

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: P557475

Luminaire Tested: **FUSL-12-4-LD4-2STD-30-UNV-93-85-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: P557475
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-LD4-2STD-30-UNV-93-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

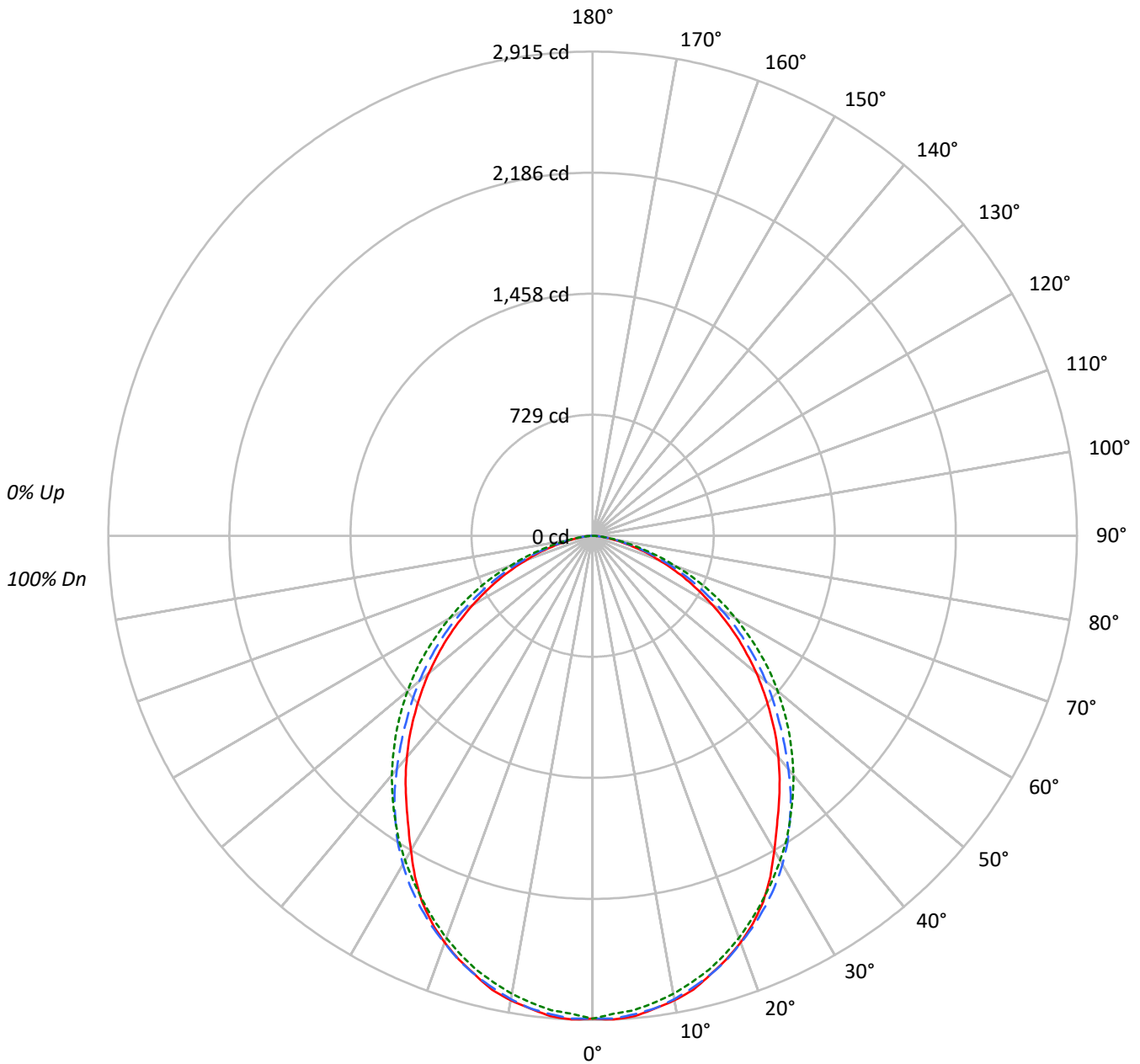
Lumens per Lamp: N/A
Luminaire Lumens: 6722.0 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	7823	7823	7823
5°	7844	7811	7744
10°	7761	7739	7651
15°	7623	7623	7536
20°	7461	7471	7375
25°	7216	7305	7189
30°	6795	7100	7013
35°	6420	6806	6817
40°	6108	6438	6607
45°	5759	6048	6358
50°	5391	5699	6087
55°	4973	5302	5758
60°	4478	4838	5356
65°	3954	4302	4871
70°	3295	3664	4139
75°	2590	2926	3240
80°	1852	2060	2284
85°	1207	1207	1139



