

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: P556208

Luminaire Tested: **FUSL-12-4-LD4-1HI-35-UNV-80-84-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: P556208
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-80-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

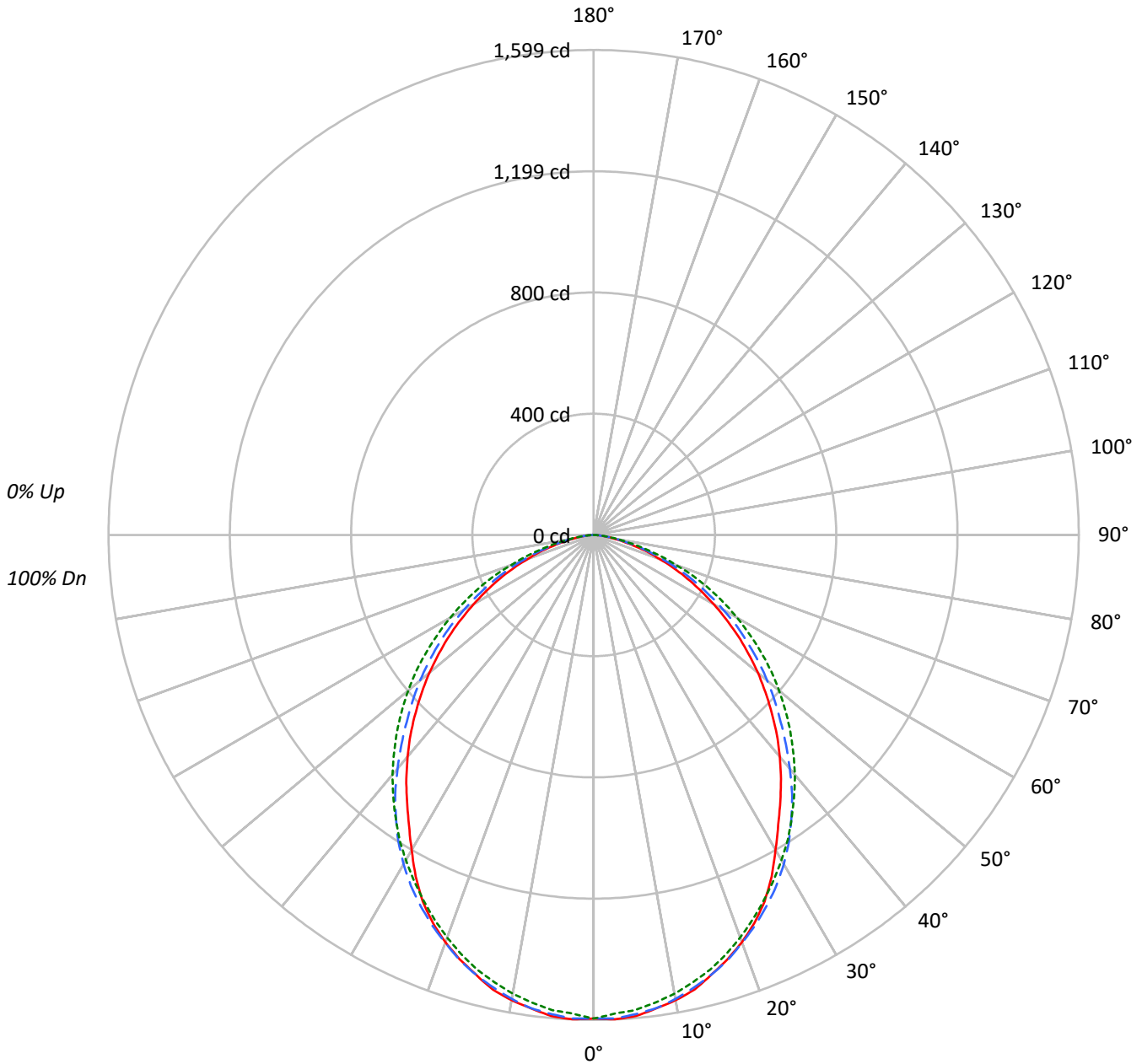
Lumens per Lamp: N/A
Luminaire Lumens: 3687.0 lumens
Efficiency: N/A
Efficacy: 85.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P556208

