0°-40°	2112.1	51.2
0°-60°	3491.0	84.6
0°-90°	4125.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4125.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1784	1784	1784	1784	1784	
5°	1782	1781	1774	1765	1759	169
15°	1679	1683	1679	1672	1660	473
25°	1491	1503	1510	1499	1486	683
35°	1199	1216	1271	1278	1273	751
45°	929	944	975	1020	1025	716
55°	650	661	694	732	753	580
65°	381	391	415	444	470	378
75°	153	161	173	181	191	167
85°	24	24	24	23	23	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1784.0	1784.0	1784.0	1784.0	1784.0
2.5°	1788.8	1789.4	1785.3	1774.4	1767.5
5°	1781.9	1781.2	1774.4	1764.8	1759.3
7.5°	1762.0	1763.4	1761.3	1747.6	1740.1
10°	1742.8	1743.5	1738.0	1727.1	1718.2
12.5°	1718.2	1717.5	1709.9	1704.5	1690.1
15°	1679.1	1683.2	1679.1	1671.6	1659.9
17.5°	1641.4	1641.4	1644.1	1631.1	1622.2
20°	1598.9	1601.0	1601.0	1590.7	1580.4
22.5°	1549.6	1555.7	1557.8	1546.8	1534.5
25°	1491.3	1503.0	1509.8	1498.9	1485.8
27.5°	1420.7	1438.5	1459.1	1450.9	1436.5
30°	1341.9	1368.0	1402.2	1395.4	1385.1
32.5°	1267.2	1293.2	1340.5	1337.8	1332.3
35°	1199.4	1215.8	1271.3	1278.2	1273.4
37.5°	1134.9	1150.0	1202.1	1217.9	1213.7
40°	1067.1	1083.5	1124.7	1152.8	1154.1
42.5°	999.9	1015.7	1049.3	1089.7	1089.7
45°	928.6	944.4	975.2	1019.8	1025.3
47.5°	858.7	875.2	905.3	949.9	958.8
50°	790.2	805.3	835.4	878.6	892.3
52.5°	718.9	735.4	764.8	804.6	824.5
55°	650.4	661.4	693.6	731.9	753.2
57.5°	579.1	589.4	625.7	658.6	680.5
60°	510.6	523.6	551.7	585.3	610.6
62.5°	444.8	458.5	482.5	512.0	540.7
65°	381.1	391.3	414.6	444.1	469.5
67.5°	319.4	328.3	351.6	372.1	398.9
70°	257.0	268.7	285.8	305.7	322.8
72.5°	207.0	211.8	226.2	240.6	258.4
75°	152.8	161.1	172.7	180.9	191.2
77.5°	109.7	114.5	121.3	128.2	137.8
80°	73.3	75.4	81.6	82.9	90.5
82.5°	44.5	45.9	47.3	48.0	50.7
85°	24.0	24.0	24.0	22.6	22.6
87.5°	13.7	13.7	11.7	9.6	6.9
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)