

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: P557376

Luminaire Tested: **FUSL-12-4-LD4-2LO-50-UNV-81-84-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: P557376
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-50-UNV-81-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

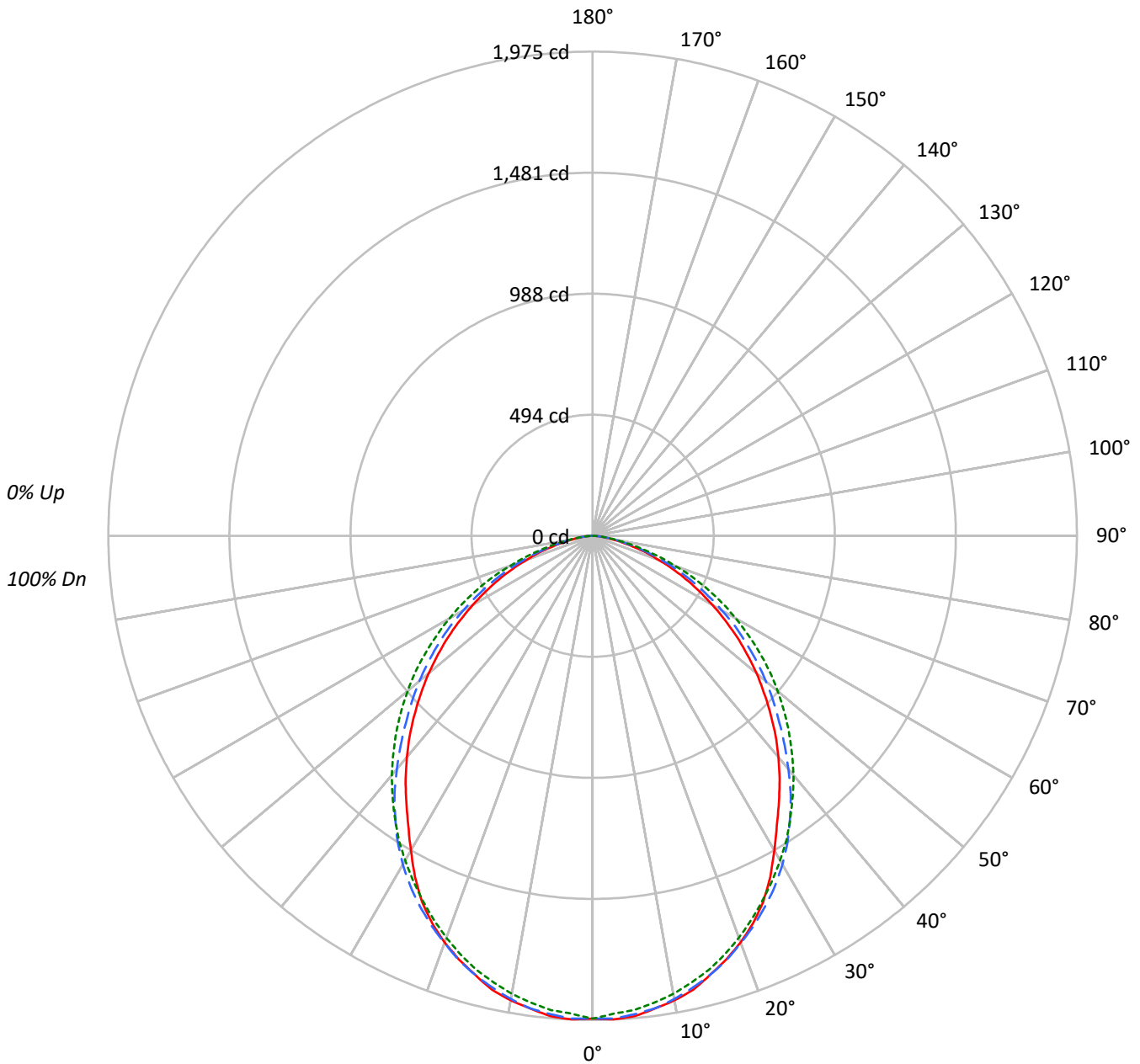
Lumens per Lamp: N/A
Luminaire Lumens: 4554.0 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	5300	5300	5300
5°	5314	5291	5246
10°	5258	5243	5183
15°	5164	5164	5105
20°	5055	5062	4997
25°	4888	4949	4871
30°	4603	4810	4751
35°	4350	4611	4618
40°	4138	4362	4476
45°	3902	4098	4308
50°	3652	3861	4124
55°	3369	3592	3901
60°	3034	3278	3629
65°	2679	2915	3300
70°	2232	2482	2804
75°	1754	1983	2195
80°	1255	1395	1548
85°	818	818	772



