

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: P556543

Luminaire Tested: **FUSL-12-4-LD4-1LO-40-UNV-80-97-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: P556543
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-80-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

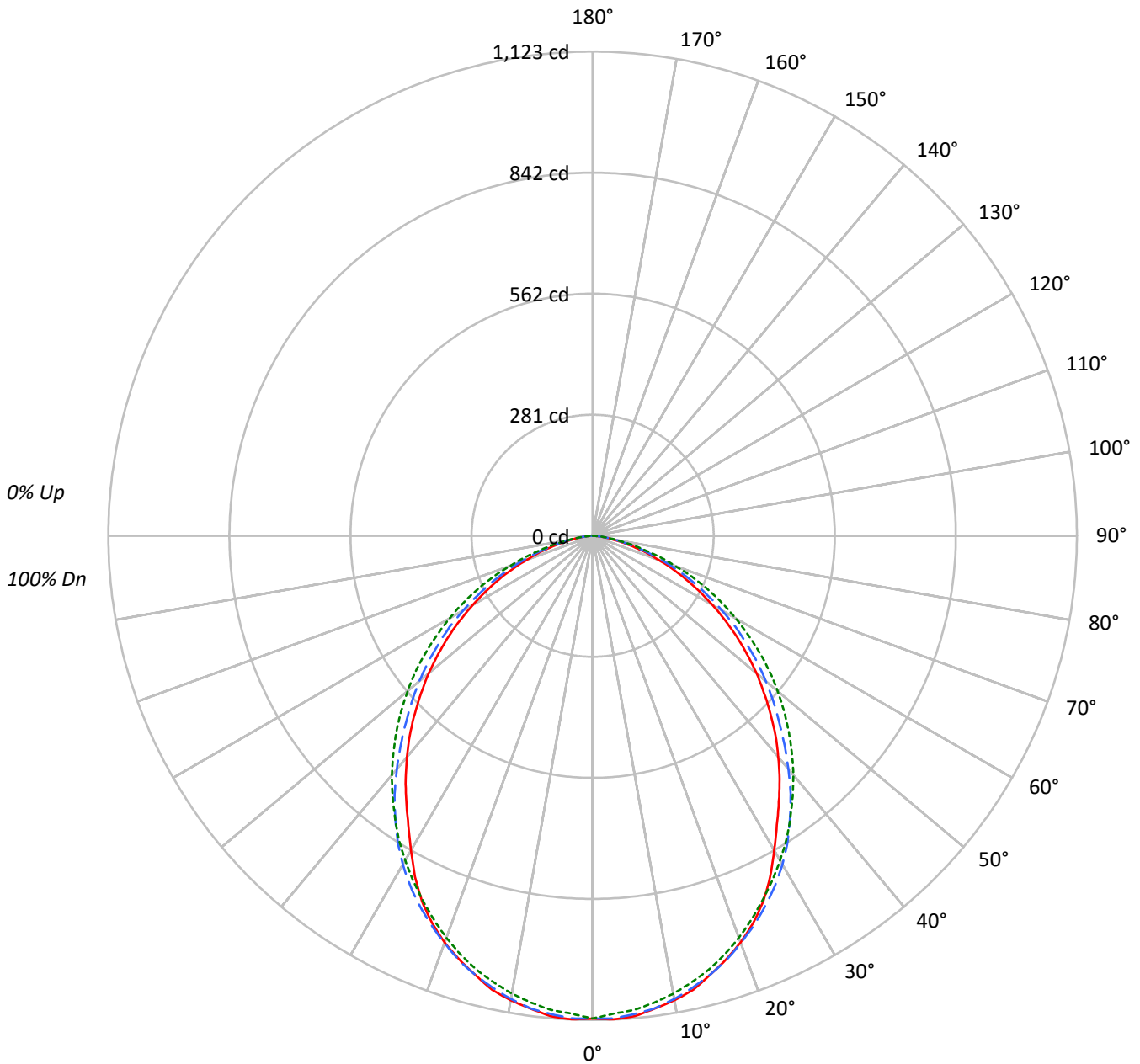
Lumens per Lamp: N/A
Luminaire Lumens: 2589.0 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	3013	3013	3013
5°	3021	3008	2983
10°	2989	2981	2947
15°	2936	2936	2902
20°	2874	2877	2840
25°	2779	2814	2769
30°	2617	2735	2701
35°	2473	2621	2625
40°	2353	2480	2545
45°	2218	2329	2449
50°	2076	2195	2345
55°	1915	2042	2218
60°	1725	1864	2063
65°	1523	1657	1876
70°	1269	1412	1594
75°	997	1127	1248
80°	713	793	880
85°	466	466	438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.4	4.1
10°-20°	296.2	11.4
20°-30°	432.8	16.7
30°-40°	491.3	19.0
40°-50°	474.2	18.3
50°-60°	391.2	15.1
60°-70°	260.5	10.1
70°-80°	116.6	4.5
80°-90°	20.9	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°	834.4	32.2
0°-40°	1325.6	51.2
0°-60°	2191.1	84.6
0°-90°	2589.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2589.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1120	1120	1120	1120	1120	
5°	1118	1118	1114	1108	1104	106
15°	1054	1056	1054	1049	1042	297
25°	936	943	948	941	933	429
35°	753	763	798	802	799	472
45°	583	593	612	640	644	450
55°	408	415	435	459	473	364
65°	239	246	260	279	295	237
