

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: P556342

Luminaire Tested: **FUSL-12-4-LD4-1HI-50-UNV-80-87-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: P556342
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-50-UNV-80-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

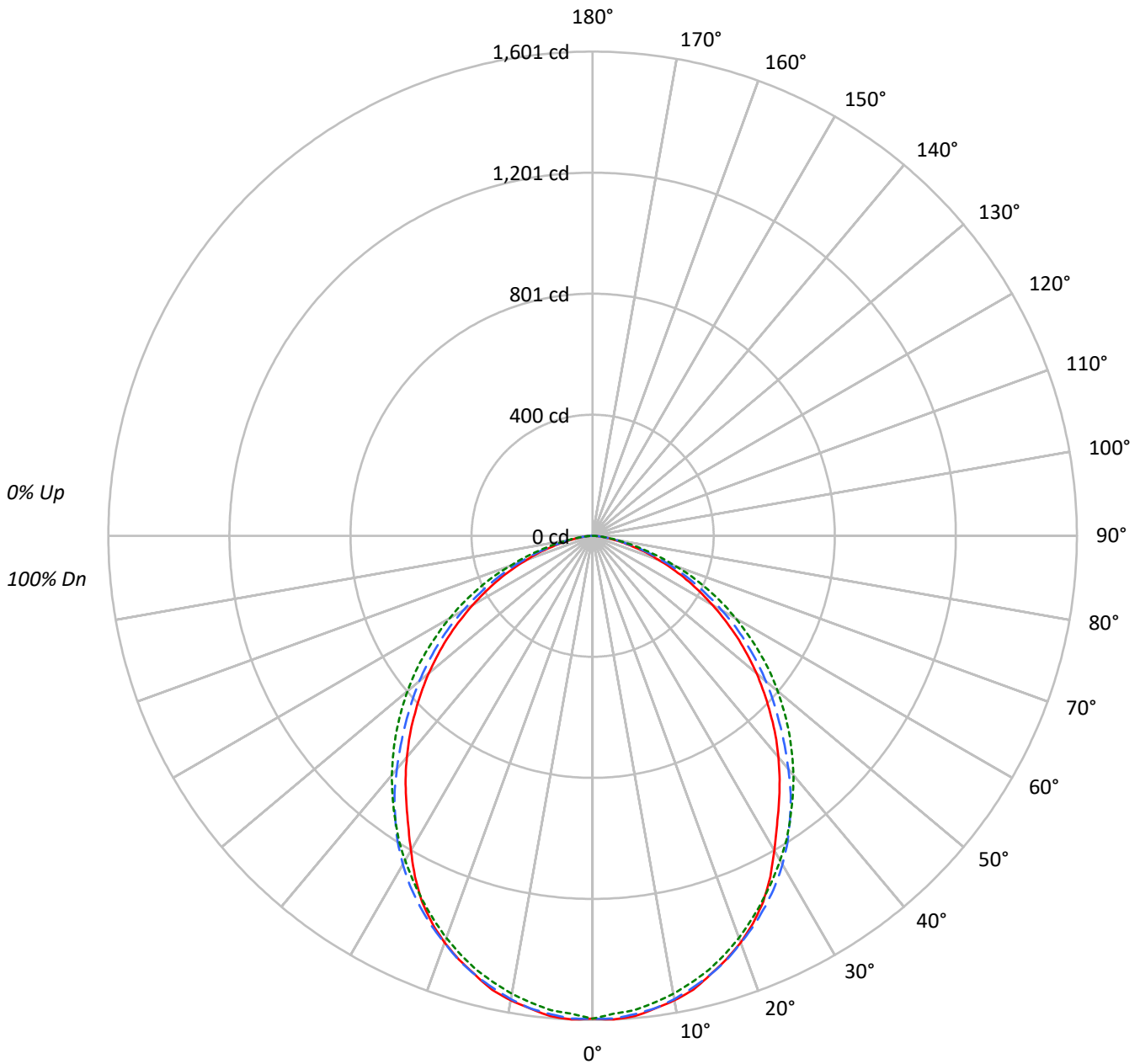
Lumens per Lamp: N/A
Luminaire Lumens: 3692.0 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P556342

CATALOG NUMBER: FUSL-12-4-LD4-1HI-50-UNV-80-87-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P556342

