

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: P556773

Luminaire Tested: **FUSL-12-4-LD4-1STD-35-UNV-93-86-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: P556773
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-LD4-1STD-35-UNV-93-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

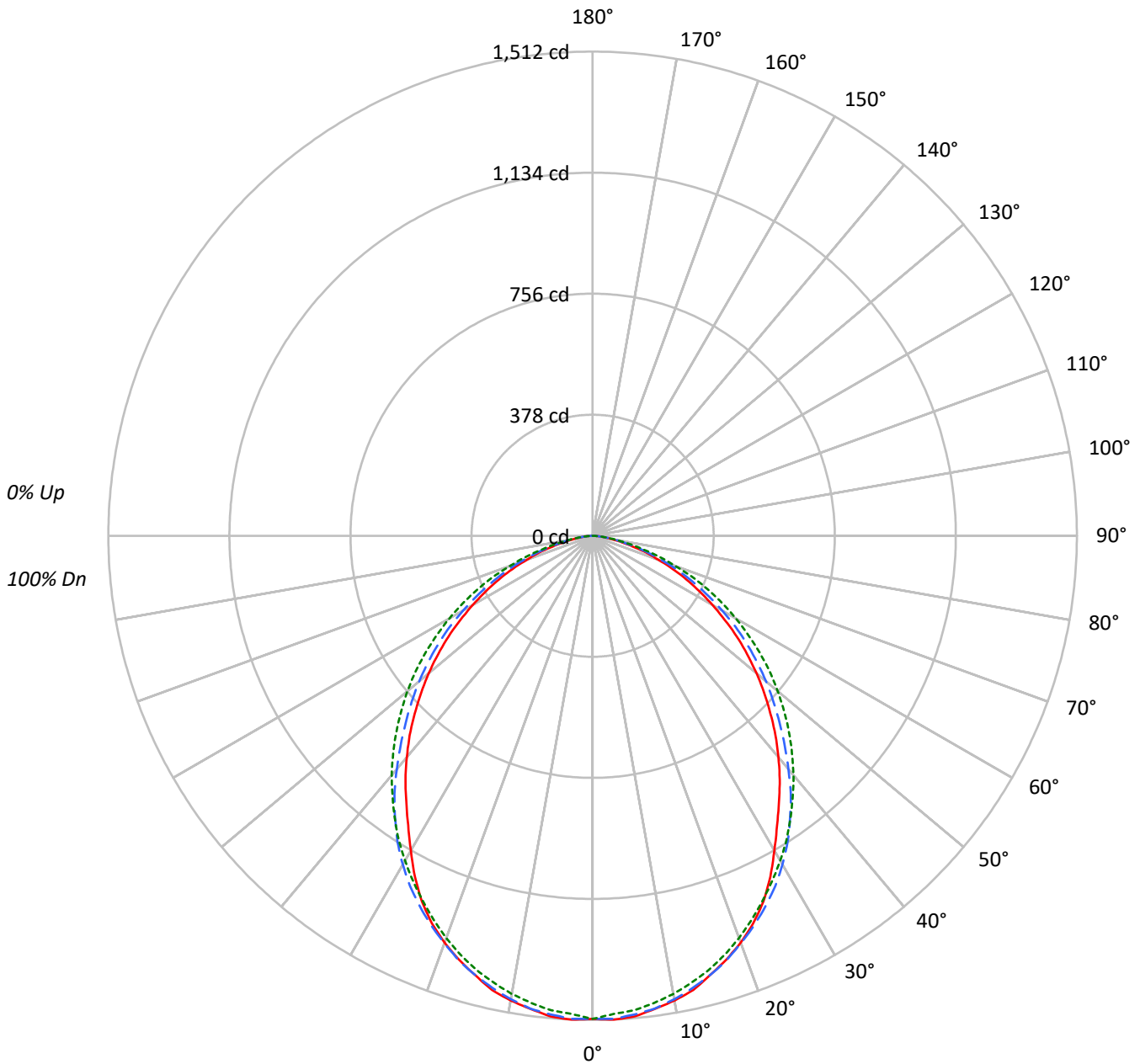
Lumens per Lamp: N/A
Luminaire Lumens: 3488.0 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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: P556773

