

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: P556701

Luminaire Tested: **FUSL-12-4-LD4-1STD-30-UNV-82-96-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: P556701
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-30-UNV-82-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

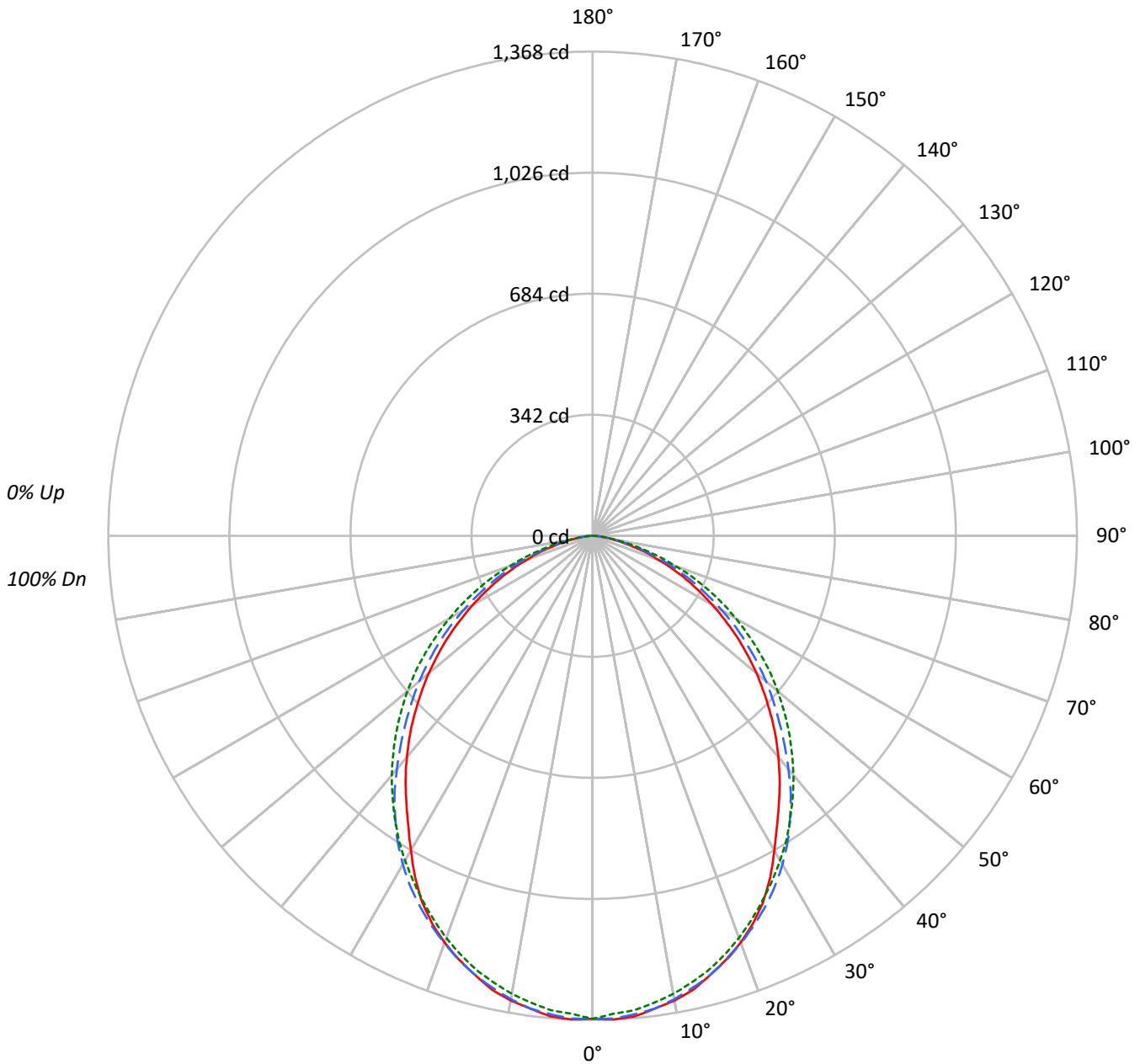
Lumens per Lamp: N/A
Luminaire Lumens: 3155.0 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (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: P556701

