

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: P556403

Luminaire Tested: **FUSL-12-4-LD4-1LO-30-UNV-80-85-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: P556403
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-LD4-1LO-30-UNV-80-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

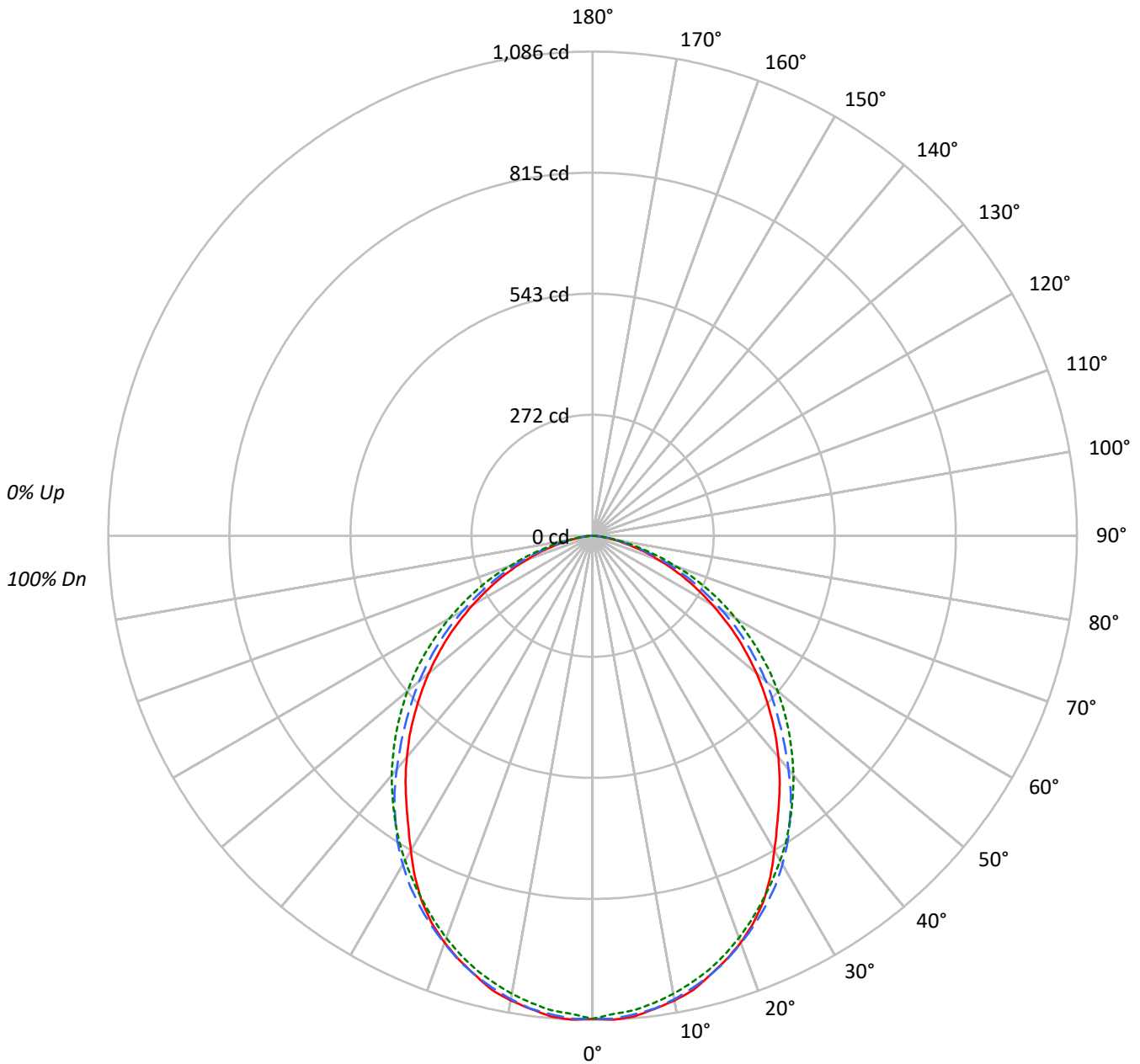
Lumens per Lamp: N/A
Luminaire Lumens: 2505.0 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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: P556403

