

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: P557428

Luminaire Tested: **FUSL-12-4-LD4-2STD-30-UNV-80-86-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: P557428
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-80-86-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

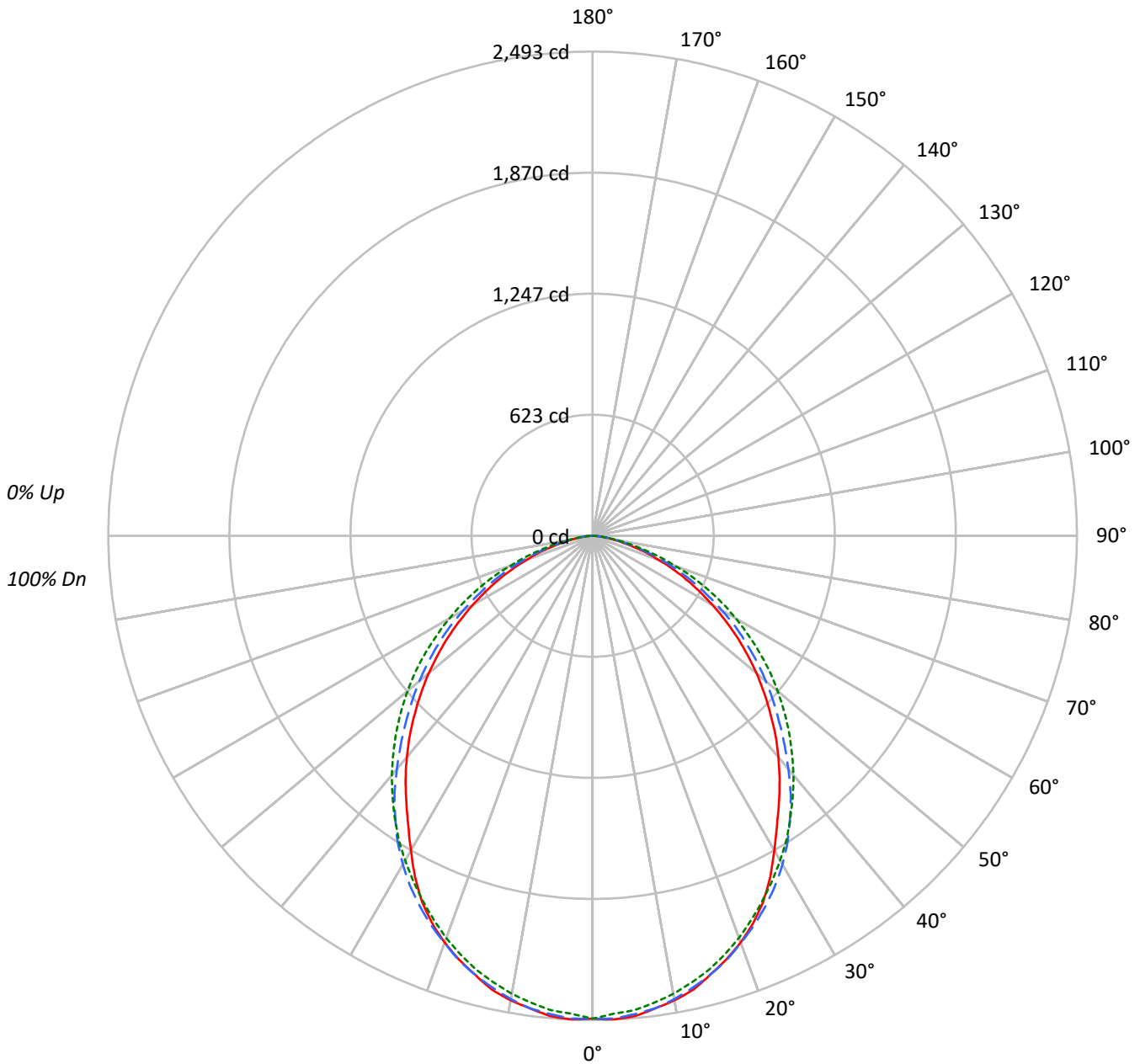
Lumens per Lamp: N/A
Luminaire Lumens: 5749.0 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (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					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	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°	6691	6691	6691
5°	6708	6680	6623
10°	6637	6619	6543
15°	6520	6520	6445
20°	6381	6390	6308
25°	6171	6248	6149
30°	5811	6073	5998
35°	5491	5821	5830
40°	5224	5506	5650
45°	4925	5173	5438
50°	4611	4874	5206
55°	4253	4535	4925
60°	3830	4138	4581
65°	3382	3680	4166
70°	2818	3134	3540
75°	2215	2503	2771
80°	1584	1762	1954
85°	1031	1031	973



