

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: P556179

Luminaire Tested: **FUSL-12-4-LD4-1HI-30-UNV-82-85-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: P556179
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-LD4-1HI-30-UNV-82-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

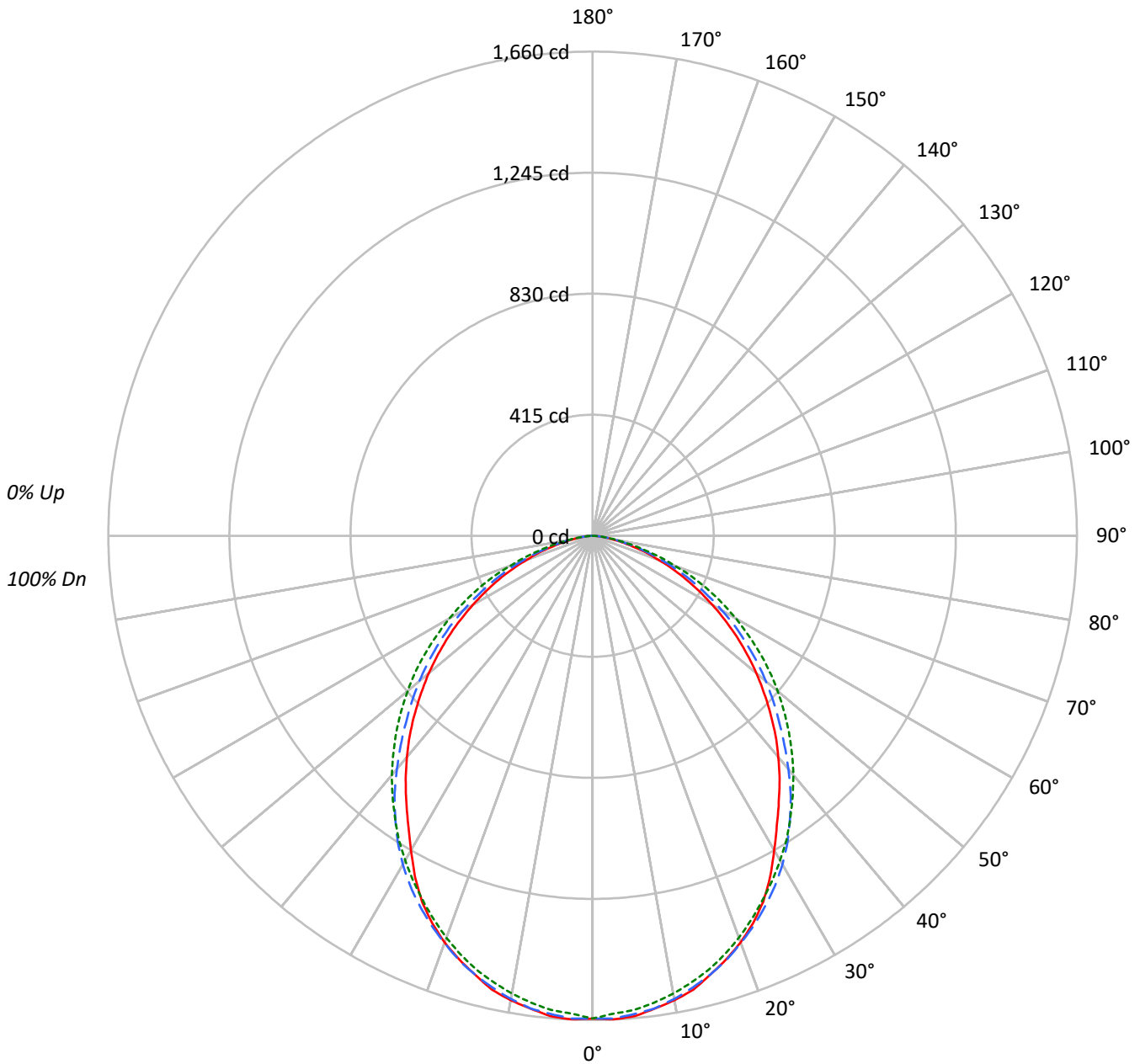
Lumens per Lamp: N/A
Luminaire Lumens: 3827.0 lumens
Efficiency: N/A
Efficacy: 88.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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	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°	4454	4454	4454
5°	4466	4447	4409
10°	4418	4406	4356
15°	4340	4340	4290
20°	4248	4253	4199
25°	4108	4159	4093
30°	3869	4042	3993
35°	3655	3875	3881
40°	3478	3665	3761
45°	3279	3443	3620
50°	3069	3245	3466
55°	2831	3019	3278
60°	2549	2754	3049
65°	2251	2450	2773
70°	1876	2086	2356
75°	1474	1666	1844
80°	1054	1173	1300
85°	689	689	648