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.7	4.1
10°-20°	768.9	11.4
20°-30°	1123.7	16.7
30°-40°	1275.5	19.0
40°-50°	1231.3	18.3
50°-60°	1015.7	15.1
60°-70°	676.4	10.1
70°-80°	302.7	4.5
80°-90°	54.2	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°	2166.3	32.2
0°-40°	3441.8	51.2
0°-60°	5688.8	84.6
0°-90°	6722.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6722.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2907	2907	2907	2907	2907	
5°	2904	2903	2892	2876	2867	275
15°	2736	2743	2736	2724	2705	771
25°	2430	2449	2460	2442	2421	1113
35°	1954	1981	2072	2083	2075	1225
45°	1513	1539	1589	1662	1671	1168
55°	1060	1078	1130	1193	1227	946
65°	621	638	676	724	765	616
75°	249	262	281	295	312	272
85°	39	39	39	37	37	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2907.1	2907.1	2907.1	2907.1	2907.1
2.5°	2914.9	2916.0	2909.3	2891.5	2880.3
5°	2903.7	2902.6	2891.5	2875.8	2866.9
7.5°	2871.4	2873.6	2870.2	2847.9	2835.6
10°	2840.1	2841.2	2832.3	2814.4	2799.9
12.5°	2799.9	2798.8	2786.5	2777.5	2754.1
15°	2736.2	2742.9	2736.2	2723.9	2704.9
17.5°	2674.8	2674.8	2679.3	2658.0	2643.5
20°	2605.5	2608.9	2608.9	2592.1	2575.4
22.5°	2525.1	2535.2	2538.5	2520.7	2500.6
25°	2430.2	2449.2	2460.4	2442.5	2421.3
27.5°	2315.2	2344.2	2377.7	2364.3	2340.9
30°	2186.7	2229.2	2285.0	2273.9	2257.1
32.5°	2065.0	2107.4	2184.5	2180.0	2171.1
35°	1954.4	1981.2	2071.7	2082.9	2075.1
37.5°	1849.5	1874.0	1958.9	1984.6	1977.9
40°	1738.9	1765.7	1832.7	1878.5	1880.7
42.5°	1629.4	1655.1	1709.9	1775.7	1775.7
45°	1513.3	1539.0	1589.2	1661.8	1670.8
47.5°	1399.4	1426.2	1475.3	1547.9	1562.4
50°	1287.7	1312.3	1361.4	1431.8	1454.1
52.5°	1171.5	1198.4	1246.4	1311.2	1343.5
55°	1059.9	1077.7	1130.2	1192.8	1227.4
57.5°	943.7	960.5	1019.7	1073.3	1109.0
60°	832.0	853.3	899.0	953.8	995.1
62.5°	724.8	747.2	786.2	834.3	881.2
65°	621.0	637.7	675.7	723.7	765.0
67.5°	520.4	535.0	572.9	606.4	650.0
70°	418.8	437.8	465.7	498.1	526.0
72.5°	337.3	345.1	368.6	392.0	421.0
75°	249.1	262.5	281.4	294.8	311.6
77.5°	178.7	186.5	197.7	208.8	224.5
80°	119.5	122.9	132.9	135.1	147.4
82.5°	72.6	74.8	77.1	78.2	82.6
85°	39.1	39.1	39.1	36.9	36.9
87.5°	22.3	22.3	19.0	15.6	11.2
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)