

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: P556266

Luminaire Tested: **FUSL-12-4-LD4-1HI-35-UNV-93-94-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: P556266
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-93-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

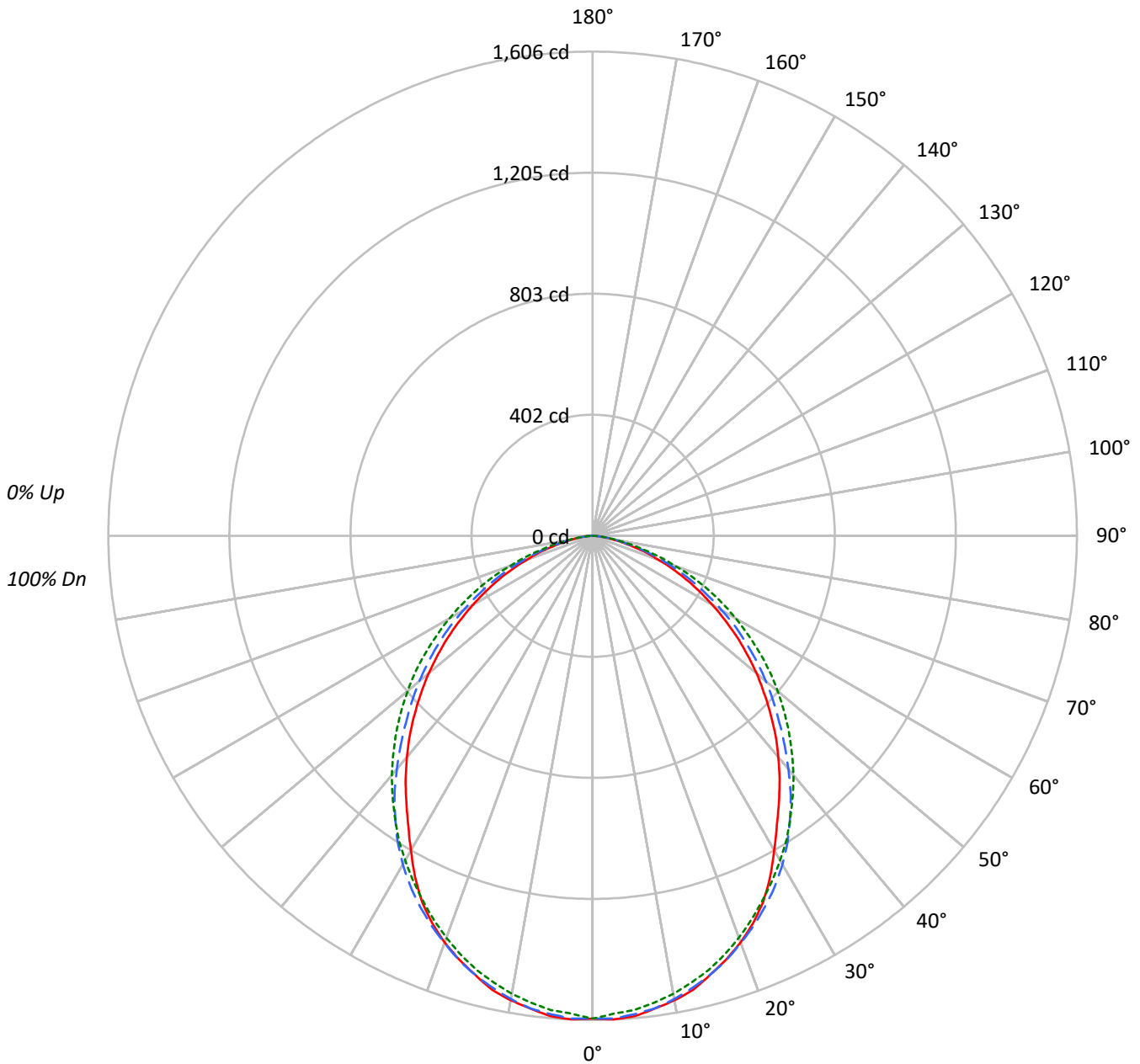
Lumens per Lamp: N/A
Luminaire Lumens: 3703.0 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (A_{in}): 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°	4310	4310	4310
5°	4321	4303	4266
10°	4275	4263	4215
15°	4199	4199	4151
20°	4110	4116	4063
25°	3975	4024	3960
30°	3743	3911	3864
35°	3537	3749	3755
40°	3365	3547	3640
45°	3172	3332	3503
50°	2970	3140	3353
55°	2739	2921	3172
60°	2467	2666	2950
65°	2178	2370	2683
70°	1815	2019	2280
75°	1426	1612	1785
80°	1020	1134	1258
85°	664	664	627



