

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: P554664

Luminaire Tested: **FUSL-12-2-LD4-2HI-30-UNV-93-88-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: P554664
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-12-2-LD4-2HI-30-UNV-93-88-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

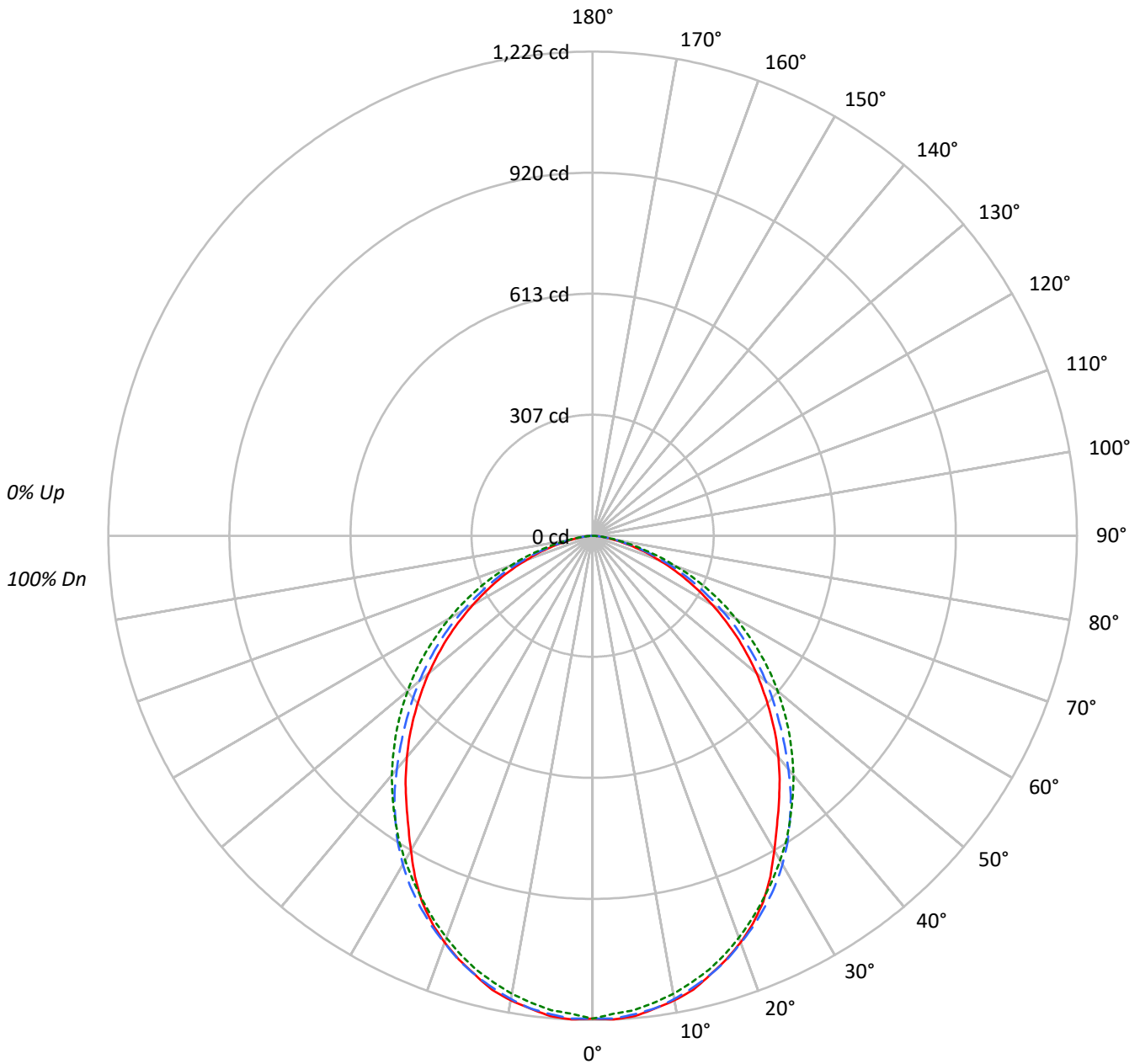
Lumens per Lamp: N/A
Luminaire Lumens: 2827.0 lumens
Efficiency: N/A
Efficacy: 65.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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: P554664

