

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: P554405

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-93-86-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: P554405
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-30-UNV-93-86-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

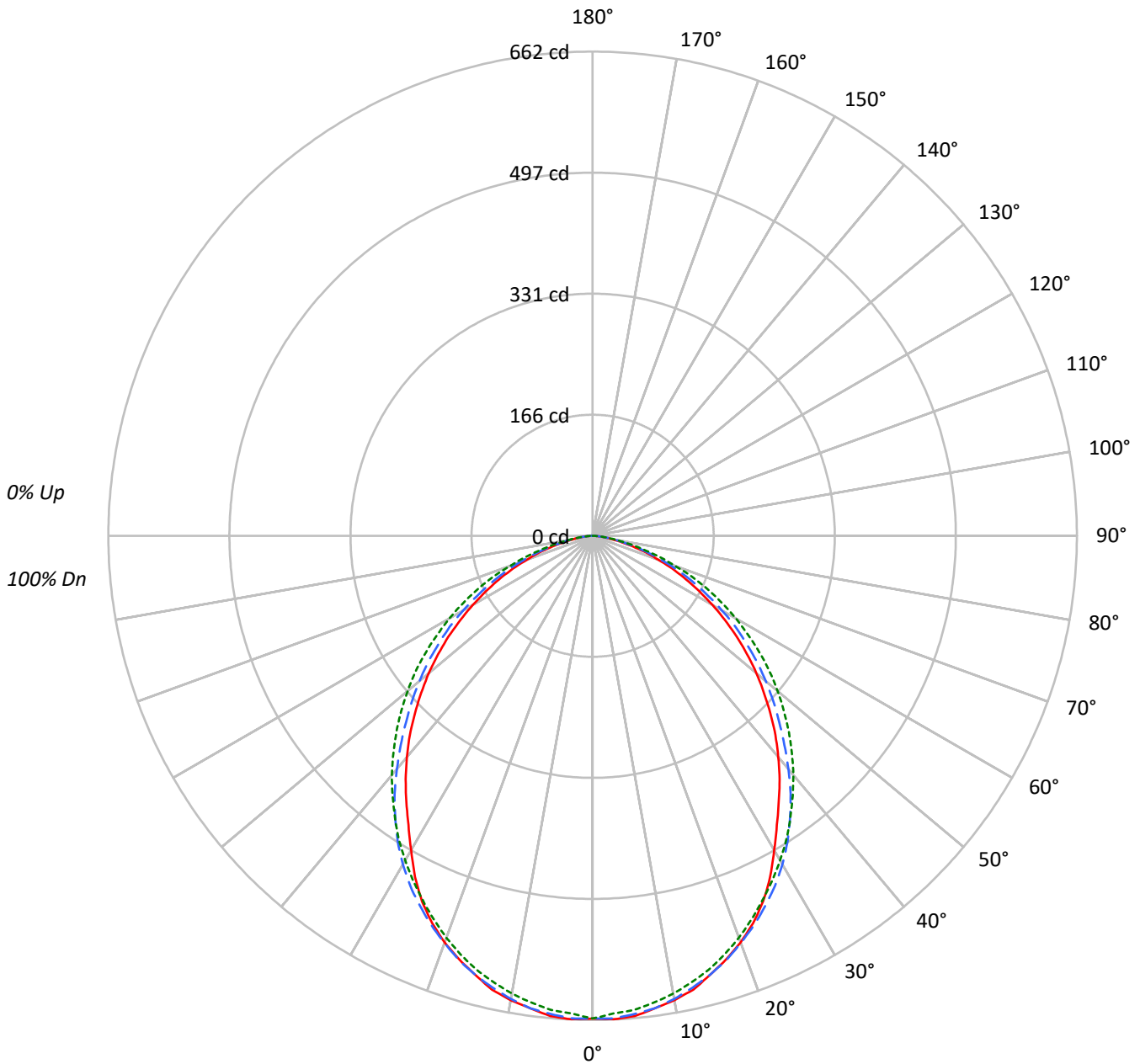
Lumens per Lamp: N/A
Luminaire Lumens: 1526.0 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	3552	3552	3552
5°	3561	3546	3516
10°	3523	3514	3474
15°	3461	3461	3422
20°	3388	3392	3349
25°	3276	3317	3264
30°	3085	3223	3184
35°	2915	3090	3095
40°	2774	2923	3000
45°	2614	2746	2887
50°	2447	2588	2764
55°	2258	2408	2614
60°	2033	2197	2432
65°	1796	1954	2212
70°	1496	1663	1879
75°	1175	1329	1470
80°	840	936	1038
85°	550	550	519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.1	4.1
10°-20°	174.6	11.4
20°-30°	255.1	16.7
30°-40°	289.6	19.0
40°-50°	279.5	18.3
50°-60°	230.6	15.1
60°-70°	153.6	10.1
70°-80°	68.7	4.5
80°-90°	12.3	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°	491.8	32.2
0°-40°	781.3	51.2
0°-60°	1291.4	84.6
0°-90°	1526.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1526.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	659	659	656	653	651	62
15°	621	623	621	618	614	175
25°	552	556	558	554	550	253
35°	444	450	470	473	471	278
45°	344	349	361	377	379	265
55°	241	245	257	271	279	215
65°	141	145	153	164	174	140
75°	56	60	64	67	71	62
85°	9	9	9	8	8	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	660.0	660.0	660.0	660.0	660.0
2.5°	661.7	662.0	660.5	656.4	653.9
5°	659.2	658.9	656.4	652.9	650.8
7.5°	651.8	652.3	651.6	646.5	643.7
10°	644.7	645.0	643.0	638.9	635.6
12.5°	635.6	635.4	632.6	630.5	625.2
15°	621.2	622.7	621.2	618.4	614.1
17.5°	607.2	607.2	608.2	603.4	600.1
20°	591.5	592.3	592.3	588.5	584.7
22.5°	573.2	575.5	576.3	572.2	567.7
25°	551.7	556.0	558.5	554.5	549.7
27.5°	525.6	532.2	539.8	536.7	531.4
30°	496.4	506.1	518.7	516.2	512.4
32.5°	468.8	478.4	495.9	494.9	492.9
35°	443.7	449.8	470.3	472.8	471.1
37.5°	419.9	425.4	444.7	450.5	449.0
40°	394.8	400.8	416.1	426.4	427.0
42.5°	369.9	375.7	388.2	403.1	403.1
45°	343.5	349.4	360.8	377.3	379.3
47.5°	317.7	323.8	334.9	351.4	354.7
50°	292.3	297.9	309.1	325.0	330.1
52.5°	266.0	272.0	282.9	297.7	305.0
55°	240.6	244.7	256.6	270.8	278.6
57.5°	214.2	218.0	231.5	243.6	251.8
60°	188.9	193.7	204.1	216.5	225.9
62.5°	164.5	169.6	178.5	189.4	200.0
65°	141.0	144.8	153.4	164.3	173.7
67.5°	118.1	121.4	130.1	137.7	147.6
70°	95.1	99.4	105.7	113.1	119.4
72.5°	76.6	78.3	83.7	89.0	95.6
75°	56.5	59.6	63.9	66.9	70.7
77.5°	40.6	42.3	44.9	47.4	51.0
80°	27.1	27.9	30.2	30.7	33.5
82.5°	16.5	17.0	17.5	17.7	18.8
85°	8.9	8.9	8.9	8.4	8.4
87.5°	5.1	5.1	4.3	3.5	2.5
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)