

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: P556214

Luminaire Tested: **FUSL-12-4-LD4-1HI-35-UNV-80-87-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: P556214
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-35-UNV-80-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

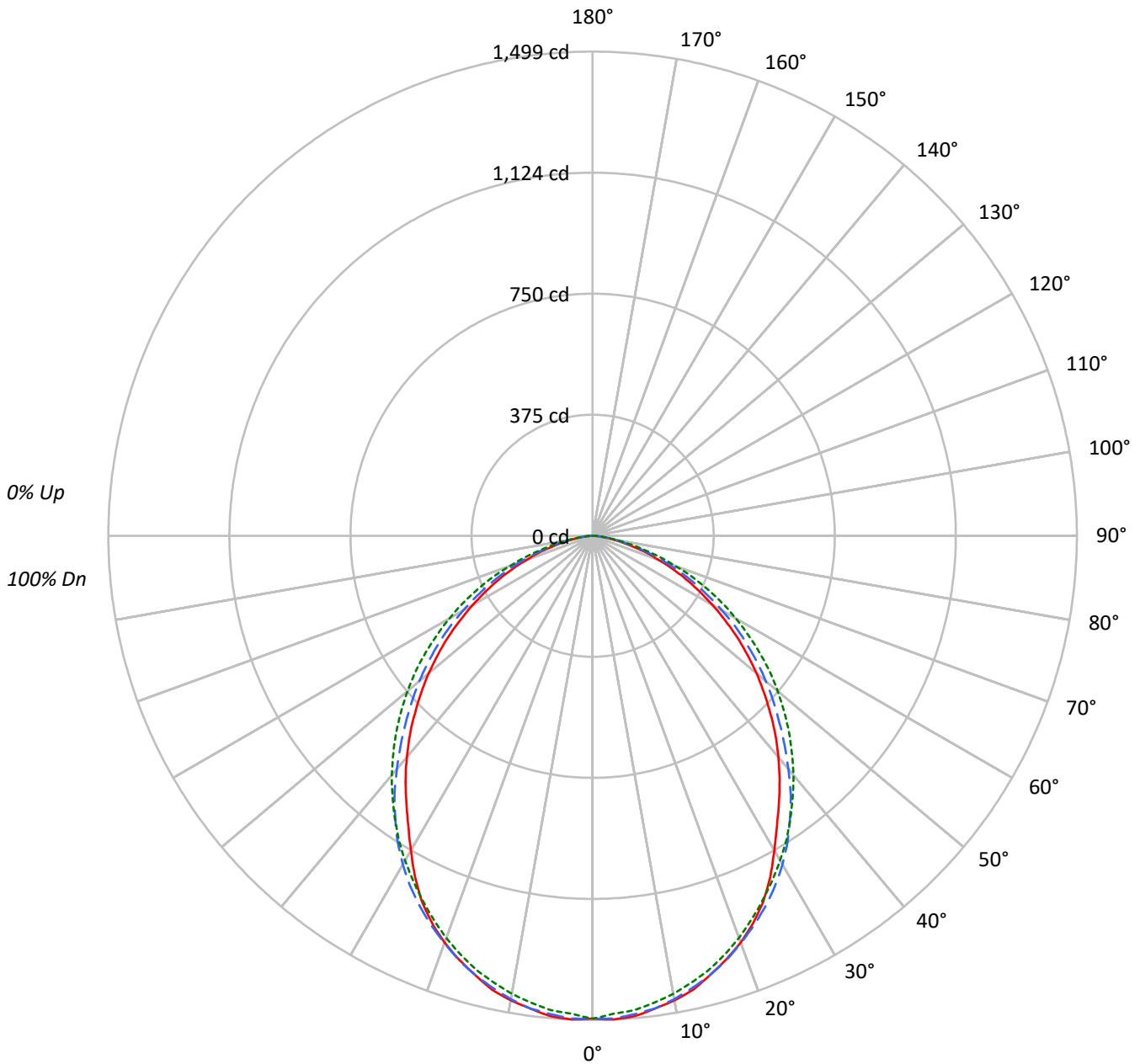
Lumens per Lamp: N/A
Luminaire Lumens: 3457.0 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (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°	4023	4023	4023
5°	4034	4017	3983
10°	3991	3980	3935
15°	3920	3920	3875
20°	3837	3842	3793
25°	3711	3757	3697
30°	3494	3651	3607
35°	3302	3500	3506
40°	3142	3311	3398
45°	2962	3110	3270
50°	2772	2931	3131
55°	2557	2727	2961
60°	2303	2489	2754
65°	2033	2213	2505
70°	1695	1884	2128
75°	1332	1504	1666
80°	953	1058	1175
85°	621	621	587