75°	96	101	108	114	120	105
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°	1119.7	1119.7	1119.7	1119.7	1119.7
2.5°	1122.7	1123.1	1120.5	1113.7	1109.4
5°	1118.4	1118.0	1113.7	1107.6	1104.2
7.5°	1105.9	1106.8	1105.5	1096.9	1092.1
10°	1093.9	1094.3	1090.9	1084.0	1078.4
12.5°	1078.4	1078.0	1073.2	1069.8	1060.7
15°	1053.9	1056.4	1053.9	1049.1	1041.8
17.5°	1030.2	1030.2	1031.9	1023.8	1018.2
20°	1003.5	1004.8	1004.8	998.4	991.9
22.5°	972.6	976.4	977.7	970.8	963.1
25°	936.0	943.3	947.6	940.7	932.6
27.5°	891.7	902.9	915.8	910.6	901.6
30°	842.2	858.6	880.1	875.8	869.3
32.5°	795.3	811.7	841.4	839.6	836.2
35°	752.8	763.1	797.9	802.2	799.2
37.5°	712.3	721.8	754.5	764.4	761.8
40°	669.7	680.1	705.9	723.5	724.4
42.5°	627.6	637.5	658.6	683.9	683.9
45°	582.9	592.7	612.1	640.1	643.5
47.5°	539.0	549.3	568.2	596.2	601.8
50°	496.0	505.4	524.4	551.4	560.1
52.5°	451.2	461.5	480.0	505.0	517.5
55°	408.2	415.1	435.3	459.4	472.7
57.5°	363.5	369.9	392.7	413.4	427.1
60°	320.5	328.6	346.3	367.3	383.3
62.5°	279.2	287.8	302.8	321.3	339.4
65°	239.2	245.6	260.2	278.7	294.7
67.5°	200.4	206.0	220.7	233.6	250.3
70°	161.3	168.6	179.4	191.8	202.6
72.5°	129.9	132.9	141.9	151.0	162.2
75°	95.9	101.1	108.4	113.6	120.0
77.5°	68.8	71.8	76.1	80.4	86.5
80°	46.0	47.3	51.2	52.0	56.8
82.5°	28.0	28.8	29.7	30.1	31.8
85°	15.1	15.1	15.1	14.2	14.2
87.5°	8.6	8.6	7.3	6.0	4.3
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)