

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: P556052

Luminaire Tested: **FUSL-12-2-LD4-3STD-40-UNV-82-86-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: P556052
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-82-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC 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

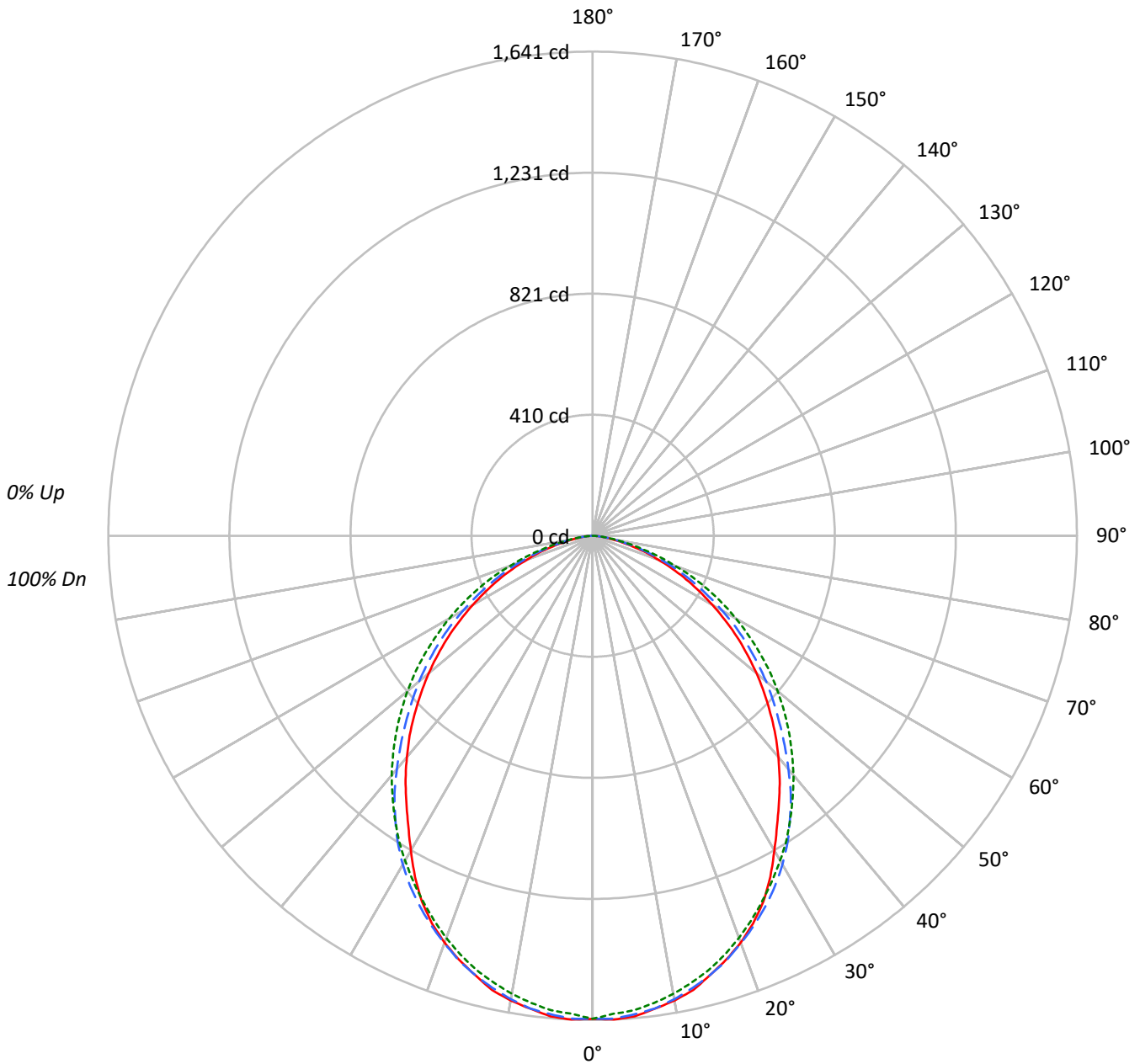
Lumens per Lamp: N/A
Luminaire Lumens: 3785.0 lumens
Efficiency: N/A
Efficacy: 75.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	8810	8810	8810
5°	8833	8796	8721
10°	8740	8716	8616
15°	8584	8584	8486
20°	8403	8413	8305
25°	8126	8227	8096
30°	7652	7996	7898
35°	7230	7664	7677
40°	6879	7250	7440
45°	6486	6811	7161
50°	6071	6419	6856
55°	5600	5971	6485
60°	5043	5449	6031
65°	4452	4846	5486
70°	3710	4126	4661
75°	2915	3296	3649
80°	2086	2318	2572
85°	1359	1359	1284



