

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: P556979

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-80-85-EDD**

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: P556979
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-LD4-2HI-35-UNV-80-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

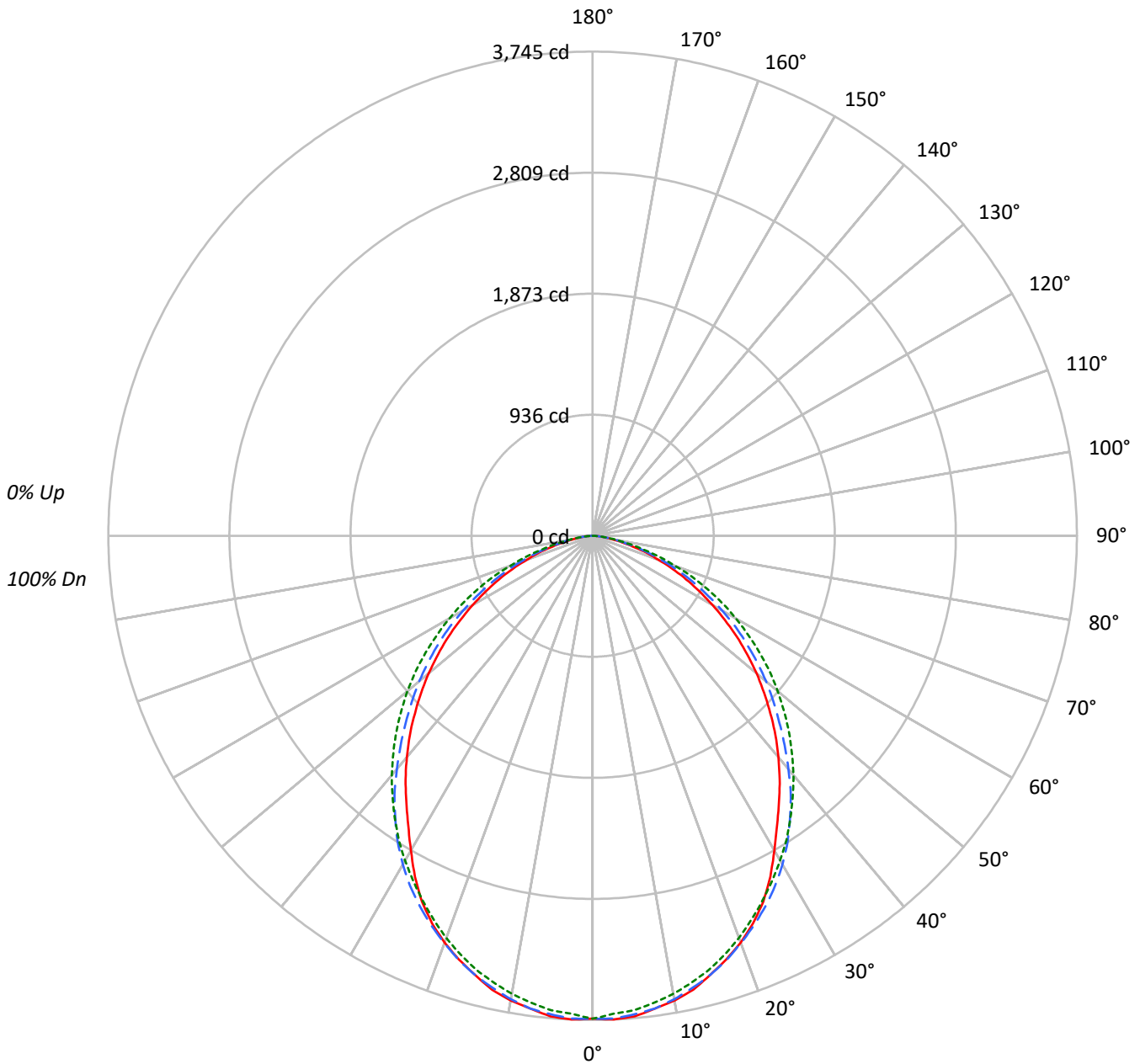
Lumens per Lamp: N/A
Luminaire Lumens: 8637.0 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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