CATALOG NUMBER: FUSL-12-4-LD4-1STD-30-UNV-82-96-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P556701

CATALOG NUMBER: FUSL-12-4-LD4-1STD-30-UNV-82-96-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°	3672	3672	3672
5°	3682	3666	3635
10°	3642	3632	3591
15°	3578	3578	3537
20°	3502	3507	3462
25°	3387	3429	3374
30°	3189	3333	3292
35°	3013	3194	3199
40°	2867	3022	3101
45°	2703	2839	2984
50°	2530	2675	2857
55°	2334	2489	2703
60°	2102	2271	2513
65°	1855	2019	2287
70°	1547	1720	1943
75°	1215	1373	1520
80°	869	967	1072
85°	565	565	534



TEST NUMBER: P556701

CATALOG NUMBER: FUSL-12-4-LD4-1STD-30-UNV-82-96-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.5	4.1
10°-20°	360.9	11.4
20°-30°	527.4	16.7
30°-40°	598.7	19.0
40°-50°	577.9	18.3
50°-60°	476.7	15.1
60°-70°	317.5	10.1
70°-80°	142.1	4.5
80°-90°	25.4	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°	1016.8	32.2
0°-40°	1615.4	51.2
0°-60°	2670.1	84.6
0°-90°	3155.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3155.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1364	1364	1364	1364	1364	
5°	1363	1362	1357	1350	1346	129
15°	1284	1287	1284	1278	1270	362
25°	1141	1150	1155	1146	1136	522
35°	917	930	972	978	974	575
45°	710	722	746	780	784	548
55°	498	506	530	560	576	444
65°	291	299	317	340	359	289
75°	117	123	132	138	146	128
85°	18	18	18	17	17	25
90°	0	0	0	0	0	



TEST NUMBER: P556701

CATALOG NUMBER: FUSL-12-4-LD4-1STD-30-UNV-82-96-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1364.5	1364.5	1364.5	1364.5	1364.5
2.5°	1368.1	1368.6	1365.5	1357.1	1351.9
5°	1362.9	1362.4	1357.1	1349.8	1345.6
7.5°	1347.7	1348.7	1347.2	1336.7	1330.9
10°	1333.0	1333.5	1329.3	1320.9	1314.1
12.5°	1314.1	1313.6	1307.8	1303.7	1292.6
15°	1284.3	1287.4	1284.3	1278.5	1269.6
17.5°	1255.4	1255.4	1257.5	1247.6	1240.7
20°	1222.9	1224.5	1224.5	1216.6	1208.8
22.5°	1185.2	1189.9	1191.5	1183.1	1173.7
25°	1140.6	1149.5	1154.8	1146.4	1136.4
27.5°	1086.6	1100.3	1116.0	1109.7	1098.7
30°	1026.4	1046.3	1072.5	1067.2	1059.4
32.5°	969.2	989.1	1025.3	1023.2	1019.0
35°	917.3	929.9	972.4	977.6	973.9
37.5°	868.1	879.6	919.4	931.5	928.3
40°	816.2	828.7	860.2	881.7	882.7
42.5°	764.8	776.8	802.5	833.5	833.5
45°	710.3	722.3	745.9	780.0	784.2
47.5°	656.8	669.4	692.4	726.5	733.3
50°	604.4	615.9	639.0	672.0	682.5
52.5°	549.9	562.5	585.0	615.4	630.6
55°	497.5	505.8	530.5	559.8	576.1
57.5°	442.9	450.8	478.6	503.7	520.5
60°	390.5	400.5	422.0	447.7	467.0
62.5°	340.2	350.7	369.0	391.6	413.6
65°	291.4	299.3	317.1	339.7	359.1
67.5°	244.3	251.1	268.9	284.6	305.1
70°	196.6	205.5	218.6	233.8	246.9
72.5°	158.3	162.0	173.0	184.0	197.6
75°	116.9	123.2	132.1	138.4	146.2
77.5°	83.9	87.5	92.8	98.0	105.4
80°	56.1	57.7	62.4	63.4	69.2
82.5°	34.1	35.1	36.2	36.7	38.8
85°	18.3	18.3	18.3	17.3	17.3
87.5°	10.5	10.5	8.9	7.3	5.2
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)