

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: P557560

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-80-88-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: P557560
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-40-UNV-80-88-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

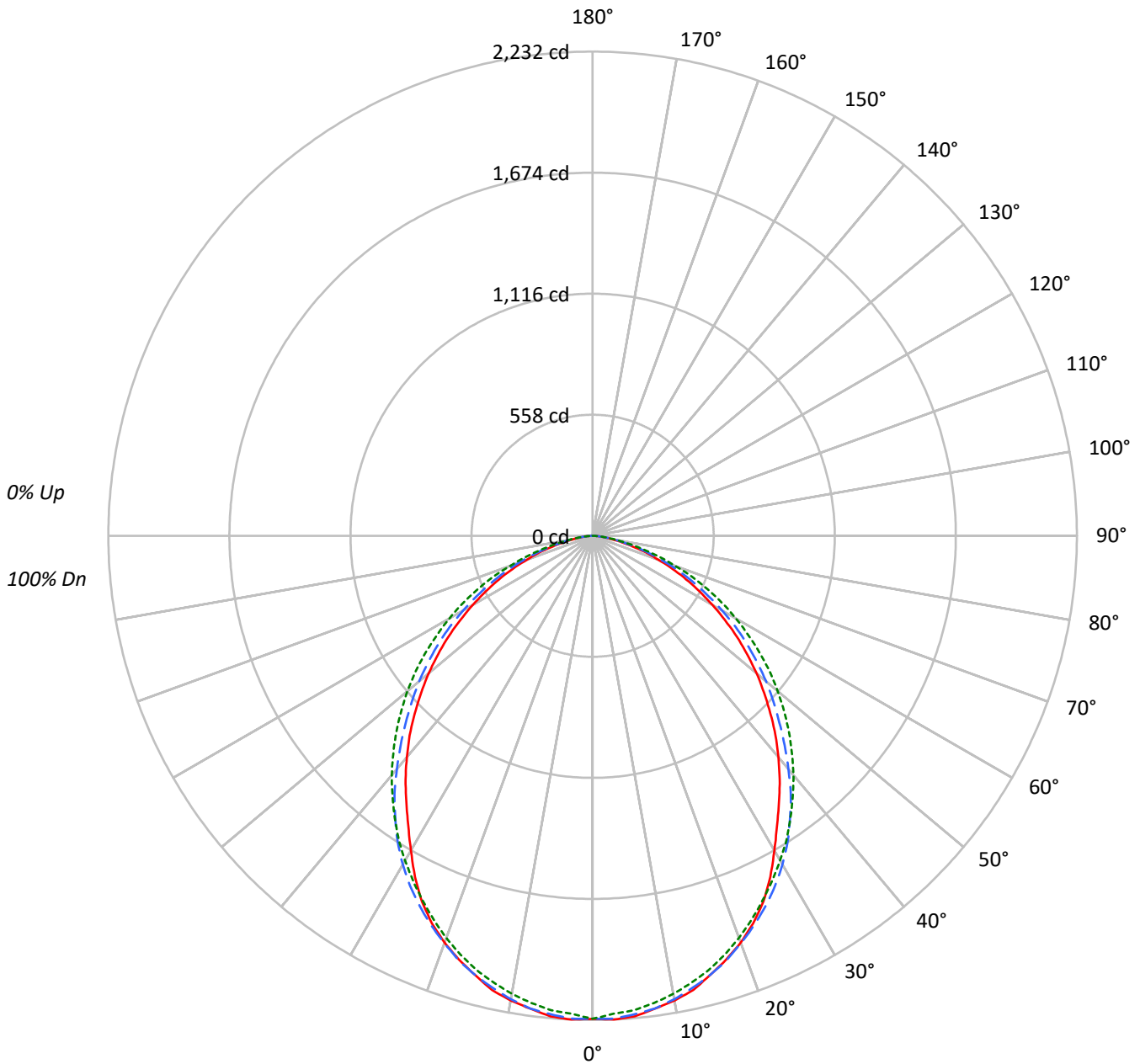
Lumens per Lamp: N/A
Luminaire Lumens: 5148.0 lumens
Efficiency: N/A
Efficacy: 77.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5991	5991	5991
5°	6007	5982	5931
10°	5943	5927	5859
15°	5838	5838	5771
20°	5714	5722	5648
25°	5526	5595	5506
30°	5204	5438	5371
35°	4917	5212	5221
40°	4678	4931	5060
45°	4410	4632	4869
50°	4129	4365	4662
55°	3808	4061	4410
60°	3429	3705	4102
65°	3028	3295	3731
70°	2523	2806	3170
75°	1983	2241	2481
80°	1418	1578	1750
85°	923	923	871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.6	4.1
10°-20°	588.9	11.4
20°-30°	860.6	16.7
30°-40°	976.8	19.0
40°-50°	943.0	18.3
50°-60°	777.9	15.1
60°-70°	518.0	10.1
70°-80°	231.8	4.5
80°-90°	41.5	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°	1659.1	32.2
0°-40°	2635.9	51.2
0°-60°	4356.7	84.6
0°-90°	5148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5148.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2226	2226	2226	2226	2226	
5°	2224	2223	2214	2202	2196	210
15°	2096	2101	2096	2086	2072	591
25°	1861	1876	1884	1871	1854	852
35°	1497	1517	1587	1595	1589	938
45°	1159	1179	1217	1273	1280	894
55°	812	825	866	914	940	724
65°	476	488	518	554	586	472
