

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: P556217

Luminaire Tested: **FUSL-12-4-LD4-1HI-35-UNV-80-88-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: P556217
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-80-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

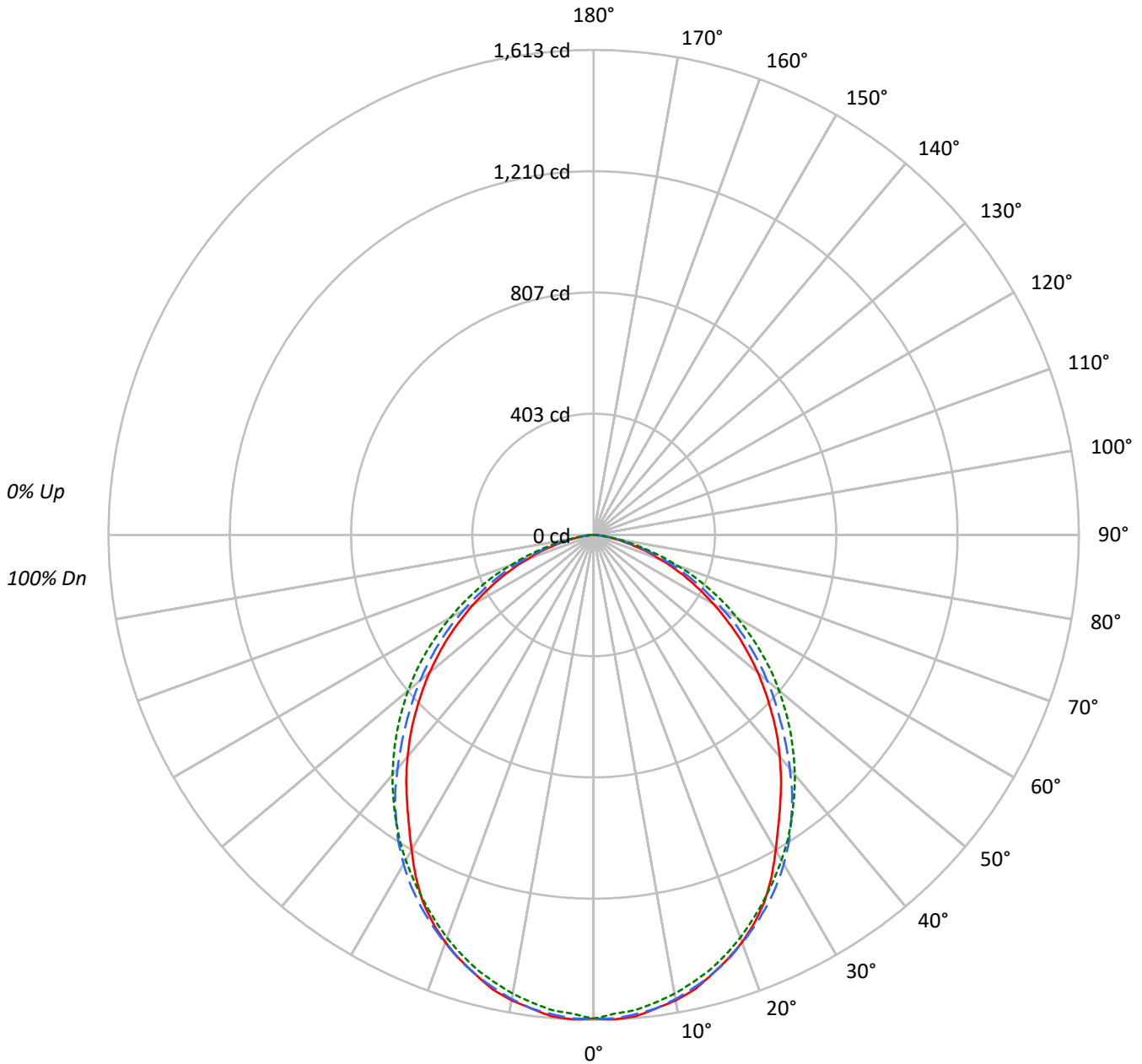
Lumens per Lamp: N/A
Luminaire Lumens: 3720.0 lumens
Efficiency: N/A
Efficacy: 86.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	4329	4329	4329
5°	4341	4323	4286
10°	4295	4283	4234
15°	4218	4218	4170
20°	4129	4135	4081
25°	3993	4043	3978
30°	3760	3929	3881
35°	3553	3766	3773
40°	3380	3563	3656
45°	3187	3347	3519
50°	2983	3154	3369
55°	2752	2935	3187
60°	2478	2678	2964
65°	2188	2381	2696
70°	1824	2028	2290
75°	1433	1620	1792
80°	1024	1139	1265
85°	667	667	630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.5	4.1
10°-20°	425.5	11.4
20°-30°	621.8	16.7
30°-40°	705.9	19.0
40°-50°	681.4	18.3
50°-60°	562.1	15.1
60°-70°	374.3	10.1
70°-80°	167.5	4.5
80°-90°	30.0	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°	1198.8	32.2
0°-40°	1904.7	51.2
0°-60°	3148.2	84.6
0°-90°	3720.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3720.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1609	1609	1609	1609	1609	
5°	1607	1606	1600	1592	1587	152
15°	1514	1518	1514	1507	1497	427
25°	1345	1355	1362	1352	1340	616
35°	1082	1096	1146	1153	1148	678
45°	838	852	880	920	925	646
55°	586	596	626	660	679	523
