

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: P554852

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-93-86-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: P554852
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-LD4-2HI-50-UNV-93-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

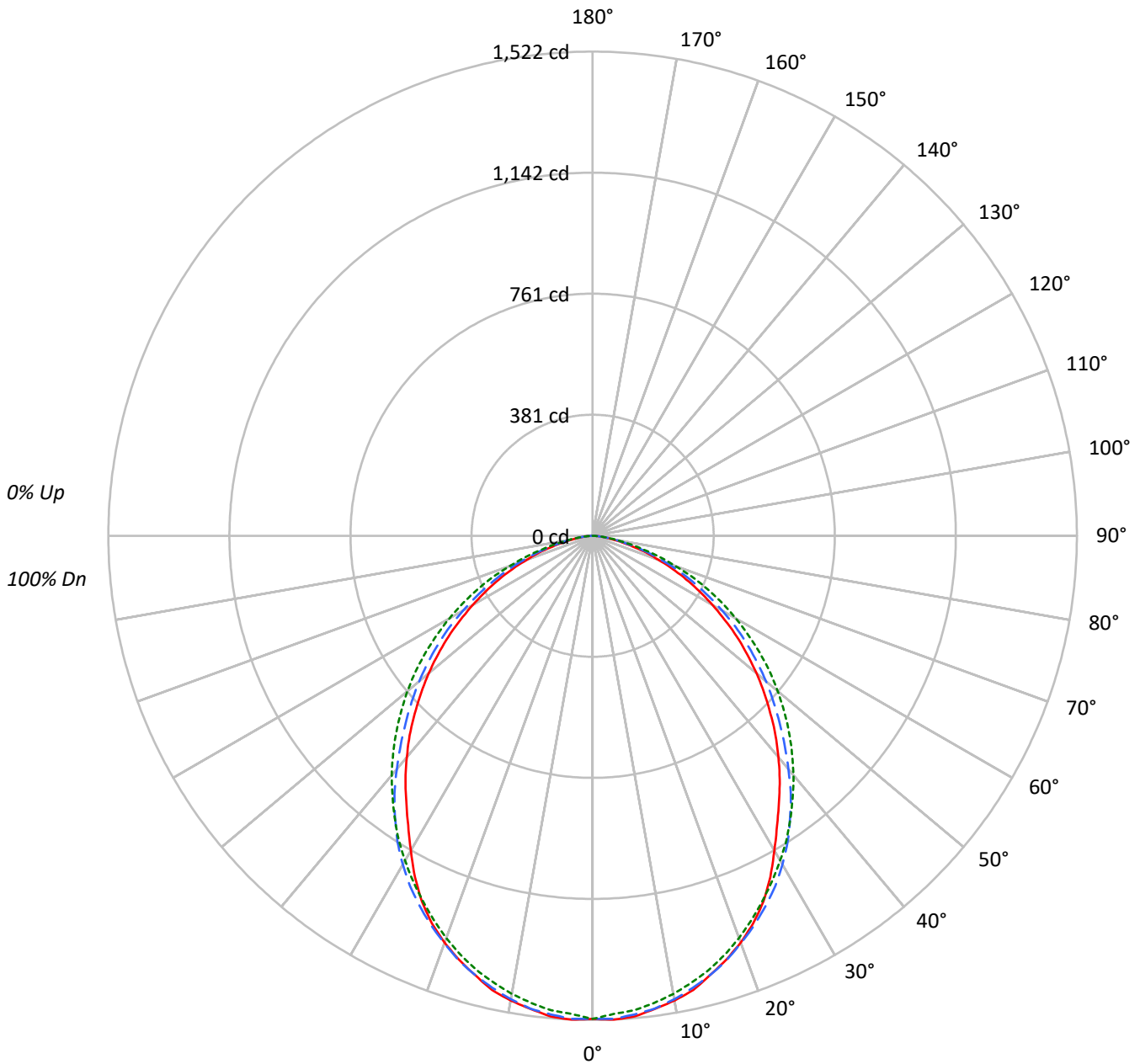
Lumens per Lamp: N/A
Luminaire Lumens: 3511.1 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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°	8172	8172	8172
5°	8194	8159	8090
10°	8107	8084	7992
15°	7963	7963	7872
20°	7794	7805	7704
25°	7538	7631	7510
30°	7098	7417	7326
35°	6707	7110	7121
40°	6381	6726	6901
45°	6016	6318	6642
50°	5632	5954	6359
55°	5195	5539	6016
60°	4678	5055	5595
65°	4130	4494	5089
70°	3443	3829	4324
75°	2705	3057	3385
80°	1934	2151	2386
85°	1260	1260	1192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	4.1
10°-20°	401.6	11.4
20°-30°	586.9	16.7
30°-40°	666.2	19.0
40°-50°	643.1	18.3
50°-60°	530.5	15.1
60°-70°	353.3	10.1
70°-80°	158.1	4.5
80°-90°	28.3	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°	1131.5	32.2
0°-40°	1797.7	51.2
0°-60°	2971.4	84.6
0°-90°	3511.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3511.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1518	1518	1518	1518	1518	
5°	1517	1516	1510	1502	1497	144
15°	1429	1433	1429	1423	1413	403
25°	1269	1279	1285	1276	1265	581
35°	1021	1035	1082	1088	1084	640
45°	790	804	830	868	873	610
55°	554	563	590	623	641	494