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.1	4.1
10°-20°	657.6	11.4
20°-30°	961.0	16.7
30°-40°	1090.9	19.0
40°-50°	1053.1	18.3
50°-60°	868.7	15.1
60°-70°	578.5	10.1
70°-80°	258.9	4.5
80°-90°	46.3	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°	1852.7	32.2
0°-40°	2943.6	51.2
0°-60°	4865.3	84.6
0°-90°	5749.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5749.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2486	2486	2486	2486	2486	
5°	2483	2482	2473	2460	2452	235
15°	2340	2346	2340	2330	2313	660
25°	2078	2095	2104	2089	2071	952
35°	1672	1694	1772	1781	1775	1047
45°	1294	1316	1359	1421	1429	999
55°	906	922	967	1020	1050	809
65°	531	545	578	619	654	527
75°	213	224	241	252	266	233
85°	33	33	33	32	32	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2486.3	2486.3	2486.3	2486.3	2486.3
2.5°	2493.0	2493.9	2488.2	2472.9	2463.4
5°	2483.4	2482.5	2472.9	2459.5	2451.9
7.5°	2455.7	2457.6	2454.8	2435.7	2425.2
10°	2429.0	2429.9	2422.3	2407.0	2394.6
12.5°	2394.6	2393.6	2383.1	2375.5	2355.4
15°	2340.2	2345.9	2340.2	2329.6	2313.4
17.5°	2287.6	2287.6	2291.4	2273.3	2260.9
20°	2228.4	2231.3	2231.3	2216.9	2202.6
22.5°	2159.6	2168.2	2171.1	2155.8	2138.6
25°	2078.4	2094.7	2104.2	2088.9	2070.8
27.5°	1980.1	2004.9	2033.5	2022.1	2002.0
30°	1870.2	1906.5	1954.3	1944.7	1930.4
32.5°	1766.1	1802.4	1868.3	1864.5	1856.8
35°	1671.5	1694.5	1771.8	1781.4	1774.7
37.5°	1581.8	1602.8	1675.4	1697.3	1691.6
40°	1487.2	1510.1	1567.4	1606.6	1608.5
42.5°	1393.6	1415.6	1462.4	1518.7	1518.7
45°	1294.2	1316.2	1359.2	1421.3	1428.9
47.5°	1196.8	1219.7	1261.8	1323.9	1336.3
50°	1101.3	1122.3	1164.3	1224.5	1243.6
52.5°	1002.0	1024.9	1066.0	1121.4	1149.1
55°	906.5	921.7	966.6	1020.1	1049.7
57.5°	807.1	821.4	872.1	917.9	948.5
60°	711.6	729.7	768.9	815.7	851.1
62.5°	619.9	639.0	672.4	713.5	753.6
65°	531.1	545.4	577.9	618.9	654.3
67.5°	445.1	457.5	490.0	518.7	555.9
70°	358.2	374.4	398.3	426.0	449.9
72.5°	288.5	295.1	315.2	335.3	360.1
75°	213.0	224.5	240.7	252.2	266.5
77.5°	152.8	159.5	169.1	178.6	192.0
80°	102.2	105.1	113.7	115.6	126.1
82.5°	62.1	64.0	65.9	66.9	70.7
85°	33.4	33.4	33.4	31.5	31.5
87.5°	19.1	19.1	16.2	13.4	9.6
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)