65°	344	353	374	400	423	341
75°	138	145	156	163	172	151
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°	1608.8	1608.8	1608.8	1608.8	1608.8
2.5°	1613.1	1613.7	1610.0	1600.2	1594.0
5°	1606.9	1606.3	1600.2	1591.5	1586.6
7.5°	1589.0	1590.3	1588.4	1576.0	1569.2
10°	1571.7	1572.3	1567.4	1557.5	1549.5
12.5°	1549.5	1548.9	1542.1	1537.1	1524.1
15°	1514.2	1517.9	1514.2	1507.4	1496.9
17.5°	1480.2	1480.2	1482.7	1471.0	1462.9
20°	1441.9	1443.8	1443.8	1434.5	1425.2
22.5°	1397.4	1403.0	1404.8	1395.0	1383.8
25°	1344.9	1355.4	1361.6	1351.7	1339.9
27.5°	1281.2	1297.3	1315.8	1308.4	1295.4
30°	1210.2	1233.6	1264.5	1258.4	1249.1
32.5°	1142.8	1166.3	1208.9	1206.4	1201.5
35°	1081.6	1096.4	1146.5	1152.7	1148.4
37.5°	1023.5	1037.1	1084.1	1098.3	1094.6
40°	962.3	977.1	1014.2	1039.6	1040.8
42.5°	901.7	916.0	946.2	982.7	982.7
45°	837.5	851.7	879.5	919.7	924.6
47.5°	774.4	789.3	816.5	856.6	864.7
50°	712.6	726.2	753.4	792.3	804.7
52.5°	648.3	663.2	689.8	725.6	743.5
55°	586.5	596.4	625.5	660.1	679.2
57.5°	522.3	531.5	564.3	594.0	613.7
60°	460.5	472.2	497.5	527.8	550.7
62.5°	401.1	413.5	435.1	461.7	487.6
65°	343.6	352.9	373.9	400.5	423.4
67.5°	288.0	296.0	317.1	335.6	359.7
70°	231.8	242.3	257.7	275.7	291.1
72.5°	186.7	191.0	204.0	216.9	233.0
75°	137.8	145.2	155.8	163.2	172.4
77.5°	98.9	103.2	109.4	115.6	124.2
80°	66.1	68.0	73.5	74.8	81.6
82.5°	40.2	41.4	42.6	43.3	45.7
85°	21.6	21.6	21.6	20.4	20.4
87.5°	12.4	12.4	10.5	8.7	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)