

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: P556020

Luminaire Tested: **FUSL-12-2-LD4-3STD-40-UNV-80-86-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: P556020
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-80-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

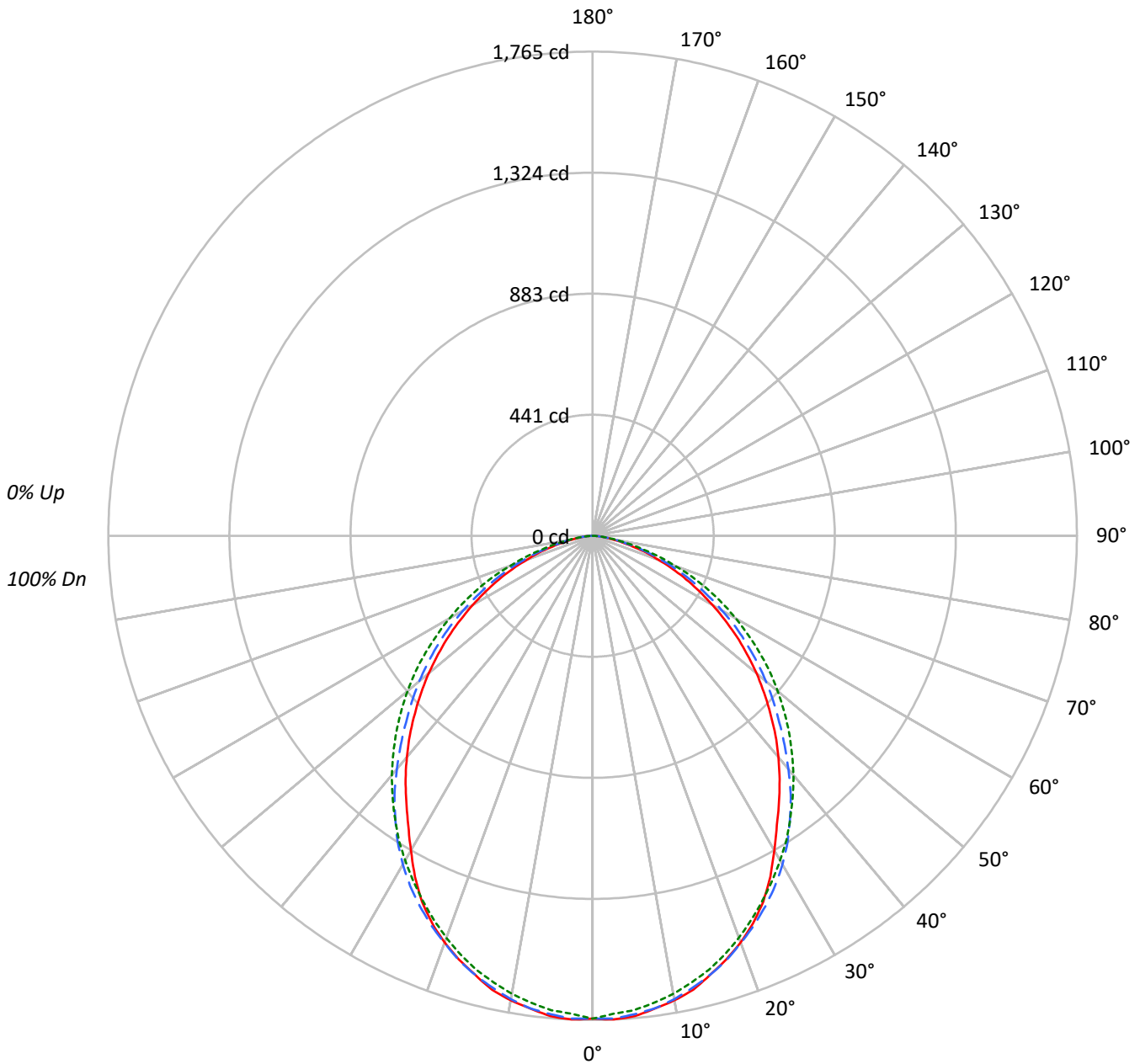
Lumens per Lamp: N/A
Luminaire Lumens: 4070.0 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	9473	9473	9473
5°	9498	9458	9378
10°	9398	9372	9265
15°	9231	9231	9126
20°	9035	9047	8931
25°	8738	8846	8706
30°	8228	8598	8493
35°	7775	8242	8255
40°	7397	7796	8000
45°	6974	7324	7700
50°	6528	6902	7371
55°	6021	6421	6974
60°	5423	5859	6485
65°	4788	5210	5899
70°	3991	4437	5012
75°	3136	3543	3924
80°	2244	2495	2768
85°	1463	1463	1377