TEST NUMBER: P556979

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-80-85-EDD

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°	10052	10052	10052
5°	10078	10036	9950
10°	9971	9944	9830
15°	9794	9794	9682
20°	9587	9599	9476
25°	9271	9386	9237
30°	8731	9123	9011
35°	8249	8745	8759
40°	7849	8272	8489
45°	7400	7771	8170
50°	6926	7323	7822
55°	6389	6813	7399
60°	5754	6217	6881
65°	5081	5528	6259
70°	4234	4708	5318
75°	3327	3760	4163
80°	2379	2647	2935
85°	1550	1550	1463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	351.7	4.1
10°-20°	988.0	11.4
20°-30°	1443.8	16.7
30°-40°	1638.8	19.0
40°-50°	1582.1	18.3
50°-60°	1305.1	15.1
60°-70°	869.1	10.1
70°-80°	388.9	4.5
80°-90°	69.6	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°	2783.4	32.2
0°-40°	4422.3	51.2
0°-60°	7309.4	84.6
0°-90°	8637.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8637.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3735	3735	3735	3735	3735	
5°	3731	3730	3715	3695	3684	353
15°	3516	3524	3516	3500	3476	991
25°	3122	3147	3161	3138	3111	1430
35°	2511	2546	2662	2676	2666	1573
45°	1944	1977	2042	2135	2147	1500
55°	1362	1385	1452	1533	1577	1215
65°	798	819	868	930	983	791
75°	320	337	362	379	400	350
85°	50	50	50	47	47	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3735.3	3735.3	3735.3	3735.3	3735.3
2.5°	3745.3	3746.8	3738.1	3715.2	3700.8
5°	3731.0	3729.5	3715.2	3695.1	3683.6
7.5°	3689.4	3692.2	3687.9	3659.2	3643.4
10°	3649.2	3650.6	3639.1	3616.2	3597.5
12.5°	3597.5	3596.1	3580.3	3568.8	3538.7
15°	3515.7	3524.3	3515.7	3499.9	3475.5
17.5°	3436.8	3436.8	3442.5	3415.3	3396.6
20°	3347.8	3352.1	3352.1	3330.6	3309.1
22.5°	3244.5	3257.4	3261.7	3238.8	3212.9
25°	3122.5	3146.9	3161.3	3138.3	3111.1
27.5°	2974.7	3012.0	3055.1	3037.9	3007.7
30°	2809.7	2864.2	2936.0	2921.6	2900.1
32.5°	2653.3	2707.8	2806.8	2801.1	2789.6
35°	2511.2	2545.7	2661.9	2676.3	2666.2
37.5°	2376.3	2407.9	2517.0	2550.0	2541.4
40°	2234.3	2268.7	2354.8	2413.7	2416.5
42.5°	2093.7	2126.7	2197.0	2281.6	2281.6
45°	1944.4	1977.4	2042.0	2135.3	2146.7
47.5°	1798.0	1832.5	1895.6	1988.9	2007.6
50°	1654.5	1686.1	1749.3	1839.7	1868.4
52.5°	1505.3	1539.7	1601.4	1684.7	1726.3
55°	1361.8	1384.8	1452.2	1532.6	1577.1
57.5°	1212.6	1234.1	1310.1	1379.0	1424.9
60°	1069.1	1096.3	1155.2	1225.5	1278.6
62.5°	931.3	960.0	1010.2	1071.9	1132.2
65°	797.9	819.4	868.2	929.9	983.0
67.5°	668.7	687.4	736.1	779.2	835.2
70°	538.1	562.5	598.4	640.0	675.9
72.5°	433.4	443.4	473.5	503.7	541.0
75°	320.0	337.2	361.6	378.8	400.4
77.5°	229.6	239.6	254.0	268.3	288.4
80°	153.5	157.8	170.8	173.6	189.4
82.5°	93.3	96.1	99.0	100.4	106.2
85°	50.2	50.2	50.2	47.4	47.4
87.5°	28.7	28.7	24.4	20.1	14.3
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)