

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: P557624

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-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: P557624
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-50-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 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

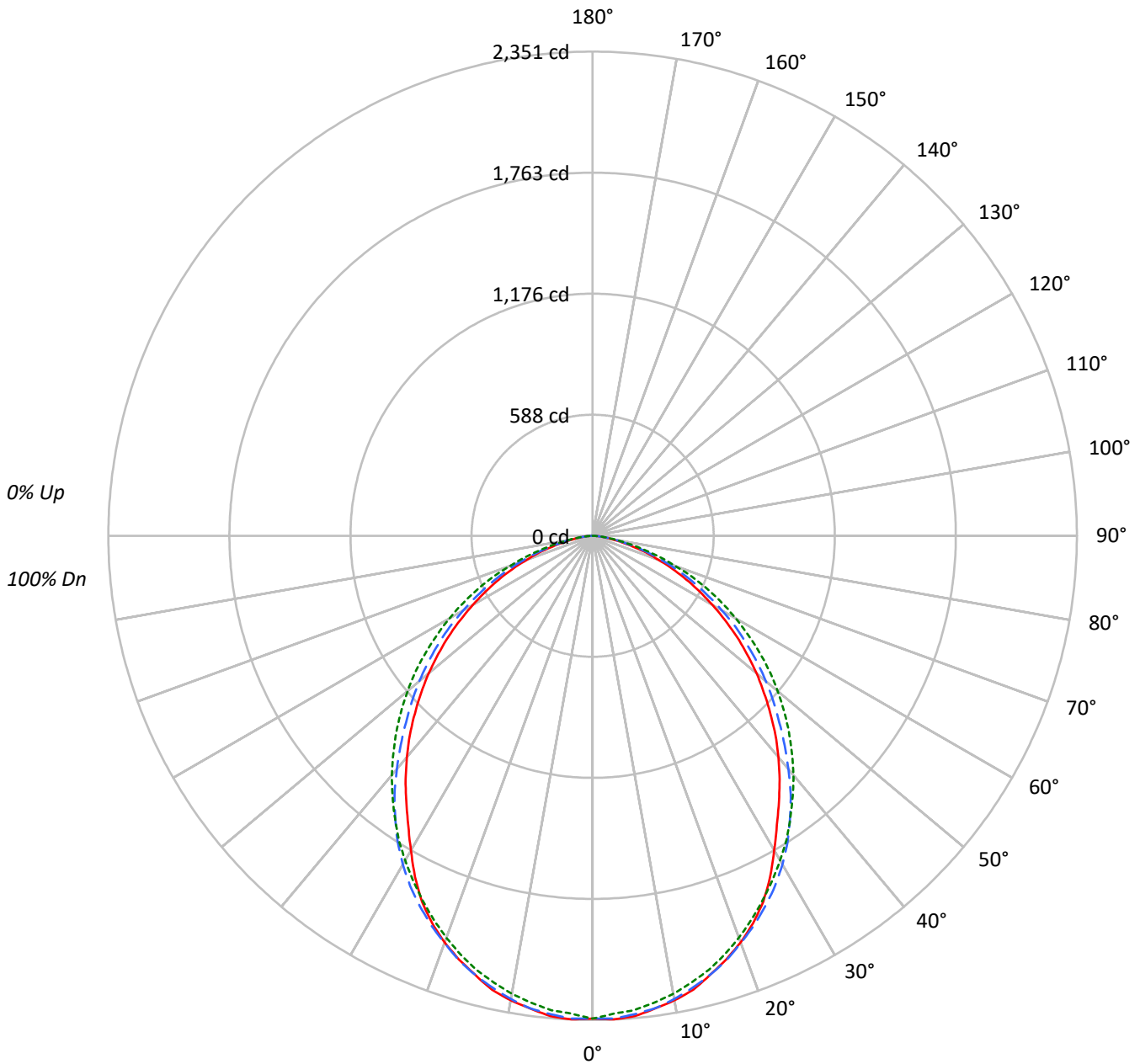
Lumens per Lamp: N/A
Luminaire Lumens: 5421.0 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (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°	6309	6309	6309
5°	6326	6299	6245
10°	6258	6241	6170
15°	6147	6147	6077
20°	6017	6025	5948
25°	5819	5891	5798
30°	5480	5726	5656
35°	5178	5488	5497
40°	4926	5192	5328
45°	4644	4878	5128
50°	4348	4596	4909
55°	4010	4276	4644
60°	3611	3902	4319
65°	3189	3470	3929
70°	2658	2955	3338
75°	2088	2360	2613
80°	1494	1661	1843
85°	973	973	917