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.8	4.1
10°-20°	423.6	11.4
20°-30°	619.0	16.7
30°-40°	702.6	19.0
40°-50°	678.3	18.3
50°-60°	559.5	15.1
60°-70°	372.6	10.1
70°-80°	166.7	4.5
80°-90°	29.8	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°	1193.4	32.2
0°-40°	1896.0	51.2
0°-60°	3133.8	84.6
0°-90°	3703.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3703.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1602	1602	1602	1602	1602	
5°	1600	1599	1593	1584	1579	151
15°	1507	1511	1507	1501	1490	425
25°	1339	1349	1355	1346	1334	613
35°	1077	1091	1141	1147	1143	675
45°	834	848	876	916	920	643
55°	584	594	623	657	676	521
65°	342	351	372	399	421	339
75°	137	145	155	162	172	150
85°	22	22	22	20	20	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1601.5	1601.5	1601.5	1601.5	1601.5
2.5°	1605.8	1606.4	1602.7	1592.8	1586.7
5°	1599.6	1599.0	1592.8	1584.2	1579.3
7.5°	1581.8	1583.0	1581.1	1568.8	1562.1
10°	1564.5	1565.2	1560.2	1550.4	1542.4
12.5°	1542.4	1541.8	1535.0	1530.1	1517.2
15°	1507.3	1511.0	1507.3	1500.6	1490.1
17.5°	1473.5	1473.5	1475.9	1464.3	1456.3
20°	1435.3	1437.2	1437.2	1428.0	1418.7
22.5°	1391.0	1396.6	1398.4	1388.6	1377.5
25°	1338.7	1349.2	1355.4	1345.5	1333.8
27.5°	1275.4	1291.4	1309.8	1302.4	1289.5
30°	1204.6	1228.0	1258.8	1252.6	1243.4
32.5°	1137.6	1160.9	1203.4	1200.9	1196.0
35°	1076.7	1091.4	1141.3	1147.4	1143.1
37.5°	1018.8	1032.4	1079.1	1093.3	1089.6
40°	957.9	972.7	1009.6	1034.8	1036.1
42.5°	897.6	911.8	941.9	978.2	978.2
45°	833.6	847.8	875.5	915.5	920.4
47.5°	770.9	785.7	812.7	852.7	860.7
50°	709.4	722.9	750.0	788.7	801.0
52.5°	645.4	660.1	686.6	722.3	740.1
55°	583.9	593.7	622.6	657.1	676.1
57.5°	519.9	529.1	561.7	591.2	610.9
60°	458.3	470.0	495.3	525.4	548.2
62.5°	399.3	411.6	433.1	459.6	485.4
65°	342.1	351.3	372.2	398.7	421.4
67.5°	286.7	294.7	315.6	334.1	358.1
70°	230.7	241.2	256.6	274.4	289.8
72.5°	185.8	190.1	203.0	215.9	231.9
75°	137.2	144.6	155.0	162.4	171.7
77.5°	98.4	102.7	108.9	115.0	123.7
80°	65.8	67.7	73.2	74.4	81.2
82.5°	40.0	41.2	42.5	43.1	45.5
85°	21.5	21.5	21.5	20.3	20.3
87.5°	12.3	12.3	10.5	8.6	6.2
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)