

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: P554482

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-80-85-EDD-90**

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: P554482
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-LD4-1STD-40-UNV-80-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

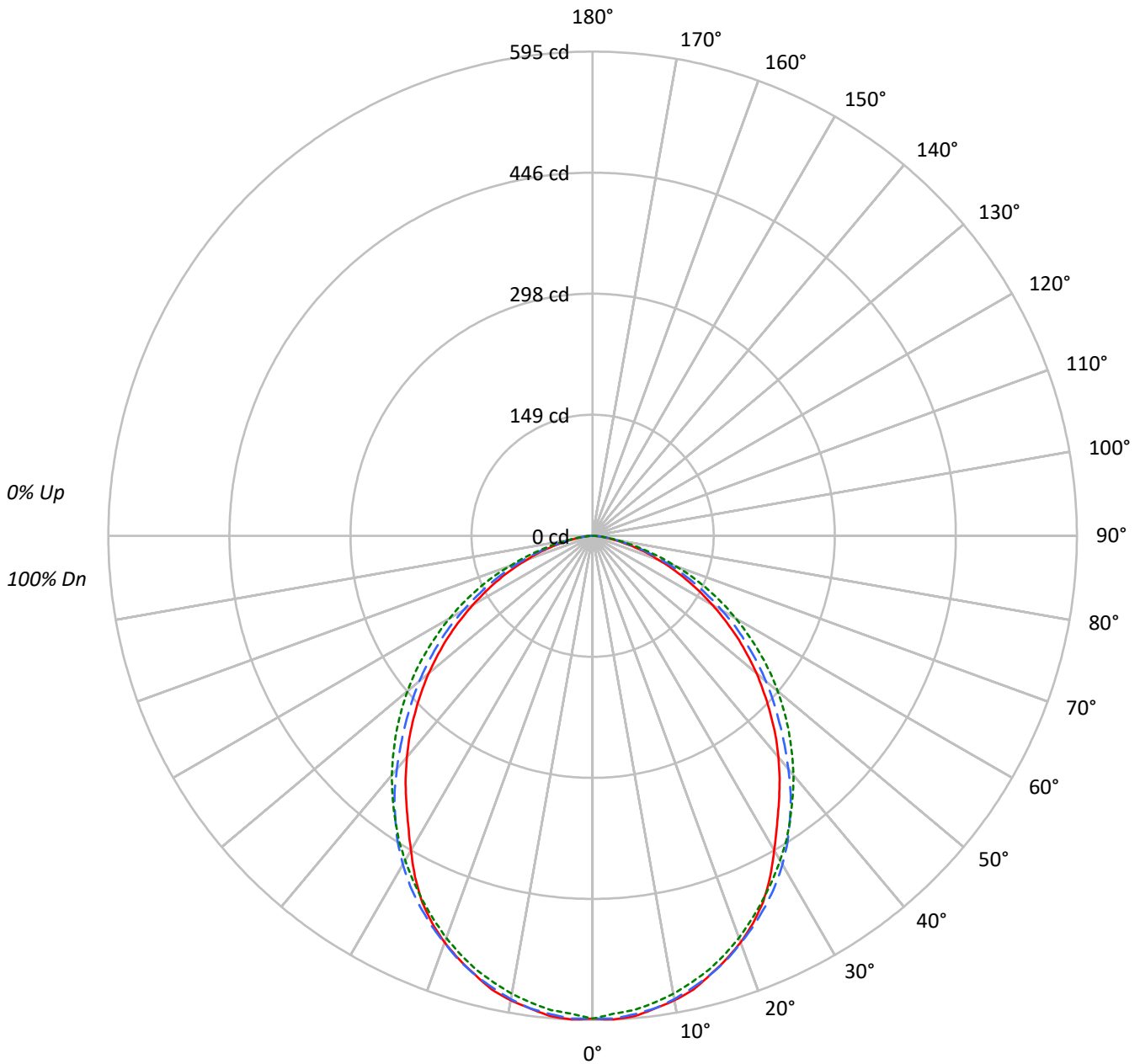
Lumens per Lamp: N/A
Luminaire Lumens: 1372.0 lumens
Efficiency: N/A
Efficacy: 82.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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				20				
RC	80				70				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	100	100	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73	73	73	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63	63	63	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54	54	54	54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47	47	47	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42	42	42	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37	37	37	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34	34	34	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30	30	30	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28	28	28	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3194	3194	3194
5°	3202	3189	3161
10°	3168	3159	3123
15°	3112	3112	3076
20°	3046	3050	3011
25°	2945	2982	2935
30°	2774	2898	2863
35°	2621	2778	2782
40°	2493	2628	2697
45°	2351	2469	2595
50°	2200	2327	2485
55°	2030	2165	2350
60°	1828	1975	2186
65°	1613	1756	1988
70°	1345	1496	1690
75°	1056	1194	1323
80°	756	840	933
85°	494	494	463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.9	4.1
10°-20°	156.9	11.4
20°-30°	229.3	16.7
30°-40°	260.3	19.0
40°-50°	251.3	18.3
50°-60°	207.3	15.1
60°-70°	138.1	10.1
70°-80°	61.8	4.5
