

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: P558009

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-80-88-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: P558009
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-LD4-3LO-35-UNV-80-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

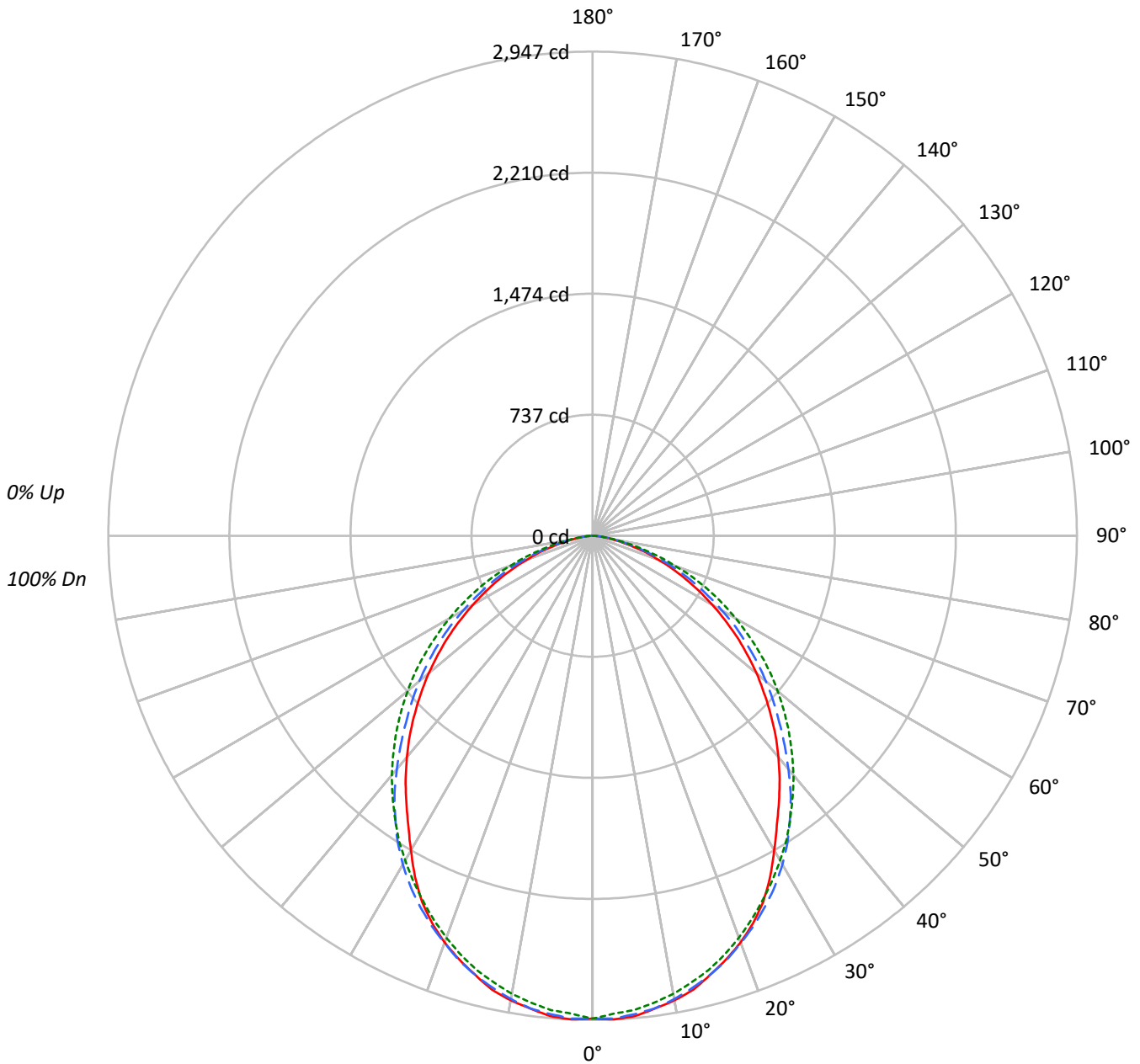
Lumens per Lamp: N/A
Luminaire Lumens: 6795.0 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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

