

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: P557266

Luminaire Tested: **FUSL-12-4-LD4-2LO-35-UNV-82-85-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: P557266
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-82-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

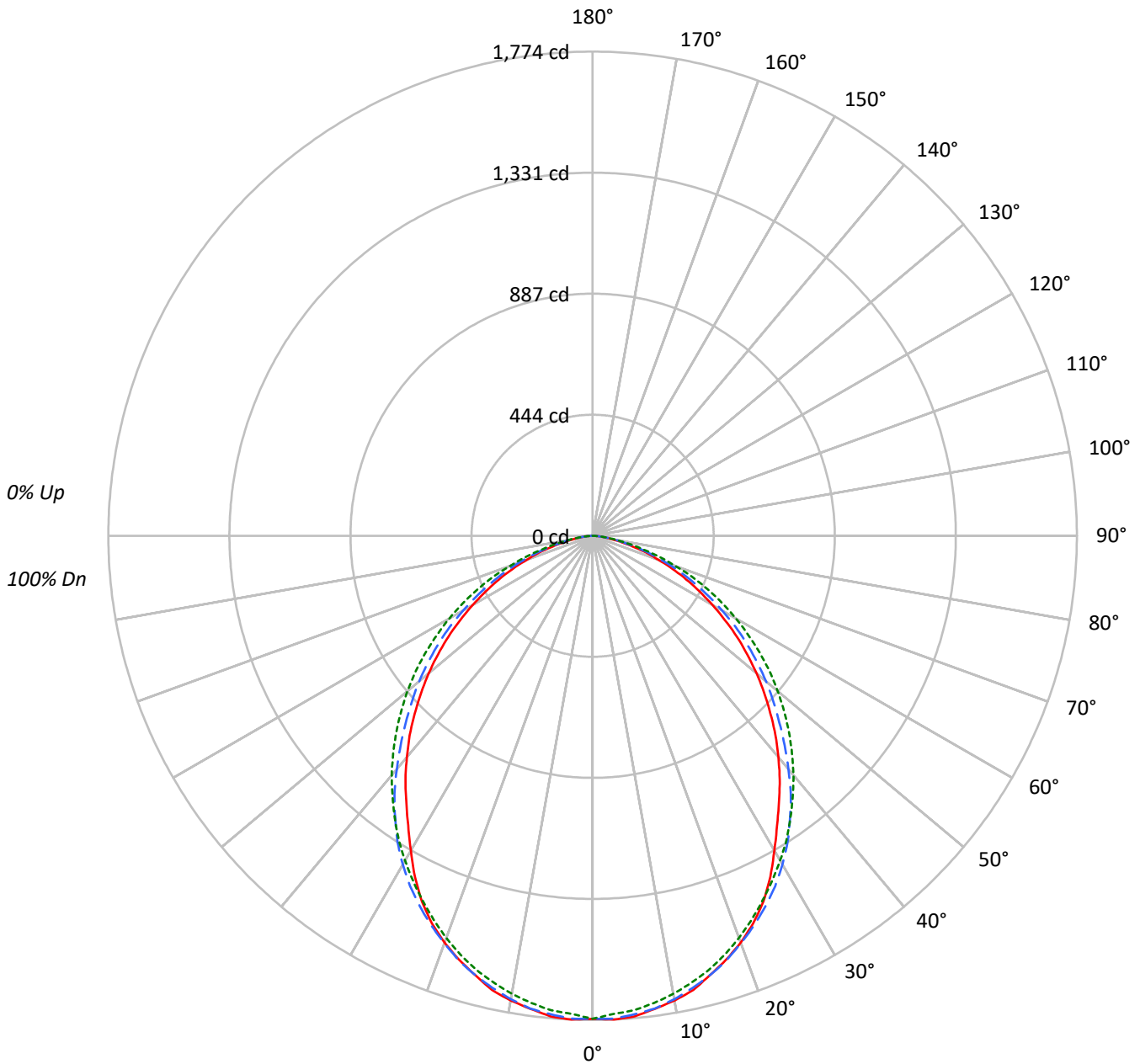
Lumens per Lamp: N/A
Luminaire Lumens: 4092.0 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	4762	4762	4762
5°	4775	4755	4714
10°	4724	4711	4657
15°	4640	4640	4587
20°	4542	4548	4490
25°	4393	4447	4376
30°	4136	4322	4269
35°	3909	4143	4150
40°	3718	3919	4022
45°	3506	3682	3871
50°	3282	3470	3706
55°	3027	3228	3506
60°	2726	2946	3260
65°	2407	2619	2965
70°	2006	2231	2519
75°	1576	1781	1972
80°	1127	1254	1390
85°	735	735	692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.6	4.1
10°-20°	468.1	11.4
20°-30°	684.0	16.7
30°-40°	776.4	19.0
40°-50°	749.5	18.3
50°-60°	618.3	15.1
60°-70°	411.8	10.1
70°-80°	184.2	4.5
80°-90°	33.0	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°	1318.7	32.2
0°-40°	2095.2	51.2
0°-60°	3463.0	84.6
0°-90°	4092.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4092.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1770	1770	1770	1770	1770	
5°	1768	1767	1760	1751	1745	167
15°	1666	1670	1666	1658	1647	470
25°	1479	1491	1498	1487	1474	677
35°	1190	1206	1261	1268	1263	745
45°	921	937	967	1012	1017	711
55°	645	656	688	726	747	576
65°	378	388	411	441	466	375
75°	152	160	171	180	190	166