80°-90°	11.1	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°	442.2	32.2
0°-40°	702.5	51.2
0°-60°	1161.1	84.6
0°-90°	1372.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1372.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	593	593	593	593	593	
5°	593	592	590	587	585	56
15°	558	560	558	556	552	157
25°	496	500	502	498	494	227
35°	399	404	423	425	424	250
45°	309	314	324	339	341	238
55°	216	220	231	244	250	193
65°	127	130	138	148	156	126
75°	51	54	57	60	64	56
85°	8	8	8	8	8	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	593.4	593.4	593.4	593.4	593.4
2.5°	595.0	595.2	593.8	590.2	587.9
5°	592.7	592.4	590.2	587.0	585.1
7.5°	586.1	586.5	585.8	581.3	578.8
10°	579.7	579.9	578.1	574.4	571.5
12.5°	571.5	571.2	568.7	566.9	562.1
15°	558.5	559.8	558.5	556.0	552.1
17.5°	545.9	545.9	546.9	542.5	539.6
20°	531.8	532.5	532.5	529.1	525.7
22.5°	515.4	517.4	518.1	514.5	510.4
25°	496.0	499.9	502.2	498.5	494.2
27.5°	472.5	478.5	485.3	482.6	477.8
30°	446.3	455.0	466.4	464.1	460.7
32.5°	421.5	430.1	445.9	445.0	443.1
35°	398.9	404.4	422.8	425.1	423.5
37.5°	377.5	382.5	399.8	405.1	403.7
40°	354.9	360.4	374.1	383.4	383.9
42.5°	332.6	337.8	349.0	362.4	362.4
45°	308.9	314.1	324.4	339.2	341.0
47.5°	285.6	291.1	301.1	315.9	318.9
50°	262.8	267.8	277.9	292.2	296.8
52.5°	239.1	244.6	254.4	267.6	274.2
55°	216.3	220.0	230.7	243.5	250.5
57.5°	192.6	196.0	208.1	219.1	226.4
60°	169.8	174.2	183.5	194.7	203.1
62.5°	147.9	152.5	160.5	170.3	179.9
65°	126.7	130.2	137.9	147.7	156.1
67.5°	106.2	109.2	116.9	123.8	132.7
70°	85.5	89.4	95.1	101.7	107.4
72.5°	68.8	70.4	75.2	80.0	85.9
75°	50.8	53.6	57.4	60.2	63.6
77.5°	36.5	38.1	40.3	42.6	45.8
80°	24.4	25.1	27.1	27.6	30.1
82.5°	14.8	15.3	15.7	16.0	16.9
85°	8.0	8.0	8.0	7.5	7.5
87.5°	4.6	4.6	3.9	3.2	2.3
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)