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.4	4.1
10°-20°	520.9	11.4
20°-30°	761.3	16.7
30°-40°	864.1	19.0
40°-50°	834.2	18.3
50°-60°	688.1	15.1
60°-70°	458.2	10.1
70°-80°	205.1	4.5
80°-90°	36.7	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°	1467.6	32.2
0°-40°	2331.7	51.2
0°-60°	3854.0	84.6
0°-90°	4554.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4554.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1970	1970	1970	1970	1970	
5°	1967	1966	1959	1948	1942	186
15°	1854	1858	1854	1845	1832	523
25°	1646	1659	1667	1655	1640	754
35°	1324	1342	1404	1411	1406	830
45°	1025	1043	1077	1126	1132	791
55°	718	730	766	808	832	641
65°	421	432	458	490	518	417
75°	169	178	191	200	211	185
85°	26	26	26	25	25	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1969.5	1969.5	1969.5	1969.5	1969.5
2.5°	1974.8	1975.5	1971.0	1958.9	1951.3
5°	1967.2	1966.5	1958.9	1948.3	1942.2
7.5°	1945.3	1946.8	1944.5	1929.4	1921.1
10°	1924.1	1924.8	1918.8	1906.7	1896.9
12.5°	1896.9	1896.1	1887.8	1881.7	1865.8
15°	1853.7	1858.3	1853.7	1845.4	1832.5
17.5°	1812.1	1812.1	1815.1	1800.8	1790.9
20°	1765.2	1767.5	1767.5	1756.1	1744.8
22.5°	1710.7	1717.5	1719.8	1707.7	1694.1
25°	1646.4	1659.3	1666.8	1654.7	1640.4
27.5°	1568.5	1588.1	1610.8	1601.8	1585.9
30°	1481.5	1510.2	1548.0	1540.5	1529.1
32.5°	1399.0	1427.7	1480.0	1476.9	1470.9
35°	1324.1	1342.2	1403.5	1411.1	1405.8
37.5°	1253.0	1269.6	1327.1	1344.5	1340.0
40°	1178.1	1196.2	1241.6	1272.6	1274.2
42.5°	1103.9	1121.3	1158.4	1203.0	1203.0
45°	1025.2	1042.6	1076.7	1125.9	1131.9
47.5°	948.0	966.2	999.5	1048.7	1058.5
50°	872.4	889.0	922.3	970.0	985.1
52.5°	793.7	811.9	844.4	888.3	910.2
55°	718.0	730.1	765.7	808.1	831.5
57.5°	639.3	650.7	690.8	727.1	751.3
60°	563.7	578.1	609.1	646.2	674.2
62.5°	491.0	506.2	532.7	565.2	597.0
65°	420.7	432.0	457.8	490.3	518.3
67.5°	352.6	362.4	388.1	410.8	440.4
70°	283.7	296.6	315.5	337.5	356.4
72.5°	228.5	233.8	249.7	265.6	285.2
75°	168.7	177.8	190.7	199.7	211.1
77.5°	121.1	126.4	133.9	141.5	152.1
80°	81.0	83.2	90.0	91.6	99.9
82.5°	49.2	50.7	52.2	53.0	56.0
85°	26.5	26.5	26.5	25.0	25.0
87.5°	15.1	15.1	12.9	10.6	7.6
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)