

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: P556243

Luminaire Tested: **FUSL-12-4-LD4-1HI-35-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: P556243
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-35-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 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

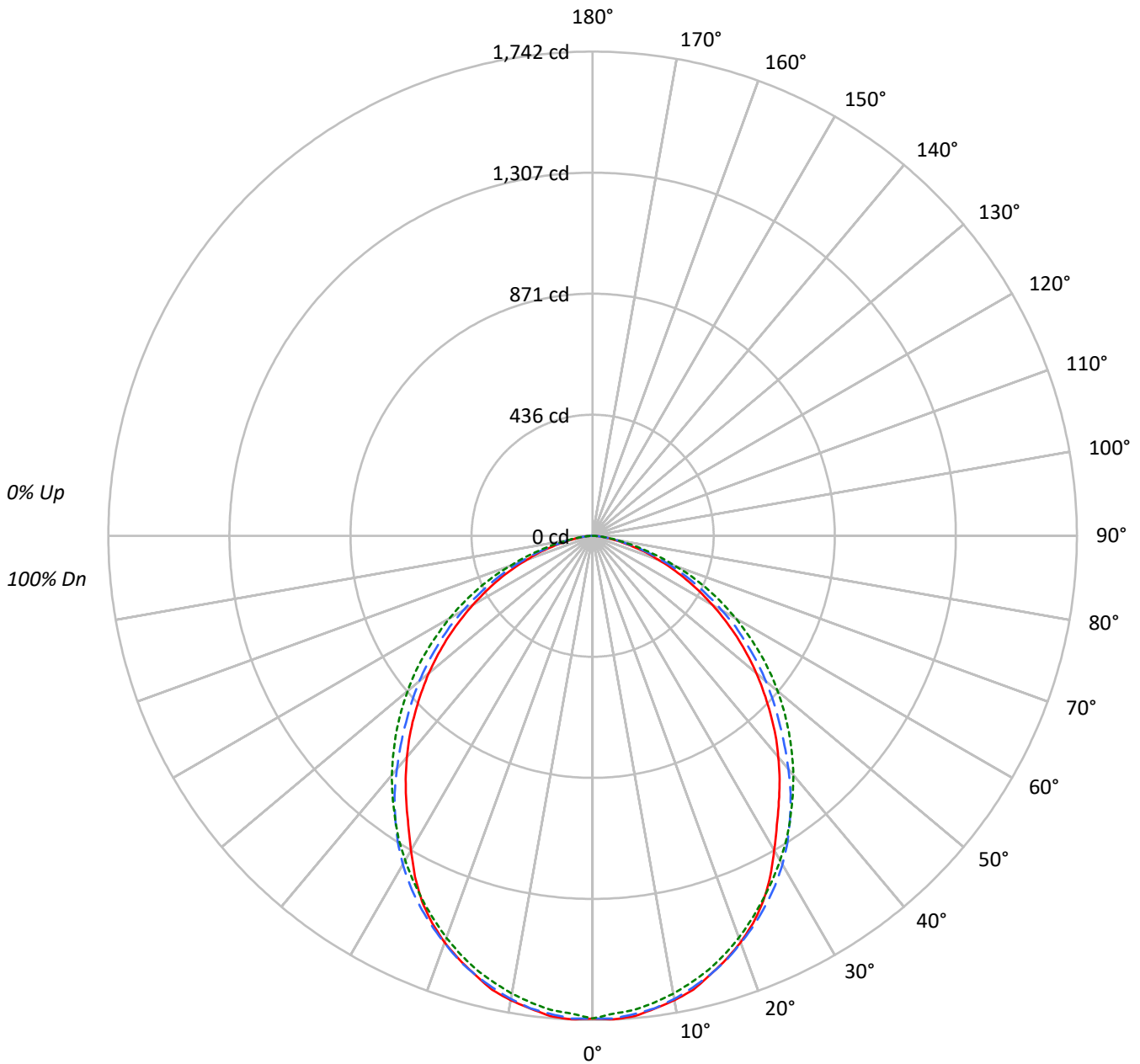
Lumens per Lamp: N/A
Luminaire Lumens: 4016.0 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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									
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°	4674	4674	4674
5°	4686	4666	4627
10°	4636	4624	4571
15°	4554	4554	4502
20°	4458	4464	4406
25°	4311	4364	4295
30°	4059	4242	4190
35°	3836	4066	4073
40°	3649	3846	3947
45°	3441	3613	3799
50°	3221	3405	3637
55°	2971	3168	3440
60°	2675	2891	3200
65°	2362	2571	2911
70°	1969	2189	2473
75°	1547	1748	1936
80°	1106	1230	1365
85°	722	722	679



