

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: P555168

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-93-84-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: P555168
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-LD4-2STD-30-UNV-93-84-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

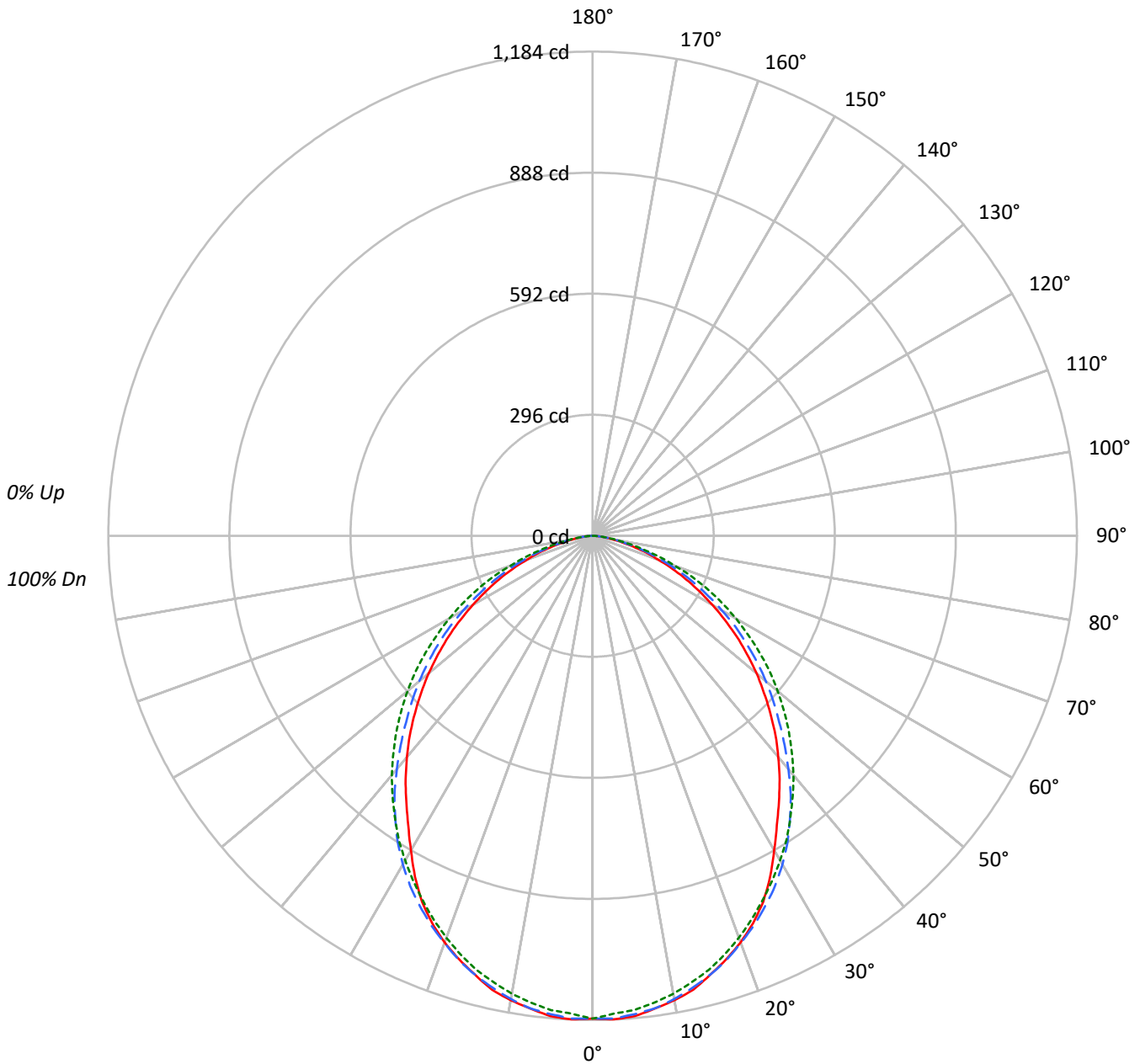
Lumens per Lamp: N/A
Luminaire Lumens: 2730.0 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P555168