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.7	4.1
10°-20°	620.1	11.4
20°-30°	906.2	16.7
30°-40°	1028.6	19.0
40°-50°	993.0	18.3
50°-60°	819.1	15.1
60°-70°	545.5	10.1
70°-80°	244.1	4.5
80°-90°	43.6	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°	1747.0	32.2
0°-40°	2775.7	51.2
0°-60°	4587.8	84.6
0°-90°	5421.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5421.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2344	2344	2344	2344	2344	
5°	2342	2341	2332	2319	2312	222
15°	2207	2212	2207	2197	2181	622
25°	1960	1975	1984	1970	1953	898
35°	1576	1598	1671	1680	1673	988
45°	1220	1241	1282	1340	1347	942
55°	855	869	912	962	990	763
65°	501	514	545	584	617	497
75°	201	212	227	238	251	220
85°	32	32	32	30	30	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2344.4	2344.4	2344.4	2344.4	2344.4
2.5°	2350.7	2351.6	2346.2	2331.8	2322.8
5°	2341.7	2340.8	2331.8	2319.2	2312.0
7.5°	2315.6	2317.4	2314.7	2296.7	2286.8
10°	2290.4	2291.3	2284.1	2269.7	2258.0
12.5°	2258.0	2257.1	2247.2	2240.0	2221.1
15°	2206.6	2212.0	2206.6	2196.7	2181.4
17.5°	2157.1	2157.1	2160.7	2143.6	2131.9
20°	2101.3	2104.0	2104.0	2090.5	2076.9
22.5°	2036.4	2044.5	2047.2	2032.8	2016.6
25°	1959.9	1975.2	1984.2	1969.8	1952.7
27.5°	1867.1	1890.5	1917.5	1906.7	1887.8
30°	1763.5	1797.7	1842.8	1833.8	1820.3
32.5°	1665.3	1699.6	1761.7	1758.1	1750.9
35°	1576.2	1597.8	1670.7	1679.7	1673.4
37.5°	1491.5	1511.3	1579.8	1600.5	1595.1
40°	1402.3	1424.0	1478.0	1514.9	1516.7
42.5°	1314.1	1334.8	1378.9	1432.1	1432.1
45°	1220.4	1241.1	1281.7	1340.2	1347.4
47.5°	1128.5	1150.2	1189.8	1248.3	1260.0
50°	1038.5	1058.3	1097.9	1154.7	1172.7
52.5°	944.8	966.4	1005.1	1057.4	1083.5
55°	854.7	869.1	911.5	961.9	989.8
57.5°	761.1	774.6	822.3	865.5	894.4
60°	671.0	688.1	725.0	769.2	802.5
62.5°	584.5	602.5	634.1	672.8	710.6
65°	500.8	514.3	544.9	583.6	617.0
67.5°	419.7	431.4	462.0	489.1	524.2
70°	337.8	353.1	375.6	401.7	424.2
72.5°	272.0	278.3	297.2	316.1	339.6
75°	200.8	211.7	227.0	237.8	251.3
77.5°	144.1	150.4	159.4	168.4	181.0
80°	96.4	99.1	107.2	109.0	118.9
82.5°	58.5	60.3	62.1	63.0	66.6
85°	31.5	31.5	31.5	29.7	29.7
87.5°	18.0	18.0	15.3	12.6	9.0
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)