

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: P557233

Luminaire Tested: **FUSL-12-4-LD4-2LO-35-UNV-80-84-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: P557233
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-LD4-2LO-35-UNV-80-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

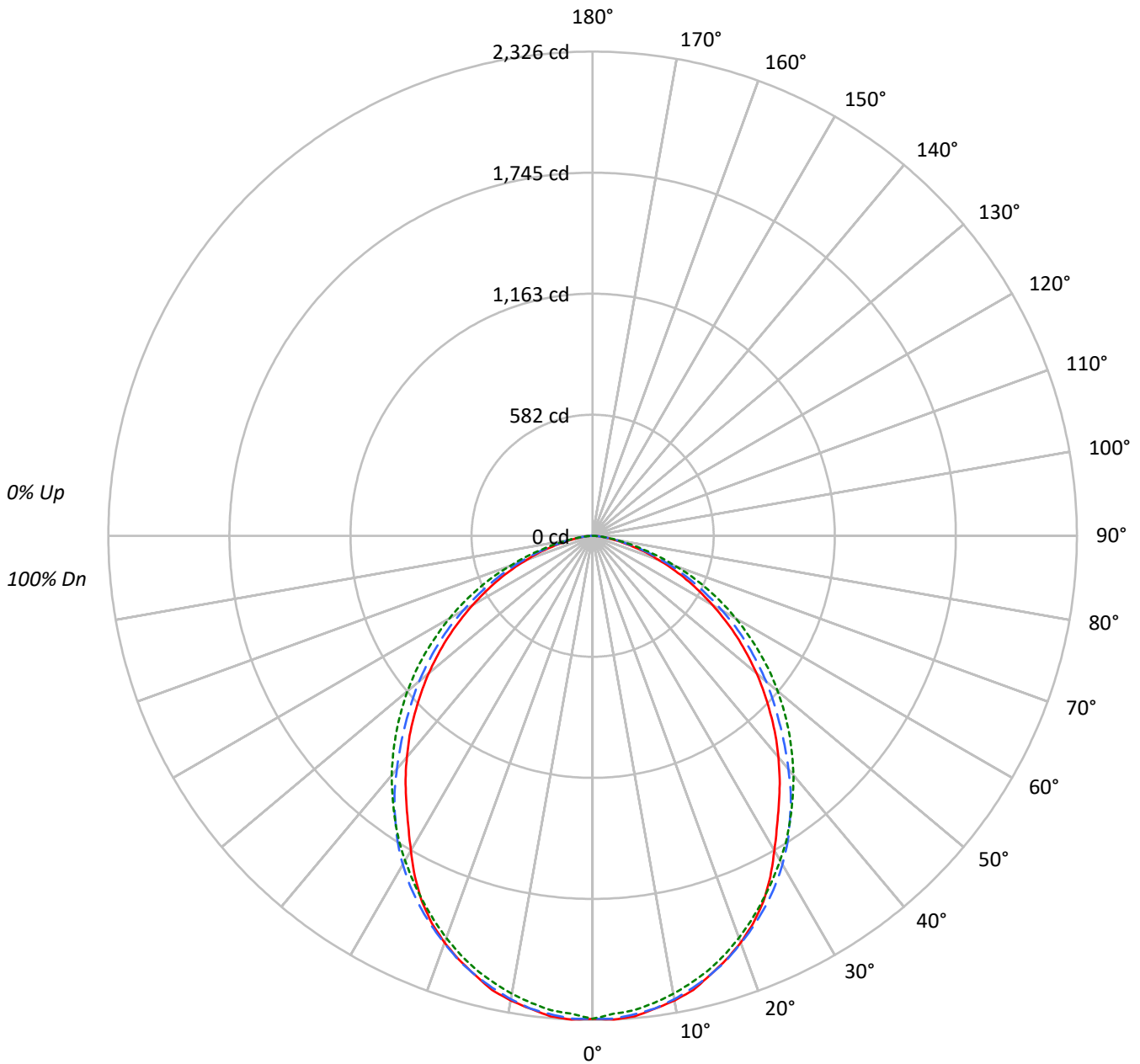
Lumens per Lamp: N/A
Luminaire Lumens: 5365.0 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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°	6244	6244	6244
5°	6260	6234	6181
10°	6194	6177	6106
15°	6084	6084	6014
20°	5955	5963	5886
25°	5759	5831	5738
30°	5423	5667	5597
35°	5124	5432	5441
40°	4875	5138	5273
45°	4596	4827	5075
50°	4302	4549	4859
55°	3969	4232	4596
60°	3574	3862	4274
65°	3156	3434	3888
70°	2630	2924	3303
75°	2067	2335	2586
80°	1478	1644	1824
85°	963	963	908



