

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: P556573

Luminaire Tested: **FUSL-12-4-LD4-1LO-40-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: P556573
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-40-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 4000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

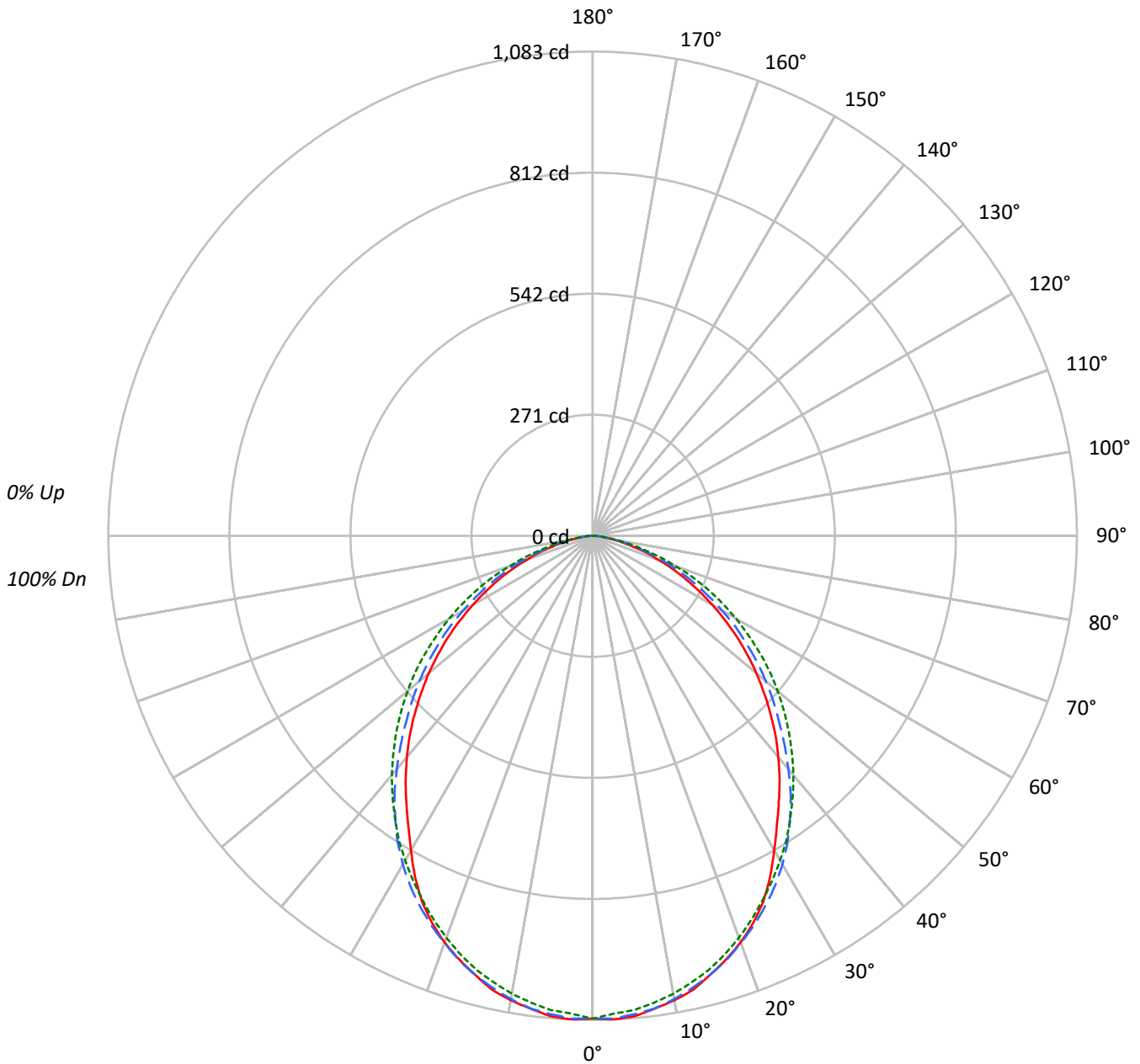
Lumens per Lamp: N/A
Luminaire Lumens: 2497.0 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P556573