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.5	4.1
10°-20°	459.4	11.4
20°-30°	671.3	16.7
30°-40°	762.0	19.0
40°-50°	735.6	18.3
50°-60°	606.8	15.1
60°-70°	404.1	10.1
70°-80°	180.8	4.5
80°-90°	32.3	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°	1294.2	32.2
0°-40°	2056.3	51.2
0°-60°	3398.7	84.6
0°-90°	4016.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4016.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1737	1737	1737	1737	1737	
5°	1735	1734	1728	1718	1713	164
15°	1635	1639	1635	1627	1616	461
25°	1452	1463	1470	1459	1447	665
35°	1168	1184	1238	1244	1240	732
45°	904	920	950	993	998	698
55°	633	644	675	713	733	565
65°	371	381	404	432	457	368
75°	149	157	168	176	186	163
85°	23	23	23	22	22	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1736.8	1736.8	1736.8	1736.8	1736.8
2.5°	1741.5	1742.2	1738.2	1727.5	1720.8
5°	1734.8	1734.1	1727.5	1718.1	1712.8
7.5°	1715.5	1716.8	1714.8	1701.5	1694.1
10°	1696.8	1697.4	1692.1	1681.4	1672.8
12.5°	1672.8	1672.1	1664.8	1659.4	1645.4
15°	1634.7	1638.7	1634.7	1627.4	1616.0
17.5°	1598.0	1598.0	1600.7	1588.0	1579.3
20°	1556.7	1558.7	1558.7	1548.7	1538.6
22.5°	1508.6	1514.6	1516.6	1506.0	1493.9
25°	1451.9	1463.2	1469.9	1459.2	1446.6
27.5°	1383.2	1400.5	1420.5	1412.5	1398.5
30°	1306.4	1331.8	1365.2	1358.5	1348.5
32.5°	1233.7	1259.1	1305.1	1302.4	1297.1
35°	1167.7	1183.7	1237.7	1244.4	1239.7
37.5°	1104.9	1119.6	1170.3	1185.7	1181.7
40°	1038.9	1054.9	1094.9	1122.3	1123.6
42.5°	973.5	988.8	1021.5	1060.9	1060.9
45°	904.1	919.5	949.5	992.8	998.2
47.5°	836.0	852.1	881.4	924.8	933.5
50°	769.3	784.0	813.4	855.4	868.7
52.5°	699.9	715.9	744.6	783.3	802.7
55°	633.2	643.9	675.2	712.6	733.3
57.5°	563.8	573.8	609.2	641.2	662.6
60°	497.1	509.8	537.1	569.8	594.5
62.5°	433.0	446.4	469.7	498.4	526.4
65°	371.0	381.0	403.7	432.4	457.1
67.5°	310.9	319.6	342.3	362.3	388.3
70°	250.2	261.6	278.2	297.6	314.3
72.5°	201.5	206.2	220.2	234.2	251.5
75°	148.8	156.8	168.1	176.2	186.2
77.5°	106.8	111.4	118.1	124.8	134.1
80°	71.4	73.4	79.4	80.7	88.1
82.5°	43.4	44.7	46.0	46.7	49.4
85°	23.4	23.4	23.4	22.0	22.0
87.5°	13.3	13.3	11.3	9.3	6.7
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)