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.8	4.1
10°-20°	437.8	11.4
20°-30°	639.7	16.7
30°-40°	726.2	19.0
40°-50°	701.0	18.3
50°-60°	578.3	15.1
60°-70°	385.1	10.1
70°-80°	172.3	4.5
80°-90°	30.8	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°	1233.3	32.2
0°-40°	1959.5	51.2
0°-60°	3238.8	84.6
0°-90°	3827.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3827.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1655	1655	1655	1655	1655	
5°	1653	1652	1646	1637	1632	156
15°	1558	1562	1558	1551	1540	439
25°	1384	1394	1401	1391	1378	634
35°	1113	1128	1180	1186	1181	697
45°	862	876	905	946	951	665
55°	603	614	644	679	699	539
65°	354	363	385	412	436	351
75°	142	149	160	168	177	155
85°	22	22	22	21	21	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1655.1	1655.1	1655.1	1655.1	1655.1
2.5°	1659.5	1660.2	1656.4	1646.2	1639.8
5°	1653.2	1652.5	1646.2	1637.3	1632.2
7.5°	1634.7	1636.0	1634.1	1621.4	1614.4
10°	1616.9	1617.6	1612.5	1602.3	1594.0
12.5°	1594.0	1593.4	1586.4	1581.3	1568.0
15°	1557.8	1561.6	1557.8	1550.8	1540.0
17.5°	1522.8	1522.8	1525.4	1513.3	1505.0
20°	1483.4	1485.3	1485.3	1475.8	1466.2
22.5°	1437.6	1443.3	1445.3	1435.1	1423.6
25°	1383.6	1394.4	1400.7	1390.6	1378.5
27.5°	1318.1	1334.6	1353.7	1346.1	1332.7
30°	1245.0	1269.1	1300.9	1294.6	1285.0
32.5°	1175.7	1199.8	1243.7	1241.2	1236.1
35°	1112.7	1128.0	1179.5	1185.8	1181.4
37.5°	1052.9	1066.9	1115.3	1129.9	1126.1
40°	990.0	1005.3	1043.4	1069.5	1070.7
42.5°	927.7	942.3	973.5	1011.0	1011.0
45°	861.6	876.2	904.8	946.1	951.2
47.5°	796.7	812.0	839.9	881.3	889.5
50°	733.1	747.1	775.1	815.1	827.9
52.5°	667.0	682.3	709.6	746.5	764.9
55°	603.4	613.6	643.5	679.1	698.8
57.5°	537.3	546.8	580.5	611.0	631.4
60°	473.7	485.8	511.8	543.0	566.5
62.5°	412.7	425.4	447.6	475.0	501.7
65°	353.5	363.1	384.7	412.0	435.5
67.5°	296.3	304.6	326.2	345.3	370.1
70°	238.4	249.2	265.1	283.6	299.5
72.5°	192.0	196.5	209.8	223.2	239.7
75°	141.8	149.4	160.2	167.9	177.4
77.5°	101.7	106.2	112.5	118.9	127.8
80°	68.0	69.9	75.7	76.9	83.9
82.5°	41.3	42.6	43.9	44.5	47.1
85°	22.3	22.3	22.3	21.0	21.0
87.5°	12.7	12.7	10.8	8.9	6.4
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)