CATALOG NUMBER: FUSL-12-4-LD4-1STD-35-UNV-93-86-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P556773

CATALOG NUMBER: FUSL-12-4-LD4-1STD-35-UNV-93-86-EDD

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°	4059	4059	4059
5°	4070	4053	4018
10°	4027	4016	3970
15°	3955	3955	3910
20°	3872	3877	3827
25°	3744	3791	3730
30°	3526	3684	3639
35°	3331	3531	3537
40°	3170	3341	3428
45°	2988	3138	3299
50°	2797	2957	3159
55°	2580	2752	2988
60°	2323	2511	2779
65°	2052	2232	2528
70°	1710	1902	2148
75°	1343	1518	1681
80°	961	1069	1185
85°	627	627	590



TEST NUMBER: P556773

CATALOG NUMBER: FUSL-12-4-LD4-1STD-35-UNV-93-86-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.0	4.1
10°-20°	399.0	11.4
20°-30°	583.1	16.7
30°-40°	661.8	19.0
40°-50°	638.9	18.3
50°-60°	527.0	15.1
60°-70°	351.0	10.1
70°-80°	157.1	4.5
80°-90°	28.1	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°	1124.1	32.2
0°-40°	1785.9	51.2
0°-60°	2951.9	84.6
0°-90°	3488.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3488.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1508	1508	1508	1508	1508	
5°	1507	1506	1500	1492	1488	143
15°	1420	1423	1420	1413	1404	400
25°	1261	1271	1277	1267	1256	577
35°	1014	1028	1075	1081	1077	635
45°	785	799	825	862	867	606
55°	550	559	586	619	637	491
65°	322	331	351	376	397	319
75°	129	136	146	153	162	141
85°	20	20	20	19	19	27
90°	0	0	0	0	0	



TEST NUMBER: P556773

CATALOG NUMBER: FUSL-12-4-LD4-1STD-35-UNV-93-86-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1508.5	1508.5	1508.5	1508.5	1508.5
2.5°	1512.5	1513.1	1509.6	1500.4	1494.6
5°	1506.7	1506.2	1500.4	1492.2	1487.6
7.5°	1489.9	1491.1	1489.3	1477.8	1471.4
10°	1473.7	1474.3	1469.6	1460.4	1452.8
12.5°	1452.8	1452.3	1445.9	1441.2	1429.1
15°	1419.8	1423.3	1419.8	1413.4	1403.6
17.5°	1387.9	1387.9	1390.2	1379.2	1371.7
20°	1352.0	1353.7	1353.7	1345.0	1336.4
22.5°	1310.3	1315.5	1317.2	1308.0	1297.5
25°	1261.0	1270.9	1276.7	1267.4	1256.4
27.5°	1201.3	1216.4	1233.8	1226.8	1214.7
30°	1134.7	1156.7	1185.7	1179.9	1171.2
32.5°	1071.5	1093.5	1133.5	1131.2	1126.6
35°	1014.1	1028.1	1075.0	1080.8	1076.7
37.5°	959.7	972.4	1016.5	1029.8	1026.3
40°	902.3	916.2	951.0	974.7	975.9
42.5°	845.5	858.8	887.2	921.4	921.4
45°	785.2	798.6	824.6	862.3	867.0
47.5°	726.1	740.0	765.5	803.2	810.7
50°	668.2	680.9	706.4	742.9	754.5
52.5°	607.9	621.8	646.7	680.3	697.2
55°	550.0	559.2	586.5	618.9	636.9
57.5°	489.7	498.4	529.1	556.9	575.5
60°	431.7	442.7	466.5	494.9	516.3
62.5°	376.1	387.7	408.0	432.9	457.2
65°	322.2	330.9	350.6	375.5	397.0
67.5°	270.1	277.6	297.3	314.7	337.3
70°	217.3	227.2	241.7	258.5	273.0
72.5°	175.0	179.1	191.2	203.4	218.5
75°	129.2	136.2	146.0	153.0	161.7
77.5°	92.7	96.8	102.6	108.4	116.5
80°	62.0	63.7	69.0	70.1	76.5
82.5°	37.7	38.8	40.0	40.6	42.9
85°	20.3	20.3	20.3	19.1	19.1
87.5°	11.6	11.6	9.9	8.1	5.8
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)