85°	24	24	24	22	22	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1769.7	1769.7	1769.7	1769.7	1769.7
2.5°	1774.4	1775.1	1771.0	1760.2	1753.4
5°	1767.6	1767.0	1760.2	1750.6	1745.2
7.5°	1747.9	1749.3	1747.2	1733.7	1726.2
10°	1728.9	1729.6	1724.1	1713.3	1704.4
12.5°	1704.4	1703.7	1696.3	1690.8	1676.5
15°	1665.7	1669.7	1665.7	1658.2	1646.6
17.5°	1628.3	1628.3	1631.0	1618.1	1609.2
20°	1586.1	1588.2	1588.2	1578.0	1567.8
22.5°	1537.2	1543.3	1545.3	1534.5	1522.2
25°	1479.4	1490.9	1497.7	1486.9	1473.9
27.5°	1409.4	1427.0	1447.4	1439.3	1425.0
30°	1331.2	1357.0	1391.0	1384.2	1374.0
32.5°	1257.1	1282.9	1329.8	1327.1	1321.7
35°	1189.8	1206.1	1261.1	1267.9	1263.2
37.5°	1125.9	1140.8	1192.5	1208.1	1204.0
40°	1058.5	1074.9	1115.7	1143.5	1144.9
42.5°	991.9	1007.6	1040.9	1081.0	1081.0
45°	921.2	936.9	967.4	1011.6	1017.1
47.5°	851.9	868.2	898.1	942.3	951.1
50°	783.9	798.8	828.8	871.6	885.2
52.5°	713.2	729.5	758.7	798.2	817.9
55°	645.2	656.1	688.0	726.1	747.2
57.5°	574.5	584.7	620.7	653.3	675.1
60°	506.5	519.4	547.3	580.6	605.8
62.5°	441.2	454.8	478.6	507.9	536.4
65°	378.0	388.2	411.3	440.6	465.7
67.5°	316.8	325.7	348.8	369.2	395.7
70°	254.9	266.5	283.5	303.2	320.2
72.5°	205.3	210.1	224.4	238.6	256.3
75°	151.6	159.8	171.3	179.5	189.7
77.5°	108.8	113.5	120.3	127.1	136.7
80°	72.7	74.8	80.9	82.3	89.7
82.5°	44.2	45.6	46.9	47.6	50.3
85°	23.8	23.8	23.8	22.4	22.4
87.5°	13.6	13.6	11.6	9.5	6.8
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)