CATALOG NUMBER: FUSL-12-2-LD4-2STD-30-UNV-93-84-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P555168

CATALOG NUMBER: FUSL-12-2-LD4-2STD-30-UNV-93-84-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	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°	6354	6354	6354
5°	6371	6344	6290
10°	6303	6286	6214
15°	6192	6192	6121
20°	6061	6069	5990
25°	5861	5934	5839
30°	5519	5767	5697
35°	5215	5528	5537
40°	4962	5229	5366
45°	4678	4912	5164
50°	4379	4629	4945
55°	4039	4307	4678
60°	3637	3930	4350
65°	3212	3494	3957
70°	2677	2976	3361
75°	2102	2377	2630
80°	1503	1674	1857
85°	982	982	926



TEST NUMBER: P555168

CATALOG NUMBER: FUSL-12-2-LD4-2STD-30-UNV-93-84-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.2	4.1
10°-20°	312.3	11.4
20°-30°	456.4	16.7
30°-40°	518.0	19.0
40°-50°	500.1	18.3
50°-60°	412.5	15.1
60°-70°	274.7	10.1
70°-80°	122.9	4.5
80°-90°	22.0	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°	879.8	32.2
0°-40°	1397.8	51.2
0°-60°	2310.4	84.6
0°-90°	2730.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2730.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1181	1181	1181	1181	1181	
5°	1179	1179	1174	1168	1164	112
15°	1111	1114	1111	1106	1099	313
25°	987	995	999	992	983	452
35°	794	805	841	846	843	497
45°	615	625	645	675	678	474
55°	430	438	459	484	498	384
65°	252	259	274	294	311	250
75°	101	107	114	120	126	111
85°	16	16	16	15	15	21
90°	0	0	0	0	0	



TEST NUMBER: P555168

CATALOG NUMBER: FUSL-12-2-LD4-2STD-30-UNV-93-84-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1180.7	1180.7	1180.7	1180.7	1180.7
2.5°	1183.8	1184.3	1181.6	1174.3	1169.8
5°	1179.3	1178.8	1174.3	1168.0	1164.3
7.5°	1166.1	1167.0	1165.7	1156.6	1151.6
10°	1153.4	1153.9	1150.3	1143.0	1137.1
12.5°	1137.1	1136.7	1131.7	1128.0	1118.5
15°	1111.3	1114.0	1111.3	1106.3	1098.6
17.5°	1086.3	1086.3	1088.1	1079.5	1073.6
20°	1058.2	1059.6	1059.6	1052.7	1045.9
22.5°	1025.5	1029.6	1031.0	1023.7	1015.6
25°	987.0	994.7	999.2	992.0	983.3
27.5°	940.3	952.1	965.7	960.2	950.7
30°	888.1	905.3	928.0	923.5	916.7
32.5°	838.7	855.9	887.2	885.4	881.7
35°	793.8	804.6	841.4	845.9	842.7
37.5°	751.1	761.1	795.6	806.0	803.3
40°	706.2	717.1	744.3	762.9	763.8
42.5°	661.8	672.2	694.4	721.2	721.2
45°	614.6	625.0	645.4	674.9	678.5
47.5°	568.3	579.2	599.2	628.7	634.6
50°	523.0	533.0	552.9	581.5	590.6
52.5°	475.8	486.7	506.2	532.5	545.7
55°	430.4	437.7	459.0	484.4	498.5
57.5°	383.3	390.1	414.1	435.9	450.4
60°	337.9	346.5	365.1	387.4	404.1
62.5°	294.4	303.4	319.3	338.8	357.9
65°	252.2	259.0	274.4	293.9	310.7
67.5°	211.4	217.3	232.7	246.3	264.0
70°	170.1	177.8	189.1	202.3	213.6
72.5°	137.0	140.2	149.7	159.2	171.0
75°	101.1	106.6	114.3	119.7	126.5
77.5°	72.6	75.7	80.3	84.8	91.2
80°	48.5	49.9	54.0	54.9	59.9
82.5°	29.5	30.4	31.3	31.8	33.6
85°	15.9	15.9	15.9	15.0	15.0
87.5°	9.1	9.1	7.7	6.4	4.5
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)