75°	191	201	216	226	239	209
85°	30	30	30	28	28	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2226.4	2226.4	2226.4	2226.4	2226.4
2.5°	2232.4	2233.2	2228.1	2214.4	2205.8
5°	2223.8	2223.0	2214.4	2202.4	2195.6
7.5°	2199.0	2200.7	2198.2	2181.0	2171.6
10°	2175.1	2175.9	2169.1	2155.4	2144.3
12.5°	2144.3	2143.4	2134.0	2127.2	2109.2
15°	2095.5	2100.6	2095.5	2086.1	2071.6
17.5°	2048.5	2048.5	2051.9	2035.6	2024.5
20°	1995.4	1998.0	1998.0	1985.2	1972.3
22.5°	1933.9	1941.6	1944.1	1930.4	1915.0
25°	1861.2	1875.7	1884.3	1870.6	1854.3
27.5°	1773.1	1795.3	1821.0	1810.7	1792.7
30°	1674.7	1707.2	1750.0	1741.4	1728.6
32.5°	1581.5	1614.0	1673.0	1669.6	1662.7
35°	1496.8	1517.3	1586.6	1595.2	1589.2
37.5°	1416.4	1435.2	1500.2	1519.9	1514.8
40°	1331.7	1352.2	1403.6	1438.6	1440.3
42.5°	1247.9	1267.6	1309.5	1359.9	1359.9
45°	1158.9	1178.6	1217.1	1272.7	1279.5
47.5°	1071.7	1092.2	1129.9	1185.5	1196.6
50°	986.2	1005.0	1042.6	1096.5	1113.6
52.5°	897.2	917.7	954.5	1004.1	1028.9
55°	811.7	825.4	865.6	913.5	940.0
57.5°	722.7	735.6	780.9	822.0	849.3
60°	637.2	653.5	688.5	730.4	762.1
62.5°	555.1	572.2	602.1	638.9	674.8
65°	475.6	488.4	517.5	554.2	585.9
67.5°	398.6	409.7	438.8	464.4	497.8
70°	320.7	335.3	356.7	381.5	402.9
72.5°	258.3	264.3	282.3	300.2	322.5
75°	190.7	201.0	215.5	225.8	238.6
77.5°	136.8	142.8	151.4	159.9	171.9
80°	91.5	94.1	101.8	103.5	112.9
82.5°	55.6	57.3	59.0	59.9	63.3
85°	29.9	29.9	29.9	28.2	28.2
87.5°	17.1	17.1	14.5	12.0	8.6
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)