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.1	4.1
10°-20°	433.0	11.4
20°-30°	632.7	16.7
30°-40°	718.2	19.0
40°-50°	693.3	18.3
50°-60°	571.9	15.1
60°-70°	380.9	10.1
70°-80°	170.4	4.5
80°-90°	30.5	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°	1219.8	32.2
0°-40°	1938.0	51.2
0°-60°	3203.2	84.6
0°-90°	3785.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3785.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1637	1637	1637	1637	1637	
5°	1635	1634	1628	1619	1614	155
15°	1541	1544	1541	1534	1523	434
25°	1368	1379	1385	1375	1363	627
35°	1100	1116	1166	1173	1168	690
45°	852	867	895	936	941	657
55°	597	607	636	672	691	533
65°	350	359	380	408	431	347
75°	140	148	158	166	176	153
85°	22	22	22	21	21	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1636.9	1636.9	1636.9	1636.9	1636.9
2.5°	1641.3	1641.9	1638.2	1628.1	1621.8
5°	1635.0	1634.4	1628.1	1619.3	1614.3
7.5°	1616.8	1618.0	1616.2	1603.6	1596.7
10°	1599.2	1599.8	1594.8	1584.7	1576.5
12.5°	1576.5	1575.9	1569.0	1564.0	1550.8
15°	1540.7	1544.5	1540.7	1533.8	1523.1
17.5°	1506.1	1506.1	1508.6	1496.7	1488.5
20°	1467.1	1469.0	1469.0	1459.6	1450.1
22.5°	1421.8	1427.5	1429.4	1419.3	1408.0
25°	1368.4	1379.1	1385.4	1375.3	1363.4
27.5°	1303.6	1320.0	1338.8	1331.3	1318.1
30°	1231.3	1255.2	1286.6	1280.4	1270.9
32.5°	1162.8	1186.7	1230.0	1227.5	1222.5
35°	1100.5	1115.6	1166.5	1172.8	1168.4
37.5°	1041.4	1055.2	1103.0	1117.5	1113.7
40°	979.1	994.2	1032.0	1057.7	1059.0
42.5°	917.5	932.0	962.8	999.9	999.9
45°	852.1	866.6	894.9	935.7	940.8
47.5°	788.0	803.1	830.7	871.6	879.8
50°	725.1	738.9	766.6	806.2	818.8
52.5°	659.7	674.8	701.8	738.3	756.5
55°	596.8	606.8	636.4	671.6	691.1
57.5°	531.4	540.8	574.1	604.3	624.5
60°	468.5	480.4	506.2	537.0	560.3
62.5°	408.1	420.7	442.7	469.8	496.2
65°	349.6	359.1	380.5	407.5	430.8
67.5°	293.0	301.2	322.6	341.5	366.0
70°	235.8	246.5	262.2	280.5	296.2
72.5°	189.9	194.3	207.5	220.7	237.1
75°	140.2	147.8	158.5	166.0	175.5
77.5°	100.6	105.0	111.3	117.6	126.4
80°	67.3	69.2	74.8	76.1	83.0
82.5°	40.9	42.1	43.4	44.0	46.5
85°	22.0	22.0	22.0	20.8	20.8
87.5°	12.6	12.6	10.7	8.8	6.3
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)