

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: P556284

Luminaire Tested: **FUSL-12-4-LD4-1HI-40-UNV-80-96-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: P556284
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-12-4-LD4-1HI-40-UNV-80-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

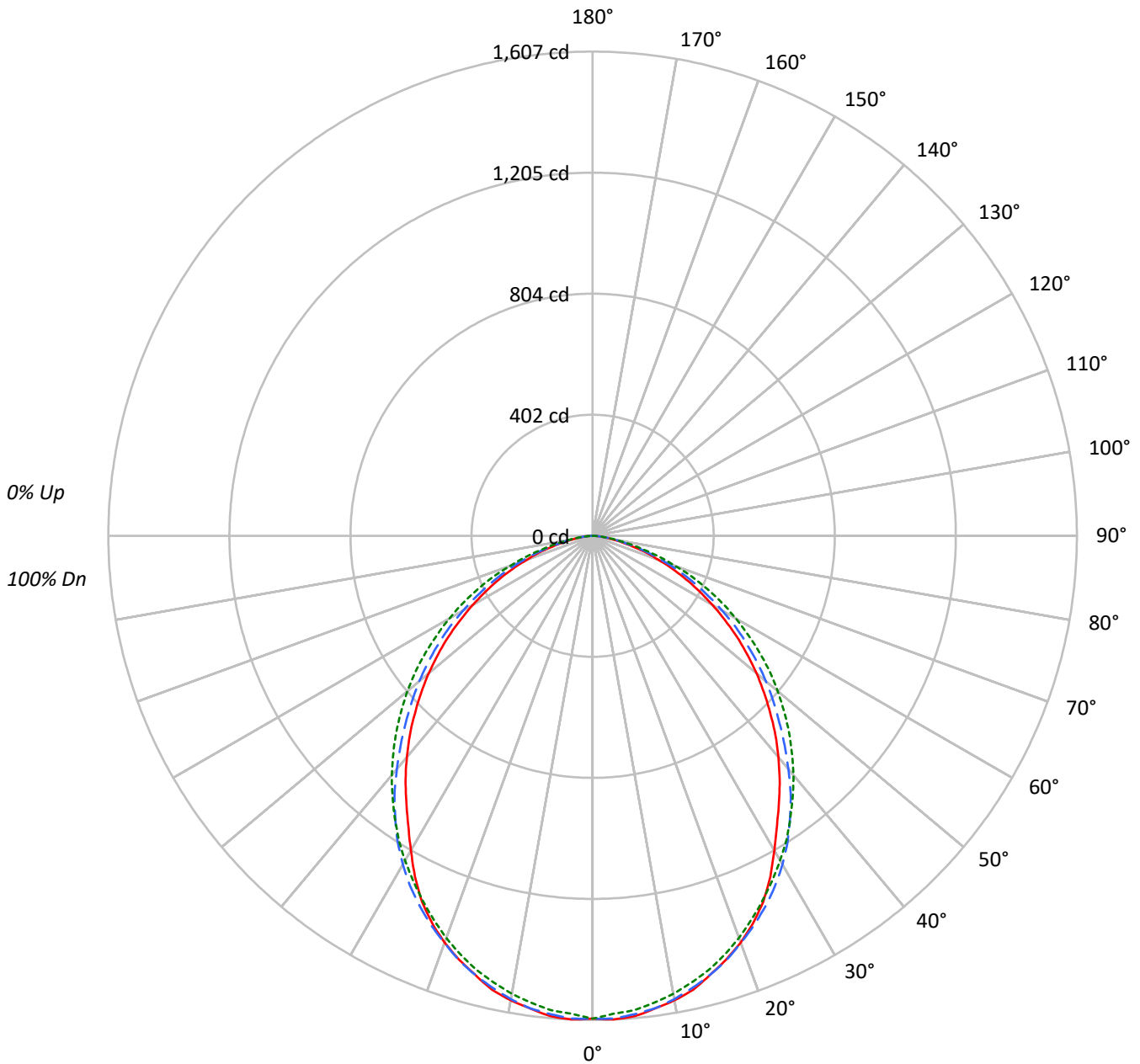
Lumens per Lamp: N/A
Luminaire Lumens: 3706.0 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	4313	4313	4313
5°	4324	4306	4270
10°	4279	4267	4218
15°	4203	4203	4155
20°	4114	4119	4066
25°	3978	4028	3964
30°	3746	3915	3867
35°	3540	3752	3758
40°	3368	3549	3642
45°	3175	3334	3505
50°	2972	3142	3356
55°	2741	2923	3175
60°	2469	2668	2953
65°	2180	2372	2686
70°	1817	2020	2282
75°	1428	1614	1786
80°	1021	1136	1260
85°	667	667	627