CATALOG NUMBER: FUSL-12-4-LD4-1LO-30-UNV-80-85-EDD

Luminous Intensity Polar Plot





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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°	2915	2915	2915
5°	2923	2911	2886
10°	2892	2884	2851
15°	2841	2841	2808
20°	2781	2784	2748
25°	2689	2722	2679
30°	2532	2646	2614
35°	2393	2536	2540
40°	2276	2399	2462
45°	2146	2254	2369
50°	2009	2124	2269
55°	1853	1976	2146
60°	1669	1803	1996
65°	1473	1603	1815
70°	1228	1366	1542
75°	965	1091	1207
80°	690	767	851
85°	451	451	423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.0	4.1
10°-20°	286.5	11.4
20°-30°	418.7	16.7
30°-40°	475.3	19.0
40°-50°	458.8	18.3
50°-60°	378.5	15.1
60°-70°	252.1	10.1
70°-80°	112.8	4.5
80°-90°	20.2	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°	807.3	32.2
0°-40°	1282.6	51.2
0°-60°	2120.0	84.6
0°-90°	2505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2505.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1083	1083	1083	1083	1083	
5°	1082	1082	1078	1072	1068	102
15°	1020	1022	1020	1015	1008	287
25°	906	913	917	910	902	415
35°	728	738	772	776	773	456
45°	564	574	592	619	623	435
55°	395	402	421	444	457	353
65°	231	238	252	270	285	229
75°	93	98	105	110	116	101
85°	15	15	15	14	14	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1083.3	1083.3	1083.3	1083.3	1083.3
2.5°	1086.3	1086.7	1084.2	1077.5	1073.4
5°	1082.1	1081.7	1077.5	1071.7	1068.4
7.5°	1070.0	1070.9	1069.6	1061.3	1056.7
10°	1058.4	1058.8	1055.5	1048.8	1043.4
12.5°	1043.4	1043.0	1038.4	1035.1	1026.3
15°	1019.7	1022.2	1019.7	1015.1	1008.0
17.5°	996.8	996.8	998.4	990.5	985.1
20°	971.0	972.2	972.2	966.0	959.7
22.5°	941.0	944.8	946.0	939.3	931.9
25°	905.6	912.7	916.9	910.2	902.3
27.5°	862.8	873.6	886.1	881.1	872.3
30°	814.9	830.7	851.5	847.4	841.1
32.5°	769.5	785.4	814.1	812.4	809.1
35°	728.3	738.3	772.0	776.2	773.3
37.5°	689.2	698.4	730.0	739.6	737.1
40°	648.0	658.0	683.0	700.0	700.9
42.5°	607.2	616.8	637.2	661.7	661.7
45°	563.9	573.5	592.2	619.3	622.6
47.5°	521.5	531.5	549.8	576.8	582.3
50°	479.9	489.0	507.3	533.6	541.9
52.5°	436.6	446.6	464.5	488.6	500.7
55°	395.0	401.6	421.2	444.5	457.4
57.5°	351.7	357.9	380.0	400.0	413.3
60°	310.1	318.0	335.0	355.4	370.8
62.5°	270.1	278.4	293.0	310.9	328.4
65°	231.4	237.6	251.8	269.7	285.1
67.5°	193.9	199.4	213.5	226.0	242.2
70°	156.1	163.1	173.6	185.6	196.0
72.5°	125.7	128.6	137.3	146.1	156.9
75°	92.8	97.8	104.9	109.9	116.1
77.5°	66.6	69.5	73.7	77.8	83.7
80°	44.5	45.8	49.5	50.4	54.9
82.5°	27.1	27.9	28.7	29.1	30.8
85°	14.6	14.6	14.6	13.7	13.7
87.5°	8.3	8.3	7.1	5.8	4.2
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)