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.7	4.1
10°-20°	465.6	11.4
20°-30°	680.3	16.7
30°-40°	772.3	19.0
40°-50°	745.5	18.3
50°-60°	615.0	15.1
60°-70°	409.5	10.1
70°-80°	183.3	4.5
80°-90°	32.8	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°	1311.6	32.2
0°-40°	2083.9	51.2
0°-60°	3444.4	84.6
0°-90°	4070.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4070.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1760	1760	1760	1760	1760	
5°	1758	1758	1751	1741	1736	166
15°	1657	1661	1657	1649	1638	467
25°	1471	1483	1490	1479	1466	674
35°	1183	1200	1254	1261	1256	741
45°	916	932	962	1006	1012	707
55°	642	652	684	722	743	573
65°	376	386	409	438	463	373
75°	151	159	170	178	189	165
85°	24	24	24	22	22	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1760.2	1760.2	1760.2	1760.2	1760.2
2.5°	1764.9	1765.6	1761.5	1750.7	1743.9
5°	1758.1	1757.5	1750.7	1741.2	1735.8
7.5°	1738.5	1739.9	1737.9	1724.3	1716.9
10°	1719.6	1720.3	1714.9	1704.0	1695.3
12.5°	1695.3	1694.6	1687.1	1681.7	1667.5
15°	1656.7	1660.8	1656.7	1649.3	1637.8
17.5°	1619.5	1619.5	1622.2	1609.4	1600.6
20°	1577.6	1579.6	1579.6	1569.5	1559.3
22.5°	1528.9	1535.0	1537.0	1526.2	1514.0
25°	1471.4	1482.9	1489.7	1478.9	1466.0
27.5°	1401.8	1419.4	1439.6	1431.5	1417.3
30°	1324.0	1349.7	1383.5	1376.8	1366.6
32.5°	1250.3	1276.0	1322.7	1320.0	1314.5
35°	1183.4	1199.6	1254.4	1261.1	1256.4
37.5°	1119.8	1134.7	1186.1	1201.6	1197.6
40°	1052.9	1069.1	1109.7	1137.4	1138.7
42.5°	986.6	1002.1	1035.3	1075.2	1075.2
45°	916.3	931.8	962.2	1006.2	1011.6
47.5°	847.3	863.5	893.3	937.2	946.0
50°	779.7	794.5	824.3	866.9	880.4
52.5°	709.3	725.6	754.6	793.9	813.5
55°	641.7	652.5	684.3	722.2	743.2
57.5°	571.4	581.5	617.4	649.8	671.5
60°	503.8	516.6	544.3	577.5	602.5
62.5°	438.9	452.4	476.1	505.1	533.5
65°	376.0	386.1	409.1	438.2	463.2
67.5°	315.1	323.9	346.9	367.2	393.6
70°	253.6	265.1	282.0	301.6	318.5
72.5°	204.2	208.9	223.1	237.3	254.9
75°	150.8	158.9	170.4	178.5	188.7
77.5°	108.2	112.9	119.7	126.5	135.9
80°	72.4	74.4	80.5	81.8	89.3
82.5°	44.0	45.3	46.7	47.3	50.0
85°	23.7	23.7	23.7	22.3	22.3
87.5°	13.5	13.5	11.5	9.5	6.8
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)