CATALOG NUMBER: FUSL-12-4-LD4-1HI-50-UNV-80-87-EDD-90

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°	4297	4297	4297
5°	4308	4290	4253
10°	4262	4251	4202
15°	4187	4187	4139
20°	4098	4103	4051
25°	3963	4012	3949
30°	3732	3900	3852
35°	3527	3738	3744
40°	3355	3536	3629
45°	3163	3322	3492
50°	2961	3130	3344
55°	2731	2913	3163
60°	2460	2658	2941
65°	2172	2363	2676
70°	1810	2013	2273
75°	1422	1607	1779
80°	1017	1131	1255
85°	664	664	624



TEST NUMBER: P556342

CATALOG NUMBER: FUSL-12-4-LD4-1HI-50-UNV-80-87-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.3	4.1
10°-20°	422.3	11.4
20°-30°	617.2	16.7
30°-40°	700.5	19.0
40°-50°	676.3	18.3
50°-60°	557.9	15.1
60°-70°	371.5	10.1
70°-80°	166.2	4.5
80°-90°	29.7	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°	1189.8	32.2
0°-40°	1890.4	51.2
0°-60°	3124.5	84.6
0°-90°	3692.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3692.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1597	1597	1597	1597	1597	
5°	1595	1594	1588	1580	1575	151
15°	1503	1506	1503	1496	1486	424
25°	1335	1345	1351	1342	1330	611
35°	1074	1088	1138	1144	1140	673
45°	831	845	873	913	918	641
55°	582	592	621	655	674	520
65°	341	350	371	398	420	338
75°	137	144	155	162	171	150
85°	22	22	22	20	20	29
90°	0	0	0	0	0	



TEST NUMBER: P556342

CATALOG NUMBER: FUSL-12-4-LD4-1HI-50-UNV-80-87-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1596.7	1596.7	1596.7	1596.7	1596.7
2.5°	1601.0	1601.6	1597.9	1588.1	1582.0
5°	1594.9	1594.2	1588.1	1579.5	1574.6
7.5°	1577.1	1578.3	1576.5	1564.2	1557.4
10°	1559.9	1560.5	1555.6	1545.8	1537.8
12.5°	1537.8	1537.2	1530.4	1525.5	1512.7
15°	1502.8	1506.5	1502.8	1496.1	1485.7
17.5°	1469.1	1469.1	1471.6	1459.9	1451.9
20°	1431.1	1432.9	1432.9	1423.7	1414.5
22.5°	1386.9	1392.4	1394.3	1384.5	1373.4
25°	1334.8	1345.2	1351.3	1341.5	1329.9
27.5°	1271.6	1287.5	1305.9	1298.6	1285.7
30°	1201.0	1224.4	1255.0	1248.9	1239.7
32.5°	1134.2	1157.5	1199.8	1197.4	1192.5
35°	1073.5	1088.2	1137.9	1144.0	1139.7
37.5°	1015.8	1029.3	1075.9	1090.0	1086.3
40°	955.1	969.8	1006.6	1031.7	1033.0
42.5°	895.0	909.1	939.1	975.3	975.3
45°	831.2	845.3	872.9	912.7	917.7
47.5°	768.6	783.3	810.3	850.2	858.2
50°	707.3	720.8	747.7	786.4	798.7
52.5°	643.5	658.2	684.6	720.1	737.9
55°	582.1	591.9	620.8	655.1	674.1
57.5°	518.3	527.5	560.0	589.5	609.1
60°	457.0	468.6	493.8	523.8	546.5
62.5°	398.1	410.4	431.8	458.2	484.0
65°	341.1	350.3	371.1	397.5	420.2
67.5°	285.8	293.8	314.7	333.1	357.0
70°	230.0	240.5	255.8	273.6	288.9
72.5°	185.2	189.5	202.4	215.3	231.3
75°	136.8	144.2	154.6	161.9	171.1
77.5°	98.1	102.4	108.6	114.7	123.3
80°	65.6	67.5	73.0	74.2	81.0
82.5°	39.9	41.1	42.3	42.9	45.4
85°	21.5	21.5	21.5	20.2	20.2
87.5°	12.3	12.3	10.4	8.6	6.1
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)