CATALOG NUMBER: FUSL-12-2-LD4-2HI-30-UNV-93-88-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P554664

CATALOG NUMBER: FUSL-12-2-LD4-2HI-30-UNV-93-88-EDD-90

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6580	6580	6580
5°	6598	6569	6514
10°	6527	6509	6435
15°	6411	6411	6338
20°	6276	6284	6203
25°	6069	6144	6047
30°	5716	5972	5899
35°	5401	5725	5734
40°	5138	5415	5557
45°	4844	5087	5348
50°	4535	4794	5120
55°	4182	4460	4844
60°	3766	4070	4505
65°	3325	3619	4097
70°	2771	3083	3481
75°	2177	2462	2724
80°	1559	1733	1922
85°	1013	1013	957



TEST NUMBER: P554664

CATALOG NUMBER: FUSL-12-2-LD4-2HI-30-UNV-93-88-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.1	4.1
10°-20°	323.4	11.4
20°-30°	472.6	16.7
30°-40°	536.4	19.0
40°-50°	517.8	18.3
50°-60°	427.2	15.1
60°-70°	284.5	10.1
70°-80°	127.3	4.5
80°-90°	22.8	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°	911.1	32.2
0°-40°	1447.5	51.2
0°-60°	2392.5	84.6
0°-90°	2827.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2827.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1223	1223	1223	1223	1223	
5°	1221	1221	1216	1210	1206	116
15°	1151	1154	1151	1146	1138	324
25°	1022	1030	1035	1027	1018	468
35°	822	833	871	876	873	515
45°	636	647	668	699	703	491
55°	446	453	475	502	516	398
65°	261	268	284	304	322	259
75°	105	110	118	124	131	115
85°	16	16	16	16	16	22
90°	0	0	0	0	0	



TEST NUMBER: P554664

CATALOG NUMBER: FUSL-12-2-LD4-2HI-30-UNV-93-88-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1222.6	1222.6	1222.6	1222.6	1222.6
2.5°	1225.9	1226.4	1223.5	1216.0	1211.3
5°	1221.2	1220.7	1216.0	1209.5	1205.7
7.5°	1207.6	1208.5	1207.1	1197.7	1192.5
10°	1194.4	1194.9	1191.1	1183.6	1177.5
12.5°	1177.5	1177.0	1171.9	1168.1	1158.3
15°	1150.7	1153.6	1150.7	1145.6	1137.6
17.5°	1124.9	1124.9	1126.8	1117.9	1111.8
20°	1095.8	1097.2	1097.2	1090.2	1083.1
22.5°	1062.0	1066.2	1067.6	1060.1	1051.6
25°	1022.0	1030.0	1034.7	1027.2	1018.3
27.5°	973.7	985.9	1000.0	994.3	984.5
30°	919.7	937.5	961.0	956.3	949.2
32.5°	868.5	886.3	918.7	916.8	913.1
35°	822.0	833.2	871.3	876.0	872.7
37.5°	777.8	788.1	823.8	834.6	831.8
40°	731.3	742.6	770.8	790.0	791.0
42.5°	685.3	696.1	719.1	746.8	746.8
45°	636.4	647.2	668.4	698.9	702.7
47.5°	588.5	599.8	620.5	651.0	657.1
50°	541.6	551.9	572.6	602.1	611.5
52.5°	492.7	504.0	524.2	551.4	565.0
55°	445.7	453.3	475.3	501.6	516.2
57.5°	396.9	403.9	428.8	451.4	466.4
60°	349.9	358.8	378.1	401.1	418.5
62.5°	304.8	314.2	330.7	350.9	370.6
65°	261.1	268.2	284.2	304.4	321.7
67.5°	218.9	225.0	241.0	255.0	273.4
70°	176.1	184.1	195.9	209.5	221.2
72.5°	141.8	145.1	155.0	164.9	177.1
75°	104.7	110.4	118.4	124.0	131.0
77.5°	75.2	78.4	83.1	87.8	94.4
80°	50.3	51.7	55.9	56.8	62.0
82.5°	30.5	31.5	32.4	32.9	34.8
85°	16.4	16.4	16.4	15.5	15.5
87.5°	9.4	9.4	8.0	6.6	4.7
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)