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.5	4.1
10°-20°	613.7	11.4
20°-30°	896.8	16.7
30°-40°	1018.0	19.0
40°-50°	982.7	18.3
50°-60°	810.7	15.1
60°-70°	539.8	10.1
70°-80°	241.6	4.5
80°-90°	43.2	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°	1729.0	32.2
0°-40°	2747.0	51.2
0°-60°	4540.4	84.6
0°-90°	5365.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5365.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2320	2320	2320	2320	2320	
5°	2318	2317	2308	2295	2288	219
15°	2184	2189	2184	2174	2159	616
25°	1940	1955	1964	1949	1932	888
35°	1560	1581	1654	1662	1656	977
45°	1208	1228	1268	1326	1334	932
55°	846	860	902	952	980	755
65°	496	509	539	578	611	491
75°	199	210	225	235	249	217
85°	31	31	31	29	29	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2320.2	2320.2	2320.2	2320.2	2320.2
2.5°	2326.5	2327.4	2322.0	2307.7	2298.8
5°	2317.5	2316.7	2307.7	2295.3	2288.1
7.5°	2291.7	2293.5	2290.8	2273.0	2263.2
10°	2266.7	2267.6	2260.5	2246.2	2234.7
12.5°	2234.7	2233.8	2224.0	2216.8	2198.1
15°	2183.8	2189.2	2183.8	2174.0	2158.9
17.5°	2134.8	2134.8	2138.4	2121.4	2109.9
20°	2079.6	2082.2	2082.2	2068.9	2055.5
22.5°	2015.4	2023.4	2026.1	2011.8	1995.8
25°	1939.6	1954.8	1963.7	1949.4	1932.5
27.5°	1847.8	1871.0	1897.7	1887.0	1868.3
30°	1745.3	1779.2	1823.7	1814.8	1801.4
32.5°	1648.1	1682.0	1743.5	1739.9	1732.8
35°	1559.9	1581.3	1653.5	1662.4	1656.2
37.5°	1476.1	1495.7	1563.5	1584.0	1578.6
40°	1387.9	1409.2	1462.7	1499.3	1501.1
42.5°	1300.5	1321.0	1364.7	1417.3	1417.3
45°	1207.8	1228.3	1268.4	1326.4	1333.5
47.5°	1116.9	1138.3	1177.5	1235.4	1247.0
50°	1027.7	1047.4	1086.6	1142.7	1160.6
52.5°	935.0	956.4	994.8	1046.5	1072.3
55°	845.9	860.2	902.1	952.0	979.6
57.5°	753.2	766.6	813.8	856.6	885.1
60°	664.1	681.0	717.5	761.2	794.2
62.5°	578.5	596.3	627.5	665.8	703.3
65°	495.6	509.0	539.3	577.6	610.6
67.5°	415.4	427.0	457.3	484.0	518.8
70°	334.3	349.4	371.7	397.5	419.8
72.5°	269.2	275.4	294.2	312.9	336.0
75°	198.8	209.5	224.6	235.3	248.7
77.5°	142.6	148.9	157.8	166.7	179.2
80°	95.4	98.1	106.1	107.9	117.7
82.5°	57.9	59.7	61.5	62.4	66.0
85°	31.2	31.2	31.2	29.4	29.4
87.5°	17.8	17.8	15.2	12.5	8.9
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)