CATALOG NUMBER: FUSL-12-4-LD4-1HI-35-UNV-80-84-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P556208

CATALOG NUMBER: FUSL-12-4-LD4-1HI-35-UNV-80-84-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°	4291	4291	4291
5°	4302	4284	4248
10°	4257	4245	4196
15°	4181	4181	4133
20°	4092	4098	4045
25°	3958	4007	3943
30°	3727	3894	3847
35°	3522	3733	3739
40°	3351	3531	3624
45°	3159	3317	3487
50°	2957	3126	3339
55°	2727	2908	3158
60°	2456	2654	2937
65°	2169	2360	2672
70°	1807	2009	2270
75°	1420	1605	1777
80°	1015	1130	1254
85°	661	661	624



TEST NUMBER: P556208

CATALOG NUMBER: FUSL-12-4-LD4-1HI-35-UNV-80-84-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.1	4.1
10°-20°	421.8	11.4
20°-30°	616.3	16.7
30°-40°	699.6	19.0
40°-50°	675.4	18.3
50°-60°	557.1	15.1
60°-70°	371.0	10.1
70°-80°	166.0	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°	1188.2	32.2
0°-40°	1887.8	51.2
0°-60°	3120.3	84.6
0°-90°	3687.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3687.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1593	1592	1586	1577	1572	151
15°	1501	1504	1501	1494	1484	423
25°	1333	1343	1350	1340	1328	610
35°	1072	1087	1136	1142	1138	672
45°	830	844	872	912	916	640
55°	581	591	620	654	673	519
65°	341	350	371	397	420	338
75°	137	144	154	162	171	149
85°	21	21	21	20	20	29
90°	0	0	0	0	0	



TEST NUMBER: P556208

CATALOG NUMBER: FUSL-12-4-LD4-1HI-35-UNV-80-84-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1594.5	1594.5	1594.5	1594.5	1594.5
2.5°	1598.8	1599.4	1595.8	1586.0	1579.8
5°	1592.7	1592.1	1586.0	1577.4	1572.5
7.5°	1574.9	1576.2	1574.3	1562.1	1555.3
10°	1557.8	1558.4	1553.5	1543.7	1535.7
12.5°	1535.7	1535.1	1528.4	1523.5	1510.6
15°	1500.8	1504.5	1500.8	1494.1	1483.7
17.5°	1467.1	1467.1	1469.6	1457.9	1450.0
20°	1429.1	1431.0	1431.0	1421.8	1412.6
22.5°	1385.0	1390.5	1392.4	1382.6	1371.6
25°	1333.0	1343.4	1349.5	1339.7	1328.1
27.5°	1269.9	1285.8	1304.2	1296.8	1284.0
30°	1199.4	1222.7	1253.3	1247.2	1238.0
32.5°	1132.7	1155.9	1198.2	1195.7	1190.8
35°	1072.0	1086.7	1136.3	1142.5	1138.2
37.5°	1014.4	1027.9	1074.5	1088.5	1084.9
40°	953.8	968.5	1005.2	1030.4	1031.6
42.5°	893.7	907.8	937.9	974.0	974.0
45°	830.0	844.1	871.7	911.5	916.4
47.5°	767.6	782.3	809.2	849.0	857.0
50°	706.3	719.8	746.7	785.3	797.6
52.5°	642.6	657.3	683.6	719.2	736.9
55°	581.3	591.1	619.9	654.2	673.2
57.5°	517.6	526.8	559.3	588.7	608.3
60°	456.4	468.0	493.1	523.1	545.8
62.5°	397.6	409.8	431.3	457.6	483.3
65°	340.6	349.8	370.6	396.9	419.6
67.5°	285.5	293.4	314.3	332.6	356.5
70°	229.7	240.1	255.4	273.2	288.5
72.5°	185.0	189.3	202.1	215.0	230.9
75°	136.6	144.0	154.4	161.7	170.9
77.5°	98.0	102.3	108.4	114.6	123.1
80°	65.5	67.4	72.9	74.1	80.9
82.5°	39.8	41.0	42.3	42.9	45.3
85°	21.4	21.4	21.4	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)