

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: P554015

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-82-97-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: P554015
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-LD4-1HI-40-UNV-82-97-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC 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

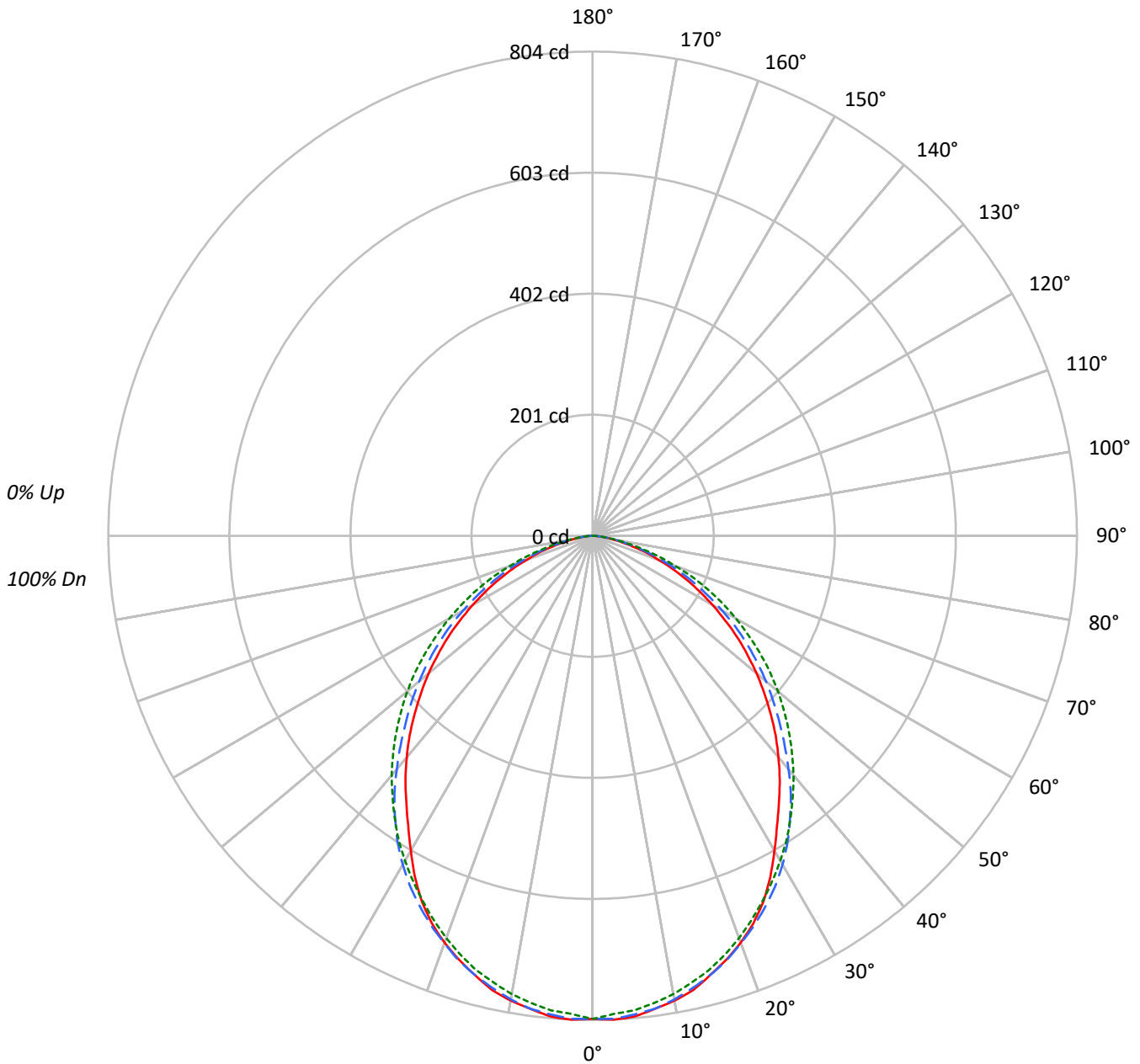
Lumens per Lamp: N/A
Luminaire Lumens: 1855.0 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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°	4317	4317	4317
5°	4329	4311	4274
10°	4283	4271	4223
15°	4207	4207	4159
20°	4118	4124	4070
25°	3982	4032	3968
30°	3750	3919	3871
35°	3543	3756	3762
40°	3372	3554	3646
45°	3178	3338	3510
50°	2976	3146	3360
55°	2745	2927	3178
60°	2471	2671	2956
65°	2183	2375	2688
70°	1819	2022	2285
75°	1429	1616	1788
80°	1023	1137	1261
85°	667	667	630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.5	4.1
10°-20°	212.2	11.4
20°-30°	310.1	16.7
30°-40°	352.0	19.0
40°-50°	339.8	18.3
50°-60°	280.3	15.1
60°-70°	186.7	10.1
70°-80°	83.5	4.5
80°-90°	14.9	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°	597.8	32.2
0°-40°	949.8	51.2
0°-60°	1569.9	84.6
0°-90°	1855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1855.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	802	802	802	802	802	
5°	801	801	798	794	791	76
15°	755	757	755	752	746	213
25°	671	676	679	674	668	307
35°	539	547	572	575	573	338
45°	418	425	439	459	461	322
55°	292	297	312	329	339	261
65°	171	176	186	200	211	170
75°	69	72	78	81	86	75
85°	11	11	11	10	10	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	802.2	802.2	802.2	802.2	802.2
2.5°	804.4	804.7	802.9	797.9	794.8
5°	801.3	801.0	797.9	793.6	791.1
7.5°	792.4	793.0	792.1	785.9	782.5
10°	783.7	784.1	781.6	776.7	772.7
12.5°	772.7	772.3	769.0	766.5	760.0
15°	755.1	756.9	755.1	751.7	746.5
17.5°	738.1	738.1	739.4	733.5	729.5
20°	719.0	720.0	720.0	715.3	710.7
22.5°	696.8	699.6	700.5	695.6	690.1
25°	670.6	675.9	679.0	674.0	668.2
27.5°	638.9	646.9	656.2	652.5	646.0
30°	603.5	615.2	630.6	627.5	622.9
32.5°	569.9	581.6	602.8	601.6	599.1
35°	539.3	546.7	571.7	574.8	572.6
37.5°	510.4	517.2	540.6	547.7	545.8
40°	479.9	487.3	505.8	518.4	519.0
42.5°	449.7	456.7	471.9	490.0	490.0
45°	417.6	424.7	438.6	458.6	461.1
47.5°	386.2	393.6	407.1	427.2	431.2
50°	355.4	362.1	375.7	395.1	401.3
52.5°	323.3	330.7	343.9	361.8	370.8
55°	292.5	297.4	311.9	329.2	338.7
57.5°	260.4	265.1	281.4	296.2	306.0
60°	229.6	235.5	248.1	263.2	274.6
62.5°	200.0	206.2	217.0	230.2	243.2
65°	171.4	176.0	186.5	199.7	211.1
67.5°	143.6	147.6	158.1	167.4	179.4
70°	115.6	120.8	128.5	137.5	145.2
72.5°	93.1	95.2	101.7	108.2	116.2
75°	68.7	72.4	77.7	81.4	86.0
77.5°	49.3	51.5	54.6	57.6	61.9
80°	33.0	33.9	36.7	37.3	40.7
82.5°	20.0	20.6	21.3	21.6	22.8
85°	10.8	10.8	10.8	10.2	10.2
87.5°	6.2	6.2	5.2	4.3	3.1
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)