TEST NUMBER: P558009

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-80-88-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°	7908	7908	7908
5°	7929	7896	7828
10°	7845	7823	7734
15°	7706	7706	7618
20°	7542	7552	7455
25°	7294	7385	7267
30°	6869	7177	7090
35°	6490	6880	6891
40°	6175	6508	6679
45°	5821	6114	6427
50°	5449	5761	6154
55°	5027	5360	5821
60°	4527	4891	5414
65°	3997	4349	4924
70°	3331	3704	4183
75°	2618	2958	3275
80°	1872	2081	2309
85°	1220	1220	1152



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.7	4.1
10°-20°	777.3	11.4
20°-30°	1135.9	16.7
30°-40°	1289.3	19.0
40°-50°	1244.6	18.3
50°-60°	1026.7	15.1
60°-70°	683.7	10.1
70°-80°	306.0	4.5
80°-90°	54.7	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°	2189.8	32.2
0°-40°	3479.2	51.2
0°-60°	5750.5	84.6
0°-90°	6795.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6795.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2939	2939	2939	2939	2939	
5°	2935	2934	2923	2907	2898	278
15°	2766	2773	2766	2754	2734	780
25°	2457	2476	2487	2469	2448	1125
35°	1976	2003	2094	2106	2098	1238
45°	1530	1556	1606	1680	1689	1180
55°	1071	1089	1142	1206	1241	956
65°	628	645	683	732	773	622
75°	252	265	284	298	315	275
85°	40	40	40	37	37	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2938.7	2938.7	2938.7	2938.7	2938.7
2.5°	2946.6	2947.7	2940.9	2922.9	2911.6
5°	2935.3	2934.1	2922.9	2907.1	2898.0
7.5°	2902.5	2904.8	2901.4	2878.8	2866.4
10°	2870.9	2872.1	2863.0	2845.0	2830.3
12.5°	2830.3	2829.2	2816.7	2807.7	2784.0
15°	2765.9	2772.7	2765.9	2753.5	2734.3
17.5°	2703.8	2703.8	2708.4	2686.9	2672.2
20°	2633.8	2637.2	2637.2	2620.3	2603.4
22.5°	2552.6	2562.7	2566.1	2548.0	2527.7
25°	2456.6	2475.8	2487.1	2469.0	2447.6
27.5°	2340.3	2369.7	2403.5	2390.0	2366.3
30°	2210.5	2253.4	2309.8	2298.5	2281.6
32.5°	2087.4	2130.3	2208.2	2203.7	2194.7
35°	1975.7	2002.8	2094.2	2105.5	2097.6
37.5°	1869.5	1894.4	1980.2	2006.1	1999.4
40°	1757.8	1784.9	1852.6	1898.9	1901.2
42.5°	1647.1	1673.1	1728.4	1795.0	1795.0
45°	1529.7	1555.7	1606.5	1679.9	1688.9
47.5°	1414.6	1441.7	1491.3	1564.7	1579.4
50°	1301.7	1326.5	1376.2	1447.3	1469.9
52.5°	1184.3	1211.4	1259.9	1325.4	1358.1
55°	1071.4	1089.4	1142.5	1205.7	1240.7
57.5°	954.0	970.9	1030.7	1084.9	1121.0
60°	841.1	862.5	908.8	964.1	1005.9
62.5°	732.7	755.3	794.8	843.3	890.7
65°	627.7	644.6	683.0	731.6	773.3
67.5°	526.1	540.8	579.2	613.0	657.1
70°	423.4	442.5	470.8	503.5	531.7
72.5°	340.9	348.8	372.6	396.3	425.6
75°	251.8	265.3	284.5	298.0	315.0
77.5°	180.6	188.5	199.8	211.1	226.9
80°	120.8	124.2	134.3	136.6	149.0
82.5°	73.4	75.6	77.9	79.0	83.5
85°	39.5	39.5	39.5	37.3	37.3
87.5°	22.6	22.6	19.2	15.8	11.3
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)