

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: P554464

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-93-84-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: P554464
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-35-UNV-93-84-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

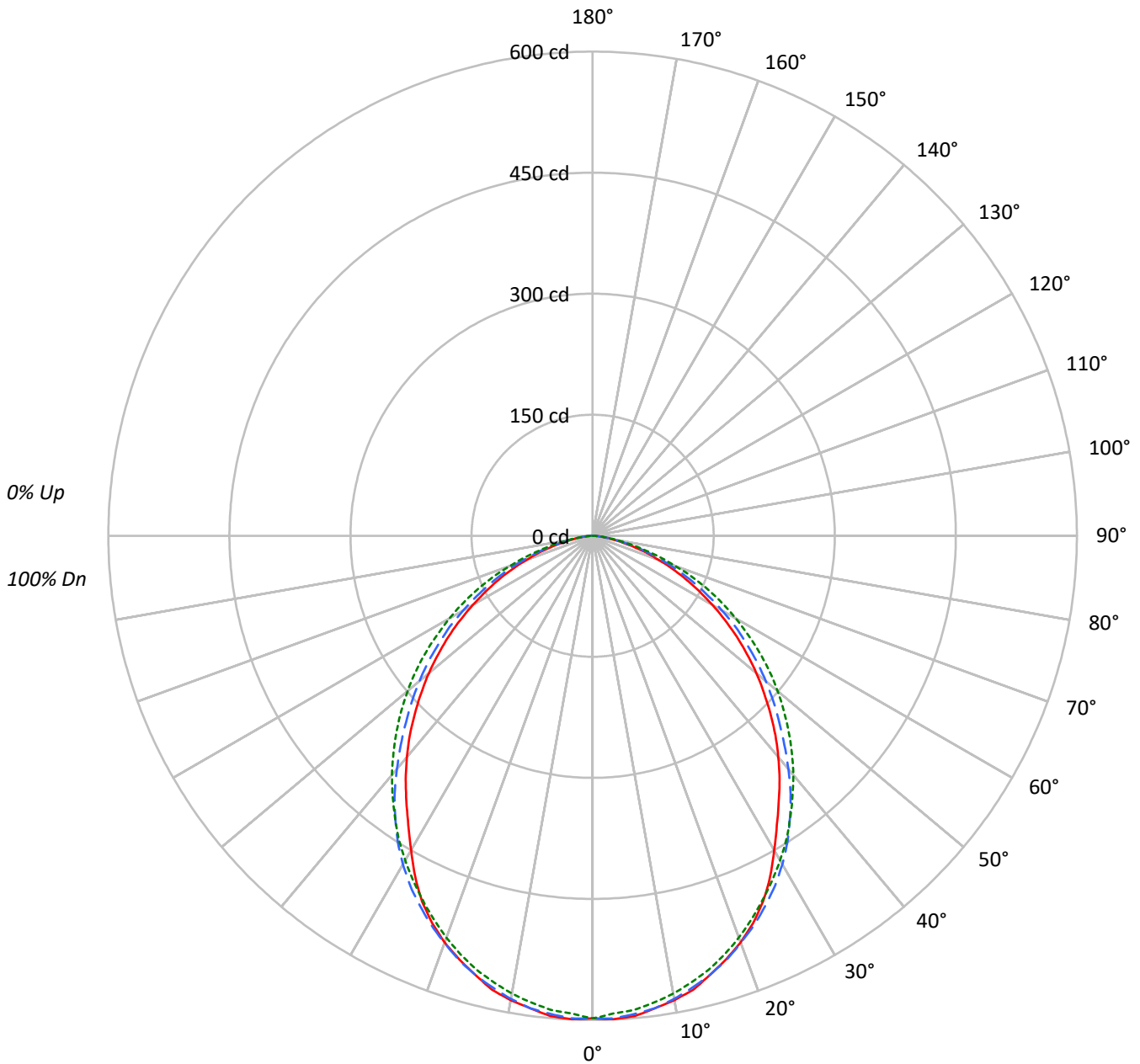
Lumens per Lamp: N/A
Luminaire Lumens: 1383.0 lumens
Efficiency: N/A
Efficacy: 83.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	3219	3219	3219
5°	3227	3214	3186
10°	3193	3184	3148
15°	3137	3137	3101
20°	3070	3074	3035
25°	2969	3006	2958
30°	2796	2921	2886
35°	2642	2800	2805
40°	2514	2649	2718
45°	2369	2489	2616
50°	2218	2345	2505
55°	2046	2182	2369
60°	1843	1991	2203
65°	1628	1770	2004
70°	1356	1507	1703
75°	1065	1204	1333
80°	762	846	939
85°	494	494	469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.3	4.1
10°-20°	158.2	11.4
20°-30°	231.2	16.7
30°-40°	262.4	19.0
40°-50°	253.3	18.3
50°-60°	209.0	15.1
60°-70°	139.2	10.1
70°-80°	62.3	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°	445.7	32.2
0°-40°	708.1	51.2
0°-60°	1170.4	84.6
0°-90°	1383.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1383.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	597	597	595	592	590	57
15°	563	564	563	560	556	159
25°	500	504	506	502	498	229
35°	402	408	426	428	427	252
45°	311	317	327	342	344	240
55°	218	222	232	245	252	195
65°	128	131	139	149	157	127
75°	51	54	58	61	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°	598.1	598.1	598.1	598.1	598.1
2.5°	599.7	600.0	598.6	594.9	592.6
5°	597.4	597.2	594.9	591.7	589.8
7.5°	590.8	591.2	590.5	585.9	583.4
10°	584.3	584.6	582.7	579.0	576.1
12.5°	576.1	575.8	573.3	571.5	566.6
15°	563.0	564.3	563.0	560.4	556.5
17.5°	550.3	550.3	551.2	546.9	543.9
20°	536.1	536.8	536.8	533.3	529.9
22.5°	519.5	521.6	522.3	518.6	514.5
25°	500.0	503.9	506.2	502.5	498.2
27.5°	476.3	482.3	489.2	486.4	481.6
30°	449.9	458.6	470.1	467.8	464.4
32.5°	424.9	433.6	449.4	448.5	446.7
35°	402.1	407.6	426.2	428.5	426.9
37.5°	380.5	385.6	403.0	408.3	406.9
40°	357.8	363.3	377.1	386.5	386.9
42.5°	335.2	340.5	351.8	365.3	365.3
45°	311.3	316.6	327.0	341.9	343.7
47.5°	287.9	293.4	303.5	318.5	321.5
50°	264.9	270.0	280.1	294.6	299.2
52.5°	241.0	246.6	256.4	269.8	276.4
55°	218.1	221.7	232.5	245.4	252.5
57.5°	194.2	197.6	209.8	220.8	228.2
60°	171.2	175.6	185.0	196.2	204.7
62.5°	149.1	153.7	161.8	171.6	181.3
65°	127.8	131.2	139.0	148.9	157.4
67.5°	107.1	110.1	117.9	124.8	133.7
70°	86.2	90.1	95.8	102.5	108.2
72.5°	69.4	71.0	75.8	80.7	86.6
75°	51.2	54.0	57.9	60.7	64.1
77.5°	36.8	38.4	40.7	43.0	46.2
80°	24.6	25.3	27.3	27.8	30.3
82.5°	14.9	15.4	15.9	16.1	17.0
85°	8.0	8.0	8.0	7.6	7.6
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)