

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: P556473

Luminaire Tested: **FUSL-12-4-LD4-1LO-35-UNV-80-88-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: P556473
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-35-UNV-80-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

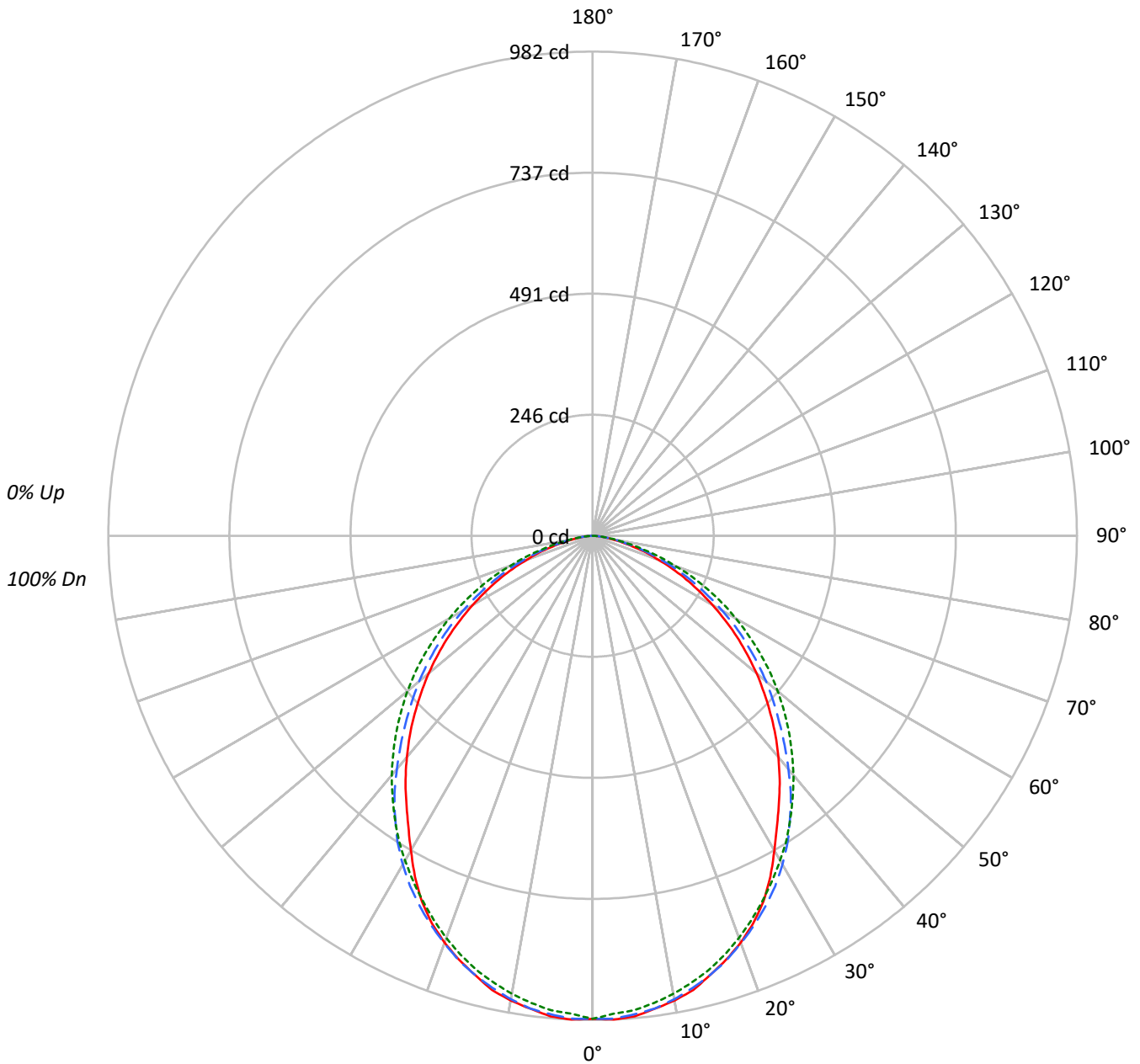
Lumens per Lamp: N/A
Luminaire Lumens: 2265.0 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (Ain): 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

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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°	2636	2636	2636
5°	2643	2632	2609
10°	2615	2608	2578
15°	2569	2569	2539
20°	2514	2517	2485
25°	2431	2461	2423
30°	2289	2392	2363
35°	2164	2293	2297
40°	2058	2169	2226
45°	1940	2038	2143
50°	1816	1920	2051
55°	1675	1787	1940
60°	1509	1630	1805
65°	1332	1450	1642
70°	1110	1234	1394
75°	872	986	1092
80°	625	694	770
85°	408	408	383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.2	4.1
10°-20°	259.1	11.4
20°-30°	378.6	16.7
30°-40°	429.8	19.0
40°-50°	414.9	18.3
50°-60°	342.2	15.1
60°-70°	227.9	10.1
70°-80°	102.0	4.5
80°-90°	18.2	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°	729.9	32.2
0°-40°	1159.7	51.2
0°-60°	1916.9	84.6
0°-90°	2265.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2265.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	980	980	980	980	980	
5°	978	978	974	969	966	93
15°	922	924	922	918	911	260
25°	819	825	829	823	816	375
35°	659	668	698	702	699	413
45°	510	519	536	560	563	393
55°	357	363	381	402	414	319
65°	209	215	228	244	258	207
75°	84	88	95	99	105	92
85°	13	13	13	12	12	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	979.6	979.6	979.6	979.6	979.6
2.5°	982.2	982.6	980.3	974.3	970.5
5°	978.4	978.0	974.3	969.0	966.0
7.5°	967.5	968.3	967.1	959.6	955.5
10°	957.0	957.4	954.3	948.3	943.4
12.5°	943.4	943.1	938.9	935.9	928.0
15°	922.0	924.2	922.0	917.8	911.4
17.5°	901.3	901.3	902.8	895.6	890.7
20°	877.9	879.1	879.1	873.4	867.8
22.5°	850.9	854.2	855.4	849.3	842.6
25°	818.9	825.3	829.0	823.0	815.9
27.5°	780.1	789.9	801.2	796.7	788.8
30°	736.8	751.1	769.9	766.2	760.5
32.5°	695.8	710.1	736.1	734.6	731.6
35°	658.6	667.6	698.1	701.8	699.2
37.5°	623.2	631.5	660.1	668.7	666.5
40°	585.9	595.0	617.5	633.0	633.7
42.5°	549.0	557.7	576.1	598.3	598.3
45°	509.9	518.6	535.5	560.0	563.0
47.5°	471.5	480.6	497.1	521.6	526.5
50°	433.9	442.2	458.7	482.4	490.0
52.5°	394.8	403.8	420.0	441.8	452.7
55°	357.1	363.1	380.8	401.9	413.6
57.5°	318.0	323.6	343.6	361.6	373.7
60°	280.4	287.5	302.9	321.4	335.3
62.5°	244.2	251.8	264.9	281.1	296.9
65°	209.2	214.9	227.7	243.9	257.8
67.5°	175.4	180.3	193.1	204.3	219.0
70°	141.1	147.5	156.9	167.8	177.2
72.5°	113.6	116.3	124.2	132.1	141.9
75°	83.9	88.4	94.8	99.3	105.0
77.5°	60.2	62.8	66.6	70.4	75.6
80°	40.3	41.4	44.8	45.5	49.7
82.5°	24.5	25.2	26.0	26.3	27.8
85°	13.2	13.2	13.2	12.4	12.4
87.5°	7.5	7.5	6.4	5.3	3.8
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)