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.9	4.1
10°-20°	423.9	11.4
20°-30°	619.5	16.7
30°-40°	703.2	19.0
40°-50°	678.8	18.3
50°-60°	560.0	15.1
60°-70°	372.9	10.1
70°-80°	166.9	4.5
80°-90°	29.9	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°	1194.3	32.2
0°-40°	1897.5	51.2
0°-60°	3136.4	84.6
0°-90°	3706.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3706.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1603	1603	1603	1603	1603	
5°	1601	1600	1594	1586	1581	152
15°	1508	1512	1508	1502	1491	425
25°	1340	1350	1356	1347	1335	614
35°	1078	1092	1142	1148	1144	675
45°	834	848	876	916	921	644
55°	584	594	623	658	677	522
65°	342	352	372	399	422	339
75°	137	145	155	163	172	150
85°	22	22	22	20	20	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1602.7	1602.7	1602.7	1602.7	1602.7
2.5°	1607.1	1607.7	1604.0	1594.1	1588.0
5°	1600.9	1600.3	1594.1	1585.5	1580.6
7.5°	1583.0	1584.3	1582.4	1570.1	1563.3
10°	1565.8	1566.4	1561.5	1551.6	1543.6
12.5°	1543.6	1543.0	1536.3	1531.3	1518.4
15°	1508.5	1512.2	1508.5	1501.8	1491.3
17.5°	1474.7	1474.7	1477.1	1465.4	1457.4
20°	1436.5	1438.3	1438.3	1429.1	1419.9
22.5°	1392.2	1397.7	1399.6	1389.7	1378.6
25°	1339.8	1350.3	1356.5	1346.6	1334.9
27.5°	1276.4	1292.4	1310.9	1303.5	1290.6
30°	1205.6	1229.0	1259.8	1253.6	1244.4
32.5°	1138.5	1161.9	1204.4	1201.9	1197.0
35°	1077.5	1092.3	1142.2	1148.3	1144.0
37.5°	1019.7	1033.2	1080.0	1094.2	1090.5
40°	958.7	973.5	1010.4	1035.7	1036.9
42.5°	898.4	912.5	942.7	979.0	979.0
45°	834.3	848.5	876.2	916.2	921.1
47.5°	771.5	786.3	813.4	853.4	861.4
50°	709.9	723.5	750.6	789.4	801.7
52.5°	645.9	660.7	687.2	722.9	740.7
55°	584.3	594.2	623.1	657.6	676.7
57.5°	520.3	529.5	562.2	591.7	611.4
60°	458.7	470.4	495.7	525.8	548.6
62.5°	399.6	411.9	433.5	460.0	485.8
65°	342.3	351.6	372.5	399.0	421.8
67.5°	286.9	294.9	315.9	334.3	358.4
70°	230.9	241.4	256.8	274.6	290.0
72.5°	186.0	190.3	203.2	216.1	232.1
75°	137.3	144.7	155.2	162.6	171.8
77.5°	98.5	102.8	109.0	115.1	123.8
80°	65.9	67.7	73.3	74.5	81.3
82.5°	40.0	41.3	42.5	43.1	45.6
85°	21.6	21.6	21.6	20.3	20.3
87.5°	12.3	12.3	10.5	8.6	6.2
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)