CATALOG NUMBER: FUSL-12-4-LD4-1LO-40-UNV-82-96-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°	2906	2906	2906
5°	2914	2901	2877
10°	2883	2875	2842
15°	2832	2832	2799
20°	2772	2775	2740
25°	2680	2714	2670
30°	2524	2637	2605
35°	2385	2528	2532
40°	2269	2392	2454
45°	2139	2246	2362
50°	2002	2117	2262
55°	1847	1970	2139
60°	1664	1798	1989
65°	1469	1598	1810
70°	1224	1361	1537
75°	962	1087	1203
80°	688	766	849
85°	448	448	423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.7	4.1
10°-20°	285.6	11.4
20°-30°	417.4	16.7
30°-40°	473.8	19.0
40°-50°	457.4	18.3
50°-60°	377.3	15.1
60°-70°	251.3	10.1
70°-80°	112.4	4.5
80°-90°	20.1	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°	804.7	32.2
0°-40°	1278.5	51.2
0°-60°	2113.2	84.6
0°-90°	2497.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2497.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1080	1080	1080	1080	1080	
5°	1079	1078	1074	1068	1065	102
15°	1016	1019	1016	1012	1005	287
25°	903	910	914	907	899	413
35°	726	736	770	774	771	455
45°	562	572	590	617	621	434
55°	394	400	420	443	456	351
65°	231	237	251	269	284	229
75°	92	98	104	110	116	101
85°	14	14	14	14	14	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1079.9	1079.9	1079.9	1079.9	1079.9
2.5°	1082.8	1083.2	1080.7	1074.1	1069.9
5°	1078.6	1078.2	1074.1	1068.3	1065.0
7.5°	1066.6	1067.4	1066.2	1057.9	1053.3
10°	1055.0	1055.4	1052.1	1045.5	1040.1
12.5°	1040.1	1039.6	1035.1	1031.8	1023.1
15°	1016.4	1018.9	1016.4	1011.9	1004.8
17.5°	993.6	993.6	995.3	987.4	982.0
20°	967.9	969.1	969.1	962.9	956.7
22.5°	938.0	941.7	943.0	936.3	928.9
25°	902.7	909.8	913.9	907.3	899.4
27.5°	860.0	870.8	883.2	878.3	869.6
30°	812.3	828.1	848.8	844.7	838.4
32.5°	767.1	782.8	811.5	809.8	806.5
35°	726.0	736.0	769.6	773.7	770.8
37.5°	687.0	696.1	727.7	737.2	734.7
40°	645.9	655.9	680.8	697.8	698.6
42.5°	605.3	614.8	635.2	659.6	659.6
45°	562.1	571.7	590.3	617.3	620.6
47.5°	519.8	529.8	548.0	575.0	580.4
50°	478.3	487.5	505.7	531.9	540.2
52.5°	435.2	445.1	463.0	487.0	499.1
55°	393.7	400.3	419.8	443.1	455.9
57.5°	350.6	356.8	378.8	398.7	412.0
60°	309.1	317.0	334.0	354.3	369.6
62.5°	269.2	277.5	292.1	309.9	327.3
65°	230.7	236.9	251.0	268.8	284.2
67.5°	193.3	198.7	212.8	225.3	241.5
70°	155.6	162.6	173.0	185.0	195.4
72.5°	125.3	128.2	136.9	145.6	156.4
75°	92.5	97.5	104.5	109.5	115.7
77.5°	66.4	69.3	73.4	77.6	83.4
80°	44.4	45.6	49.4	50.2	54.8
82.5°	27.0	27.8	28.6	29.0	30.7
85°	14.5	14.5	14.5	13.7	13.7
87.5°	8.3	8.3	7.1	5.8	4.1
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)