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.8	4.1
10°-20°	395.4	11.4
20°-30°	577.9	16.7
30°-40°	656.0	19.0
40°-50°	633.2	18.3
50°-60°	522.4	15.1
60°-70°	347.9	10.1
70°-80°	155.7	4.5
80°-90°	27.8	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°	1114.1	32.2
0°-40°	1770.0	51.2
0°-60°	2925.6	84.6
0°-90°	3457.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3457.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1495	1495	1495	1495	1495	
5°	1493	1493	1487	1479	1474	141
15°	1407	1411	1407	1401	1391	397
25°	1250	1260	1265	1256	1245	572
35°	1005	1019	1065	1071	1067	630
45°	778	792	817	855	859	600
55°	545	554	581	613	631	486
65°	319	328	348	372	393	317
75°	128	135	145	152	160	140
85°	20	20	20	19	19	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1495.1	1495.1	1495.1	1495.1	1495.1
2.5°	1499.1	1499.7	1496.2	1487.0	1481.3
5°	1493.3	1492.8	1487.0	1479.0	1474.4
7.5°	1476.7	1477.8	1476.1	1464.6	1458.3
10°	1460.6	1461.2	1456.6	1447.4	1439.9
12.5°	1439.9	1439.4	1433.0	1428.4	1416.4
15°	1407.2	1410.6	1407.2	1400.9	1391.1
17.5°	1375.6	1375.6	1377.9	1367.0	1359.5
20°	1340.0	1341.7	1341.7	1333.1	1324.5
22.5°	1298.6	1303.8	1305.5	1296.3	1286.0
25°	1249.8	1259.6	1265.3	1256.1	1245.2
27.5°	1190.7	1205.6	1222.8	1215.9	1203.9
30°	1124.6	1146.4	1175.1	1169.4	1160.8
32.5°	1062.0	1083.8	1123.5	1121.2	1116.6
35°	1005.1	1018.9	1065.4	1071.2	1067.2
37.5°	951.1	963.8	1007.4	1020.6	1017.2
40°	894.3	908.1	942.5	966.1	967.2
42.5°	838.0	851.2	879.3	913.2	913.2
45°	778.3	791.5	817.3	854.7	859.2
47.5°	719.7	733.5	758.7	796.1	803.5
50°	662.2	674.9	700.1	736.3	747.8
52.5°	602.5	616.3	641.0	674.3	691.0
55°	545.1	554.3	581.3	613.4	631.2
57.5°	485.3	494.0	524.4	552.0	570.3
60°	427.9	438.8	462.4	490.5	511.8
62.5°	372.8	384.2	404.4	429.0	453.2
65°	319.3	328.0	347.5	372.2	393.4
67.5°	267.7	275.1	294.6	311.9	334.3
70°	215.4	225.1	239.5	256.2	270.5
72.5°	173.5	177.5	189.5	201.6	216.5
75°	128.1	135.0	144.7	151.6	160.2
77.5°	91.9	95.9	101.7	107.4	115.4
80°	61.5	63.2	68.3	69.5	75.8
82.5°	37.3	38.5	39.6	40.2	42.5
85°	20.1	20.1	20.1	19.0	19.0
87.5°	11.5	11.5	9.8	8.0	5.7
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)