

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: P554530

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-93-85-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: P554530
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-93-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS 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

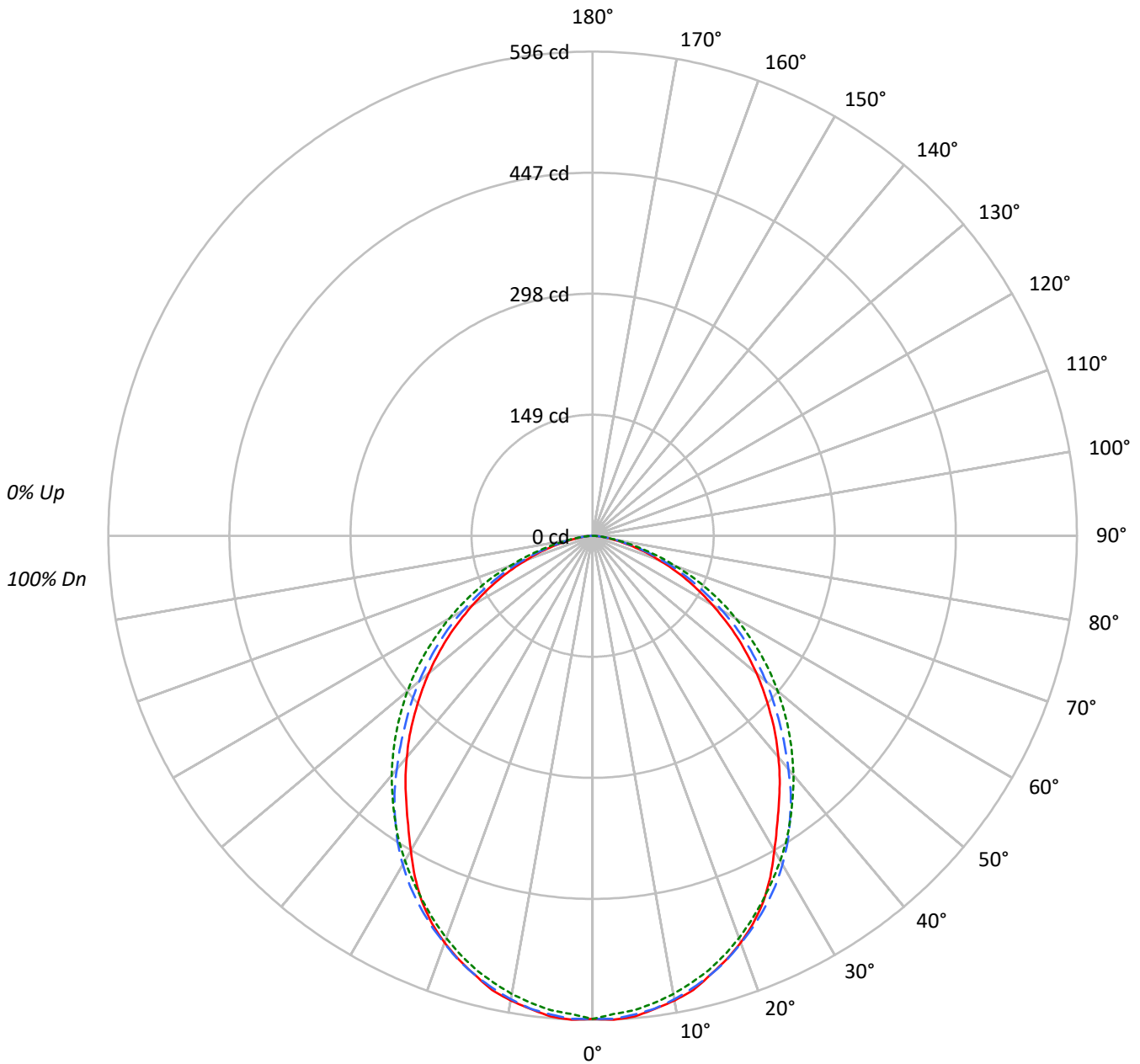
Lumens per Lamp: N/A
Luminaire Lumens: 1375.0 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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									
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°	3201	3201	3201
5°	3209	3196	3168
10°	3175	3166	3130
15°	3119	3119	3083
20°	3053	3057	3017
25°	2952	2989	2941
30°	2780	2905	2869
35°	2627	2784	2789
40°	2499	2634	2703
45°	2356	2474	2602
50°	2205	2332	2490
55°	2034	2169	2356
60°	1832	1979	2190
65°	1617	1760	1993
70°	1349	1500	1693
75°	1058	1198	1325
80°	756	843	936
85°	494	494	463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.0	4.1
10°-20°	157.3	11.4
20°-30°	229.9	16.7
30°-40°	260.9	19.0
40°-50°	251.9	18.3
50°-60°	207.8	15.1
60°-70°	138.4	10.1
70°-80°	61.9	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°	443.1	32.2
0°-40°	704.0	51.2
0°-60°	1163.7	84.6
0°-90°	1375.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1375.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	595	595	595	595	595	
5°	594	594	592	588	586	56
15°	560	561	560	557	553	158
25°	497	501	503	500	495	228
35°	400	405	424	426	424	250
45°	310	315	325	340	342	239
55°	217	220	231	244	251	193
65°	127	130	138	148	156	126
75°	51	54	58	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°	594.7	594.7	594.7	594.7	594.7
2.5°	596.3	596.5	595.1	591.5	589.2
5°	594.0	593.7	591.5	588.3	586.4
7.5°	587.3	587.8	587.1	582.5	580.0
10°	580.9	581.2	579.3	575.7	572.7
12.5°	572.7	572.5	570.0	568.2	563.4
15°	559.7	561.1	559.7	557.2	553.3
17.5°	547.1	547.1	548.0	543.7	540.7
20°	533.0	533.7	533.7	530.2	526.8
22.5°	516.5	518.6	519.3	515.6	511.5
25°	497.1	501.0	503.3	499.6	495.3
27.5°	473.6	479.5	486.4	483.6	478.8
30°	447.3	456.0	467.4	465.1	461.7
32.5°	422.4	431.1	446.8	445.9	444.1
35°	399.8	405.3	423.8	426.1	424.5
37.5°	378.3	383.3	400.7	406.0	404.6
40°	355.7	361.2	374.9	384.3	384.7
42.5°	333.3	338.6	349.8	363.2	363.2
45°	309.5	314.8	325.1	339.9	341.8
47.5°	286.2	291.7	301.8	316.6	319.6
50°	263.4	268.4	278.5	292.9	297.4
52.5°	239.6	245.1	254.9	268.2	274.8
55°	216.8	220.5	231.2	244.0	251.1
57.5°	193.0	196.5	208.6	219.5	226.8
60°	170.2	174.5	183.9	195.1	203.5
62.5°	148.3	152.8	160.8	170.7	180.2
65°	127.0	130.4	138.2	148.0	156.5
67.5°	106.5	109.4	117.2	124.0	133.0
70°	85.7	89.6	95.3	101.9	107.6
72.5°	69.0	70.6	75.4	80.2	86.1
75°	50.9	53.7	57.6	60.3	63.7
77.5°	36.6	38.2	40.4	42.7	45.9
80°	24.4	25.1	27.2	27.6	30.2
82.5°	14.8	15.3	15.8	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)