65°	324	333	353	378	400	322
75°	130	137	147	154	163	142
85°	20	20	20	19	19	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1518.4	1518.4	1518.4	1518.4	1518.4
2.5°	1522.5	1523.1	1519.6	1510.3	1504.4
5°	1516.7	1516.1	1510.3	1502.1	1497.4
7.5°	1499.8	1500.9	1499.2	1487.5	1481.1
10°	1483.4	1484.0	1479.3	1470.0	1462.4
12.5°	1462.4	1461.8	1455.4	1450.8	1438.5
15°	1429.2	1432.7	1429.2	1422.8	1412.8
17.5°	1397.1	1397.1	1399.4	1388.3	1380.8
20°	1360.9	1362.7	1362.7	1353.9	1345.2
22.5°	1318.9	1324.2	1325.9	1316.6	1306.1
25°	1269.3	1279.3	1285.1	1275.8	1264.7
27.5°	1209.3	1224.4	1241.9	1234.9	1222.7
30°	1142.2	1164.3	1193.5	1187.7	1178.9
32.5°	1078.6	1100.8	1141.0	1138.7	1134.0
35°	1020.8	1034.8	1082.1	1087.9	1083.8
37.5°	966.0	978.8	1023.2	1036.6	1033.1
40°	908.3	922.3	957.3	981.2	982.3
42.5°	851.1	864.5	893.1	927.5	927.5
45°	790.4	803.8	830.1	868.0	872.7
47.5°	730.9	744.9	770.6	808.5	816.1
50°	672.6	685.4	711.1	747.8	759.5
52.5°	611.9	625.9	651.0	684.8	701.8
55°	553.6	562.9	590.3	623.0	641.1
57.5°	492.9	501.7	532.6	560.6	579.3
60°	434.6	445.7	469.6	498.2	519.8
62.5°	378.6	390.3	410.7	435.8	460.3
65°	324.3	333.1	352.9	378.0	399.6
67.5°	271.8	279.4	299.3	316.8	339.5
70°	218.8	228.7	243.3	260.2	274.8
72.5°	176.2	180.3	192.5	204.8	219.9
75°	130.1	137.1	147.0	154.0	162.8
77.5°	93.3	97.4	103.3	109.1	117.3
80°	62.4	64.2	69.4	70.6	77.0
82.5°	37.9	39.1	40.3	40.8	43.2
85°	20.4	20.4	20.4	19.3	19.3
87.5°	11.7	11.7	9.9	8.2	5.8
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)